



General Catalogue



Gearboxes Made in Italy



Catalogue code: CT-GEMA-HM020-ML

2020 Edition

 **GEMA**
HYPO

IN THIS CATALOGUE



Rightangle-Gear

Worm gearboxes
Riduttori a vite senza fine

Paragraph **1**



Square-Gear

Square worm gearboxes
Riduttori a vite senza fine quadri

Paragraph **2**



One step-Gear

One step gearboxes
Riduttori a uno stadio

Paragraph **3**



Coaxial-Gear

Aluminum gearboxes
Riduttori coassiali in alluminio

Paragraph **4**



Coaxial-Gear

Cast iron gearboxes
Riduttori coassiali in ghisa

Paragraph **5**



Compact-Gear

Shaft mounted gearboxes
Riduttori ad assi paralleli

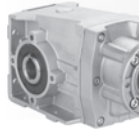
Paragraph **6**



Cube-Gear

Parallel shaft gearboxes
Riduttori ad assi paralleli

Paragraph **7**



Angletech-Gear

Helical bevel gearboxes
Riduttori a coppia conica

Paragraph **8**



Electric motors

Aluminum electric motors
Motori elettrici in alluminio

Paragraph **M**

Worm gearboxes

A modular and compact product

1

Single-piece aluminum alloy housing

Is vacuum impregnated (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint. Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing.

Single piece alloy steel input shaft and worm shaft.

High helix angle worm is case-hardened (Rc 58-60), ground, teeth are profiled and radiused, for noise reduction and enhanced efficiency.

Oversized bearings

Support positively-retained, high speed shaft for higher shock load capacity - ideal for frequent starting and reversing application. Premium, Nitrile® high temperature seals each end.

Bronze alloy worm gears.

CuSn12Ni (C91700) Nickel bronze worm gears are centrifugally cast onto an iron hub for maximum strength and superior life. Removable hollow shaft with key for safe torque transmissions.

Oversize bearing

For radial load capability and maximum hollow output shaft diameter.

Impregnated and machined bearing caps

With exterior machined surfaces enable a variety of mounting accessories. Extra-deep thread engagement provided for greater support strength. Zinc plated hardware.

Flange

Fully modular to IEC and compact integrated motor. NEMA C flange.

Premium, high temperature

Nitrile® output seals

Standard hollow output shaft mounting

Reduces total drive envelope size, weight and cost. Single and double solid output shaft is available.

Vent Free Design.

No breather or vents to leak! Factory lubricated for life with synthetic, semi-fluid gear lubricant with an operating range of -15°C to 130°C.

oil free

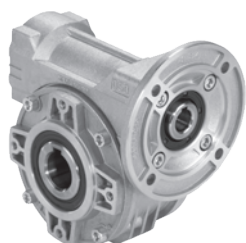


vent free



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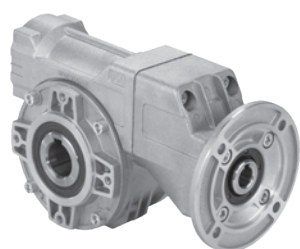
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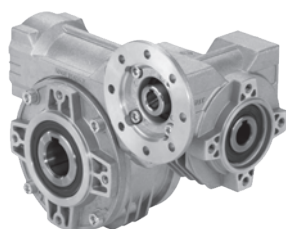
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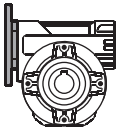
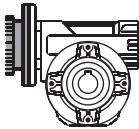
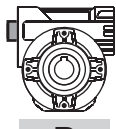
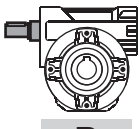
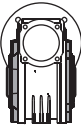
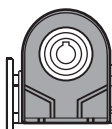
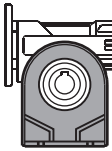
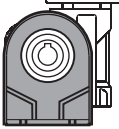
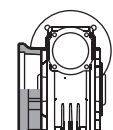
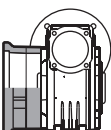
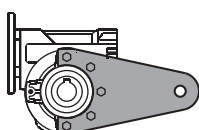
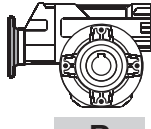
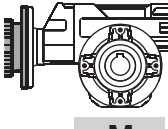
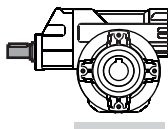
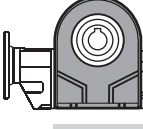
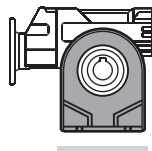
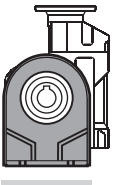
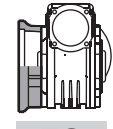
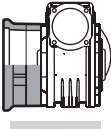
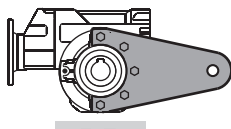
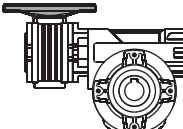
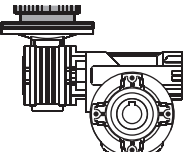
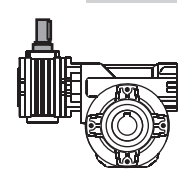
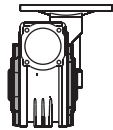
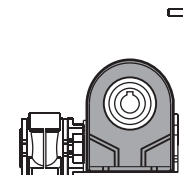
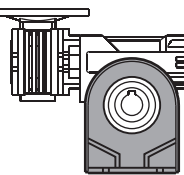
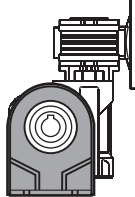
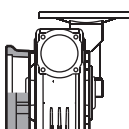
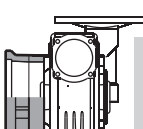
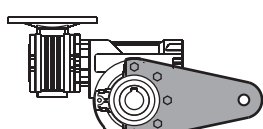


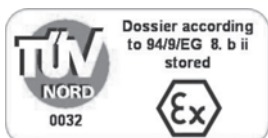
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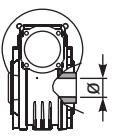
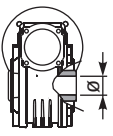
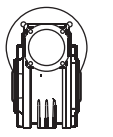
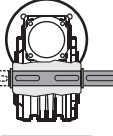
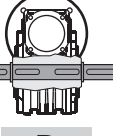
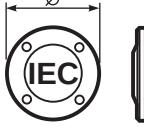
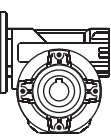
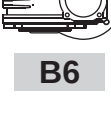
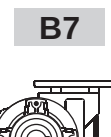
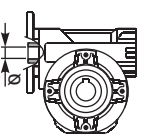
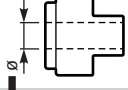
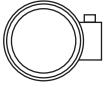
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Type - Tipo - Typ Type - Tipo	Size - Grandezza Größe - Taille Tamaño	Mounting - Montaggio - Montage Fixation - Tipo de montaje
P Worm gearboxes Riduttori a vite senza fine Schneckengetriebe Reducteurs a vis sans fin Reductores de corona sin fin  P  M  B  R	045 030 045 050 063 63A 085 110	PA  FB  PB  PA  PV  FC  FL F1 F2 F3 F4  BR
Worm gearboxes with primary reduction Riduttori a vite senza fine con precoppia Schneckengetriebe mit Stirradstufe am Eintrieb Reducteurs a vis sans fin avec pré-réduction Reductores corona sin fin con prereductora de engranajes  P  M  R	P45 P50 P63 P6A P85 P10	 FB  PB  PA  PV  FC  FL F1 F2 F3 F4  BR
Combined worm gearboxes Riduttori a vite senza fine combinati Schneckengetriebekombinationen Reducteurs a double train de vis sans fin Reductores combinados corona sin fin  P  M  R	303 453 503 633 634 6A3 6A4 854 115	 FB  PB  PA  PV  FC  FL F1 F2 F3 F4  BR



On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

Ratio Rapporto Untersetzung Reduction Relación	Hub Mozzo corona Hohlwelle Arbre creux Núcleo corona	Output shaft Albero lento Abtriebswelle Arbre de sortie Eje salida	Motor size Grandezza motore Motor Grösse Grandeur moteur Tamaño motor	Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje	Input bore Foro entrada Eingangshohlwelle Trou d'entree Eje hueco de entrada	Mountin position Esecuzione montaggio Einbaulage Exécution de montage Posición de montaje	Terminal box position Posizione morsettiera Klemmkastenlage Position boîte a bornes Posición caja de bornes
10	C	Ø	-Q	B3	-	---	
See technical data table Vedi tabella dati tecnici. Technisches Datenblatt beachten Voir tableau données techniques Ver tabla datos técnicos	 STANDARD C 030 ⇒ Ø14 045 ⇒ Ø18 050 ⇒ Ø25 063 ⇒ Ø25 63A ⇒ Ø28 085 ⇒ Ø35 110 ⇒ Ø42 I Stainless steel hub Mozzo in acciaio Inox Edelstahlhohlwelle Moyeu en acier Inox Núcleo corona de acero Inox SPECIAL SERIES SERIE SPECIALE S 045 ⇒ Ø19 050 ⇒ Ø24 X Stainless steel hub Mozzo in acciaio Inox Edelstahlhohlwelle Moyeu en acier Inox Núcleo corona de acero Inox  INCH U 045 ⇒ Ø0.750" 050 ⇒ Ø1.000" 063 ⇒ Ø1.125" 085 ⇒ Ø1.500" Z Stainless steel hub Mozzo in acciaio Inox Edelstahlhohlwelle Moyeu en acier Inox Núcleo corona de acero Inox	 Ø  S  D	 -M without flange Senza flangia B5 -A=56 (Ø120) -B=63 (Ø140) -C=71 (Ø160) -D=80 (Ø200) -E=90 (Ø200) -F=100÷112 (Ø250) -G=132 (Ø300) B14 -O=56 (Ø80) -P=63 (Ø90) -Q=71 (Ø105) -R=80 (Ø120) -T=90 (Ø140) -U=100÷112 (Ø160) -V=132 (Ø200) -O=Type R -S=Type R S series	 B3  B8  B6  B7  V5  V6	 - Nothing indication: Standard bore Kit R standard Nessuna indicazione: Foro standard Kit R standard P Input bore reduced one size Foro entrata ridotto di una misura Ex. Input Flange 71 B14 Standard Ø14 Reduced Ø11 Q Input bore reduced two sizes Due grandezze ridotte foro entrata Ex. Input Flange 71 B14 Standard Ø14 Reduced Ø9 COUPLING  A = 9mm B = 11mm C = 14mm D = 19mm E = 24mm F = 28mm Ready for input coupling Predisposto per giunto  0 Type B Tipo B  0 Type R Tipo R	Only for combined units See technical data table Solo per i riduttori combinati Vedi tabella dati tecnici. Ausführungen für Getriebekombinationen it Uniquement pour combinés. Voir tableau données techniques Sólo para combinados ver tabla datos técnicos  A  B STANDARD  C  D	With Type M specify terminal box position Con tipo M specificare posizione morsettiera

1

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

Lifting / sollevamento / hubantriebe / levage / elevación

$$P [KW] = \frac{M [Kg] \cdot g [9.81] \cdot v [m / s]}{1000}$$

Rotation / rotazione / drehung / rotation / rotation

$$P [KW] = \frac{M [Nm] \cdot n [rpm]}{9550}$$

Linear movement / traslazione / linearbewegung / translation / translacion

$$P [KW] = \frac{F [N] \cdot v [m / s]}{1000}$$

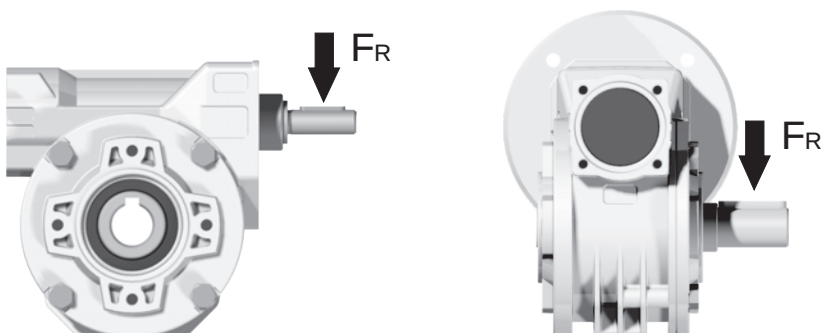
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

$$M [Nm] = \frac{9550 \cdot P[KW]}{n [rpm]}$$

$$M [lb in] = \frac{63030 \cdot P[HP]}{n [rpm]}$$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida



$F_R [N] = \frac{M [Nm] \cdot 2000}{d [mm]} \cdot f_k$		$F_R [N] = \frac{M [lb in] \cdot 8.9}{d [in]} \cdot f_k$	
M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion		
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo		
f_k	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión 1.15 Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje 1.25 Catena / Chain sprockets / Antriebskette / Chaîne / Cadena 1.75 Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal 2.50 Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana		

- If your application requires higher radial loads, contact our technical office. Higher load may be possible.
- Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
- Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
- Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
- En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

How to select a gearbox / Come selezionare un riduttore / Wie wählt man ein Getriebe
Comment sélectionner un réducteur / Cómo seleccionar un reductor

1

B Output speed
Velocità in uscita
Abtriebsdrehzahl
Vitesse de sortie
Velocidad de salida

Nominal power
Potenza nominale
Max. mögliche Leistung
Poissance nominale
Potencia nominal

A Nominal torque
Momento torcente nominale
Nenn Drehmoment
Couple nominal
Par de torsión nominal

Flange code
Codice flangia
Flanschttype
Code bride
Código bridas

Dynamic efficiency
Rendimento dinamico
Dynamischer
Rendement dynamique
Rendimiento dinámico

Input speed
Velocità in entrata
Eintriebsdrehzahl
Vitesse en entrée
Velocidad de entrada

Gear size
Grandezza riduttore
Getriebegröße
Taille réducteur
Tamaño reductor

Motor power
Potenza motore
Motorleistung
Puissance moteur
Potencia motor

045

Rightangle - Gear 41Nm

Rating - Aluminum WORM GEARBOXES

QUICK SELECTION / Selezione veloce											input speed (n _i) = 1400 min ⁻¹			
Output Speed	Ratio	Motor power	Output torque	Service factor	Nominal power	Nominal torque	Available B5 motor flanges		Available B14 motor flanges			Dynamic efficiency	Tooth Module	
n ₂ ⁻¹	i	P _{1M} [kW]	M _{2M} [Nm]	f.s.	P _{1R} [kW]	M _{2R} [Nm]	-B	-C	-O	-P	-Q	RD		Ratios code
							63	71	56	63	71		[mm]	
200	7	0.37	14	2.2	0.80	30	B		B-C	B-C		80	2.2	01
140	10	0.37	20	1.5	0.57	30	B		B-C	B-C		79	2.2	02
100	14	0.37	27	1.1	0.41	30	B		B-C	B-C		77	2.4	03

C Ratio
Rapporto
Untersetzung
Rapport de réduction
Relación

Transmitted torque
Momento torcente trasmesso
Mögliche Drehmomente
Couple de sortie
Par transmitido

Service factor
Fattore di servizio
Betriebsfaktor
Facteur de service
Factor de servicio

Nominal module
Modulo nominale
Nenn modul
Module nominale
Módulo nominal

Notes
Note
Anmerkungen
Note
Notas

fs		Oper. hours per day Ore di funz. giorn.		
Type of load and starts per hour Tipo di carico e avviamenti per ora		<2 h	2 - 8 h	8 - 16 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.9	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1.25	1.5	1.75
	Moderate / Moderato	1.5	1.75	2
	Heavy / Forte	1.75	2	2.25

D	Motor flange available Flange disponibili Erhältliche Motorflansche Bridas disponibles Bridas disponibles
B)	Mounting with reduction ring Montaggio con boccia di riduzione Reduzierhülsen Montage avec douille de réduction Montaje con casquillo de reducción
C)	Motor flangeholes position/terminal box position Posizione fori flangia/basetta motore Bohrungsposition am Motorflansch/-sockel Position trous bride/barrette à bornes moteur Posición agujeros brida / base motor
B)	Available without reduction bushes Disponibile anche senza boccia Auch ohne Reduzierbuchse verfügbar Disponible aussi sans douille de réduction Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select output speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges		Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-A	-B	-O	-P			
							56	63	56	63			
280	5	0.18	5	3.3	0.60	17	B		B-C		82	1.26	09
200	7	0.18	7	2.4	0.44	17	B		B-C		80	1.44	01
140	10	0.18	10	1.8	0.32	17	B		B-C		78	1.44	02
93	15	0.18	13	1.4	0.25	19	B		B-C		73	1.44	03
70	20	0.18	17	1.1	0.20	19	B		B-C		70	1.09	04
47	30	0.12	15	1.4	0.17	21	B		B-C		62	1.44	05
35	40	0.12	19	1.1	0.13	20	B		B-C		57	1.09	06
23	61	0.09	19	1.1	0.10	20	B		B-C		50	0.72	07
17.5	80	0.06	16	1.0	0.06	16	B		B-C		48	0.56	08
14	100	0.06*	16	0.5	0.03	8	B		B-C		40	0.45	10

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit 030 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

LUBRICATION 030 Oil Quantity 0.03 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

I Il riduttore tipo 030 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe 030 mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

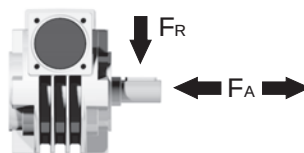
F Le réducteur de type 030 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño 030 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

RADIAL AND AXIAL LOADS

Output shaft

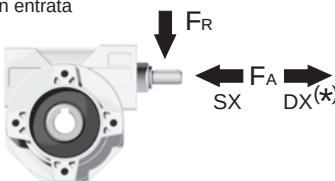
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	120	600
150	140	700
100	160	800
75	180	900
50	200	1000
25	250	1250
15	280	1400

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	20	100

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

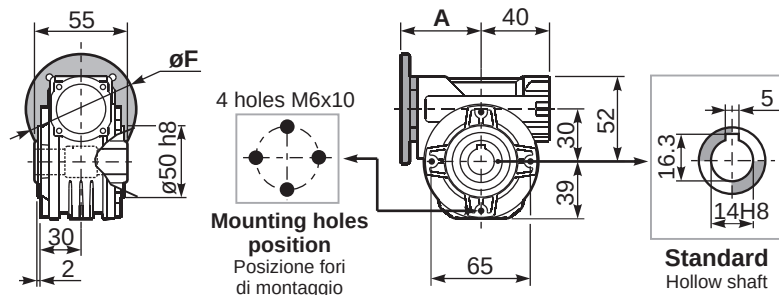
tab. 2

P030FB...

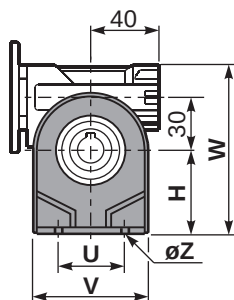
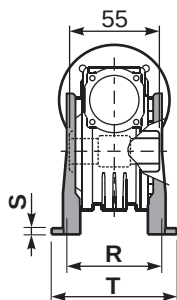
Basic wormbox
Riduttore baseGearbox
weight
peso riduttore

1.05 kg

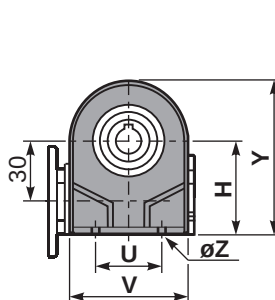
M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



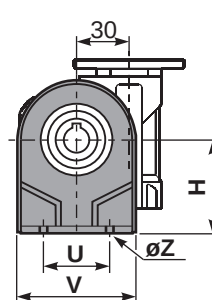
P030PA...

Feet
Piedini

P030PB...

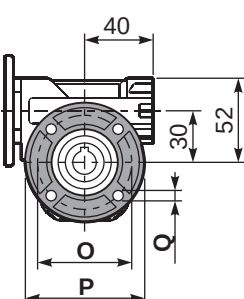
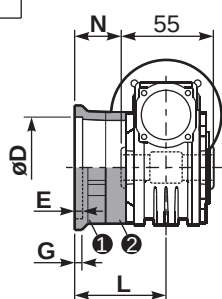
Feet
Piedini

P030PV...

Feet
Piedini

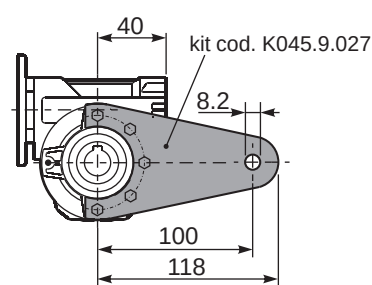
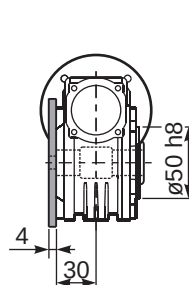
	H	R	S	T	U	V	Y	W	øZ	kit code
type B	55	66	3	87	50	78	94	107	ø6.5	K030.9.022
type S	52	66	3	87	52	90	91	104	ø6.5	KS030.9.023

P030FC...

Output flange
Flangia uscita

type B	øD	E	G	L	N	O	P	Q	kit code
FC	50 ^{+0.15} _{+0.05}	6	6	50.5	23	68	80	7	1 K030.9.010 2 -
FL	60 ^{+0.15} _{+0.05}	6	6	55.5	28	87	110	8.5	1 K045.9.010 2 -
type S	øD	E	G	L	N	O	P	Q	kit code
F1	40 ^{+0.15} _{+0.10}	3.5	5.5	49	21.5	56	80	6.5	1 KS030.9.012 2 -

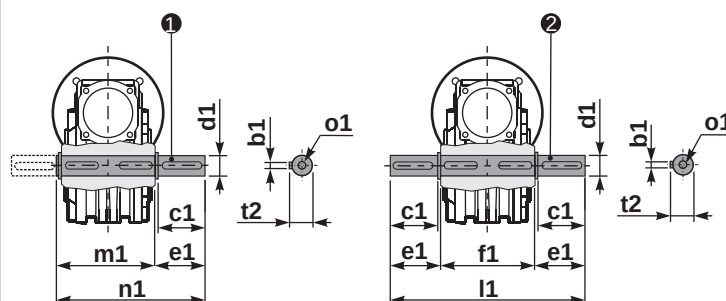
P030BR...

Reaction arm
Braccio di reazione

P030.....S...

Single Shaft
Albero lento semplice

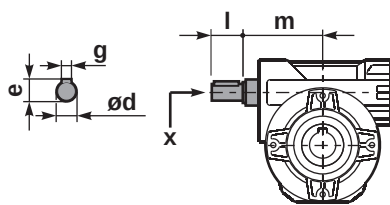
P030.....D...

Double Shaft
Albero lento bisp.

1 kit cod. K030.5.028 type B

2 kit cod. K030.5.029 type B

R030FB...

Input shaft
Albero in entrata

	ød	e	g	l	m	x	kit code
type B	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
type S	-	-	-	-	-	-	-

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	5	25	14 ^{-0.005} _{-0.020}	35.5	55	126	59	94.5	16	M5x14
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-B	-C	-O	-P	-Q			
							63	71	56	63	71			
200	7	0.37	14	2.2	0.80	30	B		B-C	B-C		80	2.2	01
140	10	0.37	20	1.5	0.57	30	B		B-C	B-C		79	2.2	02
100	14	0.37	27	1.1	0.41	30	B		B-C	B-C		77	2.4	03
67	21	0.37	36	1.2	0.43	41	B		B-C	B-C		67	1.6	04
50	28	0.25	31	1.3	0.33	41	B		B-C	B-C		65	2.5	05
38	37	0.25	40	1.0	0.26	41	B		B-C	B-C		63	1.8	06
30	46	0.25	46	0.9	0.22	41	B		B-C	B-C		59	1.5	07
23	60	0.18	41	1.0	0.18	41	B		B-C	B-C		56	1.2	08
20	70	0.12	31	1.0	0.12	30	B		B-C	B-C		54	1.0	09
13.7	102	0.09	31	1.0	0.09	29	B		B-C	B-C		49	0.72	10

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit 045 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo 045 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe 045 mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type 045 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño 045 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 045 Oil Quantity 0.09 Lt.

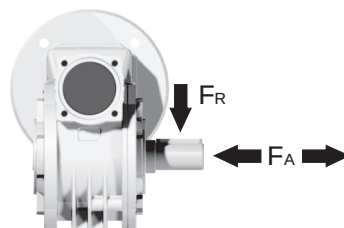
AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

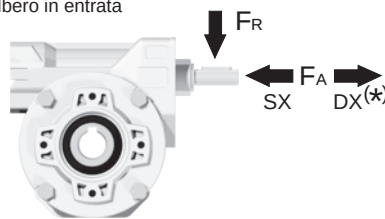
RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	180	900
150	200	1000
100	220	1100
75	240	1200
50	260	1400
25	300	1800
15	400	2000

Input shaft
albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	42	210

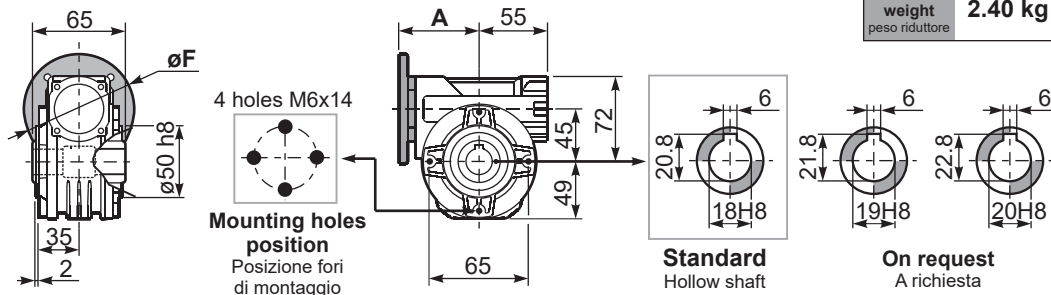
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P045FB...

Basic wormbox
Riduttore baseGearbox
weight
peso riduttore **2.40 kg**

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5



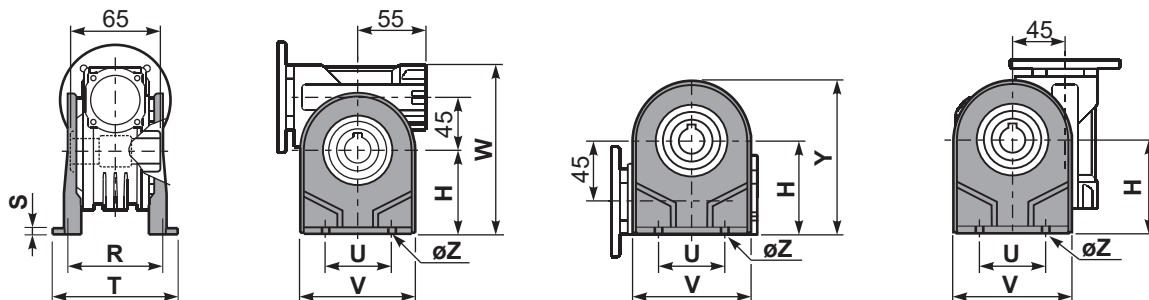
P045PA...

Feet
Piedini

P045PB...

Feet
Piedini

P045PV...

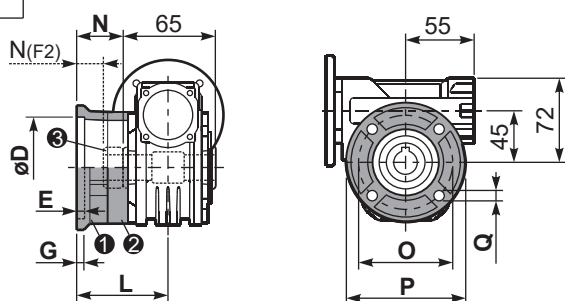
Feet
Piedini

	H	R	S	T	U	V	Y	W	øZ	kit code
type B	72	81	3	100	52	98	121	144	ø10.5	K045.9.022
type S	71	84	8	100	70	90	120	143	ø8	KS045.9.023

P045FC...

Output flange
Flangia uscita

P045BR...

Reaction arm
Braccio di reazione

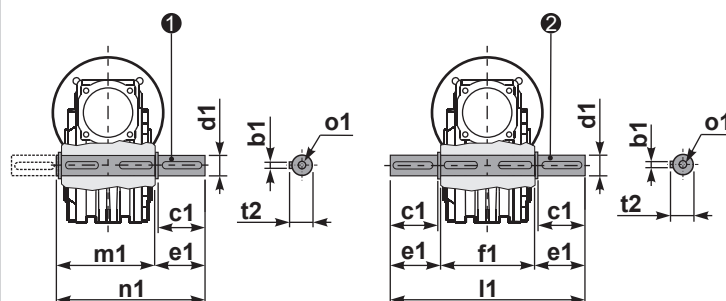
type B	øD	E	G	L	N	O	P	Q	kit code
FC	60 ^{+0.15} _{+0.05}	9	9	60.5	28	87	110	8.5	1 K045.9.010 2 -
FL	60 ^{+0.15} _{+0.05}	9	9	90.5	58	87	110	8.5	1 K045.9.010 2 K045.0.200

type S	øD	E	G	L	N	O	P	Q	kit code
F1	95 ^{+0.20} _{+0.15}	4	11	73.5	41	115	140	9	1 KS045.9.013 2 -
F2	60 ^{+0.15} _{+0.05}	9	9	60.5	19	87	110	8.5	1 KS045.9.010 2 S045.0.204
F3	80 ^{+0.15} _{+0.10}	3	8	51.5	19	100	120	9	1 KS045.9.014 2 -

P045.....S...

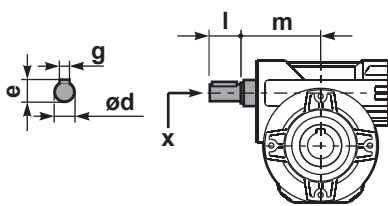
Single Shaft
Albero lento semplice

P045.....D...

Double Shaft
Albero lento bisp.

- 1 kit cod. K045.5.028 type B
kit cod. KS045.5.030 type S
- 2 kit cod. K045.5.029 type B

R045FB...

Input shaft
Albero in entrata

	ød	e	g	l	m	x	kit code
type B	11 h6	12.5	4	30	68	-	1 K045.5.006 PAM71 2 -
type S	-	-	-	-	-	-	1 - 2 -

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	6	32	18 ^{-0.005} _{-0.020}	43	65	151	70	113	20.5	M6x18
type S	6	40	19 ^{-0.005} _{-0.020}	58.8	-	-	70	128.5	21.5	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges			Available B14 motor flanges				Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-B	-C	-D	-O	-P	-Q	-R			
							63	71	80	56	63	71	80			
200	7	0.75	29	1.9	1.5	57	B	B			B-C	B		82	2.5	01
140	10	0.75	41	1.5	1.1	62	B	B			B-C	B		80	2.4	02
100	14	0.75	57	1.2	0.90	68	B	B			B-C	B		79	2.6	03
78	18	0.55	51	1.2	0.67	62	B	B			B-C	B		75	2.0	04
54	26	0.55	67	1.0	0.54	66	B	B			B-C	B		69	2.7	05
47	30	0.55	79	0.9	0.50	72	B	B			B-C	B		70	2.5	12
39	36	0.37	63	1.2	0.43	72	B			B-C	B-C			69	2.1	06
33	43	0.37	72	1.0	0.35	68	B			B-C	B-C			66	1.8	07
28	50	0.25	53	1.2	0.31	66	B			B-C	B-C			62	1.5	13
23	60	0.25	59	1.0	0.26	62	B			B-C	B-C			58	1.3	08
21	68	0.25	66	0.9	0.22	58	B			B-C	B-C			57	1.2	09
17.5	80	0.18	53	1.1	0.19	57	B			B-C	B-C			54	1.0	10
14	100	0.12	41	1.3	0.15	51	B			B-C	B-C			50	0.8	11

A Motor Flanges Available
Flange Motore Disponibili

B Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit 050 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo 050 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe 050 mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type 050 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño 050 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 050 Oil Quantity 0.14 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

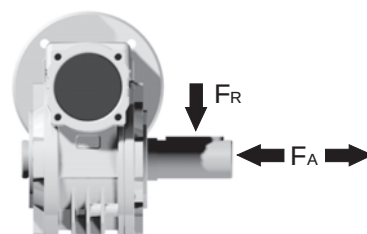
For all details on lubrication and plugs check our website

tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

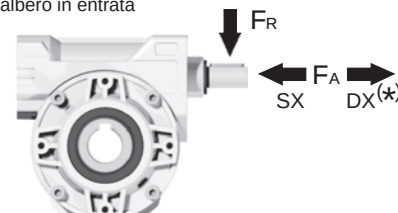
RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	240	1200
150	280	1400
100	300	1500
75	340	1700
50	380	1900
25	480	2500
15	560	2800

Input shaft
albero in entrata



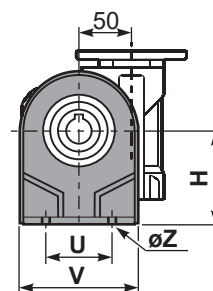
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	76	380

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

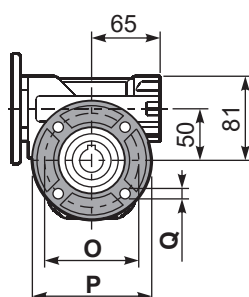
tab. 2

Gearbox weight peso riduttore	3.00 kg
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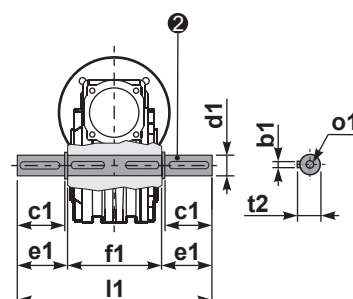
On request "type S"
A richiesta "tipo S"

Feet
Piedini

Reaction arm
Braccio di reazione



P050.....**D**... Double Shaft
Albero lento bisp.



① kit cod. K050.5.028 type **B**
kit cod. KS050.5.030 type **S**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	8	52	$25^{+0.005}_{-0.020}$	59.5	81	200	86.5	146	28	M8x20
type S	8	50	$24^{+0.005}_{-0.020}$	68.8	-	-	86.5	155	27	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
200	7	1.8	71	1.8	3.2	125		B	B		B-C	B-C		83	3.1	01
140	10	1.8	99	1.4	2.4	134		B	B		B-C	B-C		81	3.1	02
93	15	1.5	121	1.1	1.7	138		B	B		B-C	B-C		79	3.1	03
74	19	1.1	111	1.2	1.4	138		B	B		B-C	B-C		78	2.6	04
58	24	1.1	135	1.0	1.2	142		B	B		B-C	B-C		75	2.0	05
47	30	1.1	167	0.9	0.96	146		B	B		B-C	B-C		74	3.2	06
39	36	0.75	125	1.2	0.88	147		B	B		B-C	B-C		68	2.7	07
35	40	0.75	135	1.0	0.78	140		B	B		B-C	B-C		66	2.5	13
31	45	0.55	111	1.2	0.67	135	B	B			B-C	C		66	2.1	08
23	60	0.55	140	0.9	0.51	130	B	B			B-C	C		62	1.6	12
21	67	0.55	151	0.8	0.45	124	B	B			B-C	C		60	1.5	09
17.5	80	0.37	115	1.0	0.38	119	B	B			B-C	C		57	1.3	10
14.9	94	0.37	123	1.0	0.36	119	B	B			B-C	C		52	1.1	11

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **063** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **063** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **063** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **063** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **063** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 063 Oil Quantity 0.40 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

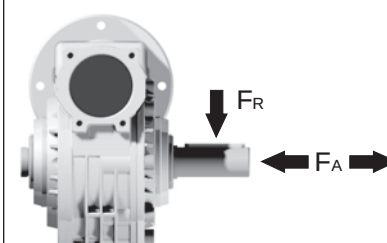
tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

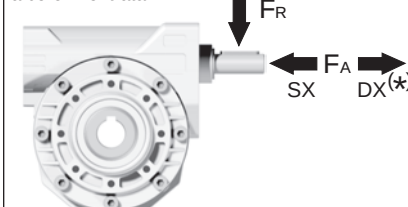
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	360	1800
150	400	2000
100	460	2300
75	500	2500
50	600	3000
25	700	3800
15	800	4000

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	90	450

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

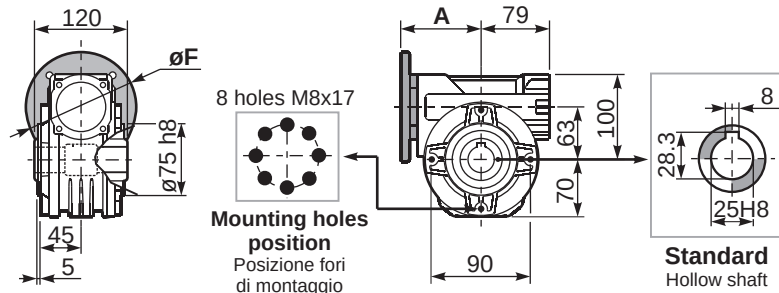
tab. 2

P063FB...

Basic wormbox
Riduttore baseGearbox
weight
peso riduttore

6.00 kg

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	99.5
71B5	K063.4.042	160	97.5
80/90B5	K063.4.043	200	99.5
71B14	K063.4.047	105	97.5
80B14	K063.4.046	120	99.5
90B14	K063.4.041	140	99.5



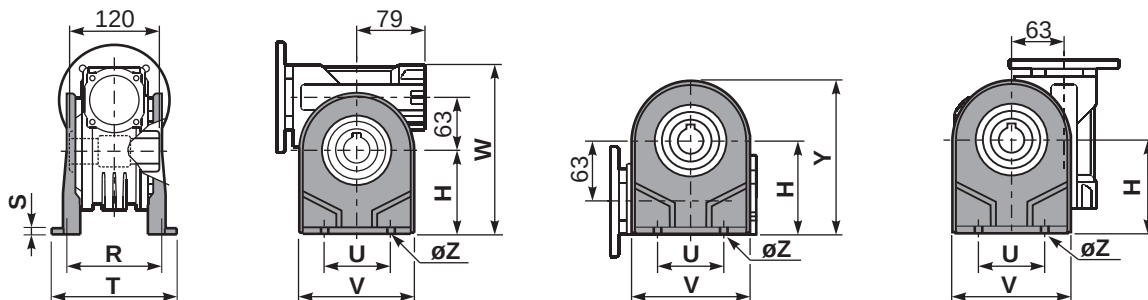
P063PA...

Feet
Piedini

P063PB...

Feet
Piedini

P063PV...

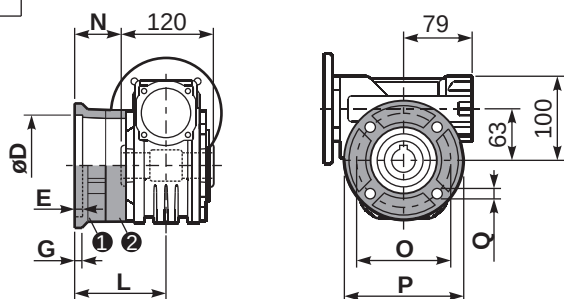
Feet
Piedini

	H	R	S	T	U	V	Y	W	øZ	kit code
type B	100	111	4	144	95	133	170	200	ø10.5	K063.9.022
type S	-	-	-	-	-	-	-	-	-	-

P063FC...

Output flange
Flangia uscita

P063BR...

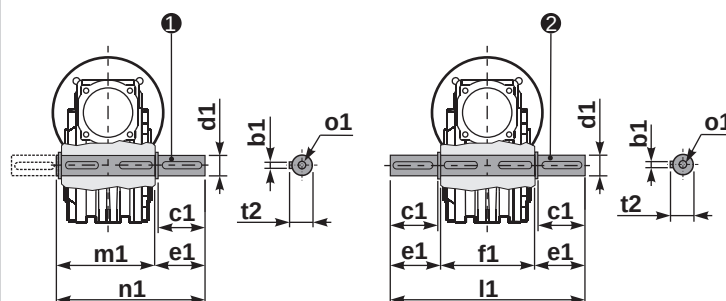
Reaction arm
Braccio di reazione

type B	øD	E	G	L	N	O	P	Q	kit code
FC	115 ^{+0.20} _{+0.15}	7	13	86	26	150	175	11	1 K063.9.010 2 -
FL	115 ^{+0.20} _{+0.15}	7	13	116	56	150	175	11	1 K063.9.010 2 K063.0.200
type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 ^{+0.20} _{+0.15}	7	13	102	42	165	200	13	1 KS070.9.013 2 -
F2	115 ^{+0.20} _{+0.15}	7	13	116	56	150	175	11	1 KS063.9.013 2 -
F3	110 ^{+0.035} ₀	5	11	82	22	130	160	10	1 KS063.9.011 2 -

P063.....S...

Single Shaft
Albero lento semplice

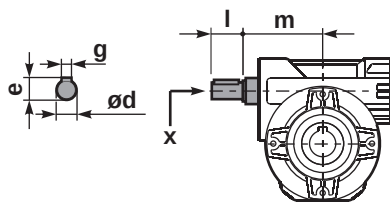
P063.....D...

Double Shaft
Albero lento bisp.

1 kit cod. K063.5.028 type B

2 kit cod. K063.5.029 type B

R063FB...

Input shaft
Albero in entrata

	ød	e	g	l	m	x	kit code
type B	18 h6	20.5	6	45	93	M6x16	1 K063.5.006 PAM80 2 K063.5.007 PAM90
type S	19 h6	21.5	6	40	93	M8x20	1 KS063.5.008 PAM80 2 KS063.5.009 PAM90

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	8	60	25 ^{-0.005} _{-0.020}	63.2	120	246.4	126.8	190	28	M8x20
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code 
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
200	7	1.8	71	2.3	4.1	162		B	B		B-C	B-C		83	3.1	01
140	10	1.8	99	1.7	3.1	173		B	B		B-C	B-C		81	3.1	02
93	15	1.5	121	1.5	2.2	178		B	B		B-C	B-C		79	3.1	03
74	19	1.5	152	1.2	1.8	178		B	B		B-C	B-C		78	2.6	04
58	24	1.5	184	1.0	1.5	185		B	B		B-C	B-C		75	2.0	05
47	30	1.5	227	0.8	1.3	189		B	B		B-C	B-C		74	3.2	06
39	36	1.1	184	1.0	1.1	191		B	B		B-C	B-C		68	2.7	07
35	40	1.1	198	0.9	1.0	181		B	B		B-C	B-C		66	2.5	13
31	45	0.75	152	1.2	0.86	175	B	B			B-C	C		66	2.1	08
23	60	0.55	140	1.2	0.66	168	B	B			B-C	C		62	1.6	12
21	67	0.55	151	1.1	0.58	159	B	B			B-C	C		60	1.5	09
17.5	80	0.37	115	1.3	0.49	153	B	B			B-C	C		57	1.3	10
14.9	94	0.37	123	1.1	0.39	130	B	B			B-C	C		52	1.1	11

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **63A** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **63A** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **63A** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **63A** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **63A** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 63A Oil Quantity 0.40 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

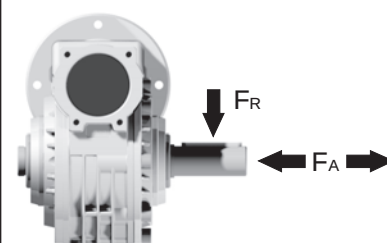
tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

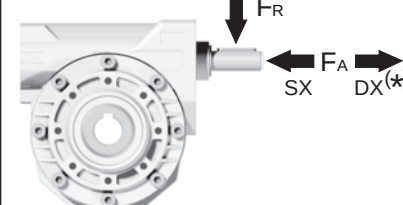
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	360	1800
150	400	2000
100	460	2300
75	500	2500
50	600	3000
25	700	3800
15	800	4000

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	90	450

*Strong axial loads in the DX direction are not allowed.

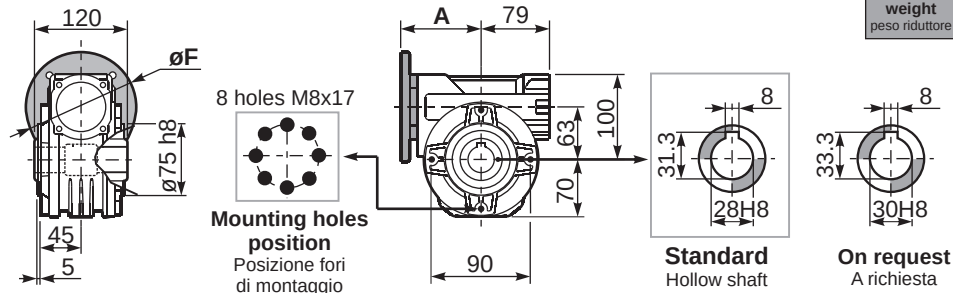
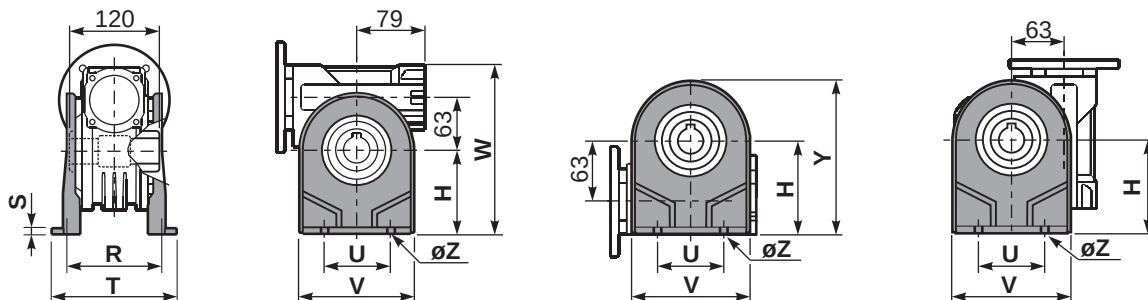
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

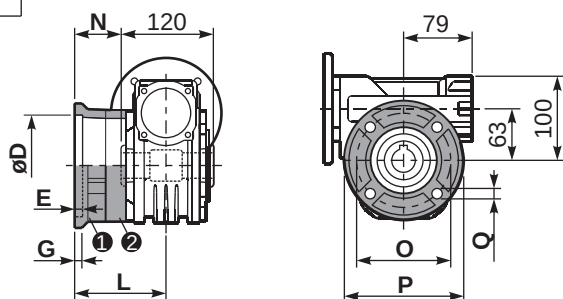
P63A**FB**...Basic wormbox
Riduttore baseGearbox
weight
peso riduttore

6.00 kg

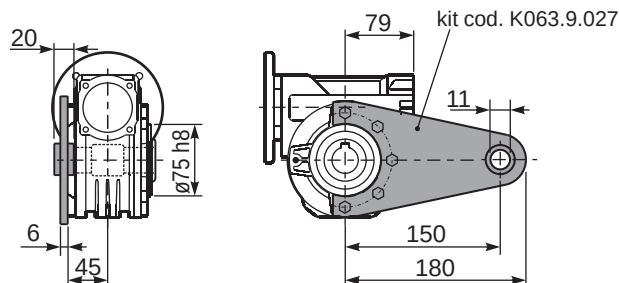
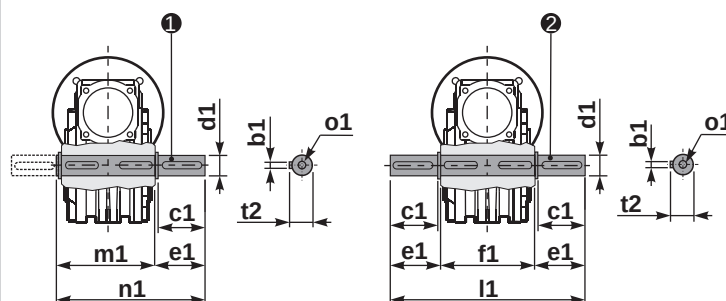
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	99.5
71B5	K063.4.042	160	97.5
80/90B5	K063.4.043	200	99.5
71B14	K063.4.047	105	97.5
80B14	K063.4.046	120	99.5
90B14	K063.4.041	140	99.5

Standard
Hollow shaftOn request
A richiestaP63A**PA**...Feet
PiediniP63A**PB**...Feet
PiediniP63A**PV**...Feet
Piedini

	H	R	S	T	U	V	Y	W	øZ	kit code
type B	115	115	12	142	120	156	185	215	ø11	K070.9.022
type S	-	-	-	-	-	-	-	-	-	-

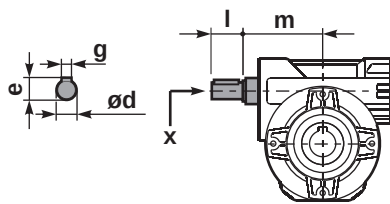
P63A**FC**...Output flange
Flangia uscita

type B	øD	E	G	L	N	O	P	Q	kit code
FC	130 ^{+0.20} _{+0.15}	7	13	85	25	165	200	13	① K070.9.010 ② -
FL	130 ^{+0.20} _{+0.15}	7	13	111	51	165	200	13	① K070.9.010 ② K070.0.200
type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 ^{+0.20} _{+0.15}	7	13	111	51	165	200	13	① KS070.9.014 ② -
F2	115 ^{+0.20} _{+0.15}	7	13	116	56	150	175	11	① KS063.9.013 ② -
F3	110 ^{+0.035} ₀	5	13.5	84.5	24.5	130	160	11	① KS070.9.011 ② -

P63A**BR**...Reaction arm
Braccio di reazioneP63A.....**S**...Single Shaft
Albero lento sempliceP63A.....**D**...Double Shaft
Albero lento bisp.

① kit cod. K070.5.028 type B

② kit cod. K070.5.029 type B

R63A**FB**...Input shaft
Albero in entrata

	ød	e	g	l	m	x	kit code
type B	18 h6	20.5	6	45	93	M6x16	① K063.5.006 PAM80 ② K063.5.007 PAM90
type S	19 h6	21.5	6	40	93	M8x20	① KS063.5.008 PAM80 ② KS063.5.009 PAM90

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	8	60	28 ^{-0.005} _{-0.020}	63.5	120	247	127.5	191	31	M8x20
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-C	-D	-E	-F	-R	-T	-U			
							71	80	90	100 112	80	90	100 112			
200	7	4.0	168	1.5	6.1	257		B	B		B	B		88	4.23	01
140	10	4.0	218	1.3	5.2	284		B	B		B	B		80	4.2	02
100	14	3.0	223	1.4	4.1	305		B	B		B	B		78	4.5	03
70	20	2.2	237	1.2	2.7	294		B	B		B	B		79	3.4	04
64	22	2.2	258	1.1	2.5	294		B	B		B	B		78	3.1	05
50	28	2.2	315	1.1	2.4	347		B	B		B	B		75	4.7	06
37	38	1.5	276	1.2	1.8	336	B	B			B			71	3.5	07
30	46	1.5	320	1.0	1.5	326	B	B			B			68	3.1	08
27	52	1.1	258	1.1	1.2	289	B	B			B			66	2.7	09
21	67	1.1	327	0.9	0.97	289	B	B			B			65	2.1	10
18.9	74	0.75	220	1.2	0.91	268	B	B			B			58	1.9	11
14.6	96	0.55	191	1.3	0.70	242	B	B			B			53	1.5	12

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **085** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

LUBRICATION 085 Oil Quantity 1.20 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

I Il riduttore tipo **085** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **085** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

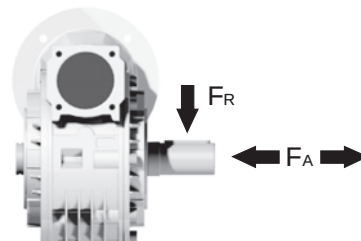
F Le réducteur de type **085** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **085** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

RADIAL AND AXIAL LOADS

Output shaft

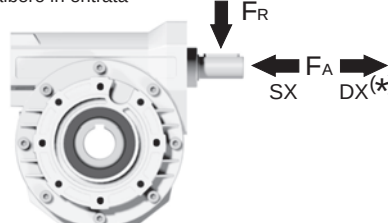
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	500	2500
150	580	2900
100	600	3000
75	700	3500
50	800	4000
25	1000	5000
15	1160	5800

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	130	650

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

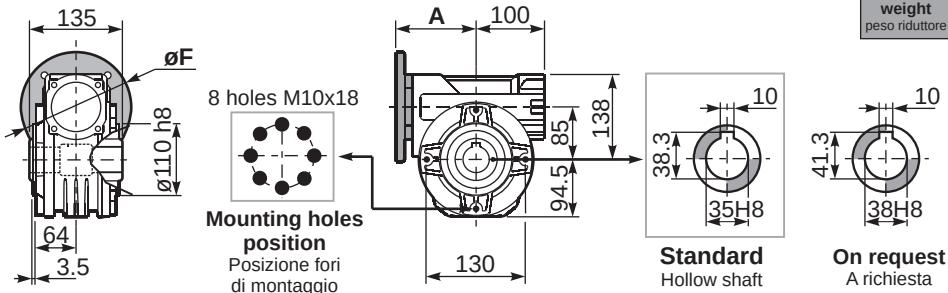
tab. 2

P085FB...

Basic wormbox
Riduttore baseGearbox
weight
peso riduttore

11.00 kg

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	116.5
80/90B5	K023.4.042	200	118.5
100/112B5	K023.4.043	250	127.5
80B14	K085.4.046	120	118.5
90B14	K085.4.045	140	118.5
100/112B14	K085.4.047	160	127.5



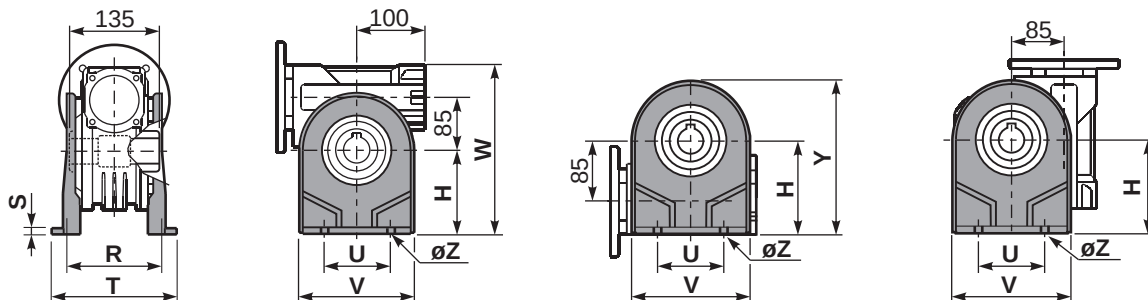
P085PA...

Feet
Piedini

P085PB...

Feet
Piedini

P085PV...

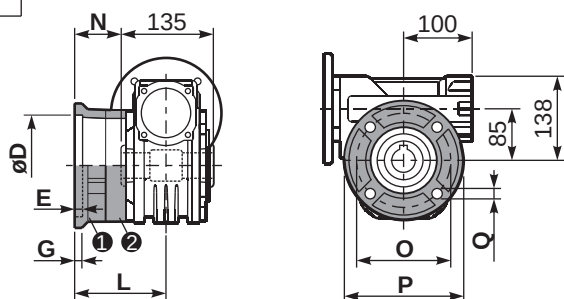
Feet
Piedini

	H	R	S	T	U	V	Y	W	øZ	kit code
type B	142	145	5	182	140	180	236.5	280	ø10.5	K085.9.022
type S	-	-	-	-	-	-	-	-	-	-

P085FC...

Output flange
Flangia uscita

P085BR...

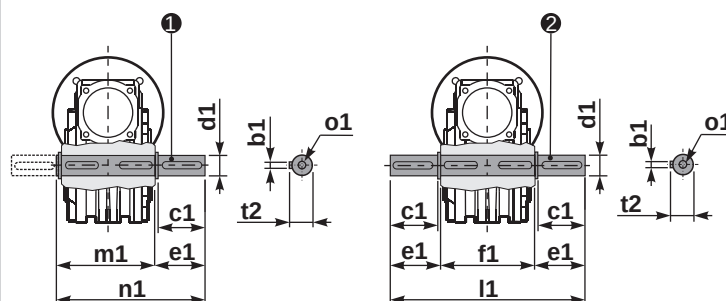
Reaction arm
Braccio di reazione

type B	øD	E	G	L	N	O	P	Q	kit code
FC	152 ^{+0.06} _{+0.00}	5	16	108	40.5	176	205	13	① K085.9.010 ② -
FL	152 ^{+0.06} _{+0.00}	5	16	148.5	81	176	205	13	① K085.9.010 ② K085.0.201
type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 H7	5	13	117.5	50	165	200	11.5	① KS085.9.012 ② -
F2	152 ^{+0.06} _{+0.00}	5	15	147.5	80	180	205	12.5	① KS085.9.013 ② -
F4	130 H7	5	13	106.5	39	165	200	13	① KS085.9.015 ② -

P085.....S...

Single Shaft
Albero lento semplice

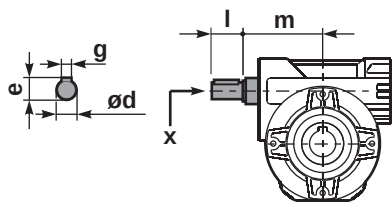
P085.....D...

Double Shaft
Albero lento bisp.

① kit cod. K085.5.028 type B

② kit cod. K085.5.029 type B

R085FB...

Input shaft
Albero in entrata

	ød	e	g	l	m	x	kit code
type B	25 h6	28	8	50	112	M8x20	① K085.5.007 PAM90 ② K085.5.008 PAM100
type S	24 h6	27	8	50	112	M8x20	① KS085.5.009 PAM90 ② KS085.5.011 PAM100

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	10	60	35 ^{-0.005} _{-0.020}	73.5	135	282	141	214.5	38	M10x23
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V			
							71	80	90	100 112	132	80	90	100 112	132			
200	7	7.5	315	1.5	11.5	483		B	B			B	B			88	5.5	01
140	10	7.5	440	1.2	9.0	525		B	B			B	B			86	5.4	02
88	16	5.5	492	1.1	6.0	536		B	B			B	B			82	5.3	03
70	20	4.0	447	1.2	4.9	546		B	B			B	B			82	4.5	04
61	23	3.0	377	1.4	4.1	515		B	B			B	B			80	3.9	05
47	30	3.0	467	1.4	4.2	651		B	B			B	B			76	5.6	06
37	38	3.0	583	1.1	3.3	641		B	B			B	B			75	4.7	07
31	45	2.2	493	1.2	2.7	599		B	B			B	B			73	4.0	08
26	53	2.2	557	1.1	2.5	620		B	B			B	B			70	3.5	09
22	64	1.5	452	1.2	1.8	536	B	B				B				69	2.9	10
16.7	84	1.1	410	1.2	1.3	494	B	B				B				65	2.2	11
14.1	99	1.1	446	1.1	1.2	483	B	B				B				60	1.9	12

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit 110 is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo 110 è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße 110 wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type 110 est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño 110 se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6
1.90 LT	1.35 LT	1.35 LT	2.00LT	2.00 LT	2.00LT

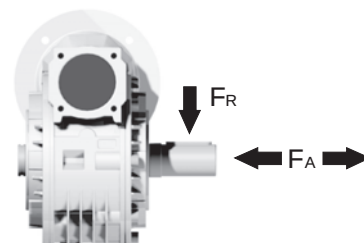
AGIP Blasias 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

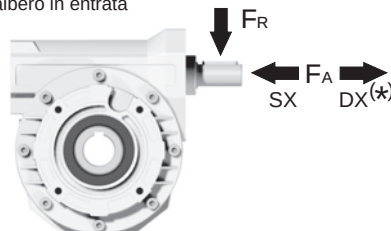
RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	600	2900
150	700	3300
100	750	3600
75	800	4000
50	920	4600
25	1200	6000
15	1400	7000

Input shaft
albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	228	1140

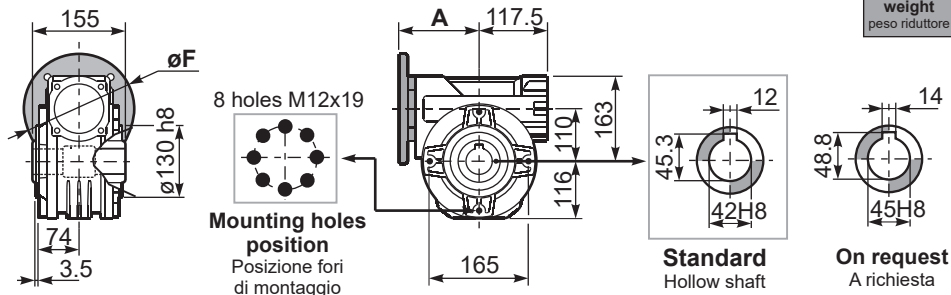
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P110FB...

Basic wormbox
Riduttore baseGearbox weight
peso riduttore **35.00 kg**

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	136
80/90B5	K023.4.042	200	138
100/112B5	K023.4.043	250	147
132B5	-	300	187
80B14	K085.4.046	120	138
90B14	K085.4.045	140	138
100/112B14	K023.4.041	160	136
132B14	-	200	187



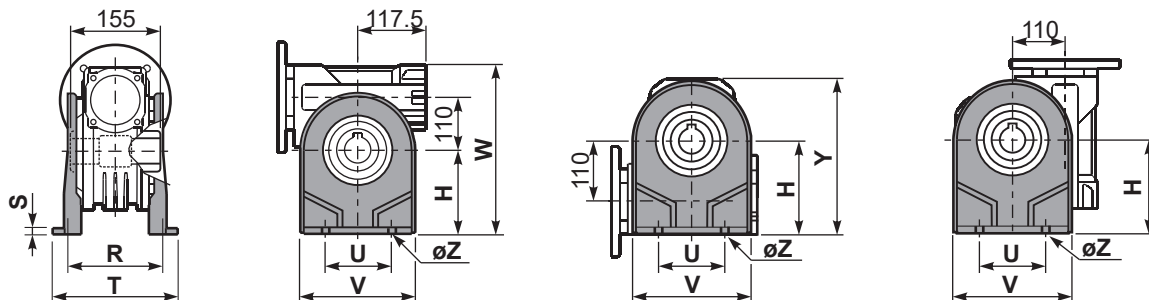
P110PA...

Feet
Piedini

P110PB...

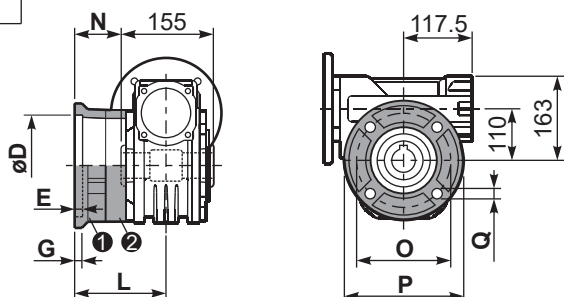
Feet
Piedini

P110PV...

Feet
Piedini

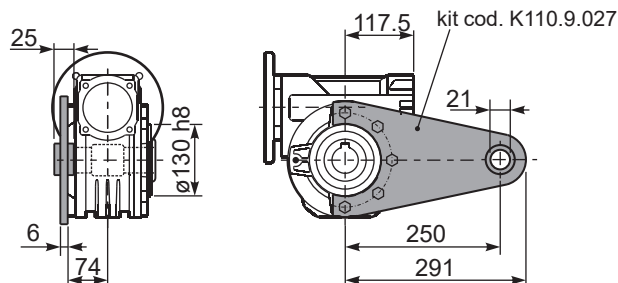
	H	R	S	T	U	V	Y	W	øZ	kit code
type B	170	180	22	224	200	240	286	333	ø13	K110.9.022
type S	-	-	-	-	-	-	-	-	-	-

P110FC...

Output flange
Flangia uscita

type B	øD	E	G	L	N	O	P	Q	kit code
FC	170 ^{+0.083} _{+0.043}	11	16.5	131.5	54	230	270	13	1 K110.9.010 2 -
FL	170 ^{+0.083} _{+0.043}	11	16.5	179.5	102	230	270	13	1 K110.9.011 2 -
type S	øD	E	G	L	N	O	P	Q	kit code
F1	180 ^{+0.040} ₀	5	18	150	72.5	215	250	15	1 KS110.9.014 2 -
F3	180 ^{+0.040} ₀	5	18	130	52.5	215	250	15	1 KS110.9.013 2 -

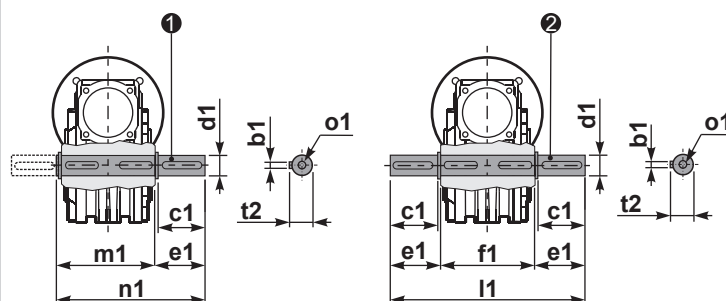
P110BR...

Reaction arm
Braccio di reazione

P110.....S...

Single Shaft
Albero lento semplice

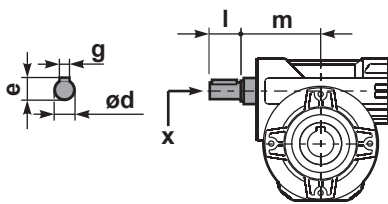
P110.....D...

Double Shaft
Albero lento bisp.

① kit cod. K110.5.028 type B

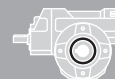
② kit cod. K110.5.029 type B

R110FB...

Input shaft
Albero in entrata

	ød	e	g	l	m	x	kit code
type B	25 h6	28	8	50	131.5	M8x20	1 K085.5.007 PAM90 2 K085.5.008 PAM100
type S	24 h6	27	8	50	131.5	M8x20	1 KS085.5.009 PAM90 2 KS085.5.011 PAM100

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	12	75	42 ^{-0.005} _{-0.020}	96.5	155	348	163.5	260	45	M12x32
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges			Available B14 motor flanges		Dynamic efficiency RD	Tooth Module [mm]	Ratios code 
							-A	-B	-C	-P	-Q			
							56	63	71	63	71			
47	30.1	0.25	38	1.4	0.36	55				C		74	2.2	01
33	43.0	0.25	53	1.0	0.26	55				C		72	2.2	02
23	60.2	0.25	62	0.9	0.22	55				C		60	2.4	03
15.5	90.3	0.12	42	1.3	0.16	55				C		57	1.6	04
11.6	120	0.12	52	1.1	0.13	55				C		53	2.5	05
8.8	159	0.12	64	0.9	0.10	55				C		49	1.8	06
7.1	198	0.12*	55	<0.8	0.09	55				C		47	1.5	07
5.4	258	0.12*	55	<0.8	0.07	55				C		45	1.2	08
4.7	301	0.12*	39	<0.8	0.05	39				C		40	1.0	09
3.2	439	0.12*	39	<0.8	0.04	39				C		36	0.72	10

 **Motor Flanges Available**
Flange Motore Disponibili

 **B) Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

 **C) Motor Flange Holes Position**
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **P45** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P45** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **P45** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P45** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P45** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION P45 Oil

Common lubrication 0.17 l (A + B).



AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

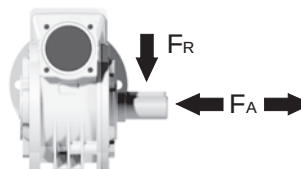
tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

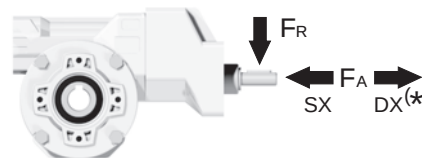
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
75	240	1200
50	260	1400
25	300	1800
15-6	400	2000

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	44	220

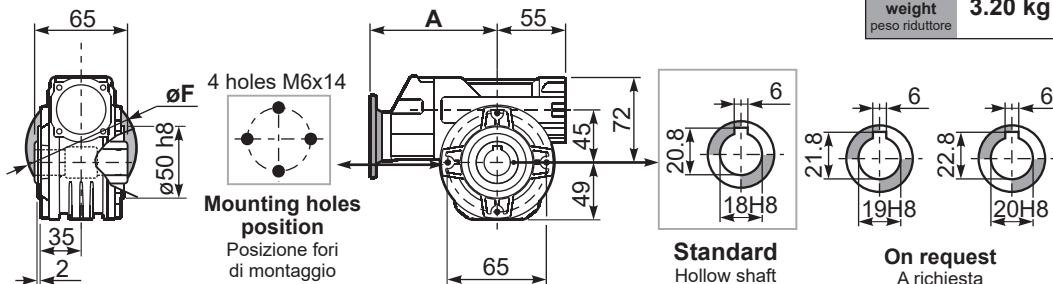
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

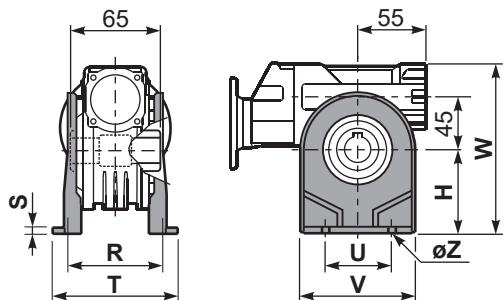
PP45FB...

Basic wormbox
Riduttore baseGearbox
weight
peso riduttore **3.20 kg**

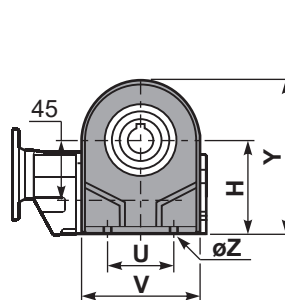
M. flanges	Kit code	øF	A
56B5	K050.4.046	120	137.5
63B5	K050.4.041	138	139.5
71B5	K050.4.042	160	137
63B14	K050.4.047	90	139.5
71B14	K050.4.045	105	137



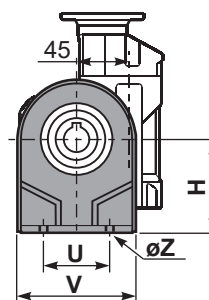
PP45PA...

Feet
Piedini

PP45PB...

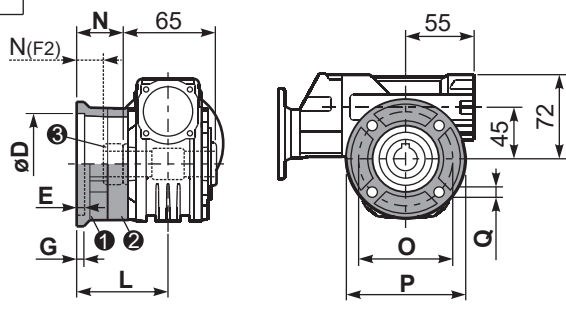
Feet
Piedini

PP45PV...

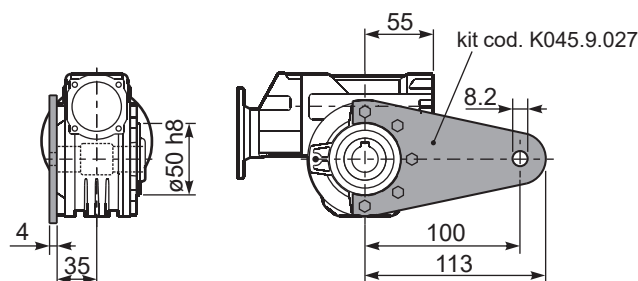
Feet
Piedini

	H	R	S	T	U	V	Y	W	øZ	kit code
type B	72	81	3	100	52	98	121	144	ø10.5	K045.9.022
type S	71	84	8	100	70	90	120	143	ø8	KS045.9.023

PP45FC...

Output flange
Flangia uscita

PP45BR...

Reaction arm
Braccio di reazione

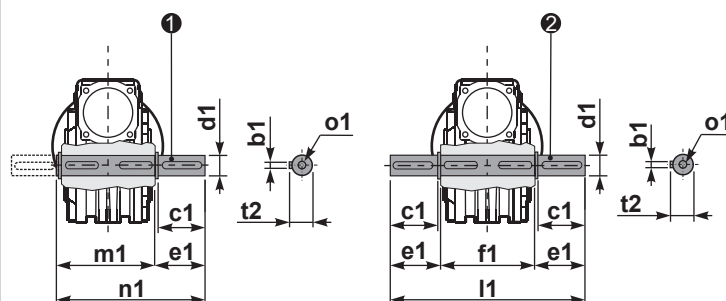
type B	øD	E	G	L	N	O	P	Q	kit code
FC	60 ^{+0.15} _{+0.05}	9	9	60.5	28	87	110	8.5	1 K045.9.010 2 -
FL	60 ^{+0.15} _{+0.05}	9	9	90.5	58	87	110	8.5	1 K045.9.010 2 K045.0.200

type S	øD	E	G	L	N	O	P	Q	kit code
F1	95 ^{+0.20} _{+0.15}	4	11	73.5	41	115	140	9	1 KS045.9.013 2 -
F2	60 ^{+0.15} _{+0.05}	9	9	60.5	19	87	110	8.5	1 KS045.9.010 2 S045.0.204
F3	80 ^{+0.03} _{+0.00}	3	8	51.5	19	100	120	9	1 KS045.9.014 2 -

PP45.....S...

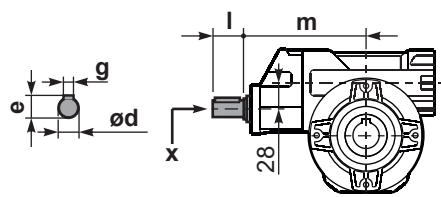
Single Shaft
Albero lento semplice

PP45.....D...

Double Shaft
Albero lento bisp.

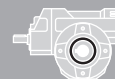
- ① kit cod. K045.5.028 type B
kit cod. KS045.5.030 type S
- ② kit cod. K045.5.029 type B

RP45FB...

Input shaft
Albero in entrata

	ød	e	g	l	m	x
type B	14 h6	16	5	25	131	M5x13
type S	-	-	-	-	-	-

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	6	32	18 ^{-0.005} _{-0.020}	43	65	151	70	113	20.5	M6x18
type S	6	40	19 ^{-0.005} _{-0.020}	58.8	-	-	70	128.5	21.5	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges			Available B14 motor flanges		Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-A	-B	-C	-P	-Q			
							56	63	71	63	71			
47	30.1	0.37	58	1.3	0.49	77				C		76	2.5	01
33	43.0	0.25	55	1.4	0.35	77				C		75	2.4	02
23	60.2	0.25	71	1.1	0.27	77				C		69	2.6	03
18.1	77.4	0.25	81	1.1	0.27	88				C		61	2.0	04
12.5	112	0.18	84	1.1	0.19	88				C		61	2.7	05
9.0	155	0.12	71	1.2	0.15	88				C		56	2.1	06
7.6	185	0.12	74	1.0	0.12	77				C		49	1.8	07
5.4	258	0.12*	77	<0.8	0.09	77				C		47	1.3	08
4.8	292	0.12*	66	<0.8	0.08	66				C		44	1.2	09
4.1	344	0.12*	44	<0.8	0.05	44				C		40	1.0	10
3.3	430	0.12*	44	<0.8	0.04	44				C		36	0.8	11

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **P50** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P50** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **P50** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P50** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P50** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION P50 Oil Common lubrication 0.26 l (A + B).



AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

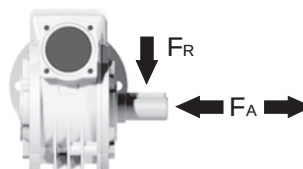
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

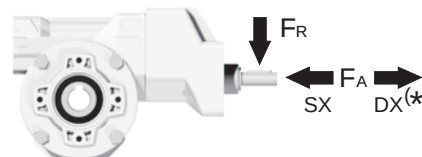
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
75	340	1700
50	380	1900
25	480	2500
15-6	560	2800

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	44	220

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

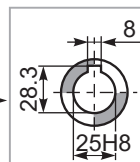
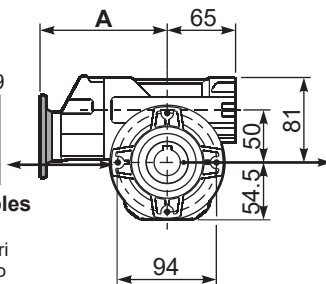
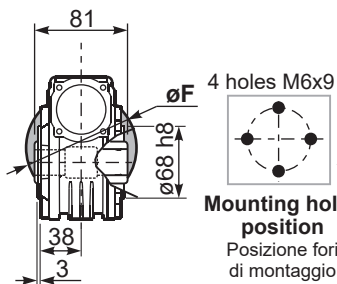
tab. 2

PP50**FB**...

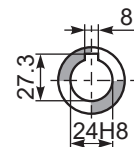
Basic wormbox
Riduttore base

Gearbox weight peso riduttore	3.80 kg
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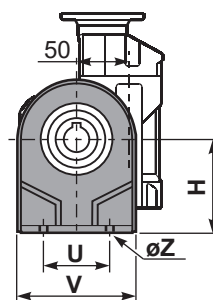
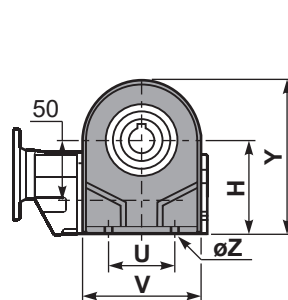
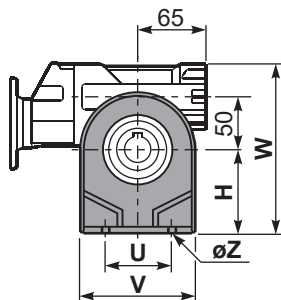
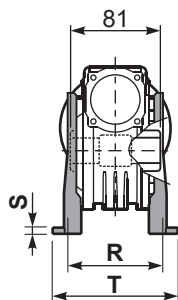
M. flanges	Kit code	øF	A
56B5	K050.4.046	120	142
63B5	K050.4.041	138	144
71B5	K050.4.042	160	141.5
63B14	K050.4.047	90	144
71B14	K050.4.045	105	141.5



Standard
Hollow shaft



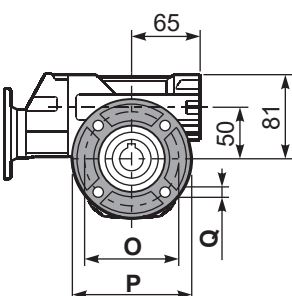
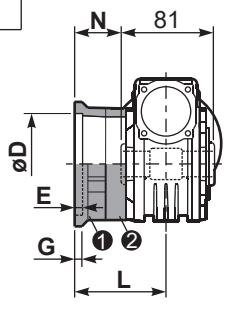
On Request "type S"
A richiesta "tipo S"

PP50**PA**...Feet
Piedini

	H	R	S	T	U	V	Y	W	øZ	kit code
type B	82	98.5	3.5	123	63	113	138.5	163	ø10.5	K050.9.022
type S	85	96	10	114	85	110	139.5	166	ø10	KS050.9.023

PP50**FC**...

Output flange
Flangia uscita

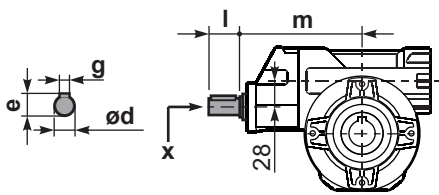


type B	øD	E	G	L	N	O	P	Q	kit code
FC	70 ^{+0.20} _{+0.15}	9	12	85	44.5	90	123	10.5	① K050.9.010 ② -
FL	70 ^{+0.20} _{+0.15}	9	12	114.5	74	90	123	10.5	① K050.9.010 ② K050.0.200

type S	øD	E	G	L	N	O	P	Q	kit code
F1	110 ^{+0.20} _{+0.15}	4	11	83.5	43	130	160	10	① KS050.9.012 ② -
F2	70 ^{+0.20} _{+0.15}	9	12	76.5	36	90	123	10.5	① KS050.9.014 ② -
F3	95 ^{+0.035} ₀	4	10	66.5	26	115	140	10	① KS050.9.013 ② -

RP50FB...

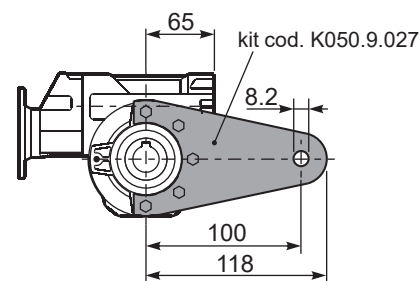
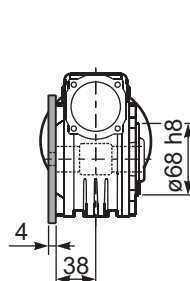
Input shaft
Albero in entrata



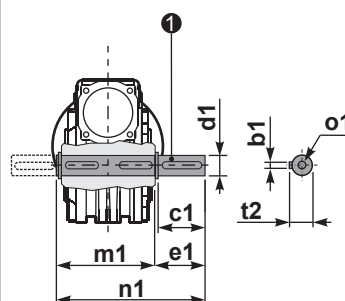
	ød	e	g	l	m	x	
type B	14 h6	16	5	25	135.5	M5x13	C35.5.061
type S	-	-	-	-	-	-	

PP50BR...

Reaction arm
Braccio di reazione

PP50 **S**

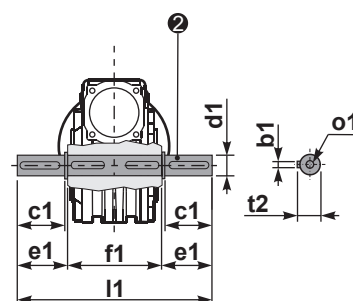
Single Shaft
Albero lento semplice



① kit cod. K050.5.028 type **B**
kit cod. KS050.5.030 type **S**

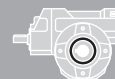
PP50 **D**

Double Shaft
Albero lento bisp.



② kit cod. K050.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	8	52	$25^{+0.005}_{-0.020}$	59.5	81	200	86.5	146	28	M8x20
type S	8	50	$24^{+0.005}_{-0.020}$	68.8	-	-	86.5	155	27	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

	Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges				Dynamic efficiency RD	Tooth Module [mm]	Ratios code
								-B	-C	-D	-E	-P	-Q	-R	-T			
								63	71	80	90	63	71	80	90			
IEC 90 - 80 - 71	47	29.9	0.75	113	1.5	1.1	165						C	C		74	2.6	01
	37	37.7	0.75	141	1.2	0.88	165						C	C		73	2.0	02
	30	47.1	0.75	169	1.1	0.83	187						C	C		70	3.2	03
	25	56.6	0.55	136	1.4	0.76	187						C	C		64	2.7	04
	19.8	70.7	0.55	164	1.1	0.63	187						C	C		62	2.1	05
	15.9	87.8	0.37	162	1.2	0.43	187						C	C		73	2.6	06
	12.6	111.0	0.37	199	0.9	0.35	187						C	C		71	2.0	07
IEC 71 - 63	10.1	139	0.37	234	0.8	0.30	187					C				67	3.2	08
	8.4	166	0.25	173	1.1	0.27	187					C				61	2.7	09
	6.7	208	0.18	151	1.1	0.20	165					C				59	2.1	10
	4.5	310	0.12	129	1.3	0.15	165					C				51	1.5	11
	3.8	370	0.12	145	1.1	0.14	165					C				48	1.3	12
	3.2	434	0.12	149	0.9	0.11	138					C				42	1.1	13

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **P63** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P63** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

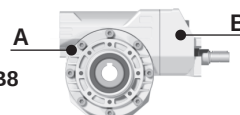
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P63** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P63** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P63** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION P63 Oil

For B3-V5-V6 separate lubrication for A (0.40 l) B (0.08 l) , for B6-B7-B8 common lubrication 0.38 l (A + B).



AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

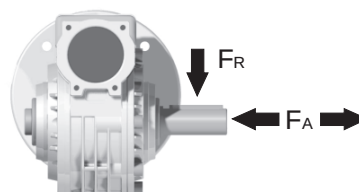
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

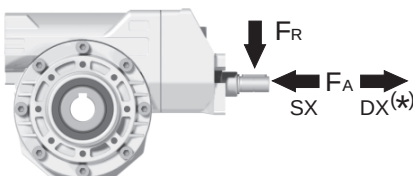
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
75	500	2500
50	600	3000
25	700	3800
15-6	800	4000

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	61	305

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

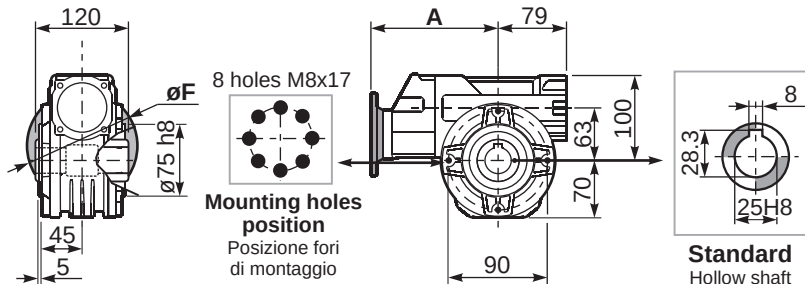
tab. 2

PP63FB...

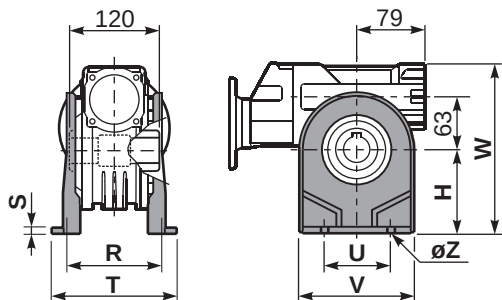
Basic wormbox
Riduttore base

Gearbox weight peso riduttore	29.9-111	139-434
	7.30 Kg	7.80 Kg

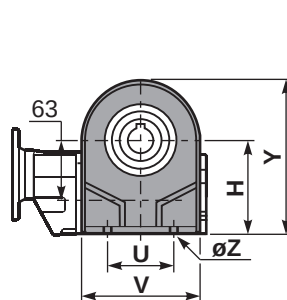
M.flange	Kit code	øF	A
71B5	K063.4.042	160	176.5
80/90B5	K063.4.043	200	178.5
71B14	K063.4.047	105	176.5
80B14	K063.4.046	120	178.5
90B14	K063.4.041	140	178.5
63B5	K050.4.041	138	162.5
71B5	K050.4.042	160	160
63B14	K050.4.047	90	162.5
71B14	K050.4.045	105	160



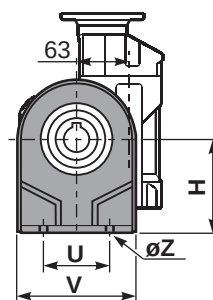
PP63PA...

Feet
Piedini

PP63PB...

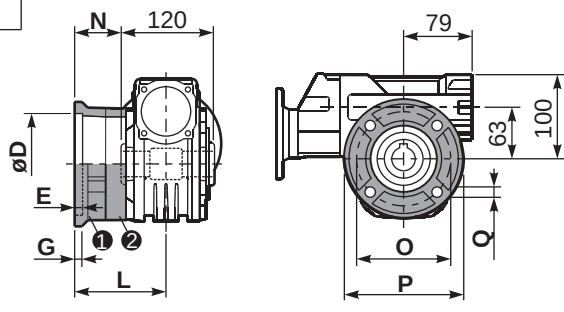
Feet
Piedini

PP63PV...

Feet
Piedini

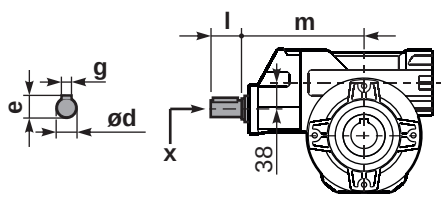
	H	R	S	T	U	V	Y	W	øZ	kit code
type B	100	111	4	144	95	133	170	200	ø10.5	K063.9.022
type S	-	-	-	-	-	-	-	-	-	-

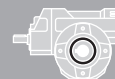
PP63FC...

Output flange
Flangia uscita

type B	øD	E	G	L	N	O	P	Q	kit code
FC	115 ^{+0.20} _{+0.15}	7	13	86	26	150	175	11	1 K063.9.010 2 -
FL	115 ^{+0.20} _{+0.15}	7	13	116	56	150	175	11	1 K063.9.010 2 K063.0.200
type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 ^{+0.20} _{+0.15}	7	13	102	42	165	200	13	1 KS070.9.013 2 -
F2	115 ^{+0.20} _{+0.15}	7	13	116	56	150	175	11	1 KS063.9.013 2 -
F3	110 ^{+0.035} ₀	5	11	82	22	130	160	10	1 KS063.9.011 2 -

RP63FB...

Input shaft
Albero in entrata



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

	Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges				Dynamic efficiency RD	Tooth Module [mm]	Ratios code
								-B	-C	-D	-E	-P	-Q	-R	-T			
								63	71	80	90	63	71	80	90			
IEC 90 - 80 - 71	47	29.9	0.75	113	1.6	1.20	182						C	C		74	2.6	01
	37	37.7	0.75	141	1.3	0.97	182						C	C		73	2.0	02
	30	47.1	0.75	169	1.2	0.91	206						C	C		70	3.2	03
	25	56.6	0.75	185	1.1	0.83	206						C	C		64	2.7	04
	19.8	70.7	0.55	162	1.3	0.70	206						C	C		61	2.1	05
	15.9	87.8	0.37	160	1.4	0.51	218						C	C		72	2.6	06
	12.6	111.0	0.37	196	1.1	0.41	218						C	C		70	2.0	07
IEC 71 - 63	10.1	139	0.37	231	0.9	0.35	218					C				66	3.2	08
	8.4	166	0.25	170	1.3	0.32	218					C				60	2.7	09
	6.7	208	0.25	195	1.0	0.25	194					C				55	2.1	10
	4.5	310	0.18	194	1.0	0.18	194					C				51	1.5	11
	3.8	370	0.18	213	0.9	0.16	194					C				47	1.3	12
	3.2	434	0.18*	143	<0.8	0.11	143					C				42	1.1	13

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit P6A is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo P6A viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

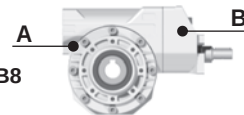
D Für die Lebensdauerschmierung ist das Getriebe der Größe P6A mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type P6A est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño P6A se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION P6A Oil

For B3-V5-V6 separate lubrication for A (0.40 l) B (0.08 l) , for B6-B7-B8 common lubrication 0.38 l (A + B).



AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

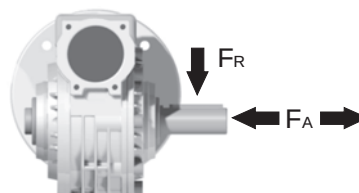
tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

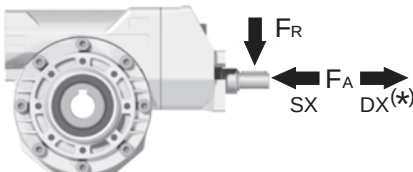
Albero di uscita



n_2 [min ⁻¹]	F_A [N]	F_R [N]
75	500	2500
50	600	3000
25	700	3800
15-6	800	4000

Input shaft

albero in entrata



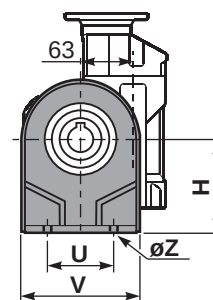
n_1 [min ⁻¹]	F_A [N]	F_R [N]
1400	61	305

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

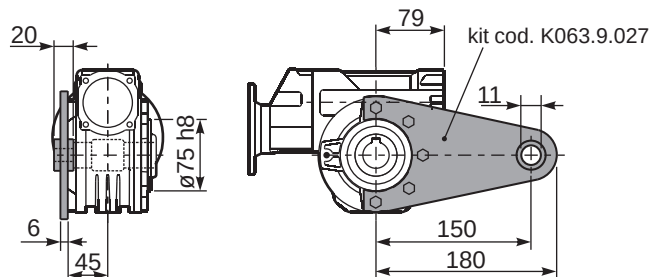
tab. 2

Gearbox weight peso riduttore	29.9÷111 7.30 Kg	139÷434 7.80 Kg
---	--------------------------------------	-------------------------------------

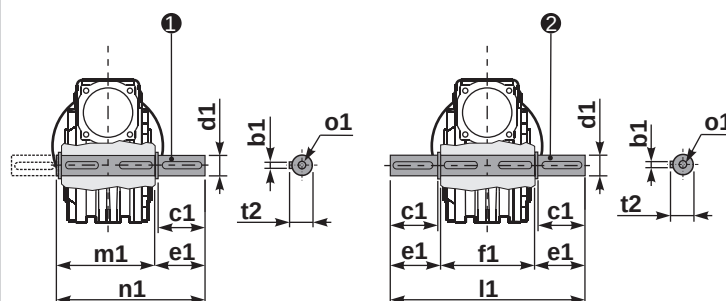
On request
A richiesta

Feet
Piedin[illegible]

Reaction arm
Braccio di reazione

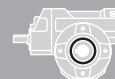


PP6A.....**D**... Double Shaft
Albero lento bisp.



② kit cod. K070.5.029 type B

[illegible]



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code 
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
23.5	59.7	1.1	300	1.4	1.5	418					C	C		67	3.5	01
19.4	72.3	1.1	347	1.2	1.3	407					C	C		64	3.1	02
17.1	81.7	1.1	374	1.1	1.2	418					C	C		61	2.7	03
13.3	105	0.75	323	1.2	0.89	385					C	C		60	2.1	04
8.0	176	0.55	415	1.1	0.58	440	B				C	C		63	3.5	05
6.6	213	0.37	322	1.3	0.47	407	B				C	C		60	3.1	06
5.8	240	0.37	321	1.3	0.48	418	B				C	C		53	2.7	07
4.3	328	0.37	438	1.0	0.35	418	B				C	C		53	2.7	08
3.3	422	0.25	374	1.0	0.26	385	B				C	C		52	2.1	09
3.0	466	0.25	358	0.9	0.23	330	B				C	C		45	1.9	10
2.3	605	0.18	297	1.1	0.20	330	B				C	C		40	1.5	11

 **Motor Flanges Available**
Flange Motore Disponibili

 **B) Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

 **C) Motor Flange Holes Position**
Posizione Fori Flangia Motore

EN Unit **P85** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P85** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **P85** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P85** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P85** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION P85 Oil

For B3-V5-V6 separate lubrication for A (1.20 l) B (0.14 l) , for B6-B7-B8 common lubrication 0.90 l (A + B).



AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

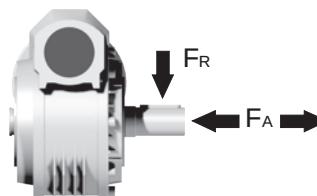
tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

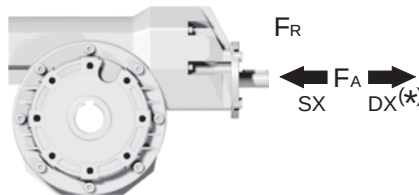
Albero di uscita



n_2 [min ⁻¹]	F_A [N]	F_R [N]
75	700	3500
50	800	4000
25	1000	5000
15-6	1160	5800

Input shaft

albero in entrata



n_1 [min ⁻¹]	F_A [N]	F_R [N]
1400	108	540

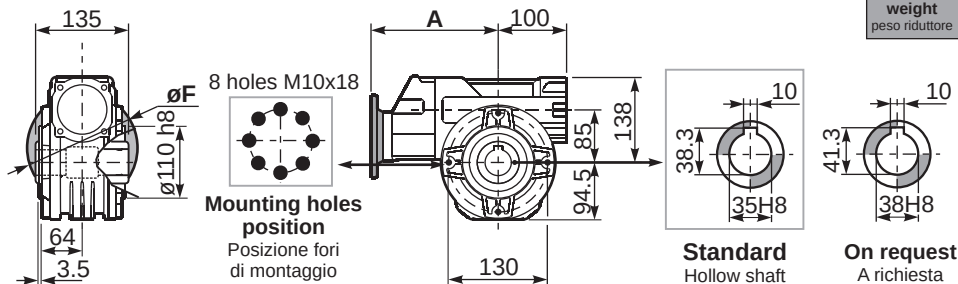
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PP85FB...

Basic wormbox
Riduttore baseGearbox weight
peso riduttore **19.30 kg**

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	195.2
71B5	K063.4.042	160	193.2
80/90B5	K063.4.043	200	195.2
71B14	K063.4.047	105	193.2
80B14	K063.4.046	120	195.2
90B14	K063.4.041	140	195.2



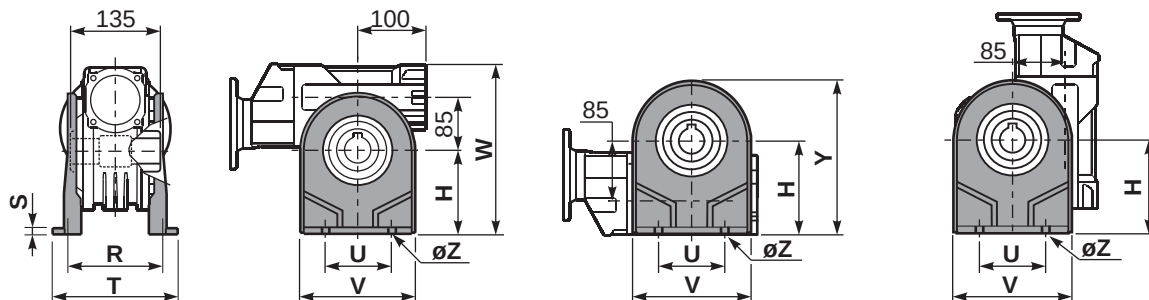
PP85PA...

Feet
Piedini

PP85PB...

Feet
Piedini

PP85PV...

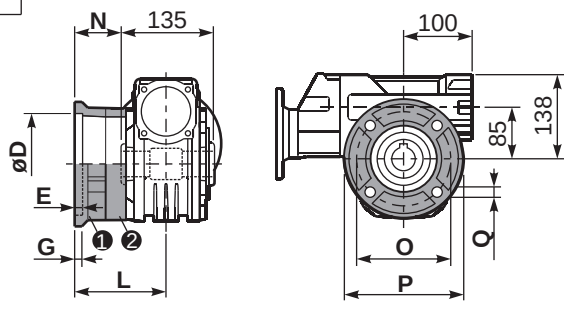
Feet
Piedini

	H	R	S	T	U	V	Y	W	øZ	kit code
type B	142	145	5	182	140	180	236.5	280	ø10.5	K085.9.022
type S	-	-	-	-	-	-	-	-	-	-

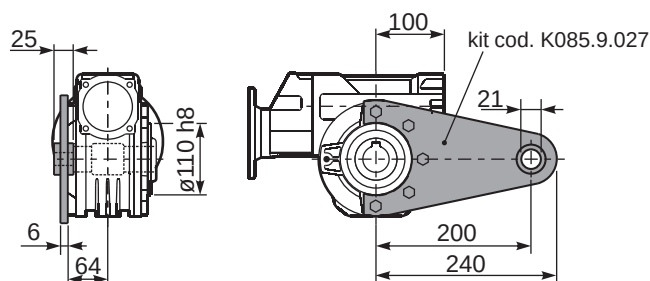
PP85FC...

Output flange
Flangia uscita

PP85BR...

Reaction arm
Braccio di reazione

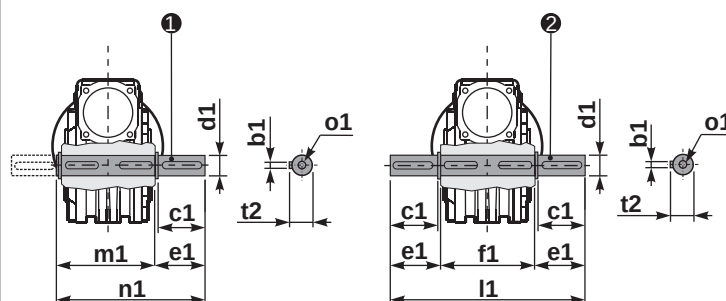
type B	øD	E	G	L	N	O	P	Q	kit code
FC	152 ^{+0.06} _{+0.00}	5	16	108	40.5	176	205	13	① K085.9.010 ② -
FL	152 ^{+0.06} _{+0.00}	5	16	148.5	81	176	205	13	① K085.9.010 ② K085.0.201
type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 ^{+0.04} _{+0.00}	5	13	117.5	50	165	200	11.5	① KS085.9.012 ② -
F2	152 ^{+0.06} _{+0.00}	5	15	147.5	80	180	205	12.5	① KS085.9.013 ② -
F4	130 ^{+0.04} _{+0.00}	5	13	106.5	39	165	200	13	① KS085.9.015 ② -



PP85.....S...

Single Shaft
Albero lento semplice

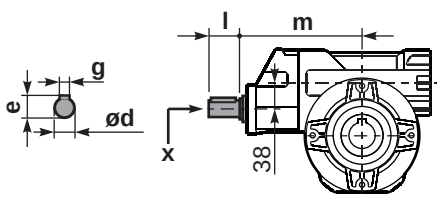
PP85.....D...

Double Shaft
Albero lento bisp.

① kit cod. K085.5.028 type B

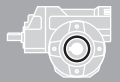
② kit cod. K085.5.029 type B

RP85FB...

Input shaft
Albero in entrata

	ød	e	g	l	m	x	
type B	19 h6	21.5	6	35	187.5	M6x16	C40.5.062
type S	-	-	-	-	-	-	-

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	10	60	35 ^{-0.005} _{-0.020}	73.5	135	282	141	214.5	38	M10x23
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
16.8	83.2	1.5	587	1.1	1.7	660					C	C		69	3.5	01
13.9	100.5	1.5	699	0.8	1.3	594					C	C		68	2.9	02
10.6	132	1.1	634	0.9	0.95	550					C	C		64	2.2	03
8.0	176	0.75	666	1.2	0.90	803	B				C	C		74	4.7	04
6.7	208	0.75	766	0.9	0.65	660	B				C	C		72	4.0	05
5.7	245	0.55	634	1.0	0.57	660	B				C	C		69	3.5	06
4.7	296	0.55	755	0.8	0.43	594	B				C	C		68	2.9	07
4.2	334	0.55	865	0.8	0.42	660	B				C	C		69	3.5	08
3.5	403	0.37	692	0.9	0.32	594	B				C	C		68	2.9	09
2.6	529	0.25	577	1.0	0.24	550	B				C	C		64	2.2	10
2.2	624	0.25	628	0.8	0.21	528	B				C	C		59	1.9	11

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **P10** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. Primary reduction unit is supplied with closed plugs and lubricated for life with synthetic oil. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P10** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. La precoppia è fornita con tappi chiusi e lubrificata a vita con olio sintetico. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **P10** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen. Die Stirnradvorstufe ist Lebensdauer geschmiert und wird mit synthetischem Öl geliefert. Die Stirnradvorstufe ist komplett geschlossen ohne Füllschrauben. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P10** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. Le précouple est fourni lubrifié à vie avec de l'huile synthétique et avec des bouchons fermés. Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño **P10** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6
1.9/0.14 LT	1.35/0.14 LT	1.35/0.14 LT	2.0/0.14 LT	2.0/0.14 LT	2.0/0.14 LT

AGIP Blasias 460

For all details on lubrication and plugs check our website

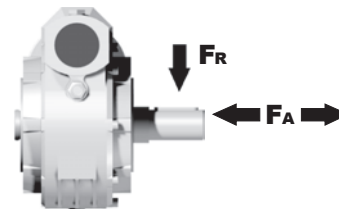
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

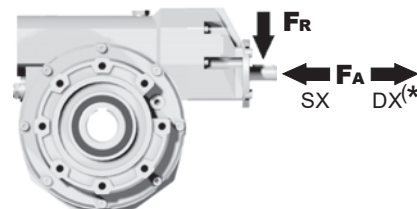
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
75	800	4000
50	920	4600
25	1200	6000
15-6	1400	7000

Input shaft

albero in entrata



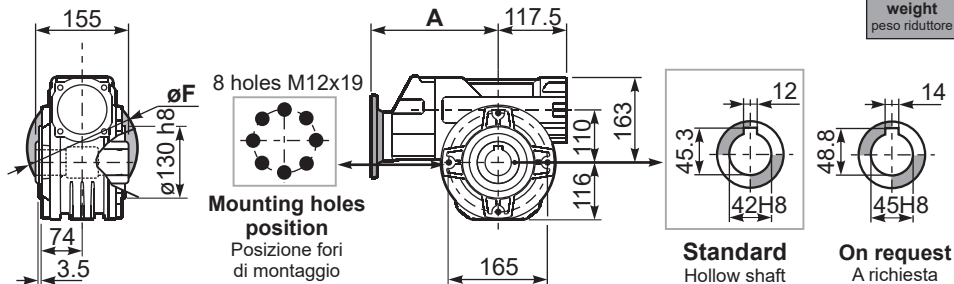
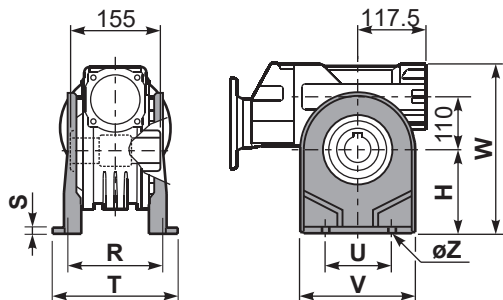
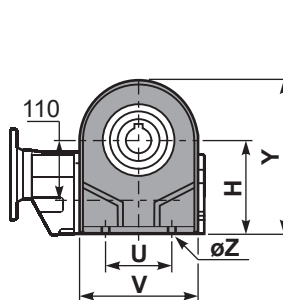
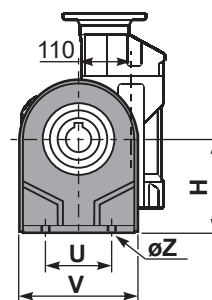
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	150	760

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

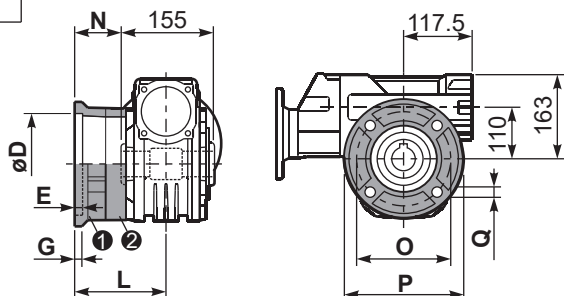
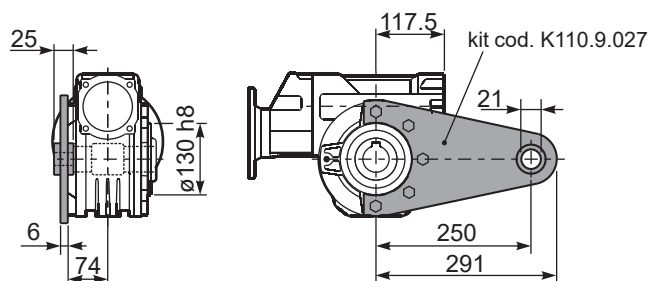
tab. 2

PP10FB...Basic wormbox
Riduttore baseGearbox weight
peso riduttore **41.00 kg**

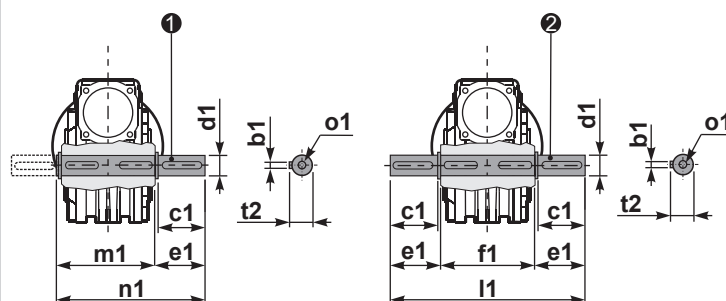
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	214.7
71B5	K063.4.042	160	212.7
80/90B5	K063.4.043	200	214.7
71B14	K063.4.047	105	212.7
80B14	K063.4.046	120	214.7
90B14	K063.4.041	140	214.7

Standard
Hollow shaftOn request
A richiesta**PP10PA...**Feet
Piedini**PP10PB...**Feet
Piedini**PP10PV...**Feet
Piedini

	H	R	S	T	U	V	Y	W	øZ	kit code
type B	170	180	22	224	200	240	286	333	ø13	K110.9.022
type S	-	-	-	-	-	-	-	-	-	-

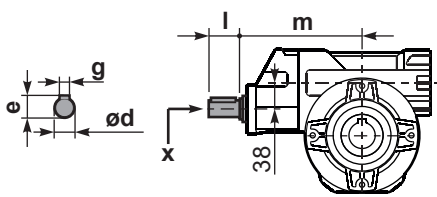
PP10FC...Output flange
Flangia uscita**PP10BR...**Reaction arm
Braccio di reazione

type B	øD	E	G	L	N	O	P	Q	kit code
FC	170 ^{+0.083} _{+0.043}	11	16.5	131.5	54	230	270	13	1 K110.9.010 2 -
FL	170 ^{+0.083} _{+0.043}	11	16.5	179.5	102	230	270	13	1 K110.9.011 2 -
type S	øD	E	G	L	N	O	P	Q	kit code
F1	180 ^{+0.040} ₀	5	18	150	72.5	215	250	15	1 KS110.9.014 2 -
F3	180 ^{+0.040} ₀	5	18	130	52.5	215	250	15	1 KS110.9.013 2 -

PP10.....S...Single Shaft
Albero lento semplice**PP10.....D...**Double Shaft
Albero lento bisp.

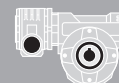
① kit cod. K110.5.028 type B

② kit cod. K110.5.029 type B

RP10FB...Input shaft
Albero in entrata

	ød	e	g	l	m	x	
type B	19 h6	21.5	6	35	205	M6x16	C40.5.062
type S	-	-	-	-	-	-	-

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	12	75	42 ^{-0.005} _{-0.020}	96.5	155	348	163.5	260	45	M12x32
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges		Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-A	-B	-O	-P			
							56	63	56	63			
9.3	150	0.06	29	1.2	0.07	35	B		B-C		48	1.44	01
6.7	210	0.06	39	0.9	0.05	35	B		B-C		45	1.44	02
4.7	300	0.06*	35	<0.8	0.05	35	B		B-C		36	1.44	03
3.1	450	0.06*	35	<0.8	0.03	35	B		B-C		33	1.44	04
2.3	600	0.06*	35	<0.8	0.03	35	B		B-C		30	1.44	05
1.6	900	0.06*	35	<0.8	0.02	35	B		B-C		27	1.44	06
1.2	1200	0.06*	35	<0.8	0.02	35	B		B-C		26	1.44	07
0.8	1830	0.06*	35	<0.8	0.01	35	B		B-C		24	1.44	08
0.6	2400	0.06*	35	<0.8	0.01	35	B		B-C		22	1.44	09

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **303** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **303** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **303** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **303** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **303** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 303 Oil Quantity 0.03/0.03 Lt.



AGIP Telium VSF 320

SHELL Omala S4 WE 320

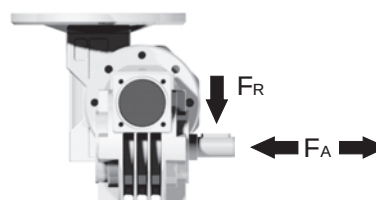
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

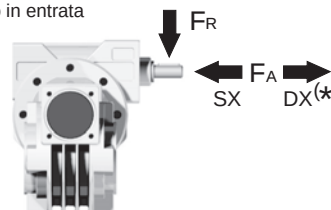
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
25	300	1800
15	400	2000

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	20	100

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

3D dimensions on request

Rightangle - Gear

35Nm

303

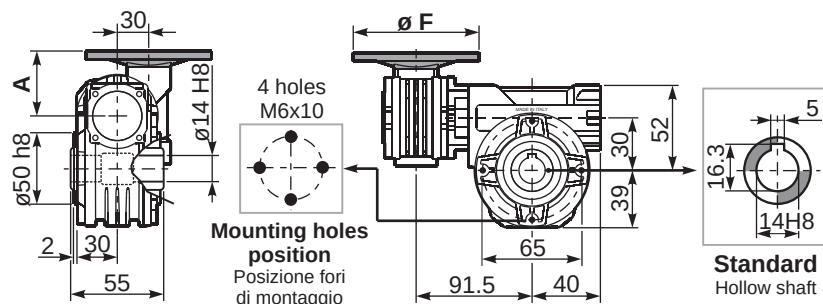
P303FB...

Basic wormbox
Riduttore base

Gearbox
weight
peso riduttore

2.15 kg

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



P303PA...

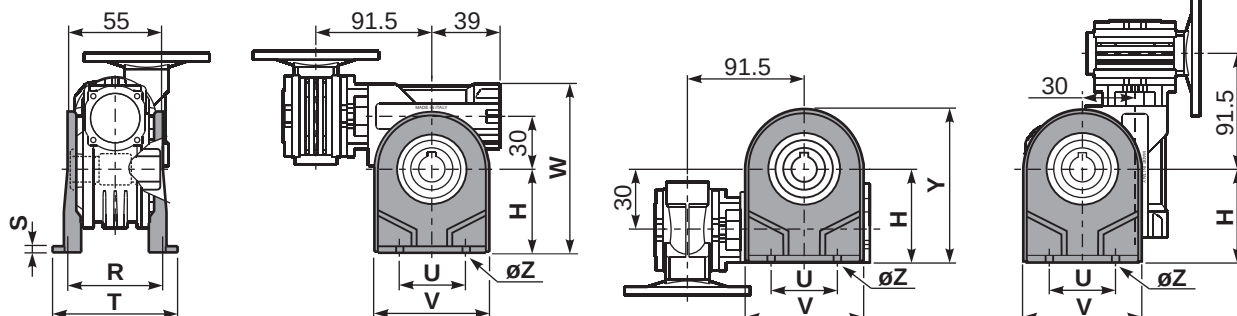
Feet
Piedini

P303PB...

Feet
Piedini

P303PV...

Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type B	55	66	3	87	50	78	94	107	ø6.5	K030.9.022
type S	52	66	3	87	52	90	91	104	ø6.5	KS030.9.023

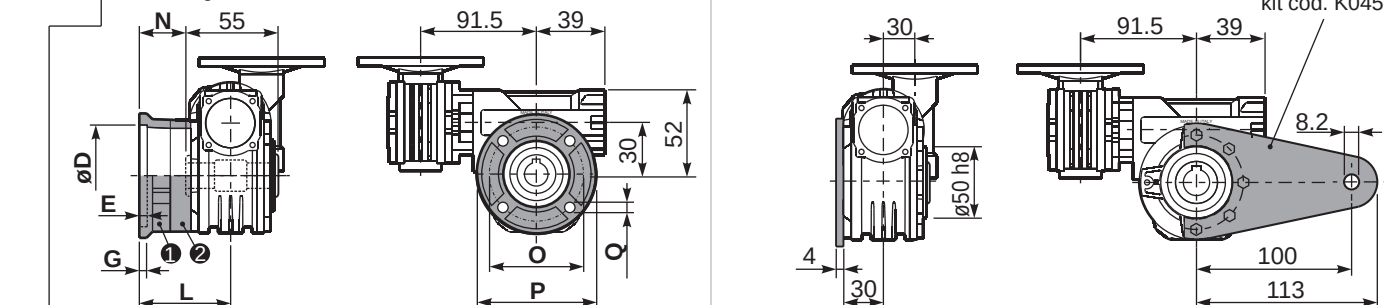
P303FC...

Output flange
Flangia uscita

P303BR...

Reaction arm
Braccio di reazione

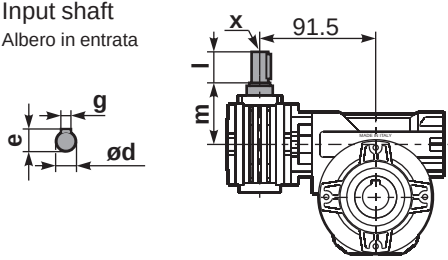
kit cod. K045.9.027



type B	øD	E	G	L	N	O	P	Q	kit code
FC	50 ^{+0.15} _{+0.05}	6	6	50.5	23	68	80	7	1 K030.9.010 2 -
FL	60 ^{+0.15} _{+0.05}	6	6	55.5	28	87	110	8.5	1 K045.9.010 2 -
type S	øD	E	G	L	N	O	P	Q	kit code
F1	40 ^{+0.15} _{+0.10}	3.5	5.5	49	21.5	56	80	6.5	1 KS030.9.012 2 -

R303FB...

Input shaft
Albero in entrata



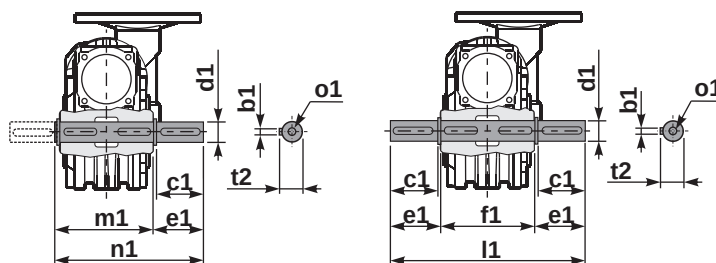
	ød	e	g	l	m	x	kit code
type B	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
type S	-	-	-	-	-	-	-

P303.....S...

Single Shaft
Albero lento semplice

P303.....D...

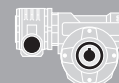
Double Shaft
Albero lento bisp.



1 kit cod. K030.5.028 type B

2 kit cod. K030.5.029 type B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	5	25	14 ^{-0.005} _{-0.020}	35.5	55	126	59	94.5	15.8	M5x14
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges		Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-A	-B	-O	-P			
							56	63	56	63			
10.0	140	0.12	57	1.2	0.14	69	B		B-C		50	2.2	01
7.0	200	0.12	79	0.9	0.11	69	B		B-C		48	2.2	02
5.0	280	0.12*	69	<0.8	0.08	69	B		B-C		45	2.4	03
3.3	420	0.12*	69	<0.8	0.07	69	B		B-C		36	1.6	04
2.5	560	0.12*	69	<0.8	0.05	69	B		B-C		33	2.5	05
1.9	740	0.12*	69	<0.8	0.05	69	B		B-C		30	1.8	06
1.5	920	0.12*	69	<0.8	0.04	69	B		B-C		27	1.5	07
1.3	1120	0.12*	69	<0.8	0.03	69	B		B-C		26	2.5	08
0.9	1480	0.12*	69	<0.8	0.03	69	B		B-C		24	1.8	09
0.8	1840	0.12*	69	<0.8	0.02	69	B		B-C		22	1.5	10
0.6	2400	0.12*	69	<0.8	0.02	69	B		B-C		21	1.2	11

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **453** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **453** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **453** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **453** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **453** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 453 Oil Quantity 0.09/0.03 Lt.



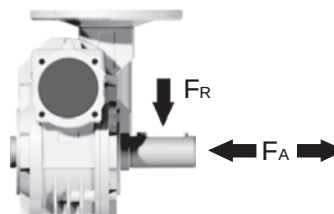
AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

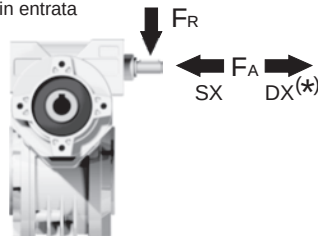
RADIAL AND AXIAL LOADS

Output shaft Albero di uscita



n_2 [min ⁻¹]	F_A [N]	F_R [N]
25	300	1800
15	400	2000

Input shaft albero in entrata



n_1 [min ⁻¹]	F_A [N]	F_R [N]
1400	20	100

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

3D dimensions on request

Rightangle - Gear

69Nm

453

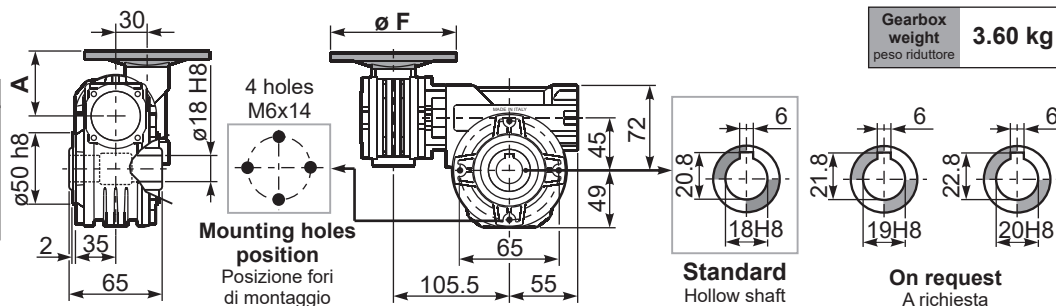
P453FB...

Basic wormbox
Riduttore base

Gearbox weight
peso riduttore

3.60 kg

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



P453PA...

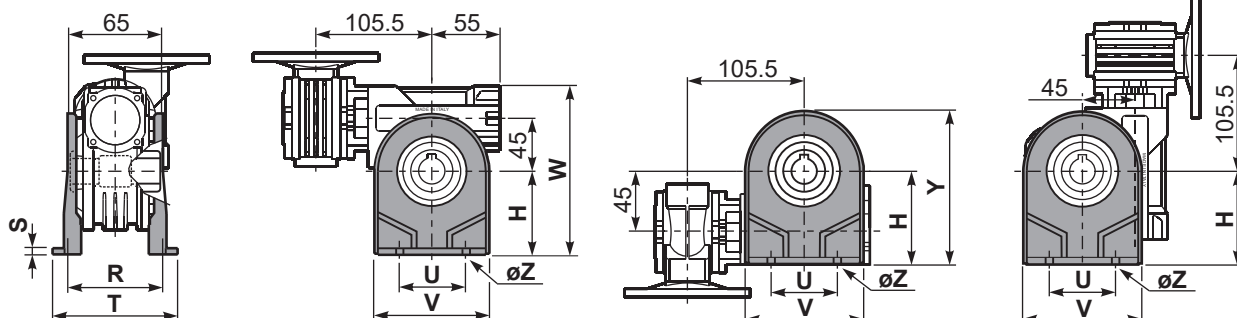
Feet
Piedini

P453PB...

Feet
Piedini

P453PV...

Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type B	72	81	3	100	52	98	121	144	ø10.5	K045.9.022
type S	71	84	8	100	70	90	120	143	ø8	KS045.9.023

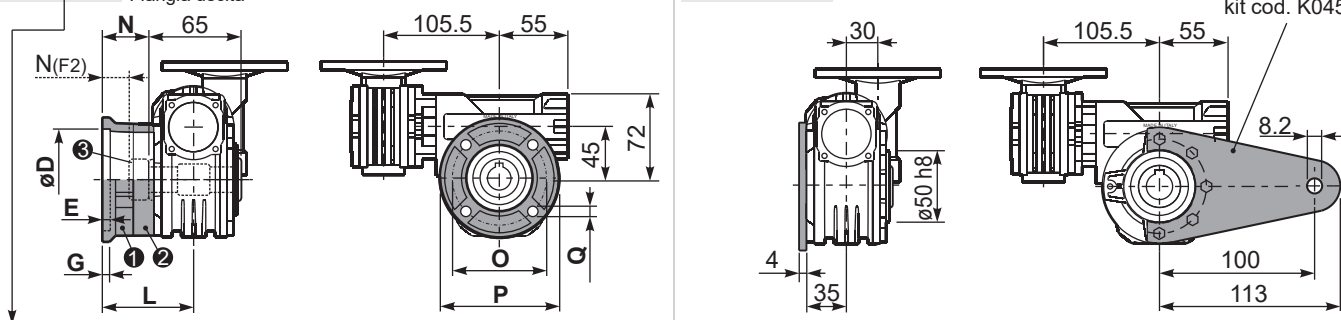
P453FC...

Output flange
Flangia uscita

P453BR...

Reaction arm
Braccio di reazione

kit cod. K045.9.027

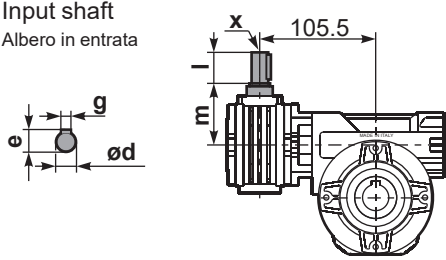


type B	øD	E	G	L	N	O	P	Q	kit code
FC	60 ^{+0.15} _{-0.05}	9	9	60.5	28	87	110	8.5	① K045.9.010 ② -
FL	60 ^{+0.15} _{-0.05}	9	9	90.5	58	87	110	8.5	① K045.9.010 ② K045.0.200

type S	øD	E	G	L	N	O	P	Q	kit code
F1	95 ^{+0.20} _{-0.15}	4	11	73.5	41	115	140	9	① KS045.9.013 ② -
F2	60 ^{+0.15} _{-0.05}	9	9	60.5	19	87	110	8.5	① KS045.9.010 ② S045.0.204
F3	80 ^{+0.030} ₀	3	8	51.5	19	100	120	9	① KS045.9.014 ② -

R453FB...

Input shaft
Albero in entrata



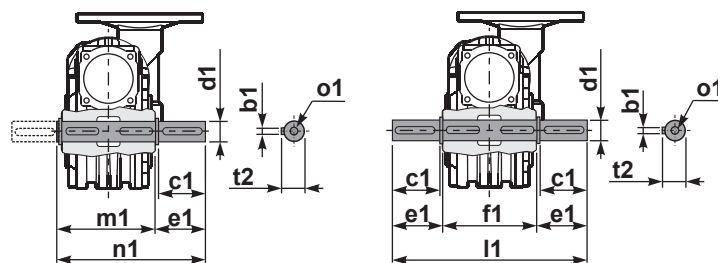
	ød	e	g	l	m	x	kit code
type B	9 h6	10.2	3	20	58	-	① K030.5.006 PAM63 ② -
type S	-	-	-	-	-	-	① - ② -

P453.....S...

Single Shaft
Albero lento semplice

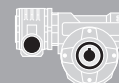
P453.....D...

Double Shaft
Albero lento bisp.



- ① kit cod. K045.5.028 type B
kit cod. KS045.5.030 type S
- ② kit cod. K045.5.029 type B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	6	32	18 ^{-0.005} _{-0.020}	43	65	151	70	113	20.5	M6x18
type S	6	40	19 ^{-0.005} _{-0.020}	58.5	-	-	70	128.5	21.5	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges		Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-A	-B	-O	-P			
							56	63	56	63			
5.6	252	0.12	97	1.1	0.14	109	B		B-C		47	2.1	01
3.9	360	0.12	124	0.9	0.11	109	B		B-C		42	2.1	02
2.6	540	0.12*	109	<0.8	0.08	109	B		B-C		39	2.1	03
1.9	720	0.12*	109	<0.8	0.06	109	B		B-C		36	2.1	04
1.6	860	0.12*	109	<0.8	0.06	109	B		B-C		32	1.8	05
1.2	1200	0.12*	109	<0.8	0.05	109	B		B-C		27	1.3	06
1.0	1440	0.12*	109	<0.8	0.04	109	B		B-C		26	2.1	07
0.8	1720	0.12*	109	<0.8	0.04	109	B		B-C		25	1.8	08
0.6	2400	0.12*	104	<0.8	0.03	104	B		B-C		21	1.3	09

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit 503 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

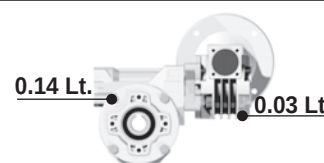
I Il riduttore tipo 503 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe 503 mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type 503 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño 503 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 503 Oil Quantity 0.14/0.03 Lt.



AGIP Telium VSF 320

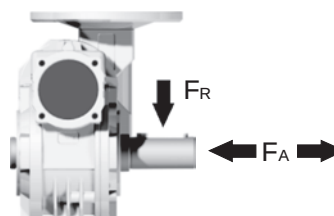
SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

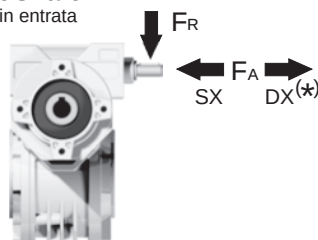
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
25	480	2500
15	560	2800

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	20	100

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

3D dimensions on request

Rightangle - Gear

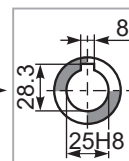
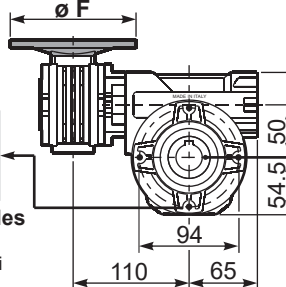
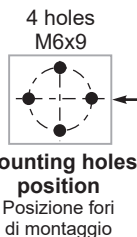
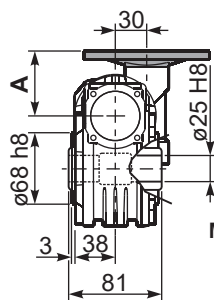
109Nm

503

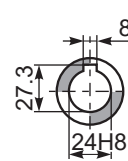
P503FB...

Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



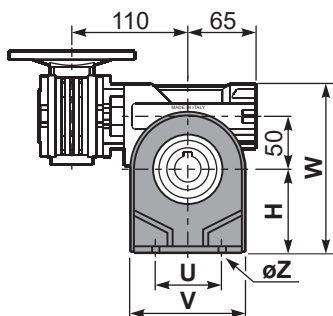
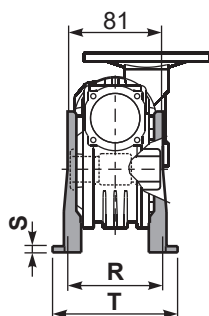
Gearbox weight
peso riduttore 4.20 kg



Standard Hollow shaft On request "type S" A richiesta "tipo S"

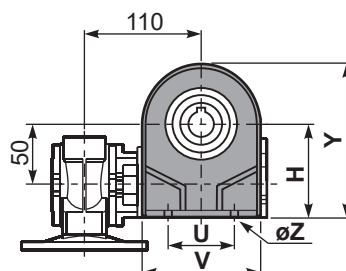
P503PA...

Feet
Piedini



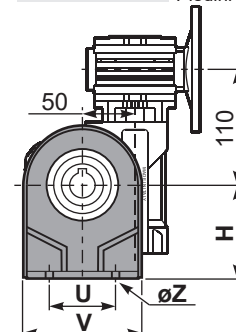
P503PB...

Feet
Piedini



P503PV...

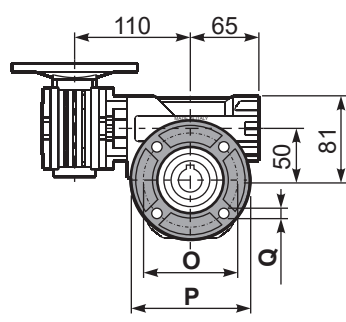
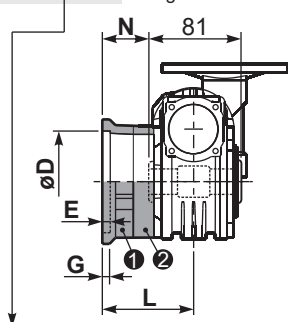
Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type B	82	98.5	3.5	123	63	113	138.5	163	ø10.5	K050.9.022
type S	85	96	10	114	85	110	139.5	166	ø10	KS050.9.023

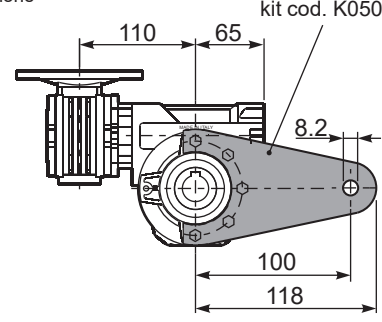
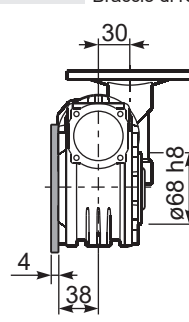
P503FC...

Output flange
Flangia uscita



P503BR...

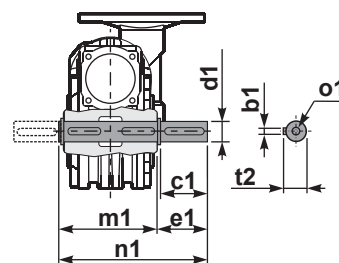
Reaction arm
Braccio di reazione



kit cod. K050.9.027

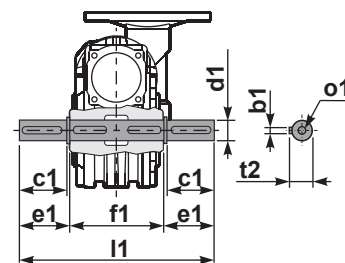
P503.....S...

Single Shaft
Albero lento semplice



P503.....D...

Double Shaft
Albero lento bisp.

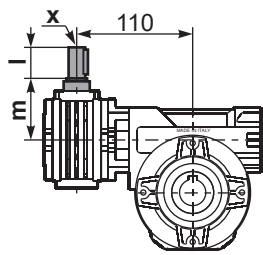
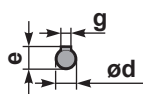


① kit cod. K050.5.028 type B
kit cod. KS050.5.030 type S

② kit cod. K050.5.029 type B

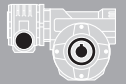
R503FB...

Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type B	9 h6	10.2	3	20	58	-	① K030.5.006 PAM63
type S	-	-	-	-	-	-	② -

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	8	52	25 ^{-0.005} _{-0.020}	59.5	81	200	86.5	146	28	M8x20
type S	8	50	24 ^{-0.005} _{-0.020}	68.5	-	-	86.5	155	27	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges		Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-A	-B	-O	-P			
							56	63	56	63			
5.6	252	0.18	142	1.6	0.29	230	B		B-C		46	2.7	01
3.9	360	0.18	181	1.3	0.23	230	B		B-C		41	2.7	02
2.6	540	0.12	164	1.4	0.17	230	B		B-C		37	2.7	03
1.9	720	0.12	200	1.1	0.14	230	B		B-C		34	2.7	04
1.3	1080	0.12	265	0.9	0.10	230	B		B-C		30	2.7	05
1.0	1440	0.12*	230	<0.8	0.09	230	B		B-C		27	2.7	06
0.5	2745	0.12*	230	<0.8	0.05	230	B		B-C		23	2.1	07

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit 633 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo 633 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe 633 mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type 633 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño 633 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 633 Oil

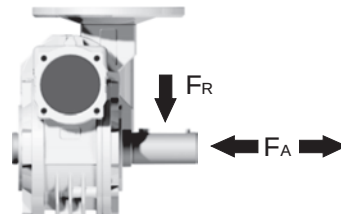
Quantity 0.40/0.03 Lt.

AGIP Telium VSF 320	SHELL Omala S4 WE 320
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For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

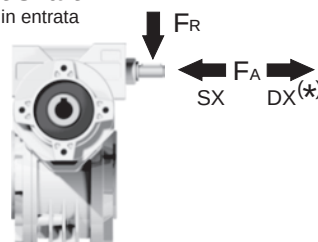
RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft
albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	20	100

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

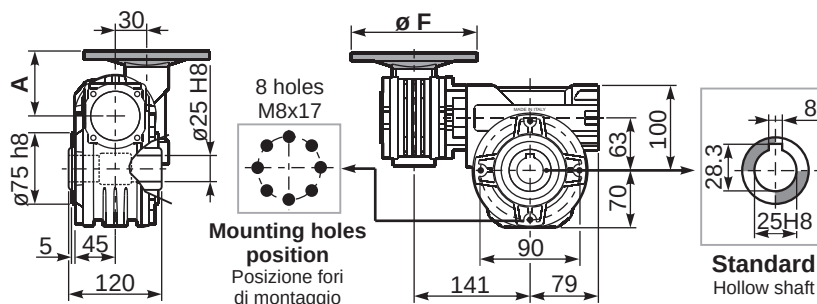
tab. 2

Basic wormbox
Riduttore base

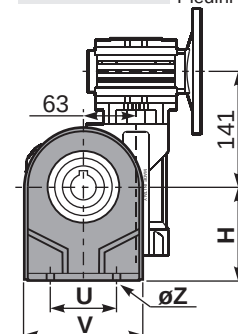
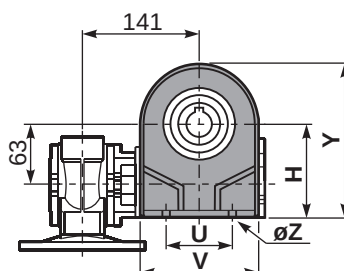
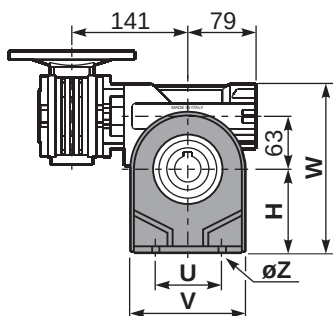
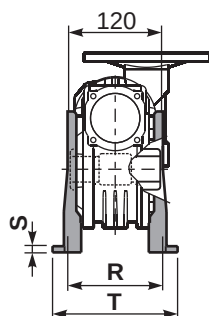
Gearbox weight
peso riduttore

7.50 kg

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



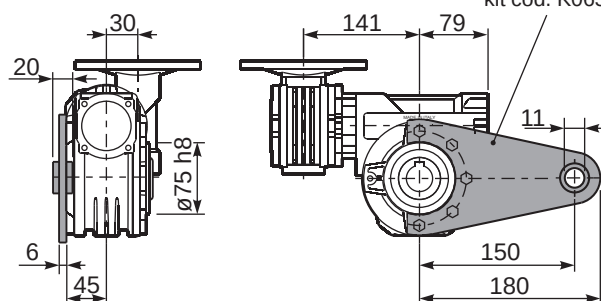
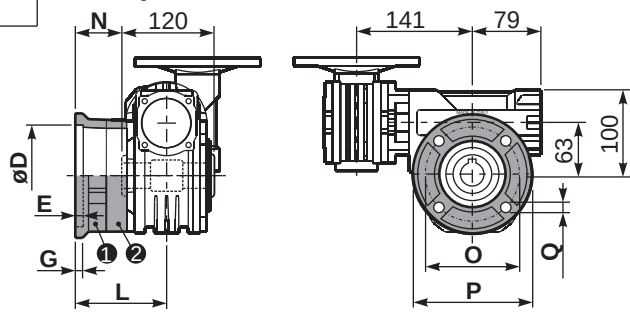
Standard Hollow shaft

Feet
PiediniFeet
PiediniFeet
Piedini[illegible]

Output flange
Flangia uscita

Reaction arm
Braccio di reazione

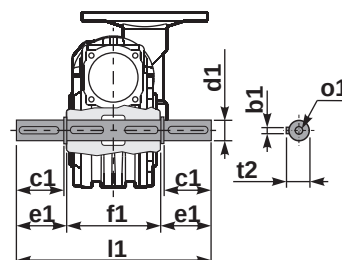
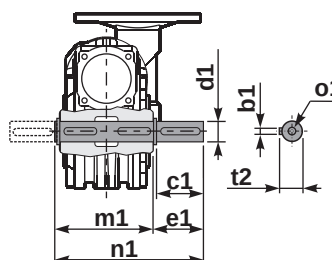
kit cod. K063.9.027



type B	øD	E	G	L	N	O	P	Q	kit code
FC	115 ^{+0.20} _{+0.15}	7	13	86	26	150	175	11	① K063.9.010 ② -
FL	115 ^{+0.20} _{+0.15}	7	13	116	56	150	175	11	① K063.9.010 ② K063.0.200
type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 ^{+0.20} _{+0.15}	7	13	102	42	165	200	13	① KS070.9.013 ② -
F2	115 ^{+0.20} _{+0.15}	7	13	116	56	150	175	11	① KS063.9.013 ② -
F3	110 ^{+0.035} ₀	5	11	82	22	130	160	10	① KS063.9.011 ② -

Single Shaft
Albero lento semplice

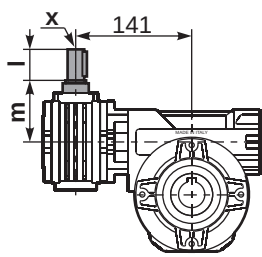
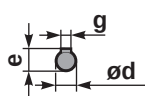
Double Shaft
Albero lento bisp.



① kit cod. K063.5.028 type **B**

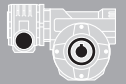
② kit cod. K063.5.029 type **B**

Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type B	9 h6	10.2	3	20	58	-	 K030.5.006 PAM63
type S	-	-	-	-	-	-	 -

[illegible]



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-B	-C	-O	-P	-Q			
							63	71	56	63	71			
5.6	252	0.25	198	1.3	0.33	265	B		B-C	B-C		46	2.7	01
3.9	360	0.18	186	1.4	0.26	265	B		B-C	B-C		42	2.7	02
2.8	504	0.18	241	1.1	0.20	265	B		B-C	B-C		39	2.7	03
1.9	756	0.12	204	1.3	0.16	265	B		B-C	B-C		33	2.7	04
1.4	1008	0.12	256	1.0	0.12	265	B		B-C	B-C		31	2.7	05
1.1	1332	0.12*	265	<0.8	0.10	265	B		B-C	B-C		30	2.7	06
0.8	1656	0.12*	265	<0.8	0.08	265	B		B-C	B-C		28	2.7	07
0.6	2160	0.12*	265	<0.8	0.07	265	B		B-C	B-C		26	2.7	08
0.6	2520	0.12*	265	<0.8	0.06	265	B		B-C	B-C		25	2.7	09

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **634** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **634** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **634** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **634** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **634** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 634 Oil 0.40 Lt.
Quantity 0.40/0.09 Lt.

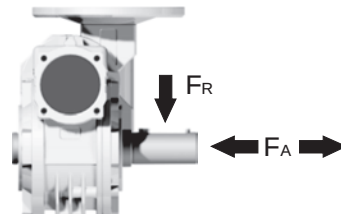
AGIP Telium VSF 320 **SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

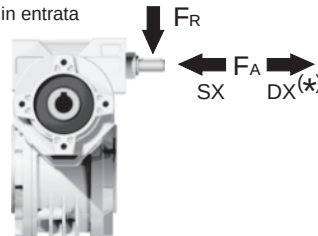
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	42	210

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

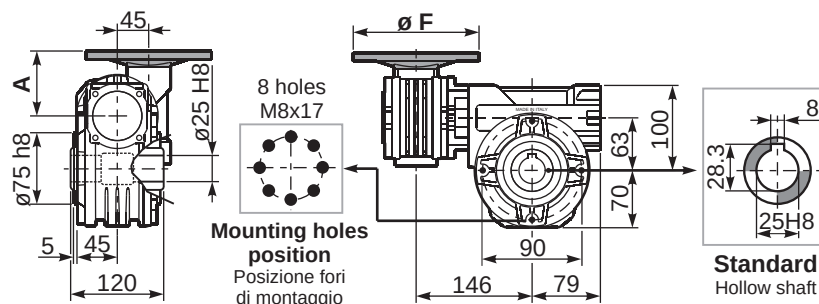
tab. 2

Basic wormbox
Riduttore base

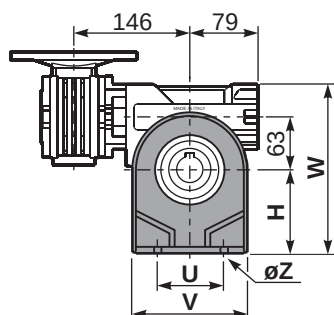
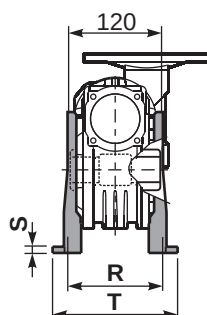
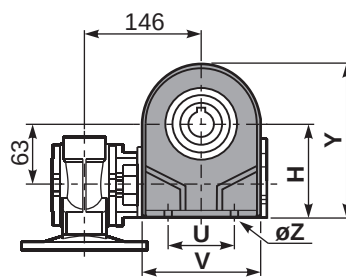
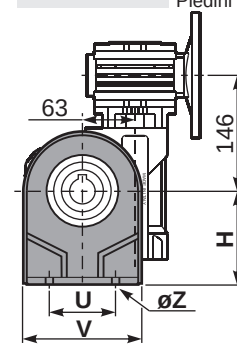
Gearbox weight
peso riduttore

8.90 kg

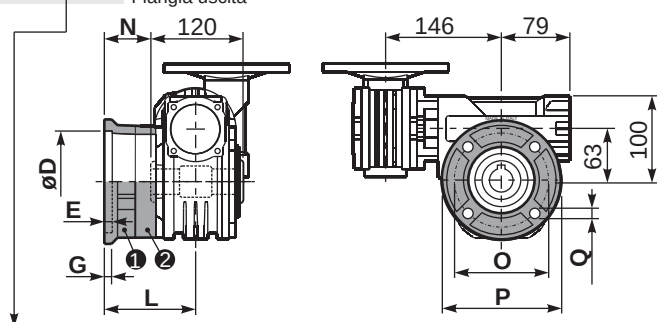
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5



Standard Hollow shaft

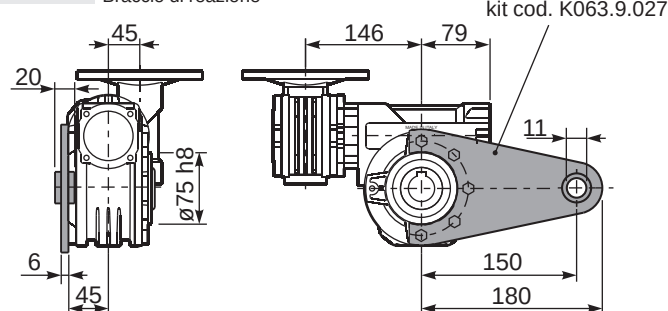
Feet
PiediniFeet
PiediniFeet
Piedini[illegible]

Output flange
Flangia uscita



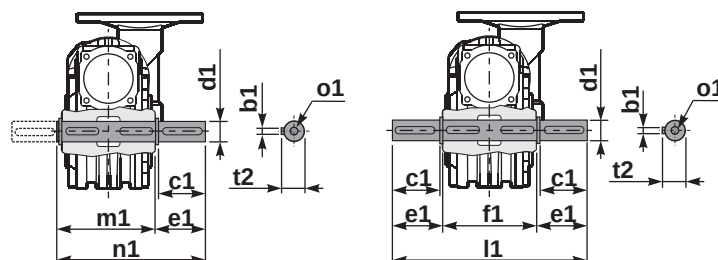
type B	øD	E	G	L	N	O	P	Q	kit code
FC	115 ^{+0.20} _{+0.15}	7	13	86	26	150	175	11	① K063.9.010 ② -
FL	115 ^{+0.20} _{+0.15}	7	13	116	56	150	175	11	① K063.9.010 ② K063.0.200
type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 ^{+0.20} _{+0.15}	7	13	102	42	165	200	13	① KS070.9.013 ② -
F2	115 ^{+0.20} _{+0.15}	7	13	116	56	150	175	11	① KS063.9.013 ② -
F3	110 ^{+0.035} ₀	5	11	82	22	130	160	10	① KS063.9.011 ② -

Reaction arm
Braccio di reazione



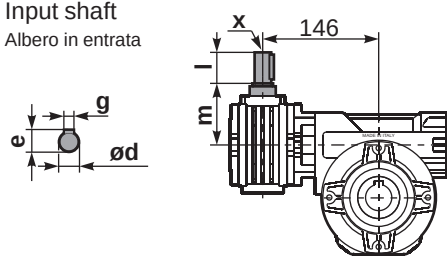
Single Shaft
Albero lento semplice

Double Shaft
Albero lento bisp.



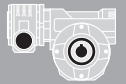
② kit cod. K063.5.029 type **B**

Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type B	11 h6	12.5	4	30	68	-	 K045.5.006 PAM71
type S	-	-	-	-	-	-	 -

[illegible]



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges		Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-A	-B	-O	-P			
							56	63	56	63			
5.6	252	0.18	142	2.0	0.37	290	B		B-C		46	2.7	01
3.9	360	0.18	181	1.6	0.29	290	B		B-C		41	2.7	02
2.6	540	0.18	245	1.2	0.21	290	B		B-C		37	2.7	03
1.9	720	0.12	200	1.4	0.17	290	B		B-C		34	2.7	04
1.3	1080	0.12	265	1.1	0.13	290	B		B-C		30	2.7	05
1.0	1440	0.12	318	0.9	0.11	290	B		B-C		27	2.7	06
0.5	2745	0.12*	242	<0.8	0.06	242	B		B-C		23	2.1	07

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit 6A3 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo 6A3 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe 6A3 mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type 6A3 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño 6A3 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 6A3 Oil 0.40 Lt. 0.03 Lt.

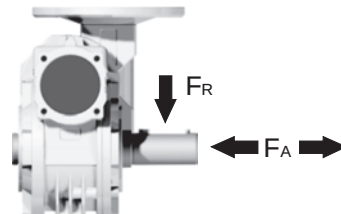
AGIP Telium VSF 320 **SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

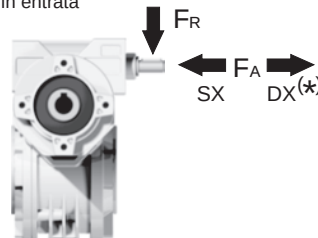
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft

albero in entrata



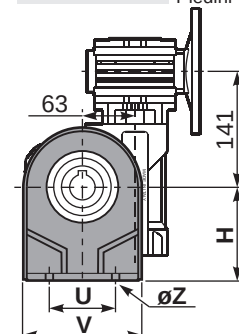
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	20	100

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

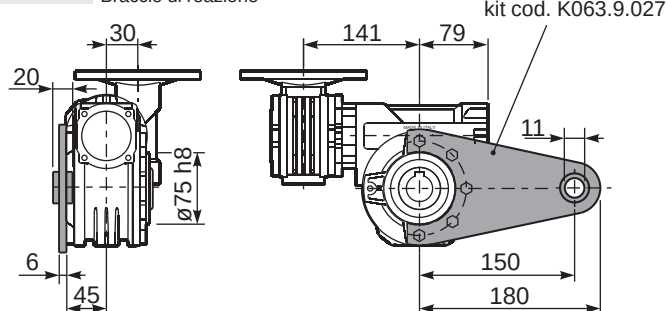
tab. 2

Gearbox weight peso riduttore	8.90 kg
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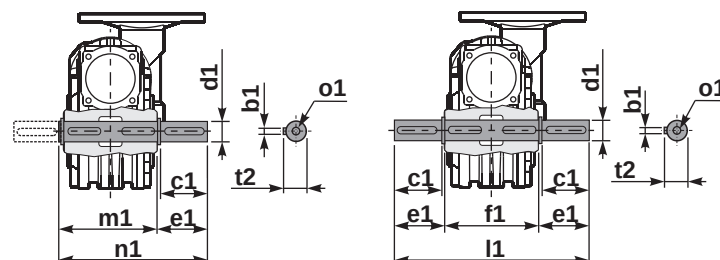
On request
A richiesta

Feet
Piedini

Reaction arm
Braccio di reazione



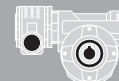
P6A3.....**D**... Double Shaft
Albero lento bisp.



② kit cod. K070.5.029 type B

Technical drawing of the motor assembly showing dimensions: X, 141, l, and m.

[illegible]



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-B	-C	-O	-P	-Q			
							63	71	56	63	71			
5.6	252	0.25	198	1.5	0.38	304	B		B-C	B-C		46	2.7	01
3.9	360	0.25	258	1.2	0.29	304	B		B-C	B-C		42	2.7	02
2.8	504	0.18	241	1.3	0.23	304	B		B-C	B-C		39	2.7	03
1.9	756	0.12	204	1.5	0.18	304	B		B-C	B-C		33	2.7	04
1.4	1008	0.12	256	1.2	0.14	304	B		B-C	B-C		31	2.7	05
1.1	1332	0.12	327	0.9	0.11	304	B		B-C	B-C		30	2.7	06
0.8	1656	0.12*	304	<0.8	0.10	304	B		B-C	B-C		28	2.7	07
0.6	2160	0.12*	304	<0.8	0.08	304	B		B-C	B-C		26	2.7	08
0.6	2520	0.12*	304	<0.8	0.07	304	B		B-C	B-C		25	2.7	09

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **6A4** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **6A4** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

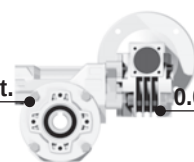
D Für die Lebensdauerschmierung ist das Getriebe der Größe **6A4** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **6A4** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **6A4** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 6A4 Oil Quantity 0.40/0.09 Lt.

0.40 Lt.



0.09 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

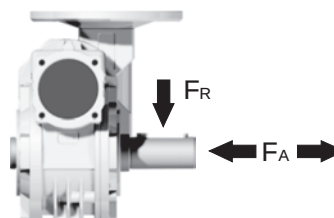
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

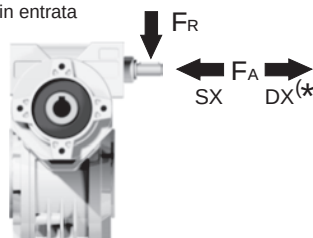
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	42	210

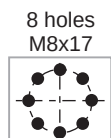
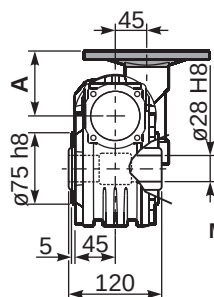
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

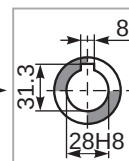
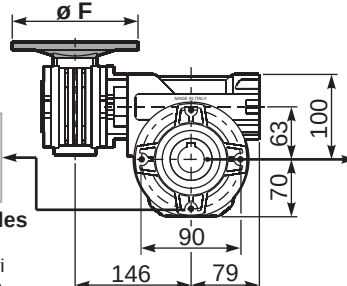
Basic wormbox
Riduttore base

8.90 kg

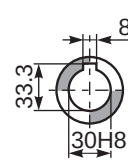
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5



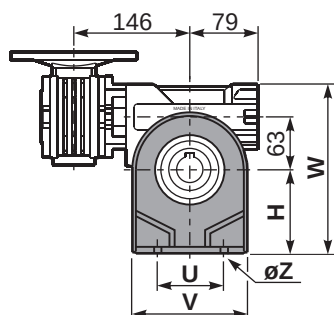
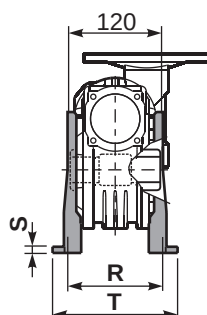
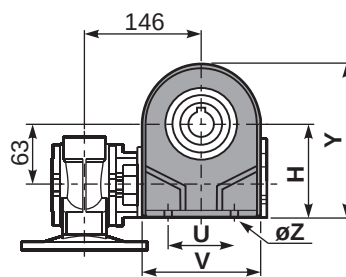
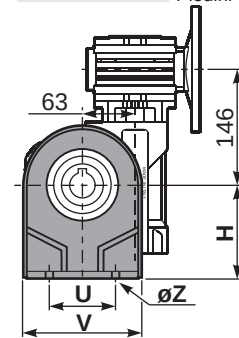
**Mounting holes
position**
Posizione fori
di montaggio



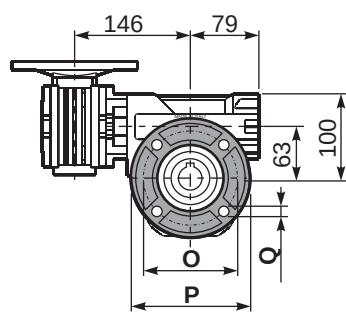
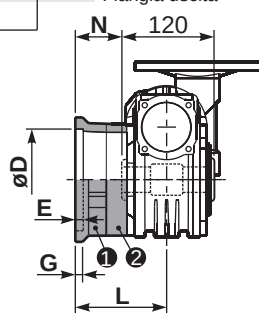
Standard



On request
A richiesta

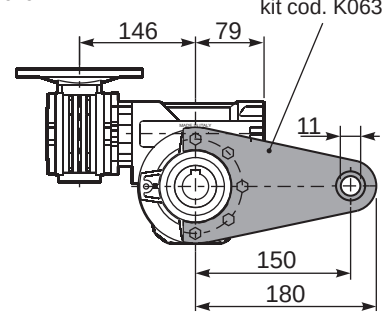
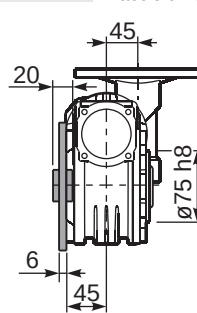
Feet
Piedini[illegible]Feet
PiediniFeet
Piedini

Output flange
Flangia uscita



type B	øD	E	G	L	N	O	P	Q	kit code
FC	130 ^{+0.20} _{+0.15}	7	13	85	25	165	200	13	① K070.9.010 ② -
FL	130 ^{+0.20} _{+0.15}	7	13	111	51	165	200	13	① K070.9.010 ② K070.0.200
type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 ^{+0.20} _{+0.15}	7	13	111	51	165	200	13	① KS070.9.014 ② -
F2	115 ^{+0.20} _{+0.15}	7	13	116	56	150	175	11	① KS063.9.013 ② -
F3	110 ^{+0.035} ₀	5	13.5	84.5	24.5	130	160	11	① KS070.9.011 ② -

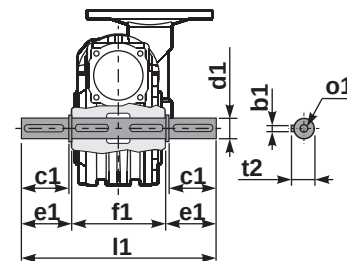
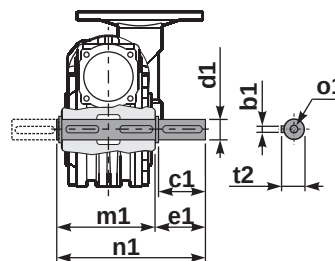
Reaction arm
Braccio di reazione



kit cod. K063.9.027

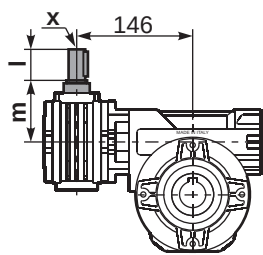
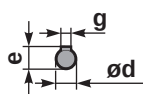
Single Shaft
Albero lento semplice

- Double Shaft
- Albero lento bisp.



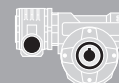
② kit cod. K070.5.029 type B

Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type B	11 h6	12.5	4	30	68	-	① K045.5.006 PAM71 ② -
type S	-	-	-	-	-	-	① - ② -

[illegible]



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-B	-C	-O	-P	-Q			
							63	71	56	63	71			
10	140	0.37	205	1.8	0.66	368	B		B-C	B-C		58	4.5	01
7.1	196	0.37	257	1.4	0.53	368	B		B-C	B-C		52	4.7	02
5.0	280	0.37	332	1.6	0.58	518	B		B-C	B-C		47	4.7	03
3.6	392	0.37	435	1.2	0.44	518	B		B-C	B-C		44	4.7	04
2.4	588	0.25	371	1.4	0.35	518	B		B-C	B-C		37	4.7	05
1.8	784	0.25	455	1.1	0.28	518	B		B-C	B-C		34	4.7	06
1.4	1036	0.18	420	1.2	0.22	518	B		B-C	B-C		33	4.7	07
1.1	1288	0.18	474	1.1	0.20	518	B		B-C	B-C		30	4.7	08
0.7	1960	0.12	449	1.2	0.14	518	B		B-C	B-C		28	4.7	09
0.5	2856	0.12	584	0.9	0.11	518	B		B-C	B-C		25	4.7	10

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **854** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **854** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **854** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **854** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **854** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

■ LUBRICATION 854 Oil

Quantity 1.2/0.09 Lt.

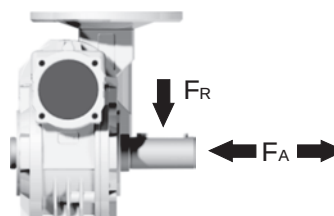
AGIP Telium VSF 320	SHELL Omala S4 WE 320
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For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

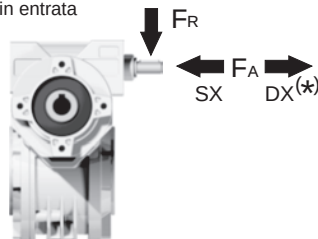
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
25	1000	5000
15	1160	5800

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	42	210

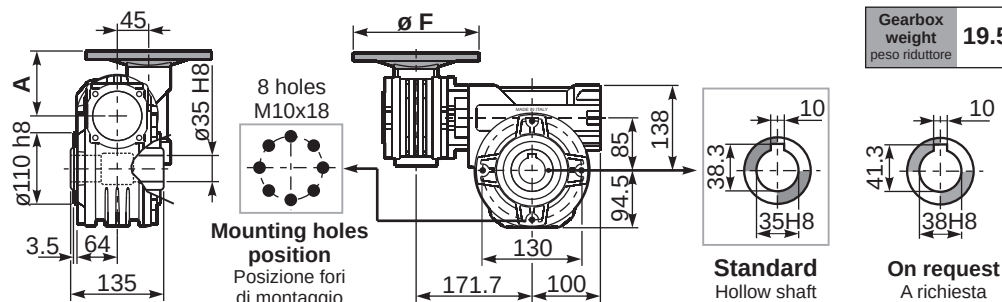
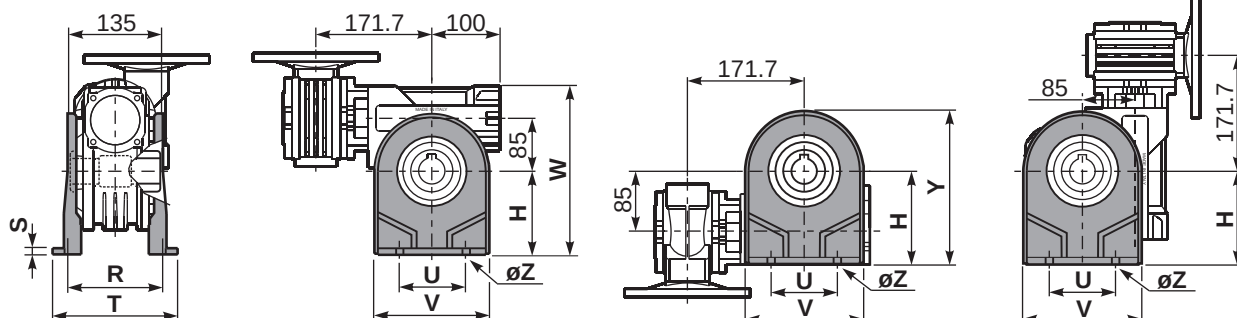
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

Basic wormbox
Riduttore base

Gearbox weight	19.50 kg
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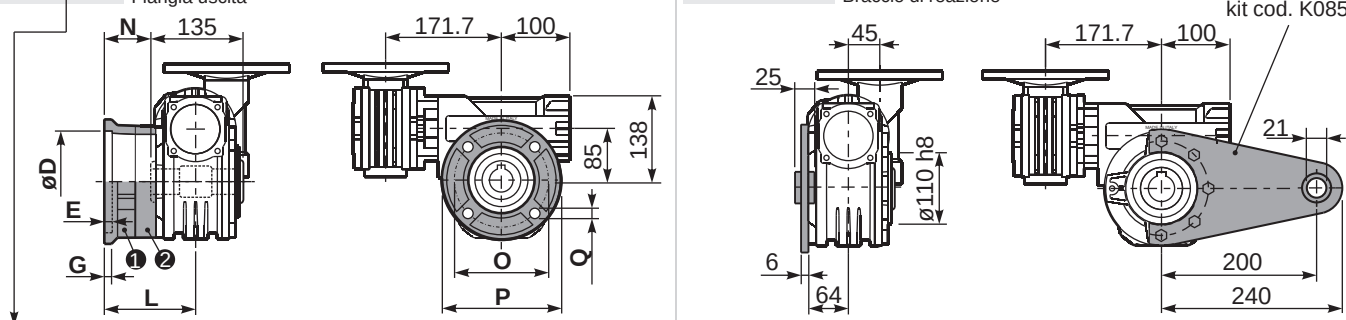
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5

Feet
PiediniFeet
PiediniFeet
Piedini[illegible]

Output flange
Flangia uscita

Reaction arm
Braccio di reazione

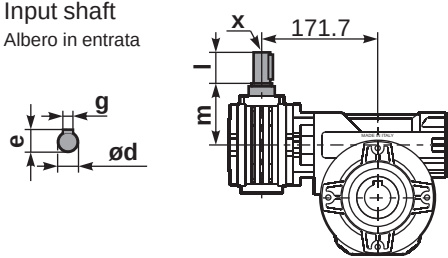
kit cod. K085.9.027



type B	øD	E	G	L	N	O	P	Q	kit code
FC	152 ^{+0.06} _{+0.00}	5	16	108	40.5	176	205	13	① K085.9.010 ② -
FL	152 ^{+0.06} _{+0.00}	5	16	148.5	81	176	205	13	① K085.9.010 ② K085.0.201

type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 ^{+0.040} ₀	5	13	117.5	50	165	200	11.5	① KS085.9.012 ② -
F2	152 ^{+0.06} ₀	5	15	147.5	80	180	205	12.5	① KS085.9.013 ② -
F4	130 ^{+0.040} ₀	5	13	106.5	39	165	200	13	① KS085.9.015 ② -

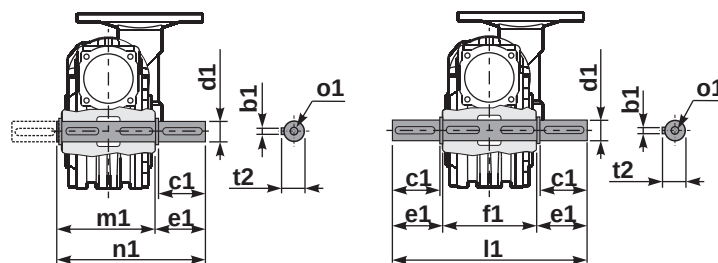
Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type B	11 h6	12.5	4	30	68	-	 K045.5.006 PAM71
type S	-	-	-	-	-	-	 -

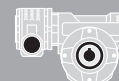
Single Shaft

P854.....**D**... Double Shaft
Albero lento bisp.



② kit cod. K085.5.029 type B

[illegible]



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges			Available B14 motor flanges				Dynamic efficiency RD	Tooth Module [mm]	Ratios code 
							-B	-C	-D	-O	-P	-Q	-R			
							63	71	80	56	63	71	80			
6.7	210	0.75	591	1.5	1.1	863	B	B			B-C	B		55	5.6	01
4.7	300	0.75	752	1.3	0.97	978	B	B			B-C	B		49	5.6	02
3.3	420	0.55	741	1.3	0.73	978	B	B			B-C	B		47	5.6	03
2.6	540	0.55	851	1.1	0.63	978	B	B			B-C	B		42	5.6	04
1.8	780	0.37	748	1.3	0.48	978	B	B			B-C	B		38	5.6	05
1.3	1080	0.37	1009	1.0	0.36	978	B			B-C	B-C			37	5.6	06
1.1	1290	0.25	770	1.3	0.32	978	B			B-C	B-C			35	5.6	07
0.8	1800	0.25	921	1.1	0.27	978	B			B-C	B-C			30	5.6	08
0.7	2040	0.18	751	1.3	0.23	978	B			B-C	B-C			30	5.6	09
0.6	2400	0.18	825	1.2	0.21	978	B			B-C	B-C			28	5.6	10
0.5	3000	0.18	958	1.0	0.18	978	B			B-C	B-C			26	5.6	11

 **Motor Flanges Available**
Flange Motore Disponibili

 **B) Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

 **C) Motor Flange Holes Position**
Posizione Fori Flangia Motore

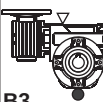
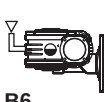
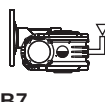
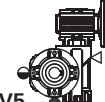
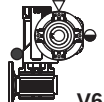
EN Unit **115** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a type that are closed. Gearbox **050** is supplied lubricated for life. See tab.1 for oils and recommended quantity. In tab.2 there are radial loads and axial loads applicable to the gearbox.

I Il riduttore tipo **115** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. Il riduttore **050** è fornito lubrificato a vita con olio sintetico. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **115** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen. Das Getriebe der Baugröße **050** ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **115** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. Le réducteur de type **050** est fourni lubrifié à vie avec de l'huile synthétique. Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño **115** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. El reductor **050** se suministra lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

					
B3	B6	B7	B8	V5	V6
1.9/0.14 LT	1.35/0.14 LT	1.35/0.14 LT	2.0/0.14 LT	2.0/0.14 LT	2.0/0.14 LT

AGIP Blasias 460

For all details on lubrication and plugs check our website

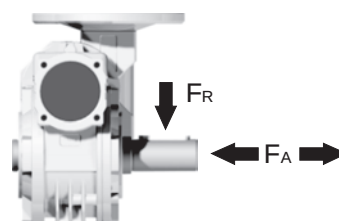
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

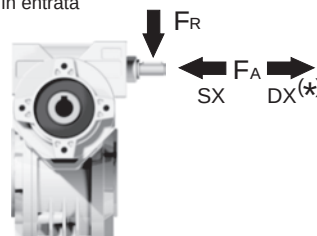
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
25	1200	6000
15	1400	7000

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	76	380

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

3D dimensions on request

Rightangle - Gear

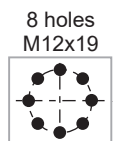
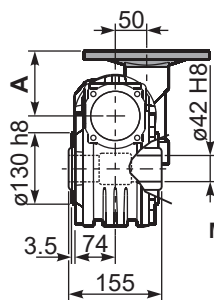
978Nm

115

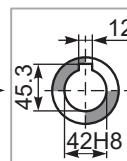
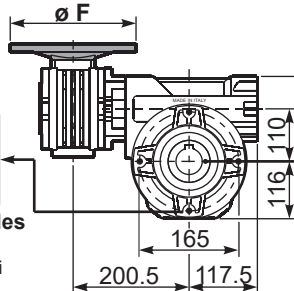
P115FB...

Basic wormbox
Riduttore base

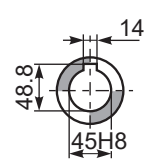
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	78.5
71B5	K050.4.042	160	76
80B5	K050.4.043	200	76.5
56B14	KC40.4.049	80	76
63B14	K050.4.047	90	78.5
71B14	K050.4.045	105	76
80B14	K050.4.046	120	76.5



Mounting holes
position
Posizione fori
di montaggio



Standard
Hollow shaft

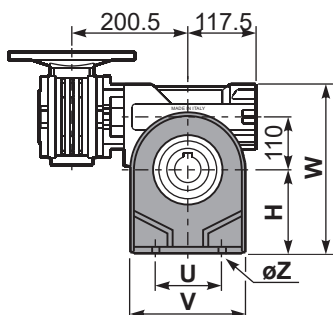
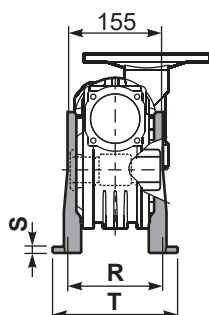


On request
A richiesta

Gearbox weight
peso riduttore 38.00 kg

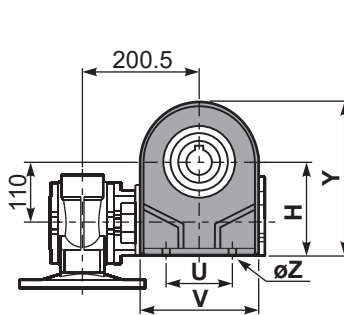
P115PA...

Feet
Piedini



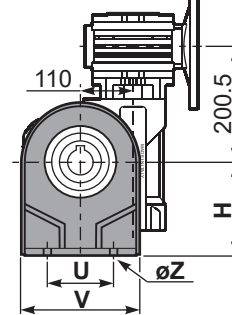
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Feet
Piedini



P115PV...

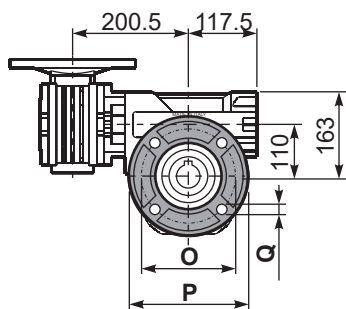
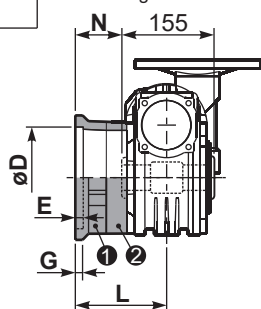
Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type B	170	180	22	224	200	240	286	333	ø13	K110.9.022
type S	-	-	-	-	-	-	-	-	-	-

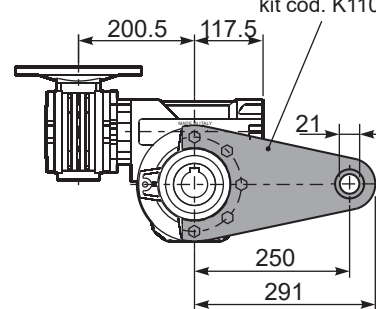
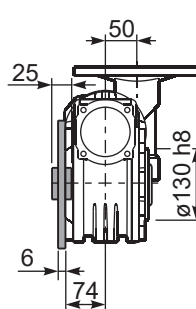
P115FC...

Output flange
Flangia uscita



P115BR...

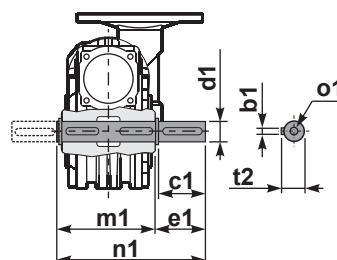
Reaction arm
Braccio di reazione



kit cod. K110.9.027

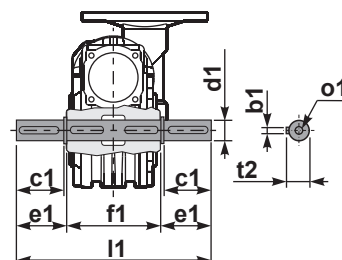
P115.....S...

Single Shaft
Albero lento semplice



P115.....D...

Double Shaft
Albero lento bisp.

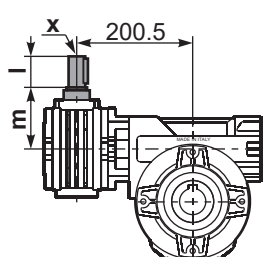
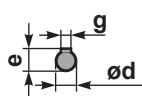


① kit cod. K110.5.028 type B

② kit cod. K110.5.029 type B

R115FB...

Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type B	16 h6	18	5	30	74.5	M6x16	① K050.5.006 PAM71 ② K050.5.007 PAM80
type S	14 h6	16	5	30	74.5	M5x10	① KS050.5.008 PAM71 ② KS050.5.009 PAM80

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	12	75	42 ^{-0.005} _{-0.020}	96.5	155	348	163.5	260	45	M12x32
type S	-	-	-	-	-	-	-	-	-	-

Square worm gearboxes

A modular and compact product

Single-piece aluminum alloy housing

Is vacuum impregnated (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint. Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing.

Single piece alloy steel input shaft and worm shaft.

High helix angle worm is case-hardened (Rc 58-60), ground, teeth are profiled and radiused, for noise reduction and enhanced efficiency.

Oversized bearings

Support positively-retained, high speed shaft for higher shock load capacity - ideal for frequent starting and reversing application. Premium, Nitrile® high temperature seals each end.

Flange

Fully modular to IEC and compact integrated motor. NEMA C flange.

Premium, high temperature

Nitrile® output seals

Bronze alloy worm gears.

CuSn12Ni (C91700) Nickel bronze worm gears are centrifugally cast onto an iron hub for maximum strength and superior life. Removable hollow shaft with key for safe torque transmissions.

Over size bearing

For radial load capability and maximum hollow output shaft diameter.

Standard hollow output shaft mounting

Reduces total drive envelope size, weight and cost. Single and double solid output shaft is available.

Impregnated and machined bearing caps

With exterior machined surfaces enable a variety of mounting accessories. Extra-deep thread engagement provided for greater support strength. Zinc plated hardware.

Vent Free Design.

No breather or vents to leak! Factory lubricated for life with synthetic, semi-fluid gear lubricant with an operating range of -15°C to 130°C.

oil free



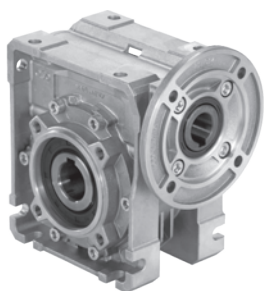
vent free



World wide sales network.

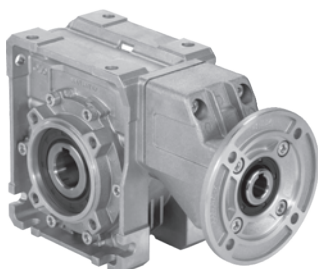
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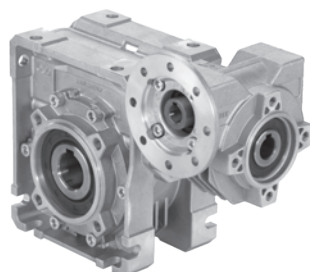
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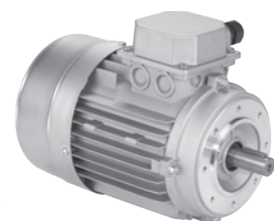
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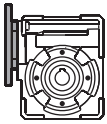
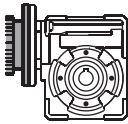
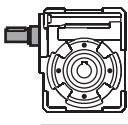
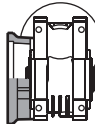
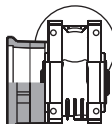
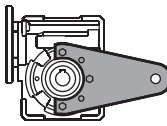
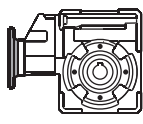
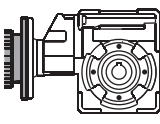
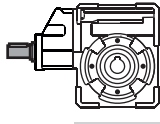
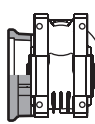
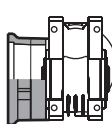
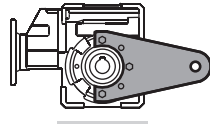
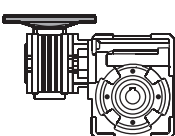
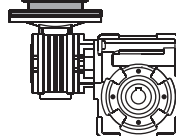
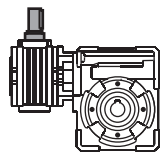
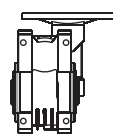
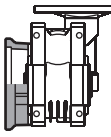
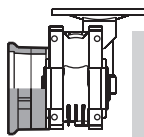
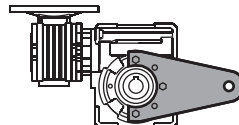
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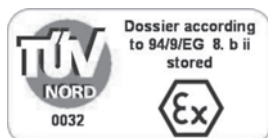
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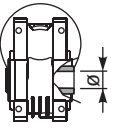
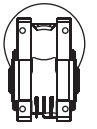
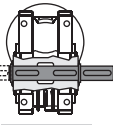
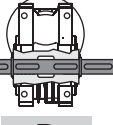
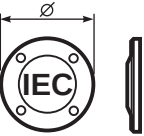
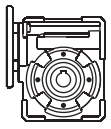
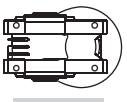
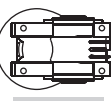
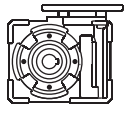
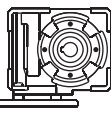
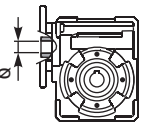
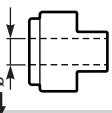
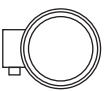
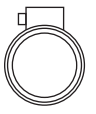
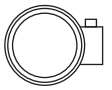
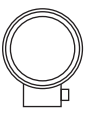
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Type - Tipo - Typ Type - Tipo	Size - Grandezza Größe - Taille Tamaño	Mounting - Montaggio - Montage Fixation - Tipo de montaje
P	Q45	FC
Worm gearboxes Riduttori a vite senza fine Schneckengetriebe Reducteurs a vis sans fin Reductores de corona sin fin     P M B R	Q30 Q45 Q50 Q63 Q75 Q85 Q11 Q13 Q15	   FB FC FL F1 F2 F3 F4  BR
Worm gearboxes with primary reduction Riduttori a vite senza fine con precoppia Schneckengetriebe mit Stirradstufe am Eintrieb Reducteurs a vis sans fin avec pré-réduction Reductores corona sin fin con prereductora de engranajes    P M R	P4Q P5Q P6Q P7Q P8Q P1Q	   FB FC FL F1 F2 F3 F4  BR
Combined worm gearboxes Riduttori a vite senza fine combinati Schneckengetriebekombinationen Reducteurs a double train de vis sans fin Reductores combinados corona sin fin    P M R	43Q 53Q 63Q 64Q 74Q 84Q 15Q	   FB FC FL F1 F2 F3 F4  BR



On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

Ratio Rapporto Untersetzung Reduction Relación	Hub Mozzo corona Hohlwelle Arbre creux Núcleo corona	Output shaft Albero lento Abtriebswelle Arbre de sortie Eje salida	Motor size Grandezza motore Motor Grösse Grandeur moteur Tamaño motor	Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje	Input bore Foro entrata Eingangshohlwelle Trou d'entree Eje hueco de entrada	Mountin position Esecuzione montaggio Einbaulage Exécution de montage Posición de montaje	Terminal box position Posizione morsetti Klemmkastenlage Position boîte a bornes Posición caja de bornes
10	C	Ø	-Q	B3	-	---	
See technical data table Vedi tabella dati tecnici. Technisches Datenblatt beachten Voir tableau données techniques Ver tabla datos técnicos	 STANDARD C Q30 ⇒ Ø14 Q45 ⇒ Ø18 Q50 ⇒ Ø25 Q63 ⇒ Ø25 Q75 ⇒ Ø30 Q85 ⇒ Ø35 Q11 ⇒ Ø42 Q13 ⇒ Ø45 Q15 ⇒ Ø50 I Stainless steel hub Mozzo in acciaio Inox Edelstahlhohlwelle Moyeu en acier Inox Núcleo corona de acero Inox SPECIAL SERIES SERIE SPECIALE S Q45 ⇒ Ø19 Q50 ⇒ Ø24 X Stainless steel hub Mozzo in acciaio Inox Edelstahlhohlwelle Moyeu en acier Inox Núcleo corona de acero Inox INCH U Q45 ⇒ Ø0.750" Q50 ⇒ Ø1.000" Q63 ⇒ Ø1.125" Q85 ⇒ Ø1.500" Z Stainless steel hub Mozzo in acciaio Inox Edelstahlhohlwelle Moyeu en acier Inox Núcleo corona de acero Inox	 Ø  S  D	 -M without flange Senza flangia B5 -A=56 (Ø120) -B=63 (Ø140) -C=71 (Ø160) -D=80 (Ø200) -E=90 (Ø200) -F=100÷112 (Ø250) -G=132 (Ø300) -H=160 (Ø350) B14 -O=56 (Ø80) -P=63 (Ø90) -Q=71 (Ø105) -R=80 (Ø120) -T=90 (Ø140) -U=100÷112 (Ø160) -V=132 (Ø200) -0=Type R -S=Type R S series	 B3  B8  B6  B7  V5  V6	 - Nothing indication: Standard bore Kit R standard Nessuna indicazione: Foro standard Kit R standard P Input bore reduced one size Foro entrata ridotto di una misura Ex. Input Flange 71 B14 Standard Ø14 Reduced Ø11 Q Input bore reduced two sizes Due grandezze ridotte foro entrata Ex. Input Flange 71 B14 Standard Ø14 Reduced Ø9 COUPLING  A = 9mm B = 11mm C = 14mm D = 19mm E = 24mm F = 28mm Ready for input coupling Predisposto per giunto  0 Type B Tipo B  0 Type R Tipo R	Only for combined units See technical data table Solo per i riduttori combinati Vedi tabella dati tecnici. Ausführungen für Getriebekombinationen it Uniquement pour combinés. Voir tableau données techniques Sólo para combinados ver tabla datos técnicos	With Type M specify terminal box position Con tipo M specificare posizione morsetti  A  B STANDARD  C  D

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

Lifting / sollevamento / hubantriebe / levage / elevación

$$P [KW] = \frac{M [Kg] \cdot g [9.81] \cdot v [m / s]}{1000}$$

Rotation / rotazione / drehung / rotation / rotation

$$P [KW] = \frac{M [Nm] \cdot n [rpm]}{9550}$$

Linear movement / traslazione / linearbewegung / translation / translacion

$$P [KW] = \frac{F [N] \cdot v [m / s]}{1000}$$

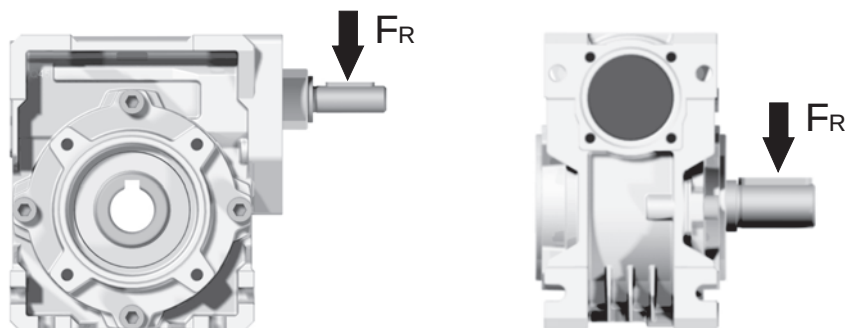
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

$$M [Nm] = \frac{9550 \cdot P[KW]}{n [rpm]}$$

$$M [lb in] = \frac{63030 \cdot P[HP]}{n [rpm]}$$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida



$F_R \text{ [N]} = \frac{M \text{ [Nm]} \cdot 2000}{d \text{ [mm]}} \cdot f_k$		$F_R \text{ [N]} = \frac{M \text{ [lb in]} \cdot 8.9}{d \text{ [in]}} \cdot f_k$	
M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion		
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo		
f _k	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión 1.15 Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje 1.25 Catena / Chain sprockets / Antriebskette / Chaîne / Cadena 1.75 Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal 2.50 Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana		

- If your application requires higher radial loads, contact our technical office. Higher load may be possible.
- Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
- Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
- Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
- En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

How to select a gearbox / Come selezionare un riduttore / Wie wählt man ein Getriebe
Comment sélectionner un réducteur / Cómo seleccionar un reductor

B

Output speed
Velocità in uscita
Abtriebsdrehzahl
Vitesse de sortie
Velocidad de salida

Nominal power
Potenza nominale
Max. mögliche Leistung
Poissance nominale
Potencia nominal

A

Nominal torque
Momento torcente nominale
Nenn Drehmoment
Couple nominal
Par de torsión nominal

Flange code
Codice flangia
Flanschtype
Code bride
Código bridas

Dynamic efficiency
Rendimento dinamico
Dynamischer
Rendement dynamique
Rendimiento dinámico

Input speed
Velocità in entrata
Eintriebsdrehzahl
Vitesse en entrée
Velocidad de entrada

Gear size
Grandezza riduttore
Getriebegröße
Taille réducteur
Tamaño reductor

Motor power
Potenza motore
Motorleistung
Puissance moteur
Potencia motor

Q45 Square - Gear
41Nm

Rating - Aluminum WORM GEARBOXES

■ QUICK SELECTION / Selezione veloce

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-B	C	-O	-P	-Q			
							63	71	56	63	71			
200	7	0.37	14	2.2	0.80	30	B		B-C	B-C		80	2.2	01
140	10	0.37	20	1.5	0.57	30	B		B-C	B-C		79	2.2	02
100	14	0.37	27	1.1	0.41	30	B		B-C	B-C		77	2.4	03

C

Ratio
Rapporto
Untersetzung
Rapport de réduction
Relación

Transmitted torque
Momento torcente trasmesso
Mögliche Drehmomente
Couple de sortie
Par transmitido

Service factor
Fattore di servizio
Betriebsfaktor
Facteur de service
Factor de servicio

Nominal module
Modulo nominale
Nenn modul
Module nominale
Módulo nominal

Notes
Note
Anmerkungen
Note
Notas

fs					
Type of load and starts per hour Tipo di carico e avviamenti per ora			Oper. hours per day Ore di funz. giorn.		
			<2 h	2 - 8 h	8 - 16 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora	≤ 10	Uniform / Uniforme	0.9	1	1.25
		Moderate / Moderato	1	1.25	1.5
		Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora	> 10	Uniform / Uniforme	1.25	1.5	1.75
		Moderate / Moderato	1.5	1.75	2
		Heavy / Forte	1.75	2	2.25

D	Motor flange available Flange disponibili Erhältliche Motorflansche Bridas disponibles Bridas disponibles
B)	Mounting with reduction ring Montaggio con boccia di riduzione Reduzierhülsen Montage avec douille de réduction Montaje con casquillo de reducción
C)	Motor flangeholes position/terminal box position Posizione fori flangia/basetta motore Bohrungsposition am Motorflansch/-sockel Position trous bride/barrette à bornes moteur Posición agujeros brida / base motor
B)	Available without reduction bushes Disponibile anche senza boccia Auch ohne Reduzierbuchse verfügbar Disponible aussi sans douille de réduction Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select ouput speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges		Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-A	-B	-O	-P			
							56	63	56	63			
280	5	0.18	5	3.3	0.60	17	B		B-C		82	1.26	01
200	7	0.18	7	2.4	0.44	17	B		B-C		80	1.44	02
140	10	0.18	10	1.8	0.32	17	B		B-C		78	1.44	03
93	15	0.18	13	1.4	0.25	19	B		B-C		73	1.44	04
70	20	0.18	17	1.1	0.20	19	B		B-C		70	1.09	05
47	30	0.12	15	1.4	0.17	21	B		B-C		62	1.44	06
35	40	0.12	19	1.1	0.13	20	B		B-C		57	1.09	07
23	61	0.09	19	1.1	0.10	20	B		B-C		50	0.72	08
17.5	80	0.06	16	1.0	0.06	16	B		B-C		48	0.56	09
14	100	0.06*	16	0.5	0.03	8	B		B-C		40	0.45	10

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit Q30 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo Q30 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe Q30 mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type Q30 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño Q30 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION Q30 Oil Quantity 0.03Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

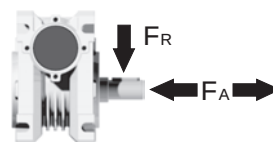
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

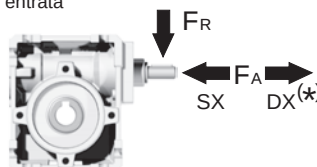
Albero di uscita



n_2 [min ⁻¹]	F_A [N]	F_R [N]
200	120	600
150	140	700
100	160	800
75	180	900
50	200	1000
25	250	1250
15	280	1400

Input shaft

albero in entrata



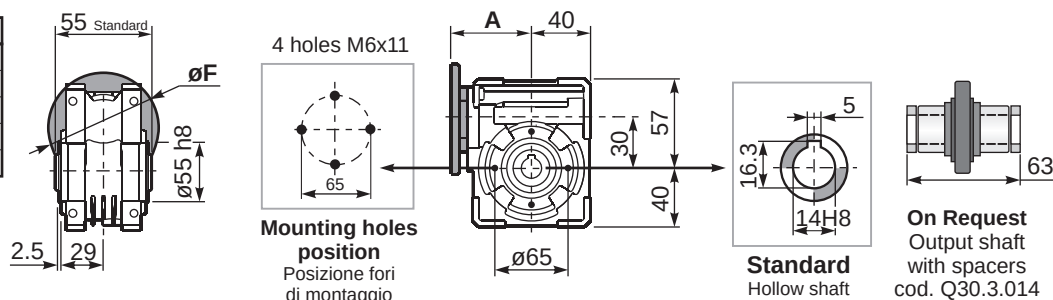
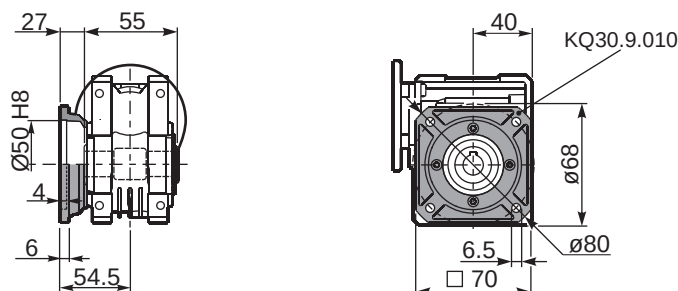
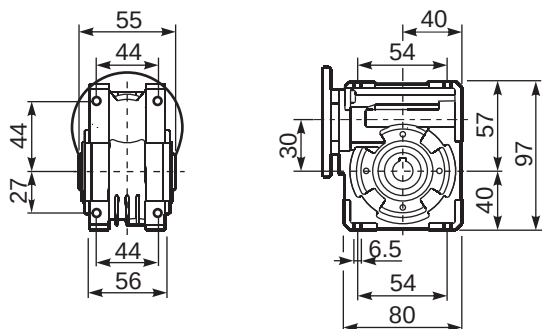
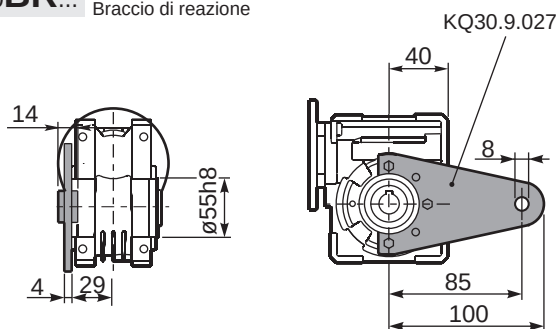
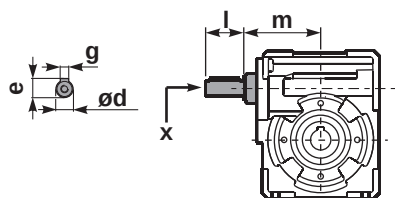
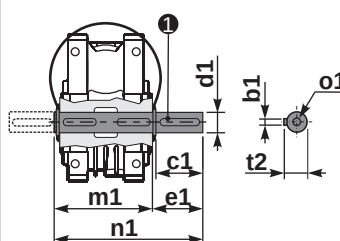
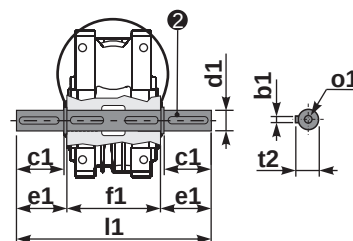
n_1 [min ⁻¹]	F_A [N]	F_R [N]
1400	20	100

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PQ30FB...Basic wormbox
Riduttore baseGearbox
weight
peso riduttore**1.15 kg**

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5

On Request
Output shaft
with spacers
cod. Q30.3.014**PQ30FC...**Square flange
Flangia quadrata**PQ30FB...**Feet
Piedini**PQ30BR...**Reaction arm
Braccio di reazione**RQ30FB...**Input shaft
Albero in entrata**PQ30.....S...**Single Shaft
Albero lento semplice**PQ30.....D...**Double Shaft
Albero lento bisp.

① kit cod. K030.5.028 type B

② kit cod. K030.5.029 type B

	ød	e	g	l	m	x	kit code
type B	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
type S	-	-	-	-	-	-	-

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	5	25	14 ^{-0.005/-0.020}	35.5	55	126	59	94.5	16	M5x14
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-B	-C	-O	-P	-Q			
							63	71	56	63	71			
200	7	0.37	14	2.2	0.80	30	B		B-C	B-C		80	2.2	01
140	10	0.37	20	1.5	0.57	30	B		B-C	B-C		79	2.2	02
100	14	0.37	27	1.1	0.41	30	B		B-C	B-C		77	2.4	03
67	21	0.37	36	1.2	0.43	41	B		B-C	B-C		67	1.6	04
50	28	0.25	31	1.3	0.33	41	B		B-C	B-C		65	2.5	05
38	37	0.25	40	1.0	0.26	41	B		B-C	B-C		63	1.8	06
30	46	0.25	46	0.9	0.22	41	B		B-C	B-C		59	1.5	07
23	60	0.18	41	1.0	0.18	41	B		B-C	B-C		56	1.2	08
20	70	0.12	31	1.0	0.12	30	B		B-C	B-C		54	1.0	09
13.7	102	0.09	31	1.0	0.09	29	B		B-C	B-C		49	0.72	10

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit Q45 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo Q45 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe Q45 mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type Q45 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño Q45 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION Q45 Oil Quantity 0.09 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

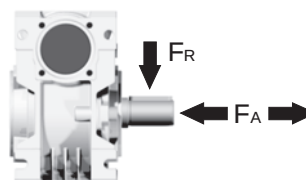
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

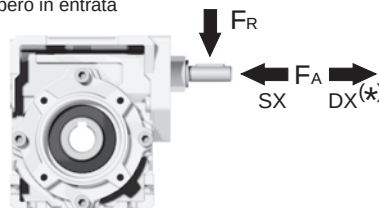
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	180	900
150	200	1000
100	220	1100
75	240	1200
50	260	1400
25	300	1800
15	400	2000

Input shaft

albero in entrata



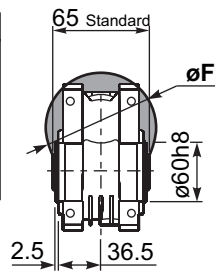
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	42	210

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PQ45**FB**... Basic wormbox
Riduttore base

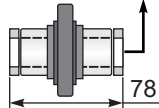
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	80
71B5	K050.4.042	160	77.5
56B14	KC40.4.049	80	77.5
63B14	K050.4.047	90	80
71B14	K050.4.045	105	77.5



4 holes M6x12
Mounting holes position
Posizione fori di montaggio

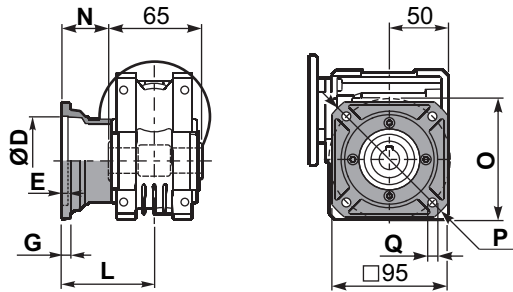
Gearbox weight
peso riduttore **2.30 kg**

ø H8	B	C	*Spacer code
18 Standard	20.8	6	Q45.3.018
19 on request	21.8	6	Q45.3.019
20 on request	22.8	6	Q45.3.020



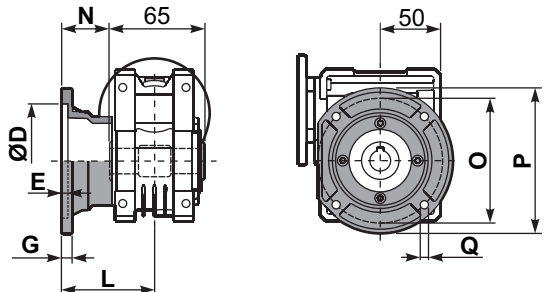
*On Request
output shaft with spacers

PQ45**FC**... Square flange
Flangia quadrata



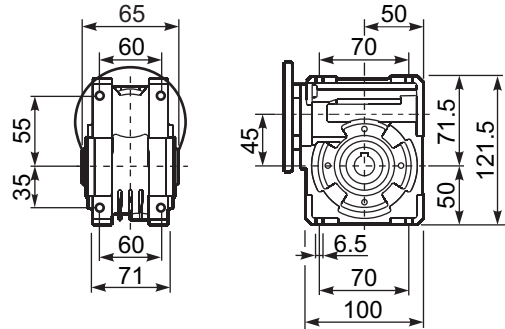
type B	øD	E	G	L	N	O	P	Q	kit code
FC	60 H8	4	7	67	34.5	75	110	9	KQ45.9.010
FL	60 H8	4	7	97	64.5	75	110	9	KQ45.9.011

PQ45**F1**... Round flange
Flangia rotonda

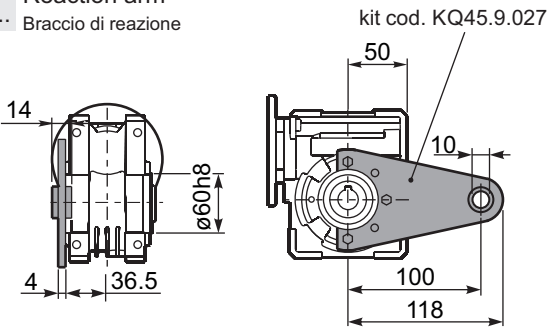


type S	øD	E	G	L	N	O	P	Q	kit code
F1	95H8	5	9	80	47.5	115	140	9.5	KSQ45.9.012
F2	-	-	-	-	-	-	-	-	-

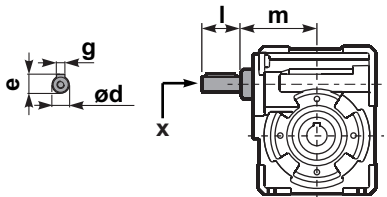
PQ45**FB**... Feet
Piedini



PQ45**BR**... Reaction arm
Braccio di reazione

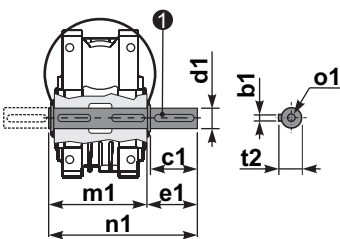


RQ45FB... Input shaft
Albero in entrata



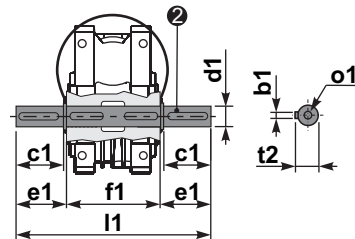
	ød	e	g	l	m	x	kit code
type B	11 h6	12.5	4	30	74	-	① K045.5.006 PAM71 ② -
type S	-	-	-	-	-	-	① - ② -

PQ45.....**S**... Single Shaft
Albero lento semplice



① kit cod. K045.5.028 type B
kit cod. KS045.5.030 type S

PQ45.....**D**... Double Shaft
Albero lento bisp.



② kit cod. K045.5.029 type B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	6	32	18 ^{-0.005} _{-0.020}	43	65	151	70	113	20.5	M6x18
type S	6	40	19 ^{-0.005} _{-0.020}	58.5	-	-	70	128.5	21.5	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges			Available B14 motor flanges				Dynamic efficiency	Tooth Module  [mm]	Ratio code 
							-B	-C	-D	-O	-P	-Q	-R	RD		
200	7	0.75	29	1.9	1.5	57	B	B			B-C	B		82	2.5	01
140	10	0.75	41	1.5	1.1	62	B	B			B-C	B		80	2.4	02
100	14	0.75	57	1.2	0.90	68	B	B			B-C	B		79	2.6	03
78	18	0.55	51	1.2	0.67	62	B	B			B-C	B		75	2.0	04
54	26	0.55	67	1.0	0.54	66	B	B			B-C	B		69	2.7	05
47	30	0.55	79	0.9	0.50	72	B	B			B-C	B		70	2.5	12
39	36	0.37	63	1.2	0.43	72	B			B-C	B-C			69	2.1	06
33	43	0.37	72	1.0	0.35	68	B			B-C	B-C			66	1.8	07
28	50	0.25	53	1.2	0.31	66	B			B-C	B-C			62	1.5	13
23	60	0.25	59	1.0	0.26	62	B			B-C	B-C			58	1.3	08
21	68	0.25	66	0.9	0.22	58	B			B-C	B-C			57	1.2	09
17.5	80	0.18	53	1.1	0.19	57	B			B-C	B-C			54	1.0	10
14	100	0.12	41	1.3	0.15	51	B			B-C	B-C			50	0.8	11

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit Q50 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo Q50 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe Q50 mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type Q50 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño Q50 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION Q50 Oil Quantity 0.14 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

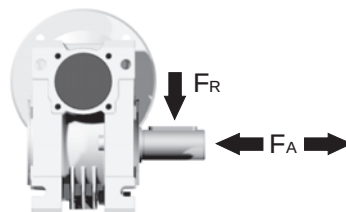
tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

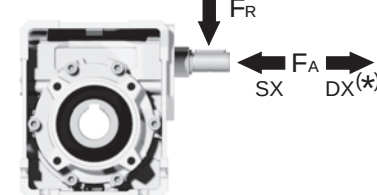
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	240	1200
150	280	1400
100	300	1500
75	340	1700
50	380	1900
25	480	2500
15	560	2800

Input shaft

albero in entrata



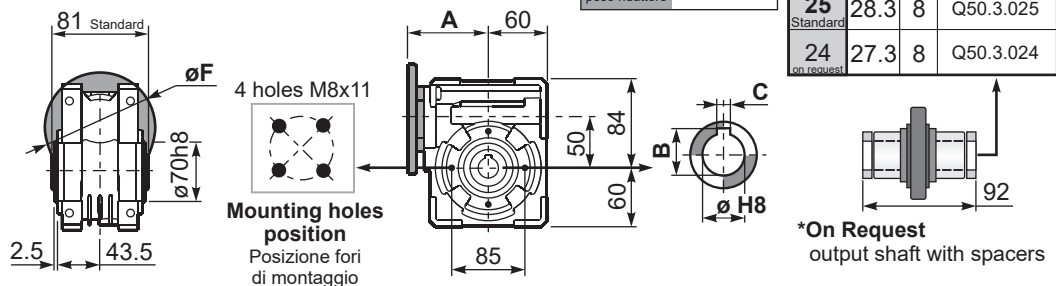
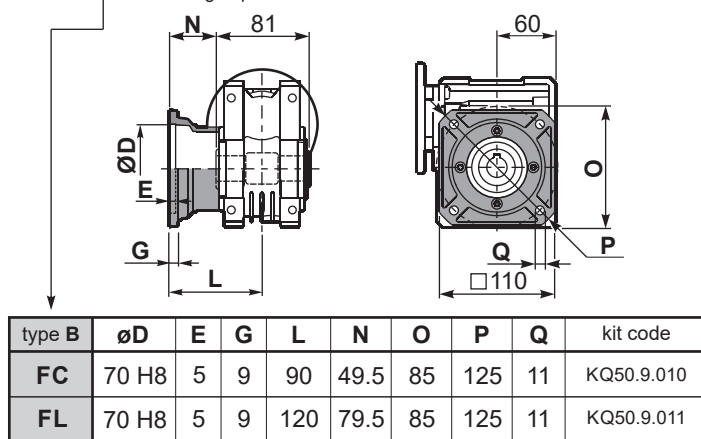
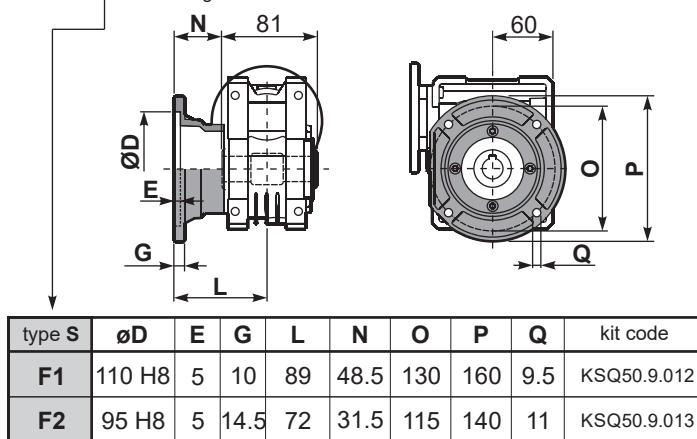
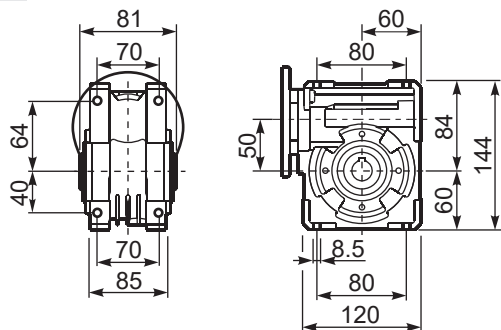
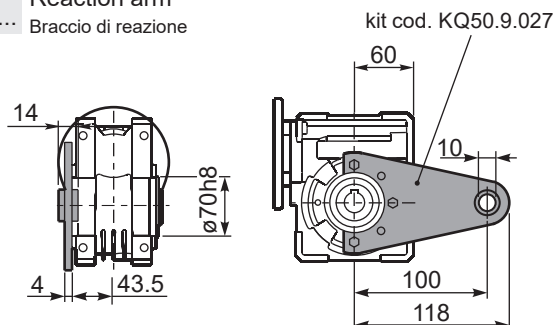
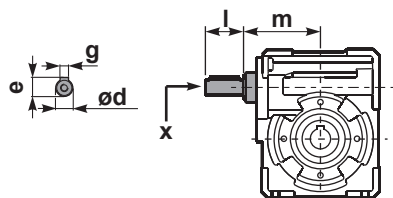
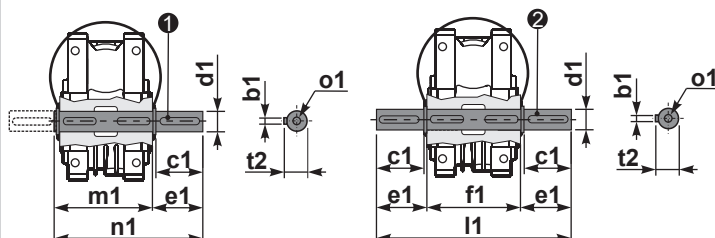
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	76	380

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PQ50FB...Basic wormbox
Riduttore baseGearbox weight
peso riduttore **3.25 kg**

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	83.5
71B5	K050.4.042	160	81
80B5	K050.4.043	200	81.5
56B14	KC40.4.049	80	81
63B14	K050.4.047	90	83.5
71B14	K050.4.045	105	81
80B14	K050.4.046	120	81.5

**PQ50FC...**Square flange
Flangia quadrata**PQ50F1...**Round flange
Flangia rotonda**PQ50FB...**Feet
Piedini**PQ50BR...**Reaction arm
Braccio di reazione**RQ50FB...**Input shaft
Albero in entrata**PQ50.....S...**Single Shaft
Albero lento semplice**PQ50.....D...**Double Shaft
Albero lento bisp.

- ① kit cod. K050.5.028 type B
kit cod. KS050.5.030 type S
- ② kit cod. K050.5.029 type B

	ød	e	g	l	m	x	kit code
type B	16 h6	18	5	30	79.5	M6x16	① K050.5.006 PAM71 ② K050.5.007 PAM80
type S	14 h6	16	5	30	79.5	M5x10	① KS050.5.008 PAM71 ② KS050.5.009 PAM80

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	8	52	25 ^{-0.005} _{-0.020}	59.5	81	200	86.5	146	28	M8x20
type S	8	50	24 ^{-0.005} _{-0.020}	68.8	-	-	86.5	155	27	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code 
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
200	7	1.8	71	1.8	3.2	125		B	B		B-C	B-C		83	3.1	01
140	10	1.8	99	1.4	2.4	134		B	B		B-C	B-C		81	3.1	02
93	15	1.5	121	1.1	1.7	138		B	B		B-C	B-C		79	3.1	03
74	19	1.1	111	1.2	1.4	138		B	B		B-C	B-C		78	2.6	04
58	24	1.1	135	1.0	1.2	142		B	B		B-C	B-C		75	2.0	05
47	30	1.1	167	0.9	0.96	146		B	B		B-C	B-C		74	3.2	06
39	36	0.75	125	1.2	0.88	147		B	B		B-C	B-C		68	2.7	07
35	40	0.75	135	1.0	0.78	140		B	B		B-C	B-C		66	2.5	13
31	45	0.55	111	1.2	0.67	135	B	B			B-C	C		66	2.1	08
23	60	0.55	140	0.9	0.51	130	B	B			B-C	C		62	1.6	12
21	67	0.55	151	0.8	0.45	124	B	B			B-C	C		60	1.5	09
17.5	80	0.37	115	1.0	0.38	119	B	B			B-C	C		57	1.3	10
14.9	94	0.37	123	1.0	0.36	119	B	B			B-C	C		52	1.1	11

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **Q63** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **Q63** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **Q63** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **Q63** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **Q63** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION Q63 Oil Quantity 0.30 Lt.

AGIP Telium VSF 320

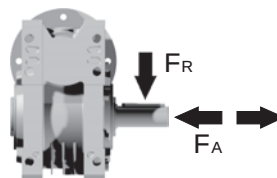
SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

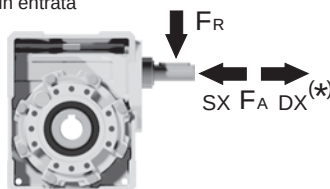
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	360	1800
150	400	2000
100	460	2300
75	500	2500
50	600	3000
25	700	3800
15	800	4000

Input shaft

albero in entrata



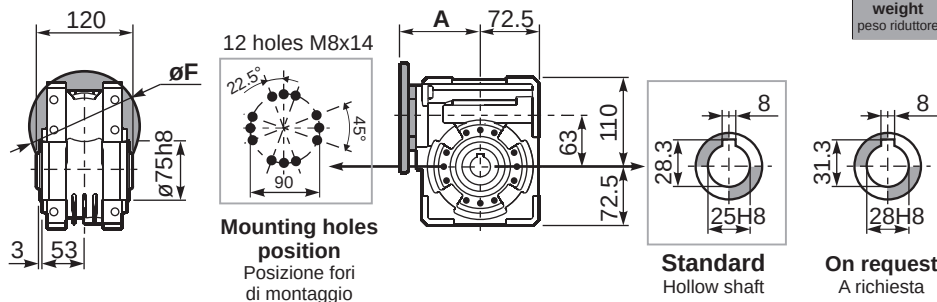
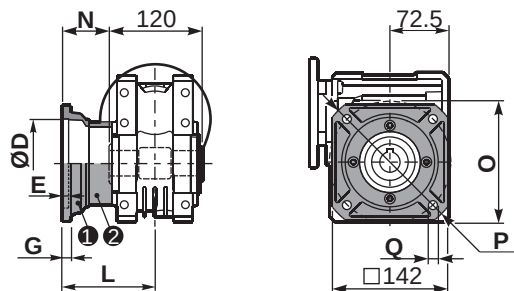
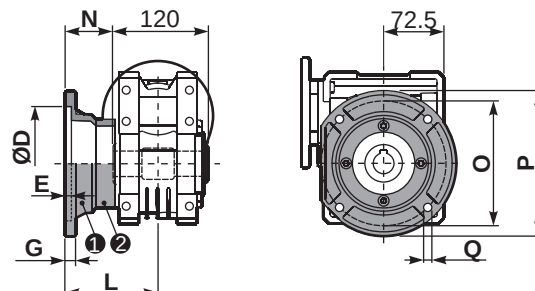
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	90	450

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

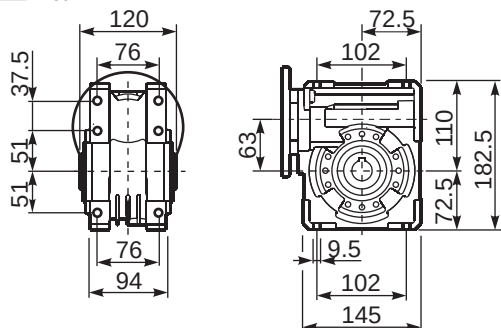
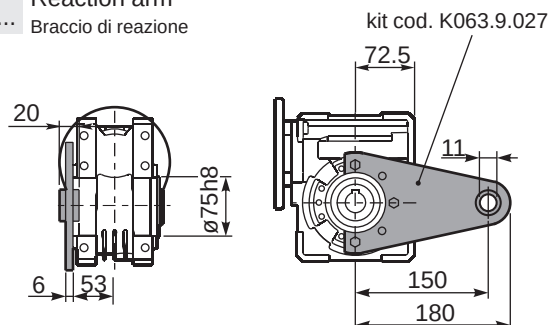
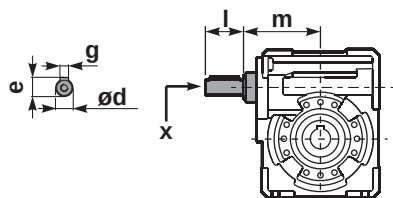
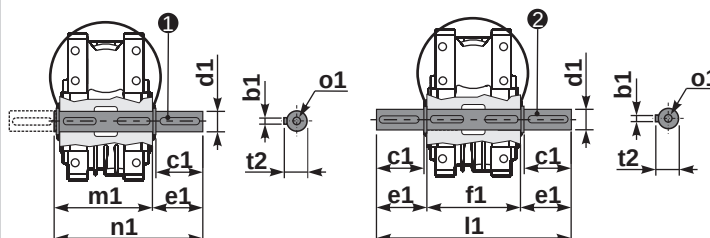
PQ63FB...Basic wormbox
Riduttore baseGearbox
peso riduttore**6.00 kg**

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	99.5
71B5	K063.4.042	160	97.5
80/90B5	K063.4.043	200	99.5
71B14	K063.4.047	105	97.5
80B14	K063.4.046	120	99.5
90B14	K063.4.041	140	99.5

**PQ63FC...**Square flange
Flangia quadrata**PQ63F1...**Round flange
Flangia rotonda

type B	øD	E	G	L	N	O	P	Q	kit code
FC	115 ^{+0.20} _{+0.15}	6	12	86	26	150	180	11	① KQ63.9.010 ② -
FL	115 ^{+0.20} _{+0.15}	6	12	116	56	150	180	11	① KQ63.9.010 ② K063.0.200

type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 ^{+0.20} _{+0.15}	7	13	110	50	165	200	13	① KS070.9.013 ② -
F2	115 ^{+0.20} _{+0.15}	7	13	124	64	150	175	11	① KS063.9.013 ② -
F3	110 ^{+0.035} ₀	5	11	90	30	130	160	10	① KS063.9.011 ② -

PQ63FB...Feet
Piedini**PQ63BR...**Reaction arm
Braccio di reazione**RQ63FB...**Input shaft
Albero in entrata**PQ63.....S...**Single Shaft
Albero lento semplice**PQ63.....D...**Double Shaft
Albero lento bisp.

① kit cod. K063.5.028 type B

② kit cod. K063.5.029 type B

	ød	e	g	l	m	x	kit code
type B	18 h6	20.5	6	45	93	M6x16	① K063.5.006 PAM80 ② K063.5.007 PAM90
type S	19 h6	21.5	6	40	93	M8x20	① KS063.5.008 PAM80 ② KS063.5.009 PAM90

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	8	60	25 ^{-0.005} _{-0.020}	63.2	120	246.4	126.8	190	28	M8x20
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code 
							-C	-D	-E	-F	-R	-T	-U			
							71	80	90	100 112	80	90	100 112			
200	7	4	172	1.1	4.4	190		B	B		B	B		90	3.75	01
140	10	4	240	1.0	3.8	230		B	B		B	B		88	3.75	02
93	15	3	261	1.0	2.9	250		B	B		B	B		85	3.75	03
70	20	2.2	249	1.0	2.2	250		B	B		B	B		83	3.00	04
56	25	1.5	205	1.2	1.8	250	B	B			B			80	2.41	05
45	31	1.5	244	1.1	1.7	270	B	B			B			77	3.75	06
35	40	1.5	295	0.9	1.3	255	B	B			B			72	3.10	07
28	50	0.75	174	1.3	0.95	220	B							68	2.41	08
23	60	0.75	200	1.0	0.75	200	B							65	2.10	09
17.5	80	0.55	177	1.0	0.56	180	B							59	1.53	10
14.0	100	0.55*	206	0.7	0.40	150	B							55	1.23	11

 Motor Flanges Available
Flange Motore Disponibili

 B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

 B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

 C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit Q75 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo Q75 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe Q75 mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type Q75 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño Q75 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION Q75 Oil Quantity 0.40 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

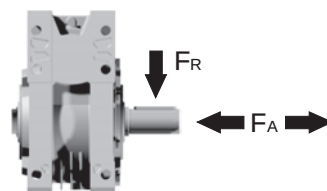
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

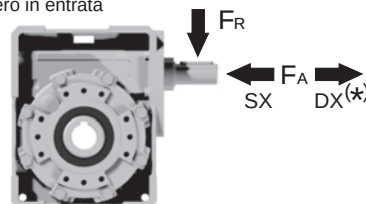
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	460	2300
150	520	2600
100	560	2800
75	620	3100
50	720	3600
25	880	4400
15	1000	5000

Input shaft

albero in entrata



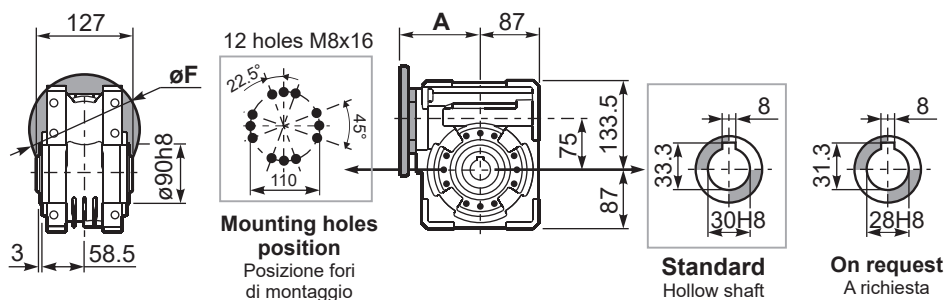
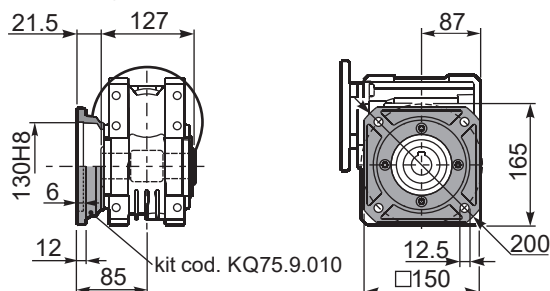
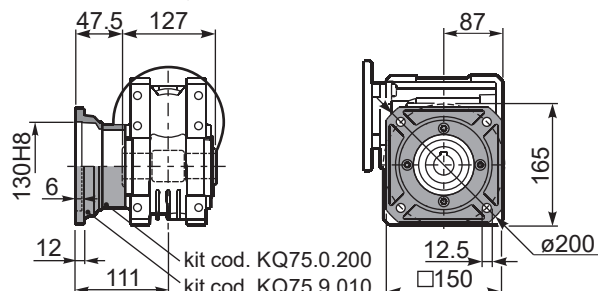
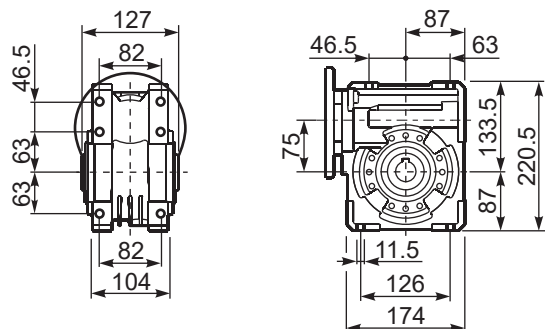
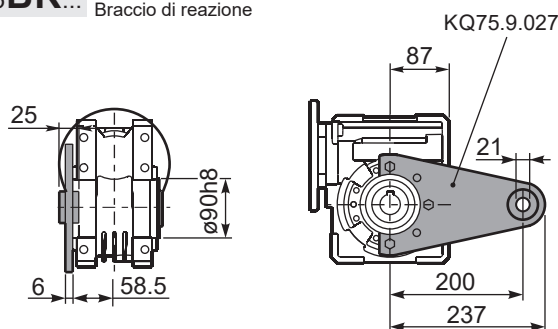
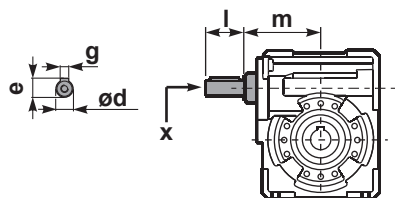
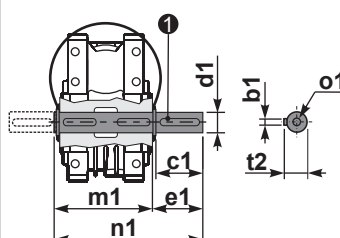
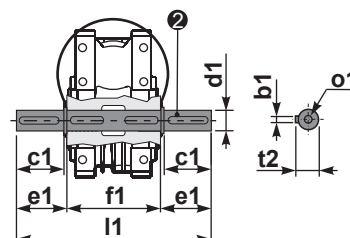
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	125	630

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PQ75FB...Basic wormbox
Riduttore baseGearbox
weight
peso riduttore**8.70 kg**

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	114
80/90B5	K023.4.042	200	116
100/112B5	K023.4.043	250	125
80B14	K085.4.046	120	116
90B14	K085.4.045	140	116
100/112B14	K085.4.047	160	125

**PQ75FC...**Square flange
Flangia quadrata**PQ75FL...**Square flange
Flangia quadrata**PQ75FB...**Feet
Piedini**PQ75BR...**Reaction arm
Braccio di reazione**RQ75FB...**Input shaft
Albero in entrata**PQ75.....S...**Single Shaft
Albero lento semplice**PQ75.....D...**Double Shaft
Albero lento bisp.

① kit cod. KQ75.5.028 Standard
kit cod. KQ75.5.026 On request

② kit cod. KQ75.5.029 Standard

	ød	e	g	l	m	x	kit code
type B	25 h6	27.8	8	50	109.5	M8x20	KQ75.5.006 PAM80 K085.5.007 PAM90 K085.5.008 PAM100

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standard	8	60	30 ^{-0.005/-0.020}	65	127	255	134	199	33	M8x20
On request	8	60	28 ^{-0.005/-0.020}	65	-	-	134	199	31	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code 
							-C	-D	-E	-F	-R	-T	-U			
							71	80	90	100 112	80	90	100 112			
200	7	4.0	168	1.5	6.1	257		B	B		B	B		88	4.23	01
140	10	4.0	218	1.3	5.2	284		B	B		B	B		80	4.2	02
100	14	3.0	223	1.4	4.1	305		B	B		B	B		78	4.5	03
70	20	2.2	237	1.2	2.7	294		B	B		B	B		79	3.4	04
64	22	2.2	258	1.1	2.5	294		B	B		B	B		78	3.1	05
50	28	2.2	315	1.1	2.4	347		B	B		B	B		75	4.7	06
37	38	1.5	276	1.2	1.8	336	B	B			B			71	3.5	07
30	46	1.5	320	1.0	1.5	326	B	B			B			68	3.1	08
27	52	1.1	258	1.1	1.2	289	B	B			B			66	2.7	09
21	67	1.1	327	0.9	0.97	289	B	B			B			65	2.1	10
18.9	74	0.75	220	1.2	0.91	268	B	B			B			58	1.9	11
14.6	96	0.55	191	1.3	0.70	242	B	B			B			53	1.5	12

 Motor Flanges Available
Flange Motore Disponibili

 B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

 B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

 C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit Q85 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo Q85 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe Q85 mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type Q85 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño Q85 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION Q85 Oil Quantity 1.20 Lt.

AGIP Telium VSF 320

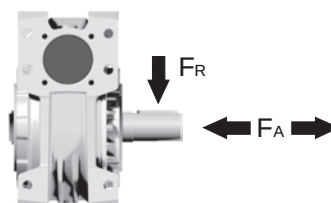
SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

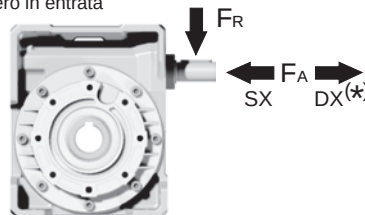
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	500	2500
150	580	2900
100	600	3000
75	700	3500
50	800	4000
25	1000	5000
15	1160	5800

Input shaft

albero in entrata



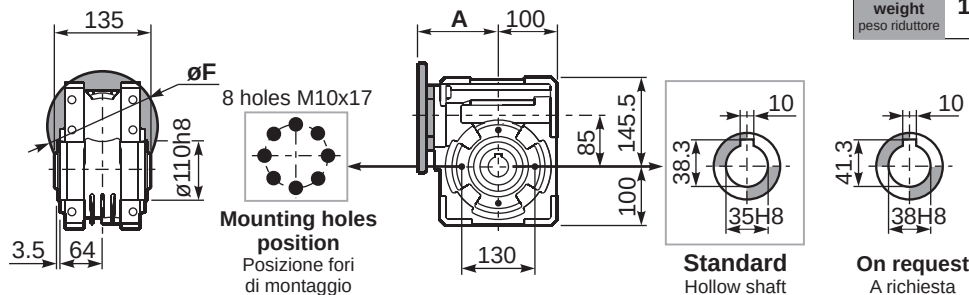
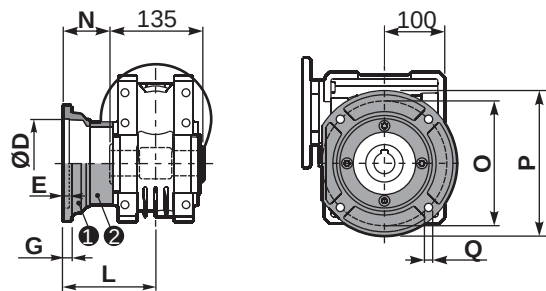
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	130	650

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

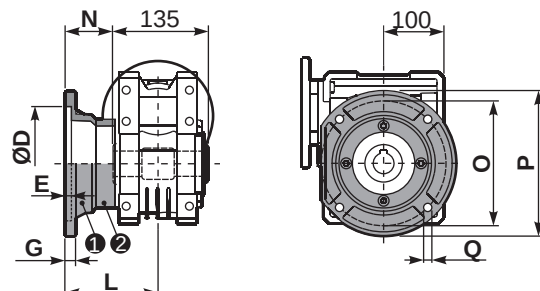
tab. 2

PQ85FB...Basic wormbox
Riduttore baseGearbox
weight
peso riduttore **12.1 kg**

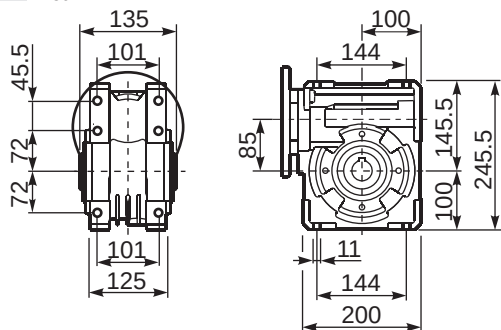
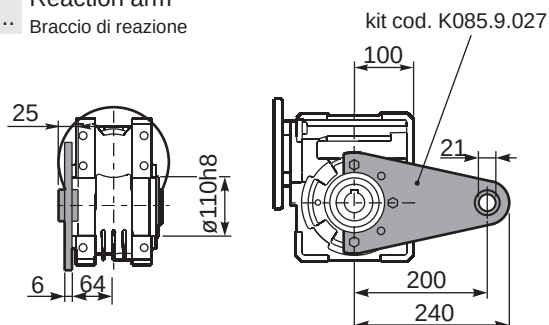
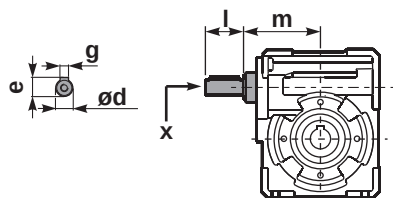
M. flanges	Kit code	øF	A
71B5	K023.4.041	160	116.5
80/90B5	K023.4.042	200	118.5
100/112B5	K023.4.043	250	127.5
80B14	K085.4.046	120	118.5
90B14	K085.4.045	140	118.5
100/112B14	K085.4.047	160	127.5

**PQ85FC...**Output flange
Flangia uscita

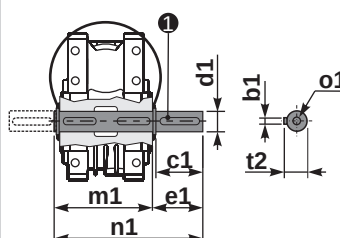
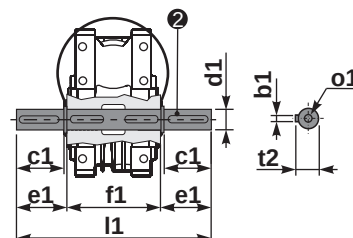
type B	øD	E	G	L	N	O	P	Q	kit code
FC	152 ^{+0.06} _{+0.00}	5	16	108	40.5	176	205	13	① K085.9.010 ② -
FL	152 ^{+0.06} _{+0.00}	5	16	148.5	81	176	205	13	① K085.9.010 ② K085.0.201

PQ85F1...Output flange
Flangia uscita

type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 H7	5	13	117.5	50	165	200	11.5	① KS085.9.012 ② -
F2	152 ^{+0.06} _{+0.00}	5	15	147.5	80	180	205	12.5	① KS085.9.013 ② -
F4	130 H7	5	13	106.5	39	165	200	13	① KS085.9.015 ② -

PQ85FB...Feet
Piedini**PQ85BR...**Reaction arm
Braccio di reazione**RQ85FB...**Input shaft
Albero in entrata

	ød	e	g	l	m	x	kit code
type B	25 h6	28	8	50	112	M8x20	① K085.5.007 PAM90 ② K085.5.008 PAM100
type S	24 h6	27	8	50	112	M8x20	① KS085.5.009 PAM90 ② KS085.5.011 PAM100

PQ85.....S...Single Shaft
Albero lento semplice**PQ85.....D...**Double Shaft
Albero lento bisp.

① kit cod. K085.5.028 type B

② kit cod. K085.5.029 type B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	10	60	35 ^{-0.005} _{-0.020}	73.5	135	282	141	214.5	38	M10x23
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V			
							71	80	90	100 112	132	80	90	100 112	132			
200	7	7.5	315	1.5	11.5	483		B	B			B	B			88	5.5	01
140	10	7.5	440	1.2	9.0	525		B	B			B	B			86	5.4	02
88	16	5.5	492	1.1	6.0	536		B	B			B	B			82	5.3	03
70	20	4.0	447	1.2	4.9	546		B	B			B	B			82	4.5	04
61	23	3.0	377	1.4	4.1	515		B	B			B	B			80	3.9	05
47	30	3.0	467	1.4	4.2	651		B	B			B	B			76	5.6	06
37	38	3.0	583	1.1	3.3	641		B	B			B	B			75	4.7	07
31	45	2.2	493	1.2	2.7	599		B	B			B	B			73	4.0	08
26	53	2.2	557	1.1	2.5	620		B	B			B	B			70	3.5	09
22	64	1.5	452	1.2	1.8	536	B	B				B				69	2.9	10
16.7	84	1.1	410	1.2	1.3	494	B	B				B				65	2.2	11
14.1	99	1.1	446	1.1	1.2	483	B	B				B				60	1.9	12

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit Q11 is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo Q11 è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße Q11 wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type Q11 est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño Q11 se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6
1.90 LT	1.35 LT	1.35 LT	2.00LT	2.00 LT	2.00LT

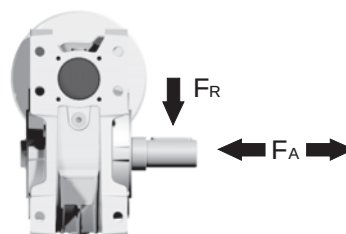
AGIP Blasias 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

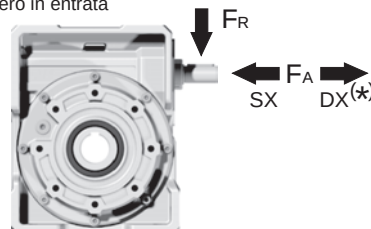
RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	600	2900
150	700	3300
100	750	3600
75	800	4000
50	920	4600
25	1200	6000
15	1400	7000

Input shaft
albero in entrata



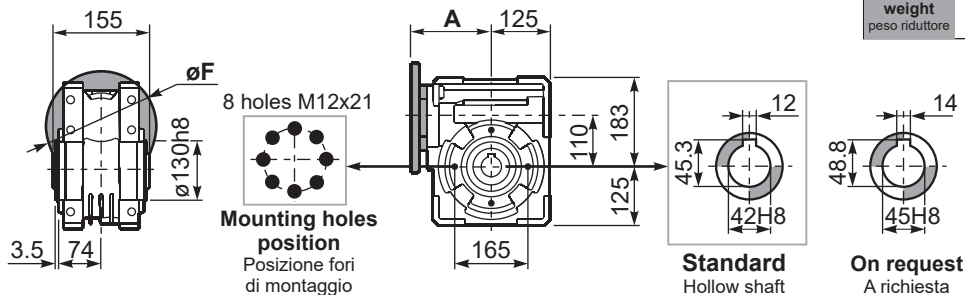
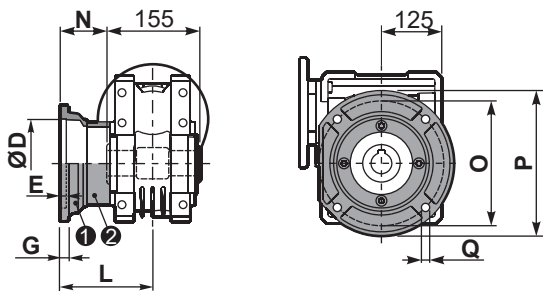
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	228	1140

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

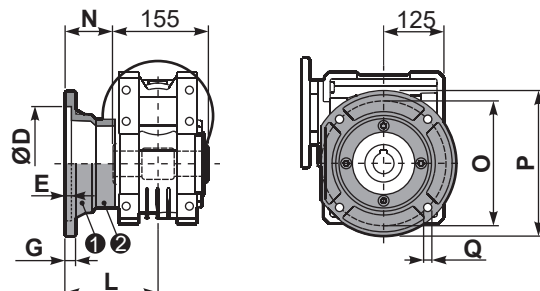
tab. 2

PQ11FB...Basic wormbox
Riduttore baseGearbox
weight
peso riduttore **35.0 kg**

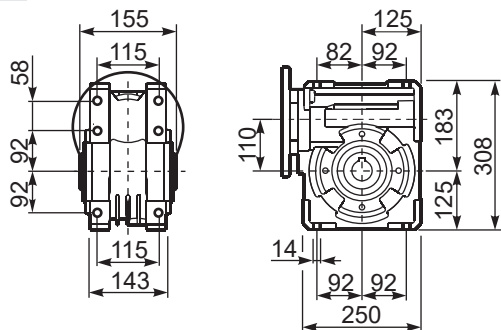
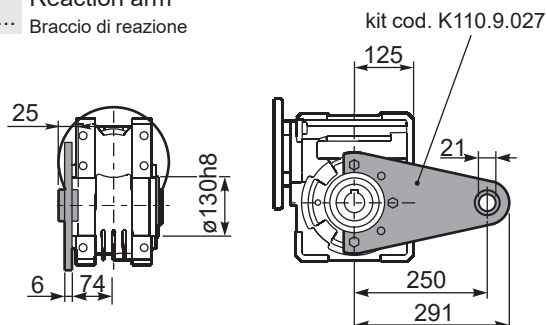
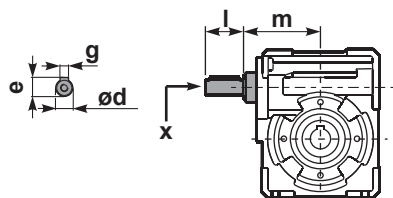
M. flanges	Kit code	øF	A
71B5	K023.4.041	160	136
80/90B5	K023.4.042	200	138
100/112B5	K023.4.043	250	147
132B5	-	300	187
80B14	K085.4.046	120	138
90B14	K085.4.045	140	138
100/112B14	K023.4.041	160	136
132B14	-	200	187

**PQ11FC...**Output flange
Flangia uscita

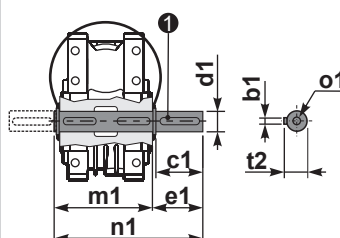
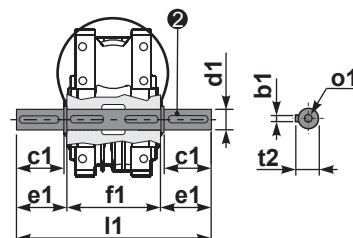
type B	øD	E	G	L	N	O	P	Q	kit code
FC	170 ^{+0.083} _{+0.043}	11	16.5	131.5	54	230	270	13	① K110.9.010 ② -
FL	170 ^{+0.083} _{+0.043}	11	16.5	179.5	102	230	270	13	① K110.9.011 ② -

PQ11F1...Output flange
Flangia uscita

type S	øD	E	G	L	N	O	P	Q	kit code
F1	180 ^{+0.040} ₀	5	18	150	72.5	215	250	15	① KS110.9.014 ② -
F3	180 ^{+0.040} ₀	5	18	130	52.5	215	250	15	① KS110.9.013 ② -

PQ11FB...Feet
Piedini**PQ11BR...**Reaction arm
Braccio di reazione**RQ11FB...**Input shaft
Albero in entrata

	ød	e	g	l	m	x	kit code
type B	25 h6	28	8	50	131.5	M8x20	① K085.5.007 PAM90 ② K085.5.008 PAM100
type S	24 h6	27	8	50	131.5	M8x20	① KS085.5.009 PAM90 ② KS085.5.011 PAM100

PQ11.....S...Single Shaft
Albero lento semplice**PQ11.....D...**Double Shaft
Albero lento bisp.

① kit cod. K110.5.028 type B

② kit cod. K110.5.029 type B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	12	75	42 ^{-0.005} _{-0.020}	96.5	155	348	163.5	260	45	M12x32
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n ₂ [min ⁻¹]	Ratio i	Motor power P _{1M} [kW]	Output torque M _{2M} [Nm]	Service factor f.s.	Nominal power P _{1R} [kW]	Nominal torque M _{2R} [Nm]	Available B5 motor flanges			B14 motor flanges not available				Dynamic efficiency RD	Tooth Module  [mm]	 Ratios code
							-E	-F	-G	-	-	-	-			
							90	100 112	132	-	-	-	-			
187	7.5	7.5	345	2.1	16.1	741		B						90	6.11	01
140	10	7.5	455	1.8	13.5	820		B						89	6.45	02
93	15	7.5	668	1.4	10.3	917		B						87	6.72	03
70	20	7.5	870	1.0	7.8	905		B						85	5.24	04
56	25	5.5	788	1.2	6.5	931		B						84	4.28	05
46.7	30	5.5	900	1.2	6.4	1047		B						80	6.91	06
35	40	4.0	851	1.2	4.9	1043		B						78	5.36	07
28	50	4.0	1023	0.9	3.8	972	B							75	4.35	08
23.3	60	3.0	896	1.0	3.1	928	B							73	3.65	09
17.5	80	2.2	816	1.0	2.3	853	B							68	2.76	10
14	100	1.5	655	1.1	1.7	742	B							64	2.23	11

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit Q13 is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo Q13 è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße Q13 wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type Q13 est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño Q13 se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

					
B3	B6	B7	B8	V5	V6
4.50 LT	3.50 LT	3.50 LT	3.30LT	4.50 LT	3.30LT

AGIP Blasias 460

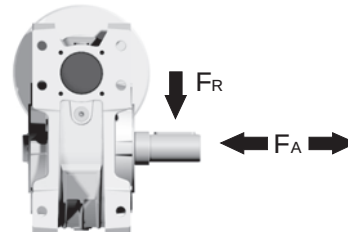
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

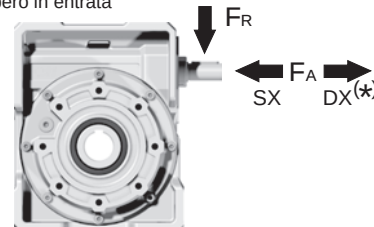
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	960	4800
150	1100	5500
100	1240	6200
75	1380	6900
50	1560	7800
25	2000	10000
15	2400	12000

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	300	1500

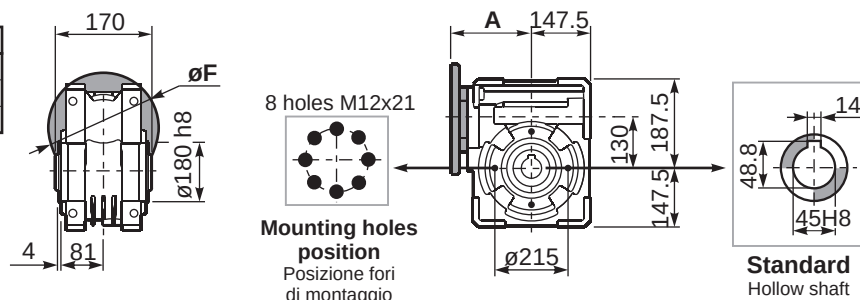
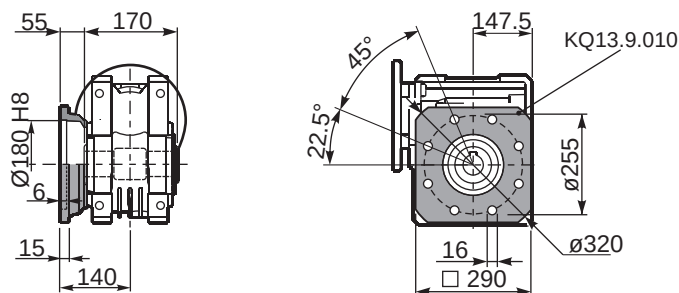
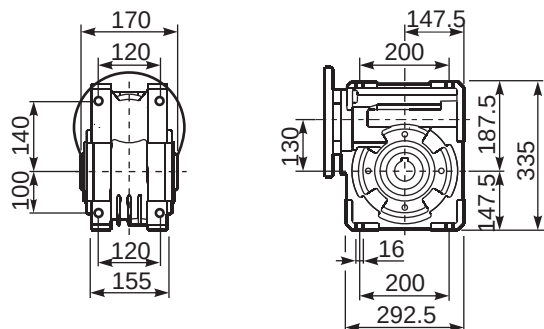
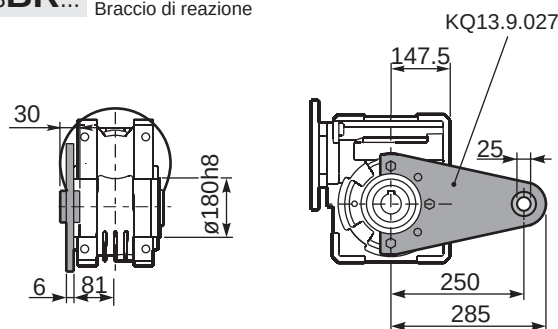
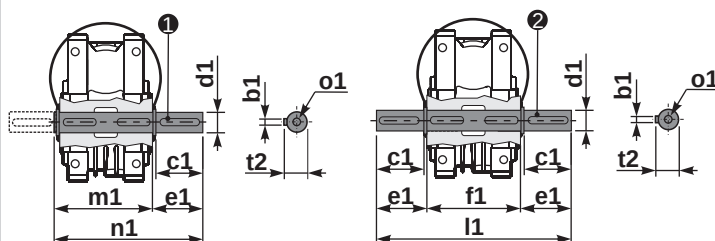
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PQ13**FB**...Basic wormbox
Riduttore baseGearbox
weight
peso riduttore

48.0 kg

M. flanges	Kit code	øF	A
90B5	KQ13.4.041	200	180
100/112B5	KQ13.4.042	250	180
132B5	KQ13.4.043	300	180

PQ13**FC**...Square flange
Flangia quadrataPQ13**FB**...Feet
PiediniPQ13**BR**...Reaction arm
Braccio di reazionePQ13.....**S**...Single Shaft
Albero lento semplicePQ13.....**D**...Double Shaft
Albero lento bisp.

① kit cod. KQ13.5.028 type B

② kit cod. KQ13.5.029 type B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type	14	80	45 ^{-0.005} _{-0.020}	85	170	340	180	265	48.5	M16
type	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges			B14 motor flanges not available				Dynamic efficiency	Tooth Module  [mm]	Ratios code 
							-F	-G	-H	-	-	-	-	RD		
187	7.5	15	698	1.7	25.8	1200		B						91	5.5	01
140	10	15	921	1.3	20.2	1240		B						90	6.155	02
93	15	11	990	1.3	13.9	1250		B						88	5.5	03
70	20	11	1291	1.0	11.1	1300		B						86	6.155	04
56	25	9	1289	0.9	8.4	1200		B						84	5	05
46.7	30	7.5	1274	0.9	7.1	1200	B							83	4.193	06
35	40	7.5	1596	1.0	7.3	1550	B							78	6.155	07
28	50	5.5	1426	1.0	5.4	1400	B							76	5	08
23.3	60	4	1195	1.1	4.2	1260	B							73	4.193	09
17.5	80	3	1113	1.0	3.1	1150								68	3.17	10
14	100	2.2	960	1.0	2.3	1000								64	2.55	11

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit Q15 is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo Q15 è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße Q15 wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type Q15 est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño Q15 se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

					
B3	B6	B7	B8	V5	V6
7.00 LT	5.40 LT	5.40 LT	5.10 LT	7.00 LT	5.10 LT

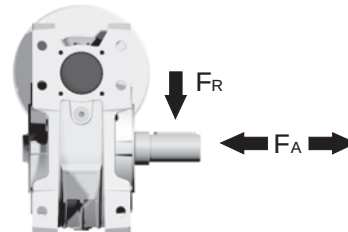
AGIP Blasias 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

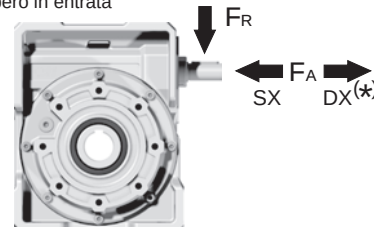
RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
200	1300	6500
150	1440	7200
100	1640	8200
75	1800	9000
50	2120	10600
25	2700	13500
15	3300	16500

Input shaft
albero in entrata



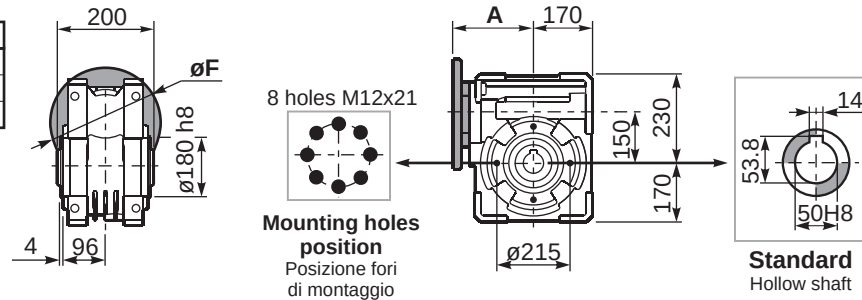
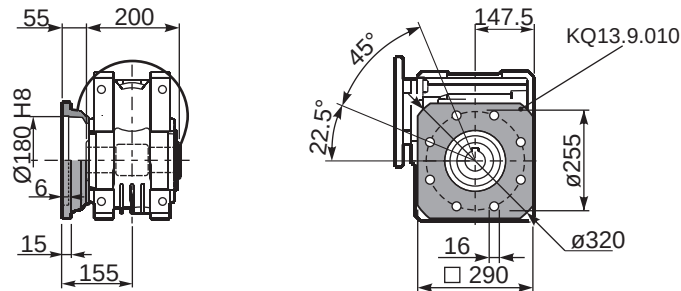
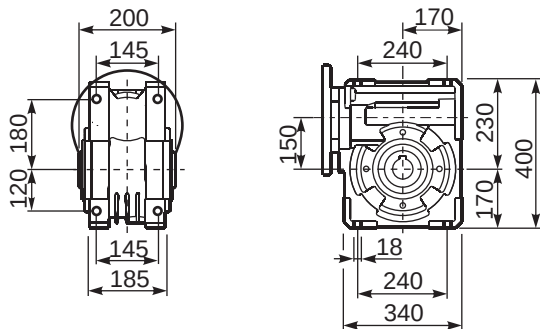
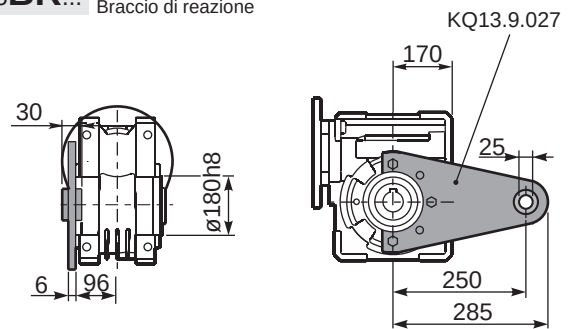
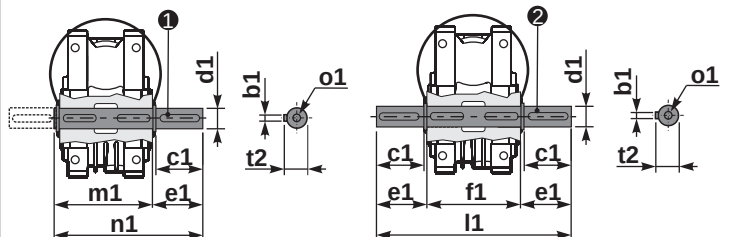
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	400	2000

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PQ15FB...Basic wormbox
Riduttore baseGearbox
weight
peso riduttore**84.0 kg**

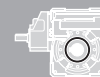
M. flanges	Kit code	øF	A
100/112B5	KQ15.4.042	250	210
132B5	KQ15.4.043	300	210
160B5	KQ15.4.044	350	210

**PQ15FC...**Square flange
Flangia quadrata**PQ15FB...**Feet
Piedini**PQ15BR...**Reaction arm
Braccio di reazione**PQ15.....S...**Single Shaft
Albero lento semplice**PQ15.....D...**Double Shaft
Albero lento bisp.

① kit cod. KQ15.5.028 type B

② kit cod. KQ15.5.029 type B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type	14	82	50 ^{-0.005/-0.020}	87	200	374	210	297	53.5	M16
type	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges			Available B14 motor flanges		Dynamic efficiency RD	Tooth Module  [mm]	Ratios code 
							-A	-B	-C	-P	-Q			
							56	63	71	63	71			
47	30.1	0.25	38	1.4	0.36	55				C		74	2.2	01
33	43.0	0.25	53	1.0	0.26	55				C		72	2.2	02
23	60.2	0.25	62	0.9	0.22	55				C		60	2.4	03
15.5	90.3	0.12	42	1.3	0.16	55				C		57	1.6	04
11.6	120	0.12	52	1.1	0.13	55				C		53	2.5	05
8.8	159	0.12	64	0.9	0.10	55				C		49	1.8	06
7.1	198	0.12*	55	<0.8	0.09	55				C		47	1.5	07
5.4	258	0.12*	55	<0.8	0.07	55				C		45	1.2	08
4.7	301	0.12*	39	<0.8	0.05	39				C		40	1.0	09
3.2	439	0.12*	39	<0.8	0.04	39				C		36	0.72	10

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **P4Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P4Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

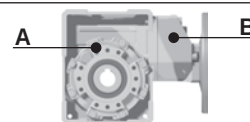
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P4Q** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P4Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P4Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION P4Q Oil

Common lubrication 0.17 l (A + B).



AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

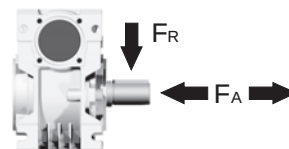
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

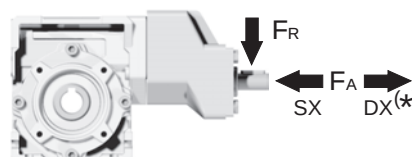
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
75	240	1200
50	260	1400
25	300	1800
15-6	400	2000

Input shaft

albero in entrata



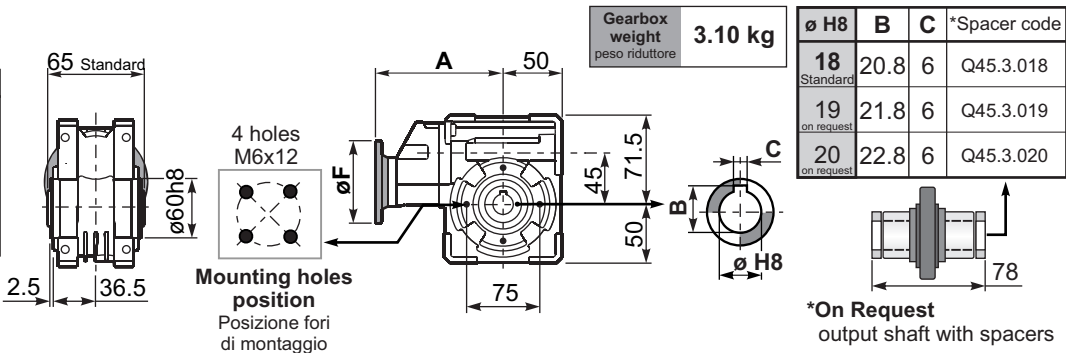
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	44	220

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

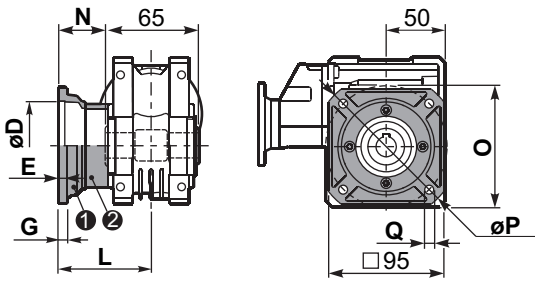
tab. 2

PP4Q**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K050.4.046	120	143.5
63B5	K050.4.041	138	145.5
71B5	K050.4.042	160	143
63B14	K050.4.047	90	145.5
71B14	K050.4.045	105	143

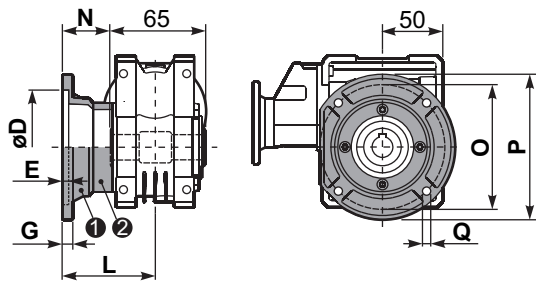


PP4Q**FC**... Square flange
Flangia quadrata



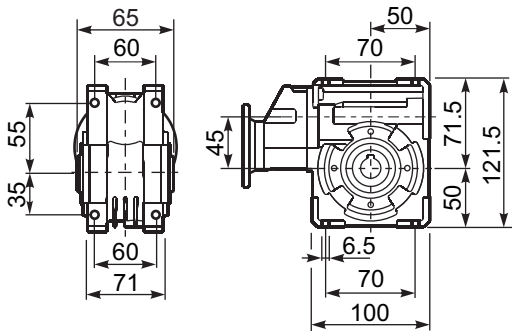
type B	øD	E	G	L	N	O	P	Q	kit code
FC	60 H8	4	7	67	34.5	75	110	9	KQ45.9.010
FL	60 H8	4	7	97	64.5	75	110	9	KQ45.9.011

PP4Q**F1**... Round flange
Flangia rotonda

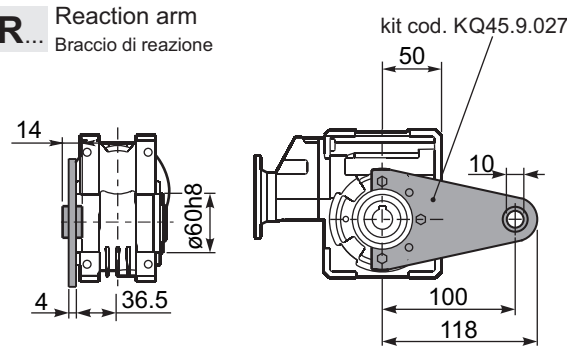


type S	øD	E	G	L	N	O	P	Q	kit code
F1	95H8	5	9	80	47.5	115	140	9.5	KSQ45.9.012
F2	-	-	-	-	-	-	-	-	-

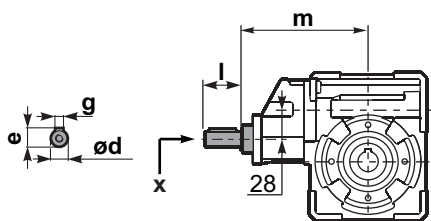
PP4Q**FB**... Feet
Piedini



PP4Q**BR**... Reaction arm
Braccio di reazione

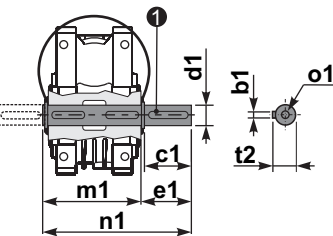


R**P4QFB**... Input shaft
Albero in entrata



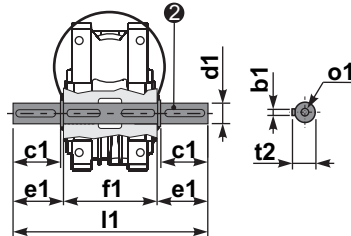
	ød	e	g	l	m	x	
type B	14 h6	16	5	25	141	M5x13	C35.5.061
type S	-	-	-	-	-	-	

PP4Q.....**S**... Single Shaft
Albero lento semplice



① kit cod. K045.5.028 type B
kit cod. KS045.5.030 type S

PP4Q.....**D**... Double Shaft
Albero lento bisp.



② kit cod. K045.5.029 type B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	6	32	18 ^{-0.005} _{-0.020}	43	65	151	70	113	20.5	M6x18
type S	6	40	19 ^{-0.005} _{-0.020}	58.5	-	-	70	128.5	21.5	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges			Available B14 motor flanges		Dynamic efficiency RD	Tooth Module [mm]	Ratios code 
							-A	-B	-C	-P	-Q			
							56	63	71	63	71			
47	30.1	0.37	58	1.3	0.49	77				C		76	2.5	01
33	43.0	0.25	55	1.4	0.35	77				C		75	2.4	02
23	60.2	0.25	71	1.1	0.27	77				C		69	2.6	03
18.1	77.4	0.25	81	1.1	0.27	88				C		61	2.0	04
12.5	112	0.18	84	1.1	0.19	88				C		61	2.7	05
9.0	155	0.12	71	1.2	0.15	88				C		56	2.1	06
7.6	185	0.12	74	1.0	0.12	77				C		49	1.8	07
5.4	258	0.12*	77	<0.8	0.09	77				C		47	1.3	08
4.8	292	0.12*	66	<0.8	0.08	66				C		44	1.2	09
4.1	344	0.12*	44	<0.8	0.05	44				C		40	1.0	10
3.3	430	0.12*	44	<0.8	0.04	44				C		36	0.8	11

 Motor Flanges Available
Flange Motore Disponibili

 B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

 B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

 C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **P5Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

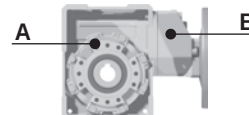
I Il riduttore tipo **P5Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **P5Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P5Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P5Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION P5Q Oil Common lubrication 0.26 l (A + B).



AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

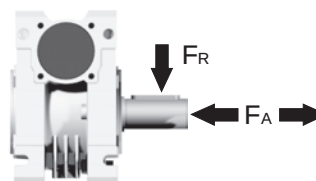
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

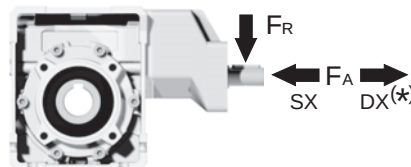
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
75	340	1700
50	380	1900
25	480	2500
15-6	560	2800

Input shaft

albero in entrata



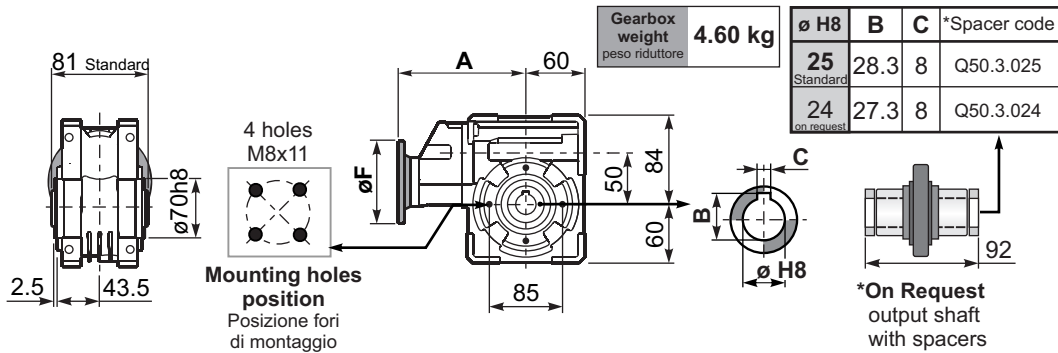
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	44	220

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

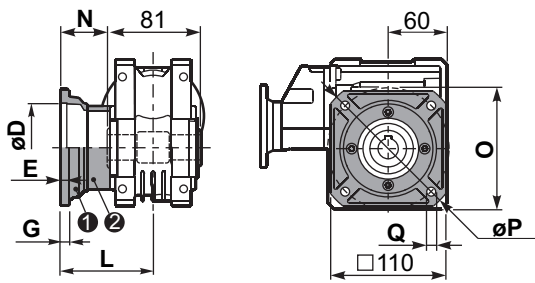
tab. 2

PP5Q**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K050.4.046	120	147
63B5	K050.4.041	138	149
71B5	K050.4.042	160	146.5
63B14	K050.4.047	90	149
71B14	K050.4.045	105	146.5

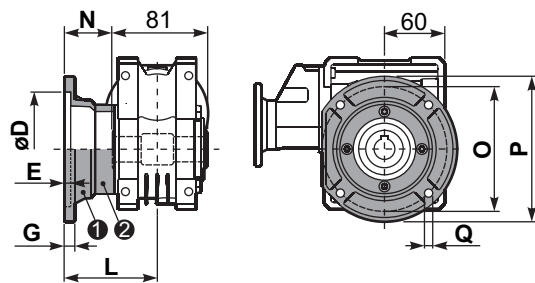


PP5Q**FC**... Square flange
Flangia quadrata



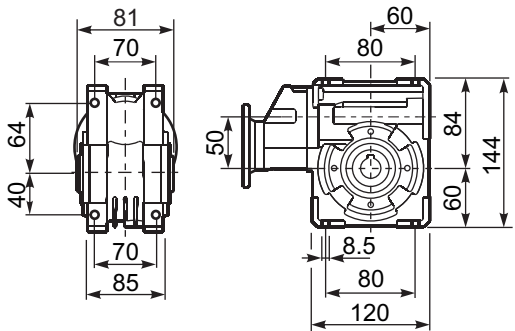
type B	øD	E	G	L	N	O	P	Q	kit code
FC	70 H8	5	9	90	49.5	85	125	11	KQ50.9.010
FL	70 H8	5	9	120	79.5	85	125	11	KQ50.9.011

PP5Q**F1**... Round flange
Flangia rotonda

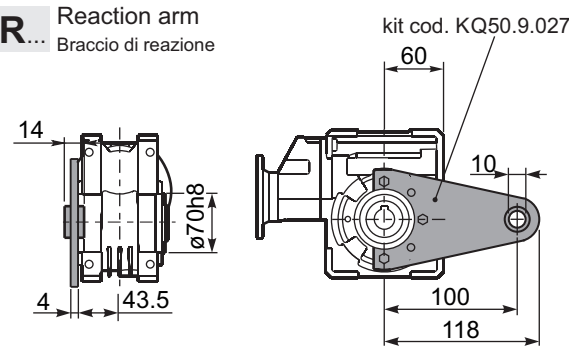


type S	øD	E	G	L	N	O	P	Q	kit code
F1	110 H8	5	10	89	69.5	130	160	9.5	KSQ50.9.012
F2	95 H8	5	14.5	72	31.5	115	140	11	KSQ50.9.013

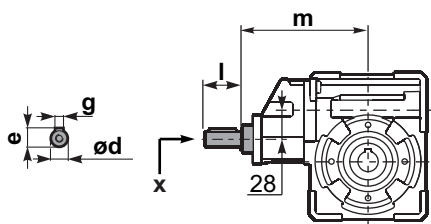
PP5Q**FB**... Feet
Piedini



PP5Q**BR**... Reaction arm
Braccio di reazione

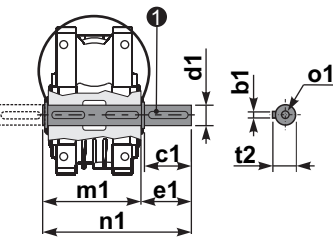


R**P5QFB**... Input shaft
Albero in entrata



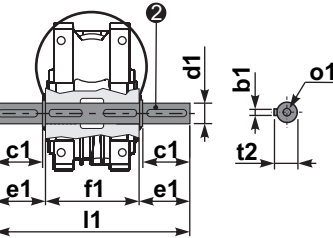
	ød	e	g	l	m	x	
type B	14 h6	16	5	25	140.5	M5x13	C35.5.061
type S	-	-	-	-	-	-	

PP5Q.....**S**... Single Shaft
Albero lento semplice



1 kit cod. K050.5.028 type B
kit cod. KS050.5.030 type S

PP5Q.....**D**... Double Shaft
Albero lento bisp.



2 kit cod. K050.5.029 type B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	8	52	25 ^{-0.005/-0.020}	59.5	81	200	86.5	146	28	M8x20
type S	8	50	24 ^{-0.005/-0.020}	68.8	-	-	86.5	155	27	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

	Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges				Dynamic efficiency RD	Tooth Module [mm]	Ratios code
								-B	-C	-D	-E	-P	-Q	-R	-T			
								63	71	80	90	63	71	80	90			
IEC 90 - 80 - 71	47	29.9	0.75	113	1.5	1.1	165						C	C		74	2.6	01
	37	37.7	0.75	141	1.2	0.88	165						C	C		73	2.0	02
	30	47.1	0.75	169	1.1	0.83	187						C	C		70	3.2	03
	25	56.6	0.55	136	1.4	0.76	187						C	C		64	2.7	04
	19.8	70.7	0.55	164	1.1	0.63	187						C	C		62	2.1	05
	15.9	87.8	0.37	162	1.2	0.43	187						C	C		73	2.6	06
	12.6	111.0	0.37	199	0.9	0.35	187						C	C		71	2.0	07
IEC 71 - 63	10.1	139	0.37	234	0.8	0.30	187					C				67	3.2	08
	8.4	166	0.25	173	1.1	0.27	187					C				61	2.7	09
	6.7	208	0.18	151	1.1	0.20	165					C				59	2.1	10
	4.5	310	0.12	129	1.3	0.15	165					C				51	1.5	11
	3.8	370	0.12	145	1.1	0.14	165					C				48	1.3	12
	3.2	434	0.12	149	0.9	0.11	138					C				42	1.1	13

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **P6Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

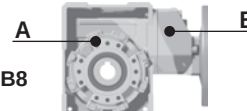
I Il riduttore tipo **P6Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **P6Q** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P6Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P6Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION P6Q Oil
For B3-V5-V6 separate lubrication for A (0.30 l) B (0.08 l), for B6-B7-B8 common lubrication 0.35 l (A + B).



AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

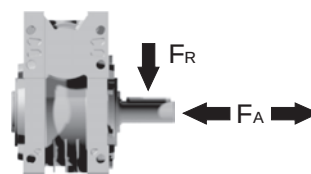
tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

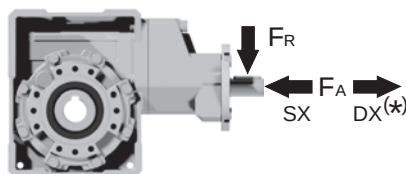
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
75	500	2500
50	600	3000
25	700	3800
15-6	800	4000

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	61	305

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

Gearbox weight	29.9+111	139+434
peso riduttore	7.05 Kg	6.60 Kg

On request
A richiesta

type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 ^{+0.20} _{+0.15}	7	13	110	50	165	200	13	① KS070.9.013 ② -
F2	115 ^{+0.20} _{+0.15}	7	13	124	64	150	175	11	① KS063.9.013 ② -
F3	110 ^{+0.035} ₀	5	11	90	30	130	160	10	① KS063.9.011 ② -

Technical drawing of a mechanical component, likely a pump or valve assembly, showing dimensions in millimeters. The drawing includes a side view and a cross-sectional view. Key dimensions are labeled: 72.5 (width of the main body), 11 (thickness of the flange), 150 (width of the base), and 180 (total width including the base). The component features a central circular opening with a cross-hatched pattern, suggesting a threaded or sealed connection.

② kit cod. K063.5.029 type B

[illegible]



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
22	62.9	0.75	248	1.2	0.87	286					C	C		77	3.10	01
18	78.5	0.75	293	1.0	0.73	286					C	C		73	2.41	02
15	94.2	0.75	333	0.9	0.70	310					C	C		69	2.10	03
11	126	0.55	297	1.0	0.55	296	B				C	C		63	1.53	04
9	157	0.37	230	1.1	0.41	252	B				C	C		58	1.23	05
8	185	0.37	257	1.2	0.43	296	B				C	C		55	3.10	06
6	231	0.25	193	1.5	0.38	296	B				C	C		49	2.41	07
5	277	0.25	222	1.3	0.33	296	B				C	C		47	2.10	08
4	378	0.18	200	1.5	0.27	296	B				C	C		43	2.10	09

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit P7Q is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo P7Q viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

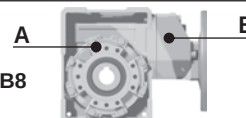
D Für die Lebensdauerschmierung ist das Getriebe der Größe P7Q mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type P7Q est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño P7Q se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION P7Q Oil

For B3-V5-V6 separate lubrication for A (0.40 l) B (0.14 l), for B6-B7-B8 common lubrication 0.65 l (A + B).



AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

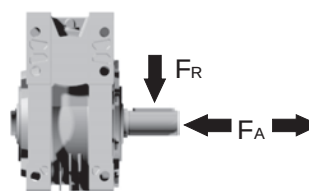
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

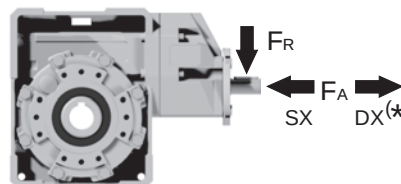
Albero di uscita



n_2 [min ⁻¹]	F_A [N]	F_R [N]
75	620	3100
50	720	3600
25	880	4400
15-6	1000	5000

Input shaft

albero in entrata



n [min ⁻¹]	F_A [N]	F_R [N]
1400	108	540

*Strong axial loads in the DX direction are not allowed.

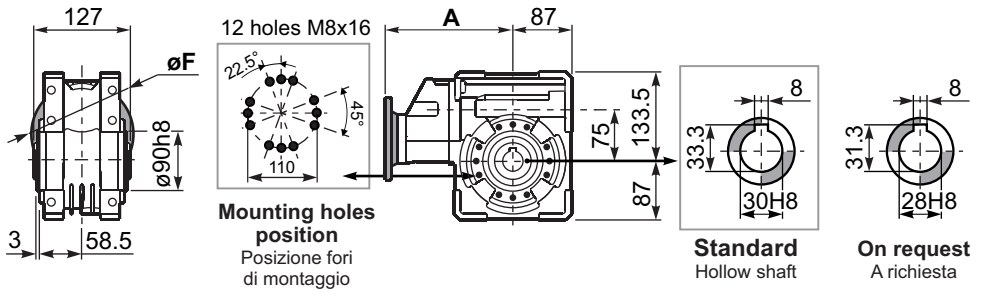
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

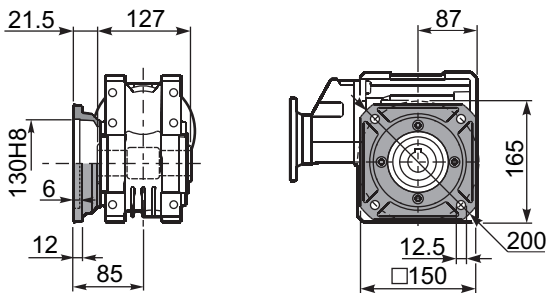
PP7Q**FB**... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **9.90 kg**

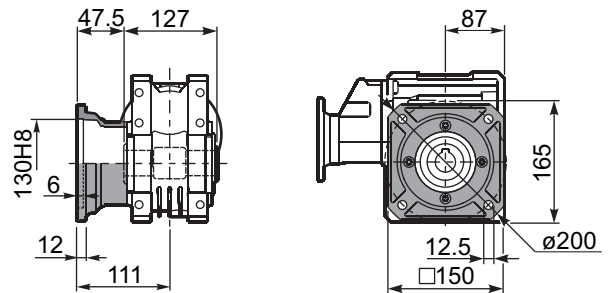
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	192.7
71B5	K063.4.042	160	190.7
80/90B5	K063.4.043	200	192.7
71B14	K063.4.047	105	190.7
80B14	K063.4.046	120	192.7
90B14	K063.4.041	140	192.7



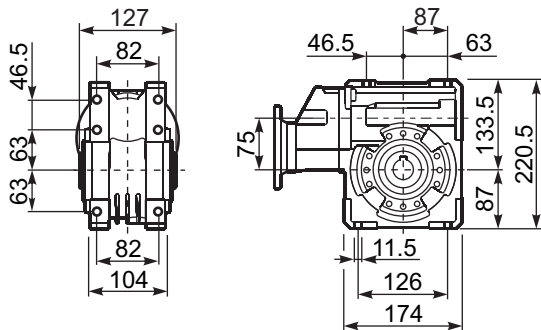
PP7Q**FC**... Square flange
Flangia quadrata



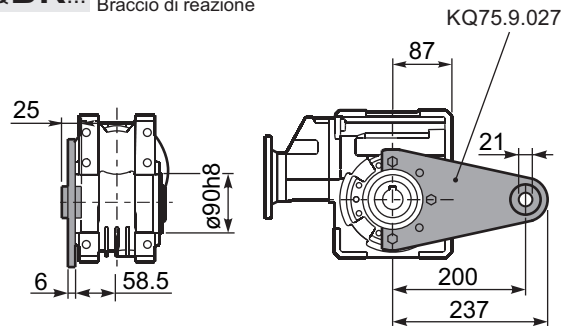
PP7Q**FL**... Square flange
Flangia quadrata



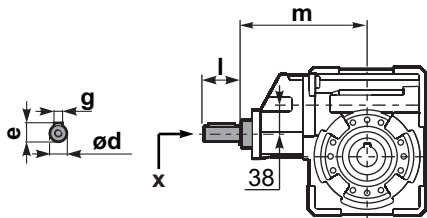
PP7Q**FB**... Feet
Piedini



PP7Q**BR**... Reaction arm
Braccio di reazione

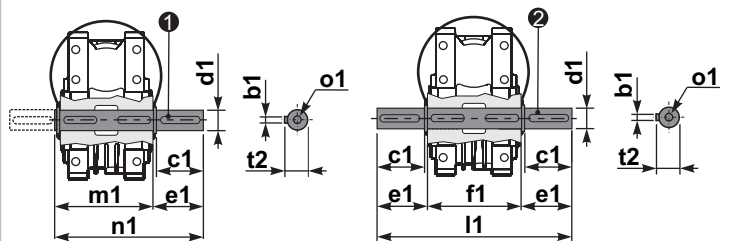


R**P7QFB**... Input shaft
Albero in entrata



PP7Q.....**S**... Single Shaft
Albero lento semplice

PP7Q.....**D**... Double Shaft
Albero lento bisp.



	ød	e	g	l	m	x	
type B	19 h6	21.5	6	35	185.5	M6x16	C40.5.062
type S	-	-	-	-	-	-	

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standard	8	60	30 ^{-0.005/-0.020}	65	127	255	134	199	33	M8x20
On request	8	50	28 ^{-0.005/-0.020}	65	-	-	134	199	31	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code 
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
23.5	59.7	1.1	300	1.4	1.5	418					C	C		67	3.5	01
19.4	72.3	1.1	347	1.2	1.3	407					C	C		64	3.1	02
17.1	81.7	1.1	374	1.1	1.2	418					C	C		61	2.7	03
13.3	105	0.75	323	1.2	0.89	385					C	C		60	2.1	04
8.0	176	0.55	415	1.1	0.58	440	B				C	C		63	3.5	05
6.6	213	0.37	322	1.3	0.47	407	B				C	C		60	3.1	06
5.8	240	0.37	321	1.3	0.48	418	B				C	C		53	2.7	07
4.3	328	0.37	438	1.0	0.35	418	B				C	C		53	2.7	08
3.3	422	0.25	374	1.0	0.26	385	B				C	C		52	2.1	09
3.0	466	0.25	358	0.9	0.23	330	B				C	C		45	1.9	10
2.3	605	0.18	297	1.1	0.20	330	B				C	C		40	1.5	11

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **P8Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P8Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

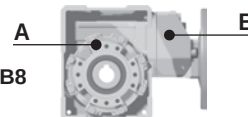
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P8Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P8Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P8Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION P8Q Oil

For B3-V5-V6 separate lubrication for A (1.20 l) B (0.14 l) , for B6-B7-B8 common lubrication 1.00 l (A + B).



AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

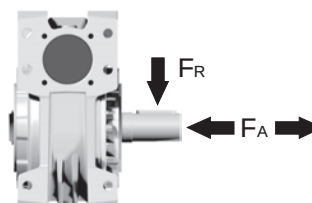
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

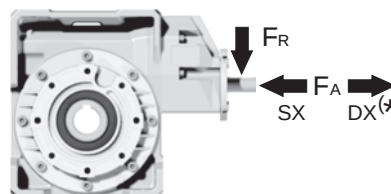
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
75	700	3500
50	800	4000
25	1000	5000
15-6	1160	5800

Input shaft

albero in entrata



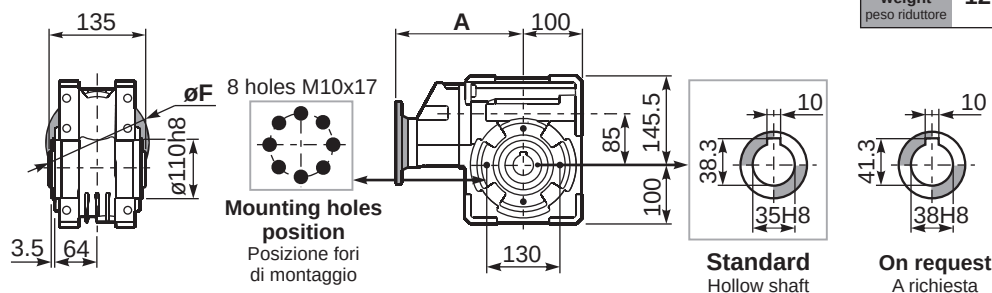
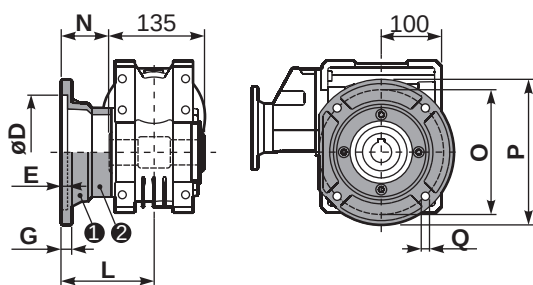
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	108	540

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

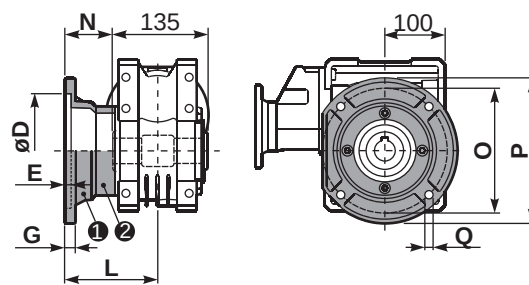
tab. 2

PP8QFB...Basic wormbox
Riduttore baseGearbox
weight
peso riduttore **12.3 kg**

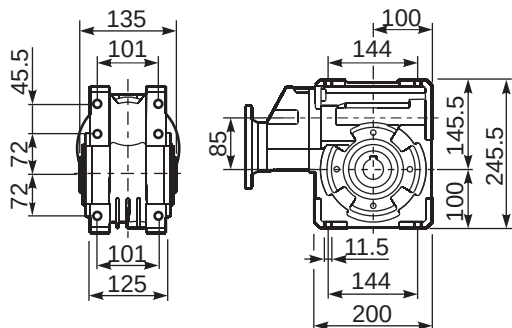
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	195.2
71B5	K063.4.042	160	193.2
80/90B5	K063.4.043	200	195.2
71B14	K063.4.047	105	193.2
80B14	K063.4.046	120	195.2
90B14	K063.4.041	140	195.2

**PP8QFC...**Output flange
Flangia uscita

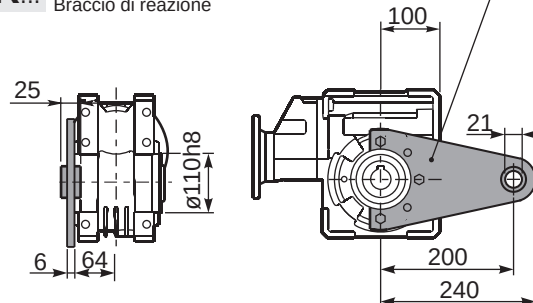
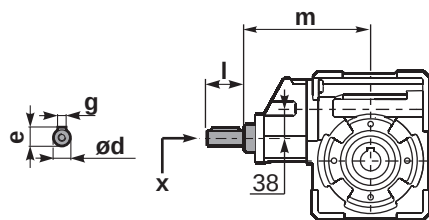
type B	øD	E	G	L	N	O	P	Q	kit code
FC	152 ^{+0.06} _{+0.00}	5	16	108	40.5	176	205	13	① K085.9.010 ② -
FL	152 ^{+0.06} _{+0.00}	5	16	148.5	81	176	205	13	① K085.9.010 ② K085.0.201

PP8QF1...Output flange
Flangia uscita

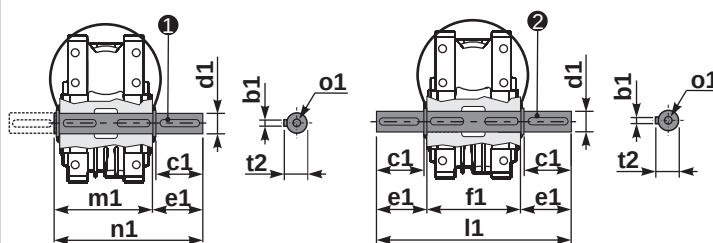
type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 ^{+0.04} _{+0.00}	5	13	117.5	50	165	200	11.5	① KS085.9.012 ② -
F2	152 ^{+0.06} _{+0.00}	5	15	147.5	80	180	205	12.5	① KS085.9.013 ② -
F4	130 ^{+0.04} _{+0.00}	5	13	106.5	39	165	200	13	① KS085.9.015 ② -

PP8QFB...Feet
Piedini**PP8QBR...**Reaction arm
Braccio di reazione

kit cod. K085.9.027

**RP8QFB...**Input shaft
Albero in entrata

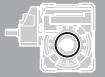
	ød	e	g	l	m	x	
type B	19 h6	21.5	6	35	187.5	M6x16	C40.5.062
type S	-	-	-	-	-	-	

PP8Q.....S...Single Shaft
Albero lento semplice**PP8Q.....D...**Double Shaft
Albero lento bisp.

① kit cod. K085.5.028 type B

② kit cod. K085.5.029 type B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	10	60	35 ^{-0.005} _{-0.020}	73.5	135	282	141	214.5	38	M10x23
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code 
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
16.8	83.2	1.5	587	1.1	1.7	660					C	C		69	3.5	01
13.9	100.5	1.5	699	0.8	1.3	594					C	C		68	2.9	02
10.6	132	1.1	634	0.9	0.95	550					C	C		64	2.2	03
8.0	176	0.75	666	1.2	0.90	803	B				C	C		74	4.7	04
6.7	208	0.75	766	0.9	0.65	660	B				C	C		72	4.0	05
5.7	245	0.55	634	1.0	0.57	660	B				C	C		69	3.5	06
4.7	296	0.55	755	0.8	0.43	594	B				C	C		68	2.9	07
4.2	334	0.55	865	0.8	0.42	660	B				C	C		69	3.5	08
3.5	403	0.37	692	0.9	0.32	594	B				C	C		68	2.9	09
2.6	529	0.25	577	1.0	0.24	550	B				C	C		64	2.2	10
2.2	624	0.25	628	0.8	0.21	528	B				C	C		59	1.9	11

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **P1Q** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. Primary reduction unit is supplied with closed plugs and lubricated for life with synthetic oil. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P1Q** è fornito privo di lubrificazione con tappi di sfianto, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. La precoppia è fornita con tappi chiusi e lubrificata a vita con olio sintetico. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **P1Q** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen. Die Stirnradvorstufe ist Lebensdauergeschmiert und wird mit synthetischem Öl geliefert. Die Stirnradvorstufe ist komplett geschlossen ohne Füllschrauben. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P1Q** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. Le pré couple est fourni lubrifié à vie avec de l'huile synthétique et avec des bouchons fermés. Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño **P1Q** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

					
B3	B6	B7	B8	V5	V6
1.9/0.14LT	1.35/0.14 LT	1.35/0.14 LT	2.0/0.14 LT	2.0/0.14 LT	2.0/0.14 LT

ENI Blasias 460

For all details on lubrication and plugs check our website

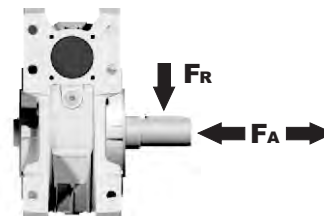
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

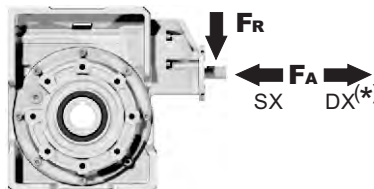
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
75	800	4000
50	920	4600
25	1200	6000
15-6	1400	7000

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	150	760

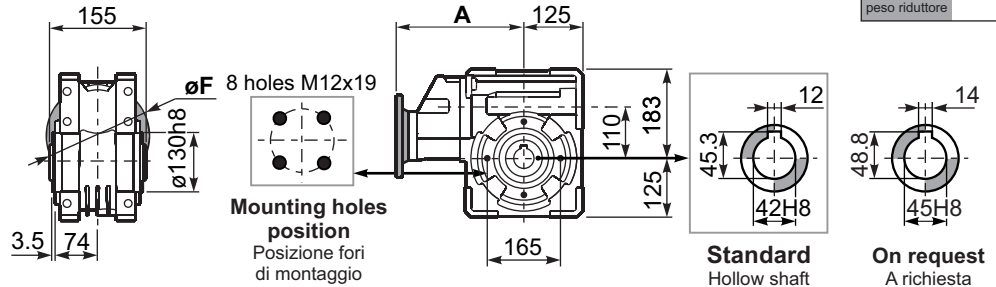
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

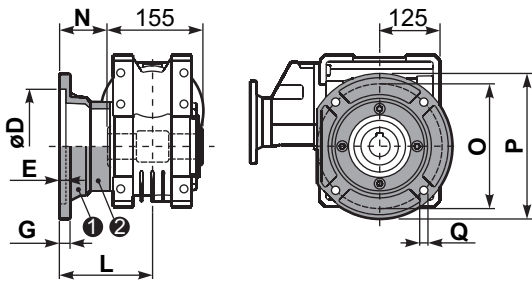
PP1Q**FB**... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **37.3 kg**

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	214.7
71B5	K063.4.042	160	212.7
80/90B5	K063.4.043	200	214.7
71B14	K063.4.047	105	212.7
80B14	K063.4.046	120	214.7
90B14	K063.4.041	140	214.7

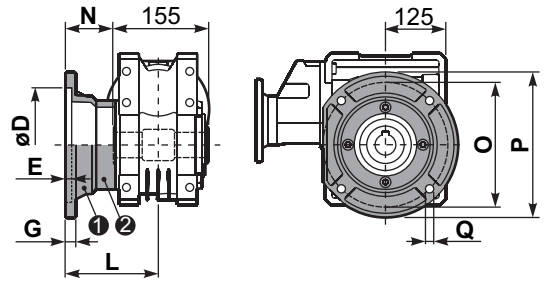


PP1Q**FC**... Output flange
Flangia uscita



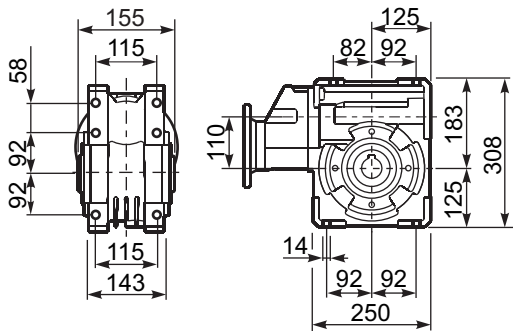
type B	øD	E	G	L	N	O	P	Q	kit code
FC	170 ^{+0.083} _{+0.043}	11	16.5	131.5	54	230	270	13	1 K110.9.010 2 -
FL	170 ^{+0.083} _{+0.043}	11	16.5	179.5	102	230	270	13	1 K110.9.011 2 -

PP1Q**F1**... Output flange
Flangia uscita

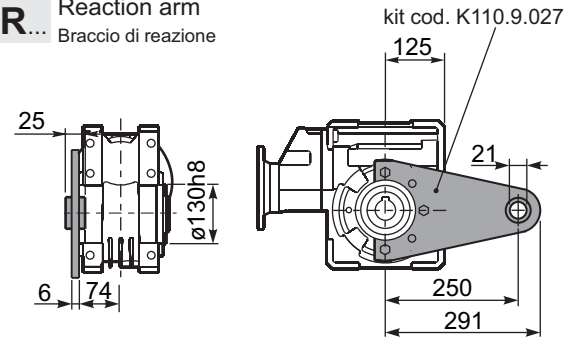


type S	øD	E	G	L	N	O	P	Q	kit code
F1	180 ^{+0.040} ₀	5	18	150	72.5	215	250	15	1 KS110.9.014 2 -
F3	180 ^{+0.040} ₀	5	18	130	52.5	215	250	15	1 KS110.9.013 2 -

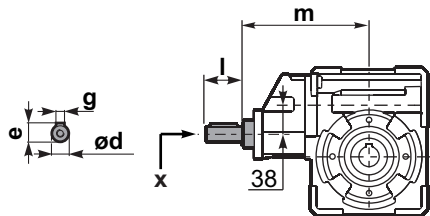
PP1Q**FB**... Feet
Piedini



PP1Q**BR**... Reaction arm
Braccio di reazione

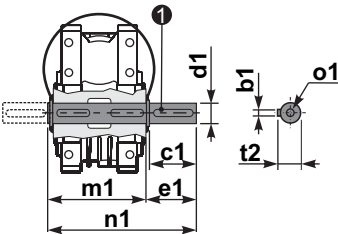


R**P1QFB**... Input shaft
Albero in entrata

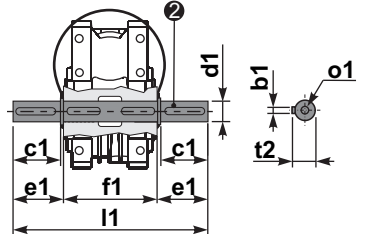


	ød	e	g	l	m	x	
type B	19 h6	21.5	6	35	205	M6x16	C40.5.062
type S	-	-	-	-	-	-	

PP1Q.....**S**... Single Shaft
Albero lento semplice

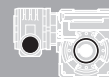


PP1Q.....**D**... Double Shaft
Albero lento bisp.



1 kit cod. K110.5.028 type B 2 kit cod. K110.5.029 type B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	12	75	42 ^{-0.005} _{-0.020}	96.5	155	348	163.5	260	45	M12x32
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

 input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges		Dynamic efficiency RD	Tooth Module [mm]	Ratios code 
							-A	-B	-O	-P			
							56	63	56	63			
10.0	140	0.12	57	1.2	0.14	69	B		B-C		50	2.2	01
7.0	200	0.12	79	0.9	0.11	69	B		B-C		48	2.2	02
5.0	280	0.12*	69	<0.8	0.08	69	B		B-C		45	2.4	03
3.3	420	0.12*	69	<0.8	0.07	69	B		B-C		36	1.6	04
2.5	560	0.12*	69	<0.8	0.05	69	B		B-C		33	2.5	05
1.9	740	0.12*	69	<0.8	0.05	69	B		B-C		30	1.8	06
1.5	920	0.12*	69	<0.8	0.04	69	B		B-C		27	1.5	07
1.3	1120	0.12*	69	<0.8	0.03	69	B		B-C		26	2.5	08
0.9	1480	0.12*	69	<0.8	0.03	69	B		B-C		24	1.8	09
0.8	1840	0.12*	69	<0.8	0.02	69	B		B-C		22	1.5	10
0.6	2400	0.12*	69	<0.8	0.02	69	B		B-C		21	1.2	11

 **Motor Flanges Available**
Flange Motore Disponibili

 **B) Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

 **C) Motor Flange Holes Position**
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

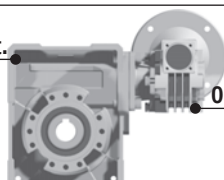
EN Unit **43Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **43Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **43Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **43Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **43Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

0.09 Lt.  **0.03 Lt.**

•LUBRICATION 43Q Oil Quantity 0.09/0.03 Lt.

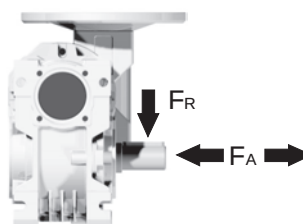
AGIP Telium VSF 320	SHELL Omala S4 WE 320
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For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

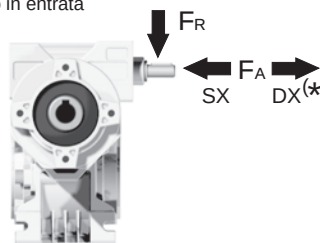
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
25	300	1800
15	400	2000

Input shaft

albero in entrata



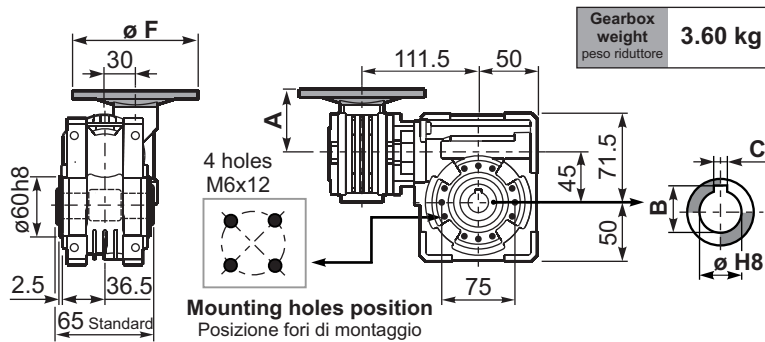
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	20	100

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

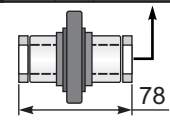
P43Q**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



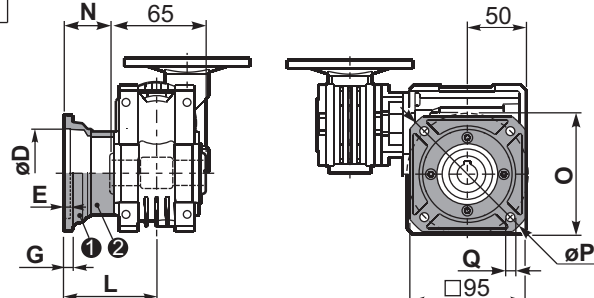
Gearbox weight
peso riduttore **3.60 kg**

ø H8	B	C	*Spacer code
18 Standard	20.8	6	Q45.3.018
19 on request	21.8	6	Q45.3.019
20 on request	22.8	6	Q45.3.020



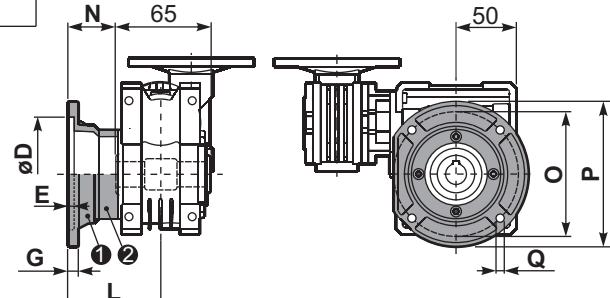
*On Request
output shaft with spacers

P43Q**FC**... Square flange
Flangia quadrata



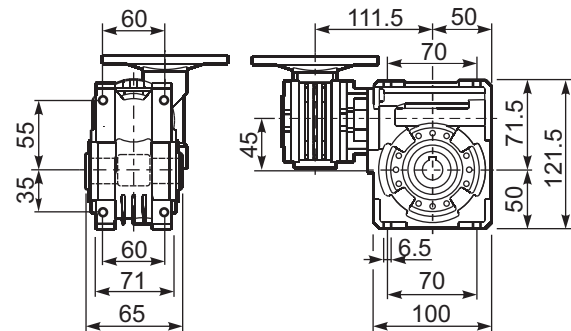
type B	øD	E	G	L	N	O	P	Q	kit code
FC	60 H8	4	7	67	34.5	75	110	9	KQ45.9.010
FL	60 H8	4	7	97	64.5	75	110	9	KQ45.9.011

P43Q**F1**... Round flange
Flangia rotonda

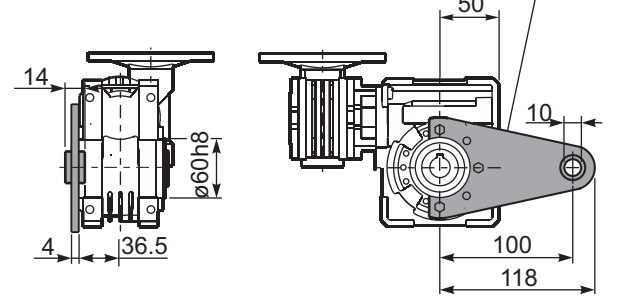


type S	øD	E	G	L	N	O	P	Q	kit code
F1	95H8	5	9	80	47.5	115	140	9.5	KSQ45.9.012
F2	-	-	-	-	-	-	-	-	-

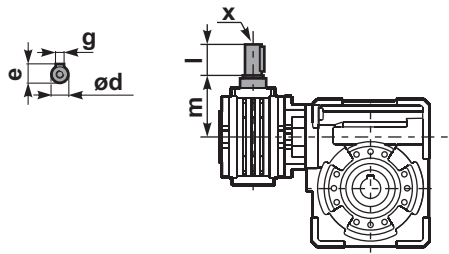
P43Q**FB**... Feet
Piedini



P43Q**BR**... Reaction arm
Braccio di reazione

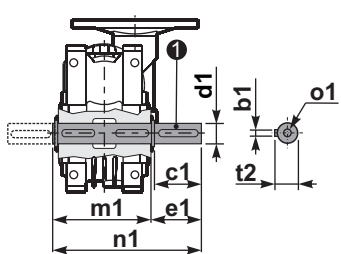


R43Q**FB**... Input shaft
Albero in entrata



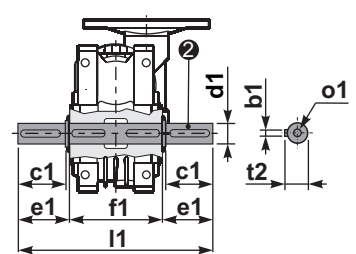
	ød	e	g	l	m	x	kit code
type B	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
type S	-	-	-	-	-	-	-

P43Q.....**S**... Single Shaft
Albero lento semplice



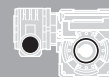
① kit cod. K045.5.028 type B
kit cod. KS045.5.030 type S

P43Q.....**D**... Double Shaft
Albero lento bisp.



② kit cod. K045.5.029 type B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	6	32	18 ^{-0.005/-0.020}	43	65	151	70	113	20.5	M6x18
type S	6	40	19 ^{-0.005/-0.020}	58.5	-	-	70	128.5	21.5	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges		Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-A	-B	-O	-P			
							56	63	56	63			
5.6	252	0.12	97	1.1	0.14	109	B		B-C		47	2.1	01
3.9	360	0.12	124	0.9	0.11	109	B		B-C		42	2.1	02
2.6	540	0.12*	109	<0.8	0.08	109	B		B-C		39	2.1	03
1.9	720	0.12*	109	<0.8	0.06	109	B		B-C		36	2.1	04
1.6	860	0.12*	109	<0.8	0.06	109	B		B-C		32	1.8	05
1.2	1200	0.12*	109	<0.8	0.05	109	B		B-C		27	1.3	06
1.0	1440	0.12*	109	<0.8	0.04	109	B		B-C		26	2.1	07
0.8	1720	0.12*	109	<0.8	0.04	109	B		B-C		25	1.8	08
0.6	2400	0.12*	104	<0.8	0.03	104	B		B-C		21	1.3	09

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **53Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **53Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **53Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **53Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **53Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

0.14 Lt.

0.03 Lt.

■ LUBRICATION 53Q Oil
Quantity 0.14/0.03 Lt.

AGIP Telium VSF 320

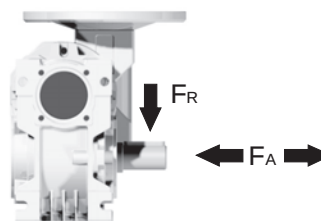
SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

■ RADIAL AND AXIAL LOADS

Output shaft

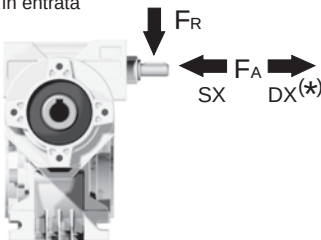
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
25	480	2500
15	560	2800

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	20	100

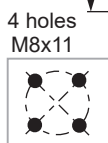
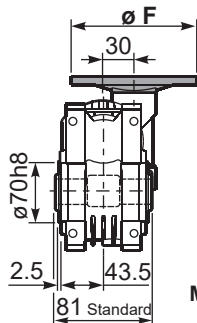
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

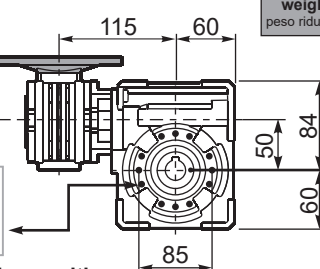
P53QFB...

Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5

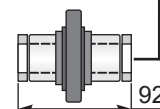
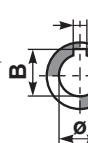


Mounting holes position
Posizione fori di montaggio



Gearbox weight	4.61 kg
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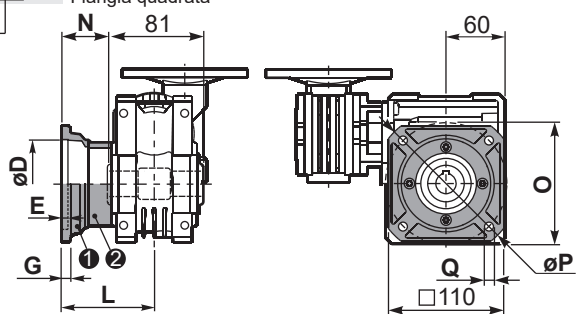
Ø H8	B	C	*Spacer code
25 Standard	28.3	8	Q50.3.025
24 on request	27.3	8	Q50.3.024



*On Request
output shaft
with spacers

P53Q**FC**...

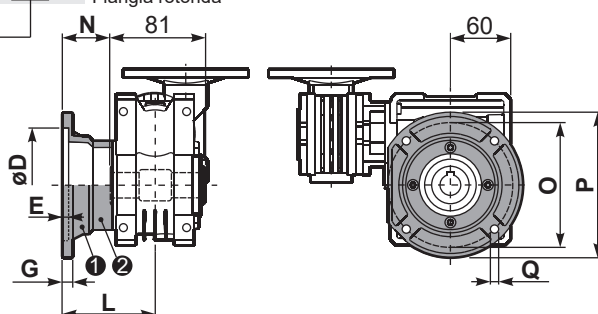
Square flange
Flangia quadrata



type B	øD	E	G	L	N	O	P	Q	kit code
FC	70 H8	5	9	90	49.5	85	125	11	KQ50.9.010
FL	70 H8	5	9	120	79.5	85	125	11	KQ50.9.011

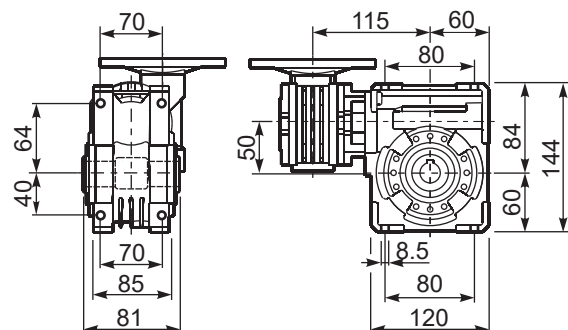
P53Q**F1**...

Round flange
Flangia rotonda



type S	øD	E	G	L	N	O	P	Q	kit code
F1	110 H8	5	10	89	48.5	130	160	9.5	KSQ50.9.012
F2	95 H8	5	14.5	72	31.5	115	140	11	KSQ50.9.013

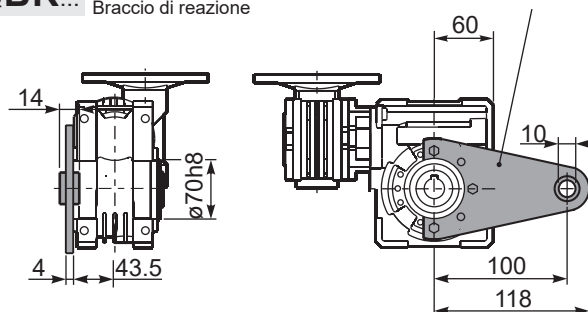
P53QFB...

Feet
Piedini

P53QBR...

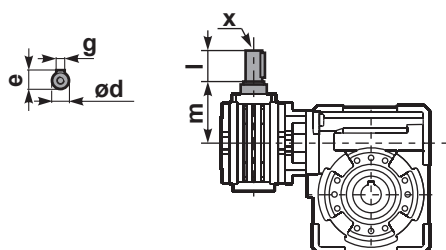
Reaction arm
Braccio di reazione

kit cod. KQ50.9.027



R53QFB...

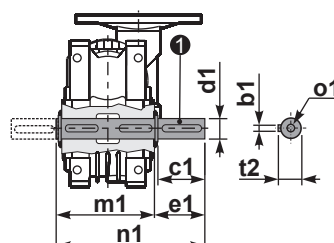
Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type B	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
type S	-	-	-	-	-	-	-

P53Q.....**S**...

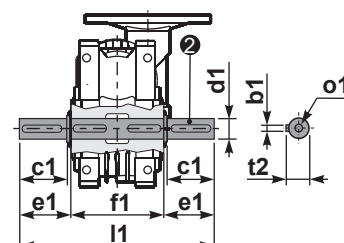
Single Shaft
Albero lento semplice



① kit cod. K050.5.028 type **B**
kit cod. KS050.5.030 type **S**

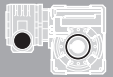
P53Q.....**D**..

- Double Shaft
- Albero lento bisp.



② kit cod. K050.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	8	52	$25^{+0.005}_{-0.020}$	59.5	81	200	86.5	146	28	M8x20
type S	8	50	$24^{+0.005}_{-0.020}$	68.8	-	-	86.5	155	27	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges		Dynamic efficiency RD	Tooth Module [mm]	Ratios code 
							-A	-B	-O	-P			
							56	63	56	63			
5.6	252	0.18	142	1.6	0.29	230	B		B-C		46	2.7	01
3.9	360	0.18	181	1.3	0.23	230	B		B-C		41	2.7	02
2.6	540	0.12	164	1.4	0.17	230	B		B-C		37	2.7	03
1.9	720	0.12	200	1.1	0.14	230	B		B-C		34	2.7	04
1.3	1080	0.12	265	0.9	0.10	230	B		B-C		30	2.7	05
1.0	1440	0.12*	230	<0.8	0.09	230	B		B-C		27	2.7	06
0.5	2745	0.12*	230	<0.8	0.05	230	B		B-C		23	2.1	07

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **63Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **63Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

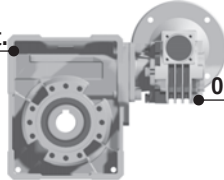
D Für die Lebensdauerschmierung ist das Getriebe der Größe **63Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **63Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **63Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

0.30 Lt.

■ LUBRICATION 63Q Oil
Quantity 0.30/0.03 Lt.



0.03 Lt.

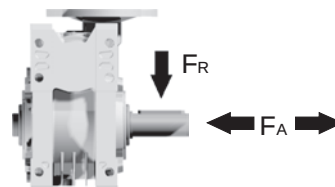
AGIP Telium VSF 320	SHELL Omala S4 WE 320
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For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

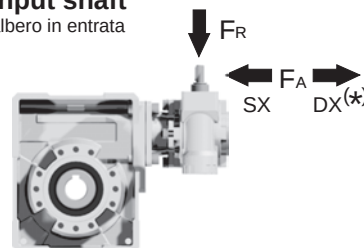
Albero di uscita



n_2 [min ⁻¹]	F_A [N]	F_R [N]
25	700	3800
15	800	4000

Input shaft

albero in entrata



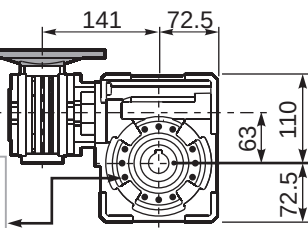
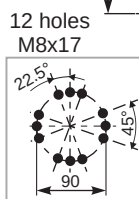
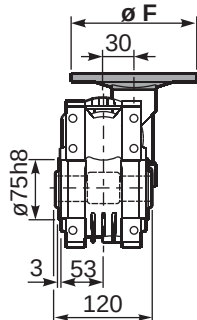
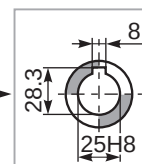
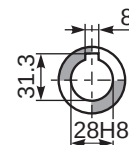
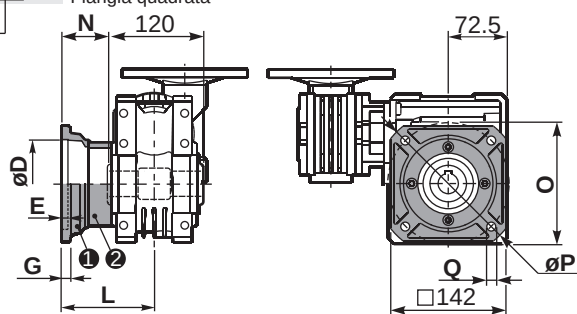
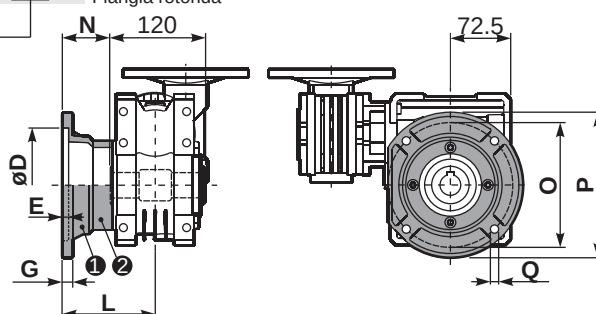
n_1 [min ⁻¹]	F_A [N]	F_R [N]
1400	20	100

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

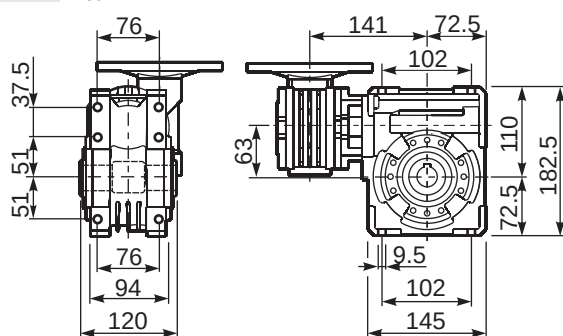
P63QFB...Basic wormbox
Riduttore baseGearbox
weight
peso riduttore**7.25 kg**

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5

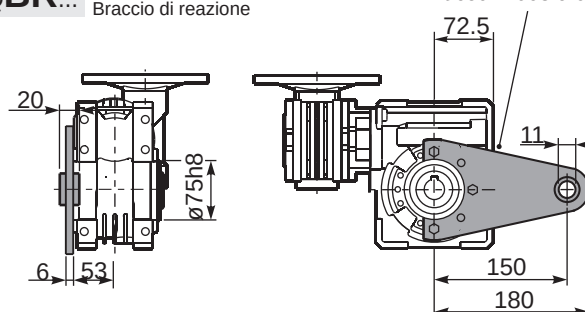
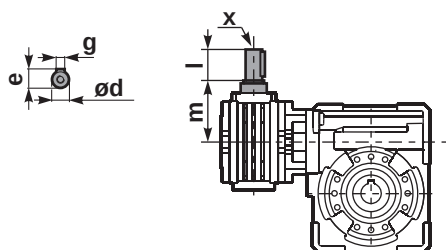
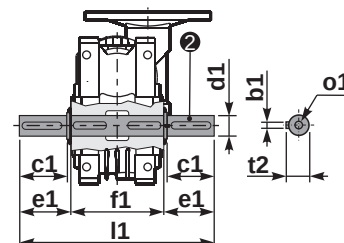
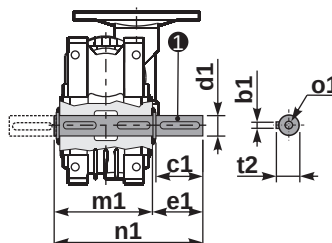
**Mounting holes position**
Posizione fori di montaggio**Standard**
Hollow shaft**On Request**
A richiesta**P63QFC...**Square flange
Flangia quadrata**P63QF1...**Round flange
Flangia rotonda

type B	øD	E	G	L	N	O	P	Q	kit code
FC	115 ^{+0.20} _{+0.15}	6	12	86	26	150	180	11	① KQ63.9.010 ② -
FL	115 ^{+0.20} _{+0.15}	6	12	116	56	150	180	11	① KQ63.9.010 ② K063.0.200

type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 ^{+0.20} _{+0.15}	7	13	110	50	165	200	13	① KS070.9.013 ② -
F2	115 ^{+0.20} _{+0.15}	7	13	124	64	150	175	11	① KS063.9.013 ② -
F3	110 ^{+0.035} ₀	5	11	90	30	130	160	10	① KS063.9.011 ② -

P63QFB...Feet
Piedini**P63QBR...**Reaction arm
Braccio di reazione

kit cod. K063.9.027

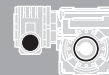
**R63QFB...**Input shaft
Albero in entrata**P63Q.....S...**Single Shaft
Albero lento semplice**P63Q.....D...**Double Shaft
Albero lento bisp.

① kit cod. K063.5.028 type B

② kit cod. K063.5.029 type B

	ød	e	g	l	m	x	kit code
type B	9 h6	10.2	3	20	58	-	① K030.5.006 PAM63 ② -
type S	-	-	-	-	-	-	① - ② -

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	8	60	25 ^{-0.005} _{-0.020}	63.2	120	246.4	126.8	190	28	M8x20
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Dynamic efficiency	Tooth Module  [mm]	Ratios code 
							-B	-C	-O	-P	-Q			
							63	71	56	63	71	RD		
5.6	252	0.25	198	1.3	0.33	265	B		B-C	B-C		46	2.7	01
3.9	360	0.18	186	1.4	0.26	265	B		B-C	B-C		42	2.7	02
2.8	504	0.18	241	1.1	0.20	265	B		B-C	B-C		39	2.7	03
1.9	756	0.12	204	1.3	0.16	265	B		B-C	B-C		33	2.7	04
1.4	1008	0.12	256	1.0	0.12	265	B		B-C	B-C		31	2.7	05
1.1	1332	0.12*	265	<0.8	0.10	265	B		B-C	B-C		30	2.7	06
0.8	1656	0.12*	265	<0.8	0.08	265	B		B-C	B-C		28	2.7	07
0.6	2160	0.12*	265	<0.8	0.07	265	B		B-C	B-C		26	2.7	08
0.6	2520	0.12*	265	<0.8	0.06	265	B		B-C	B-C		25	2.7	09

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **64Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **64Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **64Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **64Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **64Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

0.30 Lt.

0.09 Lt.

LUBRICATION 64Q Oil
Quantity 0.30/0.09 Lt.

AGIP Telium VSF 320

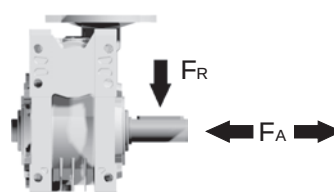
SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

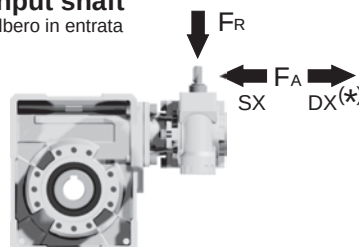
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft

albero in entrata



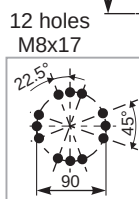
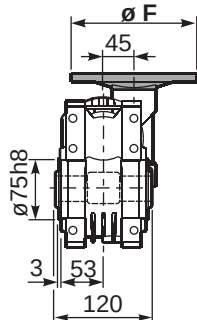
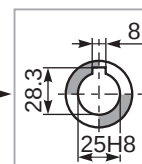
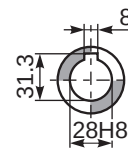
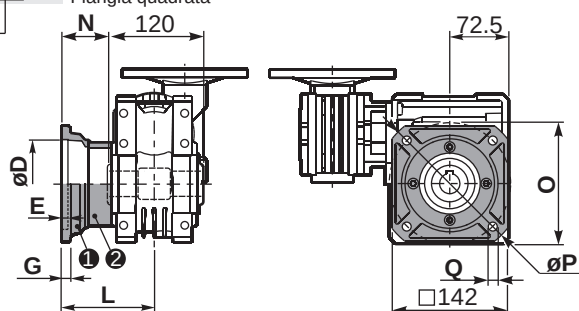
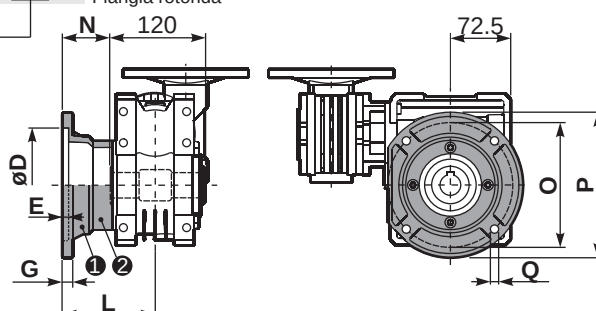
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	42	210

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

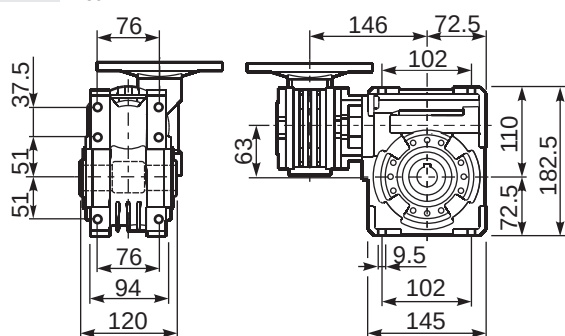
P64QFB...Basic wormbox
Riduttore baseGearbox
weight
peso riduttore**7.25 kg**

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5

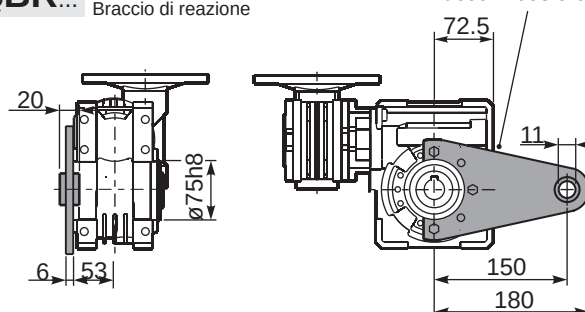
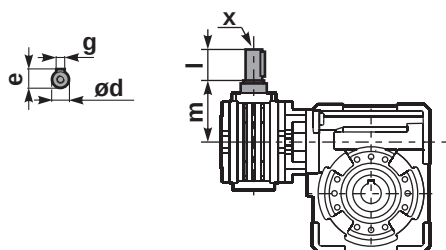
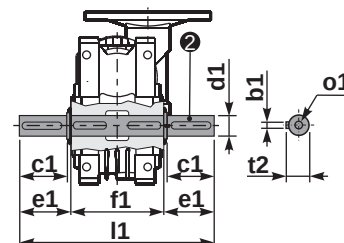
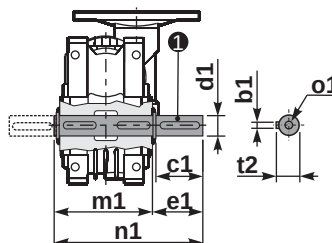
Mounting holes position
Posizione fori di montaggioStandard
Hollow shaftOn Request
A richiesta**P64QFC...**Square flange
Flangia quadrata**P64QF1...**Round flange
Flangia rotonda

type B	øD	E	G	L	N	O	P	Q	kit code
FC	115 ^{+0.20} _{+0.15}	6	12	86	26	150	180	11	1 KQ63.9.010 2 -
FL	115 ^{+0.20} _{+0.15}	6	12	116	56	150	180	11	1 KQ63.9.010 2 K063.0.200

type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 ^{+0.20} _{+0.15}	7	13	110	50	165	200	13	1 KS070.9.013 2 -
F2	115 ^{+0.20} _{+0.15}	7	13	124	64	150	175	11	1 KS063.9.013 2 -
F3	110 ^{+0.035} ₀	5	11	90	30	130	160	10	1 KS063.9.011 2 -

P64QFB...Feet
Piedini**P64QBR...**Reaction arm
Braccio di reazione

kit cod. K063.9.027

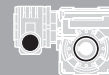
**R64QFB...**Input shaft
Albero in entrata**P64Q.....S...**Single Shaft
Albero lento semplice**P64Q.....D...**Double Shaft
Albero lento bisp.

1 kit cod. K063.5.028 type B

2 kit cod. K063.5.029 type B

	ød	e	g	l	m	x	kit code
type B	11 h6	12.5	4	30	68	-	1 K045.5.006 PAM71 2 -
type S	-	-	-	-	-	-	1 - 2 -

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	8	60	25 ^{-0.005} _{-0.020}	63.2	120	246.4	126.8	190	28	M8x20
type S	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Dynamic efficiency RD	Tooth Module [mm]	Ratios code 
							-B	-C	-O	-P	-Q			
							63	71	56	63	71			
5	280	0.37	403	0.9	0.33	359	B		B-C	B-C		57	3.10	01
3.5	400	0.25	314	1.1	0.29	359	B		B-C	B-C		46	3.10	02
2.5	560	0.25	420	0.9	0.21	359	B		B-C	B-C		44	3.10	03
1.7	840	0.18	423	0.8	0.15	359	B		B-C	B-C		41	3.10	04
1.3	1120	0.12	339	1.1	0.13	359	B		B-C	B-C		37	3.10	05
0.9	1480	0.09	336	1.1	0.10	359	B		B-C	B-C		37	3.10	06
0.8	1840	0.09	373	1.0	0.09	359	B		B-C	B-C		33	3.10	07
0.6	2400	0.06	275	1.3	0.08	359	B		B-C	B-C		28	3.10	08
0.5	2800	0.06	298	1.2	0.07	359	B		B-C	B-C		26	3.10	09
0.3	4080	0.06	250	1.4	0.09	359	B		B-C	B-C		15	3.10	10

 Motor Flanges Available
Flange Motore Disponibili

 B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

 B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

 C) Motor Flange Holes Position
Posizione Fori Flangia Motore

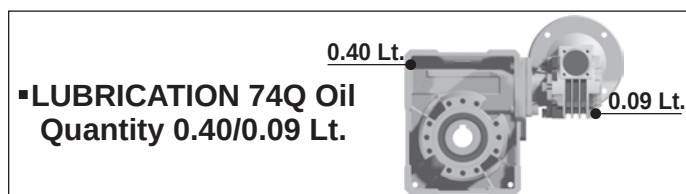
EN Unit 74Q is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo 74Q viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe 74Q mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type 74Q est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño 74Q se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.



■ LUBRICATION 74Q Oil
Quantity 0.40/0.09 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

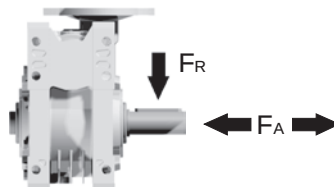
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

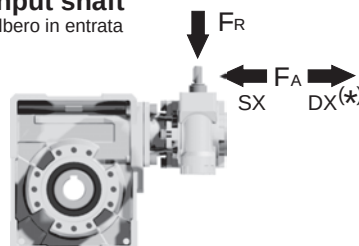
Albero di uscita



n_2 [min ⁻¹]	FA [N]	FR [N]
25	880	4400
15	1000	5000

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	42	210

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

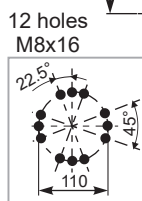
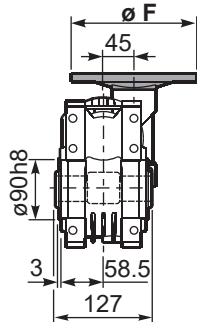
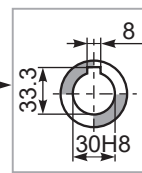
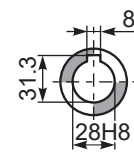
tab. 2

P74QFB...

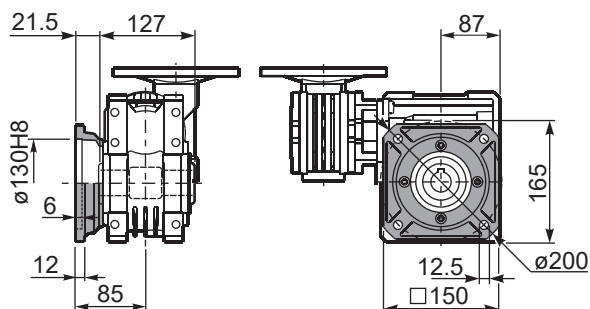
Basic wormbox
Riduttore baseGearbox
weight
peso riduttore

11.4 kg

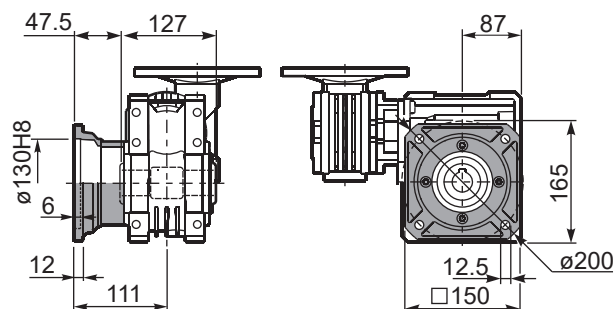
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5

Mounting holes position
Posizione fori di montaggioStandard
Hollow shaftOn request
A richiesta

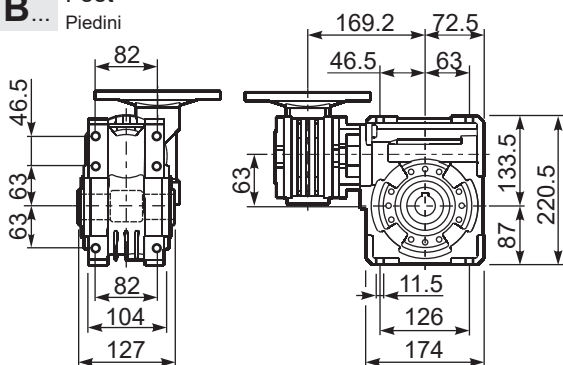
P74QFC...

Square flange
Flangia quadrata

P74QFL...

Square flange
Flangia quadrata

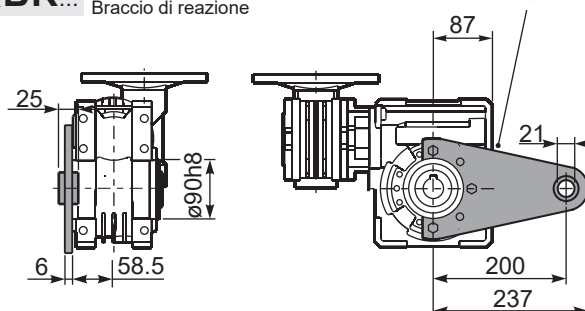
P74QFB...

Feet
Piedini

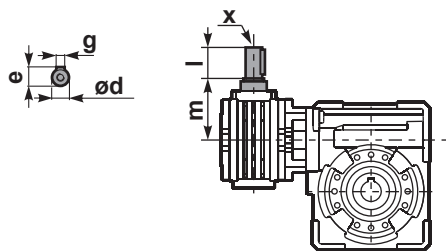
P74QBR...

Reaction arm
Braccio di reazione

kit cod. KQ75.9.027



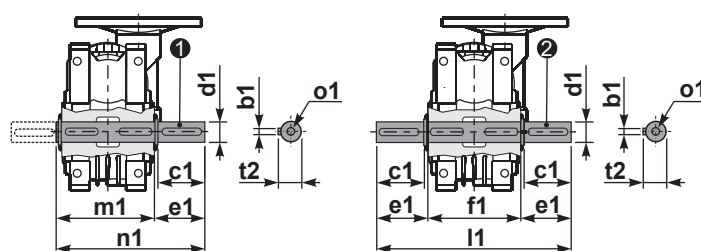
R74QFB...

Input shaft
Albero in entrata

P74Q.....S...

Single Shaft
Albero lento semplice

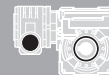
P74Q.....D...

Double Shaft
Albero lento bisp.

① kit cod. KQ75.5.028 Standard ② kit cod. KQ75.5.029 Standard
kit cod. KQ75.5.026 On request

	ød	e	g	l	m	x	kit code
type B	11 h6	12.5	4	30	68	-	① K045.5.006 PAM71 ② -
type S	-	-	-	-	-	-	① - ② -

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standard	8	60	30 ^{-0.005/-0.020}	65	127	255	134	199	33	M8x20
On request	8	60	28 ^{-0.005/-0.020}	65	-	-	134	199	31	M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Dynamic efficiency	Tooth Module  [mm]	Ratio code 
							-B	-C	-O	-P	-Q			
							63	71	56	63	71	RD		
10	140	0.37	205	1.8	0.66	368	B		B-C	B-C		58	4.5	01
7.1	196	0.37	257	1.4	0.53	368	B		B-C	B-C		52	4.7	02
5.0	280	0.37	332	1.6	0.58	518	B		B-C	B-C		47	4.7	03
3.6	392	0.37	435	1.2	0.44	518	B		B-C	B-C		44	4.7	04
2.4	588	0.25	371	1.4	0.35	518	B		B-C	B-C		37	4.7	05
1.8	784	0.25	455	1.1	0.28	518	B		B-C	B-C		34	4.7	06
1.4	1036	0.18	420	1.2	0.22	518	B		B-C	B-C		33	4.7	07
1.1	1288	0.18	474	1.1	0.20	518	B		B-C	B-C		30	4.7	08
0.7	1960	0.12	449	1.2	0.14	518	B		B-C	B-C		28	4.7	09
0.5	2856	0.12	584	0.9	0.11	518	B		B-C	B-C		25	4.7	10

A Motor Flanges Available
Flange Motore Disponibili

B Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **84Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **84Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **84Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

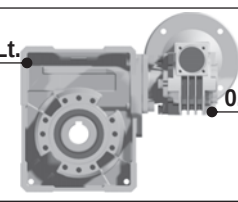
F Le réducteur de type **84Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **84Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

1.20 Lt.

0.09 Lt.

LUBRICATION 84Q Oil
Quantity 1.20/0.09 Lt.



AGIP Telium VSF 320

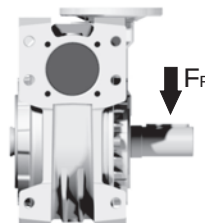
SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

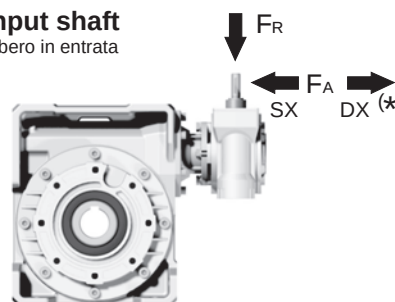
Albero di uscita



n [min ⁻¹]	FA [N]	FR [N]
25	1000	5000
15	1160	5800

Input shaft

albero in entrata



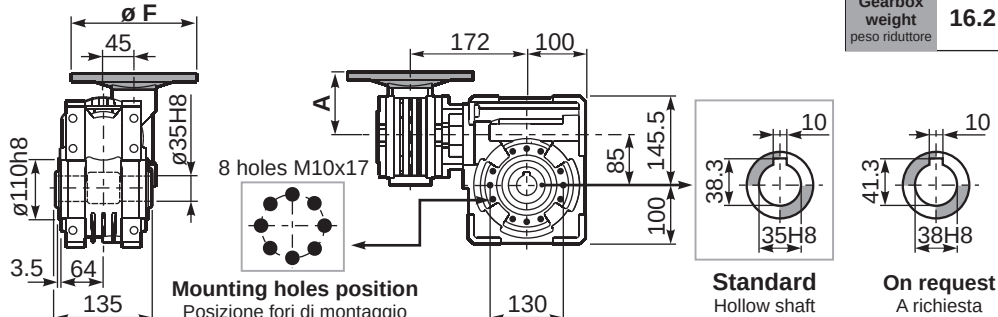
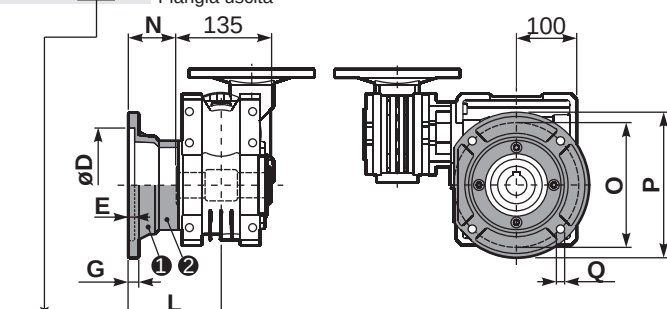
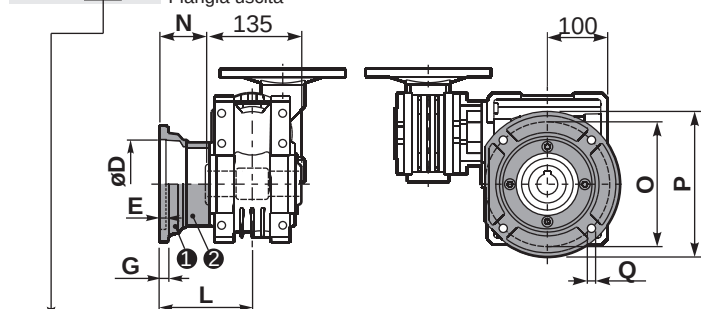
n [min ⁻¹]	FA [N]	FR [N]
1400	42	210

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P84QFB...Basic wormbox
Riduttore baseGearbox weight
peso riduttore **16.2 kg**

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5

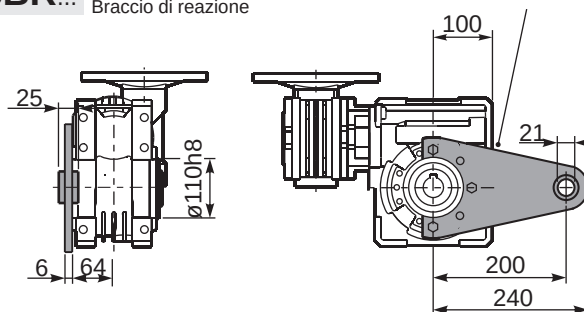
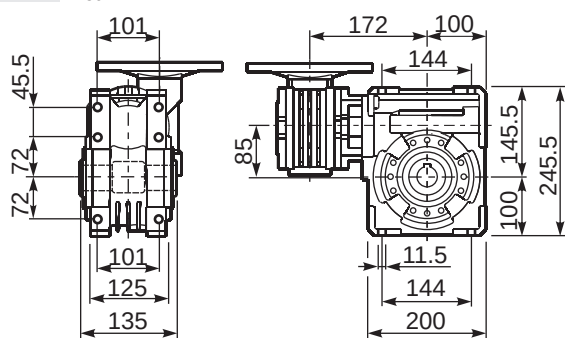
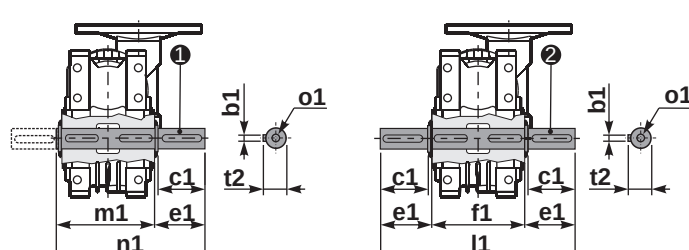
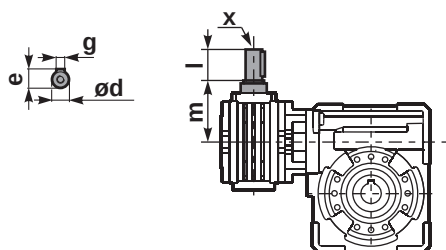
**P84QFC...**Output flange
Flangia uscita**P84QF1...**Output flange
Flangia uscita

type B	øD	E	G	L	N	O	P	Q	kit code
FC	152 ^{+0.06} _{+0.00}	5	16	108	40.5	176	205	13	① K085.9.010 ② -
FL	152 ^{+0.06} _{+0.00}	5	16	148.5	81	176	205	13	① K085.9.010 ② K085.0.201

type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 H7	5	13	117.5	50	165	200	11.5	① KS085.9.012 ② -
F2	152 ^{+0.06} _{+0.00}	5	15	147.5	80	180	205	12.5	① KS085.9.013 ② -
F4	130 H7	5	13	106.5	39	165	200	13	① KS085.9.015 ② -

P84QFB...Feet
Piedini**P84QBR...**Reaction arm
Braccio di reazione

kit cod. K085.9.027

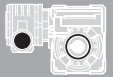
**R84QFB...**Input shaft
Albero in entrata**P84Q.....S...**Single Shaft
Albero lento semplice**P84Q.....D...**Double Shaft
Albero lento bisp.

① kit cod. K085.5.028 type B

② kit cod. K085.5.029 type B

	ød	e	g	l	m	x	kit code
type B	11 h6	12.5	4	30	68	-	① K045.5.006 PAM71 ② -
type S	-	-	-	-	-	-	① - ② -

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	10	60	35 ^{-0.005} _{-0.020}	73.5	135	282	141	214.5	38	M10x23
type S	-	-	-	-	-	-	-	-	-	-



■ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges			Available B14 motor flanges				Dynamic efficiency RD	Tooth Module [mm]	Ratios code 
							-B	-C	-D	-O	-P	-Q	-R			
							63	71	80	56	63	71	80			
6.7	210	0.75	591	1.5	1.1	863	B	B			B-C	B		55	5.6	01
4.7	300	0.75	752	1.3	0.97	978	B	B			B-C	B		49	5.6	02
3.3	420	0.55	741	1.3	0.73	978	B	B			B-C	B		47	5.6	03
2.6	540	0.55	851	1.1	0.63	978	B	B			B-C	B		42	5.6	04
1.8	780	0.37	748	1.3	0.48	978	B	B			B-C	B		38	5.6	05
1.3	1080	0.37	1009	1.0	0.36	978	B			B-C	B-C			37	5.6	06
1.1	1290	0.25	770	1.3	0.32	978	B			B-C	B-C			35	5.6	07
0.8	1800	0.25	921	1.1	0.27	978	B			B-C	B-C			30	5.6	08
0.7	2040	0.18	751	1.3	0.23	978	B			B-C	B-C			30	5.6	09
0.6	2400	0.18	825	1.2	0.21	978	B			B-C	B-C			28	5.6	10
0.5	3000	0.18	958	1.0	0.18	978	B			B-C	B-C			26	5.6	11

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

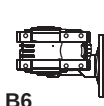
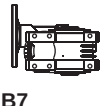
EN Unit **15Q** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a type that are closed. Gearbox **050** is supplied lubricated for life. See tab.1 for oils and recommended quantity. In tab.2 there are radial loads and axial loads applicable to the gearbox.

I Il riduttore tipo **15Q** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. Il riduttore **050** è fornito lubrificato a vita con olio sintetico. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **15Q** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen. Das Getriebe der Baugröße **050** ist lebensdauer geschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **15Q** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. Le réducteur de type **050** est fourni lubrifié à vie avec de l'huile synthétique. Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño **15Q** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. El reductor **050** se suministra lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

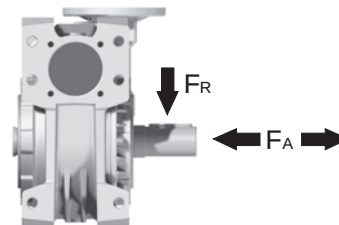
					
B3	B6	B7	B8	V5	V6
1.9/0.14LT	1.35/0.14 LT	1.35/0.14 LT	2.0/0.14 LT	2.0/0.14 LT	2.0/0.14 LT

AGIP Blasla 460

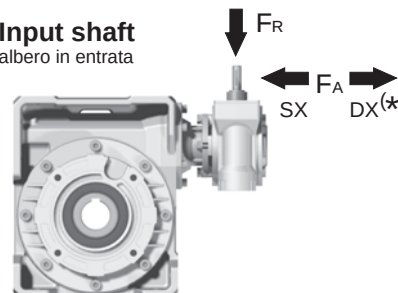
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

■ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

n_2 [min ⁻¹]	FA [N]	FR [N]
25	1200	6000
15	1400	7000

Input shaft
albero in entrata

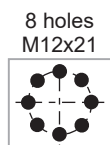
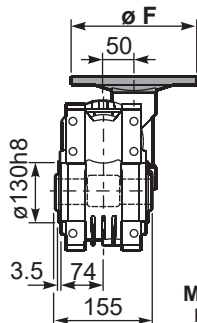
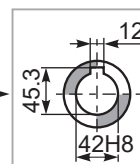
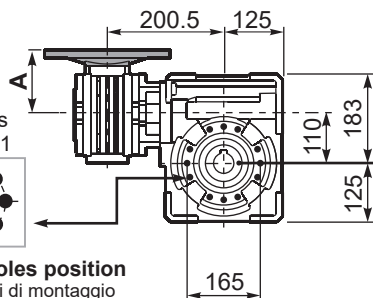
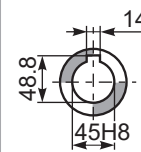
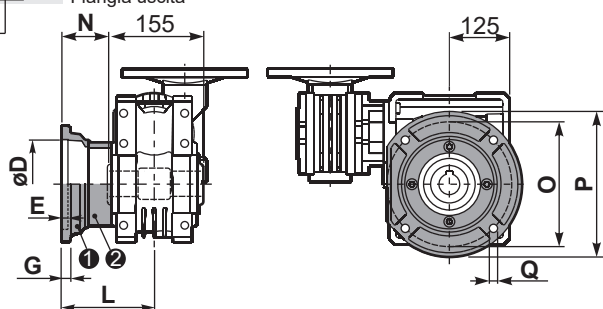
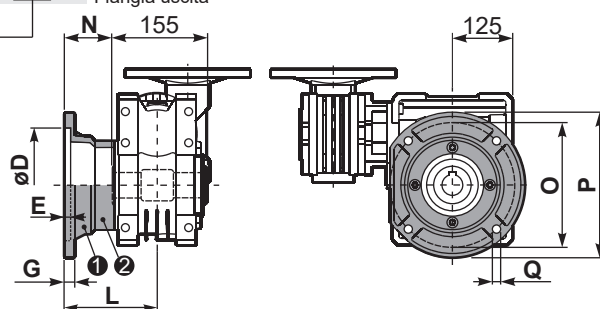
n_1 [min ⁻¹]	FA [N]	FR [N]
1400	76	380

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

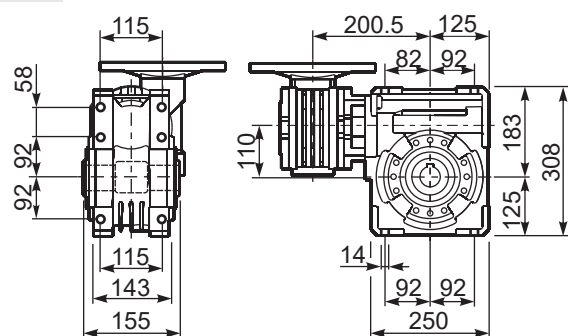
P15QFB...Basic wormbox
Riduttore baseGearbox
weight
peso riduttore **38.8 kg**

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	78.5
71B5	K050.4.042	160	76
80B5	K050.4.043	200	76.5
56B14	KC40.4.049	80	76
63B14	K050.4.047	90	78.5
71B14	K050.4.045	105	76
80B14	K050.4.046	120	76.5

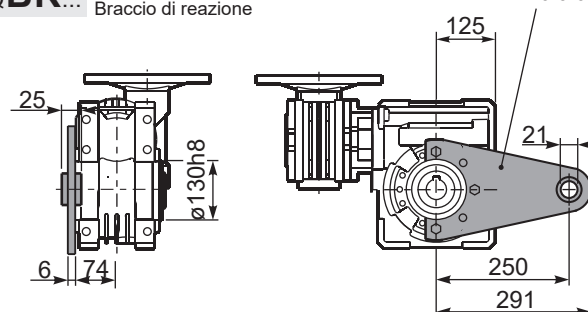
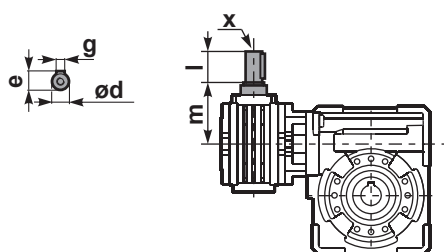
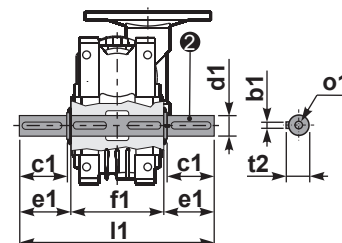
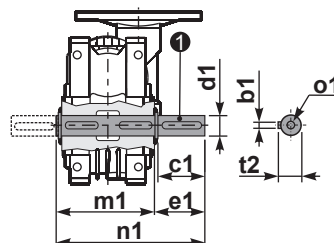
Mounting holes position
Posizione fori di montaggioStandard
Hollow shaftOn request
A richiesta**P15QFC...**Output flange
Flangia uscita**P15QF1...**Output flange
Flangia uscita

type B	øD	E	G	L	N	O	P	Q	kit code
FC	170 ^{+0.083} _{-0.043}	11	16.5	131.5	54	230	270	13	1 K110.9.010 2 -
FL	170 ^{+0.083} _{-0.043}	11	16.5	179.5	102	230	270	13	1 K110.9.011 2 -

type S	øD	E	G	L	N	O	P	Q	kit code
F1	180 ^{+0.040} ₀	5	18	150	72.5	215	250	15	1 KS110.9.014 2 -
F3	180 ^{+0.040} ₀	5	18	130	52.5	215	250	15	1 KS110.9.013 2 -

P15QFB...Feet
Piedini**P15QBR...**Reaction arm
Braccio di reazione

kit cod. K110.9.027

**R15QFB...**Input shaft
Albero in entrata**P15Q.....S...**Single Shaft
Albero lento semplice**P15Q.....D...**Double Shaft
Albero lento bisp.

1 kit cod. K110.5.028 type B

2 kit cod. K110.5.029 type B

	ød	e	g	l	m	x	kit code
type B	16 h6	18	5	30	79.5	M6x16	1 K050.5.006 PAM71 2 K050.5.007 PAM80
type S	14 h6	16	5	30	79.5	M5x10	1 KS050.5.008 PAM71 2 KS050.5.009 PAM80

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type B	12	75	42 ^{-0.005} _{-0.020}	96.5	155	348	163.5	260	45	M12x32
type S	-	-	-	-	-	-	-	-	-	-

Aluminum one step gearboxes

A modular and compact product

Flange

Fully modular to IEC and Compact integrated motor.
NEMA C flange

Alloy housing

Is vacuum impregnated (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint

Gears

Hardened and ground gears.

Removable inspection cover

Allows periodic inspection of gearing during routine maintenance

Output shaft

With well proportioned bearings

Feet

Removable feet.

Single-piece aluminum alloy housing

Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing

Ideal for use as first step with wormgearboxes.

Lubricated for life with synthetic oil with operative range from -15° to $+130^{\circ}\text{C}$

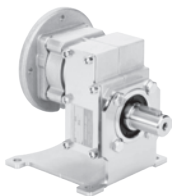


World wide sales network.



Specific type datasheet on page...

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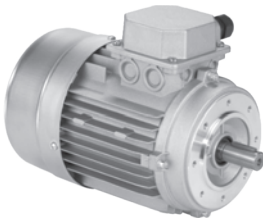


Types / Tipi
Tipen / Types
Tipos



3-5	3-7	3-9	3-11
211A 20Nm	311A 30Nm	411A 38Nm	511A 110Nm

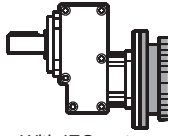
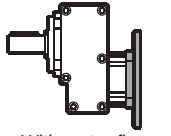
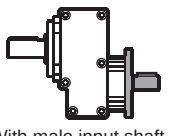
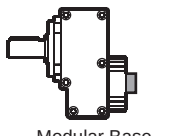
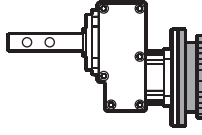
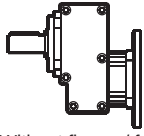
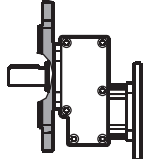
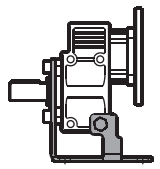
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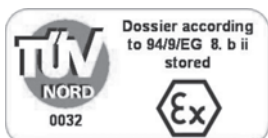


Types / Tipi
Tipen / Types
Tipos

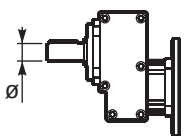
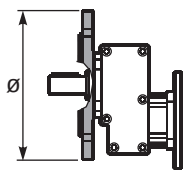
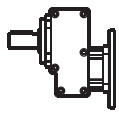
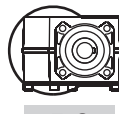
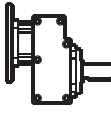
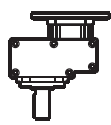
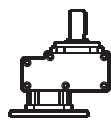


M-1										
56A 56B	63A 63B	71A 71B	80A 80B	90S 90L	100LA 100LB	112M	132S 132M	160M 160L	180M 180L	

Type - Tipo - Typ Type - Tipo	Size - Grandezza - Grösse Taille - Tamaño	Mounting - Montaggio Montage - Fixation Tipo de montaje	Ratio - Rapporto Untersetzung Reduction Relación
P	311A	-F	2.84
Aluminum one step gear Riduttori in alluminio a uno stadio  With IEC motor M  With motor flange P  With male input shaft R  Modular Base B Special output shaft Albero uscita speciale  Only on request for Q.ty A richiesta per quantità	1 Stages Riduzioni Stufen Trains Etapas 211A 311A 411A 511A	 Without flange / feet -N  Output flange mounted -F  Mounted feet H1	See technical data table Vedi tabella dati tecnici. Technisches Datenblatt beachten Voir Tableau données techniques Ver tabla datos técnicos



On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

Output shaft Albero uscita Abtriebswelle Arbre de sortie Eje en salida	Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor	Input bore Foro entrata Eingangshohlwelle Trou d'entree Eje hueco de entrada	Mounting position Posizione montaggio Einbaulage Position de montage Position de montaje	Terminal box position Posizione morsettiere Klemmkastenlage Position boîte à bornes Posición caja de bornes
S	2	-C	-	B3	B
 → STANDARD 211A S → Ø14 311A S → Ø14 C ⇒ Ø19 E ⇒ Ø24 411A S ⇒ Ø14 C ⇒ Ø19 E ⇒ Ø24 511A C ⇒ Ø19 E ⇒ Ø24 G ⇒ Ø28	 N Senza flangia Without flange 211A I ⇒ Ø105 Flangia integrata Integrated flange 311A 1 ⇒ Ø120 2 ⇒ Ø140 3 ⇒ Ø160 4 ⇒ Ø200 411A 1 ⇒ Ø120 2 ⇒ Ø140 3 ⇒ Ø160 4 ⇒ Ø200 511A 1 ⇒ Ø120 2 ⇒ Ø140 3 ⇒ Ø160 4 ⇒ Ø200 5 ⇒ Ø250	Flange Flangia  B5 -A=56 (Ø120) -B=63 (Ø140) -C=71 (Ø160) -D=80 (Ø200) -E=90 (Ø200) -F=100÷112 (Ø250) -G=132 (Ø300) B14 -O=56 (Ø80) -P=63 (Ø90) -Q=71 (Ø105) -R=80 (Ø120) -T=90 (Ø140) -U=100÷112 (Ø160) -V=132 (Ø200) Type R Tipo R  211A 311A -1 ⇒ Ø14 411A -2 ⇒ Ø19 511A -3 ⇒ Ø24 Without flange Senza flangia  211A 311A -Z ⇒ Ø9 (56B5) -0 ⇒ Ø11 (63B5) -1 ⇒ Ø14 (71B5) 411A -1 ⇒ Ø14 (71B5) -2 ⇒ Ø19 (80B5) -3 ⇒ Ø24 (90B5) 511A -2 ⇒ Ø19 (80B5) -3 ⇒ Ø24 (90B5) -4 ⇒ Ø28 (100B5)	- Nothing indication: standard bore Nessuna indicazione: foro standard	 B3 STANDARD  B6  B7  B8  V5  V6	 A  B STANDARD  C  D

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

Lifting / sollevamento / hubantriebe / levage / elevación

$$P [KW] = \frac{M [Kg] \cdot g [9.81] \cdot v [m / s]}{1000}$$

Rotation / rotazione / drehung / rotation / rotation

$$P [KW] = \frac{M [Nm] \cdot n [rpm]}{9550}$$

Linear movement / traslazione / linearbewegung / translation / translacion

$$P [KW] = \frac{F [N] \cdot v [m / s]}{1000}$$

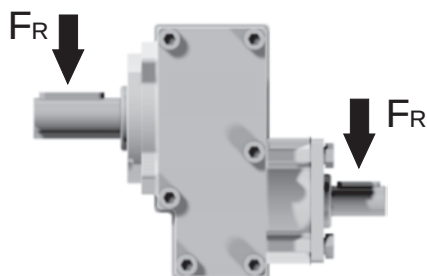
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

$$M [Nm] = \frac{9550 \cdot P[KW]}{n [rpm]}$$

$$M [lb in] = \frac{63030 \cdot P[HP]}{n [rpm]}$$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida



	$F_R [N] = \frac{M [Nm] \cdot 2000}{d [mm]} \cdot f_k$	$F_R [N] = \frac{M [lb in] \cdot 8.9}{d [in]} \cdot f_k$
M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion	
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo	
f_k	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión 1.15 Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje 1.25 Catena / Chain sprockets / Antriebskette / Chaîne / Cadena 1.75 Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal 2.50 Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana	

- If your application requires higher radial loads, contact our technical office. Higher load may be possible.
- Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
- Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
- Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
- En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

How to select a gearbox / Come selezionare un riduttore / Wie wählt man ein Getriebe
Comment sélectionner un réducteur / Cómo seleccionar un reductor

The diagram illustrates the relationship between input and output parameters for a gearbox. It is divided into two main sections, A and B, connected by a central vertical line.

Section A (Input):

- Input speed: Velocità in entrata, Eintriebsdrehzahl, Vitesse en entrée, Velocidad de entrada
- Flange code: Codice flangia, Flanschttype, Code bride, Código bridas
- Nominal torque: Momento torcente nominale, Nenn Drehmoment, Couple nominal, Par de torsión nominal

Section B (Output):

- Output speed: Velocità in uscita, Abtriebsdrehzahl, Vitesse de sortie, Velocidad de salida
- Gear size: Grandezza riduttore, Getriebegröße, Taille réducteur, Tamaño reductor
- Motor power: Potenza motore, Motorleistung, Puissance moteur, Potencia motor
- Nominal power: Potenza nominale, Max. mögliche Leistung, Poissance nominale, Potencia nominal

311A One step 30Nm Rating - Aluminum ONE STEP GEARBOXES

▪ **QUICK SELECTION** / Selezione veloce

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges				 Output Shaft	 Ratios code
							-B	-C	-O	-P	-Q			
							63	71	56	63	71			
892	1.57	0.37	3.9	3.3	1.24	13			C	C		2844		01
493	2.84	0.37	7.0	3.3	1.21	23			C	C		1954	standard ø14	02
426	3.29	0.37	8.1	3.2	1.18	26			C	C		1756		03
362	3.87	0.37	9.6	2.9	1.08	28			C	C		1558		04

[illegible]

fs					
Type of load and starts per hour Tipo di carico e avviamenti per ora		Oper. hours per day Ore di funz. giorn.			
		3 h	10 h	24 h	
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora	≤ 10	Uniform / Uniforme	0.8	1	1.25
		Moderate / Moderato	1	1.25	1.5
		Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora	> 10	Uniform / Uniforme	1	1.25	1.5
		Moderate / Moderato	1.25	1.5	1.75
		Heavy / Forte	1.5	1.75	2.15

D	Motor flange available Flange disponibili Erhältliche Motorflansche Brides disponibles Bidas disponibles	
B)	Mounting with reduction ring Montaggio con boccola di riduzione Reduzierhülsen Montage avec douille de réduction Montaje con casquillo de reducción	
C)	Motor flangeholes position/terminal box position Posizione fori flangia/basetta motore Bohrungsposition am Motorflansch/-sockel Position trous bride/barrette à bornes moteur Posición agujeros brida / base motor	
B)	Available without reduction bushes Disponibile anche senza boccola Auch ohne Reduzierbuchse verfügbar Disponible aussi sans douille de réduction Disponible tambien sin casquillo	

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select ouput speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges				Output Shaft  standard Ø14	Ratios code 
							-B	-C	-D	-E	-O	-P	-Q	-R		
682	2.05	0.37	5	2.0	0.73	10					C	C			1939	01
595	2.35	0.37	6	2.1	0.76	12					C	C			1740	02
500	2.80	0.37	7	2.0	0.75	14					C	C			1542	03
414	3.38	0.37	8	2.0	0.75	17					C	C			1344	04
298	4.70	0.37	12	1.7	0.64	20					C	C			1047	05
225	6.22	0.37	15	1.5	0.55	23					C	C			956	06
169	8.29	0.37	20	1.0	0.36	20					C	C			758	07
142	9.83	0.25	16	1.0	0.24	16					C	C			659	08

The dynamic efficiency is **0.98** for all ratios

 **Motor Flanges Available**
Flange Motore Disponibili

 **B) Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

 **C) Motor Flange Holes Position**
Posizione Fori Flangia Motore

EN Unit **211A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **211A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **211A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **211A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **211A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 211A Oil Quantity 0.05 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

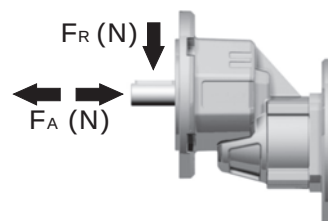
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

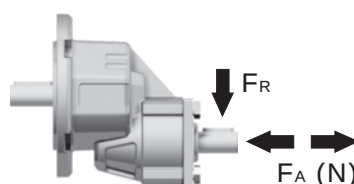
Albero di uscita



n_2	FA	FR
700	101	504
600	120	600
400	138	696
300	151	756
200	175	876
140	192	960

Input shaft

albero in entrata

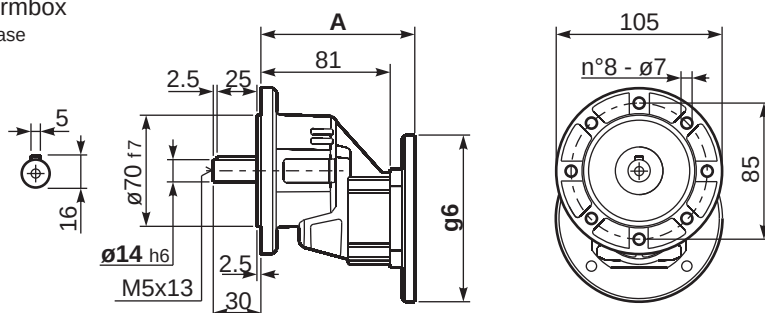


n_1	FA	FR
1400	168	840
900	192	960

*Strong axial loads in the DX direction are not allowed.

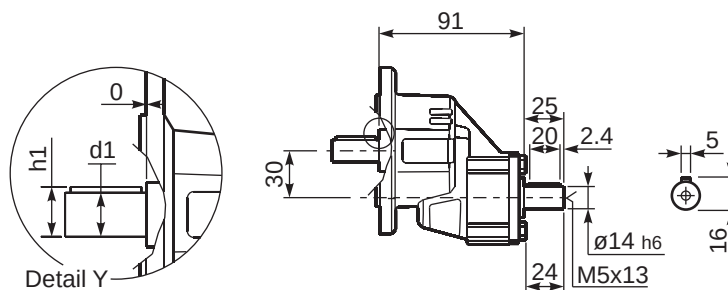
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P211A-F...Basic wormbox
Riduttore baseGearbox
weight
peso riduttore **1.40 kg**

B5 Motor Flanges	A	g6	kit code
63 B5	99.5	138	K050.4.041
71 B5	97	160	K050.4.042

B14 Motor Flanges	A	g6	kit code
56 B14	97	80	KC40.4.049
63 B14	99.5	90	K050.4.047
71 B14	97	105	K050.4.045

R211A-F...Basic wormbox
Riduttore base***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	Ø 14x30	5	16	M5x13



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft 	Ratios code 
							-B	-C	-O	-P	-Q		
891	1.57	0.37	4	3.3	1.2	13			C	C		2844	01
493	2.84	0.37	7	3.3	1.2	23			C	C		1954	02
425	3.29	0.37	8	3.2	1.2	26			C	C		1756	03
362	3.87	0.37	10	2.9	1.1	28			C	C		1558	04
303	4.62	0.37	11	2.6	0.97	30			C	C		1360	05
222	6.30	0.37	16	2.2	0.83	35			C	C		1063	06
170	8.22	0.37	20	1.9	0.69	38			C	C		974	07
129	10.86	0.37	27	1.0	0.39	28			C	C		776	08

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **311A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **311A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **311A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **311A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **311A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 311A Oil Quantity 0.10 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

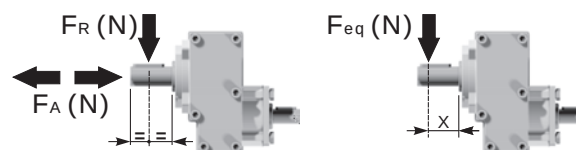
tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

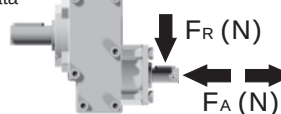
$$F_{eq} = F_R \cdot \frac{38.5}{X+18.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
700	120	640	400	160	800	200	200	1020
600	140	700	300	175	880	140	225	1120

Input shaft

Albero in entrata

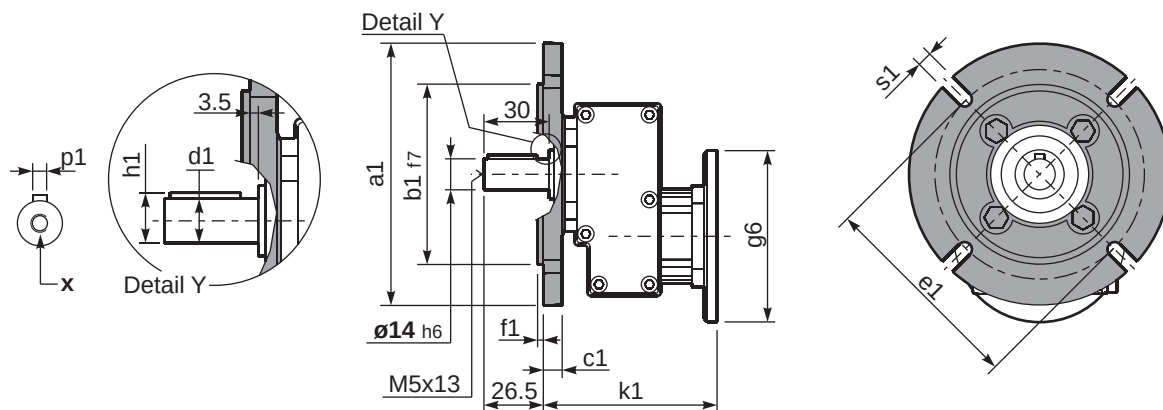


n_1	FA	FR
1400	180	860
900	200	980

tab. 2

P311-F... Output flange
flange di uscita

Gearbox
weight
peso riduttore **2.50 kg**



***Available output shaft / Alberi di uscita**

	Shaft - d1	p1	h1	x
Standard	Ø 14x30	5	16	M5x13
On request A richiesta	Ø 19x40	6	21.5	M6x16
	Ø 24x40	8	27	M6x16

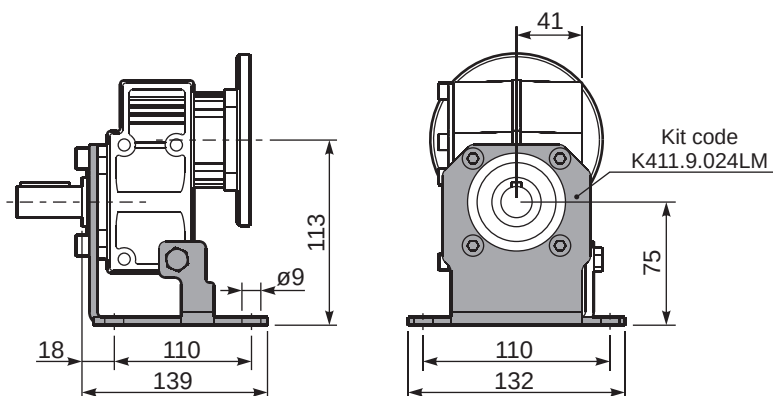
Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

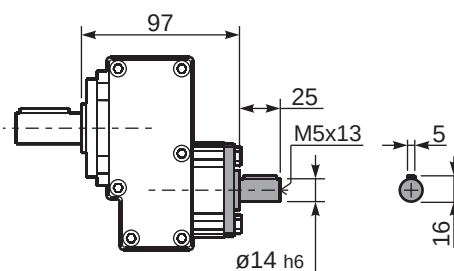
*Holes position
posizione fori



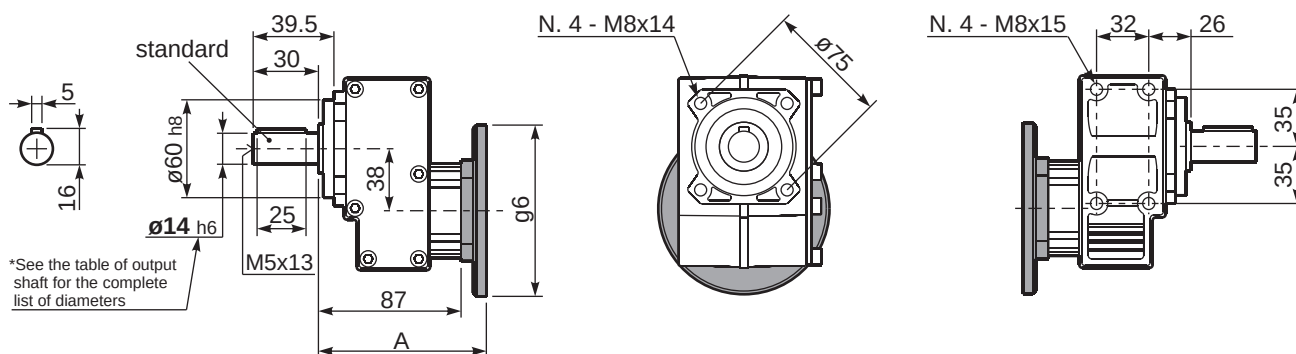
P311-H1... With feet
Con piedini



R311-N... Input Shaft
Albero in entrata



P311-N... Basic gearbox
Riduttore base



B14 Motor Flanges	A	g6	k1	kit code
56 B14	103	80	106.5	KC40.4.049
63 B14	105.5	90	109	K050.4.047
71 B14	103	105	106.5	K050.4.045

B5 Motor Flanges	A	g6	k1	kit code
63 B5	105.5	138	109	K050.4.041
71 B5	103	160	106.5	K050.4.042



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n ₂ [min ⁻¹]	Ratio i	Motor power P _{1M} [kW]	Output torque M _{2M} [Nm]	Service factor f.s.	Nominal power P _{1R} [kW]	Nominal torque M _{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges				Output Shaft 	 Ratios code
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
891	1.57	1.5	16	1.3	1.9	20	B				C	C		2844	standard ø19 On request ø14 ø24	01
493	2.84	1.5	28	1.2	1.8	35	B				C	C		1954		02
425	3.29	1.5	33	1.2	1.7	38	B				C	C		1756		03
362	3.87	1.5	39	1.0	1.5	40	B				C	C		1558		04
303	4.62	1.5	46	1.0	1.5	47	B				C	C		1360		05
222	6.30	1.1	46	1.0	1.1	46	B				C	C		1063		06
170	8.22	0.55	30	1.3	0.69	38	B				C	C		974		07
129	10.86	0.37	27	1.0	0.39	28	B				C	C		776		08

The dynamic efficiency is **0.98** for all ratios

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **411A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **411A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **411A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **411A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **411A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 411A Oil Quantity 0.10 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

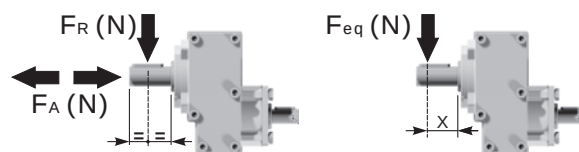
tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

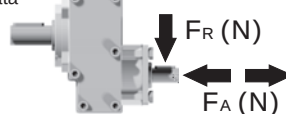
$$F_{eq} = F_R \cdot \frac{40}{X+20}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
700	182	910	400	230	1150	200	290	1450
600	200	1000	300	250	1250	140	320	1600

Input shaft

Albero in entrata

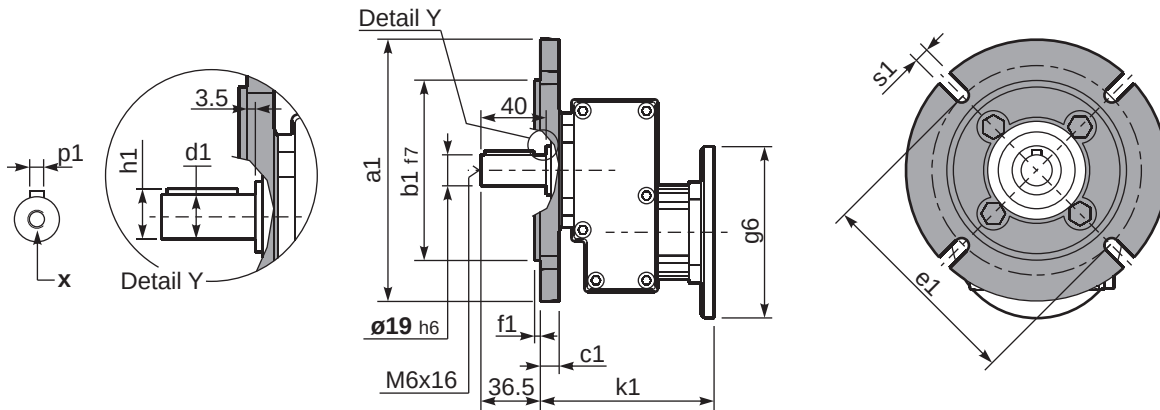


n_1	FA	FR
1400	240	1200
900	280	1400

tab. 2

P411-F... Output flange
flange di uscita

Gearbox
weight
peso riduttore **3.20 kg**



***Available output shaft / Alberi di uscita**

	Shaft - d1	p1	h1	x
Standard	Ø 19x40	6	21.5	M6x16
On request A richiesta	Ø 14x30	5	16	M5x13
	Ø 24x40	8	27	M6x16

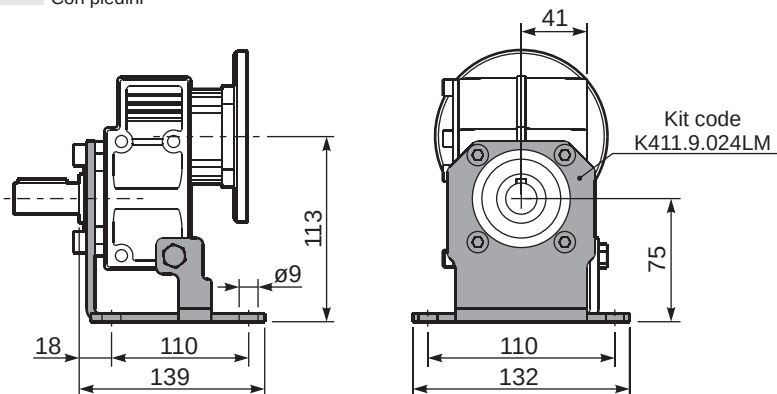
Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

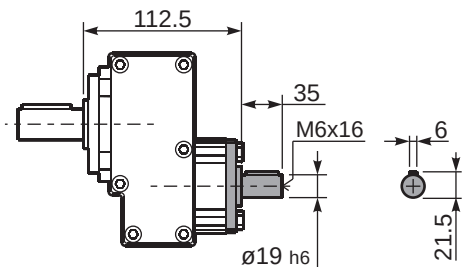
*Holes position
posizione fori



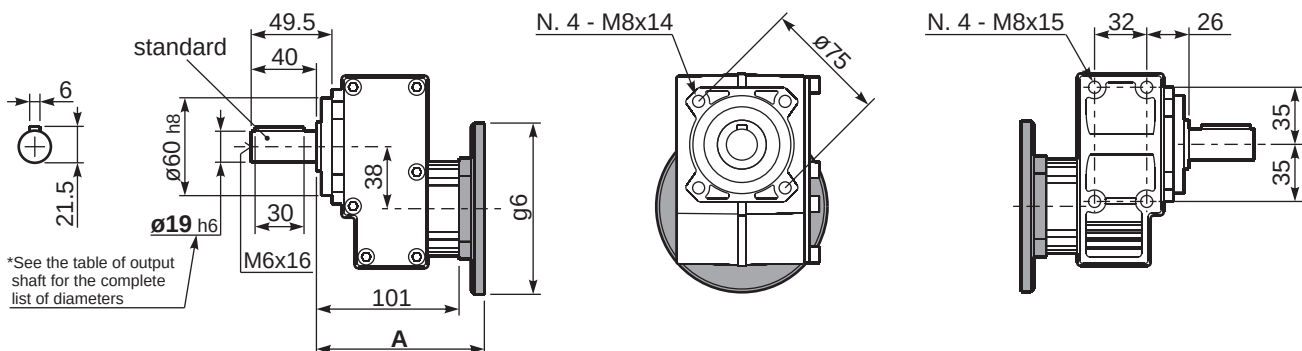
P411-H1... With feet
Con piedini



R411-N... Input Shaft
Albero in entrata



P411-N... Basic gearbox
Riduttore base



B5 Motor Flanges	A	g6	k1	kit code
63 B5	121.5	140	125	K063.4.041
71 B5	119.5	160	123	K063.4.042
80/90 B5	121.5	200	125	K063.4.043

B14 Motor Flanges	A	g6	k1	kit code
71 B14	119.5	105	123	K063.4.047
80 B14	121.5	120	125	K063.4.046
90 B14	121.5	140	125	K063.4.041



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n ₂ [min ⁻¹]	Ratio i	Motor power P _{1M} [kW]	Output torque M _{2M} [Nm]	Service factor f.s.	Nominal power P _{1R} [kW]	Nominal torque M _{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges						Output Shaft	
							-C	-D	-E	-F	-G	-R	-T	-U	-V				
							71	80	90	100 112	132	80	90	100 112	132				
1077	1.30	4	34	1.2	4.6	40	B									3039	 standard ø28 On request ø19 ø24	01	
571	2.45	4	64	1.1	4.3	70	B									2049		02	
423	3.31	4	87	1.0	4.1	90	B									1653		03	
325	4.31	4	113	1.0	3.8	110	B									1356		04	
266	5.27	3	104	1.1	3.1	110	B									1158		05	
184	7.63	2.2	111	1.0	2.2	110	B									861		06	
133	10.50	1.1	77	1.0	1.1	80	B									663		07	
The dynamic efficiency is 0.98 for all ratios																			

The dynamic efficiency is 0.98 for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **511A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **511A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **511A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **511A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **511A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 511A Oil Quantity 0.29 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

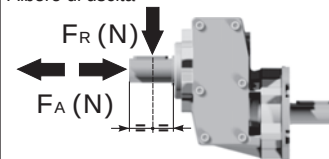
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

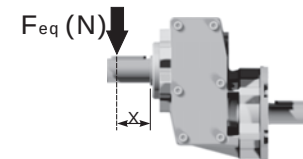
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



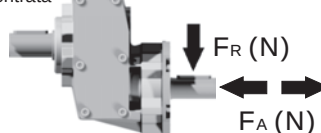
$$F_{eq} = F_R \cdot \frac{47.5}{X+22.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
700	294	1470	400	370	1850	200	460	2300
600	320	1600	300	400	2000	140	510	2550

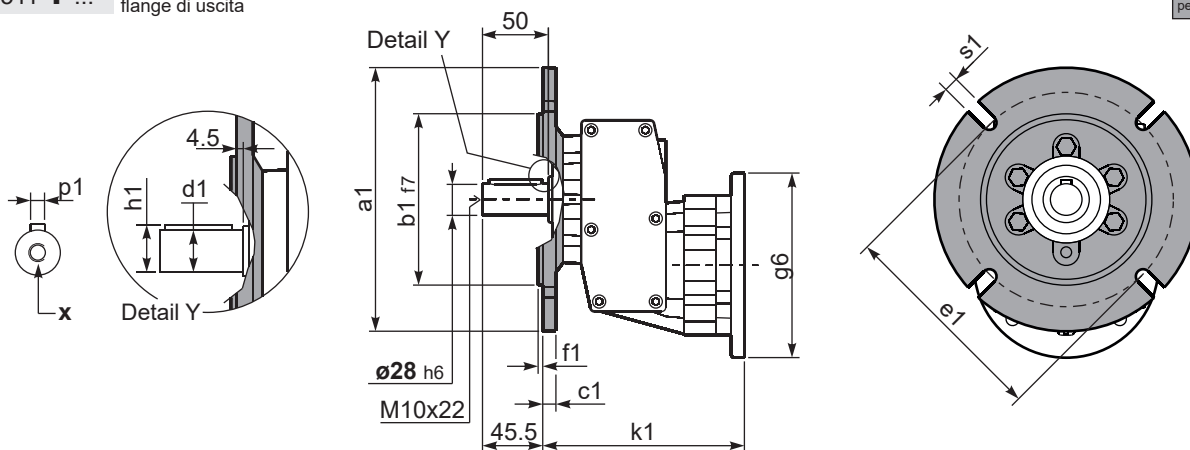
Input shaft

Albero in entrata



n_1	FA	FR
1400	400	2000
900	440	2200

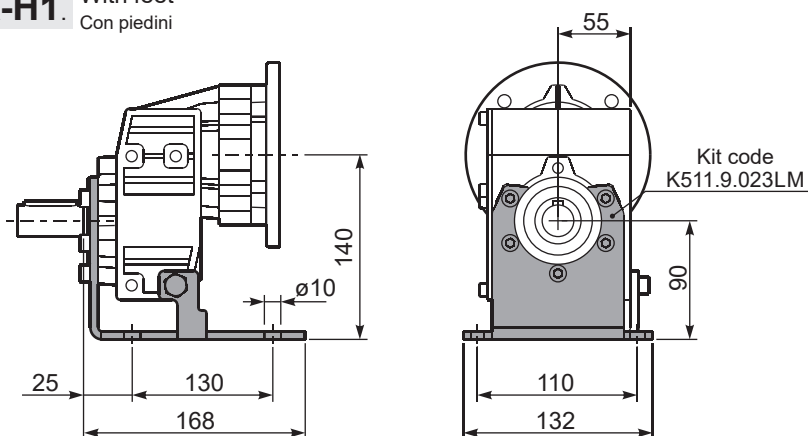
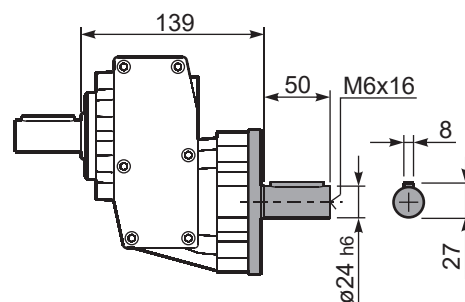
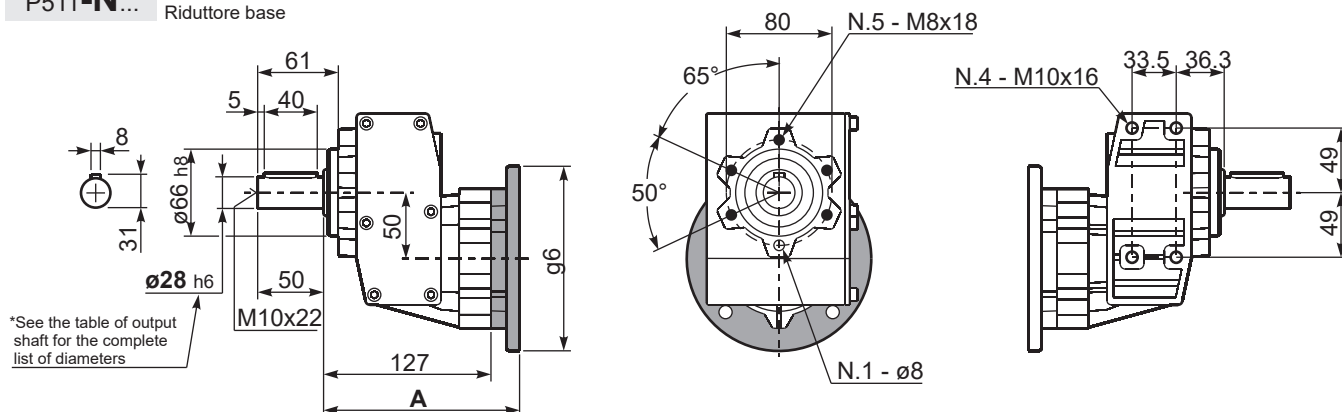
tab. 2

P511-F...Output flanges
flange di uscitaGearbox
weight
peso riduttore**5.00 kg*****Available output shaft / Albero di uscita**

	Shaft - d1	p1	h1	x
Standard	ø 28x50	8	31	M10x22
On request A richiesta	ø 24x50	8	27	M8x19
	ø 19x40	6	21.5	M6x16

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	7	KC40.9.010
140	95	10	115	3	9	KC40.9.011
160	110	10	130	3.5	9	KC40.9.012
200	130	11	165	3.5	11	KC40.9.013
250	180	11.5	215	3.5	14	KC40.9.014

P511A-H1.With feet
Con piedini**R511A-N...**Input Shaft
Albero in entrata**P511-N...**Basic gearbox
Riduttore base

B5 Motor Flanges	A	g6	k1	kit code
71 B5	145.5	160	150	K023.4.041
80/90 B5	147.5	200	152	K023.4.042
100/112 B5	156.5	250	161	K023.4.043
132 B5	174.5	300	179	KC50.4.043

B14 Motor Flanges	A	g6	k1	kit code
80 B14	147.5	120	152	K085.4.046
90 B14	147.5	140	152	K085.4.045
100/112 B14	156.5	160	161	K085.4.047
132 B14	174.5	200	179	KC50.4.041

Aluminum in line gearboxes

A modular and compact product

Alloy housing

Is vacuum impregnated (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint

Flange

Fully modular to IEC and Compact integrated motor.
NEMA C flange

Removable inspection cover

Allows periodic inspection of gearing during routine maintenance

Oil seals

Two oil seals on request

Output shaft

With well proportioned bearings

Lubricated for life with synthetic oil with operative range from -15° to $+130^{\circ}\text{C}$



Foot prints

Compatible to the main standard of the market.

Feet

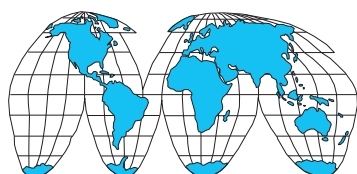
Removable feet. With patented locking system.

Gears

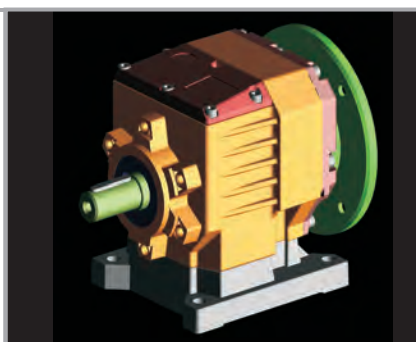
Hardened and ground gears.

Single-piece aluminum alloy housing

Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing



World wide sales network.



Specific type datasheet on page...



Types / Tipi
Tipen / Types
Tipos

On page / A pagina / Auf Seite / À la page / En la página								
4-5	4-7	4-9	4-11	4-13	4-15	4-17	4-19	4-21
202A 70Nm	302A 120Nm	412A 175Nm	413A 175Nm	452A 300Nm	512A 360Nm	513A 360Nm	612A 530Nm	613A 530Nm



Types / Tipi
Tipen / Types
Tipos

On page / A pagina / Auf Seite / À la page / En la página										
M-1										
56A 56B	63A 63B	71A 71B	80A 80B	90S 90L	100LA 100LB	112M	132S 132M	160M 160L	180M 180L	

Type - Tipo - Typ
Type - Tipo

Size - Grandezza - Grösse
Taille - Tamaño

Mounting - Montaggio
Montage - Fixation
Tipo de montaje

Ratio - Rapporto
Untersetzung - Reduction
Relación

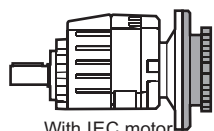
P

412A

-F

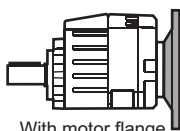
7.33

Aluminum coaxial gear boxes
Riduttori coassiali in alluminio



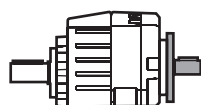
With IEC motor

M



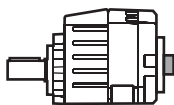
With motor flange

P



With male input shaft

R



Modular base

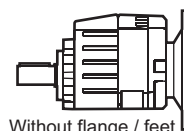
B

2 Stages
Riduzioni
Stufen
Trains
Etapas

3 Stages
Riduzioni
Stufen
Trains
Etapas

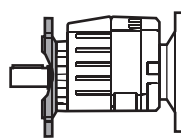
**202A
302A
412A
452A
512A
612A**

**413A
513A
613A**



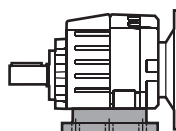
Without flange / feet

-N



Output flange mounted

-F



Mounted feet

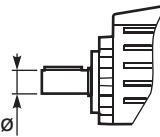
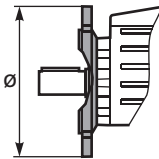
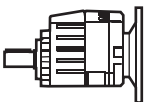
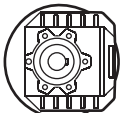
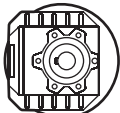
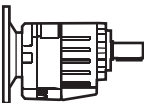
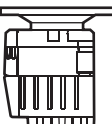
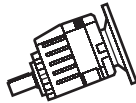
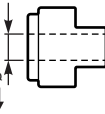
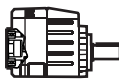
B..

Feet / piedini		G	H	R	L	L1	S
Feet Code	Market reference						
B1	112	18	85	110	87	50	
B2	212/3	18	100	130	107.5		
S1	17	18	75	110	90+20		
S2	27	25	90	110	130		
M1	42/3	25	80	110+120	85		
L4	04	13	80	105			
L5	05	16	100	125			

You see feet code in the chart of the dimensions
Vedi codice piede nella tabella delle dimensioni



On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

Output shaft Albero uscita Abtriebswelle Arbre de sortie Eje en salida	Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor	Mounting position Posizione montaggio Einbaulage Position de montage Position de montage	Input bore Foro entrata Eingangshohlwelle Trou d'entree Eje hueco de entrada	Terminal box position Posizione morsettiera Klemmkastenlage Position boîte à bornes Posición caja de bornes
V	2	-C	B3	-	
 → STANDARD 202A S ⇒ Ø14 B ⇒ Ø16 D ⇒ Ø20 V ⇒ Ø25 302A S ⇒ Ø14 B ⇒ Ø16 C ⇒ Ø19 D ⇒ Ø20 E ⇒ Ø24 V ⇒ Ø25 412A 413A B ⇒ Ø16 C ⇒ Ø19 D ⇒ Ø20 E ⇒ Ø24 V ⇒ Ø25 452A 512A 513A E ⇒ Ø24 V ⇒ Ø25 G ⇒ Ø28 H ⇒ Ø30 I ⇒ Ø35 612A 613A G ⇒ Ø28 H ⇒ Ø30 I ⇒ Ø35 L ⇒ Ø38 M ⇒ Ø40	 N Senza flangia Without flange 202A 302A 1 ⇒ Ø120 2 ⇒ Ø140 3 ⇒ Ø160 4 ⇒ Ø200 412A 413A 1 ⇒ Ø120 2 ⇒ Ø140 3 ⇒ Ø160 4 ⇒ Ø200 5 ⇒ Ø250 452A 512A 513A 3 ⇒ Ø160 4 ⇒ Ø200 5 ⇒ Ø250 612A 613A 3 ⇒ Ø160 4 ⇒ Ø200 5 ⇒ Ø250	 Flange Flangia B5 -A=56 (Ø120) -B=63 (Ø140) -C=71 (Ø160) -D=80 (Ø200) -E=90 (Ø200) -F=100+112 (Ø250) -G=132 (Ø300) B14 -O=56 (Ø80) -P=63 (Ø90) -Q=71 (Ø105) -R=80 (Ø120) -T=90 (Ø140) -U=100+112 (Ø160) -V=132 (Ø200)  Type R Tipo R 202A 413A -1 ⇒ Ø14 302A 412A 513A 613A -2 ⇒ Ø19 452A 512A 612A -3 ⇒ Ø24  Without flange Senza flangia -M ⇒ With coupling 202A 413A -Z ⇒ Ø9 (56B5) -0 ⇒ Ø11 (63B5) -1 ⇒ Ø14 (71B5) 302A 412A 513A 613A -1 ⇒ Ø14 (71B5) -2 ⇒ Ø19 (80B5) -3 ⇒ Ø24 (90B5) 452A 512A 612A -2 ⇒ Ø19 (80B5) -3 ⇒ Ø24 (90B5) -4 ⇒ Ø28 (100B5)	 B3 STANDARD  B6  B7  B8  V5  V6  V8	- Nothing indication: standard bore Nessuna indicazione: foro standard COUPLING  A = 9mm B = 11mm C = 14mm D = 19mm E = 24mm F = 28mm 0 Ready for input coupling Predisposto per giunto 	With Type M specify terminal box position Con tipo M specificare posizione morsettiera  A  B STANDARD  C  D

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

Lifting / sollevamento / hubantriebe / levage / elevación

$$P [KW] = \frac{M [Kg] \cdot g [9.81] \cdot v [m / s]}{1000}$$

Rotation / rotazione / drehung / rotation / rotation

$$P [KW] = \frac{M [Nm] \cdot n [rpm]}{9550}$$

Linear movement / traslazione / linearbewegung / translation / translacion

$$P [KW] = \frac{F [N] \cdot v [m / s]}{1000}$$

TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

$$M [Nm] = \frac{9550 \cdot P[KW]}{n [rpm]}$$

$$M [lb in] = \frac{63030 \cdot P[HP]}{n [rpm]}$$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida



$F_R [N] = \frac{M [Nm] \cdot 2000}{d [mm]} \cdot f_k$		$F_R [N] = \frac{M [lb in] \cdot 8.9}{d [in]} \cdot f_k$	
M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion		
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo		
f_k	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión 1.15 Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje 1.25 Catena / Chain sprockets / Antriebskette / Chaîne / Cadena 1.75 Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal 2.50 Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana		

- If your application requires higher radial loads, contact our technical office. Higher load may be possible.
- Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
- Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
- Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
- En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

How to select a gearbox / Come selezionare un riduttore / Wie wählt man ein Getriebe
Comment sélectionner un réducteur / Cómo seleccionar un reductor

B	Output speed Velocità in uscita Abtriebsdrehzahl Vitesse de sortie Velocidad de salida	Nominal power Potenza nominale Max. mögliche Leistung Poissance nominale Potencia nominal	A	Nominal torque Momento torcente nominale Nenn Drehmoment Couple nominal Par de torsión nominal	Flange code Codice flangia Flanschttype Code bride Código bridas		Input speed Velocità in entrata Eintriebsdrehzahl Vitesse en entrée Velocidad de entrada
	Gear size Grandezza riduttore Getriebegröße Taille réducteur Tamaño reductor	Motor power Potenza motore Motorleistung Puissance moteur Potencia motor					

412A Coaxial - Gear
160Nm

Rating - Aluminum COAXIAL GEARBOXES



▪ **QUICK SELECTION** / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed  n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges					Output Shaft  $\varnothing$	 Ratios code
							-B	-C	-D	-E	-Q	-R	-T	-U			
							63	71	80*	90*	71	80	90	100 112			
398	3.52	3	69	1.2	3.5	80	B				C	C			2821		01
320	4.37	3	86	1.0	3.1	90	B				C	C			2818		02
252	5.55	3	109	0.9	2.8	100	B				C	C			2813		03
220	6.36	2.2	92	1.0	2.3	95	B				C	C			1921		04
191	7.33	2.2	106	1.1	2.5	120	B				C	C			2812		05

C	Ratio Rapporto Untersetzung Rapport de réduction Relación
----------	---

Transmitted torque
Momento torcente trasmesso
Mögliche Drehmomente
Couple de sortie
Par transmitido

Service factor
Fattore di servizio
Betriebsfaktor
Facteur de service
Factor de servicio

Output shaft diam.
Diam. albero uscita
Durchmesser abtriebswelle
Diametre arbre lent
Diametro eie de salida

Notes
Note
Anmerkungen
Note
Notas

fs					
Type of load and starts per hour Tipo di carico e avviamenti per ora			Oper. hours per day Ore di funz. giorn.		
			3 h	10 h	24 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora	≤ 10	Uniform / Uniforme	0.8	1	1.25
		Moderate / Moderato	1	1.25	1.5
		Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora	> 10	Uniform / Uniforme	1	1.25	1.5
		Moderate / Moderato	1.25	1.5	1.75
		Heavy / Forte	1.5	1.75	2.15

D	Motor flange available Flange disponibili Erhältliche Motorflansche Brides disponibles Bidas disponibles	
B)	Mounting with reduction ring Montaggio con boccola di riduzione Reduzierhülsen Montage avec douille de réduction Montaje con casquillo de reducción	
C)	Motor flangeholes position/terminal box position Posizione fori flangia/basetta motore Bohrungsposition am Motorflansch/-sockel Position trous bride/barrette à bornes moteur Posición agujeros brida / base motor	
B)	Available without reduction bushes Disponibile anche senza boccola Auch ohne Reduzierbuchse verfügbar Disponible aussi sans douille de réduction Disponible tambien sin casquillo	

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select ouput speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)



QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft 	Ratios code
							-B	-C	-O	-P	-Q		
							63	71*	56	63	71		
407	3.44	0.55**	12	2.0	1.1	25			C	C		2821	01
327	4.28	0.55**	15	1.9	1.1	30			C	C		2818	02
257	5.45	0.55**	20	2.0	1.1	40			C	C		2815	03
225	6.23	0.55**	23	2.0	1.1	45			C	C		1921	04
194	7.20	0.55**	26	1.9	1.1	50			C	C		2812	05
181	7.74	0.55**	28	1.8	0.99	50			C	C		1918	06
142	9.85	0.55**	36	1.7	0.93	60			C	C		1915	07
123	11.42	0.55**	41	1.5	0.80	60			C	C		1715	08
107	13.03	0.55**	47	1.3	0.70	60			C	C		1912	09
93	15.10	0.37	37	1.6	0.61	60			C	C		1712	10
86	16.20	0.37	39	1.5	0.57	60			C	C		1910	11
75	18.78	0.37	45	1.3	0.49	60			C	C		1710	12
66	21.15	0.37	51	1.2	0.43	60			C	C		1312	13
64	21.84	0.37	53	1.1	0.42	60			C	C		1015	14
53	26.31	0.37	64	0.9	0.35	60			C	C		1310	15
48.5	28.88	0.37	70	1.0	0.37	70			C	C		1012	16
39	35.91	0.37	87	0.8	0.30	70			C	C		1010	17
37.1	37.69	0.25	62	1.1	0.28	70			C	C		912	18
29.9	46.87	0.25	77	0.9	0.23	70			C	C		910	19
28.1	49.76	0.25	81	0.9	0.21	70			C	C		712	20
22.6	61.89	0.18	77	0.9	0.17	70			C	C		710	21

** Concerning a reduced dimensions electric motor.
Riferito a motore con grandezza ridotta

* Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14
* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

Motor Flanges Available
Flangia Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **202A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **202A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **202A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **202A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **202A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 202A Oil Quantity 0.15 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

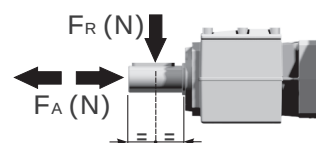
tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

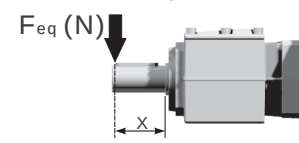
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



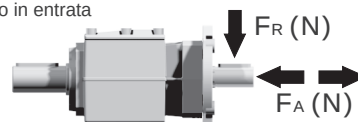
$$F_{eq} = F_R \cdot \frac{35.7}{X+20.7}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	140	700	140	246	1320	70	340	1700
250	151	756	120	270	1350	40	380	1900
200	185	924	85	300	1500	15	-	-

Input shaft

Albero in entrata

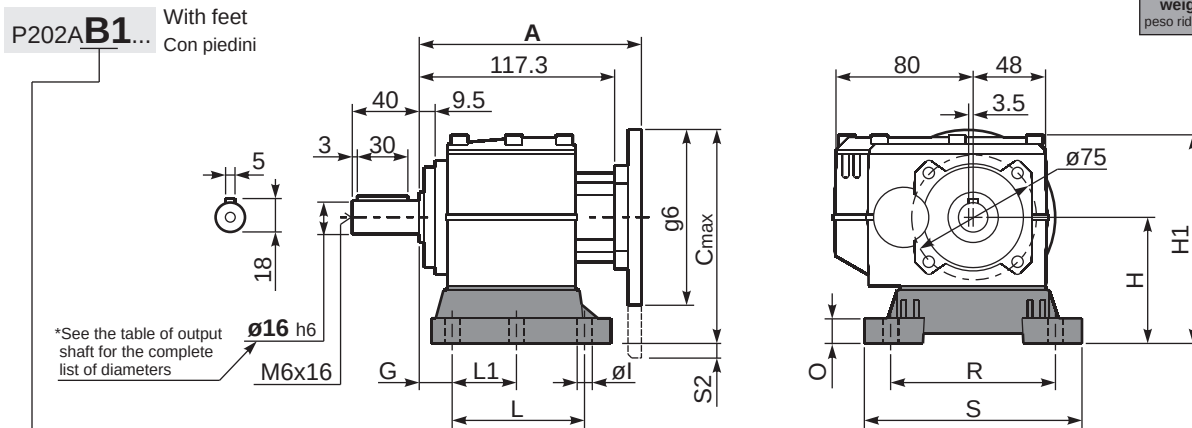


n_1	FA	FR
1400	140	700
900	160	800
500	190	950

tab. 2

Gearbox weight
peso riduttore

With flange **3.3 kg**
With feet **3.7 kg**

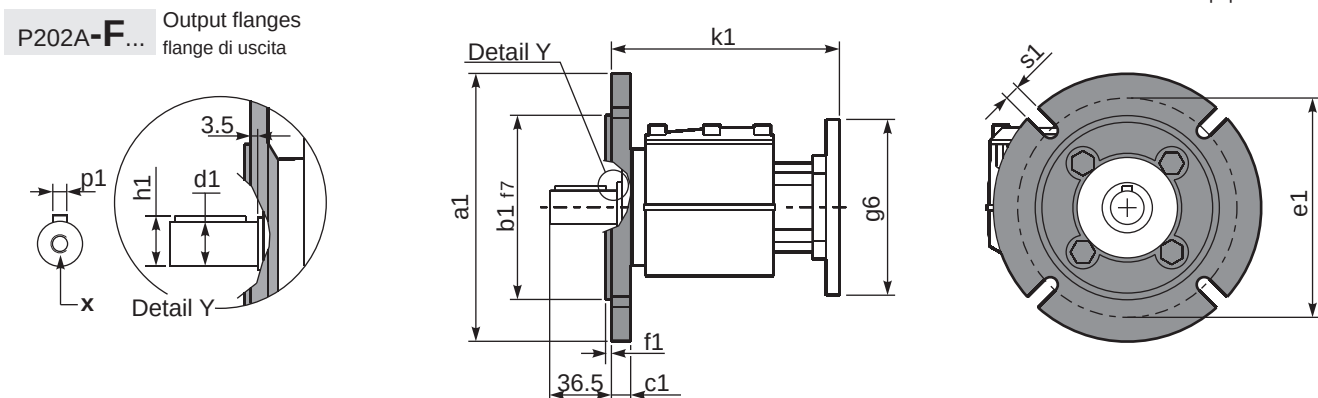


Feet Code	Market reference	G	H	R	L	L1	S	H1	O	Ø	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	133	15	9	-	-	KC30.9.022
B2	212/3	18	100	130	107.5	60	155	145	5	11	-	-	KC30.9.023LM
S1	17-32	18	75	110	110	50	130	123	15	9	-	63B5	KC30.9.024

Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types
Tipi più diffusi



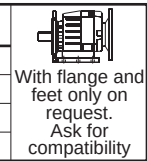
***Available output shaft / Alberi di uscita**

	Shaft - d1	p1	h1	x
Standard	Ø 16x40	5	18	M6x16
On request A richiesta	Ø 14x30	5	16	M6x16
	Ø 20x40	6	22.5	M8x19
	Ø 25x50	8	28	M8x19

Available output flanges / flange di uscita

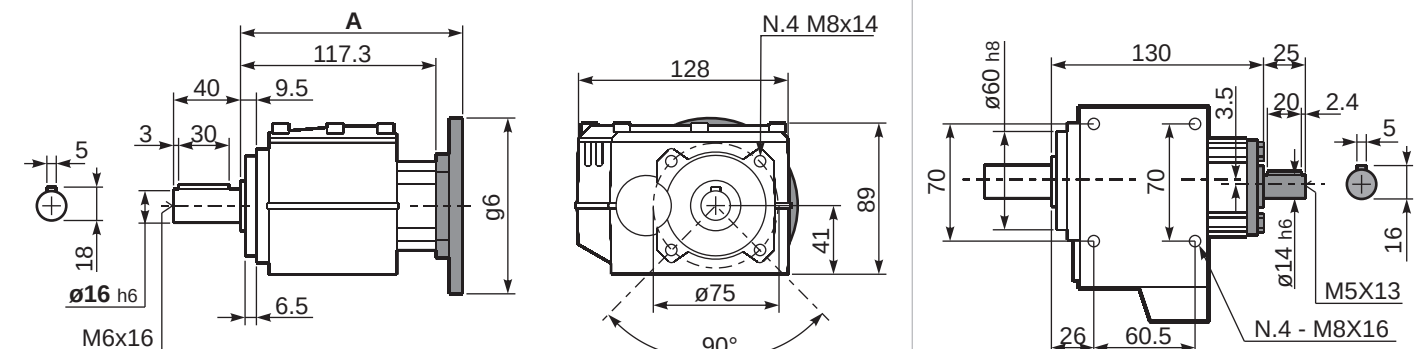
a1 Ø	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

* Holes position
Posizione fori



P202A-N... Basic gearbox
Riduttore base

R202A-N... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C _{max}	g6	k1	kit code
63 B5	135.8	170	140	139.3	K050.4.041
71 B5	133.3	180	160	136.8	K050.4.042

B14 Motor Flanges	A	C _{max}	g6	k1	kit code
56 B14	133.3	139	80	136.8	KC40.4.049
63 B14	135.8	146	90	139.3	K050.4.047
71 B14	133.3	152.5	105	136.8	K050.4.045



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft 	Output Shaft 	Ratios code 
							-B	-C	-D	-E	-Q	-R	-T			
							63	71*	80*	90*	71	80	90			
407	3.44	1.5	34	1.0	1.6	35	B				C	C		2821		01
327	4.28	1.5	42	1.0	1.4	40	B				C	C		2818		02
257	5.45	1.5	53	1.0	1.5	52	B				C	C		2815		03
225	6.23	1.5	61	1.1	1.7	70	B				C	C		1921		04
194	7.20	1.5	71	1.0	1.5	70	B				C	C		2812		05
181	7.74	1.5	76	1.1	1.6	80	B				C	C		1918	standard	06
142	9.85	1.5	97	1.0	1.5	95	B				C	C		1915	ø20	07
123	11.42	1.5	112	1.0	1.5	115	B				C	C		1715		08
107	13.03	1.1	93	1.2	1.3	114	B				C	C		1912	ø14	09
93	15.10	1.1	108	1.1	1.2	114	B				C	C		1712	ø16	10
86	16.20	0.75	80	1.3	1.0	107	B				C	C		1910	ø19	11
75	18.78	0.75	92	1.2	0.87	107	B				C	C		1710	ø24	12
66	21.15	0.75	104	1.1	0.82	114	B				C	C		1312	ø25	13
64	21.84	0.75	107	1.1	0.83	119	B				C	C		1015	On request	14
53	26.31	0.55	95	1.1	0.62	107	B				C	C		1310		15
48.5	28.88	0.55	105	1.1	0.60	114	B				C	C		1012		16
39	35.91	0.37	87	1.2	0.46	107	B				C	C		1010		17
37.1	37.69	0.37	91	1.1	0.41	102	B				C	C		912		18
29.9	46.87	0.37	113	0.9	0.35	107	B				C	C		910		19
28.1	49.76	0.25	81	1.2	0.31	101	B				C	C		712		20
22.6	61.89	0.25	101	1.1	0.26	107	B				C	C		710		21

The dynamic efficiency is **0.96** for all ratios

*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14
* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **302A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **302A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **302A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **302A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **302A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 302A Oil Quantity 0.15 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

tab. 1

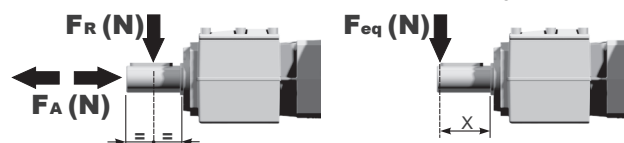
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

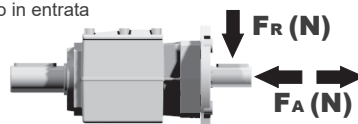
$$F_{eq} = F_R \cdot \frac{35.7}{X+20.7}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	140	700	140	246	1320	70	340	1700
250	151	756	120	270	1350	40	380	1900
200	185	924	85	300	1500	15	-	-

Input shaft

Albero in entrata

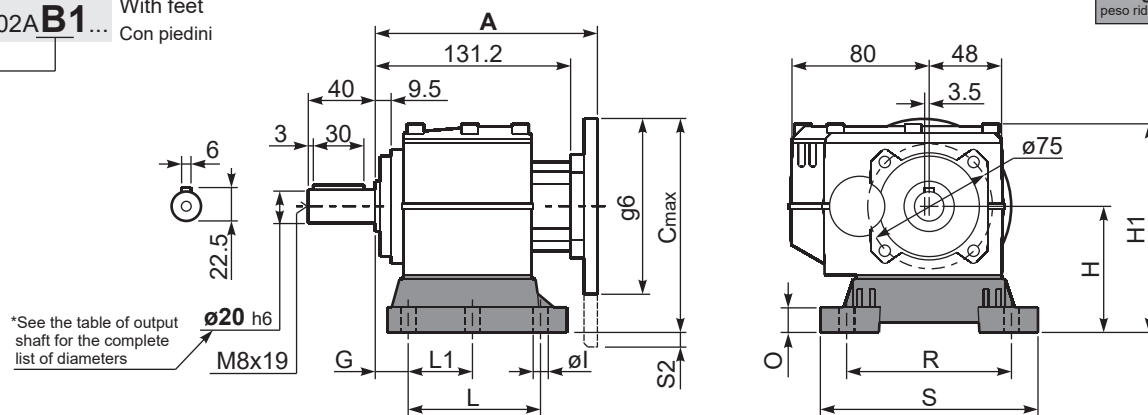


n_1	FA	FR
1400	226	1130
900	264	1320
500	322	1610

tab. 2

Gearbox weight With flange **3.5 kg**
peso riduttore With feet **4.0 Kg**

P302A-B1... With feet
Con piedini



*See the table of output shaft for the complete list of diameters

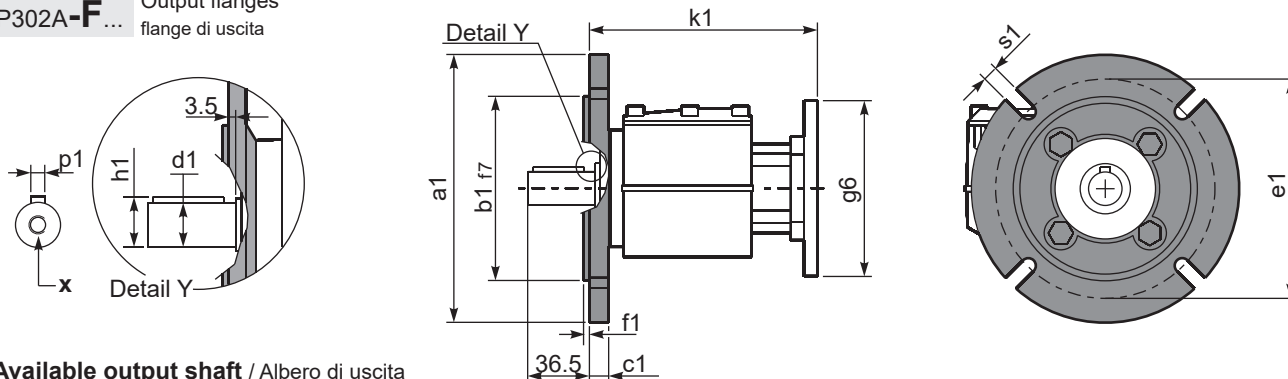
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	Ø	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	133	15	9	15 80/90B5	-	KC30.9.022
B2	212/3	18	100	130	107.5	60	155	145	5	11	3.5 80/90B5	-	KC30.9.023LM
S1	17-32	18	75	110	110	50	130	123	15	9	5 71B5	71B5	KC30.9.024

Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types
Tipi più diffusi

P302A-F... Output flanges
flange di uscita



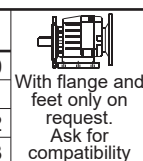
*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	Ø 20x40	6	22.5	M8x19
On request A richiesta	Ø 14x30	5	16	M6x16
	Ø 16x40	5	18	M6x16
	Ø 19x40	6	21.5	M6x16
	Ø 24x50	8	27	M8x19
	Ø 25x50	8	28	M8x19

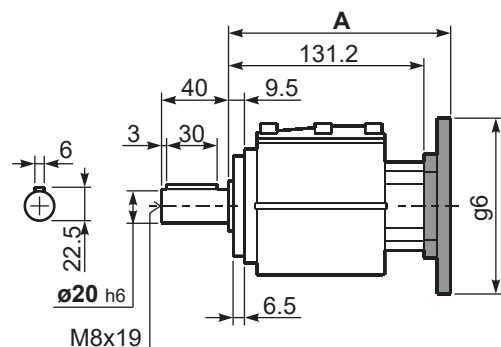
Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

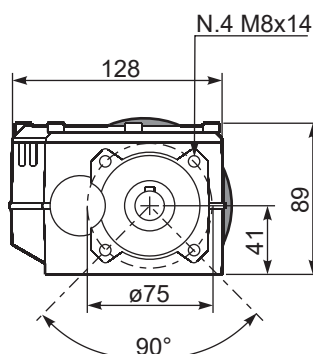
* Holes position
Posizione fori



P302A-N... Basic gearbox
Riduttore base

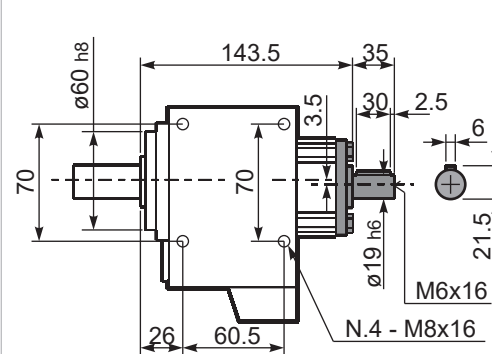


B5 Motor Flanges	A	C _{max}	g6	k1	kit code
63 B5	151.7	170	140	155.2	K063.4.041
71 B5	149.7	180	160	153.2	K063.4.042
80/90 B5	151.7	200	200	155.2	K063.4.043



B14 Motor Flanges	A	C _{max}	g6	k1	kit code
71 B14	149.7	152.5	105	153.2	K063.4.047
80 B14	151.7	160	120	155.2	K063.4.046
90 B14	151.7	170	140	155.2	K063.4.041

R302A-N... Input Shaft
Albero in entrata





■ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft		
							-B	-C	-D	-E	-F	-Q	-R	-T	-U			Ratios code
							63	71	80*	90*	100*	71	80	90	100			
398	3.52	3	68	1.2	3.5	80	B					C	C			2821		01
321	4.37	3	84	1.1	3.1	90	B					C	C			2818		02
252	5.56	3	107	0.9	2.7	100	B					C	C			2813		03
220	6.36	2.2	90	1.2	2.5	105	B					C	C			1921		04
191	7.33	2.2	104	1.2	2.5	120	B					C	C			2812		05
177	7.89	2.2	112	1.2	2.5	130	B					C	C			1918		06
139	10.06	2.2	143	1.2	2.5	165	B					C	C			1913		08
120	11.66	2.2	166	1.0	2.2	165	B					C	C			1713	standard	09
106	13.26	1.5	130	1.3	1.9	165	B					C	C			1912	ø25	10
102	13.68	1.5	134	1.2	1.8	165	B					C	C			1513		25
91	15.37	1.5	151	1.1	1.6	165	B					C	C			1712	ø16	11
86	16.33	1.5	160	1.0	1.5	165	B					C	C			1313	ø19	26
78	18.04	1.5	177	0.9	1.4	165	B					C	C			1512	ø20	23
65	21.54	1.1	154	1.1	1.2	165	B					C	C			1312	ø24	14
63	22.29	1.1	160	1.0	1.1	165	B					C	C			1013	On request	15
53	26.31	0.75	129	1.2	0.90	155	B					C	C			1310		16
47.6	29.40	0.75	144	1.1	0.86	165	B					C	C			1012		17
39	35.91	0.55	130	1.2	0.66	155	B					C	C			1010		18
36.5	38.37	0.55	139	1.2	0.66	165	B					C	C			912		19
29.9	46.87	0.55	170	0.9	0.51	155	B					C	C			910		20
27.6	50.67	0.37	123	1.1	0.41	137	B					C	C			712		21
22.6	61.89	0.37	150	1.0	0.38	155	B					C	C			710		22

The dynamic efficiency is **0.96** for all ratios

*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14

* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

Motor Flanges Available
Flange Motore DisponibiliB) Supplied with Reduction Bushing
Fornito con Bussola di RiduzioneB) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di RiduzioneC) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **412A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **412A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **412A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **412A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **412A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

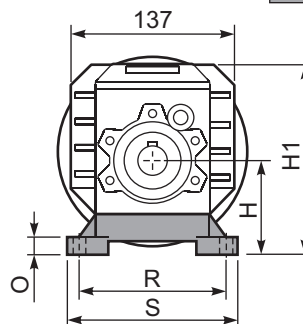
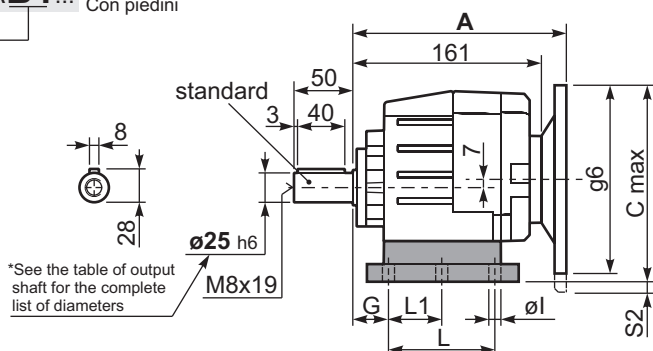
Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio						
	B3	B6	B7	B8	V5	V6	V8
	0.25 LT	0.35 LT	0.40 LT	0.45 LT	0.40 LT	0.50 LT	Ask
SHELL Omala S4 WE 320				ENI Telium VSF 320			

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS									
Output shaft Albero di uscita					$F_{eq} = F_R \cdot \frac{46}{X+21}$				
n_2	F_A	F_R	n_2	F_A	F_R	n_2	F_A	F_R	
300	310	1550	140	406	2030	70	540	2700	
250	330	1650	120	448	2240	40	600	3000	
200	360	1800	85	480	2400	15	600	3000	
Input shaft Albero in entrata									
n_1	F_A	F_R	n_1	F_A	F_R	n_1	F_A	F_R	
1400	240	1200	900	280	1400	500	340	1700	

tab. 2

P412A-B1... With feet
Con piediniGearbox weight
peso riduttore With flange 5.7 kg
With feet 5.9 Kg

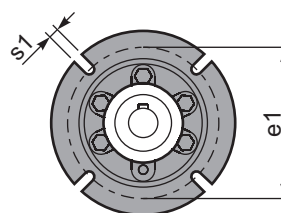
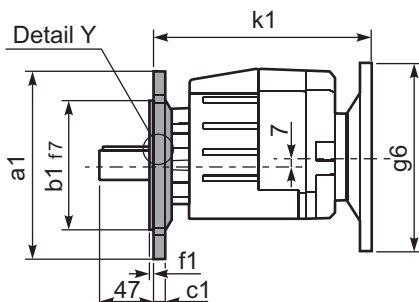
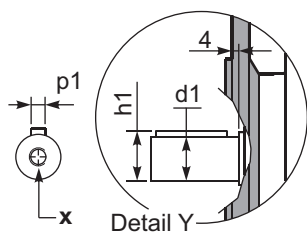
Feet / piedini

Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	167.5	15	-	8 80/90B5 33 100/112B5	-	KC35.9.021
B2	212/3	18	100	130	107.5	60	155	182.5	17	11	18 100/112B5	-	KC40.9.025
S1	17	18	75	110	90+110	50	145	155.5	15	9	18 80/90B5 43 100/112B5	-	KC40.9.022
S2	27	25	90	110	130	-	145	172.5	20	9	3 80/90B5 28 100/112B5	-	KC40.9.024
H2	022-223	25	100	110	115	-	145	182.5	20	9	18 100/112B5	-	KC40.9.026
M1	42/3	25	80	110+120	85	-	145	162.5	15	9	13 80/90B5 38 100/112B5	-	KC40.9.023

Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types
Tipi più diffusi

P412A-F... Output flanges
flange di uscita

*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 25x50	8	28	M8x19
On request A richiesta	ø 16x40	5	18	M6x16
	ø 19x40	6	21.5	M6x16
	ø 20x40	6	22.5	M8x19
	ø 24x50	8	27	M8x19

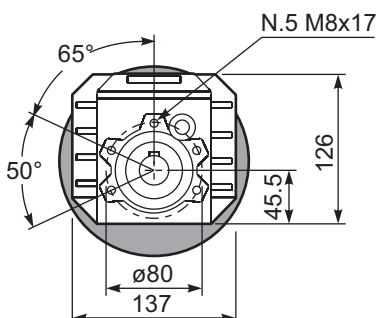
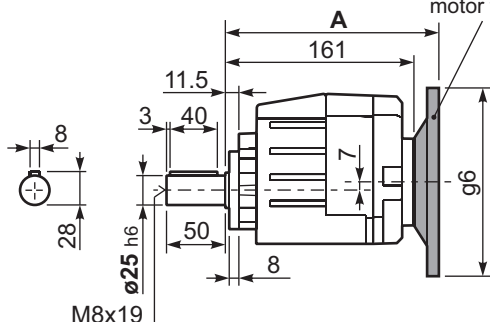
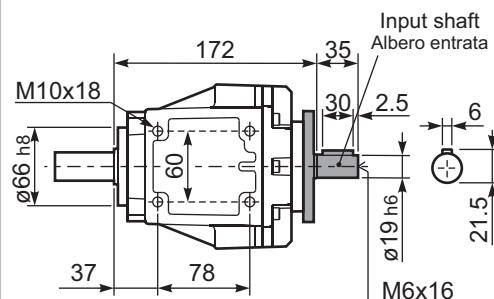
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	7	KC40.9.010
140	95	10	115	3	9	KC40.9.011
160	110	10	130	3.5	9	KC40.9.012
200	130	10	165	3.5	11	KC40.9.013
250	180	11.5	215	3.5	14	KC40.9.014

With flange and feet only on request.
Ask for compatibility

P412A-N... Basic gearbox
Riduttore base

Suggested B14 motor flanges

R412A-N... Input Shaft
Albero in entrata

B5 Motor Flanges	A	C _{max}	g6	k1	kit code
63 B5	181.5	177	140	185.5	K063.4.041
71 B5	179.5	187	160	183.5	K063.4.042
80/90 B5	181.5	207	200	185.5	K063.4.043
100/112 B5	196.5	232	250	200.5	KC40.4.043

B14 Motor Flanges	A	C _{max}	g6	k1	kit code
71 B14	179.5	159.5	105	183.5	K063.4.047
80 B14	181.5	167	120	185.5	K063.4.046
90 B14	181.5	177	140	185.5	K063.4.041
100/112 B14	196.5	187	160	200.5	KC40.4.041



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft 	Ratios code 
							-B	-C	-O	-P	-Q		
							63	71	56	63	71		
36.5	38.40	0.37	91	1.8	0.67	165			C	C		171713	02
32.0	43.69	0.37	104	1.6	0.59	165			C	C		191712	03
27.6	50.64	0.37	120	1.4	0.51	165			C	C		171712	04
26.2	53.36	0.37	127	1.3	0.47	160			C	C		191710	05
22.9	61.21	0.37	145	1.2	0.43	170			C	C		191312	06
22.6	61.85	0.37	147	1.1	0.40	160			C	C		171710	07
19.7	70.95	0.37	168	1.0	0.37	170			C	C		131712	08
19.1	73.43	0.37	174	1.0	0.37	175			C	C		101713	09
18.7	74.77	0.37	177	0.9	0.33	160			C	C		191310	10
16.2	86.66	0.25	139	1.2	0.29	160			C	C		131710	11
14.5	96.85	0.25	155	1.1	0.27	170			C	C		101712	12
13.6	102.89	0.25	165	1.1	0.27	175			C	C		101313	13
11.1	126.40	0.18	155	1.1	0.21	170			C	C		91712	17
10.3	135.69	0.18	166	1.0	0.20	170			C	C		101312	15
8.4	165.74	0.12	131	1.2	0.15	160			C	C		101310	16
7.9	177.09	0.12	140	1.2	0.15	170			C	C		91312	18
6.5	216.31	0.09	136	1.2	0.12	160			C	C		91310	19

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **413A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **413A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **413A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

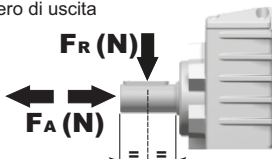
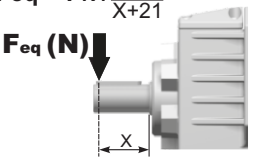
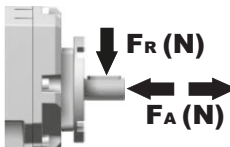
F Le réducteur **413A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **413A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

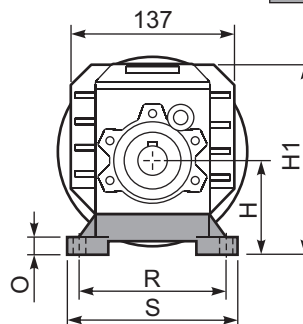
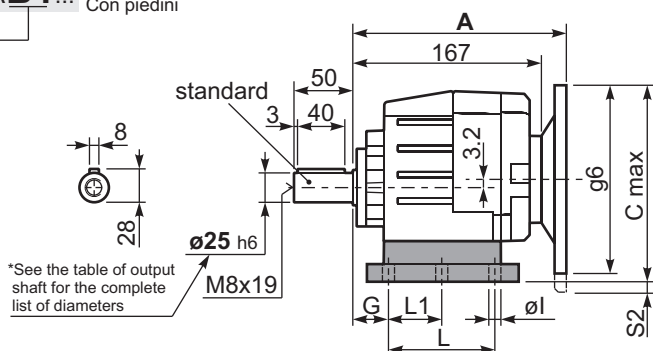
Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio						
							
B3	B6	B7	B8	V5	V6	V8	
0.30 LT	0.35 LT	0.45 LT	0.45 LT	0.45 LT	0.55 LT	Ask	
SHELL Omala S4 WE 320				ENI Telium VSF 320			

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS									
Output shaft Albero di uscita					$F_{eq} = F_R \cdot \frac{46}{X+21}$				
									
n_2	F_A	F_R	n_2	F_A	F_R	n_2	F_A	F_R	
300	310	1550	140	406	2030	70	540	2700	
250	330	1650	120	448	2240	40	600	3000	
200	360	1800	85	480	2400	15	600	3000	
Input shaft Albero in entrata									
n_1	F_A	F_R	n_1	F_A	F_R	n_1	F_A	F_R	
1400	140	700	900	160	800	500	190	950	

tab. 2

P413A-B1... With feet
Con piediniGearbox
weight
peso riduttore With flange **6.1 kg**
With feet **6.3 Kg**

Feet / piedini

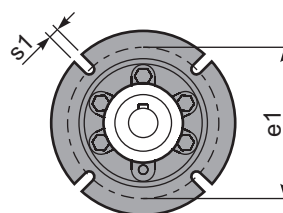
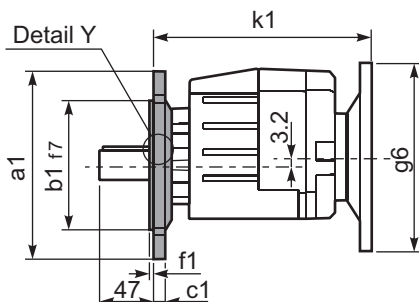
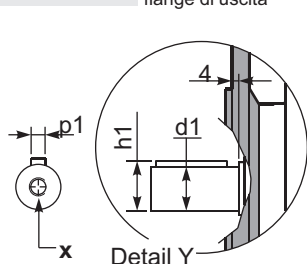
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	Øl	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	167.5	15	-	-	-	KC35.9.021
B2	212/3	18	100	130	107.5	60	155	182.5	17	11	-	-	KC40.9.025
S1	17	18	75	110	90+110	50	145	155.5	15	9	2 80/90B5	-	KC40.9.022
S2	27	25	90	110	130	-	145	172.5	20	9	-	-	KC40.9.024
H2	022-223	25	100	110	115	-	145	182.5	20	9	-	-	KC40.9.026
M1	42/3	25	80	110+120	85	-	145	162.5	15	9	-	-	KC40.9.023

Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types
Tipi più diffusi

4

P413A-F... Output flanges
flange di uscita

*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	Ø 25x50	8	28	M8x19
On request A richiesta	Ø 16x40	5	18	M6x16
	Ø 19x40	6	21.5	M6x16
	Ø 20x40	6	22.5	M8x19
	Ø 24x50	8	27	M8x19

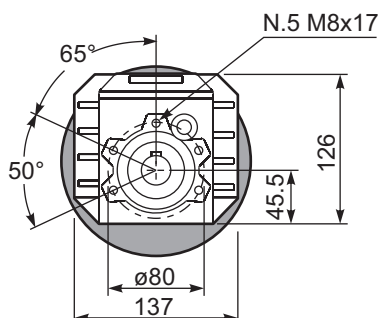
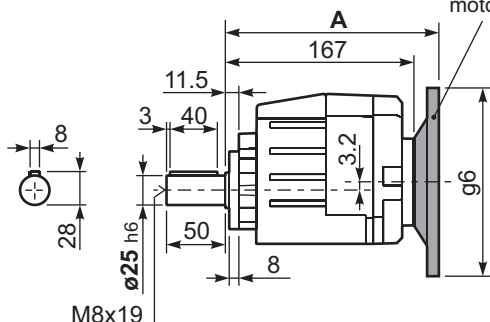
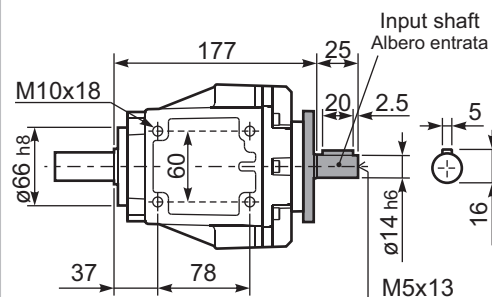
Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	7	KC40.9.010
140	95	10	115	3	9	KC40.9.011
160	110	10	130	3.5	9	KC40.9.012
200	130	10	165	3.5	11	KC40.9.013
250	180	11.5	215	3.5	14	KC40.9.014

With flange and feet only on request. Ask for compatibility

P413A-N... Basic gearbox
Riduttore base

Suggested B14 motor flanges

R413A-N... Input Shaft
Albero in entrata

B5 Motor Flanges	A	C _{max}	g6	k1	kit code
63 B5	185.5	173.2	140	189.5	K050.4.041
71 B5	183	183.2	160	187	K050.4.042

B14 Motor Flanges	A	C _{max}	g6	k1	kit code
56 B14	183	143.2	80	187	KC40.4.049
63 B14	185.5	148.2	90	189.5	K050.4.047
71 B14	183	155.7	105	187	K050.4.045



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft		
							-C	-D	-E	-F	-G	-R	-T	-U	-V			Ratios code
							71	80	90	100	112	132*	80	90	100	112		
388	3.61	4	93	1.6	6.3	150	B									3018		01
331	4.23	4	108	1.6	6.1	170	B									3016		02
279	5.01	4	129	1.6	6.1	200	B									3014		03
231	6.07	4	156	1.6	6.3	250	B									3012		04
206	6.81	4	175	1.6	6.2	277	B									2018		05
176	7.96	4	204	1.5	5.8	300	B									2016	standard ø30	06
148	9.45	4	242	1.3	4.9	304	B									2014		07
122	11.43	4	293	1.0	4.0	300	B									2012		08
99	14.21	3	274	1.0	2.8	265	B									2010	ø24	09
84	16.62	3	321	0.9	2.8	304	B									1314		10
70	20.10	2.2	286	1.0	2.3	300	B									1312	ø25	11
56	24.98	1.85	302	0.9	1.6	265	B									1310	ø28	12
47.6	29.41	1.5	288	1.1	1.6	304	B									814	ø35	13
39.3	35.58	1.5	349	0.9	1.3	300	B									812	On request	14
34.6	40.50	1.1	290	1.0	1.1	290	B									614		15
31.7	44.23	1.1	316	0.8	0.92	265	B									810		16
28.6	49.00	0.75	240	1.2	0.93	300	B									612		17
23.0	60.90	0.75	299	0.9	0.66	265	B									610		18

The dynamic efficiency is **0.96** for all ratios

*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14

* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **452A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **452A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **452A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **452A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **452A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

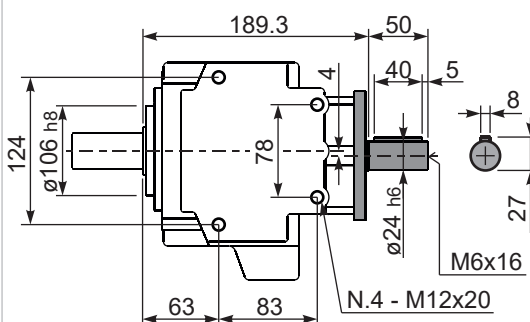
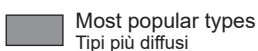
Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3 0.31 LT	B6 0.31 LT	B7 0.31 LT	B8 0.31 LT	V5 0.31 LT	V6 0.31 LT	V8 Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS		
Output shaft / Albero di uscita		
		$F_{eq} = F_R \cdot \frac{51}{X+21}$
F_R (N)	F_A (N)	
F_{eq} (N)		
X		
n_2	FA	FR
300	415	2070
250	430	2160
200	470	2340
140	540	2700
120	560	2790
85	630	3150
n_2	FA	FR
70	700	3510
40	810	4050
15	900	4500
Input shaft / Albero in entrata		
F_R (N)	F_A (N)	
n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

4-14



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft		
							-C	-D	-E	-F	-G	-R	-T	-U	-V			Ratios code
							71	80	90	100*	132*	80	90	100	132			
388	3.61	5.5	127	1.2	6.6	155	B									3018		01
331	4.23	5.5	148	1.2	6.5	180	B									3016		02
279	5.01	5.5	176	1.2	6.4	210	B									3014		03
231	6.07	5.5	213	1.2	6.4	255	B									3012		04
206	6.81	5.5	239	1.3	6.7	300	B									2018		05
176	7.96	5.5	279	1.2	6.4	335	B									2016		07
148	9.45	5.5	331	1.1	5.8	360	B									2014	standard	08
122	11.43	4	293	1.1	4.4	330	B									2012	ø30	09
100	14.00	3	270	1.3	3.9	360	B									1316		21
84	16.62	3	321	1.1	3.3	360	B									1314	ø24	11
70	20.10	2.2	286	1.2	2.5	330	B									1312	ø25	12
57	24.61	2.2	350	0.9	2.0	330	B									1112	ø28	20
47.6	29.41	1.5	288	1.2	1.9	360	B									814	ø35	14
39.3	35.58	1.5	349	0.9	1.4	330	B									812	On request	15
34.6	40.50	1.1	290	1.1	1.2	320	B									614		16
31.7	44.23	1.1	316	0.8	0.88	255	B									810		17
28.6	49.00	1.1	351	0.9	1.0	330	B									612		18
23.0	60.90	0.75	299	0.8	0.64	255	B									610		19

The dynamic efficiency is **0.96** for all ratios

*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14
* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **512A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **512A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **512A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **512A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **512A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

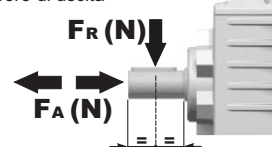
Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
0.70 LT	0.80 LT	1.15 LT	1.20 LT	1.15 LT	1.25 LT	Ask
SHELL Omala S4 WE 320				ENI Telium VSF 320		

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

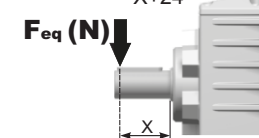
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



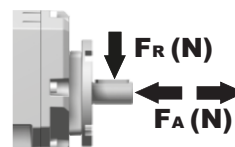
$$F_{eq} = F_R \cdot \frac{54}{X+24}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	460	2300	140	600	3000	70	780	3900
250	480	2400	120	620	3100	40	900	4500
200	520	2600	85	700	3500	15	1000	5000

Input shaft

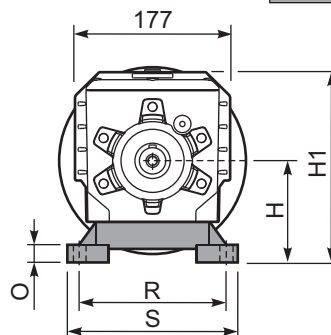
Albero in entrata



n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

Gearbox weight peso riduttore	With flange	11.7 kg
	With feet	11.9 Kg



Feet Code	Market reference	G	H	R	L	S	H1	O	Øl	S2 only with motor flange	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	211	20	11	10 100/112B5 35 132B5	-	KC50.9.024
B4	30/35	20	130	180	149.5	216	231	18	14	15 132B5	-	KC60.9.024
S4	47-57	30	115	135	165	170	216	25	14	5 100/112B5 30 132B5	-	KC50.9.022
H3	023-233	30	130	135	135	185	231	25	14	15 132B5	-	KC50.9.025
M2	52/3	30	110	135+150	100	190	211	18	11	10 100/112B5 35 132B5	-	KC50.9.023

 Most popular types
Tipi più diffusi

4

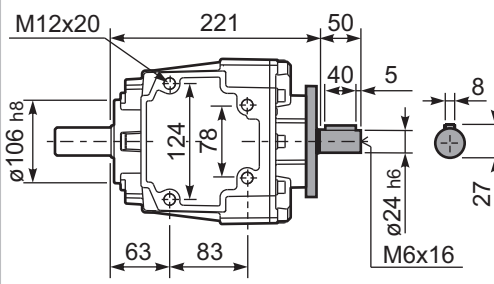
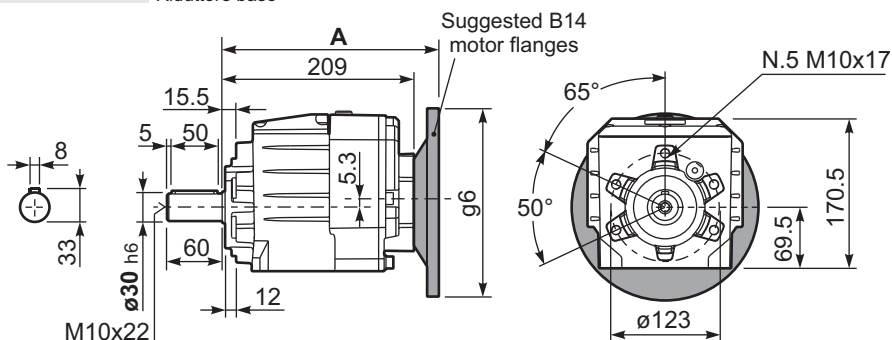
Technical drawing of the output shaft assembly. The drawing includes a front view on the left showing a circular shaft with a central hole, dimensions $p1$ and x , and a circular detail callout labeled "Detail Y". The side view on the right shows the shaft with dimensions $a1$, $b1$, $f7$, $f1$, $c1$, 57.5 , 53 , 96 , and $k1$. A circular detail callout labeled "Detail Y" is also present. The drawing is labeled "Available output shaft / Albero di uscita" and includes the text "8.5 with KC50.9.011" and "51.5 with KC50.9.011".

	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 24x50	8	27	M8x19
	ø 25x50	8	28	M8x19
	ø 28x60	8	31	M8x19
	ø 35x60	10	38	M10x22

a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	11	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

R512A-N... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011	B14 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
71 B5	227.5	215.3	160	230	K023.4.041	236	80 B14	229.5	195.3	120	232	K085.4.046	238
80/90 B5	229.5	235.3	200	232	K023.4.042	238	90 B14	229.5	205.3	140	232	K085.4.045	238
100/112 B5	238.5	260.3	250	241	K023.4.043	247	100/112 B14	238.5	215.3	160	241	K085.4.047	247
132 B5	259.5	285.3	300	259	KC51.4.043	265	132 B14	259.5	235.3	200	259	KC51.4.041	265



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft 	Ratios code
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
35.2	39.79	1.5	382	0.9	1.4	360	B				C	C		191316	01
29.6	47.22	1.1	331	1.1	1.2	360	B				C	C		191314	02
25.6	54.73	1.1	384	0.9	1.0	360	B				C	C		171314	03
21.1	66.22	0.75	318	1.0	0.78	330	B				C	C		171312	04
18.3	76.69	0.75	369	1.0	0.73	360	B				C	C		131314	05
16.7	83.59	0.55	297	1.2	0.67	360	B				C	C		190814	06
15.1	92.78	0.55	329	1.0	0.55	330	B				C	C		131312	07
13.4	104.68	0.55	371	1.0	0.54	360	B				C	C		101314	08
11.9	117.22	0.37	278	1.2	0.44	330	B				C	C		170812	09
11.1	126.65	0.37	300	1.1	0.41	330	B				C	C		101312	10
10.2	136.62	0.37	324	1.1	0.41	360	B				C	C		91314	11
8.5	165.29	0.25	264	1.2	0.31	330	B				C	C		91312	12
7.8	180.40	0.25	289	1.2	0.31	360	B				C	C		71314	13
6.4	218.26	0.25	349	0.9	0.24	330	B				C	C		71312	14
5.8	241.82	0.25	387	0.9	0.23	360	B				C	C		90814	15
4.8	292.57	0.18	358	0.9	0.18	330	B				C	C		90812	16
4.4	319.32	0.18	391	0.9	0.18	360	B				C	C		70814	17
3.6	386.33	0.12	305	1.1	0.13	330	B				C	C		70812	18
2.9	480.16	0.12	380	0.7	0.08	255	B				C	C		70810	19

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **513A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **513A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **513A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

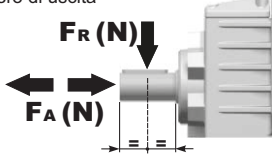
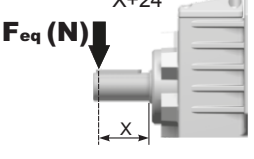
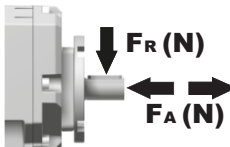
F Le réducteur **513A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **513A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio						
							
1.00 LT	0.90 LT	1.25 LT	1.15 LT	1.45 LT	1.40 LT	Ask	
SHELL Omala S4 WE 320				ENI Telium VSF 320			

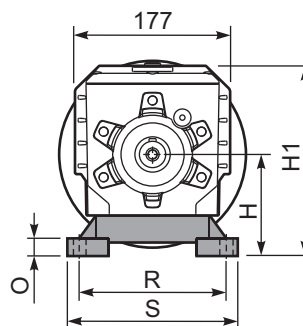
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS									
Output shaft Albero di uscita					$F_{eq} = F_R \cdot \frac{54}{X+24}$				
									
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR	
300	460	2300	140	600	3000	70	780	3900	
250	480	2400	120	620	3100	40	900	4500	
200	520	2600	85	700	3500	15	1000	5000	
Input shaft Albero in entrata									
n_1	FA	FR	n_1	FA	FR	n_1	FA	FR	
1400	400	2000	900	440	2200	500	440	2200	

tab. 2

Gearbox weight	With flange	11.9 kg
peso riduttore	With feet	12.1 Kg



Feet Code	Market reference	G	H	R	L	S	H1	O	Øl	S2 only with motor flange	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	211	20	11	-	-	KC50.9.024
B4	30/35	20	130	180	149.5	216	231	18	14	-	-	KC60.9.024
S4	47-57	30	115	135	165	170	216	25	14	-	-	KC50.9.022
H3	023-233	30	130	135	135	185	231	25	14	-	-	KC50.9.025
M2	52/3	30	110	135-150	100	190	211	18	11	-	-	KC50.9.023

 Most popular types
Tipi più diffusi

4

flange di uscita

Technical drawing of the output shaft assembly. The left view is a front view showing a circular shaft with a central hole of diameter d_1 and a total height of h_1 . The shaft is mounted on a flange with a thickness of 2.5 and a total width of 8.5 with KC50.9.011. The shaft is labeled with p_1 and x . The right view is a side view showing the shaft with a diameter of 51.5 with KC50.9.011. The shaft has a length of a_1 and a flange with a diameter of g_6 . The shaft is labeled with b_1 , r_1 , f_1 , c_1 , and 57.5 . The shaft is labeled with k_1 and 15 . The shaft is labeled with $Detail Y$.

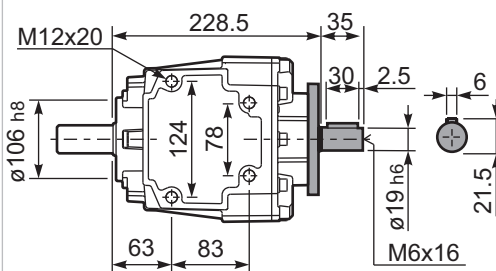
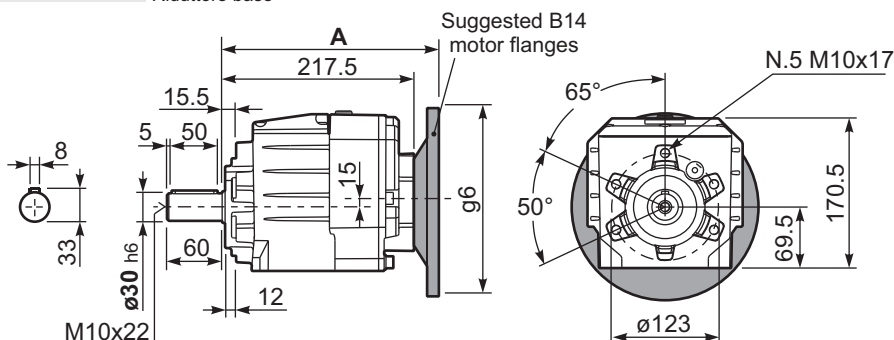
Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 24x50	8	27	M8x19
	ø 25x50	8	28	M8x19
	ø 28x60	8	31	M8x19
	ø 35x60	10	38	M10x22

a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	11	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

R513A-N... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C _{max}	g6	k1	kit code	k1 with KC50.9.011
63 B5	238	215	140	240.5	K063.4.041	246.5
71 B5	236	225	160	238.5	K063.4.042	244.5
80/90 B5	238	245	200	240.5	K063.4.043	246.5

B14 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
71 B14	236	197.5	105	238.5	K063.4.047	244.5
80 B14	238	205	120	240.5	K063.4.046	246.5
90 B14	238	215	140	240.5	K063.4.041	246.5



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft		
							-C	-D	-E	-F	-G	-R	-T	-U	-V			Ratios code
							71	80	90	100	112	132	80	90	100	112		
388	3.61	7.5	171	1.1	8.0	190	B									3018		01
331	4.23	7.5	200	1.1	8.3	230	B									3016		02
279	5.01	7.5	238	1.1	7.9	260	B									3014		03
231	6.07	7.5	288	1.1	7.8	310	B									3012		04
206	6.81	7.5	323	1.1	7.9	350	B									2018		05
176	7.96	7.5	378	1.0	7.1	370	B									2016		07
148	9.45	5.5	331	1.2	6.6	410	B									2014	standard	08
122	11.43	5.5	401	1.1	5.7	425	B									2012	ø35	09
100	14.00	4	359	1.2	4.7	435	B									1316		10
84	16.62	4	426	1.2	4.7	515	B									1314	ø28	11
70	20.10	4	515	1.0	4.0	530	B									1312	ø30	12
57	24.61	3	475	1.1	3.3	530	B									1112	ø38	20
47.6	29.41	2.2	418	1.1	2.3	450	B									814	ø40	14
39.3	35.58	2.2	506	1.0	2.3	530	B									812	On request	15
34.6	40.50	1.1	290	1.1	1.2	320	B									614		16
31.7	44.23	1.5	433	0.9	1.4	410	B									810		17
28.6	49.00	1.1	351	1.1	1.2	400	B									612		18
23.0	60.90	1.1	436	0.9	1.0	410	B									610		19

The dynamic efficiency is **0.96** for all ratios

*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14
* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

A Motor Flanges Available
Flange Motore Disponibili

B Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

C Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

D Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **612A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **612A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **612A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **612A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **612A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio						
B3	B6	B7	B8	V5	V6	V8	
0.80 LT	1.00 LT	1.20 LT	1.20 LT	1.30 LT	1.35 LT	Ask	
SHELL Omala S4 WE 320				ENI Telium VSF 320			

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS									
Output shaft Albero di uscita					Feq = $F_R \cdot \frac{60.5}{X+25.5}$				
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR	
300	560	2800	140	740	3700	70	890	4200	
250	600	3000	120	760	3800	40	1160	5800	
200	640	3200	85	840	4000	15	1300	6500	
Input shaft Albero in entrata									
n_1	FA	FR	n_1	FA	FR	n_1	FA	FR	
1400	450	2250	900	500	2500	500	600	3000	

tab. 2

Gearbox weight peso riduttore	With flange	14.1 kg
	With feet	14.5 kg



Feet Code	Market reference	G	H	R	L	S	H1	O	Øl	S2 only with motor flange	B5 max. Flange	kit code
B4	412/3	20	130	180	149.5	216	242	18	14	-	-	KC60.9.024
S4	47-57	30	115	135	165	170	227	25	14	13 132B5	-	KC50.9.022
M3	62/3	35	120	170+185	110	230	232	20	14	8 132B5	-	KC60.9.023
S7	77	35	140	170	205	204	252	8	14	-	-	KC60.9.029LM
H4	024-243	35	155	170	150	225	267	30	14	-	-	KC60.9.025

 Most popular types
Tipi più diffusi

4

Technical drawing of the KC50.9.011 motor showing front, side, and detail views with dimensions.

Front View: Shows the motor's base with dimensions $p1$ (width) and x (center-to-center distance).

Side View: Shows the motor's profile with dimensions $h1$ (total height), $d1$ (base diameter), and 2.5 (base thickness).

Detail Y: A circular detail view of the base mounting flange, showing a thickness of 2.5 and a diameter of $d1$.

Side View (Right): Shows the motor's profile with dimensions $a1$ (total height), $b1 \pm 0.7$ (height to center of shaft), $f1$ (shaft diameter), $c1$ (base width), 67.5 (base width), 16.3 (flange thickness), and 96 (total height).

Detail Y: A circular detail view of the base mounting flange, showing a thickness of 2.5 and a diameter of $d1$.

Dimensions:

- 8.5 with KC50.9.011
- 61.5 with KC50.9.011

***Available output shaft / Albero di uscita**

***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 28x60	8	31	M8x20
	ø 30x60	8	33	M10x22
	ø 38x70	10	41	M10x25
	ø 40x80	12	43	M12x28

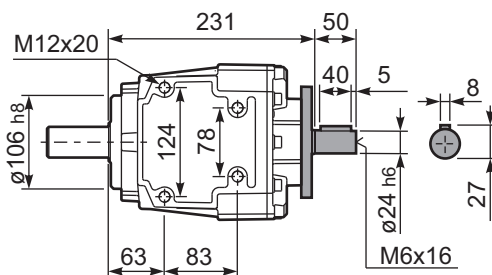
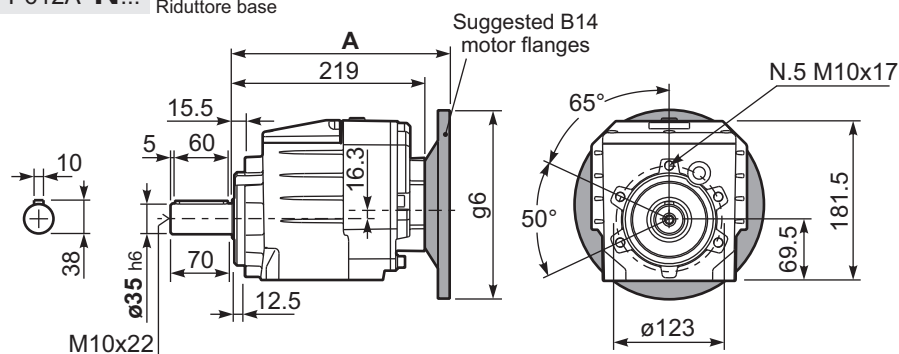
Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	11	KC50.9.011
200	130	13	164	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

With flange and feet
only on request.
Ask for compatibility

R612A-N... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011	B14 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
71 B5	237.5	251.3	160	240	K023.4.041	246	80 B14	239.5	231.3	120	242	K085.4.046	248
80/90 B5	239.5	271.3	200	242	K023.4.042	248	90 B14	239.5	241.3	140	242	K085.4.045	248
100/112 B5	248.5	296.3	250	251	K023.4.043	257	100/112 B14	248.5	251.3	160	251	K085.4.047	257
132 B5	269.5	321.3	300	269	KC51.4.043	275	132 B14	269.5	271.3	200	269	KC51.4.041	275



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft 	Ratios code 
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
35.2	39.79	1.5	382	1.1	1.7	434	B				C	C		191316	05
29.6	47.22	1.5	453	1.1	1.7	515	B				C	C		191314	06
25.6	54.73	1.5	525	1.0	1.5	515	B				C	C		171314	07
24.5	57.13	1.5	548	1.0	1.4	530	B				C	C		191312	08
21.1	66.22	1.1	464	1.1	1.2	530	B				C	C		171312	09
19.7	71.01	1.1	498	0.9	0.96	435	B				C	C		191310	10
18.3	76.69	1.1	538	1.0	1.0	515	B				C	C		131314	11
17.0	82.30	0.75	396	1.1	0.82	435	B				C	C		171310	12
16.7	83.59	0.75	402	1.1	0.82	440	B				C	C		190814	13
15.1	92.78	0.75	446	1.2	0.89	530	B				C	C		131312	14
13.4	104.68	0.75	503	1.0	0.77	515	B				C	C		101314	15
11.9	117.22	0.75	564	0.9	0.71	530	B				C	C		170812	16
11.1	126.65	0.55	449	1.2	0.65	530	B				C	C		101312	17
10.3	135.74	0.55	482	0.9	0.51	440	B				C	C		130814	18
9.6	145.68	0.37	346	1.3	0.47	435	B				C	C		170810	19
8.9	157.40	0.37	373	1.2	0.43	435	B				C	C		101310	20
8.5	165.29	0.37	392	1.3	0.50	525	B				C	C		91312	21
7.6	185.29	0.37	439	1.0	0.37	440	B				C	C		100814	22
6.8	205.43	0.37	487	0.9	0.33	435	B				C	C		91310	23
6.2	224.18	0.37	532	1.0	0.37	530	B				C	C		100812	24
5.8	241.82	0.25	387	1.1	0.28	440	B				C	C		90814	25
5.0	278.62	0.25	446	1.0	0.24	435	B				C	C		100810	26
4.8	292.57	0.25	468	1.1	0.28	530	B				C	C		90812	27
3.9	363.63	0.18	445	1.0	0.19	435	B				C	C		90810	28

The dynamic efficiency is 0.94 for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **613A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **613A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **613A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **613A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **613A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	B6	B7	B8	V5	V6	V8
1.05 LT	1.10 LT	1.25 LT	1.25 LT	1.35 LT	1.50 LT	Ask

SHELL Omala S4 WE 320

ENI Telium VSF 320

For all details on lubrication and plugs check our website

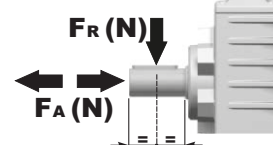
tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

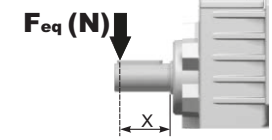
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



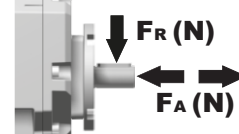
$$F_{eq} = F_R \cdot \frac{60.5}{X+25.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	560	2800	140	740	3700	70	890	4200
250	600	3000	120	760	3800	40	1160	5800
200	640	3200	85	840	4000	15	1300	6500

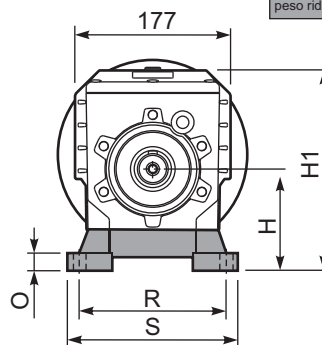
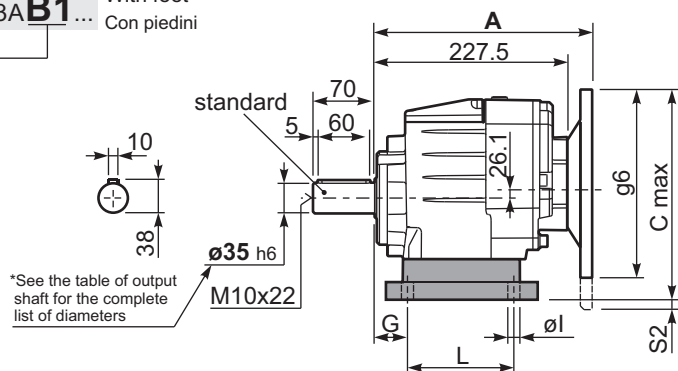
Input shaft

Albero in entrata



n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

P613A-B1... With feet
Con piediniGearbox weight
peso riduttore With flange 14.3 kg
With feet 14.7 Kg

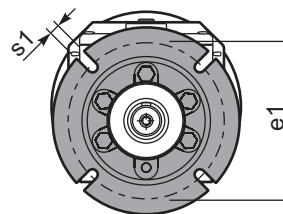
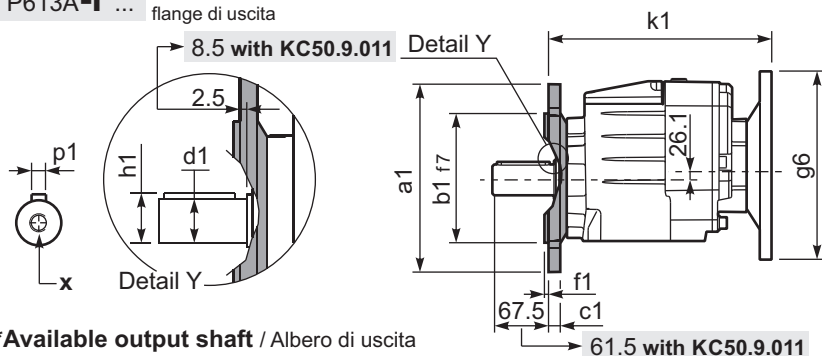
Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	Øl	S2 only with motor flange	B5 max. Flange	kit code
B4	412/3	20	130	180	149.5	216	242	18	14	-	-	KC60.9.024
S4	47-57	30	115	135	165	170	227	25	14	13 132B5	-	KC50.9.022
M3	62/3	35	120	170-185	110	230	232	20	14	8 132B5	-	KC60.9.023
S7	77	35	140	170	205	204	252	8	14	-	-	KC60.9.029LM
H4	024-243	35	155	170	150	225	267	30	14	-	-	KC60.9.025

Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types
Tipi più diffusi

P613A-F... Output flanges
flange di uscita

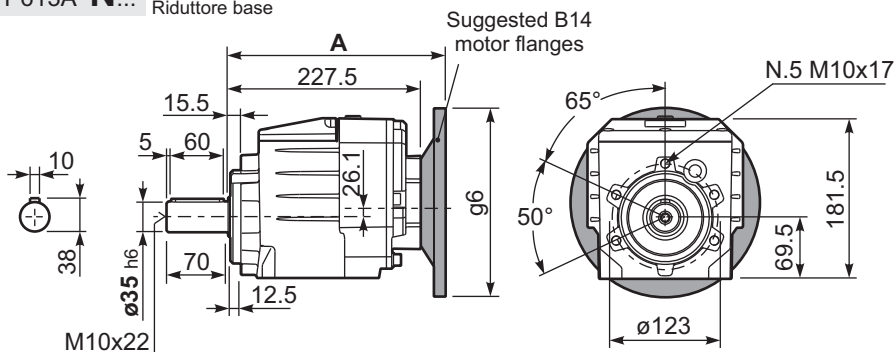
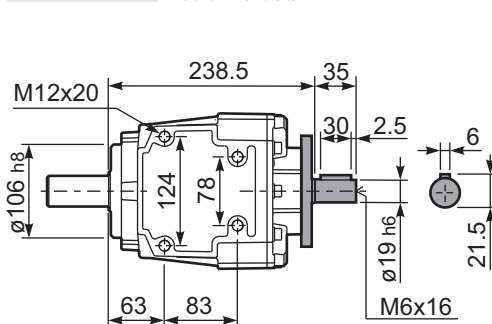
*Available output shaft / Alberi di uscita

	Shaft - d1	p1	h1	x
Standard	Ø 35x70	10	38	M10x22
On request A richiesta	Ø 28x60	8	31	M8x20
	Ø 30x60	8	33	M10x22
	Ø 38x70	10	41	M10x25
	Ø 40x80	12	43	M12x28

Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	11	KC50.9.011
200	130	13	164	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request.
Ask for compatibility

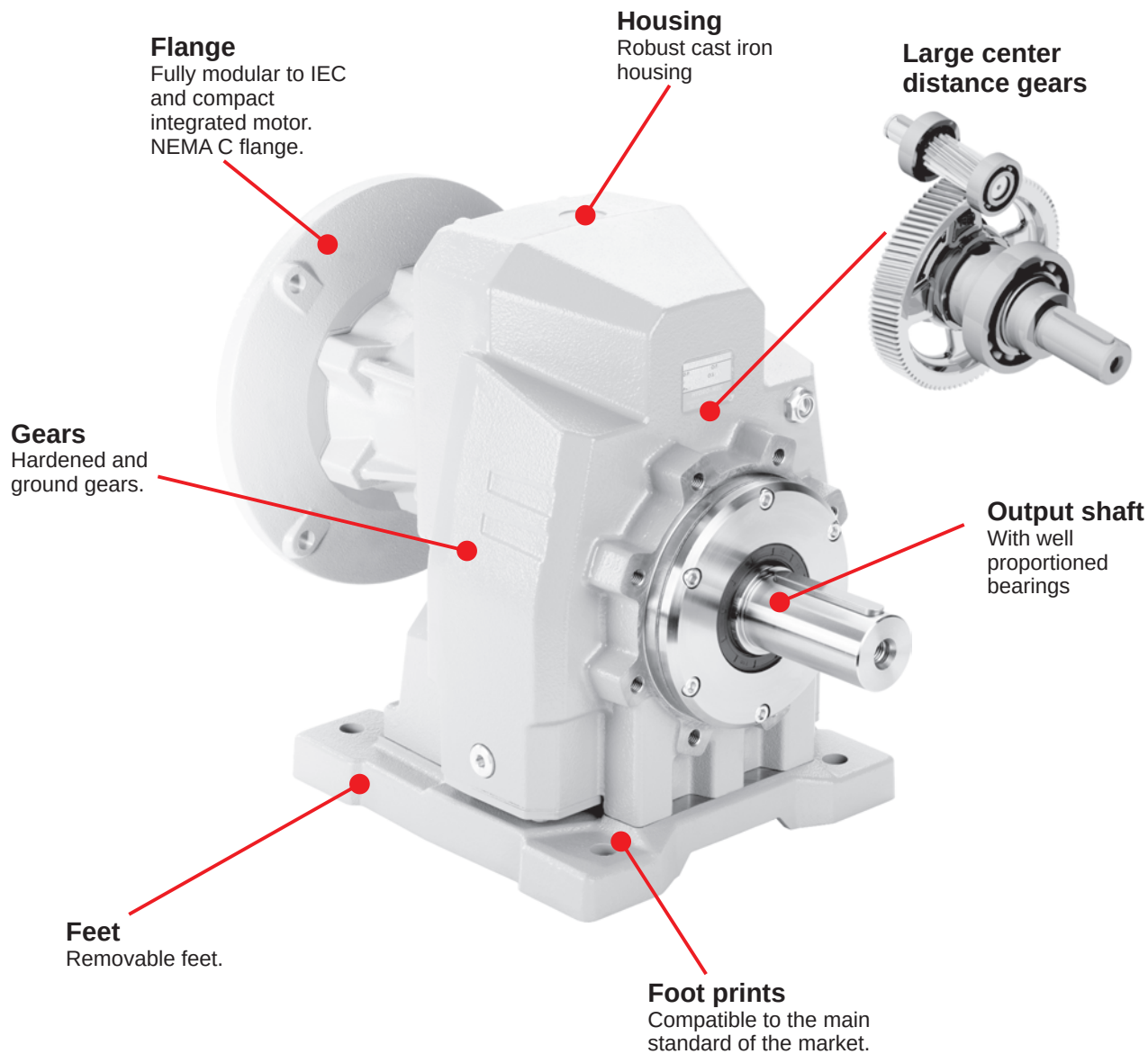
P613A-N... Basic gearbox
Riduttore baseR613A-N... Input Shaft
Albero in entrata

B5 Motor Flanges	A	C _{max}	g6	k1	kit code	k1 with KC50.9.011
63 B5	248	251.1	140	250.5	K063.4.041	256.5
71 B5	246	261.1	160	248.5	K063.4.042	254.5
80/90 B5	248	281.1	200	250.5	K063.4.043	256.5

B14 Motor Flanges	A	C _{max}	g6	k1	kit code	k1 with KC50.9.011
71 B14	246	233.6	105	248.5	K063.4.047	254.5
80 B14	248	241.1	120	250.5	K063.4.046	256.5
90 B14	248	251.1	140	250.5	K063.4.041	256.5

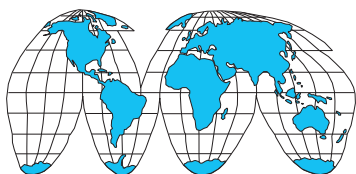
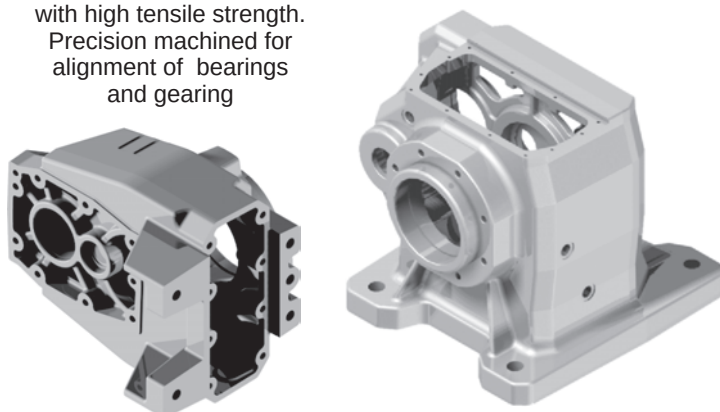
Cast iron in line gearboxes

A modular and compact product



Single-piece Cast Iron housing

with high tensile strength. Precision machined for alignment of bearings and gearing



World wide sales network.

Specific type datasheet on page...

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1 Stage



Types / Tipi
Tipen / Types
Tipos

5-5	5-11	5-17	5-23	5-29
501C 225Nm	701C 380Nm	801C 670Nm	851C 700Nm	901C 1175Nm

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2 and 3 Stages

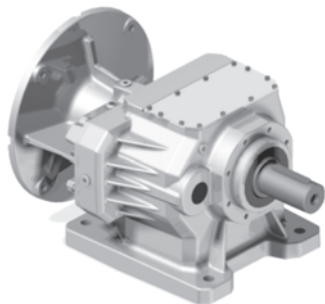


Types / Tipi
Tipen / Types
Tipos

5-7	5-9	5-13	5-15	5-19	5-21	5-25	5-27	5-31	5-33
502C 320Nm	503C 320Nm	702C 675Nm	703C 675Nm	802C 900Nm	803C 900Nm	852C 1600Nm	853C 1800Nm	902C 2100Nm	903C 2100Nm

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2 and 3 Stages



Types / Tipi
Tipen / Types
Tipos

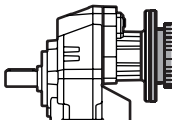
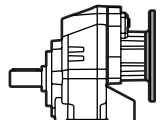
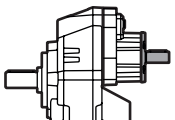
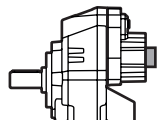
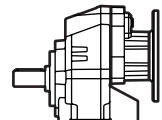
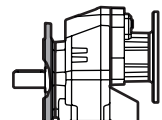
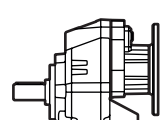
5-35	5-37	5-39	5-41
1002 2900Nm	1003 3000Nm	1102 4500Nm	1103 4600Nm

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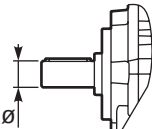
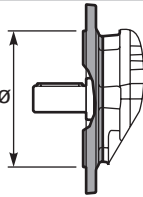
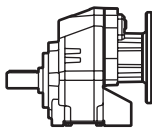
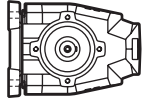
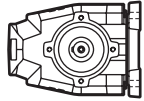
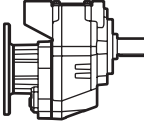
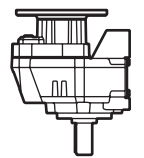
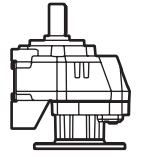
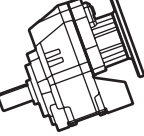
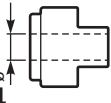
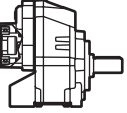
Types / Tipi
Tipen / Types
Tipos

M-1									
56A 56B	63A 63B	71A 71B	80A 80B	90S 90L	100LA 100LB	112M	132S 132M	160M 160L	180M 180L

Type - Tipo - Typ Type - Tipo	Size - Grandezza - Grösse Taille - Tamaño	Mounting - Montaggio Montage - Fixation Tipo de montaje	Ratio - Rapporto Untersetzung Reduction Relación																																																
P	702C	-F	6.57																																																
Cast iron coaxial gear boxes Riduttori coassiali in Ghisa  With IEC motor M  With motor flange P  With male input shaft R  Modular base B Not available for: 701C, 801C, 851C, 901C, 852C, 902C, 1002 , 1102, 1003 , 1103 .	1 Stage Riduzione Stufe Trains Etapas 501C 701C 801C 851C 901C 2 Stages Riduzioni Stufen Trains Etapas 502C 702C 802C 852C 902C 1002 1102 3 Stages Riduzioni Stufen Trains Etapas 503C 703C 803C 853C 903C 1003 1103	 Without flange / feet -N  Output flange mounted -F  Mounted feet B.. Feet / piedini <table><tr><th>Feet Code</th><th>Market reference</th><th>G</th><th>H</th><th>R</th><th>L</th></tr><tr><td>B1</td><td>112</td><td>18</td><td>85</td><td>110</td><td></td></tr><tr><td>B2</td><td>212/3</td><td>18</td><td>100</td><td>130</td><td></td></tr><tr><td>S1</td><td>17</td><td>18</td><td>75</td><td>110</td><td></td></tr><tr><td>S2</td><td>27</td><td>25</td><td>90</td><td></td><td></td></tr><tr><td>M1</td><td>42/3</td><td>25</td><td>80</td><td></td><td></td></tr><tr><td>L4</td><td>04</td><td>13</td><td>80</td><td></td><td></td></tr><tr><td>L5</td><td>05</td><td>16</td><td>100</td><td></td><td></td></tr></table> You see feet code in the chart of the dimensions Vedi codice piede nella tabella delle dimensioni	Feet Code	Market reference	G	H	R	L	B1	112	18	85	110		B2	212/3	18	100	130		S1	17	18	75	110		S2	27	25	90			M1	42/3	25	80			L4	04	13	80			L5	05	16	100			See technical data table Vedi tabelle dati tecnici. Technisches Datenblatt beachten Voir Tableau données techniques Ver tabla datos técnicos
Feet Code	Market reference	G	H	R	L																																														
B1	112	18	85	110																																															
B2	212/3	18	100	130																																															
S1	17	18	75	110																																															
S2	27	25	90																																																
M1	42/3	25	80																																																
L4	04	13	80																																																
L5	05	16	100																																																



On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

Output shaft Albero uscita Abtriebswelle Arbre de sortie Eje en salida	Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor	Mounting position Posizione montaggio Einbaulage Position de montage Position de montaje	Input bore Foro entrata Eingangshohlwelle Trou d'entree Eje hueco de entrada	Terminal box position Posizione morsetteria Klemmkastenlage Position boîte à bornes Posición caja de bornes
H	4	-F	B3	-	B
 → STANDARD 501C 502C 503C H → Ø30 I → Ø35 701C 702C 703C I → Ø35 L → Ø38 M → Ø40 801C 802C 803C M → Ø40 P → Ø50 851C 852C 853C P → Ø50 J → Ø60 901C 902C 903C P → Ø50 J → Ø60 1002 1003 J → Ø60 1102 1103 A → Ø70	 → STANDARD N Senza flangia Without flange 501C 502C 503C 3 → Ø160 4 → Ø200 5 → Ø250 701C 702C 703C 4 → Ø200 5 → Ø250 801C 802C 803C 5 → Ø250 6 → Ø300 851C 852C 853C 6 → Ø300 7 → Ø350 901C 902C 903C 1002 1003 6 → Ø300 7 → Ø350 8 → Ø450 1102 1103 7 → Ø350 8 → Ø450	 Flange Flangia B5 -A=56 (Ø120) -B=63 (Ø140) -C=71 (Ø160) -D=80 (Ø200) -E=90 (Ø200) -F=100÷112 (Ø250) -G=132 (Ø300) -H=160 (Ø350) -I=180 (Ø350) -L=200 (Ø400) CA=225 (Ø450) B14 -O=56 (Ø80) -P=63 (Ø90) -Q=71 (Ø105) -R=80 (Ø120) -T=90 (Ø140) -U=100÷112 (Ø160) -V=132 (Ø200)  Type R Tipo R 503C -1 → Ø14 502C 703C 803C -2 → Ø19 702C 802C 853C 903C -3 → Ø24 852C 902C 1003 1103 -4 → Ø28 1002 1102 -6 → Ø42	 B3 STANDARD  B6  B7  B8  V5  V6  V8	- Nothing indication: standard bore Nessuna indicazione: foro standard COUPLING  A = 9mm B = 11mm C = 14mm D = 19mm E = 24mm F = 28mm 0 Ready for input coupling Predisposto per giunto 	 A  B STANDARD  C  D

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

Lifting / sollevamento / hubantriebe / levage / elevación

$$P [KW] = \frac{M [Kg] \cdot g [9.81] \cdot v [m / s]}{1000}$$

Rotation / rotazione / drehung / rotation / rotation

$$P [KW] = \frac{M [Nm] \cdot n [rpm]}{9550}$$

Linear movement / traslazione / linearbewegung / translation / translacion

$$P [KW] = \frac{F [N] \cdot v [m / s]}{1000}$$

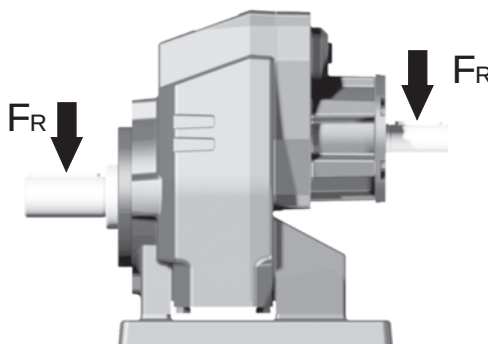
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

$$M [Nm] = \frac{9550 \cdot P[KW]}{n [rpm]}$$

$$M [lb in] = \frac{63030 \cdot P[HP]}{n [rpm]}$$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida



$F_R [N] = \frac{M [Nm] \cdot 2000}{d [mm]} \cdot f_k$		$F_R [N] = \frac{M [lb in] \cdot 8.9}{d [in]} \cdot f_k$	
M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion		
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo		
f_k	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión 1.15 Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje 1.25 Catena / Chain sprockets / Antriebskette / Chaîne / Cadena 1.75 Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal 2.50 Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana		

- If your application requires higher radial loads, contact our technical office. Higher load may be possible.
- Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
- Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
- Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
- En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

How to select a gearbox / Come selezionare un riduttore / Wie wählt man ein Getriebe
Comment sélectionner un réducteur / Cómo seleccionar un reductor

B Output speed
Velocità in uscita
Abtriebsdrehzahl
Vitesse de sortie
Velocidad de salida

Nominal power
Potenza nominale
Max. mögliche Leistung
Puissance nominale
Potencia nominal

A Nominal torque
Momento torcente nominale
Nenn Drehmoment
Couple nominal
Par de torsión nominal

Flange code
Codice flangia
Flanschtype
Code bride
Código bridas

Input speed
Velocità in entrata
Eintriebsdrehzahl
Vitesse en entrée
Velocidad de entrada

Gear size
Grandezza riduttore
Getriebegröße
Taille réducteur
Tamaño reductor

Motor power
Potenza motore
Motorleistung
Puissance moteur
Potencia motor

702C

Coaxial - Gear
675Nm

Rating - Cast Iron **COAXIAL GEARBOXES**

■ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft		
							-C	-D	-E	-F	-G	-R	-T	-U	-V			Ratio code
213	6.57	7.5	312	1.2	8.8	380	B									3018		01
185	7.56	7.5	359	1.1	7.9	390	B									3016		02
159	8.82	7.5	419	1.0	7.1	410	B									3014		03
113	12.39	7.5	588	1.0	7.2	580	B									2018		04
98	14.24	5.5	499	1.2	6.4	600	B									2016		05

C Ratio
Rapporto
Untersetzung
Rapport de réduction
Relación

Transmitted torque
Momento torcente trasmesso
Mögliche Drehmomente
Couple de sortie
Par transmitido

Service factor
Fattore di servizio
Betriebsfaktor
Facteur de service
Factor de servicio

Output shaft diam.
Diam. albero uscita
Durchmesser abtriebswelle
Diametre arbre lent
Diametro eje de salida

Notes
Note
Anmerkungen
Note
Notas

fs		Oper. hours per day Ore di funz. giorn.		
Type of load and starts per hour Tipo di carico e avviamenti per ora		3 h	10 h	24 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

D	Motor flange available Flange disponibili Erhältliche Motorflansche Bridas disponibles Bridas disponibles
B)	Mounting with reduction ring Montaggio con boccia di riduzione Reduzierhülsen Montage avec douille de réduction Montaje con casquillo de reducción
C)	Motor flangeholes position/terminal box position Posizione fori flangia/basetta motore Bohrungsposition am Motorflansch/-sockel Position trous bride/barrette à bornes moteur Posición agujeros brida / base motor
B)	Available without reduction bushes Disponibile anche senza boccia Auch ohne Reduzierbuchse verfügbar Disponible aussi sans douille de réduction Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select output speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges			Available B14 motor flanges			Output Shaft  $\emptyset$	Ratios code 
							-D	-E	-F	-R	-T	-U		
							80	90	100 112	80	90	100 112		
481	2.91	4	76	1.8	7.2	140	B	B		B	B		3499	standard $\emptyset 30$
373	3.75	4	98	1.6	6.4	160	B	B		B	B		28105	
263	5.33	4	140	1.2	4.8	170	B	B		B	B		21112	
219	6.39	4	167	1.0	4.0	170	B	B		B	B		18115	
178	7.85	4	205	1.1	4.3	225	B	B		B	B		13102	

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **501C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **501C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **501C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **501C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **501C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	B6	B7	B8	V5	V6	V8
1.25 LT	0.80 LT	0.80 LT	0.70 LT	1.40 LT	0.80 LT	Ask
SHELL Omala S4 WE 320				ENI Telium VSF 320		

For all details on lubrication and plugs check our website

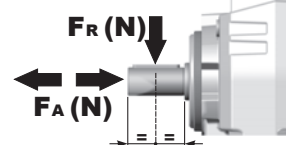
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

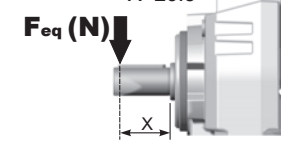
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



$$F_{eq} = F_R \cdot \frac{56.5}{X+26.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	500	2500	140	640	3200	70	820	4100
250	540	2700	120	680	3400	40	1020	5100
200	580	2900	85	760	3800	15	1100	5500

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

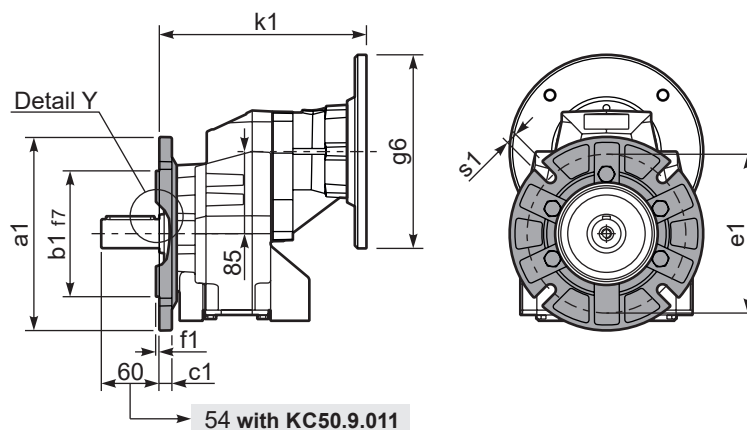
tab. 2

With feet
Con piedini

Gearbox weight peso riduttore	With flange	20.0 kg
	With feet	22.0 kg

P501C-F...

Output flanges
flange di uscita



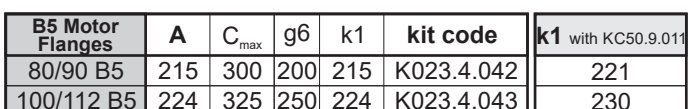
Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	11	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

P501C-N...

Basic gearbox
Riduttore base



B14 Motor Flanges	A	C _{max}	g6	k1	kit code	k1 with KC50.9.011
80 B14	215	260	120	215	K085.4.046	221
90 B14	215	270	140	215	K085.4.045	221
100/112 B14	224	280	160	224	K085.4.047	230



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges					Output Shaft 	Ratios code
							-B	-C	-D	-E	-F	-Q	-R	-T	-U			
							63	71	80	90	100 112	71	80	90	100 112			
167	8.38	4	215	1.0	4.1	225	B					C	C			2821	standard ø30	01
139	10.04	3	194	1.2	3.7	240	B					C	C			2818		02
114	12.33	3	238	1.1	3.2	260	B					C	C			2813		03
92	15.16	2.2	215	1.2	2.6	260	B					C	C			1921		04
80	17.57	2.2	250	1.1	2.3	270	B					C	C			1721		05
77	18.16	2.2	258	1.1	2.4	290	B					C	C			1918		06
67	21.05	2.2	299	1.1	2.3	320	B					C	C			1718		07
63	22.30	2.2	317	1.0	2.2	320	B					C	C			1913		08
57	24.70	1.5	242	1.3	2.0	320	B					C	C			1518		09
54	25.85	1.5	253	1.3	1.9	320	B					C	C			1713		10
47.5	29.49	1.5	289	1.1	1.7	320	B					C	C			1318		11
46.1	30.34	1.5	297	1.1	1.6	320	B					C	C			1513		12
41.7	33.60	1.1	240	1.0	1.1	250	B					C	C			1021		13
38.7	36.21	1.1	259	1.2	1.3	320	B					C	C			1313		14
34.8	40.25	1.1	288	1.0	1.1	300	B					C	C			1018		15
28.3	49.43	1.1	354	0.9	0.99	320	B					C	C			1013		16
26.7	52.53	0.75	258	1.0	0.76	260	B					C	C			918		17
21.7	64.51	0.75	317	1.0	0.75	315	B					C	C			913		18
20.2	69.37	0.37	168	1.1	0.42	190	B					C	C			718		19
16.4	85.19	0.37	206	1.1	0.41	230	B					C	C			713		20

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **502C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **502C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **502C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **502C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **502C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

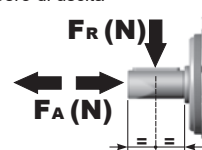
Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
1.25 LT	0.80 LT	0.80 LT	0.70 LT	1.40 LT	0.80 LT	Ask
SHELL Omala S4 WE 320				ENI Telium VSF 320		

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

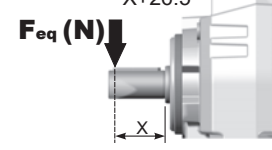
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



$$F_{eq} = F_R \cdot \frac{56.5}{X+26.5}$$



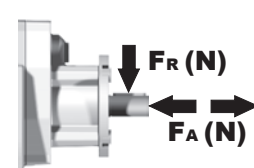
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	500	2500	140	640	3200	70	820	4100
250	540	2700	120	680	3400	40	1020	5100
200	580	2900	85	760	3800	15	1100	5500

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

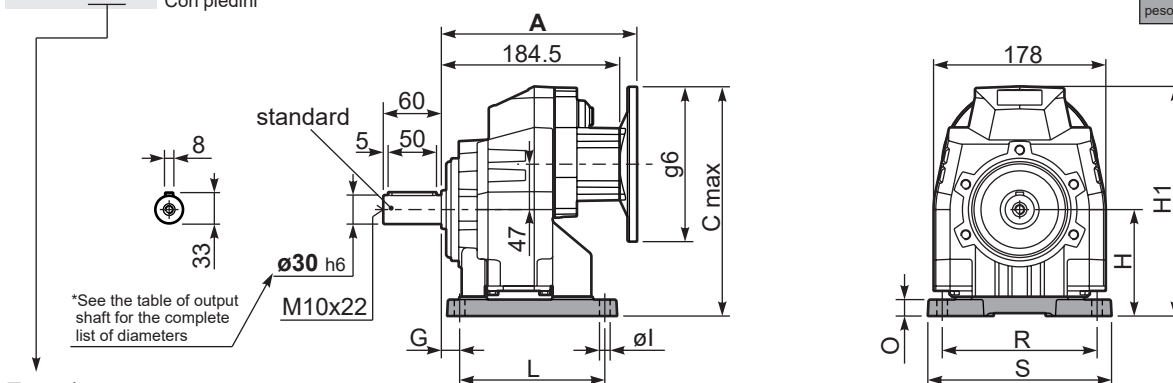
Albero in entrata



n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

tab. 2

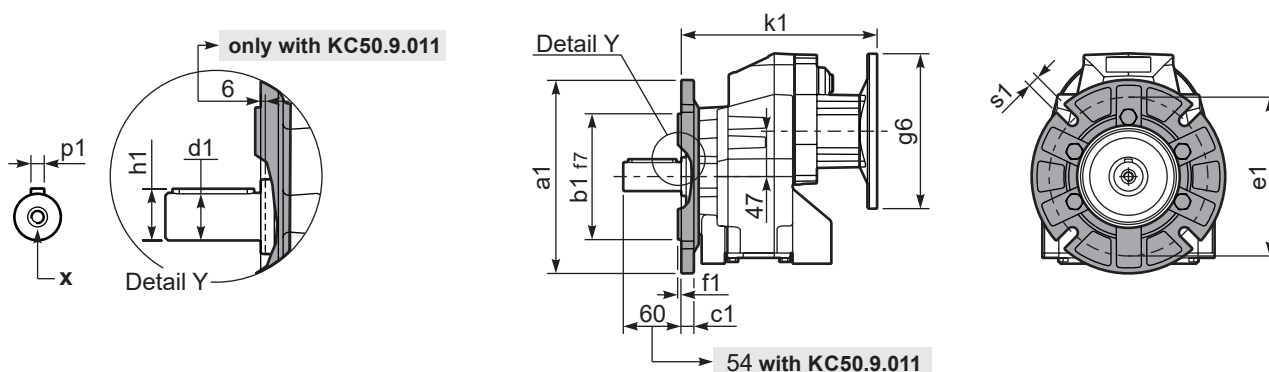
P502C-S4...

With feet
Con piediniGearbox weight
peso riduttore With flange **15.0 kg**
With feet **17.0 kg**

Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	Øl	B5 max. Flange	kit code
S4	47	30	115	135	165	170	242	22	13.5	-	C50C.9.024
-	-	-	-	-	-	-	-	-	-	-	-

P502C-F...

Output flanges
flange di uscita

*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	Ø 30x60	8	33	M10x22
On request A richiesta	-	-	-	-

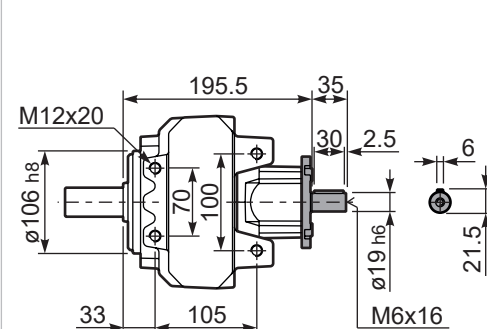
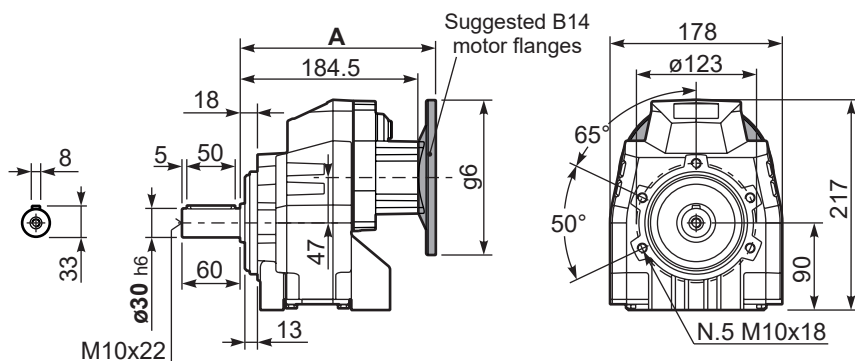
Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code	
160	110	14	130	3.5	11	KC50.9.011	 With flange and feet only on request. Ask for compatibility.
200	130	13	165	3.5	11	KC50.9.012	
250	180	15.5	215	4	14	KC50.9.013	

P502C-N...

Basic gearbox
Riduttore base

R502C-N...

Input Shaft
Albero in entrata

B5 Motor Flanges	A	C _{max}	g6	k1	kit code	k1 with KC50.9.011	B14 Motor Flanges	A	C _{max}	g6	k1	kit code	k1 with KC50.9.011
63 B5	205	232	140	205	K063.4.041	211	71 B14	203	214.5	105	203	K063.4.047	209
71 B5	203	242	160	203	K063.4.042	209	80 B14	205	222	120	205	K063.4.046	211
80/90 B5	205	262	200	205	K063.4.043	211	90 B14	205	232	140	205	K063.4.041	211
100/112 B5	220.3	287	250	220.3	KC40.4.043	226.3	100/112 B14	220.3	242	160	220.3	KC40.4.041	226.3



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft 	Output Shaft 	Ratios code 
							-B	-C	-O	-P	-Q			
							63	71	56	63	71			
18.8	74.33	0.37	176	1.8	0.67	320			C	C		191313	standard ø30	01
17.0	82.56	0.37	196	1.6	0.60	320			C	C		151318		02
16.0	87.48	0.37	207	1.5	0.57	320			C	C		131713		03
13.8	101.40	0.37	240	1.3	0.49	320			C	C		151313		04
11.4	122.57	0.37	291	1.1	0.41	320			C	C		131313		05
10.1	138.59	0.37	329	1.0	0.36	320			C	C		101318		06
8.7	160.82	0.25	257	1.2	0.31	320			C	C		91713		07
8.2	170.20	0.25	272	1.2	0.29	320			C	C		101313		08
7.6	183.48	0.25	294	1.1	0.27	320			C	C		91318		09
6.5	214.15	0.18	262	1.2	0.23	320			C	C		71713		10
6.2	225.33	0.18	276	1.2	0.22	320			C	C		91313		11
5.7	244.32	0.18	299	1.1	0.20	320			C	C		71318		12
5.5	254.15	0.18	311	1.0	0.20	320			C	C		61713		13
4.8	289.96	0.18	355	0.9	0.17	320			C	C		61318		14
4.7	300.05	0.18	367	0.9	0.17	320			C	C		71313		15
3.9	356.09	0.12	282	1.1	0.14	320			C	C		61313		16

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **503C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **503C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **503C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **503C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **503C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

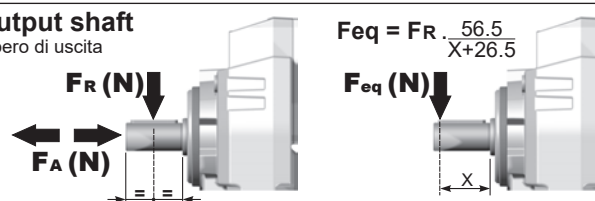
Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	B6	B7	B8	V5	V6	V8
1.35 LT	0.80 LT	0.80 LT	0.70 LT	1.50 LT	0.85 LT	Ask
SHELL Omala S4 WE 320				ENI Telium VSF 320		

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

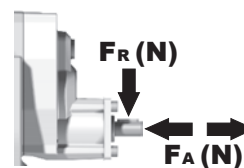


n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	500	2500	140	640	3200	70	820	4100
250	540	2700	120	680	3400	40	1020	5100
200	580	2900	85	760	3800	15	1100	5500

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



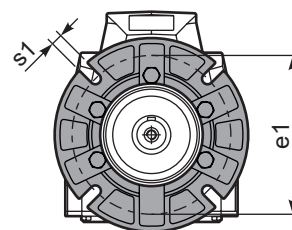
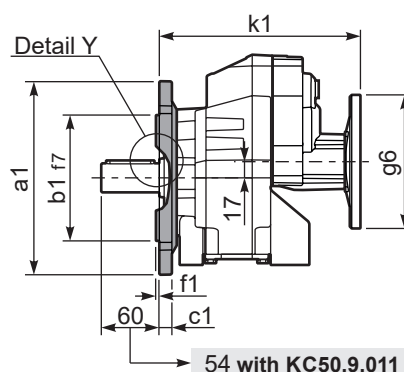
n_1	FA	FR
1400	140	700
900	160	800
500	190	950

tab. 2

Gearbox weight peso riduttore	With flange	15.0 kg
	With feet	17.0 Kg



P503C-F... Output flanges
flange di uscita

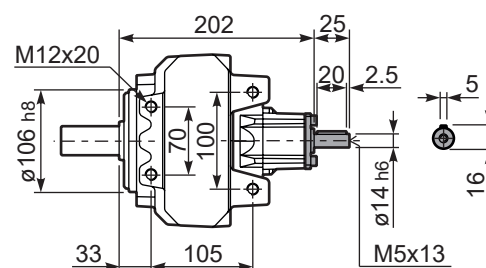


Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	11	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request.
Ask for compatibility

R503C-N... Input Shaft
Albero in entrata



B14 Motor Flanges	A	C _{max}	g6	k1	kit code	k1 with KC50.9.011
56 B14	208	172	80	208	KC40.4.049	214
63 B14	210.5	177	90	210.5	K050.4.047	216.5
71 B14	208	184.5	105	208	K050.4.045	214



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed	Ratio	Motor power	Output torque	Service factor	Nominal power	Nominal torque	Available B5 motor flanges	B14 motor flanges					Output Shaft	
n_2 [min ⁻¹]	i	P _{1M} [kW]	M _{2M} [Nm]	f.s.	P _{1R} [kW]	M _{2R} [Nm]	-G	-	-	-	-		Ratios code	
							132	-	-	-	-			
507	2.76	9	166	1.6	14.4	265		not available			2980	standard	01	
395	3.54	9	213	1.3	11.6	275					2485	ø35	02	
277	5.06	9	304	1.0	8.6	290					1891		03	
241	5.81	7.5	281	1.2	8.5	330					1693	ø40	04	
206	6.79	7.5	329	1.2	8.4	380					1495	On request	05	
On request														

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **701C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **701C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **701C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **701C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **701C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
1.85 LT	1.40 LT	1.40 LT	1.30 LT	2.25 LT	1.60 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

For all details on lubrication and plugs check our website

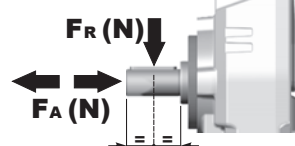
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

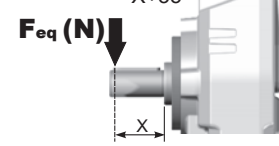
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



$$F_{eq} = F_R \cdot \frac{70}{X+35}$$



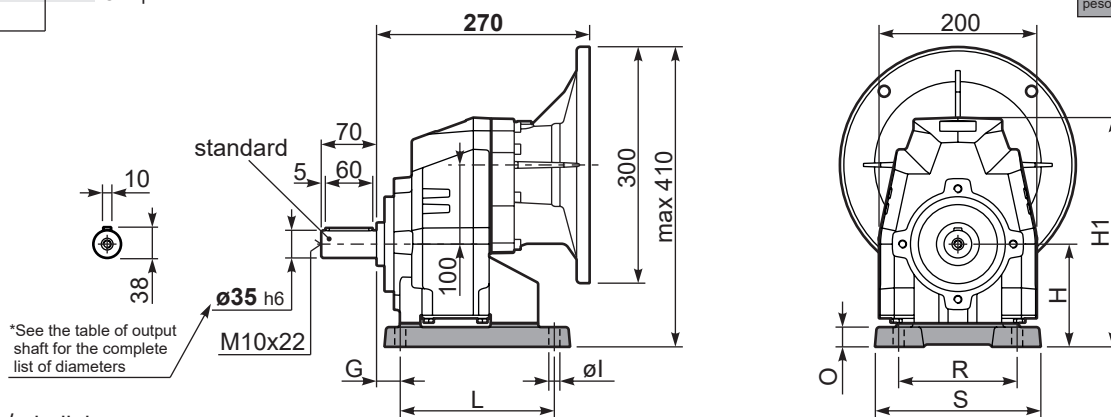
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	680	3400	140	960	4800	70	1300	6500
250	760	3800	120	1040	5200	40	1460	7300
200	900	4500	85	1120	5600	15	1800	9000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

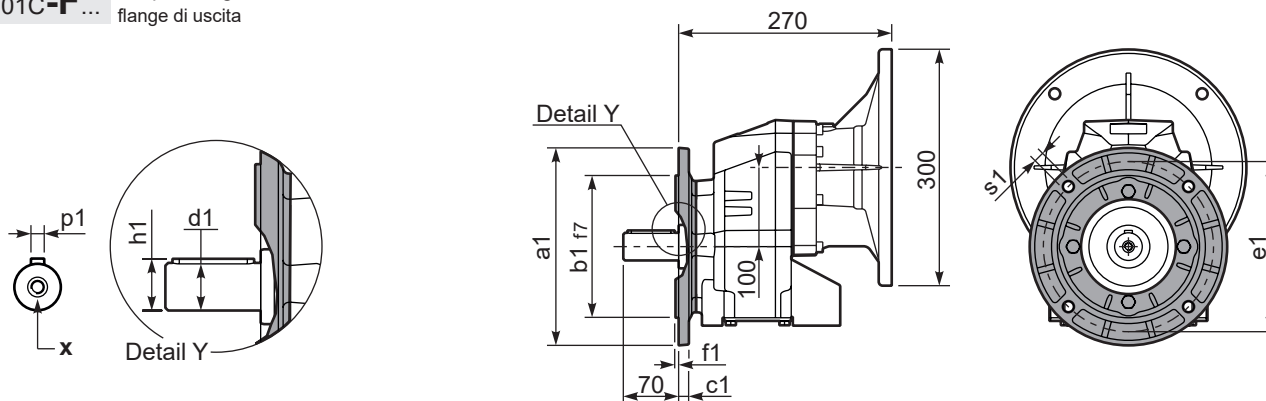
P701C-S6...

With feet
Con piediniGearbox weight
peso riduttore
With flange 36.0 kg
With feet 39.5 kg

Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	Øl	B5 max. Flange	kit code
B4	412/3	19.5	130	180	149.5	216	290	25	14	-	KC70.9.022
S6	67	30	130	150	195	210	290	25	14	-	KC70.9.024
H5	025/253	35	160	170	175	220	320	30	16	-	KC70.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P701C-F...

Output flanges
flange di uscita

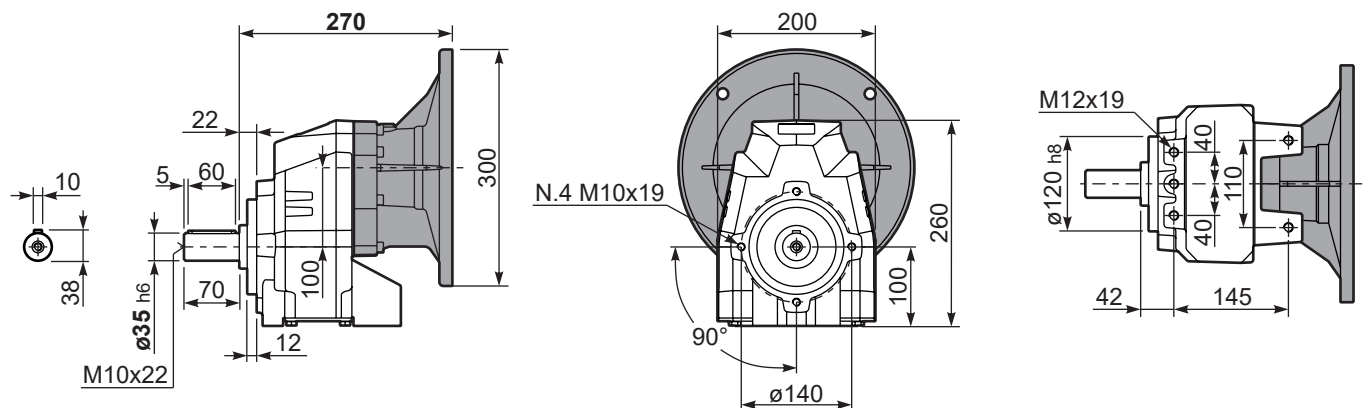
*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	Ø 35x70	10	38	M10x22
On request A richiesta	Ø 40x80	12	43	M12x28

Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code	
200	130	11	165	3.5	11	KC70.9.012	 With flange and feet only on request. Ask for compatibility
250	180	13	215	4	14	KC70.9.013	
-	-	-	-	-	-	-	

P701C-N...

Basic gearbox
Riduttore base



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Output Shaft 	Ratios code 
							-C	-D	-E	-F	-G	-R	-T	-U	-V			
							71	80	90	100 112	132	80	90	100 112	132			
213	6.57	7.5	312	1.2	8.8	380	B									3018	standard ø35 ø40 On request	01
185	7.56	7.5	358	1.1	7.9	390	B									3016		02
159	8.82	7.5	419	1.0	7.1	410	B									3014		03
113	12.39	7.5	588	1.0	7.2	580	B									2018		04
98	14.24	5.5	499	1.2	6.4	600	B									2016		05
84	16.75	5.5	587	1.1	6.1	665	B									1618		06
73	19.25	5.5	675	1.0	5.4	675	B									1616		07
64	21.78	4	558	1.2	4.7	675	B									1318		08
56	25.04	4	642	1.1	4.1	675	B									1316		09
47.9	29.23	4	750	0.9	3.5	675	B									1314		10
45.7	30.65	3	592	1.1	3.4	675	B									1116		11
39.1	35.78	3	691	1.0	2.9	675	B									1114		12
36.3	38.55	2.2	548	1.1	2.3	580	B									818		13
31.6	44.32	2.2	630	1.1	2.3	665	B									816		14
27.1	51.74	2.2	735	0.9	2.0	675	B									814		15
22.9	61.03	1.1	437	1.1	1.2	480	B									616		16
19.6	71.25	1.1	510	1.1	1.2	560	B									614		17

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **702C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **702C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **702C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **702C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

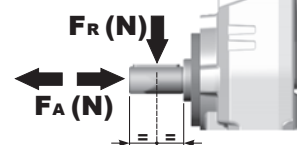
E El reductor tamaño **702C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	B6	B7	B8	V5	V6	V8
2.10 LT	1.40 LT	1.40 LT	1.30 LT	2.25 LT	1.60 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

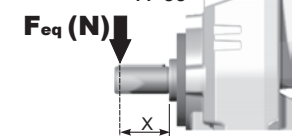
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita


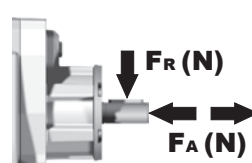
$$F_{eq} = F_R \cdot \frac{70}{X+35}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	680	3400	140	960	4800	70	1300	6500
250	760	3800	120	1040	5200	40	1460	7300
200	900	4500	85	1120	5600	15	1800	9000

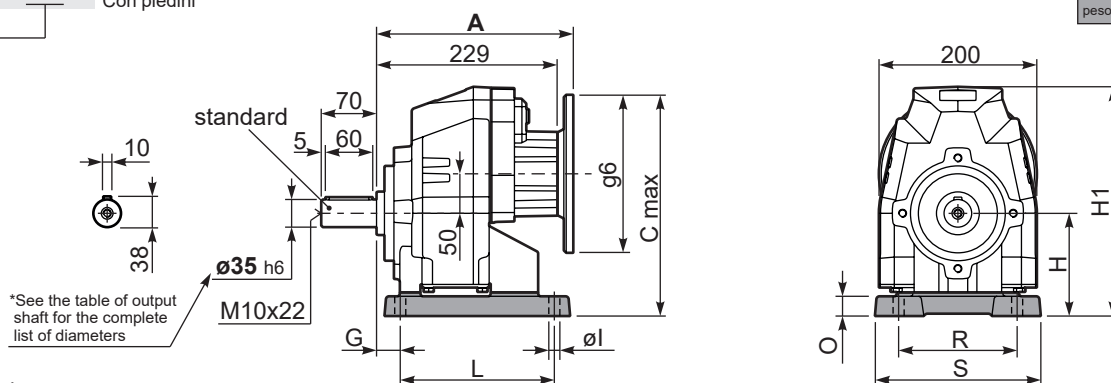
On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata


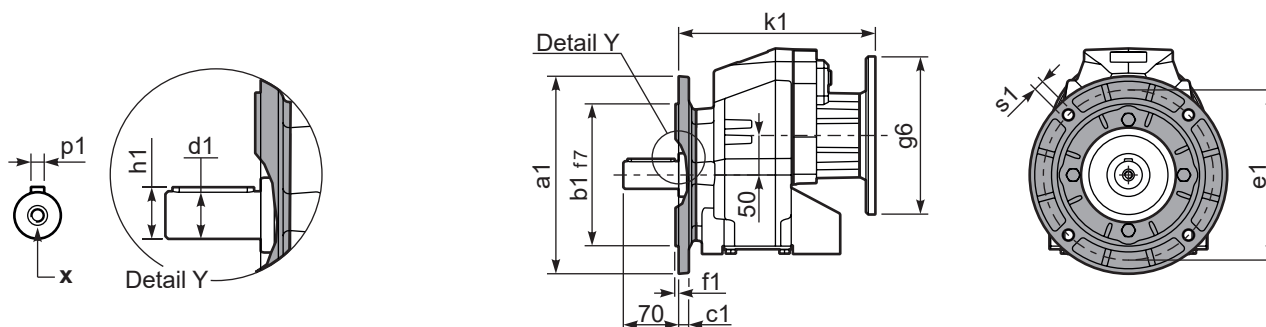
n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

P702C **S6**...With feet
Con piediniGearbox weight
peso riduttore With flange **30.0 kg**
With feet **33.5 kg**

Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øI	B5 max. Flange	kit code
B4	412/3	19.5	130	180	149.5	216	290	25	14	-	KC70.9.022
S6	67	30	130	150	195	210	290	25	14	-	KC70.9.024
H5	025/253	35	160	170	175	220	320	30	16	-	KC70.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P702C-**F**...Output flanges
flange di uscita

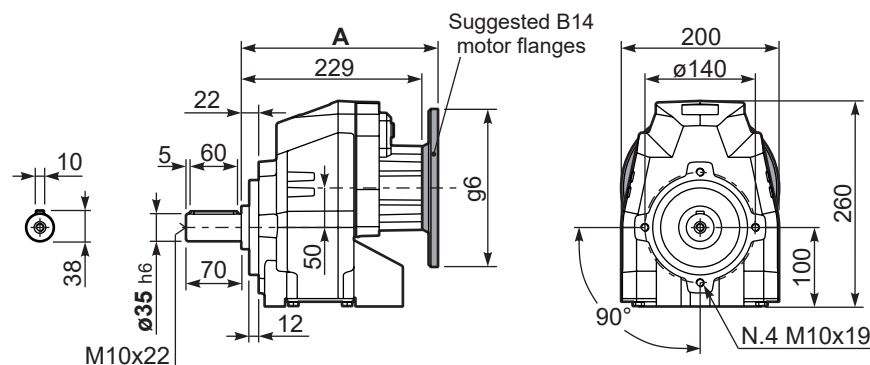
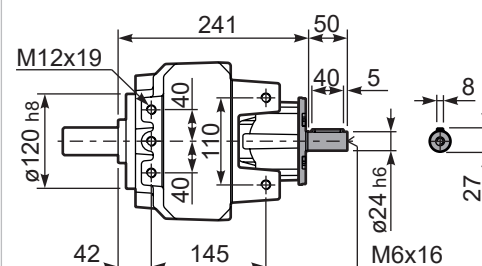
*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 40x80	12	43	M12x28

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
200	130	11	165	3.5	11	KC70.9.012
250	180	13	215	4	14	KC70.9.013
-	-	-	-	-	-	-

With flange and feet only on request.
Ask for compatibility

P702C-**N**...Basic gearbox
Riduttore baseR702C-**N**...Input Shaft
Albero in entrata

B5 Motor Flanges	A	C _{max}	g6	k1	kit code
71 B5	247.5	290	160	247.5	K023.4.041
80/90 B5	249.5	310	200	249.5	K023.4.042
100/112 B5	258.5	335	250	258.5	K023.4.043
132 B5	276.5	360	300	276.5	KC50.4.043

B14 Motor Flanges	A	C _{max}	g6	k1	kit code
80 B14	249.5	270	120	249.5	K085.4.046
90 B14	249.5	280	140	249.5	K085.4.045
100/112 B14	258.5	290	160	258.5	K085.4.047
132 B14	276.5	310	200	276.5	KC50.4.041



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft  $\varnothing$	Ratios code 
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
22.6	61.89	1.5	594	1.1	1.7	675	B				C	C		191318	01
19.7	71.16	1.5	683	1.0	1.5	675	B				C	C		191316	02
17.0	82.48	1.5	792	0.9	1.3	675	B				C	C		171316	03
14.5	96.29	1.1	675	1.0	1.1	675	B				C	C		171314	04
13.9	100.51	1.1	705	1.0	1.0	675	B				C	C		131318	05
12.1	115.56	0.75	556	1.2	0.91	675	B				C	C		131316	06
11.1	125.96	0.75	606	1.1	0.82	665	B				C	C		190816	07
10.4	134.91	0.75	649	1.0	0.78	675	B				C	C		131314	08
9.5	147.05	0.75	707	1.0	0.72	675	B				C	C		190814	09
8.2	170.44	0.55	605	1.1	0.62	675	B				C	C		170814	10
7.6	184.15	0.55	653	1.0	0.57	675	B				C	C		101314	11
6.8	205.87	0.55	730	0.9	0.51	675	B				C	C		91316	12
5.8	240.34	0.37	570	1.2	0.44	675	B				C	C		91314	13
5.0	279.22	0.37	662	1.0	0.37	665	B				C	C		100816	14
4.3	325.97	0.37	773	0.9	0.32	675	B				C	C		100814	15
3.8	364.41	0.25	583	1.1	0.28	665	B				C	C		90816	16
3.3	425.43	0.25	681	1.0	0.25	675	B				C	C		90814	17
2.9	481.19	0.18	589	1.1	0.22	665	B				C	C		70816	18
2.5	561.76	0.18	687	1.0	0.19	675	B				C	C		70814	19

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **703C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **703C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **703C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

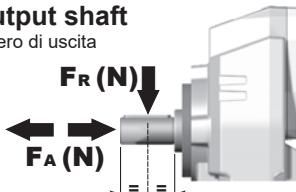
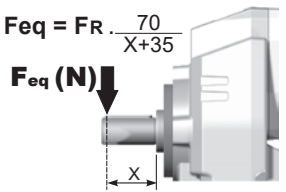
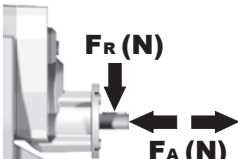
F Le réducteur **703C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **703C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

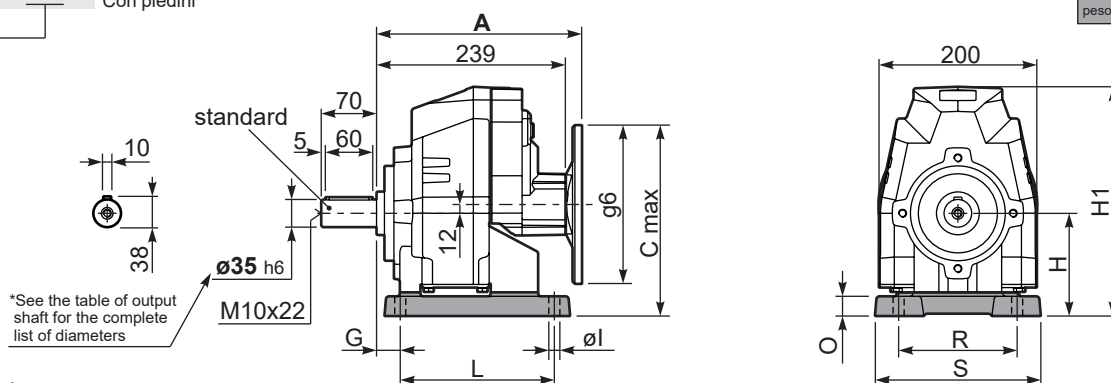
Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio						
							
B3	B6	B7	B8	V5	V6	V8	
2.20 LT	1.40 LT	1.40 LT	1.30 LT	2.40 LT	1.70 LT	Ask	
AGIP Telium VSF 320				SHELL Omala S4 WE 320			

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tab. 1

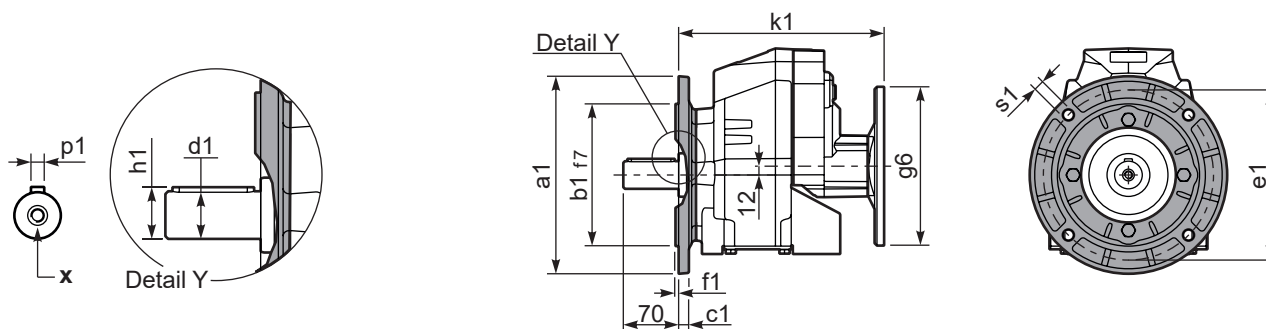
RADIAL AND AXIAL LOADS									
Output shaft Albero di uscita					$F_{eq} = F_R \cdot \frac{70}{X+35}$				
									
n_2	F_A	F_R	n_2	F_A	F_R	n_2	F_A	F_R	
300	680	3400	140	960	4800	70	1300	6500	
250	760	3800	120	1040	5200	40	1460	7300	
200	900	4500	85	1120	5600	15	1800	9000	
On request reinforced bearings to increase loads. A richiesta cuscinetti rinforzati per aumentare i carichi.									
Input shaft Albero in entrata									
n_1	F_A	F_R	n_1	F_A	F_R	n_1	F_A	F_R	
1400	240	1200	900	280	1400	500	310	1700	

tab. 2

P703C **S6**...With feet
Con piediniGearbox weight
peso riduttore With flange **30.0 kg**
With feet **33.5 kg**

Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	Øl	B5 max. Flange	kit code
B4	412/3	19.5	130	180	149.5	216	290	25	14	-	KC70.9.022
S6	67	30	130	150	195	210	290	25	14	-	KC70.9.024
H5	025/253	35	160	170	175	220	320	30	16	-	KC70.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P703C-**F**...Output flanges
flange di uscita

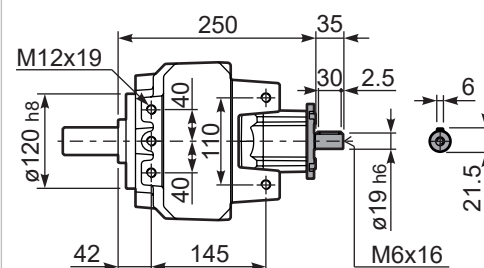
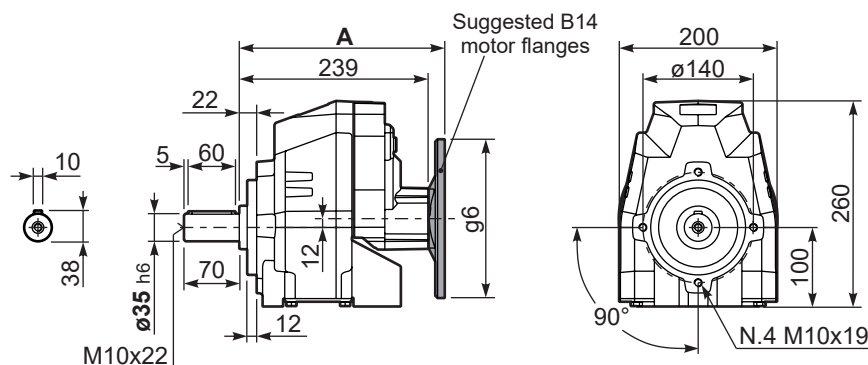
*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	Ø 35x70	10	38	M10x22
On request A richiesta	Ø 40x80	12	43	M12x28

Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code
200	130	11	165	3.5	11	KC70.9.012
250	180	13	215	4	14	KC70.9.013
-	-	-	-	-	-	-

With flange and feet only on request.
Ask for compatibility

P703C-**N**...Basic gearbox
Riduttore baseR703C-**N**...Input Shaft
Albero in entrata

B5 Motor Flanges	A	C _{max}	g6	k1	kit code
63 B5	259.5	242	140	259.5	K063.4.041
71 B5	257.5	252	160	257.5	K063.4.042
80/90 B5	259.5	272	200	259.5	K063.4.043

B14 Motor Flanges	A	C _{max}	g6	k1	kit code
71 B14	257.5	224.5	105	257.5	K063.4.047
80 B14	259.5	232	120	259.5	K063.4.046
90 B14	259.5	242	140	259.5	K063.4.041



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -G 132	B14 motor flanges - - - - - - - -	Output Shaft $\varnothing$ Ratios code
227	6.17	9	371	1.2	10.9	450		not available	18111 standard 01 16113 ø40 02 14115 ø50 03 On request
198	7.06	9	425	1.4	12.7	600			
170	8.21	9	494	1.4	12.2	670			

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **801C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **801C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **801C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **801C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **801C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
3.20 LT	1.90 LT	1.90 LT	1.55 LT	3.20 LT	2.20 LT	Ask

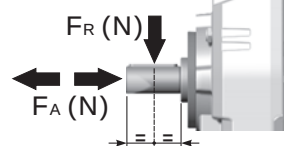
AGIP Blasias 460

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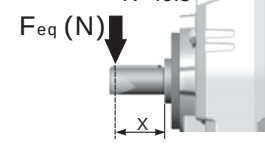
tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$F_{eq} = F_R \cdot \frac{80.5}{X+40.5}$$



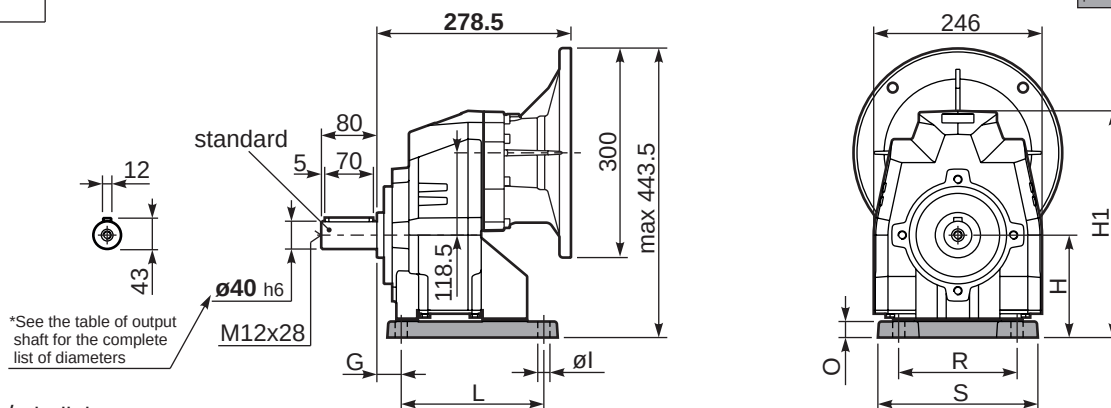
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1200	6000	140	1600	8000	70	2200	11000
250	1400	7000	120	1800	9000	40	2600	13000
200	1500	7500	85	2000	10000	15	3000	15000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

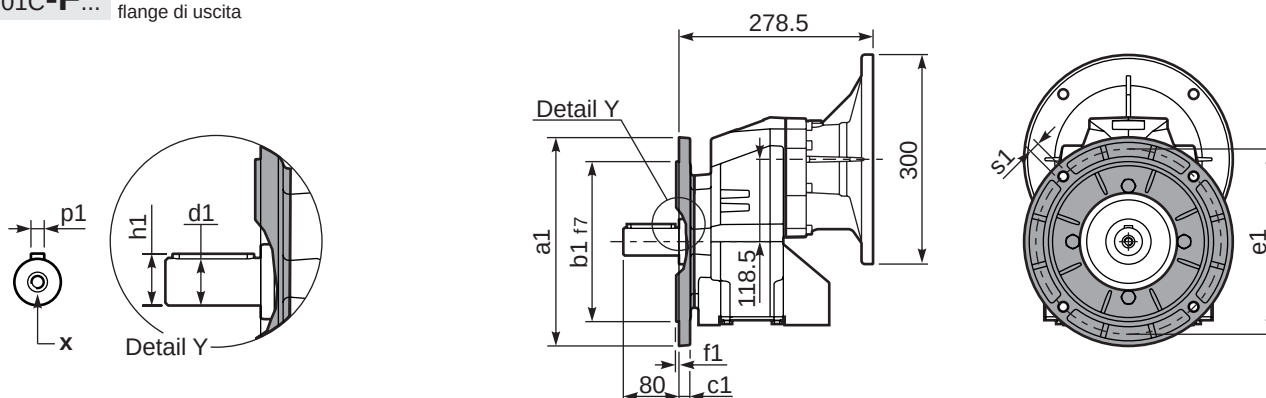
P801C-S7...

With feet
Con piediniGearbox
weight
peso riduttore
With flange 45.5 kg
With feet 49.5 kg

Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	Øl	B5 max. Flange	kit code
B5	512/3	25	155	225	156	270	333.5	30	18	-	KC80.9.022
S7	77	35	140	170	205	230	318.5	18	17.5	-	KC80.9.024
H6	026/263	40	175	215	215	265	353.5	30	16	-	KC80.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P801C-F...

Output flanges
flange di uscita

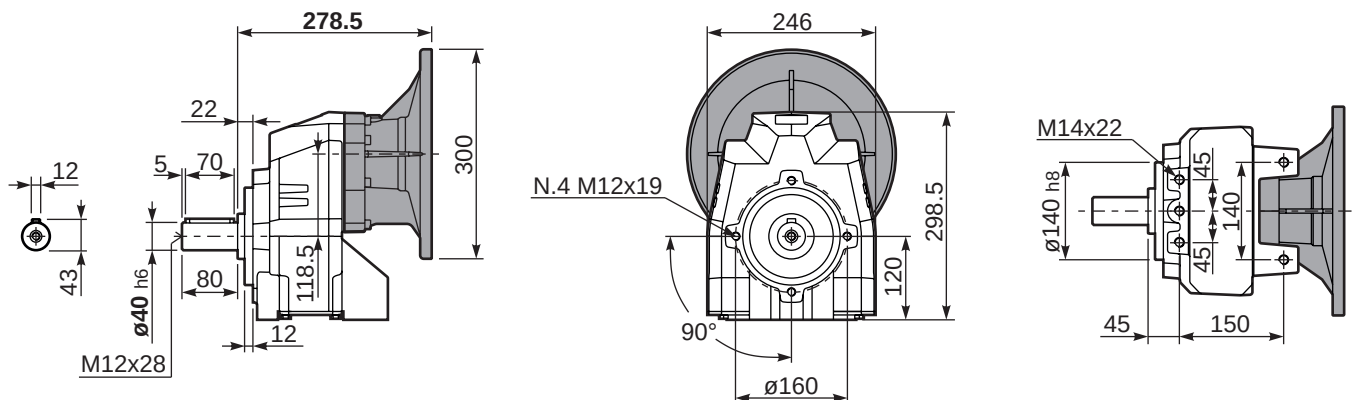
*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	Ø 40x80	12	43	M12x28
On request A richiesta	Ø 50x100	14	53.5	M16x36
	-	-	-	-

Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code	
250	180	13	215	4	14	KC80.9.013	 With flange and feet only on request. Ask for compatibility
300	230	16	265	4	14	KC80.9.014	
-	-	-	-	-	-	-	

P801C-N...

Basic gearbox
Riduttore base



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Output Shaft 	Ratios code 
							-C	-D	-E	-F	-G	-R	-T	-U	-V			
							71	80	90	100 112	132	80	90	100 112	132			
175	8.02	9	473	1.1	9.9	520	B									3018	standard ø40 ø50 On request	01
152	9.18	9	541	1.1	9.8	590	B									3016		02
131	10.68	9	630	1.1	9.7	680	B									3014		03
93	15.11	7.5	717	1.1	7.8	775	B									2018		04
81	17.30	7.5	821	1.1	7.8	885	B									2016		05
70	20.13	7.5	955	0.9	6.8	900	B									2014		06
60	23.39	5.5	820	1.1	5.9	900	B									1616		07
51	27.21	5.5	954	0.9	5.1	900	B									1614		08
46.0	30.42	4	780	1.2	4.5	900	B									1316		09
39.6	35.38	4	907	1.0	3.9	900	B									1314		10
37.6	37.24	3	719	1.2	3.7	895	B									1116		11
32.3	43.31	3	836	1.1	3.2	900	B									1114		12
29.8	47.02	2.2	668	1.1	2.3	705	B									818		13
26.0	53.85	2.2	765	1.1	2.3	810	B									816		14
22.4	62.63	2.2	890	1.0	2.2	900	B									814		15
18.9	74.16	1.1	531	1.1	1.2	585	B									616		16
16.2	86.25	1.1	617	1.1	1.2	680	B									614		17

The dynamic efficiency is 0.96 for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

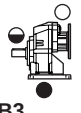
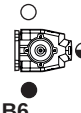
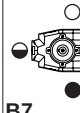
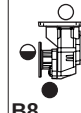
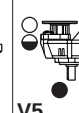
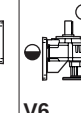
EN Unit 802C is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo 802C è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße 802C wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type 802C est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño 802C se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

						
B3	B6	B7	B8	V5	V6	V8
3.20 LT	1.90 LT	1.90 LT	1.55 LT	3.20 LT	2.20 LT	Ask

AGIP Blasias 460

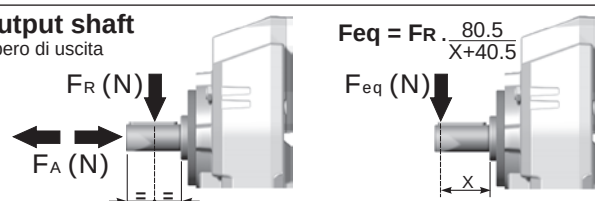
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tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



$$F_{eq} = F_R \cdot \frac{80.5}{X+40.5}$$

$$F_{eq} (N)$$

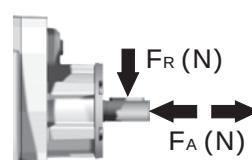
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1200	6000	140	1600	8000	70	2200	11000
250	1400	7000	120	1800	9000	40	2600	13000
200	1500	7500	85	2000	10000	15	3000	15000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

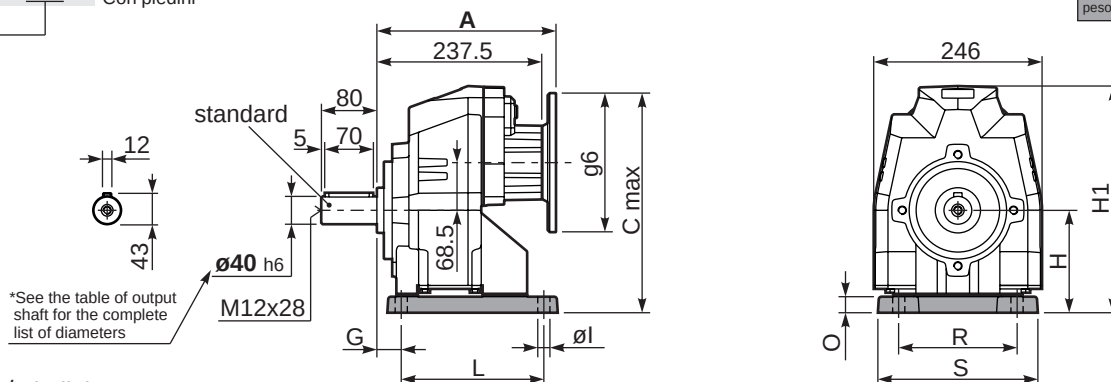
Albero in entrata



n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

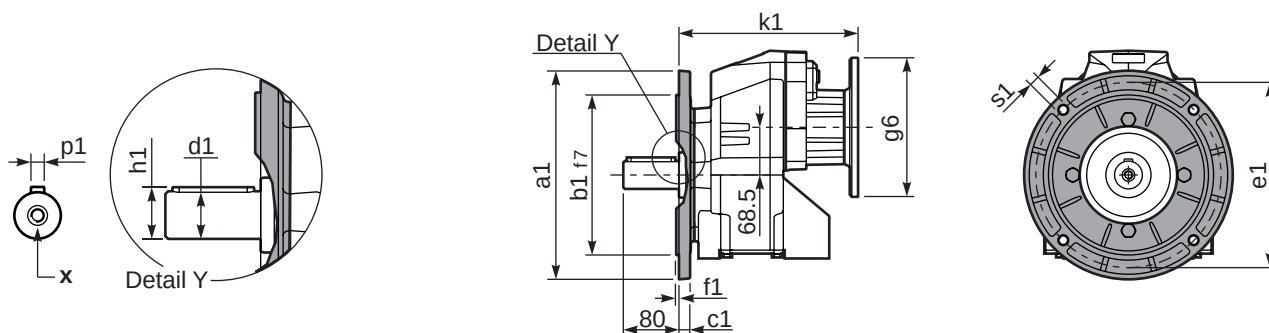
P802C-S7...

With feet
Con piediniGearbox weight
peso riduttore With flange **39.5 kg**
With feet **43.5 kg**

Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	Øl	B5 max. Flange	kit code
B5	512/3	25	155	225	156	270	333.5	30	18	-	KC80.9.022
S7	77	35	140	170	205	230	318.5	18	17.5	-	KC80.9.024
H6	026/263	40	175	215	215	265	353.5	30	16	-	KC80.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P802C-F...

Output flanges
flange di uscita

*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	Ø 40x80	12	43	M12x28
On request A richiesta	Ø 50x100	14	53.5	M16x36
	-	-	-	-

Available output flanges / flange di uscita

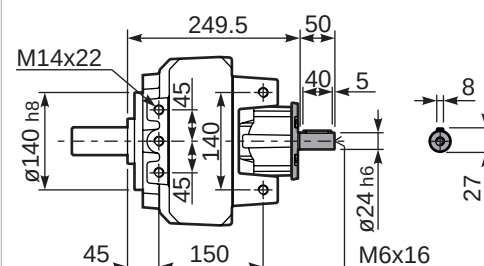
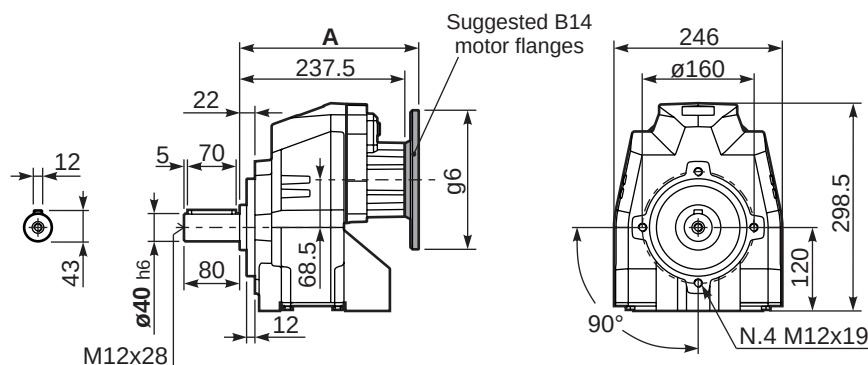
a1 Ø	b1	c1	e1	f1	s1	kit code
250	180	13	215	4	14	KC80.9.013
300	230	16	265	4	14	KC80.9.014
-	-	-	-	-	-	-

With flange and feet only on request. Ask for compatibility

P802C-N...

Basic gearbox
Riduttore base

R802C-N...

Input Shaft
Albero in entrata

B5 Motor Flanges	A	C _{max}	g6	k1	kit code
71 B5	256	323.5	160	256	K023.4.041
80/90 B5	258	343.5	200	258	K023.4.042
100/112 B5	267	368.5	250	267	K023.4.043
132 B5	285	393.5	300	285	KC50.4.043

B14 Motor Flanges	A	C _{max}	g6	k1	kit code
80 B14	258	303.5	120	258	K085.4.046
90 B14	258	313.5	140	258	K085.4.045
100/112 B14	267	323.5	160	267	K085.4.047
132 B14	285	343.5	200	285	KC50.4.041



■ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges				Output Shaft $\varnothing$	Ratios code
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
18.5	75.50	1.5	725	1.1	1.7	825	B				C	C		191318	standard $\varnothing 40$ $\varnothing 50$ On request	01
16.2	86.47	1.5	830	1.1	1.6	900	B				C	C		191316		02
14.0	100.22	1.5	962	0.9	1.4	900	B				C	C		171316		03
12.0	116.56	1.1	817	1.1	1.2	900	B				C	C		171314		04
10.2	136.82	1.1	959	0.9	1.0	900	B				C	C		151314		05
9.1	153.05	0.75	736	1.1	0.83	810	B				C	C		190816		06
8.6	163.31	0.75	785	1.1	0.86	900	B				C	C		131314		07
7.9	178.01	0.75	856	1.1	0.79	900	B				C	C		190814		08
7.3	191.67	0.75	922	1.0	0.73	900	B				C	C		101316		09
6.8	206.32	0.75	992	0.9	0.68	900	B				C	C		170814		10
6.3	222.92	0.55	791	1.1	0.63	900	B				C	C		101314		11
5.8	242.18	0.55	859	1.0	0.58	900	B				C	C		150814		12
5.6	250.15	0.55	888	1.0	0.56	900	B				C	C		91316		13
4.8	289.08	0.55	1026	0.9	0.49	900	B				C	C		130814		14
4.2	330.31	0.37	783	1.1	0.42	890	B				C	C		71316		15
3.5	394.59	0.37	936	1.0	0.36	900	B				C	C		100814		16
2.7	514.99	0.25	824	1.1	0.27	900	B				C	C		90814		17
2.1	680.03	0.18	832	1.1	0.21	900	B				C	C		70814		18

The dynamic efficiency is **0.94** for all ratiosMotor Flanges Available
Flange Motore Disponibili B) Supplied with Reduction Bushing
Fornito con Bussola di RiduzioneB) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **803C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **803C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **803C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **803C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **803C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
3.30 LT	1.90 LT	1.90 LT	1.55 LT	3.40 LT	2.30 LT	Ask

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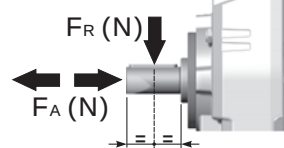
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tab. 1

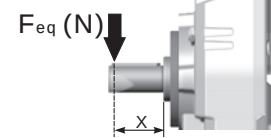
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



$$F_{eq} = F_R \cdot \frac{80.5}{X+40.5}$$



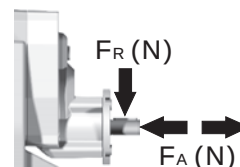
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1200	6000	140	1600	8000	70	2200	11000
250	1400	7000	120	1800	9000	40	2600	13000
200	1500	7500	85	2000	10000	15	3000	15000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata

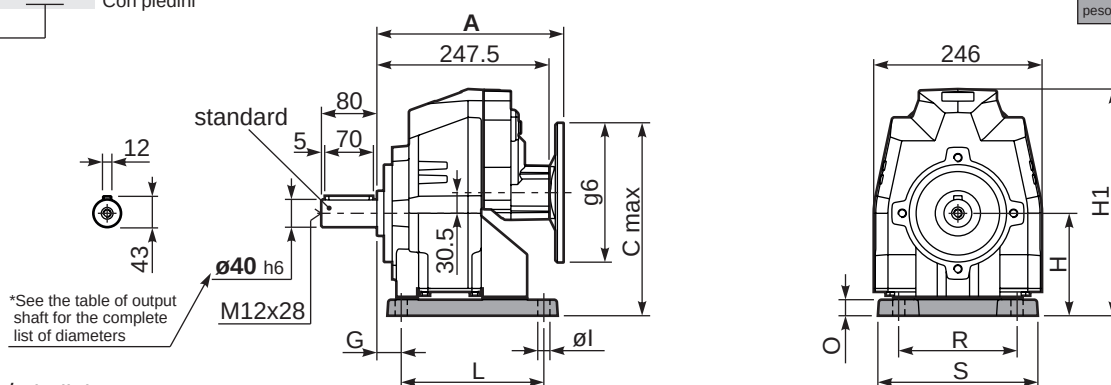


n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

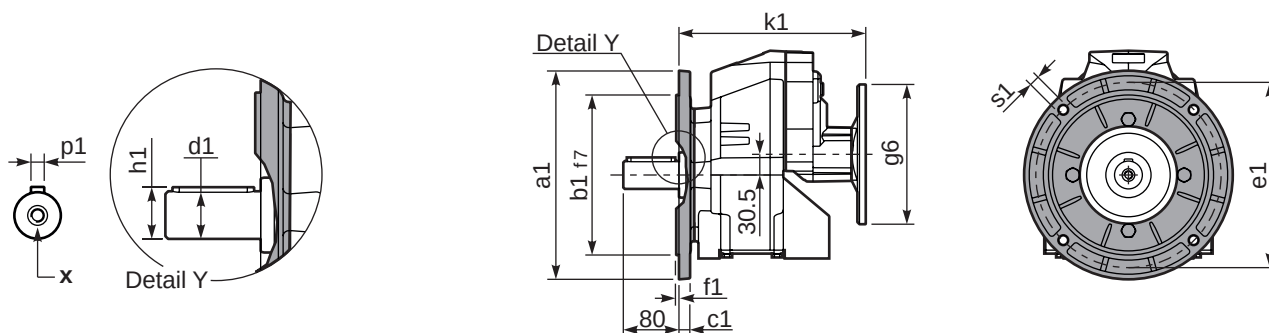
tab. 2

With feet
Con piedini

Gearbox weight peso riduttore	With flange	39.5 kg
	With feet	43.5 kg

[illegible]

Output flanges
flange di uscita



	Shaft - d1	p1	h1	x
Standard	ø 40x80	12	43	M12x28
On request A richiesta	ø 50x100	14	53.5	M16x36
	-	-	-	-

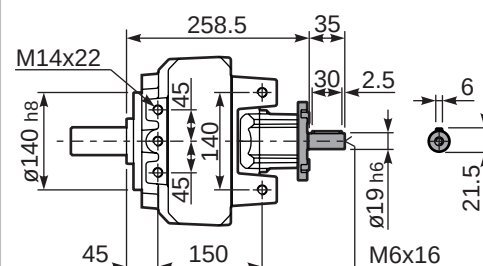
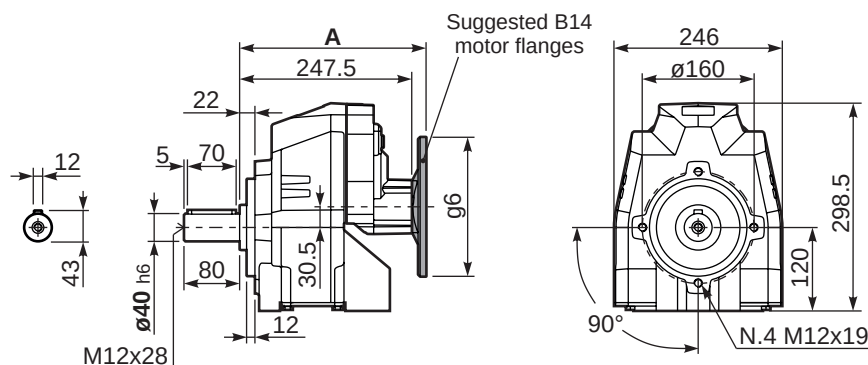
a1 Ø	b1	c1	e1	f1	s1	kit code
250	180	13	215	4	14	KC80.9.013
300	230	16	265	4	14	KC80.9.014
-	-	-	-	-	-	-



With flange and feet
only on request.
Ask for compatibility

Basic gearbox
Riduttore base

Input Shaft
Albero in entrata



B5 Motor Flanges	A	C _{max}	g6	k1	kit code
63 B5	268	275.5	140	268	K063.4.041
71 B5	266	285.5	160	266	K063.4.042
80/90 B5	268	305.5	200	268	K063.4.043

B14 Motor Flanges	A	C _{max}	g6	k1	kit code
71 B14	266	258	105	266	K063.4.047
80 B14	268	265.5	120	268	K063.4.046
90 B14	268	275.5	140	268	K063.4.041



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		B14 motor flanges				Output Shaft  $\varnothing$ On request	Ratios code 
							-H	-I	-	-	-	-		
							160	180	-	-	-	-		
412	3.40	22	480	1.3	26.4	600			not available				1551	01
343	4.08	22	575	1.2	25.7	700							1353	02
285	4.91	22	693	1.0	21.3	700							1154	03

The dynamic efficiency is **0.98** for all ratios

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

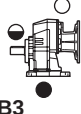
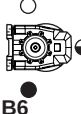
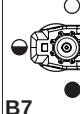
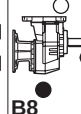
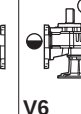
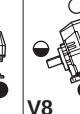
EN Unit **851C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **851C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **851C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **851C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **851C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

						
B3	B6	B7	B8	V5	V6	V8
5.30 LT	3.60 LT	3.60 LT	2.80 LT	5.80 LT	4.10 LT	Ask

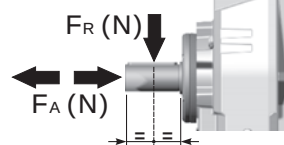
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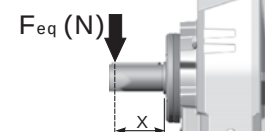
tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$F_{eq} = F_R \cdot \frac{88.5}{X+38.5}$$



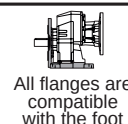
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1800	9000	140	2400	12000	70	3000	15000
250	2000	10000	120	2600	13000	40	3200	16000
200	2200	11000	85	2800	14000	15	4000	20000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

Gearbox weight peso riduttore	With flange	90.0 kg
	With feet	80.5 kg





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges				B14 motor flanges				Output Shaft 	Ratios code
							-F	-G	-H	-I	-	-	-	-		
							100 112	132	160	180	-	-	-	-		
317	4.42	22	611	1.1	24.2	700	B				not available				3015	01
264	5.30	22	733	1.0	20.2	700	B								3013	02
219	6.38	18.5	742	1.1	19.1	800	B								3011	03
168	8.33	15	784	1.0	14.7	800	B								2015	04
140	9.99	15	940	1.0	13.8	900	B								2013	05
124	11.26	15	1060	1.0	14.9	1100	B								1615	06
116	12.03	15	1132	1.1	15.2	1200	B								2011	07
104	13.50	15	1271	1.1	15.8	1400	B								1613	08
96	14.65	15	1378	1.1	15.6	1500	B								1315	09
86	16.26	15	1531	1.0	14.1	1500	B								1611	10
80	17.56	11	1214	1.2	13.0	1500	B								1313	11
65	21.50	11	1486	1.1	11.4	1600	B								1113	12
54	25.88	9	1526	1.0	9.4	1600	B								1111	13
45.0	31.09	7.5	1475	1.0	7.2	1460	B								813	14
37.4	37.43	5.5	1312	1.2	6.5	1600	B								811	15

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

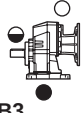
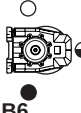
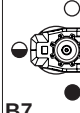
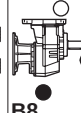
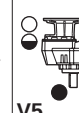
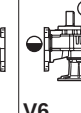
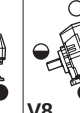
EN Unit **852C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **852C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **852C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **852C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

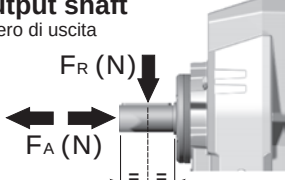
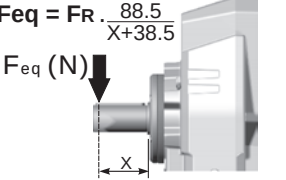
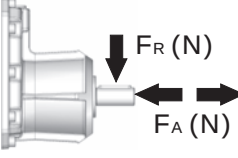
E El reductor tamaño **852C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

						
B3	B6	B7	B8	V5	V6	V8
5.40 LT	3.60 LT	3.60 LT	2.80 LT	5.90 LT	4.20 LT	Ask

AGIP Blasias 460

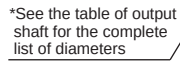
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tab. 1

RADIAL AND AXIAL LOADS								
Output shaft Albero di uscita			$F_{eq} = F_R \cdot \frac{88.5}{X+38.5}$					
								
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1800	9000	140	2400	12000	70	3000	15000
250	2000	10000	120	2600	13000	40	3200	16000
200	2200	11000	85	2800	14000	15	4000	20000
On request reinforced bearings to increase loads. A richiesta cuscinetti rinforzati per aumentare i carichi.								
Input shaft Albero in entrata								
n_1	FA	FR	n_1	FA	FR	n_1	FA	FR
1400	700	3500	900	840	4200	500	900	4500

tab. 2

Gearbox weight	With flange	86.0 kg
peso riduttore	With feet	76.5 kg



Technical drawing of a motor showing two views: a side view and a front view. The side view includes dimensions: total width $k1$, total height $a1$, mounting flange height $b1$ with fit $f7$, a central shaft diameter of 35.5 , a base flange height $g6$, a base width 100 , and a base offset $c1$ with fit $f1$. A circular detail 'Y' is indicated on the mounting flange. The front view shows the motor's circular profile with a mounting flange diameter $e1$ and a mounting hole diameter $s7$.

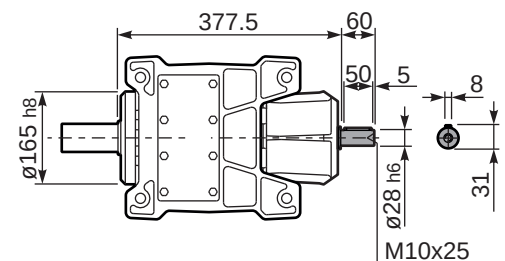
a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
-	-	-	-	-	-	-



All flanges are compatible with the foot

Technical drawing of the motor base (Fig. 1) showing dimensions: 220, 220, 190, 380, 180, 22°30', 90°, and N.4 M12x18.

B5 Motor Flanges	A	C _{max}	g6	k1	kit code
100/112 B5	387	340.5	250	387	-
132 B5	391	365.5	300	391	-
160/180 B5	402	390.5	350	402	-





■ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges						Output Shaft $\varnothing$	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V				
							71	80	90	100	112	132	80	90	100	112			
32.5	43.03	5.5	1478	1.1	5.8	1600	B										201313	standard $\varnothing 50$ $\varnothing 60$ On request	01
28.9	48.52	5.5	1667	0.9	5.0	1550	B										161315		02
27.0	51.81	4	1302	1.2	4.8	1600	B										201311		03
24.1	58.17	4	1462	1.1	4.3	1600	B										161313		04
22.2	63.09	4	1585	1.0	3.8	1550	B										131315		05
20.0	70.05	4	1760	1.0	4.0	1800	B										161311		06
18.5	75.65	4	1901	0.9	3.7	1800	B										131313		07
15.4	91.09	3	1723	1.0	3.1	1800	B										131311		08
12.6	111.50	2.2	1553	1.2	2.5	1800	B										111311		09
10.5	133.91	2.2	1865	1.0	2.1	1800	B										81313		10
8.7	161.24	1.5	1548	1.2	1.7	1800	B										81311		11
7.6	184.40	1.1	1293	1.1	1.2	1450	B										61313		12
6.3	222.04	1.1	1557	1.1	1.2	1750	B										61311		13

The dynamic efficiency is **0.94** for all ratios■ Motor Flanges Available
Flange Motore Disponibili■ B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione■ B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione■ C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **853C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **853C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **853C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **853C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

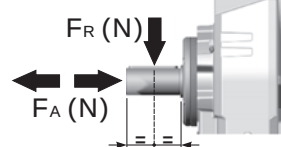
E El reductor tamaño **853C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
5.50 LT	3.80 LT	3.80 LT	3.20 LT	7.00 LT	4.60 LT	Ask
AGIP Blasias 460						

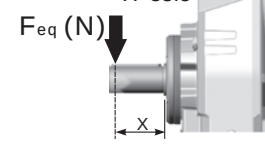
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tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

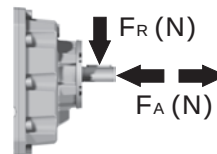
$$F_{eq} = F_R \cdot \frac{88.5}{X+38.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1800	9000	140	2400	12000	70	3000	15000
250	2000	10000	120	2600	13000	40	3200	16000
200	2200	11000	85	2800	14000	15	4000	20000

On request reinforced bearings to increase loads.

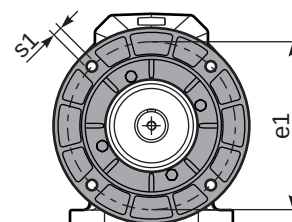
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

Gearbox weight peso riduttore	With flange	80.5 kg
	With feet	71.0 kg



a1 Ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
-	-	-	-	-	-	-



All flanges are compatible with the foot

[illegible]

B14 Motor Flanges	A	C _{max}	g6	k1	kit code
80 B14	344	325.5	120	344	K085.4.046
90 B14	344	335.5	140	344	K085.4.045
100/112 B14	353	345.5	160	353	K085.4.047
132 B14	371	365.5	200	371	KC50.4.041



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n ₂ [min ⁻¹]	Ratio i	Motor power P _{1M} [kW]	Output torque M _{2M} [Nm]	Service factor f.s.	Nominal power P _{1R} [kW]	Nominal torque M _{2R} [Nm]	Available B5 motor flanges		B14 motor flanges					Output Shaft 	 Ratios code
							-H	-I	-	-	-	-			
							160	180	-	-	-	-			
528	2.65	22	374	1.7	36.7	650			not available				2361	standard	01
409	3.42	22	483	1.6	32.8	750							1965	ø60	02
304	4.60	22	649	1.5	30.9	950							1569		03
256	5.46	22	771	1.3	27.4	1000							1371	ø50	04
211	6.64	22	937	1.3	26.5	1175							1173	On request	05

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **901C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **901C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **901C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **901C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **901C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

						
B3	B6	B7	B8	V5	V6	V8
5.90 LT	3.80 LT	3.80 LT	3.50 LT	6.80 LT	4.50 LT	Ask

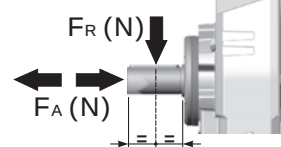
AGIP Blasias 460

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Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

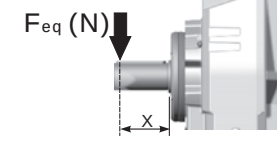
tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$F_{eq} = F_R \cdot \frac{88.5}{X+38.5}$$



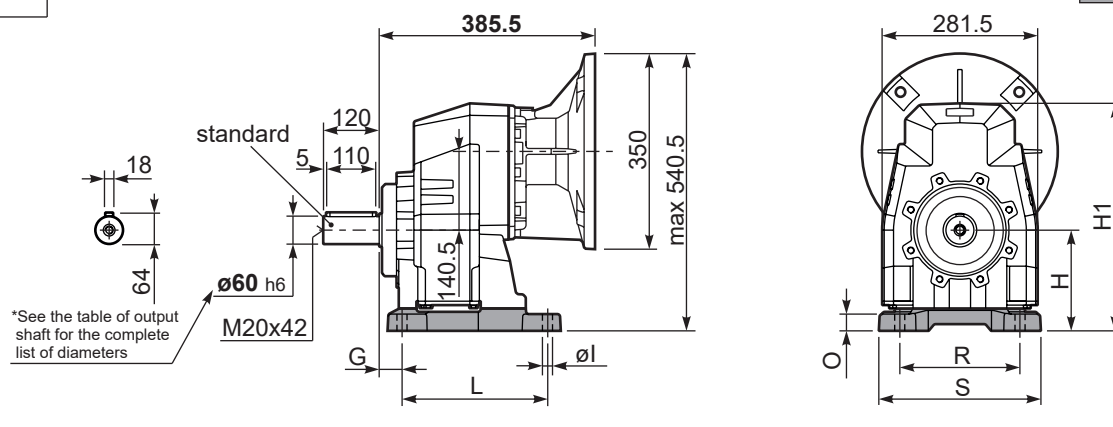
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2070	10350	140	2760	13800	70	3450	17250
250	2300	11500	120	2990	14950	40	3680	18400
200	2530	12650	85	3220	16100	15	4600	23000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

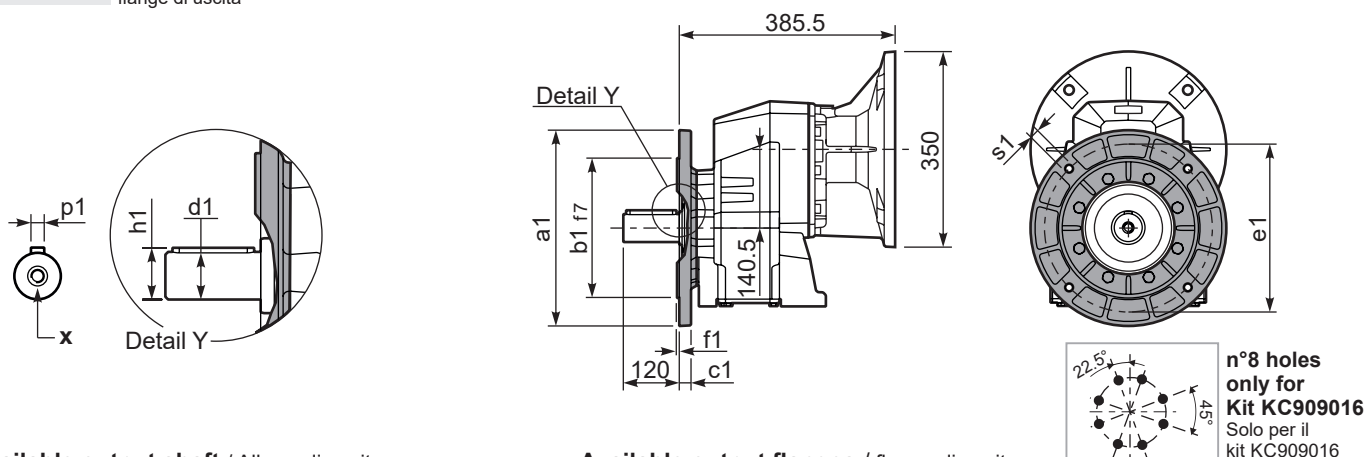
P901C-S8...

With feet
Con piediniGearbox
weight
peso riduttoreWith flange **102 kg**
With feet **110.5 kg**

Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	Øl	B5 max. Flange	kit code
B6	612/3	25	195	250	180	300	422	25	18	-	KC90.9.022
S8	87	40	180	215	260	290	407	30	18	-	KC90.9.024
S9	97	40	225	250	310	340	452	45	22	-	KC90.9.026

P901C-F...

Output flanges
flange di uscita

*Available output shaft / Albero di uscita

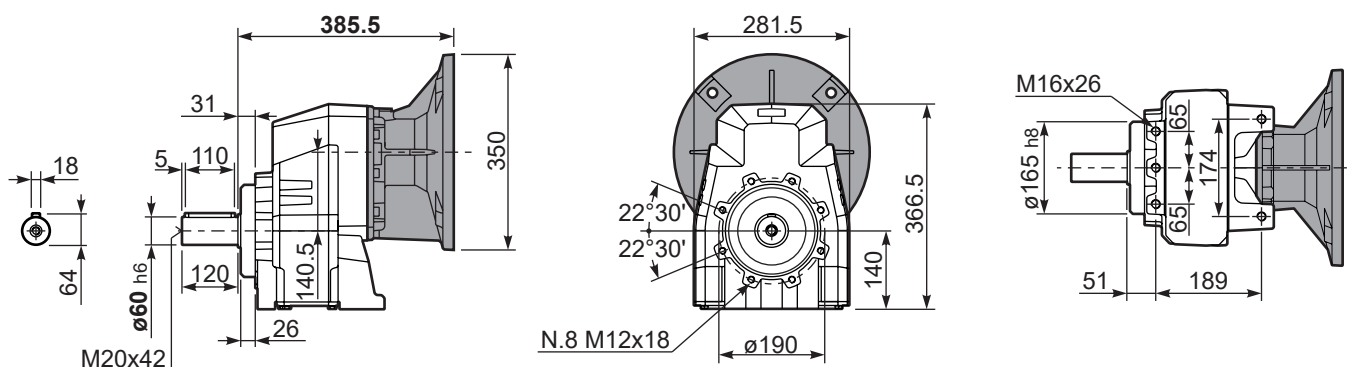
	Shaft - d1	p1	h1	x
Standard	Ø 60x120	18	64	M20x42
On request A richiesta	Ø 50x100	14	53.5	M16x36
	-	-	-	-

Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code	
300	230	21	265	4	14	KC90.9.014	
350	250	21	300	5	18	KC90.9.015	
450	350	22	400	5	18	KC90.9.016	

With flange and feet only on request.
Ask for compatibility

P901C-N...

Basic gearbox
Riduttore base



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges				B14 motor flanges				Output Shaft 	Ratios code 
							-F	-G	-H	-I	-	-	-	-		
							100 112	132	160	180	-	-	-	-		
234	5.98	22	827	1.2	25.5	1000	B				not available				3015	01
197	7.10	22	982	1.2	25.3	1175	B								3013	02
162	8.63	22	1193	1.1	23.9	1350	B								3011	03
124	11.27	18.5	1310	1.1	20.3	1500	B								2015	04
105	13.38	18.5	1555	1.1	19.4	1700	B								2013	05
92	15.24	18.5	1771	1.1	19.0	1900	B								1615	06
86	16.26	18.5	1889	1.1	19.7	2100	B								2011	07
77	18.09	18.5	2102	1.0	17.7	2100	B								1613	08
71	19.82	15	1865	1.1	15.9	2060	B								1315	09
64	21.98	15	2069	1.0	14.6	2100	B								1611	10
60	23.53	15	2214	0.9	13.6	2100	B								1313	11
58	24.25	11	1677	1.2	12.2	1940	B								1115	12
48.6	28.80	11	1991	1.1	11.1	2100	B								1113	13
40.0	34.99	9	2063	1.0	9.2	2100	B								1111	14
33.6	41.64	7.5	1976	1.0	7.2	1960	B								813	15
27.7	50.60	5.5	1774	1.2	6.3	2100	B								811	16

The dynamic efficiency is **0.96** for all ratios

 **Motor Flanges Available**
Flange Motore Disponibile

 **B) Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

 **B) Available on Request without reduction bushing**
Disponibile a Richiesta senza Bussola di Riduzione

 **C) Motor Flange Holes Position**
Posizione Fori Flangia Motore

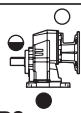
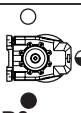
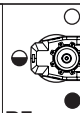
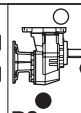
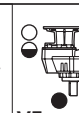
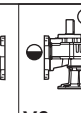
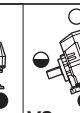
EN Unit **902C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **902C** è fornito privo di lubrificazione con tappi di sfato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **902C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **902C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **902C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

						
B3	B6	B7	B8	V5	V6	V8
5.90 LT	3.80 LT	3.80 LT	3.40 LT	6.70 LT	4.40 LT	Ask

AGIP Blasias 460

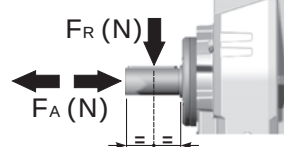
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tab. 1

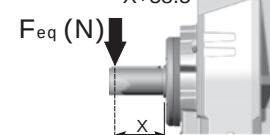
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



$$F_{eq} = F_R \cdot \frac{88.5}{X+38.5}$$



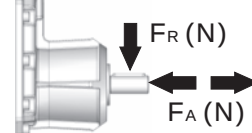
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2070	10350	140	2760	13800	70	3450	17250
250	2300	11500	120	2990	14950	40	3680	18400
200	2530	12650	85	3220	16100	15	4600	23000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata



n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

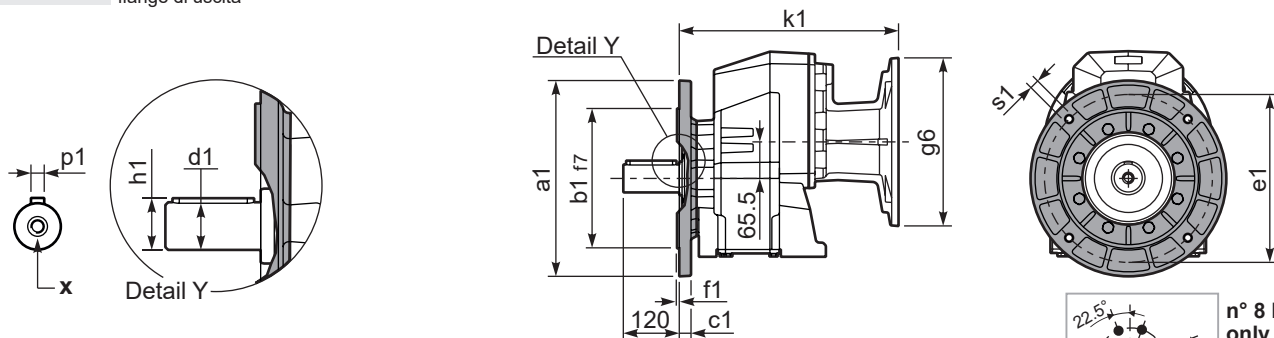
tab. 2

Gearbox weight peso riduttore	With flange 98.5 kg With feet 107.0 kg
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Feet Code	Market reference	G	H	R	L	S	H1	O	øI	B5 max. Flange	kit code
B6	612/3	25	195	250	180	300	422	25	18	-	KC90.9.022
S8	87	40	180	215	260	290	407	30	18	-	KC90.9.024
S9	97	40	225	250	310	340	452	45	22	-	KC90.9.026

Output flanges
flange di uscita

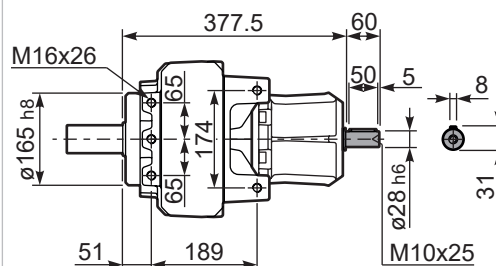


	Shaft - d1	p1	h1	x
Standard	ø 60x120	18	64	M20x42
On request A richiesta	ø 50x100	14	53.5	M16x36
	-	-	-	-

a1 Ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
450	350	22	400	5	18	KC90.9.016

With flange and feet only on request.
Ask for compatibility

Input Shaft
Albero in entrata



B5 Motor Flanges	A	C _{max}	g6	k1	kit code
100/112 B5	387	415.5	250	387	-
132 B5	391	440.5	300	391	-
160/180 B5	402	465.5	350	402	-



■ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges						Output Shaft $\varnothing$	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V				
							71	80	90	100 112	132	80	90	100 112	132				
28.8	48.55	7.5	2257	0.9	6.7	2100	B										201315	standard $\varnothing 60$ $\varnothing 50$ On request	01
24.3	57.64	5.5	1980	1.1	5.7	2100	B										201313		02
21.3	65.64	5.5	2255	0.9	5.0	2100	B										161315		03
20.0	70.04	4	1760	1.2	4.7	2100	B										201311		04
18.0	77.93	4	1958	1.1	4.2	2100	B										161313		05
16.4	85.36	4	2145	1.0	3.8	2100	B										131315		06
14.8	94.70	4	2380	0.9	3.5	2100	B										161311		07
13.8	101.35	3	1917	1.1	3.2	2100	B										131313		08
11.4	123.15	3	2330	0.9	2.7	2100	B										131311		09
9.3	150.73	2.2	2100	1.0	2.2	2100	B										111311		10
7.8	179.39	1.5	1722	1.2	1.8	2100	B										81313		11
6.4	217.98	1.5	2093	1.0	1.5	2100	B										81311		12
5.7	247.03	1.1	1732	1.1	1.2	1950	B										61313		13
4.7	300.17	1.1	2105	1.0	1.1	2100	B										61311		14

The dynamic efficiency is **0.94** for all ratios■ Motor Flanges Available
Flange Motore Disponibili■ B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione■ B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione■ C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **903C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **903C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **903C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **903C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **903C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
6.00 LT	4.10 LT	4.10 LT	3.70 LT	7.30 LT	4.90 LT	Ask
AGIP Blasias 460						

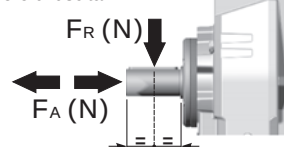
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

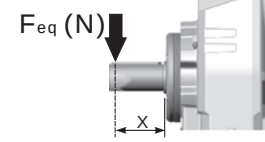
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



$$F_{eq} = F_R \cdot \frac{88.5}{X+38.5}$$



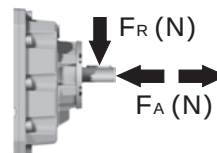
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2070	10350	140	2760	13800	70	3450	17250
250	2300	11500	120	2990	14950	40	3680	18400
200	2530	12650	85	3220	16100	15	4600	23000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata

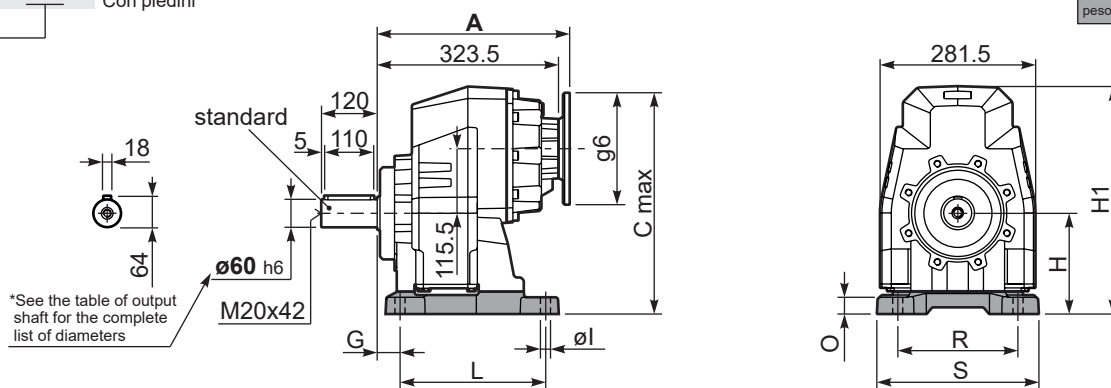


n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

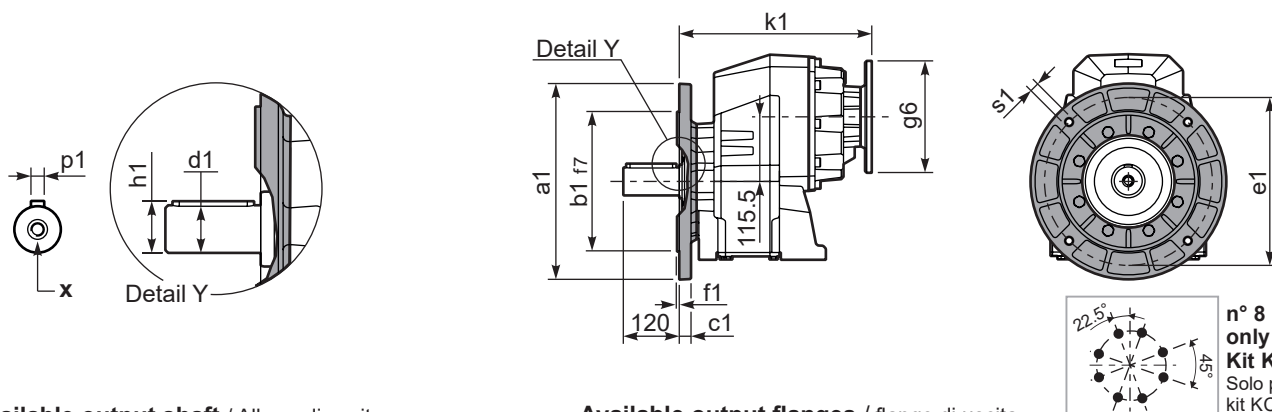
With feet
Con piedini

Gearbox weight	With flange 86.0 kg
peso riduttore	With feet 94.5 Kg



Feet Code	Market reference	G	H	R	L	S	H1	O	øI	B5 max. Flange	kit code
B6	612/3	25	195	250	180	300	422	25	18	-	KC90.9.022
S8	87	40	180	215	260	290	407	30	18	-	KC90.9.024
S9	97	40	225	250	310	340	452	45	22	-	KC90.9.026

Output flanges
flange di uscita



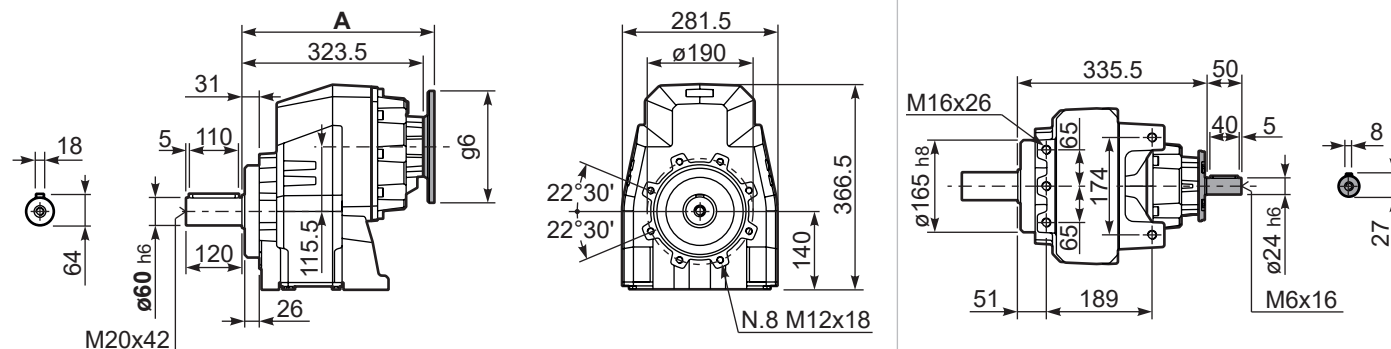
	Shaft - d1	p1	h1	x
Standard	ø 60x120	18	64	M20x42
On request A richiesta	ø 50x100	14	53.5	M16x36
	-	-	-	-

a1 Ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
450	350	22	400	5	18	KC90.9.016

With flange and feet only on request.
Ask for compatibility

Basic gearbox
Riduttore base

Input Shaft
Albero in entrata



B14 Motor Flanges	A	C_{max}	g6	k1	kit code
80 B14	344	400.5	120	344	K085.4.046
90 B14	344	410.5	140	344	K085.4.045
100/112 B14	353	420.5	160	353	K085.4.047
132 B14	371	440.5	200	371	KC50.4.041



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges				B14 motor flanges				Output Shaft 	Ratios code 
							-G	-H	-I	-L	-	-	-	-		
							132	160	180	200	-	-	-	-		
294	4.75	30	895	1.8	53.0	1650									3914	01
269	5.21	30	980	1.8	51.3	1750									3913	02
220	6.36	30	1197	1.6	45.6	1900									3911	03
188	7.45	30	1401	1.5	43.1	2100									3014	04
172	8.15	30	1535	1.4	39.3	2100									3013	05
141	9.96	30	1874	1.2	33.7	2200									3011	06
120	11.69	30	2200	1.0	30.1	2300									2214	07
109	12.80	30	2409	1.0	27.4	2300									2213	08
90	15.63	22	2161	1.1	23.5	2400									2211	09
79	17.65	22	2441	1.1	22.5	2600									1614	10
72	19.33	22	2673	1.1	22.9	2900									1613	11
67	20.77	22	2872	1.0	21.3	2900									1414	12
62	22.75	18.5	2643	1.1	19.5	2900									1413	13
59	23.60	18.5	2743	1.1	18.8	2900									1611	14
50	27.78	15	2615	1.1	15.9	2900									1411	15
45.5	30.76	15	2896	1.0	14.4	2900									1014	16
41.6	33.69	11	2330	1.2	13.1	2900									1013	17
34.0	41.15	11	2845	1.0	10.8	2900									1011	18

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **1002** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **1002** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **1002** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **1002** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **1002** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

						
B3	B6	B7	B8	V5	V6	V8
4.50 LT	8.00 LT	5.50 LT	6.00 LT	10.00 LT	7.50 LT	Ask

AGIP Blasias 460

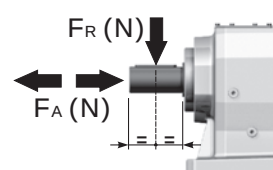
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tab. 1

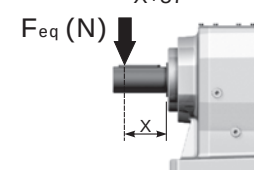
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



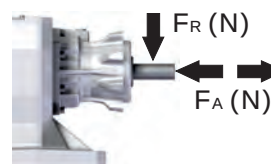
$$F_{eq} = F_R \cdot \frac{117}{X+57}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2300	11500	140	2980	14900	70	3660	18300
250	2480	12400	120	3180	15900	40	4220	21100
200	2680	13400	85	3440	17200	15	4820	24100

Input shaft

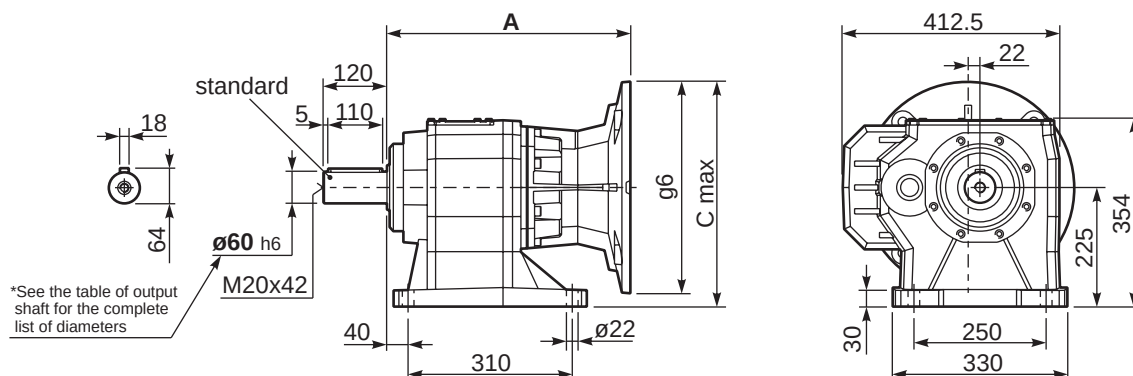
Albero in entrata



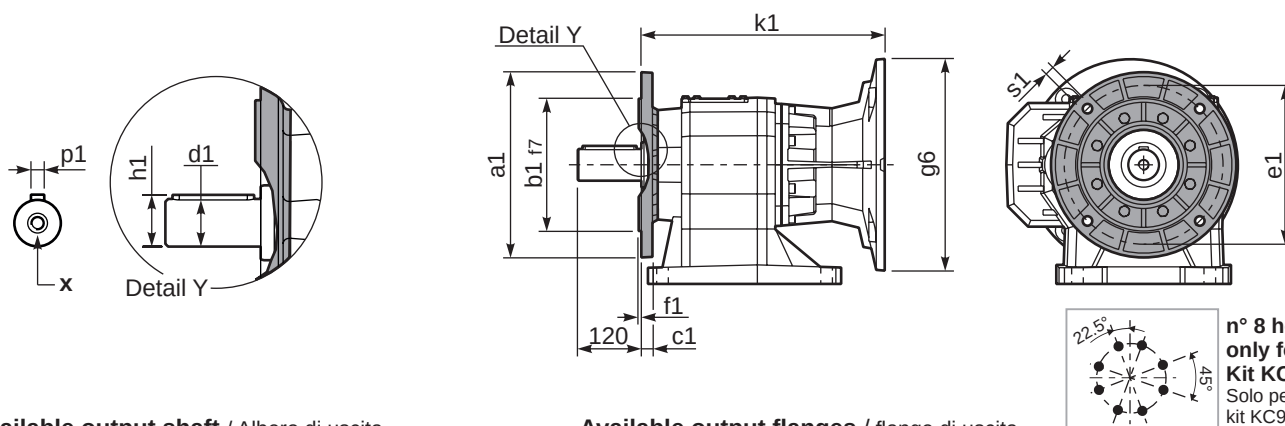
n_1	FA	FR
1400	1120	5600
900	1220	6100
500	1300	6500

tab. 2

P1002S9...

With foot
Con piedinoGearbox weight
peso riduttore 120.0 kg

P1002-F...

Output flanges
flange di uscita

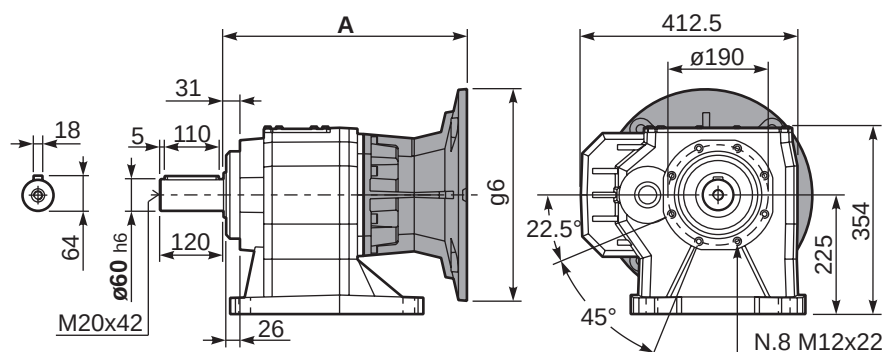
*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	Ø 60x120	18	64	M20x42
On request A richiesta	-	-	-	-

Available output flanges / flange di uscita

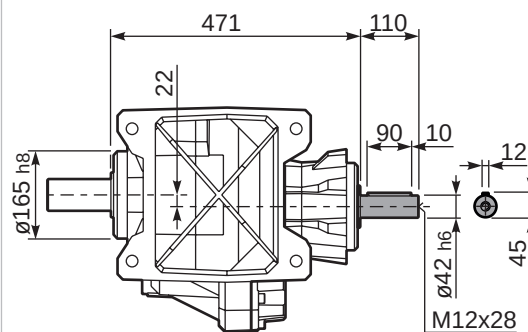
a1 Ø	b1	c1	e1	f1	s1	kit code	
300	230	21	265	4	14	KC90.9.014	All flanges are compatible with the foot
350	250	21	300	5	18	KC90.9.015	
450	350	22	400	5	18	KC90.9.016	

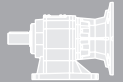
P1002S9...

Basic gearbox
Riduttore base

B5 Motor Flanges	A	C _{max}	g6	k1	kit code
132 B5	435	375	300	435	KC1109052
160 B5	460	400	350	460	KC1109053
180 B5	460	400	350	460	KC1109053_B
200 B5	460	425	400	460	KC1109054

R1002S9...

Input Shaft
Albero in entrata



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges			B14 motor flanges			Output Shaft 	Ratios code
							-F	-G	-H	-	-	-		
							100 112	132	160	-	-	-		
38.8	36.11	11	2447	1.2	12.5	2900	B			not available			301411	01
27.5	50.89	9	2941	1.0	9.2	3000	B						201414	02
25.1	55.73	7.5	2591	1.2	8.4	3000	B						201413	03
20.3	68.80	7.5	3199	0.9	6.8	3000	B						161414	04
18.6	75.35	5.5	2589	1.2	6.2	3000	B						161413	05
15.6	89.47	5.5	3074	1.0	5.2	3000	B						131414	06
15.2	92.02	5.5	3161	0.9	5.1	3000	B						161411	07
14.3	97.99	4	2462	1.2	4.8	3000	B						131413	08
12.8	109.52	4	2752	1.1	4.3	3000	B						111414	09
11.7	119.94	4	3014	1.0	3.9	3000	B						111413	10
9.6	146.47	3	2771	1.1	3.2	3000	B						111411	11
8.8	158.37	3	2996	1.0	3.0	3000	B						81414	12
8.1	173.45	2.2	2416	1.2	2.7	3000	B						81413	13
6.6	211.82	2.2	2951	1.0	2.2	3000	B						81411	14

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

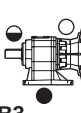
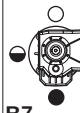
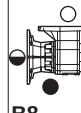
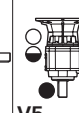
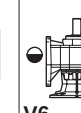
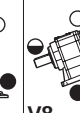
EN Unit **1003** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **1003** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **1003** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **1003** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **1003** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

						
B3	B6	B7	B8	V5	V6	V8
5.00 LT	9.00 LT	6.50 LT	6.50 LT	11.00 LT	9.00 LT	Ask

AGIP Blasias 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

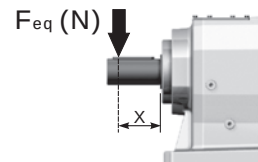
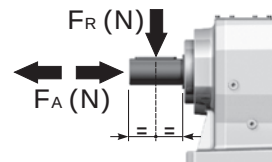
tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

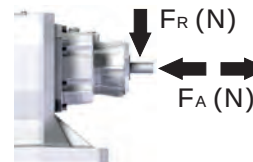
$$F_{eq} = F_R \cdot \frac{117}{X+57}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2300	11500	140	2980	14900	70	3660	18300
250	2480	12400	120	3180	15900	40	4220	21100
200	2680	13400	85	3440	17200	15	4820	24100

Input shaft

Albero in entrata



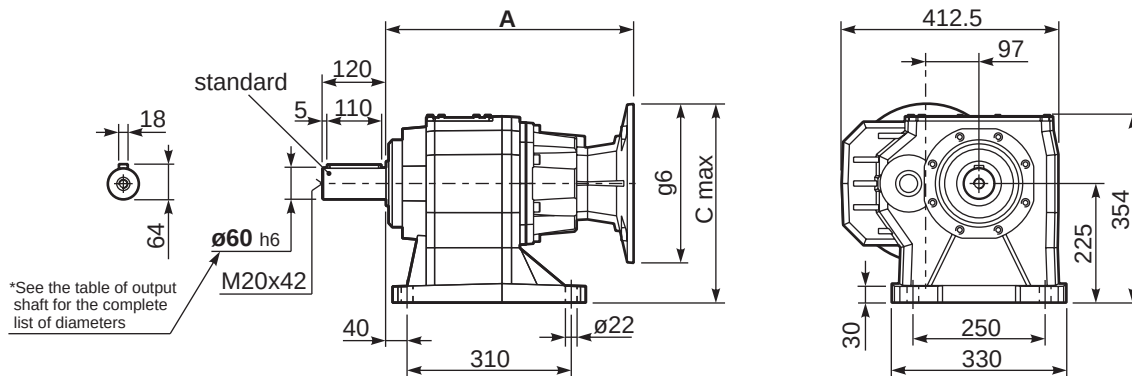
n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

tab. 2

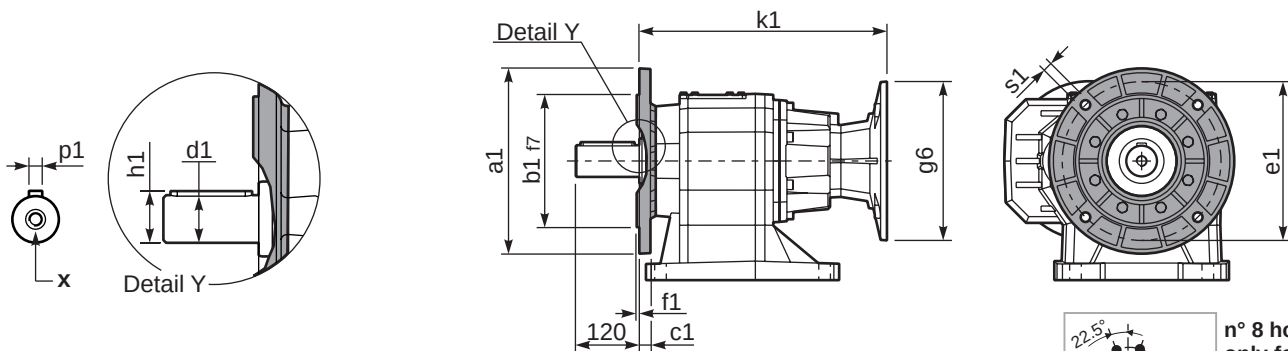
P1003S9...

With foot
Con piedinoGearbox
weight
peso riduttore

116 kg



P1003-F...

Output flanges
flange di uscita

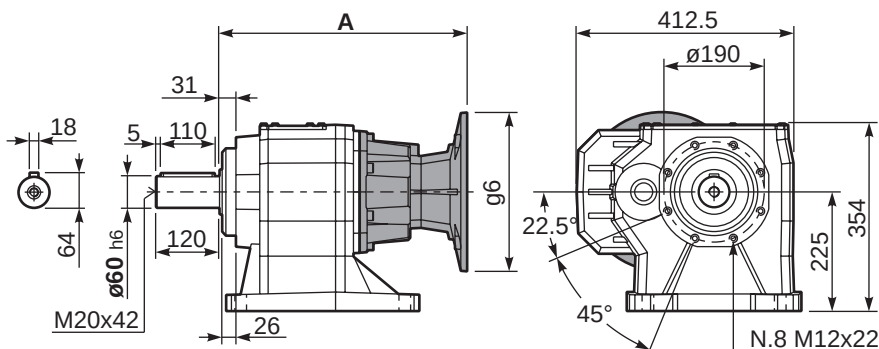
*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	Ø 60x120	18	64	M20x42
On request A richiesta	-	-	-	-

Available output flanges / flange di uscita

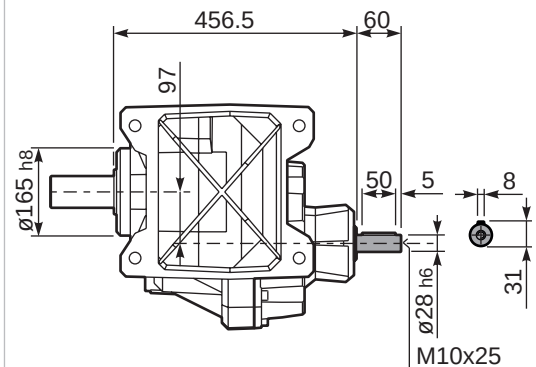
a1 Ø	b1	c1	e1	f1	s1	kit code	
300	230	21	265	4	14	KC90.9.014	 All flanges are compatible with the foot
350	250	21	300	5	18	KC90.9.015	
450	350	22	400	5	18	KC90.9.016	

P1003S9...

Basic gearbox
Riduttore base

B5 Motor Flanges	A	C _{max}	g6	k1	kit code
100/112 B5	468	350	250	468	KC1109056
132 B5	468	375	300	468	KC1109057
160 B5	483	400	350	483	KC1109058

R1003S9...

Input Shaft
Albero in entrata



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges					B14 motor flanges			Output Shaft		
							-G	-H	-I	-L	CA	-	-	-			Ratios code
							132	160	180	200	225	-	-	-			
294	4.75	45	1333	2.0	86.7	2700									3914		01
269	5.21	45	1460	1.9	82.1	2800									3913		02
220	6.36	45	1783	1.7	72.0	3000									3911		03
188	7.45	45	2088	1.6	67.7	3300									3014		04
172	8.15	45	2287	1.5	63.7	3400									3013		05
141	9.96	45	2792	1.3	55.2	3600									3011		06
120	11.69	45	3277	1.2	49.7	3800									2214		07
109	12.80	45	3589	1.1	47.7	4000									2213		08
90	15.63	45	4383	1.0	42.0	4300									2211	standard Ø70	09
79	17.65	37	4068	1.1	38.9	4500									1614		10
72	19.33	37	4455	1.0	35.6	4500									1613		11
67	20.77	30	3910	1.2	33.1	4500									1414		12
62	22.75	30	4282	1.1	30.2	4500									1413		13
59	23.60	30	4443	1.0	29.1	4500									1611		14
50	27.78	22	3842	1.2	24.7	4500									1411		15
45.5	30.76	22	4255	1.1	22.3	4500									1014		16
41.6	33.69	22	4660	1.0	20.4	4500									1013		17
34.0	41.15	18.5	4781	0.9	16.7	4500									1011		18

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **1102** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **1102** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **1102** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **1102** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **1102** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
6.50 LT	12.50 LT	7.50 LT	8.50 LT	14.50 LT	11.50 LT	Ask

AGIP Blasias 460

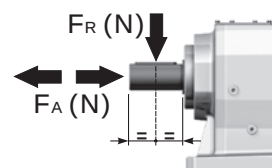
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

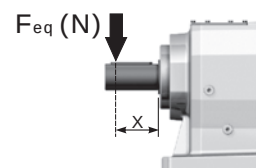
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



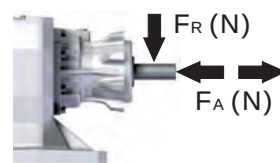
$$F_{eq} = F_R \cdot \frac{138}{X+68}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2600	13000	140	3300	16500	70	4300	21500
250	2700	13500	120	3500	17500	40	5000	25000
200	3000	15000	85	3900	19500	15	5900	29500

Input shaft

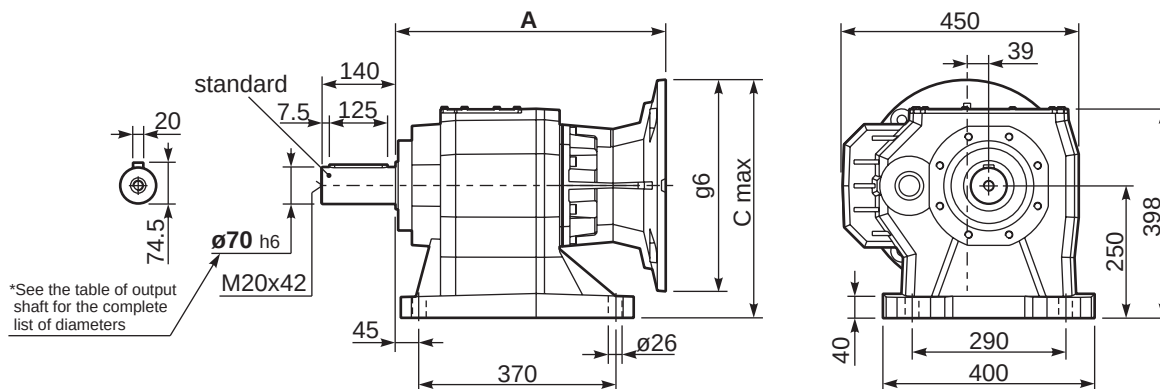
Albero in entrata



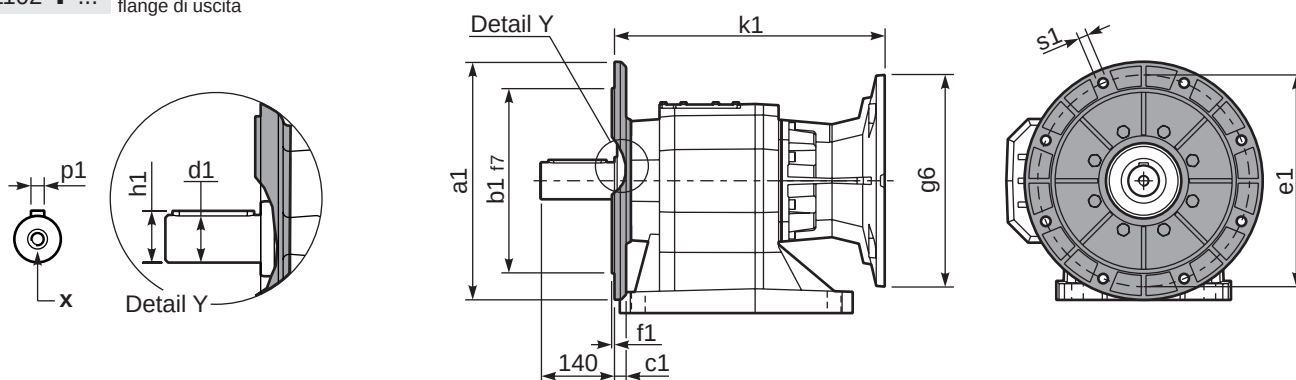
n_1	FA	FR
1400	1120	5600
900	1220	6100
500	1300	6500

tab. 2

P1102S0...

With foot
Con piedinoGearbox
weight
peso riduttore **165 kg**

P1102-F...

Output flanges
flange di uscita

*Available output shaft / Albero di uscita

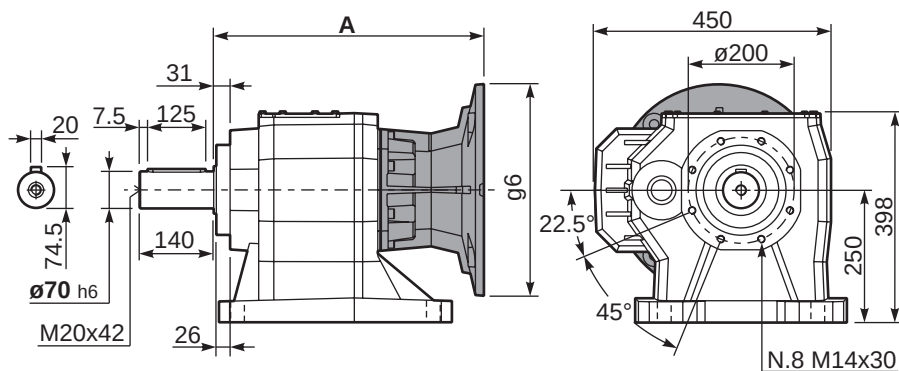
	Shaft - d1	p1	h1	x
Standard	Ø 70x140	20	74.5	M20x42
On request A richiesta	-	-	-	-

Available output flanges / flange di uscita

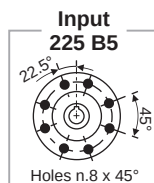
a1 Ø	b1	c1	e1	f1	s1	kit code
350	250	21	300	5	18	KC110.9.015
450	350	22	400	5	18	KC110.9.016
-	-	-	-	-	-	-

All flanges are compatible with the foot

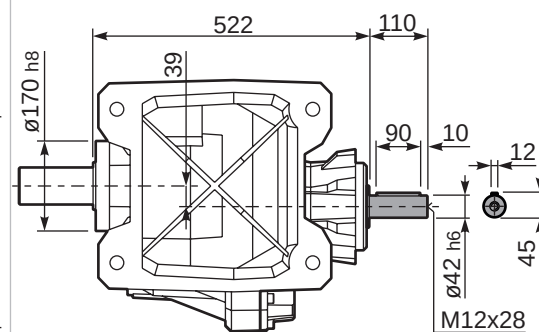
P1102S0...

Basic gearbox
Riduttore base

B5 Motor Flanges	A	C _{max}	g6	k1	kit code
132 B5	485.5	400	300	485.5	KC1109052
160 B5	510.5	425	350	510.5	KC1109053
180 B5	510.5	425	350	510.5	KC1109053 B
200 B5	510.5	450	400	510.5	KC1109054
225 B5	537.5	475	450	537.5	KC1109055



R1102S0...

Input Shaft
Albero in entrata



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				B14 motor flanges			Output Shaft 	Ratios code
							-F	-G	-H	-I	-	-	-		
							100 112	132	160	180	-	-	-		
38.8	36.11	18.5	4113	1.1	19.4	4500	B				not available			301411	01
27.5	50.89	15	4694	1.0	14.1	4600	B							201414	02
25.1	55.73	11	3777	1.2	12.9	4600	B							201413	03
20.3	68.80	11	4662	1.0	10.4	4600	B							161414	04
18.6	75.35	9	4354	1.1	9.5	4600	B							161413	05
15.6	89.47	7.5	4160	1.1	8.0	4600	B							131414	06
15.2	92.02	7.5	4278	1.1	7.6	4500	B							161411	07
14.3	97.99	7.5	4556	1.0	7.3	4600	B							131413	08
12.8	109.52	5.5	3762	1.2	6.6	4600	B							111414	09
11.7	119.94	5.5	4120	1.1	6.0	4600	B							111413	10
9.6	146.47	4	3681	1.2	4.8	4500	B							111411	11
8.8	158.37	4	3980	1.2	4.5	4600	B							81414	12
8.1	173.45	4	4359	1.1	4.1	4600	B							81413	13
6.6	211.82	3	4007	1.1	3.3	4500	B							81411	14

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

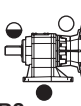
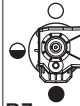
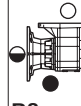
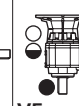
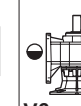
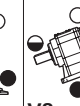
EN Unit **1103** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **1103** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **1103** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **1103** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **1103** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

						
B3	B6	B7	B8	V5	V6	V8
7.00 LT	13.00 LT	8.00 LT	9.00 LT	16.00 LT	13.50 LT	Ask

AGIP Blasias 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

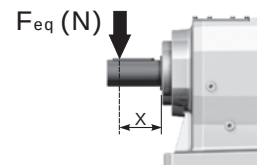
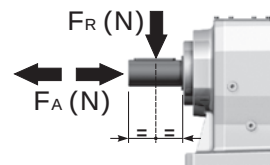
tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

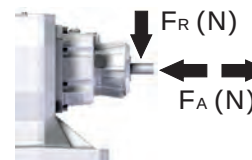
$$F_{eq} = F_R \cdot \frac{138}{X+68}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2600	13000	140	3300	16500	70	4300	21500
250	2700	13500	120	3500	17500	40	5000	25000
200	3000	15000	85	3900	19500	15	5900	29500

Input shaft

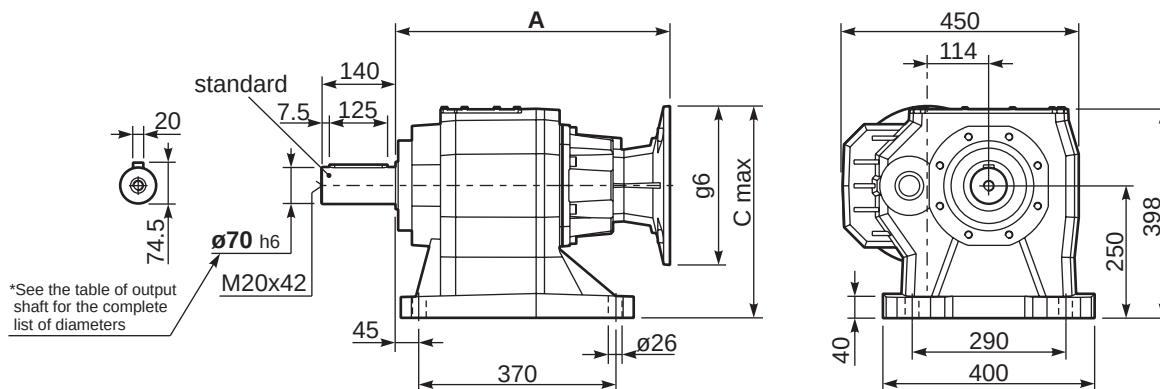
Albero in entrata



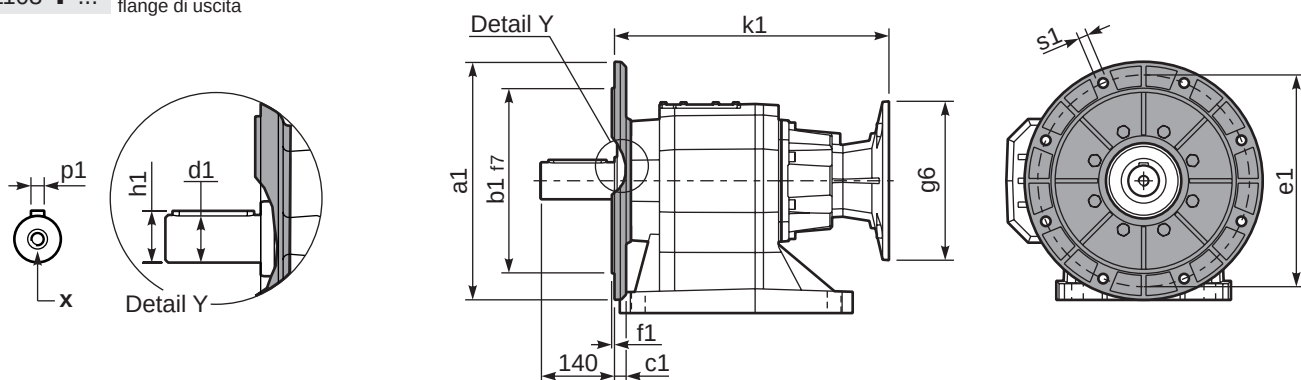
n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

tab. 2

P1103S0...

With foot
Con piedinoGearbox
weight
peso riduttore **156 kg**

P1103-F...

Output flanges
flange di uscita

*Available output shaft / Albero di uscita

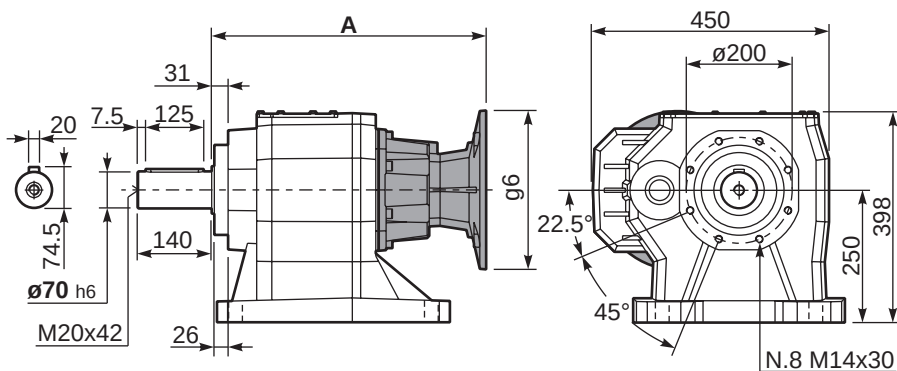
	Shaft - d1	p1	h1	x
Standard	Ø 70x140	20	74.5	M20x42
On request A richiesta	-	-	-	-

Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code
350	250	21	300	5	18	KC110.9.015
450	350	22	400	5	18	KC110.9.016
-	-	-	-	-	-	-

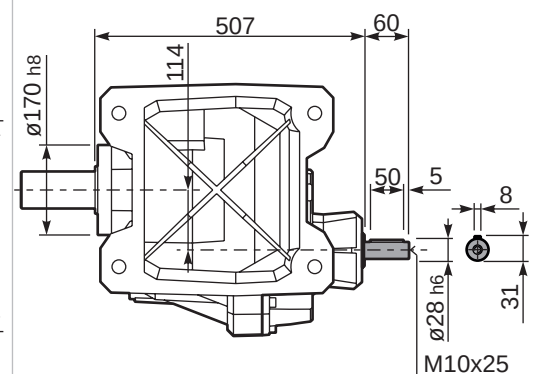
All flanges are compatible with the foot

P1103S0...

Basic gearbox
Riduttore base

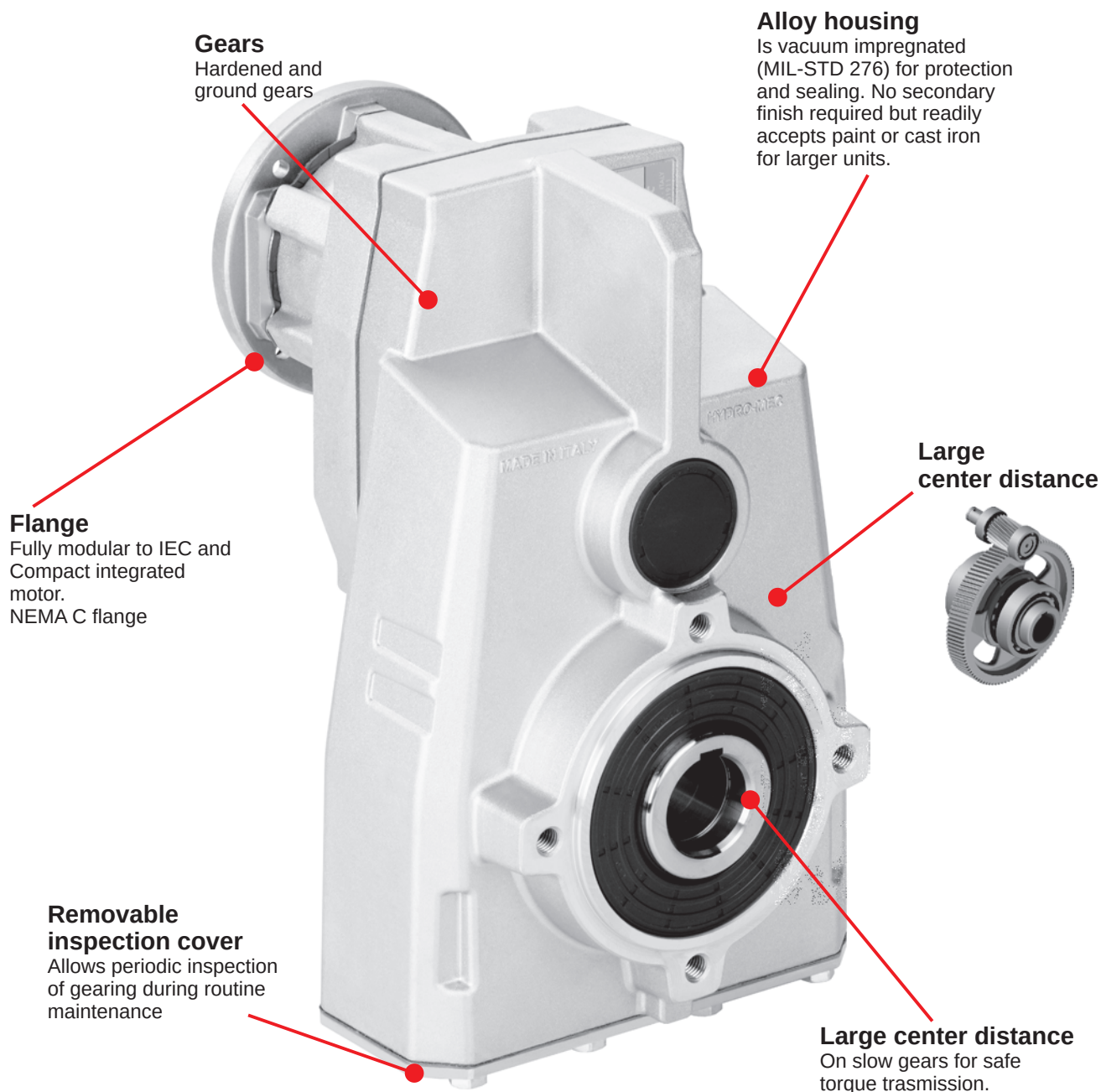
B5 Motor Flanges	A	C _{max}	g6	k1	kit code
100/112 B5	518.5	375	250	518.5	KC1109056
132 B5	518.5	400	300	518.5	KC1109057
160 B5	533.5	425	350	533.5	KC1109058
180 B5	533.5	425	350	533.5	KC1109058_B

R1103S0...

Input Shaft
Albero in entrata

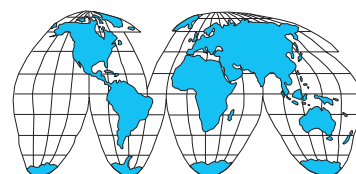
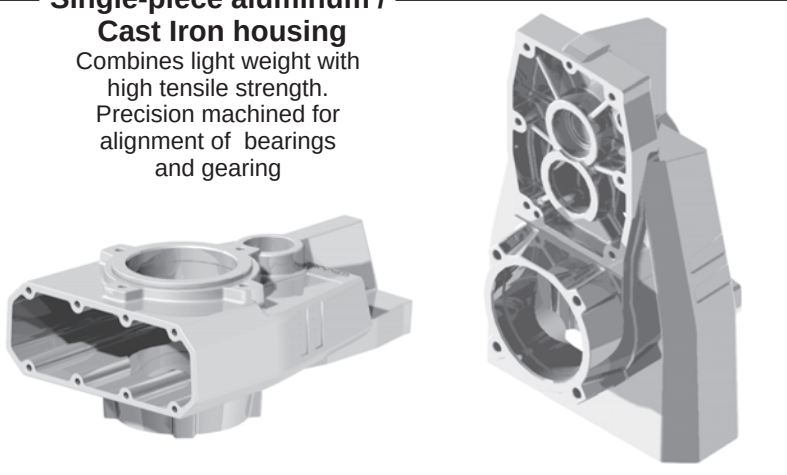
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Specific type datasheet on page...

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3 Stage



6-5	6-7
FS10 60Nm	FS20 90Nm

Types / Tipi /
Tipen / Types /
Tipos

On page / A pagina / Auf Seite / À la page / En la página

1 Stage



6-15	6-25	6-31	6-37
FA41 225Nm	FC61 380Nm	FC71 670Nm	FC81 1175Nm

Types / Tipi /
Tipen / Types /
Tipos

On page / A pagina / Auf Seite / À la page / En la página

2 and 3 Stage



6-11	6-13	6-17	6-19	6-21	6-23	6-27	6-29	6-33	6-35	6-39	6-41
FA32 150Nm	FA33 150Nm	FA42 320Nm	FA43 320Nm	FA52 490Nm	FA53 510Nm	FC62 675Nm	FC63 675Nm	FC72 900Nm	FC73 900Nm	FC82 2100Nm	FC83 2100Nm

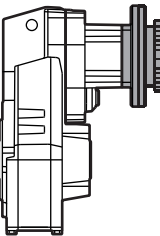
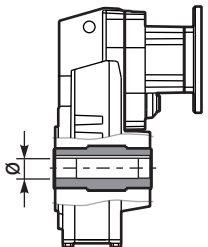
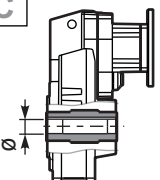
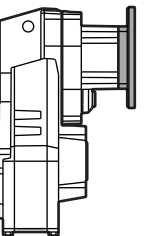
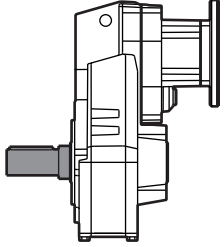
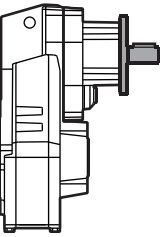
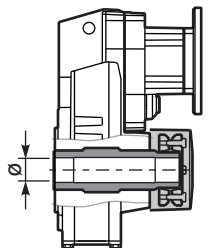
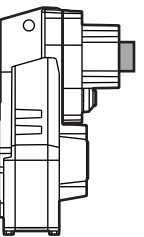
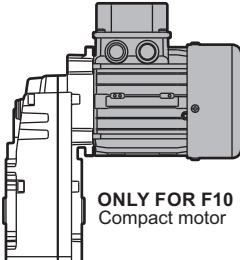
Types / Tipi /
Tipen / Types /
Tipos

On page / A pagina / Auf Seite / À la page / En la página



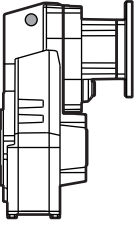
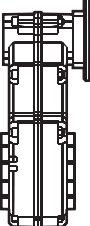
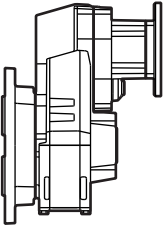
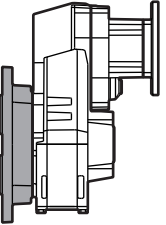
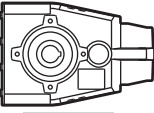
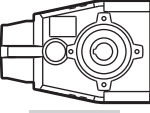
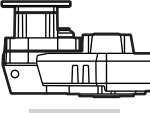
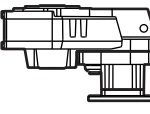
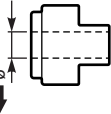
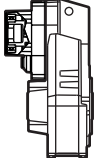
M-1										
56A 56B	63A 63B	71A 71B	80A 80B	90S 90L	100LA 100LB	112M	132S 132M	160M 160L	180M 180L	

Types / Tipi /
Tipen / Types /
Tipos

Type - Tipo - Typ Type - Tipo	Size - Grandezza - Grösse Taille - Tamaño	Mounting - Montaggio Montage - Fixation Tipo de montaje	Rapporto - Ratio Untersetzung Reduction - Relation	Output shaft Albero uscita Abtriebswelle Arbre de sortie Eje en salida
M	FA42	C	10.04	-D
Shaft mounted helical Riduttori ad assi paralleli  With IEC motor M	1 Stage Riduzione Stufe Trains Etapas 2 Stages Riduzioni Stufen Trains Etapas 3 Stages Riduzioni Stufen Trains Etapas Aluminum/Alluminio/Aluminium/Aluminio	 Hollow output shaft C	See technical data table Vedi tabella dati tecnici. Technisches Datenblatt beachten Voir Tableau données techniques Ver tabla datos técnicos	C  STANDARD Only on request for Q.ty A richiesta per quantità FS10 -J $\Rightarrow \varnothing 17$ FS20 -B $\Rightarrow \varnothing 20$ FA32-3 -C $\Rightarrow \varnothing 25$ FA41 FA42 FA43 -C $\Rightarrow \varnothing 25$ -D $\Rightarrow \varnothing 30$ -E $\Rightarrow \varnothing 35$ FA52 FA53 FC61 FC62 FC63 -E $\Rightarrow \varnothing 35$ -F $\Rightarrow \varnothing 40$ FC71 FC72 FC73 -F $\Rightarrow \varnothing 40$ -G $\Rightarrow \varnothing 45$ FC81 FC82 FC83 -H $\Rightarrow \varnothing 50$ -I $\Rightarrow \varnothing 55$
 With motor flange P	FA41 FA32 FA42 FA52 FA33 FA43 FA53	 Single output shaft A		
 With male input shaft R	Cast Iron/Ghisa/Grauguss/Fonte/Fundicion FC61 FC71 FC81 FC62 FC72 FC82 FC63 FC73 FC83	 Shrink Disk D Only on request for Q.ty A richiesta per quantità		
 Modular base B Not available for: FC61, FC71, FC81, FC82.				
 ONLY FOR F10 Compact motor C				



On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

Type - Tipo - Typ Types - Tipo	Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor	Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje	Input bore Foro entrada Eingangshohlwelle Trou d'entree Eje hueco de entrada	Terminal box position Posizione morsettiera Klemmkastenlage Position boîte à bornes Posición caja de bornes
ST	N	-C	H1	-	
 ST Foro standard Standard bore  ST Senza braccio di reazione Without reaction arm  -F Whit output flange con flangia uscita	 N Senza flangia Without flange FS20 1 → Ø140 FA32-3 FA41-2-3 2 → Ø160 3 → Ø200 4 → Ø250 FA52 FA53 FC61 FC62 FC63 4 → Ø250 FC71 FC72 FC73 4 → Ø250 5 → Ø300 FC81 FC82 FC83 5 → Ø300 6 → Ø350 7 → Ø400	Flange Flangia  B5 -A=56 (Ø120) -B=63 (Ø140) -C=71 (Ø160) -D=80 (Ø200) -E=90 (Ø200) -F=100+112 (Ø250) -G=132 (Ø300) -H=160 (Ø350) -I=180 (Ø350) B14 -O=56 (Ø80) -P=63 (Ø90) -Q=71 (Ø105) -R=80 (Ø120) -T=90 (Ø140) -U=100+112 (Ø160) -V=132 (Ø200) COMPACT CZ = 56 C0 = 63 Type R Tipo R  FA33 FA43 FS10 FS20 -1 → Ø14 FA32 FA42 FA53 FC63 FC73 -2 → Ø19 FA52 FC62 FC72 FC83 -3 → Ø24 FC82 -4 → Ø28 Without flange Senza flangia  -M → With coupling FA33 FA43 FS10 FS20 -Z → Ø9 (56B5) -0 → Ø11 (63B5) -1 → Ø14 (71B5) FA32 FA42 FA53 FC63 FC73 -1 → Ø14 (71B5) -2 → Ø19 (80B5) -3 → Ø24 (90B5) FA52 FC62 FC72 FC83 -2 → Ø19 (80B5) -3 → Ø24 (90B5) -4 → Ø28 (100B5) FA41 -4 → Ø28 (100B5)	 H1 STANDARD  H4  H3  H2  H5  H6	- Nothing indication: standard bore Nessuna indicazione: foro standard COUPLING  A = 9mm B = 11mm C = 14mm D = 19mm E = 24mm F = 28mm 0 Ready for input coupling Predisposto per giunto 	With Type M specify terminal box position Con tipo M specificare posizione morsettiera  A  B STANDARD  C  D

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

Lifting / sollevamento / hubantriebe / levage / elevación

$$P [KW] = \frac{M [Kg] \cdot g [9.81] \cdot v [m / s]}{1000}$$

Rotation / rotazione / drehung / rotation / rotation

$$P [KW] = \frac{M [Nm] \cdot n [rpm]}{9550}$$

Linear movement / traslazione / linearbewegung / translation / translacion

$$P [KW] = \frac{F [N] \cdot v [m / s]}{1000}$$

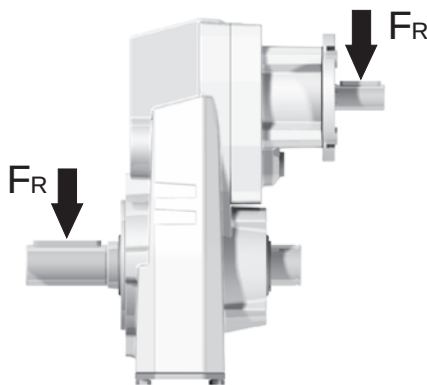
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

$$M [Nm] = \frac{9550 \cdot P[KW]}{n [rpm]}$$

$$M [lb in] = \frac{63030 \cdot P[HP]}{n [rpm]}$$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida



	$F_R [N] = \frac{M [Nm] \cdot 2000}{d [mm]} \cdot f_k$	$F_R [N] = \frac{M [lb in] \cdot 8.9}{d [in]} \cdot f_k$
M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion	
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo	
f_k	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión 1.15 Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje 1.25 Catena / Chain sprockets / Antriebskette / Chaîne / Cadena 1.75 Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal 2.50 Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana	

- If your application requires higher radial loads, contact our technical office. Higher load may be possible.
- Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
- Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
- Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
- En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

How to select a gearbox / Come selezionare un riduttore / Wie wählt man ein Getriebe
Comment sélectionner un réducteur / Cómo seleccionar un reductor

B Output speed
Velocità in uscita
Abtriebsdrehzahl
Vitesse de sortie
Velocidad de salida

Nominal power
Potenza nominale
Max. mögliche Leistung
Poissance nominale
Potencia nominal

A Nominal torque
Momento torcente nominale
Nenn Drehmoment
Couple nominal
Par de torsión nominal

Flange code
Codice flangia
Flanschtype
Code bride
Código bridas

Input speed
Velocità in entrata
Eintriebsdrehzahl
Vitesse en entrée
Velocidad de entrada

Gear size
Grandezza riduttore
Getriebegröße
Taille réducteur
Tamaño reductor

Motor power
Potenza motore
Motorleistung
Puissance moteur
Potencia motor

C Ratio
Rapporto
Untersetzung
Rapport de réduction
Relación

Transmitted torque
Momento torcente trasmesso
Mögliche Drehmomente
Couple de sortie
Par transmitido

Service factor
Fattore di servizio
Betriebsfaktor
Facteur de service
Factor de servicio

FA42 Compact- Gear 320Nm Rating - Aluminum SHAFT MOUNTED HELICAL

QUICK SELECTION / Selezione veloce input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Notes 	
							-B	-C	-D	-E	-F	-Q	-R	-T	-U			
							63	71	80	90	100	112	71	80	90			100
167	8.38	4	215	1.0	4.1	225	B						C	C			2821	01
139	10.04	3	194	1.2	3.7	240	B						C	C			2818	02
114	12.33	3	238	1.1	3.2	260	B						C	C			2813	03
92	15.16	2.2	216	1.2	2.6	260	B						C	C			1921	04

D Motor flange available
Flange disponibili
Erhältliche Motorflansche
Bridas disponibles
Bridas disponibles

Output shaft diam.
Diam. albero uscita
Durchmesser abtriebswelle
Diametre arbre lent
Diametro eje de salida

Notes
Note
Anmerkungen
Note
Notas

fs

Type of load and starts per hour Tipo di carico e avviamenti per ora		Oper. hours per day Ore di funz. giorn.		
		3 h	10 h	24 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

D Mounting with reduction ring
Montaggio con boccia di riduzione
Reduzierhülsen
Montage avec douille de réduction
Montaje con casquillo de reducción

C Motor flangeholes position/terminal box position
Posizione fori flangia/basetta motore
Bohrungsposition am Motorflansch/-sockel
Position trous bride/barrette à bornes moteur
Posición agujeros brida / base motor

B Available without reduction bushes
Disponibile anche senza boccia
Auch ohne Reduzierbuchse verfügbar
Disponible aussi sans douille de réduction
Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select output speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Hollow Shaft 	Ratios code 
							-B	-C	-O	-P	-Q		
							63	71	56	63	71		
72	19.42	0.37	46	1.3	0.48	60			C	C		281713	01
51	27.21	0.37	65	0.9	0.34	60			C	C		281313	02
36.4	38.49	0.25	62	1.0	0.24	60			C	C		191713	03
31.7	44.12	0.18	54	1.1	0.21	60			C	C		171713	04
26.7	52.50	0.18	64	0.9	0.18	60			C	C		151713	05
22.6	61.82	0.12	49	1.2	0.15	60			C	C		171313	06
19.0	73.56	0.12	58	1.0	0.13	60			C	C		151313	07
15.9	88.13	0.09	56	1.1	0.11	60			C	C		101713	08
12.0	116.67	0.06	48	1.2	0.08	60			C	C		91713	09
11.3	123.48	0.06	51	1.2	0.08	60			C	C		101313	10
9.0	155.37	0.06	64	0.9	0.06	60			C	C		71713	11
8.6	163.47	0.06	68	0.9	0.06	60			C	C		91313	12
7.6	184.39	0.06	76	0.8	0.05	60			C	C		61713	13
6.4	217.68	0.06*	90	0.7	0.04	60			C	C		71313	14
5.4	258.34	0.06*	107	0.6	0.04	60			C	C		61313	15

The dynamic efficiency is 0.94 for all ratios

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FS10** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FS10** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FS10** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FS10** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FS10** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION FS10 Oil Quantity 0.35 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL LOADS

Input shaft
Albero in entrata



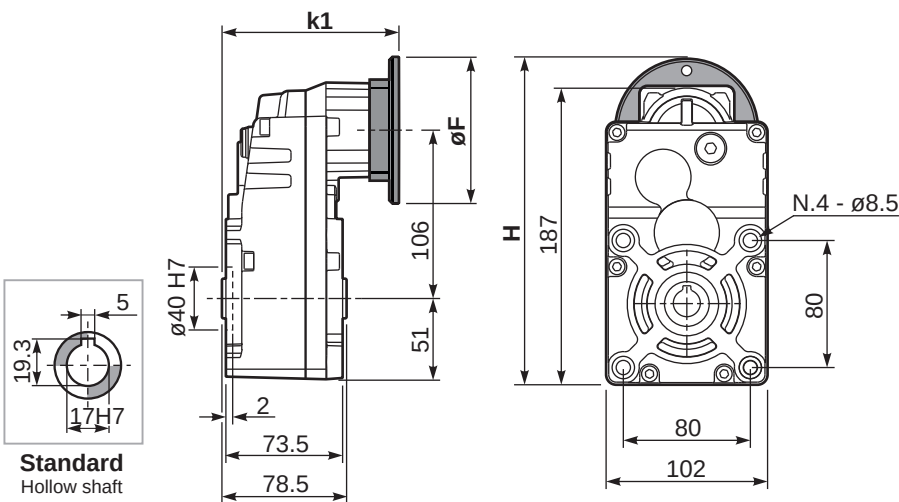
n_1	FA	FR
1400	140	700
900	160	800

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PFS10... Basic gearbox
Riduttore base

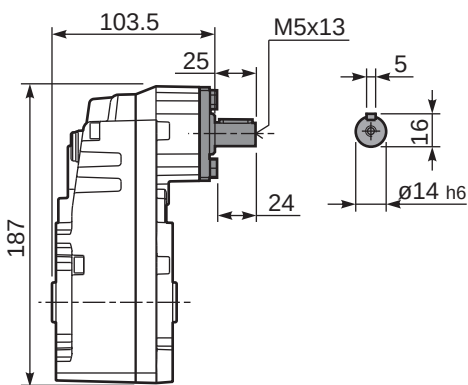
Gearbox
weight
peso riduttore **3.1 kg**



B14 Motor Flanges	H	ϕF	k1	kit code
56 B14	197	80	109.3	KC40.4.049
63 B14	202	90	111.8	K050.4.047
71 B14	209.5	105	109.3	K050.4.045

B5 Motor Flanges	H	ϕF	k1	kit code
63 B5	226	138	111.8	K050.4.041
71 B5	237	160	109.3	K050.4.042

RFS10... Input Shaft
Albero in entrata



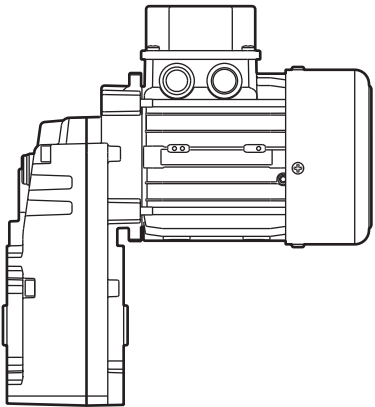
Available with integrated motor

Disponibile con motore integrato

Motor sizes available :
Grandezza motore disponibile:

- 56 IEC
- 63 IEC

For more information, contact us.
Per maggiori informazioni, contattaci.





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Hollow Shaft 	Ratios code 
							-B	-C	-O	-P	-Q		
24.2	57.95	0.25	93	1.0	0.24	90	63	71	56	63	71	2844	01
13.4	104.80	0.12	83	1.1	0.13	90			C	C		1954	02
11.5	121.47	0.12	96	0.9	0.12	90			C	C		1756	03
9.8	142.59	0.09	90	1.0	0.10	90			C	C		1558	04
8.2	170.20	0.06	70	1.3	0.08	90			C	C		1360	05
6.0	232.32	0.06	96	0.9	0.06	90			C	C		1063	06
4.6	303.20	0.06*	126	0.7	0.05	90			C	C		974	07
3.5	400.37	0.06*	166	0.5	0.04	90			C	C		776	08

The dynamic efficiency is **0.94** for all ratios * Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FS20** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FS20** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FS20** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FS20** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FS20** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION FS20 Oil Quantity 0.50 Lt.

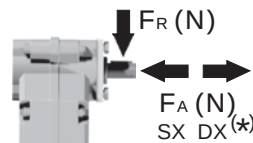
AGIP Telium VSF 320

SHELL Omala S4 WE 320

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RADIAL LOADS

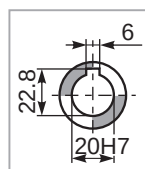
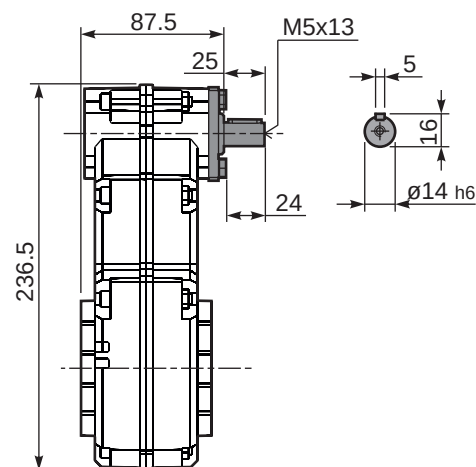
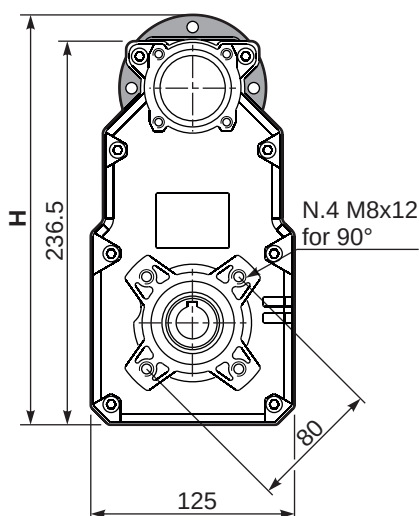
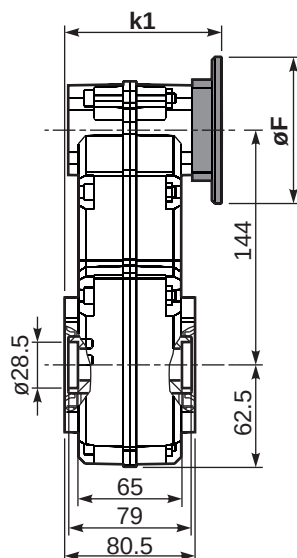
Input shaft
Albero in entrata



n_1	FA	FR
1400	140	700
900	160	800

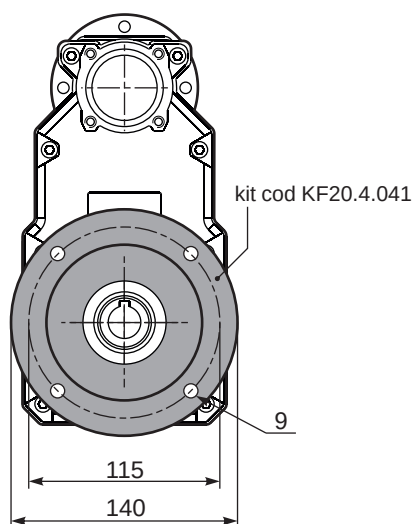
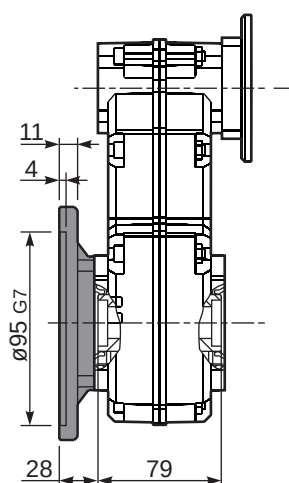
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PFS20...Basic gearbox
Riduttore baseGearbox
weight
peso riduttore**4.3 kg****RFS20...**Input Shaft
Albero in entrata**Standard**
Hollow shaft

B14 Motor Flanges	H	øF	k1	kit code
56 B14	246.5	80	94.3	KC40.4.049
63 B14	251.5	90	96.8	K050.4.047
71 B14	259	105	94.3	K050.4.045

B5 Motor Flanges	H	øF	k1	kit code
63 B5	275.5	138	96.8	K050.4.041
71 B5	286.5	160	94.3	K050.4.042

PFS20-FOutput flange
flangia di uscita



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft  $\emptyset$	Ratios code 
							-B	-C	-D	-E	-F	-Q	-R	-T	-U		
							63	71	80	90	100 112	71	80	90	100 112		
231	6.06	2.2	86	0.9	2.02	80	B					C	C			2821	01
150	9.31	1.5	91	1.0	1.48	90	B					C	C			2813	02
128	10.96	1.5	107	1.0	1.53	110	B					C	C			1921	03
110	12.71	1.5	124	1.0	1.50	125	B					C	C			1721	04
94	14.91	1.5	146	1.0	1.45	142	B					C	C			1521	05
83	16.83	1.5	165	0.9	1.36	150	B					C	C			1913	06
79	17.80	1.1	127	1.2	1.29	150	B					C	C			1321	07
72	19.51	1.1	140	1.1	1.17	150	B					C	C			1713	08
61	22.90	1.1	164	0.9	1.00	150	B					C	C			1513	09
58	24.30	1.1	174	0.9	0.94	150	B					C	C			1021	10
54	26.15	0.75	128	1.2	0.88	150	B					C	C			1910	11
51	27.34	0.75	134	1.1	0.84	150	B					C	C			1313	12
46.2	30.31	0.75	149	1.0	0.76	150	B					C	C			1710	13
44.1	31.71	0.75	156	1.0	0.72	150	B					C	C			921	14
39.4	35.57	0.75	175	0.9	0.64	150	B					C	C			1510	15
37.5	37.32	0.55	135	1.1	0.61	150	B					C	C			1013	16
33.0	42.46	0.55	154	1.0	0.54	150	B					C	C			1310	17
28.7	48.70	0.55	176	0.9	0.47	150	B					C	C			913	18
24.2	57.96	0.37	140	1.1	0.40	150	B					C	C			1010	19
21.8	64.31	0.37	156	1.0	0.36	150	B					C	C			713	20
18.5	75.64	0.25	124	1.2	0.30	150	B					C	C			910	21
14.0	99.89	0.25	163	0.9	0.23	150	B					C	C			710	22

The dynamic efficiency is 0.96 for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit FA32 is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore FA32 viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe FA32 ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur FA32 est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño FA32 se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio				
					
H1	H4	H3	H2	H5	H6
0.65 LT	0.50 LT	0.50 LT	0.60 LT	0.80 LT	0.65 LT
SHELL Omala S4 WE 320			ENI Telium VSF 320		

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tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

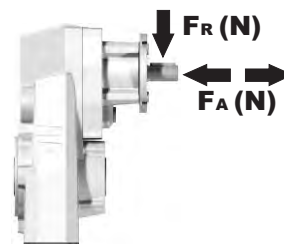


n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
300	250	1250	140	360	1800	70	470	2350
250	270	1350	120	380	1900	40	550	2750
200	320	1600	85	440	2200	15	560	2800

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

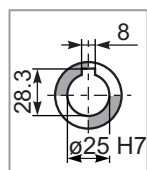
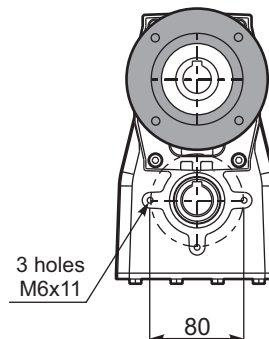
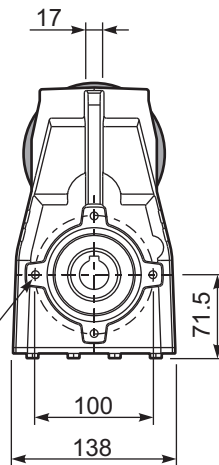
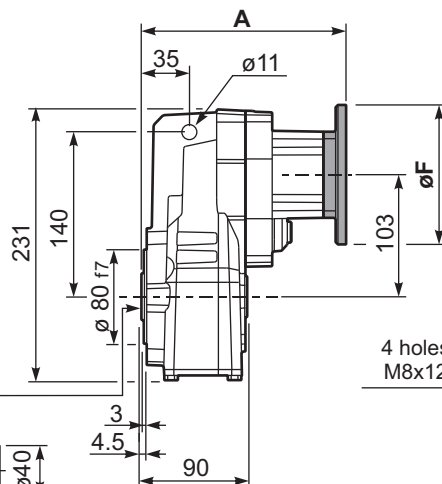
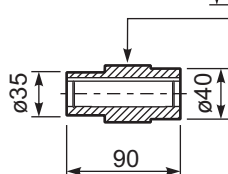
tab. 2

PFA32C...

Basic gearbox
Riduttore baseGearbox
weight
peso riduttore

7.0 kg

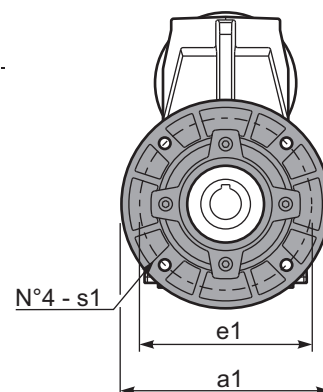
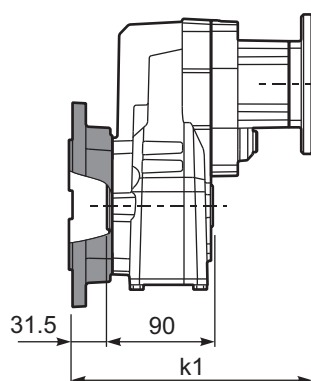
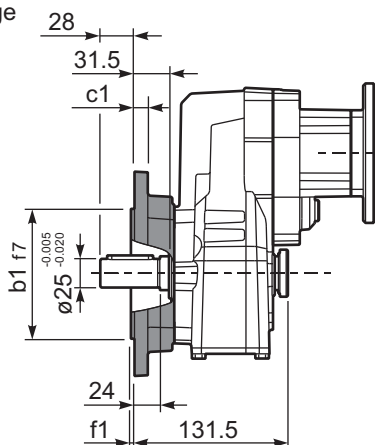
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	176.5
71B5	K063.4.042	160	174.5
80/90B5	K063.4.043	200	176.5
100/112B5	KC40.4.043	250	191.5
71B14	K063.4.047	105	174.5
80B14	K063.4.046	120	176.5
90B14	K063.4.041	140	176.5
100/112B14	KC40.4.041	160	191.5

Standard
Hollow shaft

PFA32...-F...

Output flange
Flangia uscita

Motor Flange	k1
63B5	208
71B5	206
80/90B5	208
100/112B5	223
71B14	206
80B14	208
90B14	208
100/112B14	223

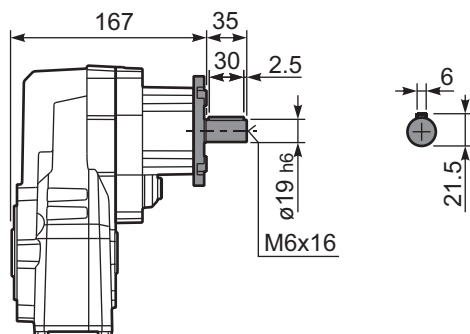


Available output flanges

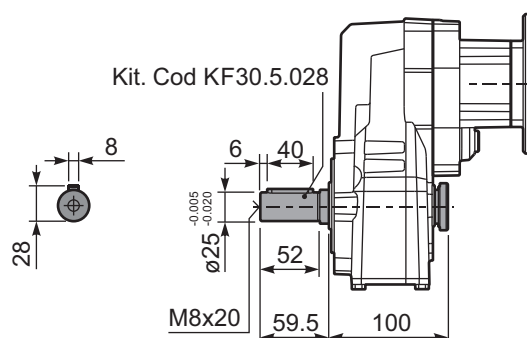
Flange di uscita

a1 ø	b1	c1	e1	f1	s1	Kit code
160	110	10	130	3	9	KX4A.9.010
200	130	11	165	3.5	11	KX4A.9.011
-	-	-	-	-	-	-

RFA32C...

Input Shaft
Albero in entrata

PFA32 A...

Single output shaft
Albero uscita semplice



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft  $\varnothing$	Ratios code 
							-B	-C	-O	-P	-Q		
63							63	71	56	63	71		
13.6	102.57	0.25	164	0.9	0.23	150			C	C		131710	01
12.6	110.77	0.18	136	1.1	0.21	150			C	C		91321	02
11.8	118.89	0.18	145	1.0	0.20	150			C	C		151310	03
10.9	128.49	0.18	157	1.0	0.18	150			C	C		101313	04
9.7	143.72	0.18	176	0.9	0.16	150			C	C		131310	05
8.7	161.67	0.12	128	1.2	0.14	150			C	C		71713	06
8.2	170.10	0.12	134	1.1	0.14	150			C	C		91313	07
7.4	188.57	0.12	149	1.0	0.12	150			C	C		91710	08
7.0	199.57	0.12	158	1.0	0.12	150			C	C		101310	09
6.2	226.51	0.09	143	1.1	0.10	150			C	C		71313	10
5.6	251.11	0.09	158	0.9	0.09	150			C	C		71710	11
5.3	264.21	0.09	167	0.9	0.09	150			C	C		91310	12
4.7	298.01	0.06	123	1.2	0.08	150			C	C		61710	13
4.0	351.82	0.06	146	1.0	0.07	150			C	C		71310	14
3.4	417.54	0.06	173	0.9	0.06	150			C	C		61310	15

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FA33** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FA33** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA33** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA33** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FA33** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio				
					
H1	H4	H3	H2	H5	H6
0.90 LT	0.55 LT	0.55 LT	0.65 LT	0.95 LT	0.70 LT
SHELL Omala S4 WE 320			ENI Telium VSF 320		

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tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$F_{eq} = F_R \cdot \frac{106}{X+80}$$

F_R (N)
 F_A (N)

F_{eq} (N)
 X

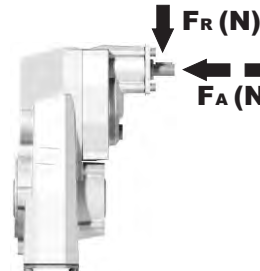
n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
300	250	1250	140	360	1800	70	470	2350
250	270	1350	120	380	1900	40	550	2750
200	320	1600	85	440	2200	15	560	2800

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata

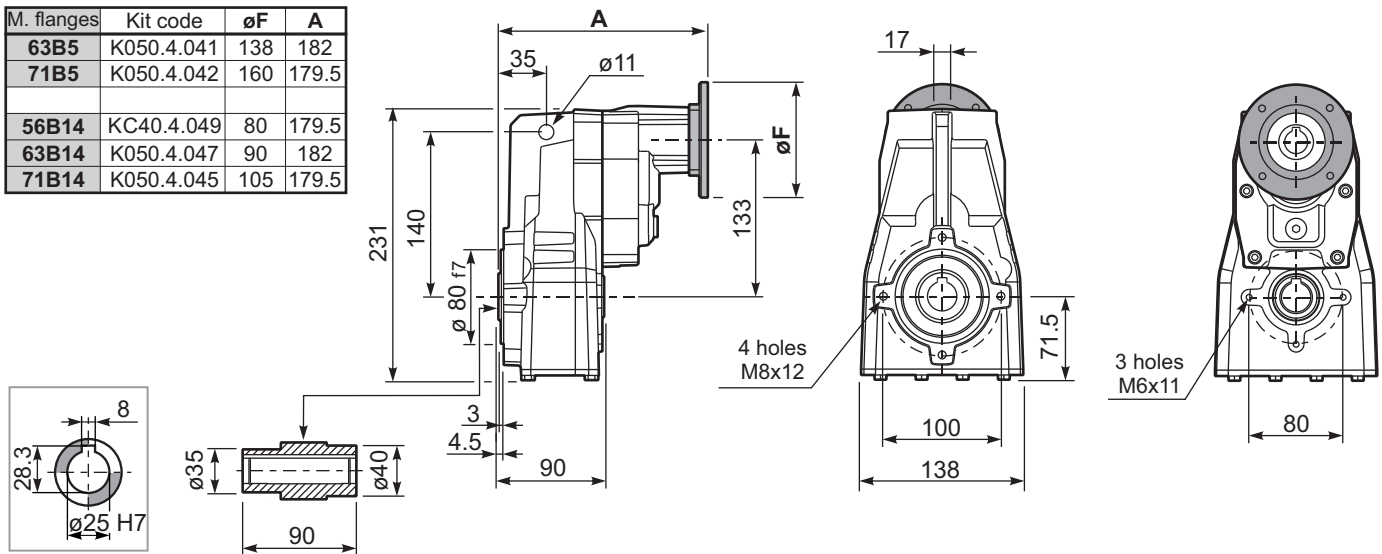


n_1	FA	FR
1400	140	700
900	160	800
500	190	950

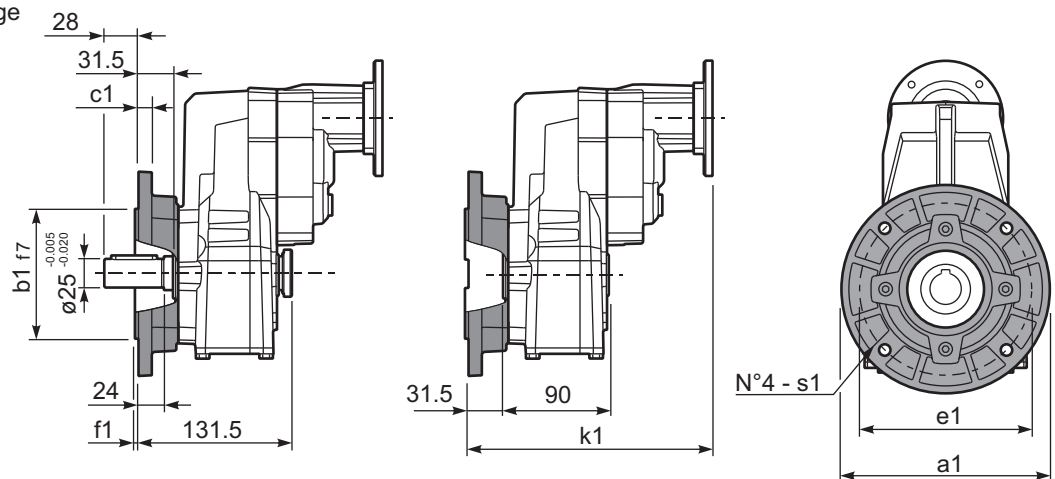
tab. 2

PFA33C...Basic gearbox
Riduttore baseGearbox
weight
peso riduttore**7.0 kg**

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	182
71B5	K050.4.042	160	179.5
56B14	KC40.4.049	80	179.5
63B14	K050.4.047	90	182
71B14	K050.4.045	105	179.5

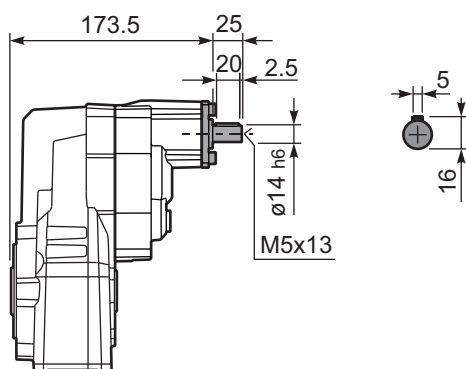
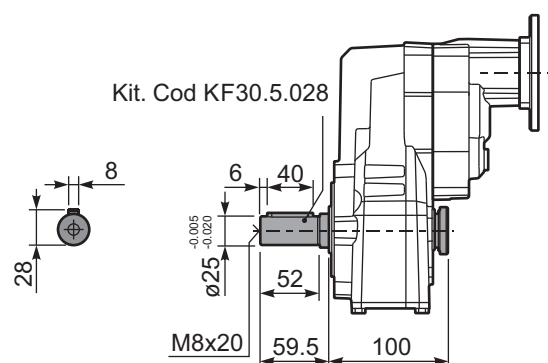
**Standard**
Hollow shaft**PFA33...-F...**Output flange
Flangia uscita

Motor Flange	k1
63B5	213.5
71B5	211
56B14	211
63B14	213.5
71B14	211

**Available output flanges**

Flange di uscita

a1 ø	b1	c1	e1	f1	s1	Kit code
160	110	10	130	3	9	KX4A.9.010
200	130	11	165	3.5	11	KX4A.9.011
-	-	-	-	-	-	-

RFA33C...Input Shaft
Albero in entrata**PFA33 A...**Single output shaft
Albero uscita semplice

Kit. Cod KF30.5.028



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges			Available B14 motor flanges			Output Shaft 	Ratios code
							-D	-E	-F	-R	-T	-U		
481	2.91	4	76	1.8	7.2	140	80	90	100	80	90	100	3499	01
373	3.75	4	98	1.6	6.4	160	80	90	100	80	90	100	28105	02
263	5.33	4	140	1.2	4.8	170	80	90	100	80	90	100	21112	03
219	6.39	4	167	1.0	4.0	170	80	90	100	80	90	100	18115	04
178	7.85	4	205	1.1	4.3	225	80	90	100	80	90	100	13102	05

The dynamic efficiency is **0.98** for all ratios

On request

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FA41** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FA41** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA41** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA41** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FA41** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

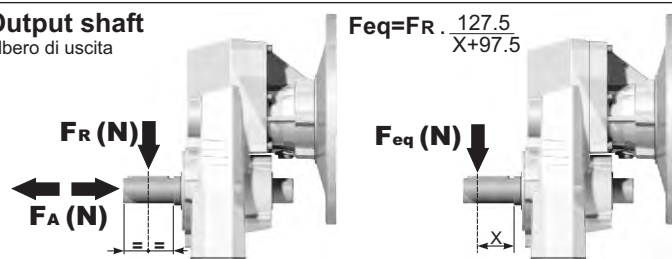
Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio				
1.10 LT	0.65 LT	0.65 LT	0.65 LT	1.15 LT	0.80 LT
SHELL Omala S4 WE 320			ENI Telium VSF 320		

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tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
300	300	1500	140	390	1950	70	490	2450
250	320	1600	120	410	2050	40	590	2950
200	350	1750	85	460	2300	15	800	4000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

Gearbox weight peso riduttore	12.1 kg
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On request
A richiesta

kit cod KX5A.5.028

Technical drawing showing the assembly of the KX5A.5.028 kit. The drawing includes the following dimensions and specifications:

- Overall width: 134
- Distance from the left edge to the center of the mounting hole: 68
- Distance from the center of the mounting hole to the right edge of the mounting plate: 60
- Distance from the center of the mounting hole to the center of the mounting plate: 50
- Distance from the center of the mounting hole to the center of the mounting plate (with tolerance): $50^{+0.005}_{-0.020}$
- Distance from the center of the mounting hole to the center of the mounting plate (with tolerance): $33^{+0.005}_{-0.020}$
- Distance from the center of the mounting hole to the center of the mounting plate (with tolerance): $8^{+0.005}_{-0.020}$
- Mounting hole diameter: $\varnothing 30$
- Mounting plate diameter: $\varnothing 30$
- Mounting plate thickness: 5
- Mounting plate material: M8x20



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges					Output Shaft 	Ratios code
							-B	-C	-D	-E	-F	-Q	-R	-T	-U			
							63	71	80	90	100 112	71	80	90	100 112			
167	8.38	4	215	1.0	4.1	225	B					C	C			2821		01
139	10.04	3	194	1.2	3.7	240	B					C	C			2818		02
114	12.33	3	238	1.1	3.2	260	B					C	C			2813		03
92	15.16	2.2	215	1.2	2.6	260	B					C	C			1921		04
80	17.57	2.2	250	1.1	2.3	270	B					C	C			1721		05
77	18.16	2.2	258	1.1	2.4	290	B					C	C			1918		06
67	21.05	2.2	299	1.1	2.3	320	B					C	C			1718		07
63	22.30	2.2	317	1.0	2.2	320	B					C	C			1913	standard ø30	08
57	24.70	1.5	242	1.3	2.0	320	B					C	C			1518		09
54	25.85	1.5	253	1.3	1.9	320	B					C	C			1713		10
47.5	29.49	1.5	289	1.1	1.7	320	B					C	C			1318	ø25	11
46.1	30.34	1.5	297	1.1	1.6	320	B					C	C			1513	ø35	12
41.7	33.60	1.1	240	1.0	1.1	250	B					C	C			1021	On request	13
38.7	36.21	1.1	259	1.2	1.3	320	B					C	C			1313		14
34.8	40.25	1.1	288	1.0	1.1	300	B					C	C			1018		15
28.3	49.43	1.1	354	0.9	0.99	320	B					C	C			1013		16
26.7	52.53	0.75	258	1.0	0.76	260	B					C	C			918		17
21.7	64.51	0.75	317	1.0	0.75	315	B					C	C			913		18
20.2	69.37	0.37	168	1.1	0.42	190	B					C	C			718		19
16.4	85.19	0.37	206	1.1	0.41	230	B					C	C			713		20

The dynamic efficiency is 0.96 for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FA42** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FA42** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA42** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA42** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FA42** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio				
1.15 LT	0.70 LT	0.70 LT	0.70 LT	1.20 LT	0.80 LT
SHELL Omala S4 WE 320			ENI Telium VSF 320		

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$F_{eq} = F_R \cdot \frac{127.5}{X + 97.5}$$

F_R (N)
 F_A (N)

F_{eq} (N)
 X

n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
300	300	1500	140	390	1950	70	490	2450
250	320	1600	120	410	2050	40	590	2950
200	350	1750	85	460	2300	15	800	4000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

F_R (N)
 F_A (N)

n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

tab. 2

PFA42C...

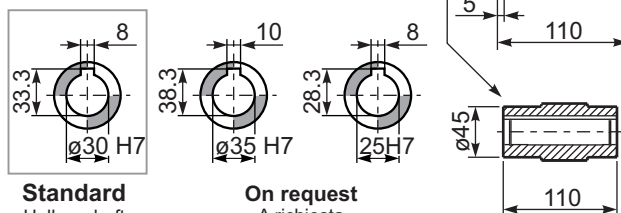
Basic gearbox
Riduttore baseGearbox
weight
peso riduttore

9.0 kg

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	169.5
71B5	K063.4.042	160	167.5
80/90B5	K063.4.043	200	169.5
100/112B5	KC40.4.043	250	184.5
71B14	K063.4.047	105	167.5
80B14	K063.4.046	120	169.5
90B14	K063.4.041	140	169.5
100/112B14	KC40.4.041	160	184.5

● Available torque arms,
see our web site

Bracci di reazione disponibili,
consulta il nostro sito web



Standard

Hollow shaft

On request

A richiesta

PFA42...-F...

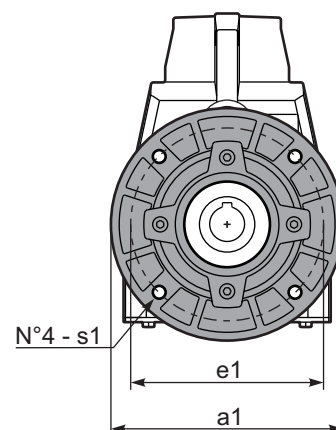
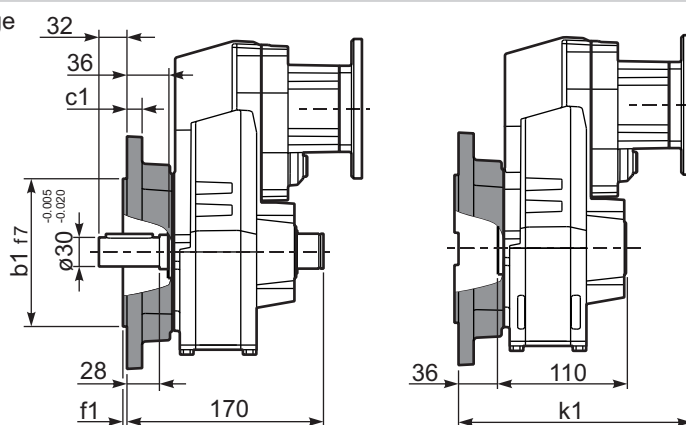
Output flange
Flangia uscita

Motor Flange	k1
63B5	205.5
71B5	203.5
80/90B5	205.5
100/112B5	220.5
71B14	203.5
80B14	205.5
90B14	205.5
100/112B14	220.5

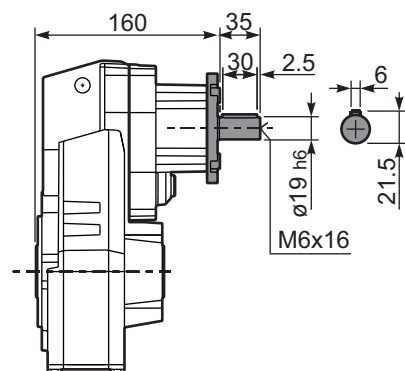
Available output flanges

Flange di uscita

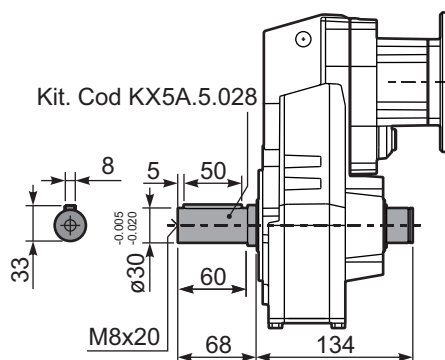
a1 ø	b1	c1	e1	f1	s1	Kit code
160	110	10	130	3	9	KX5A.9.010
200	130	13	165	3.5	11	KX5A.9.011
250	180	14	215	4	14	KX5A.9.012



RFA42C...

Input Shaft
Albero in entrata

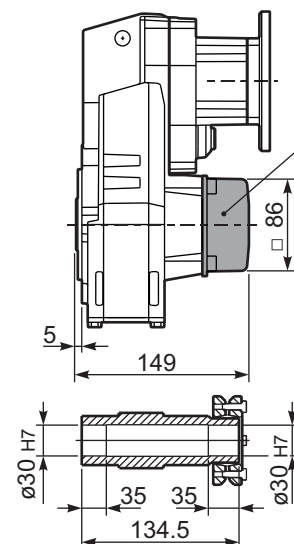
PFA42 A...

Single output shaft
Albero uscita semplice

PFA42D...

Shrink disk
Calettatore

Kit. Cod KF40.0.210LM





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft 	Ratios code
							-B	-C	-O	-P	-Q		
							63	71	56	63	71		
18.8	74.33	0.37	176	1.8	0.67	320			C	C		191313	01
17.0	82.56	0.37	196	1.6	0.60	320			C	C		151318	02
16.0	87.48	0.37	207	1.5	0.57	320			C	C		131713	03
13.8	101.40	0.37	240	1.3	0.49	320			C	C		151313	04
11.4	122.57	0.37	291	1.1	0.41	320			C	C		131313	05
10.1	138.59	0.37	329	1.0	0.36	320			C	C		101318	06
8.7	160.82	0.25	257	1.2	0.31	320			C	C		91713	07
8.2	170.20	0.25	272	1.2	0.29	320			C	C		101313	08
7.6	183.48	0.25	294	1.1	0.27	320			C	C		91318	09
6.5	214.15	0.18	262	1.2	0.23	320			C	C		71713	10
6.2	225.33	0.18	276	1.2	0.22	320			C	C		91313	11
5.7	244.32	0.18	299	1.1	0.20	320			C	C		71318	12
5.5	254.15	0.18	311	1.0	0.20	320			C	C		61713	13
4.8	289.96	0.18	355	0.9	0.17	320			C	C		61318	14
4.7	300.05	0.18	367	0.9	0.17	320			C	C		71313	15
3.9	356.09	0.12	282	1.1	0.14	320			C	C		61313	16

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FA43** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FA43** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA43** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA43** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FA43** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio				
					
H1	H4	H3	H2	H5	H6
1.30 LT	0.70 LT	0.70 LT	0.70 LT	1.35 LT	0.90 LT
SHELL Omala S4 WE 320			ENI Telium VSF 320		

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

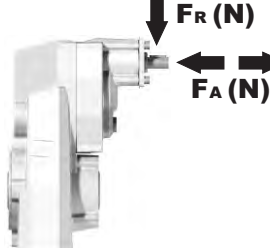
tab. 1

RADIAL AND AXIAL LOADS



n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
300	300	1500	140	390	1950	70	490	2450
250	320	1600	120	410	2050	40	590	2950
200	350	1750	85	460	2300	15	800	4000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft Albero in entrata			n_1	FA	FR
			1400	140	700
			900	160	800
			500	190	950

tab. 2

PFA43C...

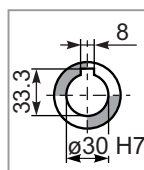
Basic gearbox
Riduttore baseGearbox
weight
peso riduttore

8.9 kg

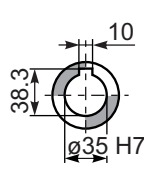
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	175
71B5	K050.4.042	160	172.5
56B14	KC40.4.049	80	172.5
63B14	K050.4.047	90	175
71B14	K050.4.045	105	172.5

- Available torque arms,
see our web site

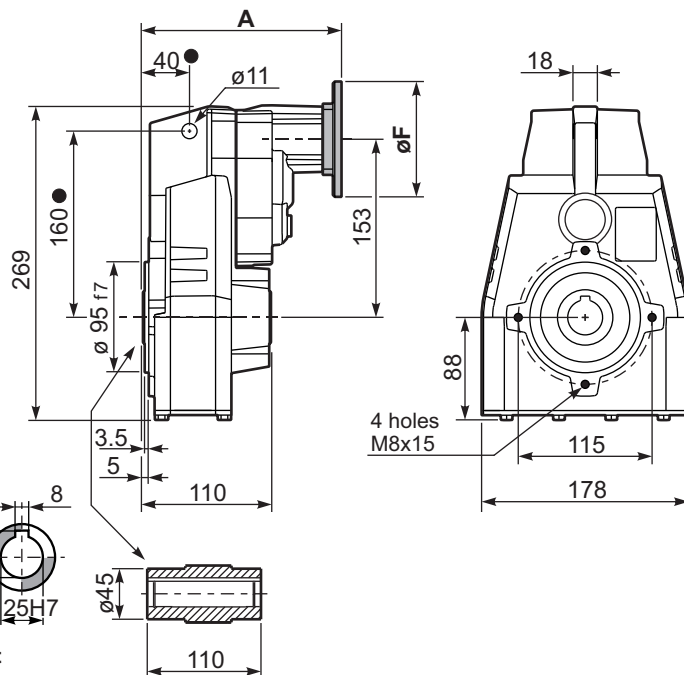
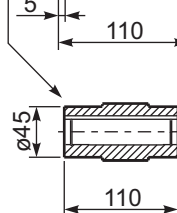
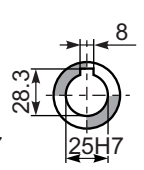
Bracci di reazione disponibili,
consulta il nostro sito web



Standard
Hollow shaft



On request
A richiesta



PFA43...-F...

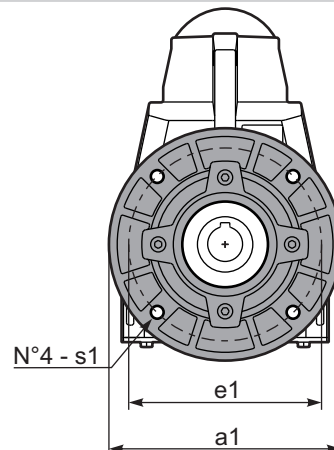
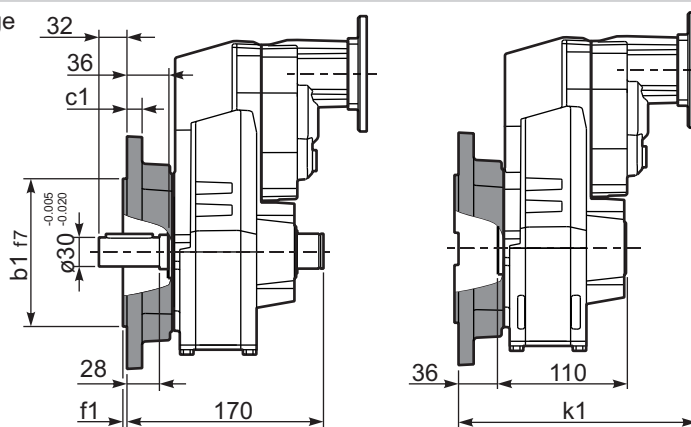
Output flange
Flangia uscita

Motor Flange	k1
63B5	211
71B5	208.5
56B14	208.5
63B14	211
71B14	208.5

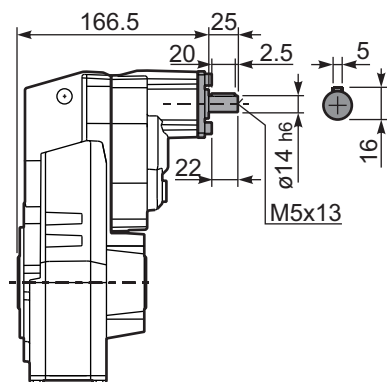
Available output flanges

Flange di uscita

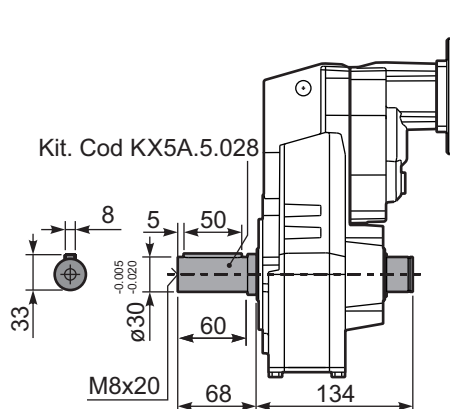
a1 ø	b1	c1	e1	f1	s1	Kit code
160	110	10	130	3	9	KX5A.9.010
200	130	13	165	3.5	11	KX5A.9.011
250	180	14	215	4	14	KX5A.9.012



RFA43C...

Input Shaft
Albero in entrata

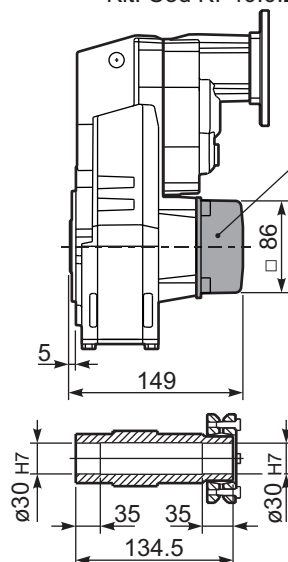
PFA43 A...

Single output shaft
Albero uscita semplice

PFA43D...

Shrink disk
Calettatore

Kit. Cod KF40.0.210LM





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Ratios code 
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100 112	132	80	90	100 112	132		
213	6.57	5.5	230	1.2	6.5	280	B									3018	01
185	7.56	5.5	265	1.1	5.9	290	B									3016	02
159	8.82	5.5	309	1.0	5.5	320	B									3014	03
113	12.39	5.5	434	1.0	5.5	450	B									2018	04
98	14.24	5.5	499	0.9	4.8	450	B									2016	05
84	16.75	4	429	1.1	4.3	470	B									1618	06
73	19.25	4	494	1.0	3.9	490	B									1616	07
64	21.78	4	558	0.9	3.4	490	B									1318	08
56	25.04	3	483	1.0	3.0	490	B									1316	09
47.9	29.23	3	564	0.9	2.6	490	B									1314	10
45.7	30.65	2.2	436	1.1	2.4	490	B									1116	11
39.1	35.78	2.2	509	1.0	2.1	490	B									1114	12
36.3	38.55	2.2	548	0.9	1.9	490	B									818	13
31.6	44.32	1.5	434	1.1	1.7	490	B									816	14
27.1	51.74	1.5	507	1.0	1.4	490	B									814	15
22.9	61.03	1.1	437	1.1	1.2	480	B									616	16
19.6	71.25	1.1	510	1.0	1.1	490	B									614	17

The dynamic efficiency is 0.96 for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FA52** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FA52** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA52** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA52** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FA52** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio				
					
1.85 LT	1.15 LT	1.15 LT	1.30 LT	2.10 LT	1.30 LT
SHELL Omala S4 WE 320			ENI Telium VSF 320		

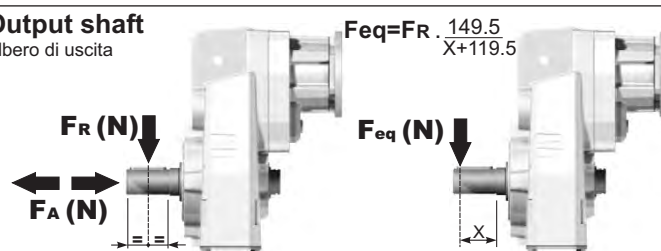
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



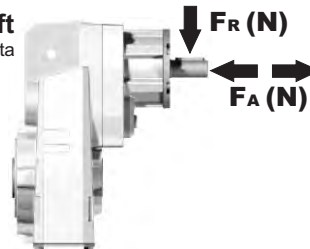
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	400	2000	140	460	2300	70	580	2900
250	420	2100	120	500	2500	40	780	3900
200	440	2200	85	550	2750	15	1140	5700

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata



n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

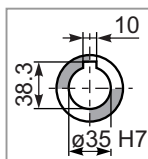
PFA52C...

Basic gearbox
Riduttore baseGearbox
weight
peso riduttore **15.5 kg**

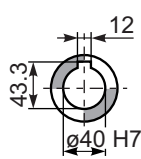
M. flanges	Kit code	øF	A
71B5	K023.4.041	160	227
80/90B5	K023.4.042	200	229
100/112B5	K023.4.043	250	238
132B5	KC50.4.043	300	256
80B14	K085.4.046	120	229
90B14	K085.4.045	140	229
100/112B14	K085.4.047	160	238
132B14	KC50.4.041	200	256

- Available torque arms,
see our web site

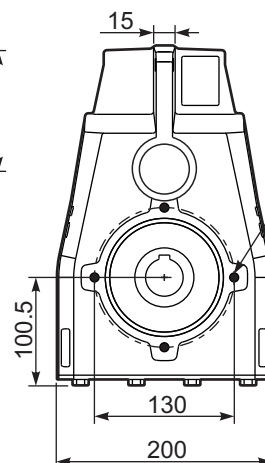
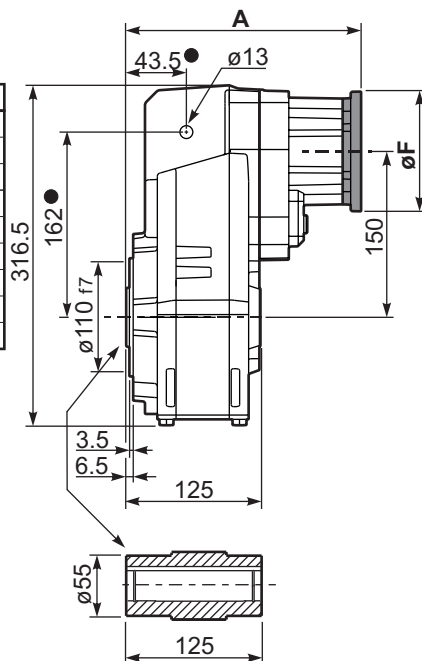
Bracci di reazione disponibili,
consulta il nostro sito web



Standard
Hollow shaft

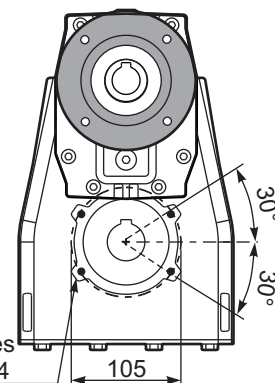


On request
A richiesta



4 holes
M10x20

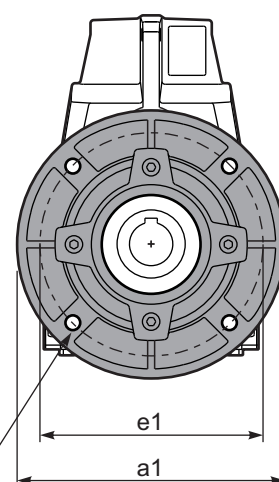
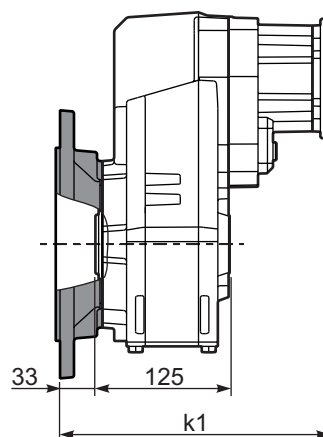
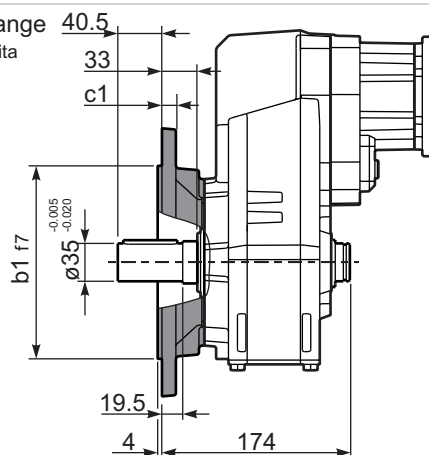
4 holes
M8x14



PFA52...-F...

Output flange
Flangia uscita

M. flanges	k1
71B5	260
80/90B5	262
100/112B5	271
132B5	289
80B14	262
90B14	262
100/112B14	271
132B14	289

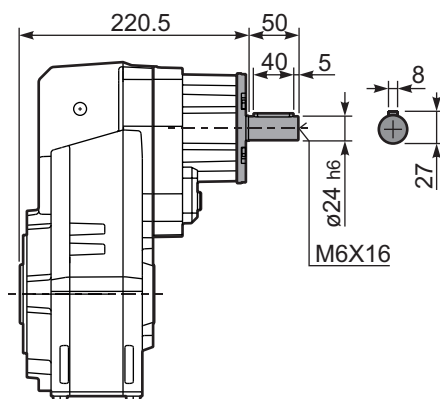


Available output flanges

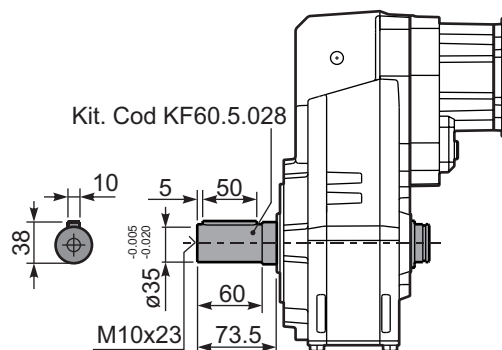
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
-	-	-	-	-	-

RFA52C...

Input Shaft
Albero in entrata

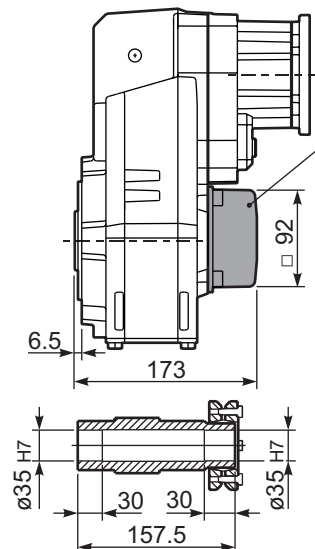
PFA52 A...

Single output shaft
Albero uscita semplice

PFA52D...

Shrink disk
Calettatore

Kit. Cod KF60.0.210LM





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges				Output Shaft 	Ratios code
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
22.6	61.89	1.1	434	1.2	1.3	510	B				C	C		191318	standard ø35 ø40 On request	01
19.7	71.16	1.1	499	1.0	1.1	510	B				C	C		191316		02
17.0	82.48	1.1	578	0.9	0.96	510	B				C	C		171316		03
14.5	96.29	0.75	463	1.1	0.83	510	B				C	C		171314		04
13.9	100.51	0.75	483	1.1	0.79	510	B				C	C		131318		05
12.1	115.56	0.55	410	1.2	0.69	510	B				C	C		131316		06
11.1	125.96	0.55	447	1.1	0.63	510	B				C	C		190816		07
10.4	134.91	0.55	479	1.1	0.59	510	B				C	C		131314		08
9.5	147.05	0.55	522	1.0	0.54	510	B				C	C		190814		09
8.2	170.44	0.37	404	1.3	0.47	510	B				C	C		170814		10
7.6	184.15	0.37	437	1.2	0.43	510	B				C	C		101314		11
6.8	205.87	0.37	488	1.0	0.39	510	B				C	C		91316		12
5.8	240.34	0.37	570	0.9	0.33	510	B				C	C		91314		13
5.0	279.22	0.25	447	1.1	0.28	510	B				C	C		100816		14
4.3	325.97	0.25	522	1.0	0.24	510	B				C	C		100814		15
3.8	364.41	0.18	446	1.1	0.22	510	B				C	C		90816		16
3.3	425.43	0.18	521	1.0	0.19	510	B				C	C		90814		17
2.9	481.19	0.18	589	0.9	0.17	510	B				C	C		70816		18
2.5	561.76	0.12	444	1.1	0.14	510	B				C	C		70814		19

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FA53** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FA53** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA53** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA53** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FA53** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio				
2.15 LT	1.25 LT	1.25 LT	1.45 LT	2.35 LT	1.45 LT
SHELL Omala S4 WE 320			ENI Telium VSF 320		

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS									
Output shaft Albero di uscita		$F_{eq} = F_R \cdot \frac{149.5}{X+119.5}$							
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR	
300	400	2000	140	460	2300	70	580	2900	
250	420	2100	120	500	2500	40	780	3900	
200	440	2200	85	550	2750	15	1140	5700	
On request reinforced bearings to increase loads. A richiesta cuscinetti rinforzati per aumentare i carichi.									
Input shaft Albero in entrata									
n_1	FA	FR	n_1	FA	FR	n_1	FA	FR	
1400	240	1200	900	280	1400	500	340	1700	

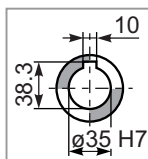
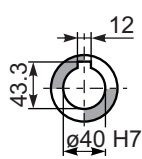
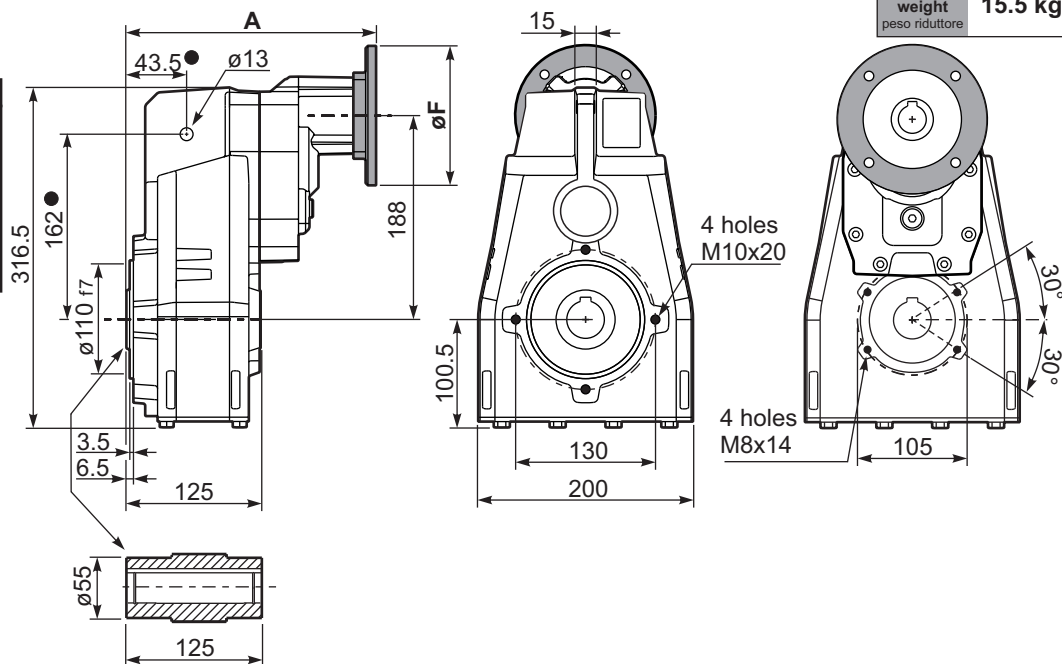
tab. 2

PFA53C...

Basic gearbox
Riduttore baseGearbox weight
peso riduttore **15.5 kg**

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	239
71B5	K063.4.042	160	237
80/90B5	K063.4.043	200	239
71B14	K063.4.047	105	237
80B14	K063.4.046	120	239
90B14	K063.4.041	140	239

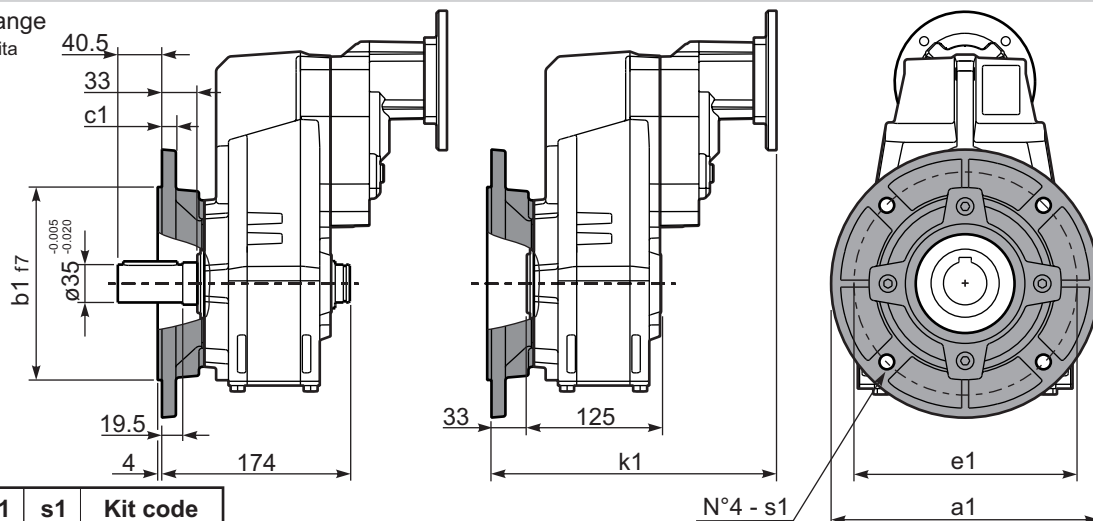
- Available torque arms,
see our web site
Bracci di reazione disponibili,
consulta il nostro sito web

Standard
Hollow shaftOn request
A richiesta

PFA53...-F...

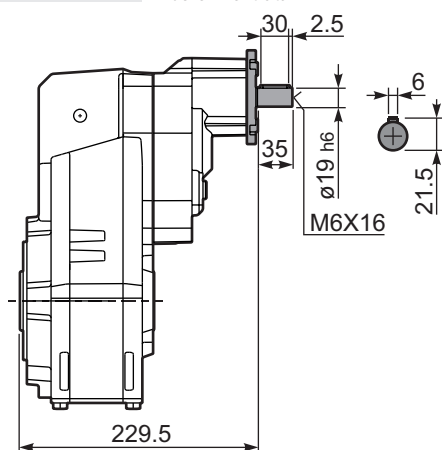
Output flange
Flangia uscita

Motor Flange	k1
63B5	272
71B5	270
80/90B5	272
71B14	270
80B14	272
90B14	272

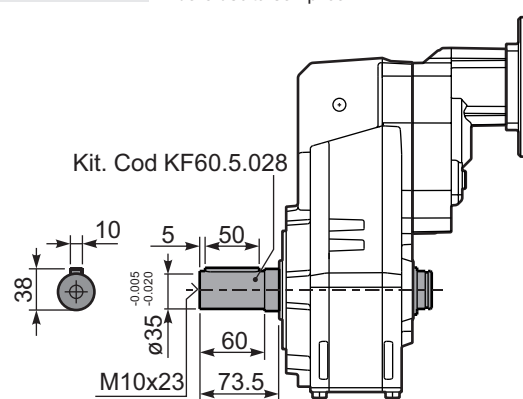
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
-	-	-	-	-	-

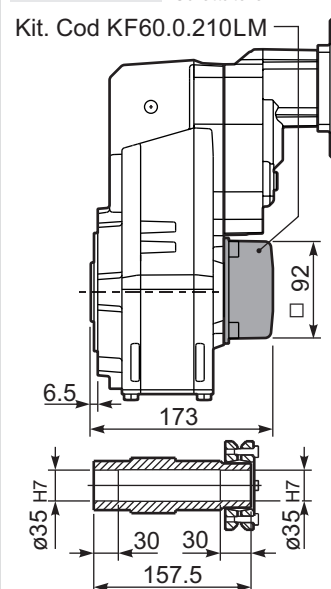
RFA53C...

Input Shaft
Albero in entrata

PFA53 A...

Single output shaft
Albero uscita semplice

PFA53D...

Shrink disk
Calettatore



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -G 132	B14 motor flanges - - - - - - - -	Output Shaft Ratios code
507	2.76	9	166	1.6	14.4	265	not available	not available	2980 standard 01
395	3.54	9	213	1.3	11.6	275			2485 ø35 02
277	5.06	9	304	1.0	8.6	290			1891 ø40 03
241	5.81	7.5	281	1.2	8.5	330			1693 On request 04
206	6.79	7.5	329	1.2	8.4	380			1495 On request 05

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FC61** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FC61** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FC61** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FC61** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FC61** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio				
H1	H4	H3	H2	H5	H6
2.05 LT	1.25 LT	1.25 LT	1.40 LT	2.05 LT	1.40 LT
SHELL Omala S4 WE 320			ENI Telium VSF 320		

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$F_{eq} = F_R \cdot \frac{149.5}{X + 119.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	600	3000	140	720	3600	70	940	4700
250	640	3200	120	740	3700	40	1220	6100
200	690	3460	85	860	4300	15	1300	6500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

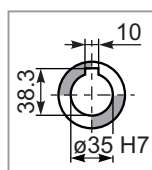
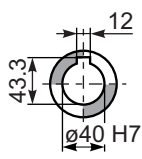
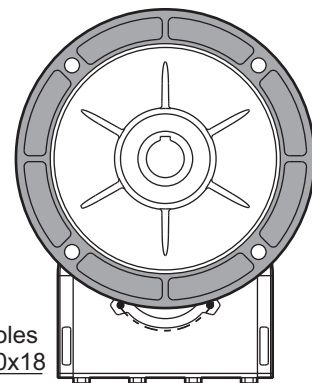
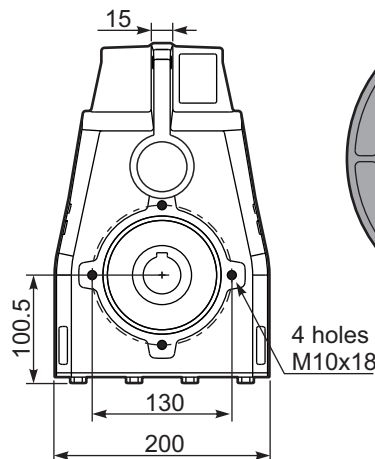
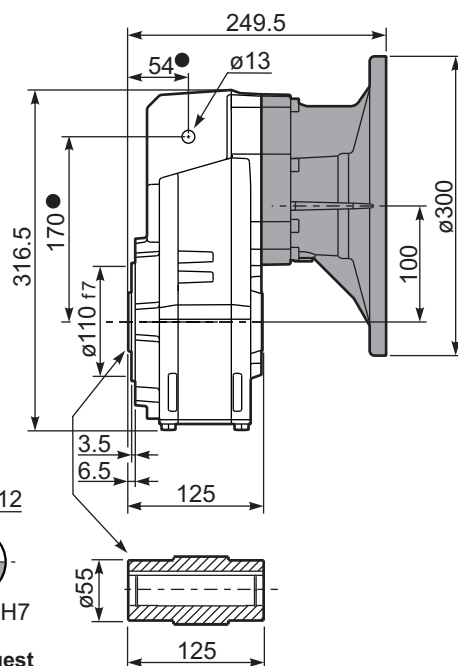
tab. 2

PFC61C...

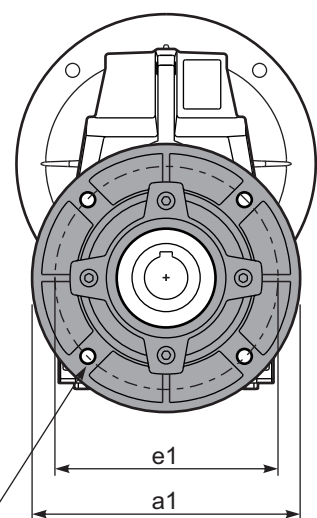
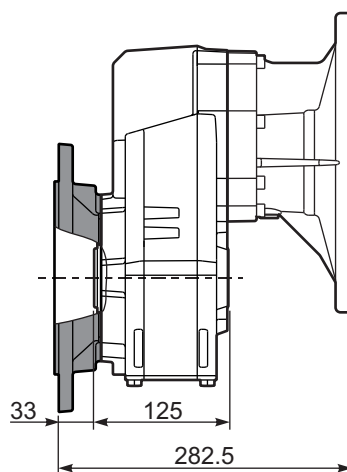
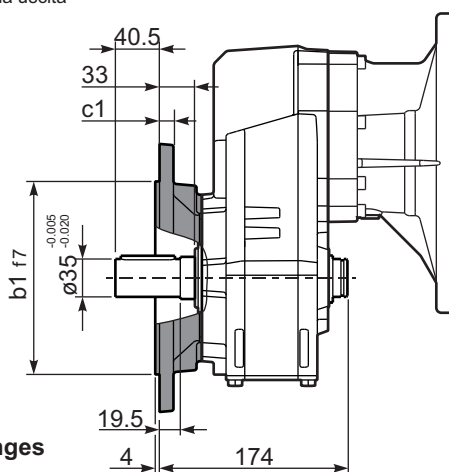
Basic gearbox
Riduttore baseGearbox
weight
peso riduttore

31.0 kg

- Available torque arms,
see our web site

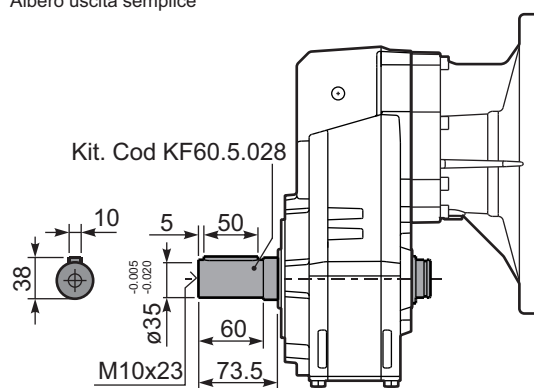
Bracci di reazione disponibili,
consulta il nostro sito webStandard
Hollow shaftOn request
A richiesta

PFC61...-F...

Output flange
Flangia uscitaAvailable output flanges
Flange di uscita

a1 Ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
-	-	-	-	-	-

PFC61 A...

Single output shaft
Albero uscita semplice

Kit. Cod KF60.5.028



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges					Output Shaft 	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V			
							71	80	90	100 112	132	80	90	100 112	132			
213	6.57	7.5	312	1.2	8.8	380	B										3018	01
185	7.56	7.5	358	1.1	7.9	390	B										3016	02
159	8.82	7.5	419	1.0	7.1	410	B										3014	03
113	12.39	7.5	588	1.0	7.2	580	B										2018	04
98	14.24	5.5	499	1.2	6.4	600	B										2016	05
84	16.75	5.5	587	1.1	6.1	665	B										1618	06
73	19.25	5.5	675	1.0	5.4	675	B										1616	07
64	21.78	4	558	1.2	4.7	675	B										1318	08
56	25.04	4	642	1.1	4.1	675	B										1316	09
47.9	29.23	4	750	0.9	3.5	675	B										1314	10
45.7	30.65	3	592	1.1	3.4	675	B										1116	11
39.1	35.78	3	691	1.0	2.9	675	B										1114	12
36.3	38.55	2.2	548	1.1	2.3	580	B										818	13
31.6	44.32	2.2	630	1.1	2.3	665	B										816	14
27.1	51.74	2.2	735	0.9	2.0	675	B										814	15
22.9	61.03	1.1	437	1.1	1.2	480	B										616	16
19.6	71.25	1.1	510	1.1	1.2	560	B										614	17

The dynamic efficiency is 0.96 for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FC62** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FC62** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FC62** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FC62** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FC62** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio				
H1	H4	H3	H2	H5	H6
2.05 LT	1.25 LT	1.25 LT	1.40 LT	2.20 LT	1.40 LT
SHELL Omala S4 WE 320			ENI Telium VSF 320		

For all details on lubrication and plugs check our website

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft Albero di uscita			F _{eq} =F _R · 149.5 X+119.5		
n_2	FA	FR	n_2	FA	FR
300	600	3000	140	720	3600
250	640	3200	120	740	3700
200	690	3460	85	860	4300
			70	940	4700
			40	1220	6100
			15	1300	6500

On request reinforced bearings to increase loads.

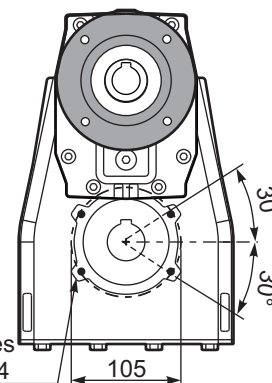
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft Albero in entrata					
n_1	FA	FR	n_1	FA	FR
1400	450	2250			
900	500	2500			
500	600	3000			

tab. 2

Gearbox weight peso riduttore	20.8 kg
---	----------------

On request
A richiesta



Technical drawing of the 1000 Series Servo Motor showing front and side views with dimensions.

Front View Dimensions:

- Overall width: 173
- Mounting flange width: 6.5
- Shaft diameter: $\varnothing 35$ H7
- Shaft length: 157.5
- Shaft section lengths: 30, 30, 30
- Shaft end diameter: $\varnothing 35$ H7

Side View Dimensions:

- Overall height: 92



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges				Output Shaft  ϕ	Ratios code 
							-B	-C	-D	-E	-Q	-R	-T			
22.6	61.89	1.5	594	1.1	1.7	675	B				C	C		191318	standard $\phi 35$	01
19.7	71.16	1.5	683	1.0	1.5	675	B				C	C		191316		02
17.0	82.48	1.5	792	0.9	1.3	675	B				C	C		171316		03
14.5	96.29	1.1	675	1.0	1.1	675	B				C	C		171314		04
13.9	100.51	1.1	705	1.0	1.0	675	B				C	C		131318		05
12.1	115.56	0.75	556	1.2	0.91	675	B				C	C		131316		06
11.1	125.96	0.75	606	1.1	0.82	665	B				C	C		190816		07
10.4	134.91	0.75	649	1.0	0.78	675	B				C	C		131314		08
9.5	147.05	0.75	707	1.0	0.72	675	B				C	C		190814		09
8.2	170.44	0.55	605	1.1	0.62	675	B				C	C		170814	$\phi 40$ On request	10
7.6	184.15	0.55	653	1.0	0.57	675	B				C	C		101314		11
6.8	205.87	0.55	730	0.9	0.51	675	B				C	C		91316		12
5.8	240.34	0.37	570	1.2	0.44	675	B				C	C		91314		13
5.0	279.22	0.37	662	1.0	0.37	665	B				C	C		100816		14
4.3	325.97	0.37	773	0.9	0.32	675	B				C	C		100814		15
3.8	364.41	0.25	583	1.1	0.28	665	B				C	C		90816		16
3.3	425.43	0.25	681	1.0	0.25	675	B				C	C		90814		17
2.9	481.19	0.18	589	1.1	0.22	665	B				C	C		70816		18
2.5	561.76	0.18	687	1.0	0.19	675	B				C	C		70814		19

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FC63** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FC63** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FC63** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FC63** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FC63** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio				
					
2.30 LT	1.35 LT	1.35 LT	1.55 LT	2.45 LT	1.55 LT
SHELL Omala S4 WE 320			ENI Telium VSF 320		

For all details on lubrication and plugs check our website

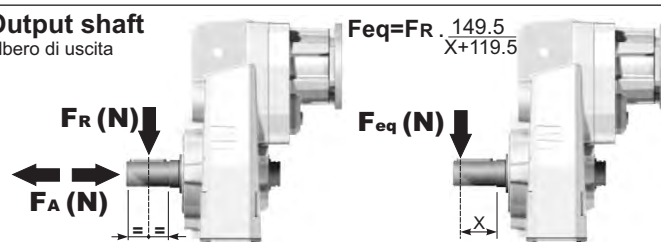
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



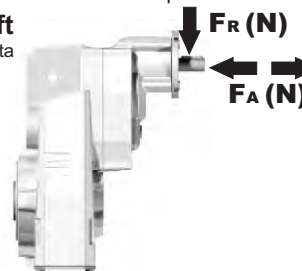
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	600	3000	140	720	3600	70	940	4700
250	640	3200	120	740	3700	40	1220	6100
200	690	3460	85	860	4300	15	1300	6500

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata



n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

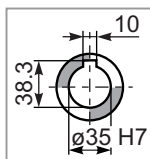
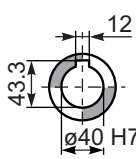
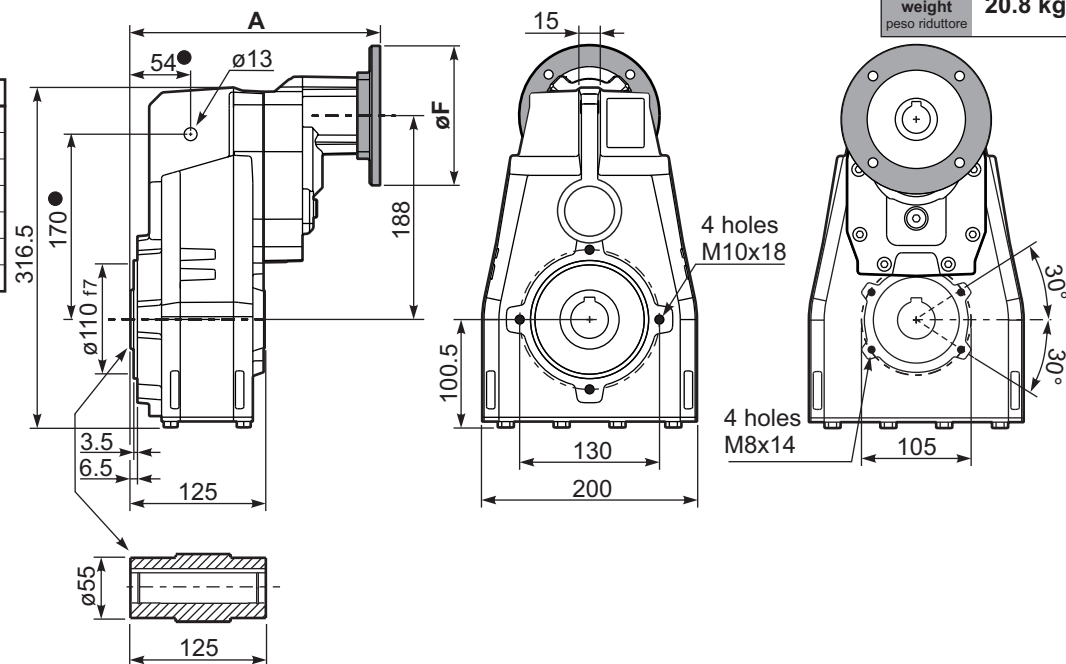
tab. 2

PFC63C...

Basic gearbox
Riduttore baseGearbox weight
peso riduttore 20.8 kg

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	239
71B5	K063.4.042	160	237
80/90B5	K063.4.043	200	239
71B14	K063.4.047	105	237
80B14	K063.4.046	120	239
90B14	K063.4.041	140	239

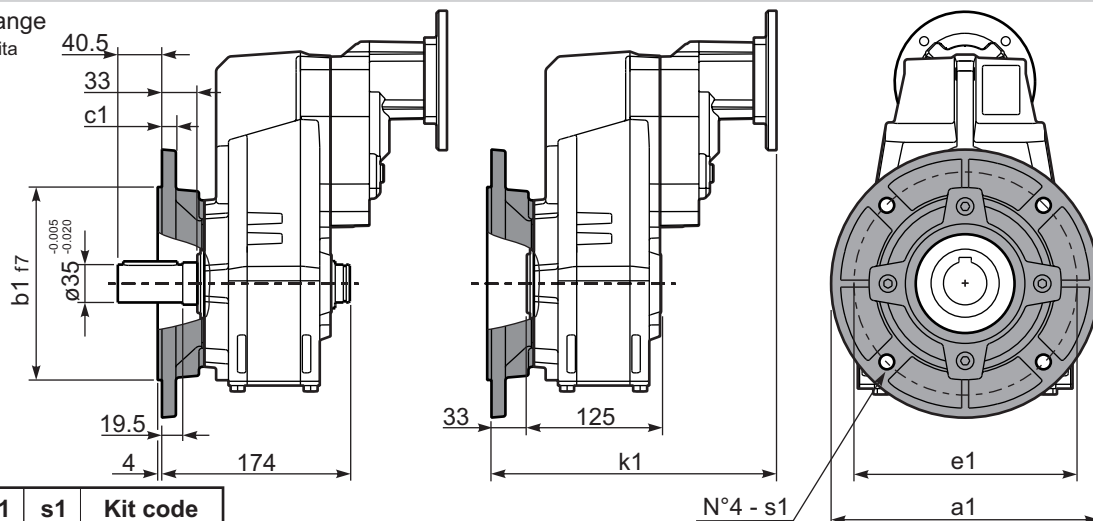
- Available torque arms,
see our web site
Bracci di reazione disponibili,
consulta il nostro sito web

Standard
Hollow shaftOn request
A richiesta

PFC63...-F...

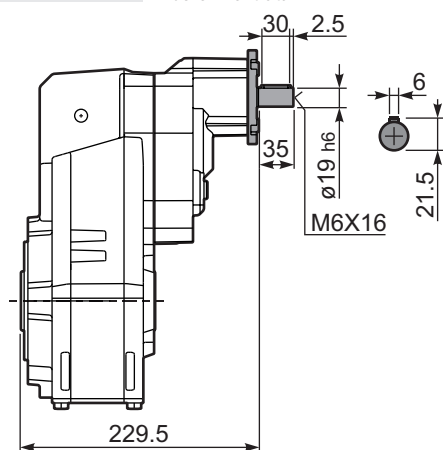
Output flange
Flangia uscita

Motor Flange	k1
63B5	272
71B5	270
80/90B5	272
71B14	270
80B14	272
90B14	272

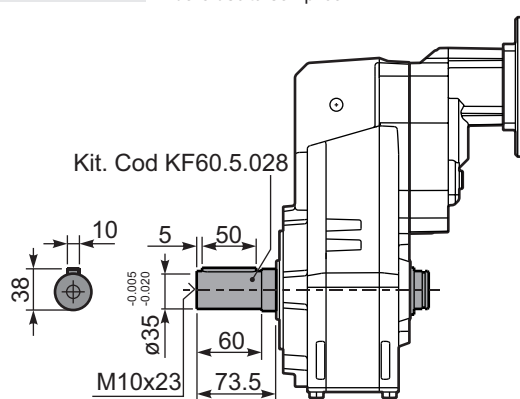
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
-	-	-	-	-	-

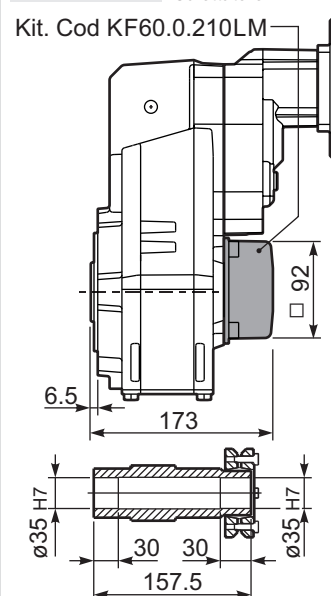
RFC63C...

Input Shaft
Albero in entrata

PFC63 A...

Single output shaft
Albero uscita semplice

PFC63D...

Shrink disk
Calettatore



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -G 132	B14 motor flanges - - - - - - - -	Output Shaft  standard ø40 ø45 On request	Ratios code 01 02 03
227	6.17	9	371	1.2	10.9	450			18111	01
198	7.06	9	425	1.4	12.7	600			16113	02
170	8.21	9	494	1.4	12.2	670		not available	14115	03

The dynamic efficiency is 0.98 for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FC71** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **FC71** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **FC71** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **FC71** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **FC71** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

					
H1	H4	H3	H2	H5	H6
3.30 LT	1.90 LT	1.90 LT	1.80 LT	3.30 LT	1.90 LT

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For all details on lubrication and plugs check our website

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$F_{eq} = F_R \cdot \frac{174.5}{X + 134.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	740	3700	140	860	4300	70	1020	5100
250	800	4000	120	900	4500	40	1300	6500
200	830	4150	85	970	4850	15	1700	8500

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

Gearbox weight peso riduttore	35.0 kg
---	----------------

-

Technical drawing of the N°4 - s1 pump assembly, showing three views: side, front, and top.

Side View Dimensions:

- 61
- 32.5
- c1
- b1 f7
- 19
- f1
- 176.5

Front View Dimensions:

- 32.5
- 144
- 293.5
- 176.5

Top View Dimensions:

- e1
- a1

Callout: N°4 - s1

a1 ø	b1	c1	e1	f1	s1	Kit code
250	180	13	215	3	14	KF70.9.011
300	230	16	265	4	14	KF70.9.012

Kit. Cod KF70.5.028

The technical drawing shows two views of the component:

- Top View (Left):** A circular flange with a central hole. Dimensions include a total diameter of 43 mm and a mounting hole diameter of 12 mm.
- Side View (Right):** Shows the profile of the component. Key dimensions include:
 - A vertical dimension of 5 mm from the base to the start of the main body.
 - An outer diameter of $\varnothing 40$ mm for the main body.
 - A horizontal length of 70 mm for the main body section.
 - A horizontal distance of 80 mm from the base to the end of the main body.
 - A total horizontal length of 93.5 mm from the base to the centerline.
 - Tolerances for the $\varnothing 40$ diameter are indicated as -0.008 and -0.025.

The bottom left corner specifies the thread type: **M12x32**.



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100 112	132	80	90	100 112	132		
175	8.02	9	473	1.1	9.9	520	B									3018	01
152	9.18	9	541	1.1	9.8	590	B									3016	02
131	10.68	9	630	1.1	9.7	680	B									3014	03
93	15.11	7.5	717	1.1	7.8	775	B									2018	04
81	17.30	7.5	821	1.1	7.8	885	B									2016	05
70	20.13	7.5	955	0.9	6.8	900	B									2014	06
60	23.39	5.5	820	1.1	5.9	900	B									1616	07
51	27.21	5.5	954	0.9	5.1	900	B									1614	08
46.0	30.42	4	780	1.2	4.5	900	B									1316	09
39.6	35.38	4	907	1.0	3.9	900	B									1314	10
37.6	37.24	3	719	1.2	3.7	895	B									1116	11
32.3	43.31	3	836	1.1	3.2	900	B									1114	12
29.8	47.02	2.2	668	1.1	2.3	705	B									818	13
26.0	53.85	2.2	765	1.1	2.3	810	B									816	14
22.4	62.63	2.2	890	1.0	2.2	900	B									814	15
18.9	74.16	1.1	531	1.1	1.2	585	B									616	16
16.2	86.25	1.1	617	1.1	1.2	680	B									614	17

The dynamic efficiency is 0.96 for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FC72** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **FC72** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **FC72** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **FC72** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **FC72** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

H1	H4	H3	H2	H5	H6
3.50 LT	1.90 LT	1.90 LT	1.80 LT	3.60 LT	1.90 LT

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For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

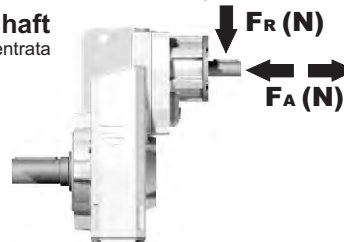


n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	740	3700	140	860	4300	70	1020	5100
250	800	4000	120	900	4500	40	1300	6500
200	830	4150	85	970	4850	15	1700	8500

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

30.5 kg

6



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft  $\varnothing$	Ratios code 
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
18.5	75.50	1.5	725	1.1	1.7	825	B				C	C		191318	01
16.2	86.47	1.5	830	1.1	1.6	900	B				C	C		191316	02
14.0	100.22	1.5	962	0.9	1.4	900	B				C	C		171316	03
12.0	116.56	1.1	817	1.1	1.2	900	B				C	C		171314	04
10.2	136.82	1.1	959	0.9	1.0	900	B				C	C		151314	05
9.1	153.05	0.75	736	1.1	0.83	810	B				C	C		190816	06
8.6	163.31	0.75	785	1.1	0.86	900	B				C	C		131314	07
7.9	178.01	0.75	856	1.1	0.79	900	B				C	C		190814	08
7.3	191.67	0.75	922	1.0	0.73	900	B				C	C		101316	09
6.8	206.32	0.75	992	0.9	0.68	900	B				C	C		170814	10
6.3	222.92	0.55	791	1.1	0.63	900	B				C	C		101314	11
5.8	242.18	0.55	859	1.0	0.58	900	B				C	C		150814	12
5.6	250.15	0.55	888	1.0	0.56	900	B				C	C		91316	13
4.8	289.08	0.55	1026	0.9	0.49	900	B				C	C		130814	14
4.2	330.31	0.37	783	1.1	0.42	890	B				C	C		71316	15
3.5	394.59	0.37	936	1.0	0.36	900	B				C	C		100814	16
2.7	514.99	0.25	824	1.1	0.27	900	B				C	C		90814	17
2.1	680.03	0.18	832	1.1	0.21	900	B				C	C		70814	18

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FC73** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **FC73** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **FC73** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **FC73** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **FC73** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

					
3.55 LT	1.95 LT	1.95 LT	1.95 LT	3.75 LT	2.00 LT

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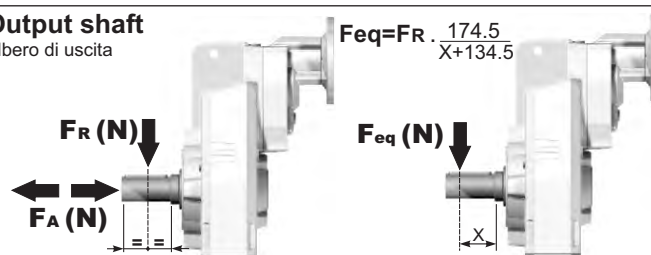
For all details on lubrication and plugs check our website

tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



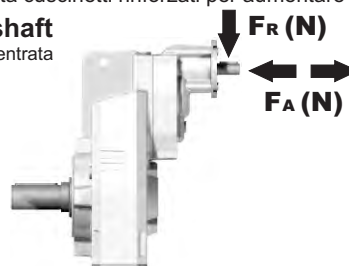
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	740	3700	140	860	4300	70	1020	5100
250	800	4000	120	900	4500	40	1300	6500
200	830	4150	85	970	4850	15	1700	8500

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata



n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2



■ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		B14 motor flanges				Output Shaft		
							-H	-I	-	-	-	-			Ratios code
							160	180	-	-	-	-			
528	2.65	22	374	1.7	36.7	650			not available				2361	standard	01
409	3.42	22	483	1.6	32.8	750							1965	ø50	02
304	4.60	22	649	1.5	30.9	950							1569		03
256	5.46	22	771	1.3	27.4	1000							1371	ø55	04
211	6.64	22	937	1.3	26.5	1175							1173	On request	05

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FC81** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **FC81** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **FC81** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **FC81** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **FC81** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

H1	H4	H3	H2	H5	H6
5.50 LT	3.50 LT	3.50 LT	3.50 LT	6.20 LT	4.40 LT

ENI Blasia 460

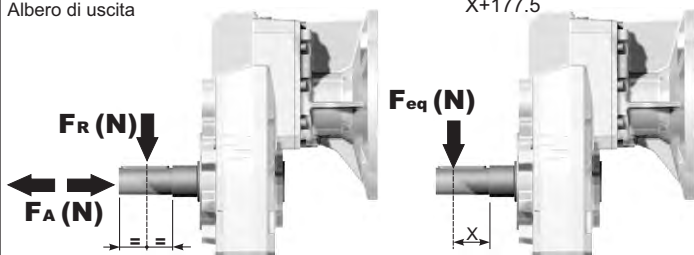
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$F_{eq} = F_R \cdot \frac{227.5}{X + 177.5}$$



n_2	F_A	F_R	n_2	F_A	F_R	n_2	F_A	F_R
300	920	4600	140	1120	5600	70	1400	7000
250	1000	5000	120	1140	5700	40	1800	9000
200	1060	5300	85	1300	6500	15	2400	12000

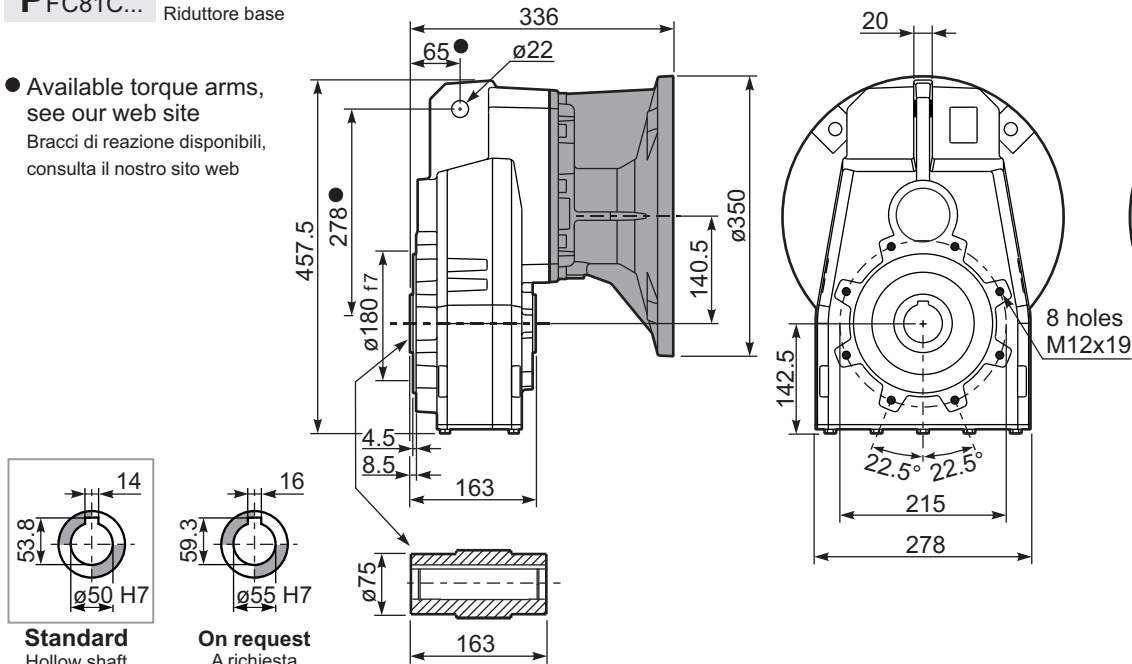
On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

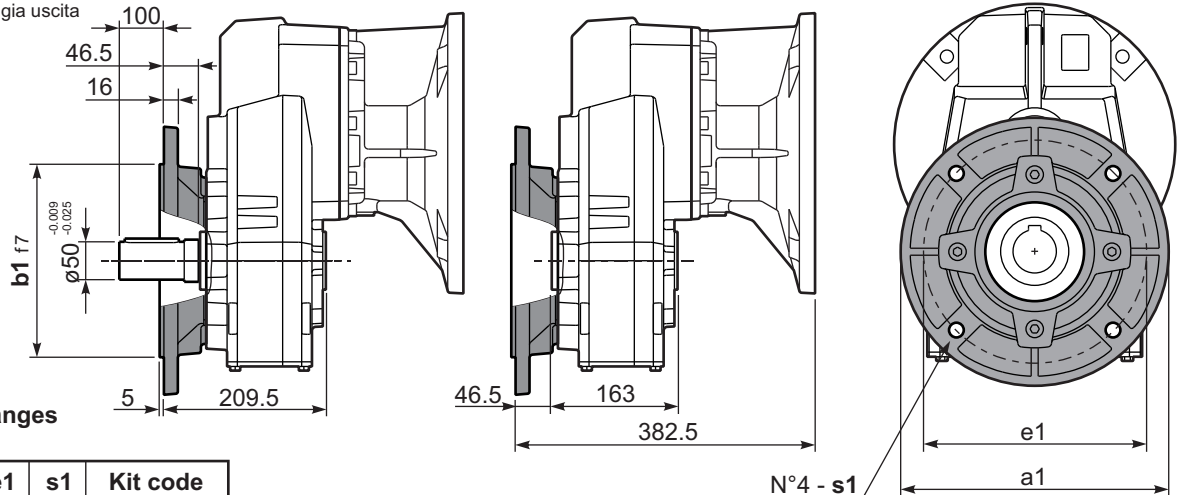
PFC81C...

Basic gearbox
Riduttore baseGearbox
weight
peso riduttore **78.0 kg**

- Available torque arms,
see our web site
Bracci di reazione disponibili,
consulta il nostro sito web

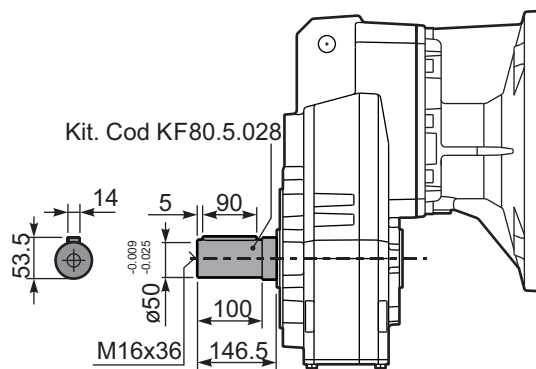


PFC81...-F...

Output flange
Flangia uscitaAvailable output flanges
Flange di uscita

a1 ϕ	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012

PFC81A...

Single output shaft
Albero uscita semplice



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges				B14 motor flanges			Output Shaft 	Ratios code
							-F	-G	-H	-I	-U	-V			
							100 112	132	160	180	100 112	132			
234	5.98	22	827	1.2	25.5	1000	B				B		3015	standard ø50 On request	01
197	7.10	22	982	1.2	25.3	1175	B				B		3013		02
162	8.63	22	1193	1.1	23.9	1350	B				B		3011		03
124	11.27	18.5	1310	1.1	20.3	1500	B				B		2015		04
105	13.38	18.5	1555	1.1	19.4	1700	B				B		2013		05
92	15.24	18.5	1771	1.1	19.0	1900	B				B		1615		06
86	16.26	18.5	1889	1.1	19.7	2100	B				B		2011		07
77	18.09	18.5	2102	1.0	17.7	2100	B				B		1613		08
71	19.82	15	1865	1.1	15.9	2060	B				B		1315		09
64	21.98	15	2069	1.0	14.6	2100	B				B		1611		10
60	23.53	15	2214	0.9	13.6	2100	B				B		1313		11
58	24.25	11	1677	1.2	12.2	1940	B				B		1115		12
48.6	28.80	11	1991	1.1	11.1	2100	B				B		1113		13
40.0	34.99	9	2063	1.0	9.2	2100	B				B		1111		14
33.6	41.64	7.5	1976	1.0	7.2	1960	B				B		813		15
27.7	50.60	5.5	1774	1.2	6.3	2100	B				B		811		16

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FC82** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **FC82** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **FC82** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **FC82** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **FC82** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

H1	H4	H3	H2	H5	H6
5.70 LT	3.60 LT	3.60 LT	3.60 LT	6.60 LT	4.50 LT

ENI Blasias 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$F_{eq} = F_R \cdot \frac{227.5}{X + 177.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	920	4600	140	1120	5600	70	1400	7000
250	1000	5000	120	1140	5700	40	1800	9000
200	1060	5300	85	1300	6500	15	2400	12000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

tab. 2

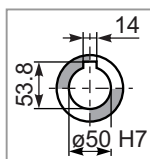
PFC82C...

Basic gearbox
Riduttore baseGearbox
weight
peso riduttore **82.5 kg**

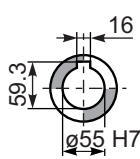
M. flanges	Kit code	øF	A
100/112B5	K023.4.043	250	299
132B5	KC51.4.043	300	320.5
160/180B5	KC86.4.0.43	350	352.5
100/112B14	K085.4.047	160	299
132B14	KC51.4.041	200	320.5

- Available torque arms,
see our web site

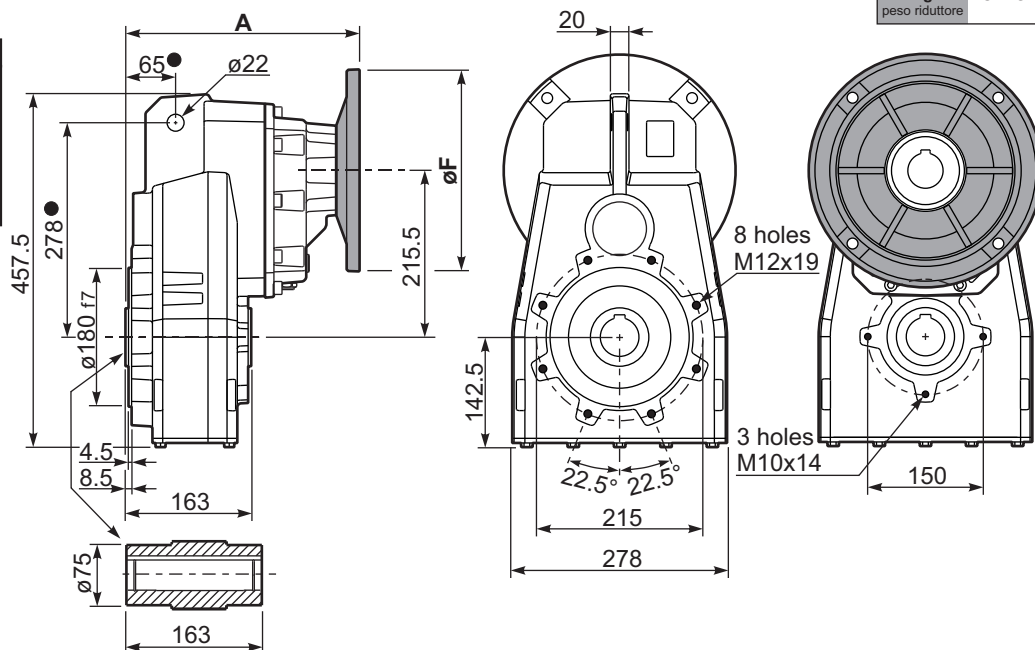
Bracci di reazione disponibili,
consulta il nostro sito web



Standard
Hollow shaft



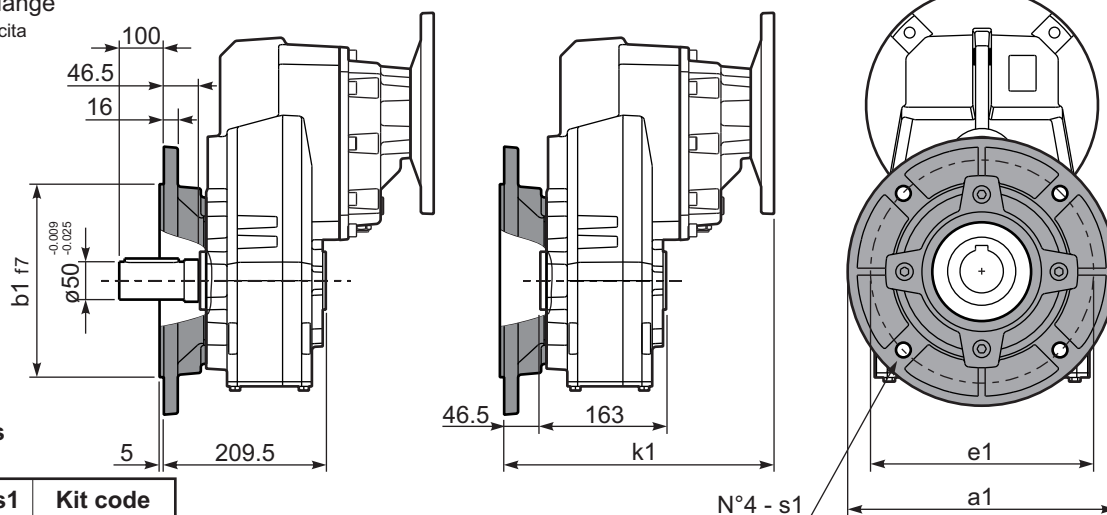
On request
A richiesta



PFC82...-F...

Output flange
Flangia uscita

M. flanges	k1
100/112B5	345.5
132B5	367
160/180B5	399
100/112B14	345.5
132B14	367

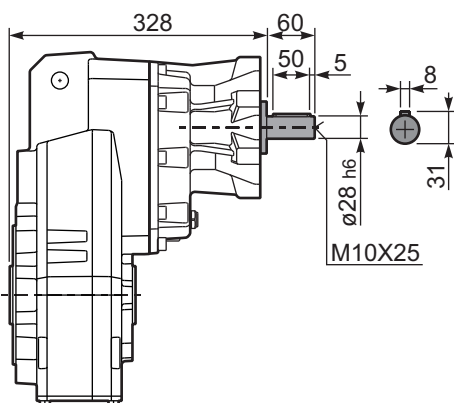


Available output flanges

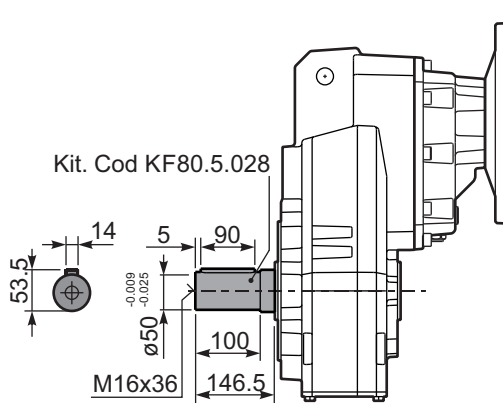
Flange di uscita

a1 ø	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012

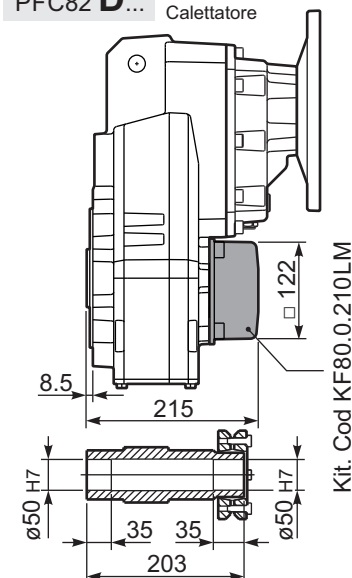
RFC82C...

Input Shaft
Albero in entrata

PFC82 A...

Single output shaft
Albero uscita semplice

PFC82 D...

Shrink disk
Calettatore



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges					Output Shaft 	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V			
							71	80	90	100	112	132	80	90	100	112		
28.8	48.55	7.5	2257	0.9	6.7	2100	B										201315	01
24.3	57.64	5.5	1980	1.1	5.7	2100	B										201313	02
21.3	65.64	5.5	2255	0.9	5.0	2100	B										161315	03
20.0	70.04	4	1760	1.2	4.7	2100	B										201311	04
18.0	77.93	4	1958	1.1	4.2	2100	B										161313	05
16.4	85.36	4	2145	1.0	3.8	2100	B										131315	06
14.8	94.70	4	2380	0.9	3.5	2100	B										161311	07
13.8	101.35	3	1917	1.1	3.2	2100	B										131313	08
11.4	123.15	3	2330	0.9	2.7	2100	B										131311	09
9.3	150.73	2.2	2100	1.0	2.2	2100	B										111311	10
7.8	179.39	1.5	1722	1.2	1.8	2100	B										81313	11
6.4	217.98	1.5	2093	1.0	1.5	2100	B										81311	12
5.7	247.03	1.1	1732	1.1	1.2	1950	B										61313	13
4.7	300.17	1.1	2105	1.0	1.1	2100	B										61311	14

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **FC83** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **FC83** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **FC83** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **FC83** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **FC83** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

H1	H4	H3	H2	H5	H6
5.80 LT	3.90 LT	3.90 LT	3.90 LT	6.80 LT	4.90 LT

ENI Blasias 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$F_{eq} = F_R \cdot \frac{227.5}{X+177.5}$$

F_R (N)
 F_A (N)

F_{eq} (N)
 X

n_2	F_A	F_R	n_2	F_A	F_R	n_2	F_A	F_R
300	920	4600	140	1120	5600	70	1400	7000
250	1000	5000	120	1140	5700	40	1800	9000
200	1060	5300	85	1300	6500	15	2400	12000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

F_R (N)

F_A (N)

n_1	F_A	F_R
1400	450	2250
900	500	2500
500	600	3000

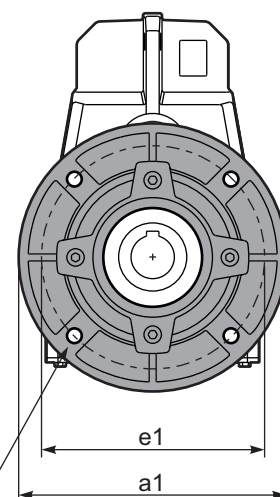
tab. 2

Gearbox weight peso riduttore	68.5 kg
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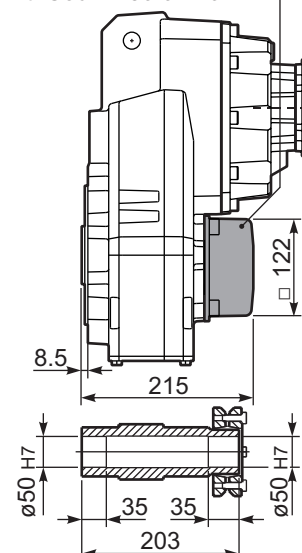
On request
A richiesta



N°4 - s1

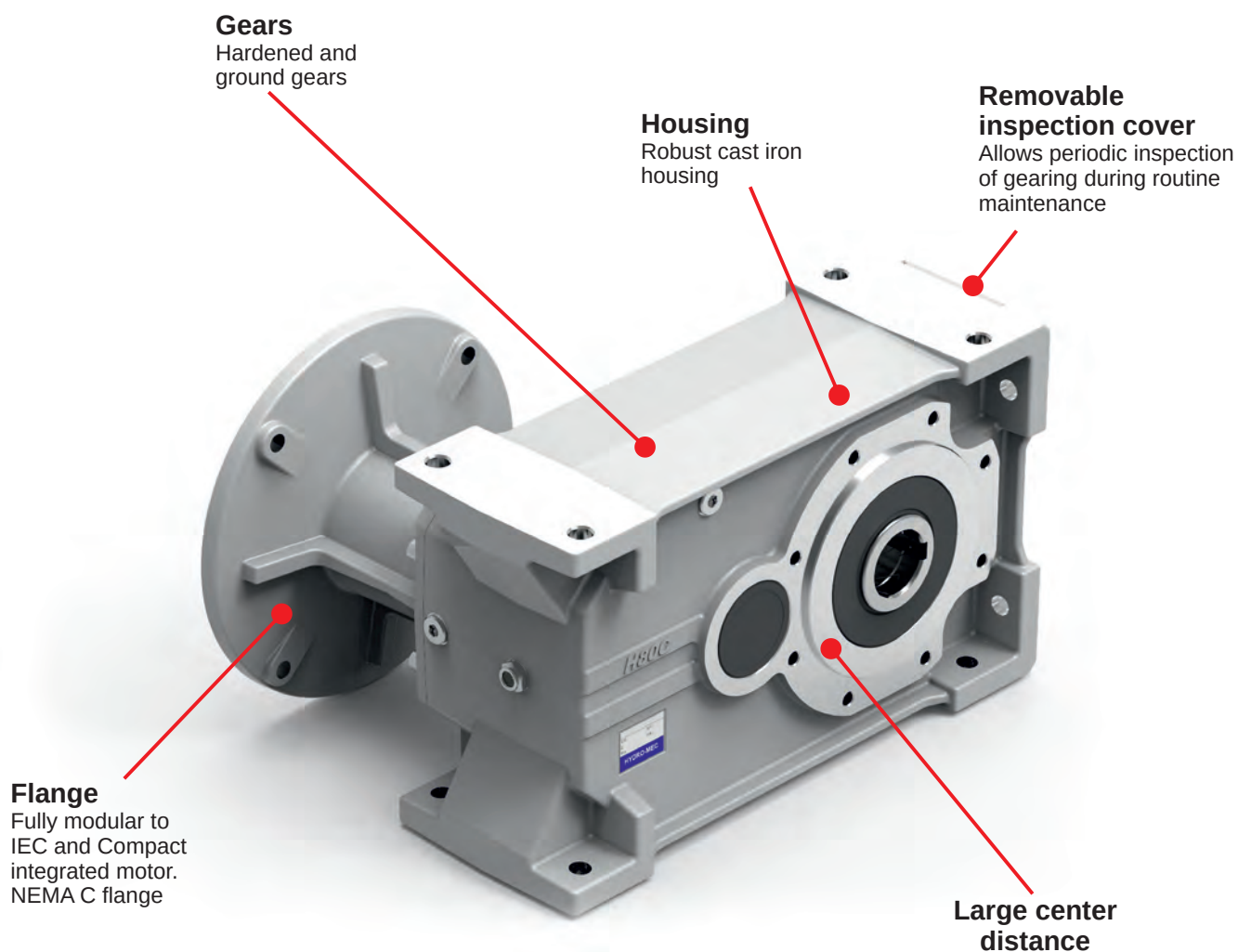


Kit. Cod KF80.0.210LM.



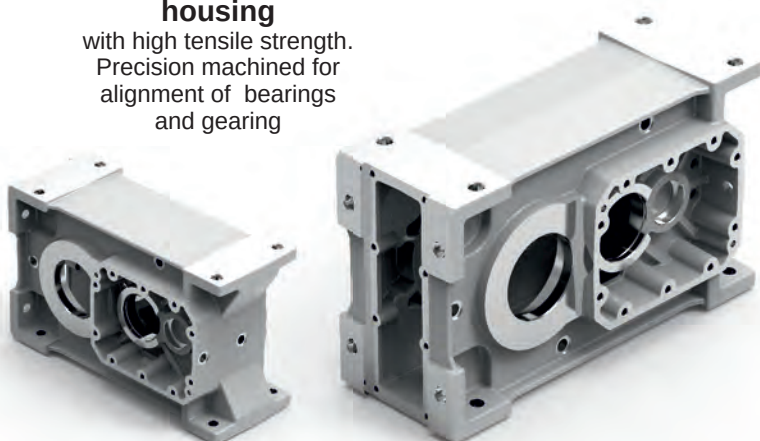
Cast iron parallel shaft gearboxes

A modular and compact product



Single-piece Cast Iron housing

with high tensile strength.
Precision machined for
alignment of bearings
and gearing



World wide sales network.

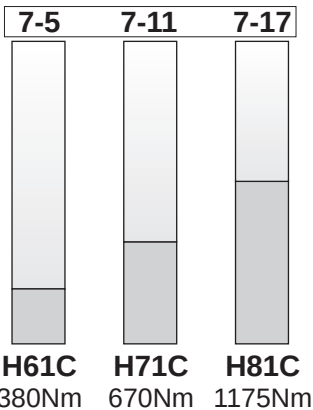
Specific type datasheet on page...

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1 Stage



Types / Tipi /
Tipen / Types /
Tipos

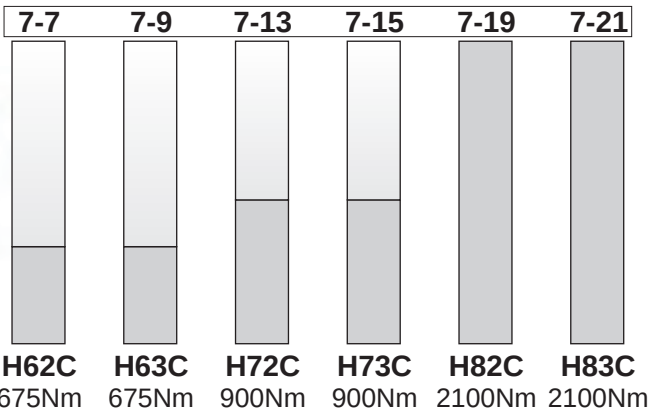


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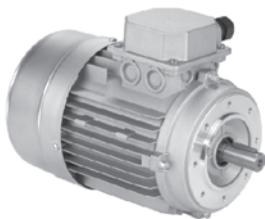
2 and 3 Stage



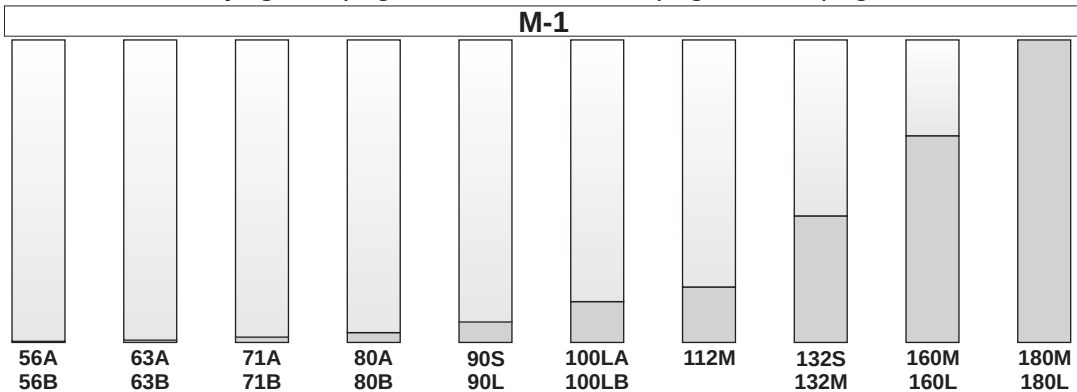
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Tipos

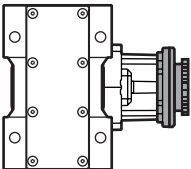
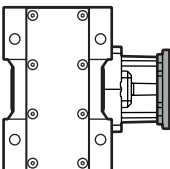
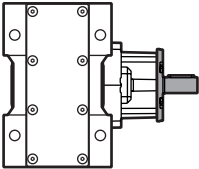
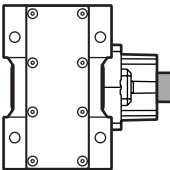
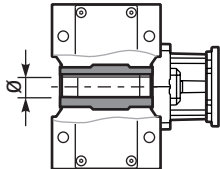
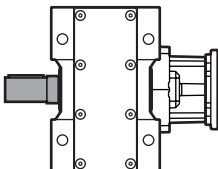
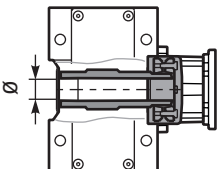
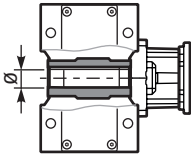
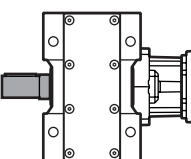
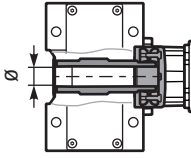


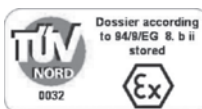
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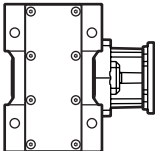
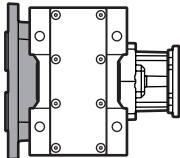
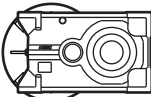
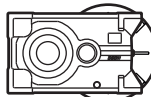
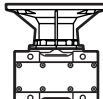
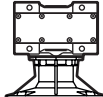
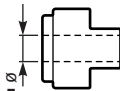
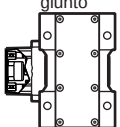
Types / Tipi /
Tipen / Types /
Tipos



Type - Tipo - Typ Type - Tipo	Size - Grandezza - Grösse Taille - Tamaño	Mounting - Montaggio Montage - Fixation Tipo de montaje	Rapporto - Ratio Untersetzung Reduction - Relacion	Output shaft Albero uscita Abtriebswelle Arbre de sortie Eje en salida
M	H62C	C	12.39	-E
Parallel shaft helical Riduttori ad assi paralleli  With IEC motor M  With motor flange P  With male input shaft R  Modular base B Not available for: H61C, H71C, H81C, H82C	1 Stage Riduzione Stufe Trains Etapas 2 Stages Riduzioni Stufen Trains Etapas 3 Stages Riduzioni Stufen Trains Etapas Cast Iron/Ghisa/Grauguss/Fonle/Fundicion H61C H71C H81C H62C H72C H82C H63C H73C H83C	 Hollow output shaft C  Single output shaft A  Shrink Disk D Only on request for Q.ty A richiesta per quantità	See technical data table Vedi tabella dati tecnici. Technisches Datenblatt beachten Voir Tableau données techniques Ver tabla datos técnicos	C  STANDARD ⇒ Only on request for Q.ty A richiesta per quantità H61C H62C H63C -E ⇒ $\varnothing 35$ -F ⇒ $\varnothing 40$ H71C H72C H73C -F ⇒ $\varnothing 40$ -G ⇒ $\varnothing 45$ H81C H82C H83C -H ⇒ $\varnothing 50$ -I ⇒ $\varnothing 55$ A  Single output shaft -N H61/2/3C ⇒ $\varnothing 35$ -O H71/2/3C ⇒ $\varnothing 40$ -K H81/2/3C ⇒ $\varnothing 50$ D  Shrink disk -T H62/3C ⇒ $\varnothing 35$ -U H72/3C ⇒ $\varnothing 40$ -V H82/3C ⇒ $\varnothing 50$



On request we can deliver our products according to the ATEX
 A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
 Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
 Sur demande nos produits peuvent se conformer à la réglementation ATEX
 A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

Type - Tipo - Typ Types - Tipo	Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor	Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje	Input bore Foro entrata Eingangshohlwelle Trou d'entree Eje hueco de entrada	Terminal box position Posizione morsettiera Klemmkastenlage Position boîte à bornes Posición caja de bornes	
-N	N	-C	B3	C	B	
 -N Senza flangia Without flange  -F Whit output flange con flangia uscita	N Senza flangia Without flange H61C H62C H63C 4 ➔ Ø250 H71C H72C H73C 4 ➔ Ø250 5 ➔ Ø300 H81C H82C H83C 5 ➔ Ø300 6 ➔ Ø350 7 ➔ Ø400	Flange Flangia  B5 -A =56 (Ø120) -B =63 (Ø140) -C =71 (Ø160) -D =80 (Ø200) -E =90 (Ø200) -F =100÷112 (Ø250) -G =132 (Ø300) -H =160 (Ø350) -I =180 (Ø350) B14 -O =56 (Ø80) -P =63 (Ø90) -Q =71 (Ø105) -R =80 (Ø120) -T =90 (Ø140) -U =100÷112 (Ø160) -V =132 (Ø200)	Type R Tipo R  H63C H73C -2 ➔ Ø19 H62C H72C H83C -3 ➔ Ø24 H82C -4 ➔ Ø28 Without flange Senza flangia  -M ➔ With coupling H63C H73C -1 ➔ Ø14 (71B5) -2 ➔ Ø19 (80B5) -3 ➔ Ø24 (90B5) H62C H72C H83C -2 ➔ Ø19 (80B5) -3 ➔ Ø24 (90B5) -4 ➔ Ø28 (100B5)	 B3 STANDARD  B6  B7  B8  V5  V6  V8	- Nothing indication: standard bore Nessuna indicazione: foro standard COUPLING  A = 9mm B = 11mm C = 14mm D = 19mm E = 24mm F = 28mm 0 Ready for input coupling Predisposto per giunto 	 A  B STANDARD  C  D

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

Lifting / sollevamento / hubantriebe / levage / elevación

$$P [KW] = \frac{M [Kg] \cdot g [9.81] \cdot v [m / s]}{1000}$$

Rotation / rotazione / drehung / rotation / rotation

$$P [KW] = \frac{M [Nm] \cdot n [rpm]}{9550}$$

Linear movement / traslazione / linearbewegung / translation / translacion

$$P [KW] = \frac{F [N] \cdot v [m / s]}{1000}$$

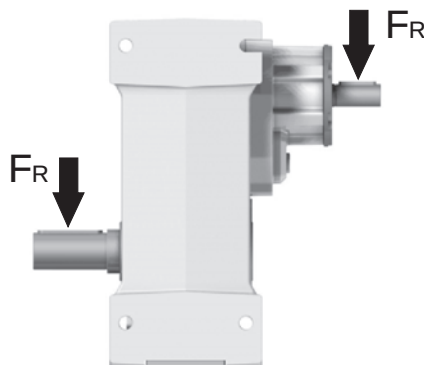
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

$$M [Nm] = \frac{9550 \cdot P[KW]}{n [rpm]}$$

$$M [lb in] = \frac{63030 \cdot P[HP]}{n [rpm]}$$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida



	$F_R [N] = \frac{M [Nm] \cdot 2000}{d [mm]} \cdot f_k$	$F_R [N] = \frac{M [lb in] \cdot 8.9}{d [in]} \cdot f_k$
M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion	
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo	
f_k	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión 1.15 Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje 1.25 Catena / Chain sprockets / Antriebskette / Chaîne / Cadena 1.75 Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal 2.50 Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana	

- If your application requires higher radial loads, contact our technical office. Higher load may be possible.
- Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
- Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
- Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
- En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

How to select a gearbox / Come selezionare un riduttore / Wie wählt man ein Getriebe
Comment sélectionner un réducteur / Cómo seleccionar un reductor

B Output speed
Velocità in uscita
Abtriebsdrehzahl
Vitesse de sortie
Velocidad de salida

Nominal power
Potenza nominale
Max. mögliche Leistung
Poissance nominale
Potencia nominal

A Nominal torque
Momento torcente nominale
Nenn Drehmoment
Couple nominal
Par de torsión nominal

Flange code
Codice flangia
Flanschtype
Code bride
Código bridas

Input speed
Velocità in entrata
Eintriebsdrehzahl
Vitesse en entrée
Velocidad de entrada

Gear size
Grandezza riduttore
Getriebegröße
Taille réducteur
Tamaño reductor

Motor power
Potenza motore
Motorleistung
Puissance moteur
Potencia motor

H62C

Cube gear

675Nm

Rating - Cast Iron

PARALLEL SHAFT GEARBOXES

QUICK SELECTION / Selezione veloce input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Notes
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100	112	132	80	90	100		
213	6.57	7.5	312	1.2	8.8	380	B									3018	01
185	7.56	7.5	358	1.1	7.9	390	B									3016	02
159	8.82	7.5	419	1.0	7.1	410	B									3014	03
113	12.39	7.5	588	1.0	7.2	580	B									2018	04

C Ratio
Rapporto
Untersetzung
Rapport de réduction
Relación

Transmitted torque
Momento torcente trasmesso
Mögliche Drehmomente
Couple de sortie
Par transmitido

Service factor
Fattore di servizio
Betriebsfaktor
Facteur de service
Factor de servicio

Output shaft diam.
Diam. albero uscita
Durchmesser abtriebswelle
Diametre arbre lent
Diametro eje de salida

Notes
Note
Anmerkungen
Note
Notas

fs

Type of load and starts per hour Tipo di carico e avviamenti per ora		Oper. hours per day Ore di funz. giorn.		
		3 h	10 h	24 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

D Motor flange available
Flange disponibili
Erhältliche Motorflansche
Bridas disponibles
Bridas disponibles

B)	Mounting with reduction ring Montaggio con boccia di riduzione Reduzierhülsen Montage avec douille de réduction Montaje con casquillo de reducción	
C)	Motor flangeholes position/terminal box position Posizione fori flangia/basetta motore Bohrungsposition am Motorflansch/-sockel Position trous bride/barrette à bornes moteur Posición agujeros brida / base motor	
B)	Available without reduction bushes Disponibile anche senza boccia Auch ohne Reduzierbuchse verfügbar Disponible aussi sans douille de réduction Disponible tambien sin casquillo	

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select output speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -G 132	B14 motor flanges - - - - - - - -	Output Shaft $\varnothing$ Ratios code
507	2.76	9	166	1.6	14.4	265		not available	2980 standard 01
395	3.54	9	213	1.3	11.6	275			2485 ø35 02
277	5.06	9	304	1.0	8.6	290			1891 03
241	5.81	7.5	281	1.2	8.5	330			1693 ø40 04
206	6.79	7.5	329	1.2	8.4	380			1495 On request 05

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **H61C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **H61C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **H61C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **H61C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **H61C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3 2.25 LT	B6 3.20 LT	B7 3.00 LT	B8 2.25 LT	V5 4.35 LT	V6 2.35 LT	V8 Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

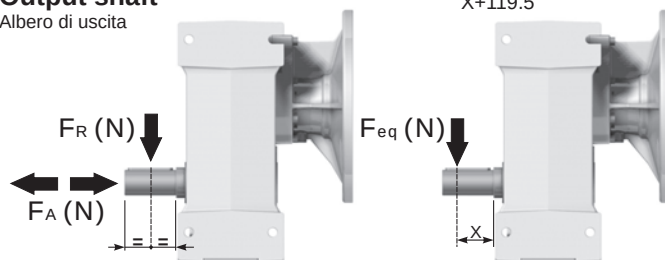
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$F_{eq} = F_R \cdot \frac{149.5}{X + 119.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	600	3000	140	720	3600	70	940	4700
250	640	3200	120	740	3700	40	1220	6100
200	690	3460	85	860	4300	15	1300	6500

On request reinforced bearings to increase loads.

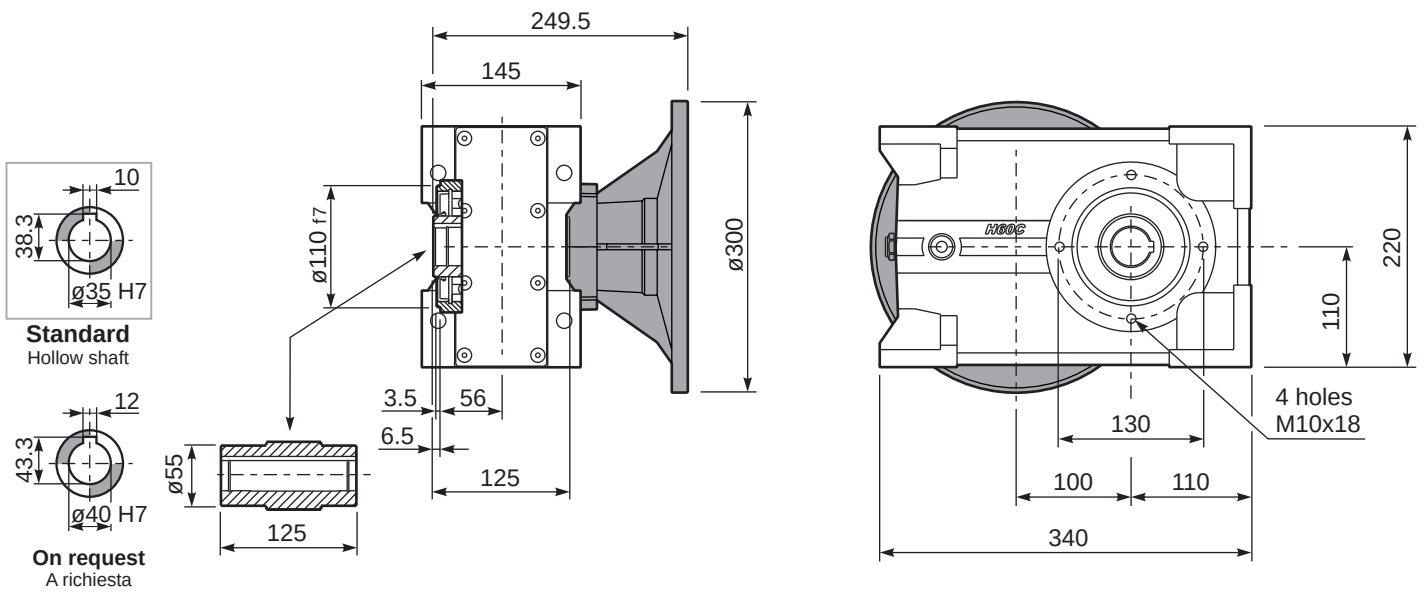
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

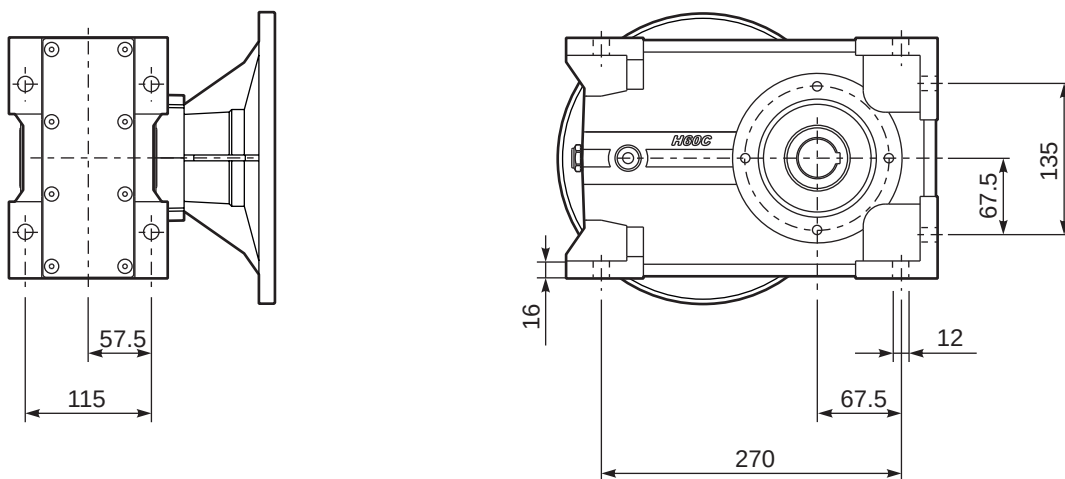
PH61C...

Basic gearbox
Riduttore baseGearbox
weight
peso riduttore

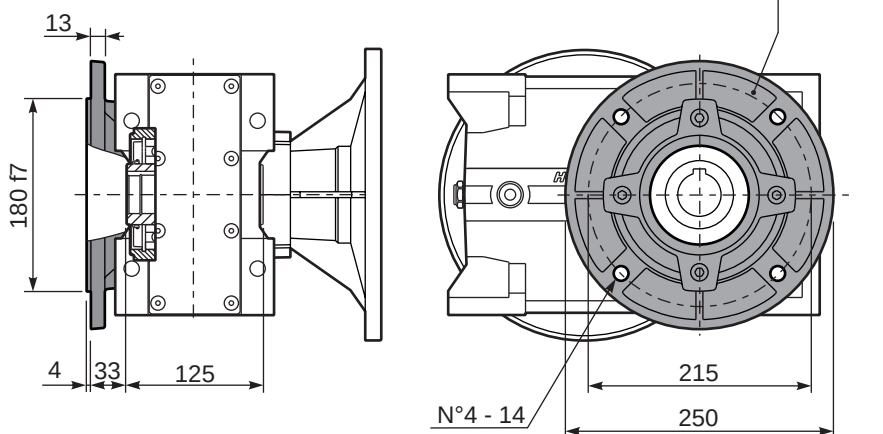
40.0 kg



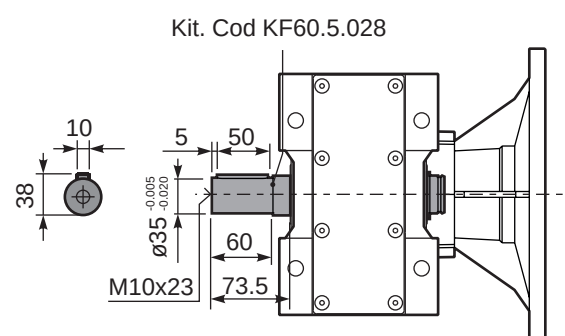
PH61C...-N

Feet
Piedini

PH61C...-F

Output flange
Flangia uscita

PH61C A...

Single output shaft
Albero uscita semplice



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100 112	132	80	90	100 112	132		
213	6.57	7.5	312	1.2	8.8	380	B									3018	01
185	7.56	7.5	358	1.1	7.9	390	B									3016	02
159	8.82	7.5	419	1.0	7.1	410	B									3014	03
113	12.39	7.5	588	1.0	7.2	580	B									2018	04
98	14.24	5.5	499	1.2	6.4	600	B									2016	05
84	16.75	5.5	587	1.1	6.1	665	B									1618	06
73	19.25	5.5	675	1.0	5.4	675	B									1616	07
64	21.78	4	558	1.2	4.7	675	B									1318	08
56	25.04	4	642	1.1	4.1	675	B									1316	09
47.9	29.23	4	750	0.9	3.5	675	B									1314	10
45.7	30.65	3	592	1.1	3.4	675	B									1116	11
39.1	35.78	3	691	1.0	2.9	675	B									1114	12
36.3	38.55	2.2	548	1.1	2.3	580	B									818	13
31.6	44.32	2.2	630	1.1	2.3	665	B									816	14
27.1	51.74	2.2	735	0.9	2.0	675	B									814	15
22.9	61.03	1.1	437	1.1	1.2	480	B									616	16
19.6	71.25	1.1	510	1.1	1.2	560	B									614	17

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **H62C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **H62C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **H62C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **H62C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **H62C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
2.25 LT	3.20 LT	3.00 LT	2.25 LT	4.35 LT	2.35 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$F_{eq} = F_R \cdot \frac{149.5}{X + 119.5}$$



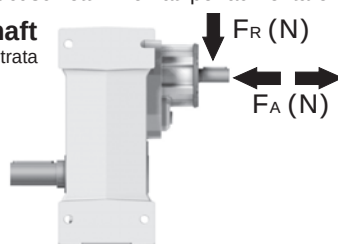
n_2	F_A	F_R	n_2	F_A	F_R	n_2	F_A	F_R
300	600	3000	140	720	3600	70	940	4700
250	640	3200	120	740	3700	40	1220	6100
200	690	3460	85	860	4300	15	1300	6500

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata



n_1	F_A	F_R
1400	450	2250
900	500	2500
500	600	3000

tab. 2



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft  $\varnothing$	Ratios code 
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
22.6	61.89	1.5	594	1.1	1.7	675	B				C	C		191318	01
19.7	71.16	1.5	683	1.0	1.5	675	B				C	C		191316	02
17.0	82.48	1.5	792	0.9	1.3	675	B				C	C		171316	03
14.5	96.29	1.1	675	1.0	1.1	675	B				C	C		171314	04
13.9	100.51	1.1	705	1.0	1.0	675	B				C	C		131318	05
12.1	115.56	0.75	556	1.2	0.91	675	B				C	C		131316	06
11.1	125.96	0.75	606	1.1	0.82	665	B				C	C		190816	07
10.4	134.91	0.75	649	1.0	0.78	675	B				C	C		131314	08
9.5	147.05	0.75	707	1.0	0.72	675	B				C	C		190814	09
8.2	170.44	0.55	605	1.1	0.62	675	B				C	C		170814	10
7.6	184.15	0.55	653	1.0	0.57	675	B				C	C		101314	11
6.8	205.87	0.55	730	0.9	0.51	675	B				C	C		91316	12
5.8	240.34	0.37	570	1.2	0.44	675	B				C	C		91314	13
5.0	279.22	0.37	662	1.0	0.37	665	B				C	C		100816	14
4.3	325.97	0.37	773	0.9	0.32	675	B				C	C		100814	15
3.8	364.41	0.25	583	1.1	0.28	665	B				C	C		90816	16
3.3	425.43	0.25	681	1.0	0.25	675	B				C	C		90814	17
2.9	481.19	0.18	589	1.1	0.22	665	B				C	C		70816	18
2.5	561.76	0.18	687	1.0	0.19	675	B				C	C		70814	19

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **H63C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **H63C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **H63C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

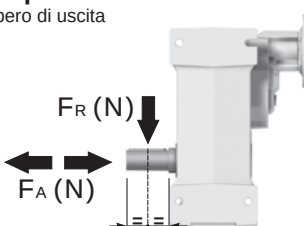
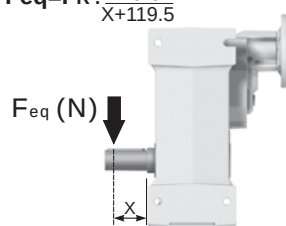
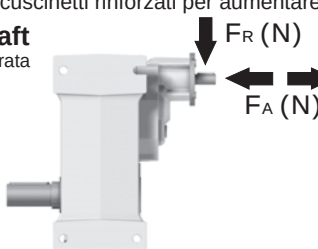
F Le réducteur **H63C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **H63C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio						
							
B3	B6	B7	B8	V5	V6	V8	
2.35 LT	3.85 LT	3.15 LT	2.35 LT	4.55 LT	2.50 LT	Ask	
AGIP Telium VSF 320				SHELL Omala S4 WE 320			

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS									
Output shaft Albero di uscita			$F_{eq} = F_R \cdot \frac{149.5}{X+119.5}$						
									
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR	
300	600	3000	140	720	3600	70	940	4700	
250	640	3200	120	740	3700	40	1220	6100	
200	690	3460	85	860	4300	15	1300	6500	
On request reinforced bearings to increase loads. A richiesta cuscinetti rinforzati per aumentare i carichi.									
Input shaft Albero in entrata									
n_1	FA	FR	n_1	FA	FR	n_1	FA	FR	
1400	240	1200	900	280	1400	500	340	1700	

tab. 2

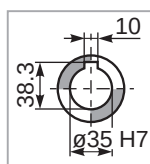
P_{H63C}...

Basic gearbox
Riduttore base

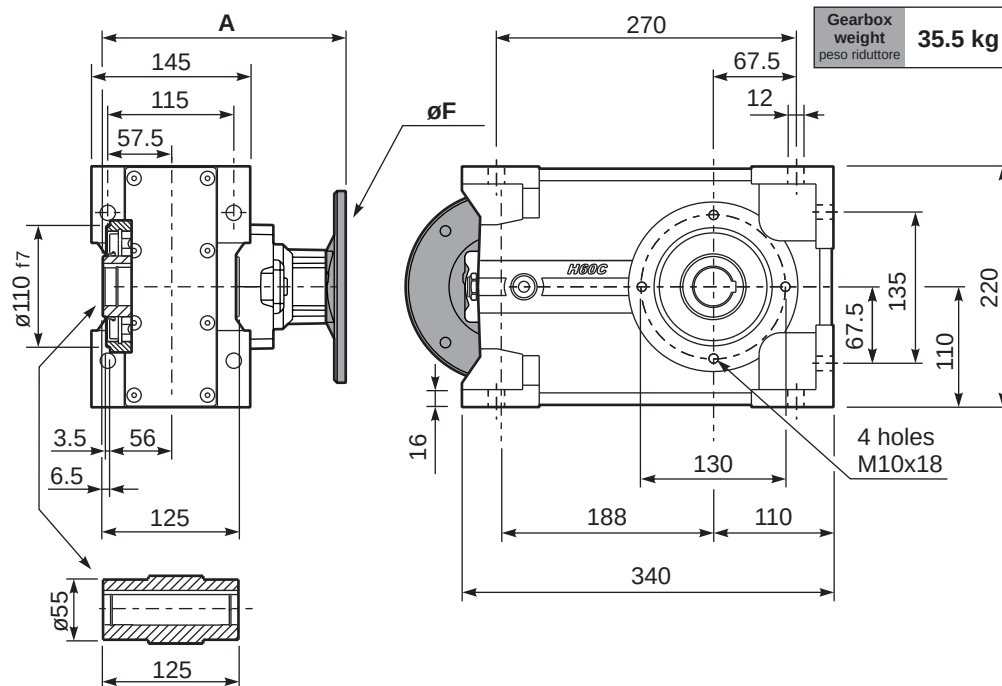
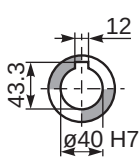
M. flanges	Kit code	ØF	A
63B5	K063.4.041	140	239
71B5	K063.4.042	160	237
80/90B5	K063.4.043	200	239
71B14	K063.4.047	105	237
80B14	K063.4.046	120	239
90B14	K063.4.041	140	239

Standard

Hollow shaft

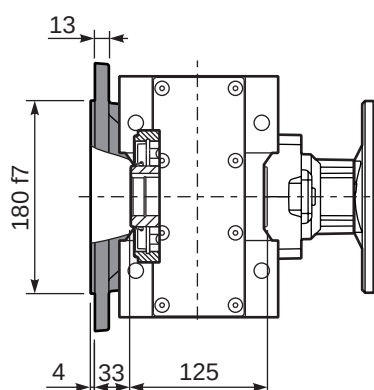


On request
A richiesta

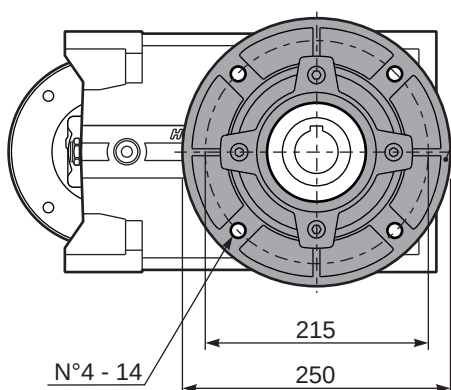


PH63C...-F

Output flange
Flangia uscita



Kit. Cod KF60.9.011

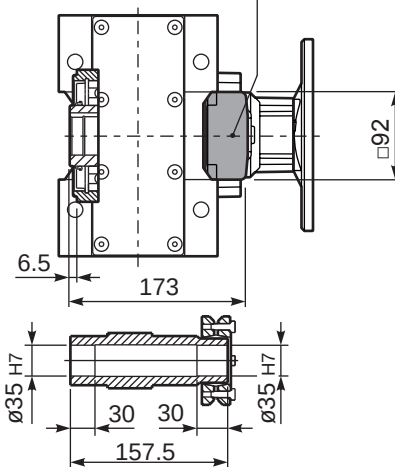


PH63C D...

Shrink disk

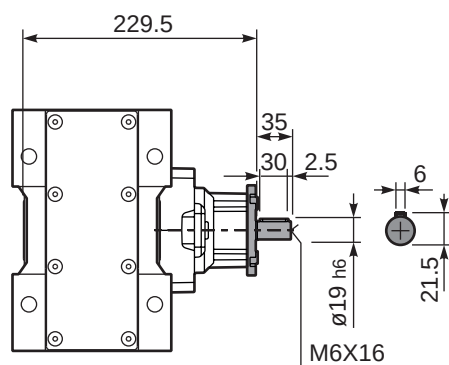
Calettatore

Kit. Cod KF60.0.210LM



RH63C...

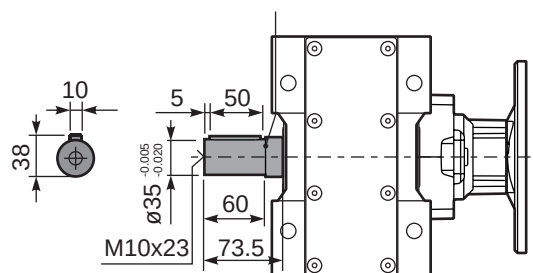
Input Shaft
Albero in entrata



PH63C A...

Single output shaft
Albero uscita semplice

Kit. Cod KF60.5.028





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -G 132	B14 motor flanges - - - - - - - -	Output Shaft $\varnothing$ Ratios code
227	6.17	9	371	1.2	10.9	450		not available	18111 standard 01 16113 $\varnothing 40$ 02 14115 $\varnothing 45$ 03 On request
198	7.06	9	425	1.4	12.7	600			
170	8.21	9	494	1.4	12.2	670			

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **H71C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **H71C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **H71C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **H71C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **H71C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
3.20 LT	4.65 LT	4.00 LT	3.20 LT	6.00 LT	3.10 LT	Ask

AGIP Blasias 460

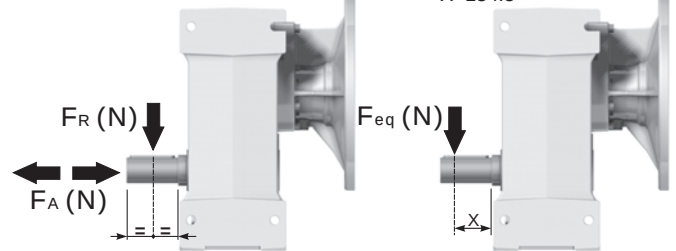
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$F_{eq} = F_R \cdot \frac{174.5}{X+134.5}$$



n_2	F_A	F_R	n_2	F_A	F_R	n_2	F_A	F_R
300	740	3700	140	860	4300	70	1020	5100
250	800	4000	120	900	4500	40	1300	6500
200	830	4150	85	970	4850	15	1700	8500

On request reinforced bearings to increase loads.

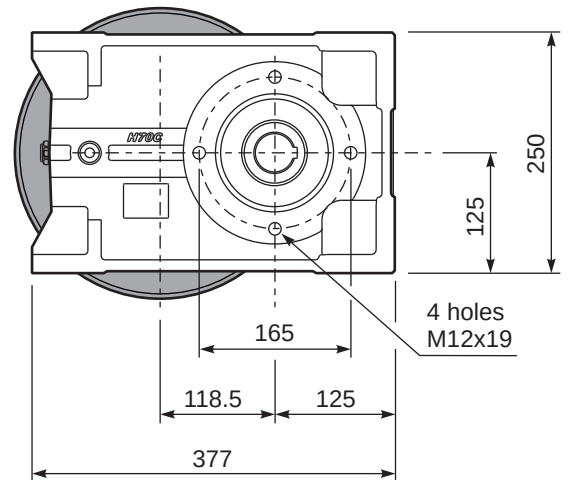
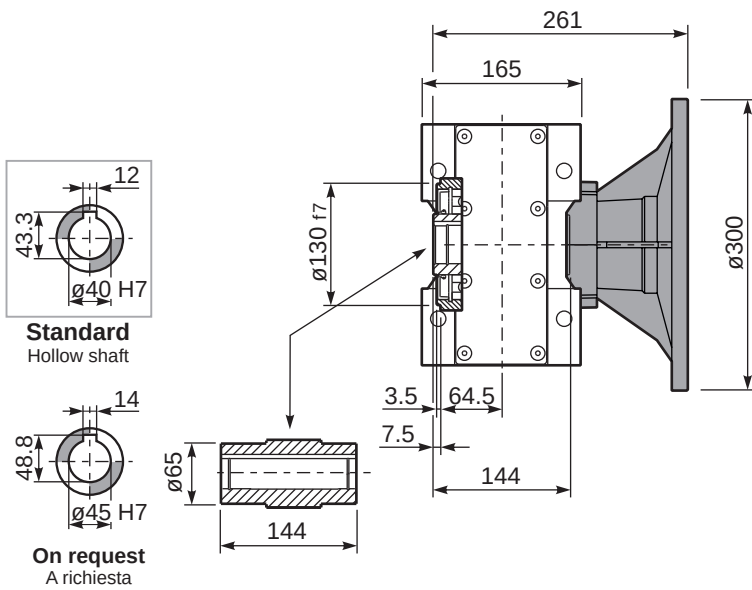
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

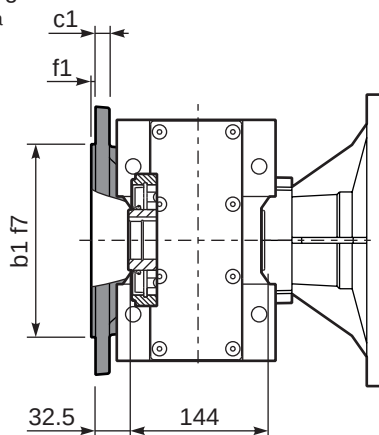
PH71C...

Basic gearbox
Riduttore baseGearbox
weight
peso riduttore

51.0 kg



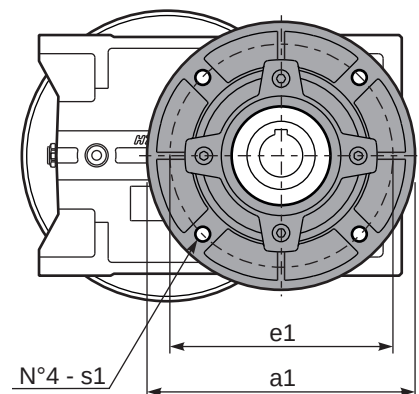
PH71C...-F

Output flange
Flangia uscita

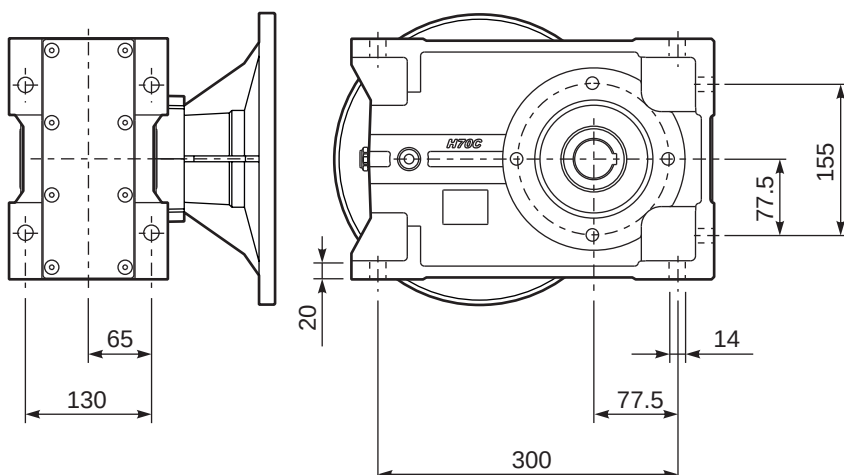
Available output flanges

Flange di uscita

a1 Ø	b1	c1	e1	f1	s1	Kit code
250	180	13	215	3	14	KF70.9.011
300	230	16	265	4	14	KF70.9.012



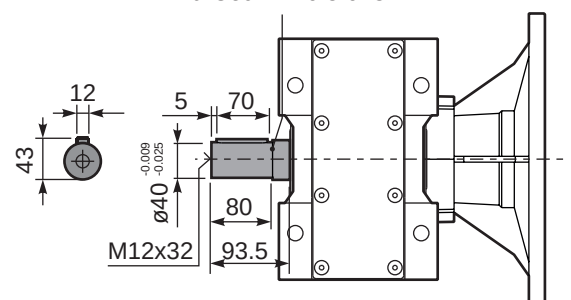
PH71C...-N

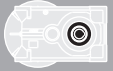
Feet
Piedini

PH71C A...

Single output shaft
Albero uscita semplice

Kit. Cod KF70.5.028





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges					Output Shaft 	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V			
							71	80	90	100 112	132	80	90	100 112	132			
175	8.02	9	473	1.1	9.9	520	B									3018	standard ø40 ø45 On request	01
152	9.18	9	541	1.1	9.8	590	B									3016		02
131	10.68	9	630	1.1	9.7	680	B									3014		03
93	15.11	7.5	717	1.1	7.8	775	B									2018		04
81	17.30	7.5	821	1.1	7.8	885	B									2016		05
70	20.13	7.5	955	0.9	6.8	900	B									2014		06
60	23.39	5.5	820	1.1	5.9	900	B									1616		07
51	27.21	5.5	954	0.9	5.1	900	B									1614		08
46.0	30.42	4	780	1.2	4.5	900	B									1316		09
39.6	35.38	4	907	1.0	3.9	900	B									1314		10
37.6	37.24	3	719	1.2	3.7	895	B									1116		11
32.3	43.31	3	836	1.1	3.2	900	B									1114		12
29.8	47.02	2.2	668	1.1	2.3	705	B									818		13
26.0	53.85	2.2	765	1.1	2.3	810	B									816		14
22.4	62.63	2.2	890	1.0	2.2	900	B									814		15
18.9	74.16	1.1	531	1.1	1.2	585	B									616		16
16.2	86.25	1.1	617	1.1	1.2	680	B									614		17

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **H72C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **H72C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **H72C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **H72C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **H72C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
3.20 LT	4.65 LT	4.00 LT	3.20 LT	6.20 LT	3.10 LT	Ask

AGIP Blasias 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

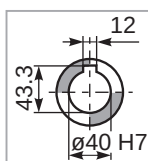
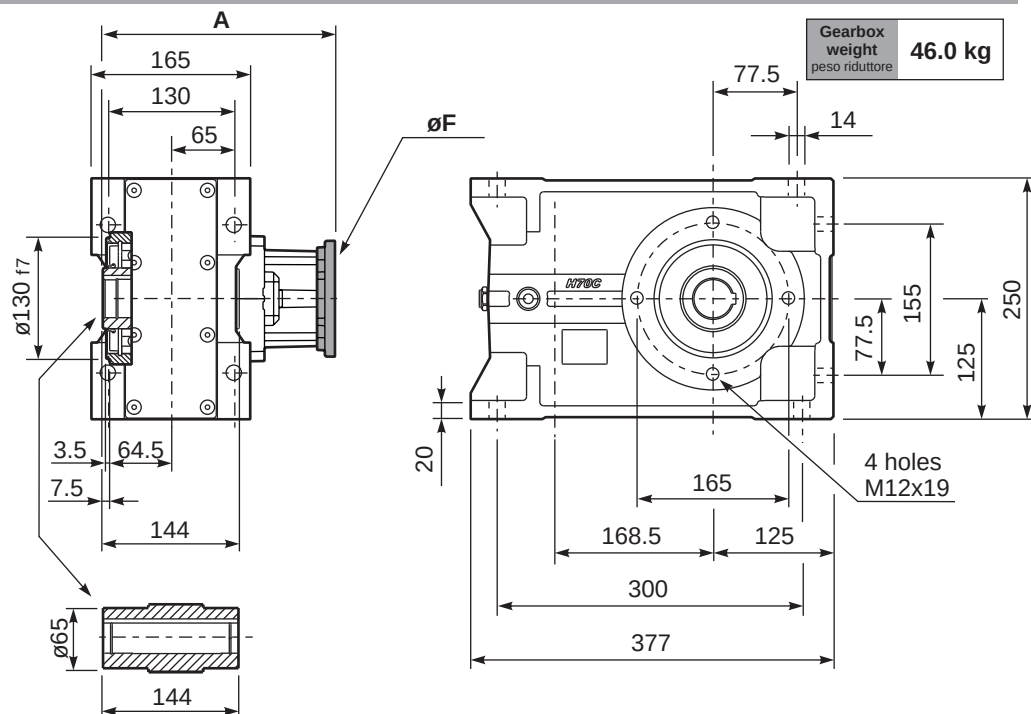
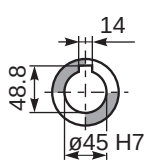
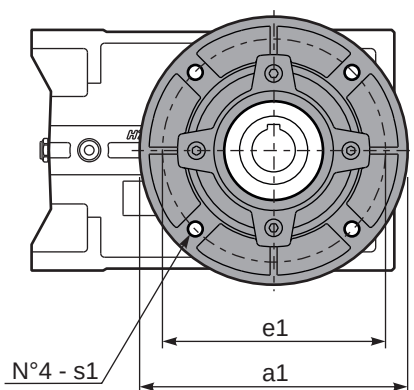
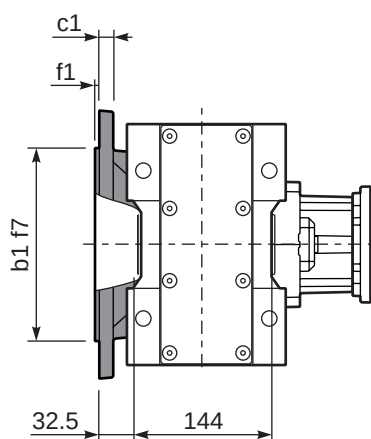
tab. 1

RADIAL AND AXIAL LOADS								
Output shaft Albero di uscita			$F_{eq} = F_R \cdot \frac{174.5}{X+134.5}$					
n_2	F_A	F_R	n_2	F_A	F_R	n_2	F_A	F_R
300	740	3700	140	860	4300	70	1020	5100
250	800	4000	120	900	4500	40	1300	6500
200	830	4150	85	970	4850	15	1700	8500
On request reinforced bearings to increase loads. A richiesta cuscinetti rinforzati per aumentare i carichi.								
Input shaft Albero in entrata								
n_1	F_A	F_R	n_1	F_A	F_R	n_1	F_A	F_R
1400	450	2250	900	500	2500	500	600	3000

tab. 2

PH72C...Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	238.5
80/90B5	K023.4.042	200	240.5
100/112B5	K023.4.043	250	249.5
132B5	KC50.4.043	300	267.5
80B14	K085.4.046	120	240.5
90B14	K085.4.045	140	240.5
100/112B14	K085.4.047	160	249.5
132B14	KC50.4.041	200	267.5

Standard
Hollow shaftOn request
A richiestaGearbox weight
peso riduttore **46.0 kg****PH72C...-F**Output flange
Flangia uscita

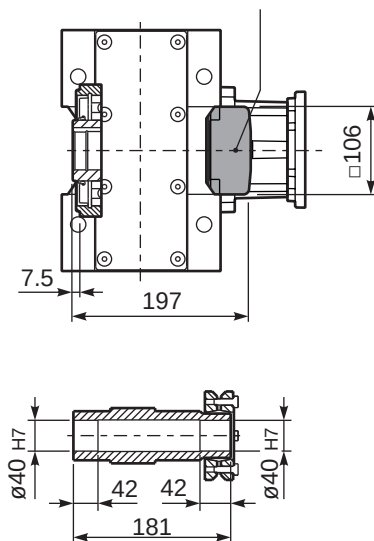
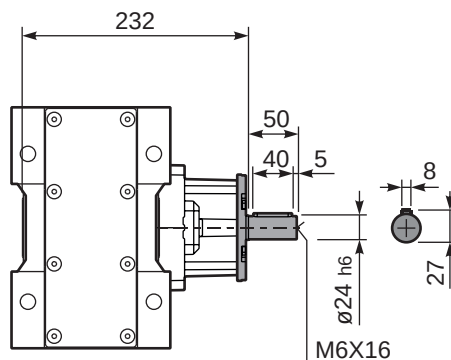
Available output flanges

Flange di uscita

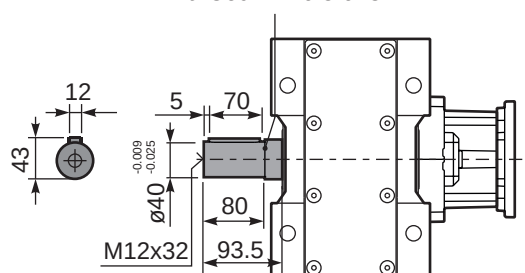
a1 ø	b1	c1	e1	f1	s1	Kit code
250	180	13	215	3	14	KF70.9.011
300	230	16	265	4	14	KF70.9.012

PH72C D...Shrink disk
Calettatore

Kit. Cod KF70.0.210LM

**RH72C...**Input Shaft
Albero in entrata**PH72C A...**Single output shaft
Albero uscita semplice

Kit. Cod KF70.5.028





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft  $\varnothing$	Ratios code 
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
18.5	75.50	1.5	725	1.1	1.7	825	B				C	C		191318	01
16.2	86.47	1.5	830	1.1	1.6	900	B				C	C		191316	02
14.0	100.22	1.5	962	0.9	1.4	900	B				C	C		171316	03
12.0	116.56	1.1	817	1.1	1.2	900	B				C	C		171314	04
10.2	136.82	1.1	959	0.9	1.0	900	B				C	C		151314	05
9.1	153.05	0.75	736	1.1	0.83	810	B				C	C		190816	06
8.6	163.31	0.75	785	1.1	0.86	900	B				C	C		131314	07
7.9	178.01	0.75	856	1.1	0.79	900	B				C	C		190814	08
7.3	191.67	0.75	922	1.0	0.73	900	B				C	C		101316	09
6.8	206.32	0.75	992	0.9	0.68	900	B				C	C		170814	10
6.3	222.92	0.55	791	1.1	0.63	900	B				C	C		101314	11
5.8	242.18	0.55	859	1.0	0.58	900	B				C	C		150814	12
5.6	250.15	0.55	888	1.0	0.56	900	B				C	C		91316	13
4.8	289.08	0.55	1026	0.9	0.49	900	B				C	C		130814	14
4.2	330.31	0.37	783	1.1	0.42	890	B				C	C		71316	15
3.5	394.59	0.37	936	1.0	0.36	900	B				C	C		100814	16
2.7	514.99	0.25	824	1.1	0.27	900	B				C	C		90814	17
2.1	680.03	0.18	832	1.1	0.21	900	B				C	C		70814	18

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **H73C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **H73C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **H73C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **H73C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **H73C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

						
B3	B6	B7	B8	V5	V6	V8
3.30 LT	5.70 LT	4.15 LT	3.30 LT	6.40 LT	3.25 LT	Ask

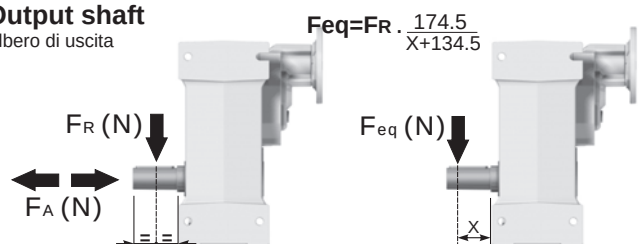
AGIP Blasias 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



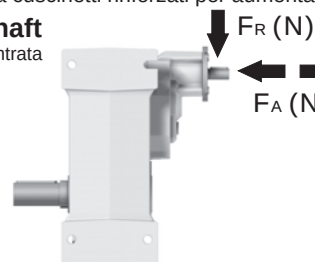
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	740	3700	140	860	4300	70	1020	5100
250	800	4000	120	900	4500	40	1300	6500
200	830	4150	85	970	4850	15	1700	8500

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata



n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

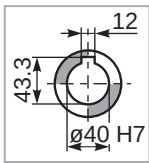
P_{H73C}...

Basic gearbox
Riduttore base

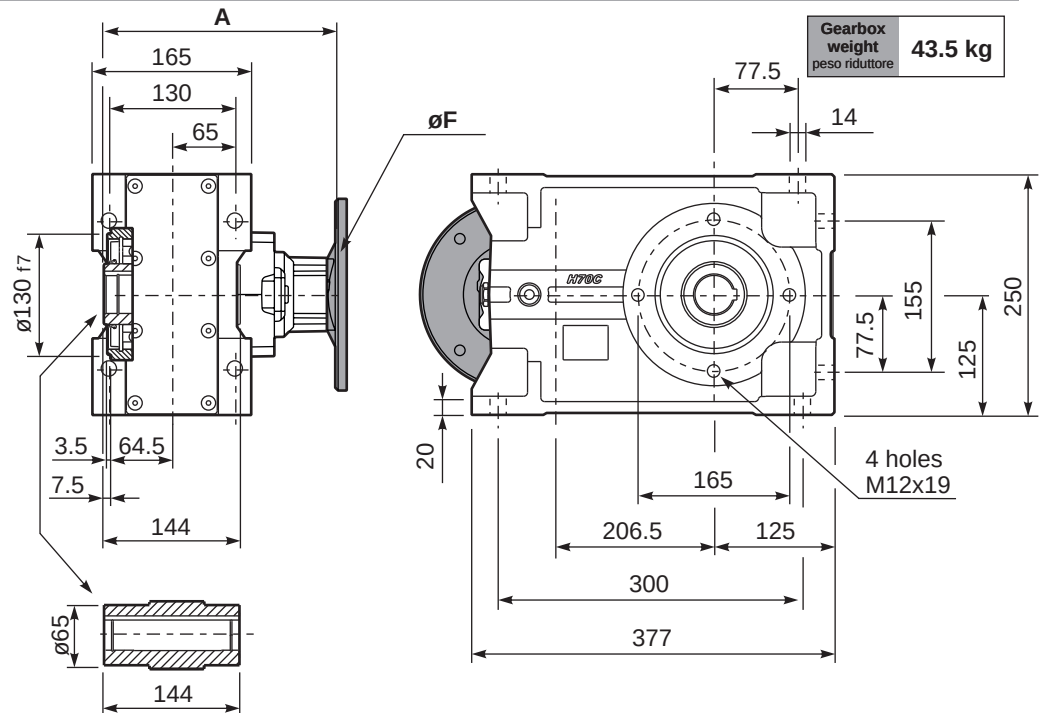
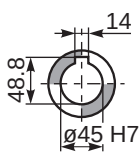
M. flanges	Kit code	ϕF	A
63B5	K063.4.041	140	250.5
71B5	K063.4.042	160	248.5
80/90B5	K063.4.043	200	250.5
71B14	K063.4.047	105	248.5
80B14	K063.4.046	120	250.5
90B14	K063.4.041	140	250.5

Standard

Hollow shaft

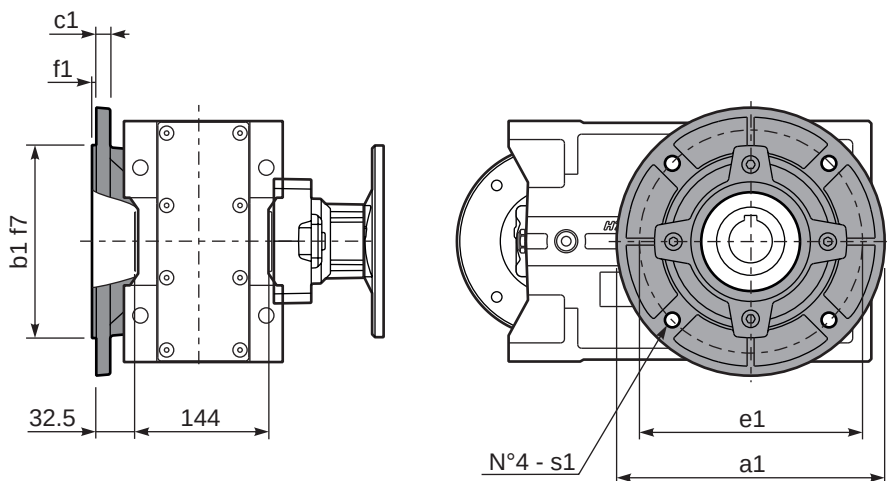


On request
A richiesta



PH73C...-F

Output flange
Flangia uscita



Available output flanges

Flange di uscita

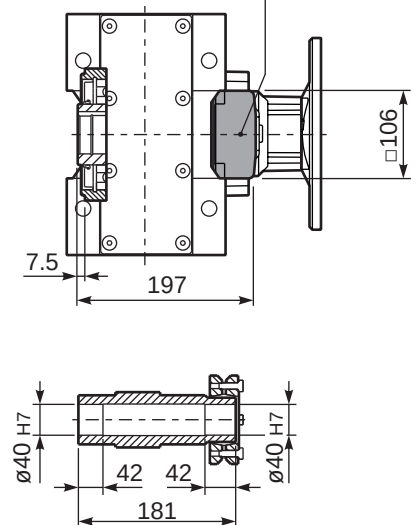
a1 ø	b1	c1	e1	f1	s1	Kit code
250	180	13	215	3	14	KF70.9.011
300	230	16	265	4	14	KF70.9.012

PH73C D...

Shrink disk

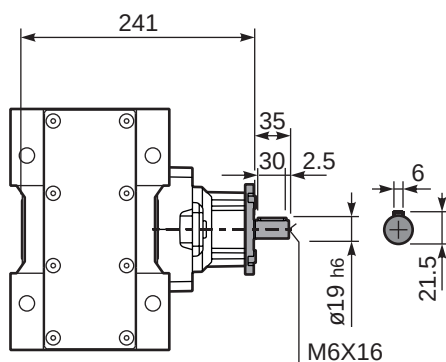
Calettatore

Kit. Cod KF70.0.210LM



RH73C...

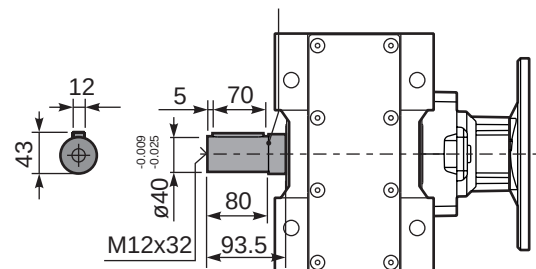
Input Shaft
Albero in entrata



PH73C A...

Single output shaft
Albero uscita semplice

Kit. Cod KF70.5.028





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		B14 motor flanges				Output Shaft  $\emptyset$	Ratios code 
							-H	-I	-	-	-	-		
							160	180	-	-	-	-		
528	2.65	22	374	1.7	36.7	650			not available				2361	01
409	3.42	22	483	1.6	32.8	750							1965	02
304	4.60	22	649	1.5	30.9	950							1569	03
256	5.46	22	771	1.3	27.4	1000							1371	04
211	6.64	22	937	1.3	26.5	1175							1173	05
													On request	

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **H81C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **H81C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **H81C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **H81C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **H81C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

						
B3	B6	B7	B8	V5	V6	V8
5.70 LT	7.00 LT	7.90 LT	5.70 LT	10.20 LT	5.60 LT	Ask

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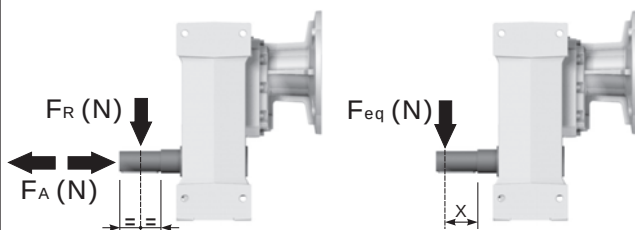
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$F_{eq} = F_R \cdot \frac{227.5}{X+177.5}$$

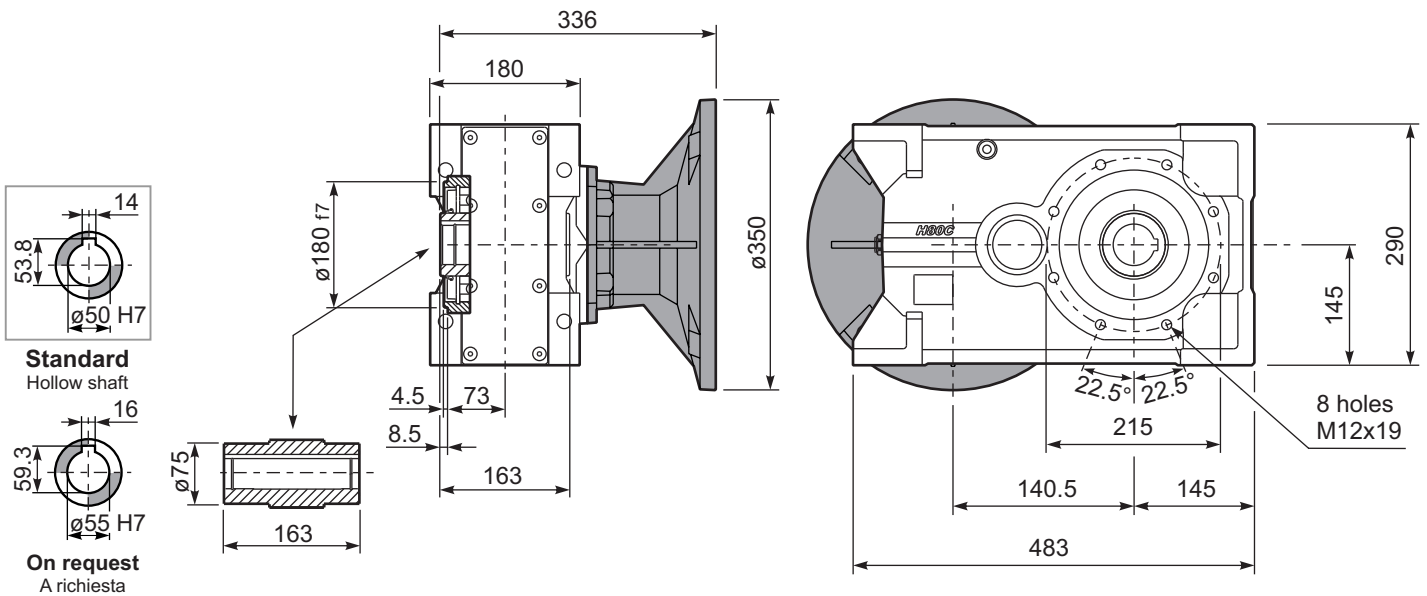
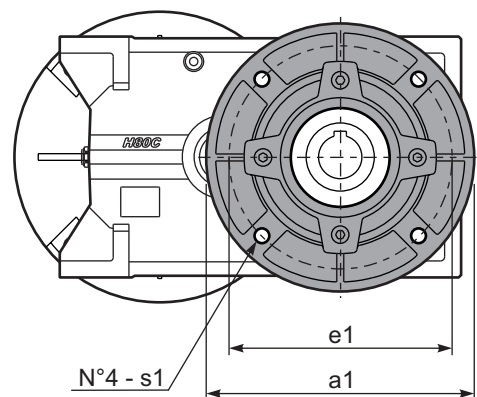
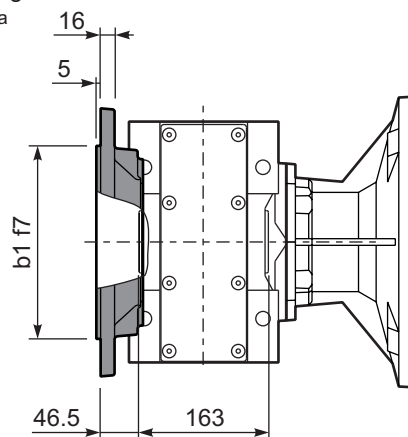


n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	920	4600	140	1120	5600	70	1400	7000
250	1000	5000	120	1140	5700	40	1800	9000
200	1060	5300	85	1300	6500	15	2400	12000

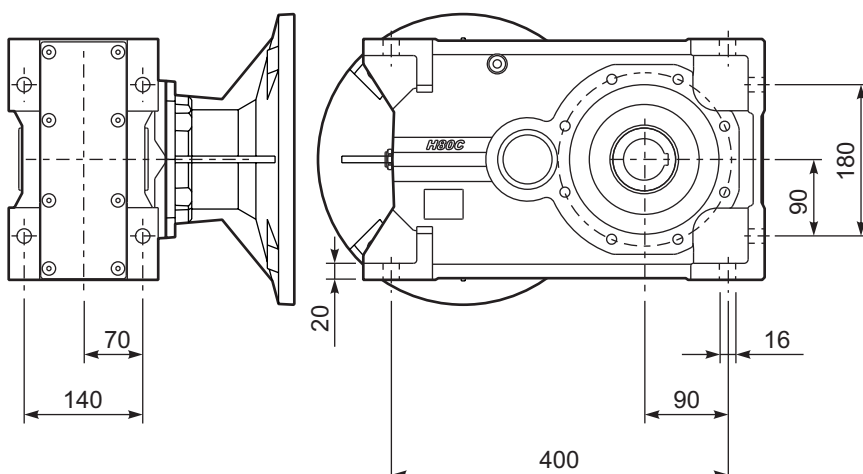
On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

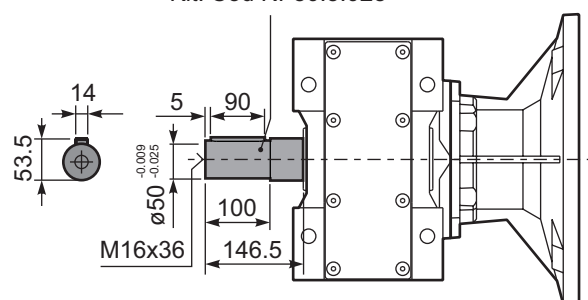
tab. 2

P H81C...Basic gearbox
Riduttore baseGearbox
weight
peso riduttore**89.0 kg****PH81C...-F**Output flange
Flangia uscitaAvailable output flanges
Flange di uscita

a1 $\varnothing$	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012

PH81C...-NFeet
Piedini**PH81C A...**Single output shaft
Albero uscita semplice

Kit. Cod KF80.5.028





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges				B14 motor flanges				Output Shaft 	Ratios code
							-F	-G	-H	-I	-	-	-	-		
							100 112	132	160	180	-	-	-	-		
234	5.98	22	827	1.2	25.5	1000	B				not available				3015	01
197	7.10	22	982	1.2	25.3	1175	B								3013	02
162	8.63	22	1193	1.1	23.9	1350	B								3011	03
124	11.27	18.5	1310	1.1	20.3	1500	B								2015	04
105	13.38	18.5	1555	1.1	19.4	1700	B								2013	05
92	15.24	18.5	1771	1.1	19.0	1900	B								1615	06
86	16.26	18.5	1889	1.1	19.7	2100	B								2011	07
77	18.09	18.5	2102	1.0	17.7	2100	B								1613	08
71	19.82	15	1865	1.1	15.9	2060	B								1315	09
64	21.98	15	2069	1.0	14.6	2100	B								1611	10
60	23.53	15	2214	0.9	13.6	2100	B								1313	11
58	24.25	11	1677	1.2	12.2	1940	B								1115	12
48.6	28.80	11	1991	1.1	11.1	2100	B								1113	13
40.0	34.99	9	2063	1.0	9.2	2100	B								1111	14
33.6	41.64	7.5	1976	1.0	7.2	1960	B								813	15
27.7	50.60	5.5	1774	1.2	6.3	2100	B								811	16

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **H82C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **H82C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **H82C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **H82C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **H82C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
5.60 LT	6.80 LT	7.80 LT	5.60 LT	10.00 LT	5.50 LT	Ask

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For all details on lubrication and plugs check our website

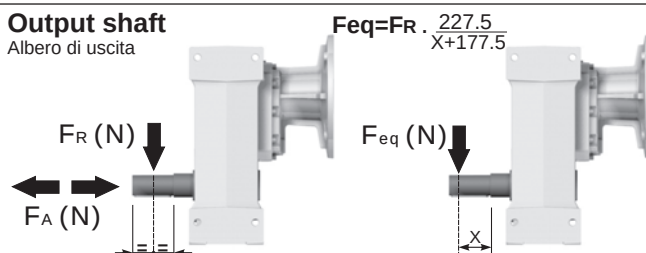
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



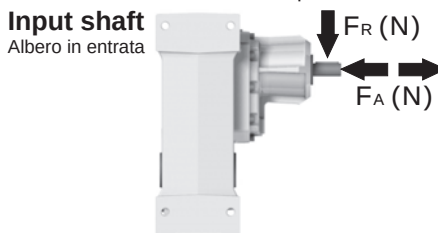
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	920	4600	140	1120	5600	70	1400	7000
250	1000	5000	120	1140	5700	40	1800	9000
200	1060	5300	85	1300	6500	15	2400	12000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata



n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

tab. 2



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100 112	132	80	90	100 112	132		
28.8	48.55	7.5	2257	0.9	6.7	2100	B									201315	01
24.3	57.64	5.5	1980	1.1	5.7	2100	B									201313	02
21.3	65.64	5.5	2255	0.9	5.0	2100	B									161315	03
20.0	70.04	4	1760	1.2	4.7	2100	B									201311	04
18.0	77.93	4	1958	1.1	4.2	2100	B									161313	05
16.4	85.36	4	2145	1.0	3.8	2100	B									131315	06
14.8	94.70	4	2380	0.9	3.5	2100	B									161311	07
13.8	101.35	3	1917	1.1	3.2	2100	B									131313	08
11.4	123.15	3	2330	0.9	2.7	2100	B									131311	09
9.3	150.73	2.2	2100	1.0	2.2	2100	B									111311	10
7.8	179.39	1.5	1722	1.2	1.8	2100	B									81313	11
6.4	217.98	1.5	2093	1.0	1.5	2100	B									81311	12
5.7	247.03	1.1	1732	1.1	1.2	1950	B									61313	13
4.7	300.17	1.1	2105	1.0	1.1	2100	B									61311	14

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **H83C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **H83C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **H83C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **H83C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **H83C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
5.80 LT	7.10 LT	8.20 LT	5.80 LT	10.80 LT	6.00 LT	Ask

AGIP Blasias 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$F_{eq} = F_R \cdot \frac{227.5}{X+177.5}$

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	920	4600	140	1120	5600	70	1400	7000
250	1000	5000	120	1140	5700	40	1800	9000
200	1060	5300	85	1300	6500	15	2400	12000

n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

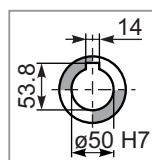
P_{H83C}...

Basic gearbox
Riduttore base

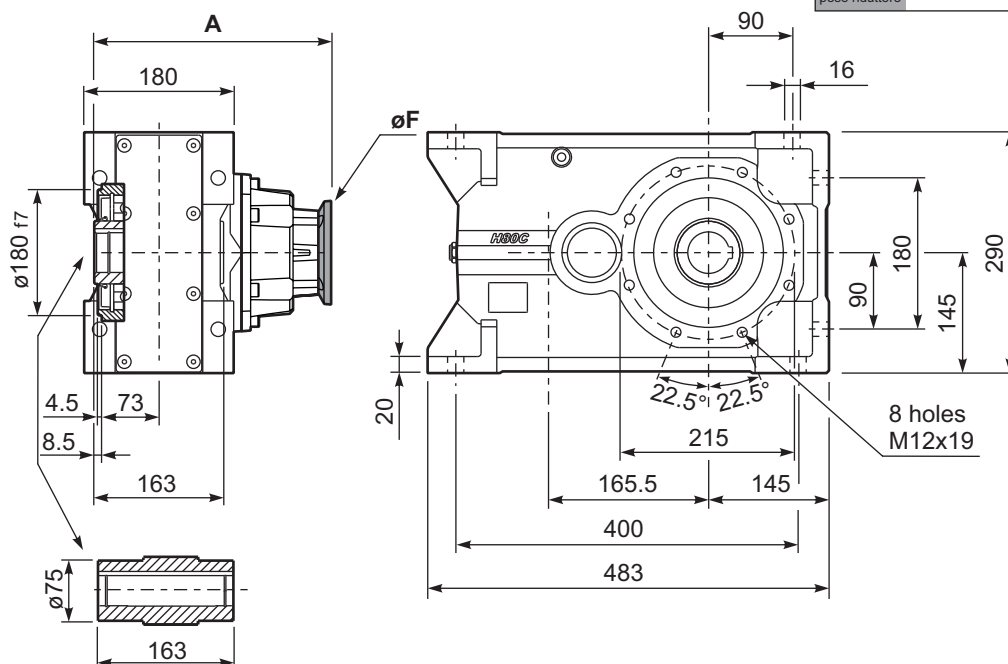
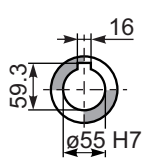
Gearbox weight peso riduttore	81.0 kg
---	----------------

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	292.5
80/90B5	K023.4.042	200	294.5
100/112B5	K023.4.043	250	303.5
132B5	KC50.4.043	300	321.5
80B14	K085.4.046	120	294.5
90B14	K085.4.045	140	294.5
100/112B14	K085.4.047	160	303.5
132B14	KC50.4.041	200	321.5

Standard Hollow shaft

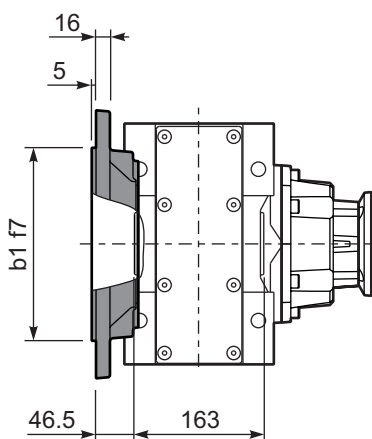


On request
A richiesta



PH83C...-F

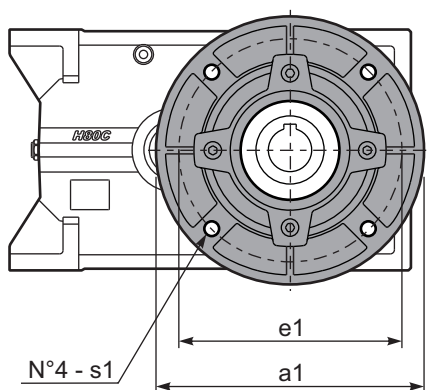
Output flange
Flangia uscita



Available output flanges

Flange di uscita

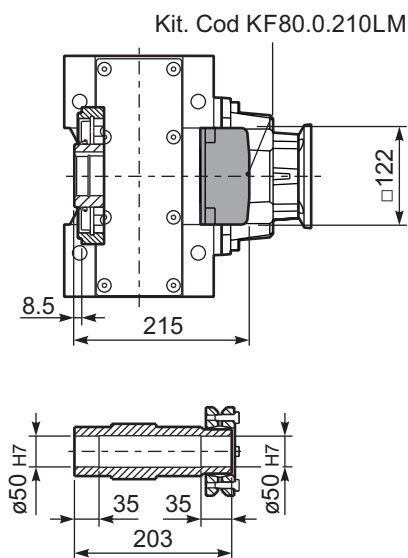
a1 ø	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012



PH83C D...

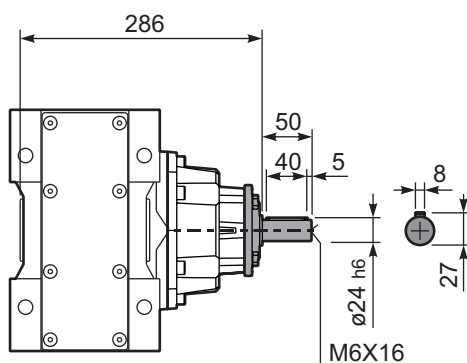
Shrink disk

Calettatore

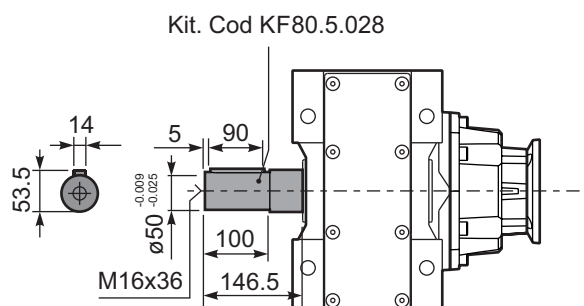


RH83C...

Input Shaft
Albero in entrata

PH83C **A...**

Single output shaft
Albero uscita semplice



Aluminum and cast iron helical bevel gearboxes

A modular and compact product
Very energy efficient drive

Removable inspection cover

Allows periodic inspection of gearing during routine maintenance

Gears

Hardened and ground gears

Alloy housing

Is vacuum impregnated (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint.

Oil seals

Two oil seals on request

Single-piece aluminum

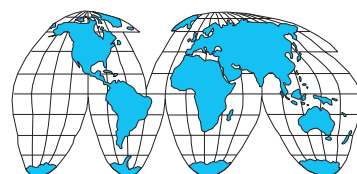
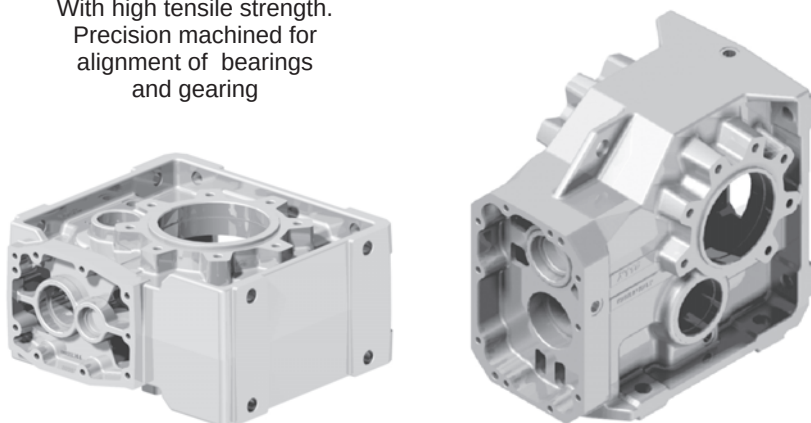
Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing

Flange

Fully modular to IEC and Compact integrated motor. NEMA C flange

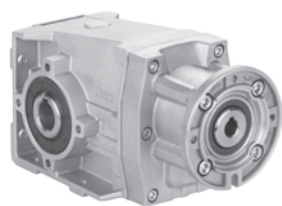
Cast Iron housing

With high tensile strength. Precision machined for alignment of bearings and gearing



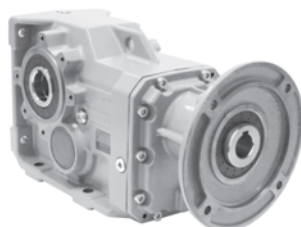
World wide sales network.

Specific type datasheet on page...



Types / Tipi
 Typen / Types
 Tipos

On page / A pagina / Auf Seite / À la page / En la página								
8-5	8-7	8-9	8-11	8-13	8-15	8-17	8-19	8-21
X22S 50Nm	X32S 90Nm	X33S 100Nm	X42A 150Nm	X43A 160Nm	X52A 250Nm	X53A 250Nm	X62A 410Nm	X63A 410Nm



Types / Tipi
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 Tipos

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8-23	8-25	8-27	8-29	8-31	8-33	8-35	8-37	8-39	8-41
X73C 675Nm	X74C 675Nm	X83C 1000Nm	X84C 1000Nm	X93C 1600Nm	X94C 1650Nm	X103 3000Nm	X104 3000Nm	X113 4500Nm	X114 4600Nm



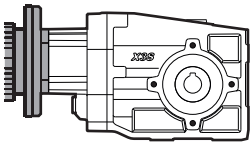
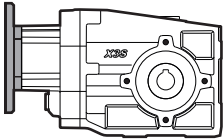
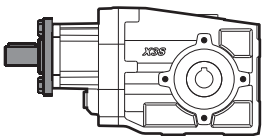
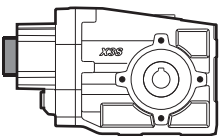
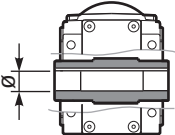
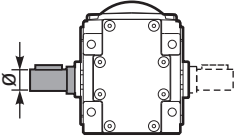
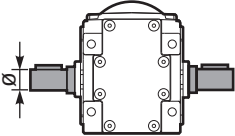
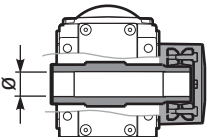
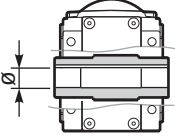
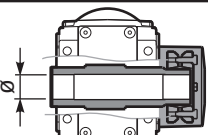
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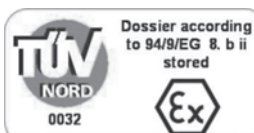
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8-43	8-45	8-47	8-49
113C 675Nm	114C 675Nm	133C 1000Nm	134C 1000Nm



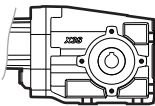
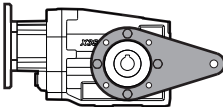
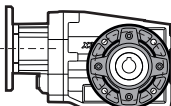
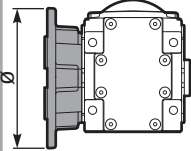
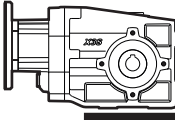
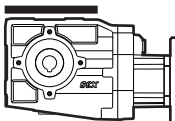
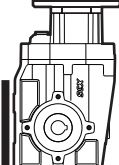
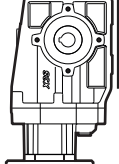
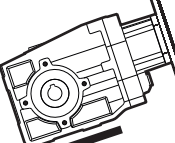
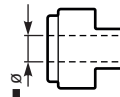
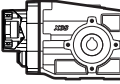
Types / Tipi
 Typen / Types
 Tipos

On page / A pagina / Auf Seite / À la page / En la página									
M-1									
56A 56B	63A 63B	71A 71B	80A 80B	90S 90L	100LA 100LB	112M	132S 132M	160M 160L	180M 180L

Type - Tipo - Typ Type - Tipo	Size - Grandezza - Grösse Taille - Tamaño	Hub - Mozzo corona Hohlwelle Arbre creux Nucleo corona	Rapporto - Ratio Untersetzung Reduction Relacion	Output shaft - Albero uscita Ausgangsflansch Arbre de sortie Brida en salida
M	X22S	C	4.83	-A
Helical-bevel gear Riduttori ortogonali  With IEC motor M  With motor flange P  With male input shaft R  Modular base B Not available for: X93C, X103, X104, X113, X114.	2 Stages Riduzioni Stufen Trains Etapas 3 Stages Riduzioni Stufen Trains Etapas Aluminum Alluminio Aluminium Aluminio X22S X32S X42A X52A X62A X33S X43A X53A X63A 3 Stages Riduzioni Stufen Trains Etapas 4 Stages Riduzioni Stufen Trains Etapas Cast Iron Ghisa Grauguss Fonte Fundicion 113C 114C 133C 134C X73C X74C X83C X84C X93C X94C X103 X104 X113 X114	Hollow output shaft C  Single output shaft A  Double output shaft only for 113/4C, 133/4C, X73/4C, X83/4C, X93/4C, X103/4 and X113/4 B  Shrink Disk (only on the DX side) D  Only on request for Q.ty A richiesta per quantità Stainless steel hub I  Stainless steel hub Mozzo in acciaio Inox Edelstahlhohlwelle Moyeu en acier Inox Nucleo corona de acero Inox Only on request for Q.ty A richiesta per quantità	See technical data table Vedi tabella dati tecnici. Technisches Datenblatt beachten Voir Tableau données techniques Ver tabla datos técnicos	Hollow output shaft STANDARD X22S -A ⇒ Ø18 -B ⇒ Ø20 X32S X33S -B ⇒ Ø20 -C ⇒ Ø25 X42A X43A -C ⇒ Ø25 -D ⇒ Ø30 X52A X53A -D ⇒ Ø30 -E ⇒ Ø35 X62A X63A -E ⇒ Ø35 -F ⇒ Ø40 X73/4C X83/4C -F ⇒ Ø40 -H ⇒ Ø45 113C 114C -F ⇒ Ø40 -G ⇒ Ø42 133C 134C -F ⇒ Ø40 -H ⇒ Ø45 X93C X94C -H ⇒ Ø45 -J ⇒ Ø50 X103 X104 -K ⇒ Ø60 X113 X114 -T ⇒ Ø70 Single and double output shaft -I X22S X32/3S ⇒ Ø20 -L X32/3S X42/3A ⇒ Ø25 -M X52/3A ⇒ Ø30 -N X52/3A X62/3A ⇒ Ø35 X73/4A* -V X83/4A 113/4C ⇒ Ø40* -O 113/4C ⇒ Ø42* -P 133/4C ⇒ Ø45* -1 X93/4C ⇒ Ø50* -3 X103/4 ⇒ Ø60* -5 X113/4 ⇒ Ø70* * Also available double output shaft  Shrink Disk -U X22S X32/3S ⇒ Ø20 -Q X42/3A ⇒ Ø30 -R X52/3A ⇒ Ø35 -S X62/3A X73/4A X83/4A 113/4C ⇒ Ø40 -6 133/4C ⇒ Ø45 -7 X93/4C ⇒ Ø50 -8 X103/4 ⇒ Ø65 -9 X113/4 ⇒ Ø75



On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

Type - Tipo - Typ Type - Tipo	Output flange Flangia di uscita Ausgangs Flansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor	Mounting position Posizione montaggio Einbaulage Position de montage Position de montaje	Input bore Foro entrata Eingangshohlwelle Trou d'entree Eje hueco de entrada	Terminal box position Posizione morsetteria Klemmkastenlage Position boîte à bornes Posición caja de bornes
BR	N	-O	B3	C	B
 FB Forma base Universal  BR Braccio d reazione Reaction arm  -F Flangia uscita output flange	 N Senza flangia Without flange X22S 0 ⇒ Ø110 1 ⇒ Ø120 X32S X33S 1 ⇒ Ø120 2 ⇒ Ø160 X42-3A X52-3A X62-3A 2 ⇒ Ø160 3 ⇒ Ø200 4 ⇒ Ø250 X73C X74C X83C X84C 4 ⇒ Ø250 113C 114C X93C X94C C ⇒ Ø280 L ⇒ Ø280 133C 134C C ⇒ Ø320 X103 X104 6 ⇒ Ø350 X113 X114 7 ⇒ Ø450	Flange Flangia  B5 -A=56 (Ø120) -B=63 (Ø140) -C=71 (Ø160) -D=80 (Ø200) -E=90 (Ø200) -F=100÷112 (Ø250) -G=132 (Ø300) -H=160 (Ø350) -I=180 (Ø350) -L=200 (Ø400) CA=225 (Ø450) Without flange Senza flangia  -M ⇒ With coupling X22S X33S X43A -Z ⇒ Ø9 (56B5) -0 ⇒ Ø11 (63B5) -1 ⇒ Ø14 (71B5) X32S X42A X53A X63A X74C X84C 114C 134C -1 ⇒ Ø14 (71B5) -2 ⇒ Ø19 (80B5) -3 ⇒ Ø24 (90B5) X52A X62A 113C 133C X73C X83C X94C -2 ⇒ Ø19 (80B5) -3 ⇒ Ø24 (90B5) -4 ⇒ Ø28 (100B5) Type R Tipo R  X22S X33S X43A -1 ⇒ Ø14 X32S X42A X53A X63A X74C X84C 114C 134C -2 ⇒ Ø19 X52A X62A 113C 133C X73C X83C X94C -3 ⇒ Ø24 X93C X104 X114 -4 ⇒ Ø28 X103 X113 -6 ⇒ Ø42	 B3 STANDARD  B6  B7  B8  V5  V6  V8	- Nothing indication: standard bore Nessuna indicazione: foro standard COUPLING  A = 9mm B = 11mm C = 14mm D = 19mm E = 24mm F = 28mm 0 Ready for input coupling Predisposto per giunto 	 A  B STANDARD  C  D

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

Lifting / sollevamento / hubantriebe / levage / elevación

$$P [KW] = \frac{M [Kg] \cdot g [9.81] \cdot v [m / s]}{1000}$$

Rotation / rotazione / drehung / rotation / rotation

$$P [KW] = \frac{M [Nm] \cdot n [rpm]}{9550}$$

Linear movement / traslazione / linearbewegung / translation / translacion

$$P [KW] = \frac{F [N] \cdot v [m / s]}{1000}$$

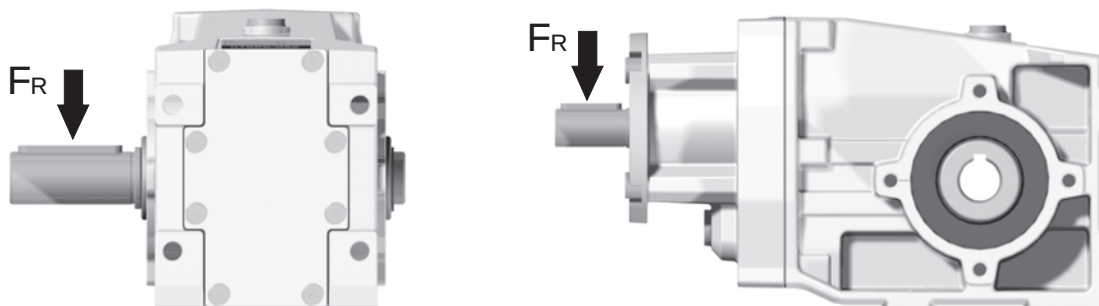
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

$$M [Nm] = \frac{9550 \cdot P[KW]}{n [rpm]}$$

$$M [lb in] = \frac{63030 \cdot P[HP]}{n [rpm]}$$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida



$$F_R [N] = \frac{M [Nm] \cdot 2000}{d [mm]} \cdot f_k$$

$$F_R [N] = \frac{M [lb in] \cdot 8.9}{d [in]} \cdot f_k$$

M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo
f_k	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión 1.15 Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje 1.25 Catena / Chain sprockets / Antriebskette / Chaîne / Cadena 1.75 Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal 2.50 Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana

- If your application requires higher radial loads, contact our technical office. Higher load may be possible.
- Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
- Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
- Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
- En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

How to select a gearbox / Come selezionare un riduttore / Wie wählt man ein Getriebe
Comment sélectionner un réducteur / Cómo seleccionar un reductor

B Output speed
Velocità in uscita
Abtriebsdrehzahl
Vitesse de sortie
Velocidad de salida

Nominal power
Potenza nominale
Max. mögliche Leistung
Puissance nominale
Potencia nominal

A Nominal torque
Momento torcente nominale
Nenn Drehmoment
Couple nominal
Par de torsión nominal

Flange code
Codice flangia
Flanschtype
Code bride
Código bridas

Input speed
Velocità in entrata
Eintriebsdrehzahl
Vitesse en entrée
Velocidad de entrada

Gear size
Grandezza riduttore
Getriebegröße
Taille réducteur
Tamaño reductor

Motor power
Potenza motore
Motorleistung
Puissance moteur
Potencia motor

Angletech Gear
50Nm

Rating - Aluminum
HELICAL-BEVEL GEARBOXES

QUICK SELECTION / Selezione veloce The dynamic efficiency is **0.96** for all ratios **input speed (n₁) = 1400 min⁻¹**

Output Speed n ₂ [min ⁻¹]	Ratio i	Motor power P _{1M} [kW]	Output torque M _{2M} [Nm]	Service factor f.s.	Nominal power P _{1R} [kW]	Nominal torque M _{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft	Notes
							-B	-C	-O	-P	-Q		Ratio code
289.7	4.83	0.37	11.7	2.6	0.95	30			C	C		289	01
189.2	7.40	0.37	17.9	1.7	0.62	30			C	C		287	02
146.2	9.58	0.37	23.2	1.7	0.64	40			C	C		199	03
127.5	10.98	0.37	26.6	1.7	0.63	45			C	C		179	04

C Ratio
Rapporto
Untersetzung
Rapport de réduction
Relación

Transmitted torque
Momento torcente trasmesso
Mögliche Drehmomente
Couple de sortie
Par transmitido

Service factor
Fattore di servizio
Betriebsfaktor
Facteur de service
Factor de servicio

Output shaft diam.
Diam. albero uscita
Durchmesser abtriebswelle
Diametre arbre lent
Diametro eje de salida

Notes
Note
Anmerkungen
Note
Notas

fs		Oper. hours per day Ore di funz. giorn.		
Type of load and starts per hour Tipo di carico e avviamenti per ora		3 h	10 h	24 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

D	Motor flange available Flange disponibili Erhältliche Motorflansche Bridas disponibles Bridas disponibles
B)	Mounting with reduction ring Montaggio con boccia di riduzione Reduzierhülsen Montage avec douille de réduction Montaje con casquillo de reducción
C)	Motor flangeholes position/terminal box position Posizione fori flangia/basetta motore Bohrungsposition am Motorflansch/-sockel Position trous bride/barrette à bornes moteur Posición agujeros brida / base motor
B)	Available without reduction bushes Disponibile anche senza boccia Auch ohne Reduzierbuchse verfügbar Disponible aussi sans douille de réduction Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select output speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)



QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft 	Ratios code
							-B	-C	-O	-P	-Q		
							63	71	56	63	71		
290	4.83	0.37	12	2.6	0.95	30			C	C		289	01
189	7.40	0.37	18	1.7	0.62	30			C	C		287	02
146	9.58	0.37	23	1.7	0.64	40			C	C		199	03
128	10.98	0.37	27	1.7	0.63	45			C	C		179	04
107	13.07	0.37	32	1.4	0.53	45			C	C		159	05
95	14.66	0.37	35	1.3	0.47	45			C	C		197	06
89	15.79	0.37	38	1.2	0.44	45			C	C		139	07
83	16.81	0.37	41	1.1	0.41	45			C	C		177	08
70	20.00	0.37	48	1.0	0.37	48			C	C		157	09
64	21.93	0.37	53	0.9	0.35	50			C	C		109	10
58	24.18	0.25	39	1.3	0.32	50			C	C		137	11
48.2	29.04	0.25	47	1.1	0.26	50			C	C		99	12
41.7	33.57	0.18	42	1.2	0.23	50			C	C		107	13
36.2	38.67	0.18	48	1.0	0.20	50			C	C		79	14
31.5	44.44	0.18	55	0.9	0.17	50			C	C		97	15
23.7	59.18	0.12	48	1.0	0.13	50			C	C		77	16
19.9	70.24	0.09	45	1.1	0.11	50			C	C		67	17

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X22S** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X22S** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X22S** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X22S** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X22S** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
0.25 LT	0.25 LT	0.25 LT	0.25 LT	0.43 LT	0.31 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

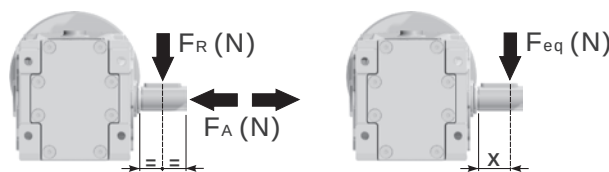
tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$F_{eq} = F_R \cdot \frac{42}{X+23}$$

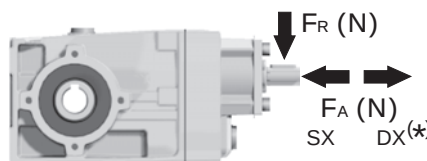


n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
400	360	1800	100	440	2200	25	440	2200
250	380	1900	75	440	2200	15	440	2200
150	420	2100	50	440	2200			

FR On request taper roller bearings to increase radial loads.
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA	FR
1400	140	700
900	160	800
500	190	950

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

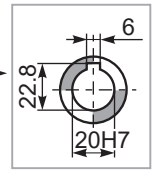
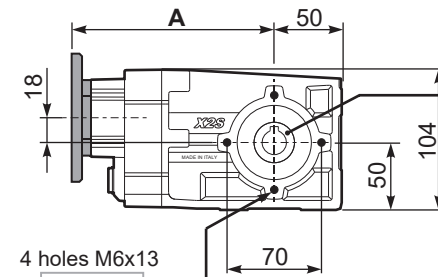
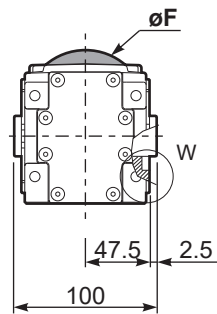
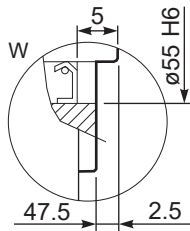
PX22SC...

Basic Gearbox

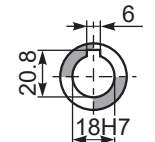
Riduttore base

Gearbox weight peso riduttore	3.70 kg
---	----------------

M. flanges	Kit code	$\varnothing F$	A
63B5	K050.4.041	138	154.5
71B5	K050.4.042	160	152
56B14	KC40.4.049	80	152
63B14	K050.4.047	90	154.5
71B14	K050.4.045	105	152



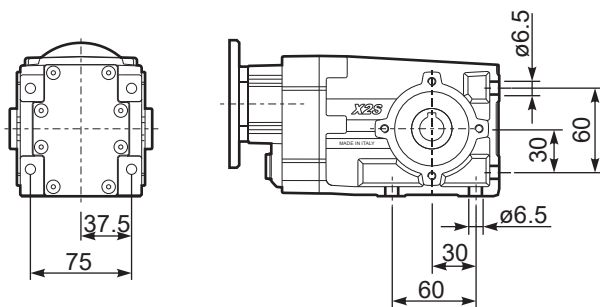
Standard
Hollow shaft



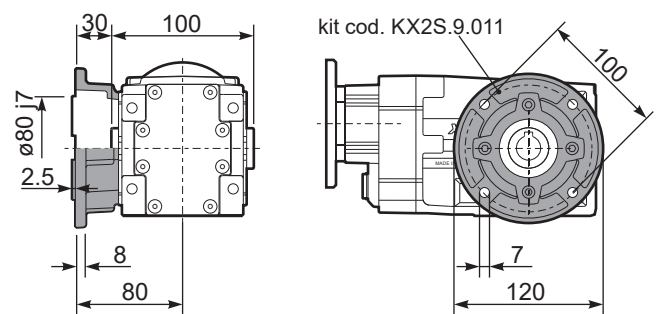
On request
A richiesta

Mounting holes position
Posizione fori di montaggio

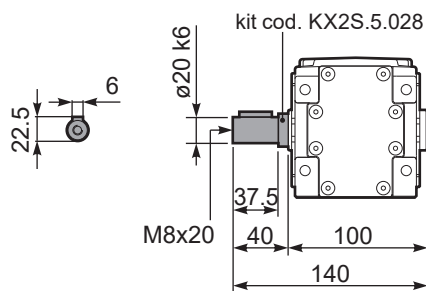
PX22S...**FB**.. Feet
Piedini



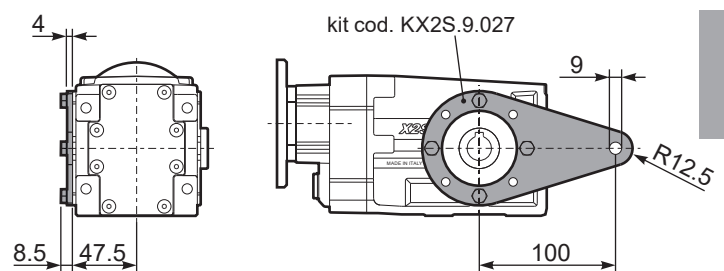
PX22S...-F1.. Output flange
Flangia uscita



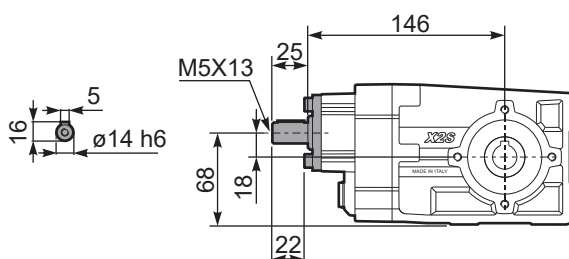
PX22SA.. Single output shaft
Albero semplice in uscita



PX22S... BR ...	Reaction Arm Braccio di reazione
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R X22S..	Input shaft Albero in entrata
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QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft 	Ratios code
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
191	7.33	1.5	72	1.0	1.5	70	B				C	C		289	01
125	11.22	1.1	80	1.1	1.2	85	B				C	C		287	02
106	13.26	1.1	95	0.9	0.98	85	B				C	C		199	03
91	15.37	1.1	110	0.8	0.89	90	B				C	C		179	04
78	18.04	0.75	89	1.0	0.76	90	B				C	C		159	05
69	20.30	0.75	100	0.9	0.68	90	B				C	C		197	06
65	21.54	0.75	106	0.9	0.64	90	B				C	C		139	07
59	23.53	0.55	85	1.1	0.58	90	B				C	C		177	08
51	27.62	0.55	100	0.9	0.50	90	B				C	C		157	09
47.6	29.40	0.55	106	0.8	0.47	90	B				C	C		109	10
42.5	32.97	0.37	80	1.1	0.42	90	B				C	C		137	11
36.5	38.37	0.37	93	1.0	0.36	90	B				C	C		99	12
31.1	45.00	0.25	73	1.2	0.31	90	B				C	C		107	13
27.6	50.67	0.25	83	1.1	0.27	90	B				C	C		79	14
23.8	58.73	0.18	73	1.2	0.23	90	B				C	C		97	15
18.1	77.55	0.18	97	0.9	0.18	90	B				C	C		77	16

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X32S** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X32S** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X32S** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X32S** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X32S** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	B6	B7	B8	V5	V6	V8
0.40 LT	0.60 LT	0.40 LT	0.60 LT	0.85 LT	0.60 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

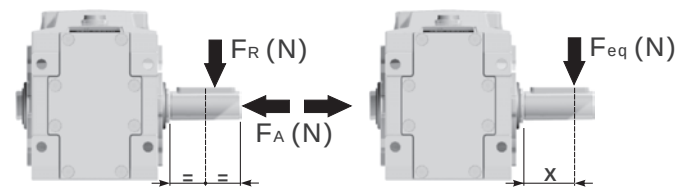
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web **tab. 1**

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$F_{eq} = F_R \cdot \frac{47.5}{X+28.5}$$

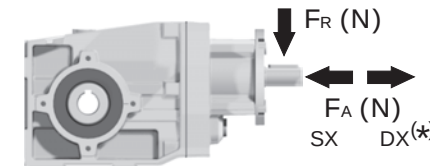


n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
250	400	2000	75	560	2800	15	560	2800
150	450	2250	50	560	2800			
100	500	2500	25	560	2800			

FR On request taper roller bearings to increase radial loads.
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA	FR
1400	240	1200
900	280	1400
500	340	1700

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

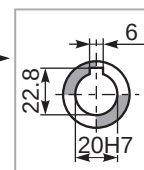
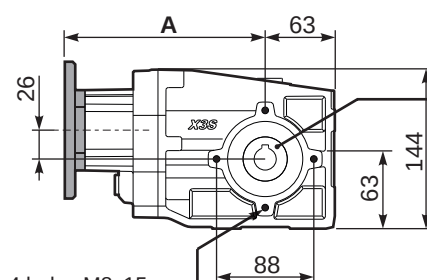
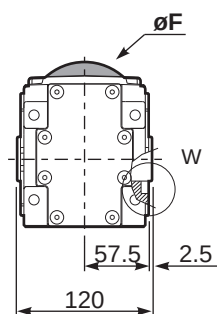
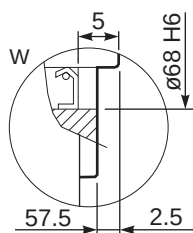
PX32SC...

Basic Gearbox
Riduttore base

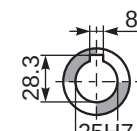
Gearbox weight
peso riduttore

6.30 kg

M. flanges	Kit code	ØF	A
63B5	K063.4.041	140	184
71B5	K063.4.042	160	182
80/90B5	K063.4.043	200	184
71B14	K063.4.047	105	182
80B14	K063.4.046	120	184
90B14	K063.4.041	140	184



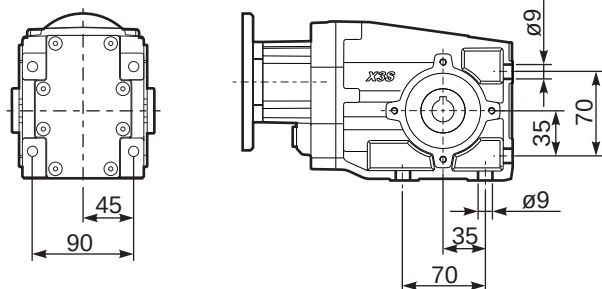
Standard Hollow shaft



On request
A richiesta

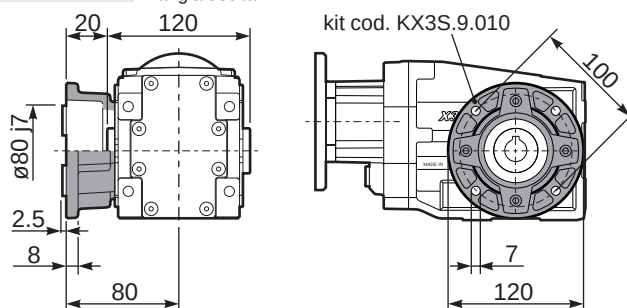
4 holes M8x15

Mounting holes position
Posizione fori di montaggio

PX32S...**FB..**Feet
Piedini

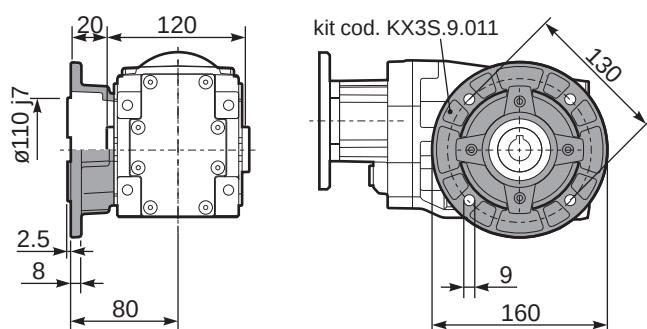
PX32S...-F1..	Output flange Flangia uscita
---------------	---------------------------------

Flangia uscita



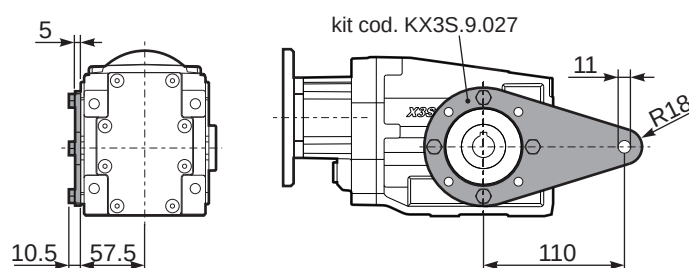
PX32S...-F2.. Output flange
Flangia uscita

Flangia uscita



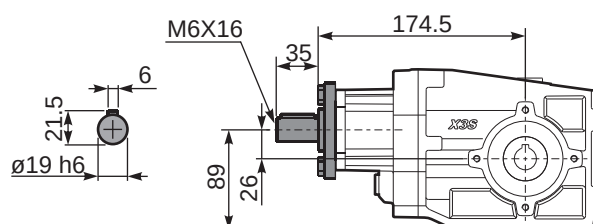
PX32S... BR..	Reaction Arm Braccio di reazione
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- Braccio di reazione



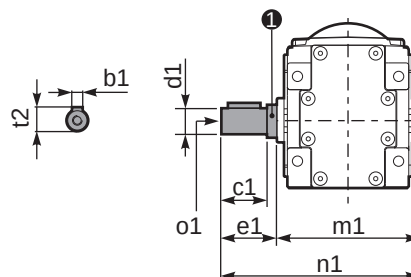
Rx32S...

Input shaft
Albero in entrata



PX32S**A**.. Single output shaft
Albero semplice in uscita

Albero semplice in uscita



d1	b1	c1	e1	m1	n1	t2	o1	① kit code
ø20 k6	6	37.5	40	120	160	22.5	M8x20	KX2S.5.028
ø25 ^{-0.005 -0.020}	8	60	63.2	126.8	190	28	M8x20	K063.5.028



QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.94** for all ratios

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft 	Ratios code
							-B	-C	-O	-P	-Q		
							63	71	56	63	71		
38.7	36.17	0.37	86	1.2	0.43	100			C	C		17179	02
31.7	44.21	0.37	105	1.0	0.35	100			C	C		19139	03
27.6	50.68	0.25	81	1.2	0.31	100			C	C		17139	04
25.3	55.36	0.25	89	1.1	0.28	100			C	C		17177	05
23.2	60.31	0.25	96	1.0	0.26	100			C	C		15139	06
21.2	65.88	0.25	105	0.9	0.24	100			C	C		15177	07
19.4	72.25	0.18	88	1.1	0.22	100			C	C		10179	08
17.6	79.64	0.18	97	1.0	0.20	100			C	C		13177	09
15.2	92.31	0.18	113	0.9	0.17	100			C	C		15137	10
14.6	95.65	0.18	117	0.9	0.16	100			C	C		9179	11
13.8	101.23	0.12	80	1.2	0.15	100			C	C		10139	12
11.0	127.37	0.12	101	1.0	0.12	100			C	C		7179	13
9.3	151.16	0.09	95	1.0	0.10	100			C	C		6179	14
7.8	178.46	0.09	113	0.9	0.09	100			C	C		7139	15
6.6	211.79	0.06	88	1.1	0.07	100			C	C		6139	16
6.1	231.37	0.06	96	1.0	0.07	100			C	C		6177	17
5.1	273.16	0.06	113	0.9	0.06	100			C	C		7137	18
4.3	324.18	0.06	134	0.7	0.05	100			C	C		6137	19

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X33S** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X33S** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X33S** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X33S** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X33S** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
0.70 LT	0.65 LT	0.40 LT	0.65 LT	0.95 LT	0.65 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

For all details on lubrication and plugs check our website

tab. 1

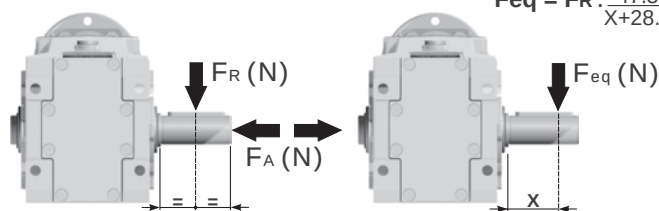
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$F_{eq} = F_R \cdot \frac{47.5}{X+28.5}$$

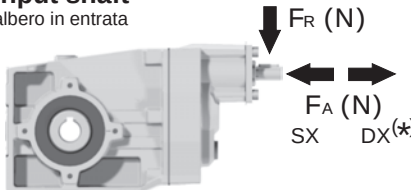


n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
250	400	2000	75	560	2800	15	560	2800
150	450	2250	50	560	2800			
100	500	2500	25	560	2800			

FR On request taper roller bearings to increase radial loads.
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA	FR
1400	140	700
900	160	800
500	190	950

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

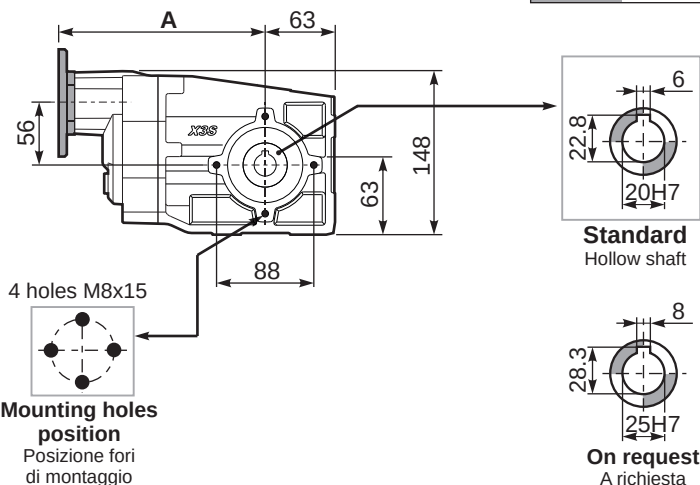
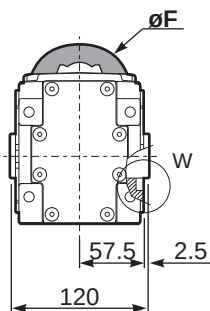
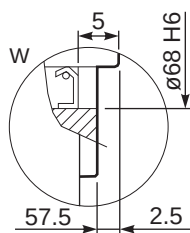
tab. 2

PX33SC...

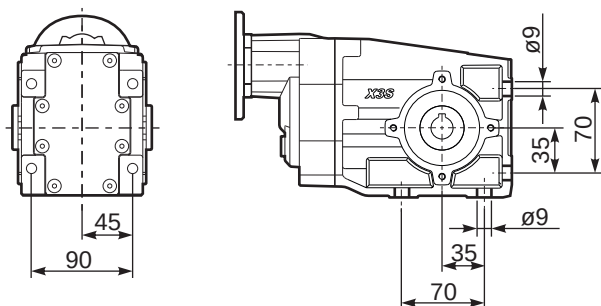
Basic Gearbox
Riduttore baseGearbox
weight
peso riduttore

6.55 kg

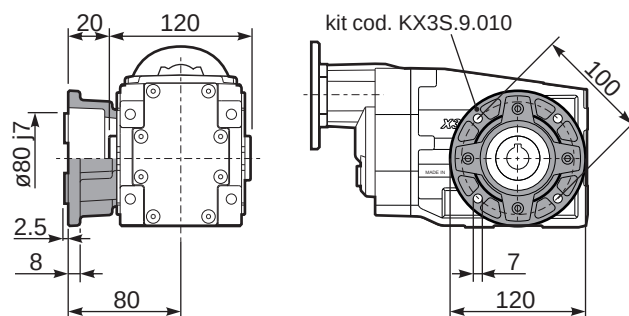
M. flanges	Kit code	ØF	A
63B5	K050.4.041	138	189.5
71B5	K050.4.042	160	187
56B14	KC40.4.049	80	187
63B14	K050.4.047	90	189.5
71B14	K050.4.045	105	187



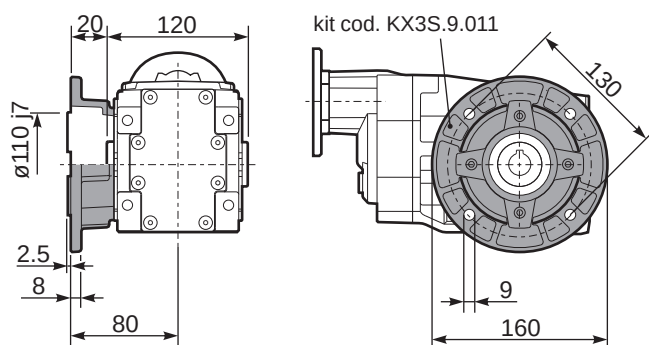
PX33S...FB..

Feet
Piedini

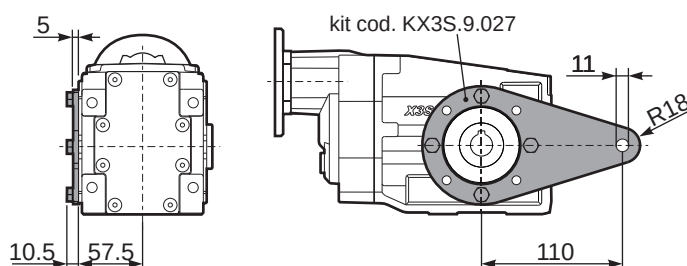
PX33S...-F1..

Output flange
Flangia uscita

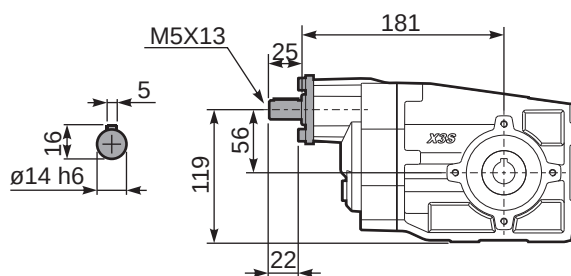
PX33S...-F2..

Output flange
Flangia uscita

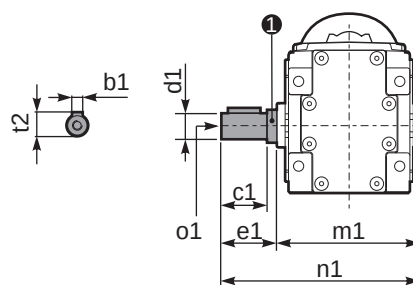
PX33S...BR..

Reaction Arm
Braccio di reazione

RX33S...

Input shaft
Albero in entrata

PX33SA..

Single output shaft
Albero semplice in uscita

d1	b1	c1	e1	m1	n1	t2	o1	1	kit code
Ø20 k6	6	37.5	40	120	160	22.5	M8x20		KX2S.5.028
Ø25 ^{-0.005/-0.020}	8	60	63.2	126.8	190	28	M8x20		K063.5.028



QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Ratios code 
							-B	-C	-D	-E	-F	-Q	-R	-T	-U		
							63	71	80	90	100 112	71	80	90	100 112		
192	7.29	2.2	104	0.9	2.0	95	B					C	C			2811	01
125	11.20	2.2	159	0.9	2.0	150	B					C	C			288	02
106	13.18	1.5	129	1.2	1.7	150	B					C	C			1911	03
92	15.27	1.1	109	1.4	1.5	150	B					C	C			1711	04
78	17.93	1.1	128	1.2	1.3	150	B					C	C			1511	05
69	20.25	1.1	145	1.0	1.1	150	B					C	C			198	06
65	21.40	1.1	153	1.0	1.1	150	B					C	C			1311	07
60	23.47	0.75	115	1.3	0.98	150	B					C	C			178	08
51	27.55	0.75	135	1.1	0.83	150	B					C	C			158	09
47.9	29.21	0.75	143	1.0	0.78	150	B					C	C			1011	10
42.6	32.88	0.75	161	0.9	0.70	150	B					C	C			138	11
36.7	38.12	0.55	138	1.1	0.60	150	B					C	C			911	12
31.2	44.89	0.55	163	0.9	0.51	150	B					C	C			108	13
27.8	50.34	0.37	122	1.1	0.40	131	B					C	C			711	14
23.9	58.58	0.37	142	1.1	0.39	150	B					C	C			98	15
18.1	77.36	0.25	126	1.2	0.30	150	B					C	C			78	16

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X42A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X42A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X42A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X42A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X42A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	B6	B7	B8	V5	V6	V8
0.60 LT	0.75 LT	0.50 LT	0.70 LT	1.10 LT	0.60 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

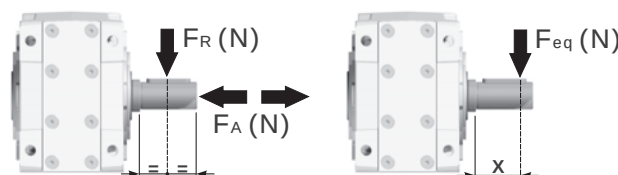
tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$F_{eq} = F_R \cdot \frac{54}{X+28}$$



n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
250	500	2500	75	800	4000	15	960	4800
150	600	3000	50	960	4800			
100	700	3500	25	960	4800			

FR On request taper roller bearings to increase radial loads.
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft

albero in entrata

n_1 [min ⁻¹]	FA	FR
1400	240	1200
900	280	1400
500	340	1700

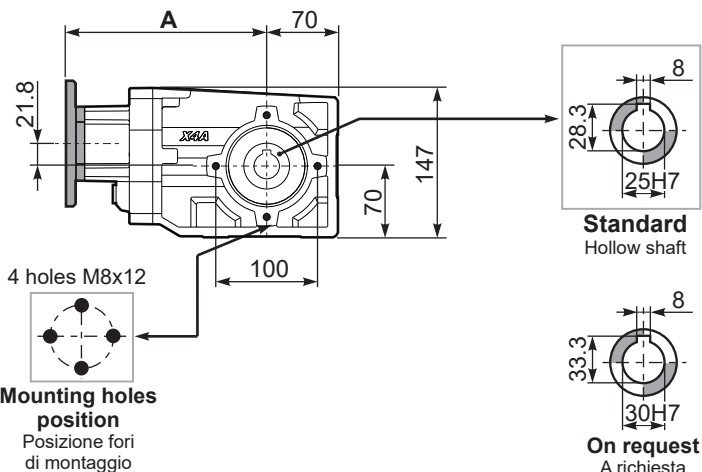
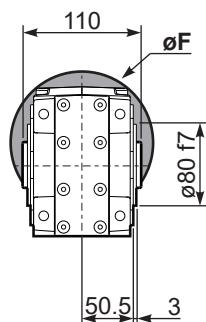
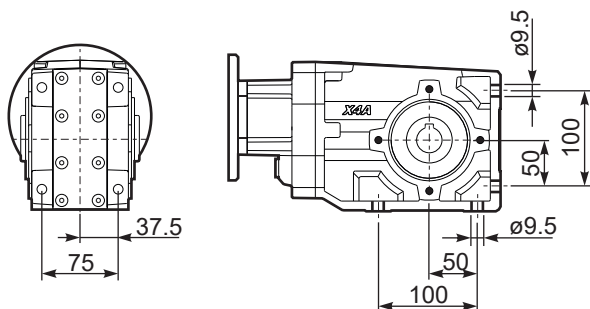
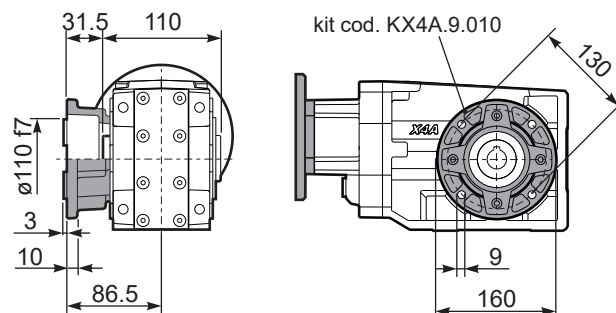
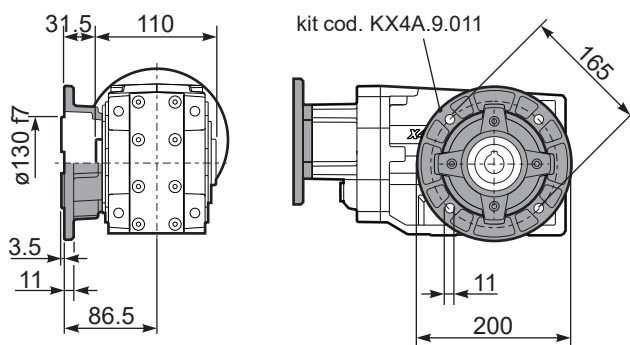
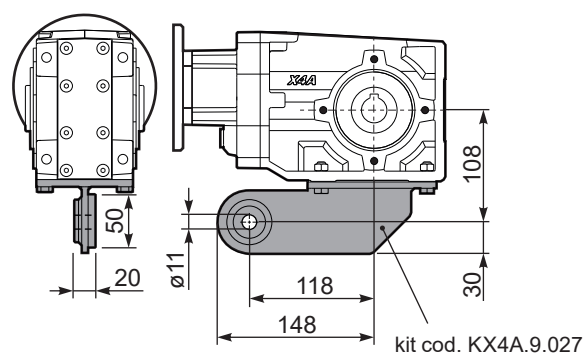
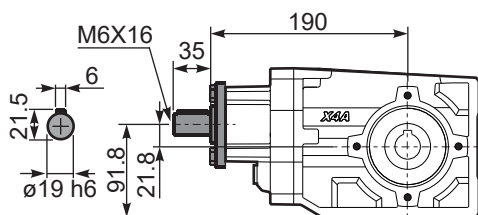
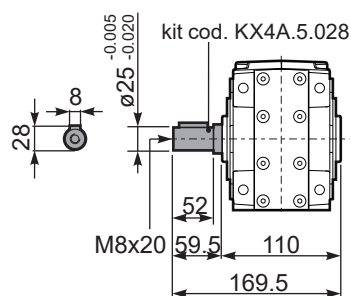
*Strong axial loads in the DX direction are not allowed.

Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PX42AC...Basic Gearbox
Riduttore baseGearbox
weight
peso riduttore**7.82 kg**

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	199.5
71B5	K063.4.042	160	197.5
80/90B5	K063.4.043	200	199.5
100/112B5	KC40.4.043	250	214.3
71B14	K063.4.047	105	197.5
80B14	K063.4.046	120	199.5
90B14	K063.4.041	140	199.5
100/112B14	KC40.4.041	160	214.5

**PX42A...FB..**Feet
Piedini**PX42A...-F2..**Output flange
Flangia uscita**PX42A...-F3..**Output flange
Flangia uscita**PX42A...BR..**Reaction Arm
Braccio di reazione**RX42A...**Input shaft
Albero in entrata**PX42AA..**Single output shaft
Albero semplice in uscita



QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.94** for all ratios

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft 	Ratios code
							-B	-C	-O	-P	-Q		
							63	71	56	63	71		
27.8	50.35	0.37	119	1.3	0.46	150			C	C		171311	01
25.4	55.22	0.37	131	1.1	0.42	150			C	C		17178	02
23.4	59.92	0.37	142	1.1	0.39	150			C	C		151311	03
21.3	65.72	0.37	156	1.0	0.36	150			C	C		15178	04
19.5	71.78	0.25	115	1.3	0.33	150			C	C		101711	05
17.6	79.44	0.25	127	1.2	0.29	150			C	C		13178	06
15.2	92.08	0.25	147	1.0	0.25	150			C	C		15138	07
14.7	95.03	0.25	152	1.0	0.25	150			C	C		91711	08
11.1	126.55	0.18	155	1.0	0.20	160			C	C		71711	09
10.5	133.15	0.18	163	1.0	0.19	160			C	C		91311	10
9.3	150.18	0.12	119	1.3	0.17	160			C	C		61711	11
7.9	177.30	0.12	140	1.1	0.14	160			C	C		71311	12
6.7	210.42	0.09	133	1.2	0.12	160			C	C		61311	13
6.1	230.79	0.09	146	1.1	0.11	160			C	C		6178	14
5.1	272.47	0.06	113	1.4	0.09	160			C	C		7138	15
4.3	323.37	0.06	134	1.2	0.08	160			C	C		6138	16

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X43A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X43A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X43A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X43A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X43A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	B6	B7	B8	V5	V6	V8
0.80 LT	0.80 LT	0.60 LT	0.80 LT	1.20 LT	0.70 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

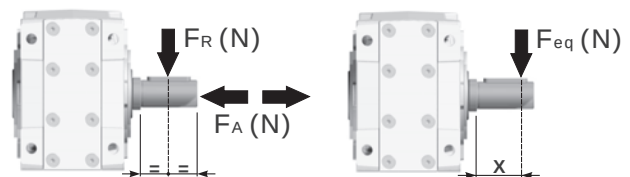
tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$F_{eq} = F_R \cdot \frac{54}{X+28}$$

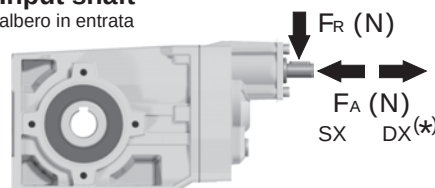


n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
250	500	2500	75	800	4000	15	960	4800
150	600	3000	50	960	4800			
100	700	3500	25	960	4800			

FR On request taper roller bearings to increase radial loads.
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft

albero in entrata

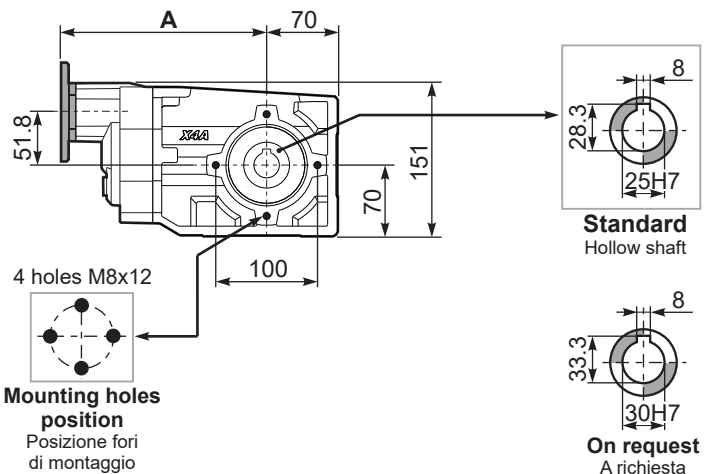
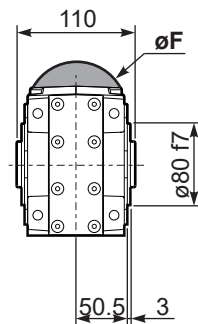
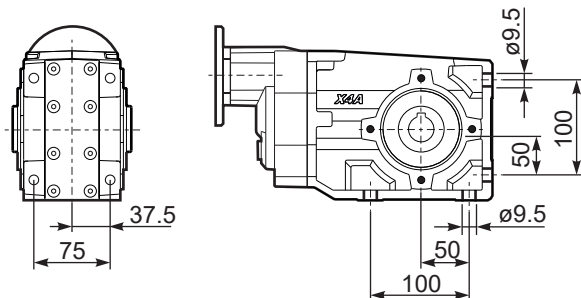
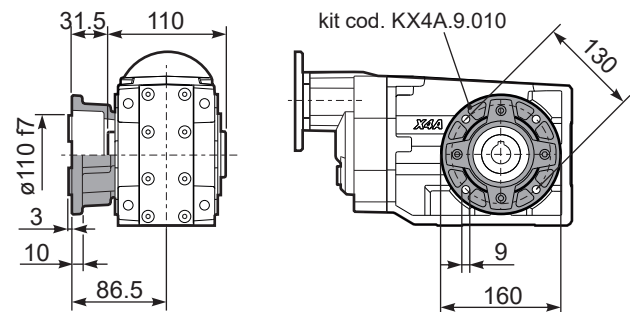
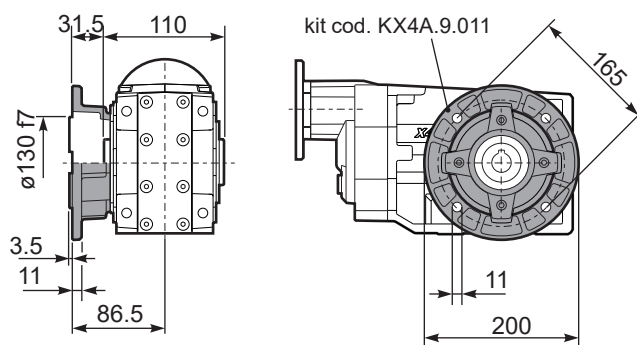
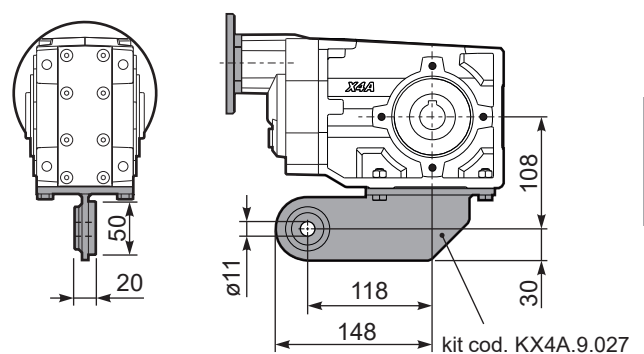
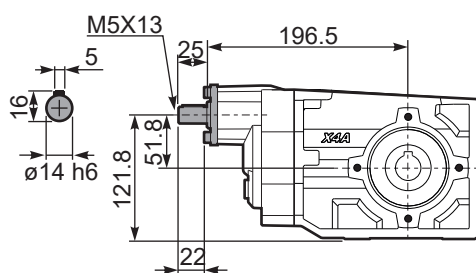
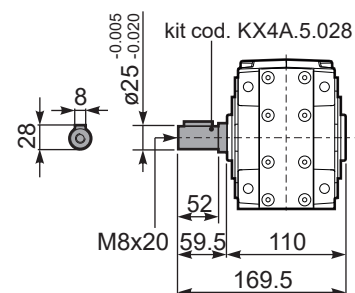


n_1 [min ⁻¹]	FA [N]	FR [N]
1400	140	700
900	160	800
500	190	950

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

PX43AC...Basic Gearbox
Riduttore baseGearbox
weight
peso riduttore**7.93 kg**

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	205
71B5	K050.4.042	160	202.5
56B14	KC40.4.049	80	202.5
63B14	K050.4.047	90	205
71B14	K050.4.045	105	202.5

**PX43A...FB..** Feet
Piedini**PX43A...-F2..** Output flange
Flangia uscita**PX43A...-F3..** Output flange
Flangia uscita**PX43A...BR..** Reaction Arm
Braccio di reazione**RX43A...** Input shaft
Albero in entrata**PX43AA..** Single output shaft
Albero semplice in uscita



QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

input speed (n_1) = 1400 min⁻¹

Output Speed n ₂ [min ⁻¹]	Ratio i	Motor power P _{1M} [kW]	Output torque M _{2M} [Nm]	Service factor f.s.	Nominal power P _{1R} [kW]	Nominal torque M _{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges				Output Shaft 	 Ratios code
							-C	-D	-E	-F	-R	-T	-U			
							71	80	90	100 112	80	90	100 112			
232	6.03	3	116	1.2	3.4	135	B							3011	standard ø30 ø35 On request	01
151	9.26	3	179	0.9	2.6	155	B							308		02
123	11.36	3	219	1.0	3.1	230	B							2011		03
91	15.36	2.2	218	1.1	2.5	250	B							1611		04
80	17.46	2.2	248	1.0	2.2	250	B							208		05
70	19.97	2.2	284	0.9	1.9	250	B							1311		06
59	23.60	1.5	231	1.1	1.6	250	B							168		07
57	24.45	1.5	239	1.0	1.6	250	B							1111		08
45.6	30.69	1.1	220	1.1	1.2	250	B							138		09
39.6	35.35	1.1	253	1.0	1.1	250	B							811		10
37.3	37.57	1.1	269	0.9	1.0	250	B							118		11
28.8	48.68	0.75	239	1.0	0.78	250	B							611		12
25.8	54.33	0.75	267	0.9	0.70	250	B							88		13
18.7	74.81	0.37	181	1.2	0.43	210	B							68		14

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X52A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X52A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X52A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X52A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X52A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio						
B3	B6	B7	B8	V5	V6	V8	
0.90 LT	1.50LT	0.75 LT	1.40 LT	1.95 LT	1.15 LT	Ask	
AGIP Telium VSF 320				SHELL Omala S4 WE 320			

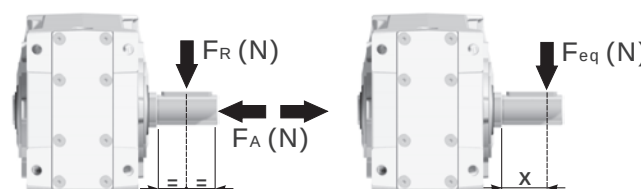
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web **tab. 1**

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$F_{eq} = F_R \cdot \frac{61.5}{X+31}$$



n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
250	600	3000	75	820	4100	15	1660	8300
150	700	3500	50	960	4800			
100	800	4000	25	1350	6750			

F_R On request taper roller bearings to increase radial loads.
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft

albero in entrata

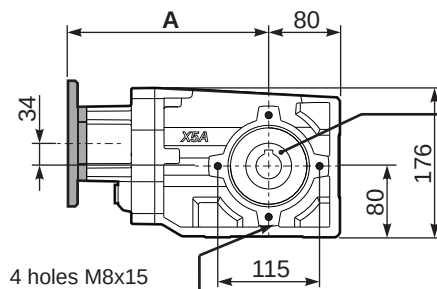
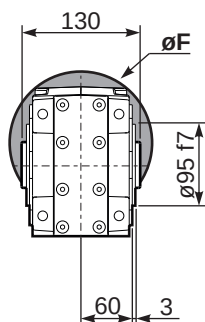
n_1 [min ⁻¹]	FA	FR
1400	450	2250
900	500	2500
500	600	3000

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

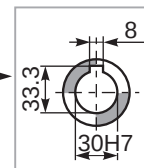
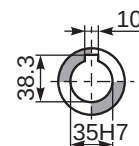
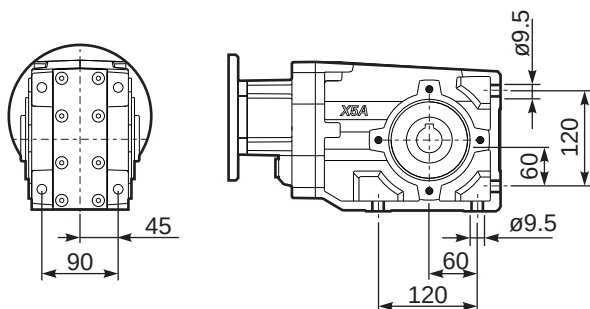
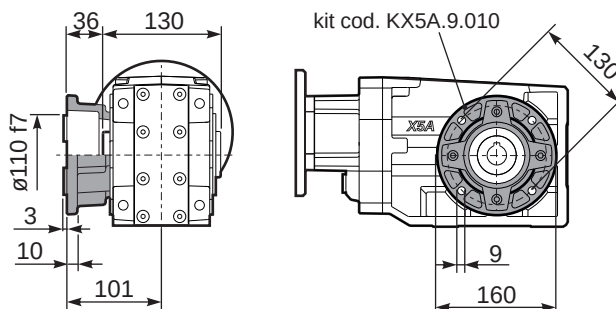
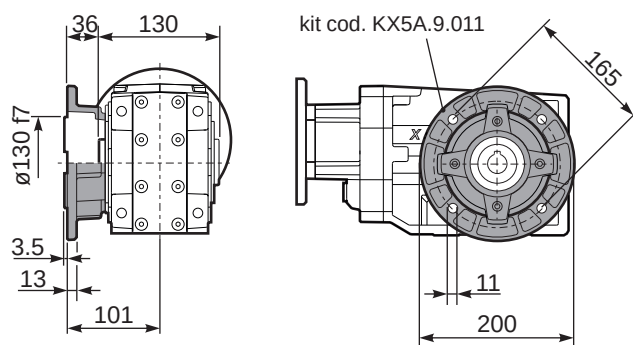
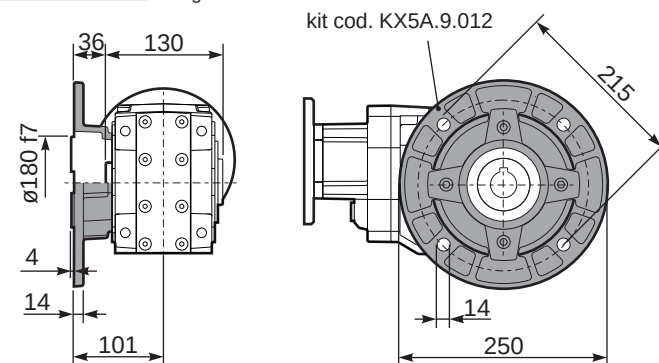
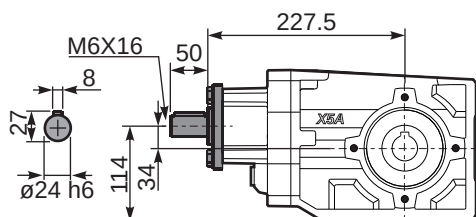
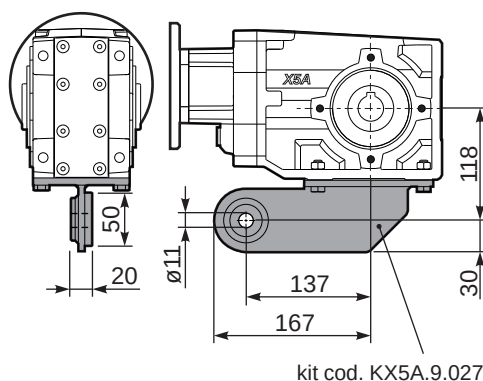
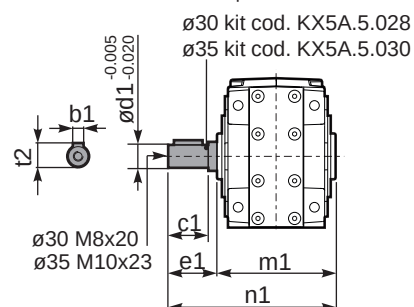
tab. 2

PX52AC...Basic Gearbox
Riduttore baseGearbox
weight
peso riduttore **12.80 kg**

M. flanges	Kit code	ØF	A
71B5	K023.4.041	160	234
80/90B5	K023.4.042	200	236
100/112B5	K023.4.043	250	245
80B14	K085.4.046	120	236
90B14	K085.4.045	140	236
100/112B14	K085.4.047	160	245



4 holes M8x15

Mounting holes
positionPosizione fori
di montaggioStandard
Hollow shaftOn request
A richiesta**PX52A...FB..**Feet
Piedini**PX52A...-F2..**Output flange
Flangia uscita**PX52A...-F3..**Output flange
Flangia uscita**PX52A...-F4..**Output flange
Flangia uscita**RX52A...**Input shaft
Albero in entrata**PX52A...BR..**Reaction Arm
Braccio di reazione**PX52A...**Single output shaft
Albero semplice in uscita

	b1	c1	d1	e1	m1	n1	t2
Ø30	8	60	30	68	134	202	33
Ø35	10	60	35	73.5	141	214.5	38



QUICK SELECTION / Selezione veloce

The dynamic efficiency is 0.94 for all ratios

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft 	Ratios code
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
24.7	56.76	0.55	201	1.2	0.69	250	B				C	C		191311	01
21.3	65.79	0.55	233	1.1	0.59	250	B				C	C		171311	02
18.1	77.23	0.55	274	0.9	0.50	250	B				C	C		151311	03
16.0	87.23	0.37	207	1.2	0.45	250	B				C	C		19138	04
15.2	92.18	0.37	219	1.1	0.42	250	B				C	C		131311	05
13.9	100.47	0.37	238	1.0	0.39	250	B				C	C		19811	06
12.0	116.45	0.37	276	0.9	0.33	250	B				C	C		17811	07
11.1	125.82	0.25	201	1.2	0.31	250	B				C	C		101311	08
9.9	141.66	0.25	227	1.1	0.28	250	B				C	C		13138	09
8.6	163.16	0.25	261	1.0	0.24	250	B				C	C		13811	10
7.8	178.96	0.18	219	1.1	0.22	250	B				C	C		1788	11
7.2	193.36	0.18	237	1.1	0.20	250	B				C	C		10138	12
6.5	216.84	0.18	265	0.9	0.18	250	B				C	C		71311	13
5.5	252.36	0.12	200	1.3	0.15	250	B				C	C		9138	14
4.8	290.67	0.12	230	1.1	0.13	250	B				C	C		9811	15
4.2	333.23	0.12	263	0.9	0.12	250	B				C	C		7138	16
3.6	383.82	0.12	303	0.8	0.10	250	B				C	C		7811	17
3.1	446.70	0.12*	353	0.7	0.09	250	B				C	C		988	18
2.4	589.85	0.12*	466	0.5	0.07	250	B				C	C		788	19

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **X53A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X53A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X53A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X53A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X53A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
1.30 LT	1.55 LT	0.85 LT	1.45 LT	2.10 LT	1.25 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

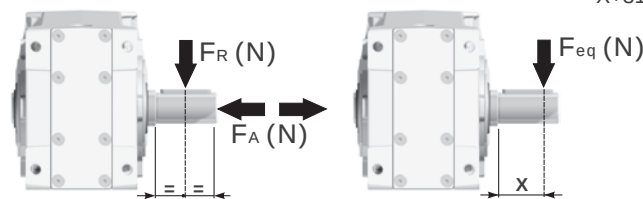
tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$F_{eq} = F_R \cdot \frac{61.5}{X+31}$$

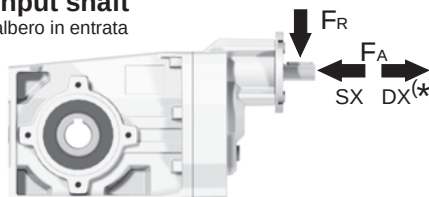


n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
250	600	3000	75	820	4100	15	1660	8300
150	700	3500	50	960	4800			
100	800	4000	25	1350	6750			

F_R On request taper roller bearings to increase radial loads.
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	400	2000
900	440	2200
500	440	2200

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

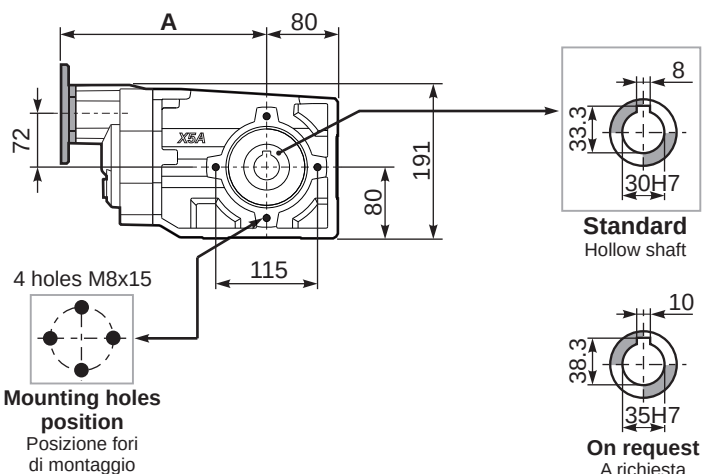
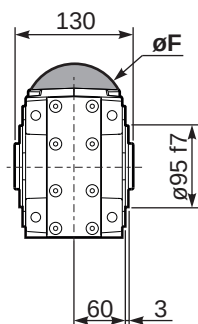
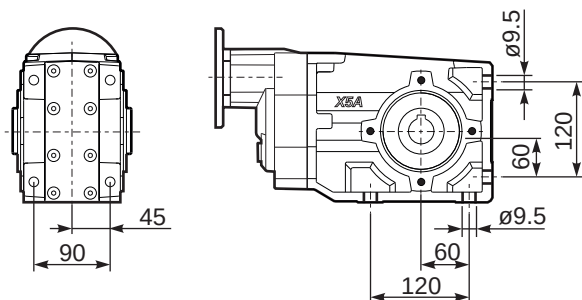
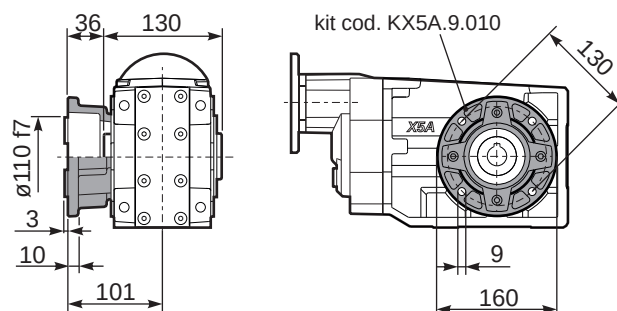
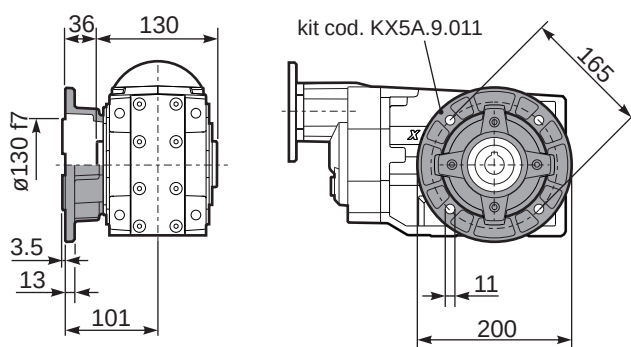
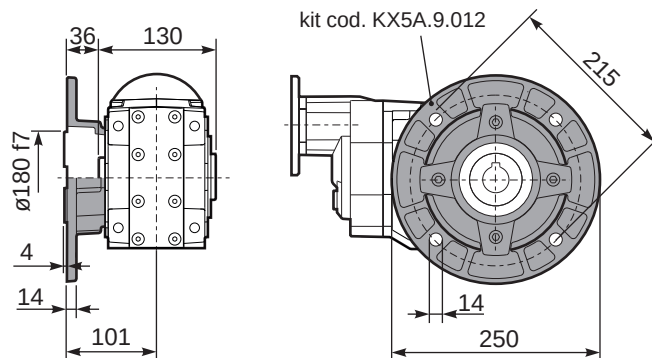
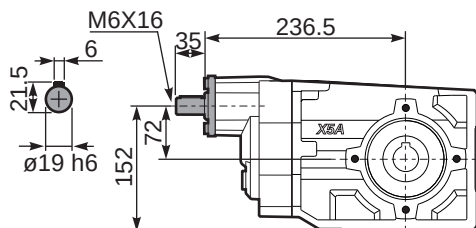
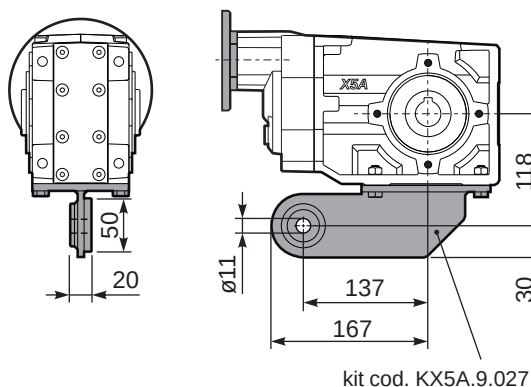
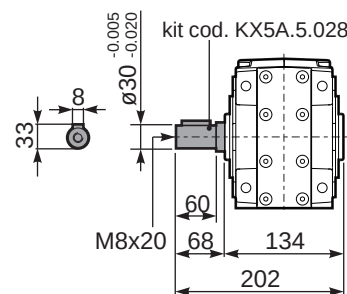
tab. 2

P_{X53AC}...

Basic Gearbox
Riduttore base

Gearbox
weight
peso riduttore **12.65 kg**

M. flanges	Kit code	ØF	A
63B5	K063.4.041	140	246
71B5	K063.4.042	160	244
80/90B5	K063.4.043	200	246
71B14	K063.4.047	105	244
80B14	K063.4.046	120	246
90B14	K063.4.041	140	246


P_{X53A}...**FB**.. Feet
Piedini

P_{X53A}...**-F2**.. Output flange
Flangia uscita

P_{X53A}...**-F3**.. Output flange
Flangia uscita

P_{X53A}...**-F4**.. Output flange
Flangia uscita

R_{X53A}... Input shaft
Albero in entrata

P_{X53A}...**BR**.. Reaction Arm
Braccio di reazione

P_{X53A}... Single output shaft
Albero semplice in uscita




QUICK SELECTION / Selezione veloce

The dynamic efficiency is 0.96 for all ratios

input speed (n_1) = 1400 min⁻¹

Output Speed n ₂ [min ⁻¹]	Ratio i	Motor power P _{1M} [kW]	Output torque M _{2M} [Nm]	Service factor f.s.	Nominal power P _{1R} [kW]	Nominal torque M _{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges					Output Shaft 	 Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V			
							71	80	90	100 112	132	80	90	100 112	132			
232	6.03	5.5	211	1.1	6.1	240	B								3011	standard ø35	01	
151	9.26	4	238	1.1	4.5	270	B								308		02	
123	11.36	4	291	1.2	4.7	350	B								2011		03	
91	15.36	4	394	1.0	3.8	385	B								1611		04	
80	17.46	4	448	0.9	3.5	400	B								208		05	
70	19.97	3	386	1.1	3.1	410	B								1311		06	
59	23.60	3	456	0.9	2.7	410	B								168		07	
57	24.45	3	472	0.9	2.6	410	B								1111		08	
45.6	30.69	2.2	436	0.9	2.0	410	B								138		09	
39.6	35.35	1.5	346	1.2	1.8	410	B								811		On request	10
37.3	37.57	1.5	368	1.1	1.7	410	B								118	11		
28.8	48.68	1.1	348	1.0	1.1	365	B								611	12		
25.8	54.33	1.1	389	1.1	1.2	410	B								88	13		
18.7	74.81	0.75	367	1.0	0.73	360	B								68	14		

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit X62A is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore X62A viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe X62A ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur X62A est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño X62A se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio						
B3	B6	B7	B8	V5	V6	V8	
1.25 LT	1.70 LT	0.95 LT	1.60 LT	2.45 LT	1.50 LT	Ask	
AGIP Telium VSF 320				SHELL Omala S4 WE 320			

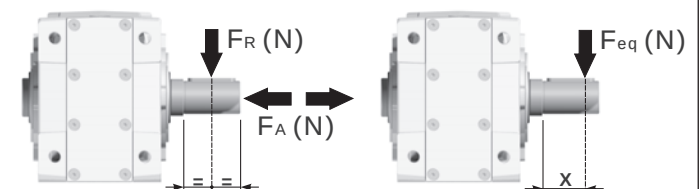
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web **tab. 1**

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$F_{eq} = F_R \cdot \frac{69}{X+39}$$



n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
250	600	3000	75	890	4450	15	1660	8300
150	700	3500	50	1140	5700			
100	780	3900	25	1330	6650			

FR On request taper roller bearings to increase radial loads.
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft

albero in entrata

n_1 [min ⁻¹]	FA	FR
1400	450	2250
900	500	2500
500	600	3000

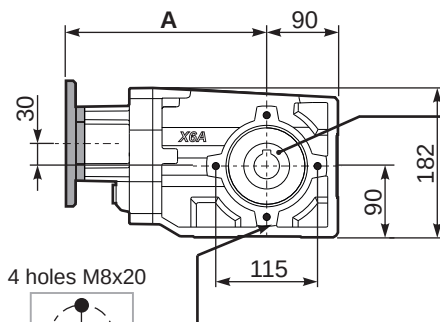
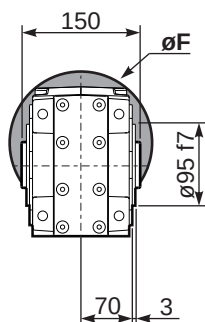
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

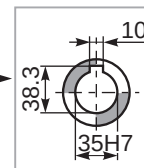
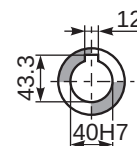
PX62AC...

Basic Gearbox
Riduttore baseGearbox
weight
peso riduttore **15.80 kg**

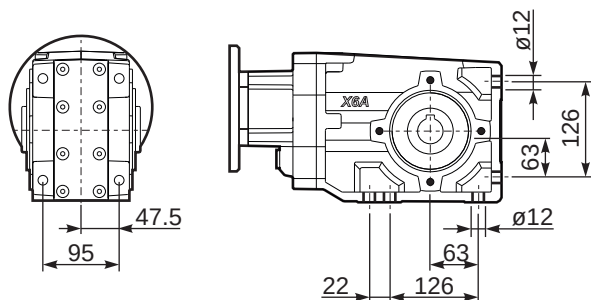
M. flanges	Kit code	ØF	A
71B5	K023.4.041	160	253
80/90B5	K023.4.042	200	255
100/112B5	K023.4.043	250	264
132B5	KC50.4.043	300	282
80B14	K085.4.046	120	255
90B14	K085.4.045	140	255
100/112B14	K085.4.047	160	264
132B14	KC50.4.041	200	282



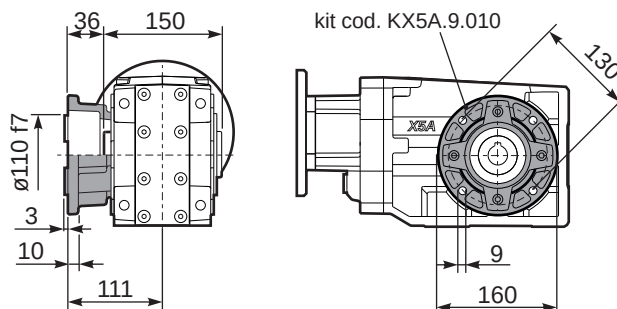
4 holes M8x20

Mounting holes
positionPosizione fori
di montaggioStandard
Hollow shaftOn request
A richiesta

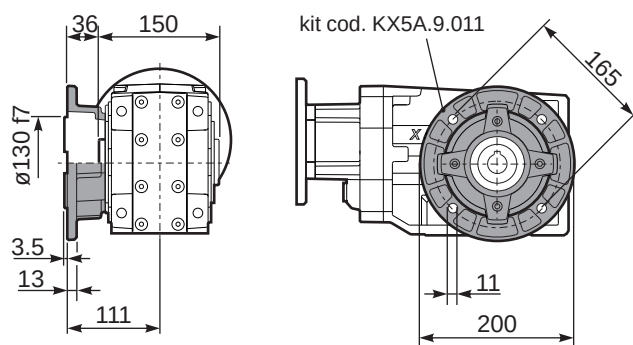
PX62A...FB..

Feet
Piedini

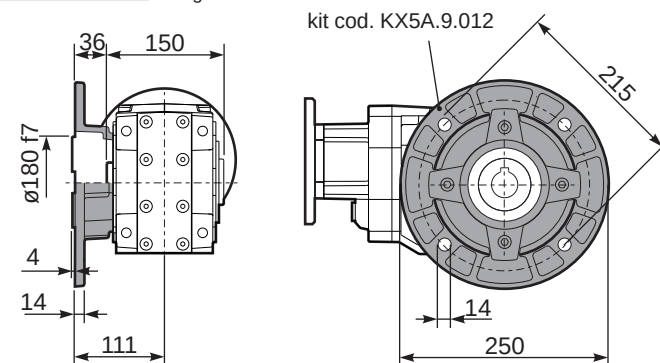
PX62A...-F2..

Output flange
Flangia uscita

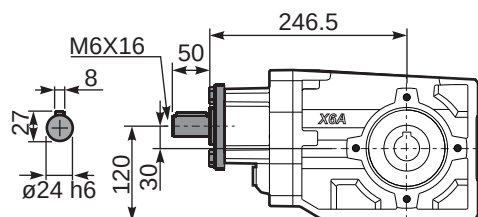
PX62A...-F3..

Output flange
Flangia uscita

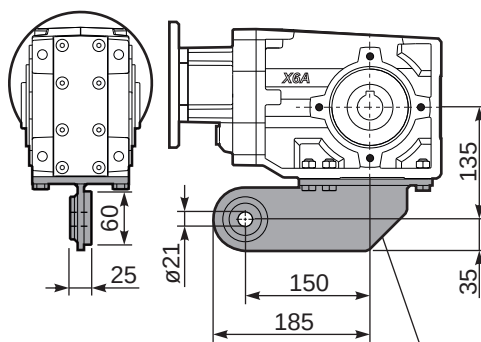
PX62A...-F4..

Output flange
Flangia uscita

RX62A...

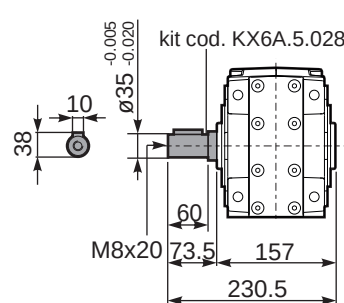
Input shaft
Albero in entrata

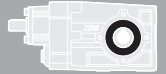
PX62A...BR..

Reaction Arm
Braccio di reazione

kit cod. KX6A.9.027

PX62A...

Single output shaft
Albero semplice in uscita



QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.94** for all ratios

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft 	Ratios code
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
24.7	56.76	1.1	398	1.0	1.1	410	B				C	C		191311	01
21.3	65.79	0.75	316	1.3	0.97	410	B				C	C		171311	02
18.1	77.23	0.75	371	1.1	0.83	410	B				C	C		151311	03
16.0	87.23	0.75	420	1.0	0.73	410	B				C	C		19138	04
15.2	92.18	0.75	443	0.9	0.69	410	B				C	C		131311	05
13.9	100.47	0.55	357	1.2	0.64	410	B				C	C		19811	06
12.0	116.45	0.55	413	1.0	0.55	410	B				C	C		17811	07
11.1	125.82	0.55	446	0.9	0.51	410	B				C	C		101311	08
9.9	141.66	0.37	336	1.2	0.45	410	B				C	C		13138	09
8.6	163.16	0.37	387	1.1	0.39	410	B				C	C		13811	10
7.8	178.96	0.37	424	1.0	0.36	410	B				C	C		1788	11
7.2	193.36	0.37	459	0.9	0.33	410	B				C	C		10138	12
6.5	216.84	0.25	347	1.2	0.29	410	B				C	C		71311	13
5.5	252.36	0.25	404	1.0	0.25	410	B				C	C		9138	14
4.8	290.67	0.25	465	0.9	0.22	410	B				C	C		9811	15
4.2	333.23	0.18	408	1.0	0.19	410	B				C	C		7138	16
3.6	383.82	0.18	470	0.9	0.17	410	B				C	C		7811	17
3.1	446.70	0.12	353	1.2	0.14	410	B				C	C		988	18
2.4	589.85	0.12	466	0.9	0.11	410	B				C	C		788	19

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X63A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X63A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X63A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X63A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X63A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
1.80 LT	1.80 LT	1.05 LT	1.70 LT	2.60 LT	1.65 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

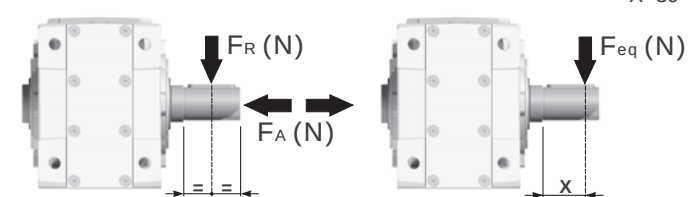
tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$F_{eq} = F_R \cdot \frac{69}{X+39}$$

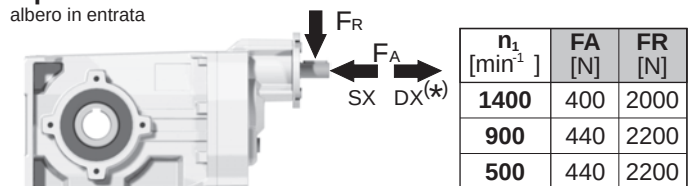


n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR	n_2 [min ⁻¹]	FA	FR
250	600	3000	75	890	4450	15	1660	8300
150	700	3500	50	1140	5700			
100	780	3900	25	1330	6650			

F_R On request taper roller bearings to increase radial loads.
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft

albero in entrata



n_1 [min ⁻¹]	FA	FR
1400	400	2000
900	440	2200
500	440	2200

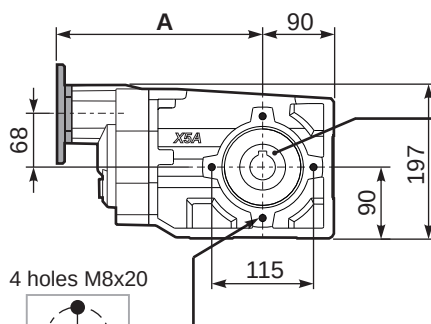
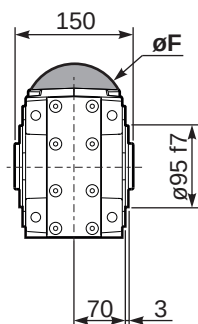
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

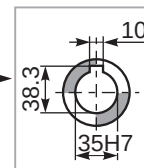
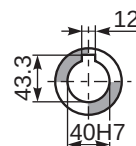
PX63AC...

Basic Gearbox
Riduttore baseGearbox
weight
peso riduttore **15.98 kg**

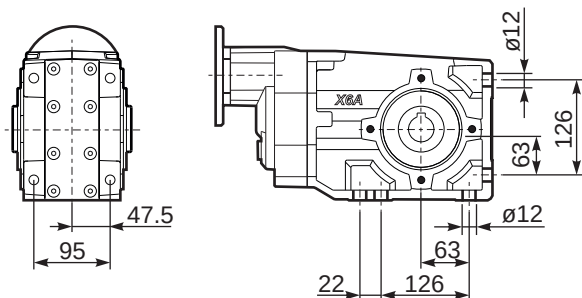
M. flanges	Kit code	ØF	A
63B5	K063.4.041	140	265
71B5	K063.4.042	160	263
80/90B5	K063.4.043	200	265
71B14	K063.4.047	105	263
80B14	K063.4.046	120	265
90B14	K063.4.041	140	265



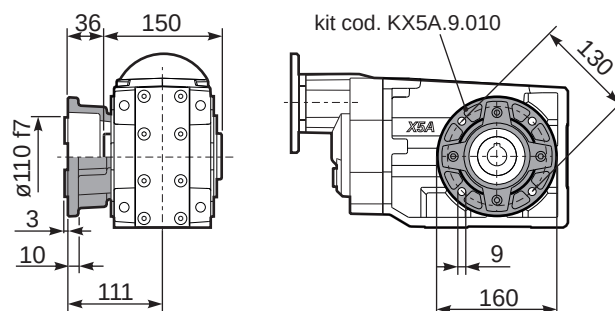
4 holes M8x20

Mounting holes
position
Posizione fori
di montaggioStandard
Hollow shaftOn request
A richiesta

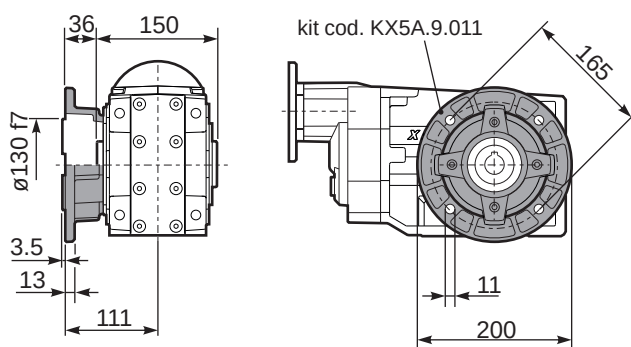
PX63A...FB..

Feet
Piedini

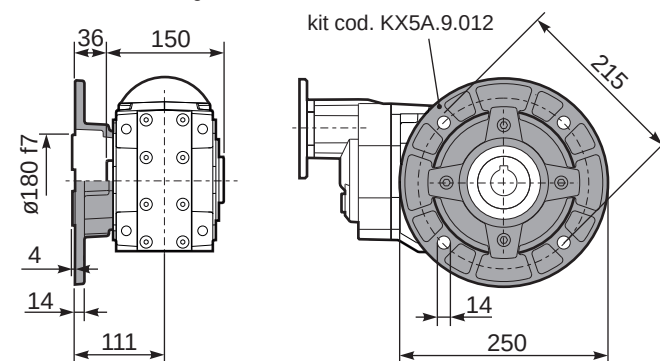
PX63A...-F2..

Output flange
Flangia uscita

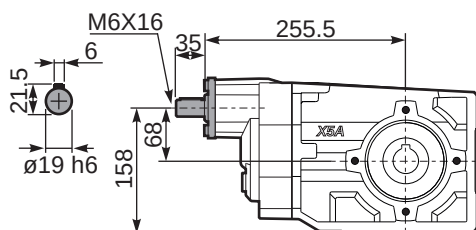
PX63A...-F3..

Output flange
Flangia uscita

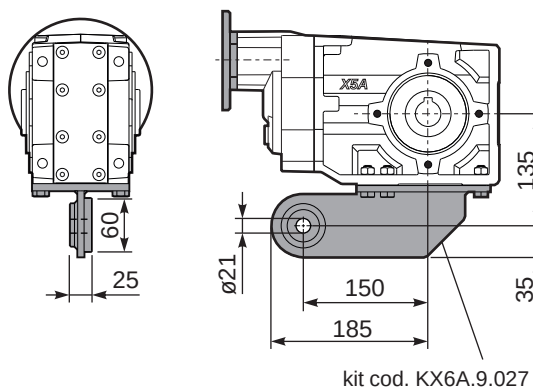
PX63A...-F4..

Output flange
Flangia uscita

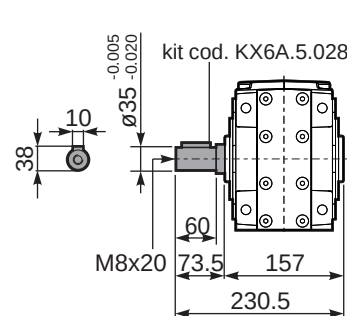
RX63A...

Input shaft
Albero in entrata

PX63A...BR..

Reaction Arm
Braccio di reazione

PX63A...

Single output shaft
Albero semplice in uscita



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges					Output Shaft 	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V			
							71	80	90	100	112	132	80	90	100	112		
176	7.94	7.5	369	1.0	7.5	380	B										302418	01
153	9.13	7.5	425	0.9	6.7	390	B										302416	02
131	10.66	5.5	366	1.1	6.0	410	B										302414	03
94	14.97	5.5	514	1.1	6.0	580	B										202418	04
81	17.21	5.5	591	1.0	5.4	600	B										202416	05
69	20.24	5.5	695	1.0	5.2	675	B										162418	06
60	23.27	4	585	1.2	4.5	675	B										162416	07
53	26.31	4	661	1.0	4.0	675	B										132418	08
46.3	30.25	4	760	0.9	3.5	675	B										132416	09
39.6	35.32	3	668	1.0	3.0	675	B										132414	10
37.8	37.03	3	701	1.0	2.8	675	B										112416	11
32.4	43.23	2.2	602	1.1	2.4	675	B										112414	12
30.1	46.58	2.2	649	1.0	2.3	675	B										82418	13
26.1	53.55	2.2	746	0.9	2.0	675	B										82416	14
22.4	62.52	1.5	600	1.1	1.7	675	B										82414	15
19.0	73.75	1.1	517	1.1	1.2	580	B										62416	16
16.3	86.09	1.1	604	1.1	1.2	675	B										62414	17

The dynamic efficiency is 0.94 for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X73C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X73C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X73C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X73C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X73C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
2.45 LT	2.55 LT	1.80 LT	1.95 LT	4.05 LT	2.55 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

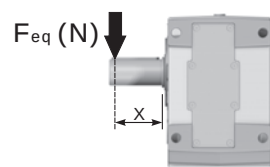
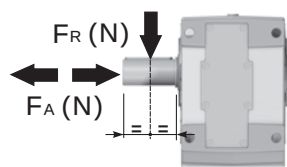
tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$F_{eq} = F_R \cdot \frac{178.5}{X+143.5}$$



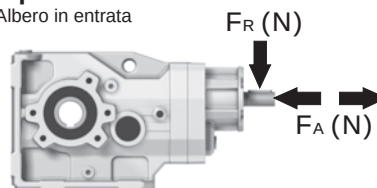
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1360	6800	140	1480	7400	70	1720	8600
250	1400	7000	120	1520	7600	40	1840	9200
200	1440	7200	85	1560	7800	15	1920	9600

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata

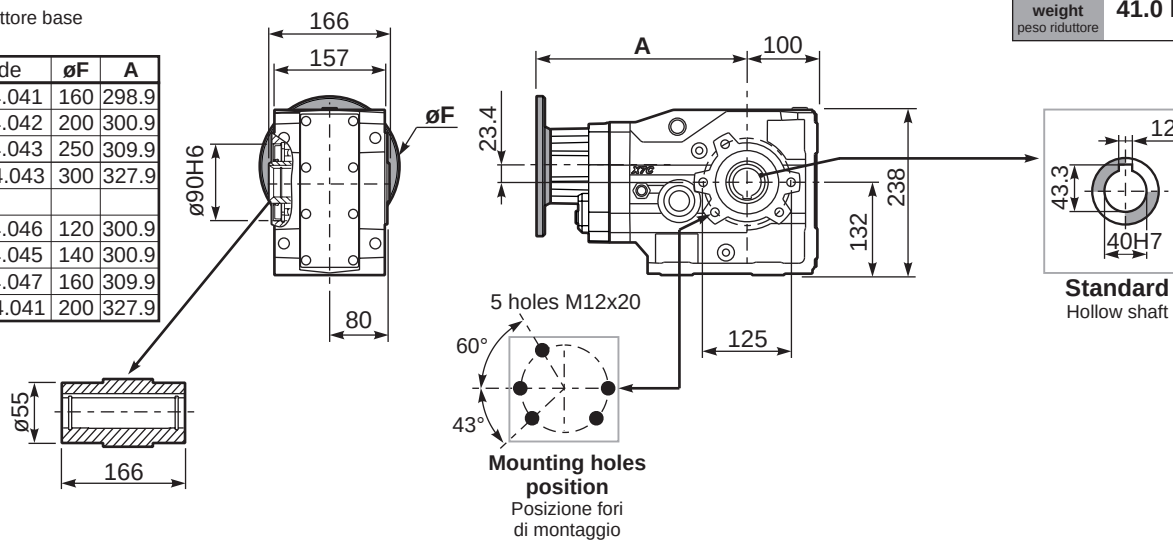
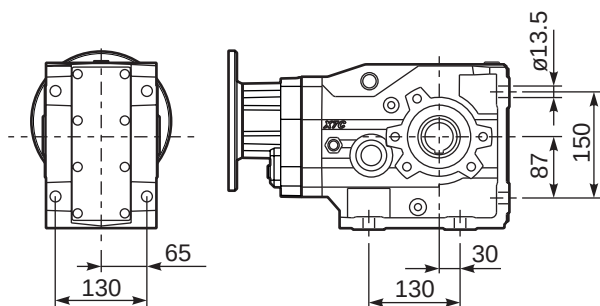
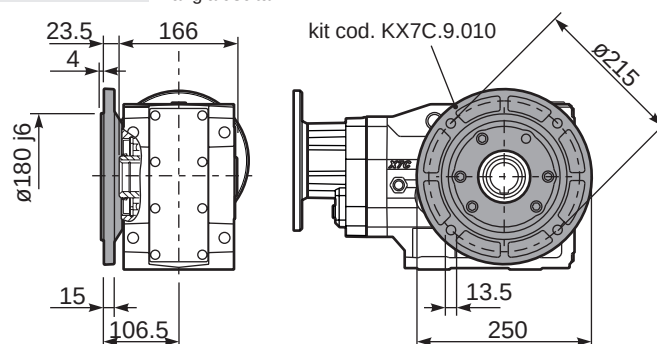
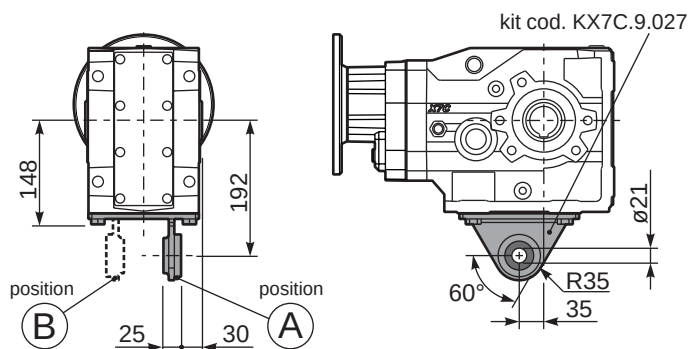
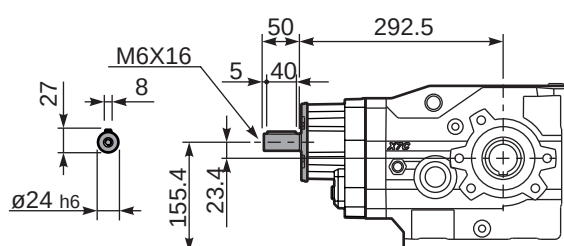
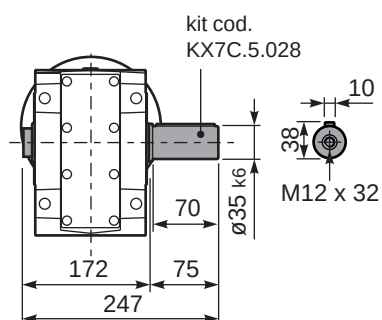
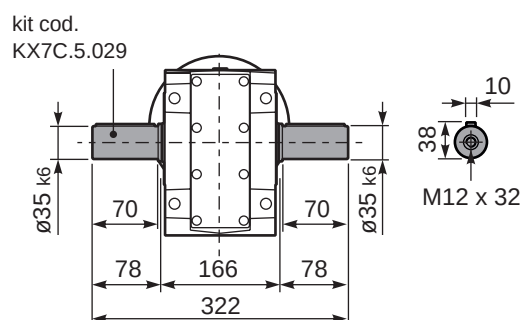


n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

PX73CC...Basic Gearbox
Riduttore baseGearbox
weight
peso riduttore **41.0 kg**

M. flanges	Kit code	ØF	A
71B5	K023.4.041	160	298.9
80/90B5	K023.4.042	200	300.9
100/112B5	K023.4.043	250	309.9
132B5	KC50.4.043	300	327.9
80B14	K085.4.046	120	300.9
90B14	K085.4.045	140	300.9
100/112B14	K085.4.047	160	309.9
132B14	KC50.4.041	200	327.9

**PX73C...FB..**Feet
Piedini**PX73C...-F4..**Output flange
Flangia uscita**PX73C...BR..**Reaction Arm
Braccio di reazione**RX73C...**Input shaft
Albero in entrata**PX73CA...**Single shaft
Albero lento semplice**PX73CB...**Double shaft
Albero lento bisp.



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges				Output Shaft 	Ratios code
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
18.7	74.79	1.5	704	1.0	1.4	675	B				C	C		19132418	standard ø40	01
16.3	85.99	1.1	591	1.1	1.3	675	B				C	C		19132416		02
14.0	99.66	1.1	685	1.0	1.1	675	B				C	C		17132416		03
12.0	116.35	0.75	548	1.2	0.92	675	B				C	C		17132414		04
11.5	121.45	0.75	572	1.2	0.89	675	B				C	C		13132418		05
10.0	139.64	0.75	658	1.0	0.77	675	B				C	C		13132416		06
9.2	152.21	0.75	717	0.9	0.71	675	B				C	C		19082416		07
8.6	163.02	0.55	567	1.2	0.66	675	B				C	C		13132414		08
7.9	177.69	0.55	618	1.1	0.61	675	B				C	C		19082414		09
6.8	205.95	0.55	716	0.9	0.52	675	B				C	C		17082414		10
6.3	222.52	0.55	774	0.9	0.48	675	B				C	C		10132414		11
5.6	248.76	0.37	578	1.2	0.43	675	B				C	C		9132416		12
4.8	290.41	0.37	675	1.0	0.37	675	B				C	C		9132414		13
4.1	337.39	0.37	784	0.9	0.32	675	B				C	C		10082416		14
3.6	393.88	0.25	618	1.1	0.27	675	B				C	C		10082414		15
3.2	440.33	0.25	690	1.0	0.24	675	B				C	C		9082416		16
2.7	514.06	0.18	616	1.1	0.21	675	B				C	C		9082414		17
2.4	581.44	0.18	697	1.0	0.18	675	B				C	C		7082416		18
2.1	678.79	0.12	526	1.3	0.16	675	B				C	C		7082414		19

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X74C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X74C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X74C** ist mit synthetischem Öl gefüllt und ist lebensdauer geschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X74C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X74C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
3.55 LT	2.65 LT	1.90 LT	2.05 LT	4.25 LT	2.65 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

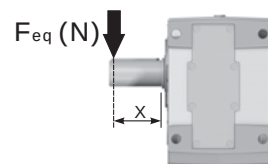
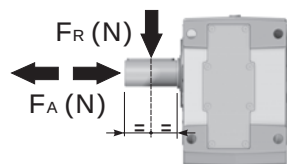
tab. 1

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$F_{eq} = F_R \cdot \frac{178.5}{X+143.5}$$



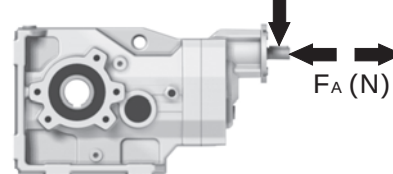
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1360	6800	140	1480	7400	70	1720	8600
250	1400	7000	120	1520	7600	40	1840	9200
200	1440	7200	85	1560	7800	15	1920	9600

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata



n_1	FA	FR
1400	240	1200
900	280	1400
500	310	1700

tab. 2

Gearbox weight peso riduttore	39.0 kg
---	----------------

Standard Hollow shaft

Technical drawings of the KX7C.9.010 kit. The left drawing is a side view showing dimensions: 23.5, 4, 166, 15, 106.5, and a height of Ø180 f6. The right drawing is a front view showing dimensions: 13.5, 250, and a diameter of Ø215. The text "kit cod. KX7C.9.010" is present above the front view.

kit cod.
KX7C.5.029

The technical drawing illustrates the KX7C.5.029 kit. The side view shows a central mounting plate with a width of 166 mm and a total width of 322 mm, including two side flanges of 78 mm each. The flanges have a thickness of 70 mm. The mounting plate has a central vertical slot and four circular holes. The side flanges have a diameter of $\varnothing 35$ k6. The top view shows a circular base with a diameter of 10 mm and a central hole with a diameter of 38 mm. The mounting plate is secured with an M12 x 32 screw.



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft  $\varnothing$	Ratios code 
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100 112	132	80	90	100 112	132		
145	9.69	9	560	1.3	12.2	755	B									302418	01
126	11.09	9	641	1.1	9.6	680	B									302416	02
108	12.90	9	746	1.1	9.6	790	B									302414	03
77	18.26	7.5	849	1.1	8.0	935	B									202418	04
67	20.91	7.5	972	1.0	7.5	1000	B									202416	05
58	24.32	5.5	835	1.2	6.4	1000	B									202414	06
49.5	28.27	5.5	971	1.0	5.5	1000	B									162416	07
42.6	32.88	4	826	1.2	4.7	1000	B									162414	08
38.1	36.76	4	924	1.1	4.2	1000	B									132416	09
32.7	42.76	3	809	1.2	3.6	1000	B									132414	10
31.1	45.00	3	851	1.2	3.5	1000	B									112416	11
26.8	52.33	3	990	1.0	3.0	1000	B									112414	12
24.6	56.82	2.2	791	1.1	2.3	850	B									82418	13
21.5	65.07	2.2	906	1.1	2.3	975	B									82416	14
18.5	75.68	2.2	1054	0.9	2.1	1000	B									82414	15
15.6	89.61	1.1	628	1.1	1.2	710	B									62416	16
13.4	104.22	1.1	731	1.1	1.2	820	B									62414	17

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X83C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X83C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X83C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X83C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño **X83C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

						
B3	B6	B7	B8	V5	V6	V8
2.80 LT	3.10 LT	2.00 LT	2.50 LT	4.95 LT	2.80 LT	Ask

AGIP Blasias 460

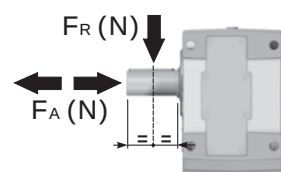
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

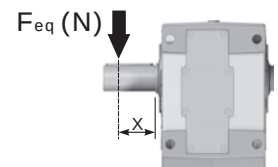
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



$$F_{eq} = F_R \cdot \frac{196.5}{X + 156.5}$$



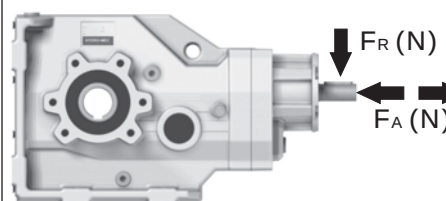
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1700	8500	140	1860	9300	70	2160	10800
250	1760	8800	120	1900	9500	40	2300	11500
200	1800	9000	85	1960	9800	15	2400	12000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata



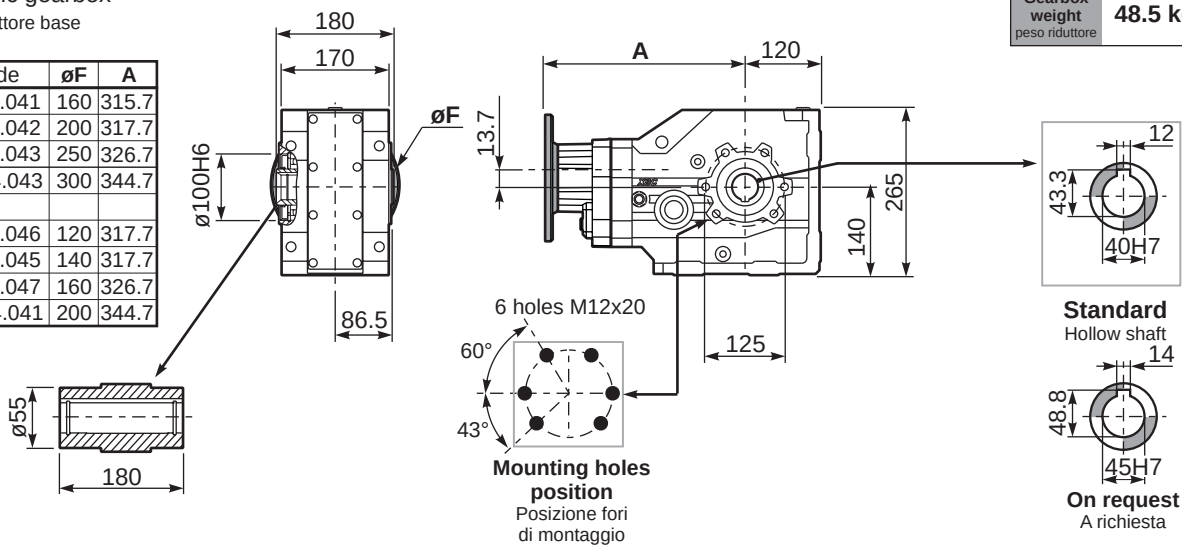
n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

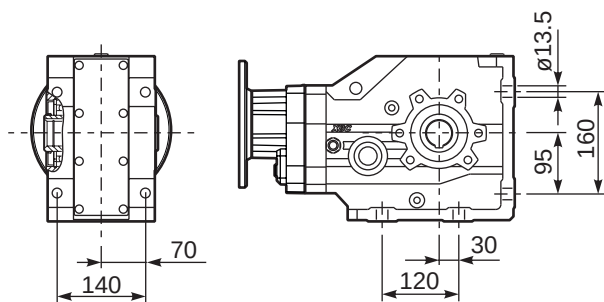
PX83CC...

Basic gearbox
Riduttore baseGearbox
weight
peso riduttore **48.5 kg**

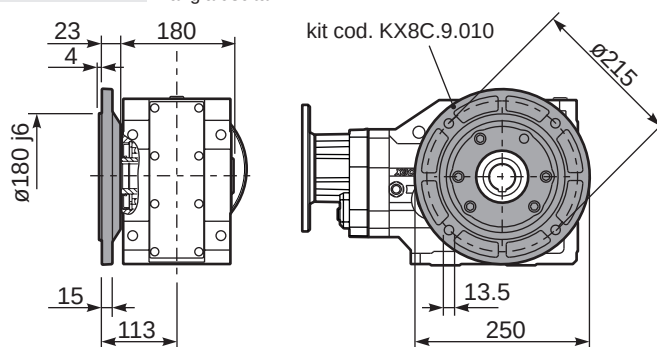
M. flanges	Kit code	ØF	A
71B5	K023.4.041	160	315.7
80/90B5	K023.4.042	200	317.7
100/112B5	K023.4.043	250	326.7
132B5	KC50.4.043	300	344.7
80B14	K085.4.046	120	317.7
90B14	K085.4.045	140	317.7
100/112B14	K085.4.047	160	326.7
132B14	KC50.4.041	200	344.7



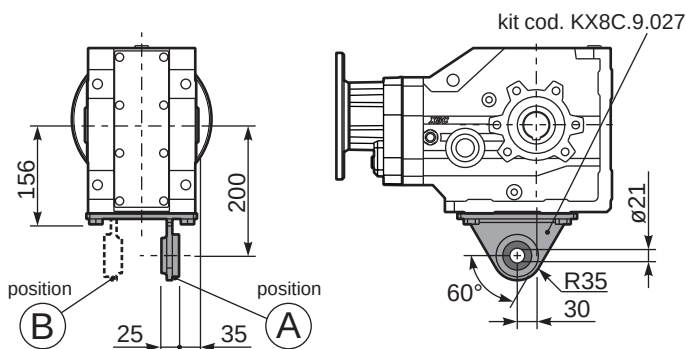
PX83C...FB..

Feet
Piedini

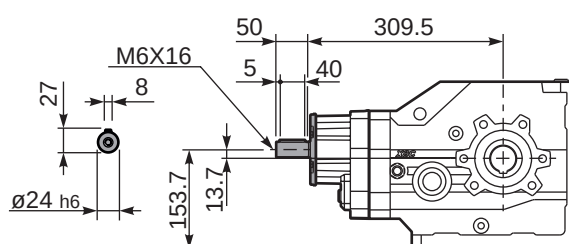
PX83C...-F4..

Output flange
Flangia uscita

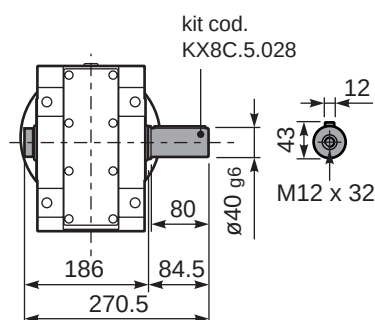
PX83C...BR..

Reaction Arm
Braccio di reazione

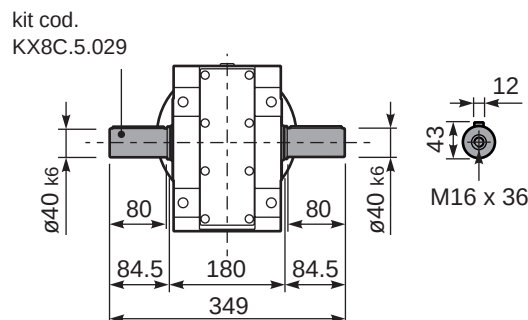
RX83C...

Input shaft
Albero in entrata

PX83CA...

Single shaft
Albero lento semplice

PX83CB...

Double shaft
Albero lento bisp.



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft  standard ø40	Ratios code
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
15.3	91.23	1.5	858	1.2	1.7	1000	B				C	C		19132418	01
13.4	104.48	1.5	983	1.0	1.5	1000	B				C	C		19132416	02
11.6	121.10	1.5	1139	0.9	1.3	1000	B				C	C		17132416	03
9.9	140.84	1.1	968	1.0	1.1	1000	B				C	C		17132414	04
8.5	165.32	1.1	1136	0.9	0.96	1000	B				C	C		15132414	05
7.6	184.94	0.75	872	1.1	0.86	1000	B				C	C		19082416	06
7.1	197.34	0.75	930	1.1	0.81	1000	B				C	C		13132414	07
6.5	215.10	0.75	1014	1.0	0.74	1000	B				C	C		19082414	08
6.0	231.60	0.55	805	1.2	0.69	1000	B				C	C		10132416	09
5.6	249.31	0.55	867	1.2	0.64	1000	B				C	C		17082414	10
5.2	269.37	0.55	937	1.1	0.59	1000	B				C	C		10132414	11
4.8	292.64	0.55	1018	1.0	0.54	1000	B				C	C		15082414	12
4.6	302.26	0.55	1051	1.0	0.53	1000	B				C	C		9132416	13
4.0	349.30	0.37	812	1.2	0.46	1000	B				C	C		13082414	14
3.5	399.12	0.37	928	1.1	0.40	1000	B				C	C		7132416	15
2.9	476.80	0.37	1108	0.9	0.33	1000	B				C	C		10082414	16
2.2	622.28	0.25	976	1.0	0.26	1000	B				C	C		9082414	17
1.7	821.70	0.18	985	1.0	0.19	1000	B				C	C		7082414	18

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X84C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X84C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X84C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X84C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X84C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
4.25 LT	3.20 LT	2.10 LT	2.60 LT	5.20 LT	2.90 LT	Ask

AGIP Blasias 460

For all details on lubrication and plugs check our website

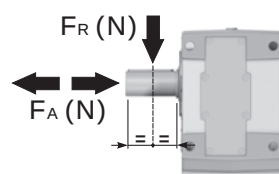
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

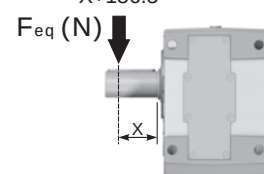
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



$$F_{eq} = F_R \cdot \frac{196.5}{X + 156.5}$$



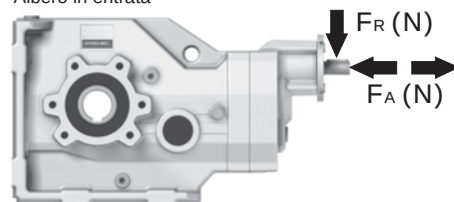
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1700	8500	140	1860	9300	70	2160	10800
250	1760	8800	120	1900	9500	40	2300	11500
200	1800	9000	85	1960	9800	15	2400	12000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata



n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

Gearbox weight peso riduttore	46.5 kg
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Double shaft
Albero lento bisp.



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges				B14 motor flanges			Output Shaft 	Ratios code
							-F	-G	-H	-I	-U	-V			
							100 112	132	160	180	100 112	132			
236	5.94	22	806	1.0	21.0	800							302915	standard ø50 ø45 On request	01
196	7.13	18.5	812	1.0	17.9	820							302913		02
163	8.58	18.5	977	1.0	17.3	950							302911		03
125	11.20	15	1033	1.0	13.9	1000							202915		04
104	13.43	15	1239	1.1	15.7	1350							202913		05
92	15.15	15	1397	1.0	14.4	1400							162915		06
87	16.17	15	1492	1.0	14.0	1450							202911		07
77	18.16	15	1675	0.9	13.3	1550							162913		08
71	19.70	11	1335	1.2	12.3	1550							132915		09
64	21.87	11	1482	1.1	11.4	1600							162911		10
59	23.62	11	1600	1.0	10.6	1600							132913		11
48.4	28.91	9	1671	1.0	8.6	1600							112913		12
40.2	34.81	7.5	1618	1.0	7.2	1600							112911		13
33.5	41.81	5.5	1436	1.1	6.0	1600							82913		14
27.8	50.34	5.5	1729	0.9	5.0	1600							82911		15

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibile

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X93C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X93C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X93C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X93C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X93C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
4.20 LT	3.60 LT	4.40 LT	5.10 LT	6.90 LT	5.00 LT	Ask

ENI Blasia 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

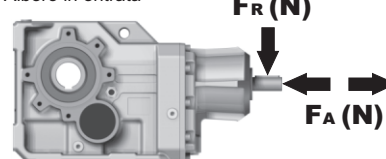
Output shaft
Albero di uscita

$$F_{eq} = F_R \cdot \frac{218}{X+168}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1800	9000	140	2700	13500	70	3020	15100
250	2400	12000	120	2800	14000	40	3200	16000
200	2600	13000	85	2900	14500	15	3500	17500

Input shaft
Albero in entrata



n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

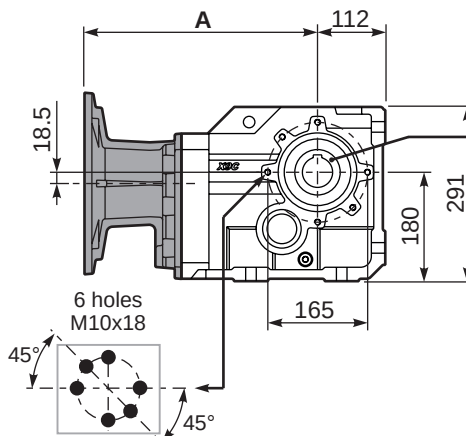
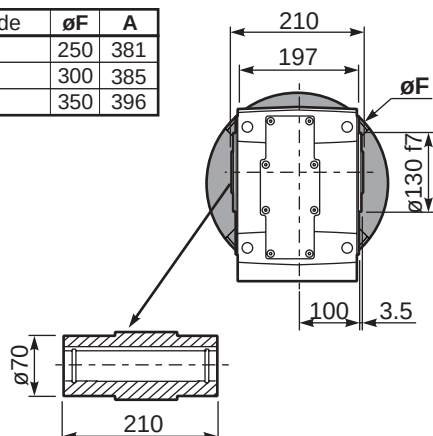
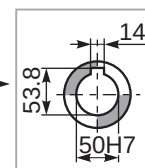
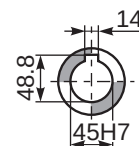
tab. 2

PX93CC...

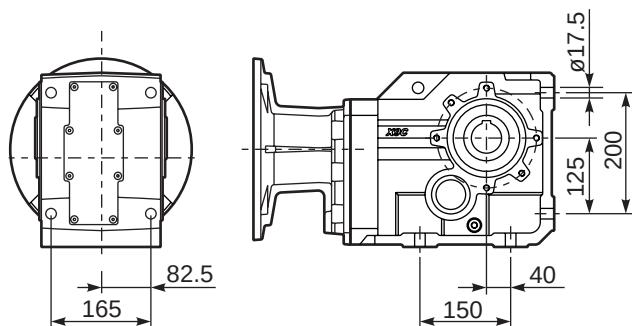
Basic Gearbox
Riduttore baseGearbox
weight
peso riduttore

75.0 kg

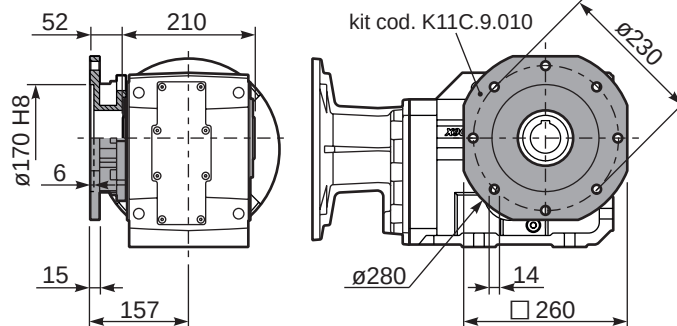
M. flanges	Kit code	øF	A
100/112B5	-	250	381
132B5	-	300	385
160/180B5	-	350	396

Mounting holes position
Posizione fori di montaggioStandard
Hollow shaftOn request
A richiesta

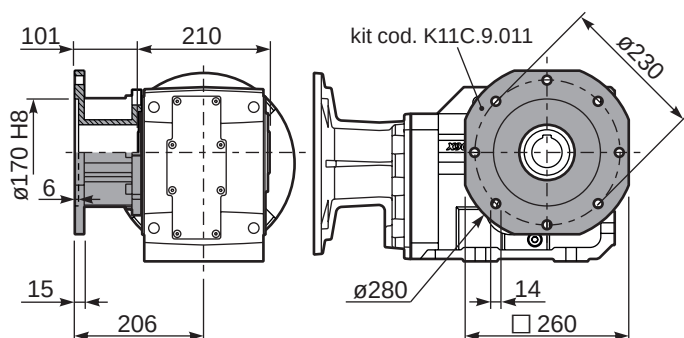
PX93C...FB..

Feet
Piedini

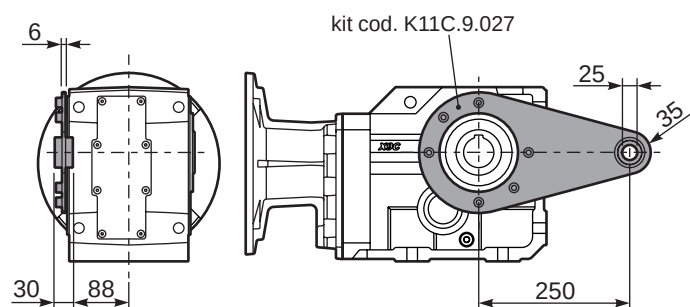
PX93C...-FC..

Output flange
Flangia uscita

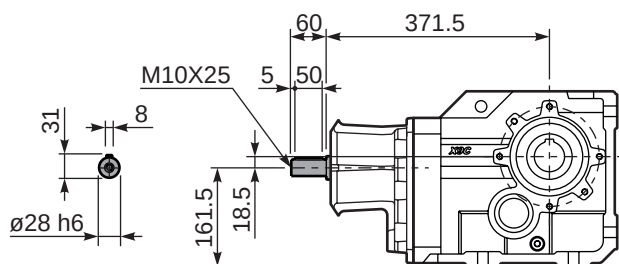
PX93C...-FL..

Output flange
Flangia uscita

PX93C...BR..

Reaction Arm
Braccio di reazione

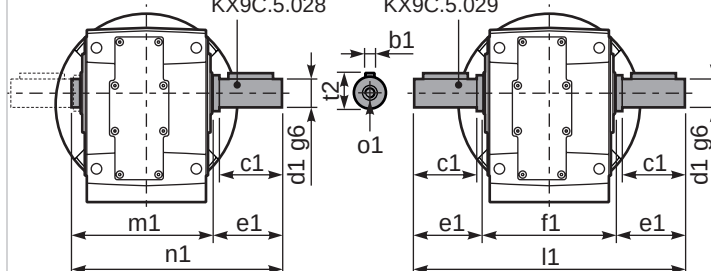
RX93C...

Input shaft
Albero in entrata

PX93CA...

Single shaft
Albero lento semplicekit cod.
KX9C.5.028

PX93CB...

Double shaft
Albero lento bisp.kit cod.
KX9C.5.029

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standard	14	100	50	105	210	420	218	323	53.5	M16
-	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100 112	132	80	90	100 112	132		
45.6	30.70	7.5	1399	1.1	8.3	1600	B									30132913	01
37.9	36.97	7.5	1685	0.9	6.9	1600	B									30132911	02
29.0	48.26	5.5	1625	1.0	5.3	1600	B									20132915	03
24.2	57.86	4	1425	1.1	4.4	1600	B									20132913	04
21.5	65.24	4	1607	1.0	3.9	1600	B									16132915	05
20.1	69.68	4	1716	1.0	3.8	1650	B									20132911	06
17.9	78.23	3	1450	1.1	3.4	1650	B									16132913	07
16.5	84.85	3	1573	1.0	3.0	1600	B									13132915	08
14.9	94.20	3	1747	0.9	2.8	1650	B									16132911	09
13.8	101.74	3	1886	0.9	2.6	1650	B									13132913	10
11.4	122.51	2.2	1672	1.0	2.1	1650	B									13132911	11
9.3	149.95	1.5	1411	1.2	1.8	1650	B									11132911	12
7.8	180.09	1.5	1694	1.0	1.5	1650	B									8132913	13
6.8	206.81	1.1	1421	1.1	1.2	1600	B									6132915	14
6.5	216.85	1.1	1490	1.1	1.2	1650	B									8132911	15
5.6	247.99	1.1	1704	1.0	1.1	1650	B									6132913	16
4.7	298.61	0.75	1407	1.2	0.88	1650	B									6132911	17

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X94C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X94C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X94C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X94C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X94C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
4.50 LT	3.80 LT	4.50 LT	5.30 LT	7.60 LT	5.30 LT	Ask
AGIP Blasias 460						

For all details on lubrication and plugs check our website

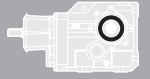
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS								
Output shaft Albero di uscita			$F_{eq} = F_R \cdot \frac{218}{X+168}$					
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1800	9000	140	2700	13500	70	3020	15100
250	2400	12000	120	2800	14000	40	3200	16000
200	2600	13000	85	2900	14500	15	3500	17500

Input shaft Albero in entrata					
n_1	FA	FR			
1400	450	2250			
900	500	2500			
500	600	3000			

tab. 2



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges				B14 motor flanges				Output Shaft  $\varnothing$	Ratios code 
							-G	-H	-I	-L	-	-	-	-		
							132	160	180	200	-	-	-	-		
219	6.39	30	1180	1.1	31.7	1300									392914	01
200	7.00	30	1292	1.1	31.2	1400									392913	02
164	8.55	30	1578	1.0	27.4	1500									392911	03
140	10.01	22	1357	1.2	24.9	1600									302914	04
128	10.97	22	1486	1.1	24.2	1700									302913	05
105	13.39	22	1815	1.2	24.5	2100									302911	06
89	15.71	22	2130	1.0	21.8	2200									222914	07
81	17.21	22	2333	1.0	20.8	2300									222913	08
67	21.02	18.5	2394	1.0	17.8	2400									222911	09
59	23.73	18.5	2703	1.0	17.1	2600									162914	10
54	25.99	18.5	2960	0.9	16.8	2800									162913	11
50	27.93	15	2576	1.1	16.2	2900									142914	12
45.8	30.59	15	2822	1.0	14.8	2900									142913	13
44.1	31.74	15	2928	1.0	14.2	2900									162911	14
37.5	37.36	11	2532	1.1	12.1	2900									142911	15
33.8	41.37	11	2804	1.0	10.9	2900									102914	16
30.9	45.31	9	2618	1.1	10.0	2900									102913	17
25.3	55.33	7.5	2573	1.2	8.5	3000									102911	18

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X103** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X103** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X103** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X103** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y verse de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X103** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

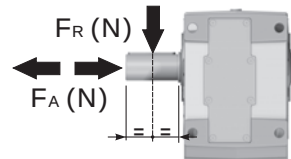
Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	B6	B7	B8	V5	V6	V8
11.50 LT	5.50 LT	10.50 LT	7.50 LT	13.50 LT	9.50 LT	Ask
AGIP Blasias 460						

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

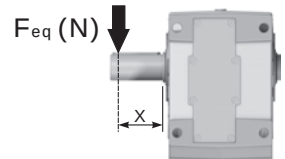
tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

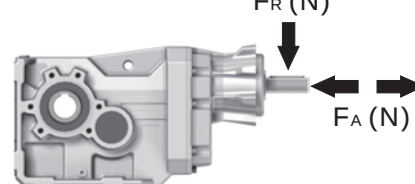


$F_{eq} = F_R \cdot \frac{253}{X+193}$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2000	10000	140	2800	14000	70	3500	17500
250	2500	12500	120	3000	15000	40	4200	21000
200	2700	13500	85	3200	16000	15	5400	27000

Input shaft
Albero in entrata



n_1	FA	FR
1400	1120	5600
900	1220	6100
500	1300	6500

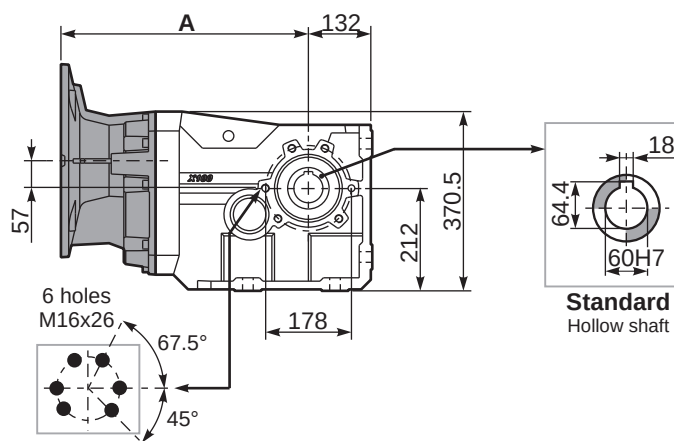
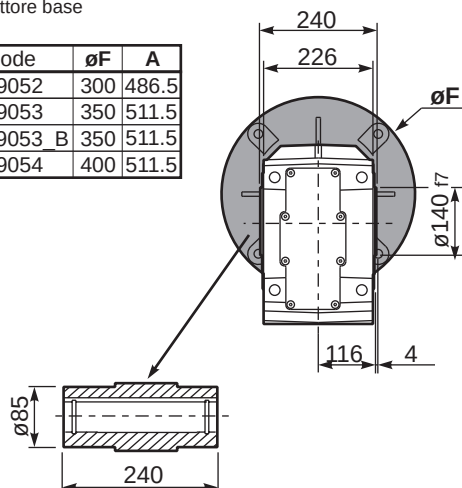
tab. 2

PX103C...

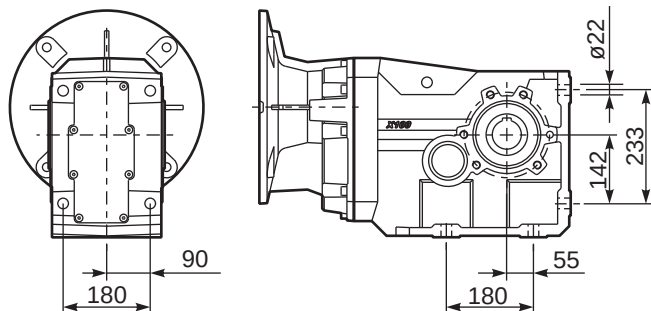
Basic Gearbox
Riduttore baseGearbox
weight
peso riduttore

125 kg

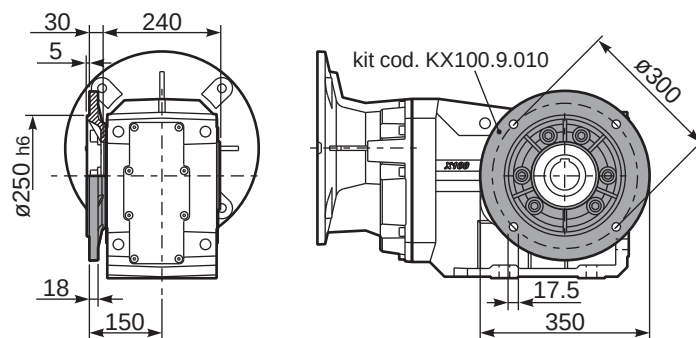
M. flanges	Kit code	øF	A
132B5	KC1109052	300	486.5
160B5	KC1109053	350	511.5
180B5	KC1109053 B	350	511.5
200B5	KC1109054	400	511.5

Mounting holes position
Posizione fori di montaggioStandard
Hollow shaft

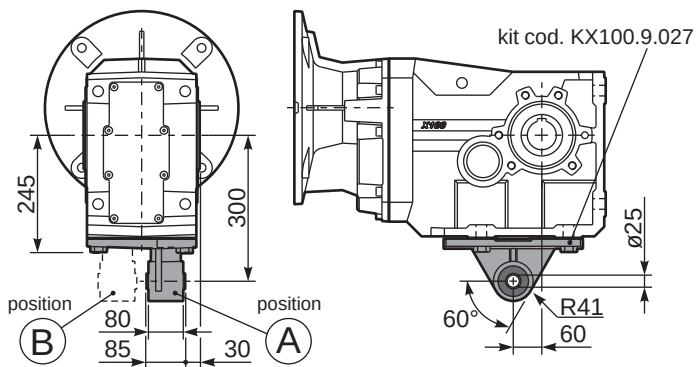
PX103...FB..

Feet
Piedini

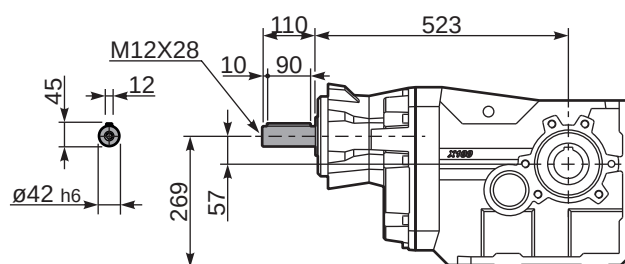
PX103...-F6..

Output flange
Flangia uscita

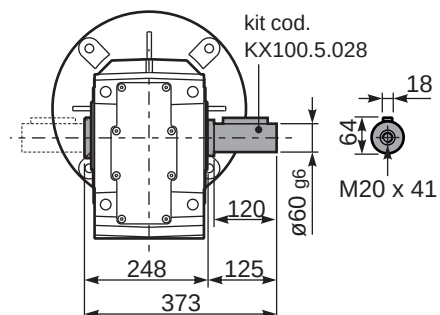
PX103...BR..

Reaction Arm
Braccio di reazione

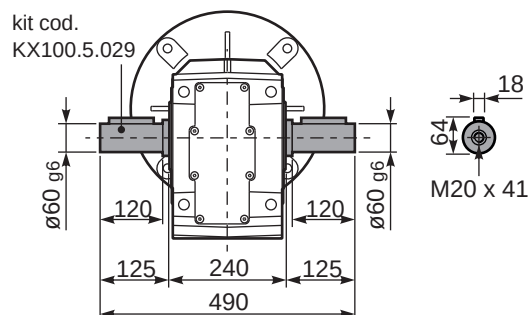
RX103...

Input shaft
Albero in entrata

PX103A...

Single shaft
Albero lento semplice

PX103B...

Double shaft
Albero lento bisp.



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges		B14 motor flanges				Output Shaft 	Ratios code
							-F	-G	-	-	-			
28.8	48.57	9	2750	1.1	9.5	2900	B		not available			30142911	standard ø60	01
20.5	68.43	7.5	3118	1.0	7.0	3000	B					20142914		02
18.7	74.95	5.5	2523	1.2	6.4	3000	B					20142913		03
15.1	92.53	5.5	3115	1.0	5.2	3000	B					16142914		04
13.8	101.33	4	2496	1.2	4.7	3000	B					16142913		05
11.6	120.33	4	2963	1.0	4.0	3000	B					13142914		06
11.3	123.75	4	3048	1.0	3.9	3000	B					16142911		07
10.6	131.78	4	3245	0.9	3.6	3000	B					13142913		08
9.5	147.28	3	2731	1.1	3.2	3000	B					11142914		09
8.7	161.30	3	2990	1.0	3.0	3000	B					11142913		10
7.1	196.98	2.2	2689	1.1	2.4	3000	B					11142911		11
6.6	212.99	2.2	2907	1.0	2.2	3000	B					8142914		12
6.0	233.26	2.2	3184	0.9	2.0	3000	B					8142913		13
4.9	284.86	2.2	3889	0.8	1.7	3000	B					8142911		14

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X104** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X104** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X104** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X104** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X104** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
12.00 LT	6.00 LT	11.50 LT	8.00 LT	14.50 LT	11.00 LT	Ask

AGIP Blasias 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS									
Output shaft Albero di uscita			$F_{eq} = F_R \cdot \frac{253}{X+193}$						
n_2	F_A	F_R	n_2	F_A	F_R	n_2	F_A	F_R	
300	2000	10000	140	2800	14000	70	3500	17500	
250	2500	12500	120	3000	15000	40	4200	21000	
200	2700	13500	85	3200	16000	15	5400	27000	
Input shaft Albero in entrata									
n_1	F_A	F_R							
1400	700	3500							
900	840	4200							
500	900	4500							

tab. 2

PX104C...

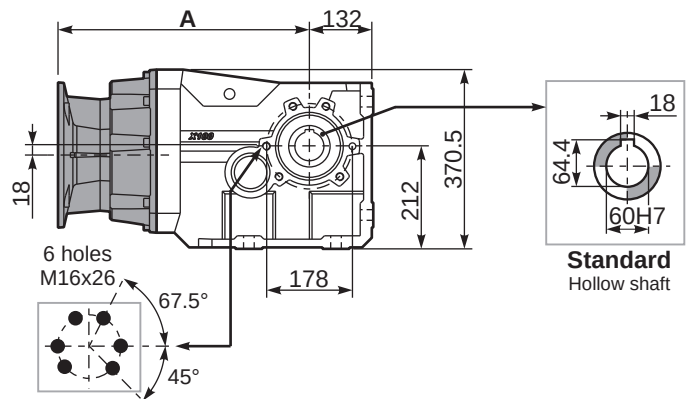
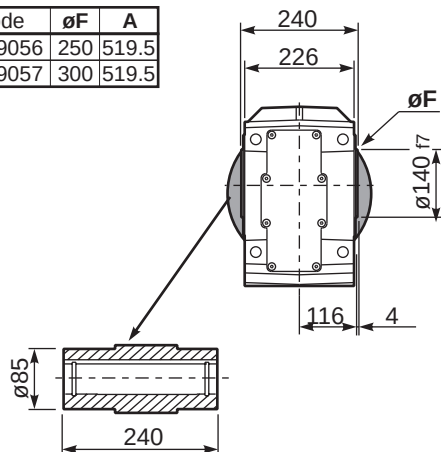
Basic Gearbox

Riduttore base

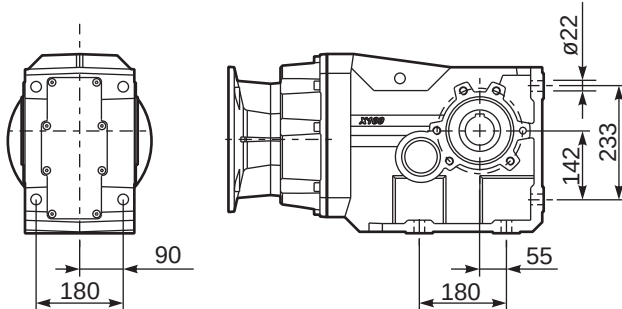
Gearbox weight
peso riduttore

118 kg

M. flanges	Kit code	øF	A
100/112B5	KC1109056	250	519.5
132B5	KC1109057	300	519.5

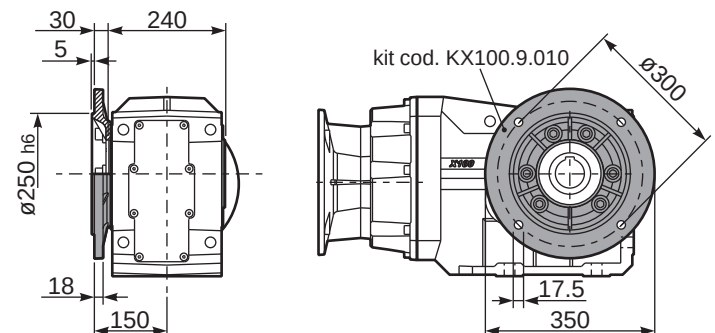


Mounting holes position
Posizione fori di montaggio

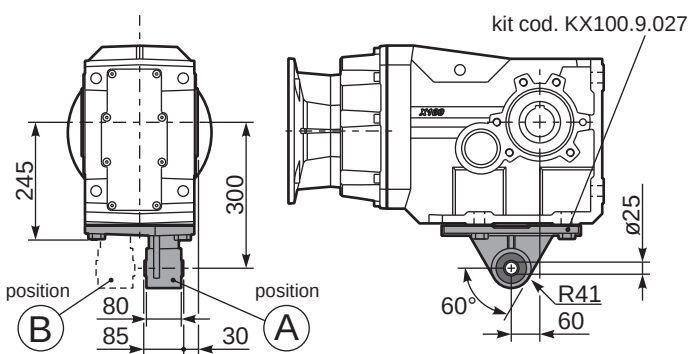
PX104...**FB..**Feet
Piedini

PX104...-F6..

Output flange
Flangia uscita

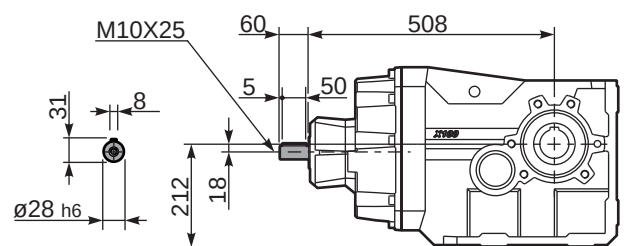
PX104...**BR..**

Reaction Arm
Braccio di reazione

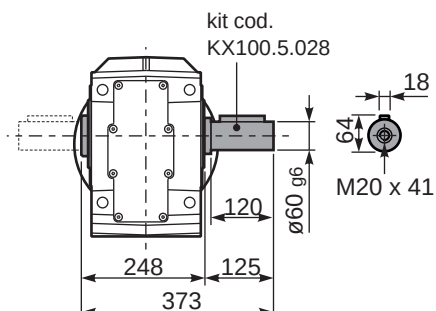


RX104...

Input shaft
Albero in entrata

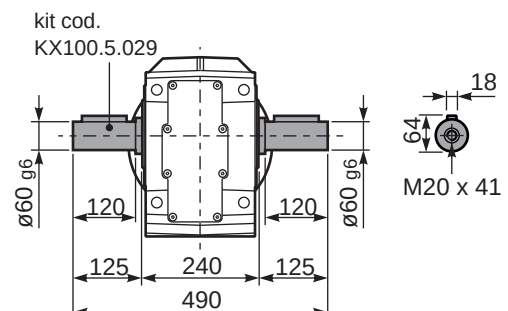
PX104**A**...

Single shaft
Albero lento semplice



PX104B...

Double shaft
Albero lento bisp.





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges					B14 motor flanges			Output Shaft  $\varnothing$	Ratios code 
							-G	-H	-I	-L	CA	-	-	-		
							132	160	180	200	225	-	-	-		
219	6.39	45	1757	1.4	61.0	2500									392914	01
200	7.00	45	1925	1.4	59.0	2650									392913	02
164	8.55	45	2350	1.2	51.1	2800									392911	03
140	10.01	45	2752	1.2	49.8	3200									302914	04
128	10.97	45	3014	1.1	45.5	3200									302913	05
105	13.39	37	3025	1.1	39.6	3400									302911	06
89	15.71	37	3550	1.0	34.7	3500									222914	07
81	17.21	37	3888	1.0	33.5	3700									222913	08
67	21.02	30	3877	1.0	29.7	4000									222911	09
59	23.73	30	4378	0.9	26.9	4100									162914	10
54	25.99	22	3523	1.2	25.8	4300									162913	11
50	27.93	22	3786	1.1	24.0	4300									142914	12
45.8	30.59	22	4146	1.1	22.9	4500									142913	13
44.1	31.74	22	4302	1.0	22.1	4500									162911	14
37.5	37.36	18.5	4255	1.1	18.8	4500									142911	15
33.8	41.37	18.5	4712	1.0	17.0	4500									102914	16
30.9	45.31	15	4179	1.1	15.5	4500									102913	17
25.3	55.33	11	3750	1.2	12.7	4500									102911	18

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X113** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X113** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X113** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X113** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X113** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	B6	B7	B8	V5	V6	V8
13.50 LT	8.00 LT	15.50 LT	14.50 LT	22.00 LT	13.00 LT	Ask
AGIP Blasias 460						

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

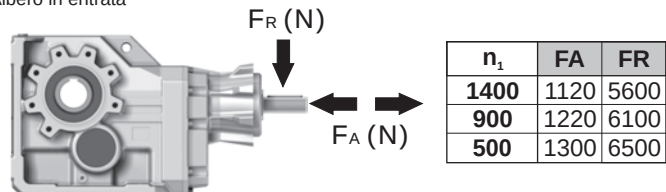
Albero di uscita



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2100	10500	140	3100	15500	70	4200	21000
250	2600	13000	120	3240	16200	40	5600	28000
200	3000	15000	85	3600	18000	15	8000	40000

Input shaft

Albero in entrata



n_1	FA	FR
1400	1120	5600
900	1220	6100
500	1300	6500

tab. 2

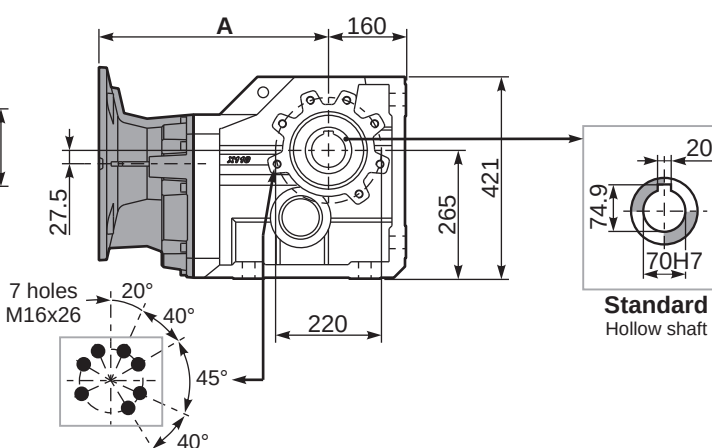
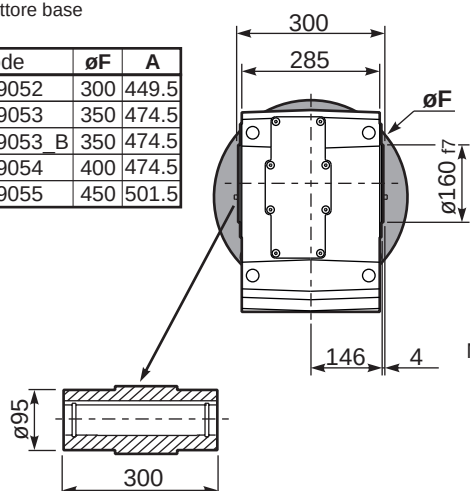
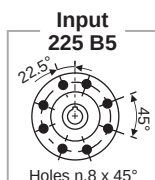
PX113C...

Basic Gearbox
Riduttore base

Gearbox weight
peso riduttore

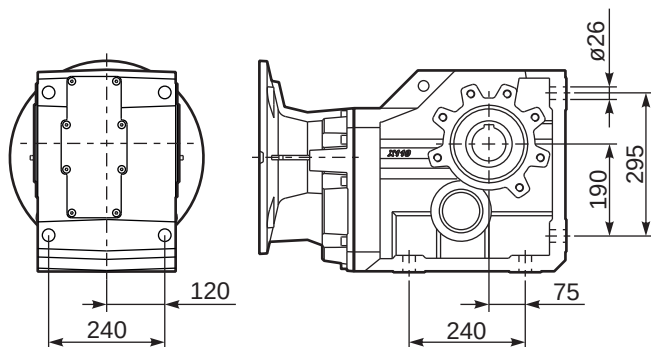
170 kg

M. flanges	Kit code	øF	A
132B5	KC1109052	300	449.5
160B5	KC1109053	350	474.5
180B5	KC1109053_B	350	474.5
200B5	KC1109054	400	474.5
225B5	KC1109055	450	501.5



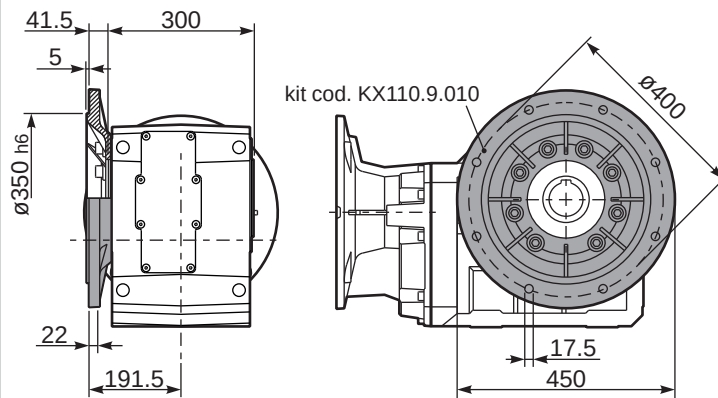
Standard

Mounting holes position
Posizione fori di montaggio

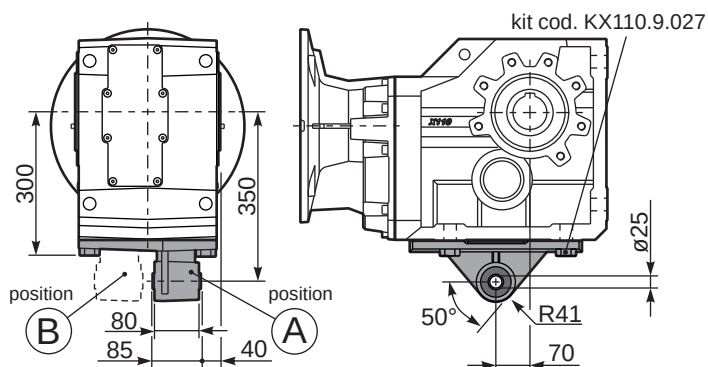
PX113...**FB..**Feet
Piedini

PX113...-F7..

Output flange
Flangia uscita

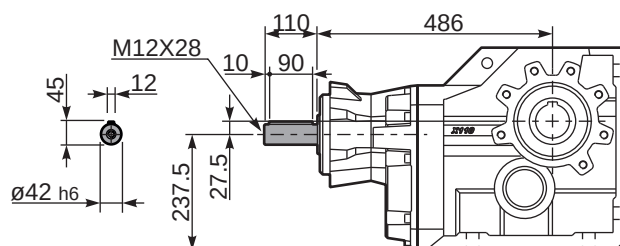
PX113...**BR..**

Reaction Arm
Braccio di reazione



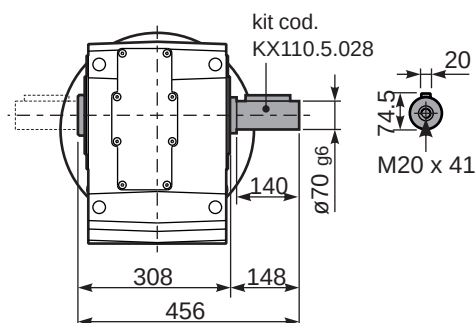
Rx113...

Input shaft
Albero in entrata



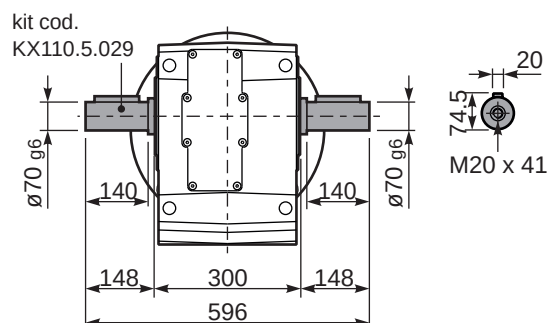
PX113A...

Single shaft
Albero lento semplice



PX113B...

Double shaft
Albero lento bisp.





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges			B14 motor flanges				Output Shaft 	Ratios code
							-F	-G	-H	-	-	-			
							100 112	132	160	-	-	-			
28.8	48.57	15	4390	1.0	14.8	4500	B			not available			30142911	standard ø70	01
20.5	68.43	11	4545	1.0	10.7	4600	B						20142914		02
18.7	74.95	11	4977	0.9	9.8	4600	B						20142913		03
15.1	92.53	7.5	4216	1.1	7.9	4600	B						16142914		04
13.8	101.33	7.5	4617	1.0	7.2	4600	B						16142913		05
11.6	120.33	5.5	4051	1.1	6.1	4600	B						13142914		06
11.3	123.75	5.5	4166	1.1	5.8	4500	B						16142911		07
10.6	131.78	5.5	4436	1.0	5.6	4600	B						13142913		08
9.5	147.28	5.5	4958	0.9	5.0	4600	B						11142914		09
8.7	161.30	4	3972	1.2	4.5	4600	B						11142913		10
7.1	196.98	3	3652	1.2	3.6	4500	B						11142911		11
6.6	212.99	3	3949	1.2	3.4	4600	B						8142914		12
6.0	233.26	3	4324	1.1	3.1	4600	B						8142913		13
4.9	284.86	2.2	3889	1.2	2.5	4500	B						8142911		14

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **X114** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X114** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X114** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X114** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X114** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
14.50 LT	8.50 LT	16.50 LT	16.00 LT	23.00 LT	14.50 LT	Ask
AGIP Blasias 460						

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

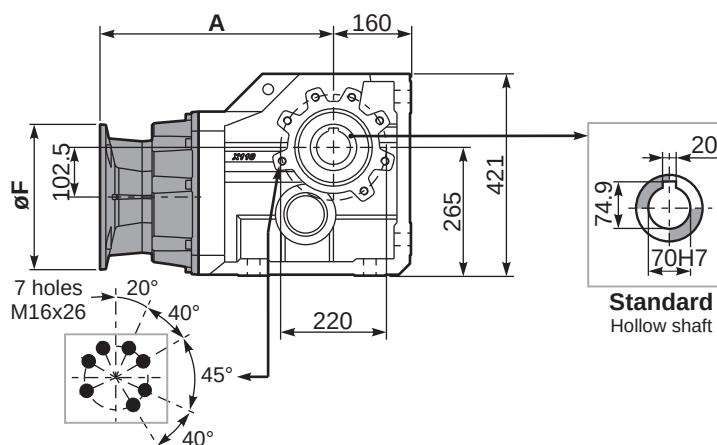
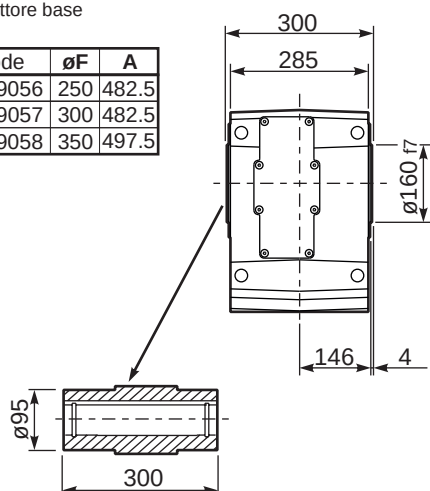
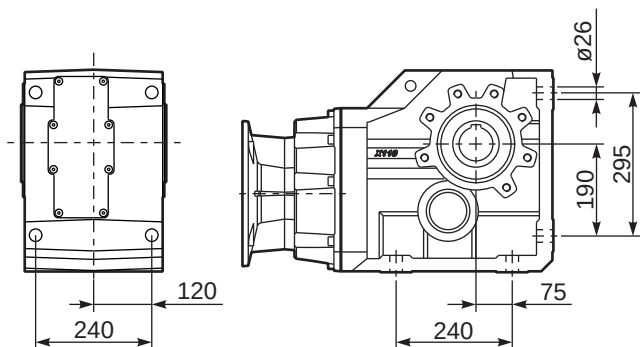
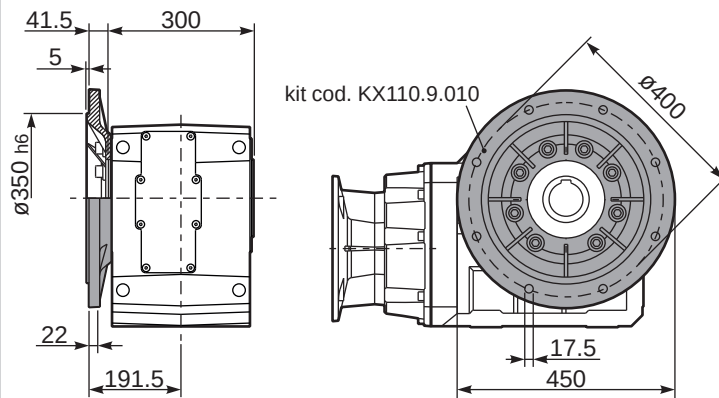
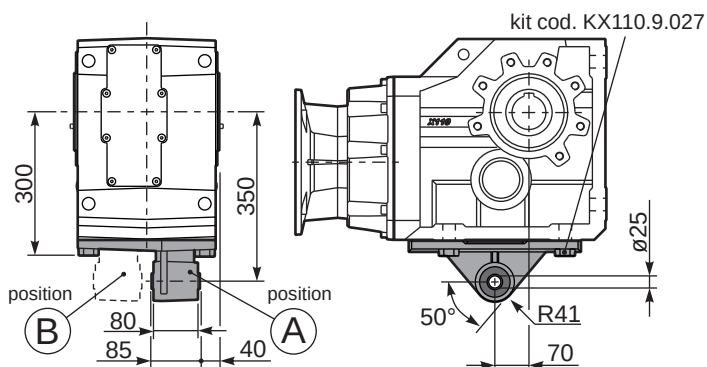
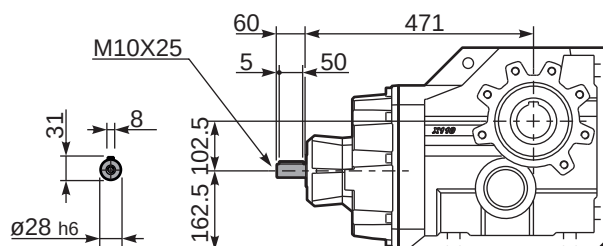
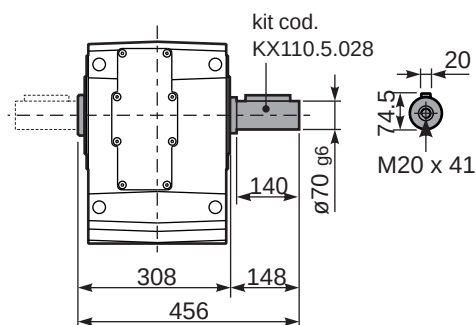
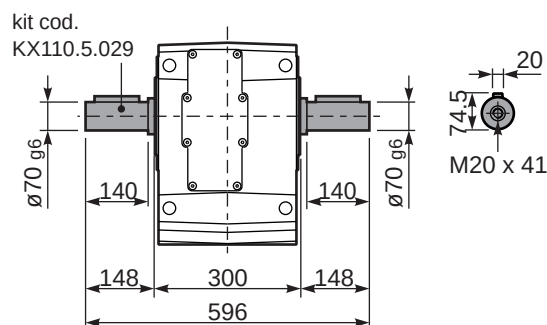
tab. 1

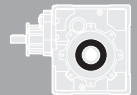
RADIAL AND AXIAL LOADS									
Output shaft Albero di uscita			Feq = FR · 325.5 / X + 255.5						
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR	
300	2100	10500	140	3100	15500	70	4200	21000	
250	2600	13000	120	3240	16200	40	5600	28000	
200	3000	15000	85	3600	18000	15	8000	40000	
Input shaft Albero in entrata									
n_1	FA	FR							
1400	700	3500							
900	840	4200							
500	900	4500							

tab. 2

PX114C...Basic Gearbox
Riduttore baseGearbox
weight
peso riduttore**161 kg**

M. flanges	Kit code	øF	A
100/112B5	KC1109056	250	482.5
132B5	KC1109057	300	482.5
160B5	KC1109058	350	497.5

Mounting holes position
Posizione fori di montaggio**Standard**
Hollow shaft**PX114...FB..**Feet
Piedini**PX114...-F7..**Output flange
Flangia uscita**PX114...BR..**Reaction Arm
Braccio di reazione**RX114...**Input shaft
Albero in entrata**PX114A...**Single shaft
Albero lento semplice**PX114B...**Double shaft
Albero lento bisp.



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft  $\varnothing$	Ratios code 
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100 112	132	80	90	100 112	132		
176	7.94	7.5	369	1.0	7.5	380	B									302418	01
153	9.13	7.5	425	0.9	6.7	390	B									302416	02
131	10.66	5.5	366	1.1	6.0	410	B									302414	03
94	14.97	5.5	514	1.1	6.0	580	B									202418	04
81	17.21	5.5	591	1.0	5.4	600	B									202416	05
69	20.24	5.5	695	1.0	5.2	675	B									162418	06
60	23.27	4	585	1.2	4.5	675	B									162416	07
53	26.31	4	661	1.0	4.0	675	B									132418	08
46.3	30.25	4	760	0.9	3.5	675	B									132416	09
39.6	35.32	3	668	1.0	3.0	675	B									132414	10
37.8	37.03	3	701	1.0	2.8	675	B									112416	11
32.4	43.23	2.2	602	1.1	2.4	675	B									112414	12
30.1	46.58	2.2	649	1.0	2.3	675	B									82418	13
26.1	53.55	2.2	746	0.9	2.0	675	B									82416	14
22.4	62.52	1.5	600	1.1	1.7	675	B									82414	15
19.0	73.75	1.1	517	1.1	1.2	580	B									62416	16
16.3	86.09	1.1	604	1.1	1.2	675	B									62414	17

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **113C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **113C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **113C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **113C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **113C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied						
For these mounting position specify in the order or add oil						
Per queste posizioni specificare in fase d'ordine o aggiungere olio						
						
B3	B6	B7	B8	V5	V6	V8
4.00 LT	2.60 LT	2.60 LT	2.60 LT	5.15 LT	2.20 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

For all details on lubrication and plugs check our website

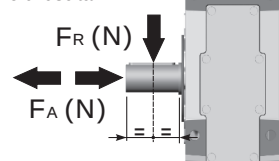
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

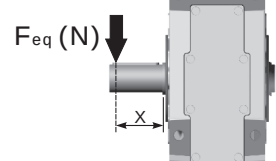
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



$$F_{eq} = F_R \cdot \frac{171}{X+131}$$



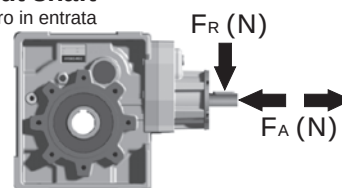
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	640	3200	140	860	4300	70	1080	5400
250	700	3500	120	900	4500	40	1300	6500
200	740	3700	85	1000	5000	15	1840	9200

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata

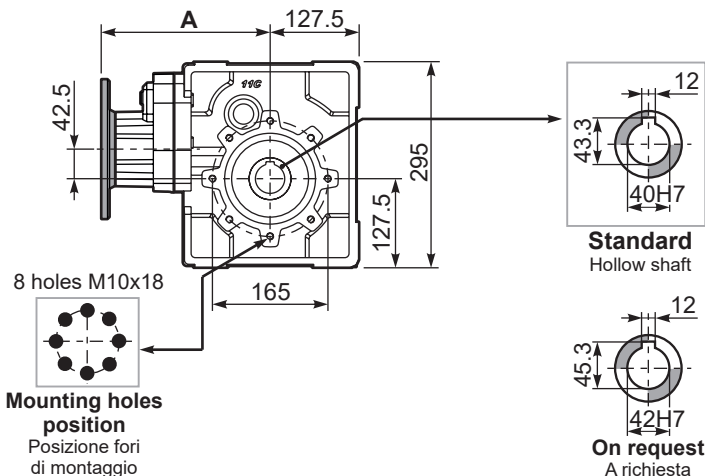
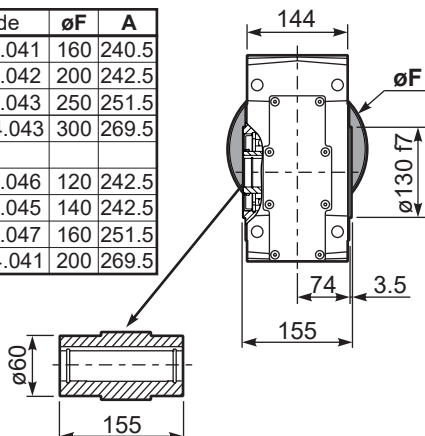


n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

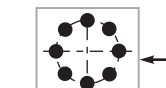
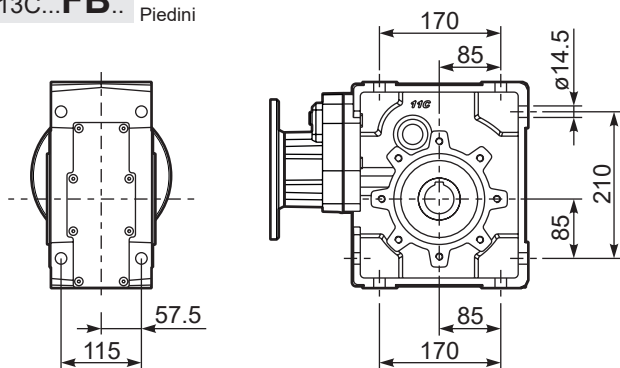
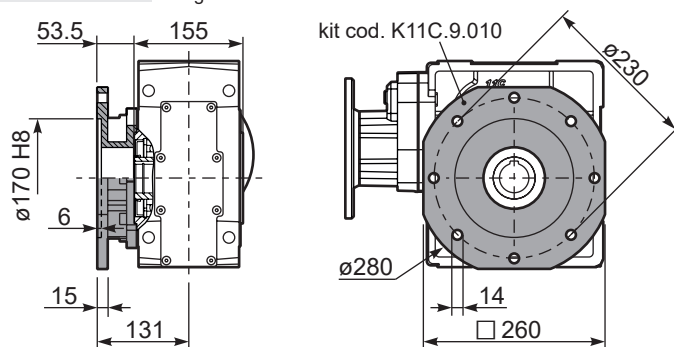
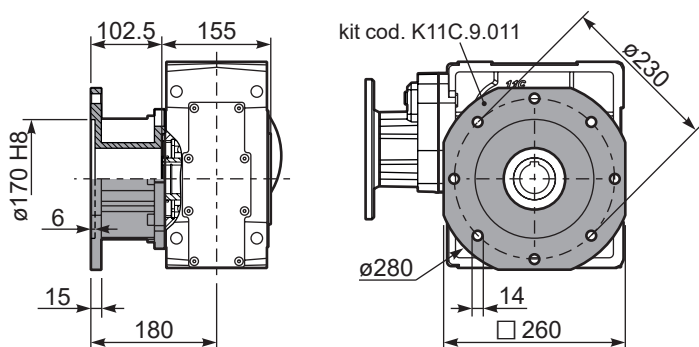
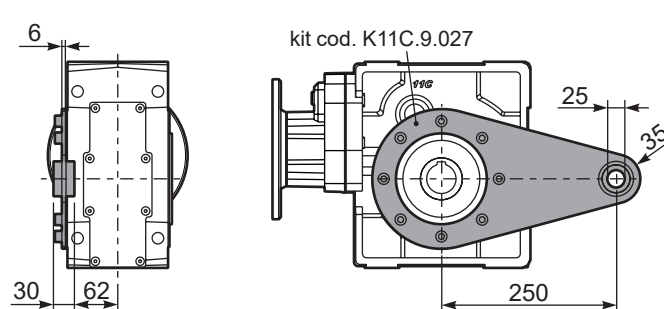
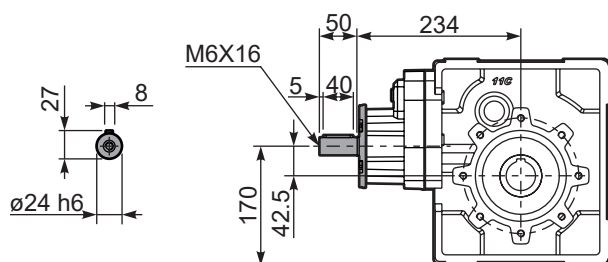
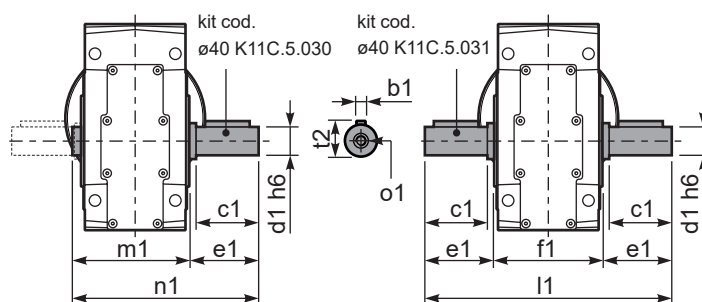
tab. 2

P113CC...Basic Gearbox
Riduttore baseGearbox
weight
peso riduttore**38.0 kg**

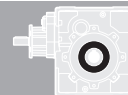
M. flanges	Kit code	øF	A
71B5	K023.4.041	160	240.5
80/90B5	K023.4.042	200	242.5
100/112B5	K023.4.043	250	251.5
132B5	KC50.4.043	300	269.5
80B14	K085.4.046	120	242.5
90B14	K085.4.045	140	242.5
100/112B14	K085.4.047	160	251.5
132B14	KC50.4.041	200	269.5



8 holes M10x18

Mounting holes
positionPosizione fori
di montaggio**P113C...FB..**Feet
Piedini**P113C...-FC..**Output flange
Flangia uscita**P113C...-FL..**Output flange
Flangia uscita**P113C...BR..**Reaction Arm
Braccio di reazione**R113C...**Input shaft
Albero in entrata**P113CA...**Single shaft
Albero lento semplice**P113CB...**Double shaft
Albero lento bisp.

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
ø40 Standard	12	80	40	84.5	155	324	164.5	249	43	M12
On request	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges				Output Shaft 	Ratios code
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
18.7	74.79	1.5	704	1.0	1.4	675	B				C	C		19132418	standard ø40 ø42 On request	01
16.3	85.99	1.1	591	1.1	1.3	675	B				C	C		19132416		02
14.0	99.66	1.1	685	1.0	1.1	675	B				C	C		17132416		03
12.0	116.35	0.75	548	1.2	0.92	675	B				C	C		17132414		04
11.5	121.45	0.75	572	1.2	0.89	675	B				C	C		13132418		05
10.0	139.64	0.75	658	1.0	0.77	675	B				C	C		13132416		06
9.2	152.21	0.75	717	0.9	0.71	675	B				C	C		19082416		07
8.6	163.02	0.55	567	1.2	0.66	675	B				C	C		13132414		08
7.9	177.69	0.55	618	1.1	0.61	675	B				C	C		19082414		09
6.8	205.95	0.55	716	0.9	0.52	675	B				C	C		17082414		10
6.3	222.52	0.55	774	0.9	0.48	675	B				C	C		10132414		11
5.6	248.76	0.37	578	1.2	0.43	675	B				C	C		9132416		12
4.8	290.41	0.37	675	1.0	0.37	675	B				C	C		9132414		13
4.1	337.39	0.37	784	0.9	0.32	675	B				C	C		10082416		14
3.6	393.88	0.25	618	1.1	0.27	675	B				C	C		10082414		15
3.2	440.33	0.25	690	1.0	0.24	675	B				C	C		9082416		16
2.7	514.06	0.18	616	1.1	0.21	675	B				C	C		9082414		17
2.4	581.44	0.18	697	1.0	0.18	675	B				C	C		7082416		18
2.1	678.79	0.12	526	1.3	0.16	675	B				C	C		7082414		19

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **114C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **114C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **114C** ist mit synthetischem Öl gefüllt und ist lebensdauer geschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **114C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

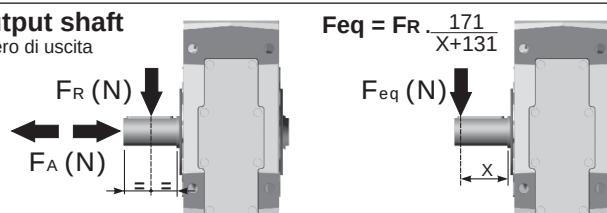
E El reductor tamaño **114C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
4.10 LT	2.70 LT	2.70 LT	2.70 LT	5.30 LT	2.35 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web **tab. 1**

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



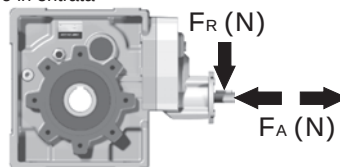
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	640	3200	140	860	4300	70	1080	5400
250	700	3500	120	900	4500	40	1300	6500
200	740	3700	85	1000	5000	15	1840	9200

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata

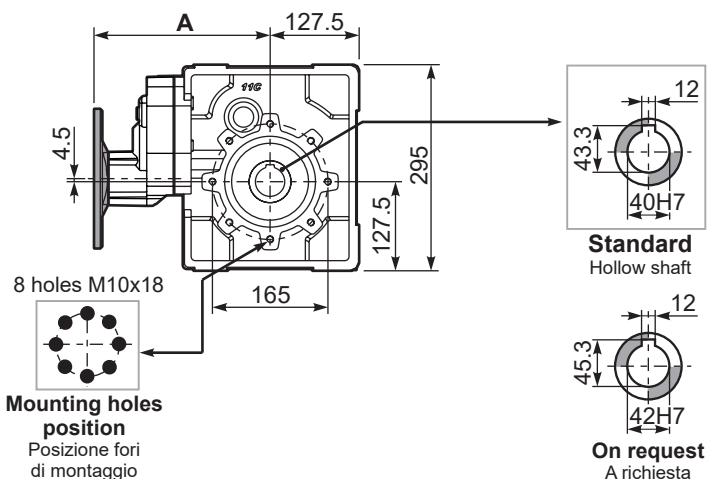
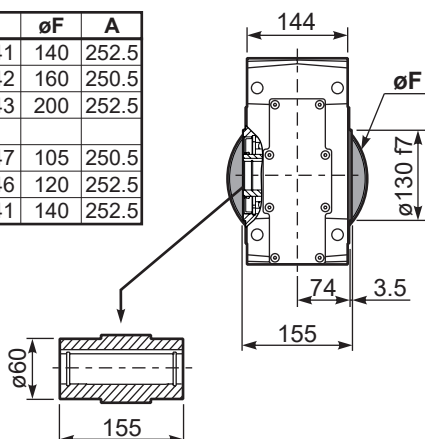
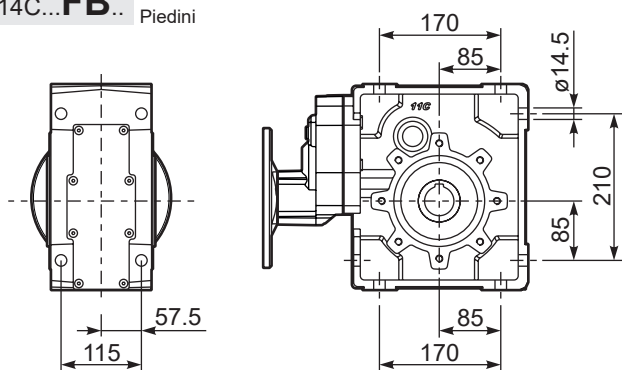
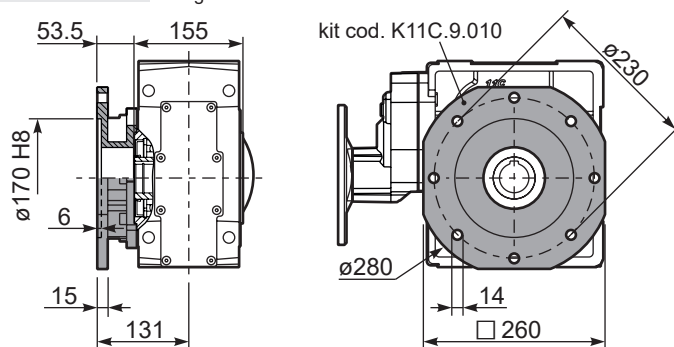
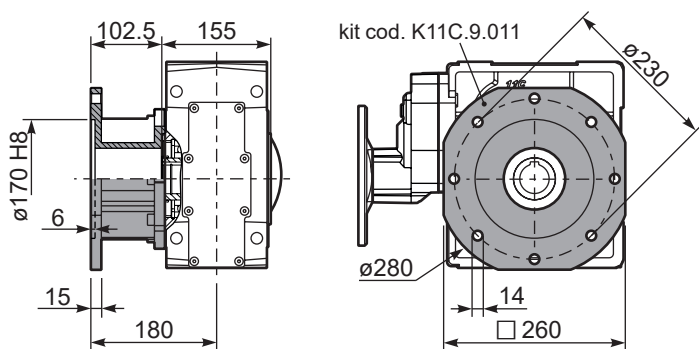
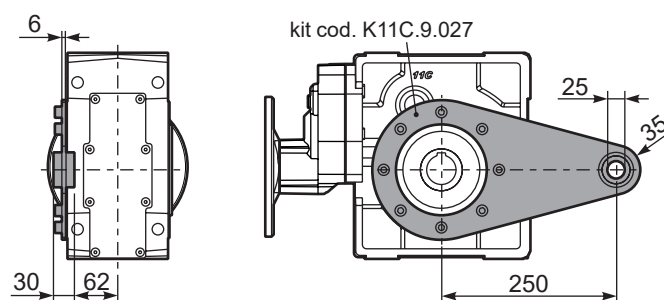
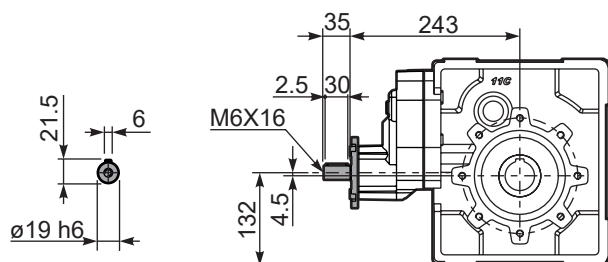
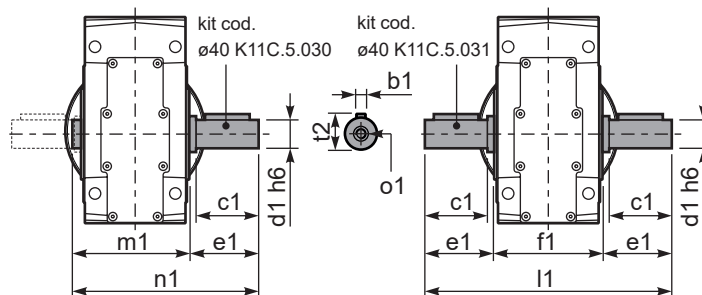


n_1	FA	FR
1400	240	1200
900	280	1400
500	310	1700

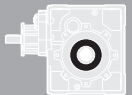
tab. 2

P114CC...Basic Gearbox
Riduttore baseGearbox
weight
peso riduttore**38.0 kg**

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	252.5
71B5	K063.4.042	160	250.5
80/90B5	K063.4.043	200	252.5
71B14	K063.4.047	105	250.5
80B14	K063.4.046	120	252.5
90B14	K063.4.041	140	252.5

**P114C...FB..**Feet
Piedini**P114C...-FC..**Output flange
Flangia uscita**P114C...-FL..**Output flange
Flangia uscita**P114C...BR..**Reaction Arm
Braccio di reazione**R114C...**Input shaft
Albero in entrata**P114CA...**Single shaft
Albero lento semplice**P114CB...**Double shaft
Albero lento bisp.

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
ø40 Standard	12	80	40	84.5	155	324	164.5	249	43	M12
On request	-	-	-	-	-	-	-	-	-	-



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges					Available B14 motor flanges					Output Shaft 	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V			
							71	80	90	100 112	132	80	90	100 112	132			
145	9.69	9	560	1.3	12.2	755	B									302418	standard ø45	01
126	11.09	9	641	1.1	9.6	680	B									302416		02
108	12.90	9	746	1.1	9.6	790	B									302414		03
77	18.26	7.5	849	1.1	8.0	935	B									202418		04
67	20.91	7.5	972	1.0	7.5	1000	B									202416		05
58	24.32	5.5	835	1.2	6.4	1000	B									202414		06
49.5	28.27	5.5	971	1.0	5.5	1000	B									162416		07
42.6	32.88	4	826	1.2	4.7	1000	B									162414		08
38.1	36.76	4	924	1.1	4.2	1000	B									132416		09
32.7	42.76	3	809	1.2	3.6	1000	B									132414	ø40 on request	10
31.1	45.00	3	851	1.2	3.5	1000	B									112416		11
26.8	52.33	3	990	1.0	3.0	1000	B									112414		12
24.6	56.82	2.2	791	1.1	2.3	850	B									82418		13
21.5	65.07	2.2	906	1.1	2.3	975	B									82416		14
18.5	75.68	2.2	1054	0.9	2.1	1000	B									82414		15
15.6	89.61	1.1	628	1.1	1.2	710	B									62416		16
13.4	104.22	1.1	731	1.1	1.2	820	B									62414		17

The dynamic efficiency is 0.94 for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit 133C is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo 133C è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße 133C wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type 133C est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño 133C se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
6.00 LT	4.30 LT	4.30 LT	3.30 LT	7.40 LT	3.10 LT	Ask

AGIP Blasias 460

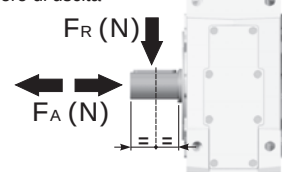
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

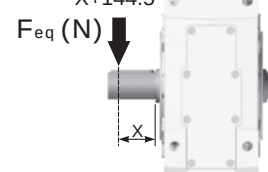
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



$$F_{eq} = F_R \cdot \frac{184.5}{X + 144.5}$$



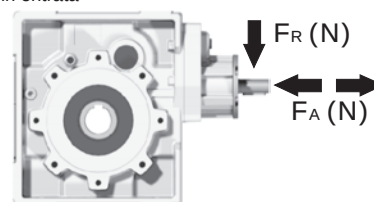
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	800	4000	140	1120	5600	70	1400	7000
250	900	4500	120	1200	6000	40	1700	8500
200	960	4800	85	1300	6500	15	2400	12000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata

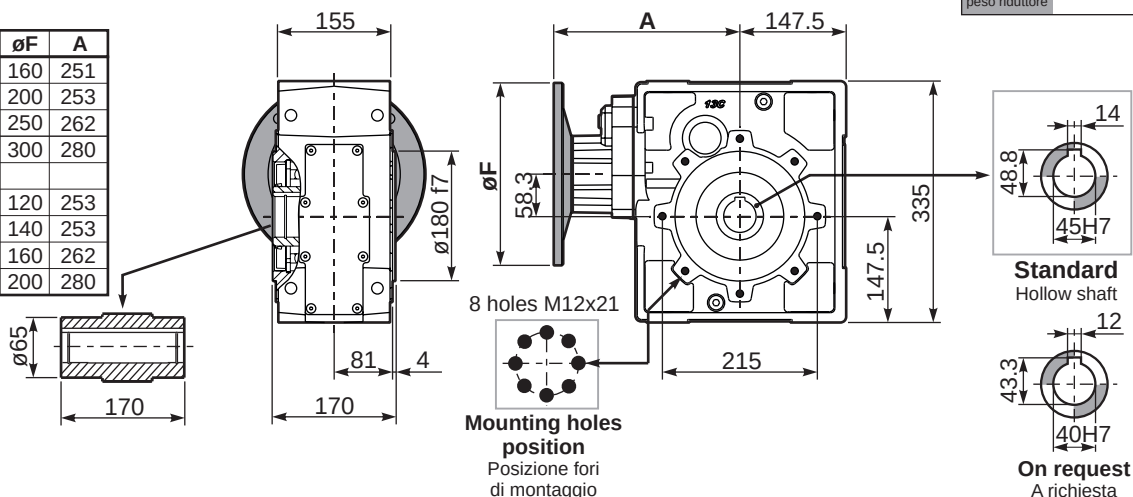
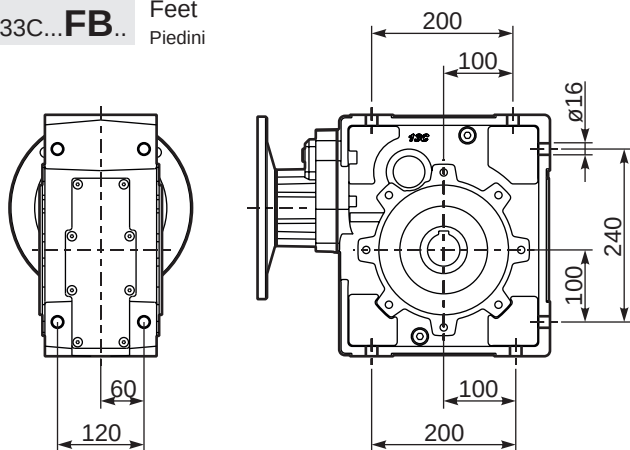
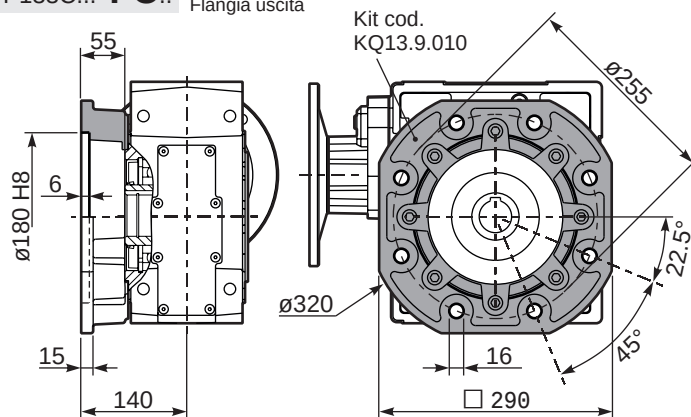
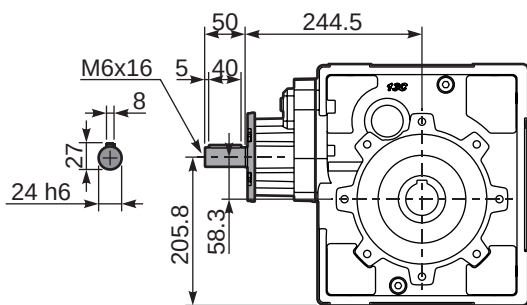
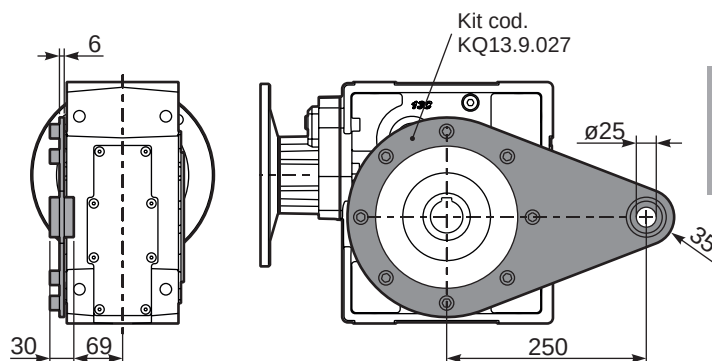
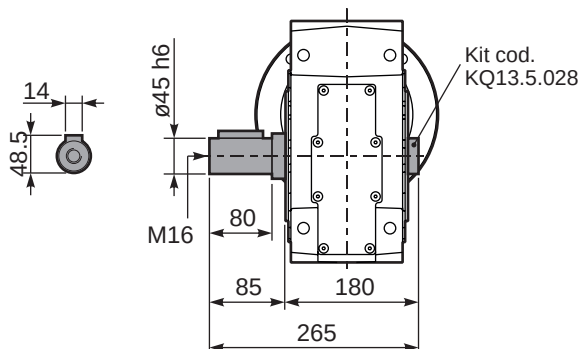
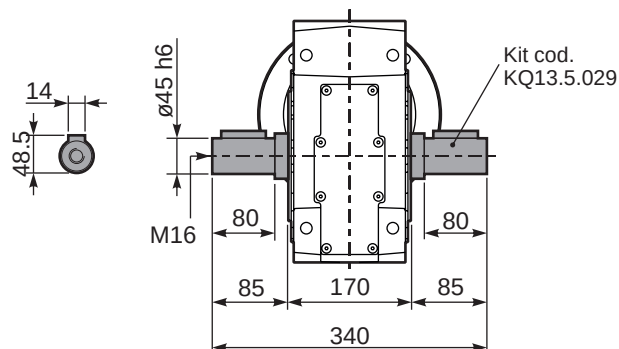


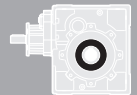
n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

P133CC...Basic gearbox
Riduttore baseGearbox
weight
peso riduttore **53.5 kg**

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	251
80/90B5	K023.4.042	200	253
100/112B5	K023.4.043	250	262
132B5	KC50.4.043	300	280
80B14	K085.4.046	120	253
90B14	K085.4.045	140	253
100/112B14	K085.4.047	160	262
132B14	KC50.4.041	200	280

**P133C...FB..**Feet
Piedini**P133C...-FC..**Output flange
Flangia uscita**R133C...**Input Shaft
Albero in entrata**P133C...BR..**Reaction arm
Braccio di reazione**P133CA..**Single output Shaft
Albero lento semplice**P133CB..**Double Input Shaft
Albero lento bisporgente



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft 	Ratios code
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
15.3	91.23	1.5	858	1.2	1.7	1000	B				C	C		19132418	01
13.4	104.48	1.5	983	1.0	1.5	1000	B				C	C		19132416	02
11.6	121.10	1.5	1139	0.9	1.3	1000	B				C	C		17132416	03
9.9	140.84	1.1	968	1.0	1.1	1000	B				C	C		17132414	04
8.5	165.32	1.1	1136	0.9	0.96	1000	B				C	C		15132414	05
7.6	184.94	0.75	872	1.1	0.86	1000	B				C	C		19082416	06
7.1	197.34	0.75	930	1.1	0.81	1000	B				C	C		13132414	07
6.5	215.10	0.75	1014	1.0	0.74	1000	B				C	C		19082414	08
6.0	231.60	0.55	805	1.2	0.69	1000	B				C	C		10132416	09
5.6	249.31	0.55	867	1.2	0.64	1000	B				C	C		17082414	10
5.2	269.37	0.55	937	1.1	0.59	1000	B				C	C		10132414	11
4.8	292.64	0.55	1018	1.0	0.54	1000	B				C	C		15082414	12
4.6	302.26	0.55	1051	1.0	0.53	1000	B				C	C		9132416	13
4.0	349.30	0.37	812	1.2	0.46	1000	B				C	C		13082414	14
3.5	399.12	0.37	928	1.1	0.40	1000	B				C	C		7132416	15
2.9	476.80	0.37	1108	0.9	0.33	1000	B				C	C		10082414	16
2.2	622.28	0.25	976	1.0	0.26	1000	B				C	C		9082414	17
1.7	821.70	0.18	985	1.0	0.19	1000	B				C	C		7082414	18

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit **134C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **134C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **134C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **134C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **134C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
6.10 LT	4.40 LT	4.40 LT	3.40 LT	7.50 LT	3.20 LT	Ask

AGIP Blasias 460

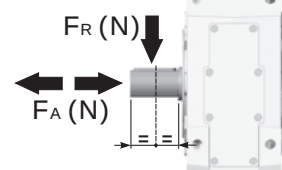
For all details on lubrication and plugs check our website

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

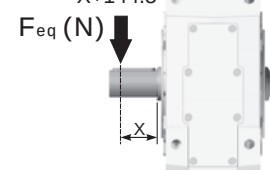
tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$F_{eq} = F_R \cdot \frac{184.5}{X + 144.5}$$



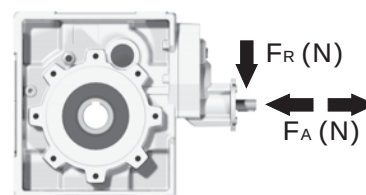
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	800	4000	140	1120	5600	70	1400	7000
250	900	4500	120	1200	6000	40	1700	8500
200	960	4800	85	1300	6500	15	2400	12000

On request reinforced bearings to increase loads.

A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft

Albero in entrata

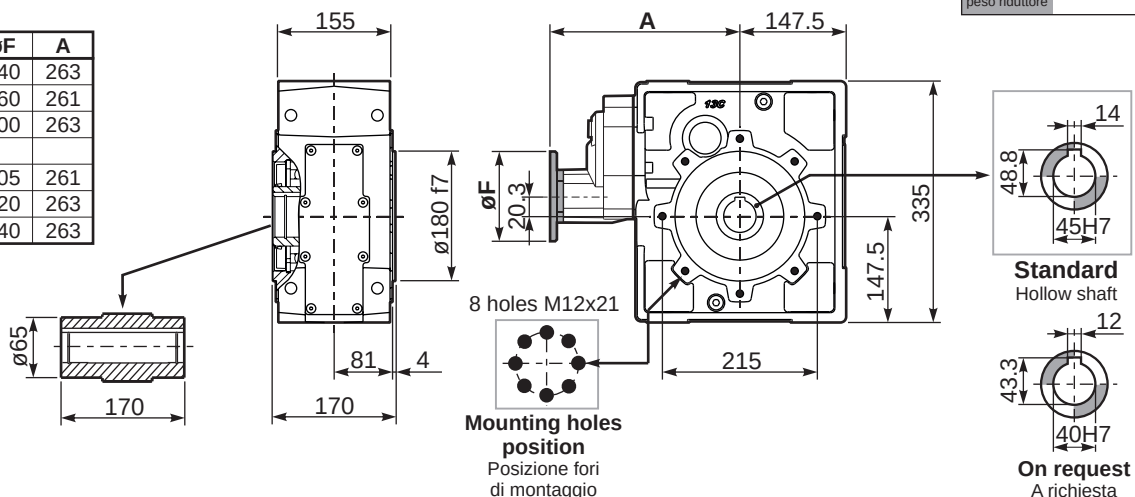
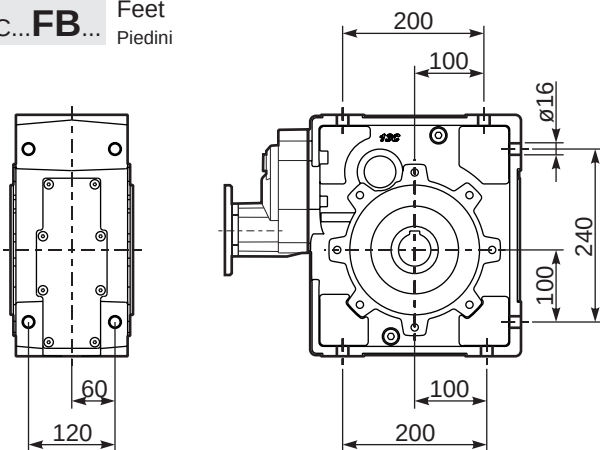
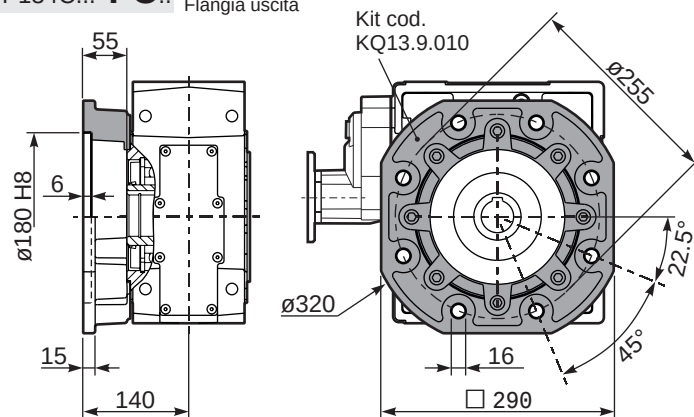
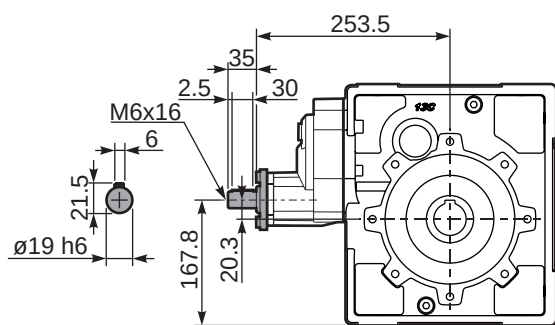
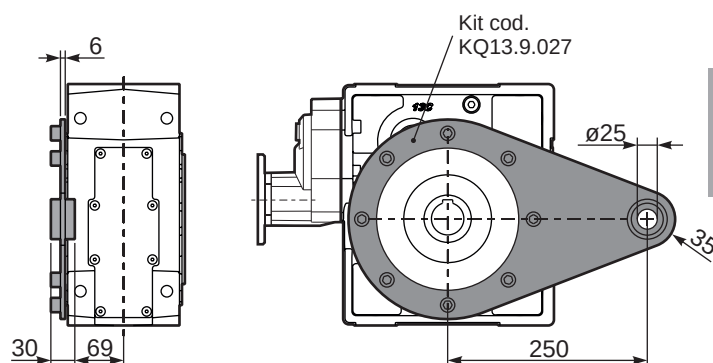
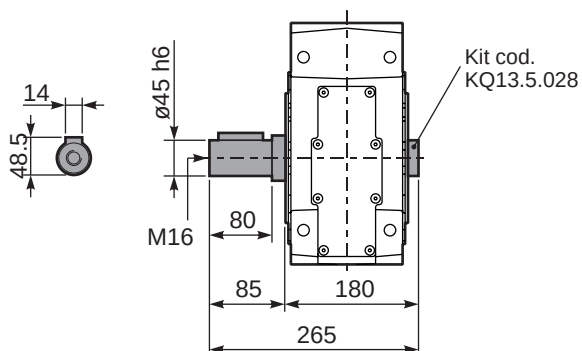
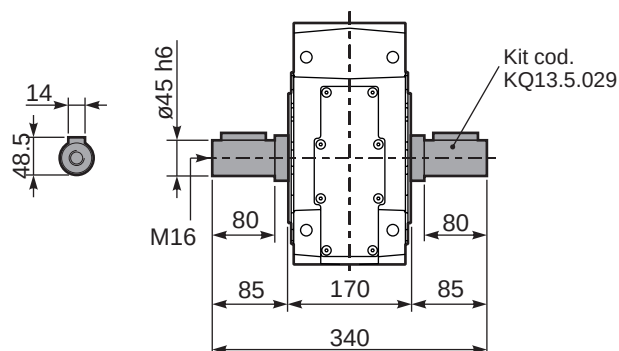


n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

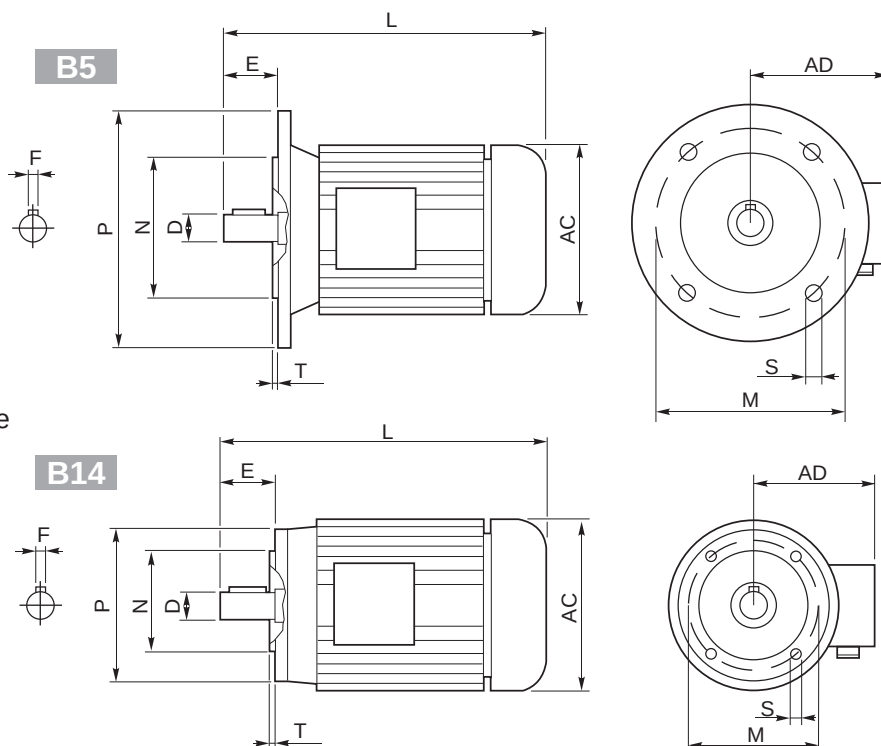
P134CC...Basic gearbox
Riduttore baseGearbox
weight
peso riduttore**53.5 kg**

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	263
71B5	K063.4.042	160	261
80/90B5	K063.4.043	200	263
71B14	K063.4.047	105	261
80B14	K063.4.046	120	263
90B14	K063.4.041	140	263

**P134C...FB...**Feet
Piedini**P134C...-FC..**Output flange
Flangia uscita**R134C...**Input Shaft
Albero in entrata**P134C...BR..**Reaction arm
Braccio di reazione**P134CA..**Single output Shaft
Albero lento semplice**P134CB..**Double Input Shaft
Albero lento bisporgente



- 1) 230/400V - 50Hz motore trifase asincrono
- 2) Isolamento Classe F
- 3) S1 servizio continuo
- 4) Protezione IP 55
- 5) Non verniciato
- 6) Manicotto di protezione per l'albero motore



Le dimensioni esterne e il peso sono indicative, possono variare tra i vari costruttori.

	2 poli / poles			4 poli / poles			6 poli / poles			B5-B14						B5					B14					Kg											
	kW	Nm	A (400V)	kW	Nm	A (400V)	kW	Nm	A (400V)	D	F	E	L	AC	AD	N	M	P	S	T	N	M	P	S	T												
56 A	0.09	0.32	0.38	0.06	0.44	0.27	—	—	—	9	3	20	199	108	96	80	100	120	7	2.5	50	65	80	M5	2.5	2.7											
56 B	0.12	0.42	0.46	0.09	0.67	0.37	—	—	—																	2.9											
63 A	0.18	0.63	0.60	0.12	0.84	0.50	0.09	0.99	0.57	11	4	23	208	120	99	95	115	140	9.5	3	60	75	90	M5	2.5	3.8											
63 B	0.25	0.87	0.76	0.18	1.30	0.69	0.12	1.32	0.74																	4.2											
71 A	0.37	1.30	1.00	0.25	1.70	0.91	0.18	1.90	0.80	14	5	30	-	130	104	110	130	160	9.5	3.5	70	85	105	M6	2.5	5.9											
71 B	0.55	1.90	1.54	0.37	2.52	1.14	0.25	2.72	1.10				255	141	107											6.5											
80 A	0.75	2.60	1.85	0.55	3.77	1.51	0.37	3.84	1.18	19	6	40	296	159	127	130	165	200	11.5	3.5	80	100	120	M6	3	8.5											
80 B	1.1	3.90	2.64	0.75	5.11	2.57	0.55	5.84	1.80																	10											
90 S	1.5	5.00	3.31	1.1	7.45	2.78	0.75	7.92	2.32	24	8	50	-	170	135	130	165	200	11.5	3.5	95	115	140	M8	3	12.5											
90 L	2.2	7.50	4.46	1.5	10.2	3.61	1.1	11.6	3.45				330													15											
100 LA	3.0	10.0	6.28	2.2	14.8	5.07	1.5	15.4	3.88	28	8	60	-	190	148	180	215	250	13	4	110	130	160	M8	3.5	20											
100 LB	—	—	—	3.0	20.1	6.66	—	—	—				22																								
112 M	4.0	13.4	8.10	4.0	26.7	8.55	2.2	22.6	5.30				381	210	164											35											
132 S	5.5	18.3	11.2	5.5	36.5	11.4	3.0	30.2	7.20	38	10	80	455	244	180	230	265	300	14	4	130	165	200	M10	4	41											
		7.5	24.9										15.3													500	51										
132 M	—	—	—	7.5	49.4	15.0	4.0	40.0	9.13				500	244	180											230	265	300	14	4	130	165	200	M10	4	51	
		—	—	—	9	61.4							18.5																								51
160 M	—	—	—	11	72	21.5	—	—	—	42	12	110	613	335	246	250	300	350	18	5	—	—	—	—	—												79.2
160 L	—	—	—	15	98	29	—	—	—				657																								97.5
180 M	—	—	—	18.5	121	35.5	—	—	—	48	14	110	712	366	266	250	300	350	19	5	—	—	—	—	—	170											
180 L	—	—	—	22	144	42	—	—	—				712													366	266	250	300	350	19	5	—	—	—	—	—
200 L	—	—	—	30	196	53	—	—	—	55	16	110	780	405	341	300	350	400	19	5	—	—	—	—	—	240											
225 S	—	—	—	37	240	69	—	—	—	60	18	140	888	463	360	350	400	450	19	5	—	—	—	—	—	305											
225 M	—	—	—	45	292	84	—	—	—																	310											

**Protection**

Standard IP55

Please specify on purchase orders if you need a higher IP protection class.

Grado di protezione

IP55 Standard

Specificare in sede di ordinazione per IP superiore.

Schutzart

IP55 Standard.

Höheren IP Grad bitte im Auftrag angeben.

Degré de protection

IP55 standard.

Au moment de la commande, spécifiez si vous souhaitez IP supérieur.

Grado de protección

IP55 standard.

Especificar en el pedido cuando necesiten protección IP superior.

Insulation

Standard CI.F

To be specified upon placing the order if different insulation is required.

Isolamento

CI.F Standard

Specificare in sede di ordinazione classe di isolamento diversa.

Isolierung

CI.F Standard.

Davon abweichende Isolierungsklasse im Auftrag angeben.

Isolement

CI.F Standard.

Au moment de la commande, spécifiez si vous souhaitez une classe d'isolement différente.

Aislamiento

CI.F standard.

Especificar al efectuar el pedido la clase diferente de aislamiento.

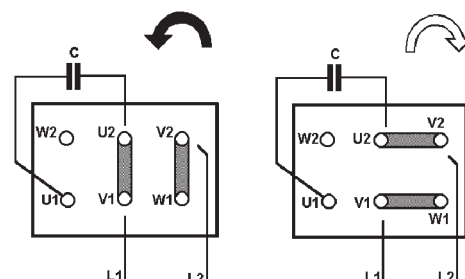
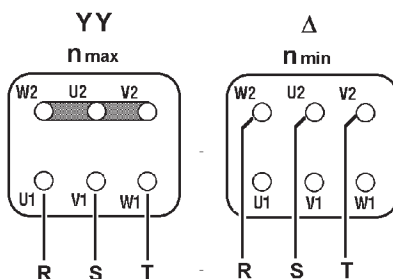
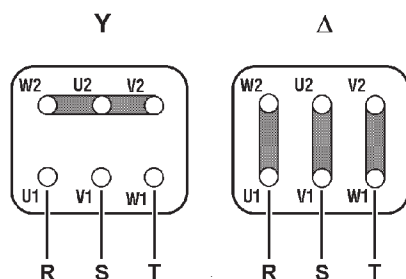
Insulation / Isolamento Isolierung / Aislamiento		E	B	F	H
Max. temp.	C°	120°	130°	155°	175°
	F*	248°	266°	311°	347°

Connections**Collegamenti****Verbindungselemente****Branchements****Conexiones**

Threephase asynchronous single polarity
Asincrono trifase singola polarità
Asynchronmotor 3-ph eine Drehzahl
Moteur triphasé à une vitesse
Asincrono trifasico de una velocidad

Threephase asynchronous double polarity
Asincrono trifase doppia polarità
Asynchronmotor 3-ph doppelte Drehzahl
Moteur triphasé à deux vitesses
Asincrono trifasico de dos velocidades

Single phase asynchronous
Asincrono monofase
Einphasen-Asynchronmotor
Moteur monophasé
Asincrono monofasico



Quotations:

Unless differently agreed, the validity of all quotations is 2 months. The quotations are provided according the RFQ (request for quotation) which shall contain the complete and detailed specification of the Product, the correctness of which is fully under responsibility of RFQ applicant.

Orders:

Only official orders issued on the Customer's letter-head are accepted. The Order Confirmation (OC) is issued within 2 working days from the order receipt unless the Products configuration issues arise. The OC shall be confirmed in writing within 2 working days from the OC date and in all its parts – the product code and description, quantities and price, other specific information, if any. The OC is considered confirmed by tacit approval in case no written confirmation is provided by the Customer.

Production time:

An average production time for the standard Products is 3-4 weeks and 2-3 weeks for kits from the OC confirmation date and/or payment receipt in case of advanced payment term. For some configurations of the standard Products the production time can be different and shall be advised in the quotation and/or in any case in OC. In the period of Christmas holidays and August holidays the days of company closure are excluded from the abovementioned production term.

Delivery terms:

FCA Sovizzo, Italy (Incoterms 2016)

Packaging:

The products are packed in wooden boxes as a standard packaging. Europallets can be also used on request. The prices and details of the packaging are indicated in the apposite section of the Price List. Payment terms: the payment should be performed in terms indicated in the invoice and by wire transfer. Prices: the prices are indicated in the invoice and intended ex-works, unless differently specified, and do not include any kind of taxes, shipment or other type of costs.

Standard Products orders cancellation:

Modification or cancellation of the orders is accepted only if notified to Hydro-Mec S.p.A. in writing and not later than 3 days from the Order Confirmation and in any case before the production of the ordered Products is launched.

Special execution of customized products:

The Products that are not included in the catalogue or configurations of the products that can not be realized using catalogue, options and accessories brochure and/or online configurator (www.cleangeartech.com) are considered Customized Products.

(a) Hydro-Mec S.p.A. is entitled to examine feasibility of Special Execution of Customized Products and define the minimum quantity, production time and eventually other special sales and production conditions issuing thereafter a Special Execution Quotation that shall be confirmed by the Customer in writing.

(b) Once the Quotation is confirmed, Hydro-Mec S.p.A. shall realize a Special Execution (SE) data sheet with its unique code for each Customized product. The SE data sheet shall be confirmed in full and in writing by The Customer.

(c) The production time of SE is definitely settled by Hydro-Mec S.p.A. and notified to the Customer after the SE data sheet confirmation. As a rule, the production time for SE of Customized products is longer than standard.

(d) The orders of Special Execution of Customized products can not be cancelled unless special written agreement is made before the production of SE is launched.

WARRANTY Conditions:

(a) Warranty period is 12 months form the shipment date.

(b) Warranty period could be extended to 18 months prior written agreement of the parties and in any case excluding wearable parts.

(c) Warranty covers only manufacturing defects. Wearable parts (for example, oil seals or lubricants leakages caused by normal wear) and failures due to the wrong assembling by the Customer are not covered by warranty.

(d) This warranty is also void in any case in which the products have been misused, used in improper environment conditions, configured beyond design limits indicated in the catalogue (especially service factor, loads and type of motors) or damaged, even accidentally or whenever installation instructions have not been strictly followed and in case of any natural disasters, in case of negligence of the Customer and the end user.

(e) The Customer is fully responsible to assure the compatibility of applications and correct mechanical couplings and electrical connections with the specifications of the Products according to Hydro-Mec S.p.A. catalogues and technical documentation

(f) The liability of Hydro-Mec S.p.A. is strictly limited to the above-stated obligations and it is therefore clearly agreed that Hydro-Mec S.p.A. take on no responsibility for any damage to persons and/or property deriving from accidents of any nature that may occur during use of the Products, whether the warranty is confirmed or otherwise, also in cases of the choice of the Product configuration being recommended by Hydro-Mec S.p.A.

WARRANTY Procedure:

(a) The Customer shall fill in the COMPLAINT FORM and forward it to Hydro-Mec S.p.A. along with other relevant information.

(b) Hydro-Mec S.p.A. examines the COMPLAINT FORM and confirms or declines the warranty.

(c) Hydro-Mec S.p.A. has the right to ask the Customer to send the malfunctioning product to Hydro-Mec S.p.A. for further examination. In case the warranty is not confirmed the Product will be shipped back to the Customer at the Customer expense. If the warranty is confirmed, Hydro-Mec S.p.A. shall compensate the shipment costs to the Customer within the limits of the best shipment quotation.

(d) In case the warranty is confirmed the Products shall be substituted at Hydro-Mec S.p.A. expense using ordinary shipment procedure. The express shipment can be used prior the agreement of the parties.

(e) In case the Product can not be substituted Hydro-Mec S.p.A. shall reimburse the value of the Product by issuing of Credit Note or in any other way agreed by the Parties.

1) Definizioni

1.1 Ai fini delle presenti condizioni generali di vendita (di seguito denominate “Condizioni di Vendita”), i seguenti termini avranno il significato di seguito ad essi attribuito:

- “HM”: Hydro-Mec S.p.A.;
- “Cliente”: qualunque società, ente o entità giuridica che acquisti i Prodotti di HM da quest’ultima;
- “Prodotti”: i beni prodotti, assemblati e/o venduti da HM;
- “Ordine/i”: ciascuna proposta di acquisto dei Prodotti inoltrata dal Cliente ad HM esclusivamente tramite e-mail, fax o web;
- “Vendita/e”: ciascun contratto di vendita concluso tra HM e il Cliente a seguito del ricevimento da parte del Cliente dell’accettazione scritta dell’Ordine da parte di HM;

2) Scopi

2.1 Le presenti Condizioni di Vendita si applicano a tutte le Vendite di Prodotti. Nel caso di contrasto tra le condizioni e i termini di cui alle presenti Condizioni di Vendita e le condizioni e i termini pattuiti nella singola Vendita, quest’ultimi prevarranno. HM non sarà vincolata da condizioni generali di acquisto del Cliente (di seguito, “CGA”), neanche nell’ipotesi in cui si faccia loro riferimento o siano contenute negli ordini o in qualsiasi altra documentazione di provenienza del Cliente, senza il preventivo consenso scritto di HM. Le CGA non saranno vincolanti per HM neppure per effetto di tacito consenso.

2.2 HM si riserva il diritto di aggiungere, modificare o eliminare qualsiasi previsione delle presenti Condizioni di Vendita, restando inteso che tali aggiunte, modifiche o cancellazioni si applicheranno a tutte le Vendite concluse a partire dal trentesimo giorno successivo alla notifica al Cliente delle nuove Condizioni di Vendita.

3) Ordini e Vendite

3.1 Il Cliente dovrà inoltrare a HM Ordini specifici contenenti la descrizione dei Prodotti, la quantità richiesta, il prezzo ed i termini richiesti per la consegna.

3.2 La Vendita dovrà ritenersi conclusa: (i) nel momento in cui il Cliente riceva da parte di HM una conferma scritta (tale conferma potrà essere inviata via e-mail, fax o mezzi telematici) conforme ai termini e alle condizioni dell’Ordine (ii) o, nel caso in cui il Cliente riceva da parte di HM una conferma scritta contenente termini difforni da quelli contenuti nell’Ordine, decorsi tre giorni lavorativi dalla data di ricezione della conferma contenente termini difforni senza che nel suddetto periodo pervenga a HM contestazione scritta da parte del Cliente; (iii) o, in assenza di conferma scritta da parte di HM, nel momento in cui i Prodotti saranno consegnati al Cliente.

3.3 Gli Ordini regolarmente accettati da HM non potranno essere annullati dal Cliente senza il consenso scritto di HM.

4) Prezzo dei Prodotti

4.1 I prezzi dei Prodotti saranno quelli indicati nel listino prezzi di HM in vigore al momento dell'inoltro dell'Ordine da parte del Cliente o, qualora il Prodotto non sia inserito nel listino prezzi o il listino prezzi non sia disponibile, quelli indicati nell'Ordine e confermati per iscritto da HM al momento dell'accettazione dell'Ordine. Eccetto quanto diversamente concordato per iscritto tra le parti, i predetti prezzi saranno calcolati franco fabbrica, al netto dell'IVA e degli sconti. Tali prezzi non comprendono i costi di imballaggio, spedizione e trasporto dai locali di HM a quelli del Cliente. Tali costi dovranno essere sostenuti separatamente dal Cliente.

4.2 HM manterrà la proprietà dei Prodotti fino alla completa corresponsione del prezzo degli stessi. Il Cliente dovrà compiere tutti gli adempimenti richiesti dalle leggi locali al fine di rendere valida ed eseguibile nei confronti di tutti i terzi la presente clausola di riserva della proprietà anche operando l'iscrizione in ogni apposito registro, ove localmente richiesto.

5) Termini di consegna

5.1 Eccetto quanto eventualmente diversamente concordato per iscritto tra le parti, HM consegnerà i prodotti franco fabbrica presso i propri stabilimenti, così come questo termine è definito negli INCOTERMS 2010 pubblicati dalla Camera di Commercio internazionale nella loro versione più aggiornata, in vigore al momento della consegna. Se richiesto, HM si occuperà del trasporto dei Prodotti a rischio, costi e spese del Cliente.

5.2 La consegna dovrà avvenire entro il termine indicato nell'Ordine come accettato nella conferma d'ordine. I termini di consegna sono indicativi e non sono termini essenziali ai sensi dell'art. 1457 del Codice Civile e, in ogni caso, non includono i tempi di trasporto.

5.3 Salvo quanto previsto dal precedente art. 5.2, HM non sarà considerata responsabile dei ritardi o della mancata consegna ascrivibili a circostanze che siano fuori dal suo controllo, quali a titolo meramente esemplificativo e senza pretesa di esaustività:

- a) dati tecnici inadeguati o imprecisioni o ritardi del Cliente nella trasmissione a HM di informazioni o dati necessari alla spedizione dei Prodotti;
- b) difficoltà nell'ottenere rifornimenti delle materie prime;
- c) problemi legati alla produzione o alla pianificazione degli ordini;
- d) scioperi parziali o totali, mancanza di energia elettrica, calamità naturali, misure imposte dalle autorità pubbliche, difficoltà nel trasporto, cause di forza maggiore, disordini, attacchi terroristici e tutte le altre cause di forza maggiore;
- e) ritardi da parte dello spedizioniere.

5.4 Il verificarsi di alcuni degli eventi sopra elencati non darà diritto al Cliente di richiedere il risarcimento degli eventuali danni o indennizzi di alcun genere.

6) Trasporto

6.1 Eccetto quanto eventualmente diversamente concordato per iscritto tra le parti, il trasporto avverrà sempre a spese e rischio del Cliente. Nel caso in cui a HM, ai sensi dell'art. 5.1, venga richiesto di occuparsi del trasporto dei Prodotti, HM sceglierà il mezzo di trasporto che riterrà più appropriato in mancanza di specifiche istruzioni del Cliente.

7) Pagamenti

7.1 Salvo diverso accordo scritto tra le parti, HM emetterà le fatture al momento della consegna dei Prodotti.

7.2 Il mancato pagamento nel tempo concordato darà diritto a HM di chiedere al Cliente il pagamento degli interessi scaduti al tasso stabilito dal Decreto Legislativo n. 231/02.

7.3 Il mancato pagamento o il ritardo nei pagamenti superiore a 30 giorni daranno a HM il diritto di sospendere la consegna dei Prodotti e risolvere ogni singola Vendita sottoscritta. La sospensione della consegna dei Prodotti o la risoluzione delle Vendite non darà il diritto al Cliente di pretendere alcun risarcimento dei danni.

7.4 Ogni reclamo relativo ai Prodotti e/o alla consegna dei medesimi non potrà in alcun caso giustificare la sospensione o il ritardo nel pagamento.

8) Non-conformità

8.1 Qualsiasi difformità dei Prodotti consegnati al Cliente rispetto al tipo ed alla quantità indicata nell'Ordine dovrà essere denunciata per iscritto a HM entro cinque giorni dalla data di consegna. Qualora la denuncia non venga comunicata entro il predetto termine, i Prodotti consegnati verranno considerati come conformi a quelli ordinati dal Cliente.

9) Garanzia

9.1 Salvo diverso accordo scritto tra le parti, HM garantisce che i Prodotti sono esenti da vizi/difetti (con esclusione di quelle parti dei Prodotti che non sono prodotte da HM) per un periodo di 12 mesi decorrente dalla data di consegna dei medesimi al Cliente.

9.2 La garanzia non opererà con riferimento a quei Prodotti i cui difetti sono dovuti a (i) danni causati durante il trasporto; (ii) un uso negligente o improprio degli stessi; (iii) inosservanza delle istruzioni di HM relative al funzionamento, manutenzione ed alla conservazione dei Prodotti; (iv) riparazioni o modifiche apportate dal Cliente o da soggetti terzi senza la previa autorizzazione scritta di HM.

9.3 A condizione che il reclamo del Cliente sia coperto dalla garanzia e notificato nei termini di cui al presente articolo, HM si impegnerà, a sua discrezione, a sostituire o riparare ciascun Prodotto o le parti di questo che presentino vizi o difetti.

9.4 Il Cliente dovrà denunciare per iscritto a HM, la presenza di vizi o difetti entro 8 giorni dalla consegna dei Prodotti se si tratta di vizi o difetti palesi, oppure, entro 8 giorni dalla scoperta in caso di vizi o difetti occulti o non rilevabili da una persona di media diligenza.

9.5 I Prodotti oggetto di denuncia dovranno essere immediatamente inviati presso la fabbrica di HM, o in qualsiasi altro luogo che quest'ultima indicherà di volta in volta, a costi e spese a carico del Cliente salvo diverso accordo tra le parti, al fine di consentire a HM l'espletamento dei necessari controlli. La garanzia non copre danni e/o difetti dei Prodotti derivanti da anomalie causate da, o connesse a, parti assemblate/aggiunte direttamente dal Cliente o dal consumatore finale. Qualora, nell'ambito della presente garanzia, un Prodotto o un componente difettoso venisse sostituito, la proprietà del Prodotto o del componente sostituito sarà ritrasferita dal Cliente a HM.

9.6 In ogni caso il Cliente non potrà far valere i diritti di garanzia verso HM se il prezzo dei Prodotti non sia stato corrisposto alle condizioni e nei termini pattuiti, anche nel caso in cui la mancata corresponsione del prezzo alle condizioni e nei termini pattuiti si riferisca a Prodotti diversi da quelli per i quali il Cliente intende far valere la garanzia.

9.7 HM non riconosce alcuna garanzia circa la conformità dei Prodotti alle norme e ai regolamenti di Paesi che non rientrano o non appartengono all'Unione Europea. Nessun'altra garanzia, espressa o implicita, quale, a titolo esemplificativo, la garanzia di buon funzionamento o di idoneità per uno scopo specifico, è concessa con riferimento ai Prodotti.

9.8 Senza pregiudizio a quanto indicato nel precedente art. 9.3 e salvo il caso di dolo o colpa grave, HM non sarà responsabile per qualsivoglia danno derivante e/connesso ai vizi dei Prodotti. In ogni caso, HM non sarà ritenuto responsabile per danni indiretti o consequenziali di qualsiasi natura quali, a titolo esemplificativo, le perdite derivanti dall'inattività del Cliente o il mancato guadagno.

10) Diritti di Proprietà Intellettuale

10.1 I Diritti di Proprietà Intellettuale sono di totale ed esclusiva proprietà di HM e la loro comunicazione o utilizzo nell'ambito delle presenti Condizioni di Vendita non crea, in relazione ad essi, alcun diritto o pretesa in capo al Cliente. Il Cliente si obbliga a non compiere alcun atto incompatibile con la titolarità dei Diritti di Proprietà Intellettuale.

11) Clausola risolutiva espressa

11.1 HM avrà facoltà di risolvere, ai sensi e per gli effetti dell'art. 1456 del Codice Civile Italiano, in qualsiasi momento mediante comunicazione scritta da inviare al Cliente, la singola Vendita nel caso di inadempimento delle obbligazioni previste dagli articoli: 4 (Prezzo dei Prodotti); 7 (Pagamenti); 10 (Diritti di Proprietà Intellettuale).

12) Mutamento nelle condizioni patrimoniali del Cliente

12.1 HM avrà diritto a sospendere l'adempimento delle obbligazioni derivanti dalla Vendita dei prodotti, in base all'art. 1461 del Codice Civile Italiano, nel caso in cui le condizioni patrimoniali del Cliente divenissero tali da porre in serio pericolo il conseguimento della controprestazione salvo che sia prestata idonea garanzia.

13) Domicilio legale, legge applicabile e giurisdizione

13.1 HM è legalmente domiciliata presso la sua sede principale.

13.2 Le Condizioni di Vendita e ogni singola Vendita saranno regolate e interpretate in conformità alla Legge Italiana.

13.3 Tutte le controversie derivanti da o connesse alle presenti Condizioni di Vendita e/o ad ogni Vendita saranno soggette alla esclusiva giurisdizione del Tribunale di Vicenza.

13.4 Salvo quanto pattuito nel precedente art. 13.3, HM si riserva il diritto, quando promotore di una azione legale in qualità di attore, di promuovere tale azione nel luogo di residenza del Cliente.

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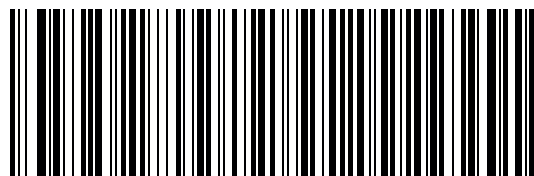
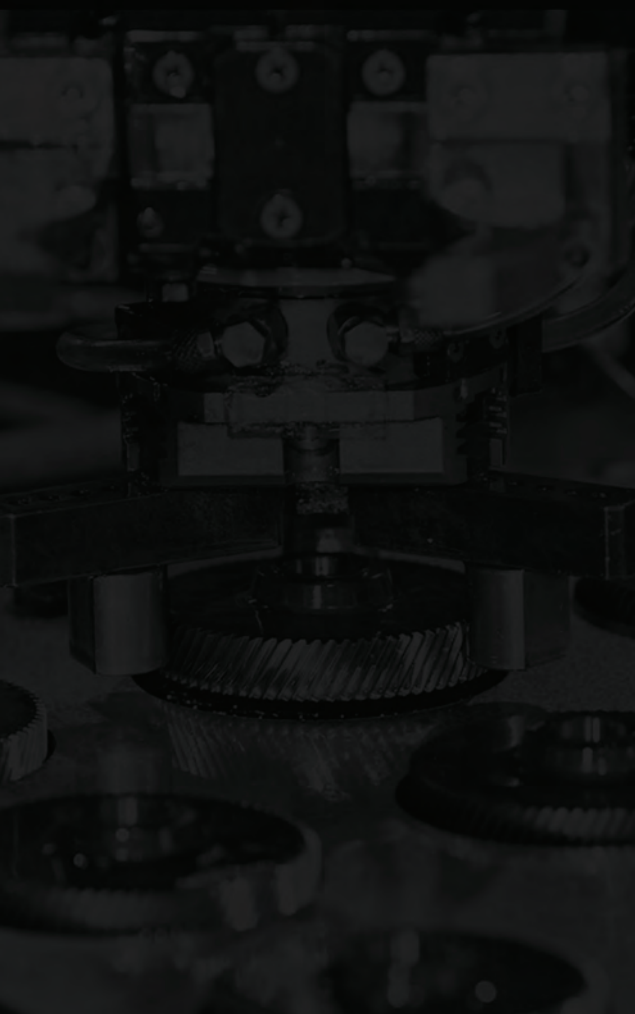
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