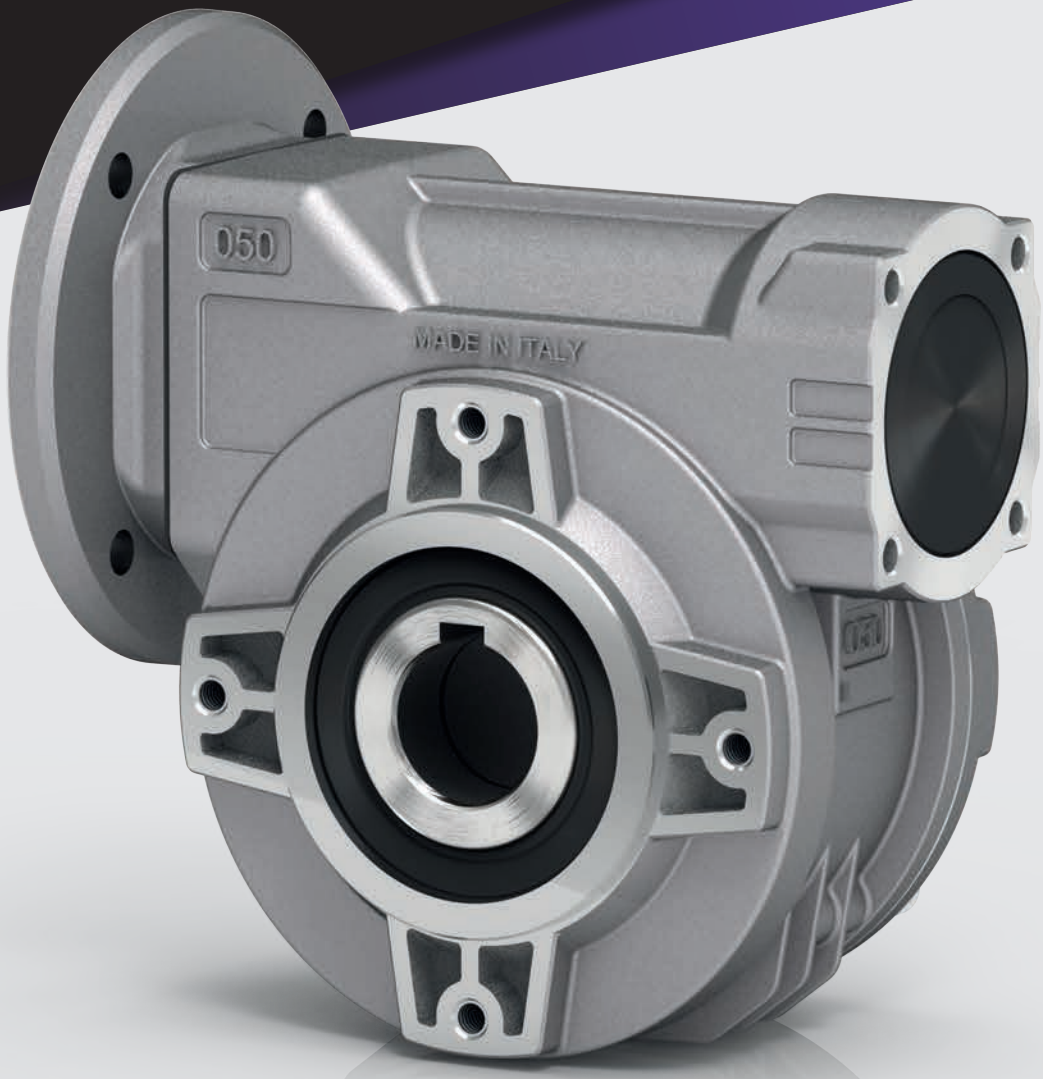
ALUMINUM WORM GEARBOXES

RIGHTANGLE GEARS

METRIC CATALOGUE EDITION 2025

ITALIAN MADE PRODUCTS



HYDRO·MEC

HIGH EFFICENCY GEARBOXES

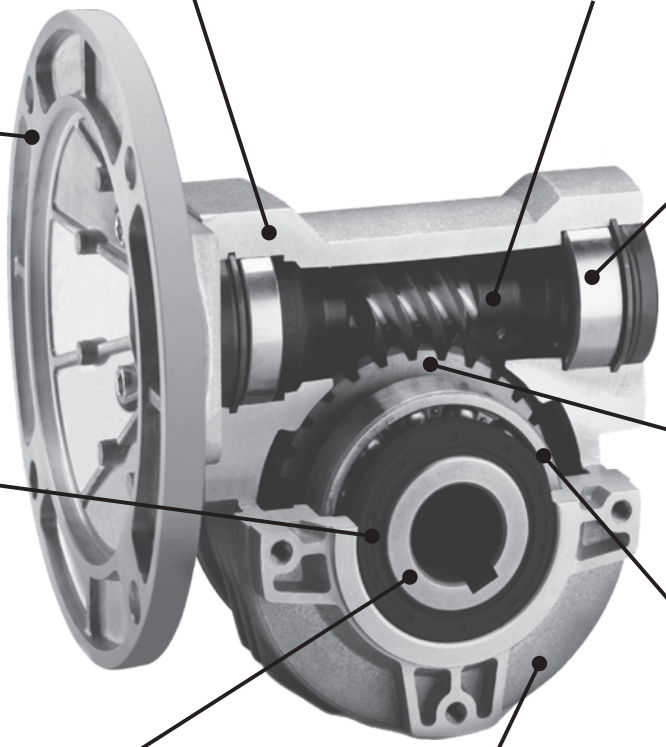
Worm gearboxes

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.

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



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.

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.

Oversize 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.

Painting
Cast iron gearboxes are painted RAL 7046

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

oil free

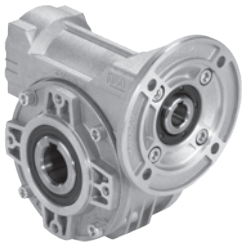


vent free



World wide sales network.

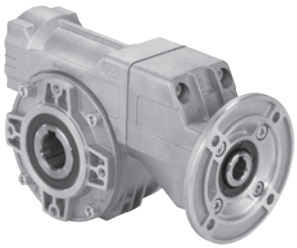
Specific type datasheet on page...



Types / Tipi / Tipen / Types / Tipos

On page / A pagina / Auf Seite / À la page / En la página

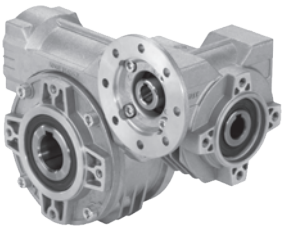
1-5	1-7	1-9	1-11	1-13	1-15	1-17
030 21Nm	**045** 41Nm	**050** 72Nm	**063** 147Nm	**63A** 191Nm	**085** 347Nm	**110** 651Nm



Types / Tipi / Tipen / Types / Tipos

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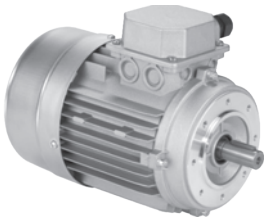
1-19	1-21	1-23	1-25	1-27	1-29
P45 55Nm	**P50** 88Nm	**P63** 187Nm	**P6A** 218Nm	**P85** 440Nm	**P10** 803Nm



Types / Tipi / Tipen / Types / Tipos

On page / A pagina / Auf Seite / À la page / En la página

1-31	1-33	1-35	1-37	1-39	1-41	1-43	1-45	1-47
303 35Nm	**453** 69Nm	**503** 109Nm	**633** 230Nm	**634** 265Nm	**6A3** 290Nm	**6A4** 304Nm	**854** 518Nm	**115** 978Nm



Types / Tipi Tipen / Types Tipos

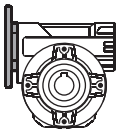
On page / A pagina / Auf Seite / À la page / En la página

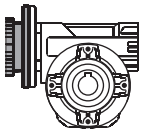
M-1								
56A 56B	**63A 63B**	**71A 71B**	**80A 80B**	**90S 90L**	**100LA 100LB**	**112M**	**132S 132M**	**160M 160L**	**180M 180L**

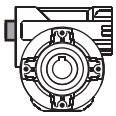
CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

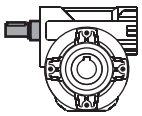
Type - Tipo - Typ Type - Tipo	**Size** - Grandezza Grösse - Taille Tamaño	**Mounting** - Montaggio - Montage Fixation Fixation - Tipo de montaje
P	**045**	**PA**

Worm gearboxes
Riduttori a vite senza fine
Schneckengetriebe
Reducteurs a vis sans fin
Reductores de corona sin fin

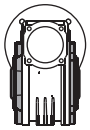

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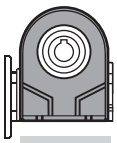

M

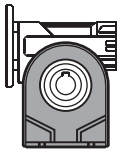

B

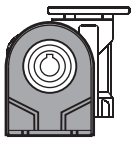

R

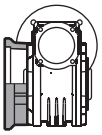
030
045
050
063
63A
085
110

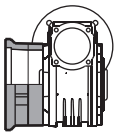

FB


PB

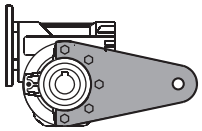

PA


PV

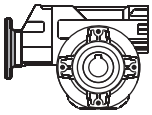

FC

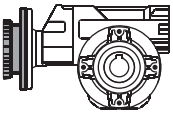

FL

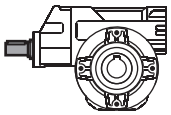
F1
F2
F3
F4


BR

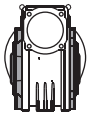
Worm gearboxes with primary reduction
Riduttori a vite senza fine con precoppia
Schneckengetriebe mit stirnradstufe am Eintrieb
Reducteurs a vis sans fin avec pré-réduction
Reductores corona sin fin con prereductora de engranajes

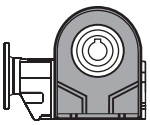

P

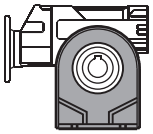

M

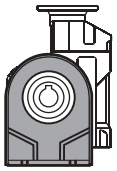

R

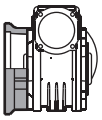
P45
P50
P63
P6A
P85
P10

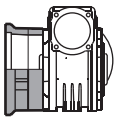

FB


PB

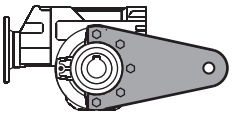

PA


PV

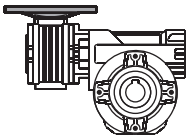

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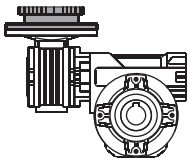

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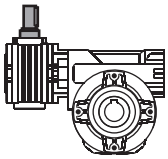
F1
F2
F3
F4


BR

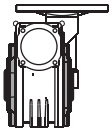
Combined worm gearboxes
Riduttori a vite senza fine combinati
Schneckengetriebekombinationen
Reducteurs a double train de vis sans fin
Reductores combinados corona sin fin

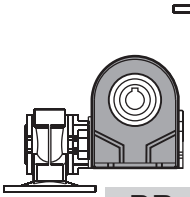

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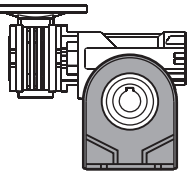

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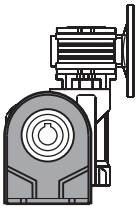

R

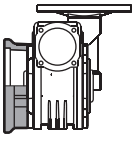
303
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6A3
6A4
854
115

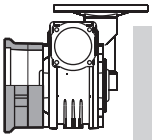

FB


PB

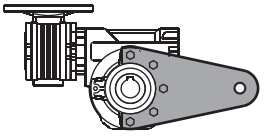

PA


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 Relaciòn	**Hub** Mozzo corona Hohlwelle Arbre creux Nucleo 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 Position 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 morsettiera Klemmkastenlage Position boîte a bornes Posición caja de bornes
10	**C**	**ø**	**-Q**	**B3**	**ST**	**---**	

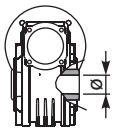
See technical data table

Vedi tabelle 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
Nucleo corona de acero Inox

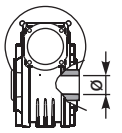
SPECIAL SERIES
SERIE SPECIALE

S

045 ⇨ ø19
050 ⇨ ø24

X

Stainless steel hub
Mozzo in acciaio Inox
Edelstahlhohlwelle
Moyeu en acier Inox
Nucleo corona de acero Inox



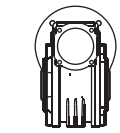
INCH

U

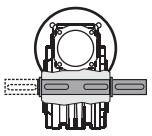
045⇨ø0.750”
050⇨ø1.000”
063⇨ø1.125”
085⇨ø1.500”

Z

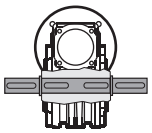
Stainless steel hub
Mozzo in acciaio Inox
Edelstahlhohlwelle
Moyeu en acier Inox
Nucleo corona de acero Inox



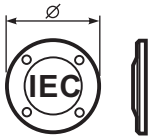
Ø



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 (ø250)
-G=132 (ø300)

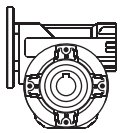
B14

-O=56 (ø80)
-P=63 (ø90)
-Q=71 (ø105)
-R=80 (ø120)
-T=90 (ø140)
-U=100 (ø160)
-V=132 (ø200)

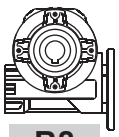
Brushless

BA=40/63-M5
BB=50/70-M5
BC=60/75-M5
BD=70/90-M6
BE=80/100-M6
BF=95/115-M8
BG=110/145-M8
BH=130/165-M8

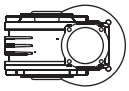
-0=Type R
-S=Type R
S series



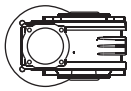
B3



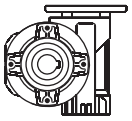
B8



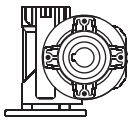
B6



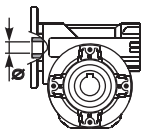
B7



V5



V6



ST

Standard bore *
Kit R standard

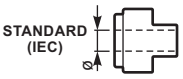
Foro standard *
Kit R standard

Input bore without Reduction Bushing

-O = 9mm
-P = 11mm
-Q = 14mm
-R = 19mm
-T = 24mm
-U = 28mm
-V = 38mm

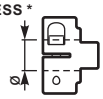
COUPLING

STANDARD (IEC)



-A = 9mm
-B = 11mm
-C = 14mm
-D = 19mm
-E = 24mm
-F = 28mm

BRUSHLESS *

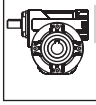


-1 = 9mm
-2 = 11mm
-3 = 14mm
-4 = 19mm
-5 = 22mm
-6 = 24mm

Ready for input coupling
Predisposto per giunto



-0
Type B
Tipo B



-0
Type R
Tipo R

* With reduction bushing where applicable
Con bussola di riduzione dove prevista

Only for combined units See technical data table

Solo per i riduttori combinati Vedi tabelle dati tecnici.

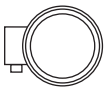
Ausführungen für Getriebekombinationen it

Uniquement pour combinés. Voir tableau données techniques

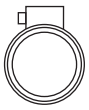
Sólo para combinados ver tabla datos técnicos

With Type M specify terminal box position

Con tipo M specificare posizione morsettiera

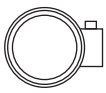


A

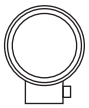


B

STANDARD



C



D

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

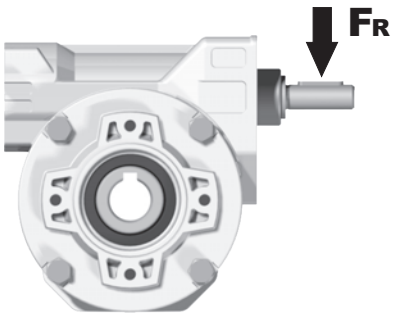
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$
Linear movement / traslazione / linearbewegung / translation / translacion	$\mathbf{P}\ [KW] = \frac{\mathbf{F}\ [N] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$

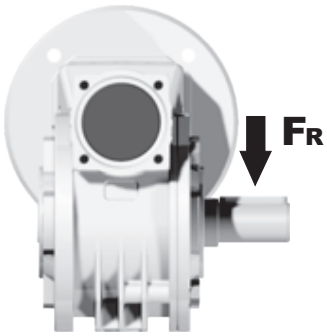
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

	$\mathbf{M}\ [Nm] = \frac{\mathbf{9550} \cdot \mathbf{P}[KW]}{\mathbf{n}\ [rpm]}$
	$\mathbf{M}\ [lb\ in] = \frac{\mathbf{63030} \cdot \mathbf{P}[HP]}{\mathbf{n}\ [rpm]}$

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





$F_R\ [N] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{2000}}{\mathbf{d}\ [mm]} \cdot f_K$	$F_R\ [N] = \frac{\mathbf{M}\ [lb\ in] \cdot \mathbf{8.9}}{\mathbf{d}\ [in]} \cdot f_K$

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 sprochets / 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.

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

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

Gear size / Grandezza riduttore / Getriebegröße / Taille réducteur / Tamaño reductor

Motor power / Potenza motore / Motorleistung / Puissance moteur / Potencia motor

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

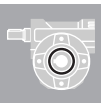
Flange code / Codice flangia / Flanschtype / Code bride / Código bridas

Dynamic efficiency / Rendimento dinamico / Dynamischer Rendement dynamique / Rendimento dinámico

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

045 Rightangle - Gear 41Nm

Rating - Aluminum WORM 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 -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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 ≤ **10** / 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 **> 10** / 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 / Brides disponibles / Bridas disponibles

B) Mounting with reduction ring / Montaggio con boccola di riduzione / Reduzierhülsen / Montage avec douille de réduction / Montaje con casquillo de reducción

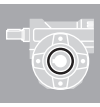


C) Motor flangeholes position/terminal box position / Posizione fori flangia/basetta motore / Bohrungsposition am Motorflansch/-sockel / Position trous bride/barrette à bornes moteur / Posición agujeros brida / base motor



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)



1

▪ 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 -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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

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.

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.

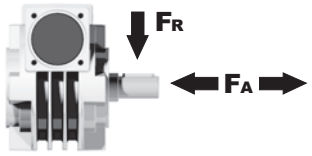
▪ LUBRICATION 030 Oil Quantity 0.03 Lt.

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

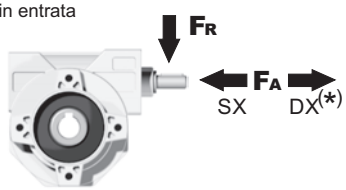
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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



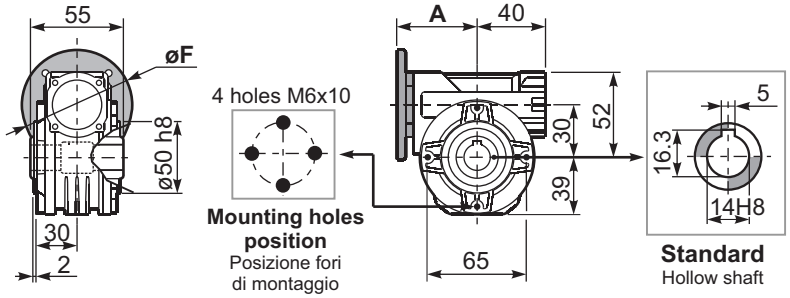
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

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

tab. 2

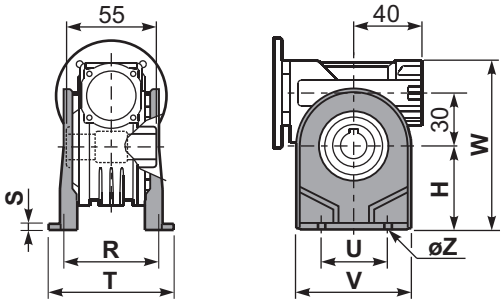
P030**FB**... Basic wormbox
Riduttore base

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

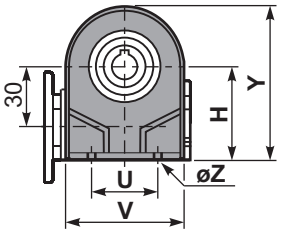


Gearbox weight peso riduttore **1.05 kg**

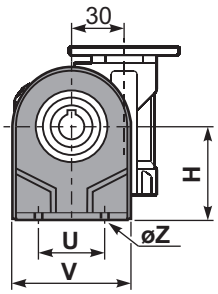
P030**PA**... Feet
Piedini



P030**PB**... Feet
Piedini

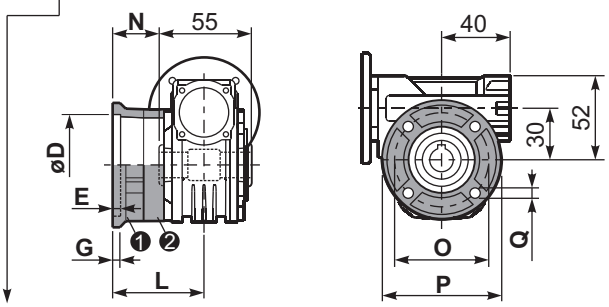


P030**PV**... Feet
Piedini



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

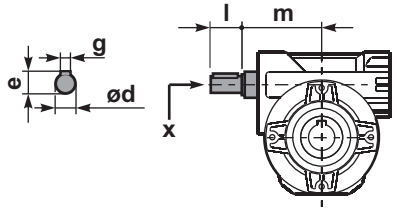
P030**FC**... Output flange
Flangia uscita



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	❶ K030.9.010 ❷ -
FL	$60^{+0.15}_{+0.05}$	6	6	55.5	28	87	110	8.5	❶ K045.9.010 ❷ -

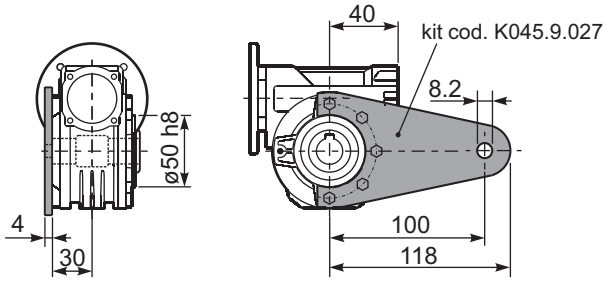
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$40^{+0.15}_{+0.10}$	3.5	5.5	49	21.5	56	80	6.5	❶ KS030.9.012 ❷ -

R030FB... Input shaft
Albero in entrata



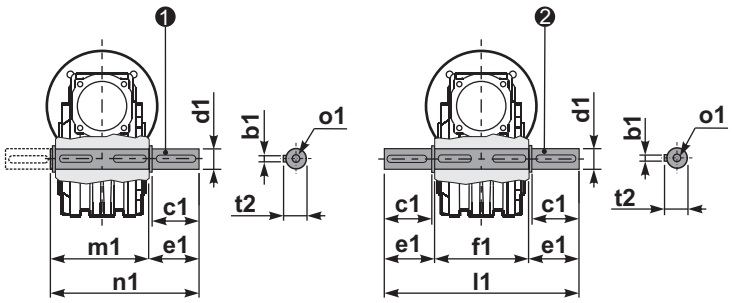
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
type **S**	-	-	-	-	-	-	-

P030**BR**... Reaction arm
Braccio di reazione



P030.....**S**... Single Shaft
Albero lento semplice

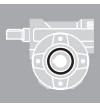
P030.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K030.5.028 type **B**

❷ 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	16	M5x14
type **S**	-	-	-	-	-	-	-	-	-	-



1

▪ 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 -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
280	**5**	0.37	11	2.8	1.05	30	**B**		B-C	**B**-C		84	1.9	11
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.

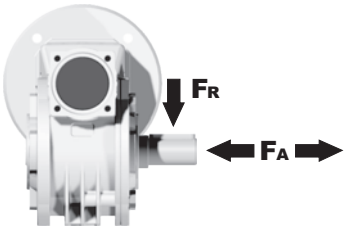
▪ LUBRICATION 045 Oil Quantity 0.09 Lt.

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

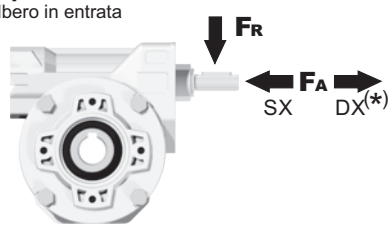
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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



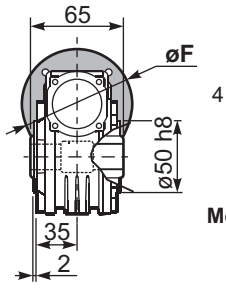
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

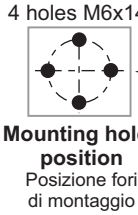
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

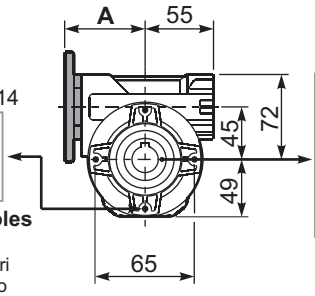
P045**FB**... Basic wormbox
Riduttore base

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

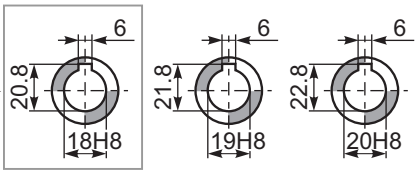




Mounting holes position
Posizione fori di montaggio



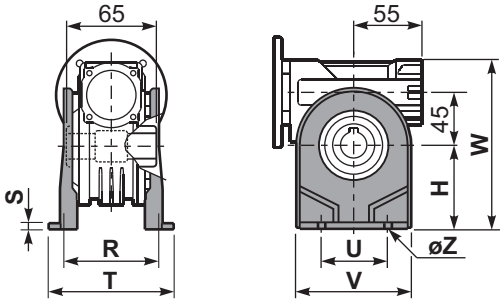
Gearbox weight peso riduttore	2.40 kg



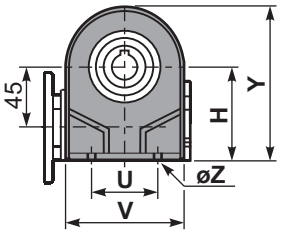
Standard
Hollow shaft

On request
A richiesta

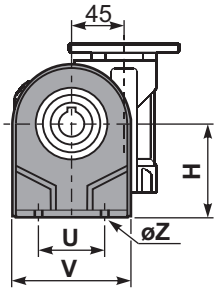
P045**PA**... Feet
Piedini



P045**PB**... Feet
Piedini

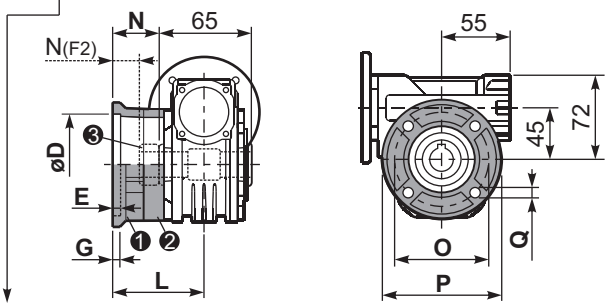


P045**PV**... Feet
Piedini



	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

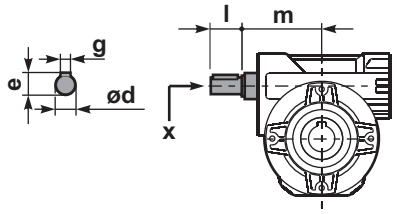
P045**FC**... Output flange
Flangia uscita



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	❶ K045.9.010 ❷ -
FL	$60^{+0.15}_{+0.05}$	9	9	90.5	58	87	110	8.5	❶ K045.9.010 ❷ K045.0.200

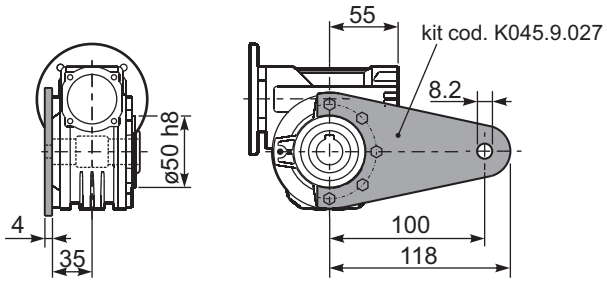
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$95^{+0.20}_{+0.15}$	4	11	73.5	41	115	140	9	❶ KS045.9.013 ❷ -
F2	$60^{+0.15}_{+0.05}$	9	9	60.5	19	87	110	8.5	❶ KS045.9.010 ❸ S045.0.204
F3	$80^{+0.15}_{+0.10}$	3	8	51.5	19	100	120	9	❶ KS045.9.014 ❷ -

R045FB... Input shaft
Albero in entrata



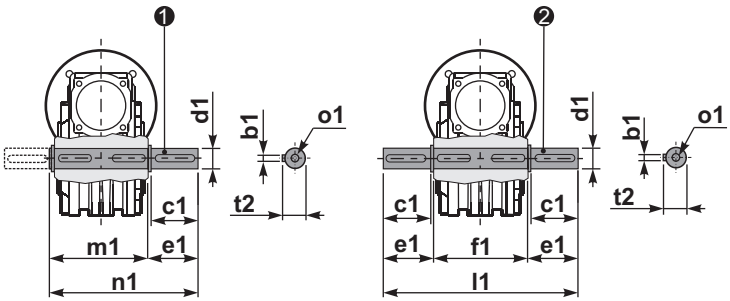
	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	68	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P045**BR**... Reaction arm
Braccio di reazione



P045.....**S**... Single Shaft
Albero lento semplice

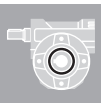
P045.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K045.5.028 type **B**
kit cod. KS045.5.030 type **S**

❷ 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	$19^{-0.005}_{-0.020}$	58.8	-	-	70	128.5	21.5	M8x20



1

▪ 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 -B 63	-C 71	-D 80	Available B14 motor flanges -O 56	-P 63	-Q 71	-R 80	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
280	**5**	0.75	22	2.6	2.0	57	**B**	**B**			**B-C**	**B**		85	2.15	14
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-C**			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				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 **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.

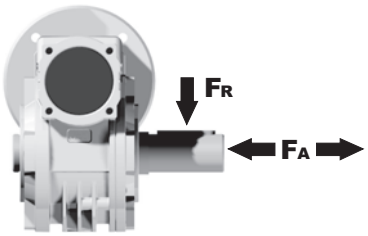
▪ LUBRICATION 050 Oil Quantity 0.14 Lt.

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

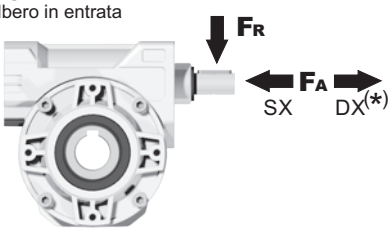
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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



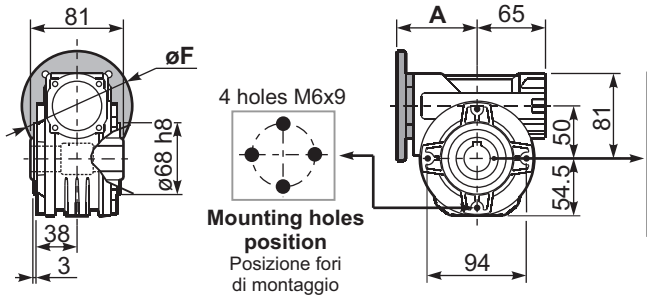
n_1 [min^{-1}]	FA [N]	FR [N]
1400	76	380

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

tab. 2

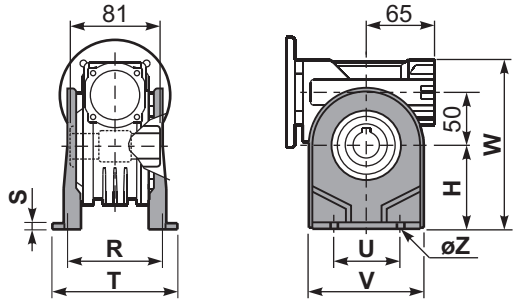
P050**FB**... Basic wormbox
Riduttore base

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

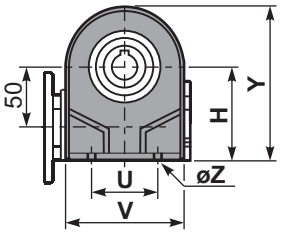


Gearbox weight peso riduttore **3.00 kg**

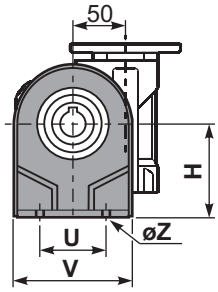
P050**PA**... Feet
Piedini



P050**PB**... Feet
Piedini

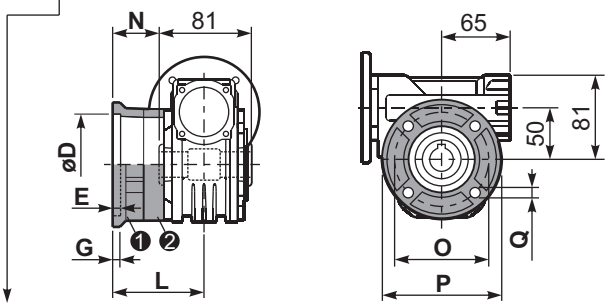


P050**PV**... Feet
Piedini



	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

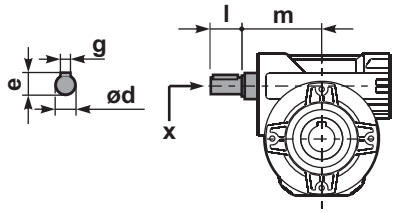
P050**FC**... Output flange
Flangia uscita



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	❶ K050.9.010 ❷ -
FL	$70^{+0.20}_{+0.15}$	9	12	114.5	74	90	123	10.5	❶ K050.9.010 ❷ K050.0.200

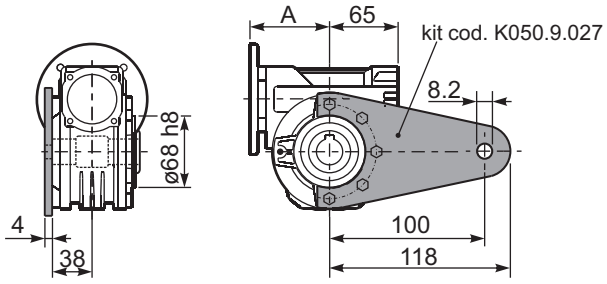
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$110^{+0.20}_{+0.15}$	4	11	83.5	43	130	160	10	❶ KS050.9.012 ❷ -
F2	$70^{+0.20}_{+0.15}$	9	12	76.5	36	90	123	10.5	❶ KS050.9.014 ❷ -
F3	$95^{+0.035}_{0}$	4	10	66.5	26	115	140	10	❶ KS050.9.013 ❷ -

R050FB... Input shaft
Albero in entrata



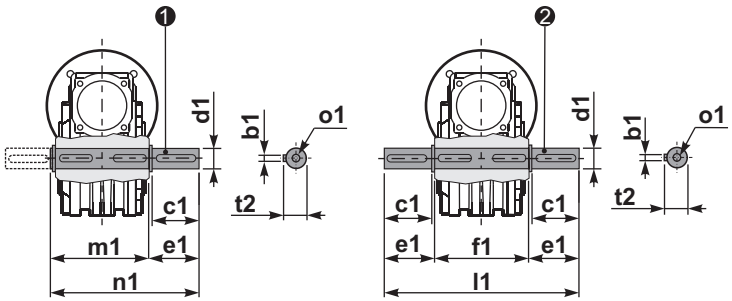
	ød	e	g	l	m	x	kit code
type **B**	16 h6	18	5	30	74.5	M6x16	❶ K050.5.006 PAM71 ❷ K050.5.007 PAM80
type **S**	14 h6	16	5	30	74.5	M5x10	❶ KS050.5.008 PAM71 ❷ KS050.5.009 PAM80

P050**BR**... Reaction arm
Braccio di reazione



P050.....**S**... Single Shaft
Albero lento semplice

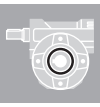
P050.....**D**... Double Shaft
Albero lento bisp.



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

❷ 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



1

▪ 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 -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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.

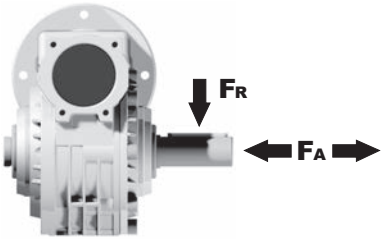
▪ LUBRICATION 063 Oil Quantity 0.40 Lt.

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

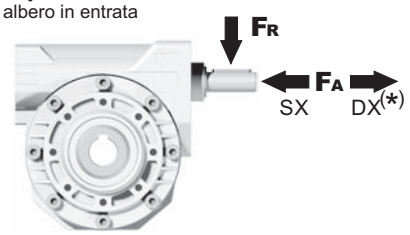
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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



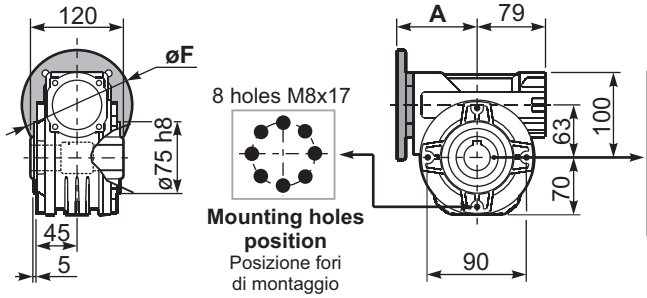
n_1 [min^{-1}]	FA [N]	FR [N]
1400	90	450

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

tab. 2

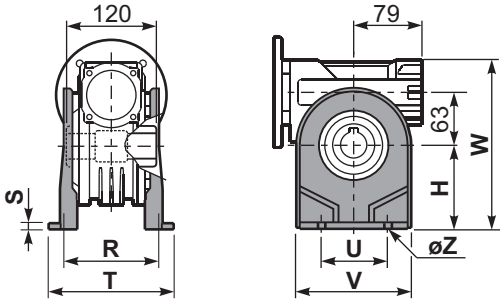
P063**FB**... Basic wormbox
Riduttore base

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

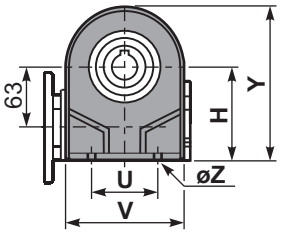


Gearbox weight peso riduttore **6.00 kg**

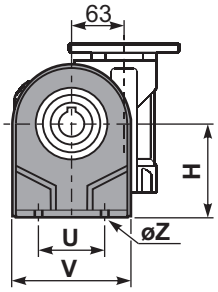
P063**PA**... Feet
Piedini



P063**PB**... Feet
Piedini

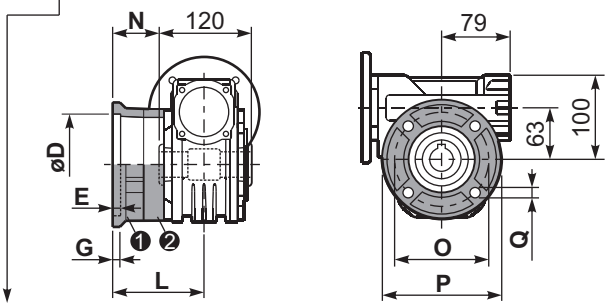


P063**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

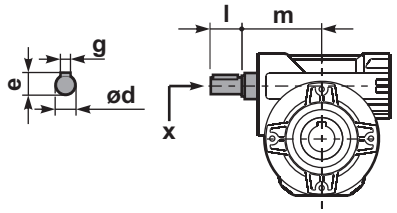
P063**FC**... Output flange
Flangia uscita



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	❶ K063.9.010 ❷ -
FL	115 $^{+0.20}_{+0.15}$	7	13	116	56	150	175	11	❶ K063.9.010 ❷ K063.0.200

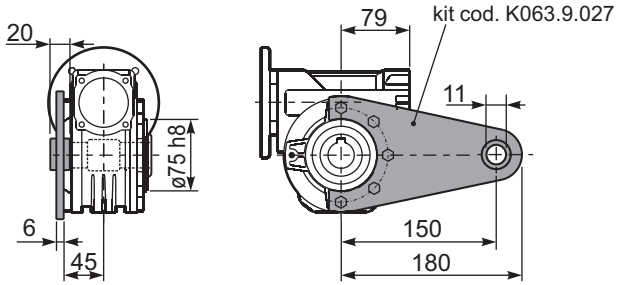
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 $^{+0.20}_{+0.15}$	7	13	102	42	165	200	13	❶ KS070.9.013 ❷ -
F2	115 $^{+0.20}_{+0.15}$	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 $^{+0.035}_{0}$	5	11	82	22	130	160	10	❶ KS063.9.011 ❷ -

R063FB... Input shaft
Albero in entrata



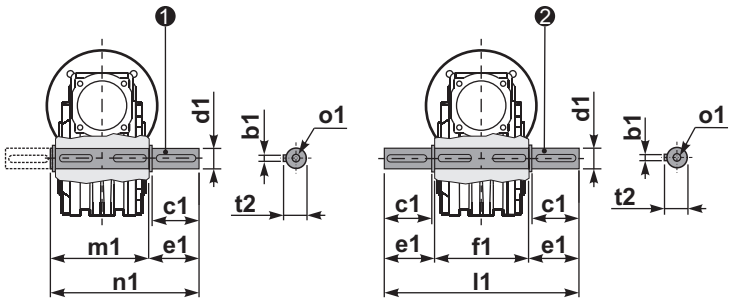
	ød	e	g	l	m	x	kit code
type **B**	18 h6	20.5	6	45	93	M6x16	❶ K063.5.006 PAM80 ❷ K063.5.007 PAM90
type **S**	19 h6	21.5	6	40	93	M8x20	❶ KS063.5.008 PAM80 ❷ KS063.5.009 PAM90

P063**BR**... Reaction arm
Braccio di reazione



P063.....**S**... Single Shaft
Albero lento semplice

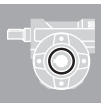
P063.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K063.5.028 type **B**

❷ kit cod. K063.5.029 type **B**

	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**	-	-	-	-	-	-	-	-	-	-



1

▪ 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 -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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.

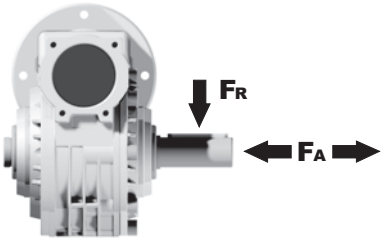
▪ LUBRICATION 63A Oil Quantity 0.40 Lt.

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

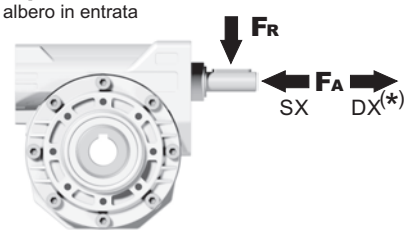
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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



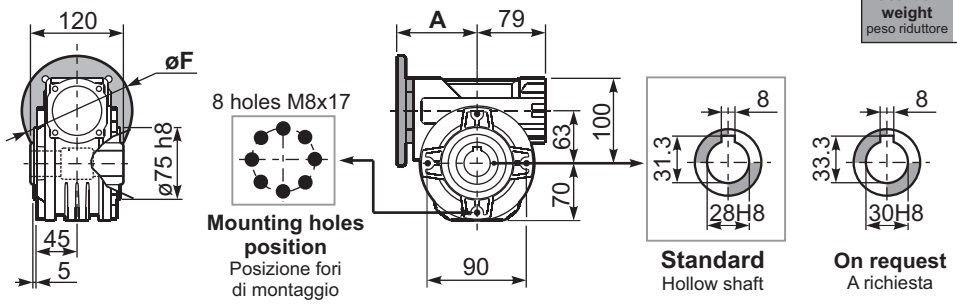
n_1 [min^{-1}]	FA [N]	FR [N]
1400	90	450

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

tab. 2

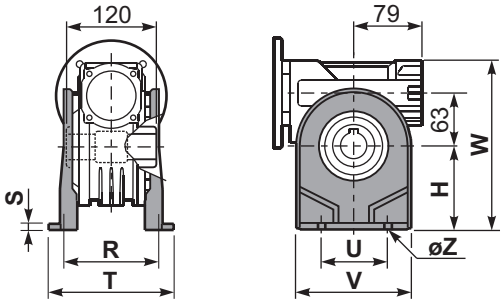
P63A**FB**... Basic wormbox
Riduttore base

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

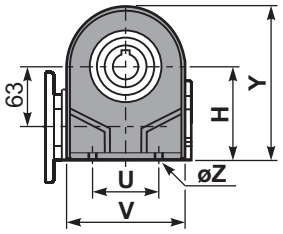


Gearbox weight peso riduttore **6.00 kg**

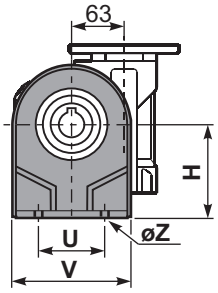
P63A**PA**... Feet
Piedini



P63A**PB**... Feet
Piedini

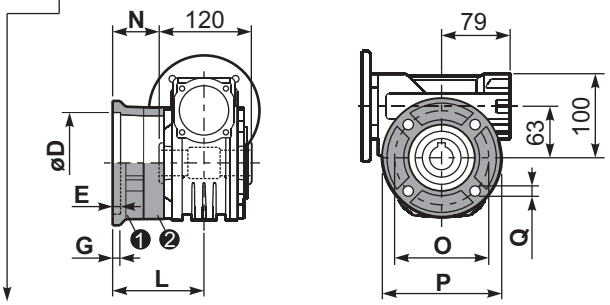


P63A**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

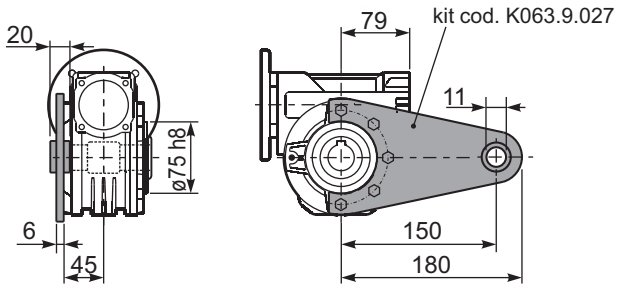
P63A**FC**... Output flange
Flangia uscita



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	❶ K070.9.010 ❷ -
FL	130 $^{+0.20}_{+0.15}$	7	13	111	51	165	200	13	❶ K070.9.010 ❷ K070.0.200

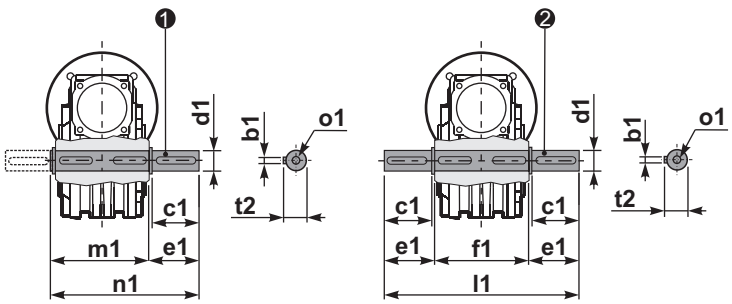
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 $^{+0.20}_{+0.15}$	7	13	111	51	165	200	13	❶ KS070.9.014 ❷ -
F2	115 $^{+0.20}_{+0.15}$	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 $^{+0.035}_{0}$	5	13.5	84.5	24.5	130	160	11	❶ KS070.9.011 ❷ -

P63A**BR**... Reaction arm
Braccio di reazione



P63A.....**S**... Single Shaft
Albero lento semplice

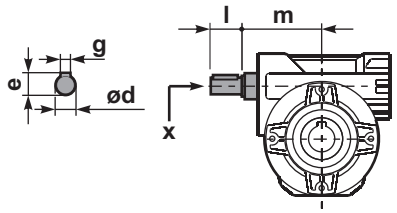
P63A.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K070.5.028 type **B**

❷ kit cod. K070.5.029 type **B**

R63AFB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type **B**	18 h6	20.5	6	45	93	M6x16	❶ K063.5.006 PAM80 ❷ K063.5.007 PAM90
type **S**	19 h6	21.5	6	40	93	M8x20	❶ KS063.5.008 PAM80 ❷ 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 -C 71	-D 80	-E 90	-F 100 112	Available B14 motor flanges -R 80	-T 90	-U 100 112	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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 **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.

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.

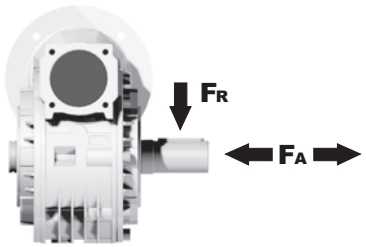
▪ LUBRICATION 085 Oil Quantity 1.20 Lt.

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

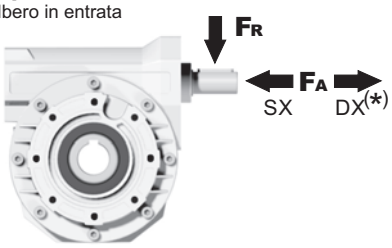
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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



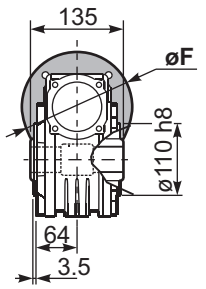
n_1 [min^{-1}]	FA [N]	FR [N]
1400	130	650

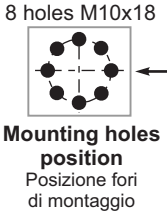
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

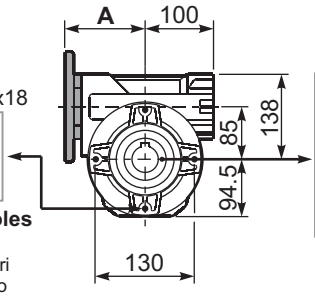
P085**FB**... Basic wormbox
Riduttore base

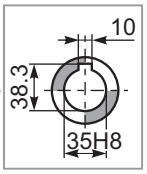
M. flanges	Kit code	øF	A
71B5	K023.4.041	160	116.5
80/90B5	K023.4.042	200	118.5
100/112B5	K023.4.043	250	127.5
80B14	K085.4.046	120	118.5
90B14	K085.4.045	140	118.5
100/112B14	K085.4.047	160	127.5



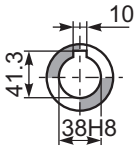


Mounting holes position
Posizione fori di montaggio





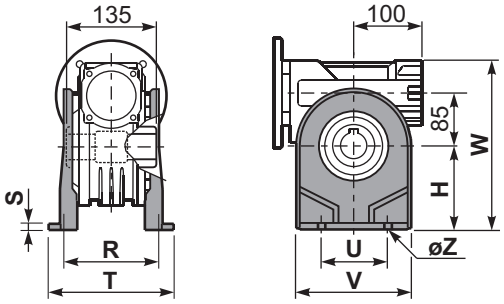
Standard
Hollow shaft



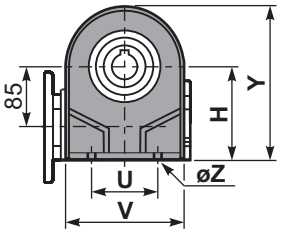
On request
A richiesta

Gearbox weight peso riduttore **11.00 kg**

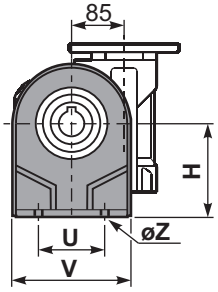
P085**PA**... Feet
Piedini



P085**PB**... Feet
Piedini

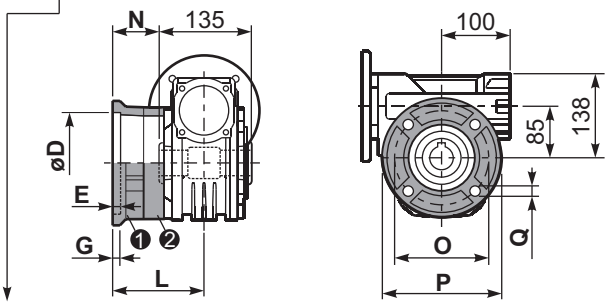


P085**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

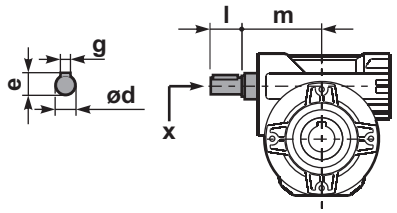
P085**FC**... Output flange
Flangia uscita



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	❶ K085.9.010 ❷ -
FL	152 $^{+0.06}_{+0.00}$	5	16	148.5	81	176	205	13	❶ K085.9.010 ❷ K085.0.201

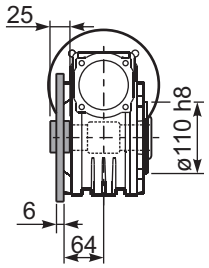
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 H7	5	13	117.5	50	165	200	11.5	❶ KS085.9.012 ❷ -
F2	152 $^{+0.06}_{+0.00}$	5	15	147.5	80	180	205	12.5	❶ KS085.9.013 ❷ -
F4	130 H7	5	13	106.5	39	165	200	13	❶ KS085.9.015 ❷ -

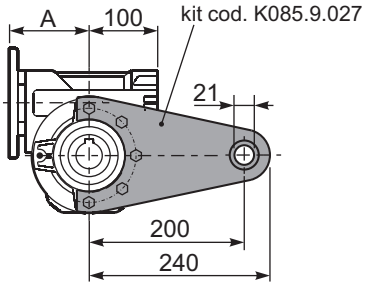
R085FB... Input shaft
Albero in entrata



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

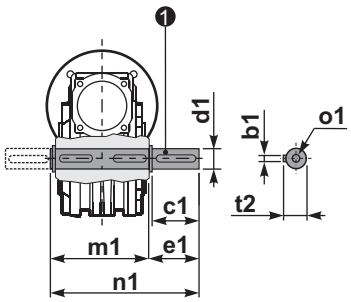
P085**BR**... Reaction arm
Braccio di reazione

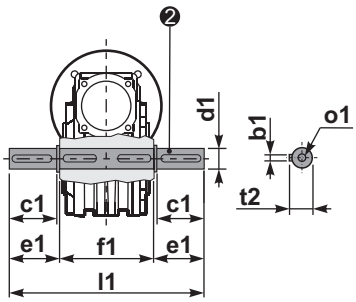




P085.....**S**... Single Shaft
Albero lento semplice

P085.....**D**... Double Shaft
Albero lento bisp.





❶ kit cod. K085.5.028 type **B**

❷ 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 -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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

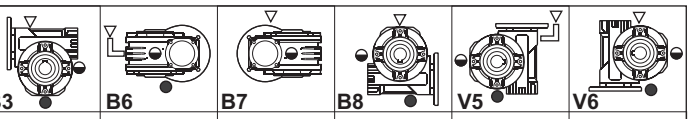
EN Unit **110** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended 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.



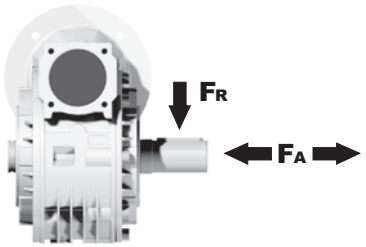
B3	B6	B7	B8	V5	V6
1.90 LT	1.35 LT	1.35 LT	2.00LT	2.00 LT	2.00LT

SHELL Omala S2 GX 460 | **ENI** Blasia 460

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

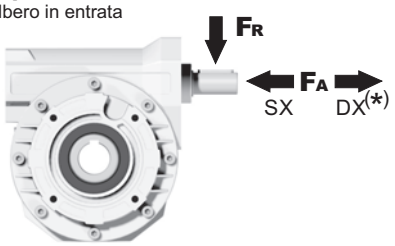
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	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



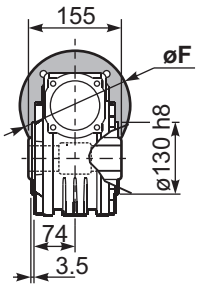
n_1 [min^{-1}]	FA [N]	FR [N]
1400	228	1140

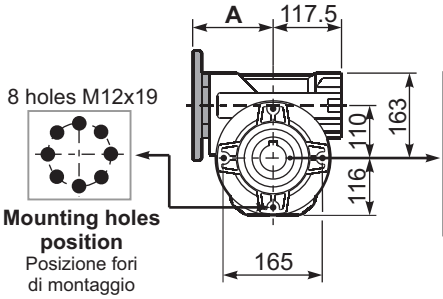
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

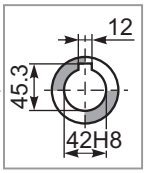
tab. 2

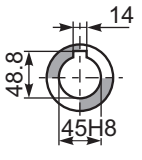
P110**FB**... Basic wormbox
Riduttore base

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



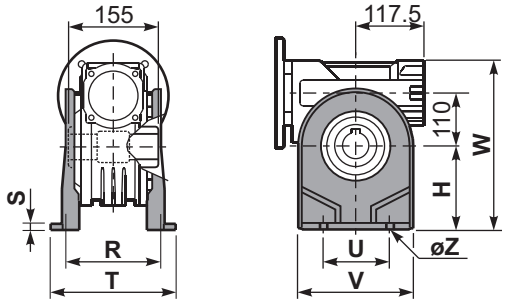




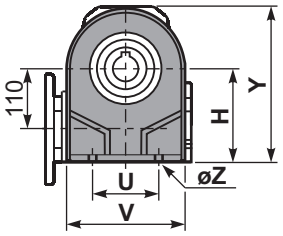


Gearbox weight peso riduttore **35.00 kg**

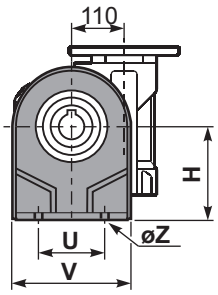
P110**PA**... Feet
Piedini



P110**PB**... Feet
Piedini

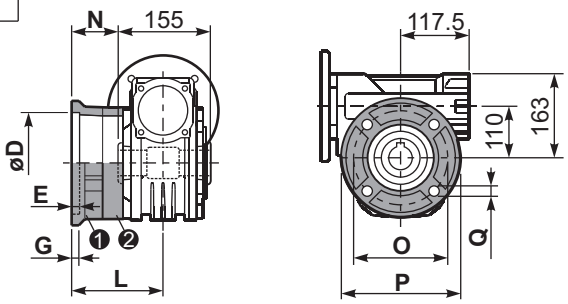


P110**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	170	180	8	224	200	240	286	333	ø13	K110.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

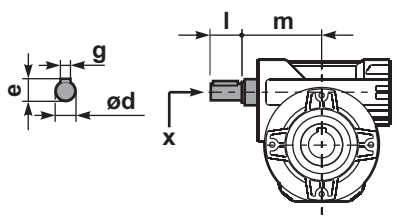
P110**FC**... Output flange
Flangia uscita



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	❶ K110.9.010 ❷ -
FL	170 +0.083 +0.043	11	16.5	179.5	102	230	270	13	❶ K110.9.011 ❷ -

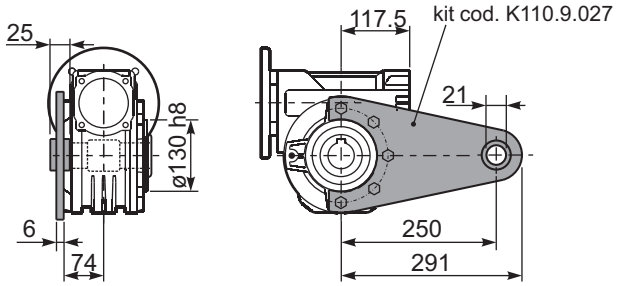
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	180 +0.040 0	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F3	180 +0.040 0	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

R110FB... Input shaft
Albero in entrata



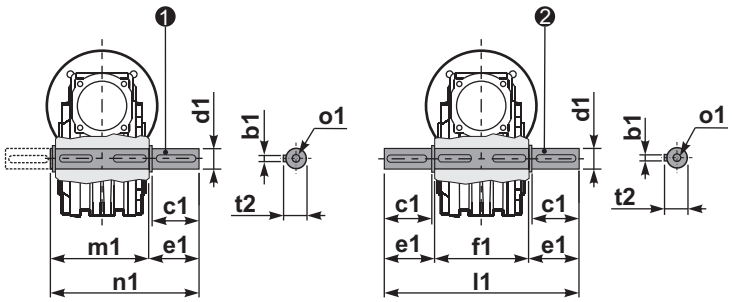
	ød	e	g	l	m	x	kit code
type **B**	25 h6	28	8	50	131.5	M8x20	❶ K085.5.007 PAM90 ❷ K085.5.008 PAM100
type **S**	24 h6	27	8	50	131.5	M8x20	❶ KS085.5.009 PAM90 ❷ KS085.5.011 PAM100

P110**BR**... Reaction arm
Braccio di reazione



P110.....**S**... Single Shaft
Albero lento semplice

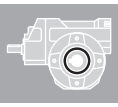
P110.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K110.5.028 type **B**

❷ 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**	-	-	-	-	-	-	-	-	-	-



1

▪ 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 -A 56	-B 63	-C 71	Available B14 motor flanges -P 63	-Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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

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 **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).



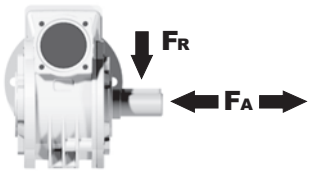
SHELL Omala S4 WE 320	**ENI** Telium VSF 320

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

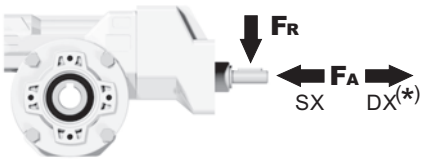
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



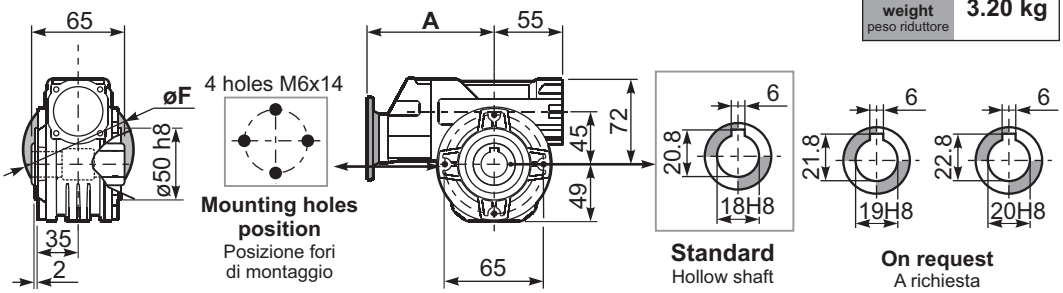
n_1 [min^{-1}]	FA [N]	FR [N]
1400	44	220

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

tab. 2

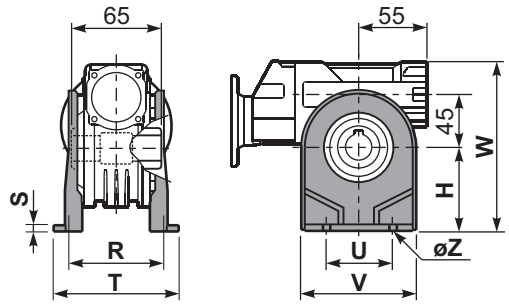
PP45**FB**... Basic wormbox
Riduttore base

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

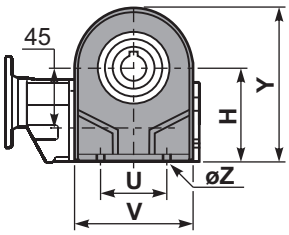


Gearbox weight peso riduttore **3.20 kg**

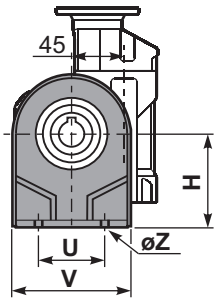
PP45**PA**... Feet
Piedini



PP45**PB**... Feet
Piedini

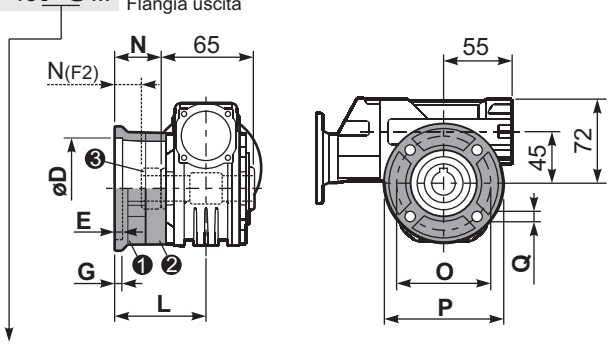


PP45**PV**... Feet
Piedini



	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

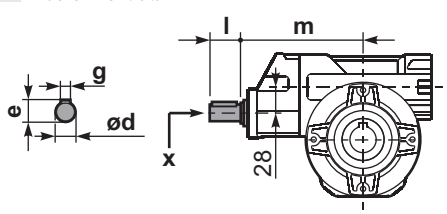
PP45**FC**... Output flange
Flangia uscita



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	❶ K045.9.010 ❷ -
FL	$60^{+0.15}_{+0.05}$	9	9	90.5	58	87	110	8.5	❶ K045.9.010 ❷ K045.0.200

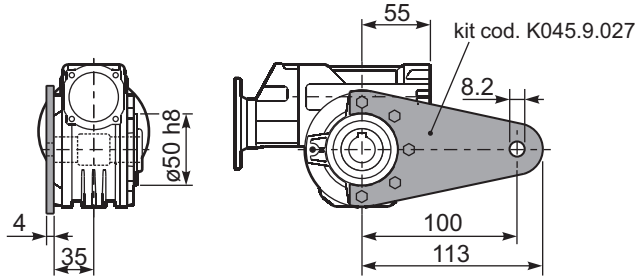
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$95^{+0.20}_{+0.15}$	4	11	73.5	41	115	140	9	❶ KS045.9.013 ❷ -
F2	$60^{+0.15}_{+0.05}$	9	9	60.5	19	87	110	8.5	❶ KS045.9.010 ❸ S045.0.204
F3	$80^{+0.03}_{+0.00}$	3	8	51.5	19	100	120	9	❶ KS045.9.014 ❷ -

R P45FB... Input shaft
Albero in entrata



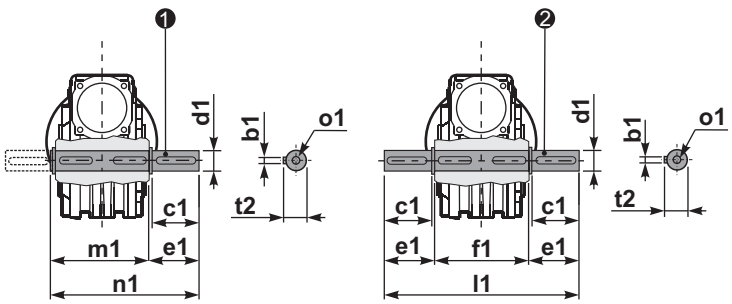
	ød	e	g	l	m	x	
type **B**	14 h6	16	5	25	131	M5x13	C35.5.061
type **S**	-	-	-	-	-	-	

PP45**BR**... Reaction arm
Braccio di reazione



PP45.....**S**... Single Shaft
Albero lento semplice

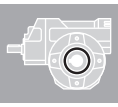
PP45.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K045.5.028 type **B**
kit cod. KS045.5.030 type **S**

❷ 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	$19^{-0.005}_{-0.020}$	58.8	-	-	70	128.5	21.5	M8x20



1

▪ 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 -A 56	-B 63	-C 71	Available B14 motor flanges -P 63	-Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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).



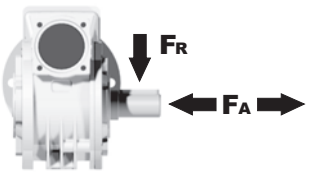
SHELL Omala S4 WE 320	**ENI** Telium VSF 320

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

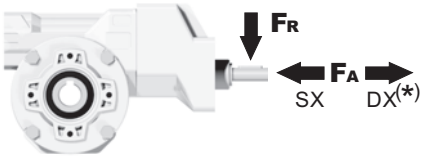
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



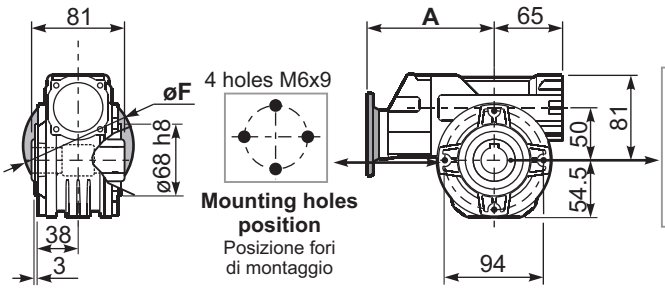
n_1 [min^{-1}]	FA [N]	FR [N]
1400	44	220

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

tab. 2

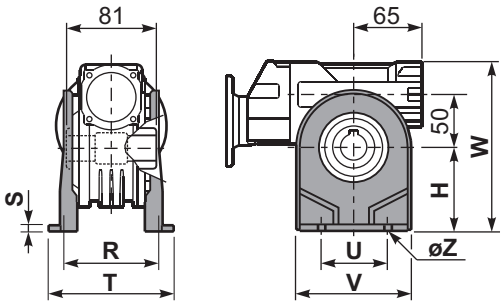
PP50**FB**... Basic wormbox
Riduttore base

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

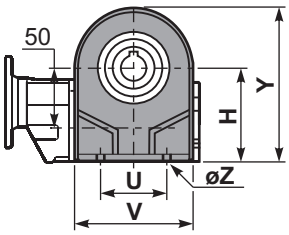


Gearbox weight peso riduttore **3.80 kg**

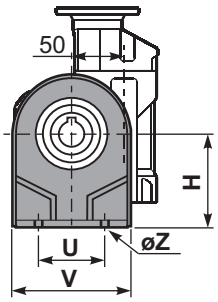
PP50**PA**... Feet
Piedini



PP50**PB**... Feet
Piedini

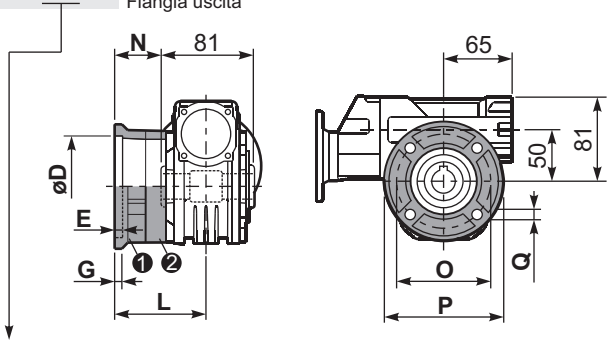


PP50**PV**... Feet
Piedini



	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

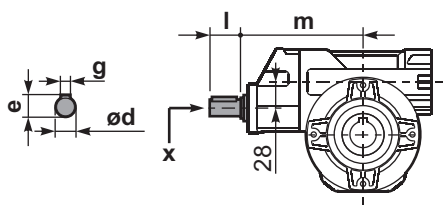
PP50**FC**... Output flange
Flangia uscita



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	❶ K050.9.010 ❷ -
FL	$70^{+0.20}_{+0.15}$	9	12	114.5	74	90	123	10.5	❶ K050.9.010 ❷ K050.0.200

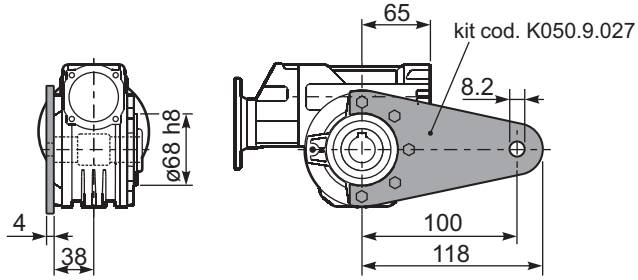
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$110^{+0.20}_{+0.15}$	4	11	83.5	43	130	160	10	❶ KS050.9.012 ❷ -
F2	$70^{+0.20}_{+0.15}$	9	12	76.5	36	90	123	10.5	❶ KS050.9.014 ❷ -
F3	$95^{+0.035}_{0}$	4	10	66.5	26	115	140	10	❶ KS050.9.013 ❷ -

RP50FB... Input shaft
Albero in entrata



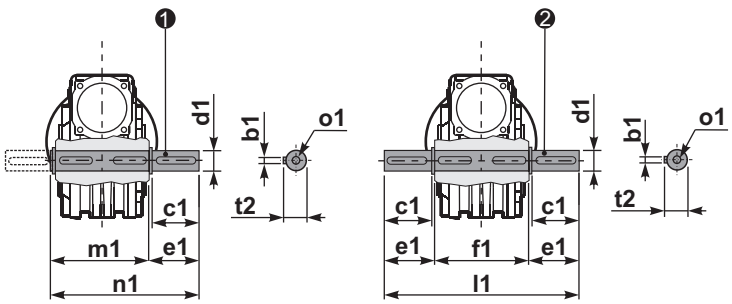
	ød	e	g	l	m	x	
type **B**	14 h6	16	5	25	135.5	M5x13	C35.5.061
type **S**	-	-	-	-	-	-	

PP50**BR**... Reaction arm
Braccio di reazione



PP50.....**S**... Single Shaft
Albero lento semplice

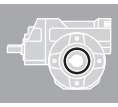
PP50.....**D**... Double Shaft
Albero lento bisp.



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

❷ 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



1

▪ 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 -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -P 63	-Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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.

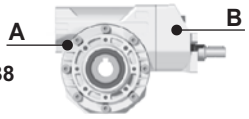
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P63** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes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

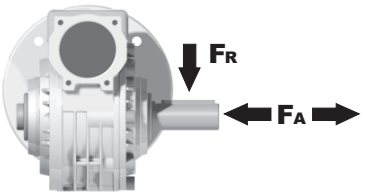


SHELL Omala S4 WE 320	**ENI** Telium VSF 320

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

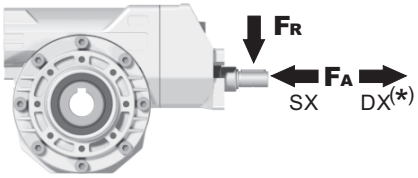
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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



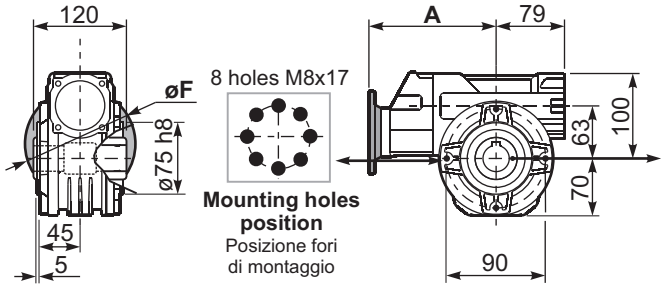
n_1 [min^{-1}]	FA [N]	FR [N]
1400	61	305

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

tab. 2

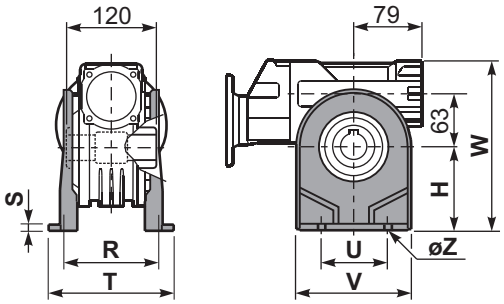
PP63**FB**... Basic wormbox
Riduttore base

	M.flange	Kit code	øF	A
29.9÷111	**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
139÷434	**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

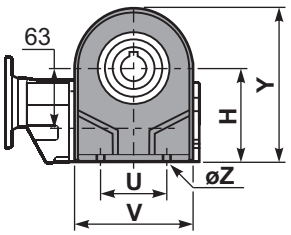


Gearbox weight peso riduttore	29.9÷111	139÷434
	7.30 Kg	**7.80 Kg**

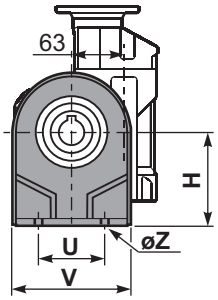
PP63**PA**... Feet
Piedini



PP63**PB**... Feet
Piedini

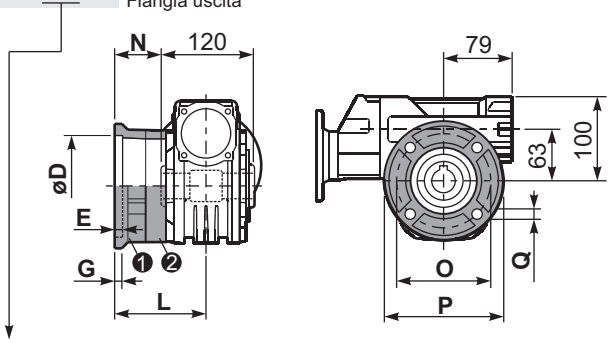


PP63**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

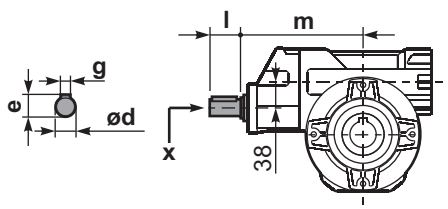
PP63**FC**... Output flange
Flangia uscita



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	❶ K063.9.010 ❷ -
FL	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ K063.9.010 ❷ K063.0.200

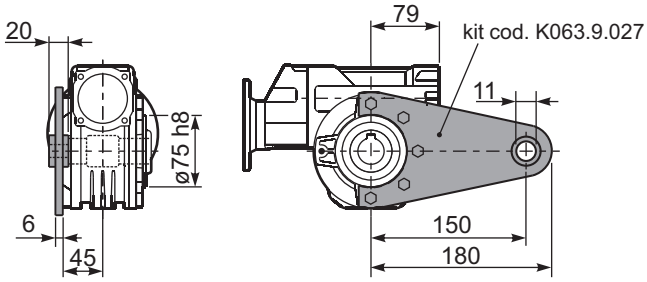
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	102	42	165	200	13	❶ KS070.9.013 ❷ -
F2	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 +0.035 0	5	11	82	22	130	160	10	❶ KS063.9.011 ❷ -

R P63FB... Input shaft
Albero in entrata



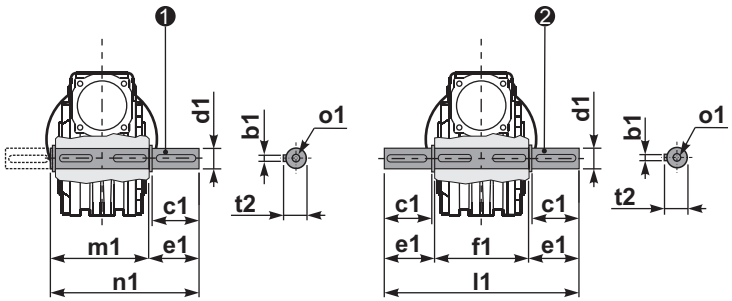
	ød	e	g	l	m	x	
29.9÷111	19 h6	21.5	6	35	169.4	M6x16	C40.5.062
139÷434	14 h6	16	5	25	154.2	M5x13	C35.5.061

PP63**BR**... Reaction arm
Braccio di reazione



PP63.....**S**... Single Shaft
Albero lento semplice

PP63.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K063.5.028 type **B**

❷ kit cod. K063.5.029 type **B**

	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**	-	-	-	-	-	-	-	-	-	-



1

▪ 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 -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -P 63	-Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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.

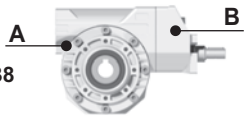
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P6A** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes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

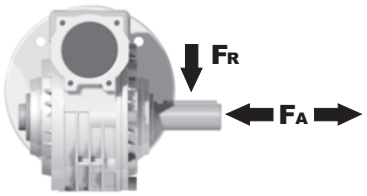


SHELL Omala S4 WE 320	**ENI** Telium VSF 320

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

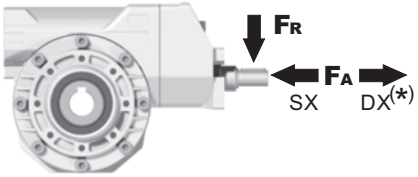
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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



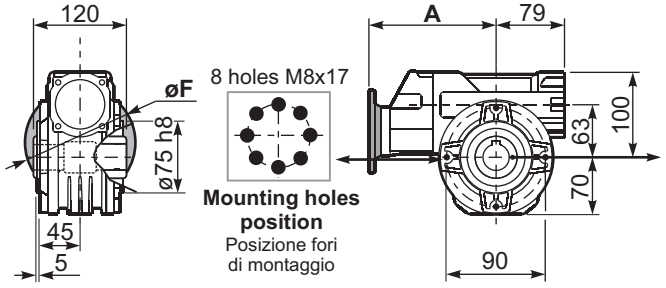
n_1 [min^{-1}]	FA [N]	FR [N]
1400	61	305

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

tab. 2

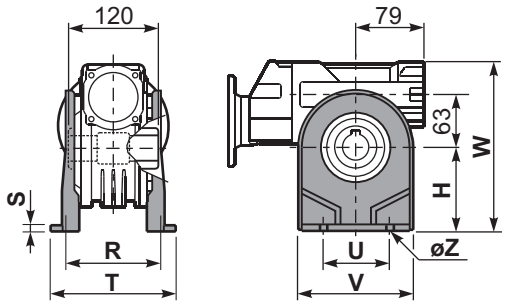
PP6A**FB**... Basic wormbox
Riduttore base

	M.flange	Kit code	øF	A
29.9÷111	**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
139÷434	**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

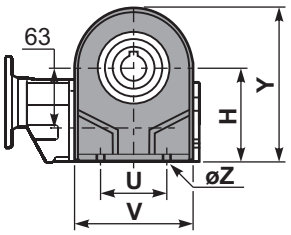


Gearbox weight peso riduttore	29.9÷111	139÷434
	7.30 Kg	7.80 Kg

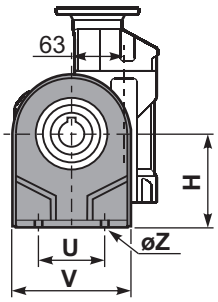
PP6A**PA**... Feet
Piedini



PP6A**PB**... Feet
Piedini

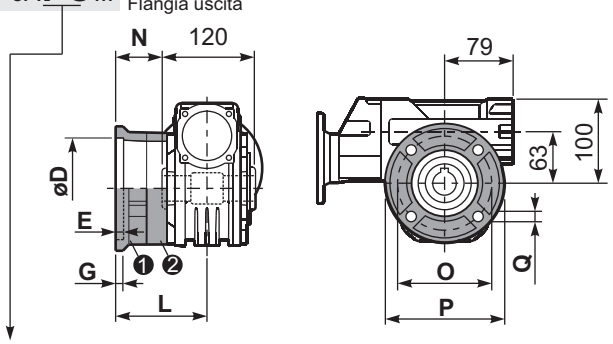


PP6A**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

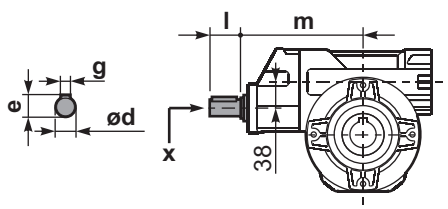
PP6A**FC**... Output flange
Flangia uscita



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	❶ K070.9.010 ❷ -
FL	130 +0.20 +0.15	7	13	111	51	165	200	13	❶ K070.9.010 ❷ K070.0.200

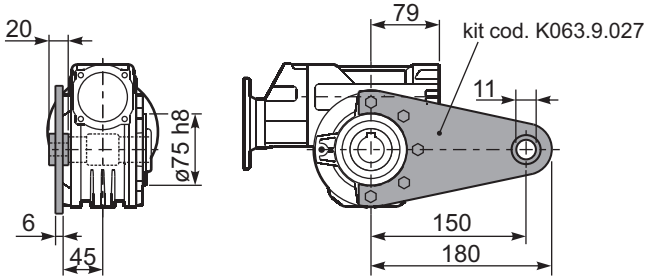
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	111	51	165	200	13	❶ KS070.9.014 ❷ -
F2	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 +0.035 0	5	13.5	84.5	24.5	130	160	11	❶ KS070.9.011 ❷ -

R P6AFB... Input shaft
Albero in entrata



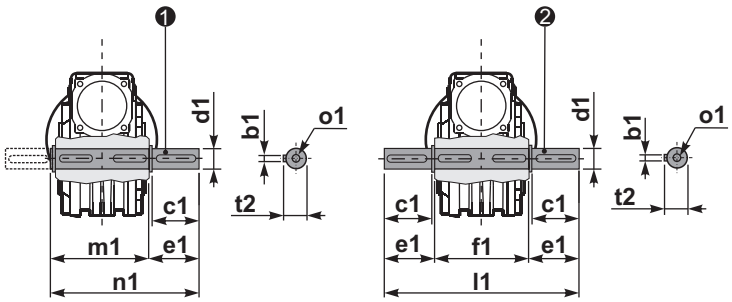
	ød	e	g	l	m	x	
29.9÷111	19 h6	21.5	6	35	169.4	M6x16	C40.5.062
139÷434	14 h6	16	5	25	154.2	M5x13	C35.5.061

PP6A**BR**... Reaction arm
Braccio di reazione



PP6A.....**S**... Single Shaft
Albero lento semplice

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



❶ kit cod. K070.5.028 type **B**

❷ kit cod. K070.5.029 type **B**

	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**	-	-	-	-	-	-	-	-	-	-

1

▪ 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 -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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.

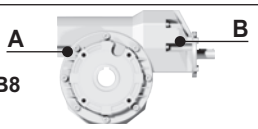
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P85** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes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

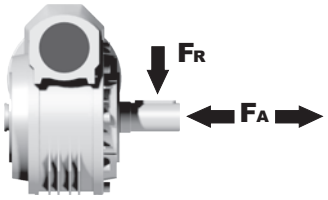


SHELL Omala S4 WE 320	**ENI** Telium VSF 320

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

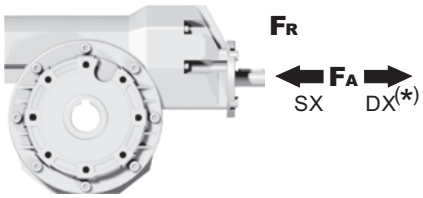
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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



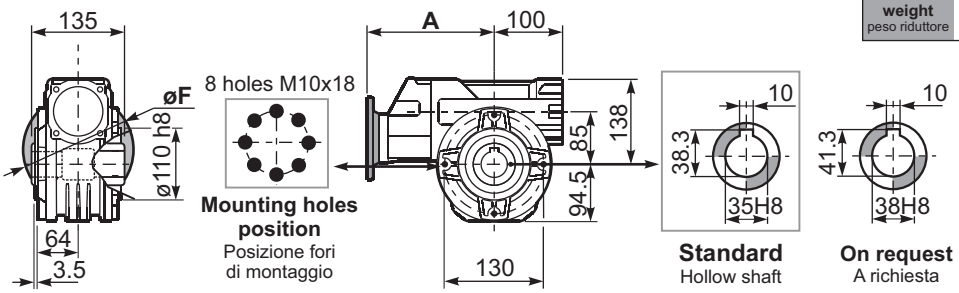
n_1 [min^{-1}]	FA [N]	FR [N]
1400	108	540

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

tab. 2

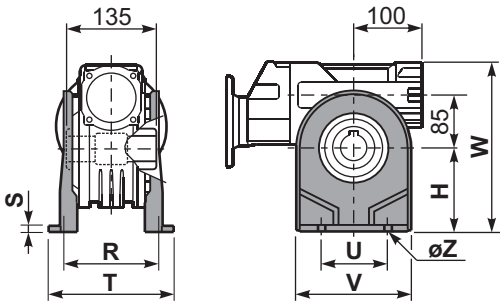
PP85**FB**... Basic wormbox
Riduttore base

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

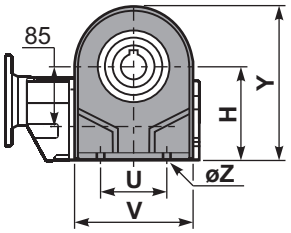


Gearbox weight peso riduttore **19.30 kg**

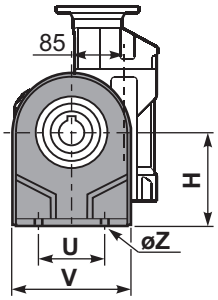
PP85**PA**... Feet
Piedini



PP85**PB**... Feet
Piedini

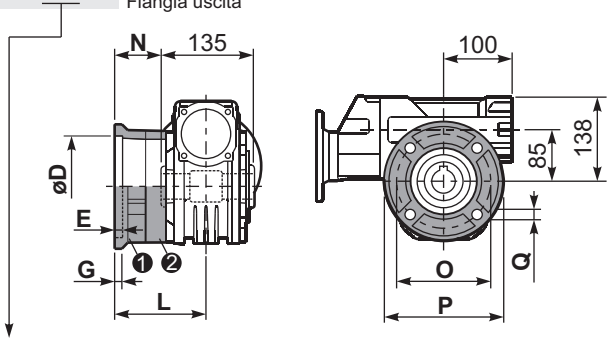


PP85**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

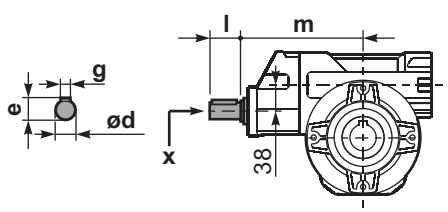
PP85**FC**... Output flange
Flangia uscita



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	❶ K085.9.010 ❷ -
FL	152 $^{+0.06}_{+0.00}$	5	16	148.5	81	176	205	13	❶ K085.9.010 ❷ K085.0.201

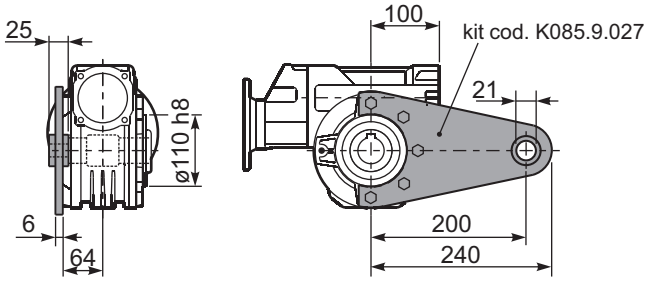
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 $^{+0.04}_{+0.00}$	5	13	117.5	50	165	200	11.5	❶ KS085.9.012 ❷ -
F2	152 $^{+0.06}_{+0.00}$	5	15	147.5	80	180	205	12.5	❶ KS085.9.013 ❷ -
F4	130 $^{+0.04}_{+0.00}$	5	13	106.5	39	165	200	13	❶ KS085.9.015 ❷ -

RP85FB... Input shaft
Albero in entrata



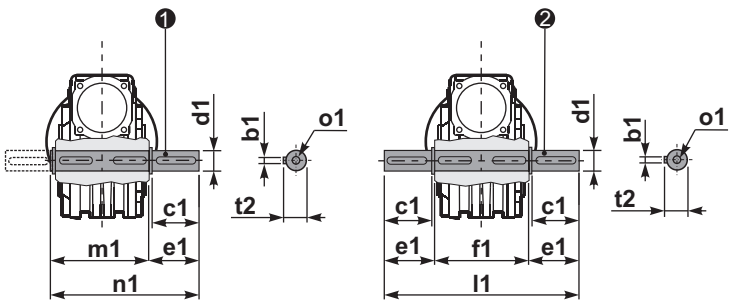
	ød	e	g	l	m	x	
type **B**	19 h6	21.5	6	35	187.5	M6x16	C40.5.062
type **S**	-	-	-	-	-	-	

PP85**BR**... Reaction arm
Braccio di reazione



PP85.....**S**... Single Shaft
Albero lento semplice

PP85.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K085.5.028 type **B**

❷ 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**	-	-	-	-	-	-	-	-	-	-



1

▪ 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 -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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 Lebensdauergeschmiert und wird mit synthetischem Öl Geliefert. Die Stirnradvorstufe ist komplett geschlossen ohne Füllschauben.
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

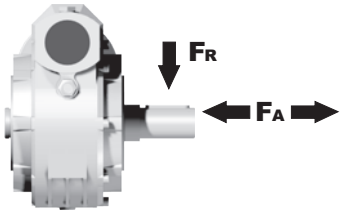
E El reductor tamaño **P10** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La 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
1.9/0.14LT	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
SHELL Omala S2 GX 460			**ENI** Blasia 460		

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

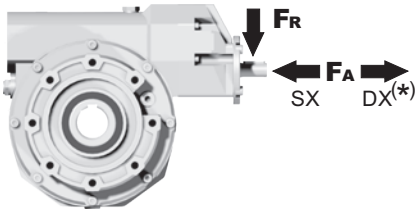
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
75	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

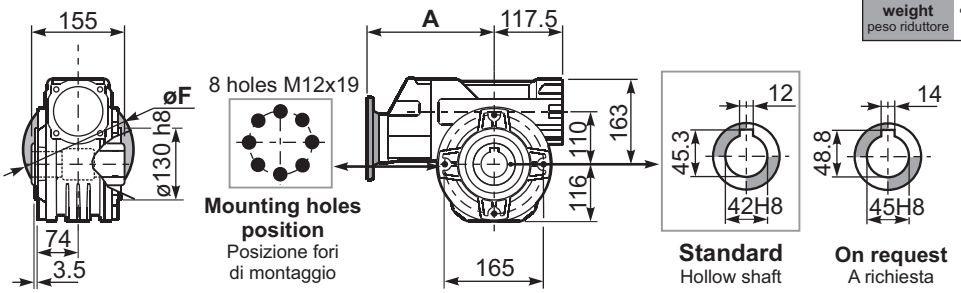
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

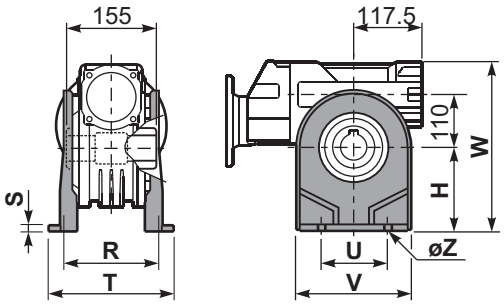
PP10**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore **41.00 kg**

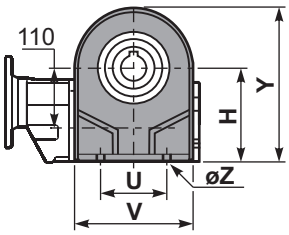
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	214.7
71B5	K063.4.042	160	212.7
80/90B5	K063.4.043	200	214.7
71B14	K063.4.047	105	212.7
80B14	K063.4.046	120	214.7
90B14	K063.4.041	140	214.7



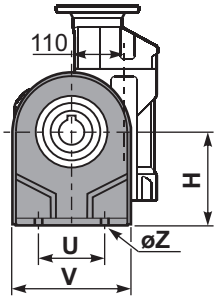
PP10**PA**... Feet
Piedini



PP10**PB**... Feet
Piedini

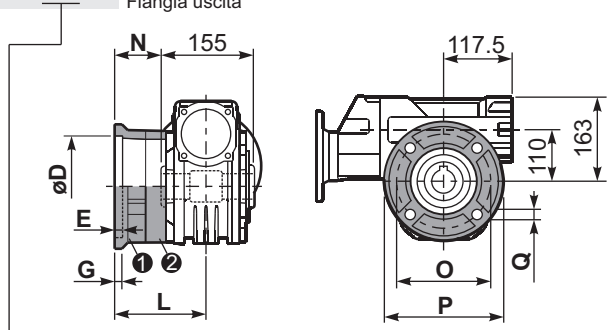


PP10**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	170	180	8	224	200	240	286	333	ø13	K110.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

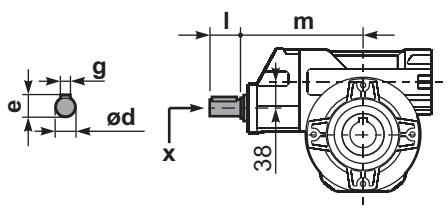
PP10**FC**... Output flange
Flangia uscita



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	❶ K110.9.010 ❷ -
FL	170 +0.083 +0.043	11	16.5	179.5	102	230	270	13	❶ K110.9.011 ❷ -

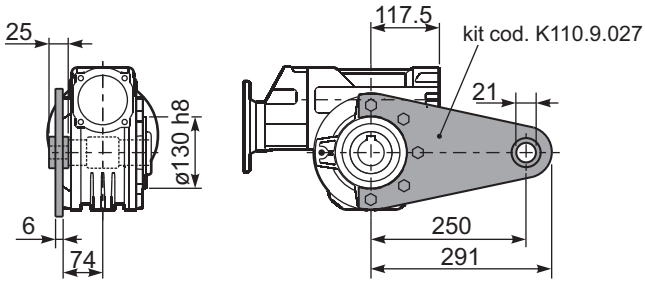
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	180 +0.040 0	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F3	180 +0.040 0	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

R P10FB... Input shaft
Albero in entrata



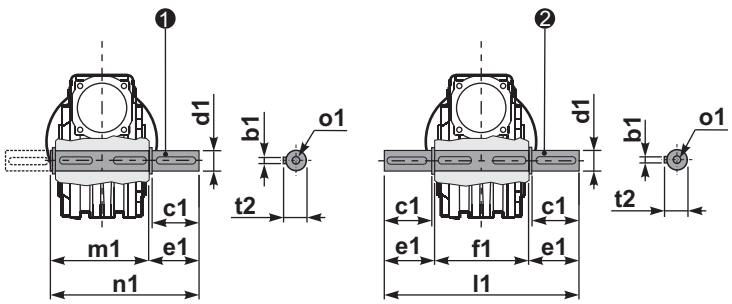
	ød	e	g	l	m	x	
type **B**	19 h6	21.5	6	35	205	M6x16	C40.5.062
type **S**	-	-	-	-	-	-	

PP10**BR**... Reaction arm
Braccio di reazione



PP10.....**S**... Single Shaft
Albero lento semplice

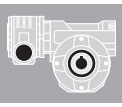
PP10.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K110.5.028 type **B**

❷ 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**	-	-	-	-	-	-	-	-	-	-



1

▪ 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 -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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	44	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

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.

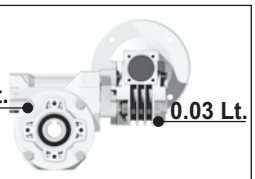
I Il riduttore tipo **303** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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.

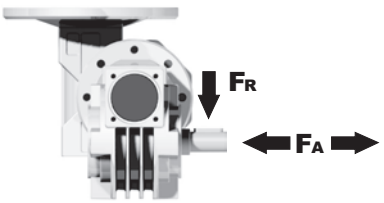


SHELL Omala S4 WE 320	**ENI** Telium VSF 320

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

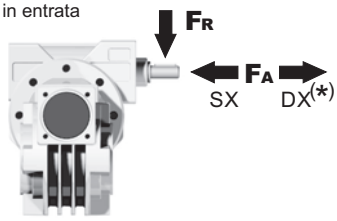
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	300	1800
15	400	2000

Input shaft
albero in entrata



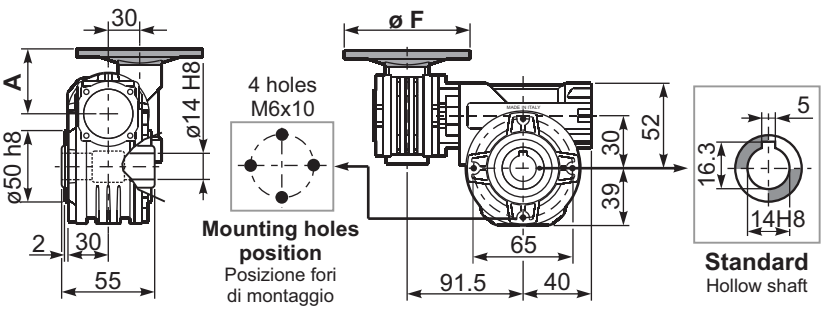
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

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

tab. 2

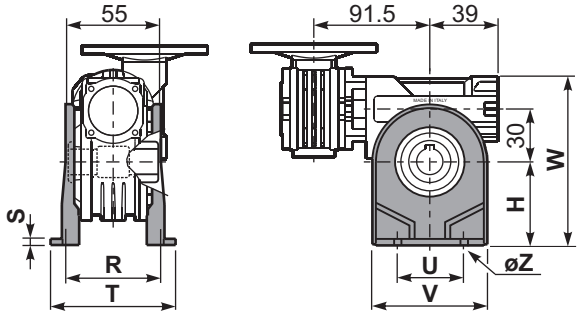
P303**FB**... Basic wormbox
Riduttore base

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

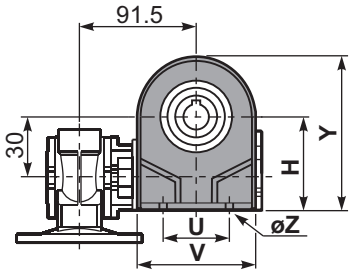


Gearbox weight peso riduttore **2.15 kg**

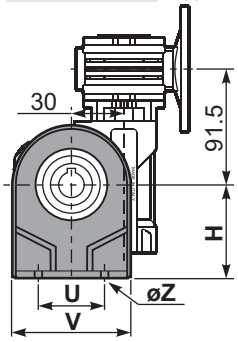
P303**PA**... Feet
Piedini



P303**PB**... Feet
Piedini

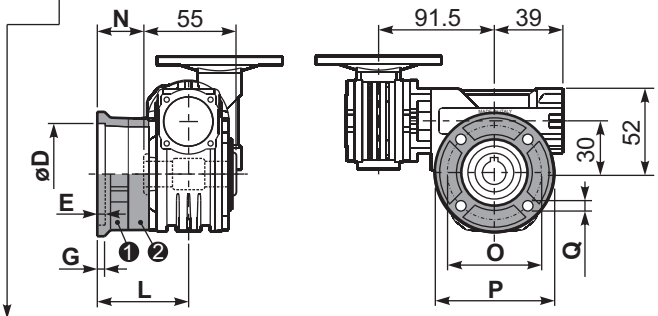


P303**PV**... Feet
Piedini



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

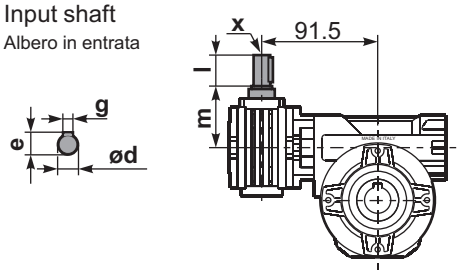
P303**FC**... Output flange
Flangia uscita



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	❶ K030.9.010 ❷ -
FL	$60^{+0.15}_{+0.05}$	6	6	55.5	28	87	110	8.5	❶ K045.9.010 ❷ -

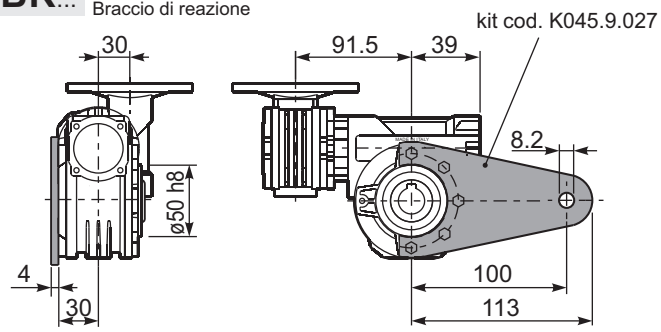
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$40^{+0.15}_{+0.10}$	3.5	5.5	49	21.5	56	80	6.5	❶ KS030.9.012 ❷ -

R303FB... Input shaft
Albero in entrata



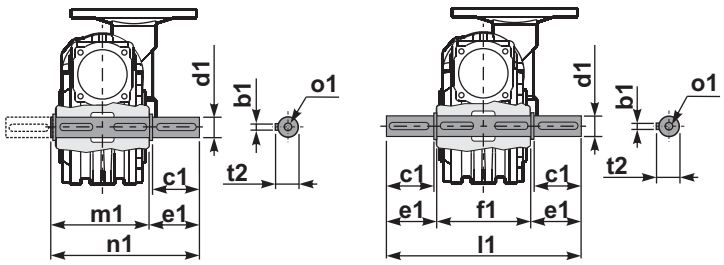
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
type **S**	-	-	-	-	-	-	-

P303**BR**... Reaction arm
Braccio di reazione



P303.....**S**... Single Shaft
Albero lento semplice

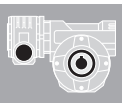
P303.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K030.5.028 type **B**

❷ 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**	-	-	-	-	-	-	-	-	-	-



1

▪ 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 -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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**	0.06	52	1.3	0.08	69	**B**		**B**-C		45	2.4	03
3.3	**420**	0.06	62	1.1	0.07	69	**B**		**B**-C		36	1.6	04
2.5	**560**	0.06	76	0.9	0.05	69	**B**		**B**-C		33	2.5	05
1.9	**740**	0.06	91	0.8	0.05	69	**B**		**B**-C		30	1.8	06
1.5	**920**	0.06*	69	<0.8	0.04	69	**B**		**B**-C		27	1.5	07
1.3	**1120**	0.06*	69	<0.8	0.03	69	**B**		**B**-C		26	2.5	08
0.9	**1480**	0.06*	69	<0.8	0.03	69	**B**		**B**-C		24	1.8	09
0.8	**1840**	0.06*	69	<0.8	0.02	69	**B**		**B**-C		22	1.5	10
0.6	**2400**	0.06*	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.

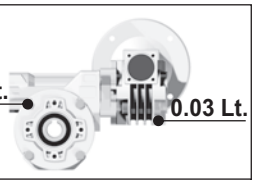
I Il riduttore tipo **453** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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.

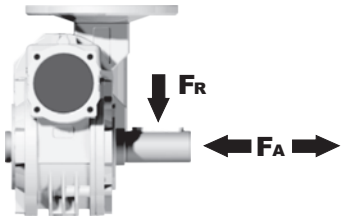


SHELL Omala S4 WE 320	**ENI** Telium VSF 320

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

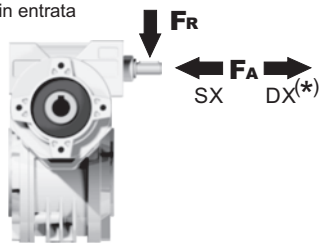
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	300	1800
15	400	2000

Input shaft
albero in entrata



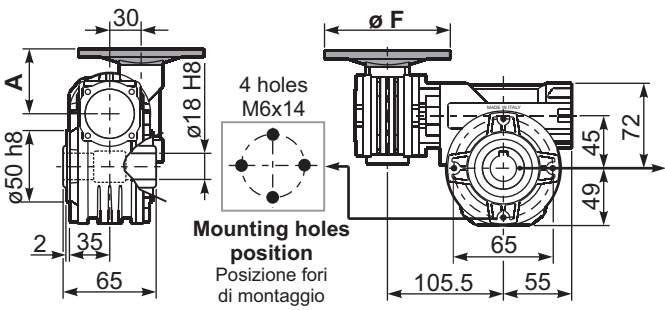
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

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

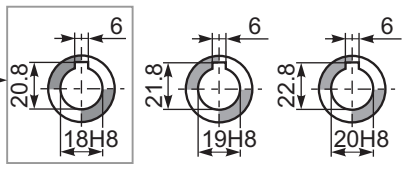
tab. 2

P453**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



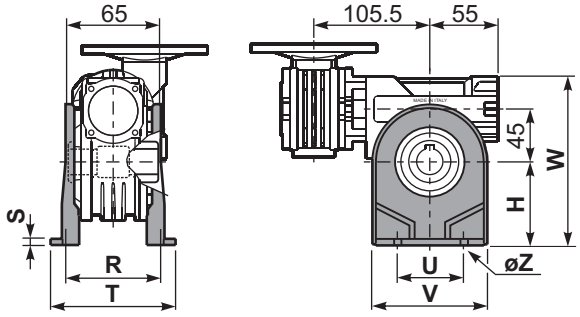
Gearbox weight peso riduttore **3.60 kg**



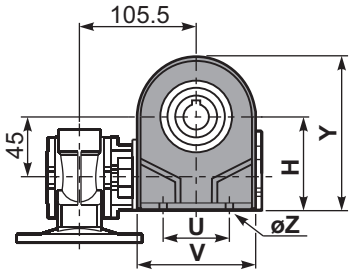
Standard Hollow shaft

On request A richiesta

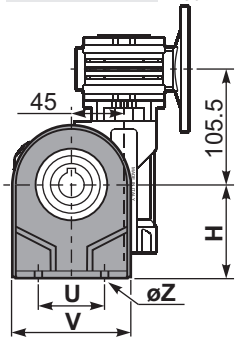
P453**PA**... Feet
Piedini



P453**PB**... Feet
Piedini

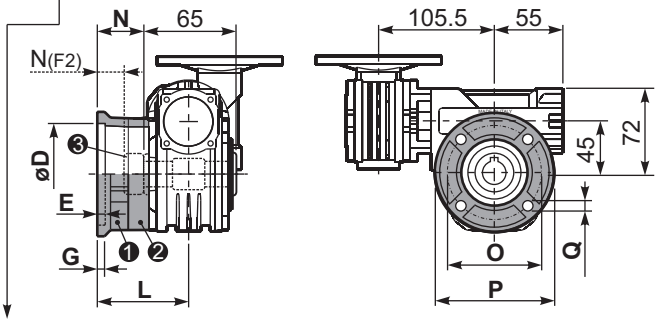


P453**PV**... Feet
Piedini



	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

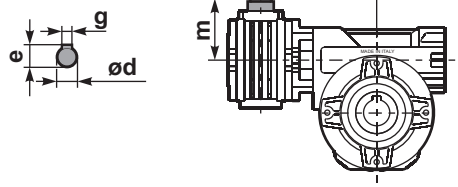
P453**FC**... Output flange
Flangia uscita



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	❶ K045.9.010 ❷ -
FL	$60^{+0.15}_{+0.05}$	9	9	90.5	58	87	110	8.5	❶ K045.9.010 ❷ K045.0.200

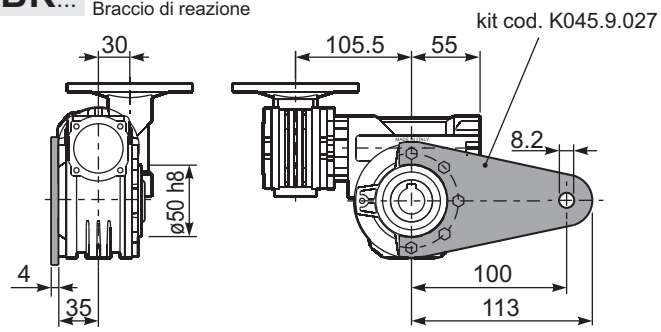
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$95^{+0.20}_{+0.15}$	4	11	73.5	41	115	140	9	❶ KS045.9.013 ❷ -
F2	$60^{+0.15}_{+0.05}$	9	9	60.5	19	87	110	8.5	❶ KS045.9.010 ❸ S045.0.204
F3	$80^{+0.030}_{0}$	3	8	51.5	19	100	120	9	❶ KS045.9.014 ❷ -

R453FB... Input shaft
Albero in entrata



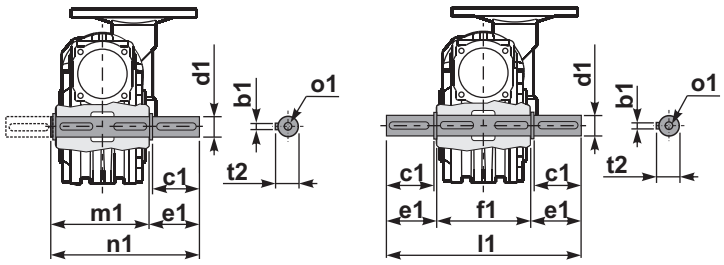
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	❶ K030.5.006 PAM63 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P453**BR**... Reaction arm
Braccio di reazione



P453.....**S**... Single Shaft
Albero lento semplice

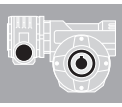
P453.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K045.5.028 type **B**
kit cod. KS045.5.030 type **S**

❷ 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



1

▪ 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 -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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**	0.09	129	0.8	**0.08**	**109**	**B**		**B**-C		39	2.1	03
1.9	**720**	0.06	106	1.0	**0.06**	**109**	**B**		**B**-C		36	2.1	04
1.6	**860**	0.06	113	1.0	**0.06**	**109**	**B**		**B**-C		32	1.8	05
1.2	**1200**	0.06	133	0.8	**0.05**	**109**	**B**		**B**-C		27	1.3	06
1.0	**1440**	0.06*	109	<0.8	**0.04**	**109**	**B**		**B**-C		26	2.1	07
0.8	**1720**	0.06*	109	<0.8	**0.04**	**109**	**B**		**B**-C		25	1.8	08
0.6	**2400**	0.06*	109	<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.

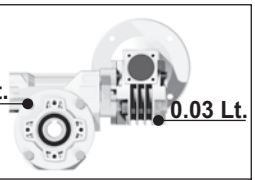
I Il riduttore tipo **503** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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.

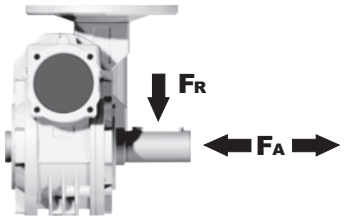


SHELL Omala S4 WE 320	**ENI** Telium VSF 320

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

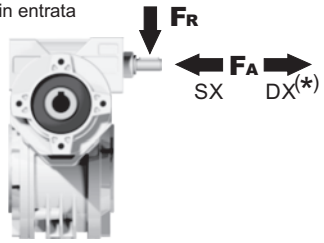
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	480	2500
15	560	2800

Input shaft
albero in entrata



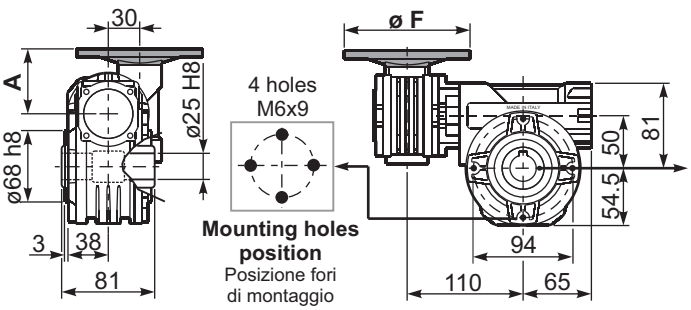
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

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

tab. 2

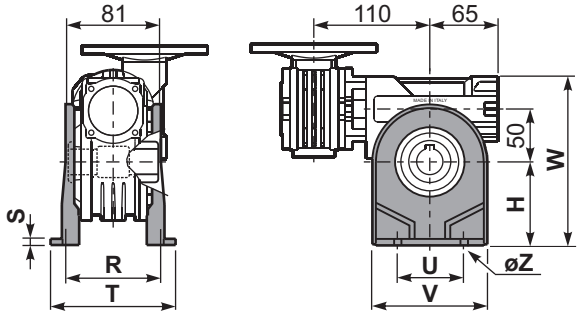
P503**FB**... Basic wormbox
Riduttore base

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

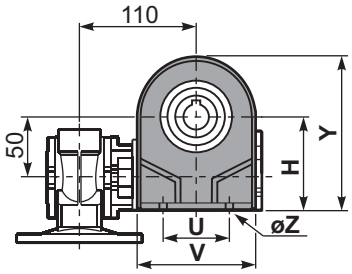


Gearbox weight / peso riduttore: **4.20 kg**

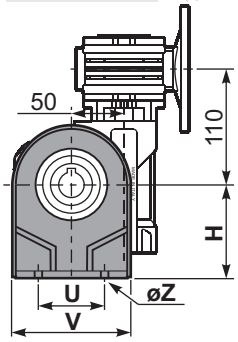
P503**PA**... Feet
Piedini



P503**PB**... Feet
Piedini

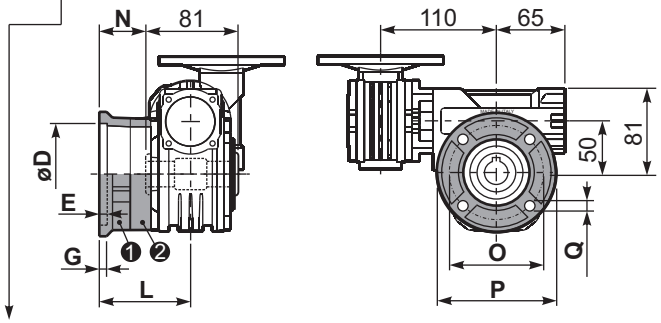


P503**PV**... Feet
Piedini



	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

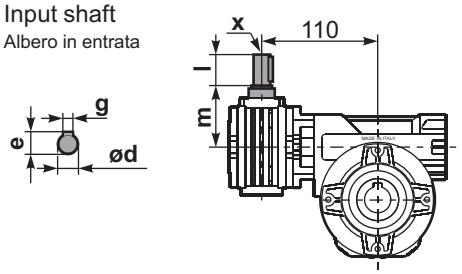
P503**FC**... Output flange
Flangia uscita



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	❶ K050.9.010 ❷ -
FL	70 $^{+0.20}_{+0.15}$	9	12	114.5	74	90	123	10.5	❶ K050.9.010 ❷ K050.0.200

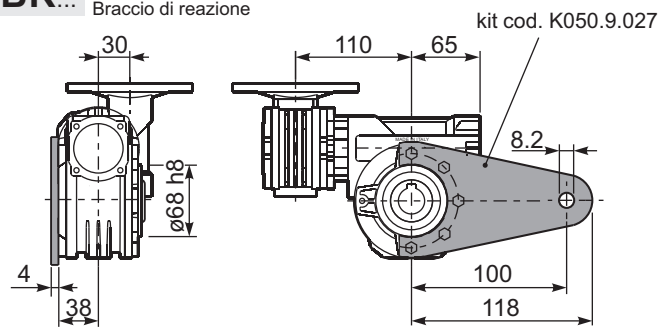
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	110 $^{+0.20}_{+0.15}$	4	11	83.5	43	130	160	10	❶ KS050.9.012 ❷ -
F2	70 $^{+0.20}_{+0.15}$	9	12	76.5	36	90	123	10.5	❶ KS050.9.014 ❷ -
F3	95 $^{+0.035}_{0}$	4	10	66.5	26	115	140	10	❶ KS050.9.013 ❷ -

R503FB... Input shaft
Albero in entrata



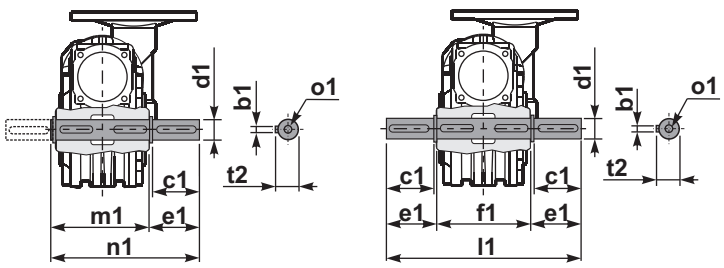
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	❶ K030.5.006 PAM63 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P503**BR**... Reaction arm
Braccio di reazione



P503.....**S**... Single Shaft
Albero lento semplice

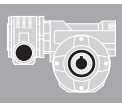
P503.....**D**... Double Shaft
Albero lento bisp.



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

❷ 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 $^{-0.005}_{-0.020}$	68.5	-	-	86.5	155	27	M8x20



1

▪ 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 -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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

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.

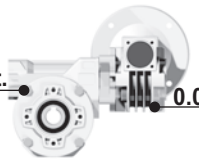
I Il riduttore tipo **633** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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.



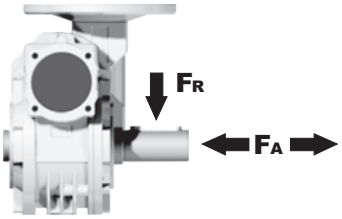
SHELL Omala S4 WE 320	**ENI** Telium VSF 320

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

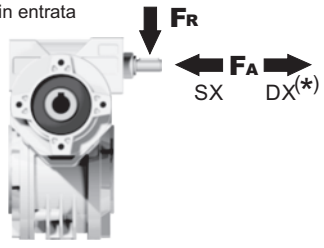
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft
albero in entrata



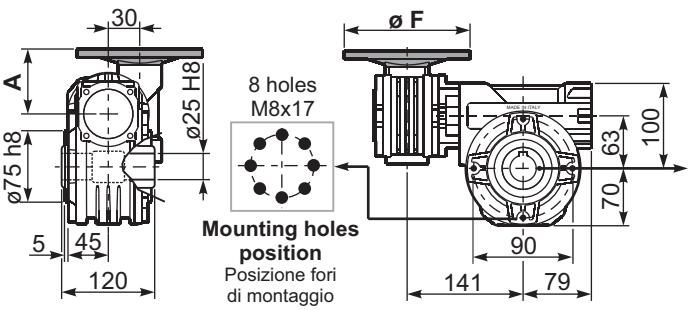
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

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

tab. 2

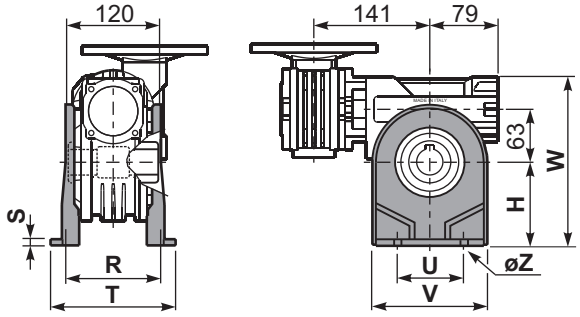
P633**FB**... Basic wormbox
Riduttore base

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

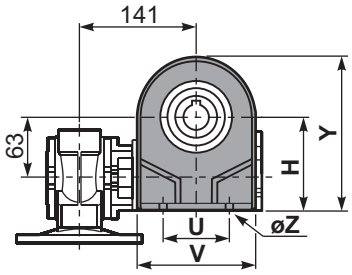


Gearbox weight peso riduttore **7.50 kg**

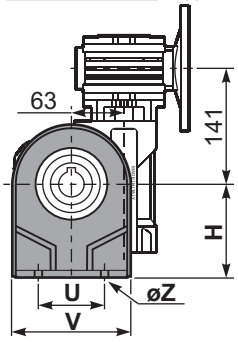
P633**PA**... Feet
Piedini



P633**PB**... Feet
Piedini

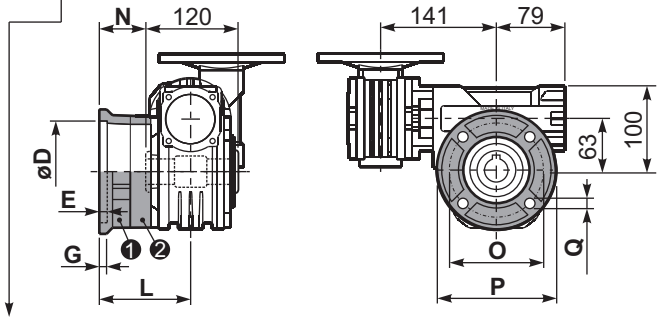


P633**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

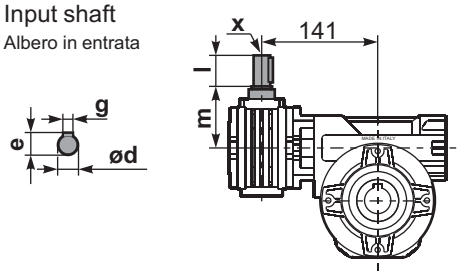
P633**FC**... Output flange
Flangia uscita



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	❶ K063.9.010 ❷ -
FL	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ K063.9.010 ❷ K063.0.200

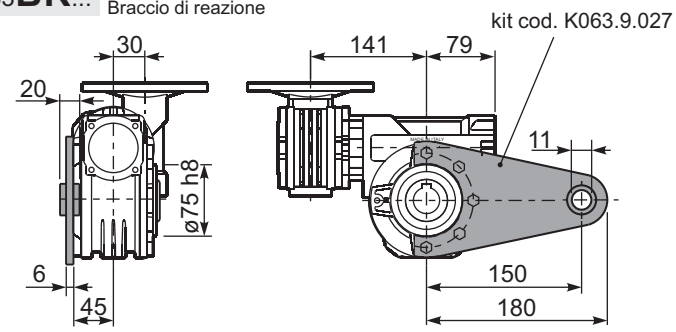
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	102	42	165	200	13	❶ KS070.9.013 ❷ -
F2	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 +0.035 0	5	11	82	22	130	160	10	❶ KS063.9.011 ❷ -

R633FB... Input shaft
Albero in entrata



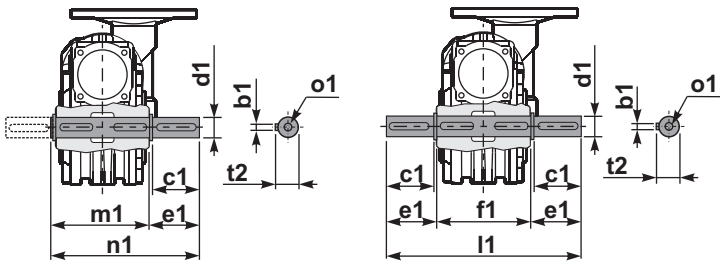
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	❶ K030.5.006 PAM63 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P633**BR**... Reaction arm
Braccio di reazione



P633.....**S**... Single Shaft
Albero lento semplice

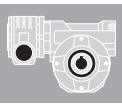
P633.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K063.5.028 type **B**

❷ kit cod. K063.5.029 type **B**

	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**	-	-	-	-	-	-	-	-	-	-



1

▪ 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 -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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.

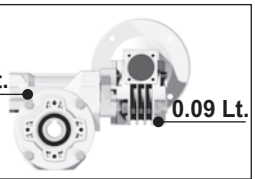
I Il riduttore tipo **634** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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 Quantity 0.40/0.09 Lt.



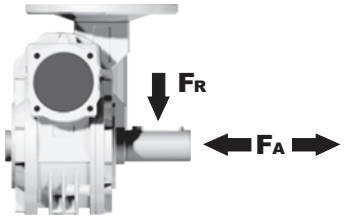
SHELL Omala S4 WE 320	**ENI** Telium VSF 320

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

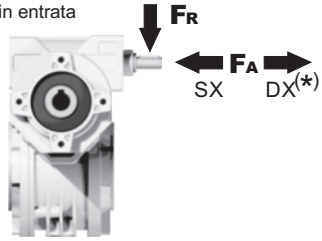
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft
albero in entrata



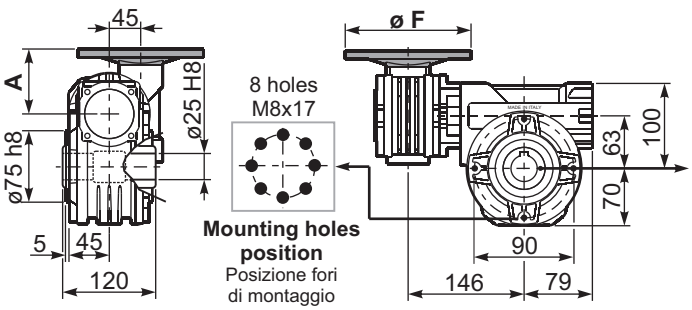
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

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

tab. 2

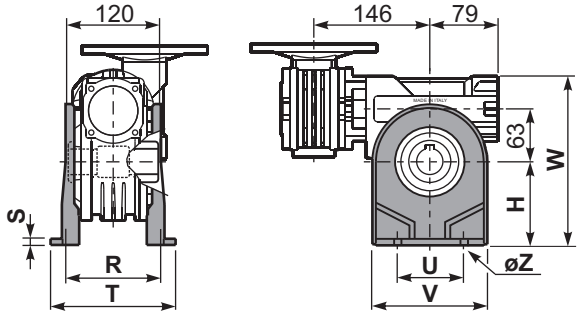
P634**FB**... Basic wormbox
Riduttore base

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

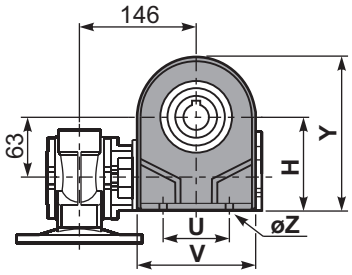


Gearbox weight peso riduttore **8.90 kg**

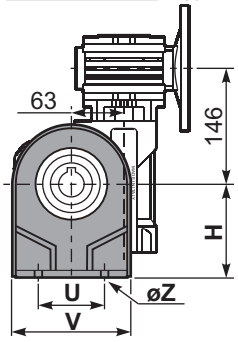
P634**PA**... Feet
Piedini



P634**PB**... Feet
Piedini

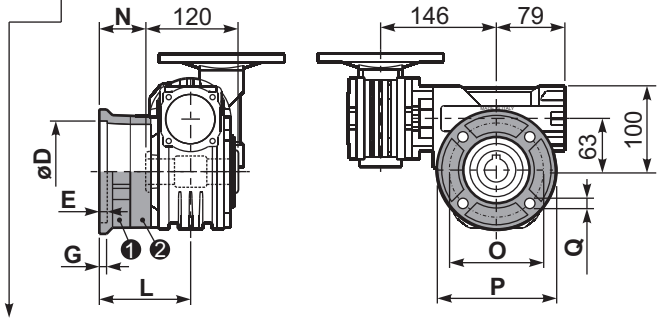


P634**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

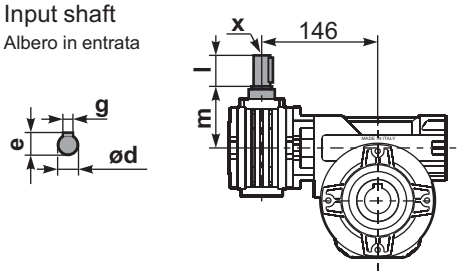
P634**FC**... Output flange
Flangia uscita



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	❶ K063.9.010 ❷ -
FL	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ K063.9.010 ❷ K063.0.200

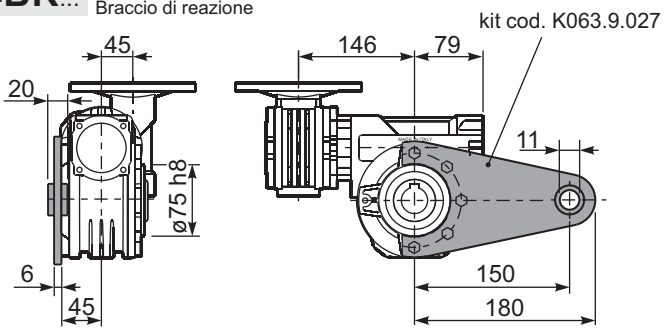
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	102	42	165	200	13	❶ KS070.9.013 ❷ -
F2	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 +0.035 0	5	11	82	22	130	160	10	❶ KS063.9.011 ❷ -

R634FB... Input shaft
Albero in entrata



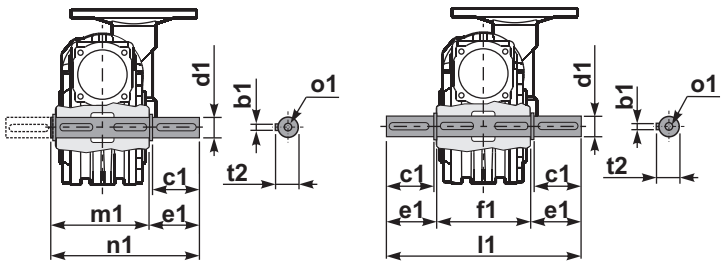
	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	68	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P634**BR**... Reaction arm
Braccio di reazione



P634.....**S**... Single Shaft
Albero lento semplice

P634.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K063.5.028 type **B**

❷ kit cod. K063.5.029 type **B**

	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**	-	-	-	-	-	-	-	-	-	-

6A3 Rightangle - Gear 63A+030 290Nm

Rating - Aluminum WORM 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 -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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

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.

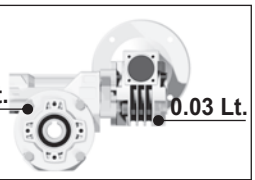
I Il riduttore tipo **6A3** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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 Quantity 0.40/0.03 Lt.

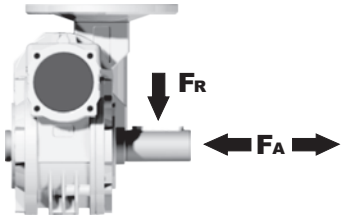


SHELL Omala S4 WE 320	**ENI** Telium VSF 320

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

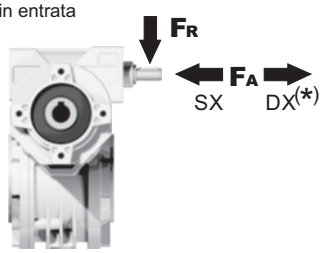
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft
albero in entrata



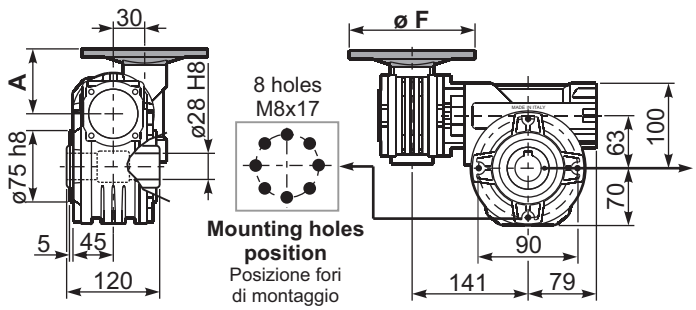
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

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

tab. 2

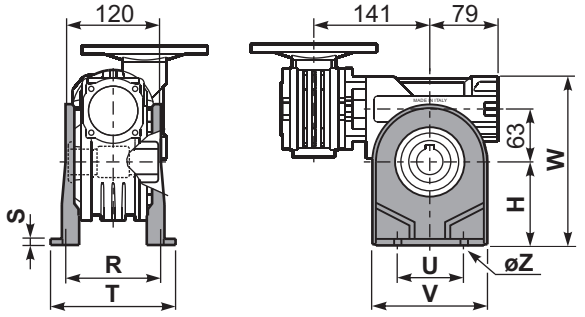
P6A3FB... Basic wormbox
Riduttore base

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

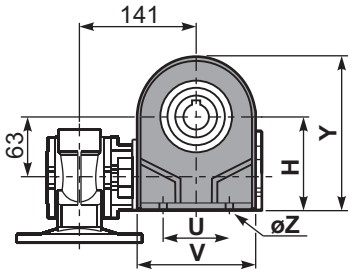


Gearbox weight peso riduttore **8.90 kg**

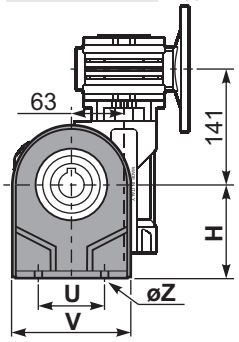
P6A3PA... Feet
Piedini



P6A3PB... Feet
Piedini

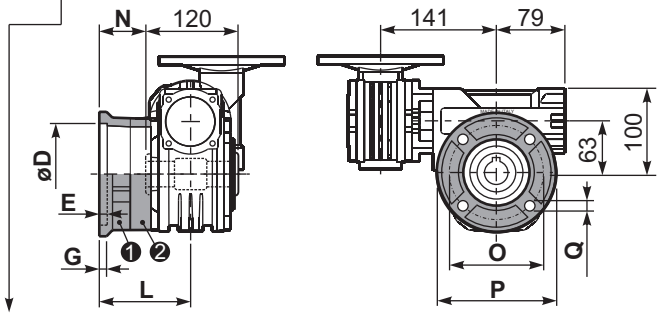


P6A3PV... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

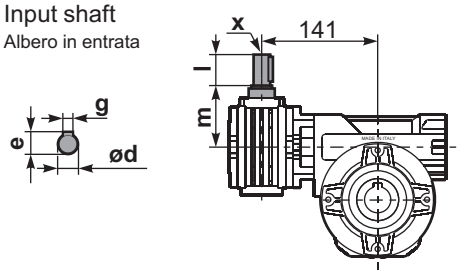
P6A3FC... Output flange
Flangia uscita



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	❶ K070.9.010 ❷ -
FL	130 +0.20 +0.15	7	13	111	51	165	200	13	❶ K070.9.010 ❷ K070.0.200

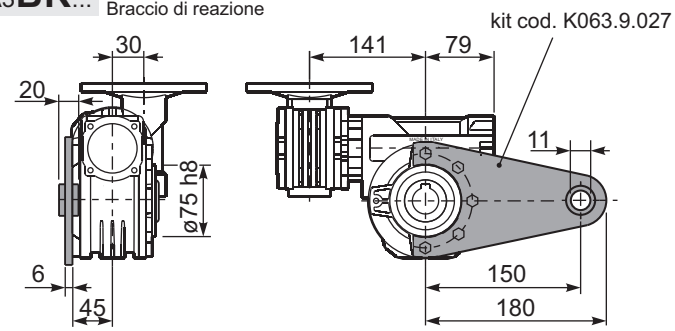
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	111	51	165	200	13	❶ KS070.9.014 ❷ -
F2	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ KS063.9.013 ❸ -
F3	110 +0.035 0	5	13.5	84.5	24.5	130	160	11	❶ KS070.9.011 ❷ -

R6A3FB... Input shaft
Albero in entrata



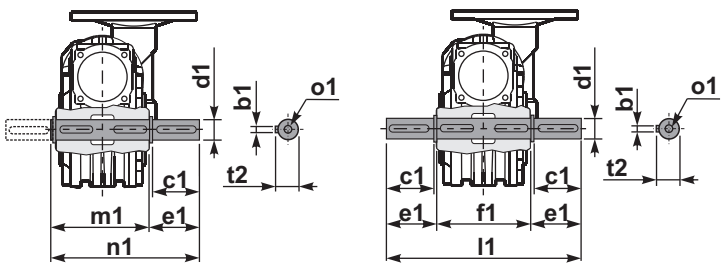
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	❶ K030.5.006 PAM63 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P6A3BR... Reaction arm
Braccio di reazione



P6A3.....S... Single Shaft
Albero lento semplice

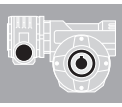
P6A3.....D... Double Shaft
Albero lento bisp.



❶ kit cod. K070.5.028 type **B**

❷ kit cod. K070.5.029 type **B**

	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**	-	-	-	-	-	-	-	-	-	-



1

▪ 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 -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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.

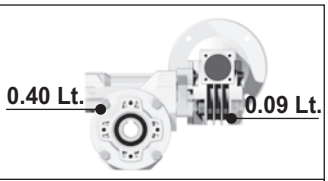
I Il riduttore tipo **6A4** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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.



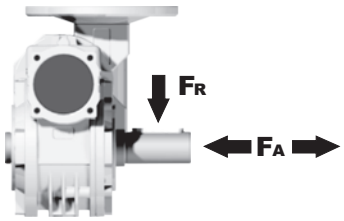
SHELL Omala S4 WE 320	**ENI** Telium VSF 320

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

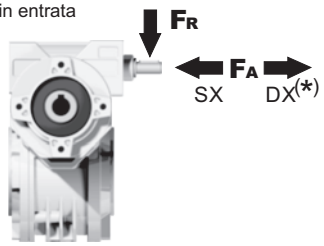
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft
albero in entrata



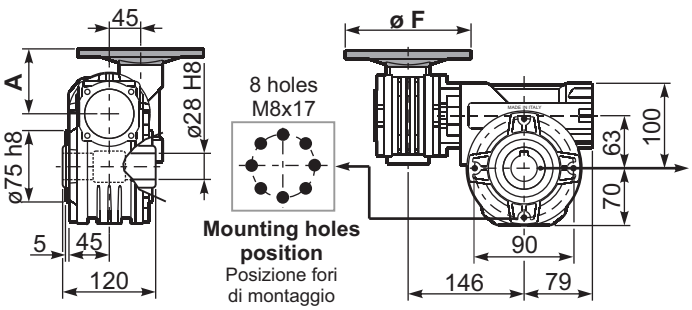
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

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

tab. 2

P6A4**FB**... Basic wormbox
Riduttore base

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



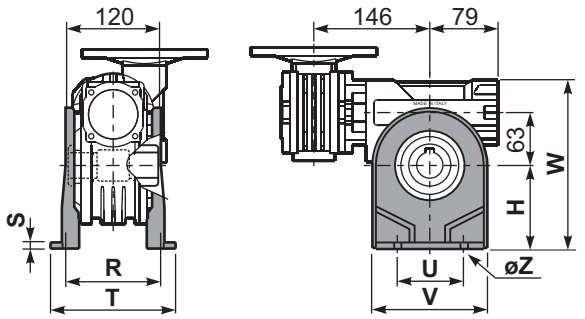
Mounting holes position
Posizione fori di montaggio

Standard
Hollow shaft

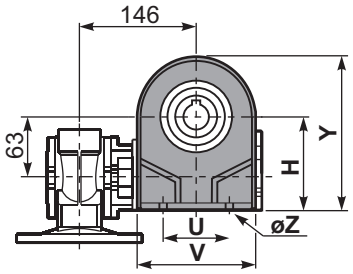
On request
A richiesta

Gearbox weight peso riduttore **8.90 kg**

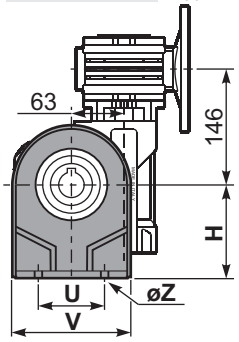
P6A4**PA**... Feet
Piedini



P6A4**PB**... Feet
Piedini

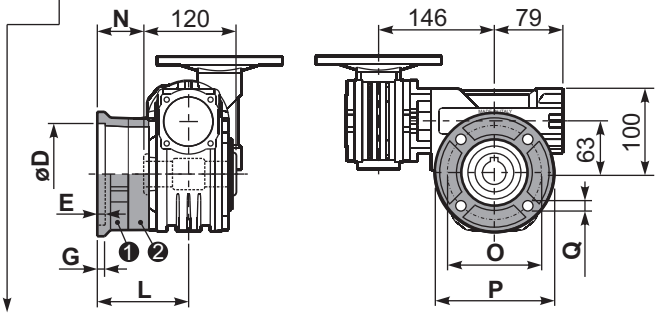


P6A4**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

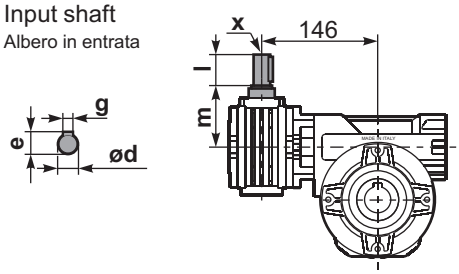
P6A4**FC**... Output flange
Flangia uscita



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	❶ K070.9.010 ❷ -
FL	130 $^{+0.20}_{+0.15}$	7	13	111	51	165	200	13	❶ K070.9.010 ❷ K070.0.200

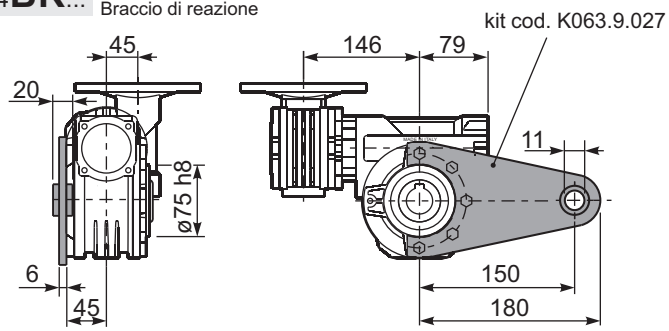
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 $^{+0.20}_{+0.15}$	7	13	111	51	165	200	13	❶ KS070.9.014 ❷ -
F2	115 $^{+0.20}_{+0.15}$	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 $^{+0.035}_{0}$	5	13.5	84.5	24.5	130	160	11	❶ KS070.9.011 ❷ -

R6A4FB... Input shaft
Albero in entrata



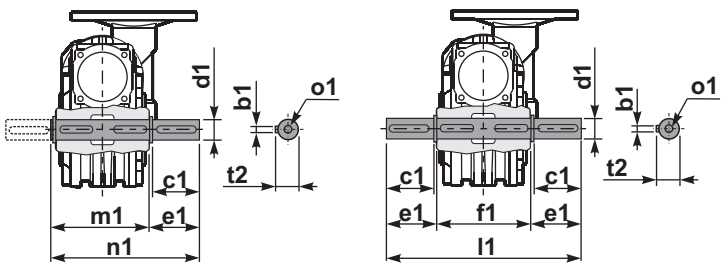
	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	68	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P6A4**BR**... Reaction arm
Braccio di reazione



P6A4.....**S**... Single Shaft
Albero lento semplice

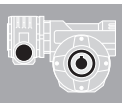
P6A4.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K070.5.028 type **B**

❷ kit cod. K070.5.029 type **B**

	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**	-	-	-	-	-	-	-	-	-	-



1

▪ 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 -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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.

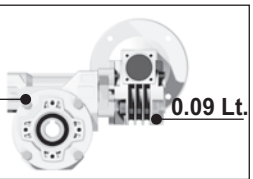
I Il riduttore tipo **854** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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.

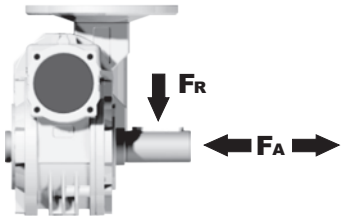


SHELL Omala S4 WE 320	**ENI** Telium VSF 320

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

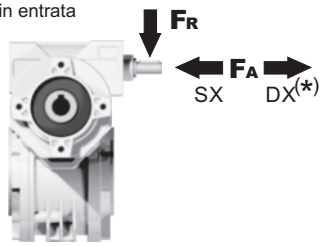
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	1000	5000
15	1160	5800

Input shaft
albero in entrata



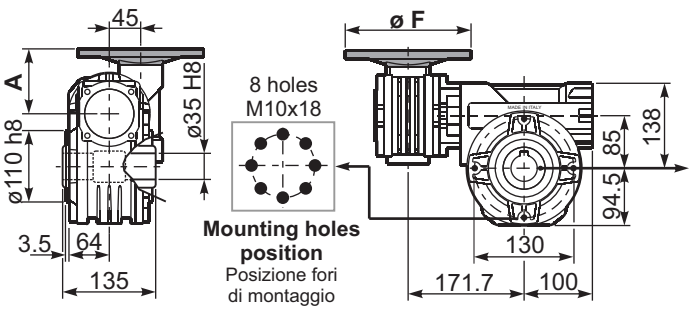
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

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

tab. 2

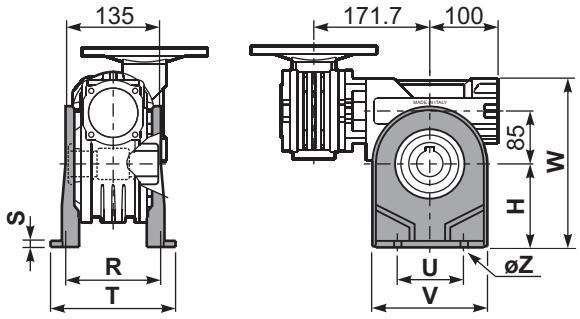
P854**FB**... Basic wormbox
Riduttore base

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

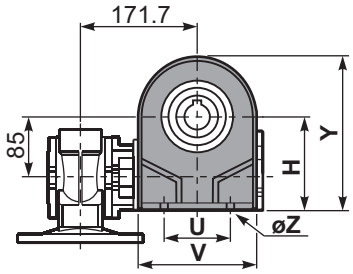


Gearbox weight peso riduttore **19.50 kg**

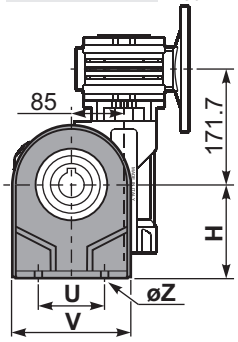
P854**PA**... Feet
Piedini



P854**PB**... Feet
Piedini

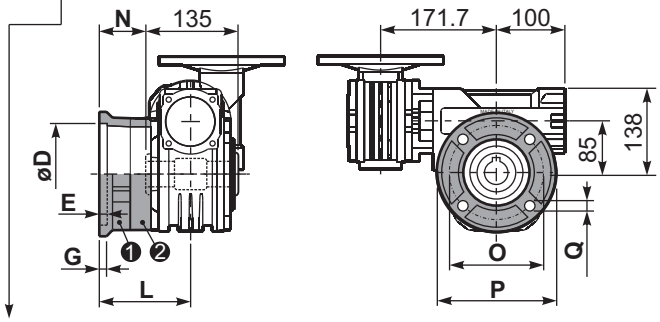


P854**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

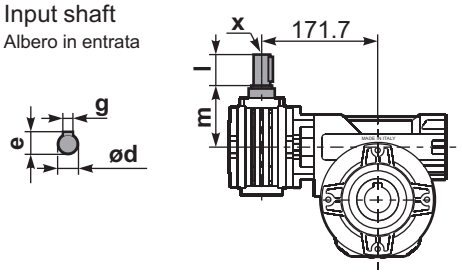
P854**FC**... Output flange
Flangia uscita



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	❶ K085.9.010 ❷ -
FL	152 +0.06 +0.00	5	16	148.5	81	176	205	13	❶ K085.9.010 ❷ K085.0.201

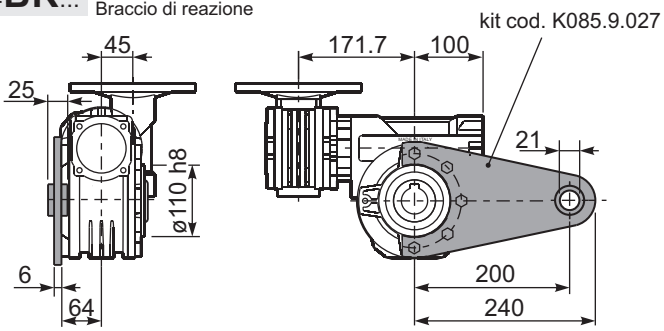
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.040 0	5	13	117.5	50	165	200	11.5	❶ KS085.9.012 ❷ -
F2	152 +0.06 0	5	15	147.5	80	180	205	12.5	❶ KS085.9.013 ❷ -
F4	130 +0.040 0	5	13	106.5	39	165	200	13	❶ KS085.9.015 ❷ -

R854FB... Input shaft
Albero in entrata



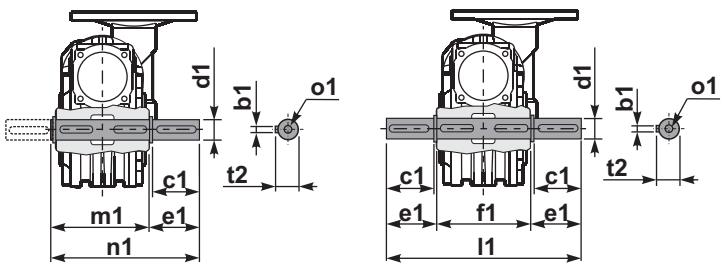
	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	68	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P854**BR**... Reaction arm
Braccio di reazione



P854.....**S**... Single Shaft
Albero lento semplice

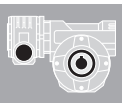
P854.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K085.5.028 type **B**

❷ 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**	-	-	-	-	-	-	-	-	-	-



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

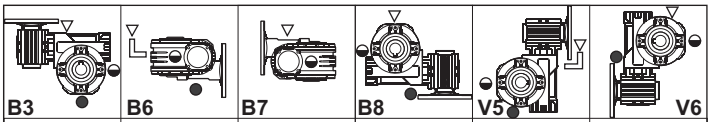
Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	Available B14 motor flanges -O 56	-P 63	-Q 71	-R 80	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
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



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
SHELL Omala S2 GX 460			**ENI** Blasia 460		

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

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.

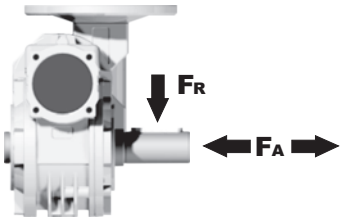
D Das Getriebe der Baugröße **115** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute 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.

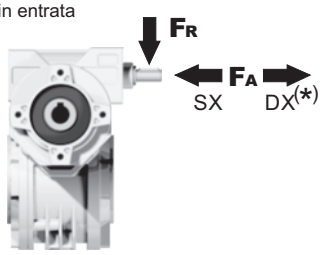
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	1200	6000
15	1400	7000

Input shaft
albero in entrata



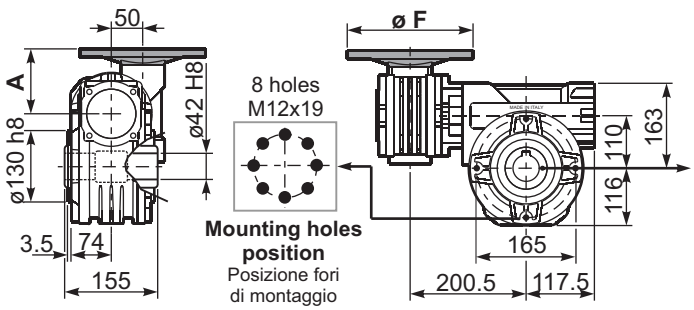
n_1 [min^{-1}]	FA [N]	FR [N]
1400	76	380

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

tab. 2

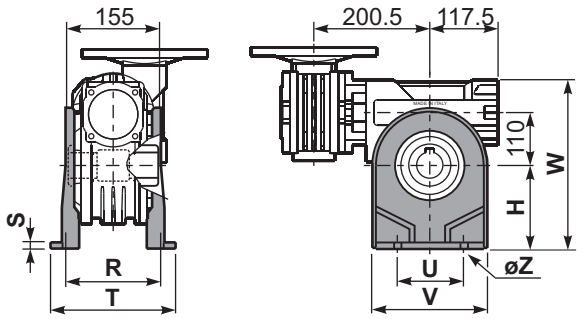
P115**FB**... Basic wormbox
Riduttore base

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

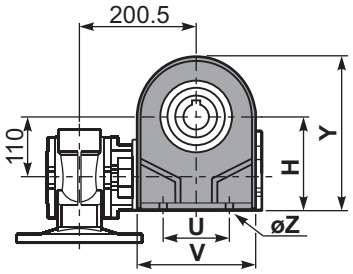


Gearbox weight / peso riduttore	38.00 kg

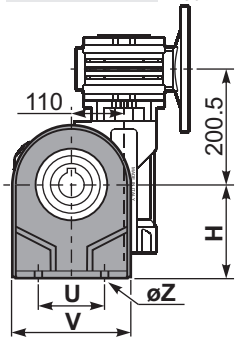
P115**PA**... Feet
Piedini



P115**PB**... Feet
Piedini

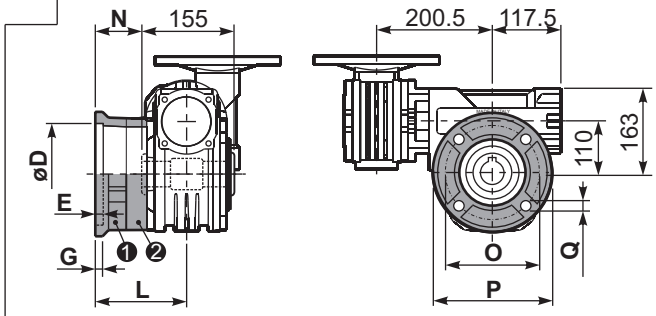


P115**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	170	180	8	224	200	240	286	333	ø13	K110.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

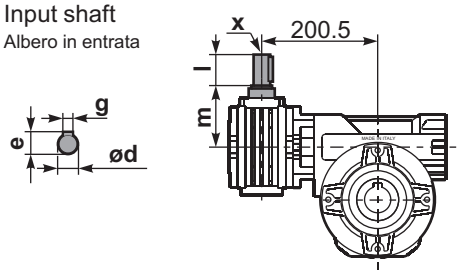
P115**FC**... Output flange
Flangia uscita



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	❶ K110.9.010 ❷ -
FL	170 +0.083 +0.043	11	16.5	179.5	102	230	270	13	❶ K110.9.011 ❷ -

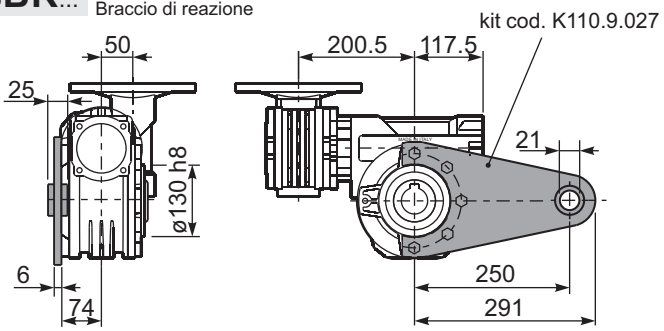
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	180 +0.040 0	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F3	180 +0.040 0	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

R115FB... Input shaft
Albero in entrata



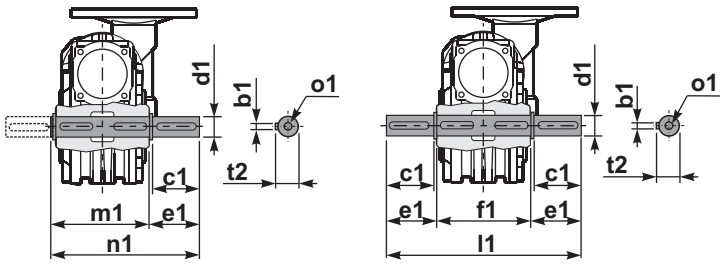
	ød	e	g	l	m	x	kit code
type **B**	16 h6	18	5	30	74.5	M6x16	❶ K050.5.006 PAM71 ❷ K050.5.007 PAM80
type **S**	14 h6	16	5	30	74.5	M5x10	❶ KS050.5.008 PAM71 ❷ KS050.5.009 PAM80

P115**BR**... Reaction arm
Braccio di reazione



P115.....**S**... Single Shaft
Albero lento semplice

P115.....**D**... Double Shaft
Albero lento bisp.

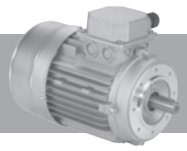


❶ kit cod. K110.5.028 type **B**

❷ kit cod. K110.5.029 type **B**

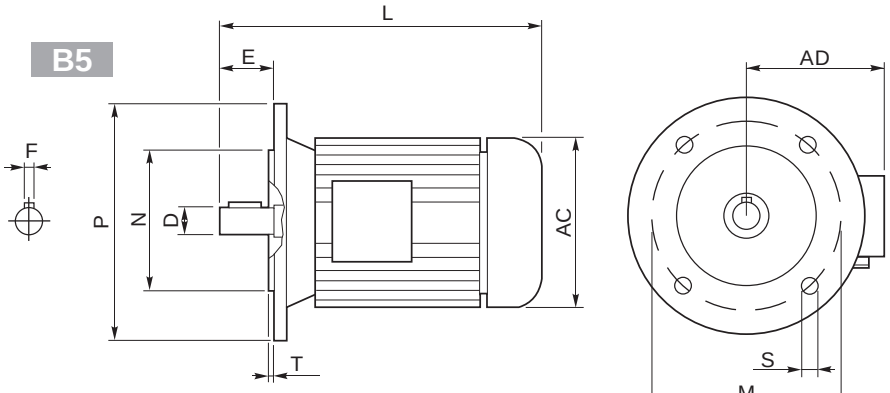
	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	12	75	42 -0.005 -0.020	96.5	155	348	163.5	260	45	M12x32
type **S**	-	-	-	-	-	-	-	-	-	-

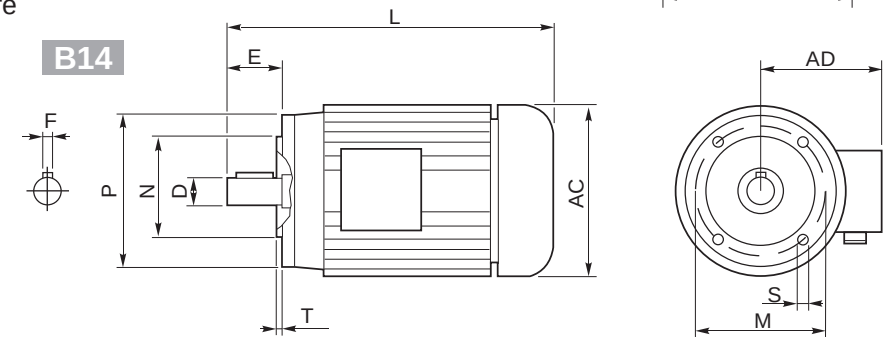
Aluminum IEC motors



1) 230/400V - 50Hz three-phase asynchronous induction motor
2) Class F insulation
3) S1 duty
4) IP 55 protection
5) Not painted
6) Hard plastic sleeve to protect output shaft during the transportation

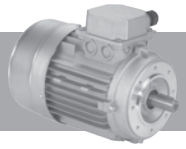
1) 230/400V - 50Hz motore trifase asincrono
2) Isolamento Classe F
3) S1 servizio continuo
4) Protezione IP 55
5) Non verniciato
6) Manicotto di protezione per l'albero motore





Outside dimensions and weight may be different according to manufacturers.
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																							51
132 M	**—**	—	—	**7.5**	49.4	15.0	**4.0**	40.0	9.13				500													51
				9	61.4	18.5																				
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	**—**	—	—																	
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 Isolierungsklas se im Auftrag angeben.

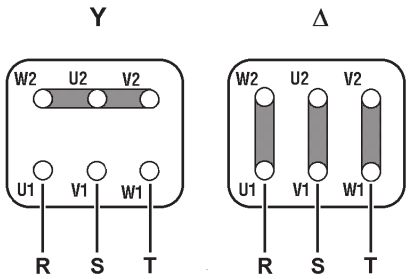
Isolement
CI.F Standard.
Au moment de la commande, spécifiez si vous souhaitez une classe d' isolement différente.

Aislamiento
CI.F standard.
Especificar al efectuar el pedido la clase diferente de aislamiento.

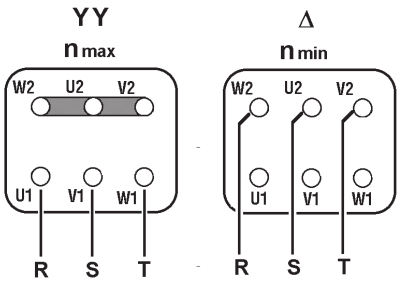
Insulation / Isolamento Isolierung /Aislamiento		E	B	F	H
Max. temp.	C°	120°	130°	155°	175°
	F*	248°	266°	311°	347°

Connections **Collegamenti** **Verbindungselemente** **Branchements** **Conexiones**

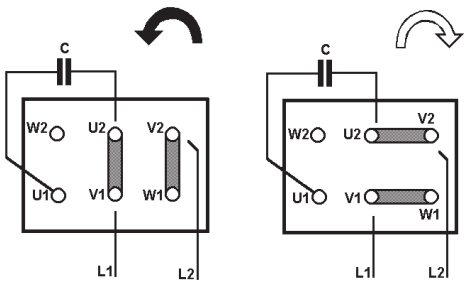
Threephase asyncronous single polarity
Asincrono trifase singola polarità
Asynchronmotor 3-ph eine Drehzahl
Moteur triphasé à une vitesse
Asincrono trifasico de una velocidad



Threephase asyncronous double polarity
Asincrono trifase doppia polarità
Asynchronmotor 3-ph doppelte Drehzahl
Moteur triphasé à deux vitesses
Asincrono trifasico de dos velocidades



Single phase asyncronous
Asincrono monofase
Einphasen-Asynchronmotor
Moteur monophasé
Asincrono monofasico



HYDROMEC SPA IS THE LEGAL RESPONSABLE FOR WARRANTY ISSUES.

PLEASE READ CAREFULLY
The following WARNING and CAUTION information are supplied to you for the proper functioning of your product.
Read ALL instructions prior to operating reducer.
Injury to personnel or reducer failure may be caused by improper installation, maintenance or operation.

WARNING:

• Written authorization is required to operate or use reducers in man lift or people moving devices.

• Check to make sure that certain applications do not exceed the allowable load capacities published in the current catalog.
• Buyer shall be solely responsible for determining the adequacy of the product for any and all uses to which Buyer shall apply the product. The application by Buyer shall not be subject to any implied warranty of fitness for a particular purpose.
• For safety, Buyer or User should provide protective guards over all shaft extensions and any moving apparatus mounted thereon. The User is responsible for checking all applicable safety codes in his area and providing suitable guards. Failure to do so may result in bodily injury and/or damage to equipment.
• Gearboxes operating in high position should have a protective shield for any possible parts falling down for casual accidents where people are moving under them.
• Hot oil and reducers can cause severe burns. Use extreme care when removing lubrication plugs and vents.
• Make certain that the power supply is disconnected before attempting to service or remove any components. Lock out the power supply and tag it to prevent unexpected application power.
• Reducers are not to be considered fail safe or self-locking devices. If these features are required, a properly sized, independent holding device should be utilized.
Reducers should not be used as a brake.
• Any brakes that are used in conjunction with a reducer must be sized or positioned in such a way so as to not subject the reducer to loads beyond the catalog rating.
• Lifting supports including eyebolts are to be used for vertically lifting the gearbox only and not other associated attachments or motors.
• Use of an oil with an EP additive on units with backstops may prevent proper operation of the backstop. Injury to personnel, damage to the reducer or other equipment may result.
• Overhung loads subject shaft bearings and shafts to stress which may cause premature bearing failure and or shaft breakage from bending fatigue, it not sized properly.

SELLING CONDITIONS
Warranty for manufacturing defects will expire one-year after the invoicing date. Hydro-Mec s.p.a. will replace or repair defective parts but will not accept any further changes for direct or indirect damages of any kind. The warraty will become null and void if repairs or changes are carried out without our prior written authorization.
Our company will not be responsible for any direct or indirect damages, caused by a wrong use of the products or for not observing the catalogue/ web indication.
If the process requires total protections the customers should consider additional measures to avoid any contaminations arising from the gearboxes.
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Hydro-Mec s.p.a reserves the right to make any necessary variation without prior notice.

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LEGGERE ATTENTAMENTE
Le seguenti raccomandazioni sono fondamentali per un buon funzionamento del vostro prodotto.
Leggere attentamente tutte le istruzioni prima di azionare il riduttore.
L'inappropriata installazione, manutenzione o funzionamento del riduttore può causare incidenti al personale addetto edanni al riduttore stesso.

ATTENZIONE:

• E' richiesta autorizzazione scritta per azionare riduttori in ascensori o dispositivi per il movimento delle persone.

• Controllare che alcune applicazioni non eccedano la massima capacità di carico ammessa pubblicata in questo catalogo.
• L'acquirente è l'unico responsabile per la determinazione dell'adeguatezza del prodotto per qualcuna o tutte le utilizzazioni che l'acquirente stesso farà del riduttore. L'applicazione dell'acquirente non potrà essere soggetta ad alcuna implicita garanzia di montaggio per uno scopo particolare.
• Per ragioni di sicurezza l'acquirente dovrà provvedere a porre protezioni adeguate su tutta la lunghezza dell'albero a tutti gli organi in movimento.
L'utilizzatore è responsabile del controllo di tutti i codici di sicurezza e la predisposizione di protezioni adeguate. In assenza di tali precauzioni si possono verificare incidenti alle persone e danni agli apparati.
• Su riduttori installati in posizioni elevate utilizzare protezioni adeguate per qualsiasi distacco accidentale di parti nel caso di passaggio di persone al di sotto.
• Olio e riduttori bollenti possono causare gravi ustioni. Usare estrema cautela nella rimozione dei tappi e delle ventole.
• Assicurarsi che la corrente di alimentazione sia scollegata prima di riparare o rimuovere alcun componente. Chiudere l'alimentazione e contrassegnare tale operazione per evitare accensioni accidentali.
• I riduttori non devono essere considerati esenti da guasti o a bloccaggio automatico. Se sono indispensabili queste caratteristiche, deve essere utilizzato un dispositivo indipendente della dimensione adatta. I riduttori non devono essere utilizzati come freni.
• Qualsiasi freno sia utilizzato insieme al riduttore deve essere della giusta grandezza e posizionato in modo da non causare carichi eccessivi non previsti dai dati forniti nel catalogo.
• I dispositivi di sollevamento come le golfare devono essere usati solo per sollevare verticalmente il riduttore e non altri dispositivi associati o motori.
• L'utilizzo di un olio con un additivo EP su gruppi provvisti di dispositivo di arresto possono inficiare l'uso corretto del freno e provocare danni alle persone, alle cose ed al riduttore stesso nonché ad altri apparecchi.
• I Carichi sospesi assoggettano i cuscinetti della vite e la vite stessa a sollecitazioni che possono causare, se non adeguatamente dimensionati, l'usura prematura dei cuscinetti e/o larottura della vite a causa della resistenza alla flessione.

CONDIZIONI DI VENDITA
La garanzia relativa a difetti di costruzione ha la durata di un anno dalla data di fatturazione della merce. Tale garanzia comporta per Hydro-Mec s.p.a. l'onere della sostituzione o riparazione delle parti difettose ma non ammette ulteriori addebiti per eventuali danni diretti o indiretti di qualsiasi natura. La garanzia decade nel caso in cui siano state eseguite riparazioni o apportate modifiche senza nostro consenso scritto.
La nostra ditta non si ritiene responsabile per eventuali danni diretti o indiretti derivanti da un uso improprio dei prodotti e dalla mancata osservanza delle indicazioni riportate a catalogo o web.
Se il processo richiede una protezione totale, i clienti dovrebbero prendere in considerazione misure aggiuntive per evitare qualsiasi contaminazione derivante dai riduttori.
Tutti i diritti sono riservati. Tutte le informazioni riportate nel presente catalogo sono puramente indicative; Hydro-Mec s.p.a si riserva il diritto di apportare qualsiasi variazione necessaria senza preavviso.

HYDRO·MEC

HIGH EFFICENCY GEARBOXES

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