

Stainless steel worm gearboxes

STANDARD FEATURES

Full Stainless Steel Housing

Special housing designed to keep adequate lubrication with low Oil q.ty to avoid internal pressures.

Flange

Fully modular to IEC B14 and Compact integrated motor. NEMA C flange

Options

Protective seals cup to stand high pressure cleaning for hollow or extended shaft version.

Output shaft interchangeable right or left hand output shafts available.

Second bearing

Standard second bearing on motor flange side and two oil seals with vertical motor position.

Stainless Steel Hollow shaft.

100 % Factory pressure leak test.

O-rings on all closing covers.

Output seals (FPM-fkm) with external dust protection lips.

Vent Free Design.

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

oil free

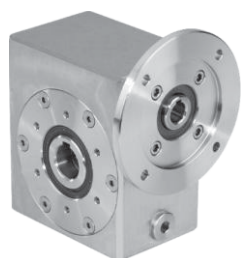


vent free

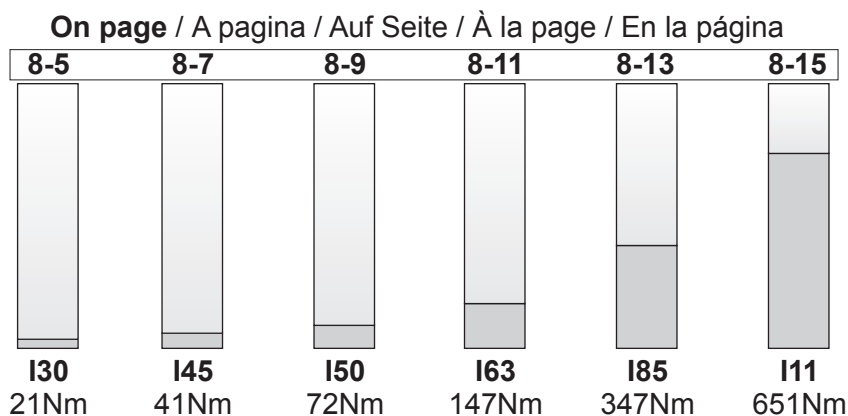


World wide sales network.

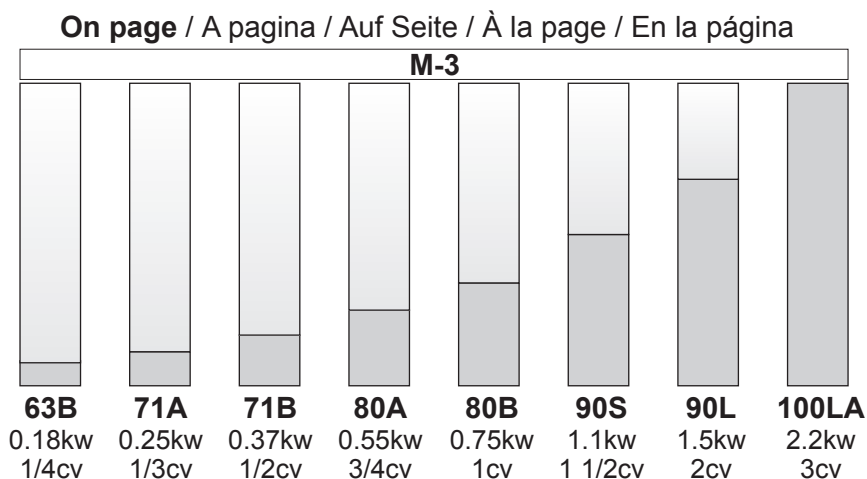
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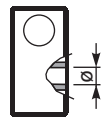
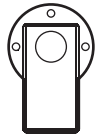
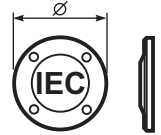
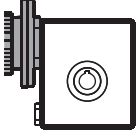
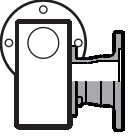

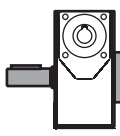
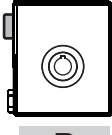
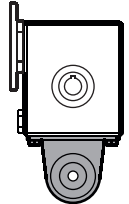
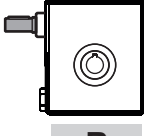


Types / Tipi /
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Tipos →

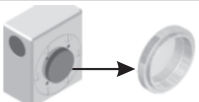
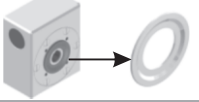


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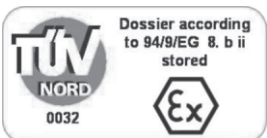
Type - Tipo - Typ Type - Tipo	Size - Grandezza Grösse - Taille Tamaño	Mounting - Montaggio Montage - Fixation Tipo de montaje	Ratio - Rapporto Untersetzung Reduction - Relación	Hub - Mozzo corona Hohlwelle - Arbre creux Nucleo corona	Output shaft Albero lento Abtriebswelle Arbre de sortie Eje solida	Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor																																								
P	I45 I30 I45 I50 I63 I85 I11	 UN	<p>See technical data table</p> <p>Vedi tabella dati tecnici.</p> <p>Technisches Datenblatt beachten</p> <p>Voir Tableau données techniques</p> <p>Ver tabla datos técnicos</p>	 I STANDARD	 Ø	 <table border="1"> <tr> <td>I30</td> <td>-O 56B14 (ø80)</td> <td>-P 63B14 (ø90)</td> <td>-W 56C (ø6.5")</td> </tr> <tr> <td>I45</td> <td>-P 63B14 (ø90)</td> <td>-Q 71B14 (ø105)</td> <td>-W 56C (ø6.5")</td> </tr> <tr> <td>I50</td> <td>-P 63B14 (ø90)</td> <td>-Q 71B14 (ø105)</td> <td>-R 80B14 (ø120)</td> </tr> <tr> <td></td> <td>-W 56C (ø6.5")</td> <td></td> <td></td> </tr> <tr> <td>I63</td> <td>-Q 71B14 (ø105)</td> <td>-R 80B14 (ø120)</td> <td>-T 90B14 (ø140)</td> </tr> <tr> <td></td> <td>-W 56C (ø6.5")</td> <td>-X 143/5TC (ø6.5")</td> <td></td> </tr> <tr> <td>I85</td> <td>-D 80B5 (ø200)</td> <td>-E 90B5 (ø200)</td> <td>-U 100-112B14 (ø160)</td> </tr> <tr> <td></td> <td>-W 56C (ø6.5")</td> <td>-X 143/5TC (ø6.5")</td> <td>-Y 182/4TC (ø8.88")</td> </tr> <tr> <td>I11</td> <td>-D 80B5 (ø200)</td> <td>-E 90B5 (ø200)</td> <td>-U 100-112B14 (ø160)</td> </tr> <tr> <td></td> <td>-X 143/5TC (ø6.5")</td> <td>-Y 182/4TC (ø8.88")</td> <td>AA 213/5TC (ø8.88")</td> </tr> </table>	I30	-O 56B14 (ø80)	-P 63B14 (ø90)	-W 56C (ø6.5")	I45	-P 63B14 (ø90)	-Q 71B14 (ø105)	-W 56C (ø6.5")	I50	-P 63B14 (ø90)	-Q 71B14 (ø105)	-R 80B14 (ø120)		-W 56C (ø6.5")			I63	-Q 71B14 (ø105)	-R 80B14 (ø120)	-T 90B14 (ø140)		-W 56C (ø6.5")	-X 143/5TC (ø6.5")		I85	-D 80B5 (ø200)	-E 90B5 (ø200)	-U 100-112B14 (ø160)		-W 56C (ø6.5")	-X 143/5TC (ø6.5")	-Y 182/4TC (ø8.88")	I11	-D 80B5 (ø200)	-E 90B5 (ø200)	-U 100-112B14 (ø160)		-X 143/5TC (ø6.5")	-Y 182/4TC (ø8.88")	AA 213/5TC (ø8.88")
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 M		 FL		 Z INCH	 S																																									
 B		 BR Full stainless steel Torque arm		$I45 \Rightarrow \varnothing 0.750"$ $I50 \Rightarrow \varnothing 1.000"$ $I63 \Rightarrow \varnothing 1.125"$ $I85 \Rightarrow \varnothing 1.500"$ $I11 \Rightarrow \varnothing 2.000"$																																										
 R																																														

On request

A	Protective seals cup CLOSE TYPE	
B	Protective seals cup OPEN TYPE	
C	Food lube	
D	Nema input flanges	

-M
without flange
Senza flangia

-O
Type R
Tipo R



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.

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

Lifting / sollevamento / hubantriebe / levage / elevación

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

Rotation / rotazione / drehung / rotation / rotation

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

Linear movement / traslazione / linearbewegung / translation / translacion

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

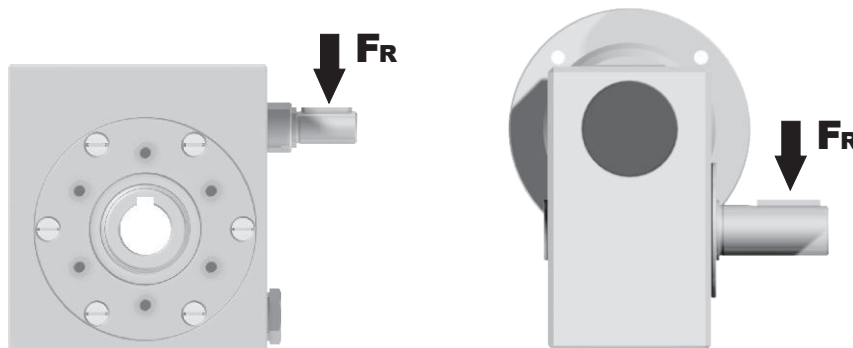
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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

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

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



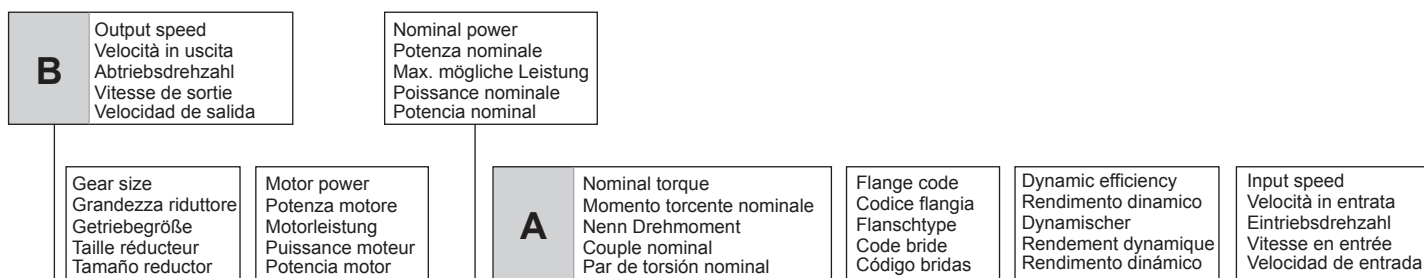
$$F_R \text{ [N]} = \frac{M \text{ [Nm]} \cdot 2000}{d \text{ [mm]}} \cdot f_k$$

$$F_R \text{ [N]} = \frac{M \text{ [lb in]} \cdot 8.9}{d \text{ [in]}} \cdot f_k$$

M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo
f_k	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión 1.15 Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje 1.25 Catena / Chain 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.

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



145 Stainlesssteel - Gear **41Nm** Rating - Stainlesssteel WORM GEARBOXES

QUICK SELECTION / Selezione veloce

input speed (n₁) = 1400 min⁻¹

Output Speed n ₂ [min ⁻¹]	Ratio i	Motor power P _{1M} [kW]	Output torque M _{2M} [Nm]	Service factor f.s.	Nominal power P _{1R} [kW]	Nominal torque M _{2R} [Nm]	B5 motor flanges not available		Available B14 motor flanges		Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-	-	-P	-Q			
200	7	0.37	14	2.2	0.80	30	-	-	63	71	80	2.2	01
140	10	0.37	20	1.5	0.57	30	-	-	B-C	B-C	79	2.2	02
100	14	0.37	27	1.1	0.41	30	-	-	B-C	B-C	77	2.4	03



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

D	Motor flange available Flange disponibili Erhältliche Motorflansche Brides disponibles Bridas disponibles	
B)	Mounting with reduction ring Montaggio con boccolla 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/-socket Position trous bride/barrette à bornes moteur Posición agujeros brida / base motor	
B)	Available without reduction bushes Disponibile anche senza boccolla Auch ohne Reduzierbuchse verfügbar Disponible aussi sans douille de réduction Disponible también sin casquillo	

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