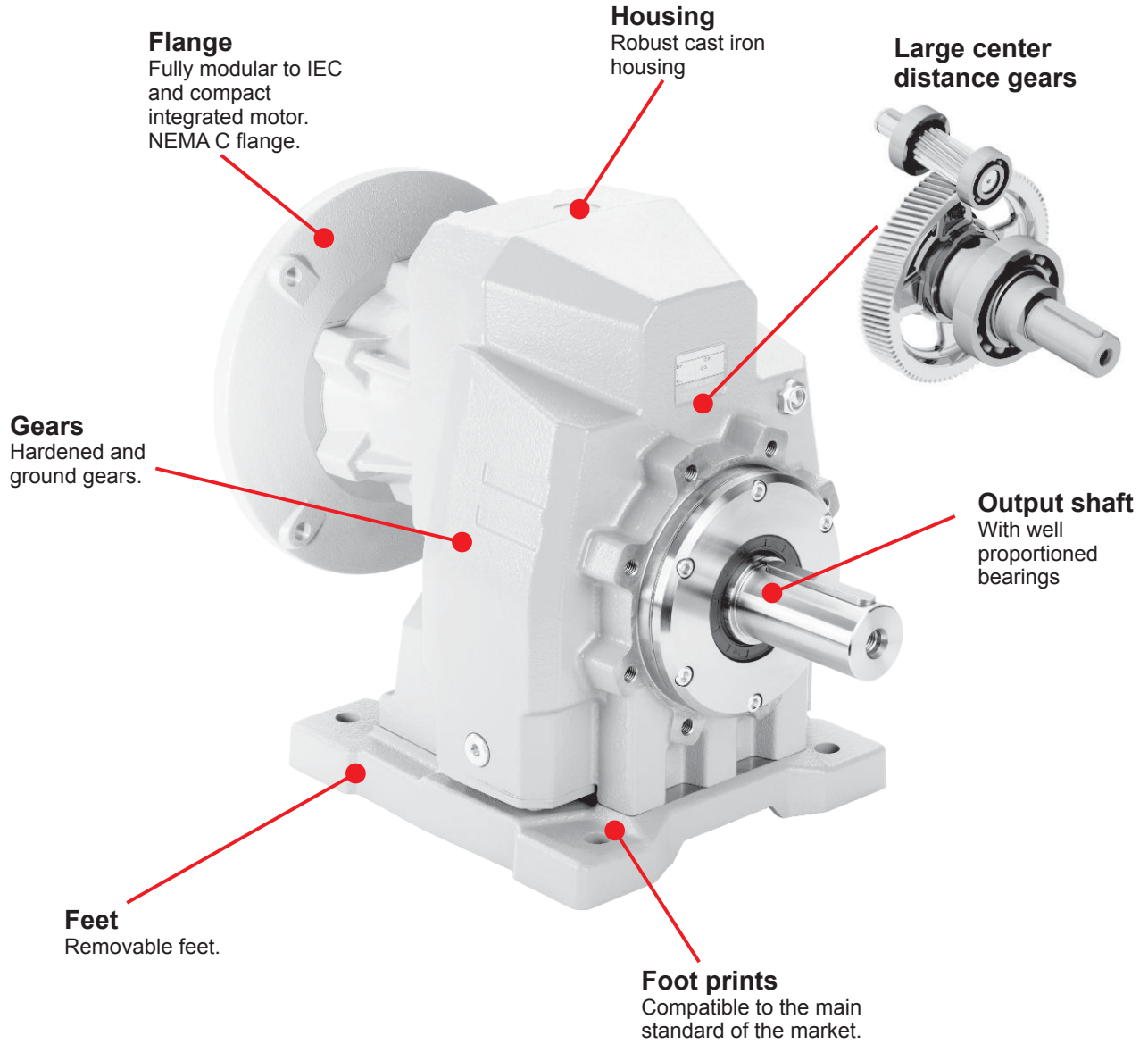


# Cast iron in line gearboxes

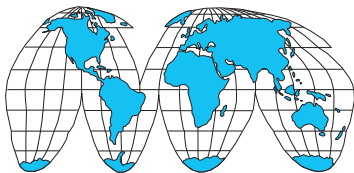
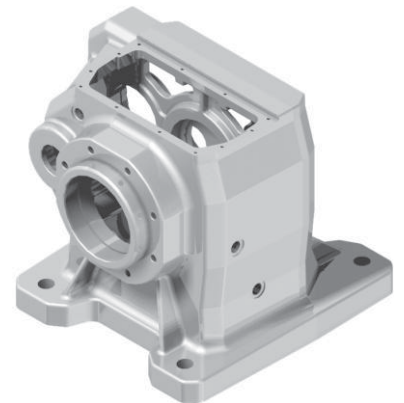
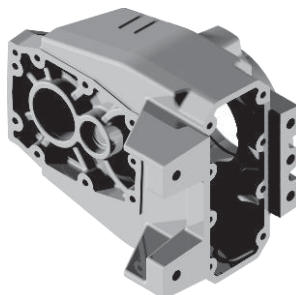
A modular and compact product

5



## Single-piece Cast Iron housing

with high tensile strength. Precision machined for alignment of bearings and gearing



World wide sales network.

# Specific type datasheet on page...

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

1 Stage



Types / Tipi  
Tipen / Tipos  
Tipos

5-5	5-11	5-17	5-23	5-29
<b>501C</b> 225Nm	<b>701C</b> 380Nm	<b>801C</b> 670Nm	<b>851C</b> 700Nm	<b>901C</b> 1175Nm

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

2 and 3 Stages

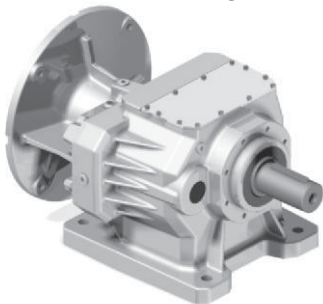


Types / Tipi  
Tipen / Tipos  
Tipos

5-7	5-9	5-13	5-15	5-19	5-21	5-25	5-27	5-31	5-33
<b>502C</b> 320Nm	<b>503C</b> 320Nm	<b>702C</b> 675Nm	<b>703C</b> 675Nm	<b>802C</b> 900Nm	<b>803C</b> 900Nm	<b>852C</b> 1600Nm	<b>853C</b> 1800Nm	<b>902C</b> 2100Nm	<b>903C</b> 2100Nm

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

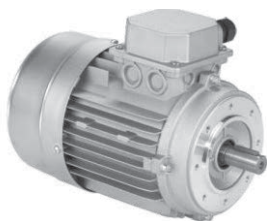
2 and 3 Stages



Types / Tipi  
Tipen / Tipos  
Tipos

5-35	5-37	5-39	5-41
<b>1002</b> 2900Nm	<b>1003</b> 3000Nm	<b>1102</b> 4500Nm	<b>1103</b> 4600Nm

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



Types / Tipi  
Tipen / Tipos  
Tipos

M-1									
<b>56A</b> <b>56B</b>	<b>63A</b> <b>63B</b>	<b>71A</b> <b>71B</b>	<b>80A</b> <b>80B</b>	<b>90S</b> <b>90L</b>	<b>100LA</b> <b>100LB</b>	<b>112M</b>	<b>132S</b> <b>132M</b>	<b>160M</b> <b>160L</b>	<b>180M</b> <b>180L</b>

Type - Tipo - Typ  
Type - Tipo

Size - Grandezza - Grösse  
Taille - Tomafío

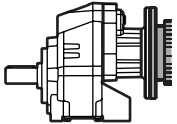
Mounting - Montaggio  
Montage - Fixation  
Tipo de montaje

**P**

**702C**

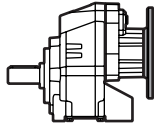
**-F**

Cast iron coaxial gear boxes  
Riduttori coassiali in Ghisa



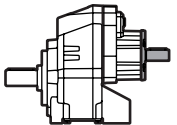
With IEC motor

**M**



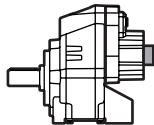
With motor flange

**P**



With male input shaft

**R**



Modular base

**B**



Not available for:  
701C, 801C,  
851C, 901C,  
852C, 902C,  
1002, 1102,  
1003, 1103.

**1** Stage  
Riduzione  
Stufe  
Trains  
Etapas

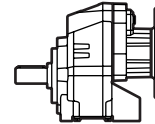
**501C**  
**701C**  
**801C**  
**851C**  
**901C**

**2** Stages  
Riduzioni  
Stufen  
Trains  
Etapas

**502C**  
**702C**  
**802C**  
**852C**  
**902C**  
**1002**  
**1102**

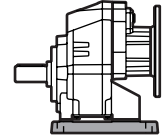
**3** Stages  
Riduzioni  
Stufen  
Trains  
Etapas

**503C**  
**703C**  
**803C**  
**853C**  
**903C**  
**1003**  
**1103**



Without flange / feet

**-N**



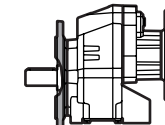
Mounted feet

**B..**

Feet / piedini

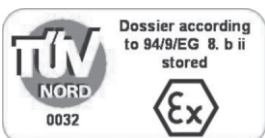
Feet Code	Market reference	G	H	R	L	L1	S
B1	112	18	85	110	87	50	
B2	212/3	18	100	130	107.5		
S1	17	18	75	110	90+20		
S2	27	25	90	110	130		
M1	42/3	25	80	110+120	85		
L4	04	13	80	105			
L5	05	16	100	125			

You see feet code in the chart of the dimensions  
Vedi codice piede nella tabella delle dimensioni

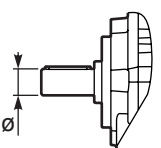
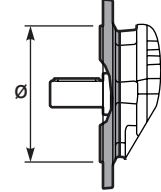



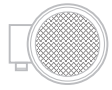



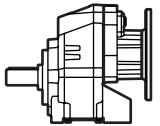
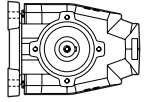
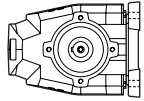
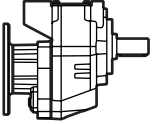
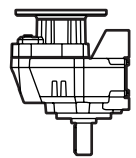
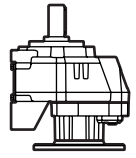
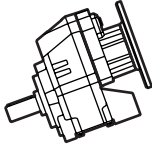


Output flange mounted

**-F**



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.

Ratio - Rapporto Untersetzung Reduction Relación	Output shaft Albero uscita Abtriebswelle Arbre de sortie Eje en salida	Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor	Terminal box position Posizione morsettiera Klemmkastenlage Position boîte à bornes Posición caja de bornes	Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje	
<b>6.57</b>	<b>H</b>	<b>4</b>	<b>-F</b>	<b>B</b>	<b>B3</b>	
<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>	 <p>→ STANDARD</p> <p>501C 502C 503C</p> <p><b>H</b> → <b>∅30</b></p> <p><b>I</b> ⇒ <b>∅35</b></p> <p>701C 702C 703C</p> <p><b>I</b> → <b>∅35</b></p> <p><b>L</b> ⇒ <b>∅38</b></p> <p><b>M</b> ⇒ <b>∅40</b></p> <p>801C 802C 803C</p> <p><b>M</b> → <b>∅40</b></p> <p><b>P</b> ⇒ <b>∅50</b></p> <p>851C 852C 853C</p> <p><b>P</b> → <b>∅50</b></p> <p><b>J</b> ⇒ <b>∅60</b></p> <p>901C 902C 903C</p> <p><b>P</b> ⇒ <b>∅50</b></p> <p><b>J</b> → <b>∅60</b></p> <p>1002 1003</p> <p><b>J</b> → <b>∅60</b></p> <p>1102 1103</p> <p><b>A</b> → <b>∅70</b></p>	 <p>→ STANDARD</p> <p><b>N</b> Senza flangia Without flange</p> <p>501C 502C 503C</p> <p><b>3</b> ⇒ <b>∅160</b></p> <p><b>4</b> ⇒ <b>∅200</b></p> <p><b>5</b> → <b>∅250</b></p> <p>701C 702C 703C</p> <p><b>4</b> ⇒ <b>∅200</b></p> <p><b>5</b> → <b>∅250</b></p> <p>801C 802C 803C</p> <p><b>5</b> ⇒ <b>∅250</b></p> <p><b>6</b> → <b>∅300</b></p> <p>851C 852C 853C</p> <p><b>6</b> ⇒ <b>∅300</b></p> <p><b>7</b> → <b>∅350</b></p> <p>901C 902C 903C 1002 1003</p> <p><b>6</b> ⇒ <b>∅300</b></p> <p><b>7</b> → <b>∅350</b></p> <p><b>8</b> ⇒ <b>∅450</b></p> <p>1102 1103</p> <p><b>7</b> ⇒ <b>∅350</b></p> <p><b>8</b> → <b>∅450</b></p>	<p>Flange Flangia</p>  <p><b>B5</b></p> <p><b>-A</b>=56 (∅120)</p> <p><b>-B</b>=63 (∅140)</p> <p><b>-C</b>=71 (∅160)</p> <p><b>-D</b>=80 (∅200)</p> <p><b>-E</b>=90 (∅200)</p> <p><b>-F</b>=100+112 (∅250)</p> <p><b>-G</b>=132 (∅300)</p> <p><b>-H</b>=160 (∅350)</p> <p><b>-I</b>=180 (∅350)</p> <p><b>-L</b>=200 (∅400)</p> <p><b>CA</b>=225 (∅450)</p> <p><b>B14</b></p> <p><b>-O</b>=56 (∅80)</p> <p><b>-P</b>=63 (∅90)</p> <p><b>-Q</b>=71 (∅105)</p> <p><b>-R</b>=80 (∅120)</p> <p><b>-T</b>=90 (∅140)</p> <p><b>-U</b>=100+112 (∅160)</p> <p><b>-V</b>=132 (∅200)</p> <p>Type R Tipo R</p>  <p>503C</p> <p><b>-1</b> ⇒ <b>∅14</b></p> <p>502C 703C 803C</p> <p><b>-2</b> ⇒ <b>∅19</b></p> <p>702C 802C 853C 903C</p> <p><b>-3</b> ⇒ <b>∅24</b></p> <p>852C 902C 1003 1103</p> <p><b>-4</b> ⇒ <b>∅28</b></p> <p>1002 1102</p> <p><b>-6</b> ⇒ <b>∅42</b></p>	<p>Without flange Senza flangia</p>  <p>503C</p> <p><b>-Z</b> ⇒ <b>∅9</b> (56B5)</p> <p><b>-0</b> ⇒ <b>∅11</b> (63B5)</p> <p><b>-1</b> ⇒ <b>∅14</b> (71B5)</p> <p>502C 703C 803C</p> <p><b>-1</b> ⇒ <b>∅14</b> (71B5)</p> <p><b>-2</b> ⇒ <b>∅19</b> (80B5)</p> <p><b>-3</b> ⇒ <b>∅24</b> (90B5)</p> <p>702C 802C 853C 903C</p> <p><b>-2</b> ⇒ <b>∅19</b> (80B5)</p> <p><b>-3</b> ⇒ <b>∅24</b> (90B5)</p> <p><b>-4</b> ⇒ <b>∅28</b> (100B5)</p> <p>501C</p> <p><b>-4</b> ⇒ <b>∅28</b> (100B5)</p>	 <p><b>A</b></p>  <p><b>B</b></p> <p>STANDARD</p>  <p><b>C</b></p>  <p><b>D</b></p>	 <p><b>B3</b></p> <p>STANDARD</p>  <p><b>B6</b></p>  <p><b>B7</b></p>  <p><b>B8</b></p>  <p><b>V5</b></p>  <p><b>V6</b></p>  <p><b>V8</b></p>

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

Lifting / sollevamento / hubantriebe / levage / elevación

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

Rotation / rotazione / drehung / rotation / rotação

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

Linear movement / traslazione / linearbewegung / translation / translación

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

TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

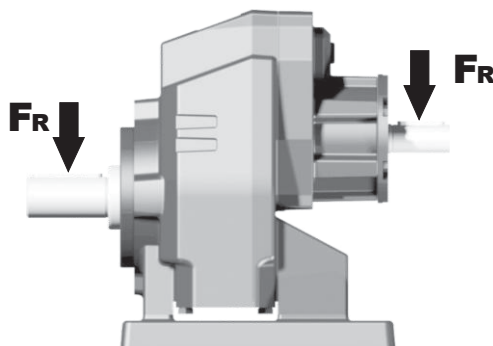
$$M [Nm] = \frac{9550 \cdot P[KW]}{n [rpm]}$$

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

5

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

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



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

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

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

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

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

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

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

**702C** Coaxial - Gear **675Nm** Rating - Cast Iron COAXIAL GEARBOXES

**QUICK SELECTION / Selezione veloce** input speed ( $n_1$ ) = 1400 min<sup>-1</sup>

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Output Shaft 	Ratios code 
							-C	-D	-E	-F	-G	-R	-T	-U	-V			
213	<b>6.57</b>	7.5	312	1.2	8.8	380	B										3018	01
185	<b>7.56</b>	7.5	359	1.1	7.9	390	B										3016	02
159	<b>8.82</b>	7.5	419	1.0	7.1	410	B										3014	03
113	<b>12.39</b>	7.5	588	1.0	7.2	580	B										2018	04
98	<b>14.24</b>	5.5	499	1.2	6.4	600	B										2016	05

**C** Ratio  
Rapporto  
Untersetzung  
Rapport de réduction  
Relación

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

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

Output shaft diam.  
Diam. albero uscita  
Durchmesser abtriebswelle  
Diametre arbre lent  
Diametro eje de salida

Notes  
Note  
Anmerkungen  
Note  
Notas

**fs**

Type of load and starts per hour Tipo di carico e avviamenti per ora		Oper. hours per day Ore di funz. giorn.		
		3 h	10 h	24 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

**D** Motor flange available  
Flange disponibili  
Erhältliche Motorflansche  
Brides disponibles  
Bridas disponibles

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

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

**B)** Available without reduction bushes  
Disponibile anche senza boccia  
Auch ohne Reduzierbuchse verfügbar  
Disponible aussi sans douille de réduction  
Disponible tambien sin casquillo

<b>A</b>	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>B</b>	Select output speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
<b>C</b>	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
<b>D</b>	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)