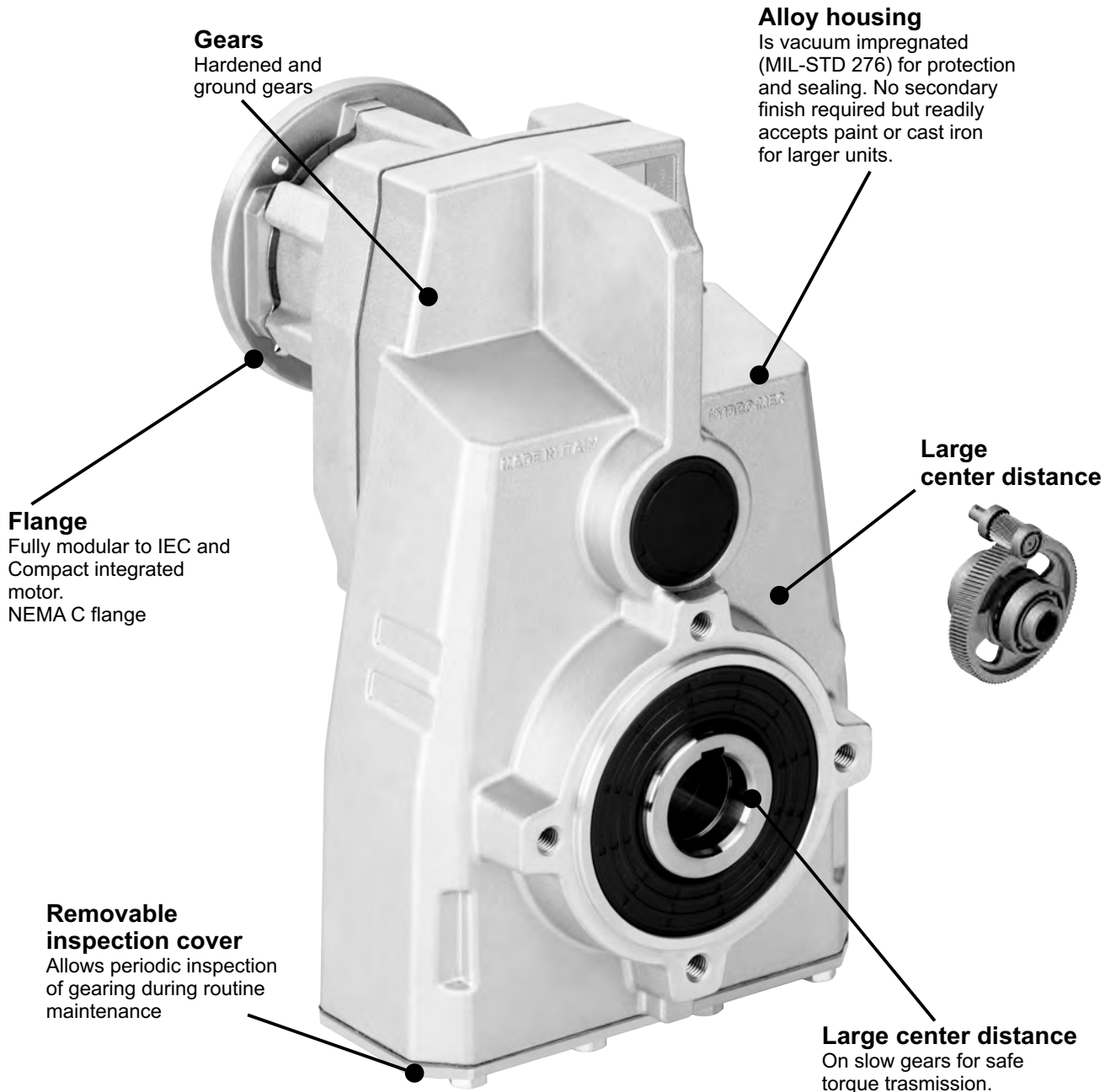


Aluminum & cast iron shaft mounted gearboxes

A modular and compact product

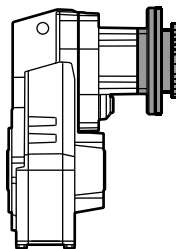
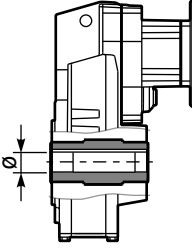
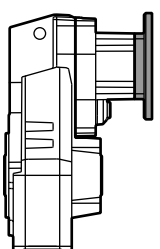
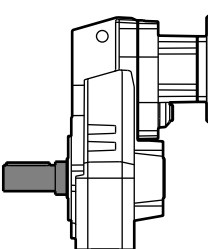
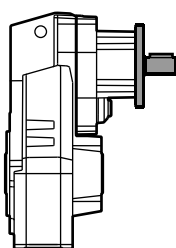
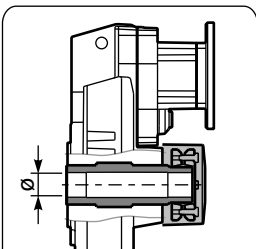
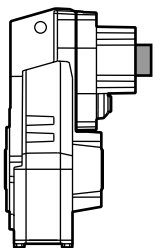
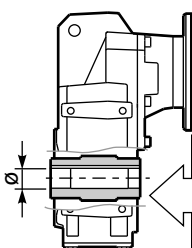


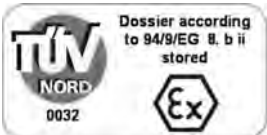
Single-piece aluminum / Cast Iron housing

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



World wide sales network.

Type - Tipo - Typ - Tipo	Size - Grandezza Grösse - Tomaño	Mounting - Montaggio Montage - Tipo de montaje	Rapporto - Ratio Untersetzung - Relacion
M	FA42	C	10.04
<p>Shaft mounted helical Riduttori ad assi paralleli</p>  <p>With IEC motor</p> <p style="text-align: center;">M</p>	<p>1 Stage Riduzione Stufe Etapa</p> <p>2 Stages Riduzioni Stufen Etapas</p> <p>3 Stages Riduzioni Stufen Etapas</p>	 <p>Hollow output shaft</p> <p style="text-align: center;">C</p>	<p>See technical data table</p> <p>Vedi tabelle dati tecnici.</p> <p>Technisches Datenblatt beachten.</p> <p>Ver tabla datos técnicos</p>
 <p>With motor flange</p> <p style="text-align: center;">P</p>	<p style="text-align: center;">Aluminum/Alluminio/Aluminium/Aluminio</p> <p style="text-align: center;">FA41 FA61</p> <p style="text-align: center;">FS20</p>	 <p>Single output shaft</p> <p style="text-align: center;">A</p>	
 <p>With male input shaft</p> <p style="text-align: center;">R</p>	<p style="text-align: center;">Cast Iron/Ghisa/Grauguss/Fundicion</p> <p style="text-align: center;">FA42 FA52 FA62</p> <p style="text-align: center;">FA43 FA53 FA63</p> <p style="text-align: center;">FS50</p>	 <p>Shrink Disk</p> <p style="text-align: center;">D</p> <p>Only on request for Q.ty A richiesta per quantità</p>	
 <p>Modular base</p> <p style="text-align: center;">B</p>	<p style="text-align: center;">FC81</p> <p style="text-align: center;">FC72 FC82</p> <p style="text-align: center;">FC73 FC83</p>	 <p>Stainless steel hub</p> <p style="text-align: center;">I</p> <p>On request for q.ty Stainless steel hub Mozzo in acciaio Inox Edelstahlhohlwelle Nucleo corona de acero Inox</p>	

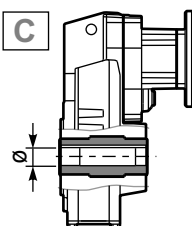
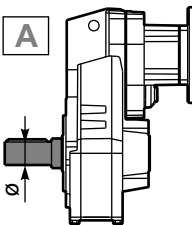
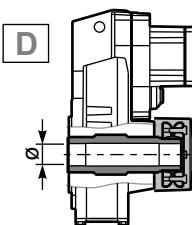
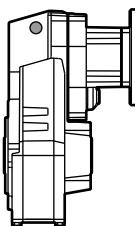
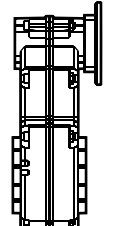
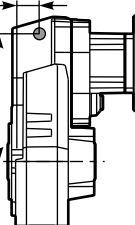
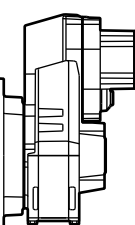
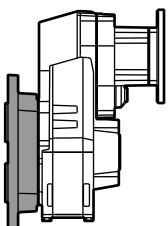
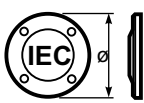




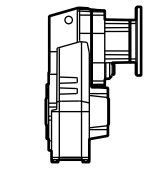
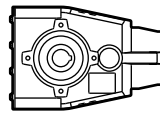
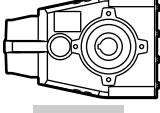
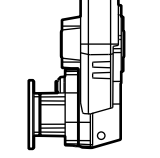
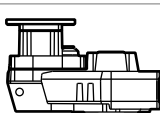
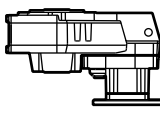


A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX

On request we can deliver our products according to the ATEX

Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern

A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

Output shaft Albero uscita Ausgangsflansch Brida en solida	Type - Tipo Typ - Tipo	Output flange Flangia di uscita Ausgangs Flansch Brida en salida	Motor size Grandezza motore Motor Grösse Tamaño motor	Terminal box position Posizione morsetteria Klemmkastenlage Posición caja de bornes	Mounting position Posizione montaggio Einbaulage Position de montage																																												
<p>D</p>  <p>STANDARD Only on request for Q.ty A richiesta per quantità</p> <p>FS20</p> <p>B → $\varnothing 20$</p> <p>FA41 FA42 FA43 FS50</p> <p>D → $\varnothing 30$</p> <p>E → $\varnothing 35$</p> <p>FA52 FA53 FA61 FA62 FA63</p> <p>E → $\varnothing 35$</p> <p>F → $\varnothing 40$</p> <p>FC72 FC73</p> <p>F → $\varnothing 40$</p> <p>G → $\varnothing 45$</p> <p>FC81 FC82 FC83</p> <p>H → $\varnothing 50$</p> <p>I → $\varnothing 55$</p> <p>A</p>  <p>Single output shaft</p> <p>M FA41/2/3 → $\varnothing 30$</p> <p>N FA52/3 FA61/2/3 → $\varnothing 35$</p> <p>O FC72/3 → $\varnothing 40$</p> <p>K FC81/2/3 → $\varnothing 50$</p> <p>D</p>  <p>Shrink disk</p> <p>Q FA42/3 → $\varnothing 30$</p> <p>T FA52/3 FA62/3 → $\varnothing 35$</p> <p>U FC72/3 → $\varnothing 40$</p> <p>V FC82/3 → $\varnothing 50$</p>	<p>ST</p>  <p>ST</p> <p>Foro standard Standard bore</p>  <p>only for FS20</p> <p>ST</p> <p>Senza braccio di reazione Without reaction arm</p>  <p>Available torque arms, see our web site.</p> <p>Bracci di reazione disponibili, vedi il nostro sito web.</p> <p>S..</p>  <p>-F</p> <p>Whit output flange con flangia uscita</p>	<p>N</p>  <p>N Senza flangia Without flange</p> <p>FS20</p> <p>1 → $\varnothing 140$</p> <p>FA41 FA42 FA43</p> <p>2 → $\varnothing 160$</p> <p>3 → $\varnothing 200$</p> <p>4 → $\varnothing 250$</p> <p>FA52 FA53 FA61 FA62 FA63</p> <p>4 → $\varnothing 250$</p> <p>5 → $\varnothing 300$</p> <p>FC72 FC73</p> <p>4 → $\varnothing 250$</p> <p>5 → $\varnothing 300$</p> <p>6 → $\varnothing 350$</p> <p>FC81 FC82 FC83</p> <p>5 → $\varnothing 300$</p> <p>6 → $\varnothing 350$</p> <p>7 → $\varnothing 400$</p>	<p>C</p> <p>Standard Flange Flangia Standard</p>  <table border="1"> <tr> <td>B5</td> <td>B14</td> </tr> <tr> <td>A=56 ($\varnothing 120$)</td> <td>O=56 ($\varnothing 80$)</td> </tr> <tr> <td>B=63 ($\varnothing 140$)</td> <td>P=63 ($\varnothing 90$)</td> </tr> <tr> <td>C=71 ($\varnothing 160$)</td> <td>Q=71 ($\varnothing 105$)</td> </tr> <tr> <td>D=80 ($\varnothing 200$)</td> <td>R=80 ($\varnothing 120$)</td> </tr> <tr> <td>E=90 ($\varnothing 200$)</td> <td>T=90 ($\varnothing 140$)</td> </tr> <tr> <td>F=100+112 ($\varnothing 250$)</td> <td>U=100+112 ($\varnothing 160$)</td> </tr> <tr> <td>G=132 ($\varnothing 300$)</td> <td>V=132 ($\varnothing 200$)</td> </tr> <tr> <td>H=160 ($\varnothing 350$)</td> <td></td> </tr> <tr> <td>I=180 ($\varnothing 350$)</td> <td></td> </tr> </table> <p>Type R / Tipo R</p> <table border="1"> <tr> <td>FA43 FS20 FS50</td> <td>FA42 FA53 FA63 FC73</td> </tr> <tr> <td>1 → $\varnothing 14$</td> <td>2 → $\varnothing 19$</td> </tr> <tr> <td>FA52 FA62 FC72 FC83</td> <td>FC82</td> </tr> <tr> <td>3 → $\varnothing 24$</td> <td>4 → $\varnothing 28$</td> </tr> </table> <p>Without flange / Senza flangia</p> <table border="1"> <tr> <td>FA43 FS20 FS50</td> <td>FA42 FA53 FA63 FC73</td> </tr> <tr> <td>Z → $\varnothing 9$ (56B5)</td> <td>1 → $\varnothing 14$ (71B5)</td> </tr> <tr> <td>0 → $\varnothing 11$ (63B5)</td> <td>2 → $\varnothing 19$ (80B5)</td> </tr> <tr> <td>1 → $\varnothing 14$ (71B5)</td> <td>3 → $\varnothing 24$ (90B5)</td> </tr> <tr> <td>FA52 FA62 FC72 FC83</td> <td>FC82</td> </tr> <tr> <td>2 → $\varnothing 19$ (80B5)</td> <td>5 → $\varnothing 38$ (132B5)</td> </tr> <tr> <td>3 → $\varnothing 24$ (90B5)</td> <td>6 → $\varnothing 42$ (160B5)</td> </tr> <tr> <td>4 → $\varnothing 28$ (100B5)</td> <td>7 → $\varnothing 48$ (180B5)</td> </tr> </table> <p>→ STANDARD</p>	B5	B14	A =56 ($\varnothing 120$)	O =56 ($\varnothing 80$)	B =63 ($\varnothing 140$)	P =63 ($\varnothing 90$)	C =71 ($\varnothing 160$)	Q =71 ($\varnothing 105$)	D =80 ($\varnothing 200$)	R =80 ($\varnothing 120$)	E =90 ($\varnothing 200$)	T =90 ($\varnothing 140$)	F =100+112 ($\varnothing 250$)	U =100+112 ($\varnothing 160$)	G =132 ($\varnothing 300$)	V =132 ($\varnothing 200$)	H =160 ($\varnothing 350$)		I =180 ($\varnothing 350$)		FA43 FS20 FS50	FA42 FA53 FA63 FC73	1 → $\varnothing 14$	2 → $\varnothing 19$	FA52 FA62 FC72 FC83	FC82	3 → $\varnothing 24$	4 → $\varnothing 28$	FA43 FS20 FS50	FA42 FA53 FA63 FC73	Z → $\varnothing 9$ (56B5)	1 → $\varnothing 14$ (71B5)	0 → $\varnothing 11$ (63B5)	2 → $\varnothing 19$ (80B5)	1 → $\varnothing 14$ (71B5)	3 → $\varnothing 24$ (90B5)	FA52 FA62 FC72 FC83	FC82	2 → $\varnothing 19$ (80B5)	5 → $\varnothing 38$ (132B5)	3 → $\varnothing 24$ (90B5)	6 → $\varnothing 42$ (160B5)	4 → $\varnothing 28$ (100B5)	7 → $\varnothing 48$ (180B5)	<p>B</p>  <p>A</p>  <p>B</p> <p>STANDARD</p>  <p>C</p>  <p>D</p>	<p>H1</p>  <p>H1</p> <p>STANDARD</p>  <p>H4</p>  <p>H3</p>  <p>H2</p>  <p>H5</p>  <p>H6</p> <p>Specify only for vertical positions</p> <p>Specificare solo per posizione verticale</p>
B5	B14																																																
A =56 ($\varnothing 120$)	O =56 ($\varnothing 80$)																																																
B =63 ($\varnothing 140$)	P =63 ($\varnothing 90$)																																																
C =71 ($\varnothing 160$)	Q =71 ($\varnothing 105$)																																																
D =80 ($\varnothing 200$)	R =80 ($\varnothing 120$)																																																
E =90 ($\varnothing 200$)	T =90 ($\varnothing 140$)																																																
F =100+112 ($\varnothing 250$)	U =100+112 ($\varnothing 160$)																																																
G =132 ($\varnothing 300$)	V =132 ($\varnothing 200$)																																																
H =160 ($\varnothing 350$)																																																	
I =180 ($\varnothing 350$)																																																	
FA43 FS20 FS50	FA42 FA53 FA63 FC73																																																
1 → $\varnothing 14$	2 → $\varnothing 19$																																																
FA52 FA62 FC72 FC83	FC82																																																
3 → $\varnothing 24$	4 → $\varnothing 28$																																																
FA43 FS20 FS50	FA42 FA53 FA63 FC73																																																
Z → $\varnothing 9$ (56B5)	1 → $\varnothing 14$ (71B5)																																																
0 → $\varnothing 11$ (63B5)	2 → $\varnothing 19$ (80B5)																																																
1 → $\varnothing 14$ (71B5)	3 → $\varnothing 24$ (90B5)																																																
FA52 FA62 FC72 FC83	FC82																																																
2 → $\varnothing 19$ (80B5)	5 → $\varnothing 38$ (132B5)																																																
3 → $\varnothing 24$ (90B5)	6 → $\varnothing 42$ (160B5)																																																
4 → $\varnothing 28$ (100B5)	7 → $\varnothing 48$ (180B5)																																																

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / POTENCIA NECESARIA

Lifting / sollevamento / hubantriebe / elevación

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

Rotation / rotazione / drehung / rotation

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

Linear movement / traslazione / linearbewegung / translacion

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

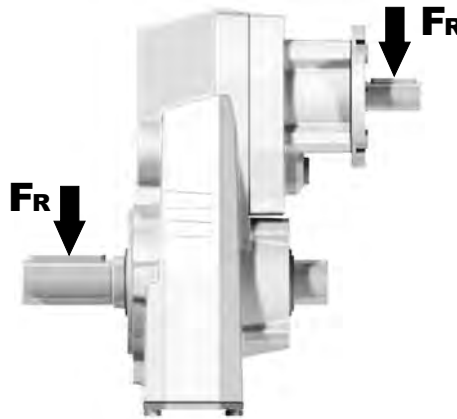
TORQUE / COPPIA / DREHMOMENT / PAR

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

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

RADIAL LOADS / CARICHI RADIALI / RADIALE / CARGA RADIAL

- 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.
- 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 / Par torsion	
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diámetro primitivo	
f_k	Coefficiente di trasformazione / Factor / Faktor / Coefficiente de transmisión 1.15 Ingranaggi / Gearwheels / Zahnrad / Engranaje 1.25 Catena / Chain sprochets / Antriebskette / Cadena 1.75 Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Correa trapezoidal 2.50 Cinghia piatta / Flat-belt pulley / Flachzahnriem. / 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.
- 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 / Cómo seleccionar un reductor

B Output speed
Velocità in uscita
Abtriebsdrehzahl
Velocidad de salida

Nominal power
Potenza nominale
Max. mögliche Leistung
Potencia nominal

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

Flange code
Codice flangia
Flanschtype
Código bridas

Input speed
Velocità in entrata
Eintriebsdrehzahl
Velocidad de entrada

Gear size
Grandezza riduttore
Getriebegröße
Tamaño reductor

Motor power
Potenza motore
Motorleistung
Potencia motor

FA42

Compact- Gear
300Nm

Rating - Aluminum
SHAFT MOUNTED HELICAL

QUICK SELECTION / Selezione veloce										input speed (n_1) = 1400 min ⁻¹						
Output Speed n_2 [min ⁻¹]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges				Available B14 motor flanges				Output Shaft 	Ratios code
							B	C	D	E	Q	R	T	U		
167	8.38	4	215	1.0	4.0	220	B				C	C			2821	-
139	10.04	3	194	1.1	3.4	220	B				C	C			2818	
114	12.33	3	238	1.0	3.0	240	B				C	C			2813	
92	15.16	2.2	216	1.1	2.4	240	B				C	C			1921	

C Ratio
Rapporto
Untersetzung
Relación

Transmitted torque
Momento torcente trasmesso
Mögliche Drehmomente
Par transmitido

Service factor
Fattore di servizio
Betriebsfaktor
Factor de servicio

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

Notes
Note
Anmerkungen
Notas

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

D	Motor flange available Flange disponibili Erhältliche Motorflansche Bridas disponibles
B)	Mounting with reduction ring Montaggio con boccia di riduzione Reduzierhülsen Montaje con casquillo de reducción
C)	Motor flangeholes position/terminal box position Posizione fori flangia/basetta motore Bohrungsposition am Motorflansch/-sockel Posición agujeros brida / base motor
B)	Available without reduction bushes Disponibile anche senza boccia Auch ohne Reduzierbuchse verfügbar 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	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select output speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	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	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)	Seleccionar la brida disponible (sobre pedido)