

Réducteurs à axes parallèles, en aluminium et en fonte

Aluminium & cast iron shaft mounted gearboxes

Un produit compact et modulaire
A modular and compact product

A modular and compact product

Engrenages en acier trempé et rectifiés

Gears

Hardened and ground gears

Carcasse aluminium imprégnée à vide

Alloy housing

Is vacuum impregnated (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint or cast iron for larger units.

Distance déportée Large center distance



Bride modulaire

Flange

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

Couvercle d'inspection amovible

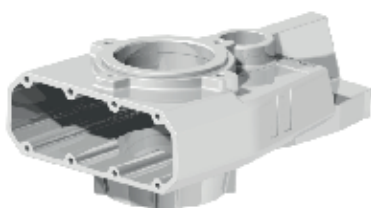
Removable inspection cover

Allows periodic inspection of gearing during routine maintenance

Carcasse en fonte d'une seule pièce

Single-piece aluminum / Cast Iron housing

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



Distance déportée pour une meilleure transmission du couple

Large center distance

On slow gears for safe torque transmission.



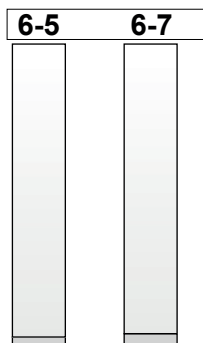
World wide sales network.

Fiche technique spécifique en page

Specific type datasheet on page

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3 Stage

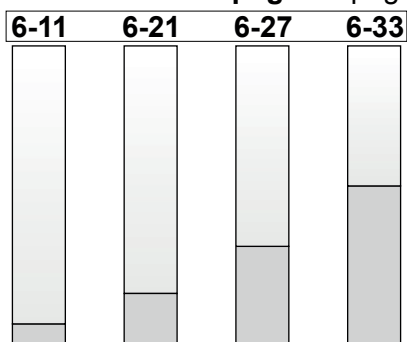


Types / Tipi /
Tipen / Types /
Tipos

FS10 60Nm
FS20 90Nm

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1 Stage

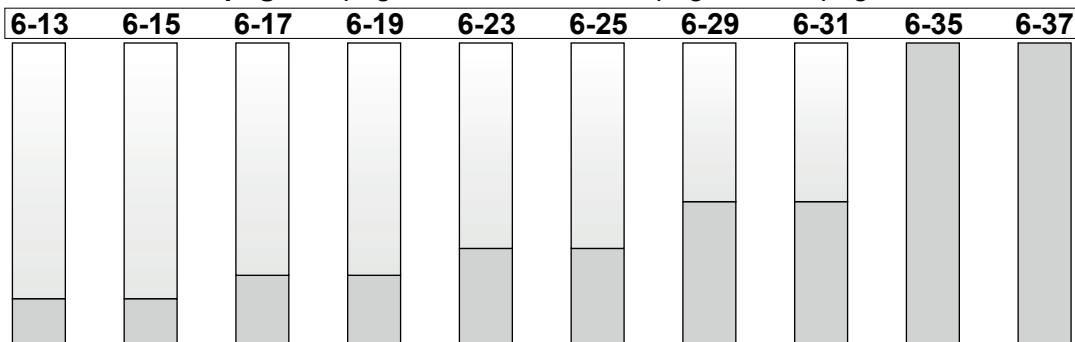


Types / Tipi /
Tipen / Types /
Tipos

FA41 225Nm
FC61 380Nm
FC71 670Nm
FC81 1175Nm

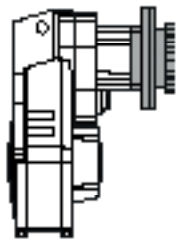
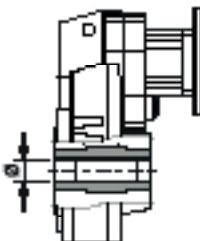
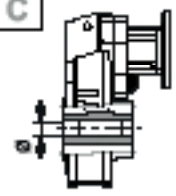
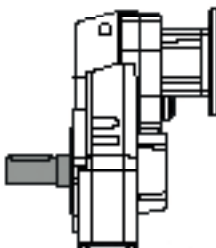
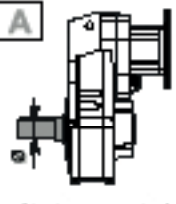
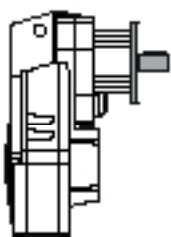
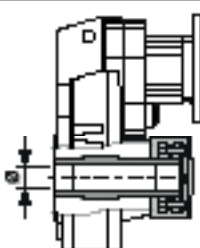
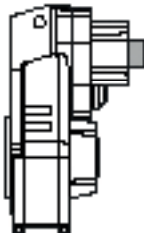
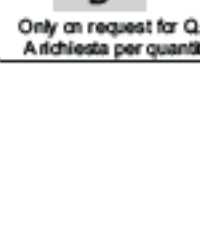
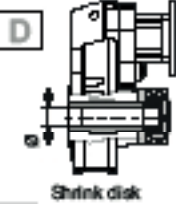
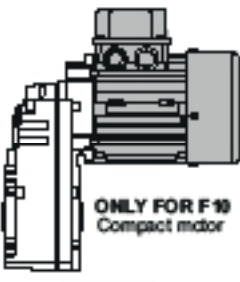
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2 and 3 Stage



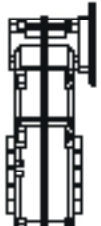
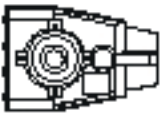
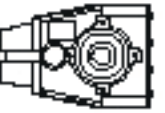
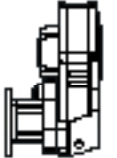
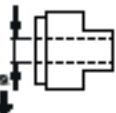
Types / Tipi /
Tipen / Types /
Tipos

FA42 320Nm
FA43 320Nm
FA52 490Nm
FA53 510Nm
FC62 675Nm
FC63 675Nm
FC72 900Nm
FC73 900Nm
FC82 2100Nm
FC83 2100Nm

Type - Tipo - Typ Type - Tipo	Size - Grandezza - GröÙe Talla - Tamaño	Mounting - Montaggio Montage - Fixation Tipo de montaje	Rapporto - Ratio Untersetzung Reduction - Reduccion	Output shaft Albero uscita Arbre de sortie Eje en salida
M	FA42	C	10.04	-D
Shaft mounted helical Riduttori ad assi paralleli	1 Stage Riduzione Stufe Trains Etapas 2 Stages Riduzioni Stufen Trains Etapas 3 Stages Riduzioni Stufen Trains Etapas			
	Aluminum/Alluminio/Aluminium/Aluminio		See technical data table Vedi tabella dati tecnici. Technisches Datenblatt beachten Voir Tableau données techniques Ver tabla datos técnicos	
With IEC motor M	FA41	Hollow output shaft C		→ STANDARD → Only on request for Q.ty A richiesta per quantità
	FA32 FA42 FA52			FS10 -J → ø17 FS20 -B → ø20 FA32-3 -C → ø25 FA41 FA42 FA43 -C → ø25 -D → ø30 -E → ø35 FA52 FA53 FC81 FC82 FC83 -E → ø35 -F → ø40 FC71 FC72 FC73 -F → ø40 -G → ø45 FC81 FC82 FC83 -H → ø50 -I → ø55
With motor flange P	FA33 FA43 FA53	Single output shaft A		
	Cast Iron/Ghisa/Grauguss/Fonle/Fundición			Single output shaft
With male input shaft R	FC61 FC71 FC81	Shrink Disk D		-L FA32/3 → ø25 -M FA41/2/3 → ø30 -N FA52/3 → ø35 -O FC71/2/3 → ø40 -K FC81/2/3 → ø50
	FC62 FC72 FC82			
Modular base B	FC63 FC73 FC83	Only on request for Q.ty A richiesta per quantità		Shrink disk
Not available for: FC61, FC71, FC81, FC82.				-Q FA42/3 → ø30 -T FA52/3 → ø35 -U FC72/3 → ø40 -V FC82/3 → ø50
				
ONLY FOR F10 Compact motor C				



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

Type - Tipo - Typ Types - Tipo	Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Größe Grandeur moteur - Tamaño motor	Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje	Input bore Foro entrata Eingangshohlwelle Trou d'entrée Eje hueco de entrada	Terminal box position Posizione morsettiere Klemmkastenlage Position boîte à bornes Posición caja de bornes
ST	N	-C	H1	-	
 ST Foro standard Standard bore  ST Senza braccio di reazione Without reaction arm  -F With output flange con flangia uscita	N Senza flangia Without flange FS20 1 ⇒ $\varnothing 140$ FA32-3 FA41-2-3 2 ⇒ $\varnothing 160$ 3 ⇒ $\varnothing 200$ 4 ⇒ $\varnothing 250$ FA52 FA53 FC61 FC62 FC63 4 ⇒ $\varnothing 250$ FC71 FC72 FC73 4 ⇒ $\varnothing 250$ 5 ⇒ $\varnothing 300$ FC61 FC62 FC63 5 ⇒ $\varnothing 300$ 6 ⇒ $\varnothing 350$ 7 ⇒ $\varnothing 400$	Flange Flangia B5 -A=56 ($\varnothing 120$) -B=63 ($\varnothing 140$) -C=71 ($\varnothing 160$) -D=80 ($\varnothing 200$) -E=90 ($\varnothing 200$) -F=100+112 ($\varnothing 250$) -G=132 ($\varnothing 300$) -H=160 ($\varnothing 350$) -I=180 ($\varnothing 350$) B14 -O=56 ($\varnothing 80$) -P=63 ($\varnothing 90$) -Q=71 ($\varnothing 105$) -R=80 ($\varnothing 120$) -T=90 ($\varnothing 140$) -U=100+112 ($\varnothing 160$) -V=132 ($\varnothing 200$) COMPACT CZ = 56 C0 = 63 Type R Tipo R FA33 FA43 FS10 FS20 -1 ⇒ $\varnothing 14$ FA32 FA42 FA53 FC63 FC73 -2 ⇒ $\varnothing 19$ FA52 FC62 FC72 FC83 -3 ⇒ $\varnothing 24$ FC82 -4 ⇒ $\varnothing 28$ With out flange Senza flangia -M ⇒ With coupling FA33 FA43 FS10 FS20 -Z ⇒ $\varnothing 9$ (58B5) -0 ⇒ $\varnothing 11$ (63B5) -1 ⇒ $\varnothing 14$ (71B5) FA32 FA42 FA53 FC63 FC73 -1 ⇒ $\varnothing 14$ (71B5) -2 ⇒ $\varnothing 19$ (80B5) -3 ⇒ $\varnothing 24$ (90B5) FA52 FC62 FC72 FC83 -2 ⇒ $\varnothing 19$ (80B5) -3 ⇒ $\varnothing 24$ (90B5) -4 ⇒ $\varnothing 28$ (100B5) FA41 -4 ⇒ $\varnothing 28$ (100B5)	 H1 STANDARD  H4  H3  H2  H5  H6	- Nothing indication: standard bore Nessuna indicazione: foro standard COUPLING  A = 9mm B = 11mm C = 14mm D = 19mm E = 24mm F = 28mm 0 Ready for input coupling Pronto posto per giunto 	With Type M specify terminal box position Con tipo M specificare posizione morsettiere  A  B STANDARD  C  D

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

Lifting / sollevamento / hubantriebe / levage / elevación

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

Rotation / rotazione / drehung / rotation / rotation

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

Linear movement / traslazione / linearbewegung / translation / translacion

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

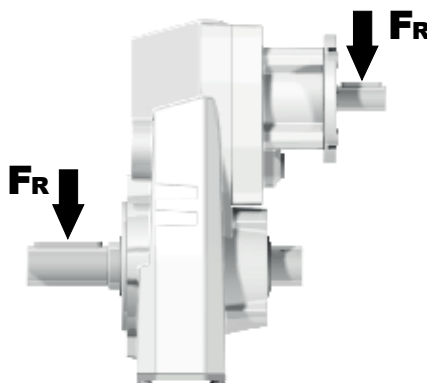
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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

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

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



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

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

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

B

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

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

A

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

Flange code
Codice flangia
Flanschtype
Code bride
Código bridas

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

FA42

Compact- Gear
320Nm

Rating - Aluminum
SHAFT MOUNTED HELICAL

QUICK SELECTION / Selezione veloce											input speed (n _i) = 1400 min ⁻¹							
Output Speed	Ratio	Motor power	Output torque	Service factor	Nominal power	Nominal torque	Available B5 motor flanges					Available B14 motor flanges				Output Shaft		
n ₂ [min ⁻¹]	i	P _{1M} [kW]	M _{2M} [Nm]	f.s.	P _{1R} [kW]	M _{2R} [Nm]	-B	-C	-D	-E	-F	-Q	-R	-T	-U			
							63	71	80	90	100 112	71	80	90	100 112		Ø	Ratio code
167	8.38	4	215	1.0	4.1	225	B					C	C			2821		01
139	10.04	3	194	1.2	3.7	240	B					C	C			2818		02
114	12.33	3	238	1.1	3.2	260	B					C	C			2813		03
92	15.16	2.2	216	1.2	2.6	260	B					C	C			1921		04

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	≤ 10	Uniform / Uniforme	0.8	1	1.25
		Moderate / Moderato	1	1.25	1.5
		Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora	> 10	Uniform / Uniforme	1	1.25	1.5
		Moderate / Moderato	1.25	1.5	1.75
		Heavy / Forte	1.5	1.75	2.15

D		Motor flange available Flange disponibili Erhältliche Motorflansche Bridas disponibles Bridas disponibles
B)		Mounting with reduction ring Montaggio con boccola di riduzione Reduzierhülsen Montage avec douille de réduction Montaje con casquillo de reducción
		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 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 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 correspondant 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)