5.0 RIDUTTORI A VITE SENZA FINE GX — GX WORM GEARBOXES — SCHNECKENGETRIEBE GX

GHA - MODULAR

La serie MODULAR costituisce la serie basic all'interno della gamma di riduttori GHA.

Le speciali caratteristiche NANOTECNOLOGICHE del rivestimento e il design basic della carcassa rendono la serie MODULAR particolarmente idonea per applicazioni in ambienti ALIMENTARE (SECCO) e FARMACEUTICO.

I riduttori della serie GHA MODULAR non sono certificati per l'utilizzo a contatto con gli alimenti.

GHA - MODULAR

The MODULAR series is the basic series within the range of GHA reducers.

The special NANOTECHNOLOGICAL characteristics of the coating and the basic design of the casing make the MODULAR Series particularly suitable for applications in FOOD (dry environment) and PHARMACEUTICAL sectors.

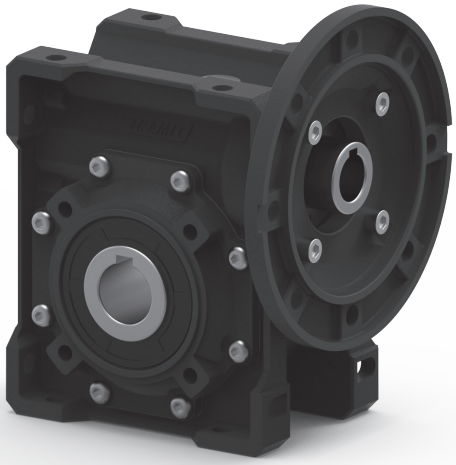
The GHA MODULAR series reducers are not certified for use in contact with food.

GHA - MODULAR

Die Serie MODULAR ist die Basisbaureihe innerhalb der Produktpalette der GHA-behandelten Getriebe.

Die speziellen NANOTECHNOLOGISCHEN Eigenschaften der Beschichtung und das grundlegende Design des Gehäuses prädestinieren die MODULAR-Serie für Anwendungen in der Lebensmittel- (trockene Umgebung) und Pharmaindustrie.

Die Getriebe der Serie GHA MODULAR sind nicht für den Einsatz in Kontakt mit Lebensmitteln zugelassen.



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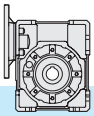


5.1 Caratteristiche

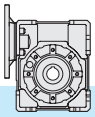
- I riduttori a vite senza fine della serie GX sono disponibili nella versione con predisposizione per attacco motore GXC.
- La serie compatta GXC presenta il vantaggio di un ingombro più ridotto.
- Le carcasse e le flange in lega di alluminio sono sabbiate e trattate con tecnologia G.H.A.
- La vite senza fine è in acciaio legato cementato-temprato ed è rettificata.
- La corona ha il mozzo in acciaio INOX AISI 316 e l'anello dentato in bronzo GCuSn12.
- Viene fornito l'albero uscita cavo di serie in acciaio INOX AISI 316 ed esiste un'ampia disponibilità di accessori: seconda entrata (in acciaio non INOX), flangia uscita e braccio di reazione (in lega di alluminio con trattamento G.H.A. e montato con viti in acciaio inox.)

5.1 Characteristics

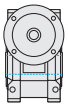
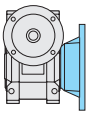
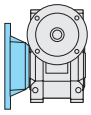
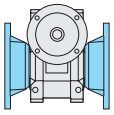
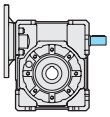
- *GX series worm gearboxes are available in the following versions: GXC suitable for motor mounting assembling.*
- *the GX compact version, which actually offers reduced space requirement.*
- *The casings and flanges made of aluminium alloy are sandblasted and treated with G.H.A technology.*
- *The worm shaft is made of hardened-bonded steel and ground.*
- *The wheel has an AISI 316 stainless steel hub with a toothed ring made in bronze GcuSn12.*
- *The hollow output shaft is supplied as standard in AISI 316 stainless steel and there is a wide range of accessories available: second inlet (not in stainless steel), outlet flange and reaction arm (in aluminium alloy with G.H.A treatment and mounted with stainless steel screws).*

5.1 Merkmale

- Die Schneckengetriebe der Serie GX sind in die Versiön GXC mit Motoranschluß lieferbar.
- Die kompakte GXC-Serie hat den Vorteil einer geringeren Stellfläche
- Die Gehäuse und die Flansche aus Aluminiumlegierung sind sandgestrahlt und mit G.H.A.-Technologie hergestellt.
- Die Schneckenwelle ist aus einsatzgehärtetem, abgeschrecktem und daraufhin geschliffenem Legierungsstahl
- Das Schneckenrad besteht aus einer Nabe aus Edelstahl AISI 316 und einer Bronze- Verzahnung GCuSn12.
- Die hohle Abtriebswelle wird standardmäßig aus Edelstahl AISI 316 geliefert und es gibt eine große Auswahl an Zubehör: zweiter Eingang (nicht aus Edelstahl), Abtriebsflansch und Reaktionsarm (aus Aluminiumlegierung mit G.H.A.-Behandlung und mit Edelstahlschrauben montiert).



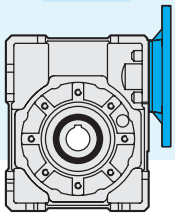
5.2 Designazione — *5.2 Designation* — 5.2 Bezeichnung

Riduttore *Gearbox* Getriebe	Tipo entrata *Input type* Antriebsart	Grandezza *Size* Größe	Rapporto rid. *Ratio* *Untersetzung*	Predispos.att. mot. *Motor coupling* Motoranschluss	Posizione di mont. *Mounting position* Einbaulage	Albero uscita *Output shaft* Abtriebswelle	Flangia in uscita. *Output flange* Abtriebsflansch	Seconda entrata *Additional input* Zusatzantrieb	Braccio di reazione *Torque arm* Drehmomentstütze	Campo di applicaizone *Field of application* Anwendungsbereich
GX	**C**	**50**	**10/1**	**P.A.M**	**B3**	**H25**	**F1S**	**SeA**	**BR**	**A**
Riduttore a vite senza fine ***Wormgearbox*** **Schneckengetriebe**	 **C**	**30** **40** **50** **63** **75** **89**	**5** **7.5** **10** **15** **20** **25** **30** **40** **50** **65** **80** **100**	**56** **63** **71** **80** **90** **100** **112**	**B3, B6** **B7, B8** **V5, V6**	 **H..**	 **F1D-F2D-F3D**  **F1S-F2S-F3S**  **F12-F22-F32**	 **SeA**	 **BR**	**A** Alimentare e Farmacetuico *Food and* *Pharmaceutical* Lebensmittel- und Pharmaindustrie **M *** Marino *Marine* Schifffahrt

*: a richiesta — *: on request — *: auf Anfrage

Tipo entrata — ***Input type*** — **Antriebstyp**

GX..C



5.3 Rendimento

Rd - È il rendimento dinamico, definito come rapporto tra la potenza in uscita P_2 e quella in entrata P_1. Dipende principalmente dalla velocità di strisciamento, dal tipo di lubrificante e dall' angolo d'elica. I valori indicati nelle tabelle sono validi se si applica la corrispondente coppia in uscita. In fase di rodaggio, circa le prime 300 ore di funzionamento sotto carico, il valore deve essere considerato inferiore del 30% rispetto a quello indicato in tabella.

Rs - È il rendimento statico che si ha al momento dell' avviamento del riduttore e varia in base al rapporto di riduzione.
Risulta importante, per una corretta valutazione del riduttore da impiegare, nelle applicazioni in cui non si raggiungono mai le condizioni di regime come nei funzionamenti intermittenti. Analogalmente al caso dinamico, anche il rendimento statico durante il rodaggio risulta inferiore del 30% rispetto al valore indicato in tabella.

5.3 Efficiency

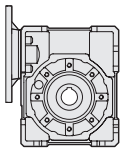
***Rd** - dynamic efficiency, defined as the ratio between P_2 output power and P_1 input power. It mainly depends on the slipping speed, the type of lubricant and the lead angle. The values reported in the table are valid when the corresponding output torque is applied. During the first 300 operating hours under load, the value to be considered is 30% lower than that reported in the table.*

***Rs** - static efficiency at gearbox start-up; it changes depending on the reduction ratio.
Rs value is important for selecting the right gearbox for applications where a steady state is never achieved, as for intermittent duty applications. Same as dynamic efficiency, static efficiency too during the running-in period will be 30% lower than the value reported in the table.*

5.3 Wirkungsgrad

Rd - dynamischer Wirkungsgrad, ist das Verhältnis zwischen P_2 Abtriebsleistung und P_1 Antriebsleistung. Rd Wert wird durch Gleitgeschwindigkeit, Art des Schmiermittels und Steigungswinkel beeinflusst. Die Tabellen zeigen die Werte die gültig sind wenn das entsprechende Abtriebsdrehmoment gegeben ist. Während der Einlaufszeit in den ersten 300 Betriebsstunden unter Belastung, ist dieser Wert 30% niedriger als der in der Leistungstabelle angegebenen Wert.

Rs - statischer Wirkungsgrad beim Getriebestart und in Abhängigkeit zur Untersetzung..
Der Wert Rs ist wichtig für die Auswahl des richtigen Getriebes für Anwendungen wo ein stetiger Betrieb nicht auftritt, wie bei Anwendungen mit Aussetzbetrieb. Der statischer Wirkungsgrad auch während der Einlaufszeit wird 30% niedriger als der in der Tabelle angegebenen Wert.



GX	Rs											
	5	7.5	10	15	20	25	30	40	50	65	80	100
30	0.70	0.67	0.62	0.55	0.47	0.43	0.39	0.30	0.27	0.25	0.22	0.21
40	0.69	0.67	0.63	0.55	0.52	0.45	0.40	0.35	0.29	0.26	0.25	0.23
50	0.69	0.68	0.65	0.58	0.53	0.47	0.41	0.37	0.32	0.28	0.25	0.23
63	0.70	0.68	0.65	0.57	0.55	0.50	0.47	0.38	0.33	0.29	0.28	0.23
75	/	0.68	0.65	0.58	0.55	0.51	0.43	0.39	0.35	0.31	0.28	0.24
89	/	0.68	0.65	0.58	0.55	0.52	0.45	0.39	0.36	0.32	0.29	0.25

5.4 Irreversibilità

Nelle applicazioni dove è necessario evitare la trasmissione del moto retrogrado o sostenere il carico, in assenza di alimentazione elettrica, è consigliabile adottare freni esterni.
Nei riduttori a vite senza fine emerge questa caratteristica naturale, denominata grado di irreversibilità, che cresce con l'aumentare del rapporto di riduzione in quanto strettamente legata al relativo rendimento.

Per ottenere alti gradi di irreversibilità occorre quindi adottare i rapporti di riduzione più elevati, senza dimenticare che, il rendimento, tende a crescere durante le prime 500 ore di funzionamento per poi stabilizzarsi sui valori riportati a catalogo.

5.4 Irreversibility

The use of external brakes is advised in case of applications where backwards motion must be hindered and the load must be held should the feed be cut off.

Some worm gearboxes feature natural irreversibility. The higher the ratio, the higher is the irreversibility, since it is strictly dependent on the relative efficiency.

In order to achieve high irreversibility it is therefore necessary to select higher efficiency reduction ratios not to forget that the efficiency is growing during the first 500 hours life until it stabilizes to the values mentioned in the catalogue.

5.4 Selbsthemmung

Aussenbremsen sind bei Anwendungen zu benutzen, bei denen Rückbewegung vermeiden werden muss oder die Last auch im Falle von Fehlen an Speisung gehalten werden muss.
Einige Schneckengetriebe sind selbsthemmend. Je höher die Untersetzung ist, desto höher ist die Selbsthemmung, da diese stark vom jeweiligen Wirkungsgrad abhängig ist. Um eine höhere Selbsthemmung zu erreichen, wählen Sie bitte höhere Untersetzungsverhältnisse.
Bitte beachten Sie, dass der Wirkungsgrad der Getriebe in den ersten 500 Betriebsstunden ansteigt und sich erst anschließend auf die im Katalog angegebenen Werte stabilisiert.

Irreversibilità statica

Condizione di impedimento alla rotazione comandata dall'albero lento senza escludere possibili ritorni lenti nel caso in cui il carico sia sottoposto a vibrazioni.

Rs < 0.45 si ha irreversibilità
Rs = 0.45 ÷ 0.55 irreversibilità incerta
Rs > 0.55 si ha reversibilità

Static irreversibility

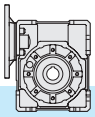
Static irreversibility occurs when the rotation controlled by the output shaft is hindered; possible slow returns cannot be excluded should the load be subject to vibrations.

***Rs < 0.45** provides irreversibility*
***Rs = 0.45 ÷ 0.55** irreversibility is uncertain*
***Rs > 0.55** reversibility is possible*

Statische Selbsthemmung

Statische Selbsthemmung liegt vor, wenn die von Abtriebswelle gesteuerten Drehung gehindert wird. Langsamer Rücklauf ist möglich, falls die Last Schwingungen ausgesetzt wird.

Rs < 0.45 es liegt Selbsthemmung vor
Rs = 0.45 ÷ 0.55 ungewisse Selbsthemmung
Rs > 0.55 es liegt Reversibilität vor



Irreversibilità dinamica

Condizione di arresto e quindi di sostegno del carico nel momento in cui cessa l'azione di comando. La condizione è più difficile da ottenere in quanto viene influenzata dal rendimento dinamico, dalla velocità di rotazione, da eventuali vibrazioni che il carico può generare e dalla direzione del movimento rispetto al carico.

Quest'ultima condizione è molto evidente nei sollevamenti:
un carico in salita, cessando l'azione di comando, deve arrestarsi e quindi assumere velocità zero (rendimento statico) prima di invertire il moto e cadere per gravità.

Un carico in discesa tende invece a proseguire nel suo moto ostacolato, nella caduta, dal solo rendimento dinamico.

Rd < 0.45 si ha irreversibilità
Rd = 0.45 ÷ 0.55 irreversibilità incerta
Rd > 0.55 si ha reversibilità

Dynamic irreversibility

Dynamic irreversibility is characterized by stillstand and hold of the load when the drive stops.
It is more difficult to achieve this condition because it is influenced by dynamic efficiency, speed of rotation and possible vibrations generated by the motion direction with regard to the load.

This last condition is much more evident during the lifting: if the drive stops during the lifting of the load this has to come to a speed equals to zero (static irreversibility) before the reversal of motion rotation and its drop for gravity.

On the contrary the load during its descent gets its motion obstructed by its dynamic efficiency.

***Rd < 0.45** provides irreversibility*
***Rd = 0.45 ÷ 0.55** irreversibility is uncertain*
***Rd > 0.55** reversibility is possible*

Dynamische Selbsthemmung

Stillstand und Stütze der Last beim Aussetzen der Steuerung.
Diese Bedingung ist schwieriger zu erreichen, da sie vom dynamischen Wirkungsgrad, der Drehzahl und von der Last verursachten möglichen Vibrationen abhängig ist

Dieser letzte Fall kommt bei Hubanwendungen stark zu tragen. Wenn der Antrieb während dem Hub stoppt, muss die Last eine Geschwindigkeit von annähernd null erreichen (statische Irreversibilität), bevor die Rotation sich umkehrt und die Last durch die Gravitation nach unten fährt.

Dem entgegengesetzt bekommt die Last durch die Abwärtsbewegung Ihre dynamische Effizienz.

Rd < 0.45 es liegt Selbsthemmung vor
Rd = 0.45 ÷ 0.55 ungewisse Selbsthemmung
Rd > 0.55 es liegt Reversibilität vor

5.5 Gioco angolare

Gioco angolare standard

Misurato bloccando l'albero entrata, e ruotando l'albero uscita nelle due direzioni applicando la coppia strettamente necessaria a creare il contatto tra i denti degli ingranaggi, al massimo pari al 2% della coppia nominale (T_{2M}).

5.5 Backlash

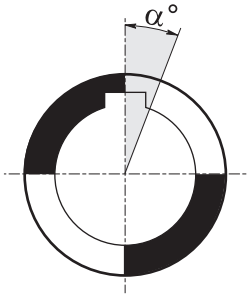
Backlash

Angular backlash measured after having blocked the input shaft by rotating output shaft in both directions and applying the torque which is strictly necessary to create a contact between the teeth of the gears. The applied torque should be at most 2% of the max. torque (T_{2M}).

5.5 Winkelspiel

Winkelspiel

Nachdem die Antriebswelle blockiert worden ist, darf das Winkelspiel auf die Abtriebswelle bemesst werden. Dabei soll die Antriebswelle in beiden Richtungen gedreht werden und ein Drehmoment ausgeübt werden, das zur Entstehen eines Kontaktes zwischen den Zaehnen genuegt. Das ausgeübte Drehmoment soll höchstens 2% des max. von Getrieben garantierten Drehmoment (T_{2M}) sein.



GX						
i_n	30 max	40 max	50 max	63 max	75 max	89 max
5	16'	13.5'	10.5'	10'	/	/
7.5	16'	13.5'	10.5'	10'	10'	9.5'
10	16'	13.5'	10.5'	10'	10'	9'
15	16'	13.5'	10.5'	10'	10'	9'
20	14.5'	12'	9.5'	8.5'	8.5'	8.5'
25	14.5'	12'	9.5'	8.5'	8.5'	8.5'
30	14.5'	12'	8.5'	8.5'	8.5'	8.5'
40	14.5'	12'	9.5'	8.5'	8.5'	8'
50	14'	12'	9.5'	8.5'	8.5'	8'
65	14'	12'	9'	8'	8'	8'
80	13.5'	11.5'	9'	7.5'	7.5'	7.5'
100	13'	11'	9'	7.5'	7.5'	7.5'

5.6 Carichi radiali

Carichi radiali Fr_2 e assiali Fa_2 sull'albero uscita [N]

Se il carico radiale sull'albero non è applicato a metà della sporgenza dell'albero, il valore del carico ammissibile deve essere valutato utilizzando la formula che si riferisce ad Fry_2, in cui i valori di a, b e Fr_2 sono riportati nelle tabelle relative ai carichi radiali.
Nel caso di alberi bisporgenti il valore del carico applicabile a ciascuna estremità è uguale ai 2/3 del valore di tabella, purchè i carichi applicati siano uguali di intensità e direzione ed agiscano nello stesso senso. Diversamente contattare il servizio tecnico.

5.6 Radial load

***Fr_2 radial loads and Fa_2 axial loads on the output shaft** [N]*

Should the radial load affect the shaft not at the half-way point of its projection but at a different point, the value of the admissible load has to be calculated using the Fry_2 formula: a, b and Fr_2 values are reported in the radial load tables.
With regard to double-projecting shafts, the load applicable at each end is 2/3 of the value given in the table, on condition that the applied loads feature same intensity and direction and that they act in the same direction.
Otherwise please contact the technical department.

5.6 Radialbelastungen

Fr_2 Radialbelastungen und Fa_2 Axialbelastungen auf die Abtriebswelle [N]

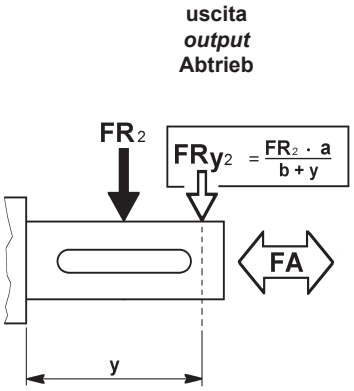
Falls die Radialbelastungen nicht in dem Mittelpunkt der herausragenden Welle sondern in einem anderen Punkt wirken, soll die zulässige Belastung mit der Formel bezüglich Fry_2 kalkuliert werden: a, b und Fr_2 Werte sind aus der Tabelle der Radialbelastungen zu entnehmen.
Bei doppelseitigen Abtriebswellen ist die Belastung, die an jedem Ende anwendbar ist, 2/3 des in der Tabelle angegebenen Wertes unter der Bedingung, dass die Belastungen die selbe Stärke und Richtung aufweisen und dass sie in der selben Richtung wirken. Andernfalls muß mit dem technischen Büro Rücksprache gehalten werden.

I carichi radiali indicati nelle tabelle si intendono applicati a metà della sporgenza dell'albero e sono riferiti ai riduttori operanti con fattore di servizio 1.

The radial loads indicated in the chart are considered to be applied at the half-way point of the shaft projection, and refer to gear units operating with service factor 1.

Die Radialbelastungen, die in den Tabellen angegeben werden, gelten für Ansatzpunkte in der Mitte des herausragenden Wellenteils und für Getriebe mit Betriebsfaktor 1.

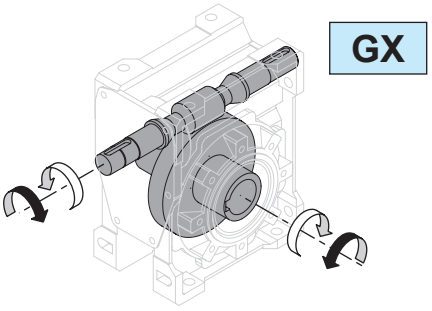
GX												
n_1=1400 rpm		30		40		50		63		75		89	
i_n	n_2 [rpm]	a = 66.5 b = 49		a = 83.5 b = 60.5		a = 102 b = 73.5		a = 122.5 b = 93.5		a = 134 b = 100		a = 163 b = 118	
		Fr_2	Fa_2	Fr_2	Fa_2	Fr_2	Fa_2	Fr_2	Fa_2	Fr_2	Fa_2	Fr_2	Fa_2
5	**280**	700	140	1400	280	1400	300	1800	360	/		/	
7.5	**187**	750	150	1500	300	1650	330	2100	420	2500	500	2600	520
10	**140**	800	160	1600	320	1800	360	2300	460	2800	560	3000	600
15	**93**	850	170	1700	340	1950	390	2600	520	3000	600	3400	680
20	**70**	900	180	1800	360	2200	440	2800	560	3300	660	3800	760
25	**56**	950	190	1900	380	2400	480	3100	620	3700	740	4100	820
30	**47**	1000	200	2000	400	2600	520	3400	680	4000	800	4500	900
40	**35**	1050	210	2100	420	2850	570	3700	740	4400	880	4900	980
50	**28**	1100	220	2200	440	3100	620	4000	800	4850	970	5300	1060
60	**23**	1150	230	2400	480	3200	640	4200	840	5000	1000	5600	1120
63	**22**	1250	250	2500	500	3400	680	4450	890	5300	1060	5900	1180
80	**17.5**	1350	270	2700	540	3800	760	4900	980	5800	1160	6500	1300
100	**14**	1500	300	3000	600	4000	800	5400	1080	6500	1300	7000	1400



5.7 Senso di rotazione

5.7 Direction of rotation

5.7 Drehrichtung



5.8 Lubrificazione

I riduttori a vite senza fine serie GX sono forniti completi di lubrificante sintetico per uso alimentare: OLIO FUCHS CASSIDA FLUID 320.

Si raccomanda di precisare sempre, in fase di ordine, la posizione di montaggio desiderata.
Per ulteriori dettagli consultare pag. 17 paragrafo 1.6

5.8 Lubrication

The GX series worm gearboxes are supplied complete with synthetic lubricant for food use: FUCHS CASSIDA FLUID 320 OIL.

It is recommended to always specify the desired assembly position when placing the order.
For further details, please see page 17 paragraph 1.6

5.8 Schmierung

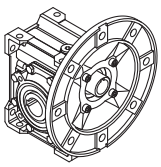
Die Schneckengetriebe der Serie GX werden mit synthetischem Lebensmittelöl FUCHS CASSIDA FLUID 320 geliefert.

Es wird empfohlen, bei der Bestellung immer die gewünschte Einbaulage anzugeben.
Für weitere Details siehe Seite 17, Absatz 1.6.

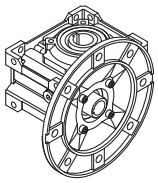
Posizioni di montaggio

Mounting positions

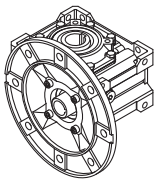
Einbaulagen



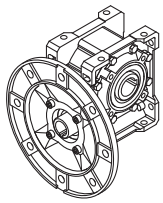
B3



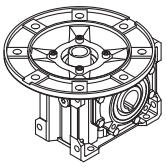
B6



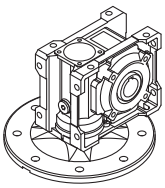
B7



B8



V5



V6

		Q.tà olio / *Oil quantity* / Schmiermittelmenge [lt]			
		Posizione di montaggio / *Mounting position* / Einbaulage			
		B3	**B6 - B7**	**B8**	**V5 - V6**
GX	**30**	0.015	0.030	0.015	
	40	0.040	0.060	0.040	
	50	0.080	0.120	0.080	
	63	0.160	0.220	0.160	
	75	0.260	0.340	0.260	
	89	1.1	0.9	1	1.5

E' presente un solo tappo di riempimento olio.

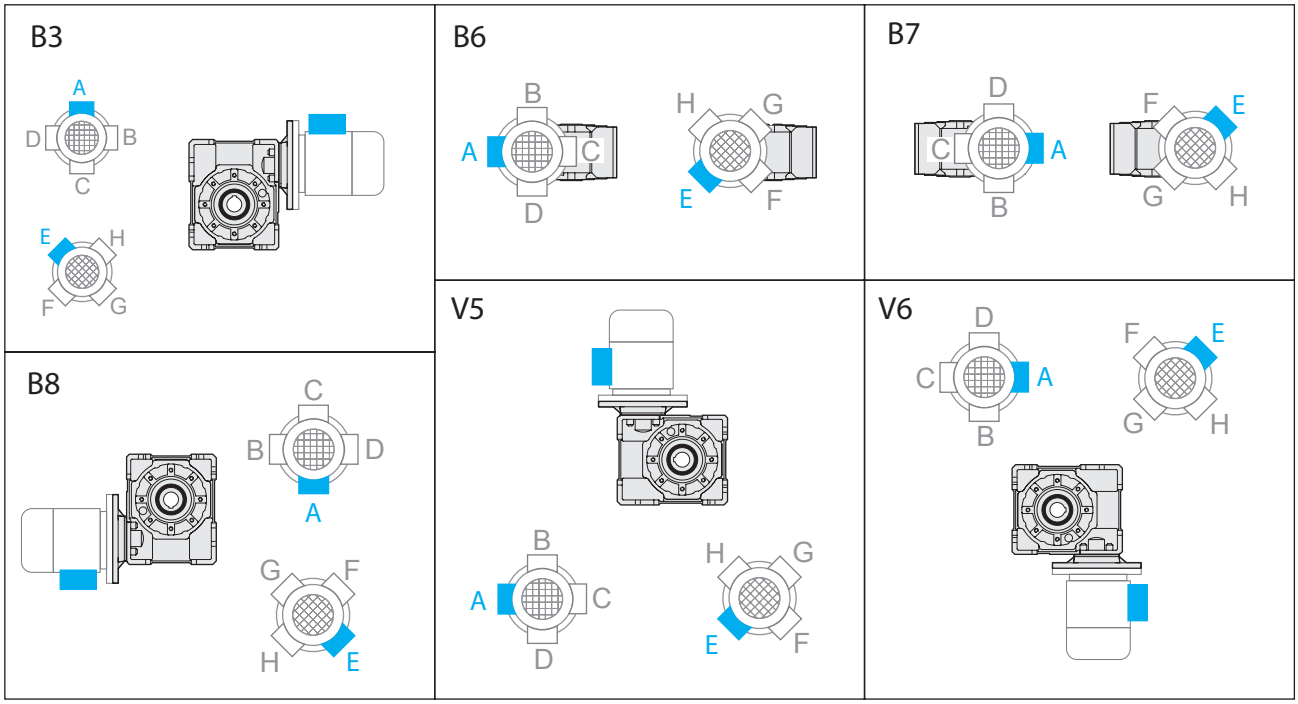
Aluminium housings have one oil filling plug only.

Aluminiumgehäuse verfügen über 1 Einfüllschraube.

5.9 Posizione morsettiera

5.9 Terminal board position

5.9 Lage der Klemmenkaste



Specificare sempre in fase di ordinazione la posizione di montaggio e la forma costruttiva.
Posizione morsettiera v. pag. 89 (PM=1; PM=2)

Mounting position always to be specified when ordering.
Terminal board position see page 89 (PM=1; PM=2)

Bei der Bestellung immer die gewünschte Montageposition und Bauform angeben.
Lage der Klemmenkaste Seite 89 (PM=1; PM=2)

5.10 Dati tecnici — *5.10 Technical data* — 5.10 Technische Daten

	n_1 = 2800				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**				
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14	
GXC 30	**5**	560	0.89		5.6	**0.37**	2.5		
	7.5	373	0.86		8	**0.37**	2.0		
	10	280	0.84		11	**0.37**	1.5		
	15	187	0.81		15	**0.37**	1.1		
	20	140	0.76		13	**0.25**	1.2	**63**	
	25	112	0.74		16	**0.25**	1.0		
	30	93	0.71	—	13	**0.18**	1.0		**56**
Kg	**40**	70	0.65		16	**0.18**	1.0		
1.4	**50**	56	0.62		14	**0.13**	1.1		
	65	43	0.57		17	**0.13**	1.0		
	80	35	0.54		13	**0.09**	1.0	—	
	100	28	0.52		16	**0.09**	0.8		

	n_1 =1400				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**				
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14	
GXC 30	**5**	280	0.87	0.40	6.5	**0.22**	2.9		
	7.5	187	0.84	0.40	9	**0.22**	2.2		
	10	140	0.82	0.40	12	**0.22**	1.8		
	15	93	0.77	0.30	17	**0.22**	1.3		
	20	70	0.72	0.20	18	**0.18**	1.1	**63**	
	25	56	0.69	0.20	21	**0.18**	1.0		
	30	47	0.66	0.20	18	**0.13**	1.1		**56**
Kg	**40**	35	0.59	0.20	21	**0.13**	1.0		
1.4	**50**	28	0.55	0.20	17	**0.09**	1.1		
	65	22	0.51	0.10	20	**0.09**	1.0		
	80	18	0.48	0.10	16	**0.06**	1.0	—	
	100	14	0.45	0.10	18	**0.06**	0.8		

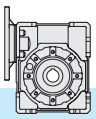
	n_1 = 900				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**				
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14	
GXC 30	**5**	180	0.85		5.9	**0.13**	3.9		
	7.5	120	0.82		9	**0.13**	2.9		
	10	90	0.80		11	**0.13**	2.3		
	15	60	0.75		15	**0.13**	1.6		
	20	45	0.69		19	**0.13**	1.2	**63**	
	25	36	0.66		23	**0.13**	1.1		
	30	30	0.63	—	18	**0.09**	1.2		**56**
Kg	**40**	23	0.55		21	**0.09**	1.1		
1.4	**50**	18	0.52		16	**0.06**	1.1		
	65	14	0.48		20	**0.06**	1.1		
	80	11	0.44		11	**0.03**	1.7	—	
	100	9	0.42		13	**0.03**	1.1		

	n_1 = 500				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**				
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14	
GXC 30	**5**	100	0.83		—	—	—		
	7.5	67	0.80		—	—	—		
	10	50	0.77		—	—	—		
	15	33	0.72		—	—	—		
	20	25	0.66		—	—	—	**63**	
	25	20	0.62		—	—	—		
	30	17	0.59	—	—	—	—		**56**
Kg	**40**	13	0.51		—	—	—		
1.4	**50**	10	0.48		—	—	—		
	65	8	0.43		—	—	—		
	80	6	0.40		—	—	—	—	
	100	5	0.38		—	—	—		

*** ATTENZIONE:** la coppia massima utilizzabile [T_{2M}] deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

**** WARNING:** Maximum allowable torque [T_{2M}] must be calculated using the following service factor : $T_{2M} = T_2 \times FS'$*

***ACHTUNG:** das max. anwendbare Drehmoment [T_{2M}] muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$



5.10 **Dati tecnici** | *5.10* ***Technical data*** | 5.10 **Technische Daten**

	n_1 = 2800				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
GXC 40	**5**	560	0.88		11.3	**0.75**	2.2	**71**	**63**	—
	7.5	373	0.87		17	**0.75**	1.8			
	10	280	0.86		22	**0.75**	1.4			
	15	187	0.82		32	**0.75**	1.0			
	20	140	0.80		30	**0.55**	1.0			
	25	112	0.76		24	**0.37**	1.1			
	30	93	0.73	—	28	**0.37**	1.3			
	40	70	0.70		24	**0.25**	1.4			
Kg	**50**	56	0.65		28	**0.25**	1.1	—		**56**
2.4	**65**	43	0.61		24	**0.18**	1.2			
	80	35	0.58		21	**0.13**	1.3			
	100	28	0.55		24	**0.13**	1.0			

	n_1 = 1400				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
GXC 40	**5**	280	0.87	0.80	16.3	**0.55**	2.1	**71**	**63**	—
	7.5	187	0.85	0.80	24	**0.55**	1.7			
	10	140	0.83	0.70	31	**0.55**	1.3			
	15	93	0.79	0.50	30	**0.37**	1.4			
	20	70	0.76	0.50	38	**0.37**	1.0			
	25	56	0.72	0.40	31	**0.25**	1.1			
	30	47	0.68	0.40	35	**0.25**	1.2			
Kg	**40**	35	0.64	0.30	38	**0.22**	1.0			
2.4	**50**	28	0.59	0.30	36	**0.18**	1.1	—		**56**
	65	22	0.54	0.20	31	**0.13**	1.1			
	80	18	0.52	0.20	31	**0.11**	1.1			
	100	14	0.49	0.20	30	**0.09**	0.9			

	n_1 = 900				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
GXC 40	**5**	180	0.85		16.7	**0.37**	2.5	**71**	**63**	—
	7.5	120	0.83		25	**0.37**	2.0			
	10	90	0.81		32	**0.37**	1.5			
	15	60	0.76		45	**0.37**	1.1			
	20	45	0.74		39	**0.25**	1.2			
	25	36	0.69		33	**0.18**	1.3			
	30	30	0.65	—	37	**0.18**	1.3			
	40	23	0.61		33	**0.13**	1.3			
Kg	**50**	18	0.55		38	**0.13**	1.1	—		**56**
2.4	**65**	14	0.51		32	**0.09**	1.2			
	80	11	0.48		37	**0.09**	1.0			
	100	9	0.45		29	**0.06**	1.0			

	n_1 = 500				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
GXC 40	**5**	100	0.83		7.1	**0.09**	7.1	**71**	**63**	—
	7.5	67	0.81		10	**0.09**	5.5			
	10	50	0.79		14	**0.09**	4.4			
	15	33	0.73		19	**0.09**	3.1			
	20	25	0.70		24	**0.09**	2.3			
	25	20	0.65		28	**0.09**	1.7			
	30	17	0.61	—	31	**0.09**	1.8			
	40	13	0.57		39	**0.09**	1.3			
Kg	**50**	10	0.51		44	**0.09**	1.2	—		**56**
2.4	**65**	8	0.46		52	**0.09**	0.9			
	80	6	0.44		61*	**0.09**	0.7*			
	100	5	0.41		71*	**0.09**	0.4*			

*** ATTENZIONE:** la coppia massima utilizzabile [T_{2M}] deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

**** WARNING:*** *Maximum allowable torque [T_{2M}] must be calculated using the following service factor : $T_{2M} = T_2 \times FS'$*

***ACHTUNG:** das max. anwendbare Drehmoment [T_{2M}] muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$

5.10 Dati tecnici — *5.10 Technical data* — 5.10 Technische Daten

	n_1 = 2800				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
GXC 50	**5**	560	0.89		22.8	**1.5**	1.9	**80**	**71**	—
	7.5	373	0.88		34	**1.5**	1.5			
	10	280	0.86		44	**1.5**	1.2			
	15	187	0.84		47	**1.1**	1.2			
	20	140	0.81		42	**0.75**	1.4			
	25	112	0.78		50	**0.75**	1.0			
	30	93	0.75	—	42	**0.55**	1.3			
	40	70	0.72		54	**0.55**	1.0			**63**
Kg	**50**	56	0.68		43	**0.37**	1.3	—		
4.0	**65**	43	0.64		53	**0.37**	1.0			
	80	35	0.61		41	**0.25**	1.2			
	100	28	0.58		35	**0.18**	1.3			

	n_1 = 1400				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
GXC 50	**5**	280	0.87	1.2	26.7	**0.9**	2.3	**80**	**71**	—
	7.5	187	0.86	1.2	40	**0.9**	1.8			
	10	140	0.84	1.0	52	**0.9**	1.4			
	15	93	0.80	0.80	74	**0.9**	1.0			
	20	70	0.78	0.70	58	**0.55**	1.3			
	25	56	0.74	0.60	47	**0.37**	1.4			
	30	47	0.71	0.60	53	**0.37**	1.2			
	40	35	0.67	0.50	68	**0.37**	1.0			**63**
Kg	**50**	28	0.62	0.40	53	**0.25**	1.3	—		
4.0	**65**	22	0.58	0.40	64	**0.25**	1.0			
	80	18	0.54	0.40	53	**0.18**	1.1			
	100	14	0.51	0.30	45	**0.13**	1.2			

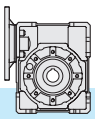
	n_1 = 900				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
GXC 50	**5**	180	0.85		33.8	**0.75**	2.2	**80**	**71**	—
	7.5	120	0.84		50	**0.75**	1.6			
	10	90	0.82		66	**0.75**	1.3			
	15	60	0.78		68	**0.55**	1.3			
	20	45	0.75		59	**0.37**	1.5			
	25	36	0.71		70	**0.37**	1.1			
	30	30	0.67	—	79	**0.37**	1.0			
	40	23	0.63		67	**0.25**	1.1			**63**
Kg	**50**	18	0.59		78	**0.25**	1.0	—		
4.0	**65**	14	0.54		67	**0.18**	1.1			
	80	11	0.51		56	**0.13**	1.2			
	100	9	0.47		45	**0.09**	1.3			

	n_1 = 500				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
GXC 50	**5**	100	0.84		14.3	**0.18**	6.4	**80**	**71**	—
	7.5	67	0.82		21	**0.18**	4.7			
	10	50	0.80		28	**0.18**	3.8			
	15	33	0.75		39	**0.18**	2.7			
	20	25	0.72		50	**0.18**	2.1			
	25	20	0.68		58	**0.18**	1.5			
	30	17	0.63	—	65	**0.18**	1.5			
	40	13	0.59		81	**0.18**	1.2			**63**
Kg	**50**	10	0.54		93	**0.18**	1.0	—		
4.0	**65**	8	0.50		56	**0.09**	1.5			
	80	6	0.46		63	**0.09**	1.2			
	100	5	0.43		74	**0.09**	0.8			

*** ATTENZIONE:** la coppia massima utilizzabile [T_{2M}] deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

**** WARNING:** Maximum allowable torque [T_{2M}] must be calculated using the following service factor : $T_{2M} = T_2 \times FS'$*

***ACHTUNG:** das max. anwendbare Drehmoment [T_{2M}] muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$



5.10 **Dati tecnici** *5.10 **Technical data*** 5.10 **Technische Daten**

	n_1 = 2800				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
GXC 63	**5**	560	0.89		45.5	**3**	1.7			
	7.5	373	0.88		68	**3**	1.3			
	10	280	0.87		89	**3**	1.1			
	15	187	0.84		95	**2.2**	1.0	**90**	**80**	—
	20	140	0.83		85	**1.5**	1.3			
	25	112	0.81		76	**1.1**	1.2			
	30	93	0.77	—	87	**1.1**	1.3			
	40	70	0.74		111	**1.1**	1.1			
Kg	**50**	56	0.70		90	**0.75**	1.1			
6.6	**65**	43	0.67		81	**0.55**	1.2	—		**71**
	80	35	0.64		65	**0.37**	1.4			
	100	28	0.60		75	**0.37**	1.1			

	n_1 = 1400				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
GXC 63	**5**	280	0.88	1.8	54	**1.8**	2.0			
	7.5	187	0.87	1.8	80	**1.8**	1.5			
	10	140	0.85	1.6	105	**1.8**	1.2			
	15	93	0.81	1.2	125	**1.5**	1.1	**90**	**80**	—
	20	70	0.80	1.2	120	**1.1**	1.2			
	25	56	0.77	1.0	118	**0.9**	1.0			
	30	47	0.73	0.90	134	**0.9**	1.1			
Kg	**40**	35	0.69	0.80	142	**0.75**	1.1			
6.6	**50**	28	0.65	0.70	122	**0.55**	1.0			
	65	22	0.61	0.60	100	**0.37**	1.2	—		**71**
	80	18	0.58	0.60	79	**0.25**	1.4			
	100	14	0.53	0.50	91	**0.25**	1.1			

	n_1 = 900				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
GXC 63	**5**	180	0.87		69	**1.5**	1.9			
	7.5	120	0.85		102	**1.5**	1.4			
	10	90	0.83		133	**1.5**	1.1			
	15	60	0.79		139	**1.1**	1.1	**90**	**80**	—
	20	45	0.77		123	**0.75**	1.4			
	25	36	0.74		109	**0.55**	1.3			
	30	30	0.70	—	122	**0.55**	1.3			
	40	23	0.66		154	**0.55**	1.1			
Kg	**50**	18	0.61		120	**0.37**	1.2			
6.6	**65**	14	0.57		98	**0.25**	1.4	—		**71**
	80	11	0.54		115	**0.25**	1.1			
	100	9	0.50		95	**0.18**	1.2			

	n_1 = 500				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
	i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
GXC 63	**5**	100	0.85		20	**0.25**	8.3			
	7.5	67	0.83		30	**0.25**	5.9			
	10	50	0.81		39	**0.25**	4.7			
	15	33	0.76		55	**0.25**	3.4	**90**	**80**	—
	20	25	0.74		71	**0.25**	2.8			
	25	20	0.71		85	**0.25**	1.9			
	30	17	0.65	—	94	**0.25**	2.1			
	40	13	0.62		118	**0.25**	1.7			
Kg	**50**	10	0.56		135	**0.25**	1.2			
6.6	**65**	8	0.52		163	**0.25**	1.0	—		**71**
	80	6	0.50		137	**0.18**	1.1			
	100	5	0.45		77	**0.09**	1.6			

*** ATTENZIONE:** la coppia massima utilizzabile [T_{2M}] deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

**** WARNING:** Maximum allowable torque [T_{2M}] must be calculated using the following service factor : $T_{2M} = T_2 \times FS'$*

***ACHTUNG:** das max. anwendbare Drehmoment [T_{2M}] muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$

5.10 Dati tecnici — *5.10 Technical data* — 5.10 Technische Daten

GXC 75 — Kg 9.5

n_1 = 2800				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**						
i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14			
7.5	373	0.89		125	**5.5**	1.0	**112**	**90**	—	—
10	280	0.88		120	**4**	1.2	**100**			
15	187	0.85		131	**3**	1.2				
20	140	0.84		171	**3**	1.0				
25	112	0.82		154	**2.2**	1.0				
30	93	0.78	—	120	**1.5**	1.4			**80**	**71**
40	70	0.75		154	**1.5**	1.2	—			—
50	56	0.73		136	**1.1**	1.2				
65	43	0.69		114	**0.75**	1.4				**71**
80	35	0.66		135	**0.75**	1.1				
100	28	0.62		159	**0.75**	0.8				

GXC 75 — Kg 9.5

n_1 = 1400				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**						
i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14			
7.5	187	0.87	2.5	178	**4**	1.0	**112**	**90**	—	—
10	140	0.86	2.3	176	**3**	1.1	**100**			
15	93	0.83	1.9	187	**2.2**	1.1				
20	70	0.81	1.7	199	**1.8**	1.1				
25	56	0.78	1.5	200	**1.5**	1.0				
30	47	0.74	1.2	167	**1.1**	1.3			**80**	**71**
40	35	0.71	1.1	213	**1.1**	1.1	—			—
50	28	0.67	1.0	206	**0.9**	1.0				
65	22	0.63	0.90	154	**0.55**	1.3				**71**
80	18	0.60	0.80	180	**0.55**	1.0				
100	14	0.56	0.70	210	**0.55**	0.8				

GXC 75 — Kg 9.5

n_1 = 900				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**						
i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14			
7.5	120	0.86		205	**3**	1.0	**112**	**90**	—	—
10	90	0.84		197	**2.2**	1.2	**100**			
15	60	0.81		231	**1.8**	1.0				
20	45	0.78		250	**1.5**	1.1				
25	36	0.76		221	**1.1**	1.1				
30	30	0.71	—	249	**1.1**	1.0			**80**	**71**
40	23	0.67		214	**0.75**	1.3	—			—
50	18	0.64		186	**0.55**	1.3				
65	14	0.59		151	**0.37**	1.5				**71**
80	11	0.56		177	**0.37**	1.2				
100	9	0.52		203	**0.37**	0.9				

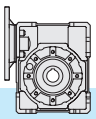
GXC 75 — Kg 9.5

n_1 = 500				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**						
i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14			
7.5	67	0.84		90	**0.75**	2.9	**112**	**90**	—	—
10	50	0.82		118	**0.75**	2.4	**100**			
15	33	0.78		167	**0.75**	1.7				
20	25	0.75		216	**0.75**	1.5				
25	20	0.72		260	**0.75**	1.1				
30	17	0.67	—	288	**0.75**	1.1			**80**	**71**
40	13	0.63		265	**0.55**	1.2	—			—
50	10	0.59		210	**0.37**	1.3				
65	8	0.55		251	**0.37**	1.0				**71**
80	6	0.52		197	**0.25**	1.2				
100	5	0.47		161	**0.18**	1.3				

*** ATTENZIONE:** la coppia massima utilizzabile [T_{2M}] deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

**** WARNING:** Maximum allowable torque [T_{2M}] must be calculated using the following service factor : $T_{2M} = T_2 \times FS'$*

***ACHTUNG:** das max. anwendbare Drehmoment [T_{2M}] muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$



5.10 **Dati tecnici** *5.10* ***Technical data*** 5.10 **Technische Daten**

GXC 89

Kg 23.6

n_1 = 2800				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
7.5	373	0.89		171	**7.5**	1.2	**112 100**	**90**	—
10	280	0.88		165	**5.5**	1.3			
15	187	0.86		241	**5.5**	1.0			
20	140	0.84		230	**4**	1.2			
25	112	0.83		212	**3**	1.2			
30	93	0.79	—	243	**3**	1.1			
40	70	0.77		230	**2.2**	1.3	—		**80**
50	56	0.74		278	**2.2**	1.0			
65	43	0.71		235	**1.5**	1.1			
80	35	0.68		205	**1.1**	1.2			
100	28	0.64		163	**0.75**	1.3			

GXC 89

Kg 23.6

n_1 = 1400				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
7.5	187	0.88	3.0	247	**5.5**	1.2	**112 100**	**90**	—
10	140	0.86	2.5	236	**4**	1.3			
15	93	0.84	2.2	256	**3**	1.2			
20	70	0.82	2.0	334	**3**	1.1			
25	56	0.80	1.8	299	**2.2**	1.1			
30	47	0.76	1.5	340	**2.2**	1.0			
40	35	0.72	1.3	355	**1.8**	1.1	—		**80**
50	28	0.69	1.1	353	**1.5**	1.0			
65	22	0.65	1.0	317	**1.1**	1.0			
80	18	0.63	1.0	309	**0.9**	1.0			
100	14	0.58	0.80	217	**0.55**	1.2			

GXC 89

Kg 23.6

n_1 = 900				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
7.5	120	0.86		206	**3**	1.7	**112 100**	**90**	—
10	90	0.85		270	**3**	1.3			
15	60	0.82		286	**2.2**	1.3			
20	45	0.79		371	**2.2**	1.1			
25	36	0.77		369	**1.8**	1.0			
30	30	0.73	—	416	**1.8**	1.0			
40	23	0.69		440	**1.5**	1.0	—		**80**
50	18	0.66		384	**1.1**	1.0			
65	14	0.62		319	**0.75**	1.1			
80	11	0.59		274	**0.55**	1.2			
100	9	0.54		313	**0.55**	1.0			

GXC 89

Kg 23.6

n_1 = 500				MOTORI / *MOTORS* / ENGINE **GHA CLASSIC**					
i_n	n_2 [min^{-1}]	Rd	P_{t0}	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC B5/B14		
7.5	67	0.84		91	**0.75**	4.7	**112 100**	**90**	—
10	50	0.83		118	**0.75**	3.7			
15	33	0.79		169	**0.75**	2.7			
20	25	0.76		219	**0.75**	2.3			
25	20	0.74		265	**0.75**	1.7			
30	17	0.68	—	294	**0.75**	1.6			
40	13	0.65		371	**0.75**	1.4	—		**80**
50	10	0.61		439	**0.75**	1.1			
65	8	0.57		388	**0.55**	1.1			
80	6	0.54		305	**0.37**	1.3			
100	5	0.49		344	**0.37**	1.0			

*** ATTENZIONE:** la coppia massima utilizzabile [T_{2M}] deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

**** WARNING:** Maximum allowable torque [T_{2M}] must be calculated using the following service factor : $T_{2M} = T_2 \times FS'$*

***ACHTUNG:** das max. anwendbare Drehmoment [T_{2M}] muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$

5.11 **Momenti d'inerzia** [Kg·cm²]
(riferiti all'albero veloce in entrata)

5.11 ***Moments of inertia*** *[Kg·cm²]*
(referred to input shaft)

5.11 **Trägheitsmoment** [Kg·cm²]
(bez. Antriebswelle)

GX30

i_n	GXC B5 - B14	
	IEC 56	IEC 63
5	0.130	0.127
7.5	0.112	0.109
10	0.103	0.100
15	0.097	0.094
20	0.095	0.092
25	0.094	0.091
30	0.093	0.090
40	0.093	0.090
50	0.092	0.089
65	0.079	-
80	0.079	-
100	0.078	-

GX63

i_n	GXC B5 - B14		
	IEC 71	IEC 80	IEC 90
5	-	2.431	2.671
7.5	-	1.949	2.269
10	-	1.744	2.063
15	-	1.597	1.916
20	-	1.545	1.864
25	-	1.514	1.833
30	-	1.508	1.828
40	0.966	1.495	-
50	0.959	1.488	-
65	0.955	1.484	-
80	0.953	1.482	-
100	0.952	1.481	-

GX40

i_n	GXC B5 - B14		
	IEC 56	IEC 63	IEC 71
5	-	0.391	0.463
7.5	-	0.321	0.356
10	-	0.272	0.347
15	-	0.266	0.340
20	-	0.263	0.338
25	-	0.262	0.337
30	-	0.262	0.337
40	-	0.261	0.336
50	0.182	0.261	-
65	0.182	0.261	-
80	0.182	0.261	-
100	0.182	0.261	-

GX75

i_n	GXC B5 - B14			
	IEC 71	IEC 80	IEC 90	IEC 100-112
7.5	-	-	3.712	4.462
10	-	-	3.234	3.984
15	-	-	2.893	3.643
20	-	-	2.774	3.523
25	-	-	2.709	3.458
30	1.615	1.575	2.689	3.438
40	-	1.573	2.659	-
50	-	1.570	2.642	-
65	1.609	1.569	2.633	-
80	1.605	1.565	2.629	-
100	1.602	1.562	2.626	-

GX50

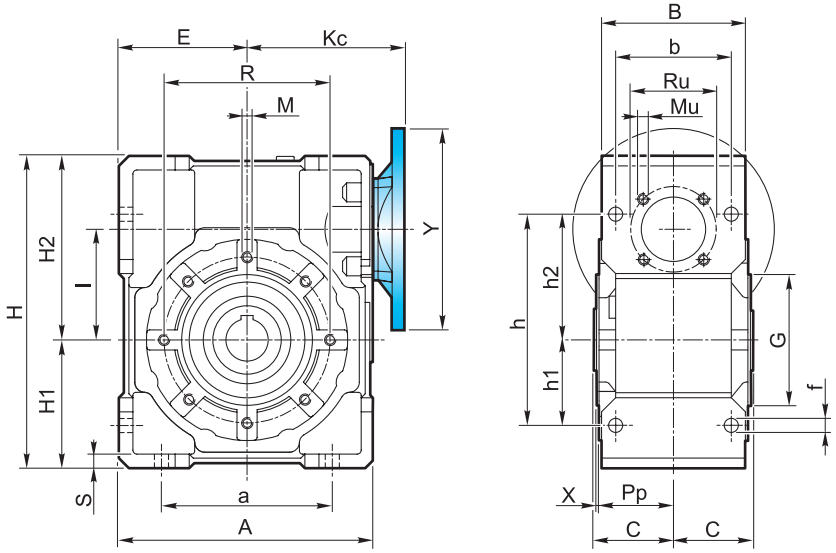
i_n	GXC B5 - B14		
	IEC 63	IEC 71	IEC 80
5	-	0.922	1.046
7.5	-	0.684	0.935
10	-	0.602	0.853
15	-	0.543	0.794
20	-	0.523	0.774
25	-	0.513	0.764
30	-	0.508	0.759
40	0.315	0.503	0.755
50	0.313	0.501	-
65	0.311	0.499	-
80	0.310	0.498	-
100	0.309	0.498	-

GX89

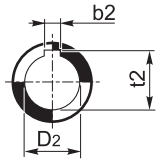
i_n	GXC B5 - B14		
	IEC 80	IEC 90	IEC 100-112
7.5		6.898	7.671
10	-	5.875	6.648
15	-	5.144	5.917
20	-	3.398	5.661
25	-	3.256	5.520
30	-	3.215	5.479
40	-	3.151	-
50	-	3.115	-
65	2.024	3.096	-
80	2.014	3.087	-
100	2.008	3.080	-

5.12 **Dimensioni** *5.12* ***Dimensions*** 5.12 **Abmessungen**

GXC

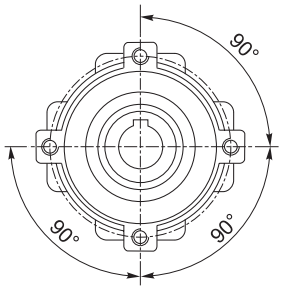


Albero uscita cavo
Output hollow shaft
Abtriebshohlwelle



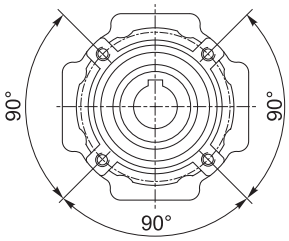
Flangia pendolare / *Shaft-mounted flange* / Aufsteckflansch

30



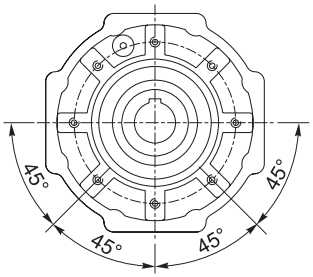
4 Fori / *Holes* / Bohrungen

40 - 50



4 Fori / *Holes* / Bohrungen

63 - 75 - 89



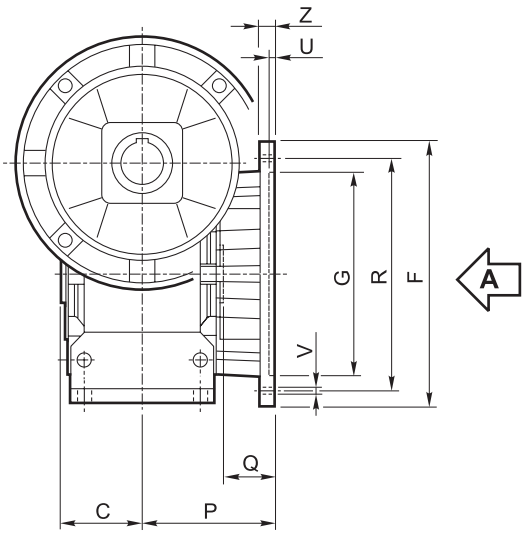
8 Fori / *Holes* / Bohrungen

GX	A	a	B	b	b_2	C	D_2 H8	E	f	G h8	H	H_1	H_2	h	h_1	h_2
30	80	54	56	44	**5**	31.5	**14**	40	6.5	55	97	40	57	71	27	44
40	105	70	71	60	**6**	39	**18**	50	6.5	60	125	50	75	90	35	55
50	125	80	85	70	**8**	46	**25**	60	8.5	70	150	60	90	104	40	64
63	147	100	103	85	**8**	56	**25**	72	9	80	182	72	110	130	50	80
75	176	120	112	90	**8**	60	**28**	86	11	95	219.5	86	133.5	153	60	93
89	203	140	130	100	**10**	70	**35**	103	13	110	248.5	103	145.5	172	70	102

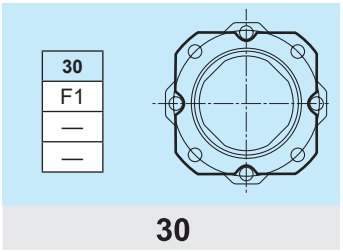
GX	I	K_c	L	M	M_u	P_p	R	Ru	S	t_2	X
30	31.5	57	15	M6x8	M5x7.5	29	65	35.4	5.5	16.3	1.5
40	40	75	20	M6X10	M5X10	36.5	75	42.4	6	20.8	1.5
50	50	82	25	M8x10	M6x10	43.5	85	53.7	7	28.3	1.5
63	63	95	30	M8x14	M6x12	53	95	60.8	8	28.3	2
75	75	112 - 110 (1)	40	M8x14	M8x12	57	115	70.7	10	31.3	2
89	90	122	40	M10x18	M8x14	67	130	70.7	12	38.3	2

(1): Solo per PAM 71B14 / *Only for PAM 71B14* / Nur PAM 71B14

Flangia uscita / *Output flange* / Abtriebsflansch



Vista da A / *View from A* / Ansicht von A



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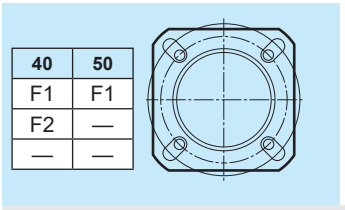
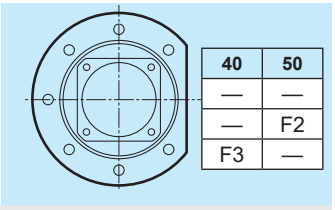
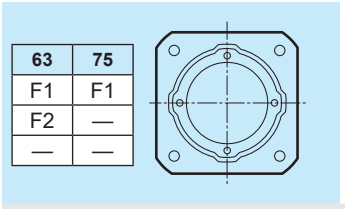
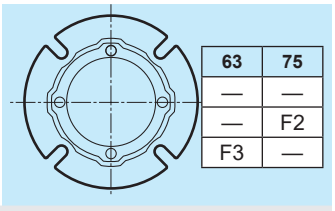


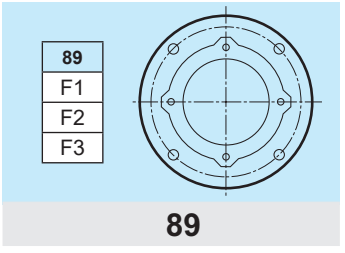


40 - 50

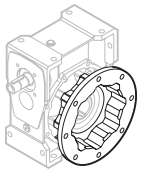




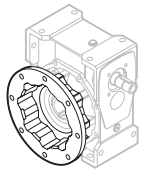
63 - 75



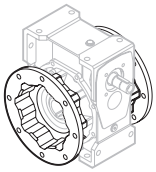
89



F...D
Standard



F...S

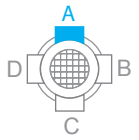


F...2

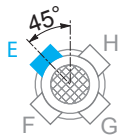
Tipo *Type* Typ		C	F		G H8	P	Q	R	U	V			Z
												Ø	
30	**F1**	31.5		66	50	54.5	23	68	4	n° 4		6.5	6
	F2												
	F3												
40	**F1**	39		85	60	67	28	75-90	4	n° 4		9	8
	F2			85	60	97	58	75-90	4	n° 4		9	8
	F3		140		95	80	41	115	5		n° 7	9	10
50	**F1**	46		94	70	90	44	85-100	5	n° 4		11	10
	F2		160		110	89	43	130	5		n° 7	11	11
	F3												
63	**F1**	56		142	115	82	26	150	5	n° 4		11	11
	F2			142	115	112	56	150	5	n° 4		11	11
	F3		160		110	80.5	24.5	130	5	n° 4		11	12
75	**F1**	60		160	130	111	51	165	5	n° 4		13	12
	F2		160		110	90	30	130	6	n° 4		11	13
	F3												
89	**F1**	70	200		152	111	41	175	5	n° 4		13	12
	F2		200		152	151	81	175	5	n° 4		13	13
	F3		200		130	110	40	165	6	n° 4		11	11

5.12 **Dimensioni** — *5.12 **Dimensions*** — 5.12 **Abmessungen**

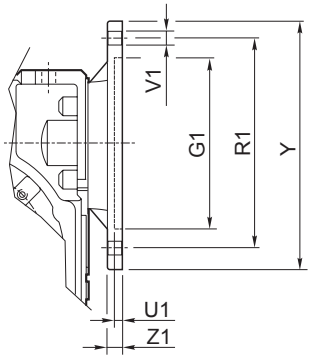
Flangia entrata / *Input flange* / Antriebsflansch



PM = 1



PM = 2



GXC	IEC	G_1	PM		R_1	U_1	V_1			Y	Z_1	Diametro fori PAM / *Holes diameter IEC* / IEC Durchmesser										
			1	2			Ø					5	7.5	10	15	20	25	30	40	50	65	80	100
30	56 B5	80	•	•	100	4	7	8			8	9	9	9	9	9	9	9	9	9	9	9	9
	56 B14	50	•	•	65	3.5	6	8		80	8	9	9	9	9	9	9	9	9	9	9	9	9
	63 B5	95	•	•	115	4	9	8		140	8	11	11	11	11	11	11	11	11	11	/	/	/
	63 B14	60	•	•	75	4	6	8		90	8	11	11	11	11	11	11	11	11	11	/	/	/
40	56 B5	80	•	•	100	4	7	8		120	9	/	/	/	/	/	/	/	/	9	9	9	9
	56 B14	50		•	65	3.5	6		4	80	8	/	/	/	/	/	/	/	/	9	9	9	9
	63 B5	95	•	•	115	4	9	8		140	9	11	11	11	11	11	11	11	11	11	11	11	11
	63 B14	60		•	75	3.5	6		4	90	8	11	11	11	11	11	11	11	11	11	11	11	11
	71 B5	110	•	•	130	4.5	9	8		160	10	14	14	14	14	14	14	14	14	/	/	/	/
	71 B14	70	•	•	85	3.5	7	8		105	8	14	14	14	14	14	14	14	14	/	/	/	/
50	63 B5	95	•	•	115	4	9	8		140	9	/	/	/	/	/	/	/	11	11	11	11	11
	63 B14	60		•	75	3.5	6		4	90	8	/	/	/	/	/	/	/	11	11	11	11	11
	71 B5	110	•	•	130	4.5	9	8		160	10	14	14	14	14	14	14	14	14	14	14	14	14
	71 B14	70		•	85	3.5	7		4	105	8	14	14	14	14	14	14	14	14	14	14	14	14
	80 B5	130	•	•	165	4.5	11	8		200	10	19	19	19	19	19	19	19	19	/	/	/	/
	80 B14	80	•	•	100	4	7	8		120	10	19	19	19	19	19	19	19	19	/	/	/	/
63	71 B5	110	•	•	130	4.5	9	8		160	10	/	/	/	/	/	/	/	14	14	14	14	14
	71 B14	70		•	85	3.5	7		4	105	10	/	/	/	/	/	/	/	14	14	14	14	14
	80 B5	130	•	•	165	4.5	11	8		200	10	19	19	19	19	19	19	19	19	19	19	19	19
	80 B14	80		•	100	4	7		4	120	10	19	19	19	19	19	19	19	19	19	19	19	19
	90 B5	130	•	•	165	4.5	11	8		200	10	24	24	24	24	24	24	24	/	/	/	/	/
	90 B14	95	•	•	115	4	8.5	8		140	10	24	24	24	24	24	24	24	/	/	/	/	/
75	71 B5	110	•	•	130	4.5	9	8		160	10	/	/	/	/	/	/	14	/	/	14	14	14
	71 B14	70		•	85	4	7		4	105	11	/	/	/	/	/	/	14	/	/	14	14	14
	80 B5	130	•	•	165	4.5	11	8		200	10	/	/	/	/	/	/	19	19	19	19	19	19
	80 B14	80		•	100	4	7		4	120	11	/	/	/	/	/	/	19	19	19	19	19	19
	90 B5	130	•	•	165	4.5	11	8		200	10	/	24	24	24	24	24	24	24	24	24	24	24
	90 B14	95		•	115	4	9		4	140	11	/	24	24	24	24	24	24	24	24	24	24	24
	100/112 B5	180	•	•	215	5	14	8		250	13	/	28	28	28	28	28	28	/	/	/	/	/
	100/112 B14	110	•	•	130	4.5	9	8		160	11	/	28	28	28	28	28	28	/	/	/	/	/
89	80 B5	130	•	•	165	4.5	11	8		200	10	/	/	/	/	/	/	/	/	/	19	19	19
	80 B14	80		•	100	4	7		4	120	11	/	/	/	/	/	/	/	/	/	19	19	19
	90 B5	130	•	•	165	4.5	11	8		200	10	/	24	24	24	24	24	24	24	24	24	24	24
	90 B14	95		•	115	4	9		4	140	11	/	24	24	24	24	24	24	24	24	24	24	24
	100/112 B5	180	•	•	215	5	14	8		250	13	/	28	28	28	28	28	28	/	/	/	/	/
	100/112 B14	110	•	•	130	4.5	9	8		160	11	/	28	28	28	28	28	28	/	/	/	/	/

N.B.: Il montaggio STD di P_M=2 solo quando non è possibile il montaggio STD di P_M=1.
N.B.: E' possibile realizzare anche tutte le composizioni ibride ottenibili dalle flange esistenti.

N.B.: STD mounting of P_M=2 only if STD mounting of P_M=1 is not possible.
N.B.: it is possible to create hybrid combinations with the existing flanges.

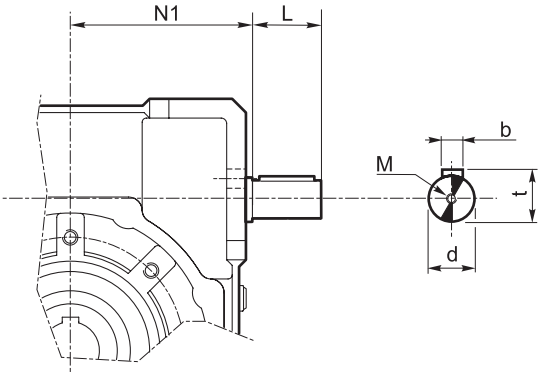
ANMERKUNG: STD Montage von P_M=2 nur wenn STD Montage von P_M=1 unmöglich ist.
ANMERKUNG: Mischkombinationen mit der verfügbaren Flanschen sind möglich.

5.13 **Entrata supplementare**
(vite bisporgente)

5.13 ***Additional input***
(double extended shaft)

5.13 **Zusatzantrieb**
(beidseitige Welle)

S.e.A.

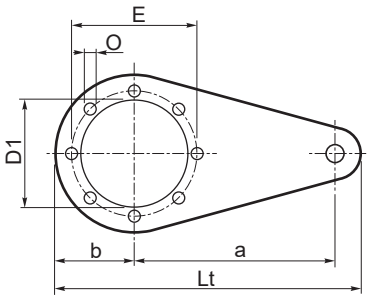


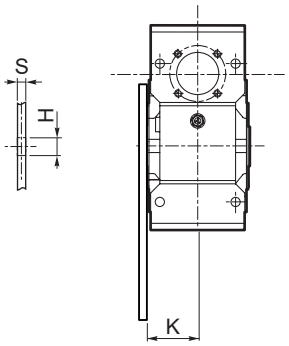
GX	d j6	L	M	N1	b	t
30	9	15	M4x10	42.5	3	10.2
40	11	20	M4x12	52.5	4	12.5
50	14	25	M5x13	62.5	5	16
63	19	30	M8x20	74.5	6	21.5
75	24	40	M8x20	91	8	27
89	24	40	M8x20	108	8	27

5.14 **Accessori**
(braccio di reazione)

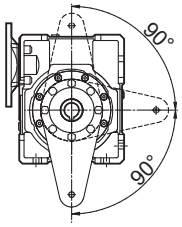
5.14 ***Accessories***
(Torque arm)

5.14 **Zubehör**
(Drehmomentstütze)

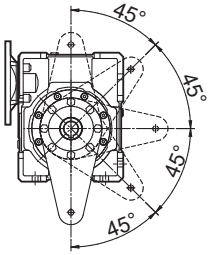




GX	a	b	D_1	E	H	K	L_t	O	S1	S2
30	85	37.5	55	65	8	24	141.5	7	14	4
40	100	45	60	75	10	31.5	167	7	14	4
50	100	50	70	85	10	39	172	9	14	5
63	150	55	80	95	10	49	227	9	14	6
75	200	70	95	115	20	47.5	302	9	25	6
89	200	80	110	130	20	57.5	312	11	25	6



30 - 40 - 50



63 - 75 - 89

5.15 Lista parti di ricambio

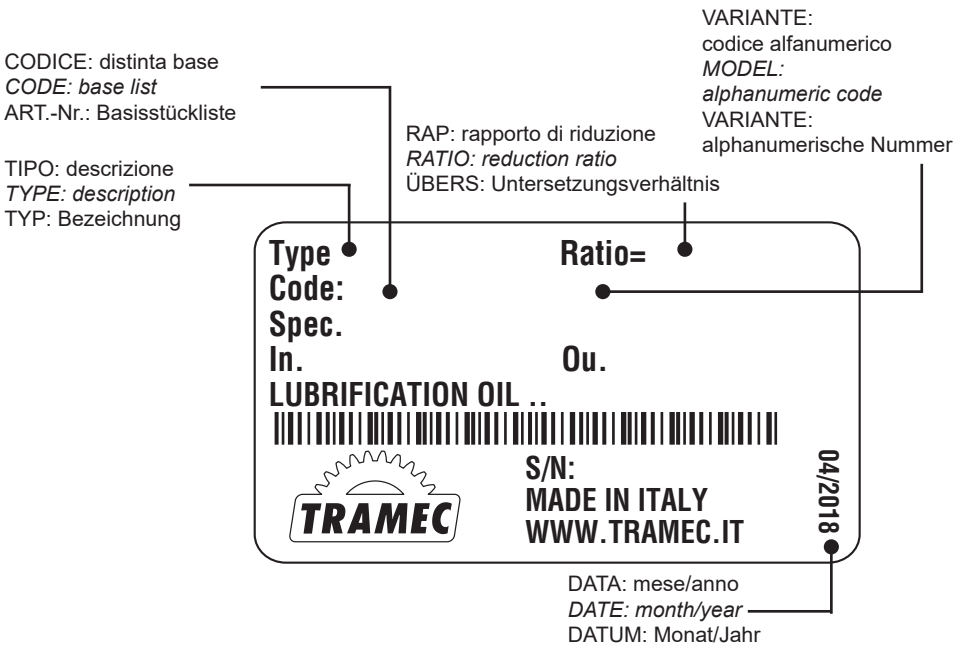
In fase di ordine delle parti di ricambio, specificare sempre n° particolare (vedi disegno esploso), data (1), n° codice (2) e n° variante (3).
(Vedi targhetta).

5.15 Spare parts list

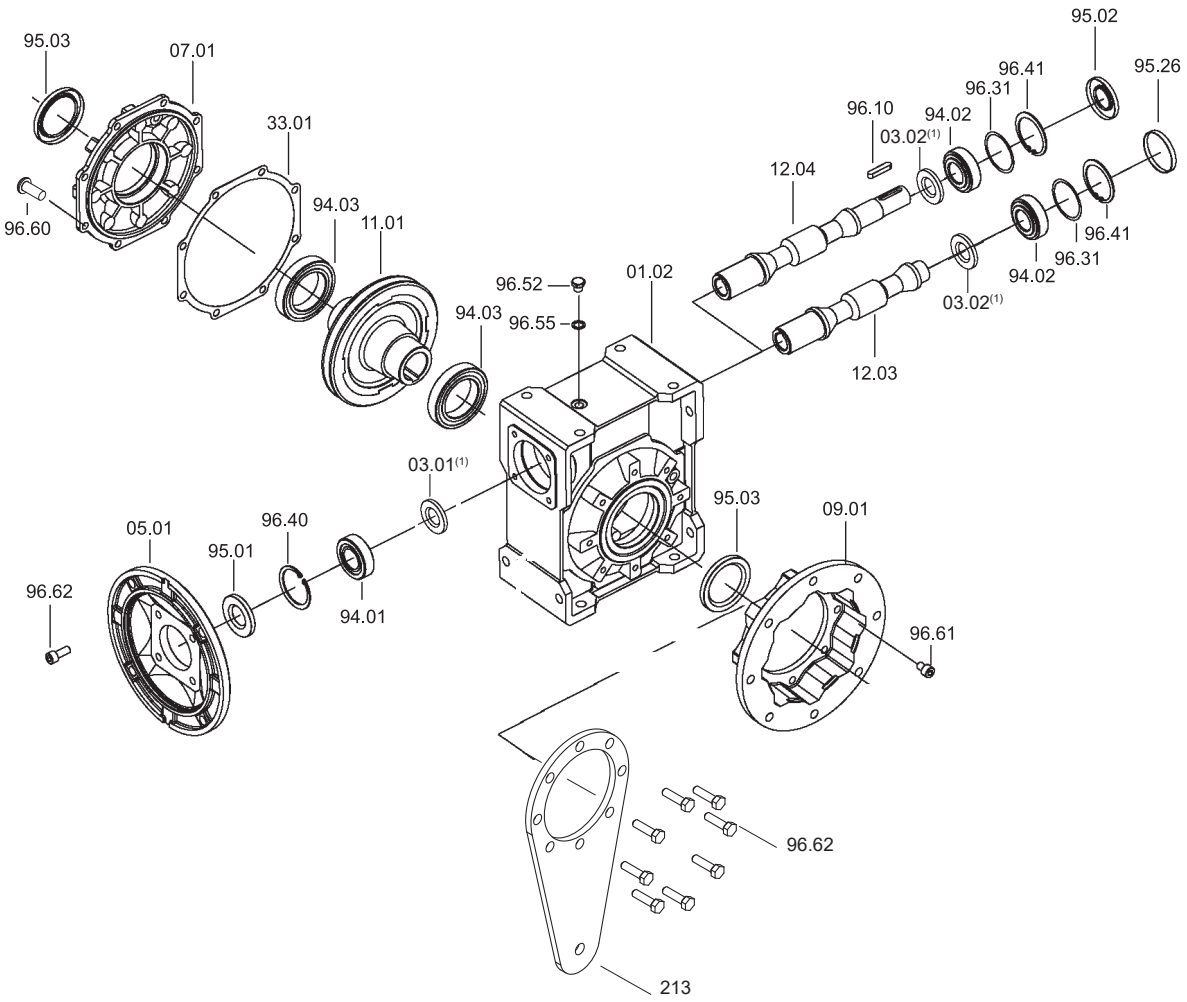
When ordering a spare part, the spare part number (see exploded technical drawing) , the date (1), the code number (2) and the variant number (3) should always be reported.
(See plate)

5.15 Ersatzteilliste

Bei der Bestellung von Ersatzteilen sind Ersatzteilnummer (s. Explosionszeichnung), Datum (1), Artikelnummer (2) und Variantenummer (3) anzugeben.
(s. Schild)



GXC



GX	IEC	Cuscinetti / *Bearings* / Lager			Anelli di tenuta / Oilseals Öldichtungen			Cappellotto / *Closed oil seal* Geschlossene Öldichtung
		94.01	**94.02**	**94.03**	**95.01**	**95.02**	**95.03**	**95.26**
30	56	**61804** (20x32x7)	**6000** 10x26x8	**6005** 25x47x12	20/32/5	10/26/7	25/40/7	ø 26x7
	63	**61804** (20x32x7)			20/32/5			
40	56	**6303** (17x47x14)	**6201** 12x32x10	**6006** 30x55x13	17/47/7	12/32/7	30/47/7	ø 32x7
	63	**6204** (20x47x14)			20/47/7			
	71	**6005** (25x47x12)			25/47/7			
50	63	**6204** (20x47x14)	**6203** 17x40x12	**6008** 40x68x15	20/47/7	17/40/7	40/62/8	ø 40x7
	71	**6005** (25x47x12)			25/47/7			
	80	**6006** (30x55x13)			30/55/7			
63	71	**6305** (25x62x17)	**6204 C3** 20x47x14	**6008** 40x68x15	25/62/7	20/47/7	40/62/8	ø 47x7
	80	**6206** (30x62x16)			30/62/7			
	90	**6007** (35x62x14)			35/62/7			
75	71	**6206** (30x62x16)	**6205 C3** 25x52x15	**6010** 50x80x16	30/62/7	25/52/7	50/72/8	ø 52x7
	80	**6206** (30x62x16)			30/62/7			
	90	**6007** (35x62x14)			35/62/7			
	100/112	**6008** (40x68x15)			40/68/10			
89	80	**6206** (30x62x16)	**6205 C3** 25x52x15	**6010** 50x80x16	30/62/7	25/52/7	50/72/8	ø 52x7
	90	**6007** (35x62x14)			35/62/7			
	100/112	**6008** (40x68x15)			40/68/10			