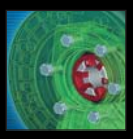




VARVEL®

MOTION CONTROL SINCE 1955

technology made in Italy

IT

EN

DE

VARfarm

by VARVEL

Tecnologia Made in Italy IT

Dal 1955 il Gruppo Varvel progetta e realizza riduttori e variatori per applicazioni fisse di piccola e media potenza. Partner affidabile nella produzione e vendita di organi di trasmissione grazie a un elevato livello di servizio, offre anche soluzioni personalizzate operando nel rispetto dei valori dell'impresa socialmente responsabile. Modularità e flessibilità guidano la progettazione dei prodotti Varvel nella realizzazione di kit comuni a tutte le famiglie di riduttori, agevolando così l'attività di distributori e rivenditori che possono configurare in pochi minuti il prodotto richiesto dal singolo cliente.

Technology Made in Italy EN

Since 1955 the Varvel Group has been making gearboxes and variators for light industry applications. Reliable partner in power transmission equipment offers also customized solutions always according to a socially responsible company values. Modularity and flexibility lead Varvel products by a unique kit form, common to all gearbox series. This feature allows distributors an easier job to set up required products in few minutes.

Technologie Made in Italy DE

Seit 1955 plant und stellt die Varvel-Gruppe Getriebe und Verstellgetriebe für feste Kleinleistunganwendungen her. Dank dem hohen Dienstniveau ist Varvel ein zuverlässiger Partner für Herstellung und Verkauf von Getriebewerkteilen und bietet maßgeschneiderte Lösungen an, in Verbindung mit sozialverträglicher Handlungsweise. Modularität und Flexibilität sind Kennzeichen für Varvel-Produkte. Die Firma produziert Teile, die sich für alle Getriebetypen eignen. Verteiler und Verkäufer können somit den Kundenanforderungen gerecht werden.

- UNI EN ISO 9001:2008
- UNI EN ISO 14001:2004
- BS OHSAS 18001:2007

- EC DIRECTIVE 2014/34/EU (ATEX)

VARfarm
by VARVEL

RIDUTTORI A VITE SENZA FINE E INGRANAGGI
per sistemi d'allevamento

WORM AND HELICAL SPEED REDUCERS
for agricultural application

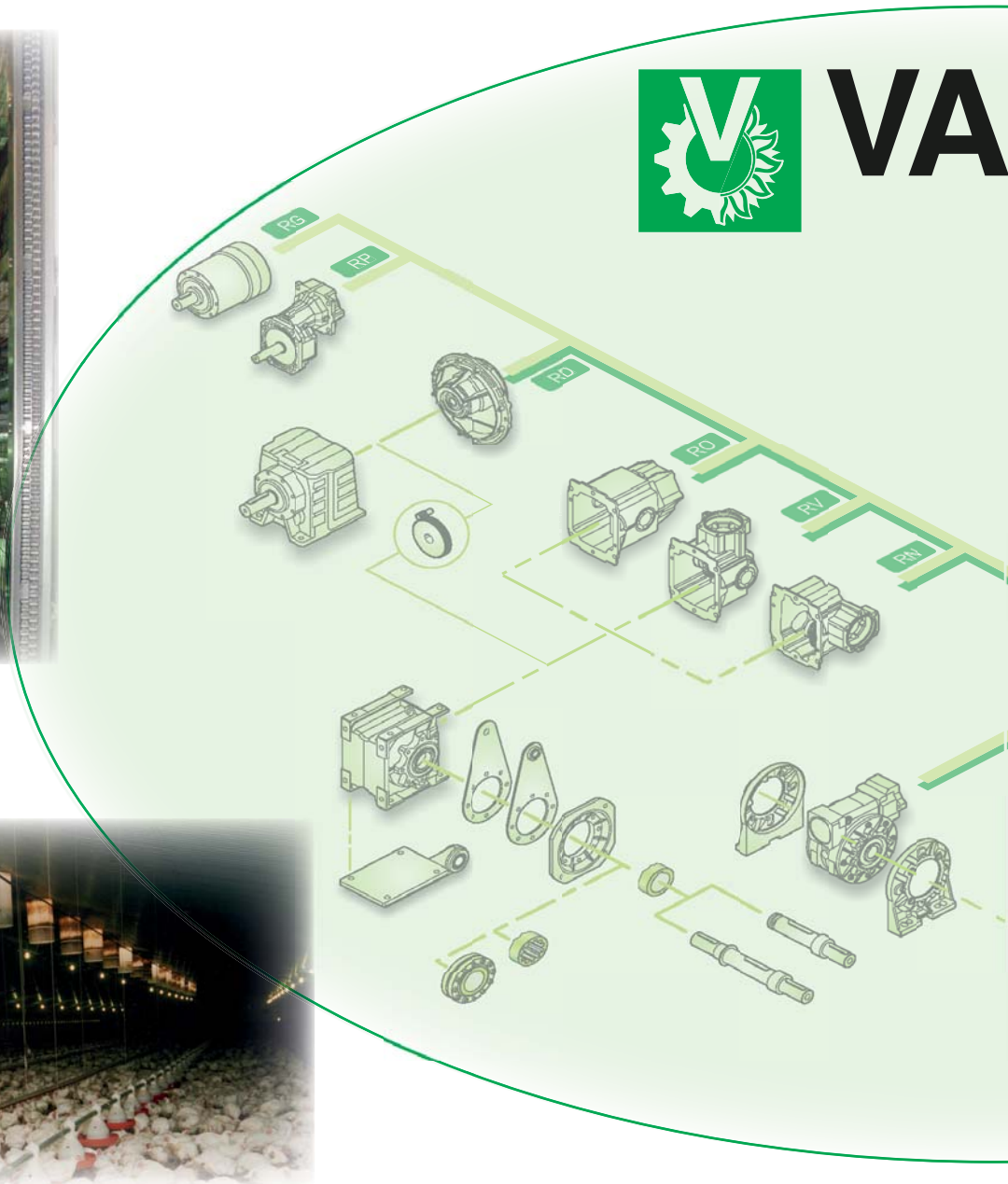
SCHNECKEN- UND STIRNRADGETRIEBE
für Landwirtschaft und Tierhaltung

VARVEL
MOTION CONTROL SINCE 1955

Riduttori - Gearboxes - Getriebe

Sistema modulare - Modular System - Modularsystem

Sistemi di gabbie
Cage system
Anlagen für die Käfighaltung



Sistemi per l'alimentazione avicola
Poutry feeding systems
Fütterungsanlagen für die Bodenhaltung

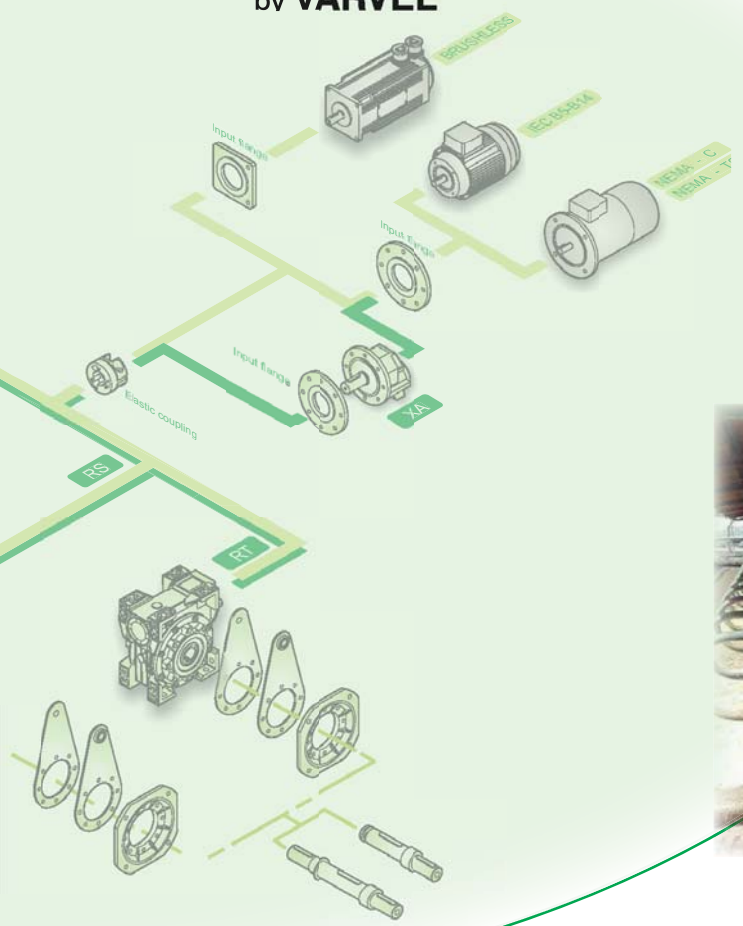
Trasportatori e raccolta uova
Egg conveyors
Eier Förder- und Sortieranlagen

Getriebe - Gearboxes - Riduttori

Modularsystem - Modular System - Sistema modulare

R farm

by VARVEL



Raschiatori
Scrapers
Entmistungsanlage

Spazzole rotanti
Cow Brushes
Kuh Bürstenmaschinen

Sistemi per l'alimentazione suina
Pig feeding systems
Fütterungsanlagen für Schweine

Giunto elastico “G” - Elastic coupling “G” - Elastische Kupplung “G”

L’utilizzo del **giunto elastico “G”** in sostituzione al tradizionale accoppiamento albero/linguetta tra motore e riduttore, introduce molteplici vantaggi mantenendo invariato l’ingombro complessivo del riduttore stesso.

The introduction of **flexible cou-pling “G type”** as replacement of traditional shaft/key fitting between motor and gearbox, gives various advantages but keeping unchanged gearbox overall dimensions.

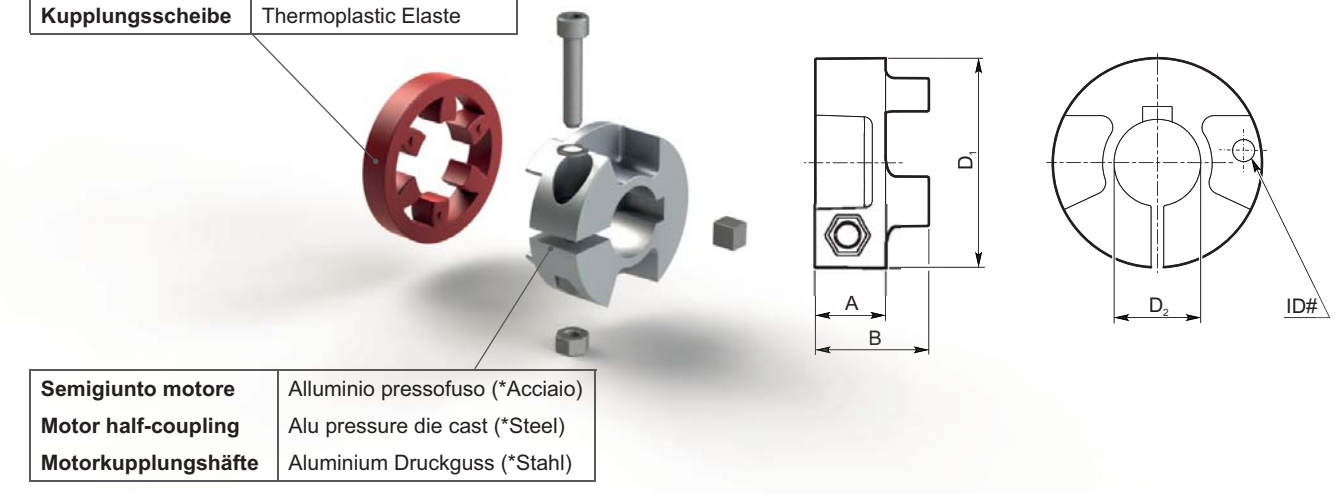
Die Einführung der **flexieblen Kupplung “G-Typ”** als Ersatz zur traditionellen Welle/Passfeder Montage zwischen Motor und Getriebe, hat verschiedene Vorteile, bei unveränderten Abmessungen des Getriebe.

Vantaggi
- Un solo riduttore per rapporto
- Maggiore flessibilità
- Rotazione stock aumentata
- Eliminazione dell’ossidazione per sfregamento (tribocorrosione)
- Gioco “zero” nel collegamento
- Disallineamento angolare 1° max
- Rigidità torsionale
- Smorzamento vibrazioni

Advantages
- One gearbox only for each ratio
- Greater flexibility
- Increased stock rotation
- Fretting corrosion elimination
- Coupling zero backlash
- Angular misalignment 1deg. max.
- Torsional rigidity
- Vibration damping

Vorzüge
- nur eine Getriebekomponente je Übersetzung
- gesteigerte Flexibilität
- höherer Lagerumschlag
- Vermeidung von Passungsrost
- spielfrei Verbindung
- Winkelausgleich bis 1°
- Verdrehsteifigkeit
- Dämpfung von Schwingungen

Anello elastico	Elastomero termoplastico
Spider	Thermoplastic elastomer
Kupplungsscheibe	Thermoplastic Elaste



Semigiunto motore	Alluminio pressofuso (*Acciaio)
Motor half-coupling	Alu pressure die cast (*Steel)
Motorkupplungshäfte	Aluminium Druckguss (*Stahl)

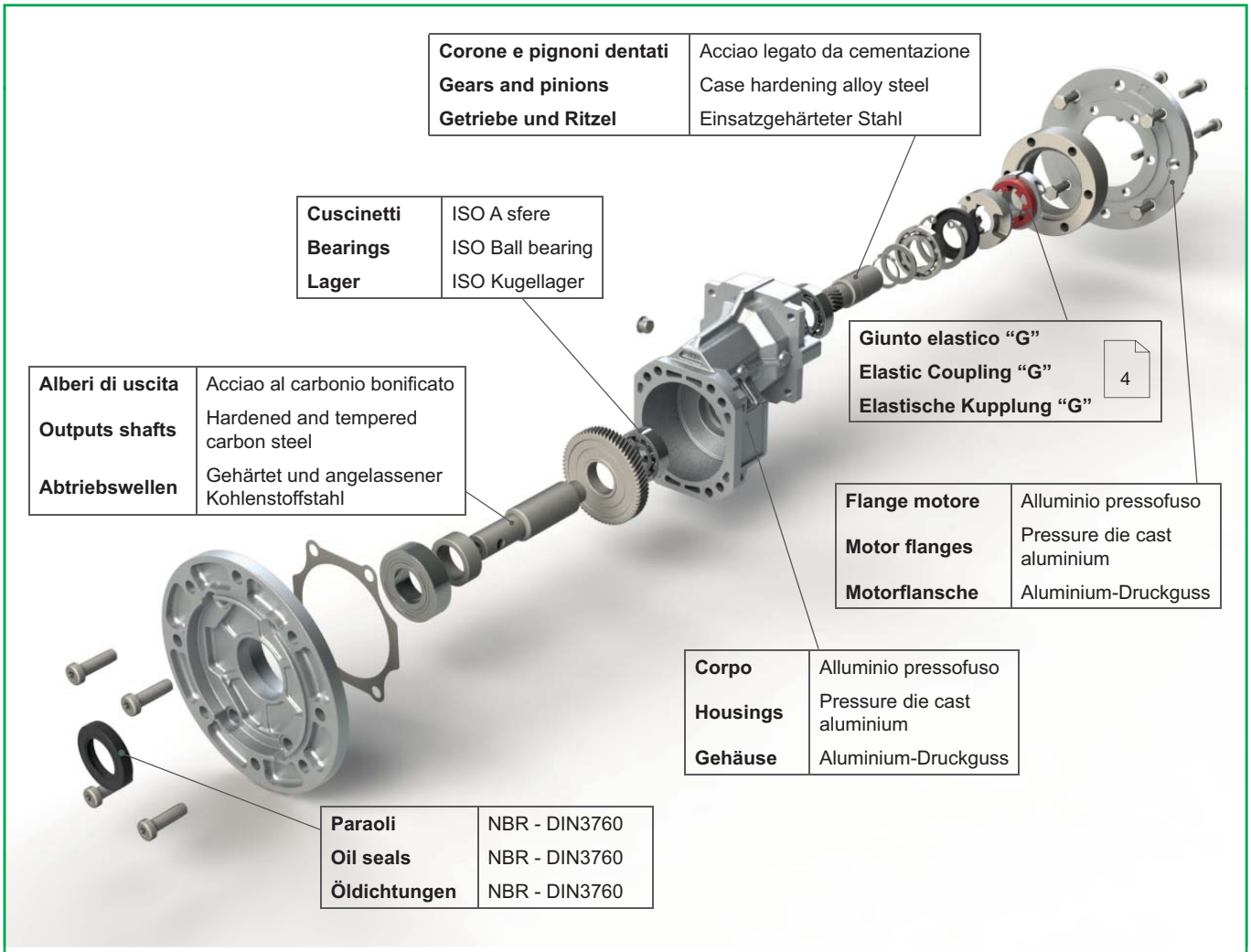
Giunto Coupling Kupplung	IEC	Codice kit Kit code Kit Code	RD	RS-RT	RP	M_t [Nm]	M_{t1} [Nm]	M_{t2} [Nm]	A [mm]	B [mm]	D_1 [mm]	D_2 [mm]	ID#
G3	IEC	KG3.009 KG3.011 KG3.014	03 03 03	28-40 28-40 40	- - - - - - - - -	4.5 - 6 4.5 - 6 7 - 8.5	15 15 28	8 - 10 8 - 10 18 - 22	11	19	30 30 36	9 11 14	309 311 314
G5	IEC	KG5.009 KG5.011 KG5.014 KG5.019 KG5.024	02-12-13-23 02-12-13-23 02-12-13-23 02-12-23 12-23	- - - 50-60 50-60 50-60 60	- - - - - - 90 90 90	8.9 - 10	14 15 30 40 70	8 - 10 8 - 10 12 - 17 20 - 25 30 - 40	14.5	23	45 45 45 45 52	9 11 14 19 24	509 511 514 519 524
G6	IEC	KG6.014 KG6.019 KG6.024 KG6.028	22-32-33-42-43 22-32-33-42-43 22-32-33-42-43 22-32-42	70 70-85-110 70-85-110 70-85-110	- - - - - - - - - - - -	15.3 - 18	60 90 130 180	30 - 40 50 - 65 85 - 100 100 - 120	19.5	31.5	58	14 19 24 28	614 619 624 628
*GS8	IEC	* KGS8.19 * KGS8.24 * KGS8.28 * KGS8.38 * KGS8.42 * KGS8.48	52-53-62-63 52-53-62-63 52-53-62-63 52-62-63 52-62 52-62	- - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - -	15	150 250 350 500 500 500	- - - - - - - - - - - - - - - - - -	35	51	79	19 24 28 38 42 48	819 824 828 838 842 848

RP

RIDUTTORI A INGRANAGGI A UNA COPPIA
SINGLE STAGE HELICAL GEARBOXES
EINSTUFIGE STIRNRADGETRIEBE

RP Riduttori - Gearboxes - Getriebe

Dati tecnici - Technical data - Technische Daten



Designazione - Designation - Bezeichnungen

F	RP-G	90	B5/160	3.94	IEC80	B14	910.001
M	RP-G	90	B5	2.52	IEC71	B5	
F			B5/1	..	IEC71	B14	
S			SQ	..	IEC80		
..			SQ/1	..	IEC80		
			B5/140	..	IEC90		
			B5/160	7.91	IEC90		
					9		
			8-9	7			10-11

Albero Uscita - Output shaft - Abtriebswelle

Forma motore elettrico - Motor size - Motorbauform

Grandezza IEC motore elettrico - IEC Motor size - IEC Motorbaugröße

Rapporto di riduzione - Reduction ratio - Untersetzungsverhältnis

Flangia uscita e diametro - Output flange and diameter - Abtriebsflansch und Durchmesser

Grandezza del riduttore - Gearbox size - Getriebegröße

Tipo di riduttore - Gearbox type - Getriebetyp

M = Motoriduttore - Geared Motor - Getriebemotor
F = Riduttore con flangia di entrata - Gearbox with input flange - Getriebe mit Eingangsflansch
S = Riduttore senza flangia di entrata - Gearbox without input flange - Getriebe ohne Eingangsflansch
.. = Riduttore con albero di entrata sporgente - Gearbox with input free shaft - Getriebe mit freie Eingangswelle

Getriebe - Gearboxes - Riduttori RP

Technische Daten - Technical data - Dati tecnici

	P_1 [kW]	i_r	n_2 [rpm]	M_2 [Nm]	FS
1400 rpm / 50 Hz	0,25	2.52	556	4.2	8.3
		2.95	475	4.9	6.7
		3.2	438	5.3	6.2
		3.94	355	6.6	4.6
		4.25	329	7.1	4.1
		4.73	296	7.9	3.7
		5.07	276	8.5	3.3
		5.7	246	9.5	2.6
		7.0	200	11.7	2.0
		7.91	177	13.2	1.6
	0,37	2.52	556	6.2	5.6
		2.95	475	7.3	4.5
		3.2	438	7.9	4.2
		3.94	355	9.7	3.1
		4.25	329	10.5	2.8
		4.73	296	11.7	2.5
		5.07	276	12.5	2.2
		5.7	246	14.1	1.8
		7.0	200	17.3	1.3
		7.91	177	19.6	1.1
	0,55	2.52	556	9.3	3.8
		2.95	475	10.8	3.0
		3.2	438	11.8	2.8
		3.94	355	14.5	2.1
		4.25	329	15.6	1.9
		4.73	296	17.4	1.7
		5.07	276	18.6	1.5
		5.7	246	21.0	1.2
		7.0	200	25.7	0.9
	0.75	2.52	556	12.6	2.8
		2.95	475	14.8	2.3
		3.2	438	16.0	2.1
		3.94	355	19.8	1.5
		4.25	329	21.3	1.3
		4.73	296	23.7	1.2
		5.07	276	25.4	1.1
		5.7	246	28.6	0.9
	1.1	2.52	556	18.5	1.6
		2.95	475	21.7	1.4
		3.2	438	23.5	1.3
		3.94	355	29.0	1.0
		4.25	329	31.3	0.9
		4.73	296	34.8	0.8
		5.07	276	37.3	0.8
	1.5	2.52	556	25.3	1.2
		2.95	475	29.6	1.0
		3.2	438	32.1	0.8

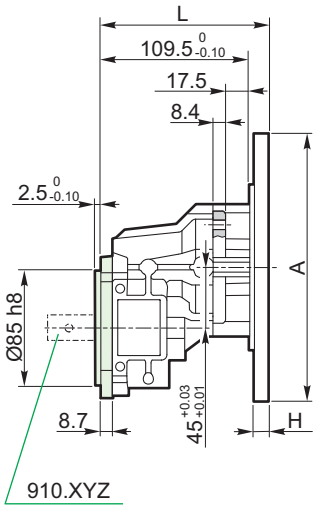
	P_1 [kW]	i_r	n_2 [rpm]	M_2 [Nm]	FS
1750 rpm / 60 Hz	0.25	2.52	694	3.4	10.4
		2.95	593	3.9	8.4
		3.2	547	4.3	7.8
		3.94	444	5.3	5.8
		4.25	412	5.7	5.1
		4.73	370	6.3	4.6
		5.07	345	6.8	4.1
		5.7	307	7.6	3.3
		7.0	250	9.4	2.5
		7.91	221	10.6	2.0
	0.37	2.52	694	5.0	7.0
		2.95	593	5.8	5.6
		3.2	547	6.3	5.3
		3.94	444	7.8	3.9
		4.25	412	8.4	3.5
		4.73	370	9.4	3.1
		5.07	345	10.0	2.8
		5.7	307	11.3	2.3
		7.0	250	13.9	1.6
		7.91	221	15.7	1.4
	0.55	2.52	694	7.4	4.8
		2.95	593	8.7	3.8
		3.2	547	9.4	3.5
		3.94	444	11.6	2.6
		4.25	412	12.5	2.4
		4.73	370	13.9	2.1
		5.07	345	14.9	1.9
		5.7	307	16.8	1.5
		7.0	250	20.6	1.1
		7.91	221	23.3	1.0
	0.75	2.52	694	10.1	3.5
		2.95	593	11.8	2.9
		3.2	547	12.8	2.6
		3.94	444	15.8	1.9
		4.25	412	17.0	1.6
		4.73	370	19.0	1.5
		5.07	345	20.3	1.4
		5.7	307	22.9	1.1
		7.0	250	28.1	0.9
		7.91	221	31.7	0.8
	1.1	2.52	694	14.8	2.0
		2.95	593	17.4	1.8
		3.2	547	18.8	1.6
		3.94	444	23.2	1.3
		4.25	412	25.0	1.1
		4.73	370	27.8	1.0
		5.07	345	29.8	1.0
		5.7	307	33.5	0.8
	1.5	2.52	694	20.2	1.5
		2.95	593	23.7	1.3
		3.2	547	25.7	1.0
		3.94	444	31.6	0.8

RP Riduttori - Gearboxes - Getriebe

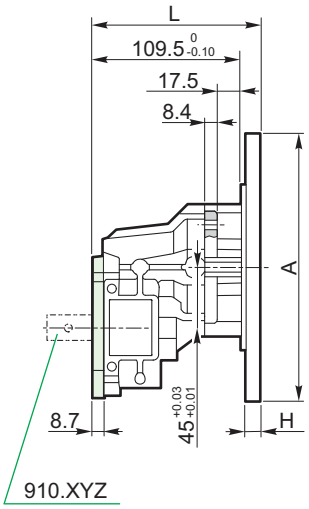
Dimensioni - Dimensions - Abmessungen

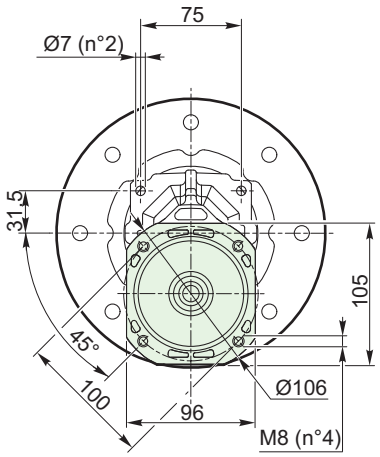
Riduttori e flange di uscita - Gearboxes and output flange - Getriebe und Abtriebsflansche

FRP-G 90 B5

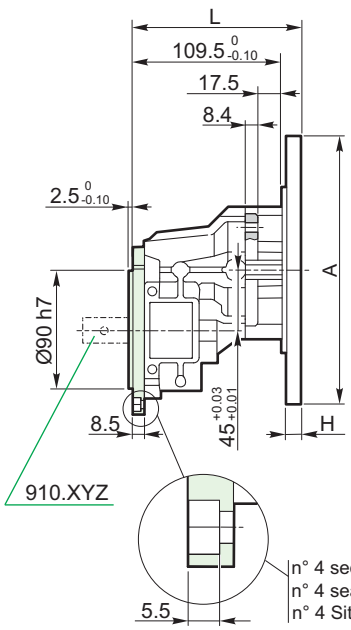


FRP-G 90 B5/1

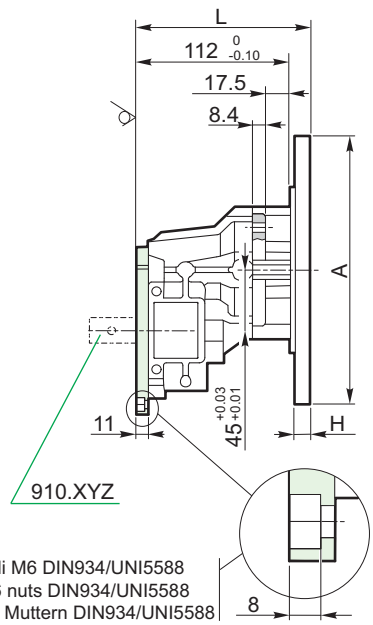




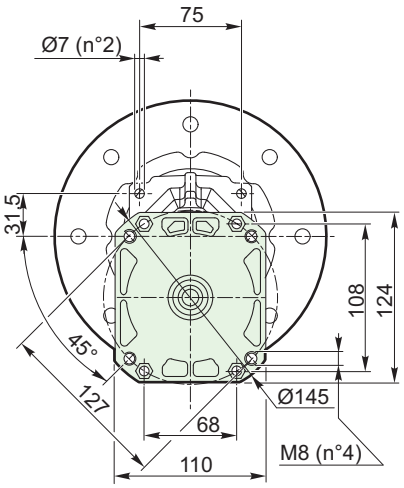
FRP-G 90 SQ



FRP-G 90 SQ/1



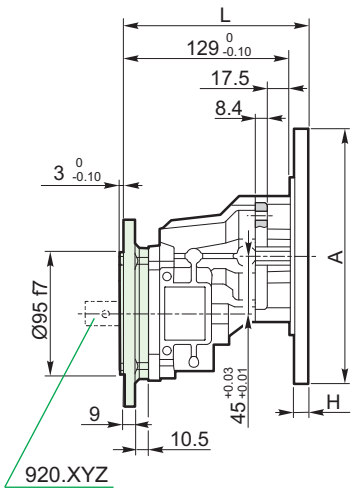
n° 4 sedi per dadi M6 DIN934/UNI5588
n° 4 seats for M6 nuts DIN934/UNI5588
n° 4 Sitze für M6 Muttern DIN934/UNI5588

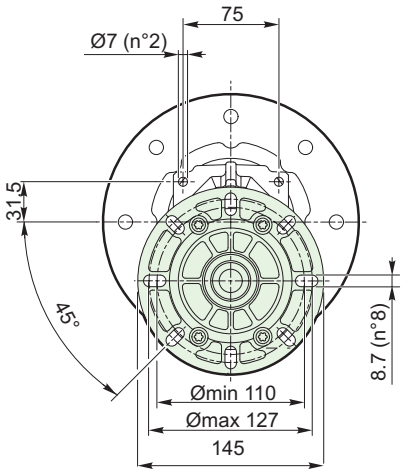


Getriebe - Gearboxes - Riduttori RP

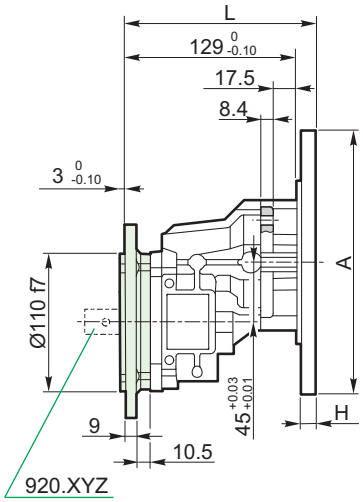
Abmessungen - Dimensions - Dimensioni

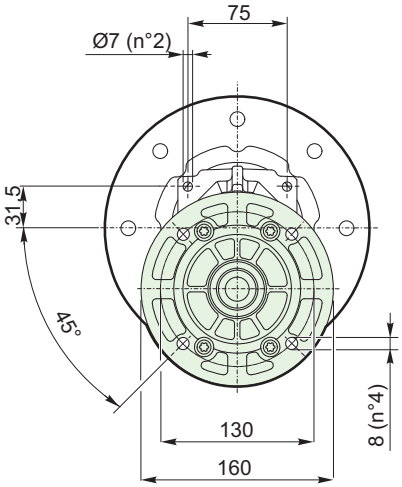
FRP-G 90 B5/140



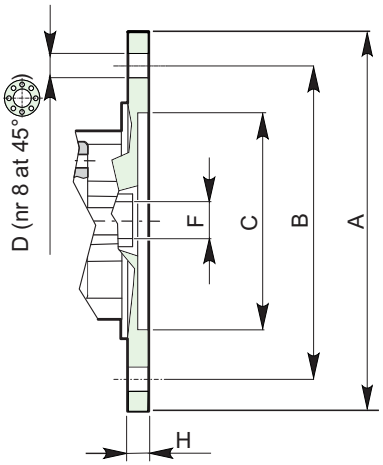


FRP-G 90 B5/160





IEC Motorflanschen - IEC motor flanges - Flange motore IEC

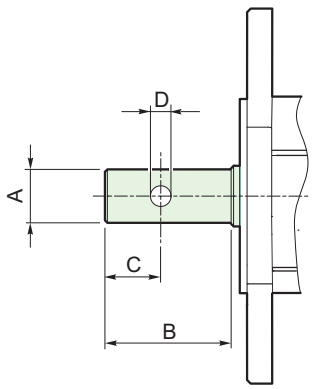


		71B5	71B14	80B5	80B14	90B5	90B14
	A	160	105	200	120	200	140
	B	130	85	165	100	165	115
	C	110	70	130	80	130	95
	D	10	7	11	7	11	10
	F	14	14	19	19	24	24
	H	11.5	10.5	11.5	10	11.5	11
FRP90 B5 FRP90 B5/1 FRP90 SQ	L	125	125	125	127	150	152
FRP90 SQ/1		127.5	127.5	127.5	129.5	152.5	154.5
FRP90 B5/140 FRP90 B5/160		144.5	144.5	144.5	146.5	169.5	171.5

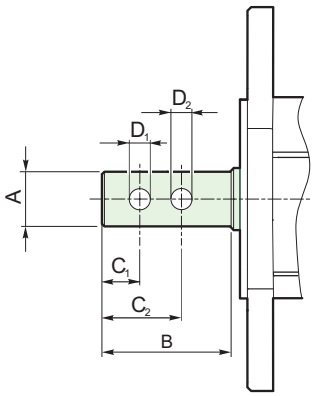
RP Riduttori - Gearboxes - Getriebe

Dimensioni - Dimensions - Abmessungen

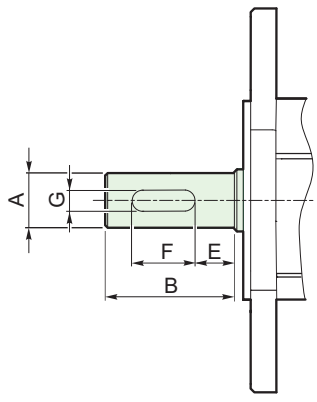
Alberi di uscita - Output shafts - Abtriebswellen



A	B	C	D (H11)	Codice albero Shaft ID Teilenummer Welle
ø16 $^{0}_{-0.05}$	50	21	6.5	910.007
ø16 $^{0}_{-0.05}$	50	21	7	910.018
ø18.8 $^{0}_{-0.1}$	80	15	8.5	920.008
ø19 $^{0}_{-0.05}$	57	23	6.5	910.001
ø19 $^{0}_{-0.05}$	57	23	6.5	910.017
ø19 h7	40	14	6.5	920.006
ø19.7 $^{+0.05}_{-0.05}$	100	50	6	920.016
ø20 h7	84	30	6	920.013
ø20 $^{0}_{-0.2}$	52	23	6.5	920.022
ø21 $^{0}_{-0.1}$	52	23	6	920.012
ø21 $^{0}_{-0.05}$	57	23	6	910.024
ø22 $^{0}_{-0.1}$	80	15	8.5	920.011
ø22 $^{0}_{-0.05}$	57	23	8.5	910.004



A	B	C_1	C_2	D_1 (H11)	D_2 (H11)	Codice albero Shaft ID Teilenummer Welle
ø19 $^{0}_{-0.05}$	57	23	38	6.5	6.5	910.015
ø19 $^{0}_{-0.2}$	92	30	48	8.5	8.5	910.002
ø19.7 $^{+0.05}_{-0.05}$	100	30	50	6	6	910.014
ø20 $^{0}_{-0.05}$	75	37	53	7	7	910.005
ø20 h7	72	20	40	8	6.5	920.023
ø22 $^{0}_{-0.2}$	52	23	38	6.5	6.5	910.009



A	B	E	F	G	Codice albero Shaft ID Teilenummer Welle
ø19 h6	40	5	30	6	910.003
					910.019
					920.003

Nota: Selezione albero/flange uscita: vedere pag.
Note: Output shaft/flange selection: see pag.
Notiz: Notiz: Auswahl der Ausgangswellen und Flansche: s. Seite

11

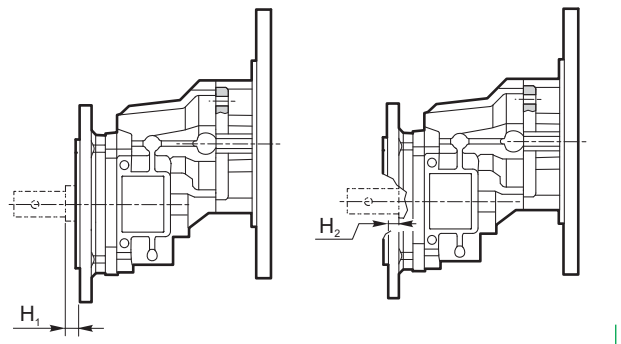
Getriebe - Gearboxes - Riduttori RP

Abmessungen - Dimensions - Dimensioni

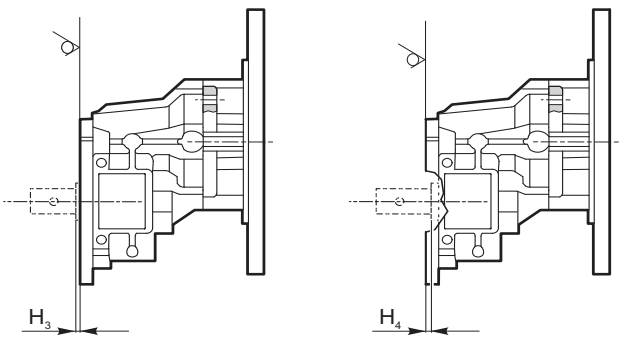
Abtriebsflansche - Output flanges - Flange di uscita

	Flangia di uscita Output flange Abtriebsflansche				Quota di spallamento Shoulder value Schulter-Wert			
Codice albero Shaft ID Welle teilenummer	B5 B5/1	SQ SQ/1	B5/140	B5/160	H_1	H_2	H_3*	H_4*
910.001	•	•			2.5		0	
910.002	•	•			0			2.5
910.003	•	•			0			2.5
920.003			•	•		9		
910.004	•	•			2.5		0	
910.005	•	•			2.5		0	
920.006			•	•		7.5		
910.007	•	•			3.5		1.0	
920.008			•	•		9		
910.009	•	•			4.5		2.0	
920.011			•	•		9		
920.012			•	•		9		
920.013			•	•	4.5			
910.014	•	•			4.5		2.0	
910.015	•	•			2.5		0	
920.016			•	•		9		
910.017	•	•			5.5		3.0	
910.018	•	•			3.5		1.0	
910.019	•	•			4.5		2.0	
920.022			•	•		9		
920.023			•	•	0			
910.024	•	•			2.5		0	

Altre estremità d'albero a richiesta - Other shaft ends on demand - weitere Ausgangswellen auf Anfrage



B5 - B5/1 - B5/140 - B5/160 - SQ

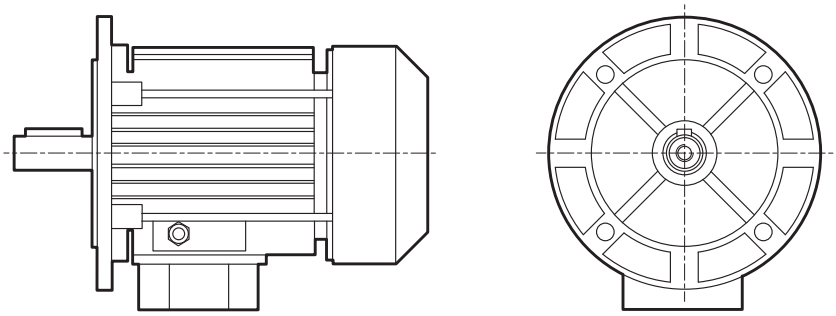


SQ/1

* Quota H_3 e H_4 solo per versioni con flange SQ/1 - Dimensions H_3 and H_4 for flange SQ/1 only - Abmessungen H_3 und H_4 nur Für Flansch SQ/1

Motori - Motors - Motoren

Designazione - Designation - Bezeichnungen



Motore - Motor - Motor RP - RD - RS - RT

MT	0.37 kW	71B	4	B14	230/400/50	IP55	F	X4
MT	0.06	56		B5				X1
MM	..	..		B14				X2
MA	..	..						X3
	..	..						X4
	..	..						
	15	160						

Posizione morsettiera - Terminal box position - Klemmkastenposition

Classe d'isolamento - Insulation class - Isolationsklasse
Class F (std)

Grado di protezione - Protection class - Schutzart
IP55 (std)

Tensione/frequenza - Voltage/frequency - Spannung/Frequenz

Forma costruttiva - Mounting form - Bauform

Numero poli - Number of poles - Polzahl

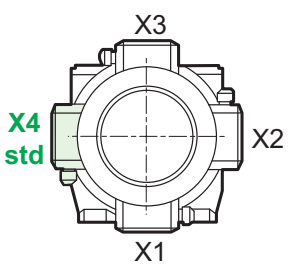
Grandezza IEC motore - IEC motor frame - IEC Motorbaugröße

Potenza motore - Motor power - Motorleistung

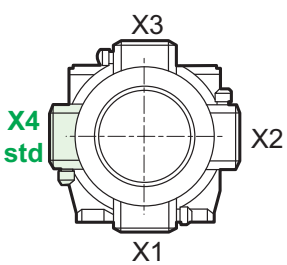
MT = Motore trifase - Three-phase motor - Dreiphasenmotor
MM = Motore monofase - Single-phase motor - Einphasenmotor
MA = Motore autofrenante - Brake motor - Bremsmotor

Posizione morsettiera - Terminal position - Klemmenkastenlage position

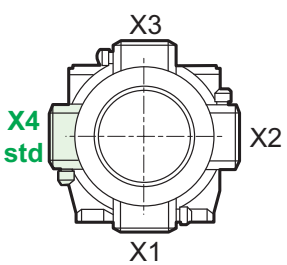
RP



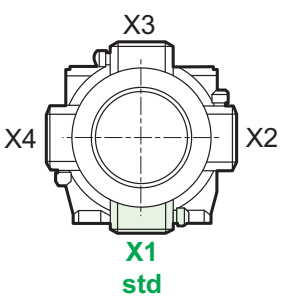
RD



RS



RT



RD

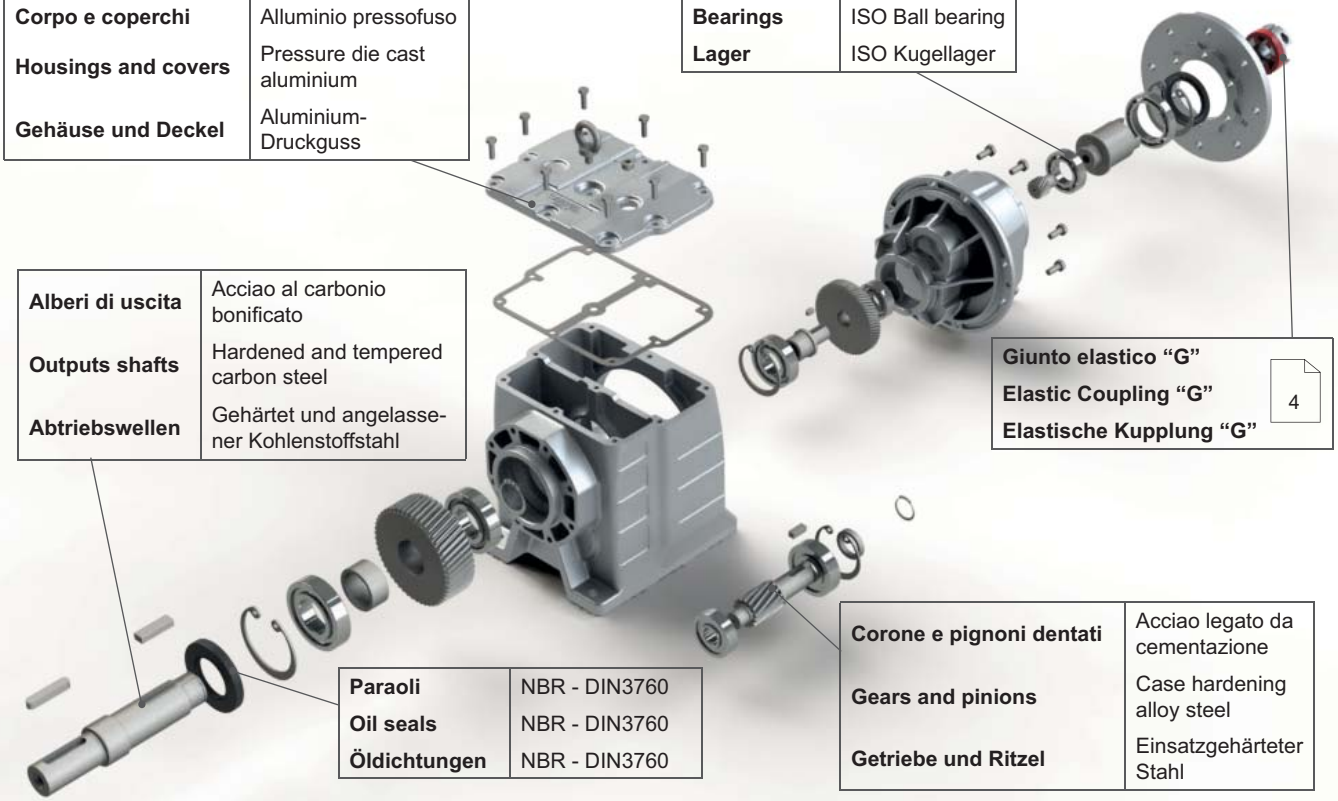
RIDUTTORI A INGRANAGGI - DUE E TRE COPPIE
TWO AND THREE STAGE HELICAL GEARBOXES
ZWEI- UND DREISTUFIGE STIRNRADGETRIEBE

RD Riduttori - Gearboxes - Getriebe

Dati tecnici - Technical data - Technische Daten

Corpo e coperchi **Housings and covers** **Gehäuse und Deckel**	Alluminio pressofuso Pressure die cast aluminium Aluminium-Druckguss

Cuscinetti	ISO. A sfere
Bearings	ISO Ball bearing
Lager	ISO Kugellager



Alberi di uscita **Outputs shafts** **Abtriebswellen**	Acciao al carbonio bonificato Hardened and tempered carbon steel Gehärtet und angelassener Kohlenstoffstahl

Giunto elastico “G”
Elastic Coupling “G”
Elastische Kupplung “G”
4

Paraoli	NBR - DIN3760
Oil seals	NBR - DIN3760
Öldichtungen	NBR - DIN3760

Corone e pignoni dentati **Gears and pinions** **Getriebe und Ritzel**	Acciao legato da cementazione Case hardening alloy steel Einsatzgehärteter Stahl

Designazione - Designation - Bezeichnungen

F	RD	3	2	/B3	H	6.3	IEC71	-B14	AU30	DFU200
M	RD	0	2	B3	H	2.25	56	B5		
F		1	3	B5	V	..	63	B14		
S		2				..	71			
..		3				..	80			
		4				..	90			
		5				630	100			
		6					112			
							132			

Flangia di uscita ø - Output flange ø - Ausgangsflansch ø

Albero di uscita ø - Output shaft ø - Ausgangswelle ø

Forma motore elettrico - Motor size - Motorbauform

Grandezza IEC motore elettrico - IEC motor size - IEC Motorbaugröße

Rapporto di riduzione - Reduction ratio - Getriebeübersetzung

Forma di montaggio riduttore - Gearbox mounting position- Einbaulage des Getriebes

Forma costruttiva riduttore - Gearbox form - Bauform des Getriebes

Numero coppie di riduzione - Number of reduction stages - Anzahl der Getrebestufen

Grandezza del riduttore - Gearbox size - Getriebegröße

Tipo di riduttore - Gearbox type - Getriebetyp

M = Motoriduttore - Geared Motor - Getriebemotor
F = Riduttore con flangia di entrata - Gearbox with input flange - Getriebe mit Eingangsflansch
S = Riduttore senza flangia di entrata - Gearbox without input flange - Getriebe ohne Eingangsflansch
.. = Riduttore con albero di entrata sporgente - Gearbox with input free shaft - Getriebe mit freie Eingangswelle

Getriebe - Gearboxes - Riduttori RD

n_1 = 1400 rpm — **Technische Daten - Technical data - Dati tecnici**

	RD0			RD1			RD2			RD3		
i_n	n_2 [rpm]	P_1 [kW]	M_2 [Nm]	n_2 [rpm]	P_1 [kW]	M_2 [Nm]	n_2 [rpm]	P_1 [kW]	M_2 [Nm]	n_2 [rpm]	P_1 [kW]	M_2 [Nm]
2.5	545	1.8	30	560	2.5	45	560	5.0	85	560	10.5	190
3.15	427	1.8	33	445	2.2	45	445	4.4	90	445	9.2	205
4.0	329	1.3	36	350	1.8	50	350	3.8	100	350	7.9	220
5.0	265	1.1	38	280	1.6	55	280	3.1	105	280	6.6	235
6.3	234	1.2	48	220	2.1	90	220	4.1	175	220	9.3	370
8.0	175	1.0	49	175	1.7	90	175	3.4	180	175	7.6	370
10.0	135	0.8	50	140	1.3	90	140	2.7	180	140	6.2	375
12.5	100	0.8	50	110	1.1	90	110	2.2	180	110	4.9	380
16.0	86	0.5	61	90	0.9	90	90	1.8	185	90	3.7	390
20.0	65	0.4	51	70	0.7	90	70	1.4	190	70	3.2	390
25.0	52	0.3	52	55	0.6	95	55	1.1	190	55	2.5	395
31.5	46	0.3	52	45	0.5	95	45	1.0	190	45	1.7	400
40	40	0.2	35	35	0.3	70	35	0.5	140	35	1.1	285
50	33	0.1	35	30	0.2	70	30	0.4	140	30	0.9	285
63	---	---	---	22	0.2	70	22	0.3	140	22	0.7	285
40	37	0.2	52	35	0.4	95	35	0.8	200	35	1.7	420
50	30	0.2	52	30	0.3	95	30	0.6	200	30	1.3	420
63	23	0.1	52	22	0.2	95	22	0.5	200	22	1.0	420
80	18	0.1	52	18	0.2	100	18	0.4	200	18	0.9	420
100	15	0.1	52	14	0.2	100	14	0.3	200	14	0.7	425
125	11	0.1	52	11	0.1	100	11	0.3	200	11	0.5	425
160	9	0.1	52	9	0.1	100	9	0.2	200	9	0.4	425
180	8	0.05	52	---	---	---	---	---	---	---	---	---
200	7	0.03	36	7	0.1	100	7	0.2	200	7	0.3	425
250	5.5	0.02	36	5.5	0.1	100	5.5	0.1	200	5.5	0.3	430
280	5	0.02	36	---	---	---	---	---	---	---	---	---
315	4.3	0.02	36	4.5	0.1	100	4.5	0.1	200	4.5	0.2	430
400	---	---	---	3.5	0.03	70	3.5	0.1	140	3.5	0.1	290
500	---	---	---	2.8	0.02	70	2.8	0.04	140	2.8	0.1	290
630	---	---	---	2.2	0.02	70	2.2	0.04	140	2.2	0.1	290

due coppie di riduzione - two-stage reduction ratios - zwei Stufen

tre coppie di riduzione - three-stage reduction ratios - drei Stufen

Rapporti fornibili a richiesta i_n = 2.25 - 2.80 - 3.55 - 4.5 - 5.6 - 7.1 - 9.0 tutte le grandezze, i_n = 35.5 solo per RD0
Ratios available on request i_n = 2.25 - 2.80 - 3.55 - 4.5 - 5.6 - 7.1 - 9.0 all sizes, i_n = 35.5 only RD0
Untersetzungen auf Anfrage i_n = 2.25 - 2.80 - 3.55 - 4.5 - 5.6 - 7.1 - 9.0 alle Größen, i_n = 35.5 nur RD0

RD Riduttori - Gearboxes - Getriebe

Dati tecnici - Technical data - Technische Daten

n_1 = 1400 rpm

	RD4			RD5			RD6		
i_n	n_2 [rpm]	P_1 [kW]	M_2 [Nm]	n_2 [rpm]	P_1 [kW]	M_2 [Nm]	n_2 [rpm]	P_1 [kW]	M_2 [Nm]
2.5	560	17.7	300	560	34	630	560	70	1300
3.15	445	15.3	320	445	30	690	445	60	1400
4.0	350	14.2	380	350	29	750	350	58	1600
5.0	280	12.3	400	280	26.8	850	280	55.4	1800
6.3	220	15.2	620	220	27.4	1160	220	46.8	2000
8.0	175	12.3	620	175	21.8	1170	175	36.6	2000
10.0	140	9.8	620	140	18.1	1180	140	31.7	2100
12.5	110	8	620	110	14.8	1190	110	25.7	2100
16.0	90	6.6	650	90	11.8	1200	90	20.3	2100
20.0	70	5.7	650	70	9.1	1220	70	15.5	2100
25.0	55	4.2	650	55	7.2	1230	55	13.0	2100
31.5	45	3.5	650	45	6.0	1240	45	10.0	2220
40	35	1.5	450	35	3.2	850	35	6	1600
50	30	1.2	450	30	2.4	850	30	4.9	1600
63	22	1.1	450	22	1.9	850	22	4.3	1600
40	35	2.5	700	35	5.0	1270	35	8.6	2200
50	30	2.1	700	30	4.1	1280	30	7	2200
63	22	1.5	700	22	3.4	1290	22	5.5	2200
80	18	1.7	700	18	2.6	1300	18	4.4	2300
100	14	1.1	700	14	2.1	1300	14	3.7	2300
125	11	0.9	700	11	1.6	1300	11	3.4	2300
160	9	0.7	700	9	1.3	1300	9	2.8	2300
180	---	---	---	---	---	---	---	---	---
200	7	0.6	700	7	1.1	1300	7	1.8	2300
250	5.5	0.4	700	5.5	0.8	1300	5.5	1.4	2300
280	---	---	---	---	---	---	---	---	---
315	4.5	0.35	700	4.5	0.45	900	4.5	1.1	2300
400	3.5	0.22	460	3.5	0.35	900	3.5	1.6	2300
500	2.8	0.12	460	2.8	0.3	900	2.8	0.8	2300
630	2.2	0.11	460	2.2	0.25	900	2.2	0.7	2300

due coppie di riduzione - two-stage reduction ratios - zwei Stufen

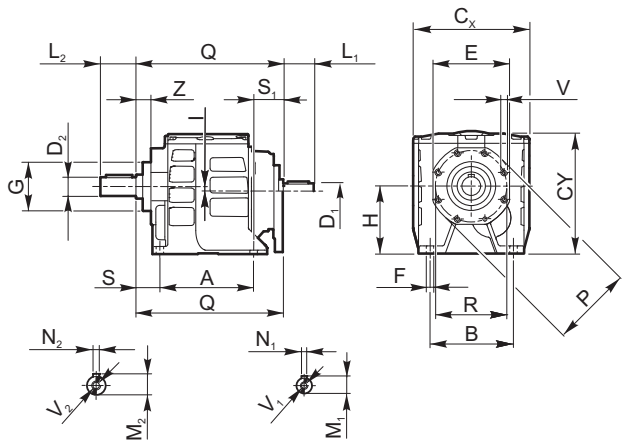
tre coppie di riduzione - three-stage reduction ratios - drei Stufen

Rapporti fornibili a richiesta i_n = 2.25 - 2.80 - 3.55 - 4.5 - 5.6 - 7.1 - 9.0 tutte le grandezze, i_n = 35.5 solo per RD0
Ratios available on request i_n = 2.25 - 2.80 - 3.55 - 4.5 - 5.6 - 7.1 - 9.0 all sizes, i_n = 35.5 only RD0
Untersetzungen auf Anfrage i_n = 2.25 - 2.80 - 3.55 - 4.5 - 5.6 - 7.1 - 9.0 alle Größen, i_n = 35.5 nur RD0

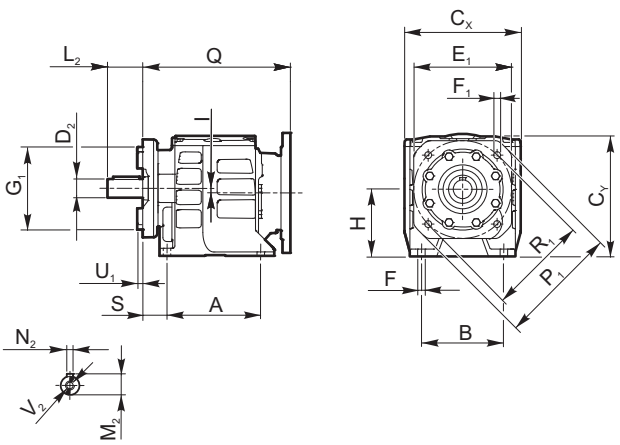
Getriebe - Gearboxes - Riduttori RD

Abmessungen - Dimensions - Dimensioni

B3



B5

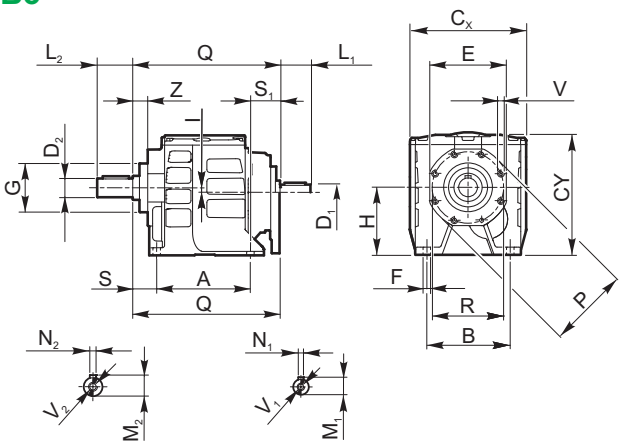


	RD02	RD03	RD12	RD13	RD22	RD23	RD32	RD33
A	95		110		130		165	
B	80		110		110		135	
C_x	100		140		155		190	
C_y	111		131		158		198	
D_1 h6	11		14		19		24	
D_2 h6	17 - 20		20 - 25		25 - 30		30 - 35	
E	82		82		102		125	
E_1	100 (115) [130]		100 (115) [130]		115 (130) [165]		130 (165) [215]	
F	9		9		9		11.5	
F_1	7 (9) [9]		7 (9) [9]		9 (9) [11]		9 (11) [13]	
G g6	60		60		65		85	
G_1 h7	80 (95) [110]		80 (95) [110]		95 (110) [130]		110 (130) [180]	
H	60		75		90		115	
I	4,5		5		6		8.5	
L_1	23		30		40		50	
L_2	35 (40)		40 (50)		50 (60)		60 (70)	
M_1	12.5		16		21.5		27	
M_2	19 - 22.5		22.5 - 28		28 - 33		33 - 38	
N_1	4		5		6		8	
N_2	5 - 6		6 - 8		8 - 8		8 - 10	
P	84		84		108		130	
P_1	120 (140) [160]		120 (140) [160]		140 (160) [200]		160 (200) [250]	
Q	140	143	151	161	190	208	220	253
R	75		75		95		115	
R_1	100 (115) [130]		100 (115) [130]		115 (130) [165]		130 (165) [215]	
S	20		18		25		30	
S_1	25	28	23	33	35	53	25	58
U_1	3 (3) [3]		3 (3) [3]		3 (3) [3]		3.5 (3.5) [3.5]	
V	M6x14 (n° 7)		M6x14 (n° 7)		M6x10 (n° 8)		M8x18 (n° 8)	
V_1	M5x12		M5x12		M6x16		M8x19	
V_2	M6x16 - M6x16		M6x16 - M6x16		M6x16 - M10x22		M10x22 - M10x22	
Z	13		10		13		13	
Kg	3.0	3.2	4.8	4.8	7.9	8.5	13.5	14.5

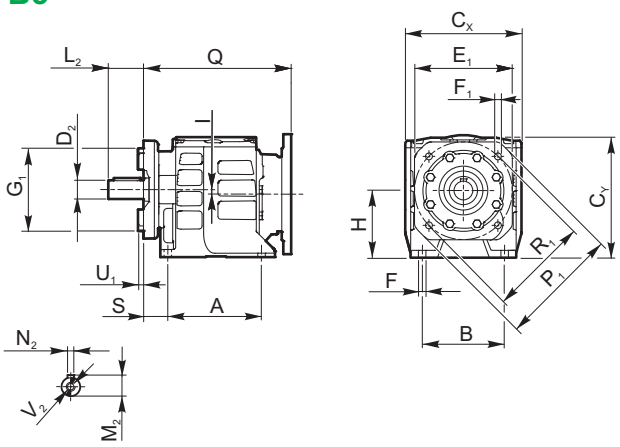
RD Riduttori - Gearboxes - Getriebe

Dimensioni - Dimensions - Abmessungen

B3



B5



	RD42	RD43	RD52	RD53	RD62	RD63
A	195		205		260	
B	150		170		215	
C_x	215		284		340	
C_y	222		255		302	
D_1 h6	28		38		48	
D_2 h6	35 - 40		40 - 50		50 - 60	
E	142		180		180	
E_1	165 (215) [265]		215 (265) [300]		215 (265) [300]	
F	13.5		18		18	
F_1	11 (13.5) [17]		13.5 (17.5) [17.5]		13.5 (17.5) [17.5]	
G g6	95		130		130	
G_1 h7	130 (180) [230]		180 (230) [250]		180 (230) [250]	
H	130		140		180	
I	13.5		0		0	
L_1	60		80		100	
L_2	70 (80)		80 (100)		100 (120)	
M_1	31		41		51.5	
M_2	38 - 43		43 - 53.5		53.5 - 64	
N_1	8		10		14	
N_2	10 - 12		12 - 14		14 - 18	
P	145		190		190	
P_1	200 (250) [300]		250 (300) [350]		250 (300) [350]	
Q	265	305	353 [367]		410 [424]	
R	130		165		165	
R_1	165 (215) [265]		215 (265) [300]		215 (265) [300]	
S	30		35 [49]		40 (54)	
S_1	40	80	82		79	
U_1	4 (4) [4]		4 (4) [4]		4 (4) [4]	
V	M8x18 (n° 8)		M10x25 (n° 8)		M10x25 (n° 8)	
V_1	M10x22		M12x28		M16x36	
V_2	M10x22 - M12x28		M12x28 - M16x36		M16x36 - M20x42	
Z	15		18		18	
Kg	20	21.5	49	52	62	70

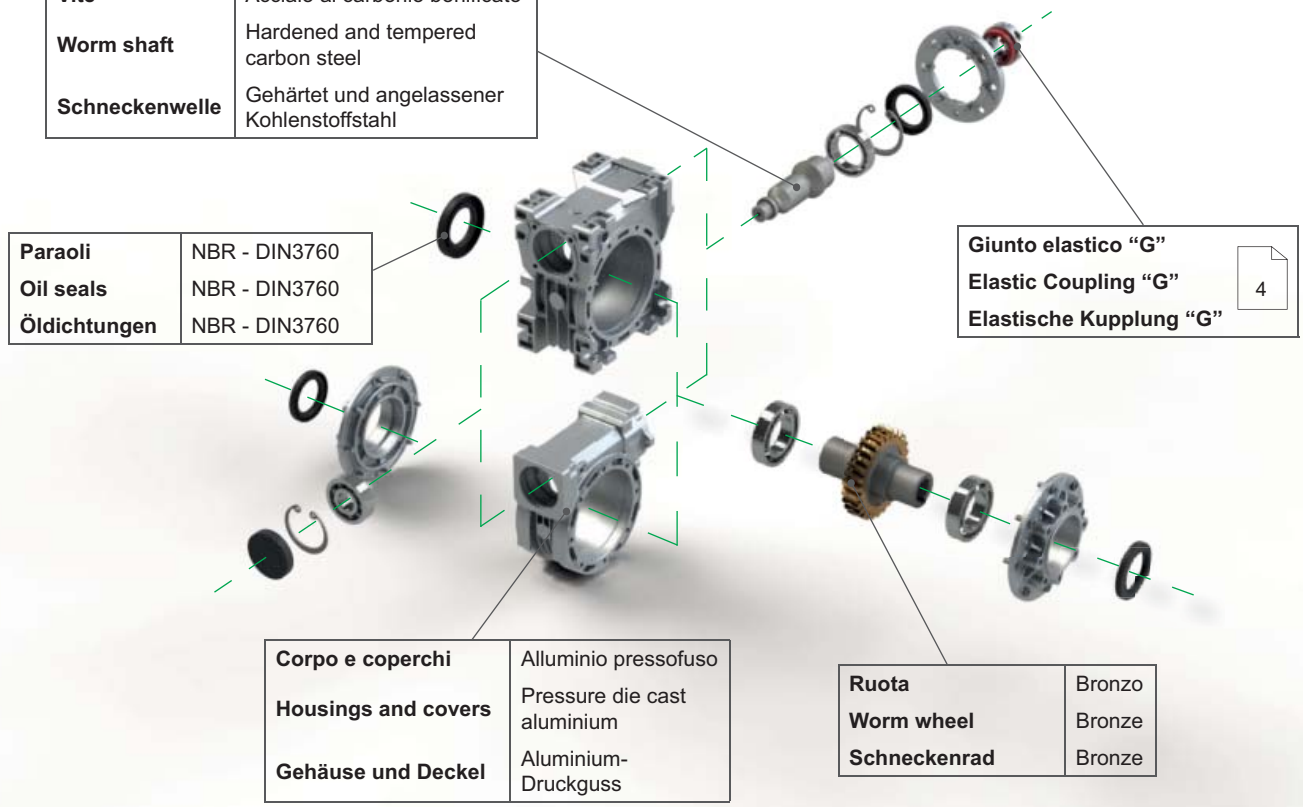
RS-RT

RIDUTTORI A VITE SENZA FINE
WORM GEARBOXES
SCHNECKENGETRIEBE

RS-RT Riduttori - Gearboxes - Getriebe

Dati tecnici - Technical data - Technische Daten

Vite **Worm shaft** **Schneckenwelle**	Acciaio al carbonio bonificato Hardened and tempered carbon steel Gehärtet und angelassener Kohlenstoffstahl



Paraoli **Oil seals** **Öldichtungen**	NBR - DIN3760 NBR - DIN3760 NBR - DIN3760

Giunto elastico "G"
Elastic Coupling "G"
Elastische Kupplung "G" 4

Corpo e coperchi **Housings and covers** **Gehäuse und Deckel**	Alluminio pressofuso Pressure die cast aluminium Aluminium-Druckguss

Ruota **Worm wheel** **Schneckenrad**	Bronzo Bronze Bronze

Designazione - Designation - Bezeichnungen

F	RS-G	..		/ 40	PC	28	IEC71	B14
M	RS-G	63	28	28	S	5	56	B5
F	RA	71	40	40	I	..	63	B14
S	RS/RS-G	80	50	50	D	..	71	
..	RT-G	100	60	60	PC	..	80	
	TA		70	70	FL	10000	90	
	RT/RT-G			85	B3		100	
				110	F		112	
				130			132	
				150			160	

Forma motore elettrico - Motor size - Motorbauform

Grandezza IEC motore elettrico - IEC motor size - IEC Motorbaugröße

Rapporto di riduzione - Reduction ratio - Getriebeübersetzung

Forma costruttiva riduttore - Gearbox form - Bauform des Getriebes

Grandezza 2° riduttore - 2nd worm gearbox size - Getriebegröße

Grandezza 1° riduttore - 1st worm gearbox size - Baugröße der 1. Getriebestufe

Grandezza precoppia - Helical stage size - Baugröße der Stirnradvorstufe

Tipo di riduttore - Gearbox type - Getriebetyp

M = Motoriduttore - Geared Motor - Getriebemotor
F = Riduttore con flangia di entrata - Gearbox with input flange - Getriebe mit Eingangsflansch
S = Riduttore senza flangia di entrata - Gearbox without input flange - Getriebe ohne Eingangsflansch
.. = Riduttore con albero di entrata sporgente - Gearbox with input free shaft - Getriebe mit freie Eingangswelle

Getriebe - Gearboxes - Riduttori RS-RT

n_1 = 1400 rpm — **Technische Daten - Technical data - Dati tecnici**

P_1 [kW]	Tipo riduttore Gearbox type Getriebe Typ	i_n	n_2 [rpm]	M_2 [Nm]
0.06	RS-RT 28	7	200	2.4
	RS-RT 28	10	140	3.3
	RS-RT 28	15	93	4.7
	RS-RT 28	20	70	6.1
	RS-RT 28	28	50	7.6
	RS-RT 28	40	35	10
	RS-RT 28	49	29	11
	RS-RT 28	56	25	12
	RS-RT 28	70	20	13
	RS-RT 40	80	18	16
	RS-RT 40	100	14	19
0.09	RS-RT 28	7	200	3.6
	RS-RT 28	10	140	5.0
	RS-RT 28	15	93	7.1
	RS-RT 28	20	70	9.1
	RS-RT 28	28	50	11
	RS-RT 28	40	35	15
	RS-RT 28	49	29	17
	RS-RT 40	56	25	20
	RS-RT 40	70	20	22
	RS-RT 40	80	18	25
	RS-RT 40	100	14	28
0.12	RS-RT 28	7	200	4.8
	RS-RT 28	10	140	6.6
	RS-RT 28	15	93	9.5
	RS-RT 28	20	70	12
	RS-RT 28	28	50	15
	RS-RT 40	40	35	20
	RS-RT 40	49	29	23
	RS-RT 40	56	25	26
	RS-RT 40	70	20	30
	RS-RT 40	80	18	33
	RS-RT 50	100	14	38
0.18	RS-RT 28	7	200	7.2
	RS-RT 28	10	140	9.9
	RS-RT 28	15	93	14
	RS-RT 40	20	70	18
	RS-RT 40	28	50	23
	RS-RT 40	40	35	30
	RS-RT 40	49	29	35
	RS-RT 40	56	25	39
	RS-RT 50	70	20	46
	RS-RT 50	80	18	51
	RS-RT 50	100	14	43

P_1 [kW]	Tipo riduttore Gearbox type Getriebe Typ	i_n	n_2 [rpm]	M_2 [Nm]
0.25	RS-RT 40	5	280	7.5
	RS-RT 40	7	200	10
	RS-RT 40	10	140	14
	RS-RT 40	15	93	20
	RS-RT 40	20	70	26
	RS-RT 40	28	50	32
	RS-RT 40	40	35	42
	RS-RT 50	49	29	52
	RS-RT 50	56	25	57
	RS-RT 50	70	20	63
	RS-RT 60	80	18	72
	RS-RT 60	100	14	88
0.37	RS-RT 40	5	280	11
	RS-RT 40	7	200	15
	RS-RT 40	10	140	21
	RS-RT 40	15	93	30
	RS-RT 40	20	70	38
	RS-RT 40	28	50	48
	RS-RT 50	40	35	65
	RS-RT 50	49	29	77
	RS-RT 60	56	25	85
	RS-RT 60	70	20	97
	RS-RT 60	80	18	107
	RS-RT 60	100	14	130
0.55	RS-RT 40	5	280	16
	RS-RT 50	7	200	23
	RS-RT 50	10	140	32
	RS-RT 50	15	93	44
	RS-RT 50	20	70	57
	RS-RT 50	28	50	75
	RS-RT 60	40	35	99
	RS-RT 60	49	29	114
	RS-RT 60	56	25	126
	RS-RT 70	70	20	155
	RS-RT 70	80	18	168
	RS-RT 85	100	14	210
0.75	RS-RT 50	5	280	23
	RS-RT 50	7	200	31
	RS-RT 50	10	140	43
	RS-RT 50	15	93	60
	RS-RT 60	20	70	79
	RS-RT 60	28	50	102
	RS-RT 60	40	35	135
	RS-RT 70	49	29	168

RS-RT Riduttori - Gearboxes - Getriebe

Dati tecnici - Technical data - Technische Daten

n_1 = 1400 rpm

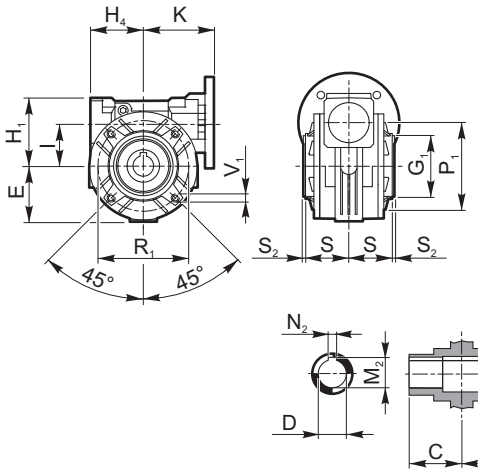
P_1 [kW]	Tipo riduttore Gearbox type Getriebe Typ	i_n	n_2 [rpm]	M_2 [Nm]
0.75	RS-RT 70	56	25	183
	RS-RT 85	70	20	226
	RS-RT 85	80	18	246
1.1	RS-RT 60	5	280	34
	RS-RT 60	7	200	45
	RS-RT 60	10	140	63
	RS-RT 60	15	93	91
	RS-RT 70	20	70	116
	RS-RT 70	28	50	158
	RS-RT 70	40	35	213
	RS-RT 85	49	29	246
	RS-RT 85	56	25	286
	RS-RT 110	70	20	352
	RS-RT 110	80	18	396
	RS-RT 110	100	14	458
1.5	RS-RT 60	5	280	46
	RS-RT 60	7	200	62
	RS-RT 60	10	140	86
	RS-RT 60	15	93	124
	RS-RT 70	20	70	166
	RS-RT 70	28	50	215
	RS-RT 85	40	35	295
	RS-RT 85	49	29	336
	RS-RT 110	49	29	356
	RS-RT 110	56	25	401
	RS-RT 110	70	20	480
	RS-RT 110	80	18	540
	RS-RT 110	100	14	624
2.2	RS-RT 70	5	280	92
	RS-RT 70	7	200	92
	RS-RT 70	10	140	129
	RS-RT 70	15	93	187
	RS-RT 85	20	70	246
	RS-RT 85	28	50	319
	RS-RT 110	40	35	438
	RS-RT 110	49	29	522
	RS-RT 110	56	25	588
	RS-RT 110	70	20	704
	RS 130	80	18	756
	RS 150	100	14	945
3.0	RS-RT 70	5	280	91
	RS-RT 70	7	200	126
	RS-RT 70	10	140	176
	RS-RT 85	15	93	255

P_1 [kW]	Tipo riduttore Gearbox type Getriebe Typ	i_n	n_2 [rpm]	M_2 [Nm]
3.0	RS-RT 85	20	70	336
	RS-RT 110	28	50	435
	RS-RT 110	40	35	598
	RS-RT 110	49	29	712
	RS 130	49	29	722
	RS 130	56	25	814
	RS 150	70	20	974
	RS 150	80	18	1064
	RS 150	100	14	1289
4.0	RS-RT 85	5	280	122
	RS-RT 85	7	200	168
	RS-RT 85	10	140	235
	RS-RT 110	15	93	344
	RS-RT 110	20	70	453
	RS-RT 110	28	50	581
	RS 130	40	35	829
	RS 130	49	29	963
	RS 130	56	25	1085
	RS 150	56	25	1115
	RS 150	70	20	1299
5.5	RS-RT 110	7	200	231
	RS-RT 110	10	140	326
	RS-RT 110	15	93	473
	RS-RT 110	20	70	623
	RS 130	28	50	809
	RS 130	40	35	1141
	RS 150	49	29	1342
	RS 150	56	25	1534
7.5	RS-RT 110	7	200	315
	RS-RT 110	10	140	445
	RS-RT 110	15	93	645
	RS 130	15	93	652
	RS 130	20	70	860
	RS 130	28	50	1103
	RS 150	40	35	1576
11.0	RS 150	7	200	467
	RS 150	10	140	660
	RS 150	15	93	968
	RS 150	20	70	1261
15.0	RS 150	7	200	637
	RS 150	10	140	900
	RS 150	15	93	1320

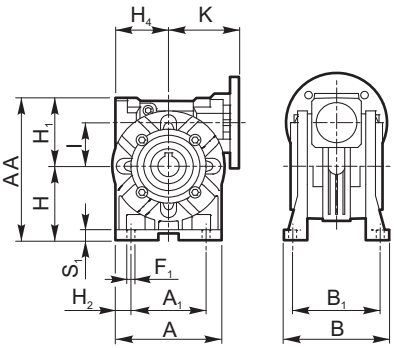
Getriebe - Gearboxes - Riduttori RS-RT

Abmessungen - Dimensions - Dimensioni

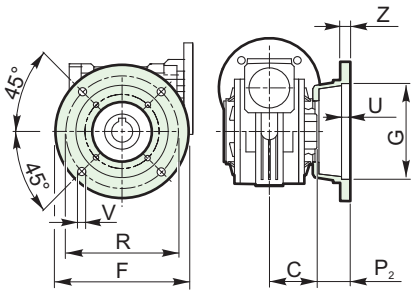
PC



S (I - D)



FL



RS

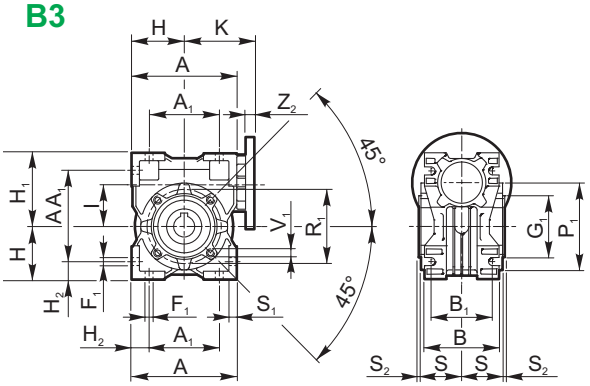
	RS28	RS40	RS50	RS60	RS70	RS85	RS110	RS130	RS150
A	70	100	120	138	158	193	250	286	336
A_1	52	70	85	95	120	140	200	235	260
AA	99	138	163	192	221	252	333	400	454
B	78	102	119	136	140	168	200	230	250
B	66	84	99	111	116	140	162	190	210
C	30	41	49	60	60	61	77.5	90	105
D H7	14	19 - 18	24 - 25	25	28 - 30	32 - 35	42	48	55
E	34	50	61	70	80	98	125	143	168
F	70	140	160	180	200	200	250	300	350
F_1	5.5	7	9	11	11	13	14	15	19
G H8	40	95	110	115	130	130	180	230	250
G_1 H8	42	60	70	70	80	110	130	180	180
H	52	71	85	100	115	135	172	200	230
H_1	47	67	78	92	106	117	161	200	224
H_2	9	15	17.5	21.5	19	26.5	25	25.5	38
H_4	40	50	60	72	86	103	139	159	183
I	28	40	50	60	70	85	110	130	150
K	57.5	70.5	83 - 88*	93 - 94*	117 - 118*	134 - 137*	151 - 153*	165 - 166*	191 - 211*
M_2	16.3	21.8 - 20.8	27.3 - 28.3	28.3	31.3 - 33.3	35.3 - 38.3	45.3	51.8	59.3
N_2	5	6 - 6	8 - 8	8	8 - 8	10 - 10	12	14	16
P	49	82	91.5	116	111	100	150	150	160
P_1	67	94	100	102	118	150	200	234	250
P_2	19	41	42.5	56	51	39	72.5	60	55
R	56	115	130	150	165	165	215	265	300
R_1	56	83	85	85	100	130	165	215	215
S	32	38	49	57.5	57	56.5	74.5	87	102
S_1	6	9	12	12	14	15	17	19	20
S_2	3	2	2.5	2.5	3	3	2.5	5	5
U	4	6	10	10	12	6	5	5	6
V	6.5 (n°4)	9 (n°4)	9 (n°4)	11 (n°4)	13 (n°4)	13 (n°4)	15 (n°8)	15 (n°8)	19 (n°8)
V_1	M6x6 (n°4)	M6x9 (n°4)	M8x12 (n°4)	M8x15 (n°8)	M8x18 (n°8)	M10x20 (n°8)	M12x21 (n°8)	M12x24 (n°8)	M14x30 (n°8)
Z	6	10	10	11	14	14	16	18	20
Kg	1.1	2.5	3.8	6.5	9	13.5	39	50	80

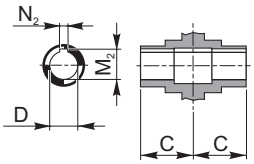
* - IEC71-B14 (RS50 - RS60) - IEC80-B14 (RS70) - IEC90-B14 (RS85) - IEC100/112-B14 (RS110 - RS130 - RS150)

RS-RT Riduttori - Gearboxes - Getriebe

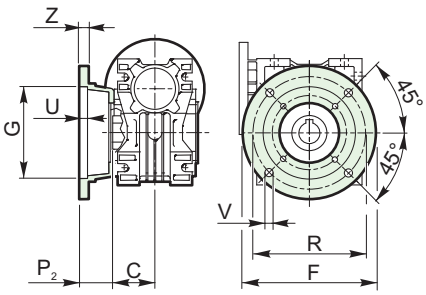
Dimensioni - Dimensions - Abmessungen

B3





F



RT

	RT28	RT40	RT50	RT60	RT70	RT85	RT110
A	80	100	120	144	172	206	255
A_1	54	70	80	100	120	140	170
AA	97	121.5	144	174	205	238	295
AA_1	71	91.5	104	130	153	172	210
B	53	71	85	100	112	130	144
B_1	44	60	70	85	90	100	115
C	30	41	49	60	60	61	77.5
D H7	14	19 - 18	24 - 25	25	28 - 30	32 - 35	42
F	80	110	125	180	200	210	270
F_1	7	7	9	9	11	13	15
G H8	50	60	70	115	130	152	170
G_1 H8	55	60	70	80	95	110	130
H	40	50	60	72	86	103	127.5
H_1	57	71.5	84	102	119	135	167.5
H_2	13	15	20	22	26	33	42.5
I	28	40	50	60	70	85	110
K	57.5	70.5	83 - 88*	93 - 94*	117 - 118*	134 - 137*	151 - 153*
M_2	16.3	21.8 - 20.8	27.3 - 28.3	28.3	31.3 - 33.3	35.3 - 38.3	45.3
N_2	5	6 - 6	8 - 8	8	8 - 8	10 - 10	12
P	53	69	93	86	111	111	131
P_1	75	86	100	110	130	160	200
P_2	23	28	44	25	51	50	53.5
R	68	87	90	150.5	165	175	230
R_1	65	75	85	95	115	130	165
S	27.5	38.5	46.5	57	57	67	74
S_1	6	7	8	10	11	14	13
S_2	2.5	2.5	3	3	3	3	3.5
U	10	4	5	6.5	12	6	5
V	7 (n° 4)	9 (n° 4)	11 (n° 4)	11 (n° 4)	13 (n° 4)	13 (n° 4)	14 (n° 8)
V_1	M6x10 (n° 4)	M6x8.5 (n° 4)	M8x10 (n° 4)	M8x20 (n° 8)	M8x16 (n° 8)	M10x18 (n° 8)	M10x21 (n° 8)
Z	7	6	10	10	14	16	18
Z_2	13	13	13	14 - 15	15.5 - 17.5	15.5 - 18.5	18 - 20
Kg	1.1	2.5	3.8	6.5	9	13.5	39

* - IEC71-B14 (RT50 - RT60) - IEC80-B14 (RT7) - IEC90-B14 (RT85) - IEC100/112-B14 (RT110)