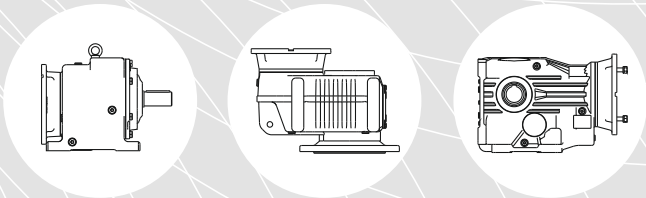
STM team

HIGH TECH
Motion



1.0 RIDUTTORI COASSIALI A
1.0 IN-LINE GEARBOXES A
1.0 STIRNRADGETRIEBE A

A

B

40-50-60-80-100

25-35-41-45

50-55-60-70-80-90
100-110-120-140

1.1 Caratteristiche tecniche

La progettazione di questa serie di riduttori è stata impostata su una struttura monolitica di straordinaria rigidezza: questo permette l'applicazione di carichi elevati senza rischi di deformazione, che ne comprometterebbero le prestazioni.
Inoltre la particolare forma interna della carcassa, consente un orientamento del flusso del lubrificante atto a raggiungere tutte le parti in movimento, ad evitare la rumorosità e a favorire la tenuta.
Un'altra novità è rappresentata dalla flangia uscita riportata che consente una grande versatilità di applicazione.
Grazie alla ormai consolidata esperienza nel campo dei riduttori ad ingranaggi coassiali a 2 e 3 stadi, abbiamo realizzato il monostadio: il giusto rapporto coppia/costo per le applicazioni industriali dove è richiesto un alto numero di giri all'albero uscita.

1.1 Technical characteristics

The design of this range of gear units is based on one body piece casting giving increased rigidity. This allows to apply high loads without risks of deformation which might negatively affect technical performances.
The particular internal shape of the body directs the oil flow in a way to reach all moving parts while reducing noise levels and improving sealing tightness.
Another piece of news is the modular attachable output flange to provide excellent versatility even in multiple applications.
Thanks to the almost reinforced experience in the field of the in-line gearboxes at 2 and 3 stage, we realised the single stage: the right relation between pair/price for the industrial application where it is required an high number of output speed shaft.

1.1 Technische Eigenschaften

Die Planung dieser Getriebeserie ist auf einer monolithischen Struktur mit ausgewöhnlicher Steifigkeit aufgebaut: dies ermöglicht die Anwendung bei hohen Belastungen ohne Verformungsgefahr, die die Leistung beeinträchtigen würde.
Außerdem erlaubt die spezielle Innenform des Gehäuses eine gleichmäßige Verteilung des Schmierstoffes, der somit alle beweglichen Teile erreicht und außerdem Geräusche vermeidet und die Dichtung fördert.
Ein weiteres neues Feature ist der Ausgangsflansch, der eine große Anwendungsvielseitigkeit ermöglicht.
Aufgrund der fundierten Erfahrung im Bereich der zwei- und dreistufigen koaxialen Reduktionsgetriebe wurde der Einstufige konzipiert: das richtige Verhältnis Drehmoment / Kosten für industrielle. Anwendungen, die eine hohe Drehzahl am Zapfwellenende benötigen

1.2 Designazione — *1.2 Designation* — 1.2 Bezeichnung

WEB: Reference Designation															
Macchine	Input Version	Modular Feet	Output Version	Output Flange	Size	N° of Reduction	Reduction Ratio	Input Version	Input Shaft	Designazione Motori *Designation Motors* Bezeichnung Motoren	Output Bearings TYPE	Type Shaft Diameter	Shaft Diameter	Mounting positions	Position Terminal Box
00 M	01 IV	02a MFG	02b OV	02c OF	03 SIZE	04 NOR	05 IR	06 IVT	07 IS		08 TOBE	09 TYPSD	10 SD	11 MP	13 PMT
CODE: Example of order: "AMP 50/2 20.8 80B5"															
A	M	— P P1 P2 F1 F2 F3 P/F P/F1 P/F2 P/F3 SR	25 32 35 40 41 45 50 55 60 70 80 90 100 110 120 140	1 2 3	*See performance tables*	— N	80B5 80B14	—		— Look-*CT 18 IGB D*	— CM	— US	— No indications standard diameter Ø... *Optional hollow shaft diameter*	M1 M2 M3 M4 M5 M6	1 2 3 4 5 6 7 8
	R									—					
	C									— Look-*CT 18 IGB D*					

00 M - Macchina — *M - Maschine* — M - Getriebe

A	A

01 IV - Versione Entrata — *IV - Input Version* — IV - Antriebausführung

M	R	C	
	—		25
			32
	—	—	35
			40
	—	—	41
	—	—	45
			50
		Only 55/3	55
			60
		Only 70/3	70
			80
		Only 90/3	90
		—	100
		—	110
		—	120
		—	140

Disponibile / available / verfügbar
— Non disponibile / not available / nicht verfügbar

02a 02b 02c

MFG - Modular Feet	*MFG - Modular Feet*	MFG - Modular Feet
OV - Versione Uscita	*OV - Output Version*	OV - Abtriebausführung
OF - Flangia Uscita	*OF - Output Flange*	OF - Flansche am Abtrieb

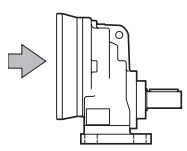
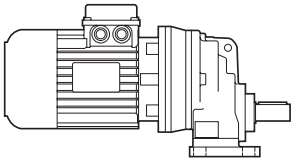
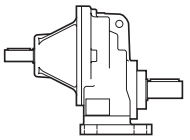
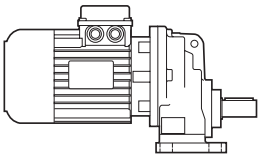
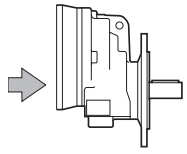
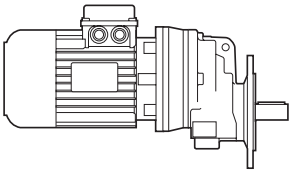
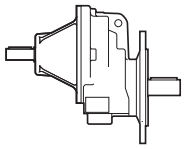
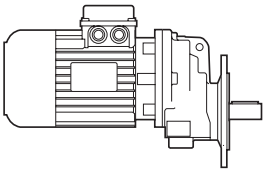
— - P - P1 - P2 - F. - P/F - P/F. - SR

1.2 Designazione — *1.2 Designation* — 1.2 Bezeichnung

A

32 - 40 - 50 - 60 - 80 -100

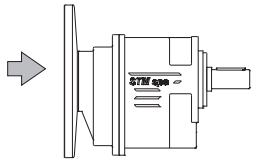
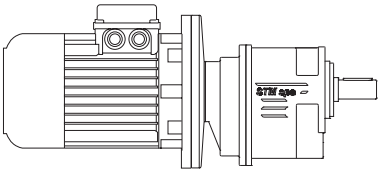
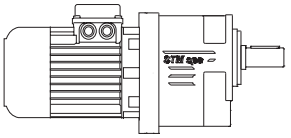
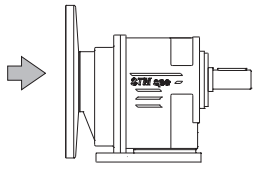
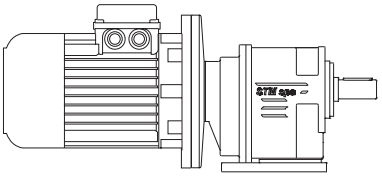
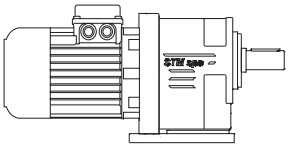
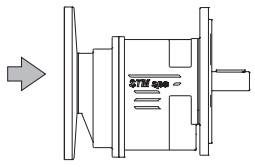
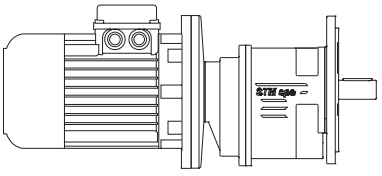
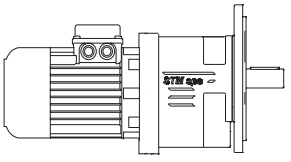
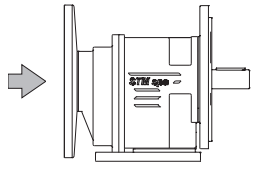
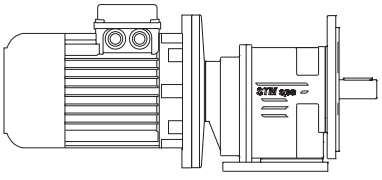
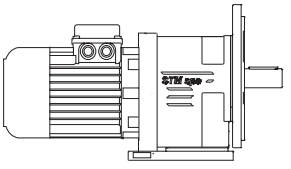
1

	AM		AR	AC
	Without Motor (pre arrangement motor)	With Motor (electric motor driven)	Without Motor (with solid input shaft)	With Motor (electric motor driven Compact)
P				
F1 F2 F3 F4				

A

25 - 35 - 41 - 45

2

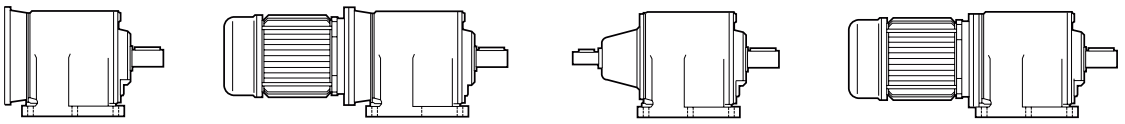
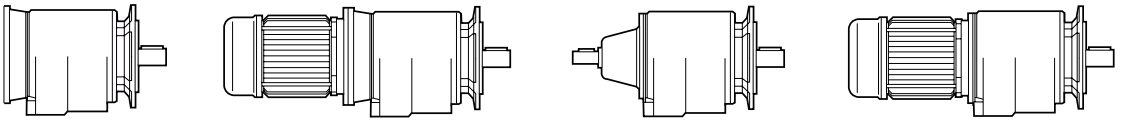
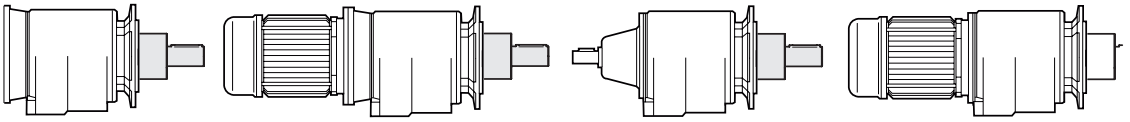
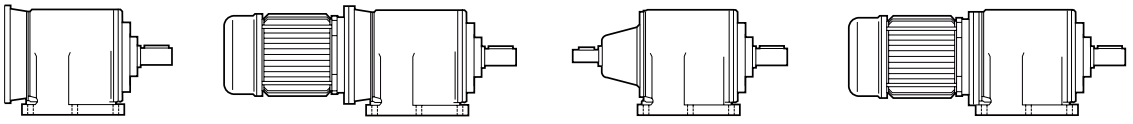
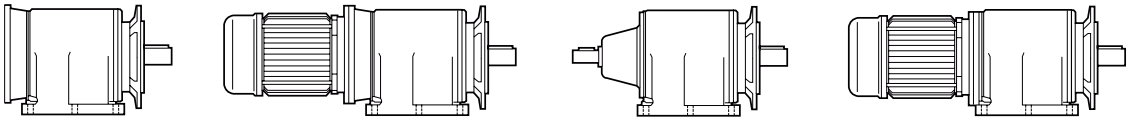
	AM		AC
	Without Motor (pre arrangement motor)	With Motor (electric motor driven)	With Motor (electric motor driven Compact)
-			
P1 25-35-45 P1 41 P2			
F1 F2 F3			
P/F. 25-35-45 P1/F. 41 P2/F.			

1.2 Designazione — *1.2 Designation* — 1.2 Bezeichnung

A

50 - 55 - 60 - 70 - 80 - 100 - 120

2-3

		AM		AR	AC
		Without Motor (pre arrangement motor)	With Motor (electric motor driven)	Without Motor (with solid input shaft)	With Motor (electric motor driven Compact)
P					
F1 F2 F3 F4					
SR	80				
P/F	50 - 55 - 60 70 - 80 - 120				
P/F.					
P/F2	70	Non disponibile / not available / nicht verfügbar			

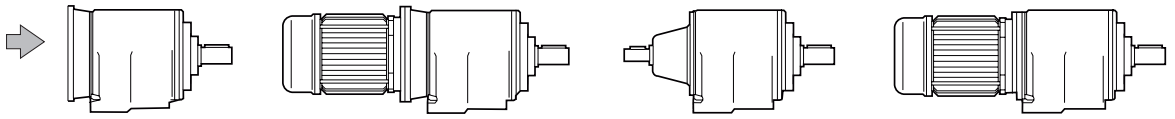
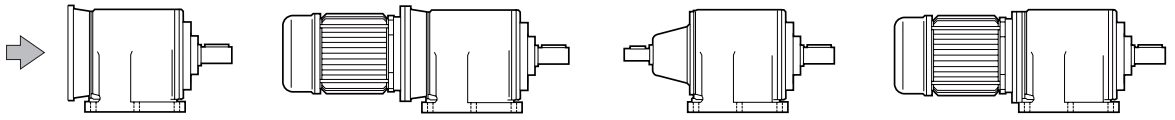
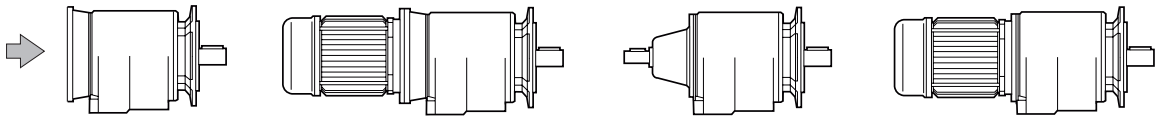
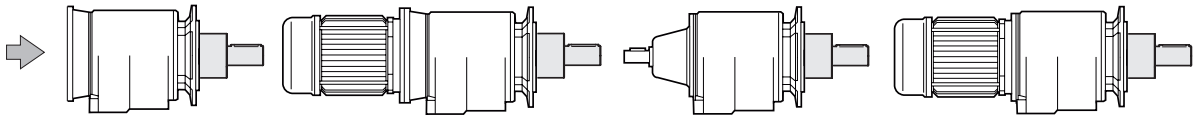
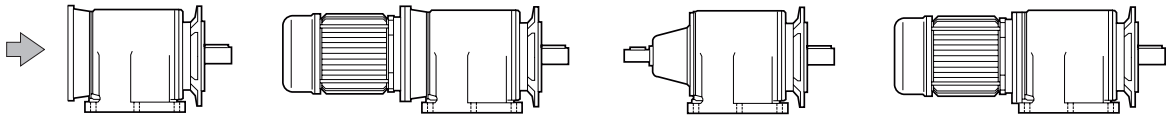
1.2 Designazione — *1.2 Designation* — 1.2 Bezeichnung

A

90 - 110 - 140

2-3

B

	AM		AR	AC
	Without Motor (pre arrangement motor)	With Motor (electric motor driven)	Without Motor (with solid input shaft)	With Motor (electric motor driven Compact)
-				
P				
F1 F2 F3				
SR				
P/F.				

03 SIZE - Grandezza — ***SIZE - Size*** — **SIZE - Größe**

	25	32	35	40	41	45	50	55	60	70	80	90	100	120	110	140
1	—		—		—	—		—		—		—		—	—	—
2-3		—		—												

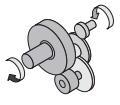
Disponibile / available / verfügbar

— Non disponibile / not available / nicht verfügbar

04 NOR - N° Stadi — ***NOR - N° of reductions*** — **NOR - N° Anzahl der stufen**

1 

2 

3 

05 IR- Rapporto di riduzione — ***IR - Reduction ratio*** — **IR - Übersetzungsverhältnis**

(Vedi prestazioni). Tutti i valori dei rapporti sono approssimati. Per applicazioni dove necessita il valore esatto consultare il ns. servizio tecnico.

(See ratings). Ratios are approximate values. If you need exact values for a specific application, please contact our Engineering.

(Siehe "Leistungen"). Bei allen Werten der Übersetzungen handelt es sich um approximative Wertangaben. Bei Applikationen, bei denen die exakte Wertangabe erforderlich ist, muss unser Technischer Kundendienst konsultiert werden.

1.2 Designazione — *1.2 Designation* — 1.2 Bezeichnung

06 07 **AM**

	IVT - Versione Entrata - TYPE	***IVT - Input Version - TYPE***	**IVT - Antriebausführung - TYPE**
	IS - Albero Entrata	***IS - Input shaft***	**IS - Antriebswelle**

Possible couplings with IEC motors

SIZE	NOR	IVT	IS	IR *(All)*
32	1	—	80 (A)	**19/200** (B5) - **19/120** (B14) 19/160 - 19/140 - 19/105 •
			71	**14/160** (B5) - **14/105** (B14) 14/140 - 14/120 - 14/90 •
			63	**11/140** (B5) - **11/90** • (B14) 11/160 - 11/120 - 11/105
			56	**9/120** (B5) 9/160 - 9/140 - 9/90 •
40	1	—	100-112	**28/250** (B5) - **28/160** (B14)
			90	**24/200** (B5) - **24/140** (B14) 24/160 - 24/120
			80	**19/200** (B5) - **19/120** (B14) 19/160 - 19/140
			71	**14/160** (B5)
			63	**11/140** (B5)
50	1	—	112	**28/250** (B5) - **28/160** (B14)
			100	**28/250** (B5) - **28/160** (B14)
			90	**24/200** (B5) - **24/140** (B14) 24/160 - 24/120
			80	**19/200** (B5) - **19/120** (B14) 19/160 - 19/140
			71	**14/160** (B5) 14/200 - 14/140 - 14/120
			63	**11/140** (B5)
60	1	—	132	**38/300** (B5) - **38/200** (B14) 38/250
			112	**28/250** (B5) - **28/160** (B14) 28/200 - 28/300
			100	**28/250** (B5) - **28/160** (B14) 28/200 - 28/300
			90	**24/200** (B5) - **24/140** (B14) 24/300 - 24/250 - 24/160 - 24/120
			80	**19/200** (B5) - **19/120** (B14) 19/160 - 19/140
			71	**14/160** (B5)
80	1	—	160	**42/350** (B5) 42/300 - 42/250
			132	**38/300** (B5) 38/350 - 38/250
			112	**28/250** (B5) 28/350 - 28/300
			100	**28/250** (B5) 28/350 - 28/300
			90	**24/200** (B5)
			80	**19/200** (B5)
100	1	—	200*	**55/400** (B5)
			180*	**48/350** (B5)
			160*	**42/350** (B5)
			132	**38/300** (B5) - **38/200** (B14) 38/250
			112	**28/250** (B5) 28/200 - 28/300
			100	**28/250** (B5) 28/200 - 28/300

(A) A32/1 - PAM 80 B5 only available in flanged configuration;
**** All PAM configurations supplied with ROTEX coupling. Where PAM configuration is marked with an asterisk, see directions (for mounting directions, see section A, paragraph "Installation" - 1.12)***
• See designation - " 13 - PMT "

SIZE	NOR	IVT	IS	IR *(All)*
25	2		63	**11/140** (B5) - **11/90**(B14) 11/120 - 11/80 •
			56	**9/120** (B5) - **9/80** • (B14) 9/140 - 9/90
	3		63	**11/140** (B5) - **11/90**(B14) 11/120 - 11/80 •
			56	**9/120** (B5) - **9/80** • (B14) 9/140 - 9/90
35	2	—	80	**19/200** (B5) - **19/120** (B14) 19/160 -19/140 - 19/105 • - 19/90 •
			71	**14/160** (B5) - **14/105** (B14) 14/140 - 14/120 - 14/90•
			63	**11/140** (B5) - **11/90**• (B14) 11/160 - 11/120 - 11/105
	3		63	**11/140** (B5) - **11/90** (B14) 11/120 - 11/80•
			56	**9/120** (B5) - **9/80**• (B14) 9/140 - 9/90
41	2	—	90 (B)	**24/200** (B5) - **24/140** (B14) 24/160 - 24/120 - 24/105•
			80	**19/200** (B5) - **19/120** (B14) 19/160 - 19/140 - 19/105•
			71	**14/160** (B5) - **14/105**• (B14) 14/200 - 14/140 - 14/120 - 14/90•
			63	**11/140** (B5) - **11/90**• (B14) 11/200 - 11/160 - 11/120 - 11/105•
	3		71	**14/160** (B5) - **14/105** (B14) 14/140 - 14/120 -14/90•
			63	**11/140** (B5) - **11/90**• (B14) 11/160 - 11/120 -11/105
45	2	—	100-112 (B)	**28/250** (B5) - **28/160** (B14) 28/140
			90	**24/200** (B5) - **24/140** (B14) 24/250 - 24/160 - 24/120
			80	**19/200** (B5) - **19/120** (B14) 19/160 - 19/140 - 19/105•
			71	**14/160** (B5) - **14/105**• (B14) 14/200 - 14/140 - 14/120
	3		80	**19/200** (B5) - **19/120** (B14) 19/160 - 19/140 - 19/105• - 19/90•
			71	**14/160** (B5) - **14/105**• (B14) 14/200 - 14/140 - 14/120 - 14/90•

(B) WARNING!- Look at chapter 1.12-Section A;
• See designation - " 13 - PMT "

1.2 Designazione — *1.2 Designation* — 1.2 Bezeichnung

06 07	AM		IVT - Versione Entrata - TYPE	*IVT - Input Version - TYPE*	IVT - Antriebsausführung - TYPE
			IS - Albero Entrata	*IS - Input shaft*	IS - Antriebswelle

Possible couplings with IEC motors

SIZE	NOR	IVT	IS	IR *(All)*
50	2	—	112	**28/250** (B5) - **28/160** (B14) 28/200 - 28/140 - 28/120
			100	**28/250** (B5) - **28/160** (B14) 28/200 - 28/140 - 28/120
			90	**24/200** (B5) - **24/140** (B14) 24/250 - 24/160 - 24/120
			80	**19/200** (B5) - **19/120** (B14) 19/250 - 19/160 - 19/140
			71	**14/160** (B5) 14/250 - 14/200 - 14/140 - 14/120
	3		90	**24/200** (B5) - **24/140** (B14) 24/160 - 24/120
			80	**19/200** (B5) - **19/120** (B14) 19/160 - 19/140
			71	**14/160** (B5)
			63	**11/140** (B5)
55	2	—	112	**28/250** (B5) - **28/160** (B14) 28/200 - 28/140 - 28/120
			100	**28/250** (B5) - **28/160** (B14) 28/200 - 28/140 - 28/120
			90	**24/200** (B5) - **24/140** (B14) 24/250 - 24/160 - 24/120
			80	**19/200** (B5) - **19/120** (B14) 19/250 - 19/160 - 19/140
			71	**14/160** (B5) 14/250 - 14/200 - 14/140 - 14/120
	3		90	**24/200** (B5) - **24/140** (B14) 24/160 - 24/120
			80	**19/200** (B5) - **19/120** (B14) 19/160 - 19/140
			71	**14/160** (B5)
			63	**11/140** (B5)
60	2	—	132	**38/300** (B5) - **38/200** (B14) 38/250
			112	**28/250** (B5) - **28/160** (B14) 28/200 - 28/140 - 28/120
			100	**28/250** (B5) - **28/160** (B14) 28/200 - 28/140 - 28/120
			90	**24/200** (B5) - 24/140 (B14) 24/250 - 24/160 - 24/120
			80	**19/200** (B5) - 19/120 (B14) 19/250 - 19/160 - 19/140
	3		112	**28/250** (B5) - **28/160** (B14)
			100	**28/250** (B5) - **28/160** (B14)
			90	**24/200** (B5) - **24/140** (B14) 24/160 - 24/120
			80	**19/200** (B5) - **19/120** (B14) 19/160 - 19/140
			71	**14/160** (B5) 14/200 - 14/140 - 14/120
70	2	—	132	**38/300** (B5) - **38/200** (B14) - 38/250
			112	**28/250** (B5) - **28/160** (B14) 28/200 - 28/140 - 28/120
			100	**28/250** (B5) - **28/160** (B14) 28/200 - 28/140 - 28/120
			90	**24/200** (B5) - 24/140 (B14) 24/250 - 24/160 - 24/120
			80	**19/200** (B5) - 19/120 (B14) 19/250 - 19/160 - 19/140
	3	—	112	**28/250** (B5) - **28/160** (B14)
			100	**28/250** (B5) - **28/160** (B14)
			90	**24/200** (B5) - **24/140** (B14) -24/160 - 24/120
			80	**19/200** (B5) - **19/120** (B14) -19/160 - 19/140
			71	**14/160** (B5) -14/200 - 14/140 - 14/120
80	2	—	180	**48/350** (B5) - 48/300 - 48/250
			160	**42/350** (B5) - 42/300 - 42/250
			132	**38/300** (B5) - 38/350 - 38/250
			112	**28/250** (B5) - 28/350 - 28/300
			100	**28/250** (B5) - 28/350 - 28/300
	3	—	112	**28/250** (B5)
			100	**28/250** (B5)
			90	**24/200** (B5)
			80	**19/200** (B5)
90	2	—	180	**48/350** (B5) - 48/300 - 48/250
			160	**42/350** (B5) - 42/300 - 42/250
			132	**38/300** (B5) - 38/350 - 38/250
			112	**28/250** (B5) - 28/350 - 28/300
			100	**28/250** (B5) - 28/350 - 28/300
	3	—	112	**28/250** (B5)
			100	**28/250** (B5)
			90	**24/200** (B5)
			80	**19/200** (B5)

1.2 Designazione — *1.2 Designation* — 1.2 Bezeichnung

06 07	AM		IVT - Versione Entrata - TYPE	*IVT - Input Version - TYPE*	IVT - Antriebausführung - TYPE
			IS - Albero Entrata	*IS - Input shaft*	IS - Antriebswelle

Possible couplings with IEC motors

SIZE	NOR	IVT	IS	IR (All)
100 110	2	—	200 *	**55/400** (B5)
			180 *	**48/350** (B5)
			160 *	**42/350** (B5)
			132	**38/300** (B5) - **38/200** (B14) - 38/250
			112	**28/250** (B5) - 28/200 - 28/300
			100	**28/250** (B5) - 28/200 - 28/300
	3	—	132	**38/300** (B5) - **38/200 (B14)** - 38/250
			112	**28/250** (B5) - 28/300 - 28/200
			100	**28/250** (B5) - 28/300 - 28/200
			90	**24/200** (B5) - **24/140 (B14)** - 24/250 - 24/160 - 24/120
120	2	—	225 *	**60/450** (B5)
			200 *	**55/400** (B5) - 55/450
			180 *	**48/350** (B5) - 48/450 - 48/400
			160 *	**42/350** (B5) - 42/450 - 42/400
			132	**38/300** (B5) - **38/200** (B14) - 38/250
			112	**28/250** (B5) - 28/200 - 28/300
			100	**28/250** (B5) - 28/200 - 28/300
	3	—	132	**38/300** (B5)
			112	**28/250** (B5)
			100	**28/250** (B5)
			90	**24/200** (B5)
140	2	—	250 *	**65/550** (B5)
			225 *	**60/450** (B5)
			200 *	**55/400** (B5)
			180 *	**48/350** (B5)
			160 *	**42/350** (B5)
			132 *	**38/300** (B5)
	3	—	225 *	**60/450** (B5)
			200 *	**55/400** (B5) - 55/450
			180 *	**48/350** (B5) - 48/450 - 48/400
			160 *	**42/350** (B5) - 42/450 - 42/400
			132	**38/300** (B5) - **38/200** (B14) - 38/250
			112	**28/250** (B5) - 28/200 - 28/300
			100	**28/250** (B5) - 28/200 - 28/300

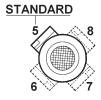
**** All PAM configurations supplied with ROTEX coupling. Where PAM configuration is marked with an asterisk, see directions (for mounting directions, see section A, paragraph "Installation" - 1.12)***

Nella tab. sono riportate le grandezze motore accoppiabili (IEC) unitamente alle dimensioni albero/flangia motore standard
Legenda:
11/140 (B5): combinazioni albero/flangia standard
11/120 : combinazioni albero/flangia a richiesta

In table the possible shaft/flange dimensions IEC standard are listed.
Key:
***11/140** : standard shaft/flange combination*
11/120 : shaft/flange combinations upon request

In Tabelle sind die möglichen Welle/Flansch-Abmessungen IEC-Standard aufgelistet.
Legende:
11/140 : Standardkombinationen Welle/Flansch
11/120 : Sonderkombinationen Welle/Flansch

IVT	—	Predisposto per accoppiamento con Unità Motrice IEC / *pre arrangement motor IEC* / geeignet für die Kombination mit Antriebseinheit IEC
	N	A richiesta / on Request / Auf Anfrage Predisposto per accoppiamento con Unità Motrice NEMA/ *pre arrangement motor NEMA* / geeignet für die Kombination mit Antriebseinheit NEMA - CT 37 US GB
IS	**...**	Grandezza IEC / *Size IEC* /



Posizione morsettiera - Vedere - 13 - PMT - Pagina B9
Terminal board position - Look - 13 - PMT - Page B9
Lage des Klemmenkastens - Siehe - 13 - PMT - Auf Seite B9

Designazione motore elettrico Se è richiesto un motoriduttore completo di motore è necessario riportare la designazione di quest'ultimo. A tale proposito consultare il ns. catalogo dei motori elettrici Electronic Line.	*Electric motor designation* *For applications requiring a gearmotor, motor designation must be specified.To this end, please refer to our Electronic Line electric motor catalogue.*	Bezeichnung des Elektromotors Wird ein Getriebemotor komplett mit Elektromotor angefordert, müssen dessen Daten angegeben werden. Diesbezüglich verweisen wir auf unseren Katalog der Elektromotoren "Electronic Line".

1.2 Designazione — *1.2 Designation* — 1.2 Bezeichnung

06 07	AR	IVT - Versione Entrata - TYPE	*IVT - Input Version - TYPE*	IVT - Antriebausführung - TYPE
		IS - Albero Entrata	*IS - Input shaft*	IS - Antriebswelle

— Nessuna indicazione = diametro standard;

— No indications = standard diameter;

— Keine Angabe = Standard-durchmesser

1	32 (∅ 16)	40 (∅ 16)	50 (∅ 16)	60 (∅ 19)	80 (∅ 24)	100 (∅ 28)

2	50 (∅ 16)	55 (∅ 16)	60 (∅ 19)	70 (∅ 19)	80 (∅ 24)	90 (∅ 24)	100 (∅ 28)	110 (∅ 28)	120 (∅ 38)	140 (∅ 48)

B

08 TOBE - Cuscinetti Uscita - TYPE — *TOBE - Output Bearings - TYPE* — TOBE - Abtriebslager - TYPE

— Nessuna indicazione = Cuscinetti Uscita del tipo radiale a una corona di sfere e cuscinetti conici in uscita.

— No indications = Output Radial Ball Bearing and tapered output bearings.

— Keine Angabe = Abtriebslager vom Typ Radial-Kugellager und Ausgangskegellager.

CM - Cuscinetti a rulli cilindrici che hanno le medesime dimensioni dei cuscinetti montati standard ma assicurano una prestazione equivalente ad una taglia di riduttore superiore.

Per maggiori dettagli fare riferimento alla tabella dei carichi radiali massimi ammissibili.

CM - Cylindrical roller bearings with the same dimensions of the standard bearings, yet ensuring the same performance level of a higher gearbox size.

For further details refer to the table of the maximum allowed radial loads.

CM - Zylinderrollenlager mit derselben Größe wie die Standardlager, die jedoch eine Leistung bieten, die der einer höheren Getriebegröße entspricht.

Weitere Details finden Sie in der Tabelle der maximal zulässigen Radiallasten.

CM	50	55	60	70	80

09 TYPSD - Tipo Albero uscita — *TYPSD - Typ output shaft* — TYPSD - Typ Abtriebwelle

— Nessuna indicazione = le dimensioni dell' albero sono secondo il sistema di misura SI (mm);

US = a richiesta
è possibile richiedere alberi con le dimensioni secondo il sistema di misura US (inch).
CT 37 US GB

— *No indications = The shaft dimensions are subject to the system of units SI (mm).*

US = On request
It's possible to request shafts dimensions according US measurement system (inch).

CT 37 US GB

— Keine Angabe = Die Wellendimensionen unterliegen dem Einheitensystem SI (mm)

US = Auf Anfrage
es ist möglich Wellen anzuforden, die den amerikanischen Abmessungen (inch) entsprechen.
CT 37 US GB

10 SD - Diametro albero — *SD - Shaft diameter* — SD - Durchmesser Abtriebswelle

— Nessuna indicazione = diametro standard;
diametro opzionale = vedi tabella.

— No indications = standard diameter;
optional diameter = *see table.*

— Keine Angabe = Standard-durchmesser
Optionaler durchmesser = siehe Tabelle.

1		32	40	50	60	80	100
	Standard	— (∅ 19)	— (∅ 19)	— (∅ 24)	— (∅ 28)	— (∅ 38)	— (∅ 48)
	Optional	∅ 14	∅ 20	∅ 25	∅ 30	∅ 40	∅ 50

2		25	35	41	45	50	55	60	70	80	90	100	110	120	140
	Standard	— (∅11)	— (∅16)	— (∅20)	— ∅25)	— (∅25)	— (∅30)	— (∅ 30)	— (∅35)	— (∅40)	— (∅50)	— (∅50)	— (∅60)	— (∅60)	— (∅70)
	Optional	∅14	∅19 ∅20	∅19 ∅25	∅24 ∅30	∅24 ∅30	∅ 32	∅ 28 ∅ 35	not available	∅38	(∅48)	∅48	not available		∅ 80
SR	Standard	—	—	—	—	—	—	—	—	∅45SR	∅55SR	—	∅70SR	—	∅80SR

1.2 Designazione

11 MP - Posizioni di montaggio

[M2, M3, M4, M5, M6] Posizioni di montaggio con indicazione dei tappi di livello, carico e scarico; se non specificato si considera standard la posizione **M1** (vedi par. 1.4)

1.2 Designation

MP - Mounting positions

[M2, M3, M4, M5, M6] *Mounting position with indication of breatherm level and drain plugs; if not specified, standard position is* ***M1*** *(see par. 1.4).*

1.2 Bezeichnung

MP - Einbaulagen

Montageposition **[M2, M3, M4, M5, M6]** mit Angabe von . Entlüftung, Schaugläsern und Ablaßschraube. Wenn nicht näher spezifiziert, wird die Standard - position **M1** zugrunde gelegt (s. Abschnitt 1.4).

12 OPT-ACC. - Opzioni

OPT-ACC - Options

OPT-ACC. - Optionen

vedi Sezione A-1.12 see Section A-1.12 s. Abschnitt A-1.12	**OPT.**	**OPT**	Materiale degli anelli di tenuta	Materials of Seals	Dichtungsstoffe
		OPT1	Stato fornitura olio	Scope of the supply - Options - OIL	Optionen - Lieferzustand - Optionen - Öl
		OPT2	Verniciatura	Painting and surface protection	Lackierung und Oberflächenschutzl

13 PMT - Posizioni della Morsettiera

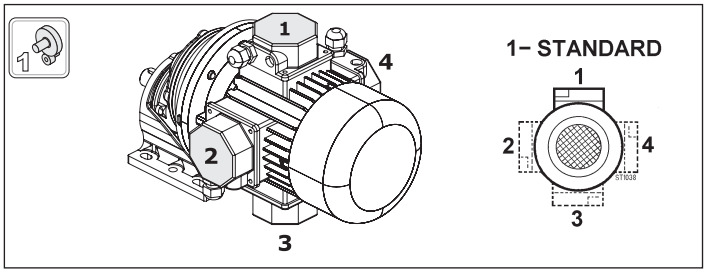
[2, 3, 4] Posizione della morsettiera del motore se diversa da quella standard (1).

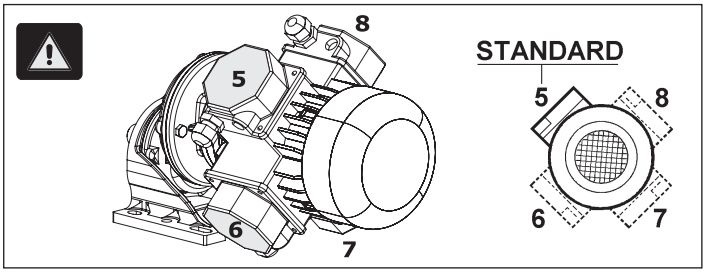
PMT - Position Terminal Box

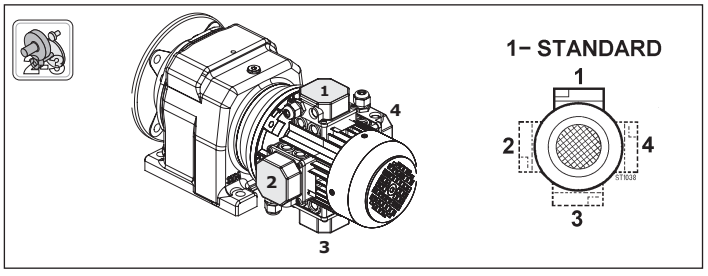
[2, 3, 4] *Position of the motor terminal box if different from the standard one (1).*

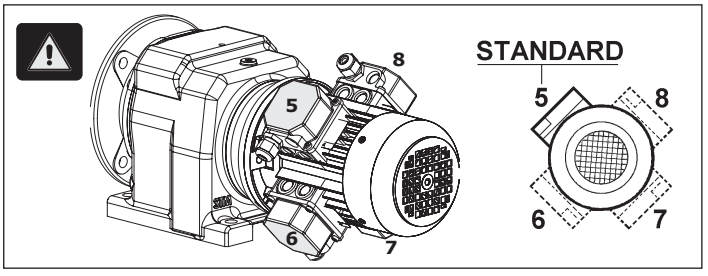
PMT - Montagposition Klemmenkasten

Montageposition Klemmenkasten **[2, 3, 4],** wenn abweichend von Standardposition [1] (für Motorgetriebe).









N.B.
La configurazione standard della flangia attacco motore prevede 4 fori a 45°.

Per le flange contrassegnate con il simbolo (•) (**vedi pagina B5)** i fori per il fissaggio al motore sono disposti in croce (esempio +). Pertanto è opportuno valutare l'ingombro della morsettiera del motore che verrà installato in quanto essa verrà a trovarsi orientata a 45° rispetto agli assi. Per la scelta della posizione della morsettiera rispetto agli assi fare riferimento allo schema seguente (in cui la posizione 5 è quella standard):

Note.
The standard configuration for the 4 holes is 45° to the axles (like an x: see par 2.3).

*For the flanges marked with (•) (**see page B5)** the holes to fit the motor are on the axles (like a +). Therefore we suggest to check the dimensions of the terminal board of the motor as it will be at 45° to the axles. Please choose the terminal board position refering to the following sketch (in which n° 5 is the standard position):*

HINWEIS.
In der Standardkonfiguration sind die 4 Flansch- bohrungen im 45°-Winkel zu den Achsen angeordnet
Bei Flanschen, die mit (•) (**Siehe auf Seite B5)** gekennzeichnet sind, sind die Bohrungen auf den Achsen angeord- net (wie ein +). Es sollte deshalb der Platzbedarf des Motorklemmenkastens beachtet werden, da er sich in 45°-Position zu den Achsen befinden wird. Die Lage des Klemmenkastens des Motors wählen Sie bitte anhand der folgenden Skizze (Pos. 5 ist Standardposition):

1.5 Carichi radiali e assiali

Quando la trasmissione del moto avviene tramite meccanismi che generano carichi radiali sull'estremità dell'albero,è necessario verificare che i valori risultanti non eccedono quelli indicati nelle tabelle.

Nella Tab. 2.3 sono riportati i valori dei carichi radiali ammissibili per l'albero veloce (Fr_1). Come carico assiale ammissibile contemporaneo si ha:

$$Fa_1 = 0.2 \times Fr_1$$

1.5 Axial and overhung loads

Should transmission movement determine radial loads on the angular shaft end, it is necessary to make sure that resulting values do not exceed the ones indicated in the tables.

In Table 2.3 permissible radial load for input shaft are listed (Fr_1). Contemporary permissible axial load is given by the following formula:

$$Fa_1 = 0.2 \times Fr_1$$

1.5 Radiale und Axiale Belastungen

Wird das Wellenende auch durch Radialkräfte belastet, so muß sichergestellt werden, daß die resultierenden Werte die in der Tabelle angegebenen nicht überschreiten.

In Tabelle 2.3 sind die Werte der zulässigen Radialbelastungen für die Antriebswelle (Fr_1) angegeben. Die Axialbelastung beträgt dann:

$$Fa_1 = 0.2 \times Fr_1$$

Tab. 2.3

n_1 min^{-1}	Fr_1 (N) AR../1					
	32	**40**	**50**	**60**	**80**	**100**
2800	170	320	430	520	600	1000
1400	220	400	550	700	800	1200
900	250	450	600	800	920	1300
500	300	500	850	1100	1300	1500

n_1 min^{-1}	Fr_1 (N) AR																	
	25	**35**	**41**	**45**	**40**	**50**	**55/2**	**55/3**	**60**	**70/2**	**70/3**	**80**	**90**	**100**	**110**	**120**	**140/2**	**140/3**
2800	—	—	—	—	320	430	700	430	520	800	520	600	600	1000	1000	1250	2800	1250
1400	—	—	—	—	400	550	900	550	700	1000	700	800	800	1200	1200	1500	3000	1500
900	—	—	—	—	450	600	1100	600	800	1200	800	920	920	1300	1300	1600	3500	1600
500	—	—	—	—	500	850	1200	850	1100	1400	1100	1300	1300	1500	1500	1800	3800	1800

1.5 Carichi radiali e assiali

In Tab. 2.4 sono riportati i valori dei carichi radiali ammissibili per l'albero lento (Fr_2) . Come carico assiale ammissibile contemporaneo si ha:

$$Fa_2 = 0.2 \times F_{r2}$$

1.5 Axial and overhung loads

In Table 2.4 permissible radial loads for output shaft are listed (Fr_2). Permissible axial load is given by the following formula:

$$Fa_2 = 0.2 \times Fr_2$$

1.5 Radiale und Axiale Belastungen

In Tabelle 2.4 sind die Werte der zulässigen Radialbelastungen für die Abtriebswelle (Fr_2) angegeben. Als zulässige Axialbelastung gilt:

$$Fa_2 = 0.2 \times Fr_2$$

B

Tab. 2.4

n_2 min^{-1}	Fr_2 (N)					
	32	**40**	**50**	**60**	**80**	**100**
2400	-	600	1250	1350	1900	2500
1850	-	650	1250	1450	2100	2800
1250	530	700	1500	1650	2450	3000
1100	570	720	1500	2000	2450	3500
830	630	750	1500	2300	2600	3600
630	700	850	1800	2400	2900	3700
500	700	950	2000	2600	3400	3800
400	740	1000	2200	2900	3800	3900
300	880	1150	2300	3000	4200	4200
250	970	1250	2500	3400	4500	4500
200	1020	1370	2500	3800	5000	5500
160	1070	1500	2500	3800	5500	6500
130	1200	1500	2500	3800	6000	7500
100	1260	1500	2500	3800	6000	8500
80	1320	1500	2500	3800	6000	8500
> 70	1420	1500	2500	3800	6000	8500

CASE A	**STANDARD OUTPUT BEARING - TYPE - TOBE= —**													
n_2 min^{-1}	Fr_2 (N)													
	25	**35**	**41**	**45**	**50**	**55**	**60**	**70**	**80**	**90**	**100**	**110**	**120**	**140**
1000	420	450	580	665	750	—	1100	—	2000	—	3800	4000	4500	—
700	540	580	750	875	1000	1100	1500	1800	2500	4000	5000	5400	5800	—
500	650	700	900	1050	1200	1300	1800	2300	3000	5000	6000	6800	7000	—
350	650	740	1100	1250	1400	1500	2300	3500	3700	6000	7000	8000	8200	15000
250	650	800	1300	1550	1800	2000	2600	4000	4500	7000	8200	9000	9500	16000
200	650	850	1500	1850	2200	2400	3300	5000	6000	8000	9000	10000	10000	16000
150	650	930	1600	2300	3000	3200	4000	5500	7500	9000	10000	11500	11500	20000
100	650	1000	1700	2550	3400	3500	4500	6000	8300	10000	11500	13000	12500	20000
80	650	1050	1850	2775	3700	3800	5000	6500	9000	11000	12000	13000	13500	24000
60	650	1100	1900	2900	3900	4500	5400	7000	9600	12000	13000	14000	15000	26000
30	650	1400	2300	3200	4100	5500	6000	8000	10000	13000	14000	16000	21000	30000
< 15	650	1800	2700	3500	4300	6000	6500	9000	11000	14000	15000	18000	25000	32000

CASE B	**ROLLER BEARING OUTPUT BEARING - TYPE - TOBE= CM**													
n_2 min^{-1}	Fr_2 (N)													
	25	**35**	**41**	**45**	**50**	**55**	**60**	**70**	**80**	**90**	**100**	**110**	**120**	**140**
1000					2400	—	2900	—	3200					
700					2600	3500	3800	4400	4700					
500					3200	4200	4500	5300	5800					
350					3900	5800	6300	6800	7900					
250					5700	6900	7100	7700	8300					
200					6200	7000	*	8200	9200					
150			—		6600	*	8700	*	*		—			
100					*	*	*	*	*					
80					*	*	*	*	*					
60					*	*	*	*	*					
30					*	*	*	*	*					
< 15					*	*	*	*	*					

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1.5 Carichi radiali e assiali

1.5 Axial and overhung loads

1.5 Radiale und Axiale Belastungen

CASE C	OUTPUT VERSION SR													
	n_2 min^{-1}	Fr_2 (N)												
		25	35	41	45	50	55	60	70	80	90	100	110	120	140
	1000									7200	—		—		—
	700									7900	8200		11500		—
	500									8000	8100		12000		24000
	350									8100	8800		13000		24000
	250									8300	9000		14000		25000
	200					—				8500	10000	—	18000	—	26000
	150									9500	10500		21000		27000
	100									11000	13500		23000		28000
	80									11500	15000		25000		31000
	60									13000	17000		28000		40000
	30									16000	21000		32000		48000
	< 15									18000	23000		35000		56000

I carichi radiali indicati nelle tabelle si intendono applicati a metà della sporgenza dell'albero standard e sono riferiti ai riduttori operanti con fattore di servizio 1. Per le sporgenze fornite in alternativa, fare riferimento alla sporgenza standard.
Valori intermedi relativi a velocità non riportate possono essere ottenuti per interpolazione considerando però che Fr_1 a 500 min^{-1} e Fr_2 a 15 min^{-1} rappresentano i carichi massimi consentiti.
Per i carichi non agenti sulla mezzeria dell'albero lento o veloce si ha:

a 0.3 della sporgenza:
$Fr_x = 1.25 \times F_{r1-2}$
a 0.8 dalla sporgenza:
$Fr_x = 0.8 \times F_{r1-2}$

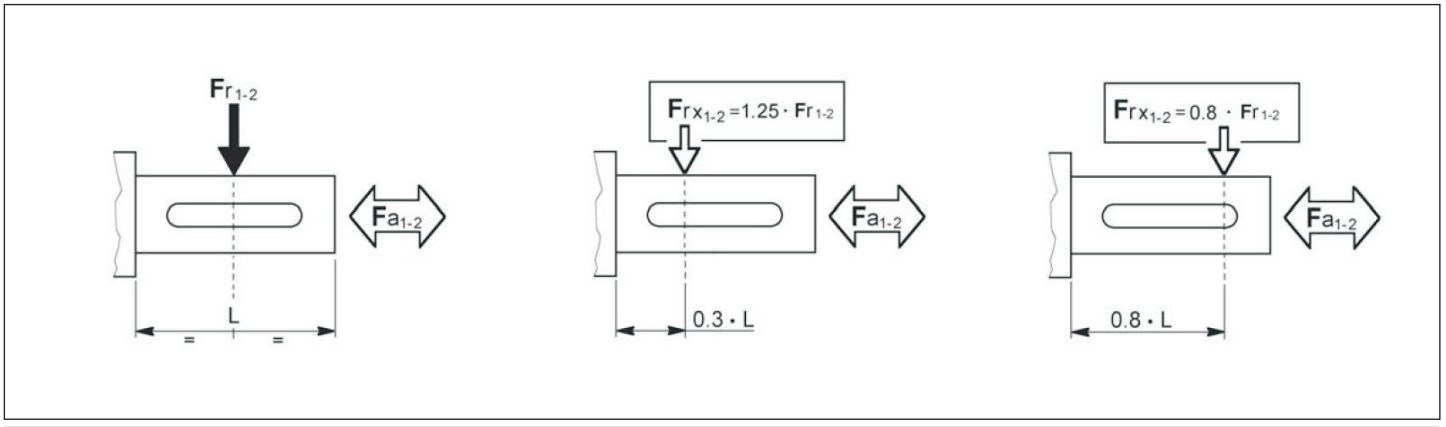
The radial loads shown in the tables are applied on the centre line of the standard shaft extension and are related to gearboxes working with service factor 1. With reference to alternative values of shaft extension, refer to standard shaft extension.
Intermediate values of speeds that are not listed can be obtained through interpolation but it must be considered that Fr_1 at 500 min^{-1} and Fr_2 at 15 min^{-1} represent the maximum allowable loads.
For loads which are not applied on the centre line of the output or input shaft, following values will be obtained:

at 0.3 from extension:
$Fr_x = 1.25 \times F_{r1-2}$
at 0.8 from extension:
$Fr_x = 0.8 \times F_{r1-2}$

Bei den in der Tabelle angegebenen Radialbelastungen wird eine Krafteinwirkung auf die Mitte des Wellenendes zugrunde gelegt; außerdem arbeiten die Getriebe mit Betriebsfaktor 1. Bei Einsatz von Sonderabtriebswellen beziehen Sie sich bitte auf die oben aufgeführten Abstände der Standardabtriebswellen.
Zwischenwerte für nicht aufgeführte Drehzahlen können durch Interpolation ermittelt werden. Hierbei ist jedoch zu berücksichtigen, daß der maximale Wert für Fr_1 bei 500 min^{-1} und für Fr_{2max} bei 15 min^{-1} gilt.
Bei Lasten, die nicht auf die Mitte der Ab- und Antriebswellen wirken, legt man folgende Werte zugrunde:

0.3 vom Wellenabsatz entfernt:
$Fr_x = 1.25 \times Fr_{1-2}$
0.8 vom Wellenabsatz entfernt:
$Fr_x = 0.8 \times Fr_{1-2}$

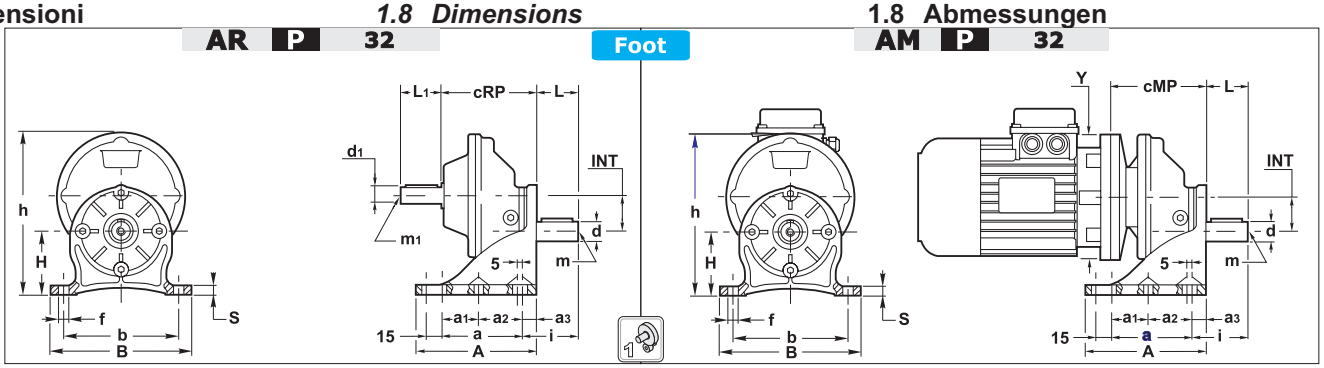
Tab. 2.6



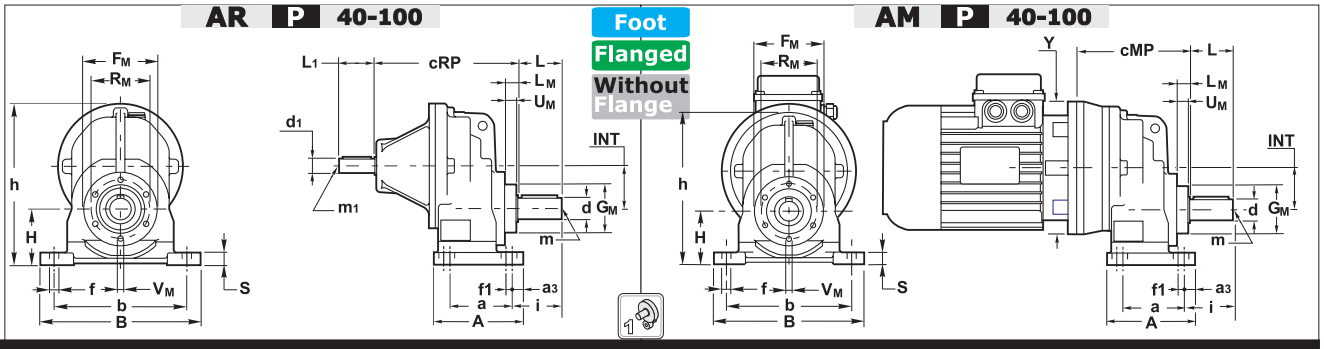
1.8 Dimensioni — *1.8 Dimensions* — 1.8 Abmessungen

P

AR P 32 — Foot

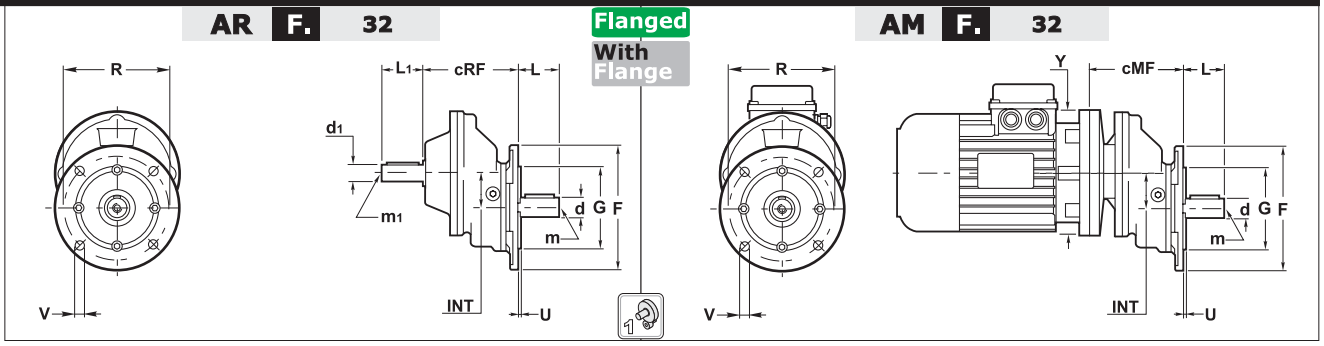


AR P 40-100 — Foot / Flanged / Without Flange

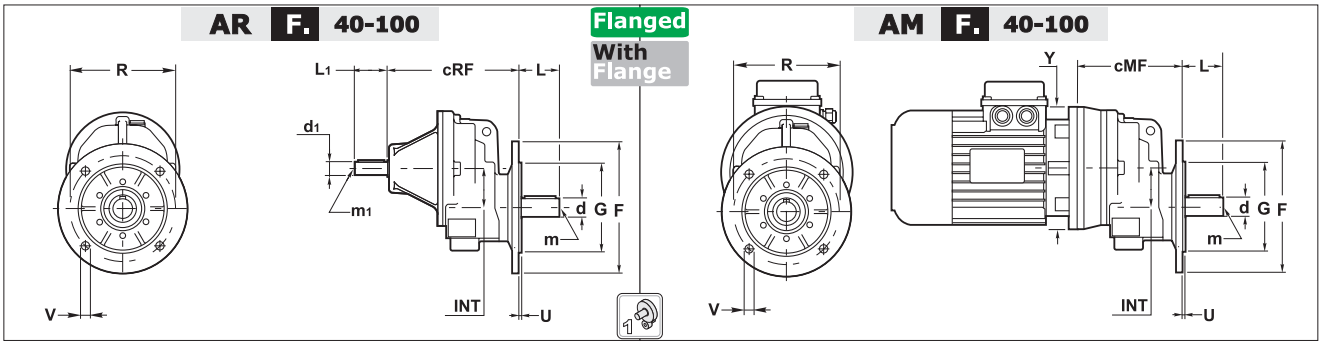


F1 / F2 / F3 / F4

AR F. 32 — Flanged With Flange



AR F. 40-100 — Flanged With Flange



General Dimensions						
General dimensions	**32**	**40**	**50**	**60**	**80**	**100**
h	153	162	181	221	276	345
INT	33	42	48	61	76	95

P - Foot versions						
Foot versions - P	**32**	**40**	**50**	**60**	**80**	**100**
a	77	45	70	70	85	130
a1	35	-	-	-	-	-
a2	42	-	-	-	-	-
a3	13	12	12	16	21	17
A	115	85	100	120	135	173
b	110	105	150	165	185	240
B	135	130	180	195	230	295
f	9	8.5	11	11	14	18
f1	5	2	7	8.5	-	-
H	60	50	63	80	100	125
S	9	12	14	15	20	22

1.8 Dimensioni — *1.8 Dimensions* — 1.8 Abmessungen

F1-F2-F3-F4 - *Flanged versions*

Flanged versions F1-F2-F3-F4	32			40				50				60			80		100	
	F1	F2	F3	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F1	F2	F1	F2
F	120	140	160	120	140	160	200	120	140	160	200	160	200	250	250	300	250	300
G	80	95	110	80	95	110	130	80	95	110	130	110	130	180	180	230	180	230
tollerance G	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6
R	100	115	130	100	115	130	165	100	115	130	165	130	165	215	215	265	215	265
U	3	3.5	3.5	3	3.5	3.5	3.5	3	3.5	3.5	3.5	3	3.5	3.5	4	4	4	4
V	9	9	10	9	9	10	13	9	9	10	13	10	13	15	15	15	15	15

Fixing - Flange Housing

Fixing Flange Housing	32	40	50	60	80	100
FM	-	82	82	110	156	156
GM	-	54	54	74	114	114
tollerance GM						
LM	-	14	14	17	20	20
RM	-	66	66	94	136	136
UM	-	13	13	15	18	17
VM		M6	M6	M8	M10	M10

Output Shaft

Output Shaft	Standard / Optional	d	L	m	i	tollerance d
32	**Standard**	19	40	M6	53	h6
	Optional	14	30	M6	43	h6
40	**Standard**	19	40	M6	53	h6
	Optional	20	40	M6	53	h6
50	**Standard**	24	50	M8	56	h6
	Optional	25	50	M8	56	h6
60	**Standard**	28	60	M10	67.5	h6
	Optional	30	60	M10	67.5	h6
80	**Standard**	38	80	M10	105	h6
	Optional	40	80	M10	105	h6
100	**Standard**	48	110	M16	129	h6
	Optional	50	110	M16	129	h6

AM - Input version

AM		32	40	50	60		80	100
IEC	Y	cMP-cMF	cMP-cMF	cMP-cMF	cMP	cMF	cMP-cMF	cMP-cMF
56 B5	120	92	-	-	-	-	-	-
56 B14	80	-	-	-	-	-	-	-
63 B5	140	92	124.5	131.5	-	-	-	-
63B14	90	92 •	-	-	-	-	-	-
71 B5	160	92	124.5	131.5	159.5	158.5	-	-
71B14	105	92	-	-	-	-	-	-
80 B5	200	102	144.5	151.5	174.5	173.5	199.5	-
80 B14	120	102	144.5	151.5	174.5	173.5	-	-
90 B5	200	-	144.5	151.5	174.5	173.5	199.5	-
90 B14	140	-	144.5	151.5	174.5	173.5	-	-
100-112 B5	250	-	154.5	161.5	184.5	183.5	209.5	236
100-112 B14	160	-	154.5	161.5	184.5	183.5	-	-
132 B5	300	-	-	-	208.5	207.5	230.5	236
132 B14	200	-	-	-	208.5	207.5	-	236
160 B5	350	-	-	-	-	-	260.5	300
180 B5	350	-	-	-	-	-	-	300
200 B5	400	-	-	-	-	-	-	305

(•) Vedi designazione 13 - PMT — *(•) See designation 13 - PMT* — (•) Siehe Beschreibung 13 - PMT

AR - Input version

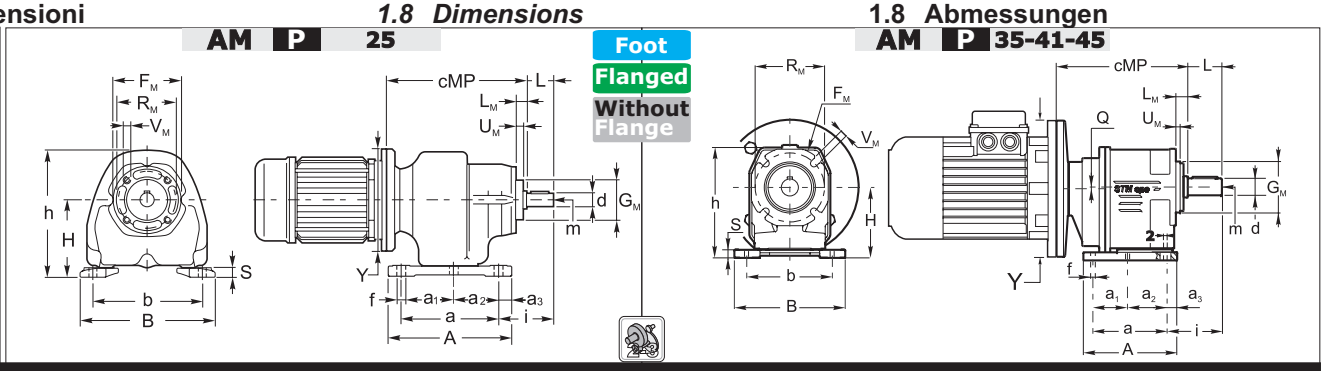
AR	32	40	50	60	80	100
d1	16	16	16	19	24	28
tollerance d1	j6	j6	j6	j6	j6	j6
L1	40	40	40	40	50	60
m1	M6	M6	M6	M6	M8	M8
cRP	92	141.5	160.5	193.5	219	284
cRF	92	141.5	160.5	192.5	219	284

AC - Input version

AC	32	40	50	60	80	100
cCP-cCF	59	85.5	92.5	114.5	142.5	179

1.8 Dimensioni — *1.8 Dimensions* — 1.8 Abmessungen

P / P1 / P2



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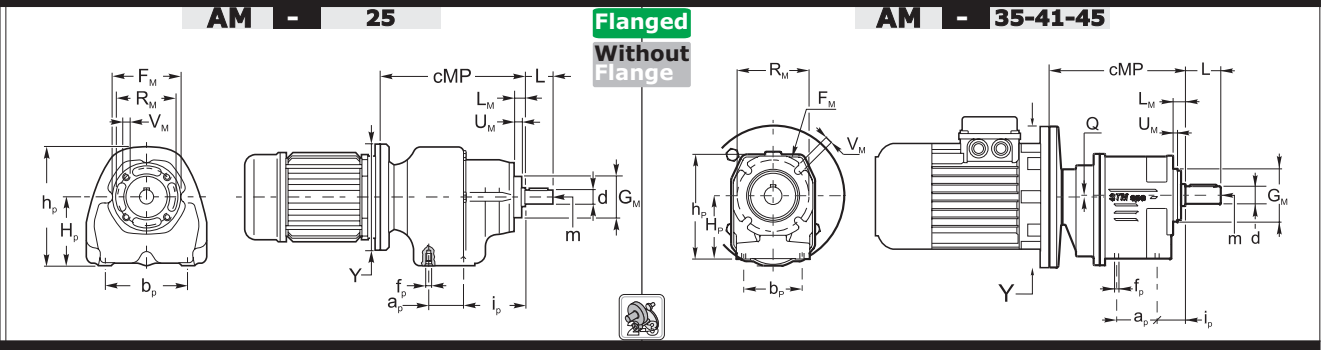
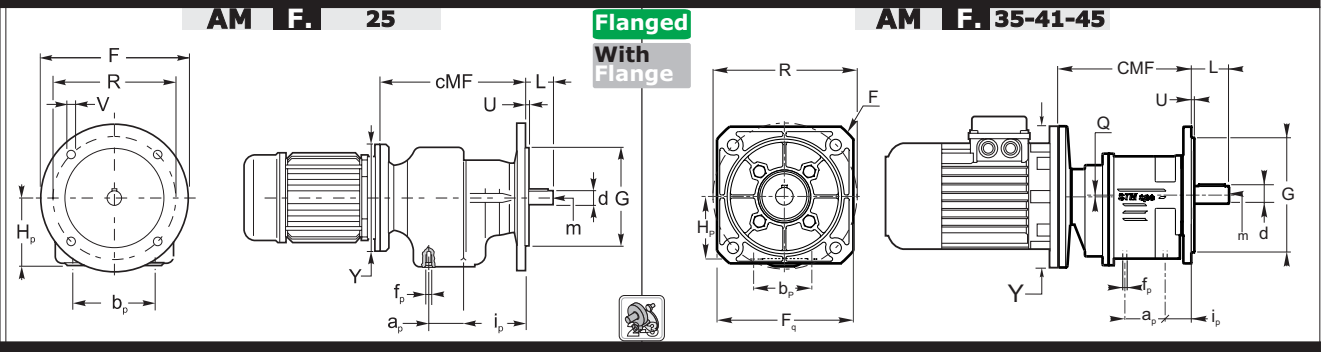
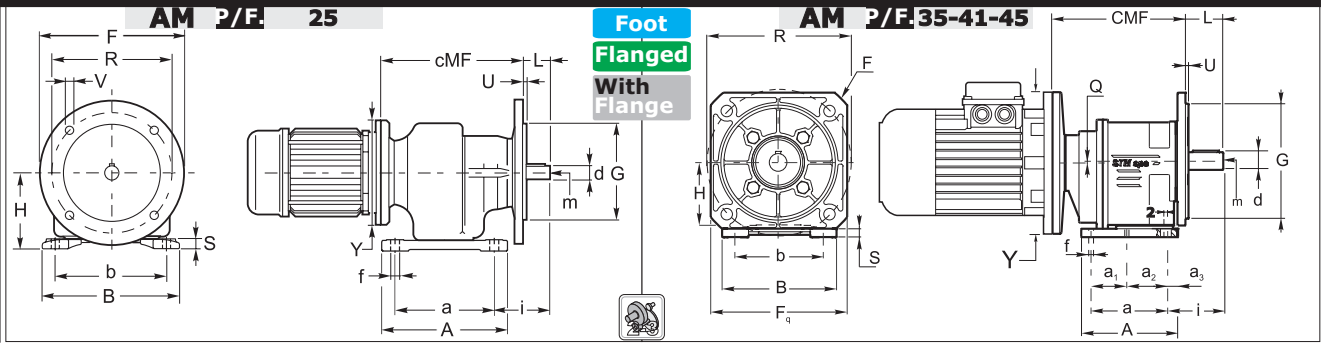


F1 / F2 / F3



P/F.



General Dimensions						
General dimensions		**25**	**35**	**41 (Version P1)**	**41 (Version P2)**	**45**
h		103	131.5	135	130	154
Q	**Stage - /2**	-	-	2	2	3
Q	**Stage - /3**	-	10	8	8	9.5

P - Foot versions						
Footversions P-P1-P2		**25**	**35**	**41(Version P1)**	**41 (Version P2)**	**45**
a		71	87 +2/2	87 +2/2	85	107.5 +2/2
a1		-	37 +2/2	37 +2/2	-	47.5 +2/2
a2		-	50 +2/2	50 +2/2	-	60 +2/2
a3		9.5	10.5 +1	10.5 +1	10	13.5 +1
A		90	110	110	105	135
b		90 +1	110	110	110	130
B		111	130	130	130	155
f		6.7	8.5	8.5	9.5	11
H		63	85	85	80	100
S		8	9	9.5	10	11

1.8 Dimensioni — *1.8 Dimensions* — 1.8 Abmessungen

F1-F2-F3 - *Flanged versions*										
Flanged versions F1-F2-F3	**25**		**35**			**41**			**45**	
	F1	**F2**	**F1**	**F2**	**F3**	**F1**	**F2**	**F3**	**F1**	**F2**
F	105	120	140	160	200	140	160	200	160	200
Fq	-	-	110	120	150	110	120	150	120	160
G	70	80	95	110	130	95	110	130	110	130
tollerance G	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6
R	85	100	115	130	165	115	130	165	130	165
U	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
V	7	7	9	9	13	9	9	13	9	13

Fixing - Feet Housing				
Fixing Feet Housing	**25**	**35**	**41**	**45**
ap	23	50	50	60
bp	66	55	67	75
fp	M6	M8(*)	M8(*)	M8(*)
ip	49	20.5	20.5	22.5
hp	95	121.5	122	142
Hp	55	75	72	88

Fixing - Flange Housing				
Fixing Flange Housing	**25**	**35**	**41**	**45**
FM	55	95	95	111
GM	33	60	60	70
tollerance GM	g6	g6	g6	g6
LM	9	11	11	12
RM	46	80	80	90
UM	6	5	5	5
VM	M6	8	8	8

(*) The threaded holes for fixing the feet of the A35, A41 and A45 are non-threaded but pre-drilled for use with trilobe rolling screws.

Output Shaft							
Output Shaft	**Standard**	**d**	**L**	**m**	**i**	**i**	**tollerance d**
	Optional				**P - P1**	**P2**	
25	**Standard**	11	22	M5	47	-	j6
	Optional	14	25	M6	50	-	j6
35	**Standard**	16	30	M6	47	-	h6
	Optional	19	40	M6	57	-	h6
	Optional	20	40	M6	57	-	h6
41	**Standard**	20	40	M6	58	58	h6
	Optional	19	40	M6	58	58	h6
	Optional	25	50	M8	68	68	h6
45	**Standard**	25	50	M8	68	-	h6
	Optional	24	50	M8	68	-	h6
	Optional	30	60	M10	78	-	h6

AM - *Input version*									
AM		**25/2**	**25/3**	**35/2**	**35/3**	**41/2**	**41/3**	**45/2**	**45/3**
IEC	**Y**	**cMP-cMF**	**cMP-cMF**	**cMP-cMF**	**cMP-cMF**	**cMP-cMF**	**cMP-cMF**	**cMP-cMF**	**cMP-cMF**
56 B5	120	116	116	-	144	-	-	-	-
56 B14	80	116 •	116 •	-	144 •	-	-	-	-
63 B5	140	116	116	126.5	144	151.5	168	-	-
63B14	90	116	116	126.5 •	144	151.5 •	168 •	-	-
71 B5	160	-	-	126.5	-	151.5	168	171.5	188
71B14	105	-	-	126.5	-	151.5 •	168	171.5 •	188 •
80 B5	200	-	-	136	-	160	-	171.5	188
80 B14	120	-	-	136	-	160	-	171.5	188
90 B5	200	-	-	-	-	160	-	182	-
90 B14	140	-	-	-	-	160	-	184	-
100-112 B5	250	-	-	-	-	-	-	184	-
100-112 B14	160	-	-	-	-	-	-	184	-

(•) Vedi designazione 13 - PMT — *(•) See designation 13 - PMT* — (•) Siehe Beschreibung 13 - PMT

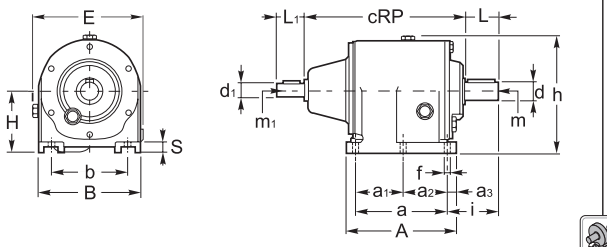
AR - *Input version*				
AR	**25**	**35**	**41**	**45**
d1	not available			
tollerance d1				
L1				
m1				
cRP				
cRF				

AC - *Input version*				
AC	**25**	**35**	**41**	**45**
cCP-cCF	93.5	not available		

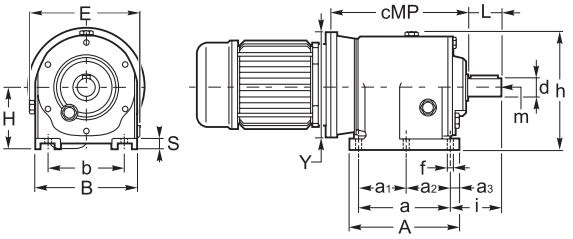
1.8 Dimensioni — *1.8 Dimensions* — 1.8 Abmessungen

P

AR P 50-60-80-100-120 — Foot

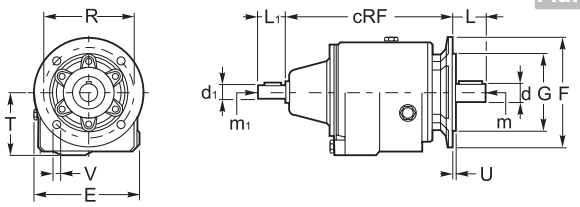


AM P 50-60-80-100-120

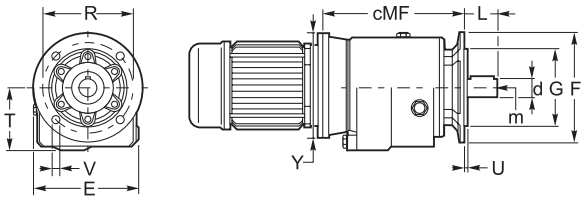


F1 F2 F3 F4

AR F. 50-60-80-100-120 — Flanged / With Flange

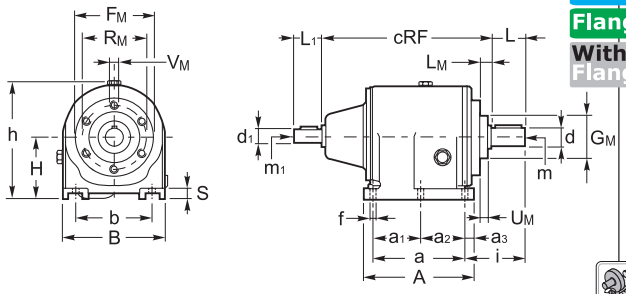


AM F. 50-60-80-100-120

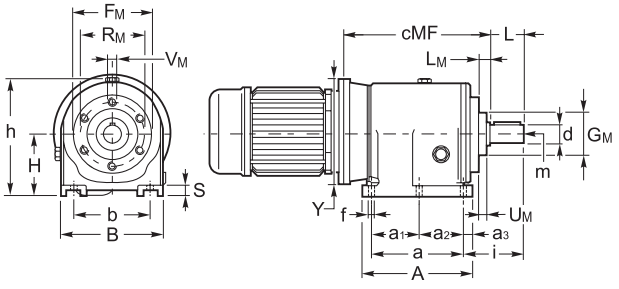


P/F

AR P/F 50-60-80-120 — Foot / Flanged / Without Flange

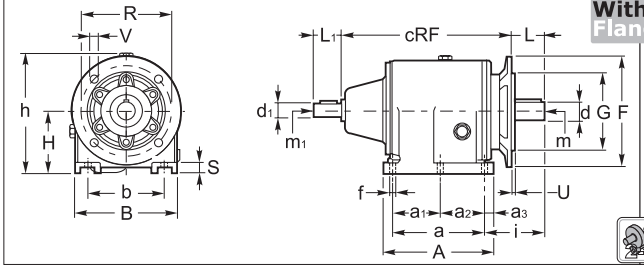


AM P/F 50-60-80-120

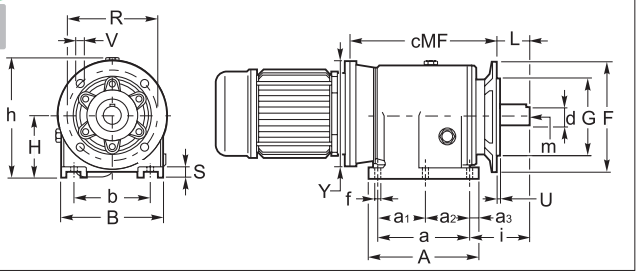


P/F.

AM P/F. 50-60-80-100-120 — Foot / Flanged / With Flange



AM P/F. 50-60-80-100-120

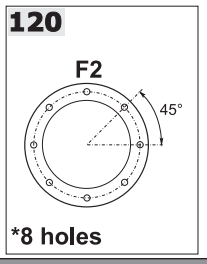


General Dimensions					
General dimensions	**50**	**60**	**80**	**100**	**120**
h	165	203	251	321	407
E	160	199	247	294	359
T	90.0	115	140	178	225

P - Foot versions					
Foot versions P	**50**	**60**	**80**	**100**	**120**
a	130.0	165.0	205.0	260.0	310.0
a1	—	—	—	—	—
a2	—	—	—	—	—
a3	12.5	15.0	20.0	21.0	27.5
A	155.0	195.0	245.0	306.0	365.0
b	110.0	135.0	170.0	215.0	250.0
B	145.0	185.0	230.0	290.0	350.0
f	9.5	14.0	20.0	20.0	23.0
H	90.0	115.0	140.0	180.0	225.0
S	15.0	20.0	25.0	35.0	45.0

1.8 Dimensioni — *1.8 Dimensions* — 1.8 Abmessungen

F1-F2-F3-F4 - *Flanged versions*														
Flanged versions F1-F2-F3-F4	**50**				**60**			**80**		**100**		**120**		
	F1	**F2**	**F3**	**F4**	**F1**	**F2**	**F3**	**F1**	**F2**	**F1**	**F2**	**F1**	**F2**	**F3**
F	120	160	200	250	160	200	250	250	300	300	350	350	450	400
G	80	110	130	180	110	130	180	180	230	230	250	250	350	300
tollerance G	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6	g6
R	100	130	165	215	130	165	215	215	265	265	300	300	400	350
U	3	3.5	3.5	4	3	3.5	3.5	4	4	4	5	5	5	5
V	9	10	13	15	10	13	15	15	15	15	19	19	19*	18



Fixing - Flange Housing					
Fixing Flange Housing	**50**	**60**	**80**	**100**	**120**
FM	110	110	164	—	230
GM	74	74	114	—	170
tollerance GM	g6	g6	g6	—	g6
LM	16	16	20	—	26.5
RM	94	94	136	—	200
UM	7	6	13	—	18
VM	M8	M8	M10	—	M12

Output Shaft							
Output Shaft		**d**	**L**	**m**	**i**	**i**	**tollerance d**
	Standard / Optional				**ARP-AMP**	**ARP/F.-AMP/F.**	
50	**Standard**	25	50	M8	75	83	h6
	Optional	24	50	M8	75	83	h6
	Optional	30	60	M10	85	93	h6
60	**Standard**	30	60	M10	90	101	h6
	Optional	28	60	M10	90	101	h6
	Optional	35	70	M10	100	111	h6
80	**Standard**	40	80	M10	115	122	h6
	Optional	38	80	M10	115	122	h6
100	**Standard**	50	100	M12	140.4	140.4	h6
	Optional	48	100	M12	140.4	140.4	h6
120	**Standard**	60	120	M12	160	191	h6

AM - *Input version*																				
AM		**50/2**		**50/3**		**60/2**		**60/3**		**80/2**		**80/3**		**100/2**		**100/3**		**120/2**		**120/3**	
IEC	**Y**	**cMP**	**cMF**	**cMP**	**cMF**	**cMP**	**cMF**	**cMP**	**cMF**	**cMP**	**cMF**	**cMP**	**cMF**	**cMP**	**cMF**	**cMP**	**cMF**	**cMP**	**cMF**	**cMP**	**cMF**
56 B5	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
56 B14	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
63 B5	140	-	-	198	206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
63B14	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
71 B5	160	204	212	198	206	-	-	235	246	-	-	-	-	-	-	-	-	-	-	-	-
71B14	105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80 B5	200	204	212	218	226	232	243	250	261	-	-	291	298	-	-	-	-	-	-	-	-
80 B14	120	204	212	218	226	232	243	250	261	-	-	-	-	-	-	-	-	-	-	-	-
90 B5	200	204	212	218	226	232	243	250	261	-	-	291	298	-	-	340.4	340.4	-	-	392	423
90 B14	140	204	212	218	226	232	243	250	261	-	-	-	-	-	-	340.4	340.4	-	-	-	-
100-112 B5	250	214	222	-	-	242.5	253.5	260	271	276	283	301	308	347.4	347.4	350.4	350.4	408	439	414	445
100-112 B14	160	214	222	-	-	242.5	253.5	260	271	-	-	-	-	-	-	-	-	-	-	-	-
132 B5	300	-	-	-	-	265	276	-	-	298.5	305.5	-	-	347.4	347.4	370.4	370.4	408	439	421	452
132 B14	200	-	-	-	-	265	276	-	-	-	-	-	-	347.4	347.4	370.4	370.4	408	439	-	-
160 B5	350	-	-	-	-	-	-	-	-	326.5	333.5	-	-	411.4	411.4	-	-	451.5	482.5	-	-
180 B5	350	-	-	-	-	-	-	-	-	326.5	333.5	-	-	411.4	411.4	-	-	451.5	482.5	-	-
200 B5	400	-	-	-	-	-	-	-	-	-	-	-	-	416.4	416.4	-	-	456.5	487.5	-	-
225 B5	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	465.5	496.5	-	-
250 B5	550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

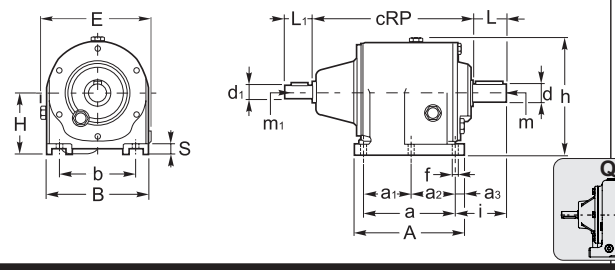
AR - *Input version*								
AR	**50/2**	**50/3**	**60/2**	**60/3**	**80/2**	**80/3**	**100**	**120**
d1	16	16	19	19	24	24	28	38
tollerance d1	j6	j6	j6	j6	j6	j6	j6	j6
L1	40	40	40	40	50	50	60	80
m1	M6	M6	M6	M6	M8	M8	M8	M10
cRP	208.5	227	247	269	295	310.5	395.4	460
cRF	216.5	235	258	280	302	317.5	395.4	491

AC - *Input version*																				
AC	**50/2**		**50/3**		**60/2**		**60/3**		**80/2**		**80/3**		**100/2**		**100/3**		**120/2**		**120/3**	
	cCP	**cCF**	**cCP**	**cCF**	**cCP**	**cCF**	**cCP**	**cCF**	**cCP**	**cCF**	**cCP**	**cCF**	**cCP**	**cCF**	**cCP**	**cCF**	**cCP**	**cCF**	**cCP**	**cCF**
	159	167	159	167	191	202	191	202	234	241	234	241	not available							

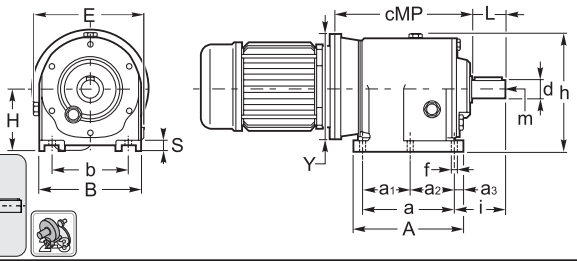
1.8 Dimensioni — *1.8 Dimensions* — 1.8 Abmessungen

P

AR P 55-70 — Foot

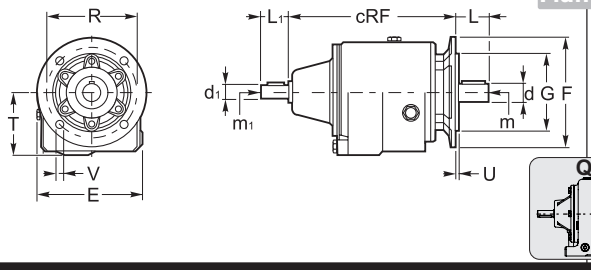


AM P 55-70

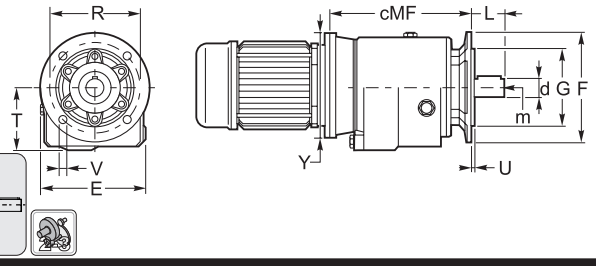


F1 F2 F3

AR F. 55-70 — Flanged With Flange

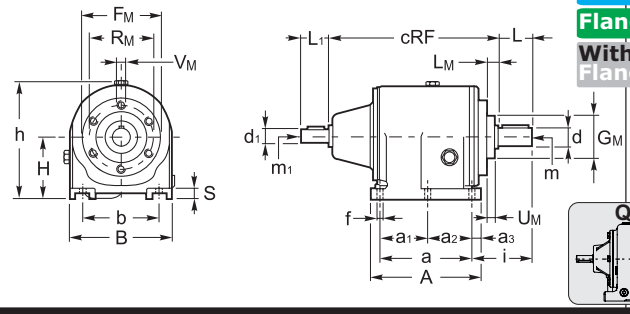


AM F. 55-70

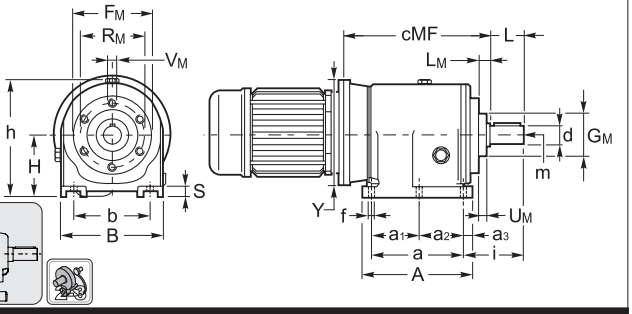


P/F

AR P/F 55-70 — Foot / Flanged Without Flange

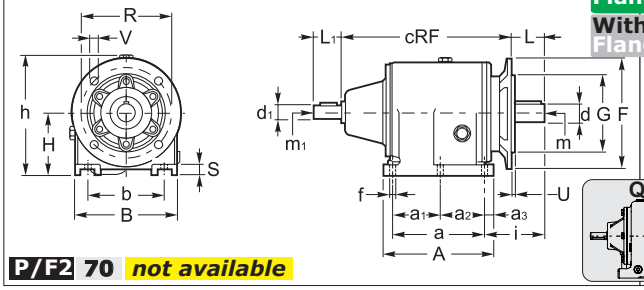


AM P/F 55-70



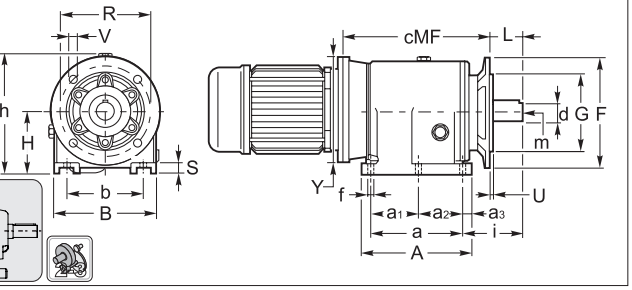
P/F.

AM P/F. 55-70 — Foot / Flanged With Flange



P/F2 70 ***not available***

AM P/F. 55-70



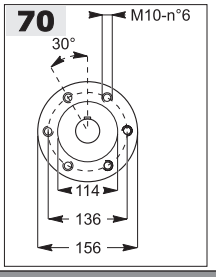
General Dimensions		
General dimensions	**55**	**70**
h	203.0	233.0
E	186.0	219.0
Q	11.0	13.5
T	114.0	129.0

P - Foot versions		
Foot versions P	**55**	**70**
a	165	195
a1	—	—
a2	—	—
a3	15	20
A	195	235
b	135	150
B	180	210
f	14	14
H	115	130
S	23	23

1.8 Dimensioni — *1.8 Dimensions* — 1.8 Abmessungen

F1-F2-F3 - *Flanged versions*					
Flanged versions F1-F2-F3	**55**			**70**	
	F1	**F2**	**F3**	**F1**	**F2**
F	160	200	250	250	300
G	110	130	180	180	230
tollerance G	g6	g6	g6	g6	g6
R	130	165	215	215	265
U	3	3.5	3.5	4	4
V	10	13	15	15	15

Fixing - Flange Housing		
Fixing Flange Housing	**55**	**70**
FM	110	Picture
GM	74	Picture
tollerance GM	g6	g6
LM	16	20
RM	94	Picture
UM	6	7
VM	M8	Picture



Output Shaft						
Output Shaft	**Standard** / Optional	**d**	**L**	**m**	**i**	**tollerance d**
55	**Standard**	30	60	M10	90	h6
	Optional	32	64	M10	94	h6
70	**Standard**	35	70	M10	100	h6

AM - *Input version*					
AM		**55/2**	**55/3**	**70/2**	**70/3**
IEC	**Y**	**cMP-cMF**	**cMP-cMF**	**cMP-cMF**	**cMP-cMF**
56 B5	120	-	-	-	-
56 B14	80	-	-	-	-
63 B5	140	-	227.5	-	-
63B14	90	-	-	-	-
71 B5	160	233.5	227.5	-	254
71B14	105	-	-	-	-
80 B5	200	233.5	247.5	251	269
80 B14	120	233.5	247.5	251	269
90 B5	200	233.5	247.5	251	269
90 B14	140	233.5	247.5	251	269
100-112 B5	250	243.5	-	261.5	279
100-112 B14	160	243.5	-	261.5	279
132 B5	300	-	-	284	-
132 B14	200	-	-	284	-
160 B5	350	-	-	-	-
180 B5	350	-	-	-	-
200 B5	400	-	-	-	-
225 B5	450	-	-	-	-
250 B5	550	-	-	-	-

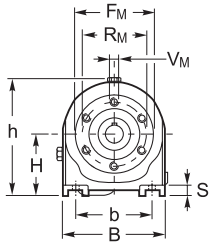
AR - *Input version*				
AR	**55/2**	**55/3**	**70/2**	**70/3**
d1	16	16	19	19
tollerance d1	j6	j6	j6	j6
L1	40	40	40	40
m1	M6	M6	M6	M6
cRP	238	256.5	266	288
cRF	238	256.5	266	288

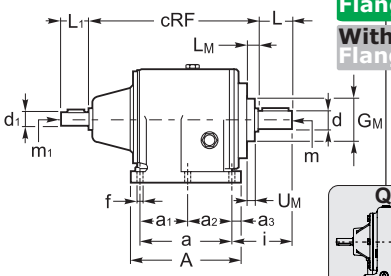
AC - *Input version*								
AC	**55/2**		**55/3**		**70/2**		**70/3**	
	cCP	**cCF**	**cCP**	**cCF**	**cCP**	**cCF**	**cCP**	**cCF**
	not available		188.5	188.5	not avalable		210.5	210.5

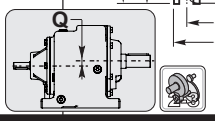
1.8 Dimensioni — *1.8 Dimensions* — 1.8 Abmessungen

P

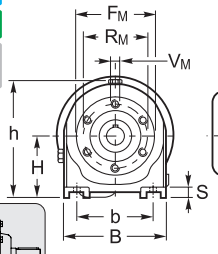
AR P 90-110-140 — Foot / Flanged / Without Flange

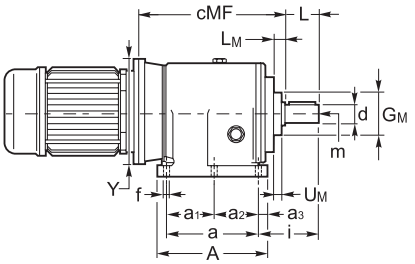






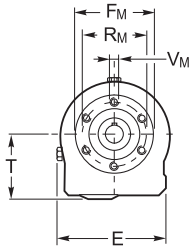
AM P 90-110-140

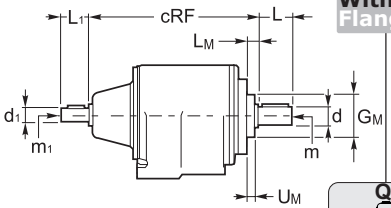


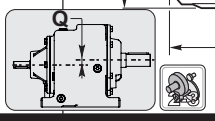


-

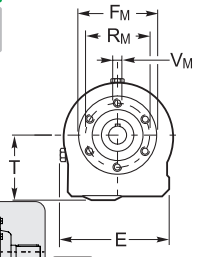
AR - 90-110-140 — Flanged / Without Flange

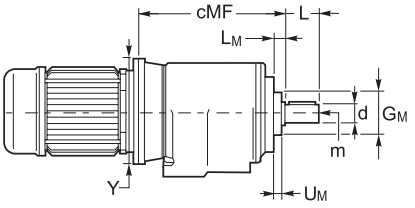






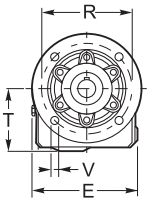
AM - 90-110-140

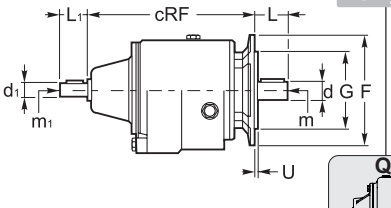


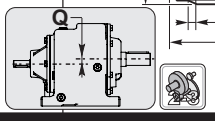


F1 / F2 / F3

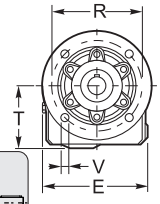
AR F. 90-110-140 — Flanged / With Flange

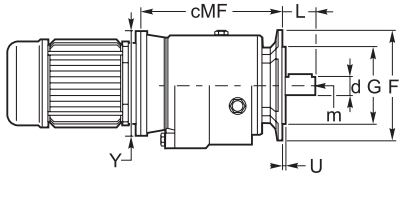






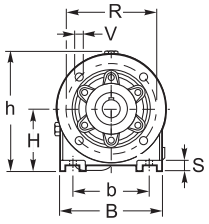
AM F. 90-110-140

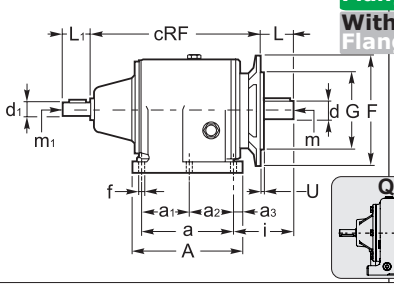


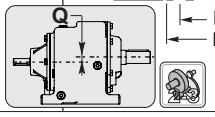


P/F.

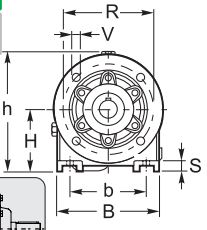
AM P/F. 90-110-140 — Foot / Flanged / With Flange

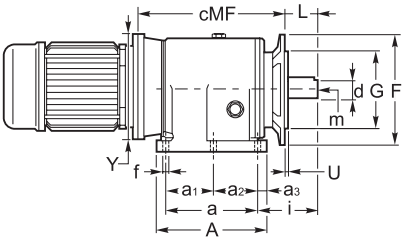






AM P/F. 90-110-140



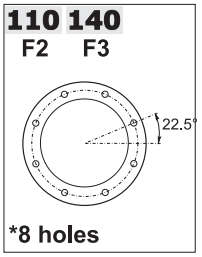


General Dimensions			
General dimensions	**90**	**110**	**140**
h	308.5	347.0	421.0
E	274.0	324.0	414.0
Q	39.5	36.0	41.4
T	192.5	222.0	268.0

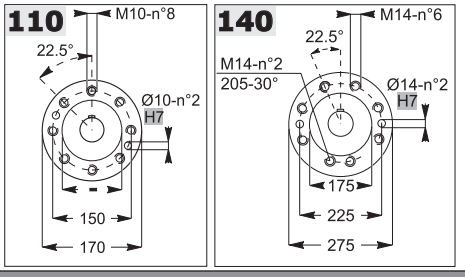
P - Foot versions			
Foot versions P	**90**	**110**	**140**
a	260	310	370
a1	—	—	—
a2	—	—	—
a3	25	25	35
A	310	360	440
b	215	250	290
B	280	320	400
f	20	22	27
H	195	225	270
S	35	35	60

1.8 Dimensioni — *1.8 Dimensions* — 1.8 Abmessungen

F1-F2-F3 - *Flanged versions*								
Flanged versions F1-F2-F3	90		110			140		
	F1	F2	F1	F2	F3	F1	F2	F3
F	300	350	350	450	400	350	400	450
G	230	250	250	350	300	250	300	350
tollerance G	g6	g6	g6	g6	g6	g6	g6	g6
R	265	300	300	400	350	300	350	400
U	4	5	5	5	5	5	5	5
V	15	19	19	19*	18	19	19	19*



Fixing - Flange Housing			
Fixing Flange Housing	90	110	140
FM	155	Picture	Picture
GM	-	Picture	Picture
tollerance GM	-	-	g6
LM	23	31.5	45.5
RM	130	Picture	Picture
UM	-	-	22
VM	M10	Picture	Picture



Output Shaft						
Output Shaft	**Standard** / Optional	d	L	m	i	tollerance d
90	**Standard**	50	100	M12	140	h6
	Optional	48	100	M12	140	h6
110	**Standard**	60	120	M12	160	h6
140	**Standard**	70	140	M16	185	h6
	Optional	80	160	M16	205	h6

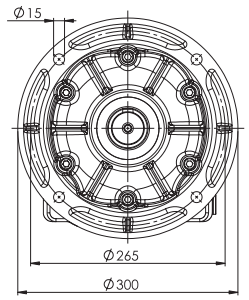
AM - *Input version*							
AM		90/2	90/3	110/2	110/3	140/2	140/3
IEC	Y	cMP-cMF	cMP-cMF	cMP-cMF	cMP-cMF	cMP-cMF	cMP-cMF
56 B5	120	-	-	-	-	-	-
56 B14	80	-	-	-	-	-	-
63 B5	140	-	-	-	-	-	-
63B14	90	-	-	-	-	-	-
71 B5	160	-	-	-	-	-	-
71B14	105	-	-	-	-	-	-
80 B5	200	-	328.5	-	-	-	-
80 B14	120	-	-	-	-	-	-
90 B5	200	-	328.5	-	367	-	-
90 B14	140	-	-	-	367	-	-
100-112 B5	250	313.5	338.5	374	377	-	493
100-112 B14	160	-	-	-	-	-	-
132 B5	300	336	-	374	397	465	493
132 B14	200	-	-	374	397	-	493
160 B5	350	364	-	438	-	474	535.5
180 B5	350	364	-	438	-	474	535.5
200 B5	400	-	-	443	-	479	540.5
225 B5	450	-	-	-	-	519	549.5
250 B5	550	-	-	-	-	519	-

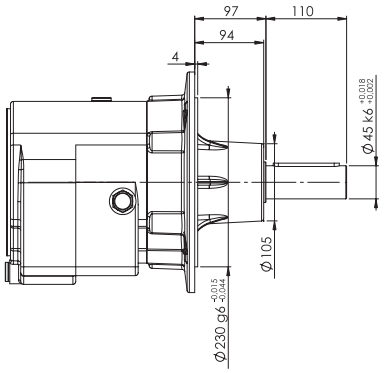
AR - *Input version*						
AR	90/2	90/3	110/2	110/3	140/2	140/3
d1	24	24	28	28	48	38
tollerance d1	j6	j6	j6	j6	j6	j6
L1	50	50	60	60	110	80
m1	M8	M8	M8	M8	M10	M10
cRP	332.5	348	422	422	458.5	508.5
cRF	332.5	348	422	422	458.5	508.5

AC - *Input version*																				
AC	55/2		55/3		70/2		70/3		90/2		90/3		110/2		110/3		140/2		140/3	
	cCP	cCF	cCP	cCF	cCP	cCF	cCP	cCF	cCP	cCF	cCP	cCF	cCP	cCF	cCP	cCF	cCP	cCF	cCP	cCF
	not available		189	189	not avalable		210.5	210.5	not available		271.5	271.5	not available							

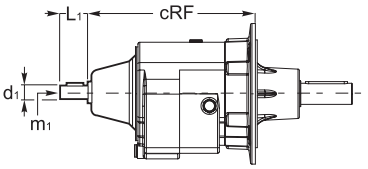
1.8 Dimensioni — *1.8 Dimensions* — 1.8 Abmessungen

SR 80

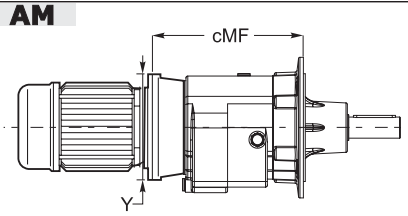




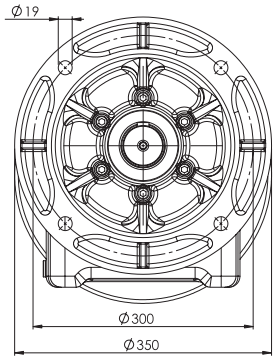
AR

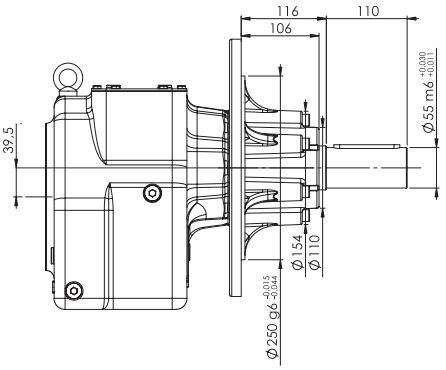


AM



SR 90





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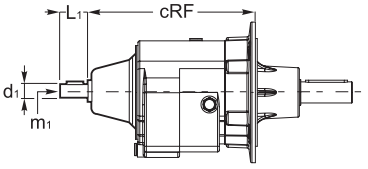
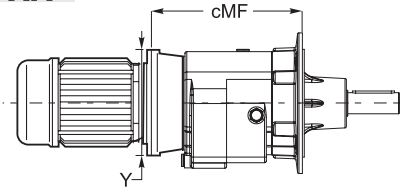
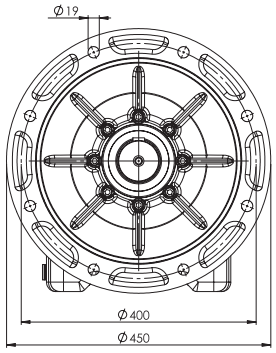
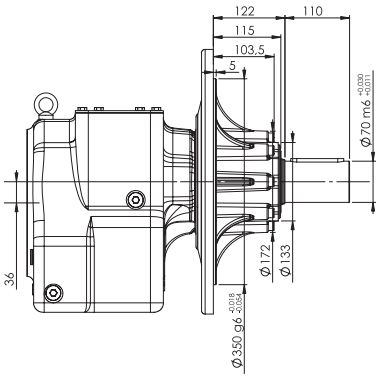


AM

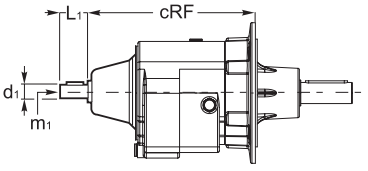


A. SR 110

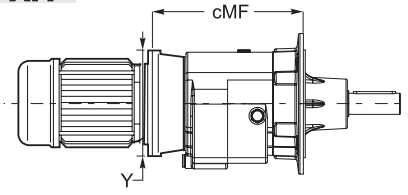




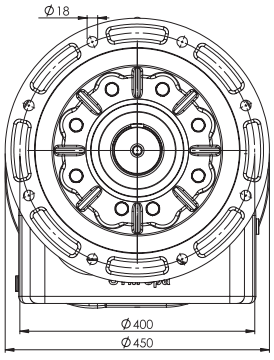
AR

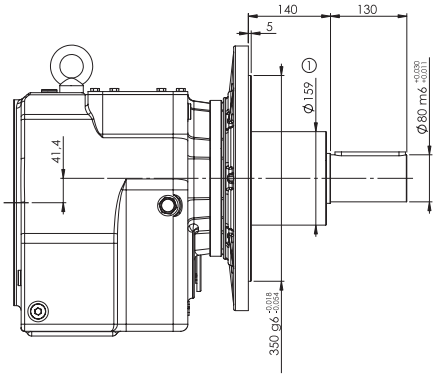


AM

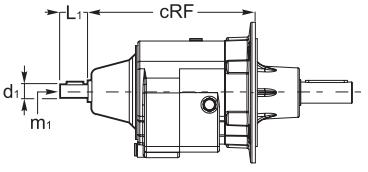


A. SR 140

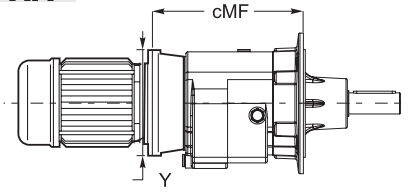




AR



AM



1.8 Dimensioni — *1.8 Dimensions* — 1.8 Abmessungen

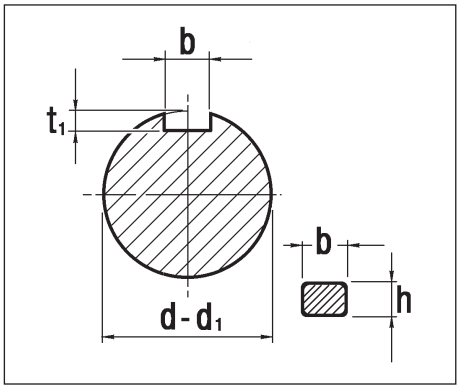
AM - *Input version*

AM		80/2	80/3	90/2	90/3	110/2	110/3	140/2	140/3
IEC	Y	cMF	cMF	cMF	cMF	cMF	cMF	cMF	cMF
56 B5	120	-	-	-	-	-	-	-	-
56 B14	80	-	-	-	-	-	-	-	-
63 B5	140	-	-	-	-	-	-	-	-
63B14	90	-	-	-	-	-	-	-	-
71 B5	160	-	-	-	-	-	-	-	-
71B14	105	-	-	-	-	-	-	-	-
80 B5	200	-	313	-	323.5	-	-	-	-
80 B14	120	-	-	-	-	-	-	-	-
90 B5	200		313	-	323.5	-	367	-	-
90 B14	140	-	-	-	-	-	367	-	-
100-112 B5	250	298	323	308.5	333.5	374	377	-	513
100-112 B14	160	-	-	-	-	-	-	-	-
132 B5	300	320.5	-	331	-	374	397	485	513
132 B14	200	-	-	-	-	374	397	-	513
160 B5	350	348.5	-	359	-	438	-	494	555.5
180 B5	350	348.5	-	359	-	438	-	494	555.5
200 B5	400	-	-	-	-	443	-	499	560.5
225 B5	450	-	-	-	-	-	-	539	569.5
250 B5	550	-	-	-	-	-	-	539	-

AR - *Input version*

AR	80/2	80/3	90/2	90/3	110/2	110/3	140/2	140/3
d1	24	24	24	24	28	28	48	38
tollerance d1	j6	j6	j6	j6	j6	j6	j6	j6
L1	50	50	50	50	60	60	110	80
m1	M8	M8	M8	M8	M8	M8	M10	M10
cRF	317	332.5	327.5	343	422	422	478.5	528.5

1.9 Linguette — *1.9 Keys* — 1.9 Federn



Albero entrata
Input shaft
Antriebswelle

d_1	b x h	t_1	
16	5 x 5	3.0	+ 0.1 0
19	6 x 6	3.5	
24	8 x 7	4.0	+ 0.2 0
28	8 x 7	4.0	

Albero uscita
Output shaft
Abtriebswelle

d	b x h	t_1	
11	4 x 4	2.5	
14	5 x 5	3.0	
16	5 x 5	3.0	+ 0.1 0
19	6 x 6	3.5	
20	6 x 6	3.5	
24	8 x 7	4.0	
25	8 x 7	4.0	
28	8 x 7	4.0	
30	8 x 7	4.0	
35	10 x 8	5.0	+ 0.2 0
38	10 x 8	5.0	
40	12 x 8	5.0	
48	14 x 9	5.5	
50	14 x 9	5.5	
60	18 x 11	7.0	
70	20 x 12	7.5	+ 0.3 0