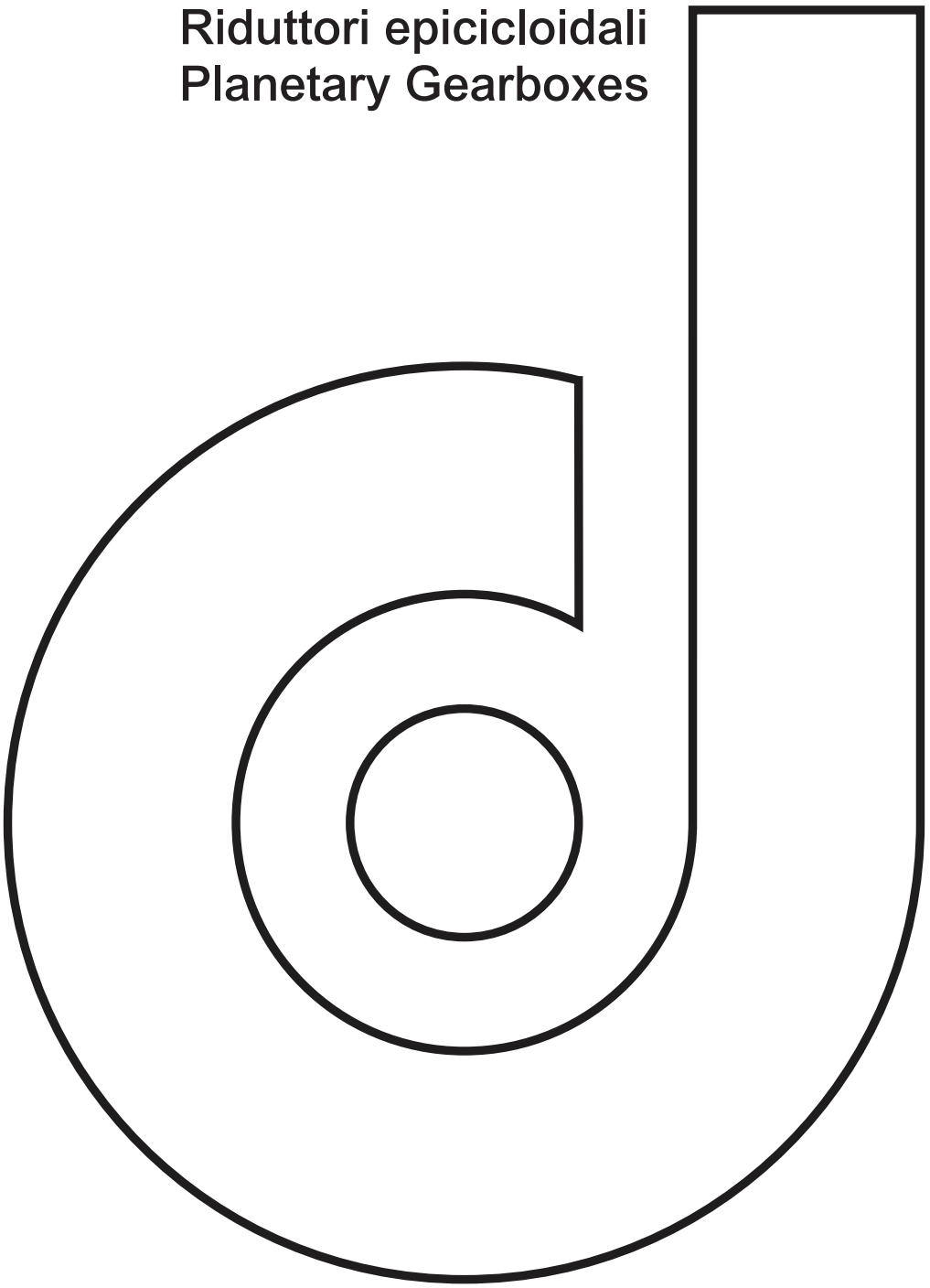
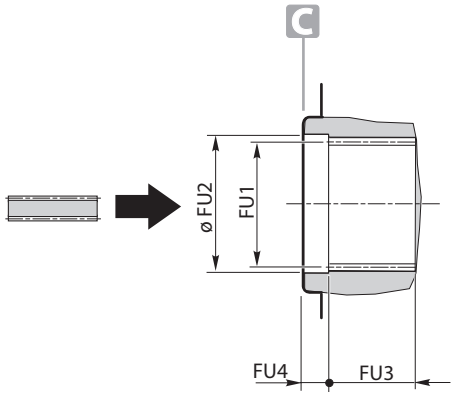
Riduttori epicicloidali
Planetary Gearboxes

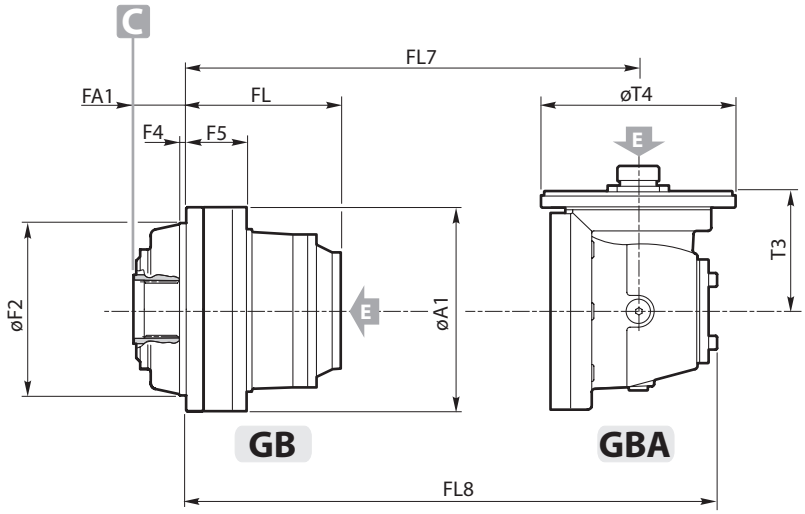


dinamic oil

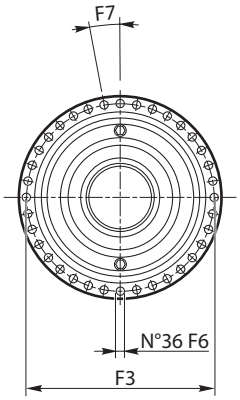


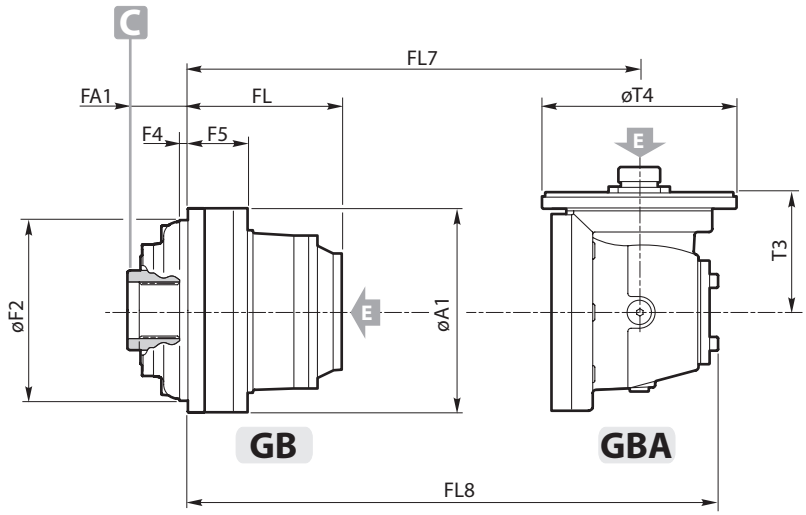
		GB - GBA							
		21000	26000	31000	40000	45000	53000	61000	85000
FS	FU1	N200x5x9H DIN 5480	N220x5x9H DIN 5480	N240x5x9H DIN 5480	N240x5x9H DIN 5480	N280x6x9H DIN 5480	N300x8x9H DIN 5480	N300x8x9H DIN 5480	N340x8x9H DIN 5480
	FU2	202 H7	222 H7	242 H7	242 H7	281 H8	303 H7	303 H7	343 H7
	FU3	120	120	170	170	175	190	190	190
	FU4	38	38	50	50	50	70	70	70

		GB - GBA							
	stages	21000	26000	31000	40000	45000	53000	61000	85000
A1		710	710	870	870	870	1090	1090	1090
F2		600 h8	600 h8	760 h8	760 h8	760 h8	930 h8	930 h8	930 h8
F3		660	660	810	810	810	1020	1020	1020
F4		23.5	23.5	35	35	35	50	50	50
F5		196	216	250	290	290	305	305	353
F6		Ø28	Ø28	Ø32	Ø32	Ø32	Ø39	Ø39	Ø39
		M.. - 10.9							
		M27	M27	M30	M30	M30	M36	M36	M36
F7		10°	10°	10°	10°	10°	10°	10°	10°
FA1		185	185	255	255	260	300	300	300
FL	1	138	158	180	220	220	225	225	273
	2	443	463	588.5	628.5	628.5	700	700	768
	3	611.5	717	838	878	895	1005	1005	1073
	4	704.5	845	966	1006	1136	1173.5	1173.5	1327
	5	763	930	1051	1091	1229	1266.5	1266.5	1455
FL7	3	697	717	—	—	—	—	—	—
	4	817.5	911	1032	1072	1149	1259	1259	1327
	5	826.5	987	1108	1148	1342	1379.5	1379.5	1521
	6	—	—	—	—	—	—	1388.5	1597
FL8	3	887	907	—	—	—	—	—	
	4	945.5	1039	1160	1200	1339	1449	1449	1517
	5	917.5	1095	1216	1256	1470	1507.5	1507.5	1649
	6	—	—	—	—	—	—	1479.5	1705
T3	3	432	432	—	—	—	—	—	—
	4	310	310	310	310	432	432	432	432
	5	171	227	227	227	310	310	310	310
	6	—	—	—	—	—	—	171	171
T4	3	295	295	—	—	—	—	—	—
	4	293	293	293	293	295	295	295	295
	5	183	242	242	242	293	293	293	293
	6	—	—	—	—	—	—	183	183

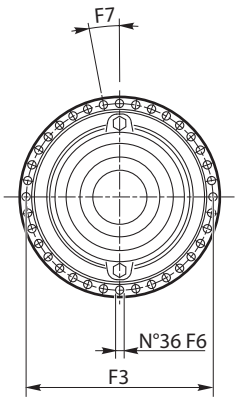


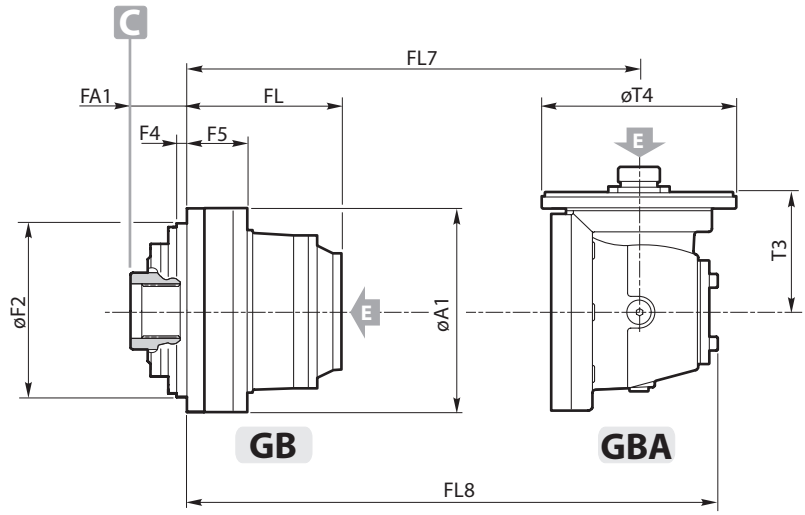
21000 - 26000



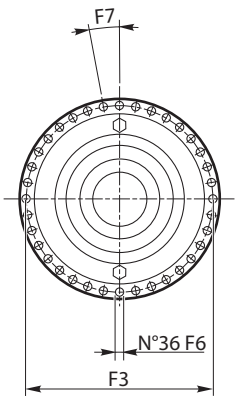


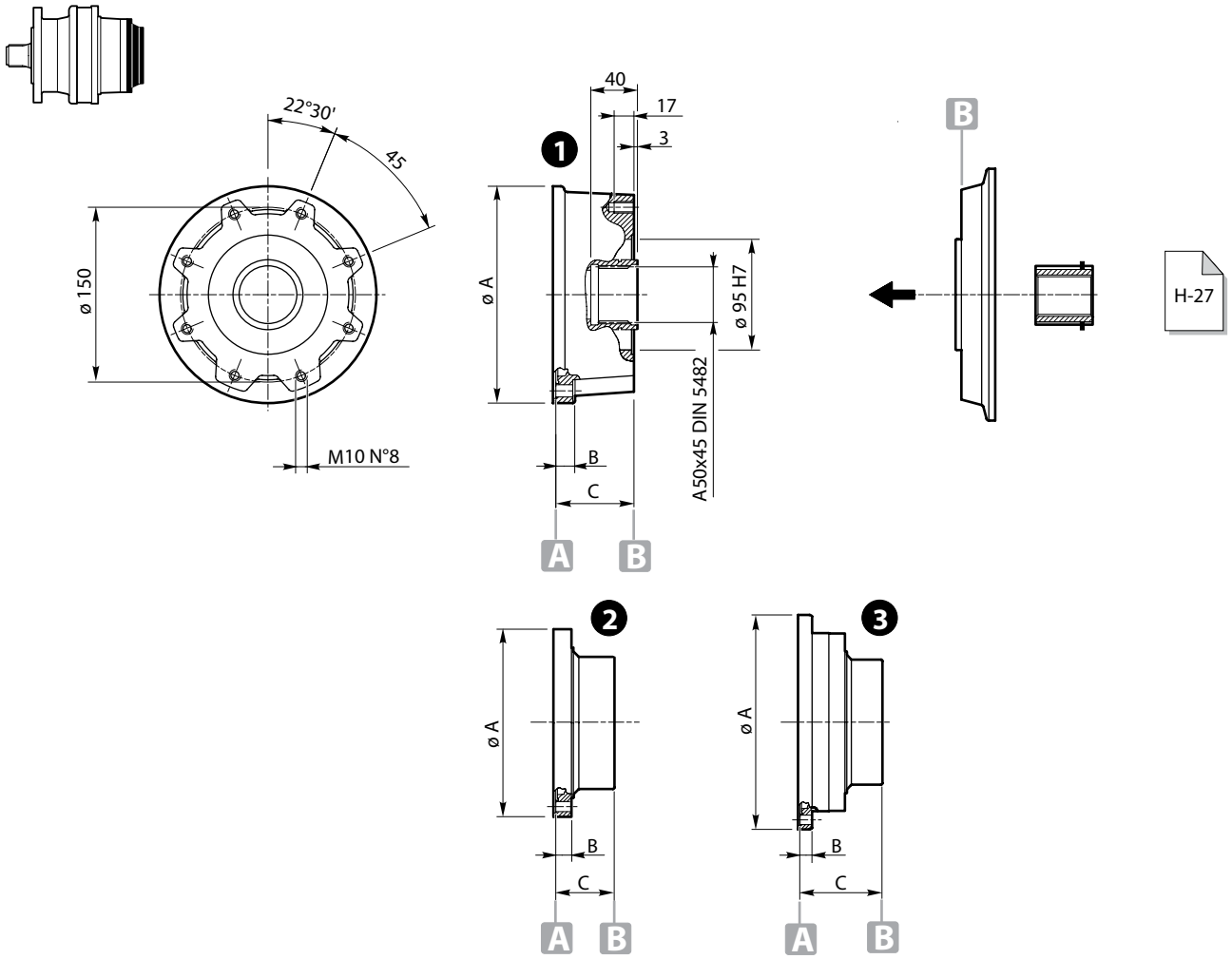
31000 ÷ 45000





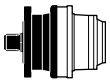
53000 ÷ 85000





1

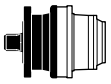
ø A	B	C	Code
186	14.5	67	K0700A1



RE 111 - 112 - 113 - 114
RE 211 - 212 - 213 - 214
RE 241 - 242 - 243 - 244
RE 312 - 313 - 314
RE 512 - 513 - 514
RE 613 - 614
RE 813 - 814
RE 1023 - 1024
RE 1523 - 1524
RE 2004
RE 2524
RE 3004
RE 3514-4804
RE 6004L
RE 8005 - 8005L
GB 12015 - 12015L
GB 16005 - 16005L
CC30-CC120

2

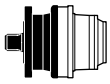
ø A	B	C	Code
244	20.5	76.5	K0700D2



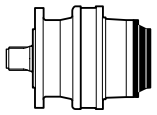
RE 311-511
RE 611 - 612
RE 812-1022
RE 1522-2003
RE 2523-3003
RE 3513-4803
RE 6003 - 6003L
RE 6004 - 6004L
RE 8004 - 8004L
GB 12014 - 12014L
GB 16004 - 16004L
GB 21004 - 21005
GB 26005-31005
GB 40005-45005
GB 53005
CC350

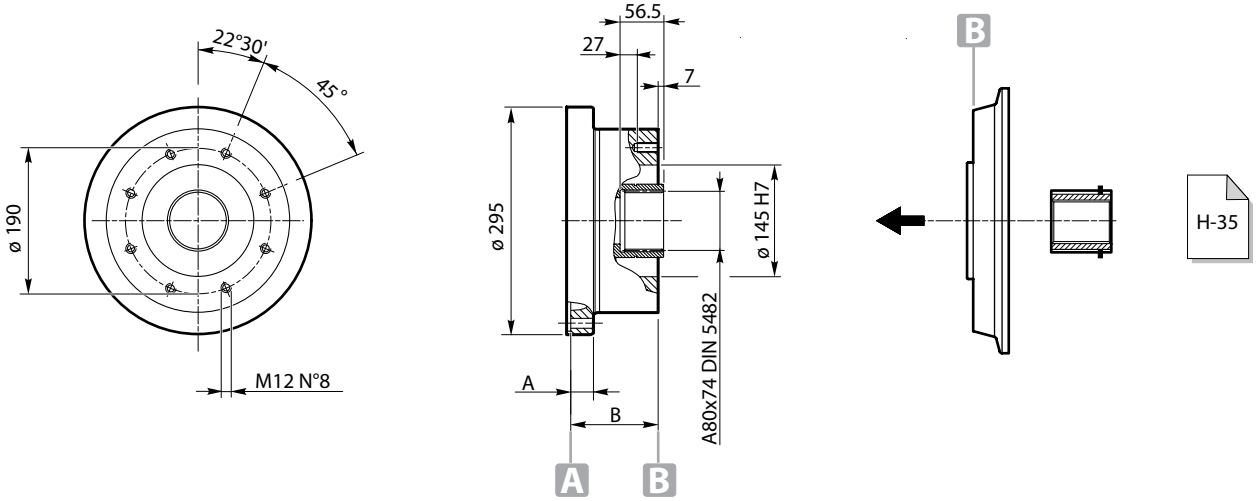
3

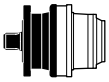
ø A	B	C	Code
295	16	121	K0700D2



RE 811
RE 1021
RE 2522
RE 3002
RE 3512
RE 8003 - 8003L
GB 12013 - 12013L
GB 16003L
GB 26004
GB 31004
GB 40004
GB 85005
GB 110005
CC1000
CC600

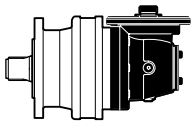


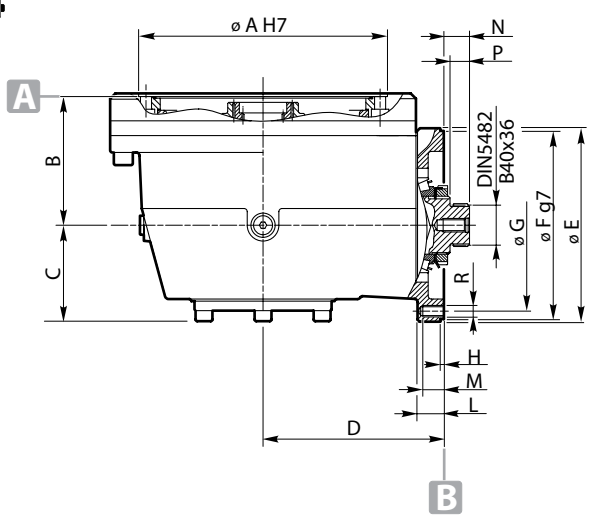


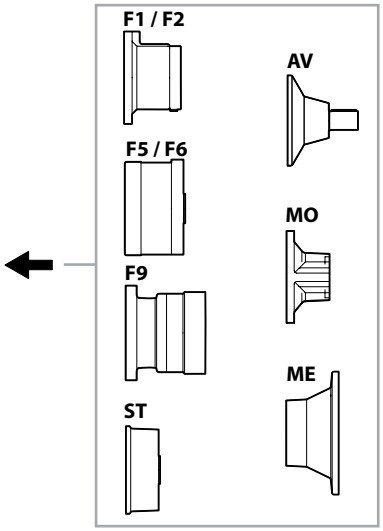


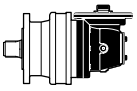
	A	B	Code
RE 811	30	114	K0700D3
RE 1021			
RE 2522			
RE 3002			
RE 3512			
RE 8003 - 8003L			
GB 12013 - 12013L			
GB 16003L			
GB 26004			
GB 31004			
GB 40004			
GB 85005			
GB 110005			
CC600	50	134	
CC1000	61	145	

CC30 - CC120





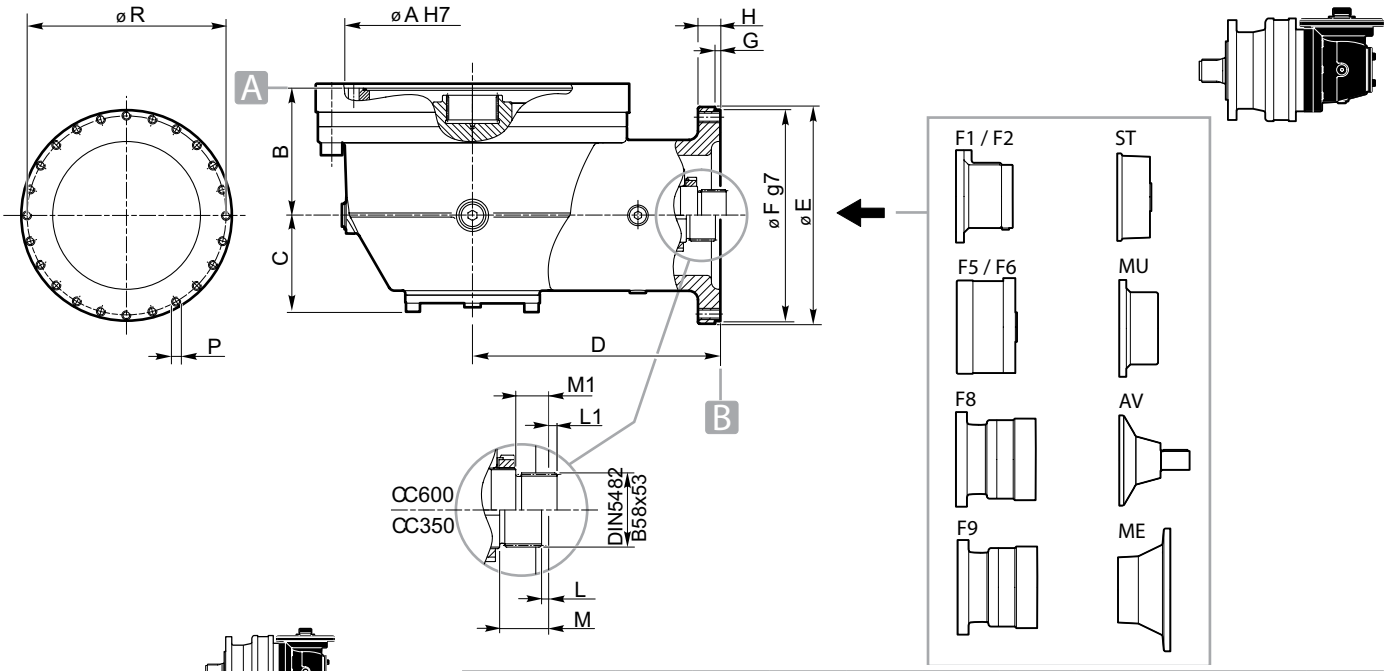


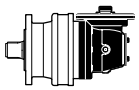


		øA	B	C	D	øE	øF	øG	H	L	N	P	R
CC30 **110/210/240**	**RA 112-113-114** **RA 212-213-214** **RA 242-243-244** **RA 313-314** **RA 513-514** **RA 814** **RA 1024** **RA 1524** **RA 2004L**	178	84	71.5	113.8	184	178	165	4	15.7	23.75	18.25	N°8-M10 AT 45°

		øA	B	C	D	øE	øF	øG	H	L	M	P	R
CC120 **310/510/610**	**RA 312** **RA 512-612** **RA 613-813** **RA 1023** **RA 1523** **RA 2003-2003L** **RA 2524** **RA 3004** **RA 3514** **RA 4804** **RA 6004-6004L** **GBA 12015-12015L** **GBA 16005-16005L** **GBA 21005**	236	122	91	171.5	183	178	165	3.5	25	24.25	18.5	N°8-M10 AT 45°

CC350 - CC600





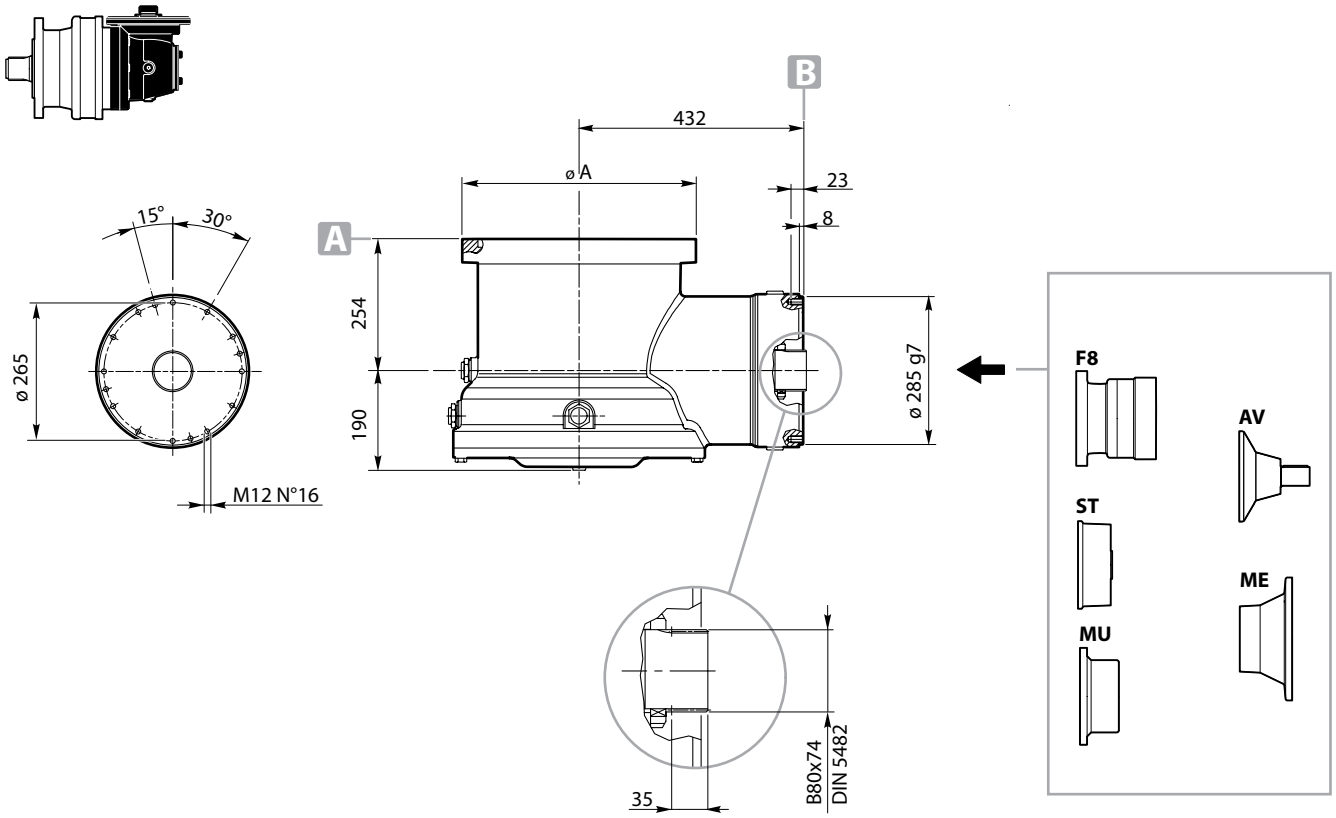
		øA	B	C	D	øE	øF	G	H	L	M	P	R
CC350 **810/1020**	**RA 812** **RA 1022** **RA 2523** **RA 3023** **RA 3523** **RA 8004-8004L** **GBA 12014-12014L** **GB 16004L** **GBA 26005** **GBA 31005** **GBA 40005**	285	142	108	276.75	242	236	6	25	5,5	38	N°24- M10 AT 15°	222

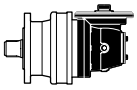
		øA	B	C	D	øE	øF	G	H	L1	M1	P	R
CC600 **810/1020**	**RA 812** **RA 1022** **RA 2523** **RA 3023** **RA 3523** **RA 8004** **GBA 12014** **GBA 16004** **GBA 26005** **GBA 31005** **GBA 40005**	285	198	128	310	293	285	8	27	6,5	25,5	N°12- M10 AT 30°	265

		øA	B	C	D	øE	øF	G	H	L1	M1	P	R
CC600 **1520/2000**	**RA 1522** **RA 2002** **RA 4803** **RA 6003-6003L** **GBA 16014** **GBA 21004** **GBA 45005** **GBA 53005** **GBA 61005**	340	206	128	310	293	285	8	27	6,5	25,5	N°12- M10 AT 30°	265

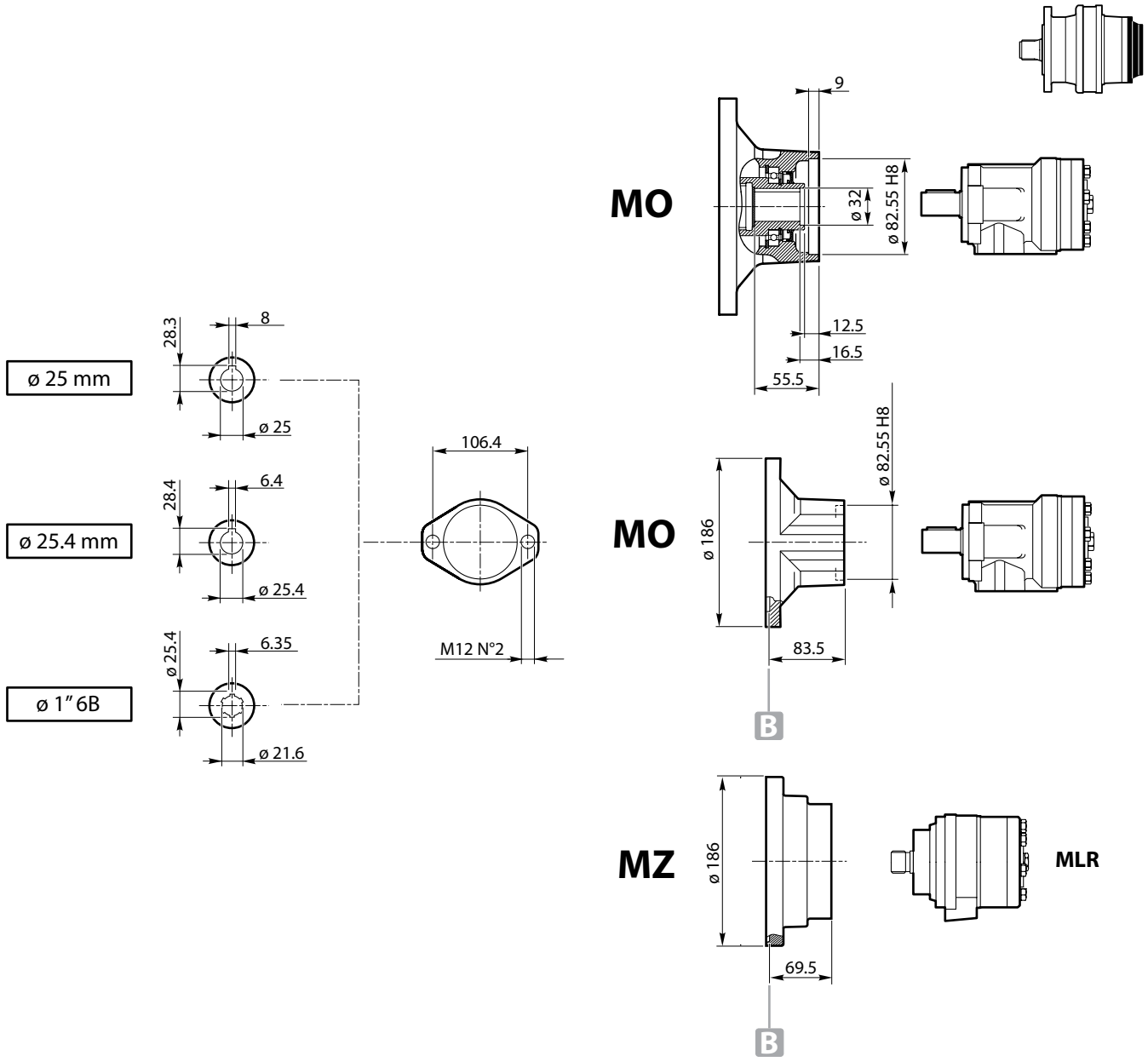
		øA	B	C	D	øE	øF	G	H	L1	M1	P	R
CC600 **2520/3000**	**RA 2522** **RA 3002** **RA 8003-8003L** **GBA 12013-12013L** **GBA 26004** **GBA 31004** **GBA 40004** **GBA 85005** **GBA 110005**	395	194	128	310	293	285	8	27	6,5	25,5	N°12- M10 AT 30°	265

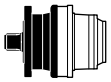
CC1000



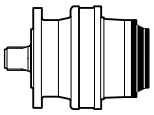


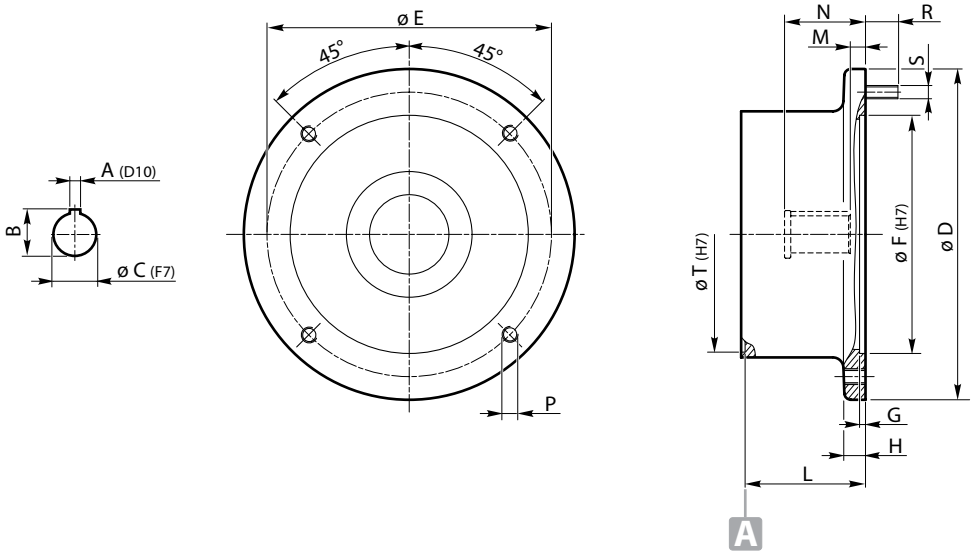
CC1000		ø A
	RA 3512-4802	452
	RA 6002-8002	490
	GBA 16003-16003L	452
	GBA 21003-26003	490
	GBA 45004	452
	GBA 53004-61004	490
	GBA 85004	490
	GBA 130005	452

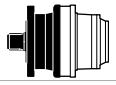




	Type	Code
RE 111 - 112 - 113 - 114	MO 25 MO 25.4 MO 1″6B MZ	K0700AA K0700AB K0700AC —
RE 211 - 212 - 213 - 214		
RE 241 - 242 - 243 - 244		
RE 312 - 313 - 314		
RE 512 - 513 - 514		
RE 613 - 614		
RE 813 - 814		
RE 1023 - 1024		
RE 1523 - 1524		
RE 2004		
RE 2524		
RE 3004		
RE 3514-4804		
RE 6004L		
RE 8005 - 8005L		
GB 12015 - 12015L		
GB 16005 - 16005L		
CC30-CC120		



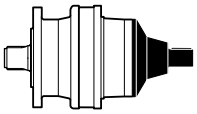


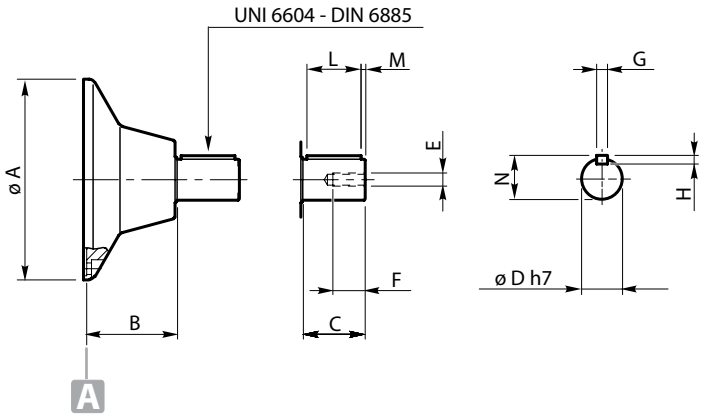


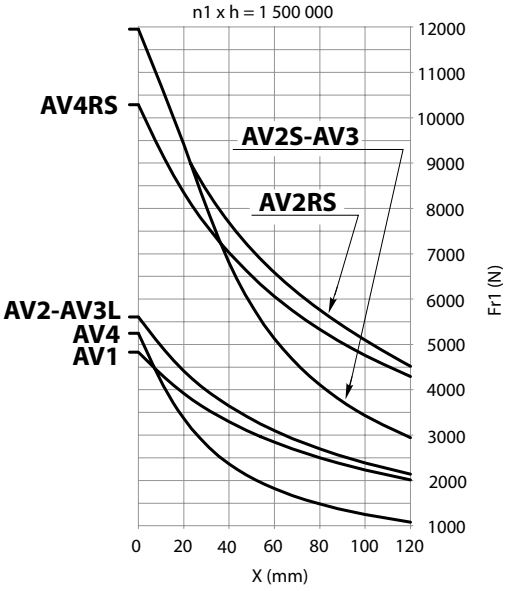
	Input type	Shaft			Flange											
		A	B	C	D	E	F	G	H	L	M	N	P	R	S	T
RE 111 - 112 - 113 - 114 RE 211 - 212 - 213 - 214 RE 241 - 242 - 243 - 244 RE 312 - 313 - 314 RE 512 - 513 - 514 RE 613 - 614 RE 813 - 814 RE 1023 - 1024 RE 1523 - 1524 RE 2004 - RE 2004L RE 2524 RE 3004 RE 3514 - 4804 RE 6004L RE 8005 - 8005L GB 12015 - 12015L GB 16005 - 16005L CC30-CC120	**ME 80**	6	21.8	19	200	165	130	4	16	82.5	6.5	44.5	—	25	N'4-M10	178
	ME 90	8	27.3	24	200	165	130	4	16	82.5	11.5	52	—	25	N'4-M10	
	ME 100/112	8	31.3	28	250	215	180	4.5	16	91	11.5	61	N°4-M12	—	—	
	ME 132	10	41.3	38	300	265	230	5	20	115.5	8	82.5	N°4-M12	—	—	
	ME 160	12	45.3	42	350	300	250	6	20	145	23	110.5	N°4-M16	—	—	
	ME 180	14	51.8	48	350	300	250	6	20	145	23	110.5	N°4-M16	—	—	

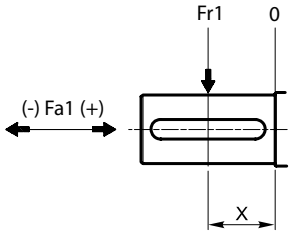
	Input type	Shaft			Flange											
		A	B	C	D	E	F	G	H	L	M	N	P	R	S	T
RE 311-511 RE 611 - 612 RE 812 -1022 RE 1522 - 2002 - 2002L RE 2003 RE 2523 - 3003 RE 3513 - 4803 RE 6003 - 6003L RE 6004 - 6004L RE 8004 - 8004L GB 12004 - 12004L GB 16004 - 16004L GB 21004 - 21005 GB 26005 - 31005 GB 40005 - 45005 GB 53005 CC350	**ME132**	10	41.3	38	300	265	230	5	20	125.5	8	82.5	N°4-M12	—	—	236
	ME160	12	45.3	42	344	300	250	7	20	154.5	23	110.5	N°4-M16	—	—	
	ME180	14	51.8	48	344	300	250	7	20	154.5	23	110.5	N°4-M16	—	—	
	ME225	18	64.4	60	450	400	350	7	20	191.5	30	143.5	N°4-M16	—	—	

	Input type	Shaft			Flange											
		A	B	C	D	E	F	G	H	L	M	N	P	R	S	T
RE 811 RE 1021 RE 2522 RE 3002 RE 3512 RE 8003 - 8003L GB 12013 - 12013L GB 16003L GB 26004 GB 31004 GB 40004 GB 85005 GB 110005 CC600 - CC1000	**ME200**	16	59.3	55	400	350	300	7	18	165	11.5	114.5	N°4-M18	—	—	285
	ME225	18	64.4	60	450	400	350	7	20	194	30.5	143.5	N°8-M18	—	—	
	ME250	18	6.4	65	550	500	450	7	22	195	17	145	N°8-ø19	—	—	
	ME280	20	79.9	75	550	500	450	7	22	195	12	145	N°8-ø19	—	—	

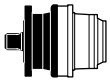








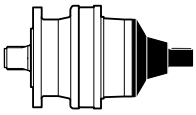
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV1	4 800	4 800
AV2 - AV3L - AV4	7 800	7 800
AV2S - AV3	4 900	7 800
AV2RS - AV4RS	4 900	4 900

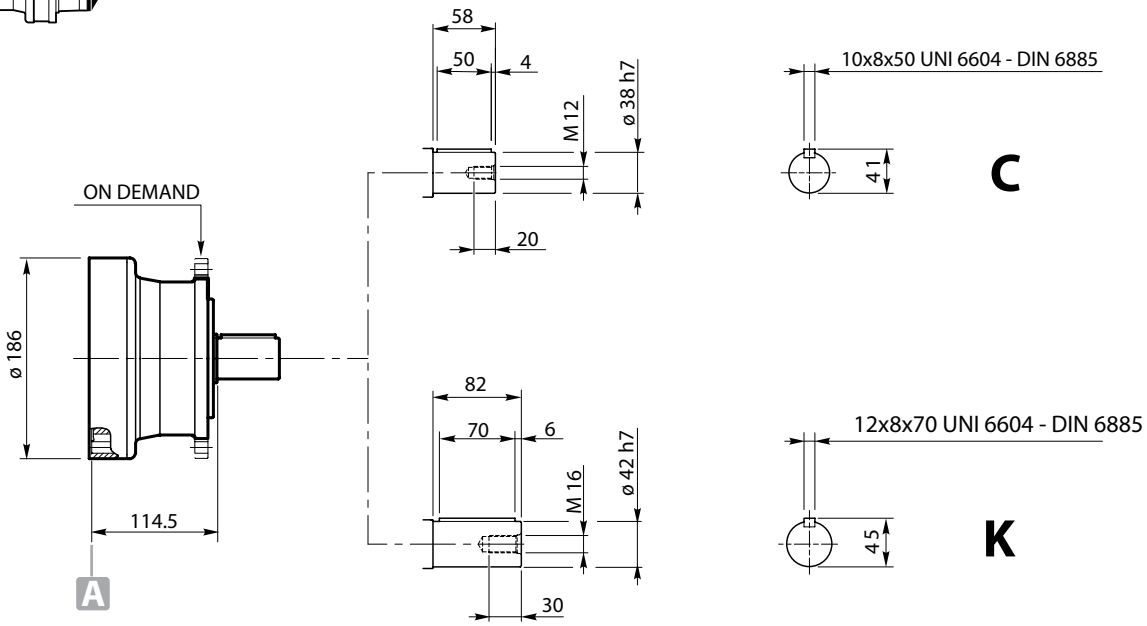


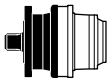
	Type	øA	B	C	øD	E	F	G	H	L	M	N	Code
RE 111 - 112 - 113 - 114 **RE 211 - 212 - 213 - 214** **RE 241 - 242 - 243 - 244** **RE 312 - 313 - 314** **RE 512 - 513 - 514** **RE 613 - 614 - 813 - 814** **RE 1023 - 1024 -1523 - 1524** **RE 2000 - 2524 - 3004 -3514** **RE 4804 - 6004L - 8005 - 8005L** **GB 12015 - 12015L** **GB 16005 - 16005L** **CC30-CC120**	**AV1**	186	83.5	58	38	M12	30	10	8	50	4	41	K0700AH
	AV2	186	96.5	82	42	M12	30	12	8	70	6	45	K0700AI
	AV3L	186	96.5	82	48	M16	40	14	9	70	6	51.5	K0700AI
	AV4	186	108.5	65	40	M12	30	12	8	60	2.5	43	K0700AX
	AV4RS	186	108.5	65	40	M12	30	12	8	60	2.5	43	K0700AX

	Type	øA	B	C	øD	E	F	G	H	L	M	N	Code
RE 311-511-611-612 **RE 812-1022-1522-2003** **RE 2523-3003-3513-4803** **RE 6003-6003L-6004-6004L** **RE 8004-8004L** **GB 12014-12014L-16004-16004L** **GB 21004-21005-26005-31005** **GB 40005-45005-53005** **GB 61005** **CC350-CC600**	**AV2**	244	106	82	42	M12	30	12	8	70	6	45	K0700DL
	AV2S	244	106	82	42	M12	30	12	8	70	6	45	K0700DL
	AV2RS	244	106	82	42	M12	30	12	8	70	6	45	K0700DL
	AV3	244	106	82	48	M16	40	14	9	70	6	51.5	K0700DM
	AV4	244	118	65	40	M12	30	12	8	60	2.5	43	K0700DJ
	AV4RS	244	118	65	40	M12	30	12	8	60	2.5	43	K0700DJ

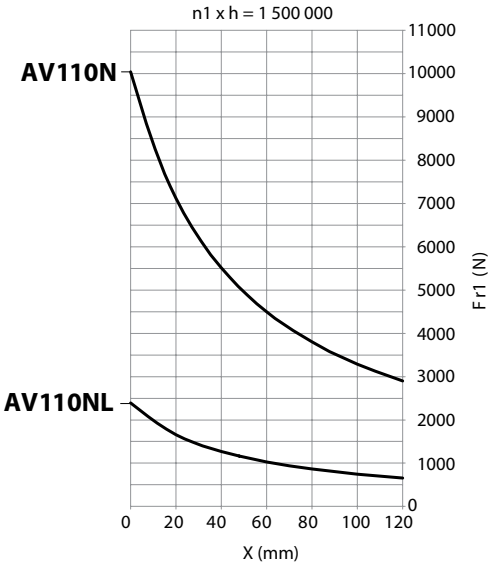
AVF-AV110N-NL

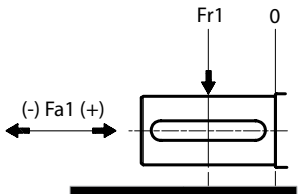






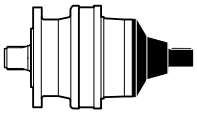
	Code
RE 111 - 112 - 113 - 114	K0700AY
RE 211 - 212 - 213 - 214	
RE 241 - 242 - 243 - 244	
RE 312 - 313 - 314	
RE 512 - 513 - 514	
RE 613 - 614	
RE 813 - 814	
RE 1023 - 1024	
RE 1523 - 1524	
RE 2004	
RE 2524	
RE 3004	
RE 3514	
RE 4804	
RE 6004L	
RE 8005 - 8005L	
GB 12015 - 12015L	
GB 16005 - 16005L	
CC30-CC120	

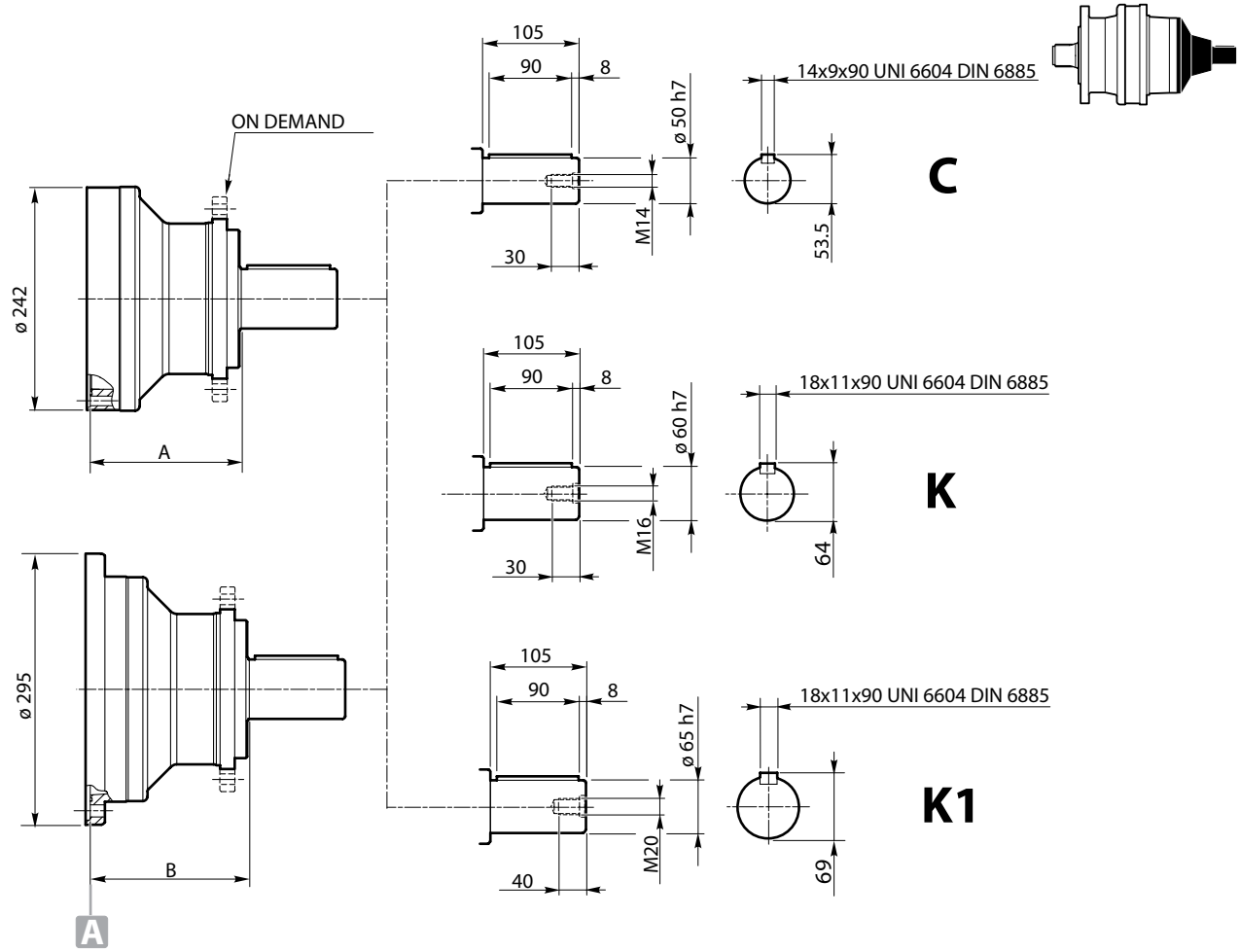


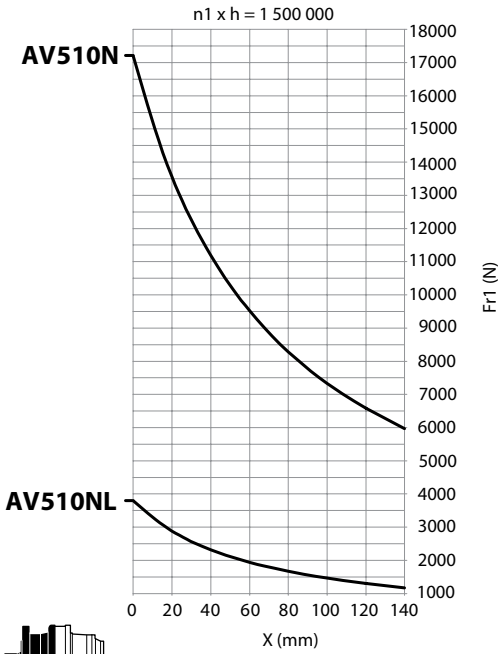


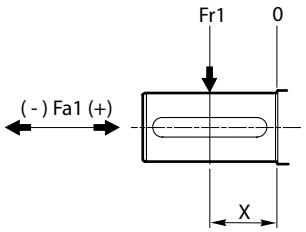
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV110N	4 900	7 800
AV110NL	3 750	3 750

AVF-AV510N-NL

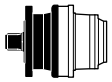






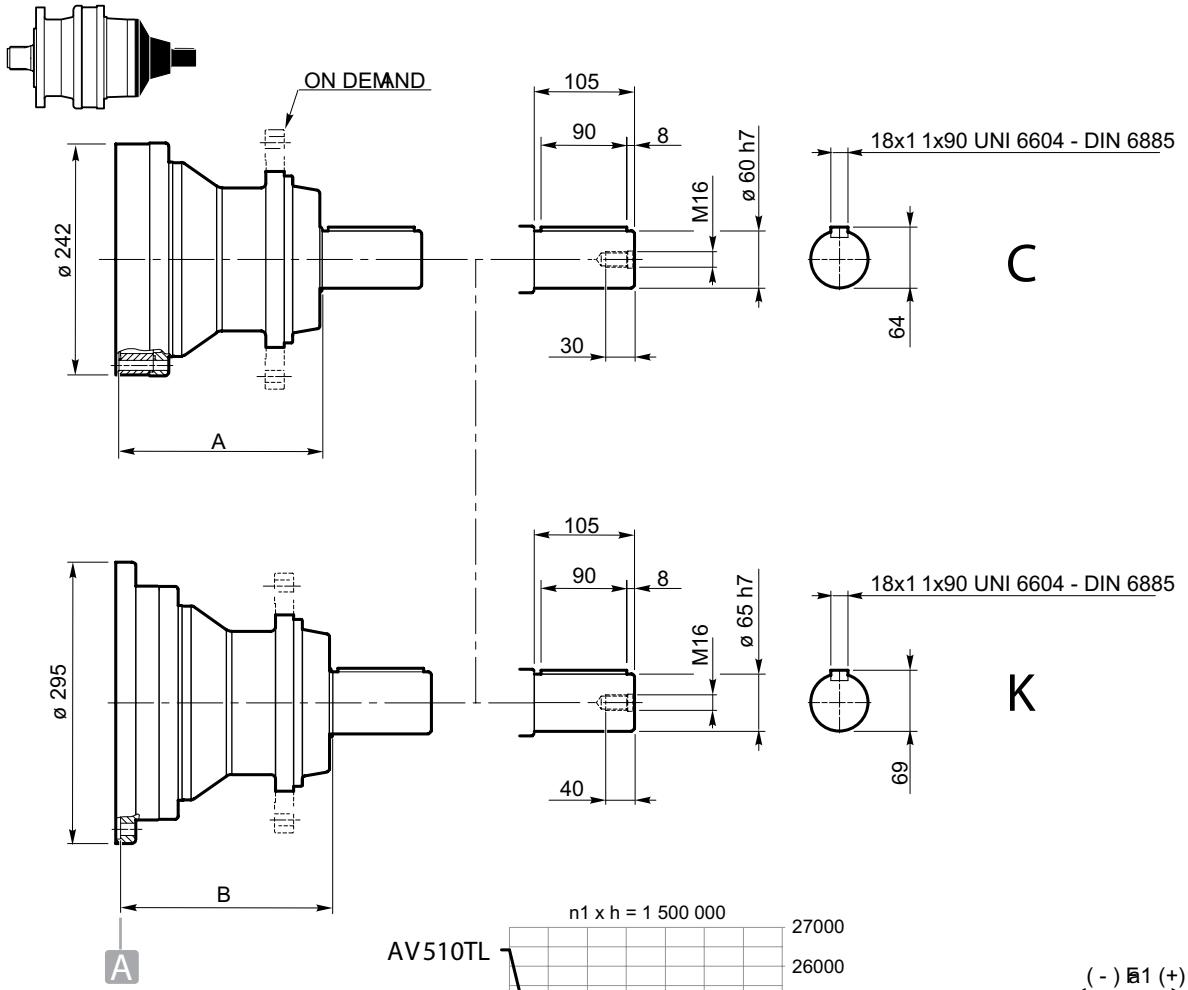


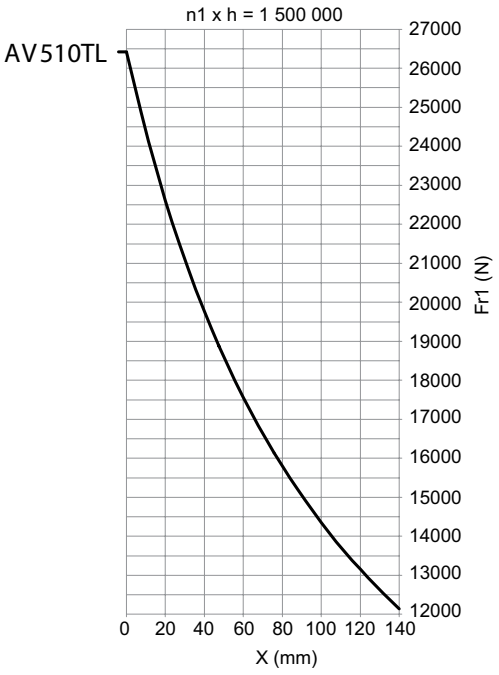
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV510NL	6 600	6 600
AV510N	15 250	15 250

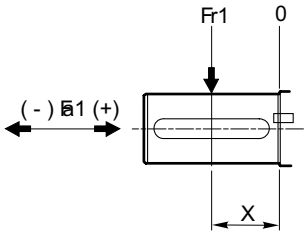


	A	B
RE 311-511-611-612-812-1022-1522-2003-2523-3003-3513-4803-6003-6003L	164	—
RE 6004-6004L-8004-8004L	164	—
GB 12014-12014L-16004-16004L-21004-21005-26005-31005-40005-45005	164	—
GB 53005-61005	—	172.5
RE 811-1021-2522-3002-3512-8003-8003L	—	172.5
GB 12013-12013L-16003L-26004-31004-40004-85005-110005	—	172.5
CC350	128	—
CC600	—	153

AVF-AV510TL



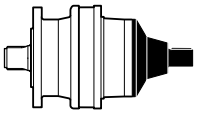


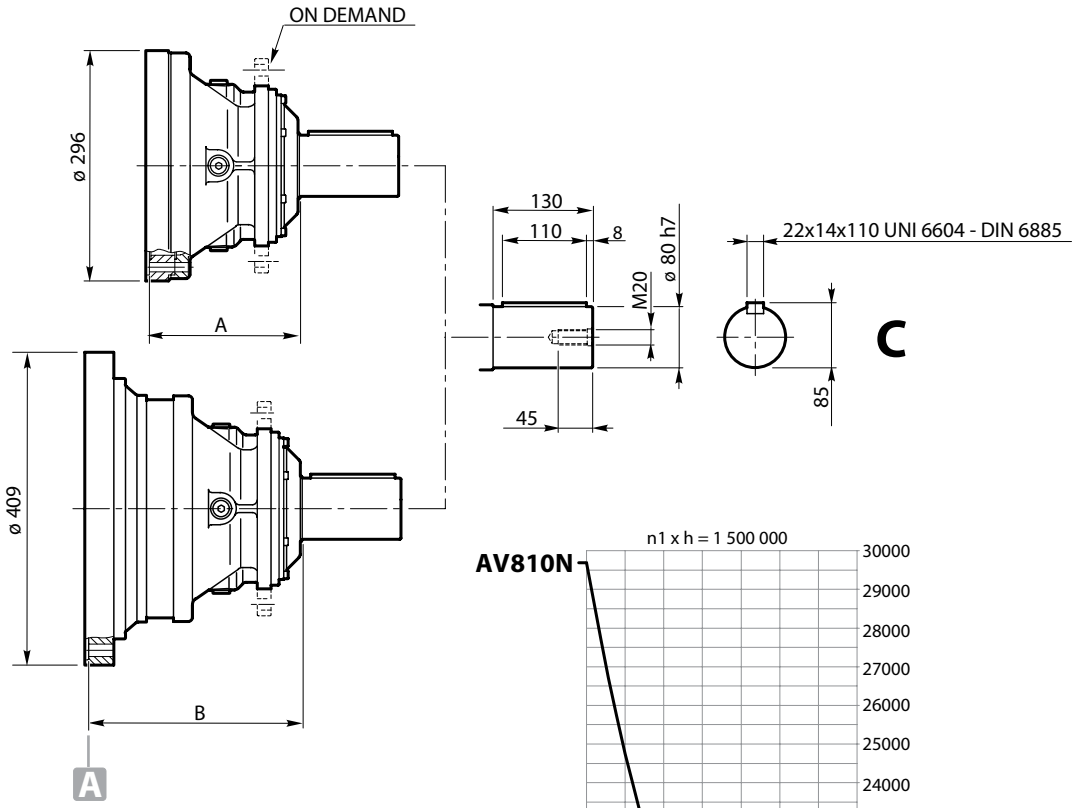


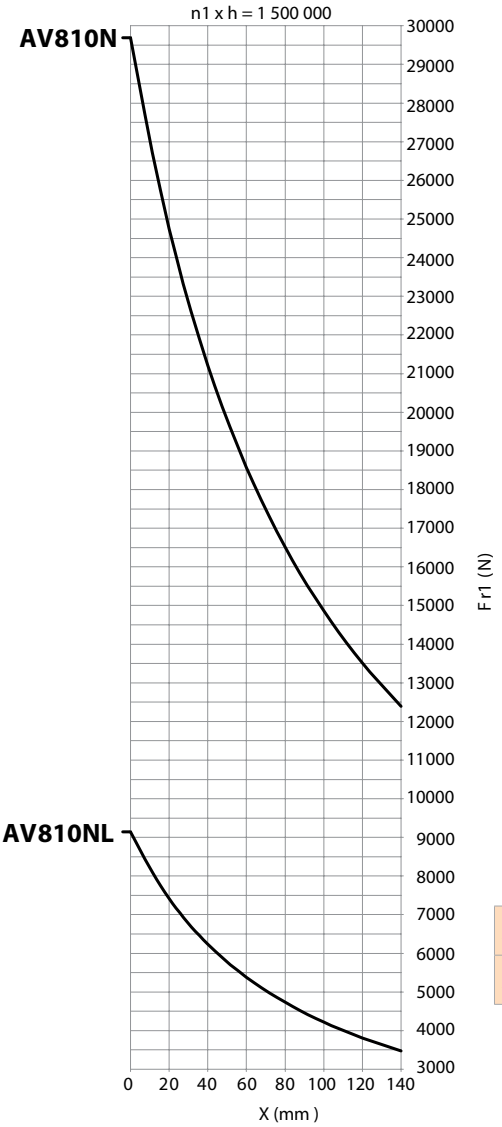
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV510TL	21 600	21 600

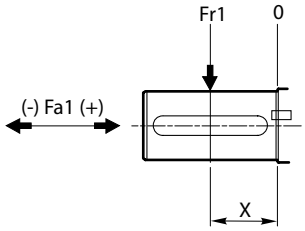
	A	B
RE 311-511-611-612-812-1022-1522-2003-2523-3003-3513-4803-6003-6003L	212	—
RE 6004-6004L-8004-8004L	212	—
GB 12014-12014L-16004-16004L-21004-21005-26005-31005-40005-45005	212	—
GB 53005-61005	212	—
RE 811-1021-2522-3002-3512-8003-8003L	—	221
GB 12013-12013L-16003L-26004-31004-40004-85005-110005	—	221
CC350	176	—
CC600	—	201

AVF-AV810N-NL

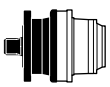






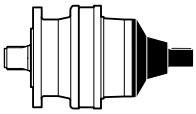


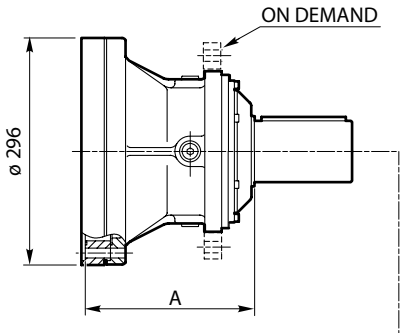
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV810NL	14 800	14 800
AV810N	25 900	25 900

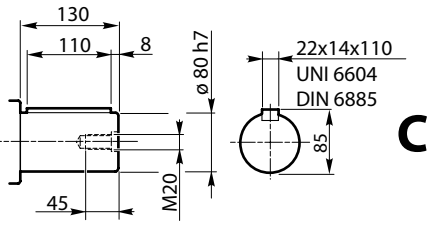


	A	B
RE 811-1021-2522-3002-3512-8003-8003L	195.5	—
GB 12013-12013L-16003L-26004-31004-40004-85005-110005	195.5	—
RE 2521-3001-8002-8002L	—	278
GB 12012-12012L-26003-31003-40003-85004-110004-205005-235005	—	278
CC600	162.5	—
CC1000	162.5	—

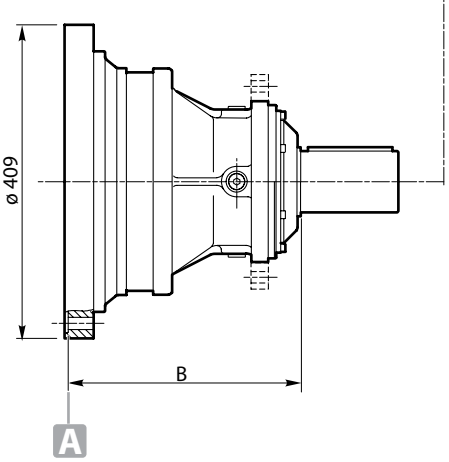
AVF-AV810T-TL

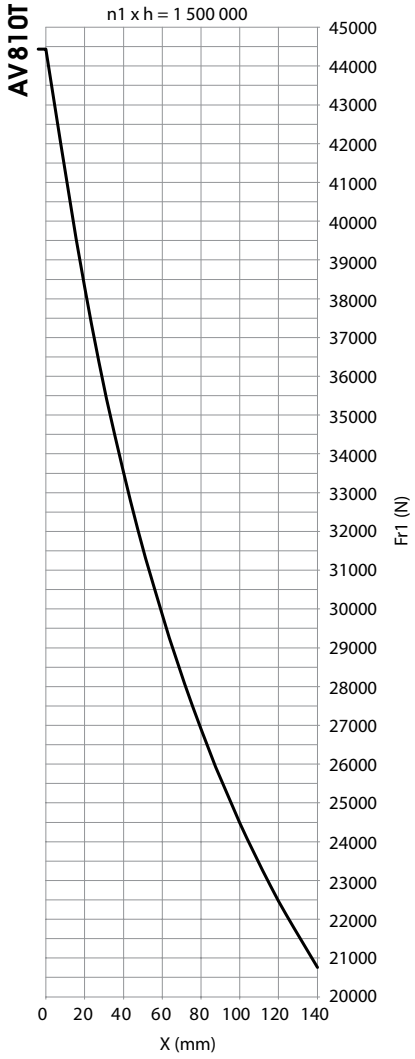


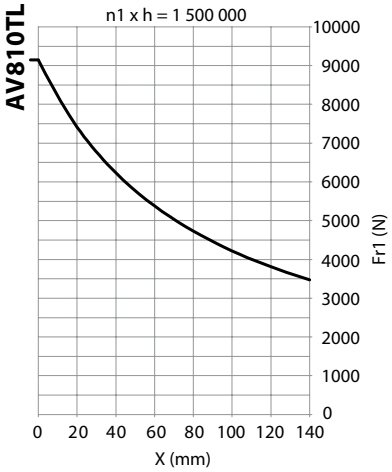


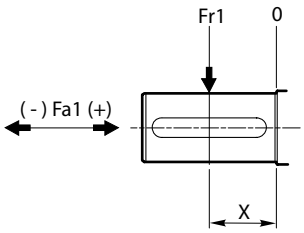


C

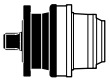






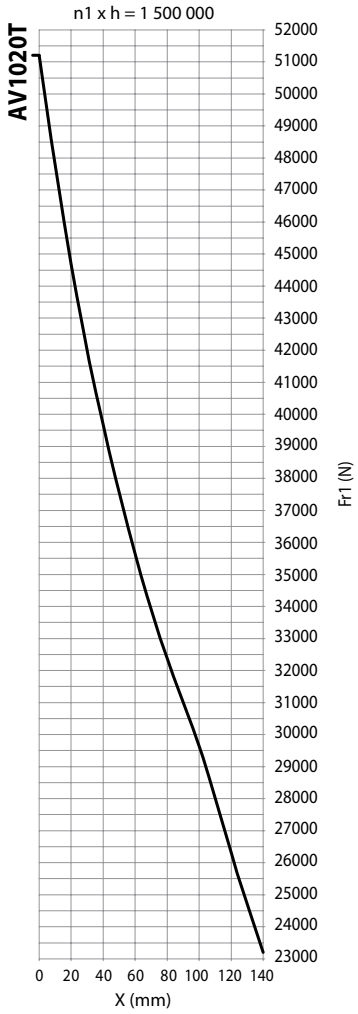


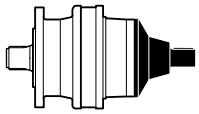
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV810T	39 200	25 900

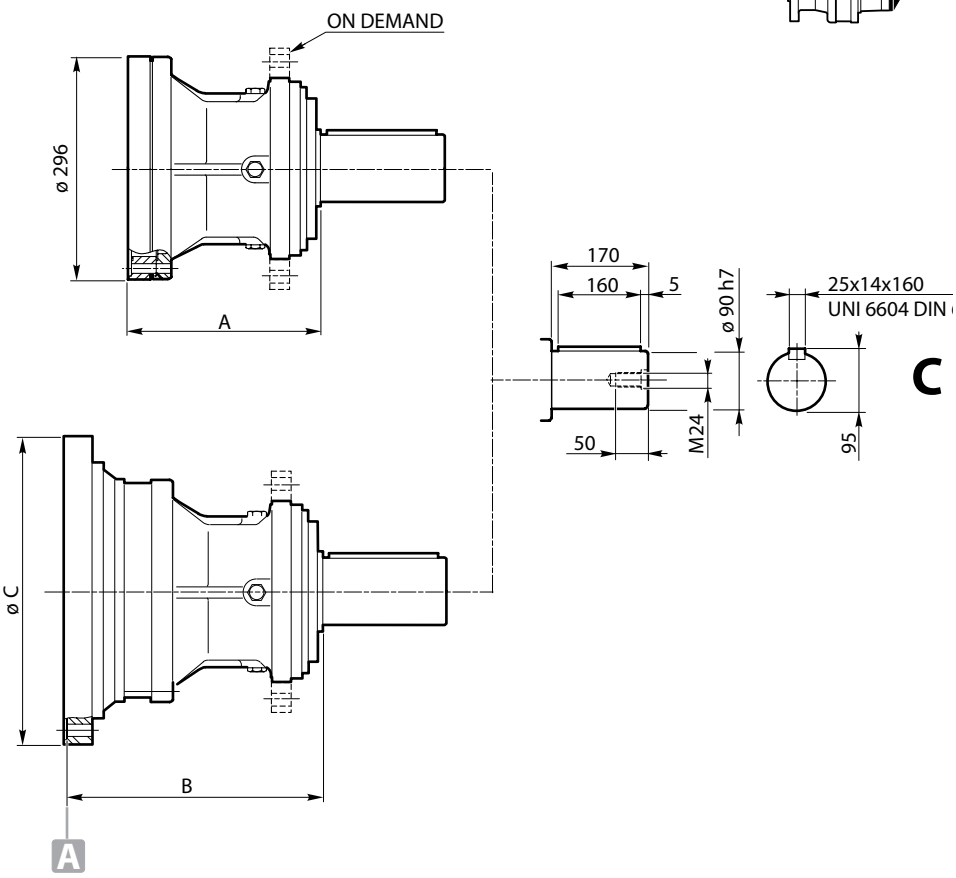


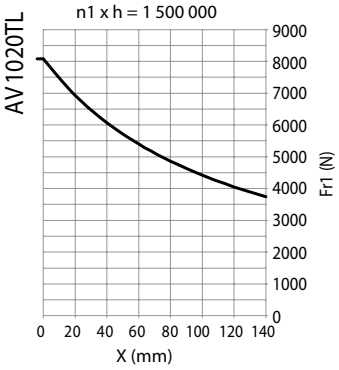
	A	B
RE 811-1021-2522-3002-3512-8003-8003L	218	—
GB 12013-12013L-16003L-26004-31004-40004-85005-110005	218	—
RE 2521-3001-8002-8002L	—	296
GB 12012-12012L-26003-31003-40003-85004-110004-205005-235005	—	296
CC600	185	—
CC1000	185	—

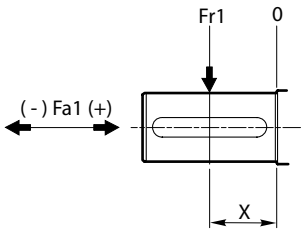
AVF-AV1020T-TL



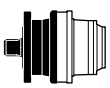






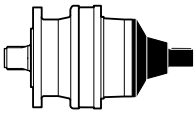


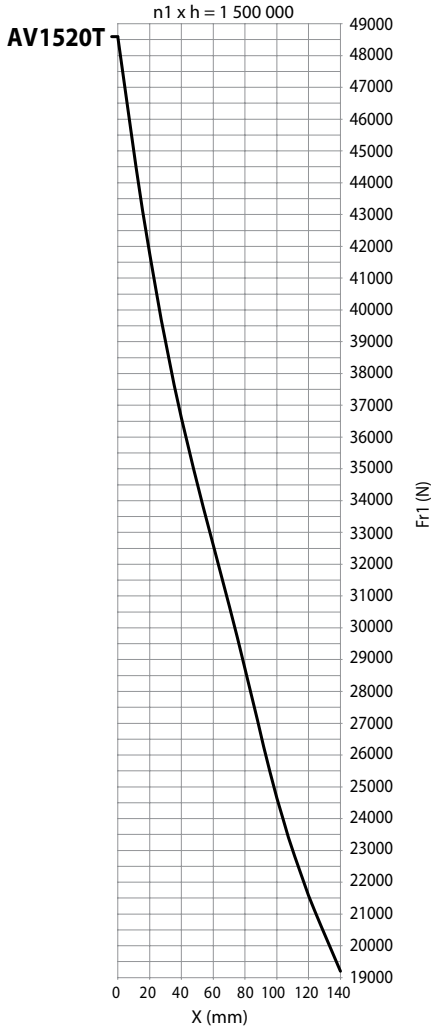
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV1020T	46 450	26 850

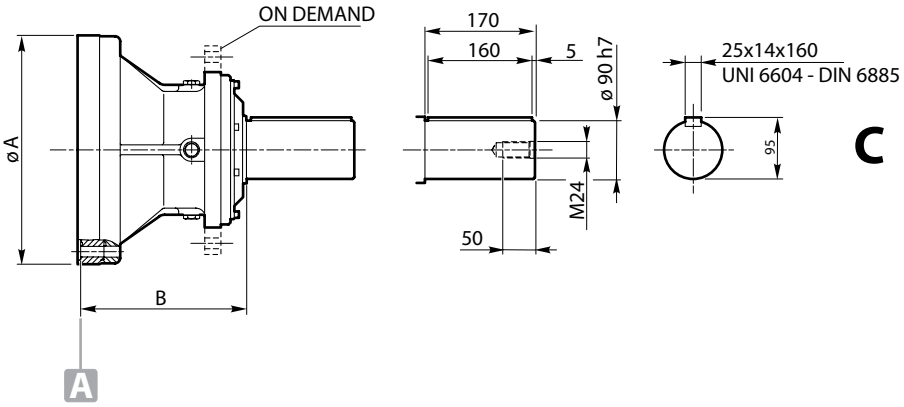


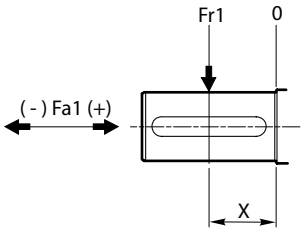
	A	B	C
RE 811-1021-2522-3002-3512-8003-8003L	249	—	—
GB 12013-12013L-16003L-26004-31004-40004-85005-110005	249	—	—
RE 2521-3001-8002-8002L	—	327	409
GB 12012-12012L-26003-31003-40003-85004-110004	—	327	409
RE 3511-4801	—	348	452
GB 16002-16002L-45003-130004	—	348	452
CC1000	216	—	—

AVF-AV1520T

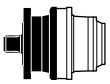






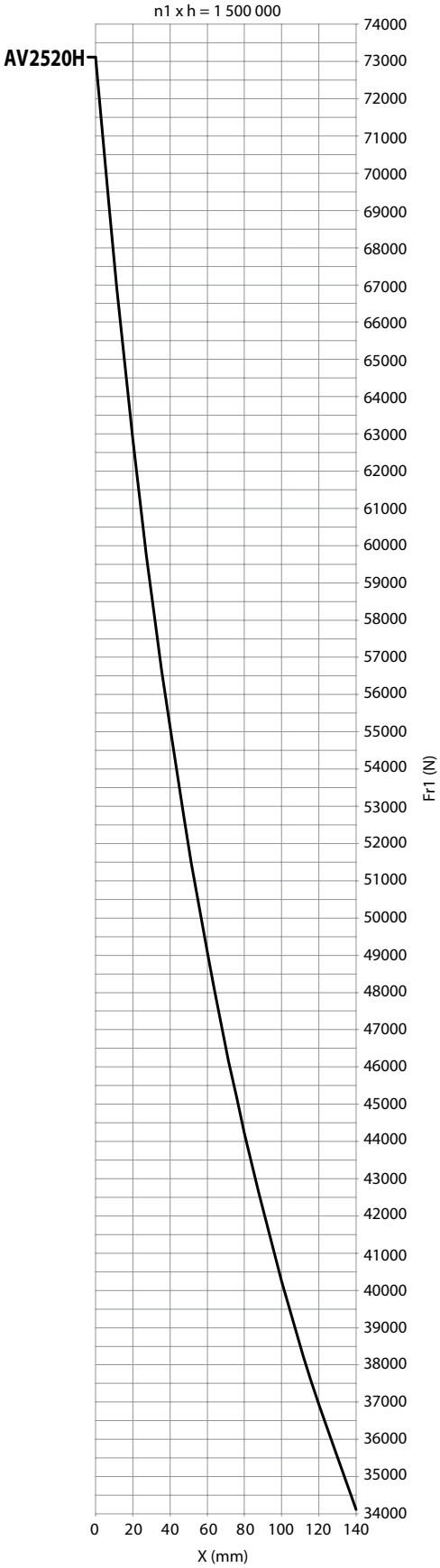


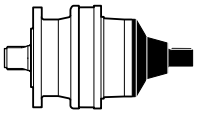
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV1520T	26 000	8 500

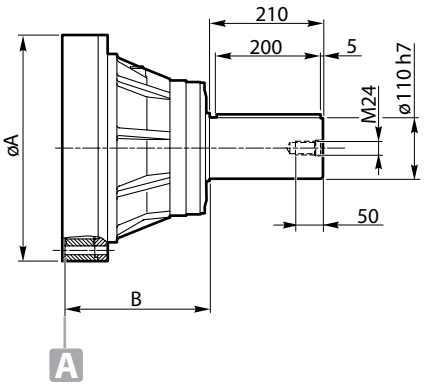


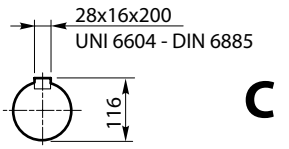
	A	B
RE 1521-2001-6002-6002L	353	252
GB 21003-45004-53004-61004-130005	353	252
RE 6001	490	321
GB 21002-53003-61003-150004	490	321

AV2520H-HL

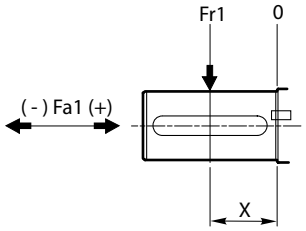


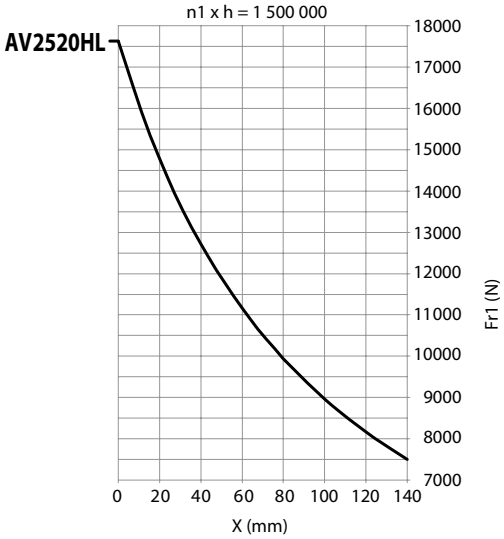


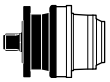




	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV2520H	66 000	50 000
AV2520HL	29 700	29 700

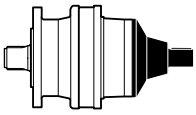


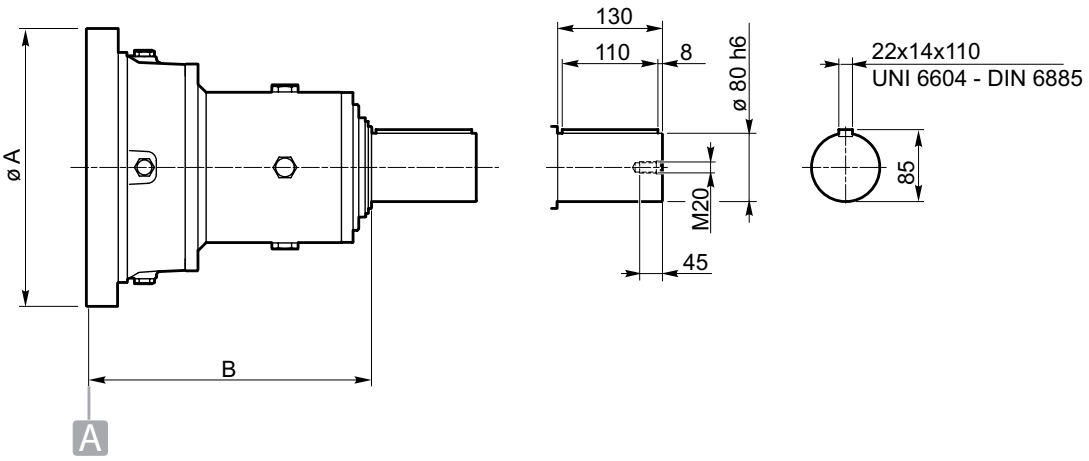


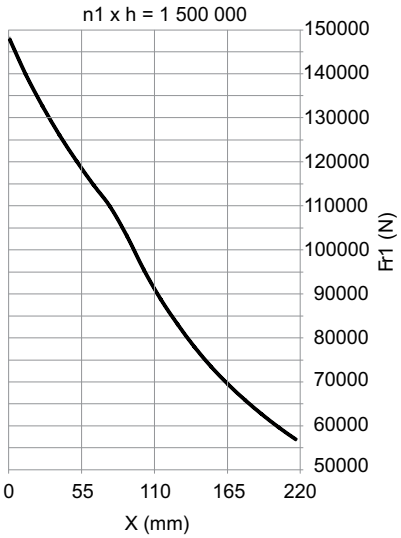


	A	B
RE 2521-3001-8002-8002L	409	257
GB 12012-12012L--26003-31003-40003 GB 85004-110004-205005-235005	409	257
RE 3511-4801	452	320
GB 16002-16002L-45003-130004	452	320
RE 6001	490	293
GB 21002-53003-61003-150004	490	293
RE 8001	490	385
GB 26002-85003	490	385
GB 12011-16001-31002-40002-45002-110003 GB 130003-205004-235004	368	610

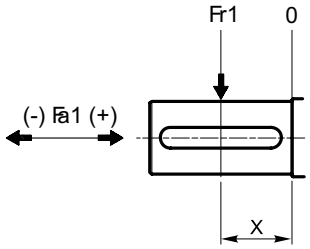
AV80

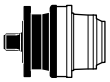






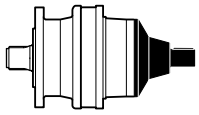
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV80	31 700	31 700

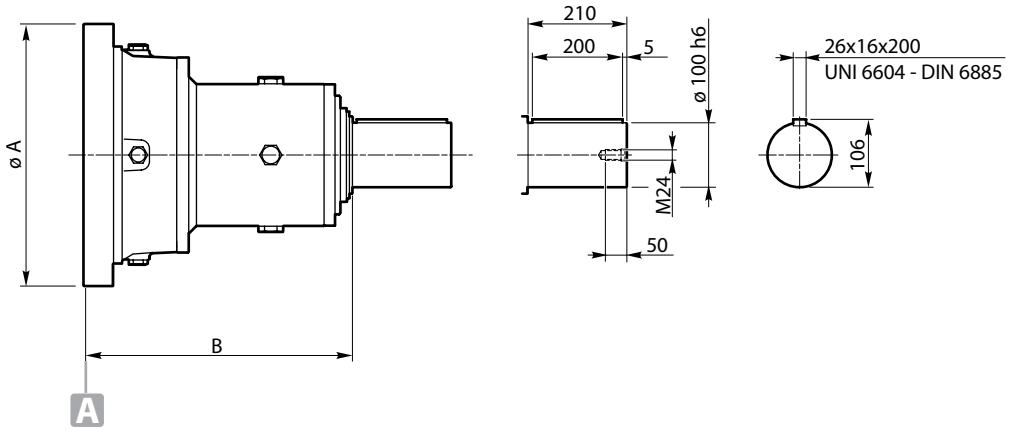


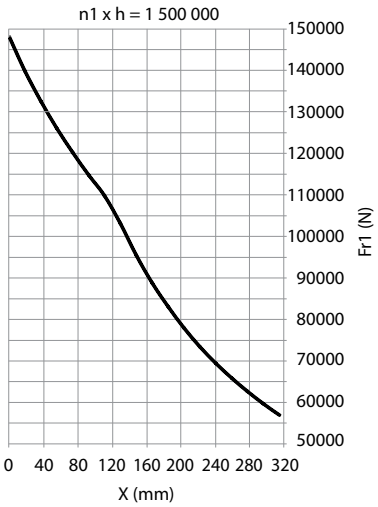


	A	B
RE 811-1021-2522-3002-3512-80003-8003L	295	187.5
GB 12013-12013L-16003L-260004-31004-40004-85005-110005	295	187.5
RE 2521-3001-8002-8002L	409	298
GB 12012-12012L-26003-31003-40003-85004-110004-205003	409	298

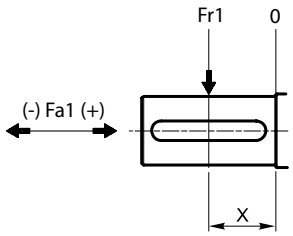
AV100

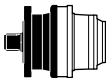






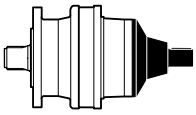
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV100	52 000	-

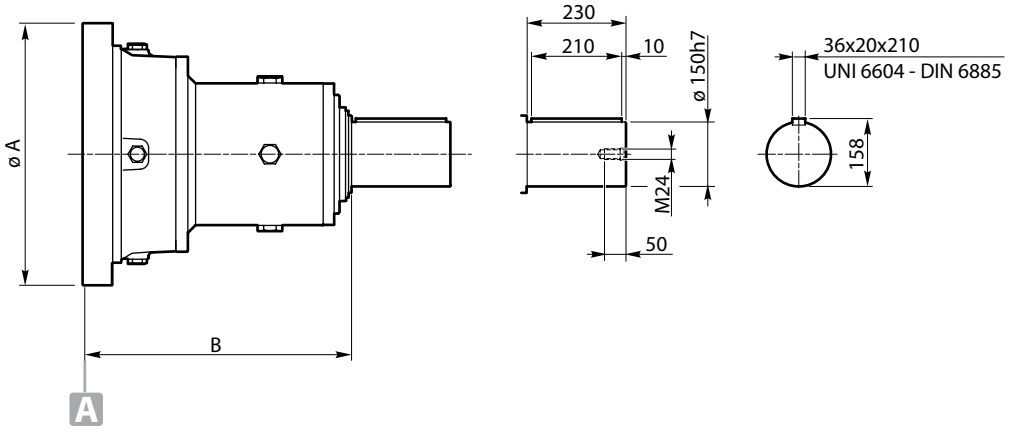


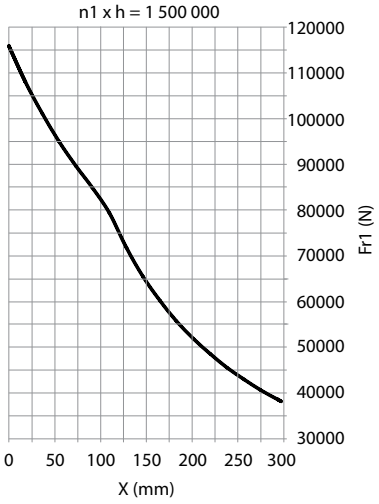


	A	B
RE 3511-4801	452	464.5
GB 16002-45003-130004	452	464.5
RE 6001-8001	490	437
GB 21002-26002-53003-61003-85003-150004	490	437
GB 12011-16001	610	550
GB 31002-40002-45002-110003-130003-150003-205004-235004	610	550

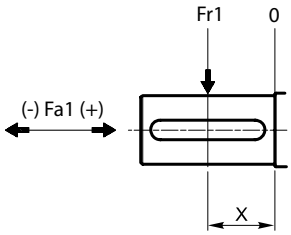
AV150

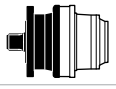




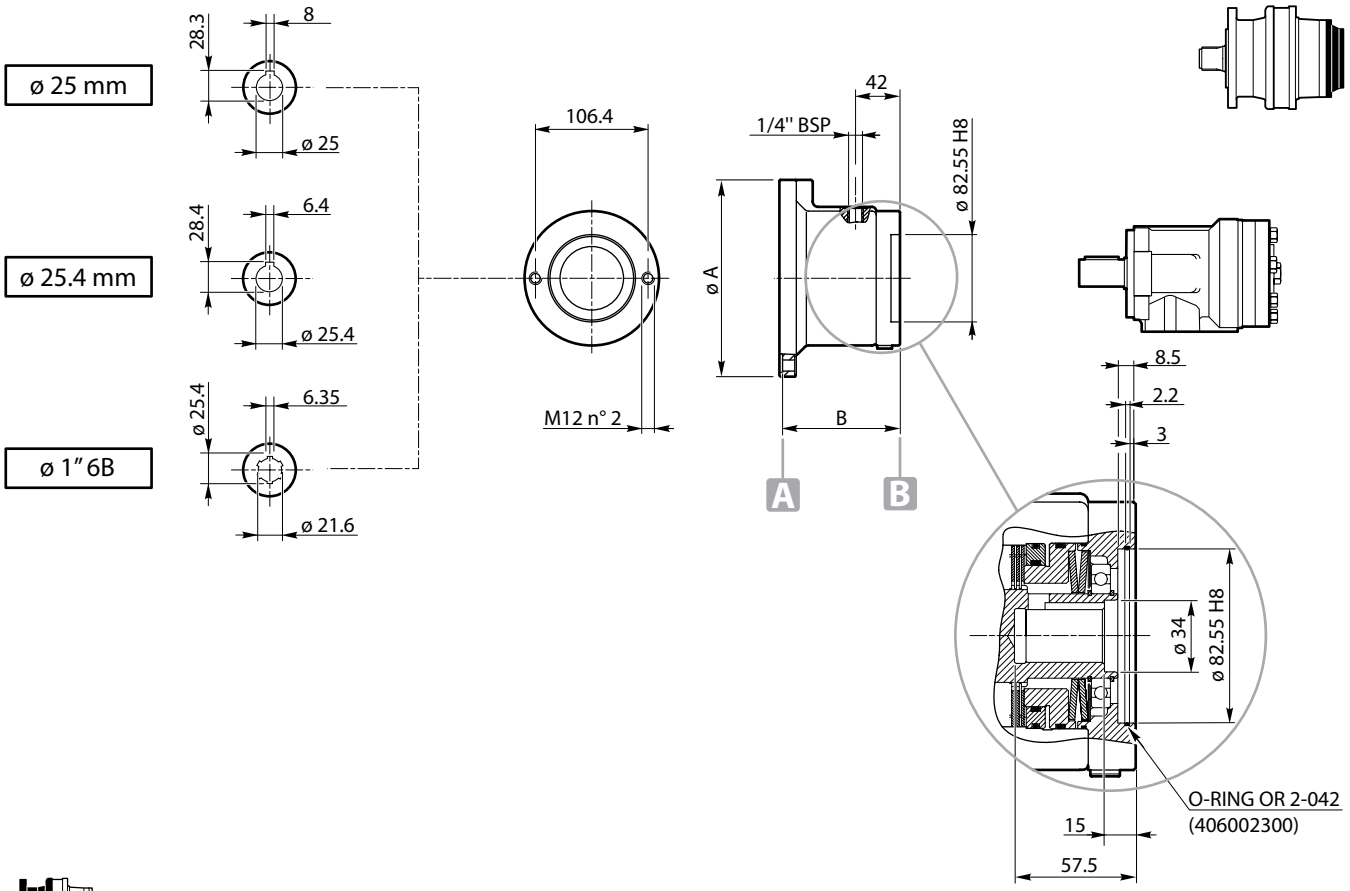


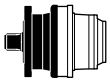
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV150	63 000	-





	A	B
RE 6001-8001	490	634
GB 21002-26002-53003-61003-150004	490	634
GB 12011-16001	610	626
GB 31002-40002-45002-110003-130003-15000-205004-235004	610	626

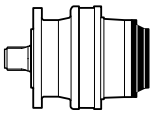


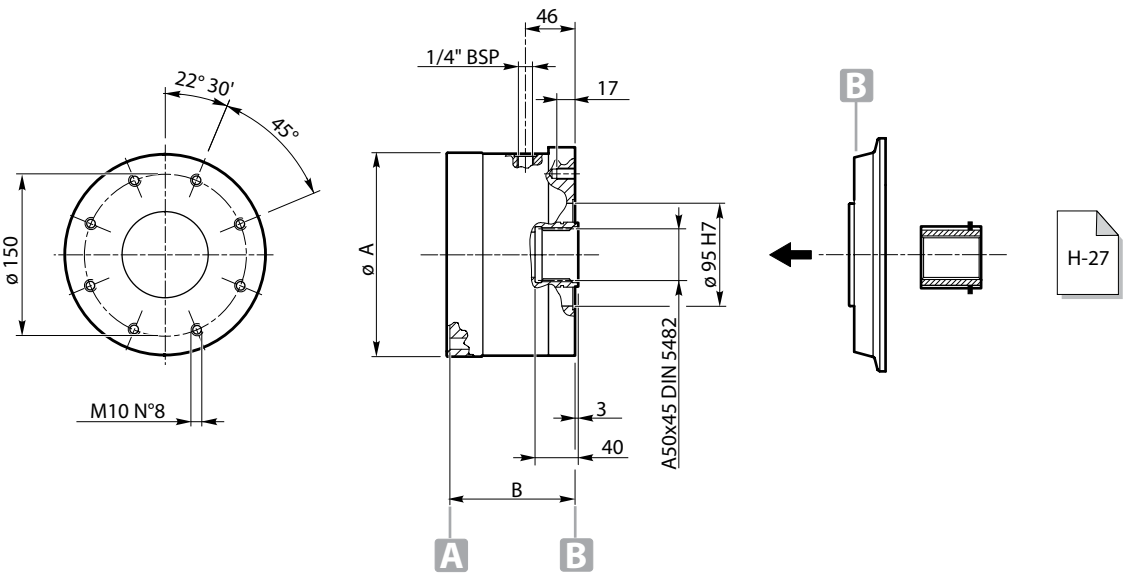


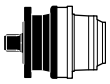
	ø A	B		F 01	F 10	F 11	F 12	F 13	F 14	F 05	F 16	
RE 111 - 112 - 113 - 114 **RE 211 - 212 - 213 - 214** **RE 241 - 242 - 243 - 244** **RE 312 - 313 - 314** **RE 512 - 513 - 514** **RE 613 - 614** **RE 813 - 814** **RE 1023 - 1024** **RE 1523 - 1524** **RE 2004** **RE 2524** **RE 3004** **RE 3514-4804** **RE 6004L** **RE 8005 - 8005L** **GB 12015 - 12015L** **GB 16005 - 16005L** **CC30-CC120**	186	109.5	**Tb** (Nm)	132	133	182	235	332	468	530	608	±5%
			pb (bar)	23	29	34	26	30	36	39	42	
			p max (bar)	300								
			n1 max (RPM)	700								

	ø A	B		F 02	F 20	F 21	F 22	F 23	F 24	F 25	F 26	
RE 311-511 **RE 611 - 612** **RE 812-1022** **RE 1522-2003** **RE 2523-3003** **RE 3513-4803** **RE 6003 - 6003L** **RE 6004 - 6004L** **RE 8004 - 8004L** **GB 12014 - 12014L** **GB 16004 - 16004L** **GB 21004 - 21005** **GB 26005-31005** **GB 40005-45005** **GB 53005** **CC350**	244	118.5	**Tb** (Nm)	132	133	182	235	332	468	530	608	±5%
			pb (bar)	23	29	34	26	30	36	39	42	
			p max (bar)	300								
			n1 max (RPM)	700								

F5-F6

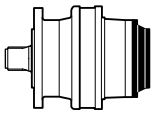


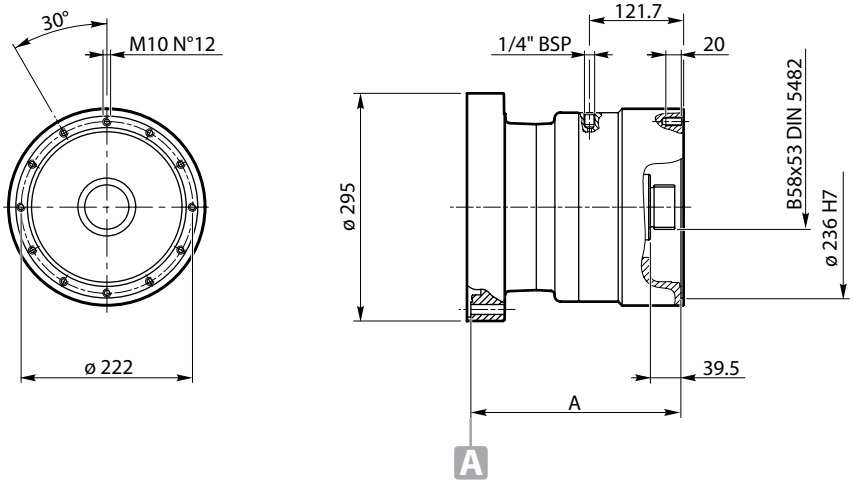


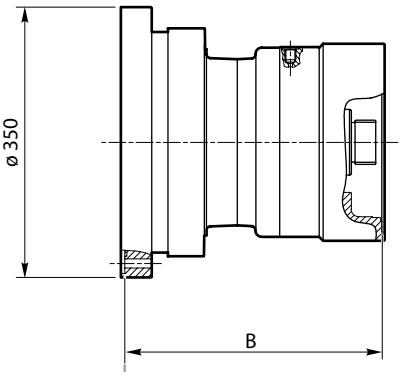


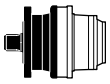
	ø A	B		F 501	F 502	F 503	F504	F505	F506	F 508	
RE 111 - 112 - 113 - 114 **RE 211 - 212 - 213 - 214** **RE 241 - 242 - 243 - 244** **RE 312 - 313 - 314** **RE 512 - 513 - 514** **RE 613 - 614** **RE 813 - 814** **RE 1023 - 1024** **RE 1523 - 1524** **RE 2004** **RE 2524** **RE 3004** **RE 3514-4804** **RE 6004L** **RE 8005 - 8005L** **GB 12015 - 12015L** **GB 16005 - 16005L** **CC30** **CC120**	186	115	**Tb** (Nm)	110	215	325	405	500	630	818	±5%
			pb (bar)	10	20	30	38	28	35	33	
			p max (bar)	300							
			n1 max (RPM)	1500 (standard)							
				3500 (special)							

	ø A	B		F 601	F 602	F 603	F604	F 605	F 606	F608	F610	F612	
RE 311-511 **RE 611 - 612** **RE 812-1022** **RE 1522-2003** **RE 2523-3003** **RE 3513-4803** **RE 6003 - 6003L** **RE 6004 - 6004L** **RE 8004 - 8004L** **GB 12014 - 12014L** **GB 16004 - 16004L** **GB 21004 - 21005** **GB 26005-31005** **GB 40005-45005** **GB 53005** **CC350**	244	125	**Tb** (Nm)	110	215	325	405	500	630	818	1005	1150	±5%
			pb (bar)	10	20	30	38	28	35	33	40	40	
			p max (bar)	300									
			n1 max (RPM)	1500 (standard)									
				3500 (special)									



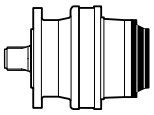


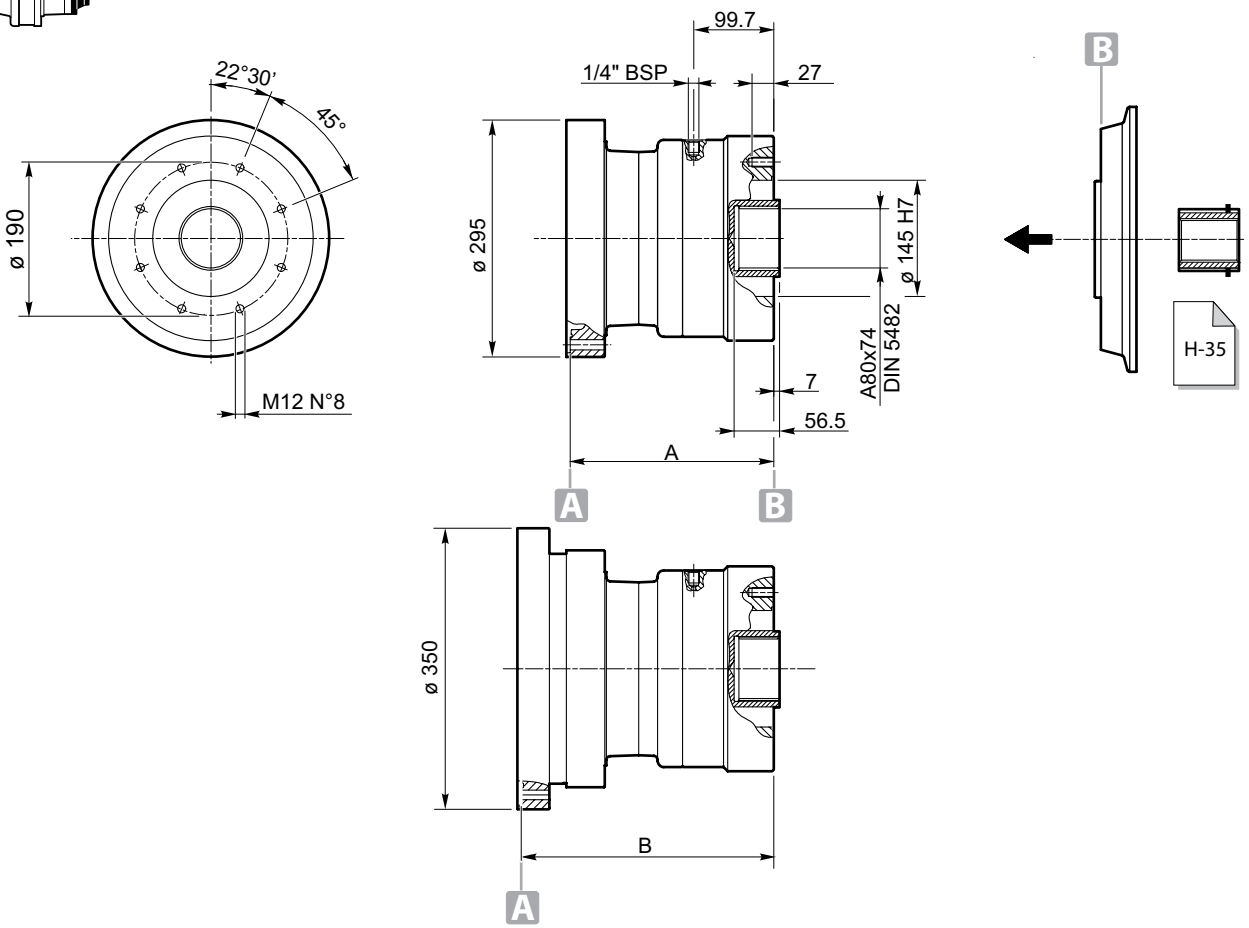


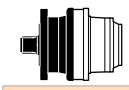


	A	B		F 813	F 815	F 818	F 820	F 823	F 827	F 830	
RE 811	272.5	-	**Tb** (Nm)	1271	1525	1780	2034	2288	2670	3051	±5%
RE 1021	272.5	-									
RE 1521-2001	-	314.5									
RE 2522-3002	272.5	-									
RE 3512-4801	272.5	-									
RE 6002-6002L	-	314.5	**pb** (bar)	54	65	76	58	65	76	87	
RE 8003-8003L	272.5	-									
GB 12013-12013L	272.5	-									
GB 16003L	-	314.5									
GB 16003	-	314.5									
GB 21003	272.5	-									
GB 26004	272.5	-									
GB 31004	272.5	-	**p max** (bar)	300							
GB 40004	-	314.5									
GB 45004	-	314.5									
GB 53004	-	314.5									
GB 61004	272.5	-									
GB 85005	272.5	-									
GB 110005	-	314.5	**n1 max** (RPM)	1500 (standard)							
GB 130005	-	314.5									
GB 150005	272.5	-									
CC600	272.5	-		3500 (special)							
CC1000	292.5	-									
	292.5	-									

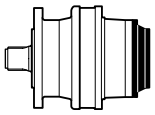
F8-MU

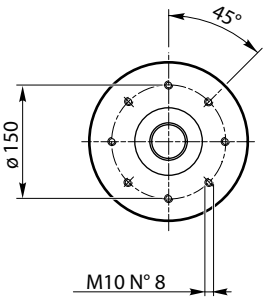


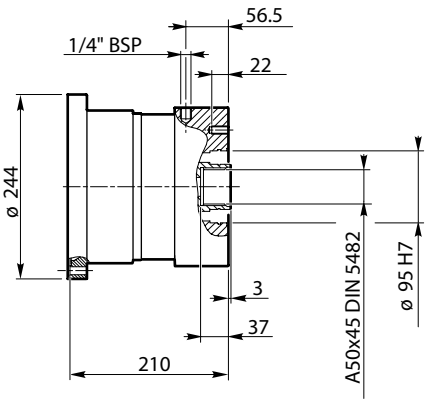




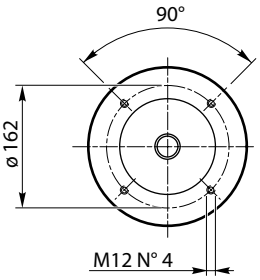
	A	B		F 813	F 815	F 818	F 820	F 823	F 827	F 830	
	253.5	-									
RE 811	253.5	-									
RE 1021	-	314.5	**Tb** (Nm)	1271	1525	1780	2034	2288	2670	3051	
RE 1521-2001	253.5	-									
RE 2522-3002	253.5	-									
RE 3512-4801	-	314.5									
RE 6002-6002L	253.5	-									
RE 8003-8003L	253.5	-									
GB 12013-12013L	253.5	-	**pb** (bar)	54	65	76	58	65	76	87	
GB 16003L	-	314.5									
GB 16003	-	314.5									
GB 21003	253.5	-									
GB 26004	253.5	-									±5%
GB 31004	253.5	-									
GB 40004	-	314.5	**p max** (bar)	300							
GB 45004	-	314.5									
GB 53004	-	314.5									
GB 61004	253.5	-									
GB 85005	253.5	-									
GB 110005	-	314.5									
GB 130005	-	314.5	**n1 max** (RPM)	1500 (standard)							
GB 150005	253.5	-									
CC600	253.5	-		3500 (special)							
CC1000	253.5	-									
	253.5	-									

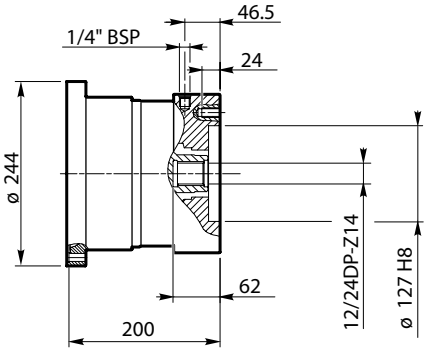




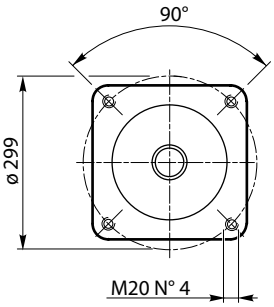


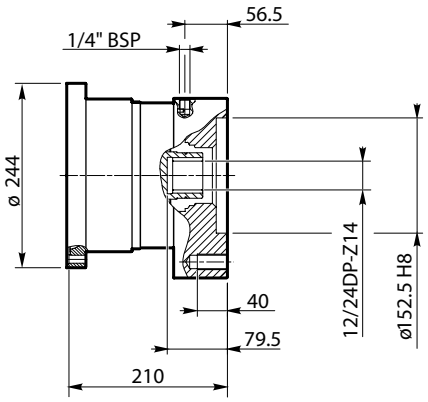
ST



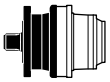


SAE "C"



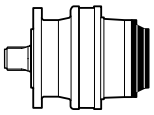


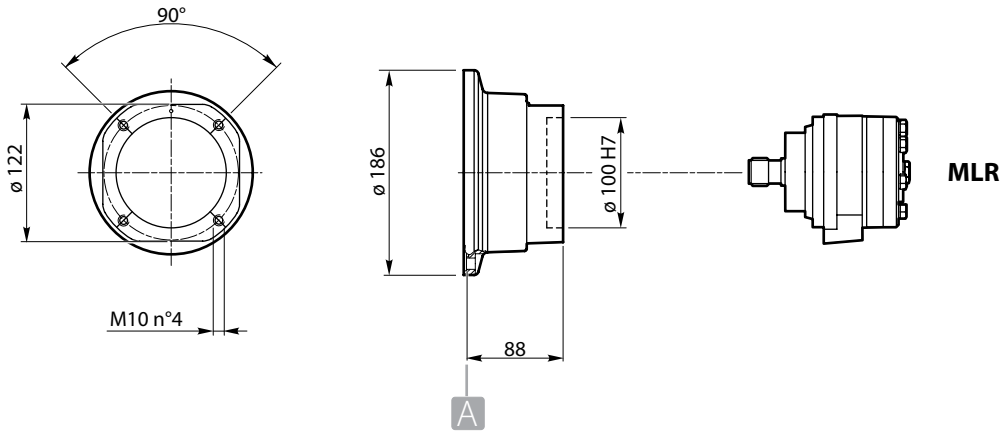
SAE "D"

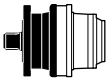


		F 902	F 903	F 904	F 905	F 906	F 908	F 910	F 912	F 915	
RE 311-511 **RE 611 - 612** **RE 812-1022** **RE 1522-2003** **RE 2523-3003** **RE 3513-4803** **RE 6003 - 6003L** **RE 6004 - 6004L** **RE 8004 - 8004L** **GB 12014 - 12014L** **GB 16004 - 16004L** **GB 21004 - 21005** **GB 26005-31005** **GB 40005-45005** **GB 53005** **CC350**	**Tb** (Nm)	244	317	439	488	683	854	976	1120	1465	±5%
	pb (bar)	16	21	20	16	23	23	26	32	39	
	p max (bar)	300									
	n1 max (RPM)	1500 (standard)									
		3500 (special)									

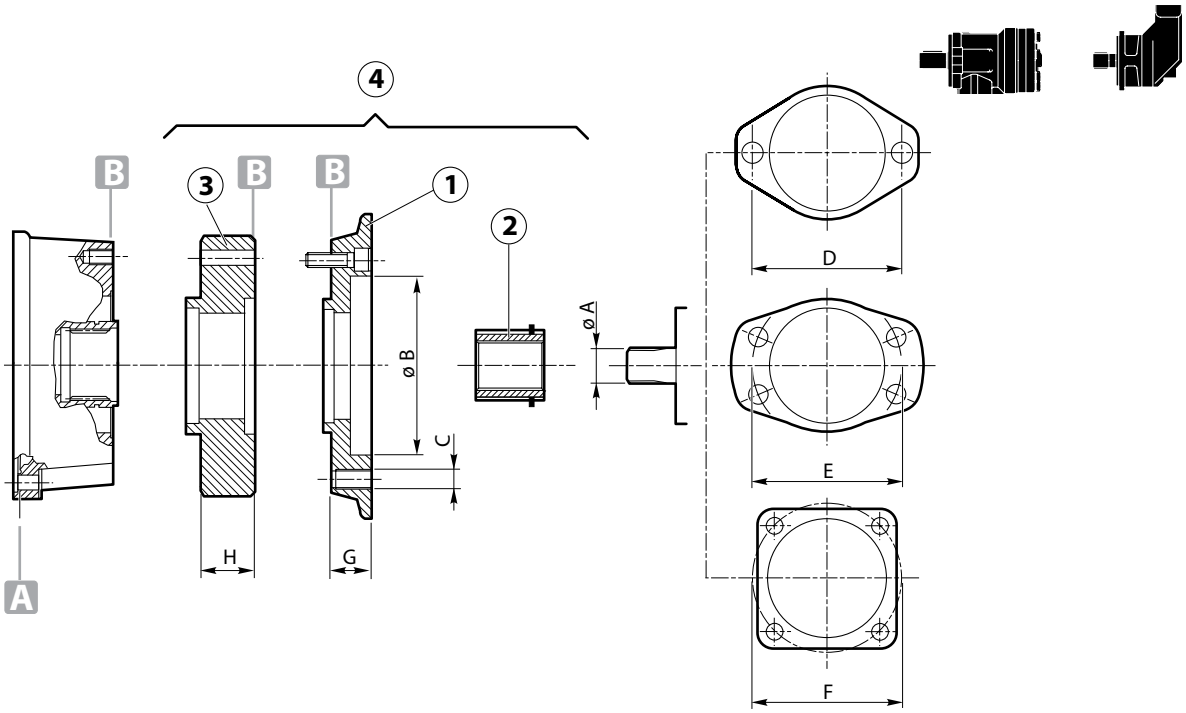
Upon request, brakes up to size F912 can be equipped with freewheeling clutch.







		20	30	40	45	
RE 111 - 112 - 113 - 114 **RE 211 - 212 - 213 - 214** **RE 241 - 242 - 243 - 244** **RE 312 - 313 - 314** **RE 512 - 513 - 514** **RE 613 - 614** **RE 813 - 814** **RE 1023 - 1024** **RE 1523 - 1524** **RE 2004** **RE 2524** **RE 3004** **RE 3514-4804** **RE 6004L** **RE 8005 - 8005L** **GB 12015 - 12015L** **GB 16005 - 16005L**	**Tb** **(Nm)**	220	308	396	459	+5%
	pb **(bar)**	24	24	24	26	
	p max **(bar)**	150				
	n1 max **(RPM)**	700				



AXIAL PUMP	øA	øB	øC	øD	E	F	G	H	1	2	3	4
M1 15-21	ø 19	82.55	M12	106.4	—	—	26	—	20300047	40000659	—	AQ
M2 24-50	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M2 24-50	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
M3 40-65	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M3 40-65	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB

DANFOSS	øA	øB	øC	øD	E	F	G	H	1	2	3	4
OMM	ø 16	63	M8	80	—	—	14	—	40000698	40000694	—	CE
OMP 25-400	ø 25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
OMP 25-400	ø 25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
OMP 25-400	1" B6	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
OMP 25-400	ø 32	82.55	M12	106.4	—	—	38	—	2511001	40000665	—	AD
OMR 50-375	ø 25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
OMR 50-375	ø 25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
OMR 50-375	1" B6	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
OMR 50-375	ø 32	82.55	M12	106.4	—	—	38	—	02511001	40000665	—	AD
OMH 200-500	ø 32	82.55	M12	106.4	—	—	38	—	02511001	40000665	—	AD
OMH 200-500	12/24-14	82.55	M12	106.4	—	—	38	—	02511001	40000672	—	AE
OMS 80-400	ø 31.75	82.55	M12	1064	—	—	38	—	02511001	40000664	—	UL
OMS 80-400	ø 32	82.55	M12	106.4	—	—	38	—	02511001	40000665	—	AD
OMS 80-400	12/24-14	82.55	M12	106.4	—	—	38	—	02511001	40000672	—	AE
OMS 80-400 SPEC.	12/24-14	82.55	M10	106.4			30		40000681	40000672		CV
OMSS 80-400	12/24-12	100	M10	—	—	125	21	—	02511017	02241030	—	TR
OMTS 160-500	12/24-16	125	M12	160			42		02511081	02241082		UR
OMT 160-500	12/24-17	125	M12	—	—	160	86	—	40001833	40000674	—	CI
OMT 160-500	ø 40	125	M12	—	—	160	78	—	02511041	02241051	—	TW
OMT 160-500(US)	12/24-17	127	M12			150	79.5		02511166	40000674		DF
OMV 315-800	Ø50	160	M16			200	140		02511006	02591003		VM
OMVS 315-800	10/20-16	125	M12	—	—	160	42	—	02511085	02241086	—	US
MTM	12/24-17	127	M12	—	—	162	29	38	02511108	40000674	02731111	UY

EATON (CHAR-LYNN)	øA	øB	øC	øD	E	F	G	H	1	2	3	4
SERIE 2000	ø 25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
SERIE 2000	Ø25	82.55	M12		106.4		26		40000680	40000649		BN
SERIE 2000	ø 25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
SERIE 2000	ø 31.75	82.55	M12	106.4	—	—	26	—	20300047	40000664	—	AR
SERIE 2000	ø 32	82.55	M12	106.4	—	—	38	—	2511001	40000665	—	AD
SERIE 2000	1"6B	82.55	M12	106,4	—	—	26	—	20300047	40000648	—	AM
SERIE 2000	12/24-14	82.55	M12	106.4	—	—	26	—	20300047	40000672	—	AU
SERIE 4000	12/24-14	101.6	M12			127	20		40000635	40000672		EH
SERIE 4000	12/24-17	127	M12	—	—	162	29	—	02511108	40000674	—	BH
SERIE 6000	12/24-17	127	M12	—	—	162	29	14	02511108	02971179	02731096	CQ
SERIE 6000	ø 40	127	M12	—	—	162	29	38	02511108	02241057	02731111	TV
SERIE 6000	8.5/17	127	M12	—	—	162	29	38	02511108	02241076	02731111	UH

HP HYDRAULIC	øA	øB	øC	øD	E	F	G	H	1	2	3	4
M4PV21-28	ø 25.4	101.6	M14	146	—	—	20	—	40000635	40000645	—	AV
M4PV21-28	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M4PV21-28	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
M4MF 21-28	ø 25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
M4MF 21-28	16/32- 1 3	82.55	M12	106.4	—	—	26	—	20300047	40000657	—	AP
M4MF 21-28	16/32-15	82.55	M12	106.4	—	—	26	—	20300047	40000671	—	AT
M4PV 34-65	ø 25.4	101.6	M14	146	—	—	20	—	40000635	40000645	—	AV
M4PV 34-65	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M4PV 34-65	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
M4MF 34-65	ø 25.4	101.6	M14	146	—	—	20	—	40000635	40000645	—	AV
M4MF 34-65	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M4MF 34-65	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
M4MV 34-65	ø 25.4	101.6	M14	146	—	—	20	—	40000635	40000645	—	AV
M4MV 34-65	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M4MV 34-65	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB

LINDE	øA	øB	øC	øD	E	F	G	H	1	2	3	4
HMF 35	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
HMF 50-75	16/32-21	127	M16	181	—	—	34	—	02511108	40000654	—	CF
HMF 105	16/32-23	127	M16	181	—	—	34	—	40001811	40000686	—	CH
HMF 135	16/32-27	152.4	M20	228.5	—	—	35	—	40001844	02241123	—	CZ
HMR 135	16/32-27	152.4	M20	228.5	—	—	35	—	40001844	02241123	—	CZ
BPV 70	W35x2	127	M12	162	—	—	25	—	02511108	40000670	—	VK

M + S	øA	øB	øC	øD	E	F	G	H	1	2	3	4
EPMM 8-50	ø 14	63	M8	80	—	—	14	—	40000698	40000658	—	CD
EPM M 8-50	ø 16	63	M8	80	—	—	14	—	40000698	40000694	—	CE
EPM 40-630	ø 25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
EPM 40-630	ø 25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
EPM 40-630	1" 6B	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
EPM 40-630	25/22-14	82.55	M12	106.4	—	—	26	—	20300047	40000647	—	AL
EPM 40-630	12/24-14	82.55	M12	106.4	—	—	38	—	2511001	40000672	—	AE
EPM 40-630	ø 32	82.55	M12	106.4	—	—	38	—	2511001	40000665	—	AD
EPRM 50-400	ø 25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
EPRM 50-400	ø 25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
EPRM 50-400	1" 6B	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
EPRM 50-400	25/22-14	82.55	M12	106.4	—	—	26	—	20300047	40000647	—	AL
EPRM 50-400	12/24-14	82.55	M12	106.4	—	—	38	—	2511001	40000672	—	AE
EPRM 50-400	ø 32	82.55	M12	106.4	—	—	38	—	2511001	40000665	—	AD
EPMS 80-400	ø 31.75	82.55	M12	106.4	—	—	38	—	2511001	40000664	—	AG
EPMS 80-400	ø 32	82.55	M12	106.4	—	—	38	—	2511001	40000665	—	AD
EPMS 80-400	12/24-17	82.55	M12	106.4	—	—	38	—	2511001	40000674	—	AF
EPMT 160-500	12/24-17	125	M12	—	—	160	86	—	40001833	40000674	—	CI
MTS 250	12/24-16	125	M12	160			42		02511081	02241082		UR

REXROTH	øA	øB	øC	øD	E	F	G	H	1	2	3	4
A2FE 45	W30x2	160	M16	200			107.5		02511250	40000669		ER
A2FE 56	W30x2	160	M16	200			107.5		02511250	40000669		ER
A2FE 80	W35x3	190	M20	224			133		02511281	40000670		ES
A2FM 10-16	ø 25	80	M8	—	—	100	36.5	—	40001842	40000649	—	CL
A2FM 10-16	W25x1.25	80	M8	—	—	100	36.5	—	40001842	40000668	—	CM
A2FM 23-32	ø 25	100	M10	—	—	125	48	—	40000682	40000649	—	BS
A2FM 23-32	W25X1.25	100	M10	—	—	125	48	—	40000682	40000668	—	BT
A2FM 23-32	W30x2	100	M10	—	—	125	48	—	40000682	40000669	—	BU
A2FM 45-63	W30x2	125	M12	—	—	160	44	—	40000684	40000669	—	CA
A2FM 45-63	W35x2	125	M12	—	—	160	44	—	40000684	40000670	—	CB
A2FM 80-90	W35x2	140	M12	—	—	180	53	—	40001852	40000670	—	CN
A2FM 80-90	W40x2	140	M12	—	—	180	53	—	40001852	40001858	—	CP
A2FM 107	W40x2	160	M16	—	—	200	56.5	—	02511039	40001858	—	TP
A2FM 125	W40x2	160	M16	—	—	200	56.5	—	02511039	40001858	—	TP
A2FM 160	W50x2	180	M16	—	—	224	62	—	02511109	02591102	—	CT
A2FM 200	W50x2	200	M20	—	—	250	73	—	02511232	02591102	—	DB
A4FM 22-28	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
A4FM 22-28	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
A4FM 40	W30x2	101.6	M14	146	—	—	20	—	40000635	40000669	—	BA
A4FM 56	W30x2	127	M16	181	—	—	34	—	40001811	40000669	—	CG
A10FM 23-28	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
A10FM 37-45	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
A6VM 28	W25x1.25	100	M10	—	—	125	48	—	40000682	40000668	—	BT
A6VM 28	W30x2	100	M10	—	—	125	48	—	40000682	40000669	—	BU
A6VM 55	W30x2	125	M12	—	—	160	44	—	40000684	40000669	—	CA
A6VM 55	W35x2	125	M12	—	—	160	44	—	40000684	40000670	—	CB
A6VM 80	W35x2	140	M12	—	—	180	53	—	40001818	40000670	—	CN
A6VM 80	W40x2	140	M12	—	—	180	53	—	40001818	40001858	—	CP
A6VM 107	W45x2	160	M16	—	—	200	56.5	—	02511039	02591073	—	VN
A6VM 140	W45x2	180	M16	—	—	224	62	—	02511109	02591073	—	VQ
A6VM 160	W45x2	180	M16	—	—	224	62	—	02511109	02591073	—	VQ
A6VM 160	W50x2	180	M16	—	—	224	62	—	02511109	02591102	—	CT
A6VM 250	W50x2	200	M20	—	—	250	73	—	02511232	02591102	—	DB
AA6VM 55, 80	12/24-12	127	M14	—	—	162	29	—	02511108	40000672	—	BG
AA6VM 107, 160	8/16-13	152.4	M20	—	—	228.5	41	—	40001844	02241043	—	UX
AA2FM 10, 12, 16	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
AA2FM 23, 28, 32	12/24-12	127	M14	—	—	—	29	—	02511108	40000672	—	BG
AA2FM 45, 56 ,63	12/24-12	127	M14	—	—	162	29	—	02511108	40000672	—	BG
AA2FM 80, 90	12/24-12	127	M14	—	—	162	29	—	02511108	40000672	—	BG
AA2FM 56 ,63	16/32-21	127	M14	—	—	162	29	—	02511108	40000654	—	BD
AA2FM 80, 90	16/32-21	127	M14	—	—	162	29	—	02511108	40000654	—	BD
AA2FM 107, 125	8/16-13	152.4	M20	—	—	228.5	41	—	40001844	02241043	—	UX
AA2FM 160, 180	8/16-13	152.4	M20	—	—	228.5	41	—	40001844	02241043	—	UX

SAE STANDARD	øA	øB	øC	øD	E	F	G	H	1	2	3	4
SAE A	ø 25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	—
	ø 25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	—
	ø 31.75	82.55	M12	106.4	—	—	26	—	20300047	40000664	—	—
	ø 32	82.55	M12	106.4	—	—	26	—	20300047	40000665	—	—
	1"6B	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	—
	12/24-14	82.55	M12	106.4	—	—	26	—	20300047	40000672	—	—
SAE B	ø 25	101.6	M14	146	—	—	20	—	40000635	40000649	—	—
	ø 25.4	101.6	M14	148	—	—	20	—	40000635	40000645	—	—
	ø 31.75	101.6	M14	146	—	—	20	—	40000635	40000664	—	—
	ø 32	101.6	M14	146	—	—	20	—	40000635	40000665	—	—
	1" 6B	101.6	M14	146	—	—	20	—	40000635	40000648	—	—
	12/24-14	101.6	M14	146	—	—	20	—	40000635	40000672	—	—

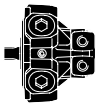
SAE STANDARD	øA	øB	øC	øD	E	F	G	H	1	2	3	4
MAGNETO	ø 25	82.55	M12	—	106.4	—	26	—	40000680	40000649	—	—
	ø 25.4	82.55	M12	—	106.4	—	26	—	40000680	40000645	—	—
	ø 31.75	82.55	M12	—	106.4	—	26	—	40000680	40000664	—	—
	ø 32	82.55	M12	—	106.4	—	26	—	40000680	40000665	—	—
	1" 6B	82.55	M12	—	106.4	—	26	—	40000680	40000648	—	—
	12/24-14	82.55	M12	—	106.4	—	26	—	40000680	40000672	—	—
SAE C	ø 31.75	127	M14	—	—	162	29	—	02511108	40000664	—	—
	12/24-14	127	M14	—	—	162	29	—	02511108	40000672	—	—
	12/24-17	127	M14	—	—	162	29	—	02511108	40000674	—	—

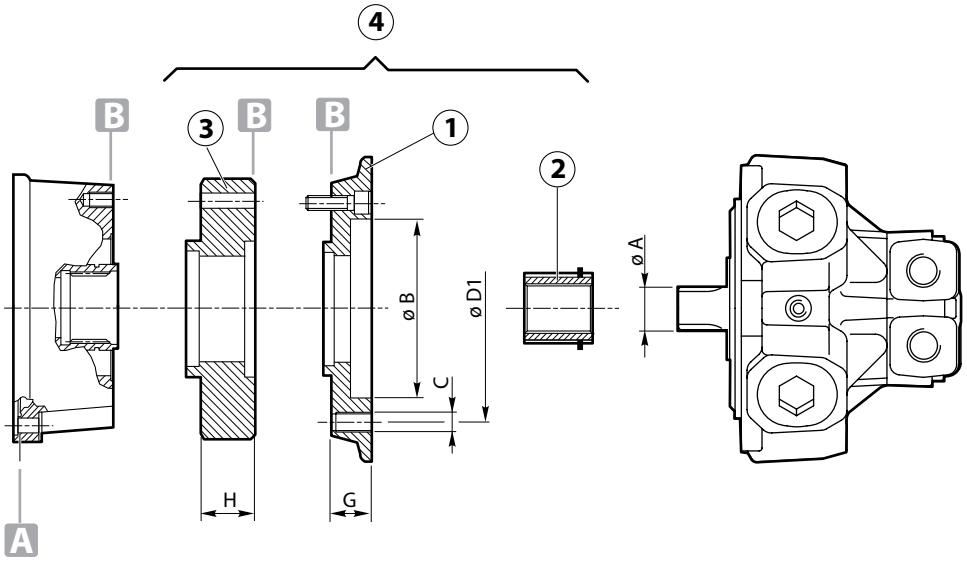
SAMHYDRAULIK	øA	øB	øC	øD	E	F	G	H	1	2	3	4
BGM 13-50	ø16	63	M8	80	—	—	14	—	40000698	40000694	—	CE
BG 40-400	ø25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
BG 40-400	ø25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
BG 40-400	1" 6B	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
AGF 50-400	ø25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
ARF 50-400	ø25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
BR 50-400	ø25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
BR 50-400	ø25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
BR 50-400	ø31.75	82.55	M12	106.4	—	—	26	—	20300047	40000664	—	AR
BR 50-400	ø 32	82.55	M12	106.4	—	—	38	—	20300047	40000665	—	AS
BR 50-400	1" 6B	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
H1C 12	Ø20	80	M8	—	—	100	36.5	—	02971201	02591008	—	CS
H1C 30	W25x1,25	100	M10	—	—	125	31	—	02511221	40000668	—	DW
H1C 55	12/24-17	127	M14	—	—	162	29	—	40000653	40000672	—	UT
H1C 55	W30x2	125	M12	—	—	160	44	—	40000684	40000669	—	CA
H1C 55	Ø30	125	M12	—	—	160	44	—	40000684	02591040	—	DU
H1C 75	W35x2	140	M12	—	—	180	53	—	40001818	40000670	—	TQ
H1C 90-108	W40x2	160	M16	—	—	200	57	—	02511039	40001858	—	TP
H1C 90-108	Ø40	160	M16	—	—	200	56.5	—	02511039	02241057	—	EF
H1C 160	W45x2	180	M16	—	—	224	62	—	02511109	02591073	—	VQ
HPR 80-400	ø31.75	82.55	M12	106.4	—	—	38	—	02511001	40000664	—	AG
HPR 80-400	ø 32	82.55	M12	106.4	—	—	38	—	02511001	40000665	—	AD
HPR 80-400	12/24-14	82.55	M12	106.4	—	—	38	—	02511001	40000672	—	AE
H2V 55	W30x2	125	M12	—	—	160	44	—	40000684	40000669	—	CA
H2V 160	W45x2	180	M16	—	—	224	62	—	02511109	02591073	—	VQ

SAUER	øA	øB	øC	øD	E	F	G	H	1	2	3	4
SMF2 033-070	16/32-21	127	M12	—	—	162	29	—	02511108	40000654	—	BD
SMF2 089	16/32-23	127	M14	—	—	162	29	—	40000653	40000686	—	BI
M25MF	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M35MF	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M35/M44 MF	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
M44MF	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M46MF	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
51D 80	W40x2	140	M12	—	—	180	53	—	40001818	40001858	—	CP
51D 110	W40x3	160	M16	—	—	200	56.5	—	02511039	40001858	—	TP
51V 080	12/24-14	127	M12	—	—	162	29	—	02511108	40000672	—	BG
51V 080	16/32-23	127	M12	—	—	162	29	—	02511108	40000686	—	BI
51V 110/160A	8/16-13	152.4	M20	—	—	228.5	40	—	02511164	02631152	—	8X
51V 160/A	8/16-13	152.4	M20	—	—	228.5	40	—	40001844	02241043	—	UX
51V 250	16/32-27	161.5	M20	—	—	317.15	35	—	02511147	02241123	—	EJ
90M 030	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
90M 030	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
90M 042	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
90M 042	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
90M 055	16/32-21	127	M12	—	—	162	29	—	02511108	40000654	—	BD
90M 075	16/32-21	127	M12	—	—	162	29	—	02511108	40000654	—	BD
90M 100	16/32-23	127	M12	—	—	162	29	—	02511108	40000686	—	BI
90M 100	8/16-13	127	M12	—	—	162	29	—	02511108	02241013	—	EV
90M 130	8/16-Z13	152.4	M20	—	—	228.5	40	—	40001844	022411043	—	UX

VOAC	øA	øB	øC	øD	E	F	G	H	1	2	3	4
F11-150 SAE	8/16-13	152.4	M20	228.5	—	—	41	—	40001844	02241043	—	UX
F12-30 SAE	ø25.4	101.6	M14	146	—	—	20	—	40000635	40000645	—	AV
F12-30 SAE	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
F12-40 SAE	ø31.75	127	M12	—	—	162	29	—	02511108	40000664	—	BF
F12-40 SAE	12/24-14	127	M12	—	—	162	29	—	02511108	40000672	—	BG
F12-60 SAE	ø31.75	127	M12	—	—	162	29	—	02511108	40000664	—	BF
F12-60 SAE	12/24-14	127	M12	—	—	162	29	—	02511108	40000672	—	BG
F12-80 SAE	12/24-17	127	M12	—	—	162	29	—	02511108	40000674	—	BH
V12-60 SAE	12/24-14	127	M12	—	—	162	29	—	02511108	40000672	—	BG
V12-80 SAE	12/24-14	127	M12	—	—	162	29	—	02511108	40000672	—	BG
F12-110 SAE	8/16-13	152.4	M20	228.5	—	—	41	—	40001844	02241043	—	UX
V14-160 ISO	W45x2	180	M16	224	—	—	62	—	02511109	02591073	—	VQ
F12-80 ISO	ø40	140	M12	—	—	180	53	38	40001852	02241057	2731111	UW
TK	12/24-17	127	M12	—	—	162	29	14	02511108	40000674	2731096	CQ
F12-30 ISO	W30x2	100	M10	—	—	125	48	—	40000682	40000669	—	BU
F12-40 MF-HI ISO	W30x2	125	M12	160	—	—	44	—	40000684	40000669	—	CA
F12-60 ISO	W35x2	125	M12	—	—	160	44	—	40000684	40000670	—	CB
F12-80 ISO	W40x2	140	M12	—	—	180	53	—	40001852	40001858	—	CP
F12-110 ISO	W45x2	160	M16	200	—	—	56.5	—	02511039	02591073	—	VN

WHITE	øA	øB	øC	øD	E	F	G	H	1	2	3	4
RS 03-24	ø25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
RS 03-24	ø25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
RS 03-24	1" 6B	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
HB 03-24	ø25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
HB 03-24	ø25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
HB 03-24	ø31.75	82.55	M12	106.4	—	—	26	—	20300047	40000664	—	AR
HB 03-24	ø32	82.55	M12	106.4	—	—	26	—	20300047	40000665	—	AS
HB 03-24	1" 6B	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
HB 03-24	12/24-14	82.55	M12	106.4	—	—	26	—	20300047	40000672	—	AU
HB 03-24	16/32-13	82.55	M12	106.4	—	—	26	—	20300047	40000657	—	AP
RE 07-45	ø25	82.55	M12	—	106.4	—	26	—	40000680	40000649	—	BN
RE 07-45	ø25.4	82.55	M12	—	106.4	—	26	—	40000680	40000645	—	BL
RE 07-45	ø31.75	82.55	M12	—	106.4	—	26	—	40000680	40000664	—	BP
RE 07-45	ø32	82.55	M12	—	106.4	—	26	—	40000680	40000665	—	BQ
RE 07-45	1" 6B	82.55	M12	—	106.4	—	26	—	40000680	40000648	—	BM
RE 07-45	12/24-14	82.55	M12	—	106.4	—	26	—	40000680	40000672	—	BR
DR 12-46	ø25	82.55	M12	—	106.4	—	26	—	40000680	40000649	—	BN
DR 12-46	ø25.4	82.55	M12	—	106.4	—	26	—	40000680	40000645	—	BL
DR 12-46	ø31.75	82.55	M12	—	106.4	—	26	—	40000680	40000664	—	BP
DR 12-46	ø32	82.55	M12	—	106.4	—	26	—	40000680	40000665	—	BQ
DR 12-46	1" 6B	82.55	M12	—	106.4	—	26	—	40000680	40000648	—	BM
DR 12-46	12/24-14	82.55	M12	—	106.4	—	26	—	40000680	40000672	—	BR

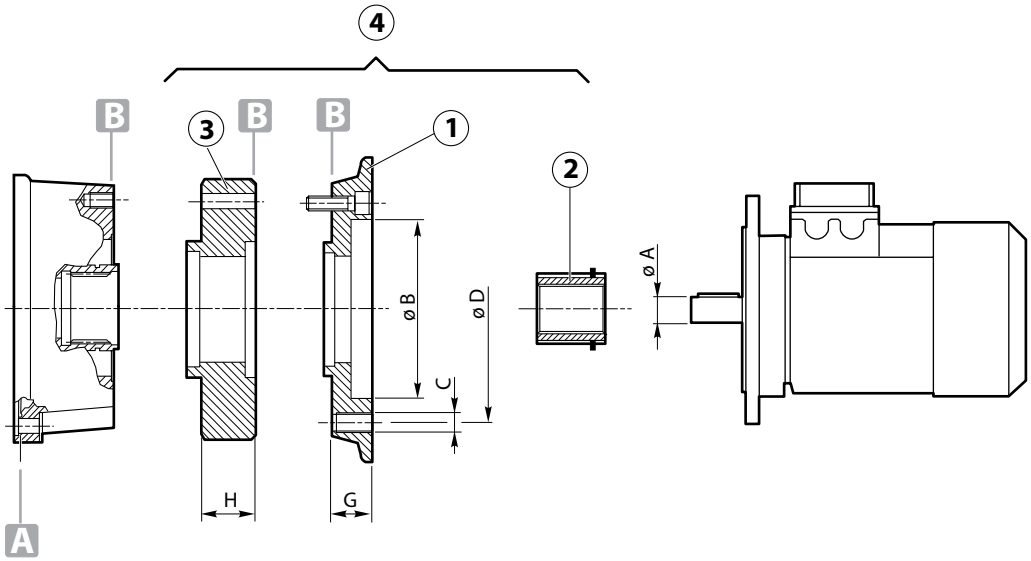




INTERMOT	øA	øB	C	øD1	E	F	G	H	1	2	3	4
G34/A-AA	ø30	82.55	M12	106.4	—	—	10.5	26	02511082	2591040	02511018	UM
G 100	W40x2	125	M8	175	—	—	44	—	02511282	40001858	—	EQ
G 100	A40x36	125	M8	175	—	—	44	—	02511282	40001858	—	ET
IAM 195	6x26x32	172	M10	190	—	—	39.5	—	02511170	40001829	—	DE

SAI	øA	øB	C	øD1	E	F	G	H	1	2	3	4
BD2	W40x2	150	M12	250	—	—	38	—	02511070	02591049	—	UE
BV2	W40x2	150	M12	250	—	—	38	—	02511070	02591049	—	UE
GM05 40-200	28x34x6	125	M10	160	—	—	40	—	02511045	40000646	—	TZ
GM05 40-200	35x2x16	125	M10	160	—	—	40	—	02511045	40000670	—	TT
GM05 40-200	ø30	125	M10	160	—	—	40	—	02511045	02591040	—	TM
GM1 100-320	28x34x6	175	M12	210	—	—	29	—	02971466	40000646	—	VB
GM1 100-320	35x2x16	175	M12	210	—	—	29	—	02971466	40000670	—	TJ
GM2 200-630	40x3x12	150	M12	250	—	—	38	—	02511070	02591044	—	UB
GM2 200-630	36x40	150	M12	250	—	—	38	—	02511070	02591063	—	VA
GM3	W40x3	265	M18	310			43.5		02511151	02591044		DS

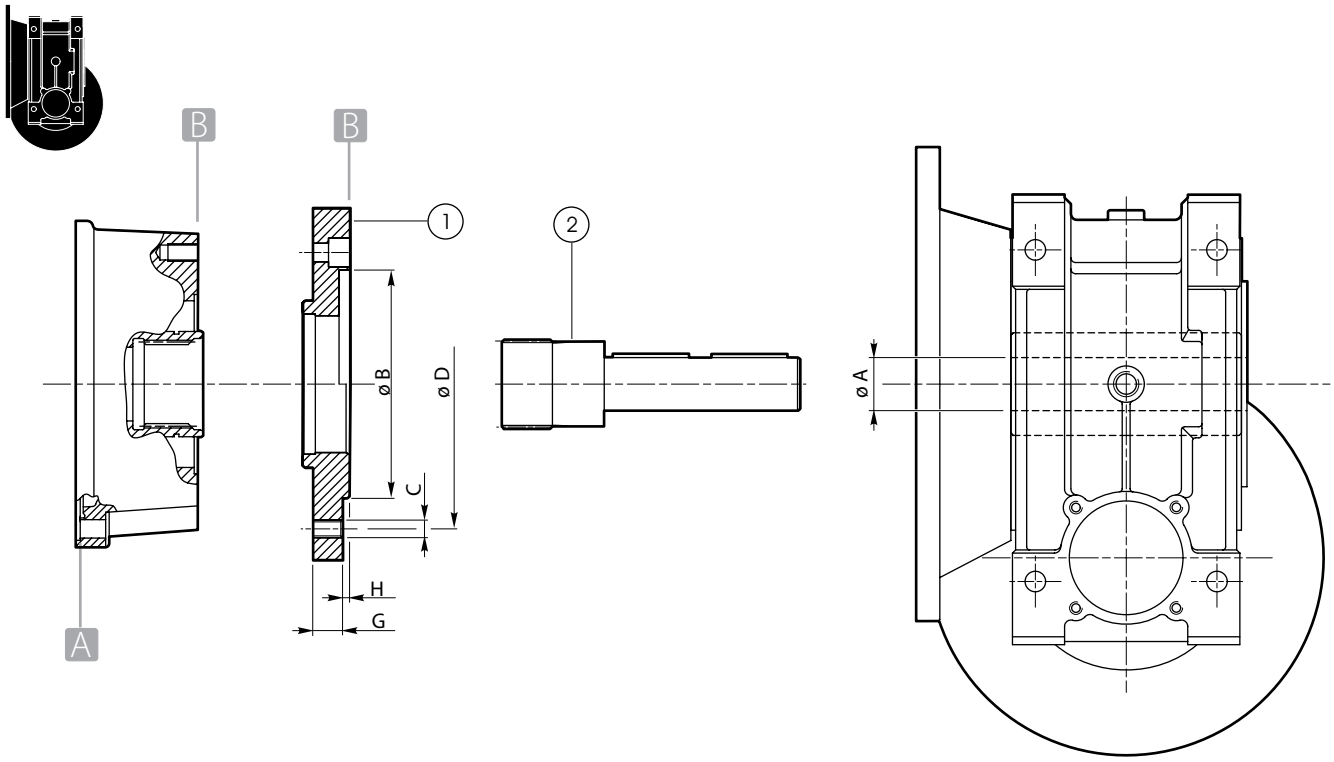
CALZONI	øA	øB	øC	øD1	E	F	G	H	1	2	3	4
MR 250-300	42x48x8	175	M10	232	—	—	92	—	02511030	02591016	—	FA



IEC	øA	øB	C	øD	E	F	G	H	1	2	3	4
63 B5	ø11	95	M8	115	—	—	20	—	02511000	02591001	—	TL
71 B5	ø14	110	M8	130	—	—	16	—	40000690	40000658	—	CC
80 B5	ø19	130	M10	165	—	—	16	—	40000683	40000659	—	BV
90 B5	ø24	130	M10	165	—	—	16	—	40000683	40000660	—	BZ
100 B5 ø24	ø24	180	M12	215	—	—	16	—	02511018	40000660	—	UÀ
100/112 B5	ø28	180	M12	215	—	—	24.5	—	02511018	40000661	—	AH
112 B5	ø38	180	M12	215	—	—	24	38	02511018	02241029	02731111	UU
132 B5	ø38	230	M12	265	—	—	49	—	02511016	—	—	AG
132 B14	ø38	130	ø 11	165	—	—	69	—	02511076	—	—	UF
200 B5	ø55	300	M18	350	—	—	130	—	02511067	02241066	—	TX

NEMA	øA	øB	C	øD	E	F	G	H	1	2	3	4
56 H	ø15.88 (0.625)	114.3 (4.500)	Ø10 (0.394)	149.2 (5.874)	—	—	53 (2.087)	—	02511122	02591085	—	VX
143-145 TC	ø22.22 (0.875)	114.3 (4.500)	Ø10 (0.394)	149.2 (5.874)	—	—	53 (2.087)	—	02511122	02591084	—	VZ
182-184 TC	ø28.57 (1.125)	215.9 (8.500)	Ø14 (0.551)	206 (8.110)	—	—	38 (1.496)	—	02511073	02591045	—	UC
213-215 TC	ø34.925 (1.375)	215.9 (8.500)	Ø14 (0.551)	184.5 (7.264)	—	—	55.5 (2.185)	—	02511037	02241048	—	VT
254-256 TC	ø41.275 (1.625)	215.9 (8.500)	Ø14 (0.551)	150 (5.906)	—	—	70 (2.756)	—	02511141	02241131	—	VJ
284-286 TC	ø47.625 (1.875)	266.7 (10.500)	Ø14 (0.551)	228.6 (9.000)	—	—	86 (3.386)	—	02511142	02241132	—	CR

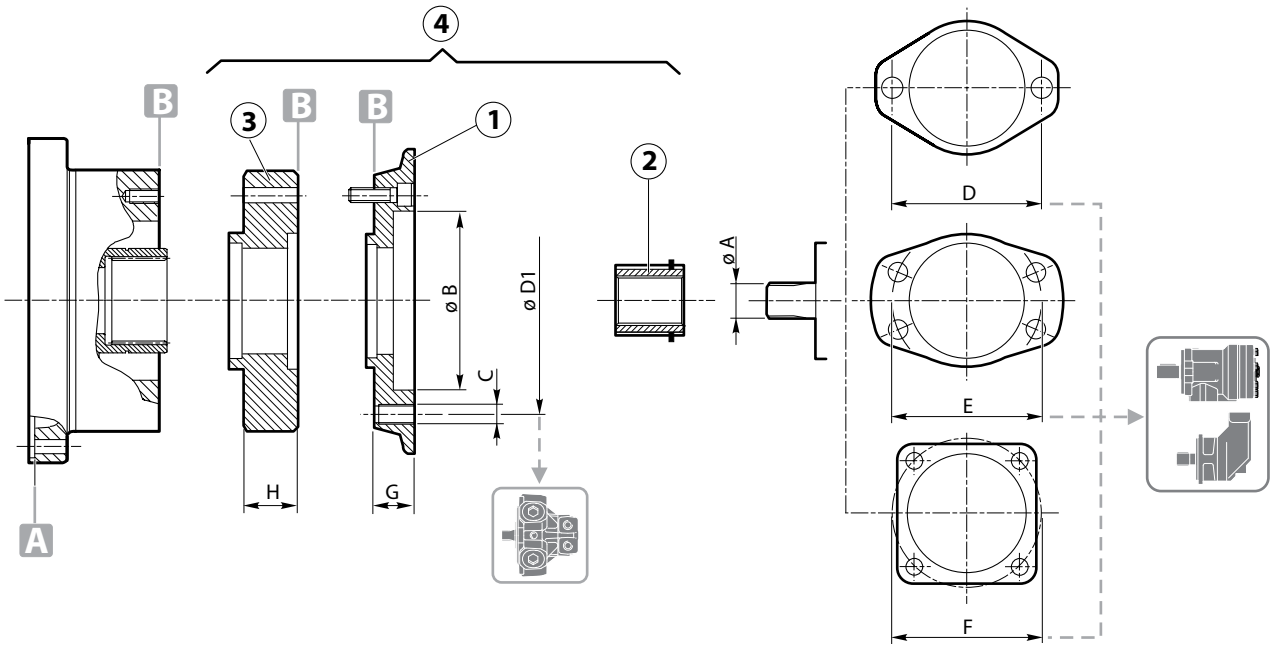
mm (inch)



VARVEL	øA	øB	øC	øD	E	F	G	H	1	2	3	4
FRS 50 FL	Ø24	110	M10	130	—	—	16	—	02511022	40000660	—	VR
FRS 60 FL	Ø25	115	M10	150	—	—	16	—	02511095	40000649	—	UZ
FRS 70 FL	Ø28	130	M12	165	—	—	13.5	—	40000644	40000650	—	TI
FRS 85 FL	Ø32	130	M12	165	—	—	13.5	—	40000644	40000655	—	TG
FRS 130 PC	Ø48	180	Ø13	215	—		20	—	40001804	40000652	—	VI

STM	øA	øB	øC	øD	E	F	G	H	1	2	3	4
RMI 50 FL	Ø24	110	M10	130	—	—	16	—	02511022	40000660	—	VR
RMI 60 FL	Ø25	115	M10	150	—	—	16	—	02511095	40000649	—	UZ
RMI 70 FL	Ø28	130	M12	165	—	—	13.5	—	40000644	40000650	—	TI
RMI 85 FL	Ø32	130	M12	165	—	—	13.5	—	40000644	40000655	—	TG
RMI 110 F1	Ø42	130	M10	165	—	—	17	—	40001810	40001809	—	VH
RMI 130 P	Ø48	180	Ø13	215	—	—	20	—	40001804	40000652	—	VI
RMI 150 P	Ø55	180	Ø13	215	—	—	20	—	40001804	40001808	—	EN

MOTOVARIO	øA	øB	øC	øD	E	F	G	H	1	2	3	4
NMRV 110	Ø42	180	M12	215	—	—	24.5	—	02511018	40001890	—	FE
NMRV 90	Ø35	130	M10	165	—	—	17	4	40001810	02591038	—	UQ



CALZONI	A	øB	øC	øD1	E	F	G	H	1	2	3	4
MR700	8x52x60	220	M12	290	—	—	55.5	—	02511229	02591156	—	4J

DANFOSS	A	øB	øC	øD	E	F	G	H	1	2	3	4
OMV	16/32-16	160	M16	—	—	200	73	—	025110102	025910102	—	5U
OMT 160-500	12/24-17	125	M12	—	—	160	66.5	—	025110117	02591123	—	3I
OMT 160-500	Ø40	125	M12	—	—	160	66.5	—	025110117	025910109	—	7W

EATON	A	øB	øC	øD	E	F	G	H	1	2	3	4
SERIE 6000	12/24-17	127	M14	—	—	162	29	—	02511192	02591123	—	3Q
SERIE 6000	12/24-14	127	M12	—	—	162	37	—	02511192	02591163	—	2G

INTERMOT	A	øB	øC	øD1	E	F	G	H	1	2	3	4
IAM H3 400-700	36x42x8	230	M14	254	—	—	43	—	02511197	02591128	—	8I
IAM300	8x32x38	190	M12	210	—	—	38.5	—	02511248	02591166	—	4N

LINDE	A	øB	øC	øD	E	F	G	H	1	2	3	4
HMF 135	16/32-27	152.4	M20	228.5	—	—	35	—	02511164	02631166	—	3Z
HMR 135	16/32-27	152.4	M20	228.5	—	—	35	—	02511164	02631166	—	3Z
HMF 105	16/32-23	127	M16	181	—	—	34	—	02511192	02631203	—	3H

M+S	A	øB	øC	øD	E	F	G	H	1	2	3	4
EPMT 160-500	12/24-17	125	M12	—	—	160	66.5	—	025110117	02591123	—	3I
EPMT 160-500	Ø40	125	M12	—	—	160	66.5	—	025110117	025910109	—	7W

REXROTH	A	øB	øC	øD	E	F	G	H	1	2	3	4
A2FM 107	W40x2	160	M16	—	—	200	51.5	—	02511230	02631193	—	3U
A2FM 160	W50x2	180	M16	—	—	224	62	—	02511163	02631150	—	3T
A2FM 200	W50x2	200	M20	—	—	250	73	—	02511165	02631150	—	4B
A6VM 107	W45x2	160	M16	—	—	200	53	—	02511167	02631160	—	9N
A6VM 160	W45x2	180	M16	—	—	224	62	—	02511163	02631151	—	9Q
A6VM 160	W50x2	180	M16	—	—	224	62	—	02511163	02631150	—	3T
A6VM 250	W50x2	200	M 20	—	—	250	73	—	02511165	02631150	—	4B
A6VM 355	W60x2	280	M16	—	—	320	84.5	—	02511261	02631210	—	5L
AA6VM 107, 160	8/16-13	152.4	M20	—	—	228.5	40	—	02511164	02631152	—	8X
AA2FM 107, 125	8/16-13	152.4	M20	—	—	228.5	40	—	02511164	02631152	—	8X
AA2FM 160, 180	8/16-13	152.4	M20	—	—	228.5	40	—	02511164	02631152	—	8X

SAI	A	øB	øC	øD	E	F	G	H	1	2	3	4
GM1	28x34x6	175	M12	210	—	—	29	—	02511263	02591176	—	6B
GM2	36x40	150	M12	250	—	—	38	—	02511209	02591141	—	9A
GM2	W40x3	150	M12	250	—	—	38	—	02511209	02591170	—	8B
GM3	W40x3	265	M18	310	—	—	43.5	—	02511151	02591044	—	4S

SAMHYDRAULIK	A	øB	øC	øD	E	F	G	H	1	2	3	4
H1C 160 M	W45x2	180	M16	—	—	224	62	—	02511039	02631151	—	9Q
H1C 226 M	W50x2	200	M20	—	—	250	73	—	02511165	02631150	—	4B
H2V 160 M	W45x2	1801	M16	—	—	224	62	—	02511163	02631151	—	9Q

SAUER	A	øB	øC	øD	E	F	G	H	1	2	3	4
51V250	16/32-27	165.1	M20	—	—	317.5	38	—	02511201	02631166	—	5J
90M 130	8/16-13	152.4	M 20	—	—	228.5	40	—	02511164	02631152	—	8X

VOAC	A	øB	øC	øD	E	F	G	H	1	2	3	4
F11-50 CETOP	W45x2	200	M20	250	—	—	73	—	02511165	02631151	—	5P
F11-150 SAE	8/16-13	152.4	M20	—	—	228.5	40	—	02511164	02631152	—	8X
F12-110 SAE	8/16-13	152.4	M20	—	—	228.5	40	—	02511164	02631152	—	8X
V14-160 ISO	W45x2	180	M16	—	—	224	62	—	02511163	02631151	—	9Q
F12-110 ISO	W45x2	160	M116	—	—	200	53	—	02511167	02631160	—	9N

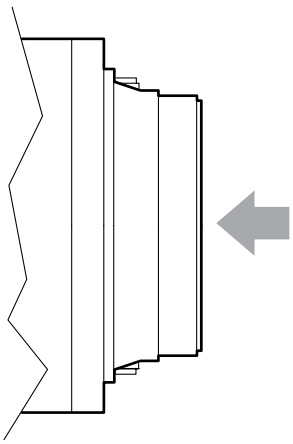
Direct motor adapters available for:

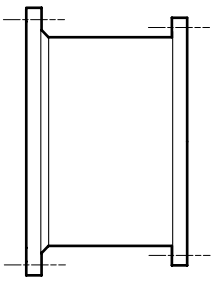
KAWASAKY	Shaft
KAWASAKI HMC 80	6/12-14
KAWASAKI HMC/HMB/HPC 125	6/12-20
KAWASAKI HMB 200	6/12 -14
KAWASAKI HMB 200	W85x3

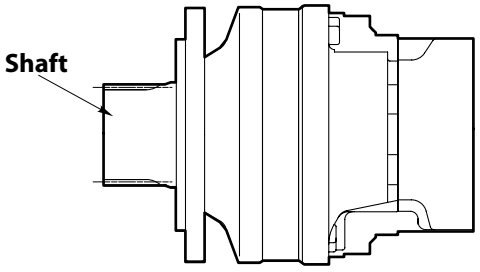
SAI	Shaft
GM3	W40x3
GM3	8x46x54
GM4/5	8x56x65
GM4/5	W65x3
GM6	N80x3

POCLAIN	Shaft
MS08/MSE08	W70x3
MS18/MSE18	W90x3
MS18/MSE18	NF E-22 141 (m2.5 z34)
MS50	NF E-22 141 (m3.75 z33)
MS02/MSE02	W50x2

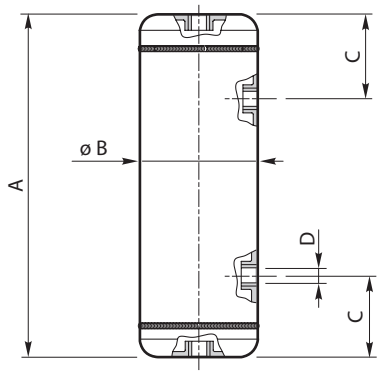
POCLAIN HYDROBASE	Shaft
MS18/MSE18	NF E-22 141 (m2.5 z34)
MS35	NF E-22 141 (m2.5 z34)
MS50	NF E-22 141 (m2.5 z38)





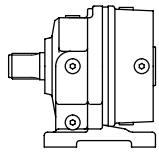
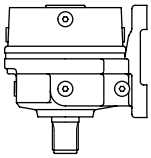
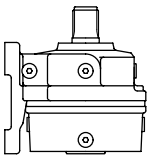
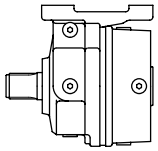
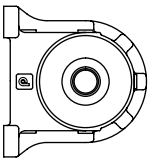
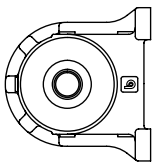
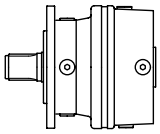
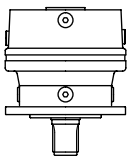
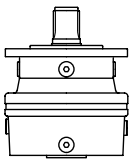


VE

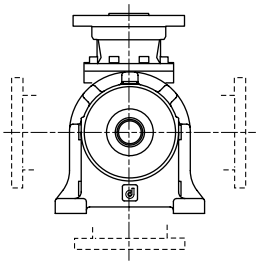


A	ø B	C	D	Capacity [Liters]	CODE
230	80	55	1/4" GAS (4)	1.0	40000712
330	130	85	1/4" GAS (4)	3.8	40000711
330	160	85	1/4" GAS (4)	5.5	40000710
510	150	85	1/4" GAS (4)	7.7	40000704
690	150	85	1/4" GAS (4)	10.7	40000706

On demand for different size

			
B3	**V5**	**V6**	**B8**
			
B6	**B7**	**B5**	**V1**
			
V3			

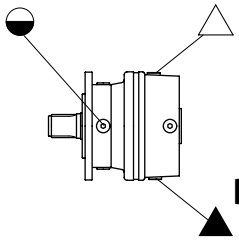
pos. 0 = STANDARD

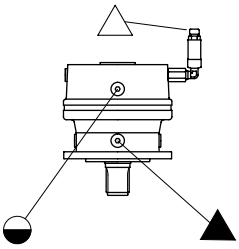


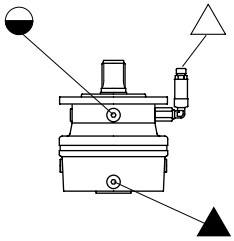
pos. 1= 90° **pos. 3= 270°**

pos. 2 = 180°

N

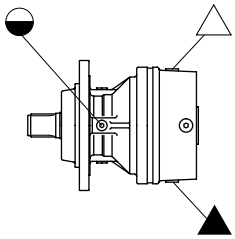

B5

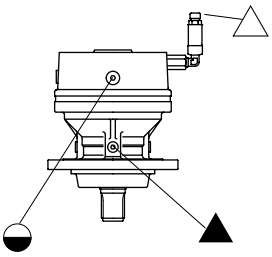

V1

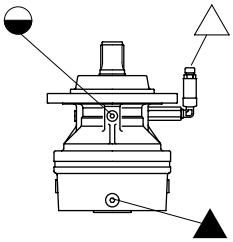

V3

110÷1520

T - TL - TR

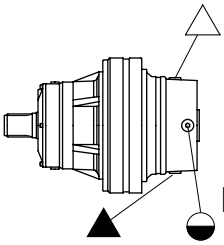

B5

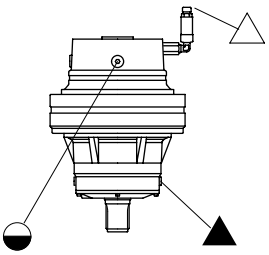

V1

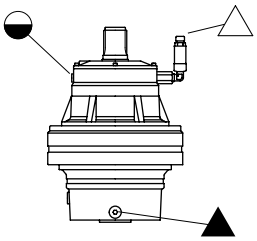

V3

110÷810

H

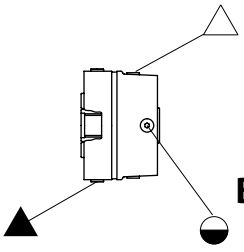

B5

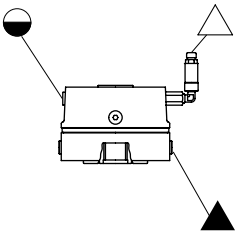

V1

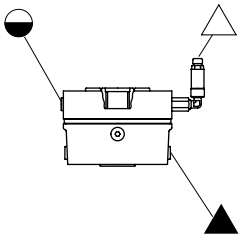

V3

1520÷130000

F

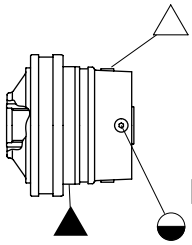

B5

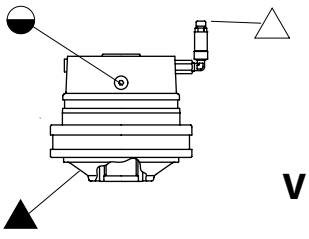

V1

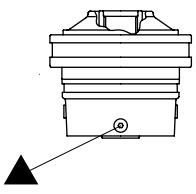

V3

110÷810

F

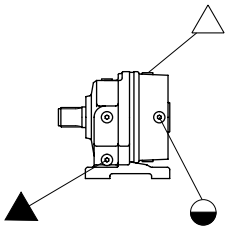

B5


V1

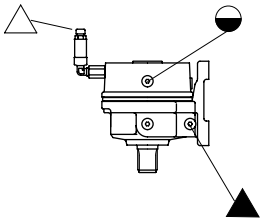

V3

1020÷1520

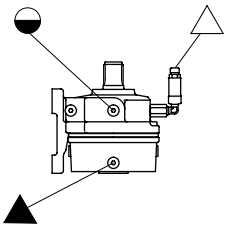
P



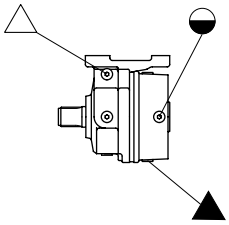
B3



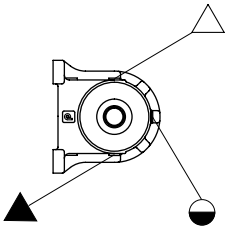
V5



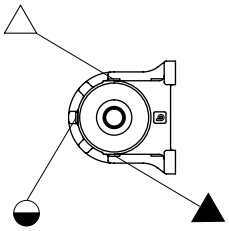
V6



B8



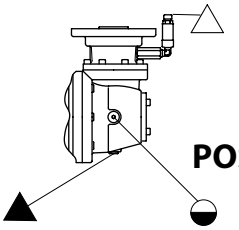
B6



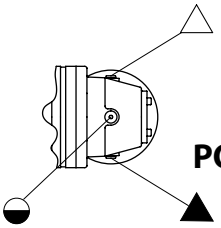
B7

110÷810

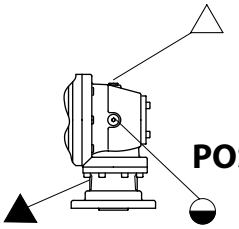
RAS



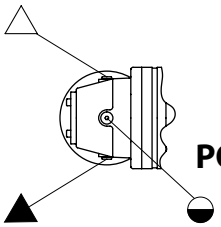
POS. 0



POS. 1



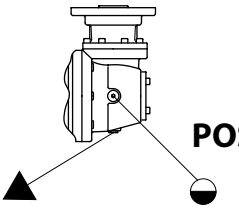
POS. 2



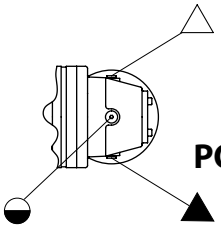
POS. 3

110÷510

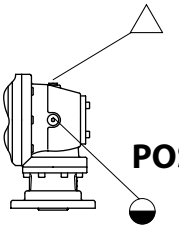
RAD



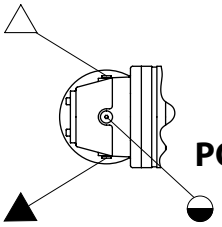
POS. 0



POS. 1



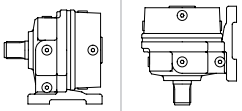
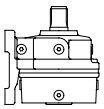
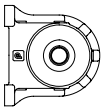
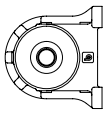
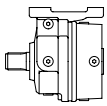
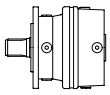
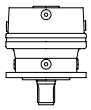
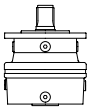
POS. 2

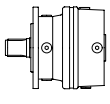
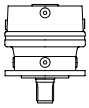
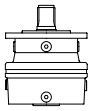


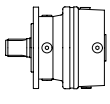
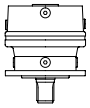
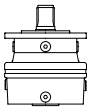
POS. 3

110÷510

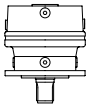
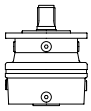
dinamic oil

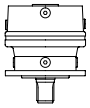
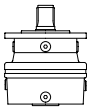
[Liters]	B3	V5	V6	B6	B7	B8	B5	V1	V3
									
RE 111	0.7	1.4	1.4	0.7	1.4	1.4	0.4	0.8	0.8
RE 112	0.9	1.8	1.8	0.9	1.8	1.8	0.5	1	1
RE 113	1.1	2.2	2.2	1.1	2.2	2.2	0.7	1.4	1.4
RE 114	1.3	2.6	2.6	1.3	2.6	2.6	0.8	1.6	1.6
RE 211	0.8	1.6	1.6	0.8	1.6	1.6	0.5	1	1
RE 212	1	2	2	1	2	2	0.6	1.2	1.2
RE 213	1.2	2.4	2.4	1.2	2.4	2.4	0.7	1.4	1.4
RE 214	1.4	2.8	2.8	1.4	2.8	2.8	0.9	1.8	1.8
RE 241	0.8	1.6	1.6	0.8	1.6	1.6	0.5	1	1
RE 242	1	2	2	1	2	2	0.6	1.2	1.2
RE 243	1.2	2.4	2.4	1.2	2.4	2.4	0.7	1.4	1.4
RE 244	1.4	2.8	2.8	1.4	2.8	2.8	0.9	1.8	1.8
RE 311	1.4	2.8	2.8	1.4	2.8	2.8	1	2	2
RE 312	1.6	3.2	3.2	1.6	3.2	3.2	1.2	2.4	2.4
RE 313	1.7	3.4	3.4	1.7	3.4	3.4	1.3	2.6	2.6
RE 314	1.8	3.6	3.6	1.8	3.6	3.6	1.4	2.8	2.8
RE 511	1.5	3	3	1.5	3	3	1.1	2.2	2.2
RE 512	1.7	3.4	3.4	1.7	3.4	3.4	1.3	2.6	2.6
RE 513	1.8	3.6	3.6	1.8	3.6	3.6	1.5	3	3
RE 514	1.9	3.8	3.8	1.9	3.8	3.8	1.6	3.2	3.2
RE 611	1.6	3.2	3.2	1.6	3.2	3.2	1.2	2.4	2.4
RE 612	1.8	3.6	3.6	1.8	3.6	3.6	1.4	2.8	2.8
RE 613	1.9	3.8	3.8	1.9	3.8	3.8	1.6	3.2	3.2
RE 614	20	40	40	20	40	40	1.7	3.4	3.4
RE 811	1.8	3.6	3.6	1.8	3.6	3.6	1.5	3	3
RE 812	2	4	4	2	4	4	1.7	3.4	3.4
RE 813	2.2	4.4	4.4	2.2	4.4	4.4	1.9	3.8	3.8
RE 814	2.3	4.6	4.6	2.3	4.6	4.6	2	4	4
RE 1021	2.4	4.8	4.8	2.4	4.8	4.8	2.1	4.2	4.2
RE 1022	2.6	5.2	5.2	2.6	5.2	5.2	2.3	4.6	4.6
RE 1023	2.7	5.4	5.4	2.7	5.4	5.4	2.4	4.8	4.8
RE 1024	2.9	5.8	5.8	2.9	5.8	5.8	2.6	5.2	5.2

[Liters]	B5	V1	V3
			
RE 1521	2.7	5.4	5.4
RE 1522	3	6	6
RE 1523	3.2	6.4	6.4
RE 1524	3.4	6.8	6.8
RE 2001	2.7	5.4	5.4
RE 2002	3	6	6
RE 2003	3.3	6.6	6.6
RE 2004	3.4	6.8	6.8
RE 2002L	3	6	6
RE 2003L	3.1	6.2	6.2
RE 2004L	3.2	6.4	6.4
RE 2521	3.9	7.7	7.7
RE 2522	4.5	9	9
RE 2523	4.7	9.4	9.4
RE 2524	5	9.9	9.9
RE 3001	3.8	7.6	7.6
RE 3002	4.6	9.1	9.1
RE 3003	4.8	9.5	9.5
RE 3004	5	10	10
RE 3511	4.9	9.8	9.8
RE 3512	5.7	11.4	11.4
RE 3513	6	12	12
RE 3514	6.2	12.4	12.4
RE 4801	4.7	9.4	9.4
RE 4802	6.8	13.6	13.6
RE 4803	7.2	14.4	14.4
RE 4804	7.4	14.8	14.8
RE 6001	7.5	15	15
RE 6002	8.5	17	17
RE 6003	9	18	18
RE 6004	9.3	18.6	18.6
RE 6002L	8.5	17	17
RE 6003L	9	18	18

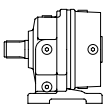
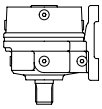
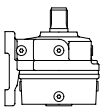
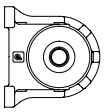
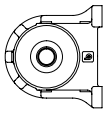
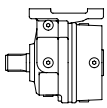
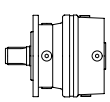
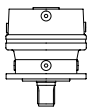
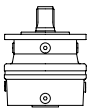
[Liters]	B5	V1	V3
			
RE 6004L	9.2	18.4	18.4
RE 8001	8.3	16.6	16.6
RE 8002	10.2	20.4	20.4
RE 8003	11	22	22
RE 8004	11.5	23	23
RE 8005	11.7	23.4	23.4
RE 8002L	10.2	20.4	20.4
RE 8003L	10.8	21.6	21.6
RE 8004L	11.4	22.8	22.8
RE 8005L	11.6	23.2	23.2
GB 12011	13.5	27	27
GB 12012	15.5	31	31
GB 12013	16.5	33	33
GB 12014	16.8	33.6	33.6
GB 12015	17	34	34
GB 12012L	15.5	31	31
GB 12013L	16.3	32.6	32.6
GB 12014L	16.7	33.4	33.4
GB 12015L	17	34	34
GB 16001	14.5	29	29
GB 16002	18	36	36
GB 16003	19.2	38.4	38.4
GB 16004	19.6	39.2	39.2
GB 16005	19.8	39.6	39.6
GB 16002L	17	34	34
GB 16003L	18	36	36
GB 16004L	18.5	37	37
GB 16005L	18.7	37.4	37.4
GB 21001	20	40	40
GB 21002	23.5	47	47
GB 21003	24.5	49	49
GB 21004	25	50	50
GB 21005	25.5	51	51

dinamic oil

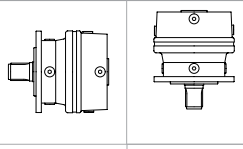
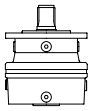
[Liters]	B5	V1	V3
			
GB 26001	20	40	40
GB 26002	25.5	51	51
GB 26003	27.5	55	55
GB 26004	28.5	57	57
GB 26005	29	58	58
GB 31001	38	76	76
GB 31002	46.5	93	93
GB 31003	48.5	97	97
GB 31004	49.5	99	99
GB 31005	50	100	100
GB 40001	41	82	82
GB 40002	49	98	98
GB 40003	51	102	102
GB 40004	52	104	104
GB 40005	52	104	104
GB 45001	41	82	82
GB 45002	50	100	100
GB 45003	53.5	107	107
GB 45004	55	110	110
GB 45005	55.5	111	111
GB 53001	70	140	140
GB 53002	80	160	160
GB 53003	85	170	170
GB 53004	86.5	173	173
GB 53005	87	174	174
GB 61001	70	140	140
GB 61002	80	160	160
GB 61003	85	170	170
GB 61004	86.5	173	173
GB 61005	87	174	174
GB 85001	75	150	150
GB 85002	87.5	175	175
GB 85003	93	186	186

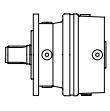
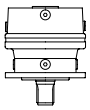
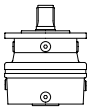
[Liters]	B5	V1	V3
			
GB 85004	95	190	190
GB 85005	95.5	191	191
GB 110001	145	290	290
GB 110002	170	340	340
GB 110003	180	360	360
GB 110004	183	366	366
GB 110005	185	370	370
GB 130001	144	288	288
GB 130002	172	344	344
GB 130003	181	362	362
GB 130004	185	370	370
GB 130005	186	372	372
GB 150001	143	286	286
GB 150002	172	344	344
GB 150003	185	370	370
GB 150004	187	374	374
GB 150005	188	376	376
GB 205001	255	510	510
GB 205002	300	600	600
GB 205003	318	636	636
GB 205004	326	652	652
GB 205005	329	658	658
GB 235001	255	510	510
GB 235002	300	600	600
GB 235003	335	670	670
GB 235004	345	690	690
GB 235005	247	494	494

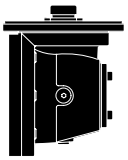
[Liters]

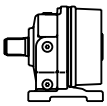
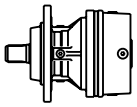
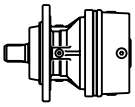
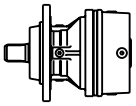
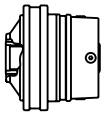
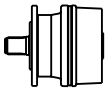
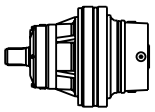
	B3-1	V5	V6	B6-1	B7	B8	B5-1	V1	V3
									
RA 112	1.5	3	3	1.5	3	3	1.2	2.4	2.4
RA 113	1.7	3.4	3.4	1.7	3.4	3.4	1.3	2.6	2.6
RA 114	1.9	3.8	3.8	1.9	3.8	3.8	1.5	3	3
RA 212	1.6	3.2	3.2	1.6	3.2	3.2	1.3	2.6	2.6
RA 213	1.8	3.6	3.6	1.8	3.6	3.6	1.4	2.8	2.8
RA 214	2	4	4	2	4	4	1.5	3	3
RA 242	1.6	3.2	3.2	1.6	3.2	3.2	1.3	2.6	2.6
RA 243	1.8	3.6	3.6	1.8	3.6	3.6	1.4	2.8	2.8
RA 244	2	4	4	2	4	4	1.5	3	3
RA 312	2.5	5	5	2.5	5	5	2.1	4.2	4.2
RA 313	2.4	4.8	4.8	2.4	4.8	4.8	2	4	4
RA 314	2.5	5	5	2.5	5	5	2.1	4.2	4.2
RA 512	2.6	5.2	5.2	2.6	5.2	5.2	2.2	4.4	4.4
RA 513	2.5	5	5	2.5	5	5	2.1	4.2	4.2
RA 514	2.6	5.2	5.2	2.6	5.2	5.2	2.3	4.6	4.6
RA 612	2.7	5.4	5.4	2.7	5.4	5.4	2.3	4.6	4.6
RA 613	2.9	5.8	5.8	2.9	5.8	5.8	2.5	5	5
RA 614	2.7	5.4	5.4	2.7	5.4	5.4	2.4	4.8	4.8
RA 812	3.8	7.6	7.6	3.8	7.6	7.6	3.5	7	7
RA 813	3.1	6.2	6.2	3.1	6.2	6.2	2.8	5.6	5.6
RA 814	3	6	6	3	6	6	2.7	5.4	5.4
RA 1022	4.4	8.8	8.8	4.4	8.8	8.8	4.1	8.2	8.2
RA 1023	3.7	7.4	7.4	3.7	7.4	7.4	3.4	6.8	6.8
RA 1024	3.5	7	7	3.5	7	7	3.2	6.4	6.4

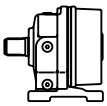
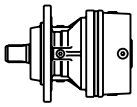
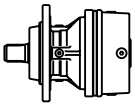
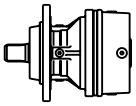
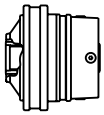
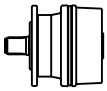
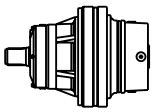
dinamic oil

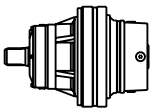
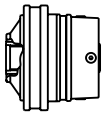
[Liters]	B5-1	V1	V3
			
RA 1522	5.7	11.4	11.4
RA 1523	4.1	8.2	8.2
RA 1524	4	8	8
RA 2002	5.7	11.4	11.4
RA 2003	4.1	8.2	8.2
RA 2004	4.1	8.2	8.2
RA 2003L	4.1	8.2	8.2
RA 2004L	3.9	7.8	7.8
RA 2522	10.7	21.4	21.4
RA 2523	11	22	22
RA 2524	10.5	21	21
RA 3002	10.6	21.2	21.2
RA 3003	11.1	22.2	22.2
RA 3004	10.6	21.2	21.2
RA 3512	14.9	29.8	29.8
RA 3513	7.7	15.4	15.4
RA 3514	7.1	14.2	14.2
RA 4802	14.7	29.4	29.4
RA 4803	9.8	19.6	19.6
RA 4804	8.3	16.6	16.6
RA 6002	17.5	35	35
RA 6003	11.5	23	23
RA 6004	10.1	20.2	20.2
RA 6003L	11.5	23	23
RA 6004L	10.1	20.2	20.2
RA 8002	18.3	36.6	36.6
RA 8003	13.2	26.4	26.4
RA 8004	13	26	26
RA 8003L	13.2	26.4	26.4
RA 8004L	12.8	25.6	25.6
GBA 12013	18.5	37	37
GBA 12014	18.5	37	37
GBA 12015	17.9	35.8	35.8
GBA 12013L	18.5	37	37
GBA 12014L	18.3	36.6	36.6
GBA 12015L	18	36	36
GBA 16003	28	56	56
GBA 16004	22.2	44.4	44.4
GBA 16005	20.7	41.4	41.4

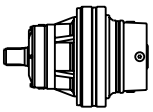
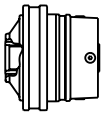
[Liters]	B5-1	V1	V3
			
GBA 16003L	27	54	54
GBA 16004L	21	42	42
GBA 16005L	19.6	39.2	39.2
GBA 21003	33.5	67	67
GBA 21004	27.5	55	55
GBA 21005	26.1	52.2	52.2
GBA 26003	35.5	71	71
GBA 26004	30.5	61	61
GBA 26005	30.5	61	61
GBA 31004	51.5	103	103
GBA 31005	51.5	103	103
GBA 40004	54	108	108
GBA 40005	54	108	108
GBA 45004	63.5	127	127
GBA 45005	58.5	117	117
GBA 53004	96.5	193	193
GBA 53005	90	180	180
GBA 61004	95	190	190
GBA 61005	89.5	179	179
GBA 61006	88	176	176
GBA 85004	103	206	206
GBA 85005	98	196	196
GBA 85006	97	194	194
GBA 110005	186	372	372
GBA 110006	187	374	374
GBA 130005	380	760	388
GBA 130006	189	378	378

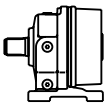
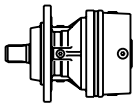
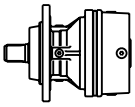
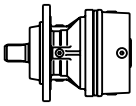
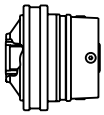
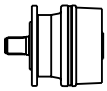
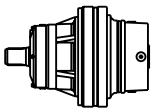
CC		
[Liters]		
CC30	1.6	**Complete filling**
CC120	2.2	
CC350	4	
CC600	6	
CC1000	16	

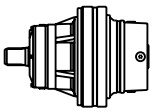
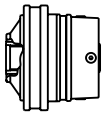
kg	P	T	TL	TR	F	N	H
							
RE 111	23	20	—	20	14	17	—
RE 112	29.5	26.5	—	26.5	21	24	—
RE 113	36.5	33.5	—	33.5	27.5	30.5	—
RE 114	43	40	—	40	34	37	—
RE 211	25	22	—	22	16	19	—
RE 212	32	29	—	29	23	26	—
RE 213	38	35	—	35	30	32	—
RE 214	45	42	—	42	37	39	—
RE 241	25	—	—	22	—	—	—
RE 242	32	—	—	29	—	—	—
RE 243	38	—	—	35	—	—	—
RE 244	45	—	—	42	—	—	—
RE 311	52	47	47	—	24	35	—
RE 312	59	54	54	—	31	42	—
RE 313	66	61	61	—	38	49	—
RE 314	72	67	66	—	45	56	—
RE 511	57	52	52	—	29	40	—
RE 512	66	61	61	—	38	49	—
RE 513	73	68	68	—	45	56	—
RE 514	80	75	75	—	52	63	—
RE 611	58	53	53	—	30	41	—
RE 612	72	67	67	—	44	55	—
RE 613	79	74	74	—	51	62	—
RE 614	86	81	81	—	58	69	—
RE 811	80	70	—	—	—	67	—
RE 812	94	84	—	—	—	80	—
RE 813	100	90	—	—	—	87	—
RE 814	107	97	—	—	—	94	—
RE 1021	100	90	—	—	60	—	—
RE 1022	117	107	—	—	77	—	—

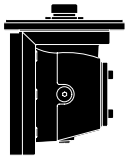
kg	P	T	TL	TR	F	N	H
							
RE 1023	126	116	—	—	86	—	—
RE 1024	133	123	—	—	93	—	—
RE 1521	—	123	—	—	84	—	130
RE 1522	—	141	—	—	102	—	148
RE 1523	—	149	—	—	110	—	156
RE 1524	—	156	—	—	117	—	163
RE 2001	—	124	—	—	85	—	131
RE 2002	—	142	—	—	104	—	150
RE 2003	—	156	—	—	118	—	163
RE 2004	—	163	—	—	125	—	170
RE 2002L	—	137	—	—	99	—	145
RE 2003L	—	149	—	—	111	—	156
RE 2004L	—	153	—	—	115	—	160
RE 2521	—	—	—	—	151	—	185
RE 2522	—	—	—	—	180	—	214
RE 2523	—	—	—	—	194	—	228
RE 2524	—	—	—	—	201	—	235
RE 3001	—	—	—	—	152	—	186
RE 3002	—	—	—	—	199	—	233
RE 3003	—	—	—	—	207	—	241
RE 3004	—	—	—	—	216	—	250
RE 3511	—	—	—	—	225	—	239
RE 3512	—	—	—	—	260	—	274
RE 3513	—	—	—	—	278	—	292
RE 3514	—	—	—	—	287	—	301
RE 4801	—	—	—	—	226	—	240
RE 4802	—	—	—	—	311	—	325
RE 4803	—	—	—	—	330	—	344
RE 4804	—	—	—	—	339	—	353

kg	H 	F 
RE 6002L	365	340
RE 6003L	375	350
RE 6004L	382	357
RE 6001	315	290
RE 6002	370	345
RE 6003	390	365
RE 6004	395	370
RE 8001	410	380
RE 8002	500	470
RE 8003	540	510
RE 8004	555	525
RE 8005	560	530
RE 8002L	485	455
RE 8003L	520	490
RE 8004L	530	500
RE 8005L	535	505
GB 12011	650	615
GB 12012	750	715
GB 12013	785	750
GB 12014	800	765
GB 12015	810	775
GB 12012L	700	665
GB 12013L	745	710
GB 12014L	750	715
GB 12015L	757	722
GB 16001	690	655
GB 16002	860	825
GB 16003	915	880
GB 16004	935	900
GB 16005	940	905
GB 16002L	860	825
GB 16003L	865	830
GB 16004L	885	850
GB 16005L	890	855
GB 21001	930	880
GB 21002	1115	1065
GB 21003	1165	1115
GB 21004	1190	1140
GB 21005	1205	1155
GB 26001	980	920
GB 26002	1230	1170
GB 26003	1330	1270
GB 26004	1360	1300
GB 26005	1380	1320
GB 31001	1900	1750
GB 31002	2280	2130
GB 31003	2375	2225
GB 31004	2410	2260
GB 31005	2425	2275
GB 40001	2030	1880

kg	H 	F 
GB 40002	2400	2250
GB 40003	2500	2350
GB 40004	2530	2380
GB 40005	2540	2390
GB 45001	2030	1880
GB 45002	2435	2285
GB 45003	2610	2460
GB 45004	2665	2515
GB 45005	2682	2532
GB 53001	3550	3200
GB 53002	4060	3710
GB 53003	4250	3900
GB 53004	4350	4000
GB 53005	4370	4020
GB 61001	3550	3200
GB 61002	4060	3710
GB 61003	4250	3900
GB 61004	4350	4000
GB 61005	4370	4020
GB 85001	3850	3450
GB 85002	4410	4010
GB 85003	4650	4250
GB 85004	4750	4350
GB 85005	4785	4385
GB 110001	7520	6620
GB 110002	8780	7880
GB 110003	9155	8255
GB 110004	9250	8350
GB 110005	9285	8385
GB 130001	7535	6635
GB 130002	8800	7900
GB 130003	9210	8310
GB 130004	9380	8480
GB 130005	9430	8530
GB 150001	7550	6650
GB 150002	8795	7895
GB 150003	9280	8380
GB 150004	9460	8560
GB 150005	9500	8600
GB 205001	12240	11790
GB 205002	14330	13880
GB 205003	15040	14590
GB 205004	15410	14960
GB 205005	15500	15050
GB 235001	12250	11800
GB 235002	14580	14130
GB 235003	15830	15380
GB 235004	16200	15750
GB 235005	16300	15850

kg	P	T	TL	TR	F	N	H
							
RA 112	43	40	—	40	34	37	—
RA 113	49.5	46.5	—	46.5	41	44	—
RA 114	56.5	53.5	—	53.5	47.5	50.5	—
RA 212	45	42	—	42	36	39	—
RA 213	52	49	—	49	43	46	—
RA 214	58	55	—	55	50	52	—
RA 242	45	—	—	42	—	—	—
RA 243	52	—	—	49	—	—	—
RA 244	58	—	—	55	—	—	—
RA 312	102	97	97	—	74	85	—
RA 313		74	74	—	51	62	—
RA 314	86	81	81	—	58	69	—
RA 512	107	102	102	—	79	90	—
RA 513	86	81	81	—	58	69	—
RA 514	93	88	88	—	65	76	—
RA 612	108	103	103	—	80	91	—
RA 613	122	117	117	—	94	105	—
RA 614	99	94	94	—	71	82	—
RA 812	170	160	—	—	—	157	—
RA 813	144	134	—	—	—	130	—
RA 814	120	110	—	—	—	107	—
RA 1022	190	180	—	—	150	—	—
RA 1023	167	157	—	—	127	—	—
RA 1024	146	136	—	—	106	—	—
RA 1522	—	258	—	—	219	—	265
RA 1523	—	191	—	—	152	—	198
RA 1524	—	169	—	—	130	—	176
RA 2002	—	259	—	—	220	—	266
RA 2003	—	192	—	—	154	—	200
RA 2004	—	176	—	—	138	—	183
RA 2003L	—	187	—	—	149	—	195
RA 2004L	—	169	—	—	131	—	176
RA 2522	—	—	—	—	286	—	320
RA 2523	—	—	—	—	270	—	304
RA 2524	—	—	—	—	214	—	248
RA 3002	—	—	—	—	287	—	321
RA 3003	—	—	—	—	289	—	323
RA 3004	—	—	—	—	257	—	291
RA 3512	—	—	—	—	575	—	589
RA 3513	—	—	—	—	350	—	364
RA 3514	—	—	—	—	398	—	412
RA 4802	—	—	—	—	576	—	590
RA 4803	—	—	—	—	446	—	460
RA 4804	—	—	—	—	380	—	394

	H	F
kg		
RA 6002	665	640
RA 6003	505	480
RA 6004	440	415
RA 6003L	500	475
RA 6004L	425	400
RA 8002	760	730
RA 8003	635	605
RA 8004	630	600
RA 8003L	620	590
RA 8004L	610	580
GBA 12013	885	850
GBA 12014	875	840
GBA 12015	850	815
GBA 12013L	835	800
GBA 12014L	835	800
GBA 12015L	800	765
GBA 16003	1210	1175
GBA 16004	1050	1015
GBA 16005	985	950
GBA 16003L	1210	1175
GBA 16004L	1000	965
GBA 16005L	935	900
GBA 21003	1465	1415
GBA 21004	1300	1250
GBA 21005	1240	1190
GBA 26003	1580	1520
GBA 26004	1465	1405
GBA 26005	1450	1390
GBA 31004	2510	2360
GBA 31005	2500	2350
GBA 40004	2635	2485
GBA 40005	2620	2470
GBA 45004	2960	2810
GBA 45005	2800	2650
GBA 53004	4600	4250
GBA 53005	4485	4135
GBA 61004	4600	4250
GBA 61005	4485	4135
GBA 61006	4420	4070
GBA 85004	5000	4600
GBA 85005	4885	4485
GBA 85006	4875	4475
GBA 110005	9385	8485
GBA 110006	9375	8475
GBA 130005	9730	8830
GBA 130006	9365	8665

	CC
kg	
CC30	35
CC120	50
CC350	90
CC600	135
CC1000	350

GB 45000

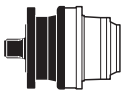
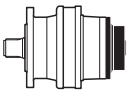
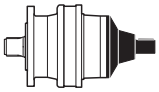
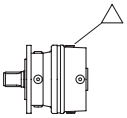
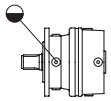
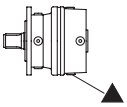
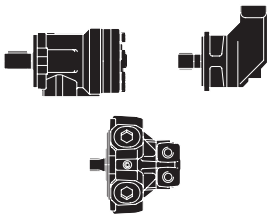
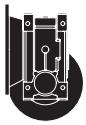
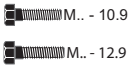
		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GB 45001	**3.83**	196	***4792***	228000	235	***5444***	216000	—	—	—	—	—	—	650000	224 (H-F)
GB 45002	**14.69**	51	***1919***	341000	61	***2180***	323000	99	***3044***	280000	—	—	—	650000	133 (H-F)
	16.87	44.5	***1742***	356000	53	***1979***	337000	86	***2764***	292000	—	—	—	650000	
GB 45003	**56.43**	13.3	***632***	421000	15.9	***718***	399000	25.7	***1003***	345000	—	—	—	650000	98 (H-F)
	64.77	11.6	***594***	454000	13.9	***705***	449000	22.4	***1003***	397000	—	—	—	650000	
	76.07	9.9	***495***	444000	11.8	***562***	421000	19.1	***785***	365000	—	—	—	650000	
	87.31	8.6	***448***	462000	10.3	***532***	457000	16.6	***785***	418000	—	—	—	650000	
GB 45004	**193.46**	3.9	***231***	513000	4.7	***269***	499000	7.5	***380***	437000	—	—	—	650000	76 (H-F)
	222.06	3.4	***205***	520000	4.1	***239***	510000	6.5	***359***	474000	—	—	—	650000	
	260.80	2.9	***176***	520000	3.5	***209***	520000	5.6	***313***	486000	—	—	—	650000	
	299.35	2.5	***159***	520000	3.0	***186***	520000	4.8	***279***	496000	—	—	—	650000	
	311.18	2.4	***149***	520000	2.9	***177***	520000	4.7	***270***	499000	—	—	—	650000	
	357.18	2.1	***137***	520000	2.5	***160***	520000	4.1	***240***	510000	—	—	—	650000	
	399.34	1.9	***118***	520000	2.3	***140***	520000	3.6	***218***	518000	—	—	—	650000	
	458.38	1.6	***111***	520000	2.0	***129***	520000	3.2	***194***	520000	—	—	—	650000	
	544.01	1.4	***96***	520000	1.7	***112***	520000	2.7	***168***	520000	—	—	—	650000	
GB 45005	**696.47**	1.1	***80***	520000	1.3	***93***	520000	2.1	***133***	520000	4.2	***217***	438000	650000	63 (H-F)
	799.42	0.94	***71***	520000	1.1	***83***	520000	1.8	***124***	520000	3.6	***217***	503000	650000	
	981.05	0.76	***60***	520000	0.92	***70***	520000	1.5	***104***	520000	3.0	***188***	520000	650000	
	1126.08	0.67	***53***	520000	0.80	***62***	520000	1.3	***93***	520000	2.6	***167***	520000	650000	
	1259.02	0.60	***48.0***	520000	0.71	***56***	520000	1.2	***84***	520000	2.3	***152***	520000	650000	
	1413.12	0.53	***43.7***	520000	0.64	***51***	520000	1.0	***77***	520000	2.1	***138***	520000	650000	
	1579.95	0.47	***38.8***	520000	0.57	***46.0***	520000	0.92	***70***	520000	1.8	***125***	520000	650000	
	1813.50	0.41	***35.4***	520000	0.50	***41.3***	520000	0.80	***62***	520000	1.6	***112***	520000	650000	
	1987.20	0.38	***27.2***	520000	0.45	***32.3***	520000	0.73	***51***	520000	1.5	***97***	520000	650000	
	2245.11	0.33	***27.0***	520000	0.40	***32.0***	520000	0.65	***50***	520000	1.3	***93***	520000	650000	
	2502.04	0.30	***22.5***	520000	0.36	***26.7***	520000	0.58	***41.9***	520000	1.2	***81***	520000	650000	
	2841.93	0.26	***21.8***	520000	0.32	***25.6***	520000	0.51	***40.2***	520000	1.0	***76***	520000	650000	
	3372.84	0.22	***18.9***	520000	0.27	***22.0***	520000	0.43	***34.2***	520000	0.9	***66***	520000	650000	
	3554.59	0.21	***16.1***	520000	0.25	***18.7***	520000	0.41	***28.6***	520000	0.8	***55***	520000	650000	

GBA 45000

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GBA 45004	**210.50**	3.6	***218***	520000	4.3	***255***	506000	6.9	***382***	471000	13.8	***651***	401000	650000	66 (H-F)
	247.21	3.0	***188***	520000	3.6	***222***	518000	5.9	***333***	482000	11.7	***582***	422000	650000	
	283.76	2.6	***169***	520000	3.2	***198***	520000	5.1	***296***	492000	10.2	***550***	457000	650000	
GBA 45005	**594.21**	1.3	***93***	520000	1.5	***108***	520000	2.4	***162***	520000	4.9	***292***	496000	650000	57 (H-F)
	709.00	1.1	***80***	520000	1.3	***93***	520000	2.0	***140***	520000	4.1	***251***	509000	650000	
	813.81	0.92	***71***	520000	1.1	***83***	520000	1.8	***124***	520000	3.6	***224***	520000	650000	
	902.83	0.83	***58***	520000	1.0	***69***	520000	1.6	***108***	520000	3.2	***205***	520000	650000	
	1036.29	0.72	***58***	520000	0.87	***67***	520000	1.4	***101***	520000	2.8	***182***	520000	650000	
	1097.04	0.68	***54***	520000	0.82	***64***	520000	1.3	***96***	520000	2.6	***174***	520000	650000	
	1236.48	0.61	***49.8***	520000	0.73	***58***	520000	1.2	***87***	520000	2.3	***157***	520000	650000	
	1407.87	0.53	***42.5***	520000	0.64	***50***	520000	1.0	***78***	520000	2.1	***140***	520000	650000	
	1586.82	0.47	***40.3***	520000	0.57	***47.0***	520000	0.91	***70***	520000	1.8	***127***	520000	650000	
	1670.88	0.45	***36.2***	520000	0.54	***43.0***	520000	0.87	***67***	520000	1.7	***121***	520000	650000	
	1883.25	0.40	***29.9***	520000	0.48	***35.5***	520000	0.77	***56***	520000	1.5	***107***	520000	650000	
	2211.75	0.34	***24.4***	520000	0.41	***29.0***	520000	0.66	***45.4***	520000	1.3	***87***	520000	650000	

Simbologia e unità di misura

Simbolo	Unità di misura	Descrizione
$_1$		valore riferito all'ingresso
$_2$		valore riferito all'uscita
bu	mm	altezza fascia dentata
de	mm	diametro esterno
dp	mm	diametro primitivo teorico
fa	N	carico assiale
$\mathbf{f_{amax}}$	N	carico assiale massimo
$\mathbf{f_r}$	N	carico radiale
H	mm	altezza pignone
$\mathbf{i_e}$	-	rapporto di riduzione effettivo
m	mm	modulo
n	RPM	velocità
$\mathbf{n_{max}}$	RPM	velocità massima
nxh	RPMxh	indice di durata
$\mathbf{P_1}$	kW	potenza nominale
pb	bar	pressione apertura freno
pmax	bar	pressione massima freno
$\mathbf{P_t}$	kW	potenza termica
T	Nm	coppia
$\mathbf{T_b}$	Nm	coppia frenante
$\mathbf{T_{max}}$	Nm	coppia massima
X	mm	distanza applicazione carico
x	-	correzione dentatura
z	-	numero di denti

Simbolo	Descrizione
	Supporto in uscita
	Entrata
	Supporto in entrata
...Nm	Coppia di serraggio [Nm]
	Quantità d'olio [litri]
	Peso [kg]
	Carico olio / sfiato
	Livello olio
	Scarico olio
	Motori idraulici
	Motori elettrici
	Riduttore a vite senza fine
 M.. - 10.9 M.. - 12.9	Vite di fissaggio raccomandata

Definizioni tecniche

Tutti i valori prestazionali indicati nel presente catalogo sono calcolati secondo le normative ISO 6336
e ISO 281,ma potrebbero non rispondere a ulteriori requisiti richiesti dai regolamenti interni degli Enti certificatori.
Per selezioni in accordo con tali regolamenti contattare il servizio commerciale Dinamic Oil.

f_S - Fattore di servizio

è il fattore che tiene conto della gravosità dell'applicazione; dipende dalle condizioni di funzionamento, dal tipo di azionamento e dalla frequenza degli avviamenti.
I dati forniti nel presente catalogo sono calcolati per $f_s = 1$.
Il valore del fattore di servizio di un riduttore è calcolabile dividendo la sua potenza nominale per la potenza assorbita.

Fattori di servizio

	CONDIZIONI DI FUNZIONAMENTO								
	Uniforme U			Variabile con urti moderati M			Variabile con urti forti H		
ore / giorno	AVVIAMENTI / ORA								
	< 16	16 - 63	64 - 250	< 16	16 - 63	64- 250	< 16	16 - 63	64 - 250
< 0.5	0.9	1.3	1.5	0.9	1.3	1.5	1.2	1.5	1.8
0.5 - 3	0.9	1.3	1.5	1.2	1.5	1.8	1.7	2.0	2.3
3 - 8	1.2	1.5	1.8	1.4	1.8	2.0	1.9	2.3	2.8
8 - 24	1.4	1.8	2.0	1.7	2.0	2.5	2.4	2.8	3.0

P_1 - Potenza nominale [kW]

è la potenza meccanica trasmissibile dal riduttore, riferita all'ingresso, alla quale con $f_s = 1$ il riduttore ha una durate di vita teorica pari a 10.000 ore secondo la norma ISO 6336. Tale valore non tiene conto di eventuali limiti di capacità termica del riduttore, ma si basa esclusivamente sulla tenuta meccanica in funzione della velocità di utilizzo.

P_a - Potenza assorbita [kW]

rispetto alla potenza installata o disponibile, è il valore di potenza realmente assorbita dall'applicazione, riferita all'ingresso del riduttore.

P_t - Potenza termica [kW]

è la massima potenza meccanica che il riduttore può trasmettere in funzionamento continuo, con lubrificazione a sbattimento, senza oltrepassare il livello termico limite (temperatura dell'olio non superiore a 90°C).
Potenze superiori possono essere trasmesse utilizzando tenute in viton e oli sintetici o appositi dispositivi di raffreddamento.
I valori indicati per le varie grandezze di riduttore si riferiscono ad un funzionamento continuo con velocità in ingresso di 1500 RPM, temperatura ambiente di 20°C, altitudine 0 / 500 m, applicazione al coperto.
Per diverse condizioni di impiego il valore di potenza termica deve essere moltiplicato per i fattori termici indicati nella seguente tabella. Per periodi di funzionamento limitati, seguiti da periodi di riposo sufficientemente lunghi da garantire un opportuno raffreddamento del riduttore, la potenza termica perde il suo significato e può essere trascurata.

Fattori termici

Temperatura ambiente	Tempo di funzionamento [%]				
	100%	80%	60%	40%	20%
10°	1.2	1.3	1.4	1.6	1.8
20°	1.0	1.1	1.3	1.4	1.6
30°	0.8	1.0	1.1	1.3	1.4
40°	0.7	0.8	1.0	1.1	1.3
50°	0.5	0.7	0.8	1.0	1.1

Altitudine [m]	Velocità in ingresso [RPM]				
	400	800	1000	1500	2000
0	1.2	1.1	1.1	1.0	0.7
500	1.2	1.1	1.1	1.0	0.7
1000	1.1	1.0	1.0	0.9	0.6
1500	1.1	1.0	1.0	0.9	0.6
2000	1.1	1.0	1.0	0.9	0.6

P_d - Potenza da dissipare [kW]
rappresenta la potenza che un eventuale sistema di raffreddamento deve dissipare, nel caso in cui la potenza da trasmettere sia superiore alla potenza termica del riduttore.

η_m - Rendimento meccanico
è il rapporto tra potenza meccanica in uscita e potenza meccanica in ingresso; normalmente è considerato pari a 0.97 – 0.98 per ogni stadio di riduzione epicicloidale di cui è composto il riduttore e pari a 0.94 - 0.95 per l'eventuale coppia conica; il valore effettivo dipende da diversi fattori tra quali velocità, coppia, rapporto, posizione di montaggio e lubrificazione.

T_2 - Coppia trasmessa [Nm]
è il valore di coppia applicata in continuo alla velocità n_1, alla quale il riduttore ha una durata di vita teorica di 10000 h per gli ingranaggi e 5000 h (L_{h10}) per i cuscinetti dell' ingranaggeria.

T_{max} - Coppia massima trasmissibile [Nm]
è la coppia massima trasmissibile dall'accessorio eventualmente fornito a corredo del riduttore. Questo valore potrebbe limitare la coppia massima trasmissibile dal riduttore.

T_{2max} - Coppia massima [Nm]
è la coppia massima d'uscita ammissibile come punta o per brevi durate (calcolata al 90% Rs del componente più debole). Per azionamenti che comportano un elevato numero di avviamenti o inversioni occorre considerare valori di coppia massima apportunamente ridotti.
Il valore indicato si riferisce alla versione con albero femmina scanalato (FS); versioni diverse potrebbero avere valori inferiori.

T_b - Coppia frenante [Nm]
è il valore della coppia frenante trasmissibile staticamente dal freno negativo.

n_1 - Velocità in ingresso [RPM]
è la velocità al lato veloce del riduttore.

n_2 - Velocità in uscita [RPM]
è la velocità al lato lento del riduttore.

n_{1max} - Velocità massima [RPM]
è la velocità massima in ingresso al freno. Per applicazioni con valori superiori rivolgersi al servizio commerciale Dinamic Oil per verificare la compatibilità con l'applicazione.

i_e - Rapporto di riduzione effettivo
è il rapporto di riduzione effettivo, cioè il rapporto tra la velocità di ingresso e quella di uscita dal riduttore.

nxh - Indice di durata [RPMxh]
è il valore che equivale al prodotto tra la velocità e la durata di vita teorica espressa in ore. É espresso come $n_2$xh quando riferito alla velocità in uscita, come $n_1$xh quando riferito alla velocità in ingresso.

Valori indicativi delle durate richieste per diverse applicazioni

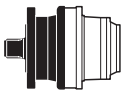
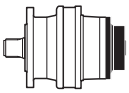
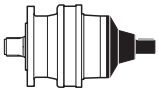
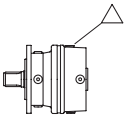
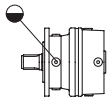
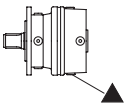
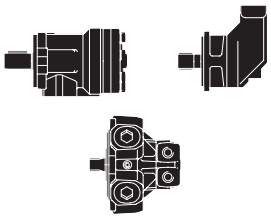
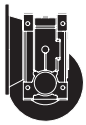
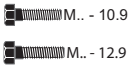
Applicazione	Ore di vita richieste
Macchine agricole	300 - 3000
Macchine con funzionamento intermittente o per brevi periodi (macchine per l'edilizia)	3000 - 8000
Macchine con funzionamento intermittente o per brevi periodi con alta affidabilità operativa (montacarichi)	8000 - 12000
Macchine con funzionamento per 8 ore al giorno, ma non pienamente utilizzate (macchine varie per l'industria, frantoi rotativi)	10000 - 25000
Macchine con funzionamento per 8 ore al giorno pienamente utilizzate (macchine varie per l'industria, nastri trasportatori)	20000 - 30000
Macchine con funzionamento continuo (laminatoi, macchine tessili)	40000 - 50000

k_f - Fattore di correzione
è il fattore da applicare per calcolare la durata teorica dei supporti con alberi maschio per valori di nxh diversi da quelli dei diagrammi riportati nel catalogo. Per tutti i riduttori le curve dei carichi esterni sono calcolate per:
- $n_2$xh = 100.000 per i supporti in uscita
- $n_1$xh = 1.500.000 per i supporti in ingresso

L_{min} - Lunghezza minima del braccio di reazione [mm]
è la lunghezza minima consigliata per il braccio di reazione da realizzarsi nelle applicazioni di tipo pendolare.

Symbols and Unit of Measurement

Symbol	Unit of measurement	Description
$_1$		Input value
$_2$		Output value
bu	mm	Height of toothed set
de	mm	External diameter
dp	mm	Theoretical primitive diameter
fa	N	Axial load
$\mathbf{f_{amax}}$	N	Maximum axial load
$\mathbf{f_r}$	N	Radial load
H	mm	Pinion height
$\mathbf{i_e}$	-	Effective reduction ratio
m	mm	Module
n	RPM	Speed
$\mathbf{n_{max}}$	RPM	Maximum speed
nxh	RPMxh	Duration index
$\mathbf{P_1}$	kW	Rated power
pb	bar	Brake opening pressure
pmax	bar	Maximum brake pressure
$\mathbf{P_t}$	kW	Thermal power
T	Nm	Torque
$\mathbf{T_b}$	Nm	Braking torque
$\mathbf{T_{max}}$	Nm	Maximum torque
X	mm	Load application distance
x	-	Tooth correction
z	-	Number of teeth

Symbol	Description
	Support at output
	Input
	Support at input
...Nm	Tightening torque [Nm]
	Oil quantity [liters]
	Weight [kg]
	Oil fill / breather plug
	Oil level
	Oil drain
	Hydraulic motors
	Electrical motors
	Wormgearbox
	Recommended screw

Technical Definitions

All values specified in this catalogue were calculated using the ISO 6336 and ISO 281 standards, but may not meet additional requirements set by the internal regulations of certifying bodies.
To select products that comply with these regulations, contact Dinamic Oil's sales team.

f_S - Service Factor

this factor represents the application's industrial rating; it depends on operating conditions, type of drive and frequency of start-up.
The information provided in this catalog is calculated for $f_s = 1$. The service factor value of a gearbox may be calculated by dividing its nominal power by its absorbed power.

Service factors

	OPERATING CONDITIONS								
	Uniform U			With moderate shocks **M**			With heavy shocks **H**		
hours / day	START-UPS / HOUR								
	< 16	**16 - 63**	**64 - 250**	**< 16**	**16 - 63**	**64- 250**	**< 16**	**16 - 63**	**64 - 250**
< 0.5	0.9	1.3	1.5	0.9	1.3	1.5	1.2	1.5	1.8
0.5 - 3	0.9	1.3	1.5	1.2	1.5	1.8	1.7	2.0	2.3
3 - 8	1.2	1.5	1.8	1.4	1.8	2.0	1.9	2.3	2.8
8 - 24	1.4	1.8	2.0	1.7	2.0	2.5	2.4	2.8	3.0

P_1 - Nominal Power [kW]

the mechanical power transmitted by the gearbox, related to input. At fs = 1 the gearbox has a theoretical lifetime of 10000 hours under the ISO 6336 standard. This value does not take into account any limits on the gearbox's thermal capacity, as it is exclusively based on mechanical resistance in accordance with the speed of use.

P_a - Absorbed Power [kW]

relates to installed or available power, the amount of power actually absorbed by the application, at the gearbox input

P_t - Thermal Power [kW]

the maximum mechanical power the gearbox can transmit while in continuous operation, with splash lubrication, without going beyond its maximum temperature level (oil temperature below 90°C). More power may be transmitted using a Viton seal and synthetic oils or special cooling devices. The values indicated for various gearbox sizes refer to continuous operation with input speeds of 1500 RPM, at an ambient temperature of 20°C and an altitude of 0 / 500 m, for indoor applications.
Under different conditions of use, thermal power must be multiplied by the thermal factors identified in the tables below. For limited periods of operation, followed by periods of rest long enough to guarantee sufficient cooling of the gearbox, thermal power loses its significance and may be neglected.

Thermal Factors

Ambient Temperature	Operating Time [%]				
	100%	80%	60%	40%	20%
10°	1.2	1.3	1.4	1.6	1.8
20°	1.0	1.1	1.3	1.4	1.6
30°	0.8	1.0	1.1	1.3	1.4
40°	0.7	0.8	1.0	1.1	1.3
50°	0.5	0.7	0.8	1.0	1.1

Altitude [m]	Input Speed [RPM]				
	400	800	1000	1500	2000
0	1.2	1.1	1.1	1.0	0.7
500	1.2	1.1	1.1	1.0	0.7
1000	1.1	1.0	1.0	0.9	0.6
1500	1.1	1.0	1.0	0.9	0.6
2000	1.1	1.0	1.0	0.9	0.6

P_d - Power to be Dissipated [kW]
the power that a cooling system must dissipate if the power to be transmitted exceeds the gearbox's thermal power.

η_m - Mechanical Efficiency
The ratio between mechanical power output and input; normally considered equal to 0.97 ÷ 0.98 for each epicycloidal reduction stage in the gearbox, and equal to 0.94 ÷ 0.95 for bevel gear; the actual value depends on a number of factors including speed, torque, ratio, assembly position and lubrication.

T_2 - Torque Transmitted [Nm]
this value represents torque continuously applied at a speed of n_1, at which the gearbox has a theoretical lifetime of 10000 h for gears, or 5000 h (L_{h10}) for the bearings in gear mechanisms.

T_{max} - Maximum Transmissible torque [Nm]
the maximum torque transmitted by the accessory supplied with the gearbox, if applicable. This value may limit the maximum transmissible torque of the gearbox.

T_{2max} - Maximum Torque [Nm]
the maximum admissible output torque, as a peak value or for brief periods of time (calculated at 90% Rs of the weakest component).
For drives with a high number of start-ups or inversions, appropriately reduced maximum torque values should be considered.
The value specified refers to the version with a splined female shaft (FS); different versions may have lower values.

T_b - Braking Torque [Nm]
the value of braking torque that may be conveyed statically by the negative brake.

n_1 - Input Speed [RPM]
the speed on the fast side of the gearbox.

n_2 - Output Speed [RPM]
the speed on the slow side of the gearbox.

n_{1max} - Maximum Speed [RPM]
the maximum input speed at the brake. For applications with higher values, contact Dinamic Oil's sales service to determine application compatibility.

i_e - Effective Reduction Ratio
the actual reduction ratio, meaning the ratio between the gearbox's input and output speeds.

nxh - Duration Index [RPMxh]
the value of the product between speed and duration of theoretical lifetime in hours. This value is expressed as $n_2$xh when used with output speed, $n_1$xh with used with input speed.

Duration Values Required for Different Applications

Application	Required Lifetime
Agricultural machinery	300 - 3000
Machines operated intermittently or for short periods of time (construction machines)	3000 - 8000
Machines operated intermittently or for short periods of time with high operational reliability (freight lifts)	8000 - 12000
Machines operated 8 hours a day but not all the time (various industrial machines, rotary mills)	10000 - 25000
Machines operated 8 hours a day all the time (various industrial machines, conveyor belts)	20000 - 30000
Machines operated continuously (rolling mills, textiles machines)	40000 - 50000

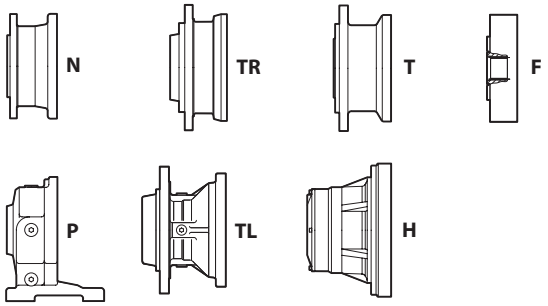
k_f - Correction Factor
the factor applied to calculate the theoretical lifetime of bearings with male shafts for values of nxh other than those shown in catalog diagrams. External load curves are calculated for all gearboxes as:
- $n_2$xh = 100000 for output supports
- $n_1$xh = 1500000 for input supports

L_{min} - Minimum Length of Torque Arm [mm]
the minimum length recommended for the torque arm, applied to pendular applications.

Order code

RA	21	3	P	S	78.7	

OUTPUT VERSION



OUTPUT SHAFT

S = Male spline
F = Female spline
C = Cylindrical shaft
K = Extended cylindrical shaft
E = Hexagonal shaft
Q = Hollow female shaft
FS = Female spline
FC = Female cylindrical shaft
U = Female cylindrical shaft

NUMBER OF STAGES

1 - 2 - 3 - 4 - 5 - 6

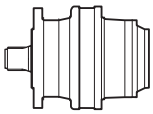
GEARBOX FRAME SIZE

RE - RA	RE - RA	GB - GBA	GB - GBA
110	**1520**	**12010**	**61000**
210	**2000**	**16000**	**85000**
240	**2520**	**21000**	**110000**
310	**3000**	**26000**	**130000**
510	**3510**	**31000**	GB
610	**4800**	**40000**	**150000**
810	**6000**	**45000**	**205000**
1020	**8000**	**53000**	**235000**

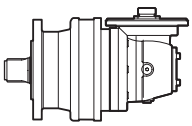
REDUCTION RATIO

Please write the exact ratio as shown on the selection table

EXECUTION



RE - GB = Linear



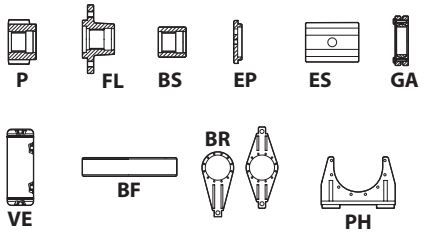
RA - GBA = Angular

COMPOSITION

/ = Standard
L = Light
R = Reinforced
S = Special

ST	BB	B3	0	BS

OUTPUT ACCESSOIRES

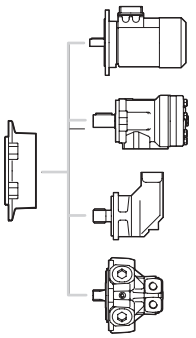


P = Pinion
FL = Flange
BS = Splined bushing
EP = End plate
ES = Hexagonal bushing
GA = Shrink disc
VE = Expansion tank
BF = Splined bar
BR = Torque arm
PH = Foot support

RIGHT ANGLE POSITIONING

MOUNTING POSITION

MOTOR ADAPTER CONFIGURATION



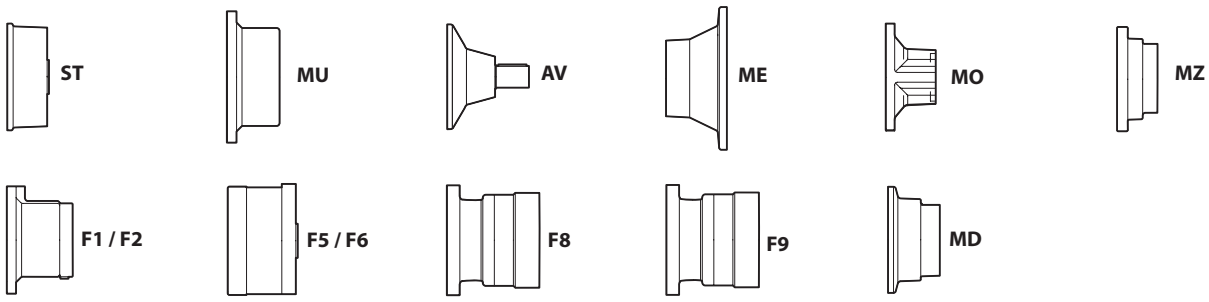
Electric motor

Orbit motor

Axial piston motor

Radial piston motor

DIRECT INPUTS



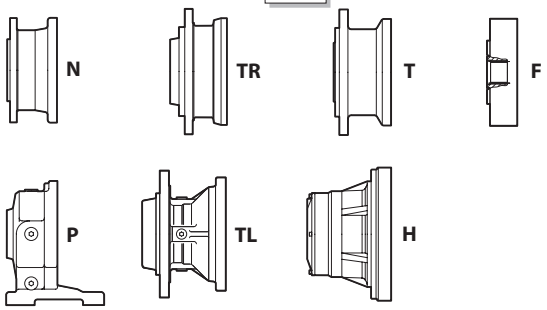
The example shows the ordering code for a right angle planetery gearbox frame 210, with 3 reduction stages a foot mounted output support and a male splined shaft, and 78.7 reduction ratio, with a "ST" input and "SAE B", 16/32 15 teeth motor adapter flange. Horizontal mounting position and standard right angle positioning, and a splined bushing output accessory.

Codice d'ordinazione

RA	21	3	P	S	78.7	

VERSIONE USCITA

G-2



ALBERO IN USCITA

S = Scanalato maschio
F = Scanalato femmina
C = Cilindrico
K = Cilindrico lungo
E = Esagonale
Q = Giunto di attrito
FS = Femmina scanalato
FC = Femmina cilindrico
U = Femmina cilindrico

NUMERO STADI DI RIDUZIONE

1 - 2 - 3 - 4 - 5 - 6

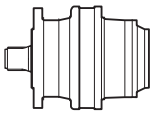
GRANDEZZA RIDUTTORE

RE - RA	RE - RA	GB - GBA	GB - GBA
110	**1520**	**12010**	**61000**
210	**2000**	**16000**	**85000**
240	**2520**	**21000**	**110000**
310	**3000**	**26000**	**130000**
510	**3510**	**31000**	GB
610	**4800**	**40000**	**150000**
810	**6000**	**45000**	**205000**
1020	**8000**	**53000**	**235000**

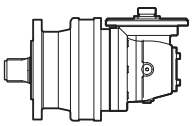
RAPPORTO DI RIDUZIONE

Indicare il valore del rapporto (compreso virgola e decimale) riportato sulle pagine dei dati tecnici relative ad ogni grandezza

ESECUZIONE



RE - GB = Lineare



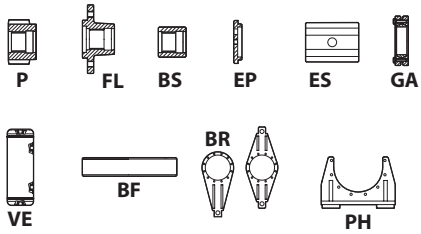
RA - GBA = Angolare

COMPOSIZIONE

/ = Standard
L = Light
R = Rinforzato
S = Speciale

ST	BB	B3	0	BS

ACCESSORI IN USCITA

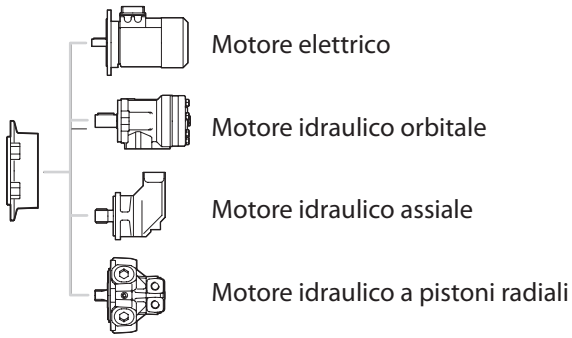


P = Pignone
FL = Flangia
BS = Boccola scanalata
EP = Fondello
ES = Manicotto esagonale
GA = Giunto di attrito
VE = Vaso di espansione
BF = Barra scanalata
BR = Braccio di reazione
PH = Piede

ORIENTAMENTO RIDUTTORE ANGOLARE

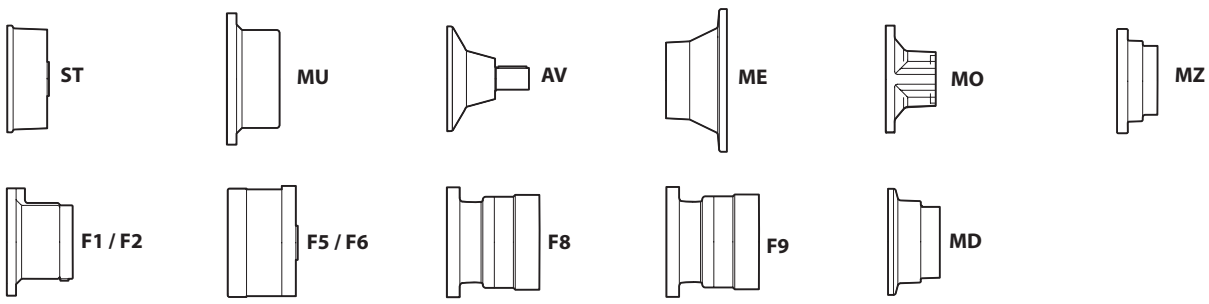
POSIZIONE DI MONTAGGIO

PREDISPOSIZIONE MOTORE



Motore elettrico
Motore idraulico orbitale
Motore idraulico assiale
Motore idraulico a pistoni radiali

ENTRATE DIRETTE



Nell'esempio è illustrato il codice di ordinazione di un riduttore planetario angolare, grandezza 210, tre stadi di riduzione, versione in uscita con i piedi e albero scanalato, rapporto di riduzione 78.7, entrata standard, predisposizione per motore "SAE B" albero 16/32 z=15, posizione di montaggio del riduttore in uscita orizzontale, orientamento del riduttore angolare standard, boccola scanalata in uscita

LEGAL NOTES

All information in this catalogue has been checked; in case of possible mistakes, we decline all responsibility.

Dinamic Oil reserves the right to amend the technical data of this catalogue without prior notice.

For all further information please contact Dinamic Oil S.p.A. Commercial Department.

NOTE LEGALI

Tutti i contenuti riportati nel presente catalogo sono stati controllati; in caso di eventuali errori viene comunque declinata ogni responsabilità.

Dinamic Oil si riserva la facoltà di modificare senza preavviso i dati tecnici riportati.

Per ulteriori informazioni contattare il servizio tecnico commerciale Dinamic Oil S.p.A.

dinamic oil

DINAMIC OIL S.p.A.
Via Togliatti,15 - 41030 - Bomporto - Modena - Italy
Phone: +39 059 812611 / Fax: +39 059 812600
E-mail: sales@dinamicoil.it - www.dinamicoil.com

DINAMIC OIL FRANCE
ZI Montbertrand BP 3612 - 38236 Charvieu Cedex - France
Phone: +33 (0) 472-46-23-18 / Fax: +33 (0) 472-46-23-27

DINAMIC OIL DEUTSCHLAND GmbH
Frankfurter Straße 151 b - D - 63303 Dreieich-Sprendlingen
Phone: +491736927478

DINAMIC OIL NORWAY A/S
Lindebergveien, 3 - 2016 Frogner
Office: +47 63825040 - Fax: +47 63825041 - Norway

DINAMIC OIL NORTH AMERICA INC.
511 Eagleton Downs Drive - Charlotte - NC - 28134 - USA
Phone: +1-704-587-4600 / Fax: +1-980-939-6297

DINAMIC OIL INDIA PVT LIMITED
Plot N°1295 a MIE Industrial Area Part B Bahadurgarh - Haryana 124507 - India
Phone: 0091 1276 267294 / 0091 1276 267295 - Fax: 0091 1276 267295 / 0091 1125 287537

DINAMIC OIL (Shanghai) Machinery Co.Ltd.
Building 2 No.128 Lane 168 Dieqiao Rd. Kangqiao Industry Park - Pudong - Shanghai – China
Zip Code: 201319 Phone 0086 21 68187100 Fax 0086 21 68187107

DINAMIC OIL ASIA PACIFIC Pte LTD
47L Tuas South Avenue 1 - Singapore 637249
Phone: +65-67910802 - Fax: +65-67912661