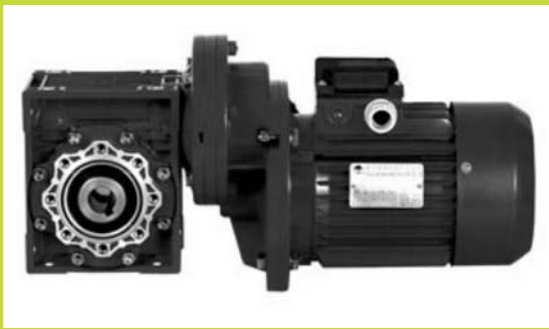


Notes



WORM GEARBOXES WITH PRE-STAGE HELICAL UNITS

Performance of worm geared motors with pre-stage helical unit

Motor		n2	i	M2	f.s	Type
Kw		rpm		Nm		
0.09	6P n1= 900	12	75	47	1.3	PR 063 MSF 040
		10	90	51	1.4	
		7.5	120	62	1.1	
		6.0	150	72	0.8	
		5.0	180	79	0.7	
		6.0	150	73	1.6	PR 063 MSF 050
		5.0	180	81	1.3	
		3.8	240	94	0.9	
		3.0	300	106	0.7	
		3.8	240	99	1.7	PR 063 MSF 063
		3.0	300	109	1.4	
0.12	4P n1= 1400	18.7	75	42	1.2	PR 063 MSF 040
		15.6	90	46	1.2	
		11.7	120	57	0.9	
		9.3	150	66	0.7	
		7.8	180	74	0.6	
		9.3	150	68	1.3	PR 063 MSF 050
		7.8	180	75	1.1	
		5.8	240	88	0.8	
	6P n1= 900	4.7	300	98	0.7	PR 063 MSF 063
		5.8	240	92	1.5	
		4.7	300	103	1.2	PR 063 MSF 040
		12	75	62	1.0	
		10	90	68	1.1	
		7.5	120	83	0.8	
		12	75	63	1.7	PR 063 MSF 050
		10	90	70	2.1	
		7.5	120	84	1.5	
		6.0	150	97	1.2	
0.18	4P n1=1400	5.0	180	108	1.0	PR 063 MSF 063
		3.8	240	125	0.7	
		6.0	150	101	2.1	PR 063 MSF 050
		5.0	180	112	1.8	
		3.8	240	131	1.3	
		3.0	300	145	1.0	
		18.7	75	64	0.8	PR 063 MSF 040
		15.6	90	70	0.8	
		11.7	120	85	0.6	PR 063 MSF 050
		18.7	75	64	1.4	
		15.6	90	71	1.5	
		11.7	120	87	1.1	
		9.3	150	101	0.9	
	6P n1=900	7.8	180	113	0.7	PR 063 MSF 063
		5.8	240	133	0.6	
		9.3	150	103	1.7	
		7.8	180	117	1.4	PR 071 MSF 063
		5.8	240	139	1.0	
		4.7	300	155	0.9	
	6P n1=900	12	75	97	2.2	PR 071 MSF 063
		10	90	107	2.4	
		7.5	120	131	1.8	
		6.0	150	152	1.4	
		5.0	180	168	1.2	
		3.8	240	197	0.9	
		3.0	300	218	0.7	PR 071 MSF 075
		5.0	180	179	1.7	
		3.8	240	211	1.2	
		3.0	00	235	1.0	

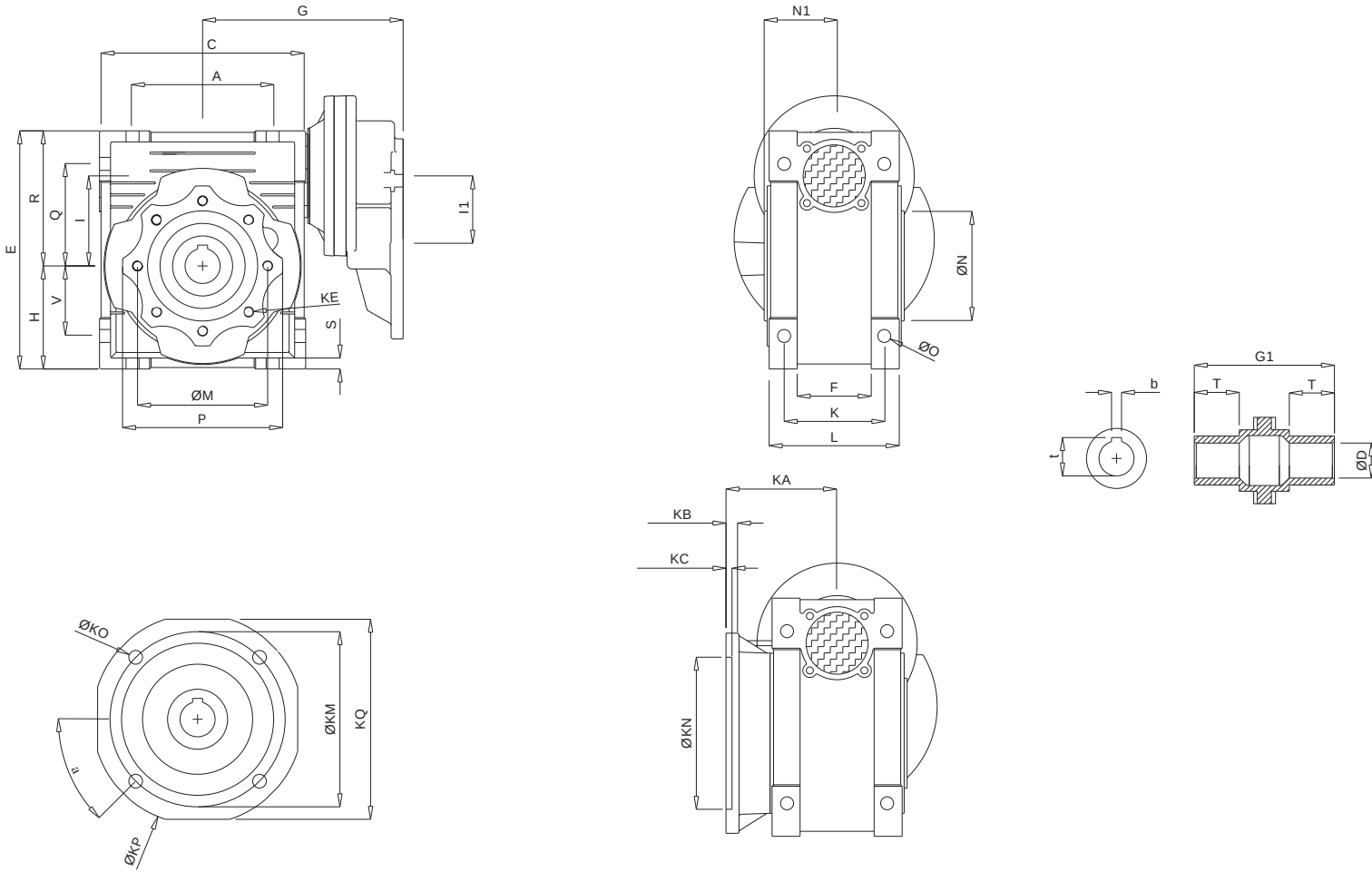
Motor		n2		M2		
Kw		rpm	i	Nm	f.s	Type
0.25	4P n1= 1400	18.7	75	88	1.0	PR 071 MSF 050
		15.6	90	98	1.1	
		11.7	120	121	0.8	
		18.7	75	91	1.8	PR 071 MSF 063
		15.6	90	100	2.0	
		11.7	120	125	1.5	
		9.3	150	143	1.2	
		7.8	180	163	1.0	
		5.8	240	192	0.7	
		4.7	300	215	0.6	
		9.3	150	151	1.7	PR 071 MSF 075
		7.8	180	172	1.4	
	5.8	240	201	1.1		
	4.7	300	230	0.9		
	6P n1= 900	12	75	135	1.6	PR 071 MSF 063
		10	90	148	1.8	
		7.5	120	181	1.3	
		6.0	150	211	1.0	
		12	75	139	2.4	PR 071 MSF 075
		10	90	155	2.5	
		7.5	120	191	1.9	
		6.0	150	219	1.5	
5.0		180	248	1.2	PR 071 MSF 090	
3.8		240	318	1.4		
3.0	300	358	1.1			
0.37	4P n1= 1400	18.7	75	134	1.2	PR 071 MSF 063
		15.6	90	148	1.4	
		11.7	120	185	1.0	
		9.3	150	212	0.8	
		18.7	75	138	1.8	PR 071 MSF 075
		15.6	90	154	1.9	
		11.7	120	191	1.5	
		9.3	150	223	1.1	
		7.8	180	254	0.9	
		7.8	180	268	1.5	PR 071 MSF 090
		5.8	240	321	1.1	
		4.7	300	371	0.9	
	6P n1= 900	12	75	206	1.6	PR 080 MSF 075
		10	90	230	1.7	
		7.5	120	283	1.3	
		6.0	150	324	1.0	
		6.0	150	347	1.6	PR 080 MSF 090
		5.0	180	389	1.3	
3.8	240	471	1.0	PR 080 MSF 110		
3.8	240	509	1.5			
3.0	300	577	1.2			
0.55	4P n1= 1400	18.7	75	205	1.2	PR 080 MSF 075
		15.6	90	230	1.3	
		11.7	120	284	1.0	
		9.3	150	332	0.8	
		15.6	90	240	2.3	PR 080 MSF 090
		11.7	120	297	1.6	
		9.3	150	355	1.3	
		7.8	180	398	1.0	
		5.8	240	477	0.8	

Performance of worm geared motors with pre-stage helical unit

Motor Kw		n2 rpm	i	M2 Nm	f.s	Tipo Type
0.55	4P n1= 1400	7.8	180	425	1.7	PR 080 MSF 110
		5.8	240	513	1.2	
		4.7	300	597	1.0	
	6P n1= 900	12	75	306	1.1	PR 080 MSF 075
		10	90	341	1.1	
		10	90	357	2.0	PR 080 MSF 090
		7.5	120	441	1.4	
		6.0	150	516	1.1	
		5.0	180	578	0.9	PR 080 MSF 110
		7.5	120	462	2.2	
		6.0	150	552	1.8	
		5.0	180	620	1.5	PR 080 MSF 130
		3.8	240	756	1.0	
		3.8	240	756	1.6	
0.75	4P n1= 1400	18.7	75	280	0.9	PR 080 MSF 075
		15.6	90	313	1.0	
		15.6	90	327	1.7	PR 080 MSF 090
		11.7	120	405	1.2	
		9.3	150	483	0.9	
		7.8	180	543	0.7	PR 080 MSF 110
		11.7	120	430	1.9	
		9.3	150	506	1.6	
		7.8	180	580	1.2	PR 080 MSF 130
		5.8	240	700	0.9	
		5.8	240	712	1.4	
		4.7	300	813	1.1	PR 090 MSF 110
	6P n1= 900	12.4	72.6	393	2.8	
		9.3	96.8	508	2.0	
		7.4	121	607	1.6	
		6.2	145	682	1.3	
		4.6	193	832	0.9	
		12.4	72.6	399	4.4	PR 090 MSF 130
		9.3	96.8	508	3.2	
		7.4	121	607	2.6	
		6.2	145	682	2.1	
		4.6	193	832	1.5	
		3.7	242	944	1.2	
1.10	4P n1=1400	19.3	72.6	392	2.2	PR 090 MSF 110
		14.5	96.8	508	1.6	
		11.6	121	599	1.3	
		9.6	145	686	1.0	
		7.2	193	828	0.8	
		19.3	72.6	398	3.5	PR 080 MSF 130
		14.5	96.8	508	2.6	
		11.6	121	608	2.0	
		9.6	145	686	1.6	
		7.2	193	843	1.2	
		5.8	242	962	0.9	
	6P n1= 900	12.4	72.6	576	1.9	PR 090 MSF 110
		9.3	96.8	746	1.4	
		7.4	121	890	1.1	
		6.2	145	1000	0.9	
		12.4	72.6	585	3.0	PR 090 MSF 130
		9.3	96.8	746	2.2	
		7.4	121	890	1.7	
		6.2	145	1000	1.4	
		4.6	193	1220	1.0	
		4.6	193	1220	1.0	

Motor Kw		n2 rpm	i	M2 Nm	f.s	Tipo Type
1.50	4P n1= 1400	19.3	72.6	535	1.6	PR 090 MSF 110
		14.5	96.8	693	1.2	
		11.6	121	817	1.0	
		9.6	145	936	0.8	PR 090 MSF 130
		19.3	72.6	542	2.6	
		14.5	96.8	693	1.9	
2.20	2P n1 = 2800	11.6	121	830	1.5	PR 090 MSF 110
		9.6	145	936	1.1	
		7.2	193	1149	0.8	
		38.6	72.6	398	1.8	PR 090 MSF 110
		28.9	96.8	516	1.3	
		23.1	121	617	1.1	
		38.6	72.6	409	2.9	PR 090 MSF 130
		28.9	96.8	545	2.0	
		23.1	121	654	1.6	
		19.3	145	752	1.3	

Overall dimensions



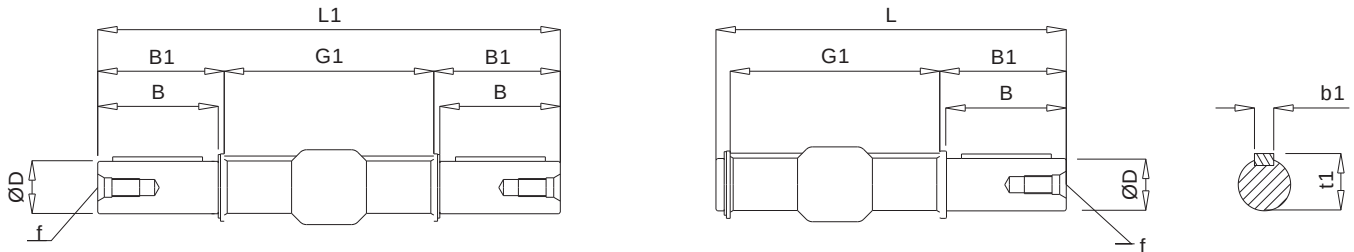
Size	A	C	D (H7)	E	F	G	G1	H	I	I1	L	M	N (h8)	N1	O	P	Q	R
063 / 040	70	100	18	121.5	43	123	78	50	40	40	71	75	60	36.5	6.5	87	55	71.5
063 / 050	80	120	25	144	49	133	92	60	50	40	85	85	70	43.5	8.5	100	64	84
071 / 050	80	120	25	144	49	143	92	60	50	50	85	85	70	43.5	8.5	100	64	84
063 / 063	100	144	25	174	67	148	112	72	63	40	103	95	80	53	8.5	110	80	102
071 / 063	100	144	25	174	67	158	112	72	63	50	103	95	80	53	8.5	110	80	102
071 / 075	120	172	28	205	72	176	120	86	75	50	112	115	95	57	11	140	93	119
080 / 075	120	172	28	205	72	186	120	86	75	63	112	115	95	57	11	140	93	119
071 / 090	140	208	35	238	74	193	140	103	90	50	130	130	110	67	13	160	102	135
080 / 090	140	208	35	238	74	203	140	103	90	63	130	130	110	67	13	160	102	135
80(90)/110	170	252.5	42	295	-	233	155	127.5	110	63	144	165	130	74	14	200	125	167.5
80(90)/130	200	292.5	45	335	-	253	170	147.5	130	63	155	215	180	81	16	250	140	187.5

Size	S	T	V	K	KA	KB	KC	KE	a	KM	KN (H8)	KO	KP	KQ	b	t	kg
063 / 040	6.5	26	35	60	67	7	4	M6 x 8 (4)	45°	87	60	9	110	95	6	20.8	3.9
063 / 050	7	30	40	70	90	9	5	M8 x 10 (4)	45°	90	70	11	125	110	8	28.3	5.2
071 / 050	7	30	40	70	90	9	5	M8 x 10 (4)	45°	90	70	11	125	110	8	28.3	5.8
063 / 063	8	36	50	85	82	10	6	M8 x 14 (8)	45°	150	115	11	180	142	8	28.3	7.9
071 / 063	8	36	50	85	82	10	6	M8 x 14 (8)	45°	150	115	11	180	142	8	28.3	8.5
071 / 075	10	40	60	90	111	13	6	M8 x 14 (8)	45°	165	130	14	200	170	8	31.3	11.3
080 / 075	10	40	60	90	111	13	6	M8 x 14 (8)	45°	165	130	14	200	170	8	31.3	13.1
071 / 090	11	45	70	100	111	13	6	M10 x 18 (8)	45°	175	152	14	210	200	10	38.3	15.3
080 / 090	11	45	70	100	111	13	6	M10 x 18 (8)	45°	175	152	14	210	200	10	38.3	17.3
80(90)/110	14	50	85	115	131	15	6	M10 x 18 (8)	45°	230	170	14	280	260	12	45.3	39
80(90)/130	15	60	100	120	140	15	6	M12 x 21 (8)	45°	255	180	16	320	290	14	48.8	52.2

For dimensions concerning the motor coupling (dimension PAM) please refer to the table on page 14.

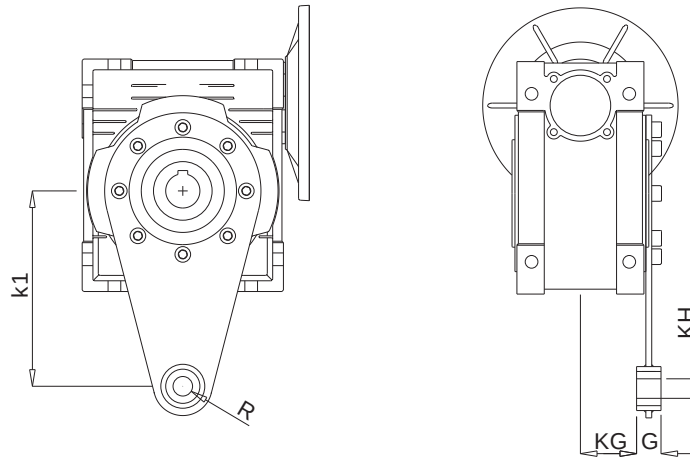
Accessories

Single and double output shafts



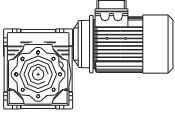
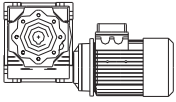
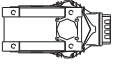
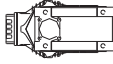
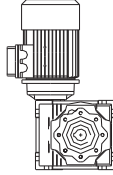
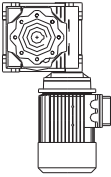
	D h6	B	B1	G1	L	L1	f	b1	t1
025	11	23	25.5	50	81	101	-	4	12.5
030	14	30	32.5	63	102	128	M6	5	16
040	18	40	43	78	128	164	M6	6	20.5
050	25	50	53.5	92	153	199	M10	8	28
063	25	50	53.5	112	173	219	M10	8	28
075	28	60	63.5	120	192	247	M10	8	31
090	35	80	84.5	140	234	309	M12	10	38
110	42	80	84.5	155	249	324	M16	12	45
130	45	80	85	170	265	340	M16	14	48.5

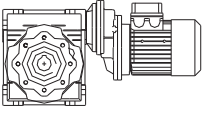
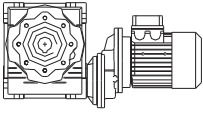
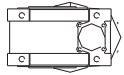
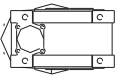
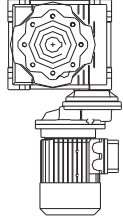
Torque arms

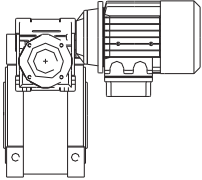
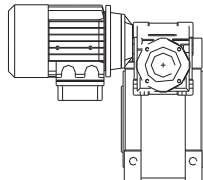
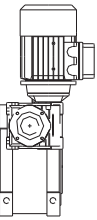
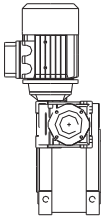
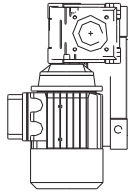
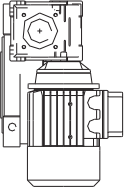
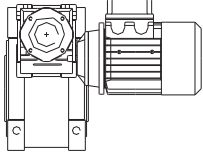
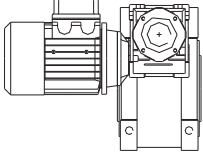


	K1	G	KG	KH	R
025	70	14	17.5	8	15
030	85	14	24	8	15
040	100	14	31.5	10	18
050	100	14	38.5	10	18
063	150	14	49	10	18
075	200	25	47.5	20	30
090	200	25	57.5	20	30
110	250	30	62	25	35
130	250	30	69		

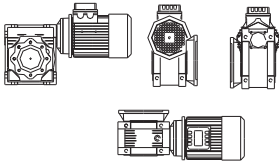
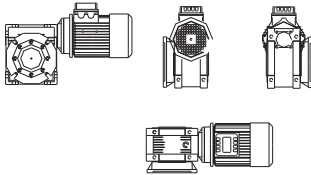
Mounting Positions

	B3	B8	B6	B7	V5	V6
MSF						

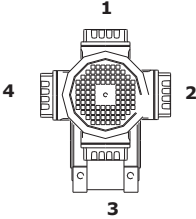
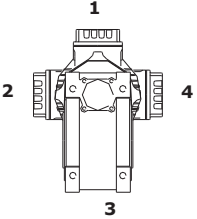
	B3	B8	B6	B7	V5	V6
PR-MSF						

	AS1	AS2	VS1	VS2
MSF-MSF				
	PS1	PS2	BS1	BS2
				

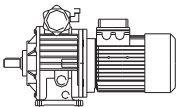
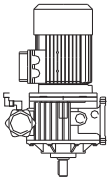
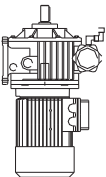
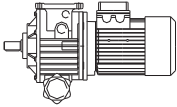
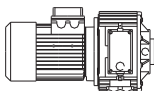
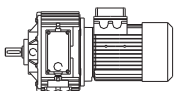
OUTPUT FLANGE

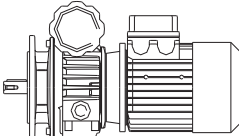
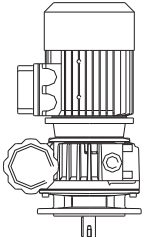
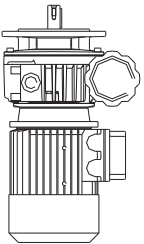
STANDARD	OPPOSITE SIDE
	

POS. TERMINAL BOX

1	1
	
2	2
	
3	3
	
4	4
	

Mounting Positions

	B3	V5	V6	B8	B6-D	B6-I
FEET						

	B3	V1	V3
FLANGE			

Lubrication

Choice of lubricants

		MVB Speed Variators	MSF Worm-gear speed reducers				Helical Units
			MSF 025~090	MSF 110~130			
	Lubricant	Synthetic	Synthetic	Synthetic	Mineral		Synthetic
	Temp °C	-25°C ~ +40°C	-25°C ~ +50°C	-25°C ~ +40°C	-5°C ~ +40°C	-15°C ~ +25°C	-25°C ~ +50°C
ISO		VG 32	VG 320	VG 320	VG 460	VG 220	VG 320
IP		A.T.F. DEXRON FLUID	TELUM VSF	MELLANA OIL 320	MELLANA OIL 460	MELLANA OIL 220	TELUM VSF
SHELL		A.T.F. DEXRON	TIVELA OIL SC320	OMALA OIL 320	OMALA OIL 460	OMALA OIL 220	TIVELA OIL SC320
AGIP		A.T.F. DEXRON	BLASIA S320	BLASIA 320	BLASIA 460	BLASIA 220	BLASIA S320
ESSO		A.T.F. DEXRON	S 220	S 220	SPARTAN EP 460	SPARTAN EP 220	S 220
MOBIL		A.T.F. 220	GLYGOYLE 30	MOBIL GEAR 320	MOBIL GEAR 634	MOBIL GEAR 630	GLYGOYLE 30
CASTROL		TQ DEXRON II	ALPHASYN PG 320	ALPHASYN PG 320	ALPHA MAX 460	ALPHA MAX 220	ALPHASYN PG 320
BP		AUTRAN DX	ENERGOL SG-XP 320	ENERGOL SG-XP 320	ENERGOL SG-XP 460	ENERGOL SG-XP 220	ENERGOL SG-XP 320

Oil volume

MSF									
Size	025	030	040	050	063	075	090	110	130
L	0.02	0.04	0.08	0.15	0.3	0.55	1	3	4.5

MVB							
Size	0.18	0.37	0.75	1.50	2.20	4.00	7.50
L	0.02	0.04	0.08	0.15	0.3	0.55	1

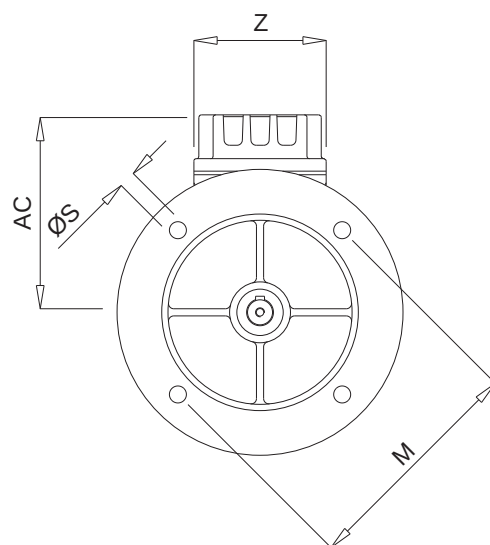
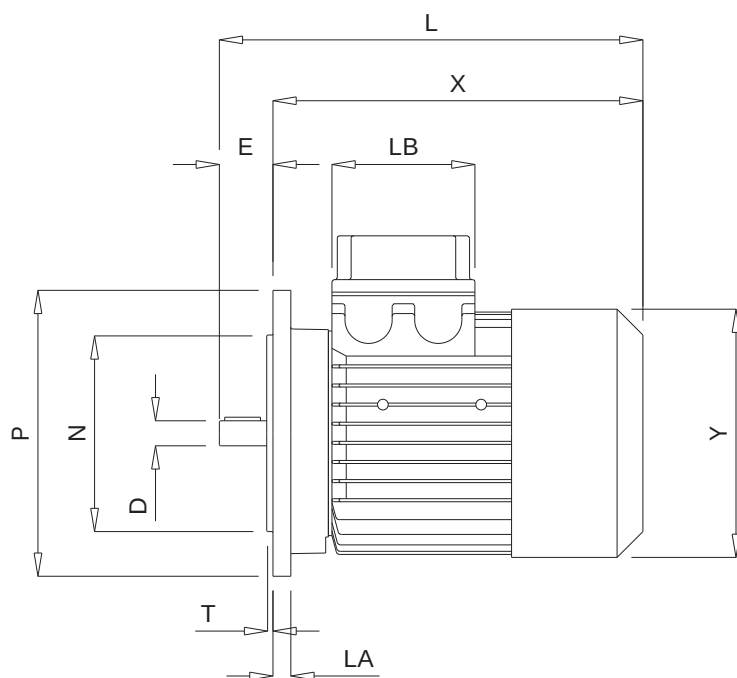


ELECTRIC MOTORS

Electric motors

Overall dimensions

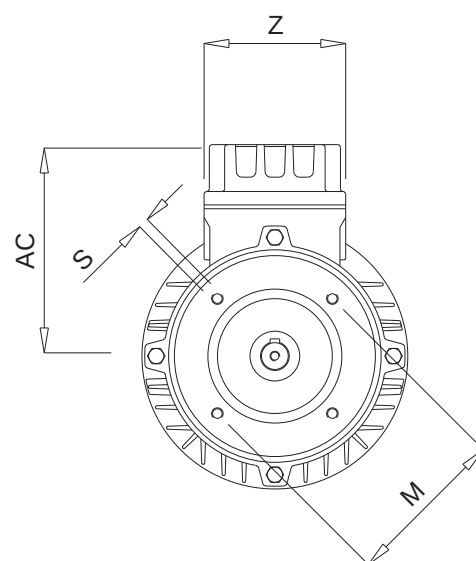
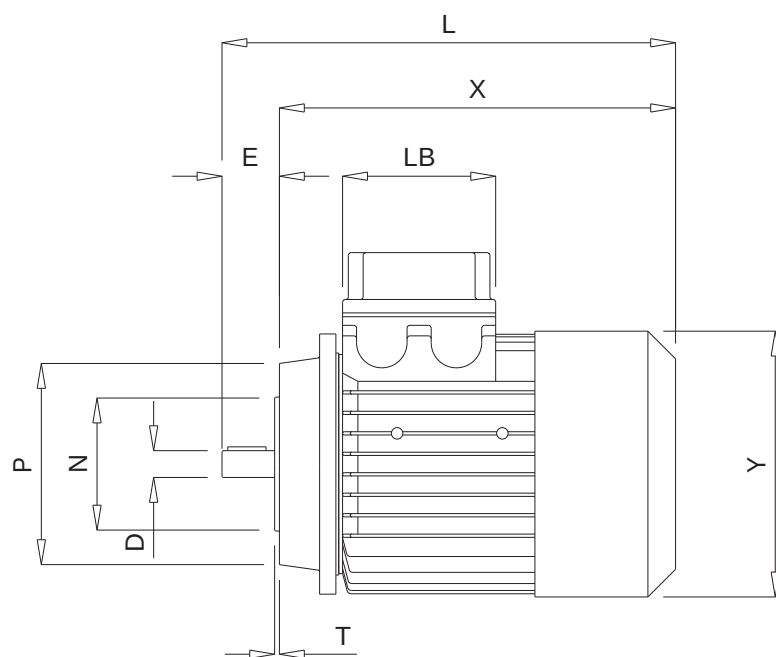
B5



SIZE	N	M	P	D	E	S	L	X	LB	Z	T	LA	AC	Y	Kg
56	80	100	120	9	20	7	193	173	74	74	3	9	91.5	110	3.1
63	95	115	140	11	23	9	212	189	74	74	3	10.5	98	123	4.2
71	110	130	160	14	30	9	246	216	74	74	3.5	10	105	136	6.5
80	130	165	200	19	40	12	275	235	89	89	3.5	11	122	156	9.2
90 S	130	165	200	24	50	12	301	251	89	89	3.5	10.5	127	176	11.4
90 L	130	165	200	24	50	12	326	276	89	89	3.5	10.5	127	176	14.4
100	180	215	250	28	60	14	364	304	89	89	4	15.5	138	194	23.4
112	180	215	250	28	60	14	388	328	89	89	4	15.5	150	218	30.4
132 S	230	265	300	38	80	14	450	370	104	104	4	20	177	257	49.2
132 M	230	265	300	38	80	14	488	408	104	104	4	20	177	257	54.5
160 M	250	300	350	42	110	18	602	492	186	186	5	14	240	310	93.8
160 L	250	300	350	42	110	18	646	536	186	186	5	14	240	310	102
180 M	250	300	350	48	110	18.5	625	538	186	186	5	20	240	360	150
180 L	250	300	350	48	110	18.5	625	613	186	186	5	20	240	360	162
200 L	300	350	400	55	110	18.5	790	613	186	186	5	18	257	354	231

Overall dimensions

B14



SIZE	N	M	P	D	E	S	L	X	LB	Z	T	AC	Y	Kg
56	50	65	80	9	20	M5	193	173	74	74	2	91.5	110	3.1
63	60	75	90	11	23	M5	212	189	74	74	2	98	123	4.2
71	70	85	105	14	30	M6	246	216	74	74	2.5	105	136	6.5
80	80	100	120	19	40	M6	275	235	89	89	3	122	156	9.2
90 S	95	115	140	24	50	M8	301	251	89	89	3	127	176	11.4
90 L	95	115	140	24	50	M8	326	276	89	89	3	127	176	14.4
100	110	130	160	28	60	M8	364	304	89	89	3.5	138	194	23.4
112	110	130	160	28	60	M8	388	328	89	89	3.5	150	218	30.4
132 S	130	165	200	38	80	M10	450	370	104	104	3.5	177	257	49.2
132 M	130	165	200	38	80	M10	488	408	104	104	3.5	177	257	54.5