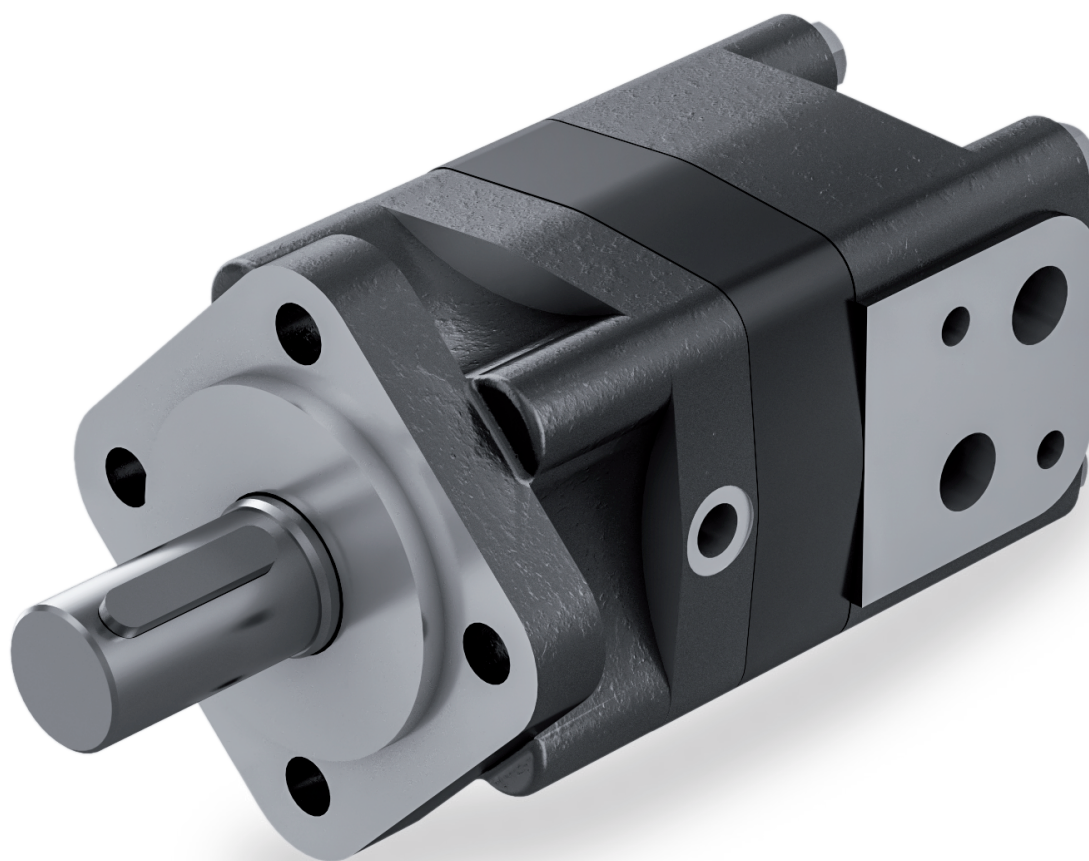
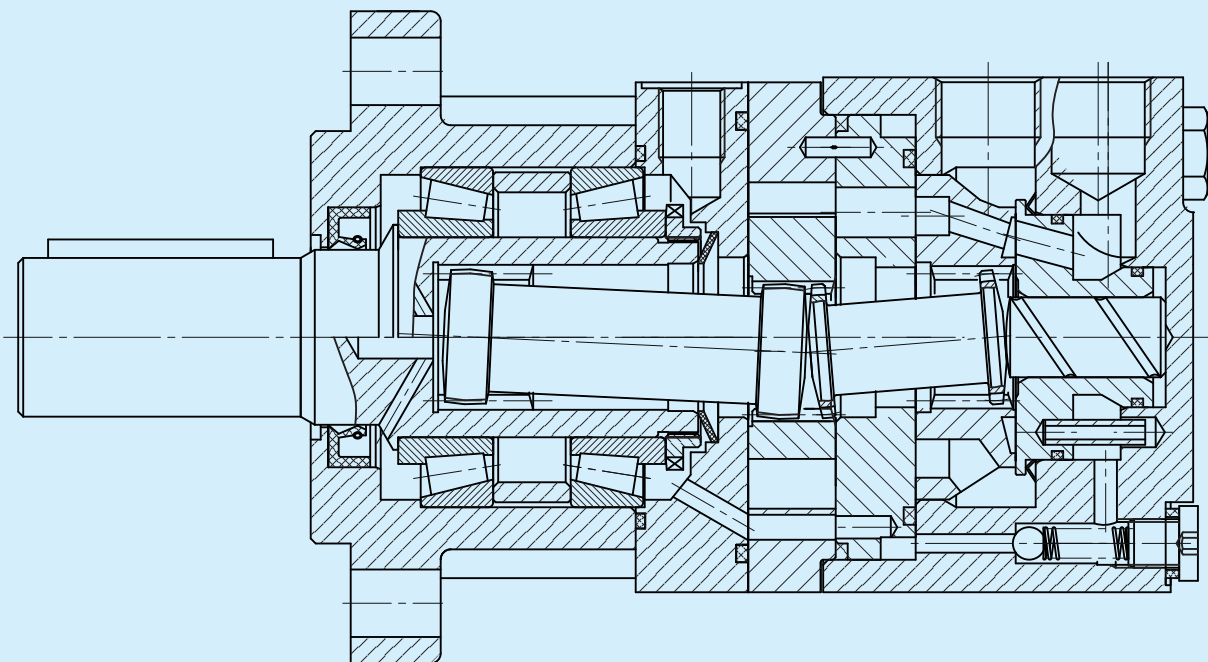


Roller motors with front distribution



Before use, carefully read the GENERAL INSTRUCTIONS FOR USE OF ORBITAL MOTORS.



Roller motor with pressure-compensated disc valve distribution and tapered roller bearings, suitable for use where high radial and axial bearing capacities are required.

	Displacement	Pressure			Torque			Rotational speed	Max. flow rate	Max. output power	Weight
	cm ³ /rev	Continuous bar	Intermittent bar	Peak bar	Continuous Nm	Intermittent Nm	Peak Nm	min ⁻¹	l/min	kW	kg
080	80.5	200	225	250	220	240	259	801	65	16	9.8
100	100.5	200	225	250	275	300	325	740	75	18	10
125	126.3	200	225	250	345	377	408	589	75	18	10.3
160	160.8	200	225	250	439	479	516	463	75	18	10.7
200	200.9	200	225	250	549	599	648	370	75	18	11.1
250	252.6	180	200	220	606	666	713	295	75	18	11.6
315	321.5	160	180	200	668	747	826	231	75	14	12.3
400	401.9	140	160	180	710	836	939	185	75	11	13.2

Intermittent conditions must not last more than 10% of each minute.
Peak conditions must not last more than 1% of each minute.

080 80.5 cm³/rev

Flow rate l/min	Pressure bar						
	35	70	105	140	175	200	225
15	35 181	75 177	114 170	150 165	187 158	213 151	239 141
30	35 363	75 355	115 346	152 340	190 330	216 322	240 310
40	33 485	75 479	115 464	155 453	193 444	220 437	240 415
50	30 610	73 602	113 594	153 580	190 565	217 556	237 530
60	28 735	70 724	110 714	150 698	188 680	214 670	235 642
65	27 801	68 790	108 775	148 760	186 742	211 727	233 704
80	23 988	66 975	104 955	140 938	170 915	193 897	213 870
Torque Nm Rotational speed min ⁻¹		Pressure Continuous			Pressure Intermittent		

100 100.5 cm³/rev

Flow rate l/min	Pressure bar						
	35	70	105	140	175	200	225
15	44 145	94 142	142 136	187 132	233 127	266 121	298 113
30	42 291	93 284	144 277	190 272	237 264	270 258	300 248
40	41 388	92 384	144 372	194 363	241 356	275 350	300 332
50	37 489	91 482	141 476	191 465	237 453	271 445	296 425
60	35 589	87 580	137 572	187 559	235 545	267 537	293 514
75	34 740	85 730	135 716	185 702	232 686	263 672	291 651
90	29 890	82 879	130 861	175 845	212 825	241 808	266 784
Torque Nm Rotational speed min ⁻¹		Pressure Continuous			Pressure Intermittent		

125 126.3 cm³/rev

Flow rate l/min	Pressure bar						
	35	70	105	140	175	200	225
15	54 115	117 113	179 108	235 105	293 101	334 96	375 90
30	55 231	118 226	180 221	238 217	298 210	339 205	377 198
40	54 309	120 305	180 296	243 289	303 283	345 279	377 265
50	51 389	118 384	177 379	240 370	298 360	340 354	372 338
60	48 468	114 461	173 455	235 445	295 433	336 427	369 409
75	42 589	109 581	169 570	232 559	292 546	331 535	366 518
90	38 708	103 699	163 685	220 673	267 656	301 643	334 624
Torque Nm Rotational speed min ⁻¹		Pressure Continuous			Pressure Intermittent		

160 160.8 cm³/rev

Flow rate l/min	Pressure bar						
	35	70	105	140	175	200	225
15	70 91	147 89	228 85	300 83	374 79	425 76	477 71
30	72 182	150 178	230 173	304 170	380 165	431 161	479 155
40	74 243	151 240	230 232	310 227	386 222	439 219	479 208
50	71 305	147 301	226 297	306 290	380 283	433 278	473 265
60	68 368	143 362	220 357	300 349	376 340	427 335	469 321
75	64 463	138 456	216 448	296 439	372 429	421 420	465 407
90	60 556	133 549	208 538	280 528	340 515	386 505	425 490
Torque Nm Rotational speed min ⁻¹		Pressure Continuous			Pressure Intermittent		

200 200.9 cm³/rev

Flow rate l/min	Pressure bar						
	35	70	105	140	175	200	225
15	87 73	184 71	285 68	374 66	467 63	532 61	596 56
30	89 145	187 142	287 139	379 136	474 132	539 129	599 124
40	92 194	187 192	287 186	387 182	482 178	549 175	599 166
50	88 244	182 241	282 238	382 232	474 226	542 223	591 212
60	84 295	175 290	275 286	374 280	469 272	534 268	586 257
75	77 370	170 365	270 358	369 351	464 343	527 336	581 325
90	68 445	165 440	260 430	349 423	424 412	482 404	532 392
Torque Nm Rotational speed min ⁻¹		Pressure Continuous			Pressure Intermittent		

250 252.6 cm³/rev

Flow rate l/min	Pressure bar					
	35	70	105	140	180	200
15	114 58	234 56	358 54	469 53	601 50	658 48
30	115 116	235 113	361 110	471 108	603 105	661 103
40	115 155	235 153	355 148	473 144	605 141	666 139
50	114 194	230 192	355 189	474 185	606 180	665 177
60	112 234	225 231	352 228	471 222	603 217	662 214
75	109 295	220 290	349 285	467 279	599 273	658 267
90	103 354	213 350	343 342	460 336	590 328	650 322
Torque Nm Rotational speed min ⁻¹		Pressure Continuous			Pressure Intermittent	

315 321.5 cm³/rev

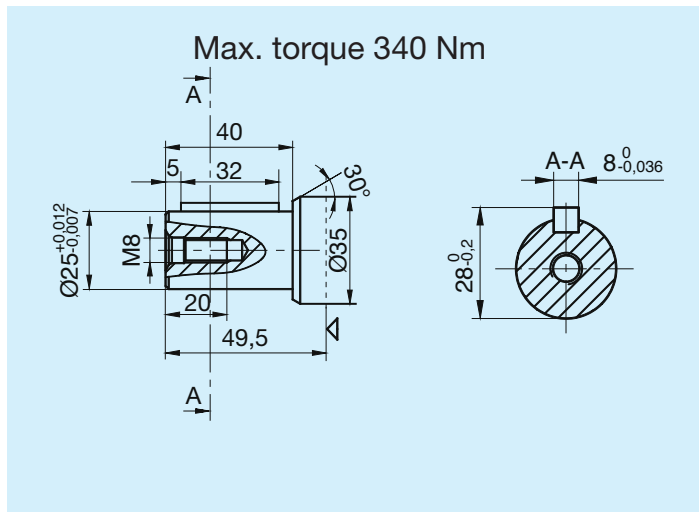
Flow rate l/min	Pressure bar					
	35	70	105	140	160	175
15	140 45	284 44	433 43	583 41	661 40	719 38
30	140 91	288 89	437 87	586 85	665 83	723 81
40	138 121	290 120	440 116	588 113	668 111	726 109
50	136 153	291 151	439 149	587 145	667 141	725 139
60	134 184	286 181	435 179	583 175	665 170	723 168
75	131 231	280 228	431 224	580 220	661 214	720 210
90	125 278	272 275	421 269	575 264	656 258	713 253

Torque Nm
Rotational speed min⁻¹Pressure
ContinuousPressure
Intermittent**400** 401.9 cm³/rev

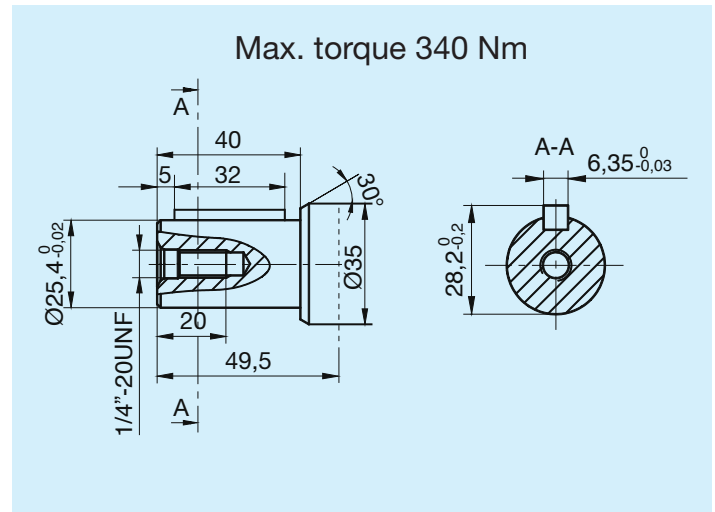
Flow rate l/min	Pressure bar				
	35	70	105	140	160
15	172 36	347 35	522 34	705 33	830 32
30	174 73	350 71	526 69	708 68	836 66
40	173 97	352 96	529 93	710 91	833 89
50	171 122	350 121	531 119	710 116	818 113
60	168 147	343 145	522 143	705 140	803 136
75	164 185	339 183	517 179	700 176	787 171
90	160 223	325 220	503 215	698 211	770 206

Torque Nm
Rotational speed min⁻¹Pressure
ContinuousPressure
Intermittent

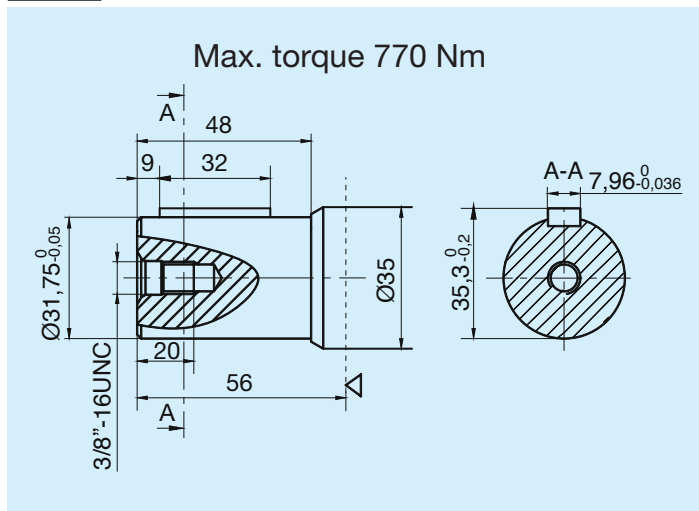
3P1 Ø25 key DIN 6885 A 8x7x32



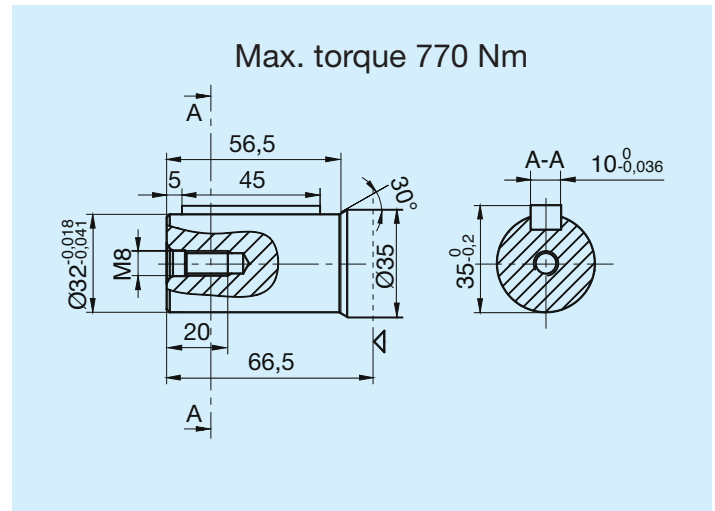
3P3 1" key BS46 1/4"x1/4"x1 1/4"



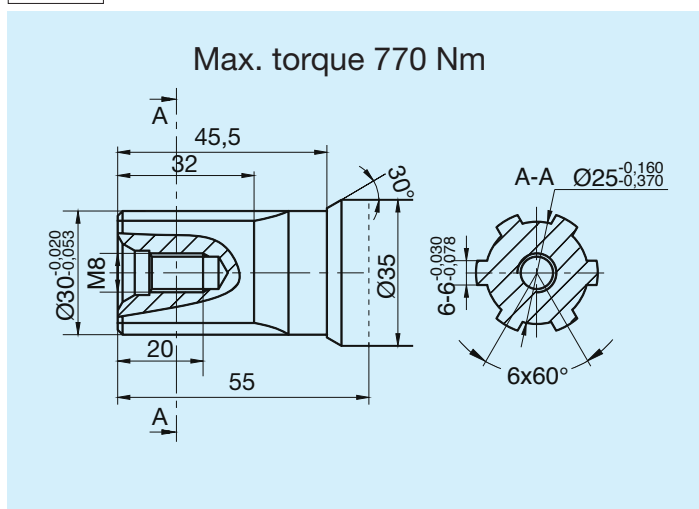
3P5 1 1/4" key SAE J744 5/16"x5/16"x1 1/4"



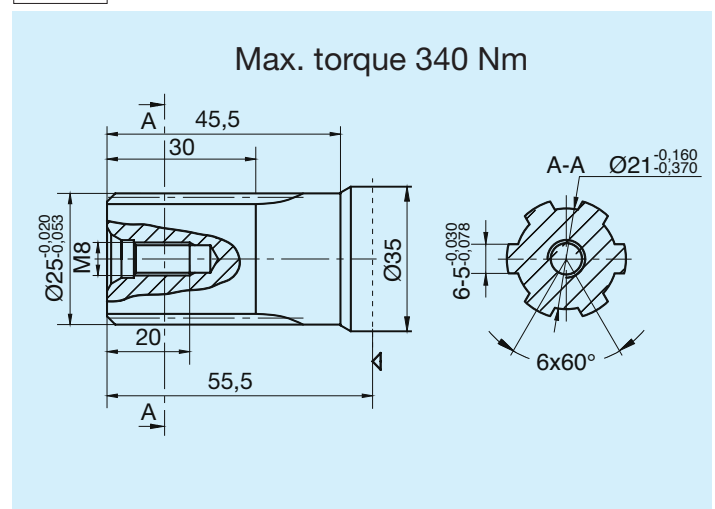
P10 Ø32 key DIN 6885 A 10x8x45



3H1 UNI 8953 6x26x30

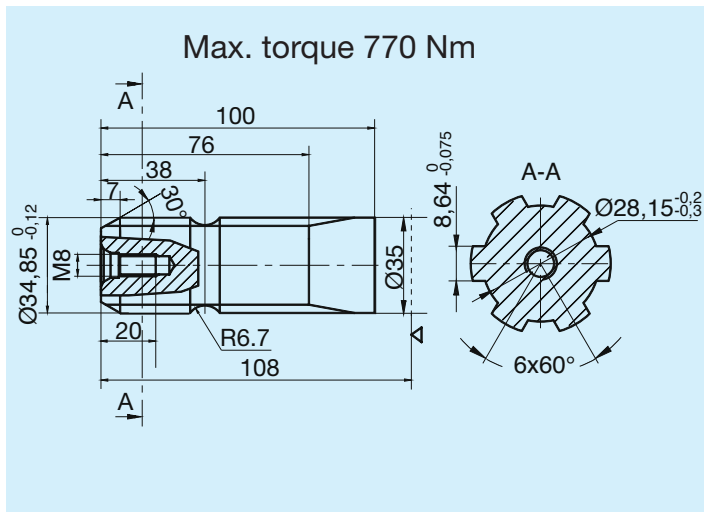


3H2 UNI 8953 6x21x25

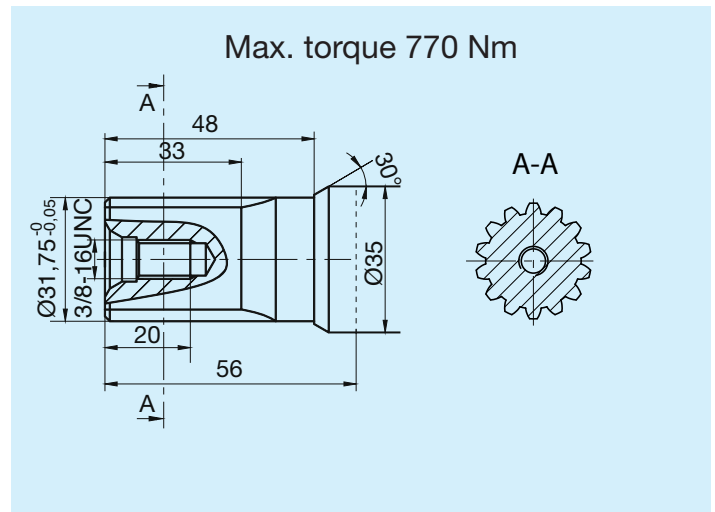


The shafts come with anti-corrosion treatment as standard.

3H3 DIN 9611 1 3/8" Z6

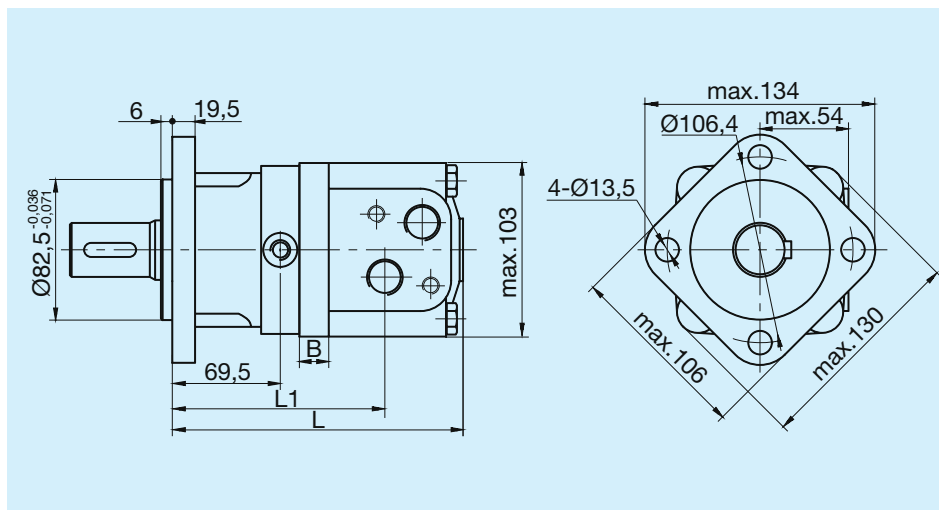


3K3 ANSI-B92.1 DP12/24 30° Z14



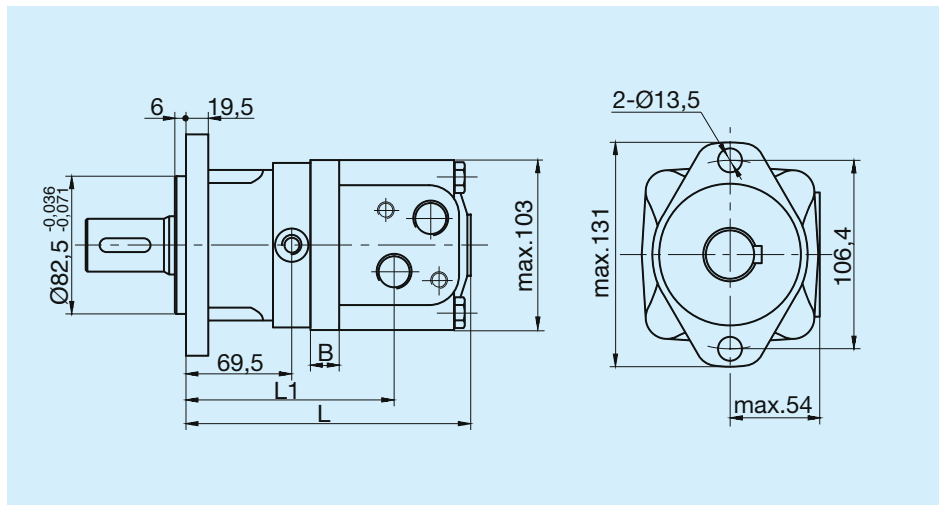
The shafts come with anti-corrosion treatment as standard.

A0 SAE A 4 holes



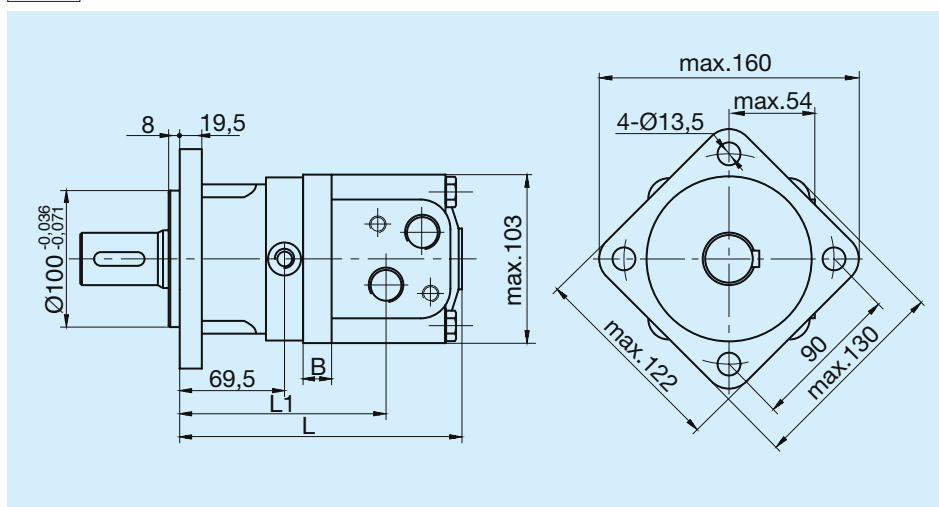
Type	L mm	L1 mm	B mm
3Y 080	170	126.5	11
3Y 100	173.5	130	14.5
3Y 125	178	134.5	19
3Y 160	184	140.5	25
3Y 200	191	147.5	32
3Y 250	200	156.5	41
3Y 315	212	168.5	53
3Y 400	226	182.5	67
3Y 500	239	195.5	80

A2 SAE A 2 holes



Type	L mm	L1 mm	B mm
3Y 080	170	126.5	11
3Y 100	173.5	130	14.5
3Y 125	178	134.5	19
3Y 160	184	140.5	25
3Y 200	191	147.5	32
3Y 250	200	156.5	41
3Y 315	212	168.5	53
3Y 400	226	182.5	67
3Y 500	239	195.5	80

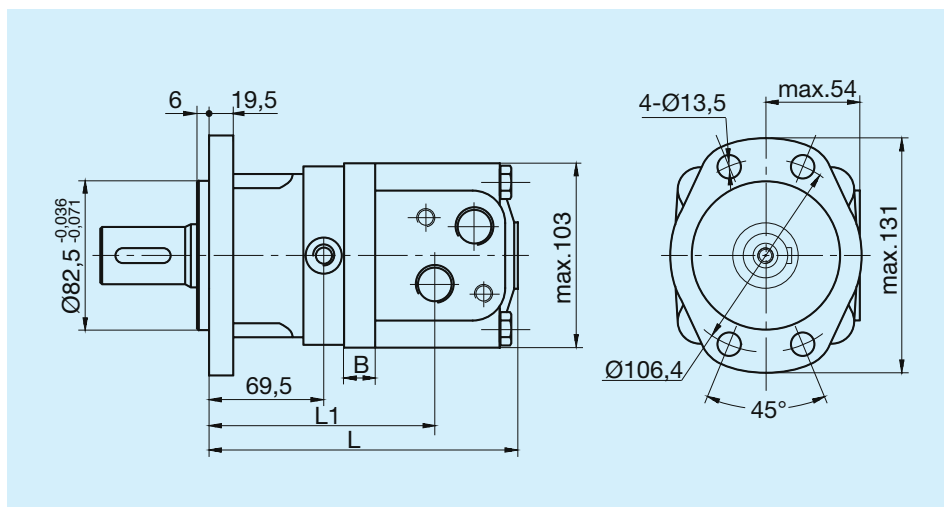
A3 ISO 3019 Ø100



Type	L mm	L1 mm	B mm
3Y 080	170	126.5	11
3Y 100	173.5	130	14.5
3Y 125	178	134.5	19
3Y 160	184	140.5	25
3Y 200	191	147.5	32
3Y 250	200	156.5	41
3Y 315	212	168.5	53
3Y 400	226	182.5	67
3Y 500	239	195.5	80

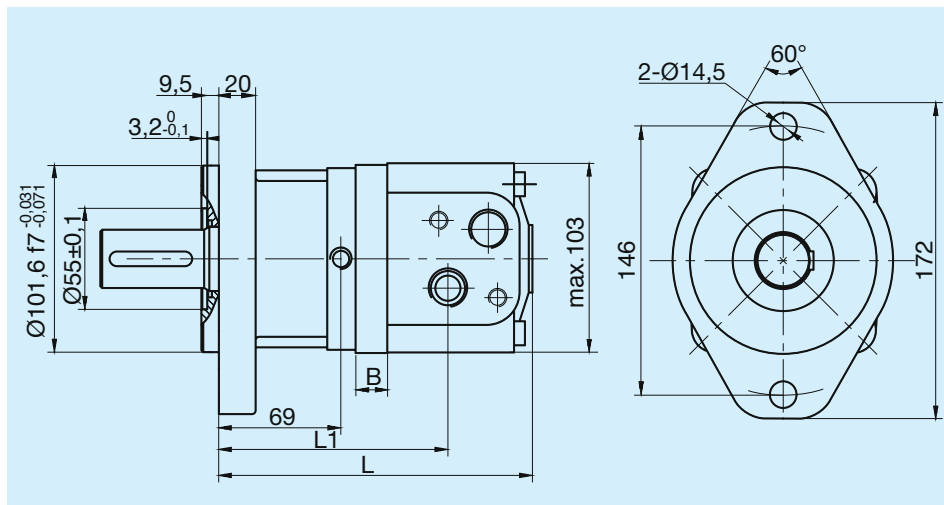
The flanges come with anti-corrosion treatment as standard.

AV Magneto 4 holes



Type	L mm	L1 mm	B mm
3Y 080	170	126.5	11
3Y 100	173.5	130	14.5
3Y 125	178	134.5	19
3Y 160	184	140.5	25
3Y 200	191	147.5	32
3Y 250	200	156.5	41
3Y 315	212	168.5	53
3Y 400	226	182.5	67
3Y 500	239	195.5	80

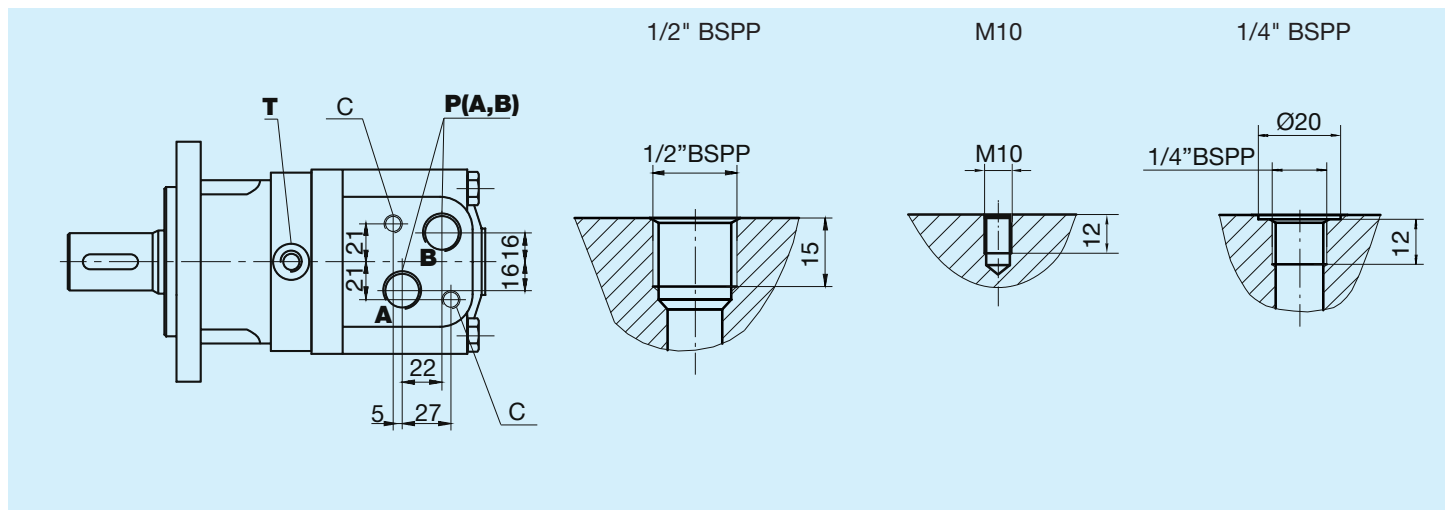
A6 SAE B 2 holes



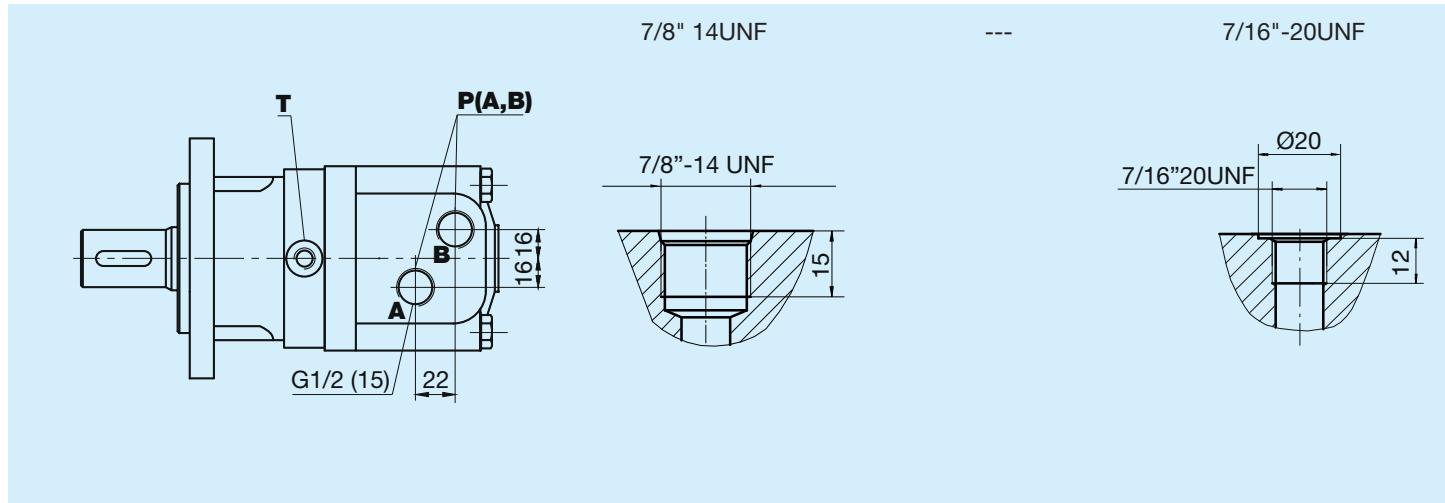
Type	L mm	L1 mm	B mm
3Y 080	170	126.5	11
3Y 100	173.5	130	14.5
3Y 125	178	134.5	19
3Y 160	184	140.5	25
3Y 200	191	147.5	32
3Y 250	200	156.5	41
3Y 315	212	168.5	53
3Y 400	226	182.5	67
3Y 500	239	195.5	80

The flanges come with anti-corrosion treatment as standard.

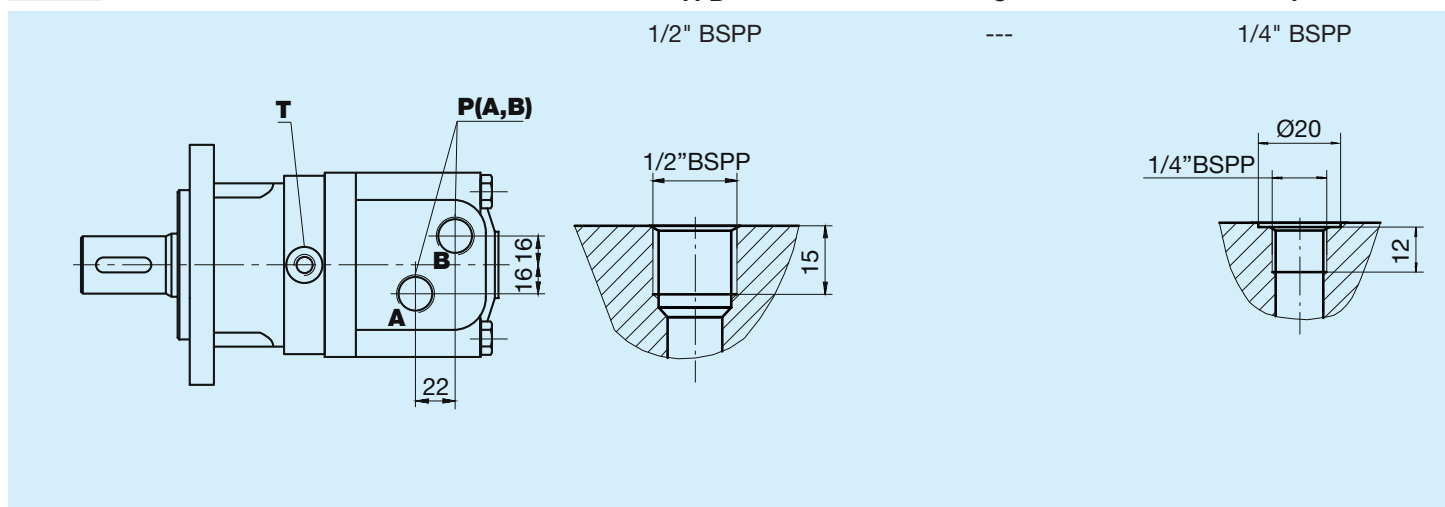
3Y0 With lateral ports



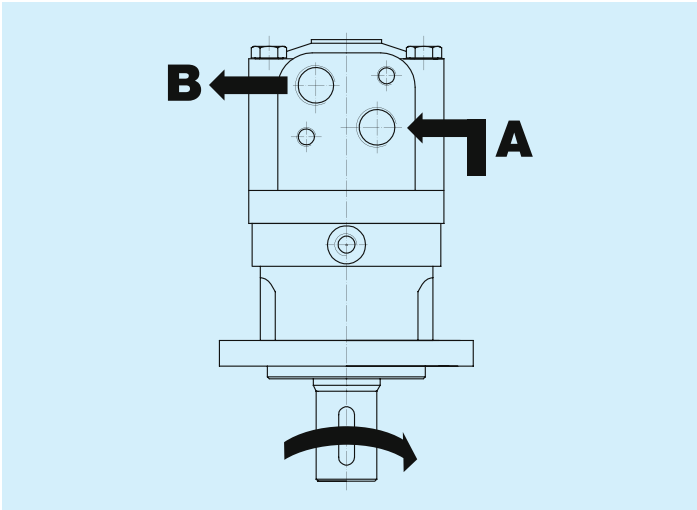
Y35 With lateral ports



Y31 With lateral ports



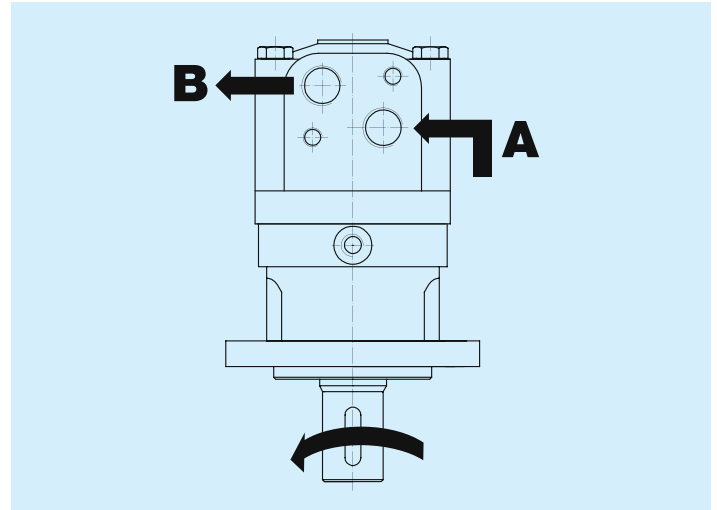
0 Standard



When facing the motor shaft, rotation is:

- Clockwise, when port A is pressurised
- Counterclockwise, when port B is pressurised.

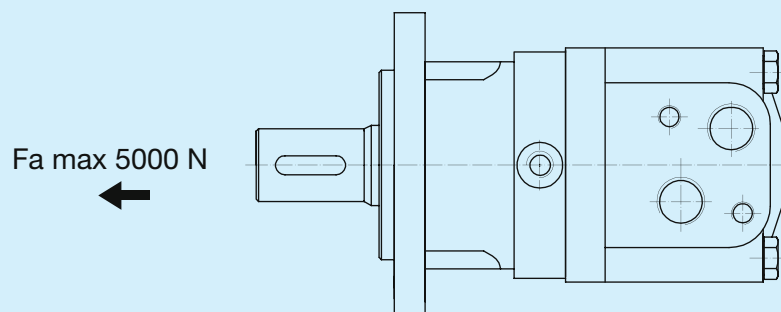
L Reverse



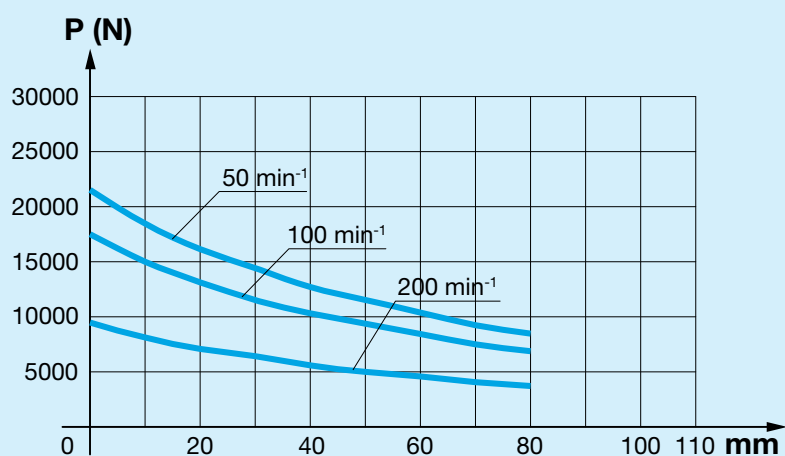
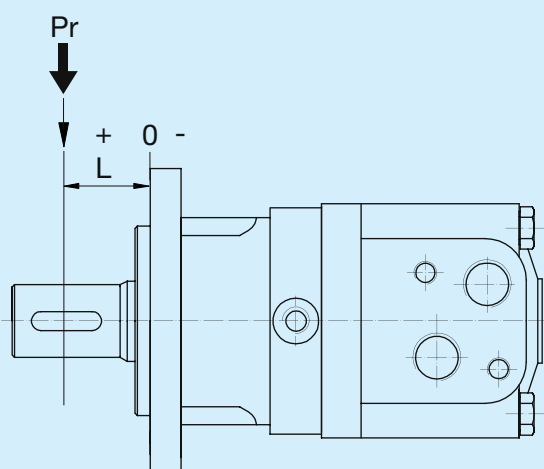
When facing the motor shaft, rotation is:

- Counterclockwise, when port A is pressurised
- Clockwise, when port B is pressurised.

Axial load



Radial load



OZ 3Y	1	2	3	4	5	6
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1		Displacement						
	080	80.5 cm³/rev	125	126.3 cm³/rev	200	200.9 cm³/rev	315	321.5 cm³/rev
	100	100.5 cm³/rev	160	160.8 cm³/rev	250	252.6 cm³/rev	400	401.9 cm³/rev

2		Shaft profile						
	3P1	Cylindrical Ø25 Key DIN6885 A 8x7x32	3P5	Cylindrical 1 1/4". Key SAE J744 5/16"x5/16"x1 1/4"	3H1	Grooved UNI 8953 6x26x30	3H3	Grooved DIN9611 1 3/8" Z6
	3P3	Cylindrical 1". Key BS46 1/4"x1/4"x1 1/4"	P10	Cylindrical Ø32 Key DIN6885 A 10x8x45	3H2	Grooved UNI 8953 6x21x25	3K3	Grooved ANSI-B92.1 DP12/24 30° Z14

3

Flanges

A0	SAE A 4 holes	A3	ISO 3019 Ø100	A6	SAE B 2 holes
A2	SAE A 2 holes	AV	Magneto 4 holes		

4		Thread ports A-B, T					
		3Y0	BSPP 1/2" Drain port BSPP 1/4"	Y35	7/8-14UNF(15) Drain port 7/16"- 20UNF	Y31	BSPP 1/2" Drain port BSPP 1/4"

5	Special options	
00	None	

6	Direction of rotation of shafts	
	0 Standard	L Reverse

