



FLOWFIT® FFPRM MOTORS



Low speed high torque orbital motors are specifically engineered to deliver powerful rotational force at reduced speeds. These motors are suitable replacements for Sauer Danfoss OMR motors. Similar to the FFPM motor, this option is also suited for light-duty applications but delivers comparable power at a much lower load. It is commonly used in agriculture, forestry, plastic moulding, and machine tools. With internal check valves, it can be installed on a bi-directional circuit without the need for a drain line.

Type		FFPRM 50	FFPRM 80	FFPRM 100	FFPRM 125	FFPRM 160	FFPRM 200	FFPRM 250	FFPRM 315	FFPRM 400
Displacement (ml/r)		51.7	80.5	100.5	126.3	160.8	200.9	252.6	321.5	401.9
Max Pressure Drop (Bar)	Cont.	140	140	140	140	140	140	110	90	70
	Int.	175	175	175	175	175	175	140	110	90
	Peak	200	200	200	200	200	200	160	130	110
Max Torque (N.m)	Cont.	93	152	194	237	310	369	380	380	380
	Int.	118	189	236	296	378	450	470	470	470
	Peak	135	216	270	338	433	509	540	540	540
Speed Range (Cont.) (r/min)		10-775	10-750	10-600	10-475	10-375	10-300	10-240	10-190	10-160
Max Flow (Cont.) (r/min)		40	60	60	60	60	60	60	60	60
Max Output Power (Cont.) (Kw)		7	10	10	10	10	8	6	5	4
Weight (Kg)		6.5	6.9	7.0	7.3	7.5	8.0	8.5	9.0	11

Intermittent operation the permissible values may occur for max. 10% of every minute
 Peak Load: the permissible values may occur for max. 1% of every minute



PERFORMANCE DATA

FFPRM50

Pressure (Bar)

Max Cont. Max int.

		50	70	90	100	120	140	160	175
Flow (L/min)	5	34 94	44 85	58 77	65 77	75 72	88 50		
	10	35 188	45 179	61 167	68 163	79 154	94 137	107 119	119 98
	15	34 285	48 279	62 271	72 263	87 252	100 232	108 213	122 187
	20	34 379	46 377	60 367	68 363	82 348	95 332	109 304	125 272
	30	32 578	43 571	59 563	66 556	79 544	94 533	107 502	121 467
Max Cont.	40	30 762	40 760	57 755	65 752	78 752	91 726	105 702	120 672
Max int.	45	29 858	39 855	56 851	64 847	77 837	89 817	104 798	120 772
	50	25 952	36 942	52 927	59 908	72 882	84 854	98 834	113 803

Torque: 36 Nm
Speed: 942 r/min

FFPRM80

Pressure (Bar)

Max Cont. Max int.

		50	70	90	100	120	140	160	175
Flow (L/min)	5	48 61	58 58	84 52	106 46	129 40			
	10	50 122	74 116	96 112	106 108	126 106	145 99	170 60	
	20	54 243	76 239	100 231	109 219	131 206	152 192	174 176	193 152
	30	50 362	72 358	96 356	104 350	128 349	148 335	172 325	191 300
	40	45 484	70 480	95 478	104 476	125 470	146 468	171 440	188 438
Max Cont.	50	41 610	68 608	91 606	101 603	122 600	145 598	168 550	186 520
	60	35 726	65 723	88 720	96 718	120 710	142 700	164 698	182 680
Max int.	70	30 845	58 834	81 820	93 802	114 789	136 767	158 754	175 730
	75	19 910	48 895	76 881	88 867	108 852	132 830	151 806	168 787

Torque: 76 Nm
Speed: 881 r/min

FFPRM100

Pressure (Bar)

Max Cont. Max int.

		50	70	90	100	120	140	160	175
Flow (L/min)	5	64 49	90 48	118 46	134 42	154 38			
	10	65 96	93 94	122 93	134 91	155 80	183 60	210 48	
	20	62 192	93 188	121 184	135 178	153 171	184 168	208 158	236 146
	30	61 296	90 294	118 290	130 290	150 288	180 282	200 270	232 258
	40	55 387	86 380	115 369	126 361	146 356	181 348	206 338	228 320
Max Cont.	50	46 484	77 479	108 472	121 463	146 452	181 445	200 428	221 410
	60	34 583	62 567	98 569	110 555	136 540	170 536	186 528	199 516
Max int.	70	30 680	63 672	97 662	110 650	138 640	170 635	190 620	210 606
	75	20 728	54 720	90 710	106 695	130 681	165 667	188 650	200 634

Torque: 90 Nm
Speed: 710 r/min

FFPRM125

Pressure (Bar)

Max Cont. Max int.

		50	70	90	100	120	140	160	175
Flow (L/min)	5	74 37	106 32	140 27	163 21				
	10	81 78	114 77	152 74	172 59	200 45	220 29	250 20	
	20	80 157	114 156	150 154	170 151	200 146	221 142	254 120	292 114
	30	78 232	112 230	149 228	169 222	198 220	220 218	252 199	290 170
	40	77 312	111 311	147 307	168 300	196 298	218 284	250 270	288 252
Max Cont.	50	62 391	105 388	143 383	165 380	195 372	223 362	254 346	278 330
	60	52 470	98 468	136 464	160 459	191 448	220 434	250 412	282 405
Max int.	70	41 548	90 544	130 540	156 541	187 538	215 535	242 530	278 496
	75	32 586	79 583	126 578	148 570	180 560	208 546	234 532	262 520

Torque: 126 Nm
Speed: 578 r/min



PERFORMANCE DATA

FFPRM160

Pressure (Bar)

Max Cont. Max int.

		50	70	90	100	120	140	160	175
Flow (L/min)	5	100 29	142 26	188 21	207 19				
	10	104 62	146 60	191 58	211 49	245 45	282 32	330 35	
	20	102 124	148 120	194 118	218 114	251 109	290 104	338 99	368 94
	30	96 183	141 181	186 179	215 176	248 166	288 158	335 144	364 132
	40	87 246	136 242	180 240	206 235	248 231	286 219	330 200	358 155
	50	70 309	126 307	172 300	198 295	238 287	278 278	320 262	350 247
	Max Cont. 60	58 371	111 367	168 359	191 354	232 346	271 338	312 323	342 306
	70	47 435	104 430	160 421	190 415	228 403	267 393	301 381	338 365
Max int. 75	34 470	91 463	150 450	180 441	221 431	261 420	291 405	328 389	

FFPRM200

Pressure (Bar)

Max Cont. Max int.

		50	70	90	100	120	140	160	175
Flow (L/min)	5	129 24	176 22	230 18	256 13				
	10	133 49	182 47	236 45	361 43	310 38	352 33	400 24	
	20	131 99	181 97	232 94	256 92	308 88	354 83	400 74	431 64
	30	126 149	176 147	239 144	252 141	308 135	353 126	400 113	430 105
	40	112 200	168 197	224 194	248 191	304 185	350 174	393 160	423 151
	50	94 252	154 249	220 246	243 243	294 238	343 228	384 212	414 194
	Max Cont. 60	78 304	144 301	213 298	236 294	287 286	339 276	382 262	410 243
	70	67 355	135 353	206 349	228 340	277 329	336 316	375 300	408 288
Max int. 75	58 382	125 379	197 373	220 362	270 350	321 337	360 322	298 312	

FFPRM250

Pressure (Bar)

Max Cont. Max int.

		50	70	90	100	110	120	140
Flow (L/min)	5	172 20	240 19	300 18	338 16	352 15		
	10	173 42	242 38	308 36	340 33	351 33	405 28	462 22
	20	170 79	238 77	301 75	339 72	350 71	402 69	460 61
	30	160 117	231 114	298 111	330 109	347 108	398 103	455 95
	40	141 157	221 155	298 153	327 150	342 148	394 146	445 135
	50	122 196	206 193	287 190	321 177	332 175	382 170	438 163
	Max Cont. 60	101 236	190 233	278 230	312 227	328 225	369 221	424 208
	70	86 276	176 273	262 270	298 266	302 264	353 255	416 245
Max int. 75	60 297	163 294	254 290	286 286	291 282	345 277	410 266	

Torque: 150 Nm
Speed: 450 r/min

FFPRM315

Pressure (Bar)

Max Cont. Max int.

		30	50	70	90	100	110
Flow (L/min)	5	110 14	199 12				
	10	108 31	190 30	272 29	360 28	400 26	451 25
	20	110 61	196 60	279 59	356 57	398 55	448 53
	30	106 91	186 90	270 89	355 86	390 84	442 82
	40	100 123	179 122	262 120	350 117	382 112	436 110
	50	92 154	169 153	252 151	342 147	373 140	432 136
	Max Cont. 60	86 185	159 184	241 182	339 177	369 172	428 170
	70	77 217	146 216	235 213	324 208	342 201	412 200
Max int. 75	66 232	132 231	212 228	303 222	332 216	402 214	

Torque: 197 Nm
Speed: 373 r/min

Torque: 254 Nm
Speed: 290 r/min

Torque: 212 Nm
Speed: 228 r/min



PERFORMANCE DATA

FFPRM400

Pressure (Bar)

Max Cont. Max int.

	30	40	60	70	80	90	
Flow (L/min)	5	152 14					
	10	154 24	205 21	308 18	349 17		
	20	150 49	201 48	302 47	340 46	392 44	441 41
	30	146 73	198 74	296 73	331 72	387 70	438 67
	40	140 98	191 97	290 96	321 95	381 94	421 92
	50	132 122	182 121	281 118	315 115	376 112	402 110
Max Cont.	60	128 146	176 145	272 143	312 140	362 138	389 132
	70	110 170	171 168	259 166	301 162	341 160	379 154
Max int.	75	98 182	162 180	232 178	292 176	320 174	356 170

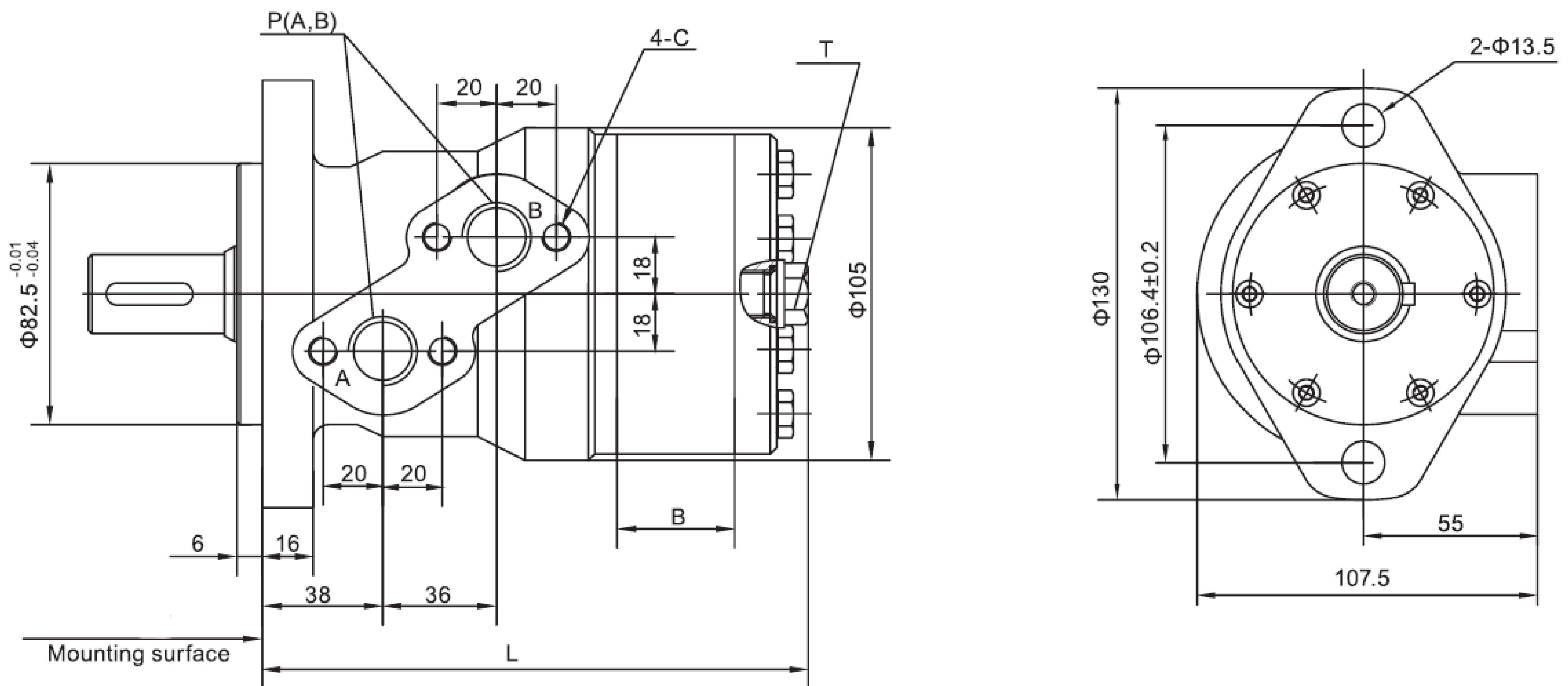
Torque: 162 Nm
Speed: 180 r/min





INSTALLATION DATA

2 Hole Oval Flange



Type	FFPRM 50	FFPRM 80	FFPRM 100	FFPRM 125	FFPRM 160	FFPRM 200	FFPRM 250	FFPRM 315	FFPRM 400
L	142	147	150.5	155	161	168	177	189	203
B	9	14	17.5	22	28	35	44	56	70

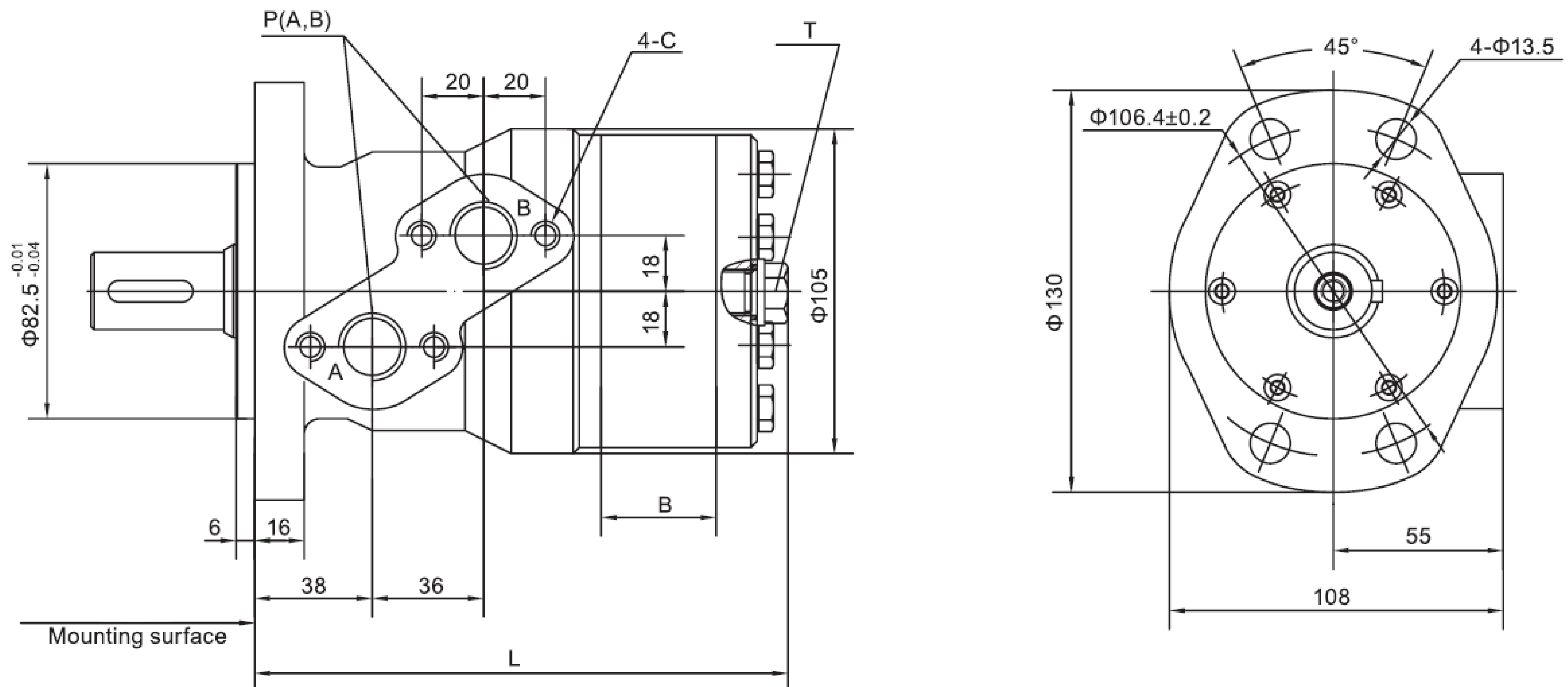
P(A,B)(deep) Ports	C (deep) - Mounting Thread	T (deep) - Drain Connection
G1/2 BSP (15)	M8 (13)	G1/4 BSP (12)





INSTALLATION DATA

F - 4 Hole Oval Flange



Type	FFPRM 50	FFPRM 80	FFPRM 100	FFPRM 125	FFPRM 160	FFPRM 200	FFPRM 250	FFPRM 315	FFPRM 400
L	142	147	150.5	155	161	168	177	189	203
B	9	14	17.5	22	28	35	44	56	70

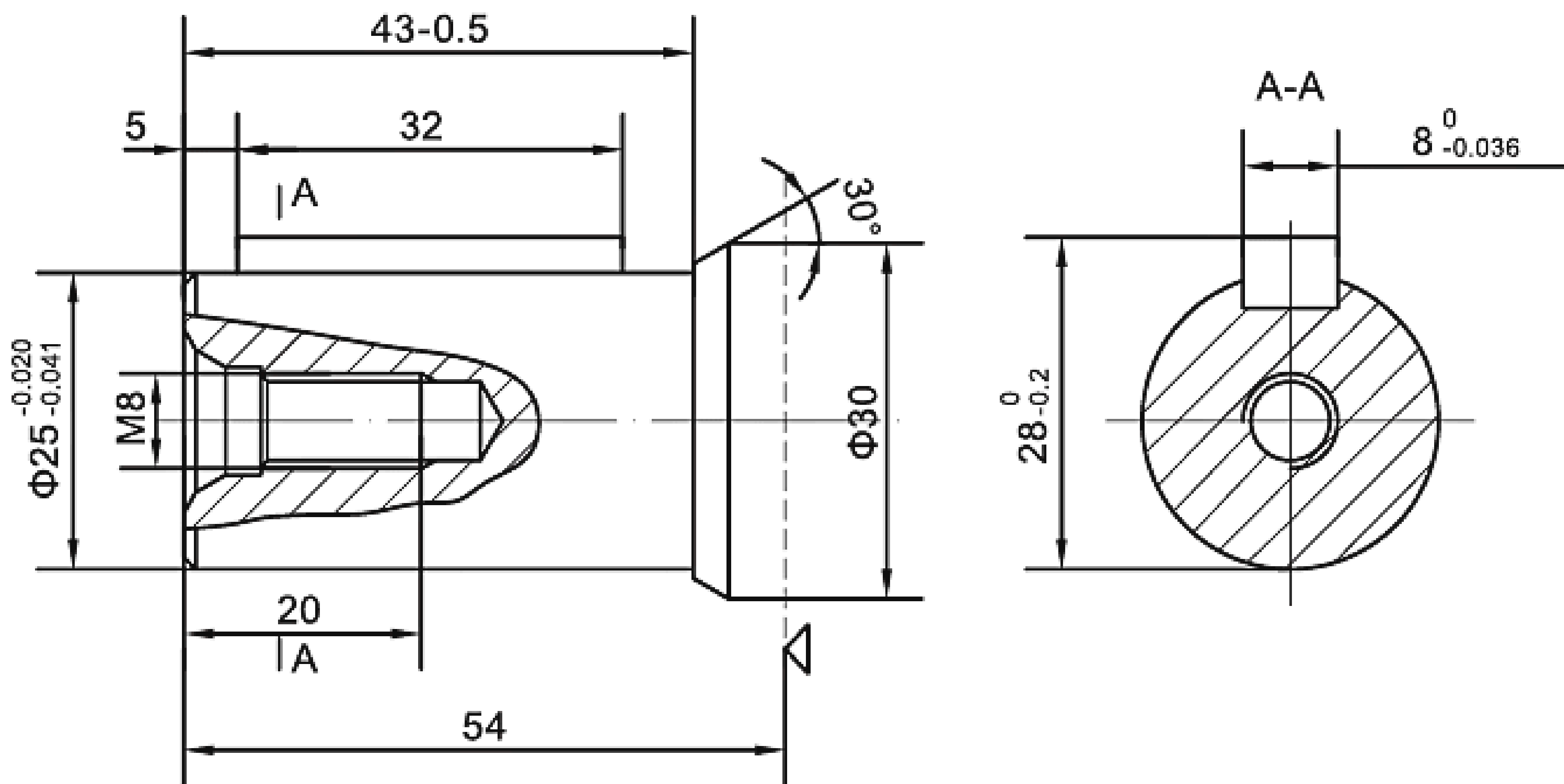
P(A,B)(deep) Ports	C (deep) - Mounting Thread	T (deep) - Drain Connection
G1/2 BSP (15)	M8 (13)	G1/4 BSP (12)



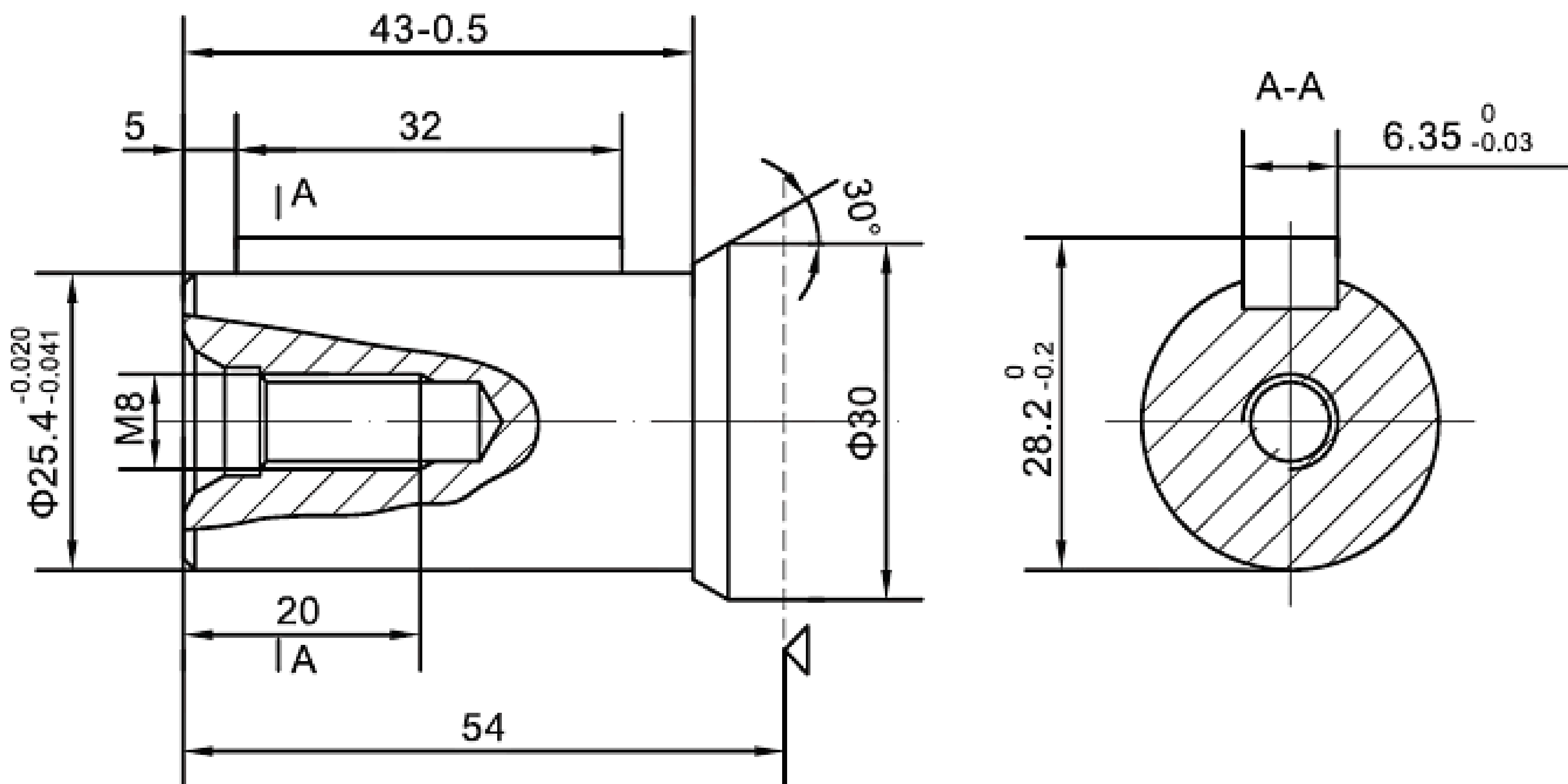


SHAFT VERSION

C - $\varnothing 25$ Cylindrical Shaft, Parallel Key 8 x 7 x 32



CO - $\varnothing 25.4$ Cylindrical Shaft, Parallel Key 6.35 x 6.35 x 32

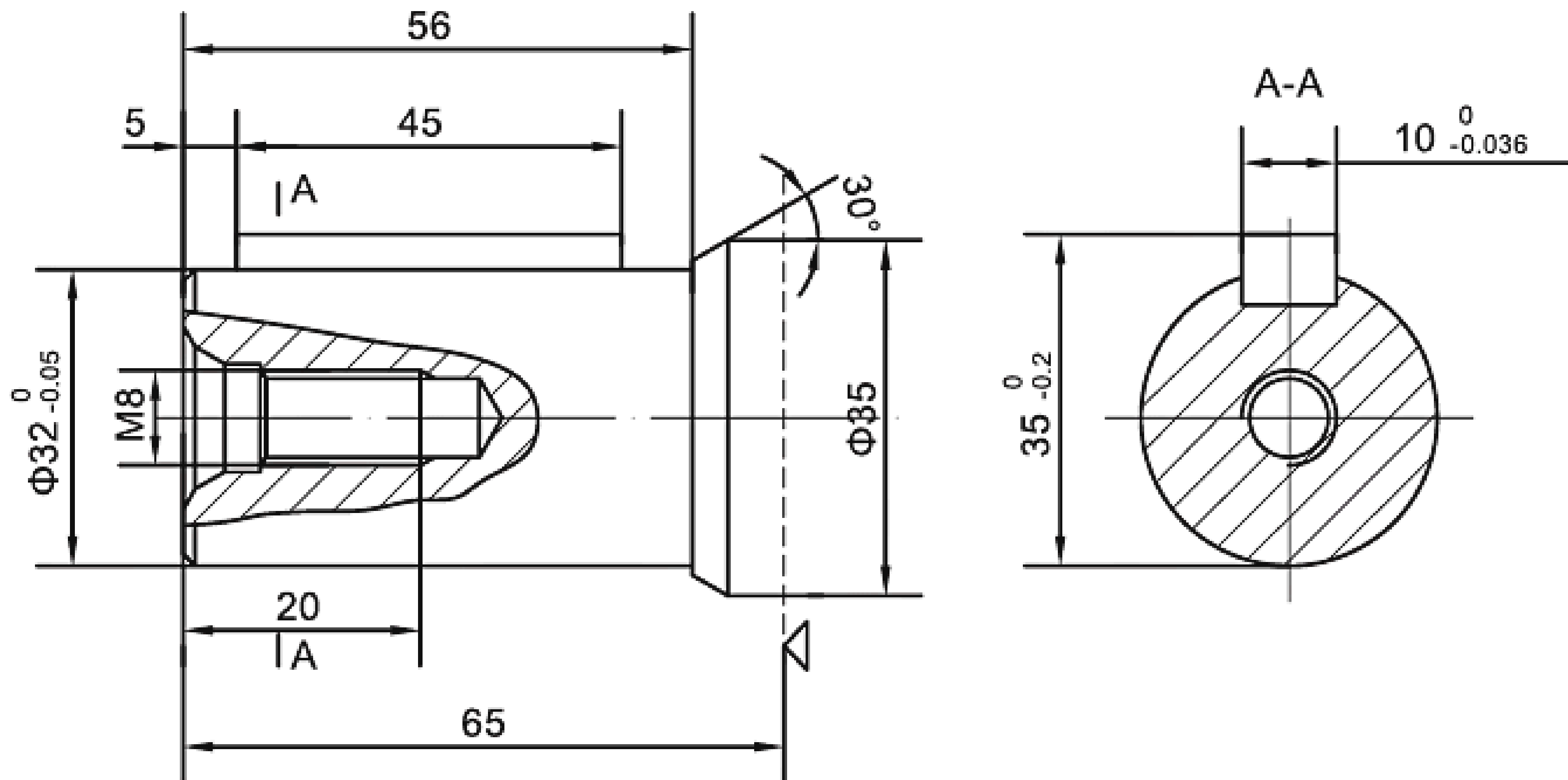


 : Motor mounting surface

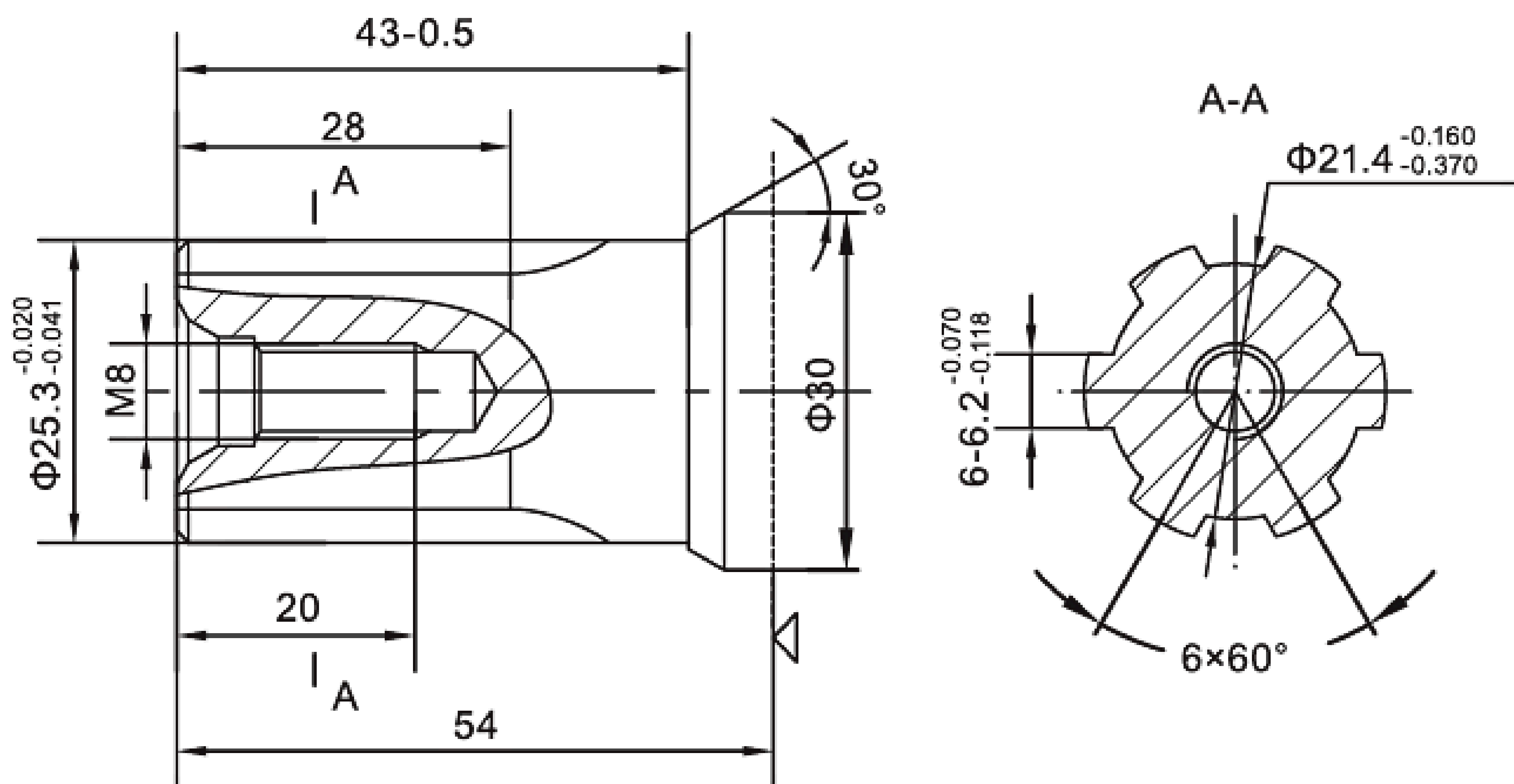


SHAFT VERSION

CB - \varnothing 32 Cylindrical Shaft, Parallel Key 10 x 8 x 45



SH - \varnothing 25.3 Splined Shaft, 6-25.3 x 21.4 x 6.2



◁ : Motor mounting surface



ORDERING CODES

1

2

3

4

FFPRM				
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Pos.1	Mounting Flange
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Omit - Oval mount, two holes

F	Oval mount, four holes
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Pos.2	Displacement code
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50	51.7 cc/rev	200	200.9 cc/rev
80	80.5 cc/rev	250	252.6 cc/rev
100	100.5 cc/rev	315	321.5 cc/rev
125	126.3 cc/rev	400	401.9 cc/rev
160	160.8 cc/rev		

Pos.3	Shaft Extensions
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C	∅ 25 Cylindrical Shaft, Parallel Key 8 x 7 x 32
CO	∅ 25.4 Cylindrical Shaft, Parallel Key 6.35 x 6.35 x 32
CB	∅ 32 Cylindrical Shaft, Parallel Key 10 x 8 x 45
SH	∅ 25.3 Splined Shaft, 6-25.3 x 21.4 x 6.2

Pos.4	Shaft Seal Version
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D	High pressure shaft seal
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All our motors are supplied with a black gloss phosphatizing finish, enhancing corrosion resistance and improving friction performance.