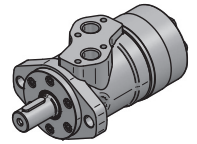
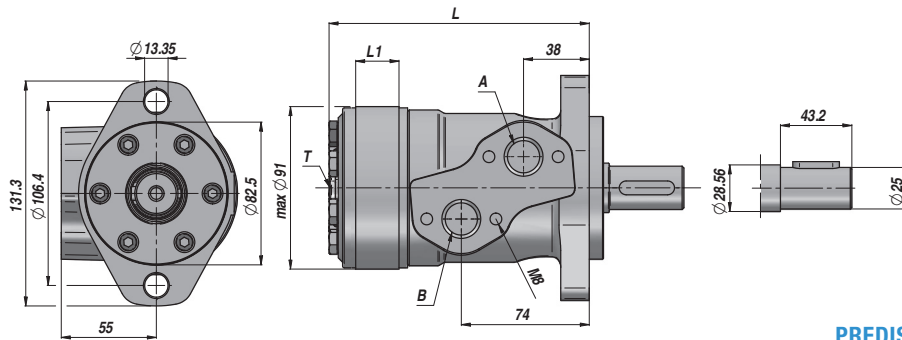
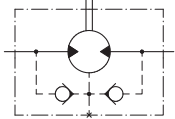
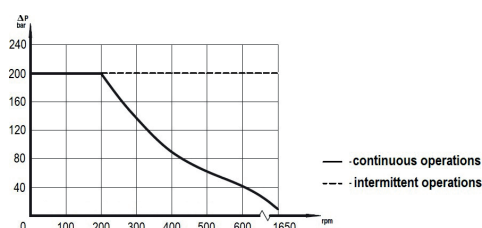
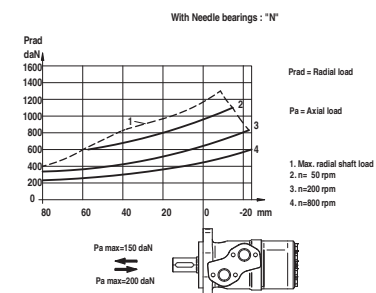


MOTEUR "Z-J HYDRAULIC"
"Z-J HYDRAULIC" MOTOR
ARBRE CYLINDRIQUE Ø25
PARALLEL SHAFT Ø25
BRIDE "SAE A" - 2 TROUS
"SAE A" FLANGE - 2 HOLES

MCPN
Standard: ARBRE RENFORCE POUR CHARGES RADIALES - WITH NEEDLE BEARINGS FOR RADIAL LOADS
CLAPET ANTI-RETOUR
INTÉGRE
BUILT-IN CHECK VALVES

PEINTURE NOIRE
BLACK PAINTED
PREDISPOSITION POUR DRAINAGE
MACHINED FOR DRAIN CONNECTION

Code Code	Type Type	cm³/tr cm³/rev	n. Max tours/min rpm	M Max daNm	Q MAX l/min	P MAX bar			A - B	T	L	L1	kg
						Chute Drop Δp	Entrée Inlet	Retour Return					
TRAVAIL EN CONTINU - CONTINUOUS WORK													
MCPN036CD0	MC-PN 36 CD	36.0	1500	5.5	55	125	165	165 *	1/2"	1/4"	137.0	7.0	5,60
MCPN050CD0	MC-PN 50 CD	51.7	1150	10.0	60	140	165	165 *			137.0	7.0	5,60
MCPN080CD0	MC-PN 80 CD	77.7	770	14.6	60	140	165	165 *			140.5	10.5	5,70
MCPN100CD0	MC-PN 100 CD	96.2	615	18.2	60	140	165	165 *			143.0	13.0	5,90
MCPN125CD0	MC-PN 125 CD	120.2	490	23.6	60	140	165	165 *			146.0	16.0	6,00
MCPN160CD0	MC-PN 160 CD	157.2	383	30.2	60	140	165	165 *			151.0	21.0	6,20
MCPN200CD0	MC-PN 200 CD	194.5	310	36.0	60	140	165	165 *			157.0	26.0	6,40
MCPN250CD0	MC-PN 250 CD	240.3	250	38.0	60	110	165	165 *			162.0	32.0	6,60
MCPN315CD0	MC-PN 315 CD	314.5	192	37.5	60	90	165	165 *			172.0	42.0	6,90
MCPN400CD0	MC-PN 400 CD	389.5	155	36.0	60	70	165	165 *			182.0	52.0	7,40
MCPN500CD0	MC-PN 500 CD	486.5	120	38.5	60	60	165	165 *			195.0	65.0	8,00

* = AVEC DRAINAGE - WITH DRAIN

PRESSION MAXI EN RETOUR SANS DRAINAGE
MAX. RETURN PRESSURE WITHOUT DRAIN

CHARGES ADMISSIBLES SUR L'ARBRE
PERMISSIBLE SHAFT LOADS


BMP SERIES HYDRAULIC MOTOR

BMP series motor are small volume, economical type, which is designed with shaft distribution flow, which adapt the Gerotor gear set design and provide compact volume, high power and low weight.

Characteristic features:

- * Advanced manufacturing devices for the Gerotor gear set, which provide small volume, high efficiency and long life.
- * Shaft seal can bear high pressure of motor of which can be used in parallel or in series.
- * Advanced construction design, high power and low weight.

Main Specification

Technical data for BMP with 25 and 1 in and 1 in splined and 28.56 tapered shaft

Type		BMP BMPH BMPW 36	BMP BMPH BMPW 50	BMP BMPH BMPW 80	BMP BMPH BMPW 100	BMP BMPH BMPW 125	BMP BMPH BMPW 160	BMP BMPH BMPW 200	BMP BMPH BMPW 250	BMP BMPH BMPW 315	BMP BMPH BMPW 400	BMP BMPH BMPW 500
Geometric displacement (cm ³ /rev.)		36	51.7	77.7	96.2	120.2	157.2	194.5	240.3	314.5	389.5	486.5
Max. speed (rpm)	cont.	1500	1150	770	615	490	383	310	250	192	155	120
	int.	1650	1450	960	770	615	475	385	310	240	190	150
Max. torque (N•m)	cont.	55	100	146	182	236	302	360	380	375	360	385
	int.	76	128	186	227	290	370	440	460	555	525	560
	peak	96	148	218	264	360	434	540	550	650	680	680
Max. output (kW)	cont.	8.0	10.0	10.0	11.0	10.0	10.0	10.0	8.5	7.0	6.0	5.0
	int.	11.5	12.0	12.0	13.0	12.0	12.0	12.0	10.5	8.5	7.0	6.0
Max. pressure drop (MPa)	cont.	12.5	14	14	14	14	14	14	11	9	7	6
	int.	16.5	17.5	17.5	17.5	17.5	17.5	17.5	14	14	10.5	9
	peak	22.5	22.5	22.5	22.5	22.5	22.5	22.5	18	16	14	12
Max. flow (L/min)	cont.	55	60	60	60	60	60	60	60	60	60	60
	int.	60	75	75	75	75	75	75	75	75	75	75
Weight (kg)		5.6	5.6	5.7	5.9	6.0	6.2	6.4	6.7	6.9	7.4	8

* Continuous pressure:Max. value of operating motor continuously.

* Intermittent pressure:Max. value of operating motor in 6 seconds per minute.

* Peak pressure:Max. value of operating motor in 0.6 second per minute.

Main Specification

Technical data for BMP with 31.75 and 32 shaft

Type		BMP BMPH 36	BMP BMPH 50	BMP BMPH 80	BMP BMPH 100	BMP BMPH 125	BMP BMPH 160	BMP BMPH 200	BMP BMPH 250	BMP BMPH 315	BMP BMPH 400	BMP BMPH 500
Geometric displacement (cm³/rev.)		36	51.7	77.7	96.2	120.2	157.2	194.5	240.3	314.5	389.5	486.5
Max. speed (rpm)	cont.	1500	1150	770	615	490	383	310	250	192	155	120
	int.	1650	1450	960	770	615	475	385	310	240	190	150
Max. torque (N•m)	cont.	55	100	146	182	236	302	360	460	475	490	430
	int.	76	128	186	227	290	370	440	570	555	580	560
	peak	96	148	218	264	360	434	540	670	840	840	780
Max. output (kW)	cont.	8.0	10.0	10.0	11.0	10.0	10.0	10.0	8.5	7.0	6.0	6.0
	int.	11.5	12.0	12.0	13.0	12.0	12.0	12.0	10.5	8.5	7.0	7.0
Max. pressure drop (MPa)	cont.	12.5	14	14	14	14	14	14	14	12	9.5	7
	int.	16.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	14	11.5	9
	peak	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	18	13
Max. flow (L/min)	cont.	55	60	60	60	60	60	60	60	60	60	60
	int.	60	75	75	75	75	75	75	75	75	75	75
Weight (kg)		5.6	5.6	5.7	5.9	6.0	6.2	6.4	6.7	6.9	7.4	8.0

* Continuous pressure:Max.value of operating motor continuously.

* Intermittent pressure:Max.value of operating motor in 6 seconds per minute .

* Peak pressure:Max.value of operating motor in 0.6 second per minute.

Performance Data

BMP 36 [36cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

	3	6	7	8	10	11	12.5	16.5
8	13	25	29	34	43	48		
15	13	25	29	34	43	48	56	75
20	13	24	29	34	43	48	56	76
30	12	24	29	34	43	48	56	76
35	12	23	28	34	43	48	56	76
40	12	23	28	32	41	47	55	75
45	11	22	26	32	41	46	54	74
55	6	15	22	28	37	44	52	71
60	3	11	18	20	30	38	49	67

BMP 50 [51.7cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

	3	6	8	10	12.5	14	16	17.5
8	20	41	56	69	89	95		
15	19	40	56	71	91	100	112	120
20	18	39	55	71	92	101	117	128
30	17	38	55	71	91	98	116	124
35	17	38	54	69	89	98	117	124
45	14	36	53	67	88	98	114	123
55	12	33	50	65	85	96	111	121
60	10	32	47	64	83	94	108	119
75	6	25	42	56	76	87	101	112

BMP 80 [77.7cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

	3	6	8	10	12.5	14	16	17.5
8	32	62	85	104	129	144		
15	32	63	84	107	126	144	165	
20	31	63	84	107	132	146	168	185
30	31	62	83	106	131	146	168	186
35	30	59	81	102	130	144	167	185
45	25	58	79	100	126	142	165	182
55	23	57	78	97	124	140	161	179
60	20	53	75	94	120	137	160	177
75	14	44	67	87	112	151	169	169

BMP 100 [96.2cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

	3	6	8	10	12.5	14	16	17.5
8	40	77	105	130	161	180		
15	39	77	106	130	160	180	208	
20	36	74	104	128	161	179	205	227
30	33	72	103	125	160	177	203	225
35	30	70	98	122	159	176	202	224
45	29	67	95	118	155	174	200	220
55	25	64	93	116	152	170	198	217
60	22	60	91	114	149	167	194	213
75	15	54	83	106	141	160	186	205

Torque (N•m) 87
Speed (rpm) 920

cont.
int.

Performance Data

BMP 125 [120.2cm³/rev.]

Pressure (MPa)

Max.cont.

Max.int.

3	6	8	10	12.5	14	16	17.5
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Flow (L/min)	8	51 63	98 60	137 55	168 47	208 28	236 15		
	15	51 121	101 116	138 110	168 102	209 89	236 73	267 48	
	20	48 162	98 158	135 153	167 148	211 137	237 128	269 109	290 94
	30	46 243	96 239	132 234	164 227	209 216	232 202	264 189	287 176
	35	42 284	92 279	130 274	160 269	206 259	229 247	260 231	284 222
	45	37 370	89 362	125 355	157 348	201 340	224 327	261 310	281 296
	55	33 452	84 446	122 438	152 431	196 420	218 412	252 402	275 384
	Max.cont. 60	29 490	78 482	117 475	146 468	191 459	215 448	248 439	272 427
	Max.int. 75	18 615	66 606	107 598	133 586	179 575	202 563	236 549	260 528

BMP 160 [157.2cm³/rev.]

Pressure (MPa)

Max.cont.

Max.int.

3	6	8	10	12.5	14	16	17.5
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Flow (L/min)	8	62 49	120 48	170 46	212 42	263 26	290 14		
	15	60 93	122 91	172 88	215 85	264 76	294 68	340 48	
	20	57 125	120 123	170 120	214 117	262 110	290 106	340 92	371 81
	30	53 187	115 184	164 181	206 178	259 175	288 168	335 155	368 139
	35	49 220	110 216	160 213	202 209	255 205	284 202	328 192	362 176
	45	44 283	102 280	154 276	196 272	248 267	278 260	321 250	358 238
	55	40 345	99 342	148 340	191 336	243 331	272 328	316 320	351 303
	Max.cont. 60	33 377	94 374	144 371	188 367	236 363	267 359	308 353	345 342
	Max.int. 75	19 473	80 469	124 465	170 459	216 453	252 447	296 440	325 424

BMP 200 [194.5cm³/rev.]

Pressure (MPa)

Max.cont.

Max.int.

3	6	8	10	12.5	14	16	17.5
---	---	---	----	------	----	----	------

Flow (L/min)	8	79 40	164 39	207 38	250 35	320 28	360 22		
	15	78 76	162 75	205 74	250 71	322 66	361 61	410 51	
	20	76 100	158 98	203 97	247 95	320 92	358 89	403 73	422 57
	30	70 151	153 149	200 147	245 145	315 142	350 139	398 131	417 120
	35	66 177	149 175	194 173	232 171	297 168	343 166	386 160	415 149
	45	63 228	146 226	190 224	230 221	294 218	340 215	383 210	410 198
	55	54 280	140 278	181 276	224 274	286 271	334 269	371 263	400 250
	Max.cont. 60	38 304	127 302	164 300	212 297	270 294	325 291	356 286	395 272
	Max.int. 75	22 382	96 378	145 374	192 371	235 368	293 364	321 360	367 350

BMP 250 [240.3cm³/rev.]

Pressure (MPa)

Max.cont.

Max.int.

3	6	8	10	12.5	14	16	17.5
---	---	---	----	------	----	----	------

Flow (L/min)	8	96 30	190 28	268 24	326 21	403 11			
	15	98 60	194 58	270 54	327 50	405 40	450 30	510 12	
	20	92 82	188 80	267 77	325 76	405 69	456 64	514 52	565 38
	30	85 123	180 120	259 118	320 114	400 106	448 98	513 87	561 76
	35	77 143	176 141	252 139	311 135	389 128	436 122	504 112	557 101
	45	70 185	168 182	243 178	300 174	377 168	428 161	495 152	543 139
	55	63 226	159 223	237 218	290 213	369 209	417 202	483 193	531 185
	Max.cont. 60	60 248	150 246	228 243	280 239	358 233	407 226	473 215	520 207
	Max.int. 75	34 309	128 306	202 302	264 297	342 292	387 286	448 278	488 264

Torque (N•m) 128
Speed (rpm) 306

cont.
int.

Performance Data

BMP 315 [314.5cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

		3	5	7	9	10	12.5	14
Flow (L/min)	8	123 25	215 23	292 21	368 17	405 11		
	15	118 47	211 46	287 44	367 40	404 28	495 21	568 10
	20	110 62	205 61	278 60	360 57	395 46	494 40	566 36
	30	101 94	196 93	271 91	349 88	388 76	490 68	565 65
	35	96 109	188 107	264 106	341 104	382 96	478 89	557 84
	45	89 141	180 140	254 138	337 135	372 127	468 120	553 115
	55	76 173	166 172	239 170	325 167	362 160	457 152	548 143
	Max.cont. 60	65 188	154 186	227 184	308 182	348 178	443 172	529 163
	Max.int. 75	40 236	120 234	201 232	279 228	323 226	418 223	497 214

BMP 400 [389.5cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

		3	4.5	5.5	6.5	8	10	12.5
Flow (L/min)	8	166 20	232 19	287 18	340 16	418 12		
	15	165 38	228 36	277 35	337 33	417 31	496 27	612 21
	20	162 50	223 49	273 49	331 48	413 45	495 41	608 35
	30	154 76	216 75	266 74	318 73	405 71	486 67	600 60
	35	146 88	210 87	256 87	312 86	395 83	480 80	588 75
	45	132 114	197 113	243 112	300 110	383 108	464 106	576 99
	55	117 139	184 137	227 136	283 135	363 135	450 132	552 123
	Max.cont. 60	102 153	163 152	215 150	272 148	347 146	436 143	532 138
	Max.int. 75	53 191	128 189	182 187	234 185	318 183	391 180	484 176

Torque (N•m) 234
Speed (rpm) 185

BMP500[486.5cm³/rev.]

Pressure (MPa)

Max.cont.

Max.int.

		1.5	3	4.5	6	7	8	9
Flow (L/min)	4	96 7	194 6	285 4				
	8	98 15	201 15	304 14	391 14	443 12	512 9	574 7
	15	96 30	192 30	284 29	380 28	421 26	496 23	550 22
	20	96 40	191 40	280 40	372 39	418 37	493 33	546 31
	30	91 61	185 60	272 60	360 58	412 56	486 53	541 50
	40	86 81	172 80	261 80	343 79	408 76	480 73	538 70
	50	78 102	160 101	241 100	332 98	391 96	466 93	528 90
	Max.cont. 60	66 122	134 121	213 120	305 119	371 117	438 114	496 110
	70	52 143	111 142	189 141	292 139	344 137	418 135	475 131
	Max.int. 75	35 153	83 152	154 151	241 150	312 149	389 147	448 144

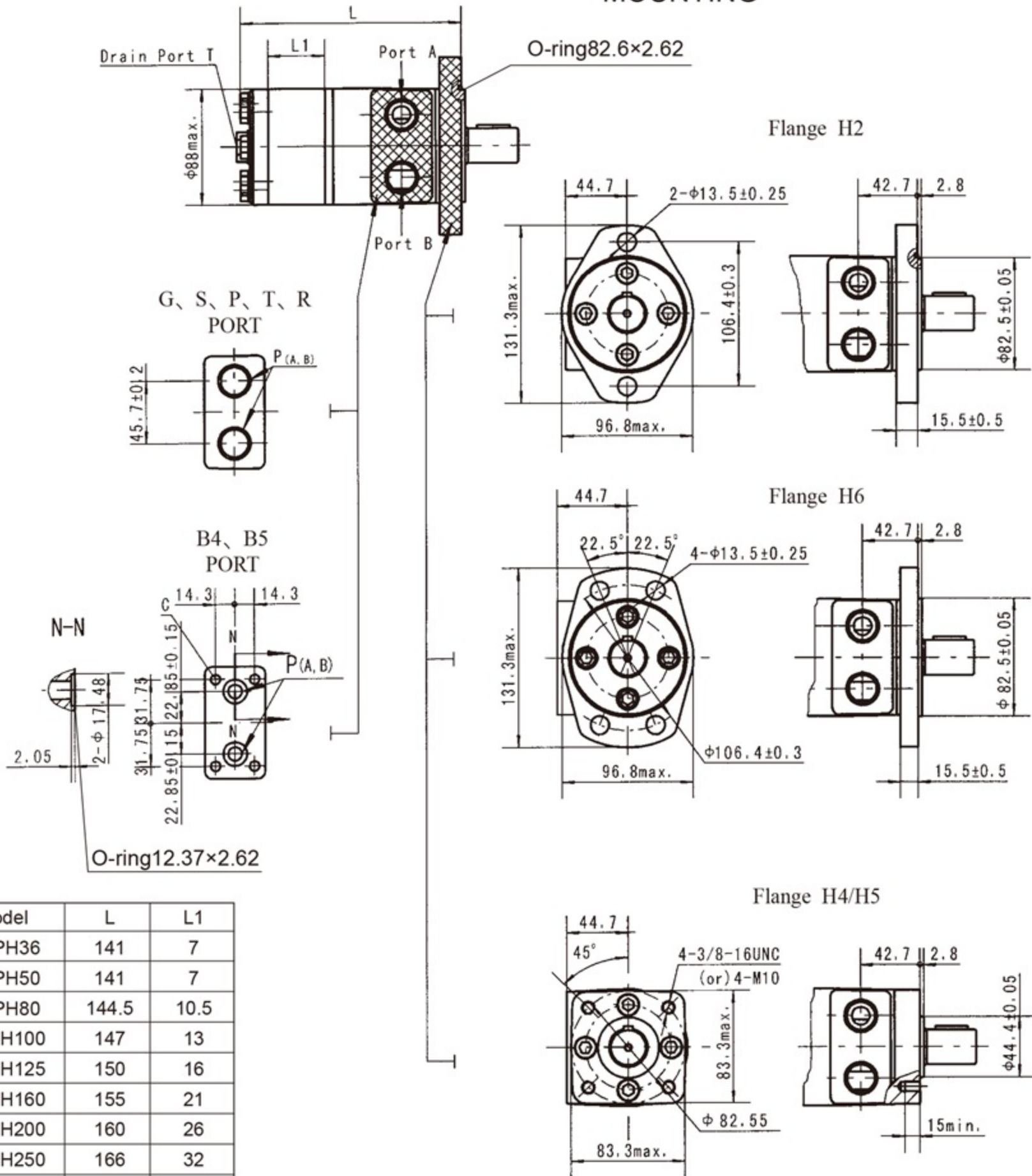
cont.

int.

Torque (N•m) 389
Speed (rpm) 147

BMPH DIMENSIONS AND MOUNTING DATA

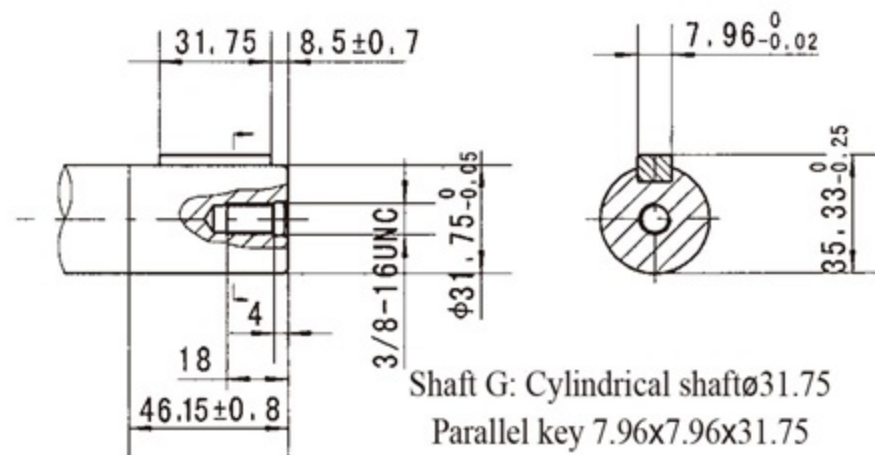
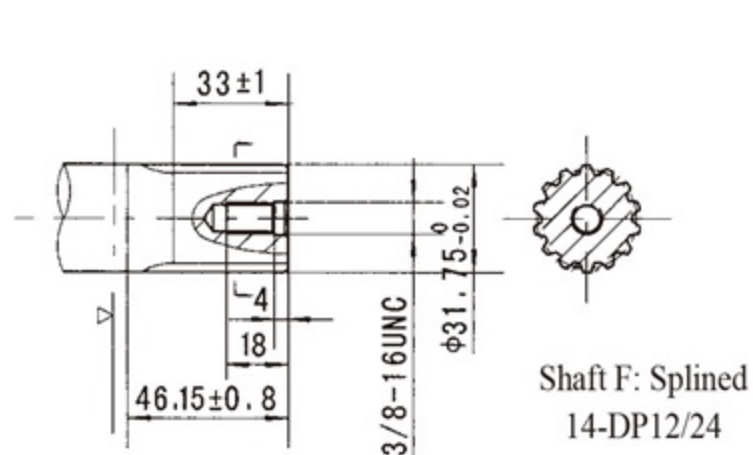
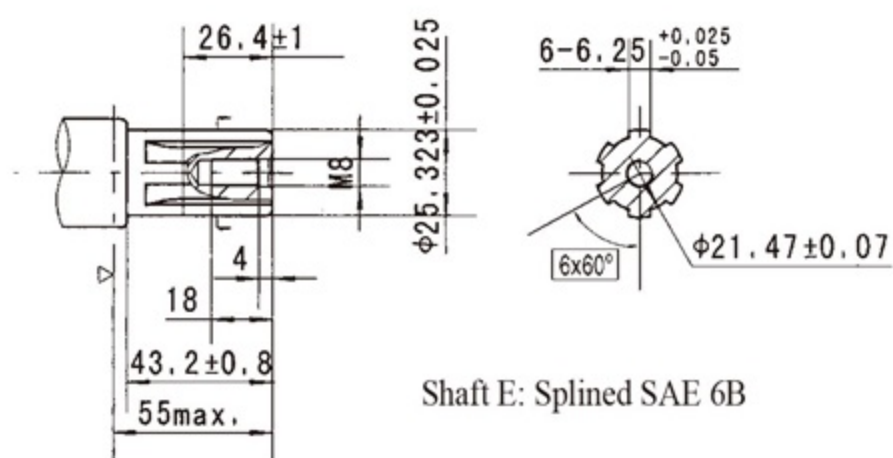
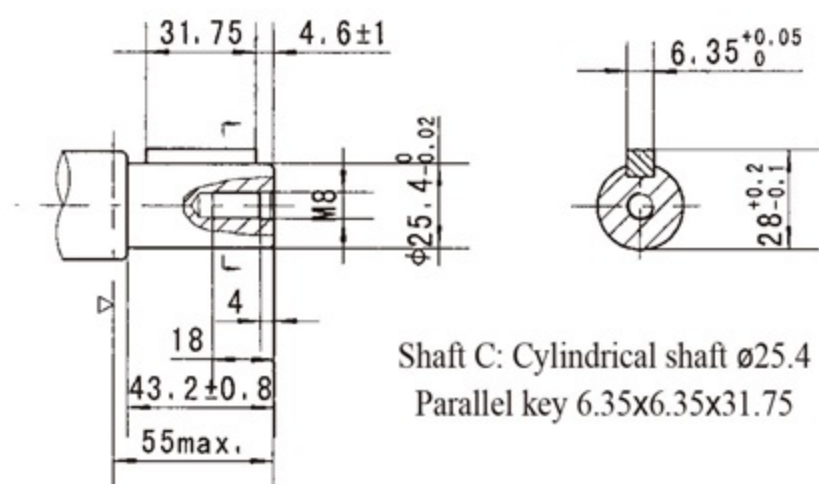
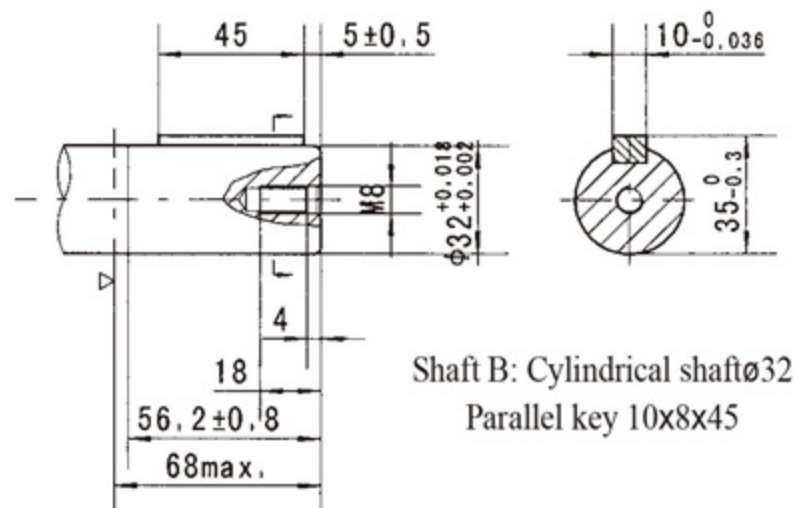
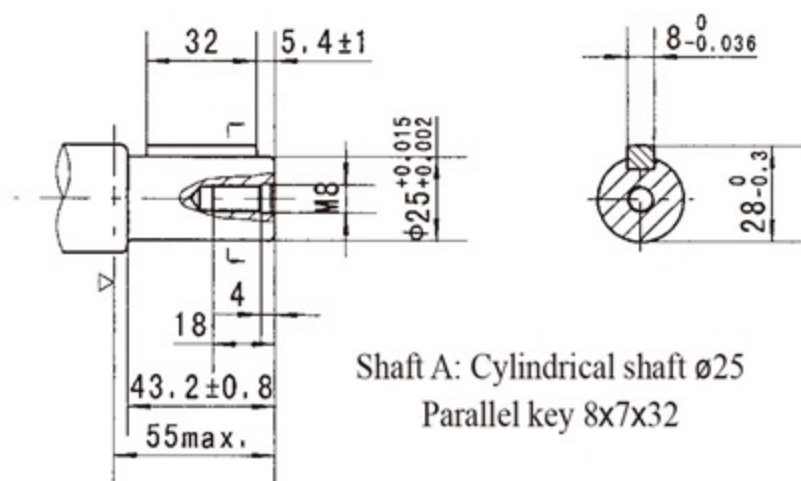
MOUNTING



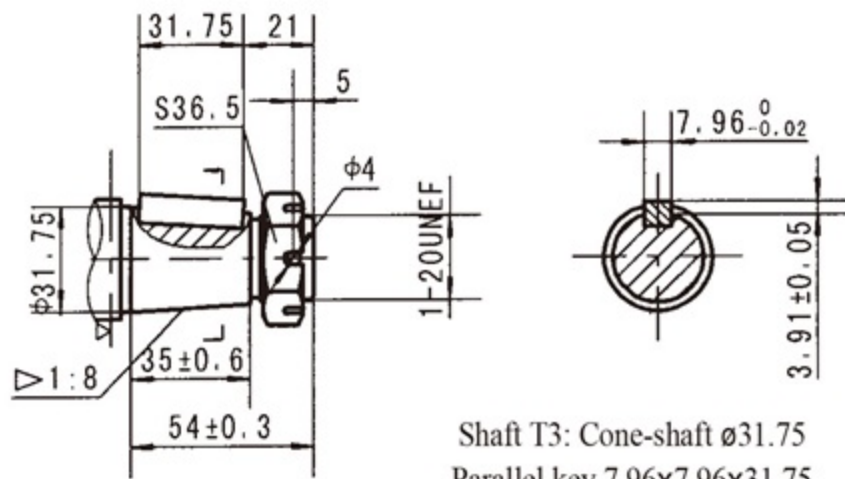
Model	L	L1
BMPH36	141	7
BMPH50	141	7
BMPH80	144.5	10.5
BMPH100	147	13
BMPH125	150	16
BMPH160	155	21
BMPH200	160	26
BMPH250	166	32
BMPH315	176	42
BMPH400	186	52
BMPH500	199	65

Code	G (depth)	S (depth)	P (depth)	T (depth)	R (depth)	B4 (depth)	B5 (depth)
P(A,B)	G1/2 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	3/4-16 O-ring (15)	PT(RC)1/2 (15)	ø10	ø10
T	G1/4 (12)	7/16-20UNF (12)	7/16-20UNF (12)	7/16-20UNF(12)	PT(RC)1/4 (9.7)	7/16-20UNF(12)	G1/4(12)
C	-	-	-	-	-	4-5/16-18UNC(13)	4-M8(13)

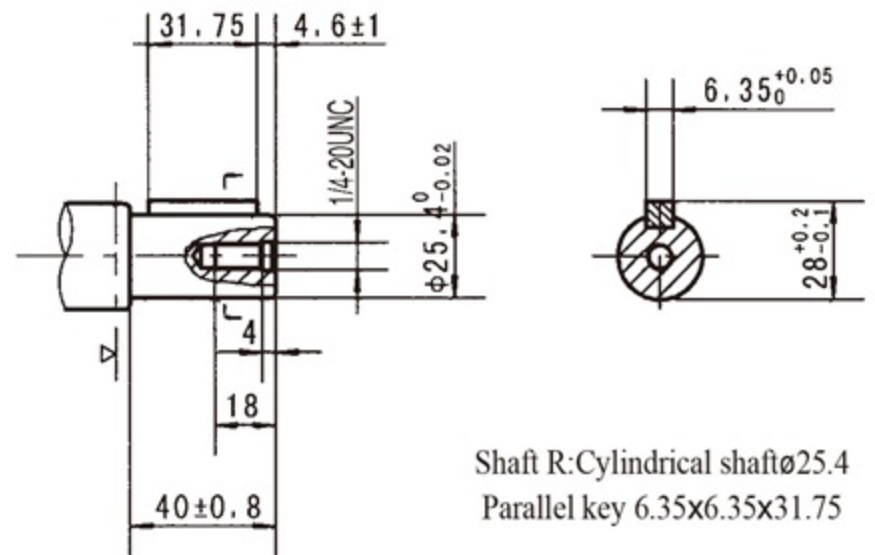
BMP SHAFT EXTENSIONS DIMENSIONS DATA



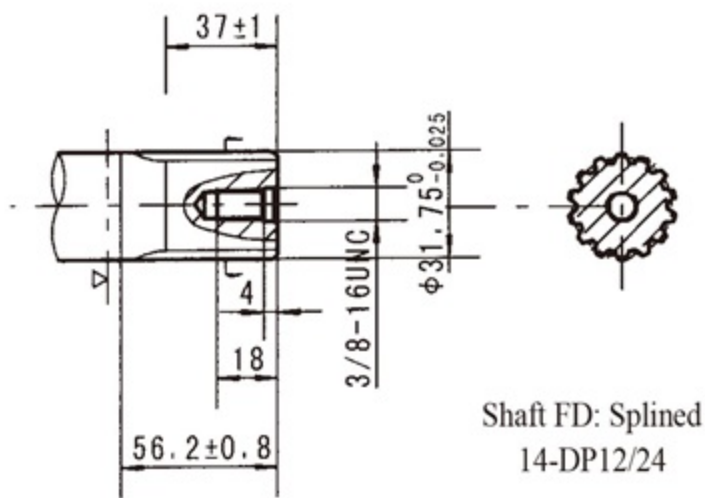
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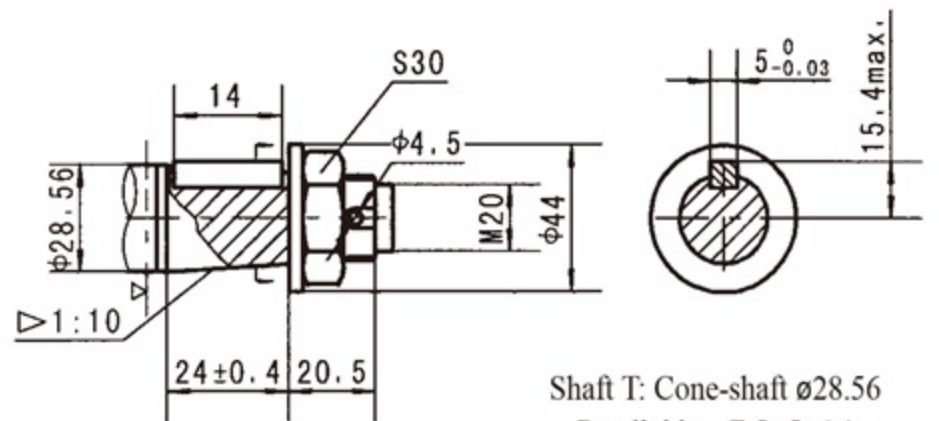
Shaft T3: Cone-shaft $\phi 31.75$
Parallel key 7.96x7.96x31.75
Tightening torque: 200±10Nm



Shaft R: Cylindrical shaft $\phi 25.4$
Parallel key 6.35x6.35x31.75

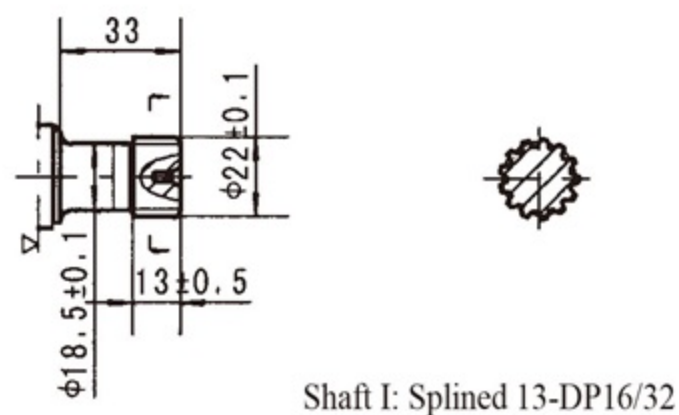
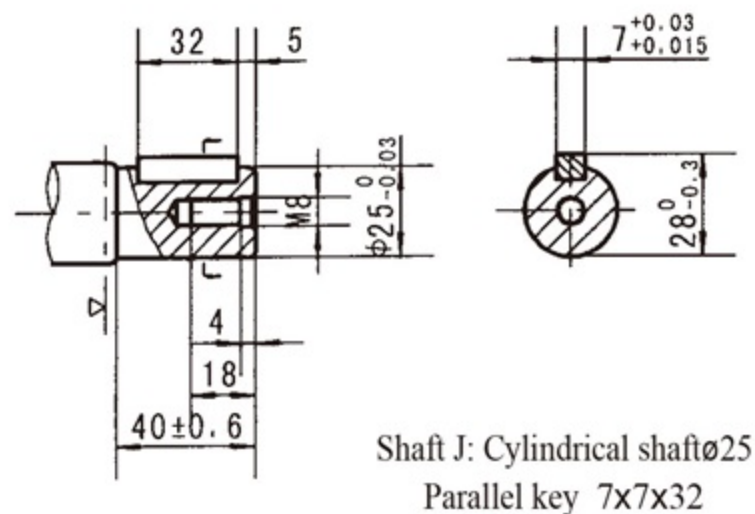
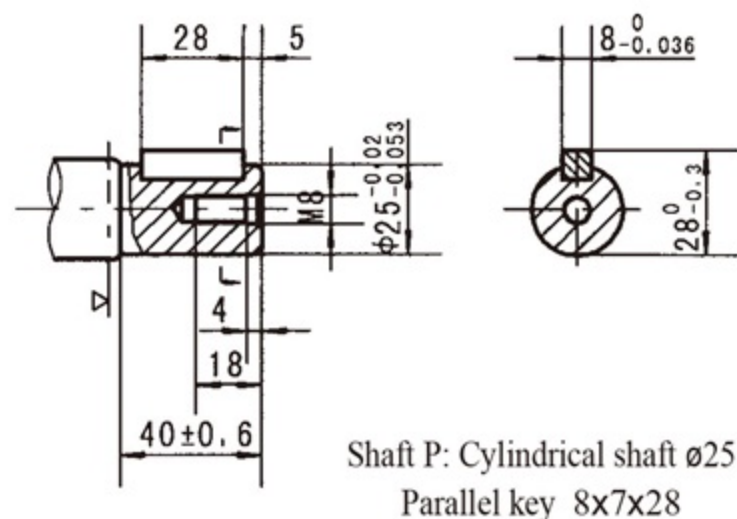
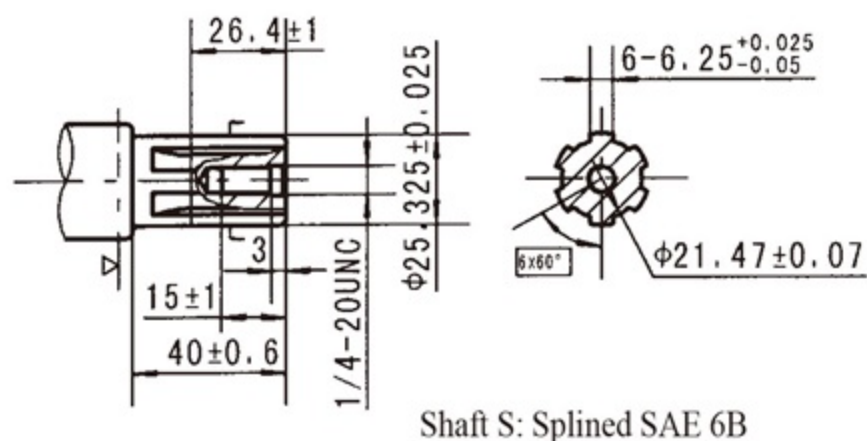
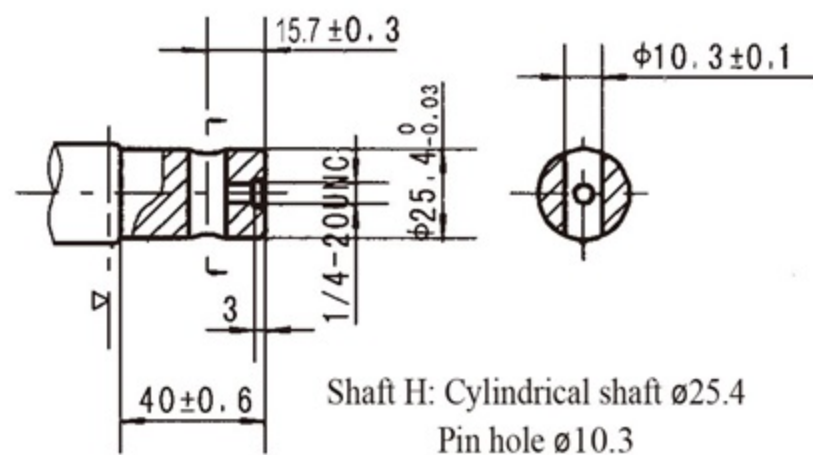
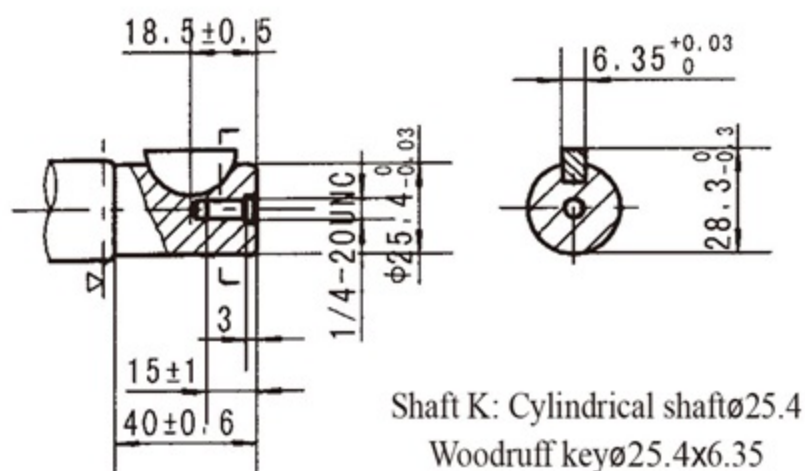


Shaft FD: Splined
14-DP12/24

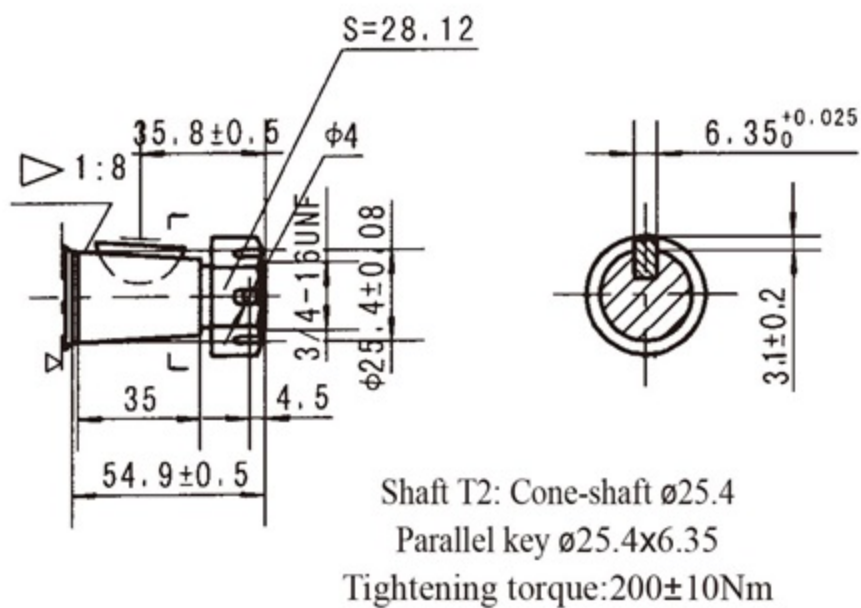
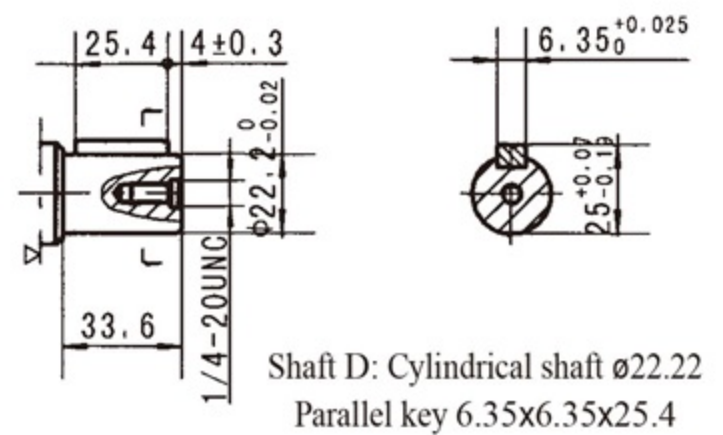
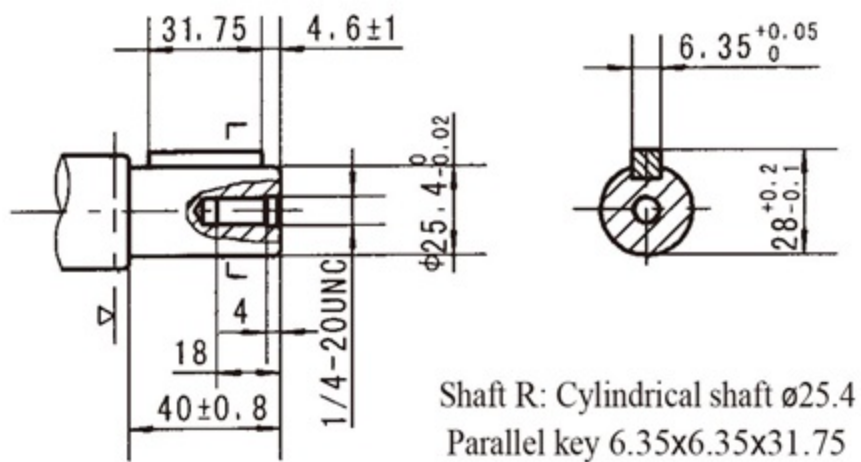
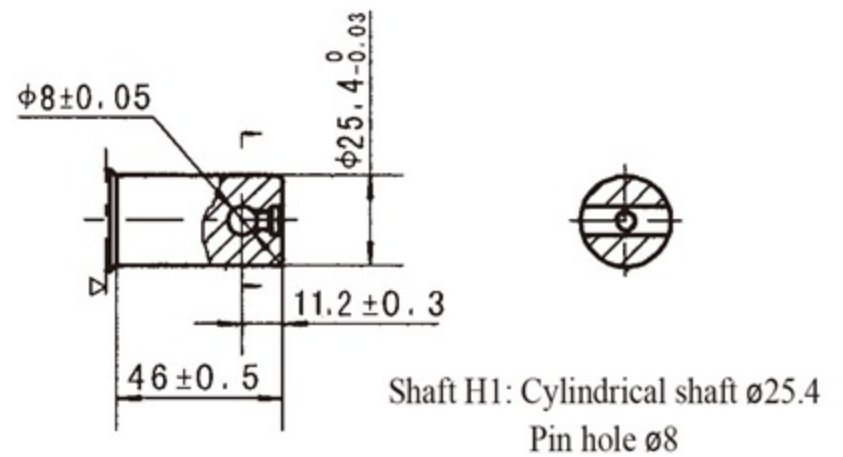
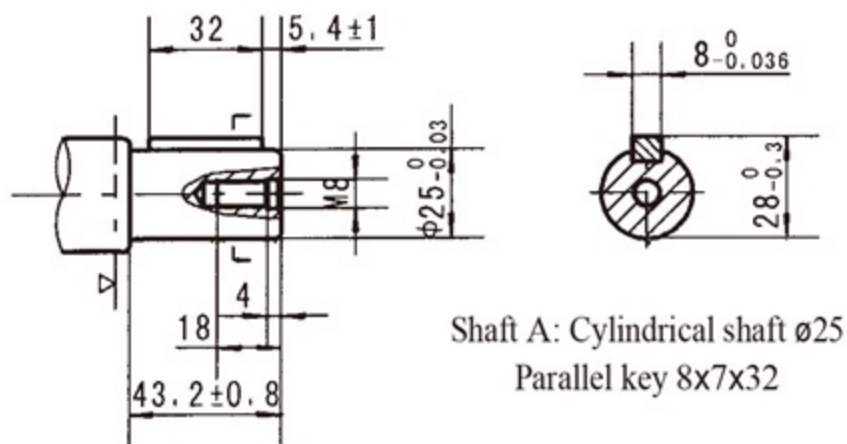


Shaft T: Cone-shaft $\phi 28.56$
Parallel key B5x5x14
Tightening torque: 100±10Nm

BMPH SHAFT EXTENSIONS DIMENSIONS DATA

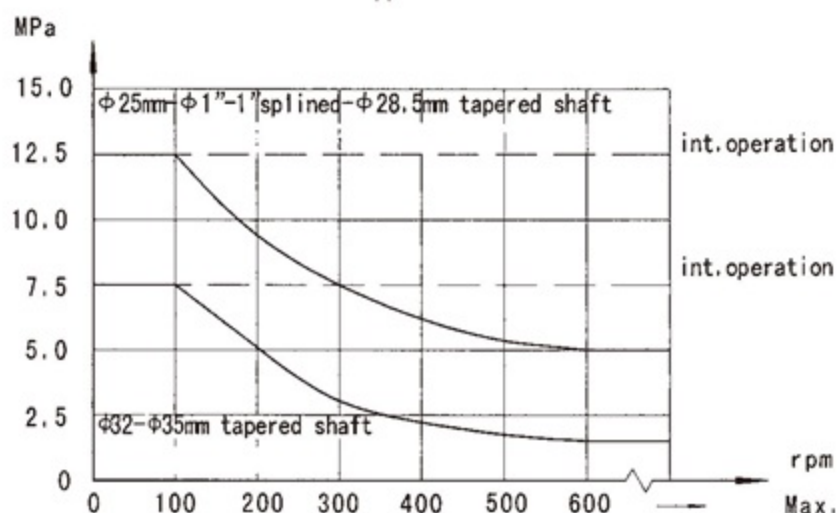
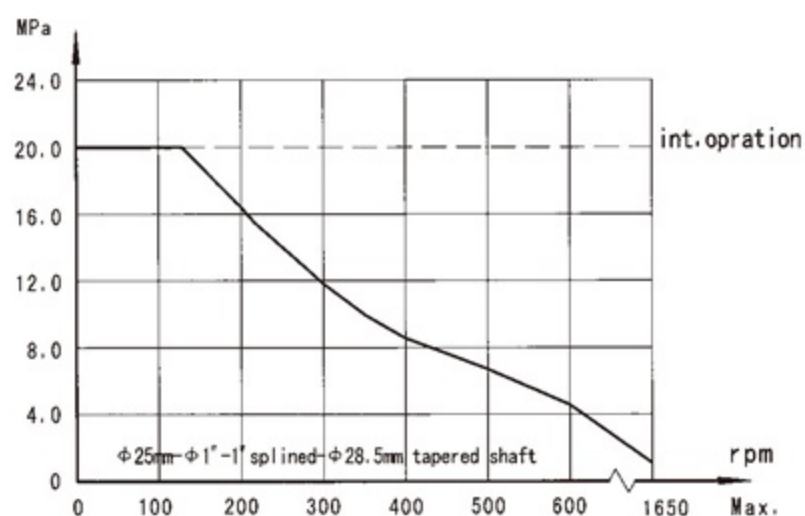
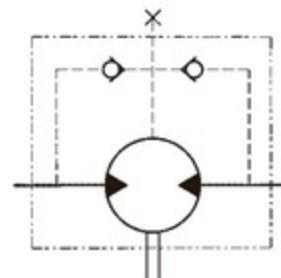


BMPH SHAFT EXTENSIONS DIMENSIONS DATA



BMP、BMPH Series Hydraulic Motor

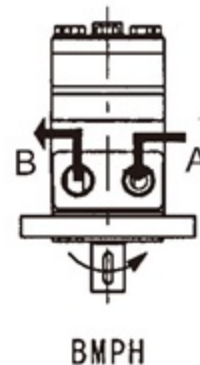
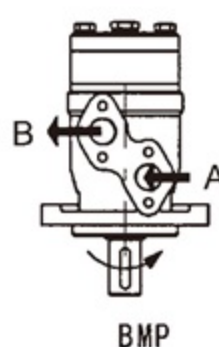
Permissible shaft seal pressure



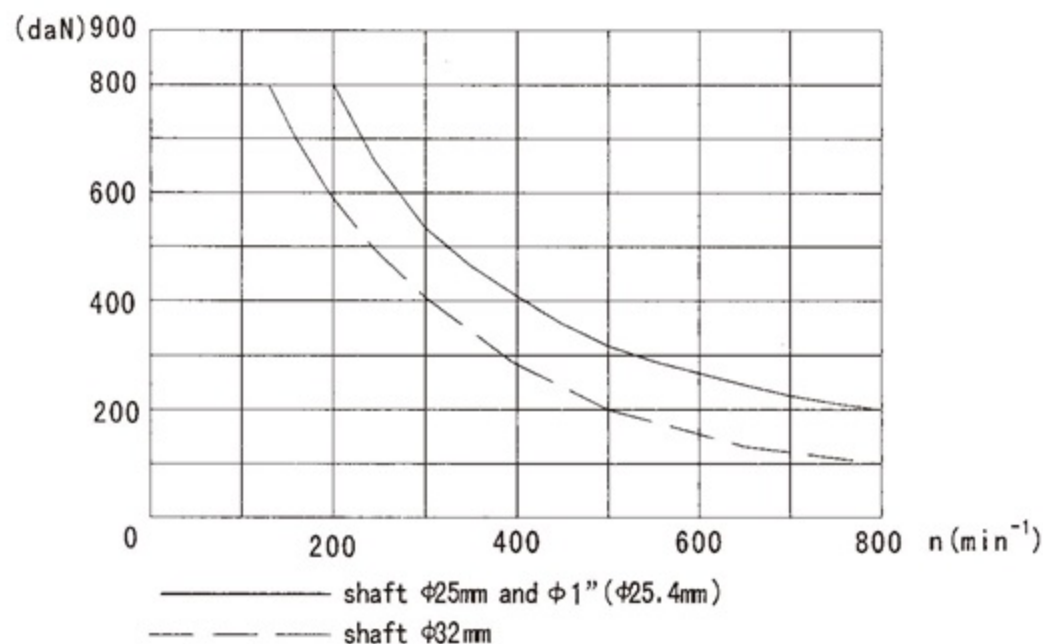
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Direction of shaft rotation: Standard

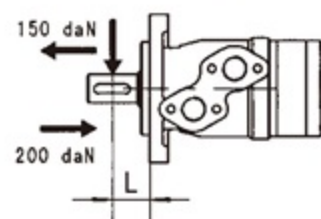
When facing shaft end of motor, shaft to rotate:
Clockwise when port "A" is pressurized.
Counter-clockwise port "B" is pressurized.



Status of the shaft's radial force (Standard motor with journal bearing)



$$F_r = \frac{800 \cdot 25000}{n \cdot 95 + L} \text{ daN}$$



F_r = Radial Force (daN)
 L = Distance (mm)
 n = Speed (rpm)
Rhomb-flange $L=30\text{mm}$
Square-flange $L=24\text{mm}$