

ZHENJIANG HYDRAULICS CO., LTD.
ZHENJIANG DALI HYDRAULIC MOTOR CO., LTD.

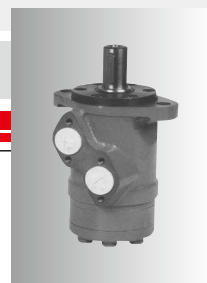


HYDRAULIC ORBITAL MOTORS
HYDRAULIC BRAKE
PLANETARY GEARBOX
VALVES

CHINA ZHENJIANG

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Usage Guide

In order to make the motors working in optimal situation, we recommend the following:

1. Oil temperature :normal 20℃~60℃ upper limit 90℃ (no more than one hour).
2. Filtering and oil cleanliness :a return filter should be installed in the system with a fineness in the range of 10~30μm and a piece of magnet should be installed at the bottom of the tank to prevent grits into the system. The max solid contamination grade of the oil is no more than 19/16.
3. Viscosity: 42~74 mm²/s at 40℃ of oil temperature ,according to the condition to choose an applicable hydraulic oil.
4. The motors can be operated in parallel or in series. When the pressure of the back exceeds 2MPa,it is necessary to install an external drain line to the tank.
- 5.1 For BMM and BMP and BMR series motors,the type of output shaft may be chosen in demand.
 - 5.1.1 The output shaft permits a radial force with the radial bearing.
 - 5.1.2 The output shaft doesn' t permit the radial force without the radial bearing.When the radial force acts on the shaft,the force must be discharged.
- 5.2 For BMS、BMSY、BMT 、BMV and BMK6 series motors, the output shaft permit high axial and radial forces.
6. The optimal operation situation should be at the 1/3~2/3 of the rated operation situation.
7. In order to obtain a longer life of operating motor should operate motors at first for one hour under 30% of rated pressure. In any case, be sure to fill up with hydraulic oil inside motor before increasing load.

Specification Data of Hydraulic Motors

Distribution type	Model	Displacement (cm ³ /rev.)	Max. operating pressure (MPa)	Speed range (rpm)	Max. output power (kW)
Axial distribution	BMM	8~50	14	30~1950	3.2
	BMP	36~400	16.5	30~879	10
	BMR	36~375	20	30~970	15
	BMH	200~500	20	30~430	17

Specification Data of Hydraulic Motor

Distribution type	Model	Displacement (cm ³ /rev.)	Max. operating pressure (MPa)	Speed range (rpm)	Max. output power (kW)
Disc distribution	BMS	80~375	22.5	30~800	20
	BMSY	80~475	22.5	8~800	24
	BMT	160~800	24	30~705	35
	BMV	315~800	28	10~446	43



BMM SERIES HYDRAULIC MOTOR

BMM 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

Type		BMM 8	BMM 12.5	BMM 20	BMM 32	BMM 40	BMM 50
Geometric displacement (cm ³ /rev.)		8.2	12.9	19.9	31.6	39.8	50.3
Max. speed (rpm)	cont.	1950	1550	1000	630	500	400
	int.	2450	1940	1250	800	630	500
Max. torque (N•m)	cont.	11	16	25	40	45	46
	int.	15	23	35	57	70	88
	peak	21	33	51	64	82	100
Max. output (kW)	cont.	1.8	2.4	2.4	2.4	2.2	1.8
	int.	2.6	3.2	3.2	3.2	3.2	3.2
Max. pressure drop (MPa)	cont.	10	10	10	10	9	7
	int.	14	14	14	14	14	14
	peak	20	20	20	16	16	16
Max. flow (L/min)	cont.	16	20	20	20	20	20
	int.	20	25	25	25	25	25
Weight (kg)		1.9	2	2.1	2.2	2.3	2.4

Type		Max.inlet pressure
BMM8-50 (MPa)	cont.	17.5
	int.	22.5

- * 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

BMM8 [8.2 cm³/rev.]

		Pressure (MPa)					
		Max.cont.			Max.int.		
		3.5	5	7	10	12	14
Flow (L/min)	2	3	5	8	10	12	14
	4	228	218	206	156	111	58
	8	474	471	463	426	391	331
	12	953	946	926	884	855	816
	15	1444	1426	1402	1360	1324	1288
	Max.cont.		4	7	10	12	14
Max.int.	20			6	10	11	14
				2395	2350	2328	2281

BMM12.5 [12.9 cm³/rev.]

		Pressure (MPa)					
		Max.cont.			Max.int.		
		3.5	5	7	10	12	14
Flow (L/min)	2	6	8	11	16	19	
	4	140	136	119	68	35	
	8	296	289	274	229	200	145
	12	605	596	583	543	514	469
	15	912	905	895	859	834	784
	Max.cont.		5	8	12	17	20
Max.int.	20			9	14	18	22
	25			1910	1891	1878	1848

BMM20 [19.9 cm³/rev.]

		Pressure (MPa)						
		Max.cont.				Max.int.		
		1.7	3.5	5	7	10	12	14
Flow (L/min)	2	3	9	14	19	26	30	
	4	99	96	89	74	42	21	
	8	398	395	391	377	340	319	288
	12	596	594	588	579	545	523	493
	15	745	741	738	728	695	684	660
	Max.cont.		4	9	14	23	28	33
Max.int.	20							
	25		1247	1245	1242	1189	1180	1176

BMM32 [31.6 cc/rev.]

		Pressure (MPa)						
		Max.cont.				Max.int.		
		2	3.5	5	7	10	12	14
Flow (L/min)	2	7	15	21	28	40		
	4	61	57	52	47	16		
	8	126	121	114	106	82	67	49
	12	250	244	239	231	207	194	167
	15	378	374	369	362	338	322	297
	Max.cont.		4	12	18	27	39	47
Max.int.	20							
	25		633	630	627	619	601	585

BMM40 [39.8 cm³/rev.]

		Pressure (MPa)					
		Max.cont.			Max.int.		
		3	5	7	8.5	10	12
Flow (L/min)	2	16	27	36	44	51	
	4	45	40	34	28	17	
	8	197	195	182	176	166	154
	12	293	287	282	277	268	257
	15	371	365	360	355	347	338
	Max.cont.		10	21	31	39	48
Max.int.	20						
	25		622	617	612	607	600

BMM50 [50.3 cm³/rev.]

		Pressure (MPa)				
		Max.cont.			Max.int.	
		1.5	3	5	7	10
Flow (L/min)	2	11	23	36	50	
	4	37	33	27	22	
	8	76	73	68	63	55
	12	115	112	107	102	94
	15	157	154	149	145	137
	Max.cont.		11	21	35	50
Max.int.	20					
	25		395	395	393	390

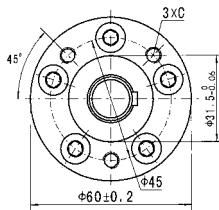
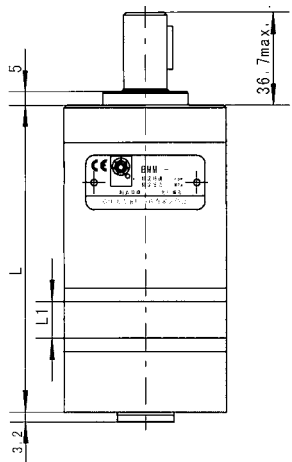
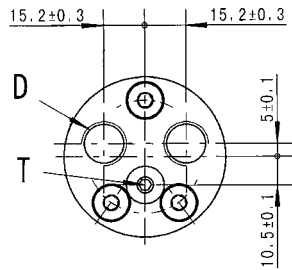
Torque (N·m) 37
Speed (rpm) 607



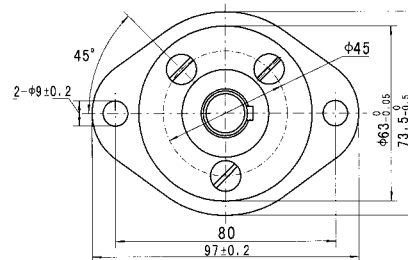
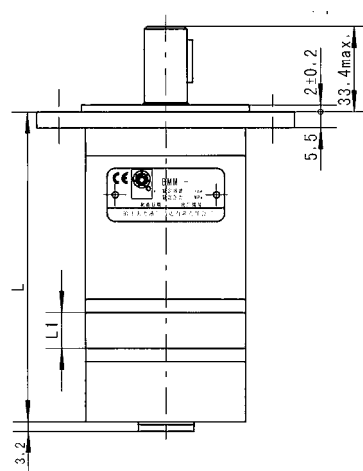
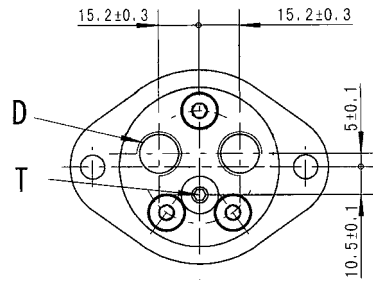
BMM END PORT DIMENSIONS AND MOUNTING DATA

MOUNTING

Flange M、U



Flange F



Model	M、U Flange		F Flange	
	L	L1	L	L1
BMM8	104	3.5	107.5	3.5
BMM12.5	106	5.5	109.5	5.5
BMM20	109	8.5	112.5	8.5
BMM32	114	13.5	117.5	13.5
BMM40	117.5	17	121	17
BMM50	122	21.5	125.5	21.5

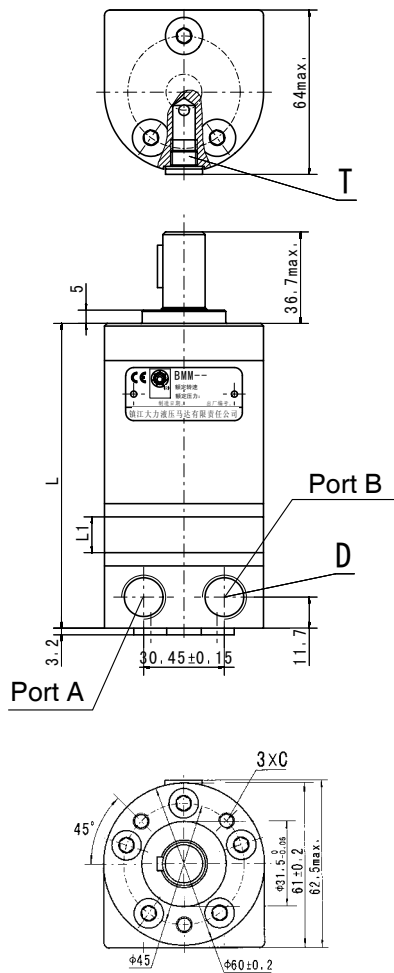
Mounting	M、U Flange		F Flange	
	1E (depth)	1U (depth)	1E (depth)	1U (depth)
C	3-M6 (10)	3-1/4-28UNF-2B(10)	--	--
D	G3/8 (12)	9/16-18UNF(12)	G3/8 (12)	9/16-18UNF(12)
T	G1/8 (8)	3/8-24UNF(8)	G1/8 (8)	3/8-24UNF(8)



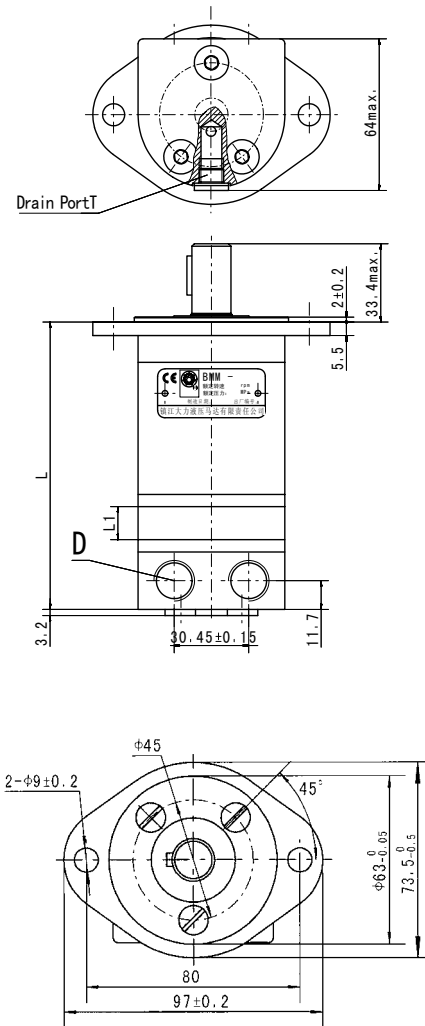
BMM SIDE PORT DIMENSIONS AND MOUNTING DATA

MOUNTING

Flange M、U



Flange F



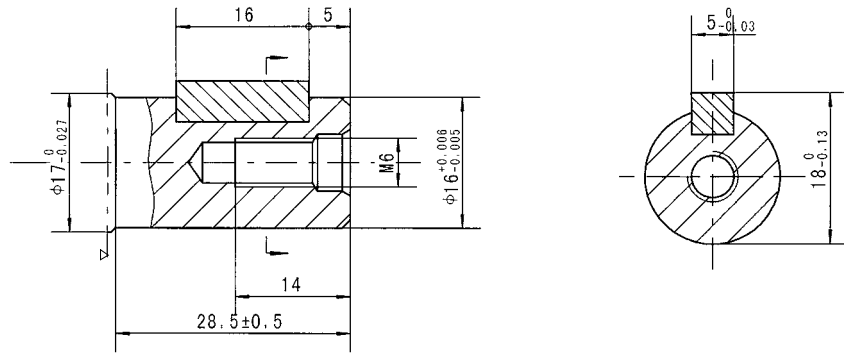
Model	M、U Flange		F Flange	
	L	L1	L	L1
BMM8	105	3.5	108.5	3.5
BMM12.5	107	5.5	110.5	5.5
BMM20	110	8.5	113.5	8.5
BMM32	115	13.5	118.5	13.5
BMM40	118.5	17	122	17
BMM50	123	21.5	126.5	21.5

Code	M、U Flange		F Flange	
	E (depth)	U (depth)	E (depth)	U (depth)
C	3-M6 (10)	3-1/4-28UNF-2B(10)	--	--
D	G3/8 (12)	9/16-18UNF(12)	G3/8 (12)	9/16-18UNF(12)
T	G1/8 (8)	3/8-24UNF(8)	G1/8 (8)	3/8-24UNF(8)

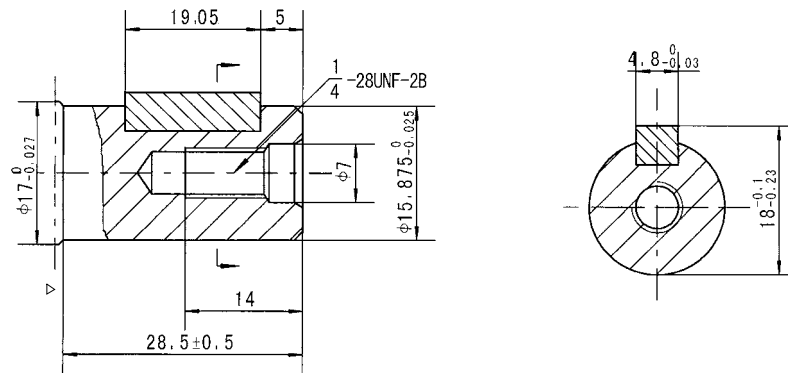


BMM SHAFT EXTENSIONS FOR BMM MOTORS

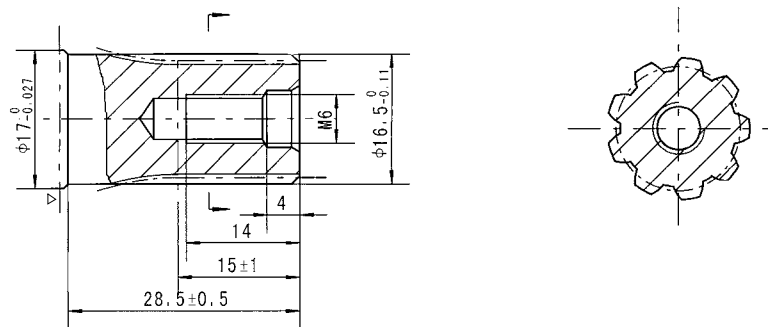
Shaft A: Cylindrical shaft $\phi 16$
Parallel key 5x5x16



Shaft B: Cylindrical shaft $\phi 15.875$
Parallel key 4.8x4.8x19.05



Shaft C: Involute splind shaft
B17x14 DIN5482

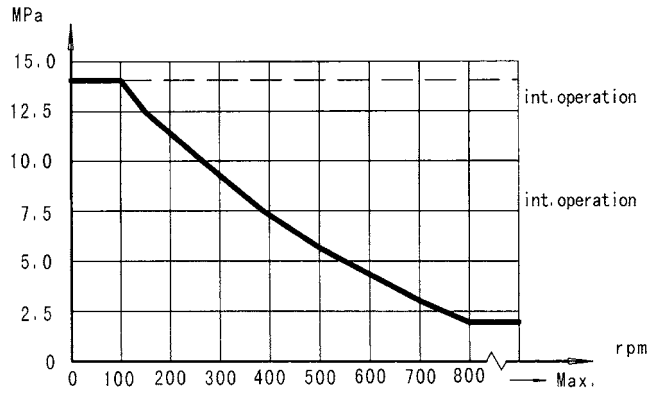
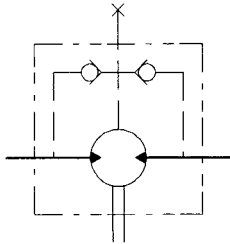


▷ Motor Mounting Surface



BMM Series Hydraulic Motor

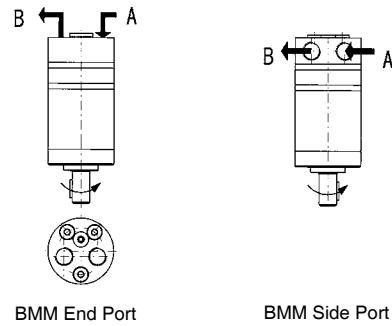
Permissible shaft seal pressure



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.

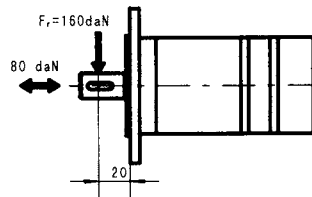
Direction of shaft rotation: Standard

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

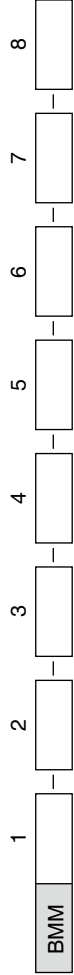
$$F_r = \frac{13040}{61.5 + L} \text{ daN}$$



F_r = Radial Force (daN)
 L = Distance (mm)
 n = Speed (rpm)
 Max. force load
 Rhomb-flange $L=15\text{mm}$
 Square-flange $L=20\text{mm}$

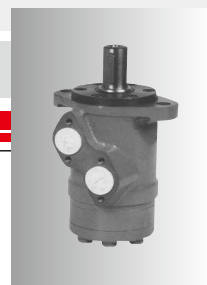


Order Information



Pos.1	2	3	4	5	6	7	8
Code	Displacement	Flange	Output shaft	Ports and drain port	Rotation direction	Paint	Unusually function
	8						
	12.5	M	A	E		00	
	20	U	B	U	Omit Standard	Blue	Omit
	32	F	C	1E	R	Black	O
	40			1U		Silver grey	No case drain
	50						

Note: When the table is used, please fill the code of left rows in the table and give us, which the code information consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us.



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
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 (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	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 125 [120.2cm³/rev.]

Pressure (MPa)

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

BMP 160 [157.2cm³/rev.]

Pressure (MPa)

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

BMP 200 [194.5cm³/rev.]

Pressure (MPa)

				Max.cont.		Max.int.			
		3	6	8	10	12.5	14	16	17.5
8		79	164	207	250	320	360		
		40	39	38	35	28	22		
15		78	162	205	250	322	361	410	
		76	75	74	71	66	61	51	
20		76	158	203	247	320	358	403	422
		100	98	97	95	92	89	73	57
30		70	153	200	245	315	350	398	417
		151	149	147	145	142	139	131	120
35		66	149	194	232	297	343	386	415
		177	175	173	171	168	166	160	149
45		63	146	190	230	294	340	383	410
		228	226	224	221	218	215	210	198
55		54	140	181	224	286	334	371	400
		280	278	276	274	271	269	263	250
Max.cont.	60	38	127	164	212	270	325	356	395
		304	302	300	297	294	291	286	272
Max.int.	75	22	96	145	192	235	293	321	367
		382	378	374	371	368	364	360	350

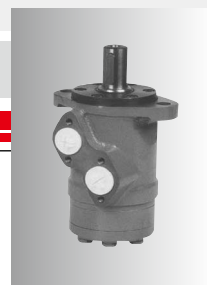
BMP 250 [240.3cm³/rev.]

Pressure (MPa)

				Max.cont.		Max.int.			
		3	6	8	10	12.5	14	16	17.5
8		96	190	268	326	403			
		30	28	24	21	11			
15		98	194	270	327	405	450	510	
		60	58	54	50	40	30	12	
20		92	188	267	325	405	456	514	565
		82	80	77	76	69	64	52	38
30		85	180	259	320	400	448	513	561
		123	120	118	114	106	98	87	76
35		77	176	252	311	389	436	504	557
		143	141	139	135	128	122	112	101
45		70	168	243	300	377	428	495	543
		185	182	178	174	168	161	152	139
55		63	159	237	290	369	417	483	531
		226	223	218	213	209	202	193	185
Max.cont.	60	60	150	228	280	358	407	473	520
		248	246	243	239	233	226	215	207
Max.int.	75	34	128	202	264	342	387	448	488
		309	306	302	297	292	286	278	264

□ cont.
 □ int.

Torque (N•m) 128
 Speed (rpm) 306



Performance Data

BMP 315 [314.5cm³/rev.]

Pressure (MPa)		Max.cont.					Max.int.	
		3	5	7	9	10	12.5	14

Flow (L/min)	Pressure (MPa)							
	3	5	7	9	10	12.5	14	
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)	Pressure (MPa)							
	3	4.5	5.5	6.5	8	10	12.5	
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)	Pressure (MPa)							
	1.5	3	4.5	6	7	8	9	
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	

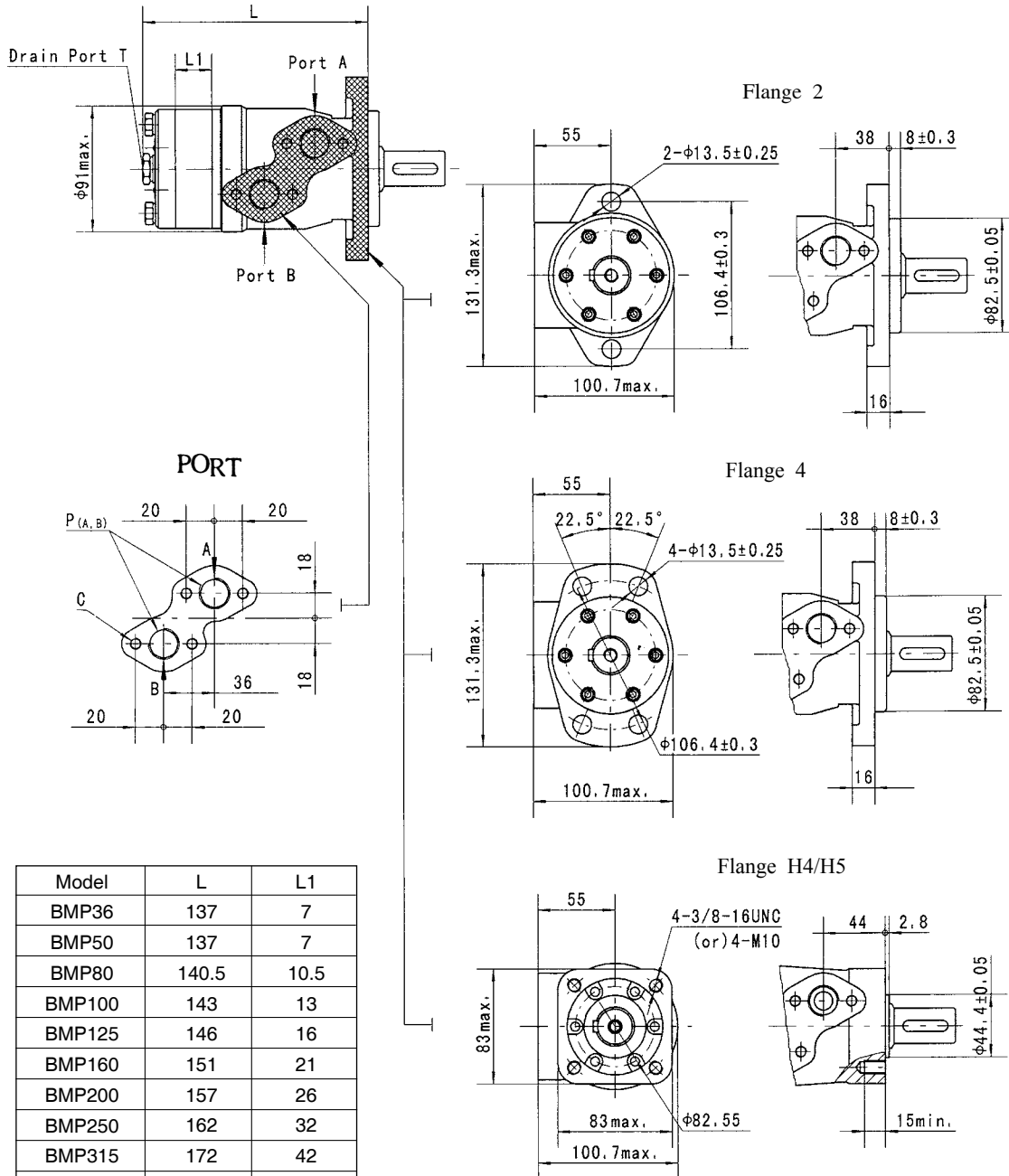
□ cont.
□ int.

Torque (N•m) 389
Speed (rpm) 147



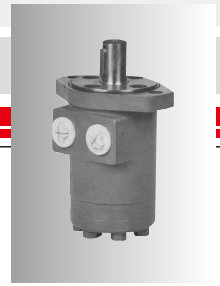
BMP DIMENSIONS AND MOUNTING DATA

MOUNTING



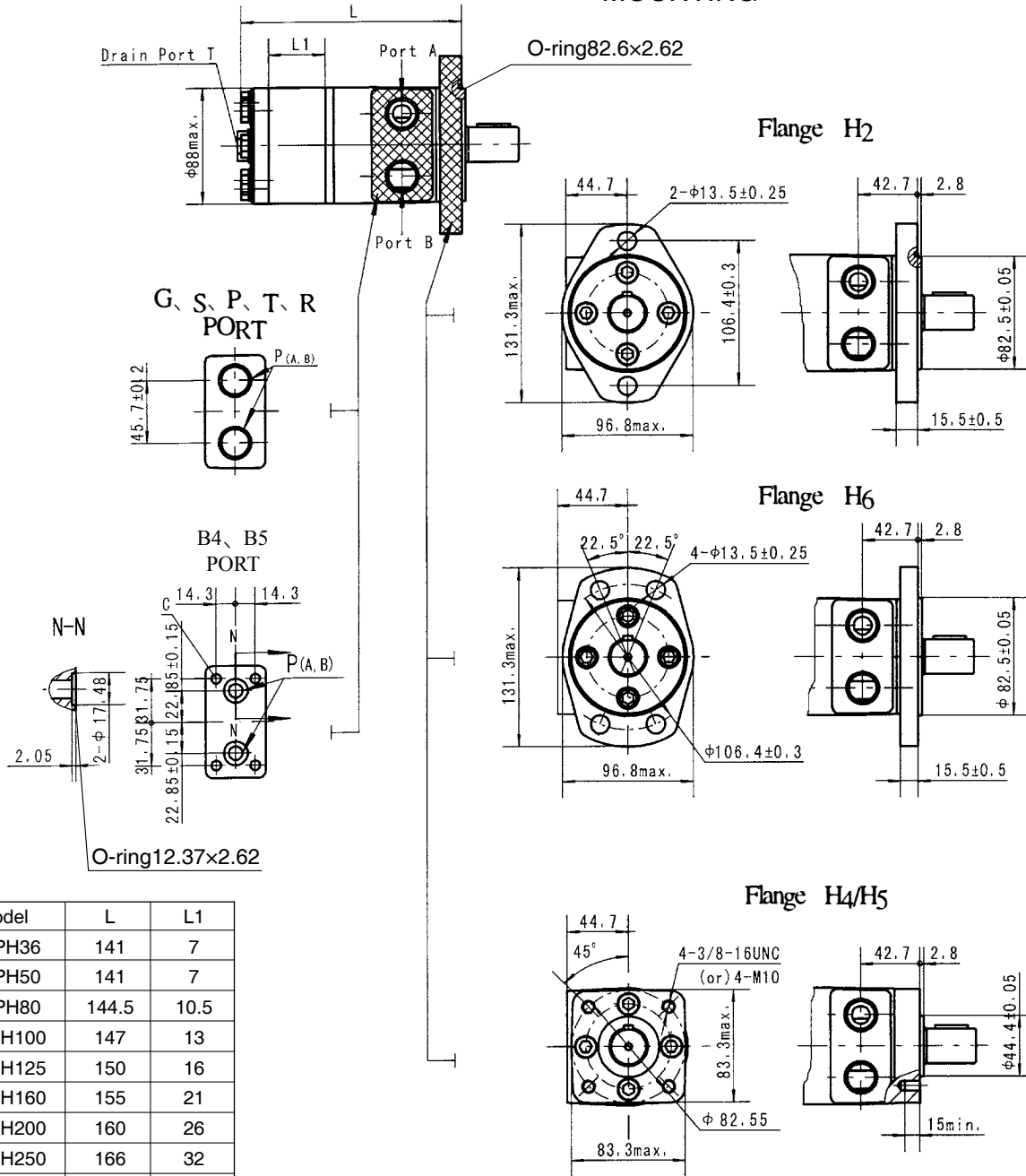
Model	L	L1
BMP36	137	7
BMP50	137	7
BMP80	140.5	10.5
BMP100	143	13
BMP125	146	16
BMP160	151	21
BMP200	157	26
BMP250	162	32
BMP315	172	42
BMP400	182	52
BMP500	195	65

Code	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	PT(RC)1/2 (15)
C	4-M8 (13)	4-M8 (13)	4-5/16-18UNC(13)	4-5/16-18UNC(13)	4-M8 (13)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 (9.7)



BMPH DIMENSIONS AND MOUNTING DATA

MOUNTING

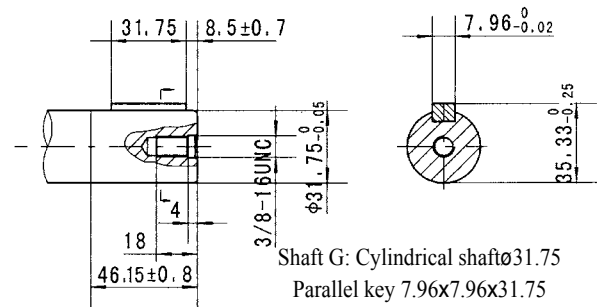
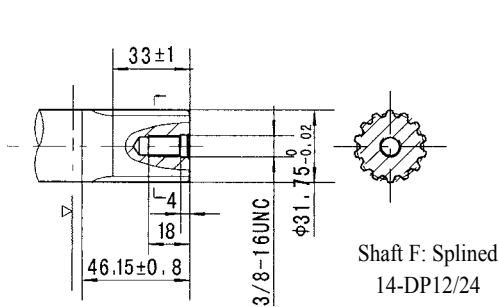
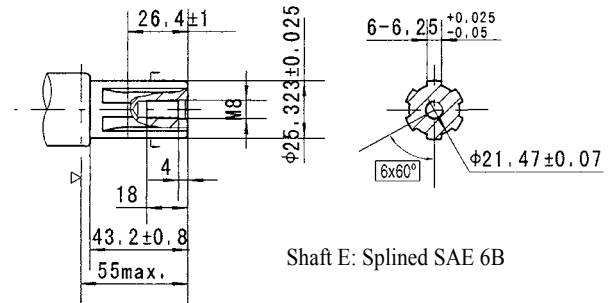
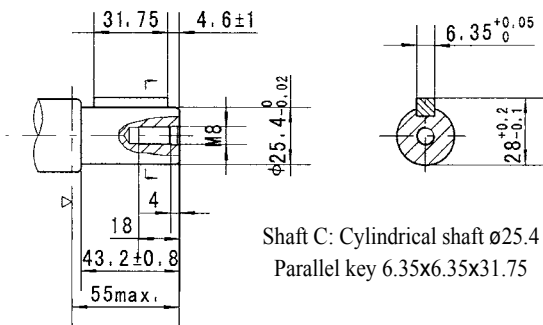
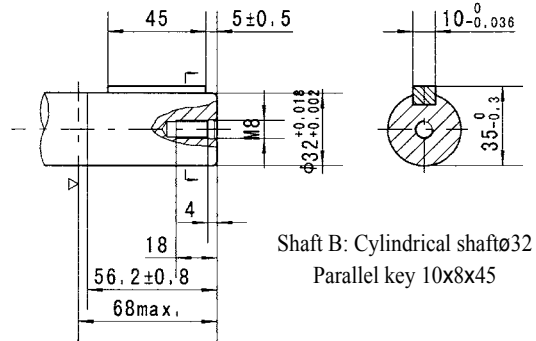
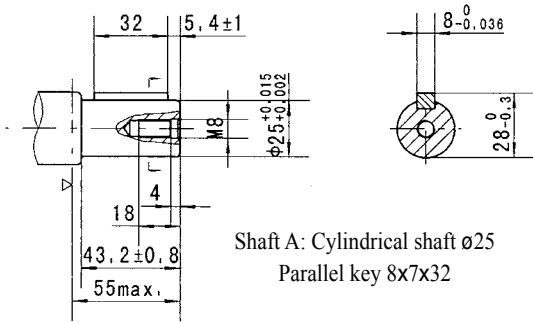


Model	L	L1
BMPH36	141	7
BMPH50	141	7
BMPH80	144.5	10.5
BMPH100	147	13
BMPH125	150	16
BMPH160	155	21
BMPH200	160	26
BMPH250	166	32
BMPH315	176	42
BMPH400	186	52
BMPH500	199	65

Code	Mounting						
	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)



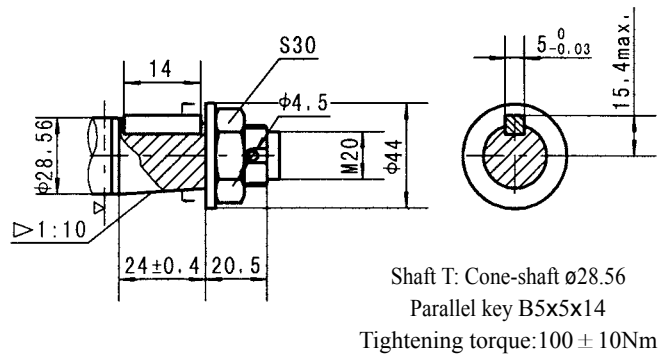
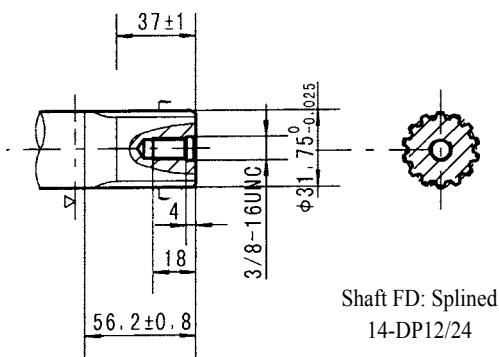
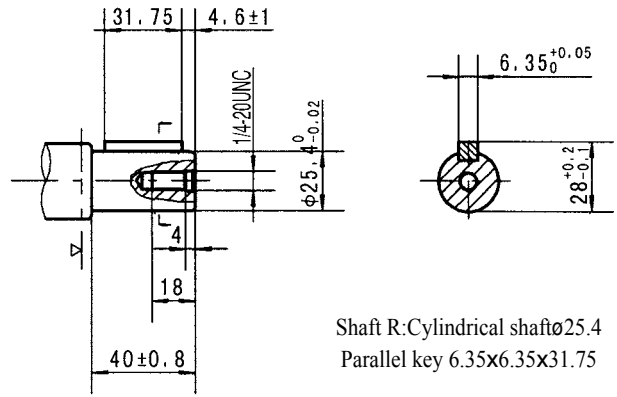
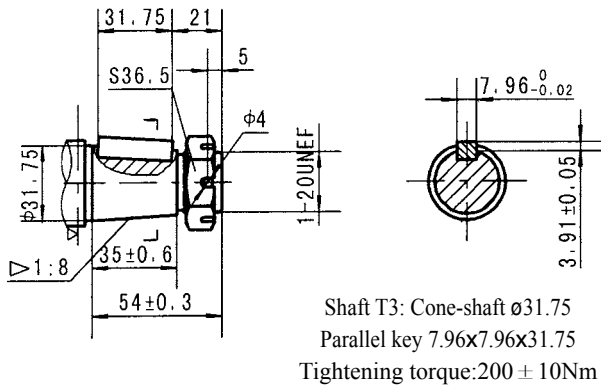
BMP SHAFT EXTENSIONS DIMENSIONS DATA



▷ Motor Mounting Surface



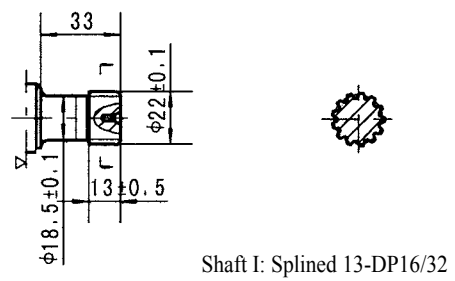
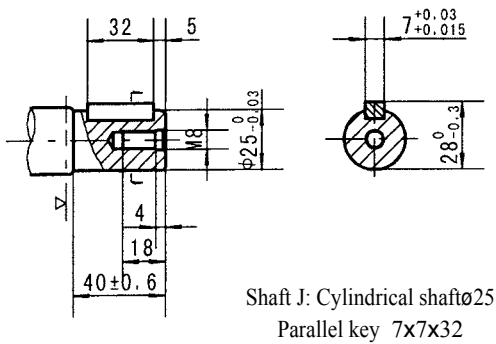
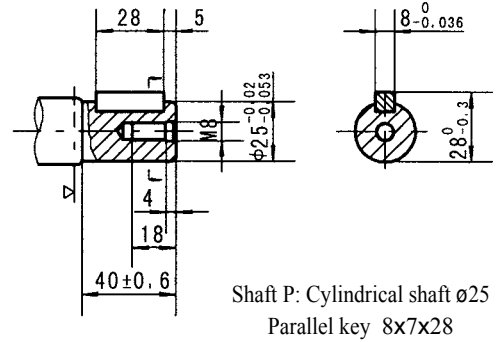
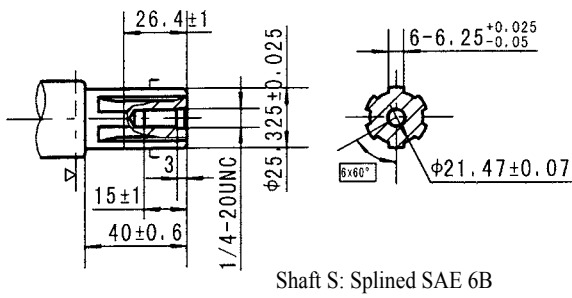
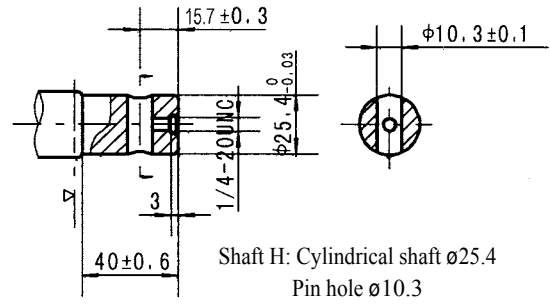
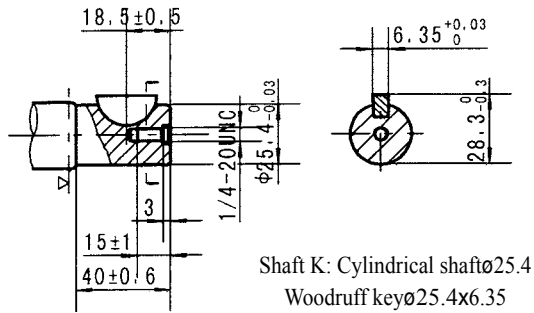
BMP SHAFT EXTENSIONS DIMENSIONS DATA



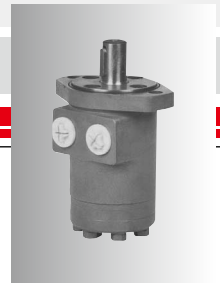
▷ Motor Mounting Surface



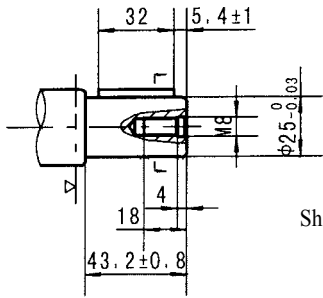
BMPH SHAFT EXTENSIONS DIMENSIONS DATA



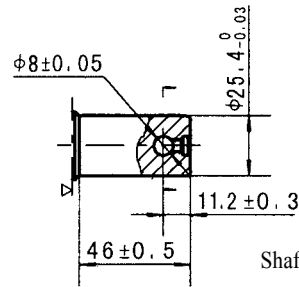
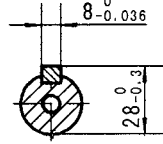
▷ Motor Mounting Surface



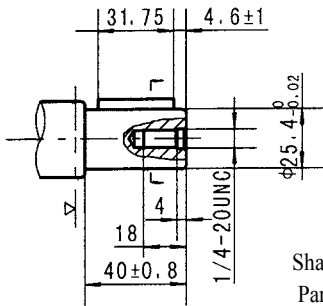
BMPH SHAFT EXTENSIONS DIMENSIONS DATA



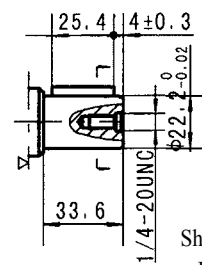
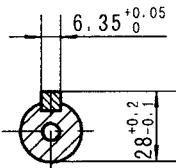
Shaft A: Cylindrical shaft $\phi 25$
Parallel key 8x7x32



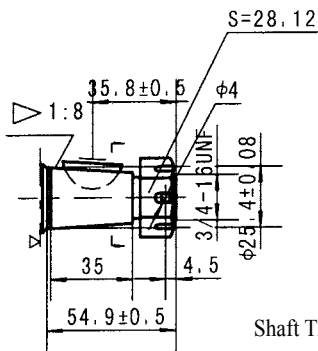
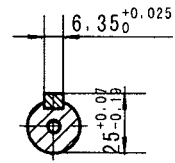
Shaft H1: Cylindrical shaft $\phi 25.4$
Pin hole $\phi 8$



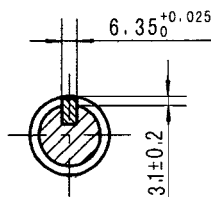
Shaft R: Cylindrical shaft $\phi 25.4$
Parallel key 6.35x6.35x31.75



Shaft D: Cylindrical shaft $\phi 22.22$
Parallel key 6.35x6.35x25.4



Shaft T2: Cone-shaft $\phi 25.4$
Parallel key $\phi 25.4 \times 6.35$
Tightening torque: $200 \pm 10 \text{ Nm}$

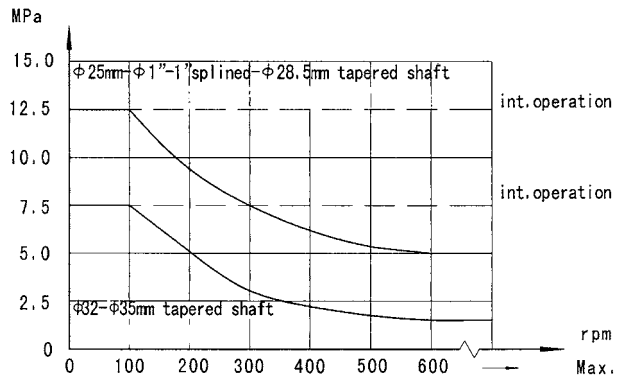
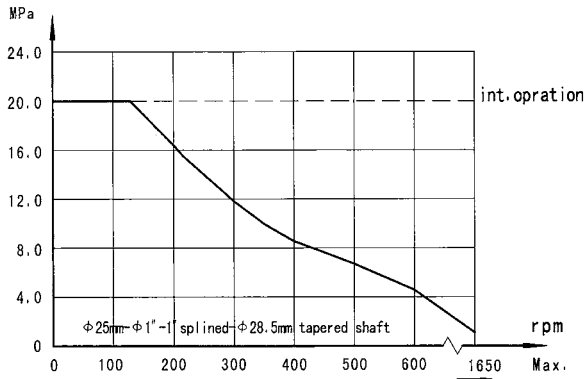
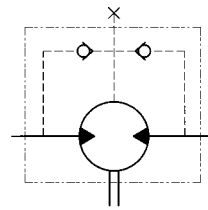


▷ Motor Mounting Surface



BMP、BMPH Series Hydraulic Motor

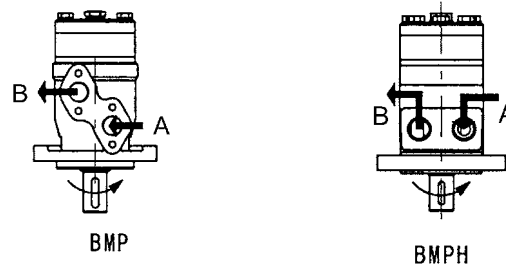
Permissible shaft seal pressure



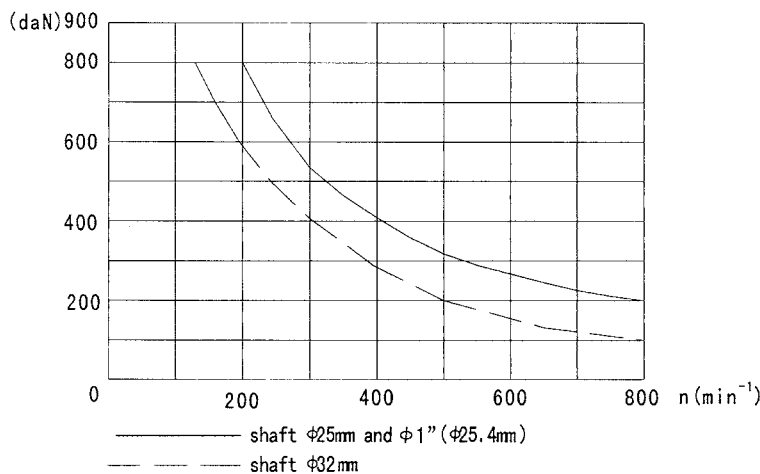
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Direction of shaft rotation: Standard

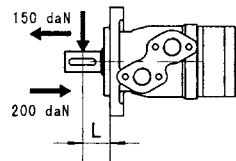
When facing shaft end of motor, shaft to rotate:
 Clockwise when port "A" is pressurized.
 Counter-clockwise when port "B" is pressurized.



Status of the shaft's radial force



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



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



Order Information

Pos.1	2	3	4	5	6	7	8
			BMP				
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function
BMP	36	2-Ø13.5 Rhomb-flange , pilot Ø82.5 × 8	A Shaft Ø25, parallel key 8x7x32	D G1/2 Manifold Mount 4 × M8, G1/4	Omit	00	Omit
	50		C Shaft Ø25.4, parallel key 6.35x6.35x31.75				
	80	E Shaft Ø25.4, splined tooth SEA 6B	S 7/8-14 O-ring manifold 4x5/16-18UNC, 7/16-20UNF	R	Blue		
	100	R Short shaft Ø25.4, parallel key 6.35x6.35x31.75				P Manifold 4x5/16-18UNC, 7/16-20UNF	Opposite
	125	B Shaft Ø32, parallel key 10x8x45	R PT(Rc)1/2 Manifold 4xM8, PT(Rc)1/4	S	Silver grey		
	160	F Shaft Ø31.75, splined tooth 14-DP12/24				T Cone shaft Ø28.56, parallel key B5x5x14	LS
	200	FD Long shaft Ø31.75, splined tooth 14-DP12/24	T3 Cone shaft Ø31.75, parallel key 7.96x7.96x25.4		Low Speed		
	250	G Shaft Ø31.75, parallel key 7.96x7.96x31.75					
	315	H5 4-M10 Square-flange , pilot Ø44.4 × 2.8					
	400						
500							

1 2 3 4 5 6 7 8

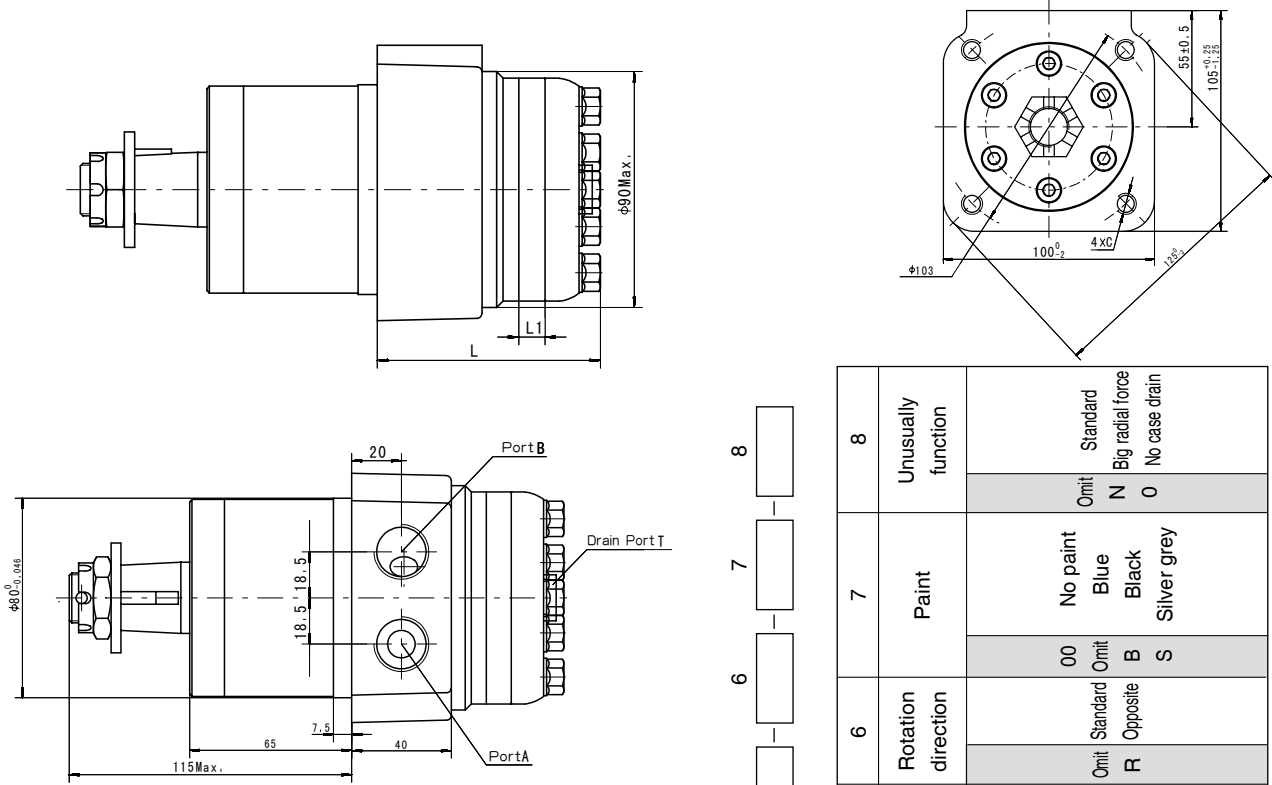
BMPH

Pos.1	2	3	4	5	6	7	8
			BMPH				
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function
BMPH	36	2-Ø13.5 Rhomb-flange , pilot Ø82.5 × 2.8	K Shaft Ø25.4, woodruff key Ø25.4 × 6.35	G G1/2, G1/4	Omit	00	Omit
	50		S Shaft Ø25.4 , splined tooth SEA 6B				
	80	A Shaft Ø25 , parallel key 8 × 7 × 32	P 1/2-14 NPTF, 7/16-20UNF	R	Blue		
	100	R Shaft Ø25.4, parallel key 6.35 × 6.35 × 31.75				T 3/4-16 O-ring, 7/16-20UNF	Opposite
	125	H Shaft Ø25.4, pin hole Ø10.3	R PT(Rc)1/2 ,PT(Rc)1/4	S	Silver grey		
	160	H1 Shaft Ø25.4, pin hole Ø8				B4 Ø10 O-ring manifold	LS
	200	D Shaft Ø22.22, parallel key 6.35 × 6.35 × 25.4	B5 4x5/16-18UNC, 7/16-20UNF		Low Speed		
	250	I Shaft Ø22.22, splined tooth 13-DP16/32				7/16-20UNF	
	315	H5 4-M10 Square-flange , pilot Ø44.4 × 2.8					
	400						
500							

Note: When the table is used, please fill the code of left rows in dash area and give us, which the code information consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us.

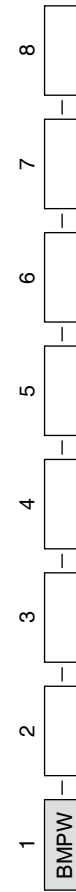


BMPW DIMENSIONS AND MOUNTING DATA



Model	L	L1
BMPW50	81	7
BMPW80	84.5	10.5
BMPW100	87	13
BMPW125	90	16
BMPW160	95	21
BMPW200	100	26
BMPW250	106	32
BMPW315	116	42
BMPW400	126	52
BMPW500	139	65

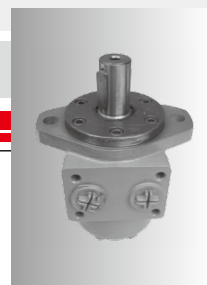
Mounting	Code		
	G (depth)	S (depth)	M (depth)
P(A,B)	G1/2 (15)	7/8-14 O-ring (17)	M22x1.5 (15)
T	G1/4 (12)	7/16-20UNF (12)	M14x1.5 (12)
C	4xM10(20)	4x3/8-16UNC(20)	4xM10(20)



Order Information

Pos.1	2	3	4	5	6	7	8
Code		Flange	Output shaft	Ports and drain port	Rotation direction	Paint	Unusually function
BMPW	50 80 100 125 160 200 250 315 400 500	Wheel-flange pilat Ø80 × 7.5 Omit	A Shaft Ø25x6 ,Parallel key 8 × 7 × 32 C Shaft Ø25.4 ,Parallel key 6.35 × 6.35 × 31.75 E Shaft Ø25.4 ,Splined key SAE 6B T Cone shaft Ø28.56 ,Parallel key B5 × 5 × 14	G G1/2, G1/4 S 7/8-14 O-ring, M 7/16-20UNF M22x1.5, M14x1.5	Omit Standard R Opposite	No paint Blue Black Silver grey	Omit N Standard 0 Big radial force No case drain

Note: When the table is used, please fill the code of left rows in the table and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us.



OZ SERIES HYDRAULIC MOTOR

OZ 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

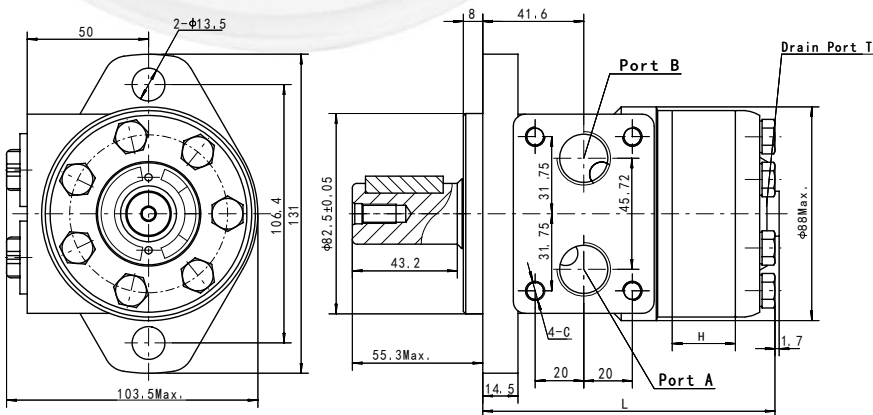
Technical data for OZ with 25 and 1 in and 1 in splined and 28.56 tapered shaft

Code	Displacement [cm ³ /rev]	Max.Speed [rpm]		Max.Torque [Nm]		Max.output [kW]		Max.pressure [MPa]		Max.Oil Flow[L/min]
		cont.	int.	cont.	int.	cont.	int.	cont.	int.	
OZ 36	37	1081	51	68	5.2	8.6	10.5	14	40	
OZ 50	51.7	774	73	96	5.2	8.6	10.5	14	40	
OZ 80	77.7	515	106	143	5.2	8.6	10.5	14	40	
OZ 100	96.2	416	140	178	5.2	8.6	10.5	14	40	
OZ 125	117.9	339	162	218	5.2	8.6	10.5	14	40	
OZ 160	155.5	257	216	288	5.2	8.6	10.5	14	40	
OZ 200	189.9	211	264	351	5.2	8.6	10.5	14	40	
OZ 250	231	173	281	351	4.6	7	9	11.5	40	
OZ 315	311.7	128	312	433	3.4	5.8	7	10.5	40	
OZ 400	386.2	104	392	582	3.4	5.8	7	10.5	40	

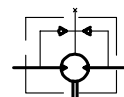
* Intermittent operation: the permissible values may occur for max.10% of every minute

OZ DIMENSIONS AND MOUNTING DATA

Type	H	L
OZ36	7	101
OZ50	7	101
OZ80	10.5	104.5
OZ100	13	107
OZ125	16	110
OZ160	21	115
OZ200	26	120
OZ250	32	126
OZ315	42	136
OZ400	52	146



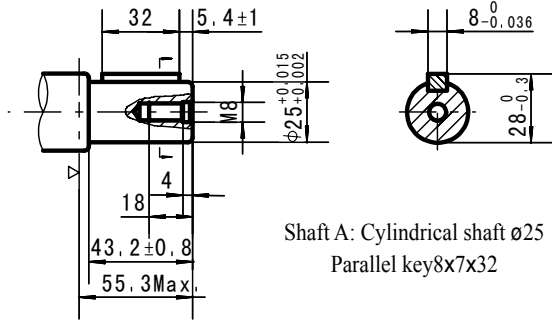
Code	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (16.7)	1/2-14NPTF (15)	PT(RC)1/2 (15)
C	4-M8 (13)	4-M8 (13)	4-5/16-18UNC(13)	4-5/16-18UNC(13)	4-M8 (13)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 (9.7)



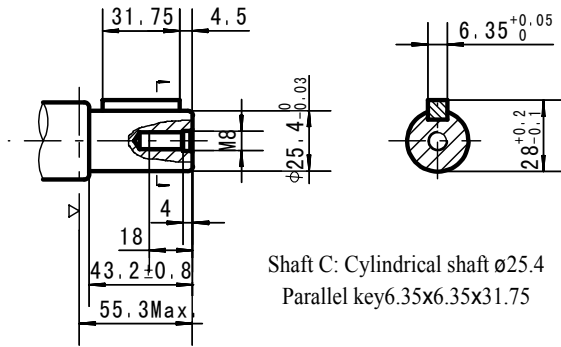
Direction of shaft rotation: Standard
 When facing shaft end of motor, shaft to rotate:
 Clockwise when port "A" is pressurized.
 Counter-clockwise when port "B" is pressurized.



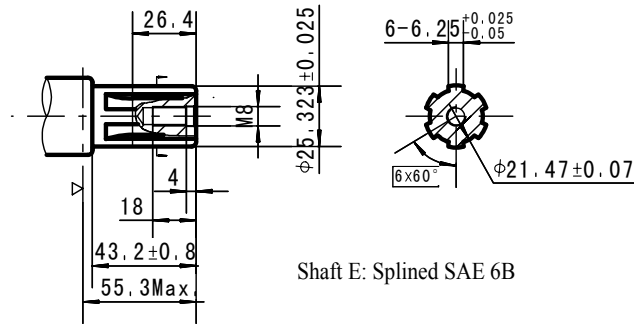
SHAFT EXTENSIONS FOR OZ MOTORS



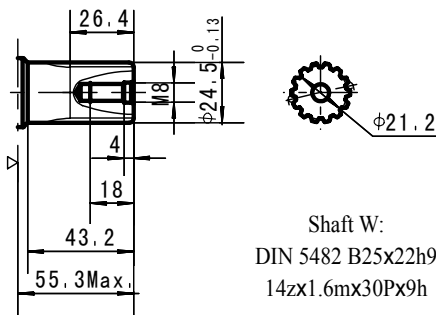
Shaft A: Cylindrical shaft ø25
Parallel key 8x7x32



Shaft C: Cylindrical shaft ø25.4
Parallel key 6.35x6.35x31.75



Shaft E: Splined SAE 6B

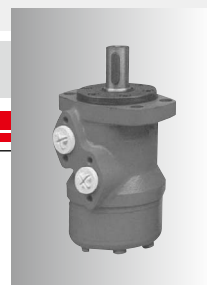


Shaft W:
DIN 5482 B25x22h9
14zx1.6mx30Px9h

▷ Motor Mounting Surface

Order Information

Pos.1	2	1	2	3	3	4	5	6	7	8							
Code	Disp.	Flange		Output Shaft		Ports and Drain Port		Rotation Direction		Paint		Unusually Function					
36	50	A	C	E	W	T	D	M	S	P	R	00	Omit	Standard	Free Running	No case drain	
80	100	2	2-ø13.5 Rhomb-flange, pilot ø82.5x8	A	Shaft ø25, parallel key 8x7x32	Shaft ø25.4, parallel key 6.35x6.35x31.75	Shaft ø25.4, splined key SEA 6B	Shaft ø24.5, splined B25X22	Cone shaft ø28.56, parallel key B5x5x14	G1/2 Manifold 4xM8, G1/4 M22x1.5 Manifold 4xM8, M14x1.5 7/8-14 O-ring manifold 4x5/16-18UNC, 7/16-20UNF 1/2-14NPTF manifold 4x5/16-18UNC, 7/16-20UNF PT(Fc) 1/2 manifold 4xM8, PT(Rc) 1/4	Standard Opposite	No paint Blue Black Silver grey	Omit F 0	Omit Blue Black Silver grey			
125	160																
200	250																
315	400																



BMR SERIES HYDRAULIC MOTOR

BMR series motor adapt the advanced Gerolor gear set design with shaft distribution flow, which can automatically compensate in operating with high pressure, provide reliable and smooth operation, high efficiency and long life.

Characteristic features:

- *Advanced manufacturing devices for the Gerolor gear set, which use low pressure of start-up, provide smooth, reliable operation and high efficiency.
- *Shaft seal can bear high pressure of back and the motor can be used in parallel or in series.
- *Special design in the driver-linker and prolong operating life
- *Special design for distribution system can meet the requirement of low noise of unit.
- *Compact volume and easy installation

Main Specification

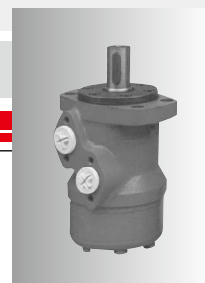
Technical data for BMR with 25 and 1 in and 1 in splined and 28.56 tapered shaft

Type		BMR BMRS 36	BMR BMRS 50	BMR BMRS 80	BMR BMRS 100	BMR BMRS 125	BMR BMRS 160	BMR BMRS 200	BMR BMRS 250	BMR BMRS 315	BMR BMRS 375
Geometric displacement (cm ³ /rev.)		36	51.7	81.5	102	127.2	157.2	194.5	253.3	317.5	381.4
Max. speed (rpm)	cont.	1085	960	750	600	475	378	310	240	190	155
	int.	1220	1150	940	750	600	475	385	300	240	190
Max. torque (N•m)	cont.	72	100	195	240	300	360	360	390	390	365
	int.	83	126	220	280	340	430	440	490	535	495
	peak	105	165	270	320	370	460	560	640	650	680
Max. output (kW)	cont.	8.5	9.5	12.5	13.0	12.5	12.5	10.0	7.0	6.0	5.0
	int.	9.8	11.2	15.0	15.0	14.5	14.0	13.0	9.5	9.0	8.0
Max. pressure drop (MPa)	cont.	14.0	14	17.5	17.5	17.5	16.5	13	11	9	7
	int.	16.5	17.5	20	20	20	20	17.5	15	13	10
	peak	22.5	22.5	22.5	22.5	22.5	22.5	22.5	20	17.5	15
Max. flow (L/min)	cont.	40	50	60	60	60	60	60	60	60	60
	int.	45	60	75	75	75	75	75	75	75	75
Weight (kg)		6.5	6.7	6.9	7	7.3	7.6	8.0	8.5	9.0	9.5

* 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

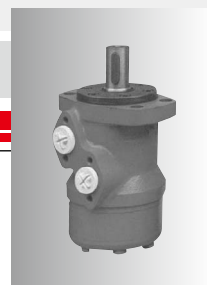
Technical data for BMR with 31.75 and 32 shaft

Type		BMR	BMR	BMR	BMR	BMR	BMR	BMR	BMR	BMR	BMR
		BMRS 36	BMRS 50	BMRS 80	BMRS 100	BMRS 125	BMRS 160	BMRS 200	BMRS 250	BMRS 315	BMRS 375
Geometric displacement (cm ³ /rev.)		36	51.7	81.5	102	127.2	157.2	194.5	253.3	317.5	381.4
Max. speed (rpm)	cont.	1250	960	750	600	475	378	310	240	190	155
	int.	1520	1150	940	750	600	475	385	300	240	190
Max. torque (N•m)	cont.	72	100	195	240	300	380	450	540	550	580
	int.	83	126	220	280	340	430	500	610	690	690
	peak	105	165	270	320	370	460	560	710	840	830
Max. output (kW)	cont.	8.5	9.5	12.5	13.0	12.5	12.5	11.0	10.0	9.0	7.5
	int.	9.8	11.2	15.0	15.0	14.5	14.0	13.0	12.0	10.0	9.0
Max. pressure drop (MPa)	cont.	14.0	14	17.5	17.5	17.5	17.5	17.5	17.5	13.5	11.5
	int.	16.5	17.5	20	20	20	20	20	20	17.5	15
	peak	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	21	17.5
Max. flow (L/min)	cont.	45	50	60	60	60	60	60	60	60	60
	int.	55	60	75	75	75	75	75	75	75	75
Weight (kg)		6.5	6.7	6.9	7	7.3	7.6	8.0	8.5	9.0	9.5

* 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

BMR 36 [36cm³/rev.]

Pressure (MPa)

	2	3	5	7	9	10	12.5	14.0	16.5
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Flow (L/min)	Max.cont.									Max.int.										
	10	16	25	37	46	50					10	16	25	37	46	50				
4	105	100	92	80	71	58					105	100	92	80	71	58				
8	208	200	188	175	158	149	134	120	108		208	200	188	175	158	149	134	120	108	
15	403	392	380	365	348	326	318	302	274		403	392	380	365	348	326	318	302	274	
20	540	531	518	500	483	462	450	435	412		540	531	518	500	483	462	450	435	412	
30	810	798	780	763	742	722	705	694	668		810	798	780	763	742	722	705	694	668	
40	1092	1080	1069	1056	1042	1028	1011	984	957		1092	1080	1069	1056	1042	1028	1011	984	957	
45	1230	1215	1194	1170	1150	1128	1100	1070	1020		1230	1215	1194	1170	1150	1128	1100	1070	1020	

BMR 50 [51.7cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5
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Flow (L/min)	Max.cont.								Max.int.									
	35	45	61	67	77	88			35	45	61	67	77	88				
5	93	84	76	73	69	46					93	84	76	73	69	46		
10	186	178	166	162	153	136	118	97			186	178	166	162	153	136	118	97
15	283	277	269	261	250	230	211	185			283	277	269	261	250	230	211	185
20	377	375	365	361	346	330	302	270			377	375	365	361	346	330	302	270
30	576	569	561	554	542	531	500	465			576	569	561	554	542	531	500	465
40	760	758	753	750	738	724	700	670			760	758	753	750	738	724	700	670
45	856	853	849	845	835	815	796	770			856	853	849	845	835	815	796	770
50	950	940	925	906	880	852	832	801			950	940	925	906	880	852	832	801
60	1138	1124	1100	1075	1056	1028	1006	970			1138	1124	1100	1075	1056	1028	1006	970

BMR 80 [81.5cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5	20
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Flow (L/min)	Max.cont.									Max.int.									
	50	64	88	108	133					50	64	88	108	133					
5	59	56	50	44	38						59	56	50	44	38				
10	118	113	106	97	86	79	56				118	113	106	97	86	79	56		
20	238	234	227	216	203	190	178	154	135		238	234	227	216	203	190	178	154	135
30	360	352	340	332	316	302	290	274	250		360	352	340	332	316	302	290	274	250
40	480	470	458	445	430	418	403	388	359		480	470	458	445	430	418	403	388	359
50	604	595	582	570	556	540	521	504	487		604	595	582	570	556	540	521	504	487
60	726	715	704	692	678	663	647	622	594		726	715	704	692	678	663	647	622	594
70	845	834	820	802	789	767	754	730	705		845	834	820	802	789	767	754	730	705
75	910	895	881	867	852	830	806	787	756		910	895	881	867	852	830	806	787	756

BMR 100 [102cm³/rev.]

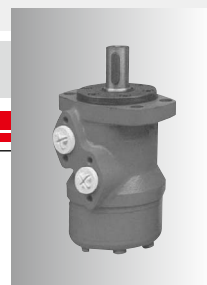
Pressure (MPa)

	5	7	9	10	12	14	16	17.5	20
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Flow (L/min)	Max.cont.									Max.int.									
	66	92	120	135	156					66	92	120	135	156					
5	45	42	38	34	27						45	42	38	34	27				
10	93	90	86	81	74	57	42				93	90	86	81	74	57	42		
20	189	185	180	173	165	158	150	139	118		189	185	180	173	165	158	150	139	118
30	286	281	275	266	257	246	237	225	207		286	281	275	266	257	246	237	225	207
40	385	378	365	355	345	332	320	314	297		385	378	365	355	345	332	320	314	297
50	482	477	470	460	448	435	420	405	389		482	477	470	460	448	435	420	405	389
60	580	572	560	548	535	523	510	500	478		580	572	560	548	535	523	510	500	478
70	678	670	660	648	638	626	615	606	580		678	670	660	648	638	626	615	606	580
75	728	720	710	695	681	667	650	634	618		728	720	710	695	681	667	650	634	618

Torque (N·m) 135
Speed (rpm) 830

□ cont.
■ int.



Performance Data

BMR 125 [127.2cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5	20

Flow (L/min)	Max.cont.									Max.int.								
	5	7	9	10	12	14	16	17.5	20	5	7	9	10	12	14	16	17.5	20
5	76	110	145	167	189					36	31	25	19	13				
10	84	118	155	176	202	228	253			73	70	60	48	36	25	19		
20	82	117	153	174	200	230	259	294	332	153	151	148	144	138	128	117	104	73
30	79	116	151	171	198	228	257	292	329	231	228	224	218	210	201	183	168	137
40	72	114	148	168	196	226	256	290	327	309	307	303	298	292	280	270	252	218
50	62	105	143	165	195	223	254	287	323	389	386	382	378	370	360	344	328	292
60	52	98	136	160	191	220	250	282	319	467	463	459	456	448	427	410	399	352
70	41	90	130	156	187	215	242	278	313	545	542	538	534	529	520	508	486	430
75	32	79	126	148	180	208	234	262	300	586	583	578	570	560	546	532	520	480

BMR 160 [157.2cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5	20

Flow (L/min)	Max.cont.									Max.int.								
	5	7	9	10	12	14	16	17.5	20	5	7	9	10	12	14	16	17.5	20
5	104	146	190	210	245					26	23	20	16	10				
10	107	150	195	216	250	290	335			59	56	50	45	37	30	22		
20	102	151	198	220	257	298	342	370	420	121	118	115	113	108	102	97	90	78
30	97	146	190	217	256	295	340	368	416	184	178	173	170	164	155	143	128	103
40	89	140	185	210	252	290	335	363	412	246	241	235	228	220	210	194	177	150
50	72	128	179	202	244	284	327	358	409	310	307	300	295	287	278	262	247	210
60	60	116	170	198	240	279	321	352	400	374	367	359	354	346	338	323	306	265
70	49	107	164	193	233	271	309	344	390	437	430	421	415	403	393	381	365	318
75	36	98	152	185	226	265	300	334	379	472	463	450	441	431	420	405	389	365

BMR 200 [194.5cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5	20

Flow (L/min)	Max.cont.									Max.int.								
	5	7	9	10	12	14	16	17.5	20	5	7	9	10	12	14	16	17.5	20
5	132	181	238	262	310					24	22	18	13	10				
10	135	186	240	264	315	356	403			49	47	45	43	38	33	24		
20	131	183	238	260	314	358	404	438	498	99	97	94	92	88	83	74	64	56
30	126	178	233	254	311	355	402	431	486	149	147	144	141	135	126	113	105	91
40	112	169	228	250	307	352	400	426	477	200	197	194	191	185	174	160	151	127
50	95	156	221	246	300	350	398	421	470	252	249	246	243	238	228	212	194	161
60	78	145	213	238	289	342	386	412	459	304	301	298	294	286	276	262	243	218
70	67	135	206	228	277	336	375	408	453	355	353	349	340	329	316	300	288	257
75	58	125	197	220	270	321	360	398	442	382	379	373	362	350	337	322	312	278

BMR 250 [253.5cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5	20

Flow (L/min)	Max.cont.									Max.int.								
	5	7	9	10	12	14	16	17.5	20	5	7	9	10	12	14	16	17.5	20
5	175	243	304	342	407					17	16	14	12	10				
10	178	246	310	344	409	465	525			37	35	31	28	23	18	11		
20	175	244	308	340	408	463	520	558	636	75	73	72	70	66	58	53	50	42
30	162	235	304	332	400	455	516	550	621	114	111	108	106	100	92	83	77	65
40	143	223	300	329	396	447	512	546	617	154	152	150	147	143	132	120	110	90
50	124	208	289	323	384	440	503	535	600	193	190	187	174	168	160	149	140	116
60	103	192	280	314	371	426	489	514	578	233	230	227	224	218	205	190	181	155
70	88	178	264	301	356	418	479	498	560	273	270	267	263	252	242	226	209	173
75	62	165	256	288	347	412	474	486	542	294	291	287	283	274	263	249	236	211

□ cont.
 ■ int.

Torque (N·m) 256
 Speed (rpm) 287



Performance Data

BMR 315 [317.5cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5
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Flow (L/min)	Max.cont.								Max.int.							
	5	7	9	10	12	14	16	17.5	5	7	9	10	12	14	16	17.5
5	215	302														
	13	11														
10	218	305	383	422	488	551	622									
	28	27	25	24	21	18	13									
20	215	303	380	418	485	549	620	660								
	60	59	57	55	52	49	45	42								
30	204	296	375	413	480	542	613	654								
	91	89	86	84	81	78	72	67								
40	196	287	368	410	477	539	609	650								
	122	120	117	112	106	100	94	85								
50	176	270	356	393	461	526	597	645								
	154	151	147	140	131	120	109	100								
Max.cont. 60	162	246	339	374	446	511	586	628								
	185	182	177	172	163	152	140	134								
70	143	235	324	358	430	493	562	614								
	217	213	208	201	190	178	166	158								
Max.int. 75	125	212	303	339	417	481	543	582								
	232	228	222	216	208	200	183	171								

Torque (N·m) 481
Speed (rpm) 200

BMR 375 [381.4cm³/rev.]

Pressure (MPa)

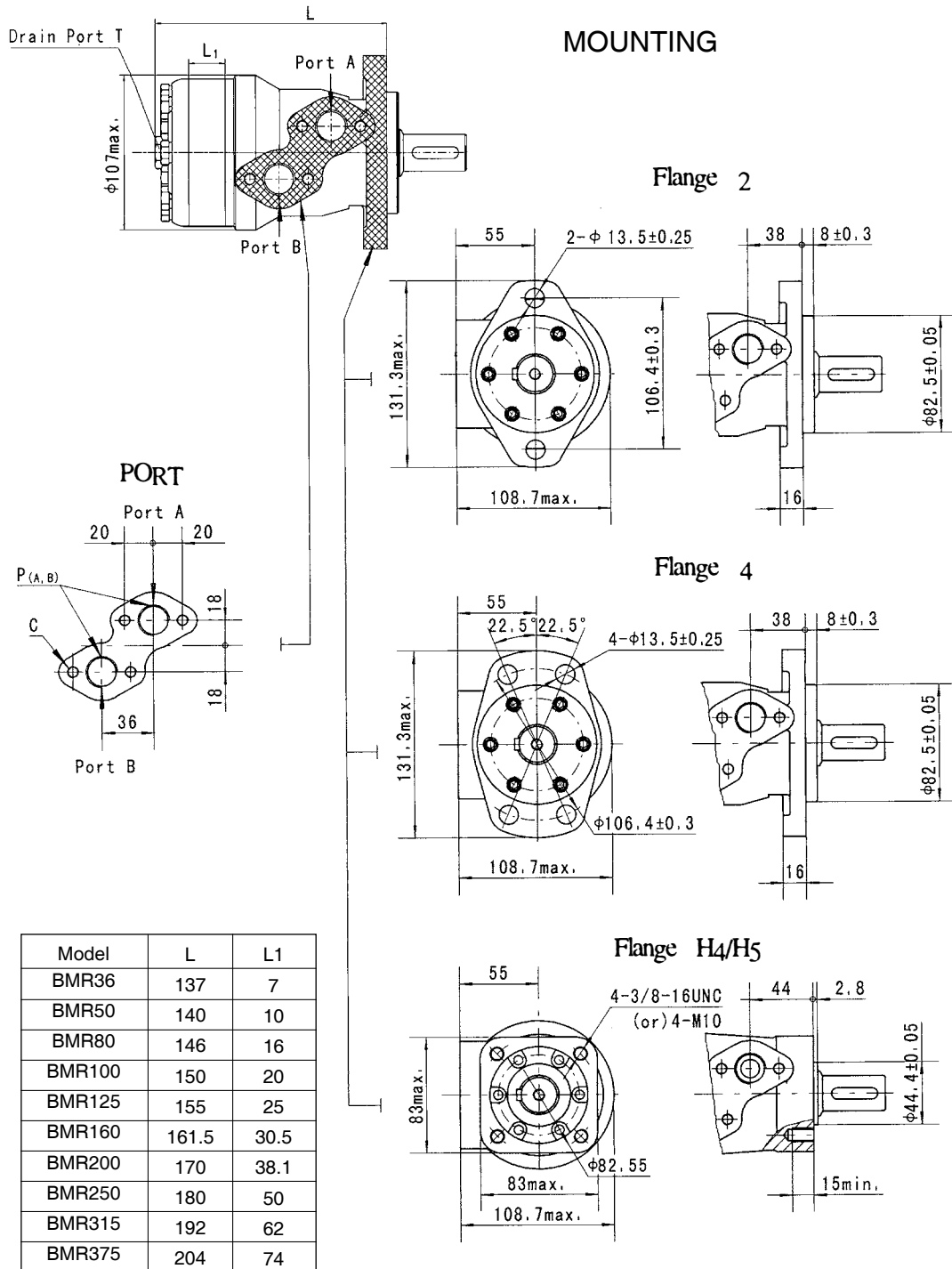
	3	4.5	5.5	6.5	8	10	12.5	14
--	---	-----	-----	-----	---	----	------	----

Flow (L/min)	Max.cont.								Max.int.							
	3	4.5	5.5	6.5	8	10	12.5	14	3	4.5	5.5	6.5	8	10	12.5	14
5	153	232														
	12	10														
10	157	236	284	337	406	497	612	668								
	24	23	22	21	19	17	15	12								
20	150	232	280	332	401	490	606	660								
	49	48	47	46	44	41	38	32								
30	142	215	274	327	398	483	603	652								
	76	75	74	73	71	67	63	50								
40	126	212	268	320	393	477	593	635								
	103	101	99	97	95	92	88	70								
50	105	187	242	302	376	455	583	608								
	128	126	124	121	118	115	111	96								
Max.cont. 60	90	167	229	281	362	444	566	600								
	154	152	150	148	145	138	130	121								
70	90	149	200	258	341	425	546	580								
	180	179	178	176	173	168	160	148								
Max.int. 75	56	125	182	241	320	408	524	565								
	195	194	193	191	189	185	178	170								

□ cont.
□ int.



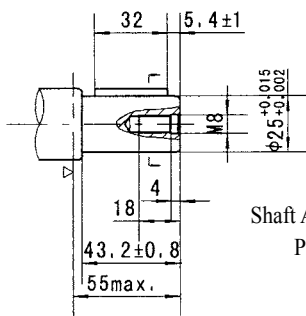
BMR DIMENSIONS AND MOUNTING DATA



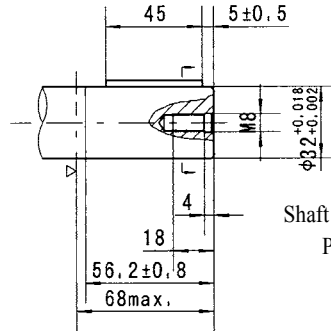
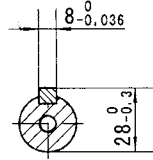
Code	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	PT(RC)1/2 (15)
C	4-M8 (13)	4-M8 (13)	4-5/16-18UNC(13)	4-5/16-18UNC(13)	4-M8 (13)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 (9.7)



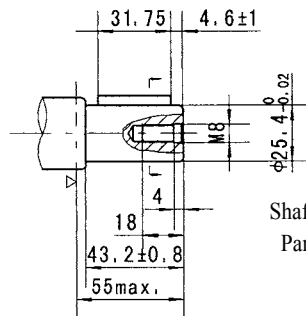
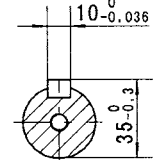
BMR SHAFT EXTENSIONS DIMENSIONS DATA



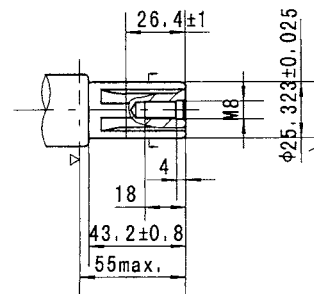
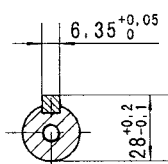
Shaft A: Cylindrical shaft ø25
Parallel key 8x7x32



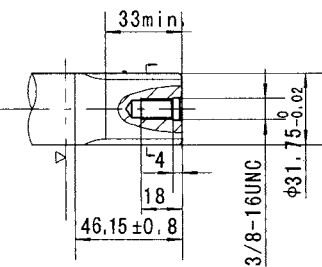
Shaft B: Cylindrical shaft ø32
Parallel key 10x8x45



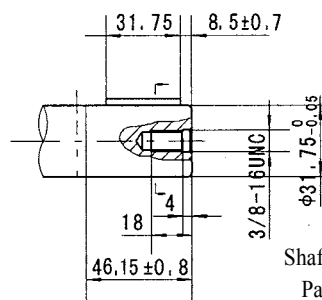
Shaft C: Cylindrical shaft ø25.4
Parallel key 6.35x6.35x31.75



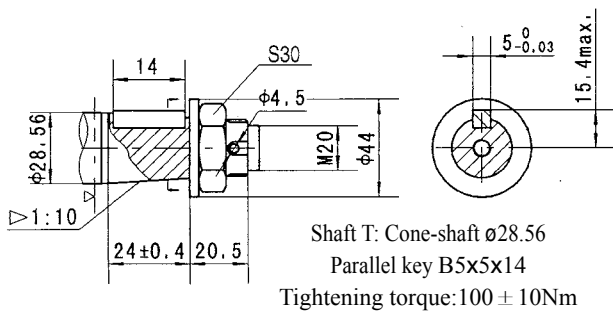
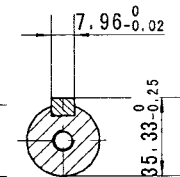
Shaft E: Splined SAE 6B
6x60°
φ21.47 ± 0.07



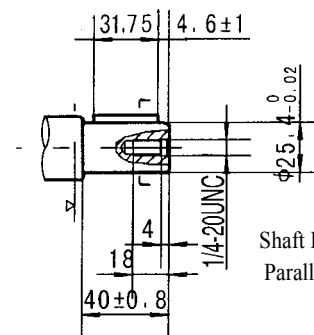
Shaft F: Splined
14-DP12/24



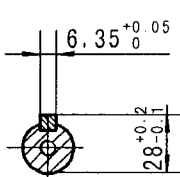
Shaft G: Cylindrical shaft ø31.75
Parallel key 7.96x7.96x31.75



Shaft T: Cone-shaft ø28.56
Parallel key B5x5x14
Tightening torque: 100 ± 10Nm



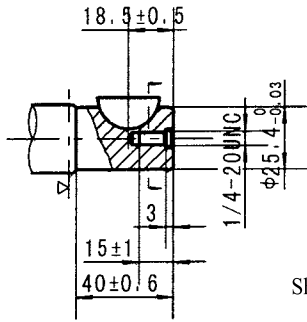
Shaft R: Cylindrical shaft ø25.4
Parallel key 6.35x6.35x31.75



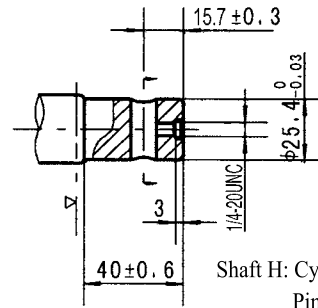
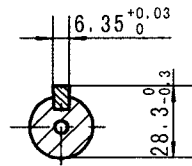
▷ Motor Mounting Surface



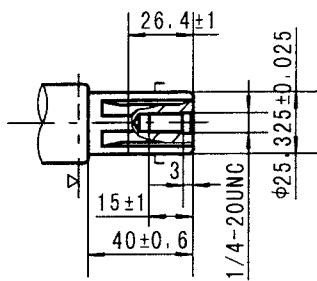
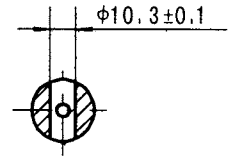
BMRS SHAFT EXTENSIONS DIMENSIDNS DATA



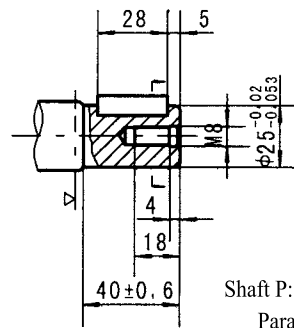
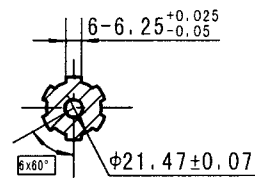
Shaft K: Cylindrical shaft $\phi 25.4$
Woodruff key $\phi 25.4 \times 6.35$



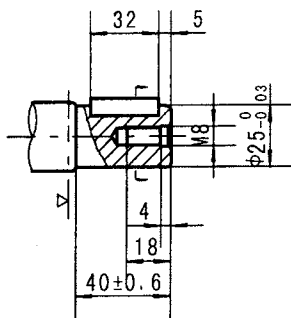
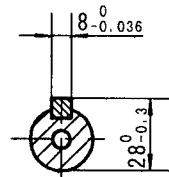
Shaft H: Cylindrical shaft $\phi 25.4$
Pin hole $\phi 10.3$



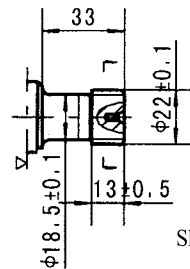
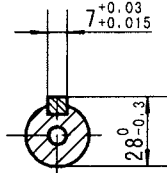
Shaft S: Splined SAE 6B



Shaft P: Cylindrical shaft $\phi 25$
Parallel key $8 \times 7 \times 28$



Shaft J: Cylindrical shaft $\phi 25$
Parallel key $7 \times 7 \times 32$



Shaft I: Splined 13-DP16/32

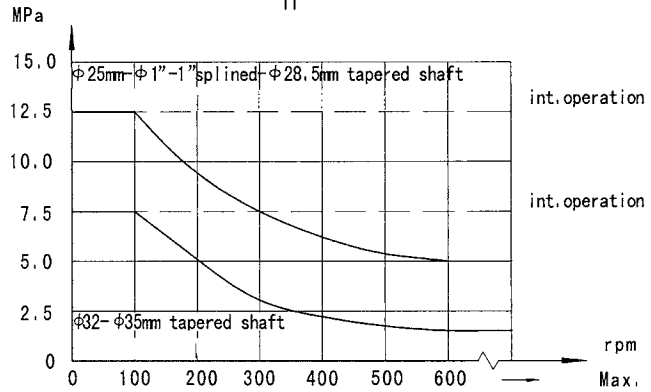
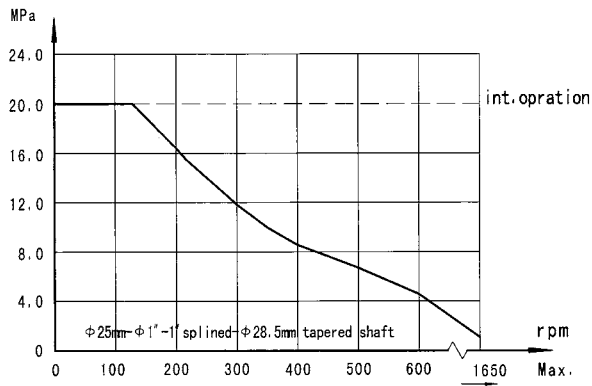
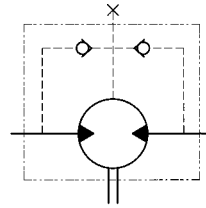


▷ Motor Mounting Surface



BMR、BMRS Series Hydraulic Motor

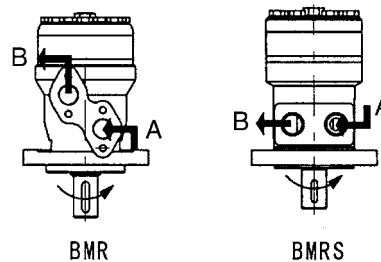
Permissible shaft seal pressure



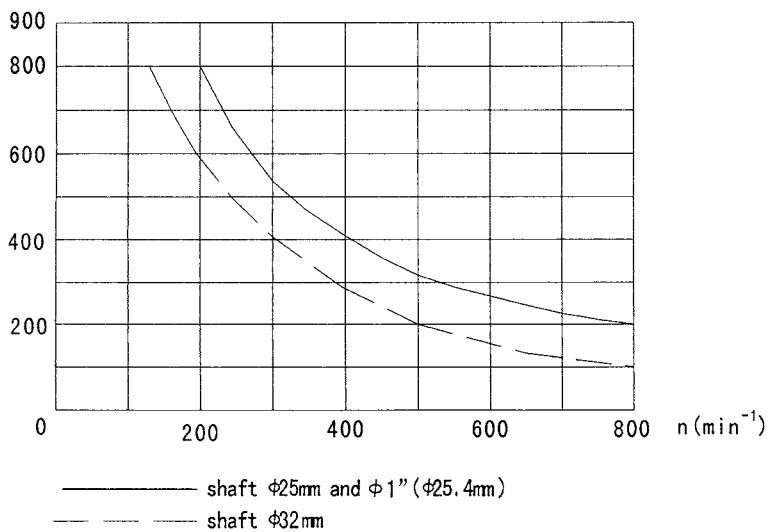
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Direction of shaft rotation: Standard

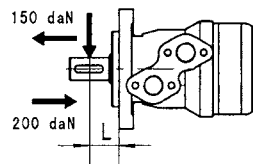
When facing shaft end of motor, shaft to rotate:
 Clockwise when port "A" is pressurized.
 Counter-clockwise when port "B" is pressurized.



Status of the shaft's radial force



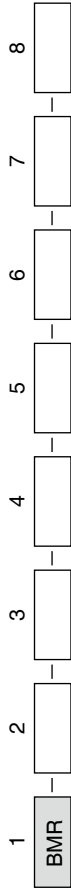
$$F_r = \frac{800, 25000}{n \cdot 95 + L} \text{ daN}$$



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



Order Information



Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function
BMR	36	2-Ø13.5Rhomb-flange, pilot Ø82.5 × 8 4-Ø13.5Rhomb-flange, pilot Ø82.5 × 8 4-3/8-16 Square-flange, pilot Ø44.4 × 2.8 4-M10 Square-flange, pilot Ø44.4 × 2.8	A Shaft Ø25,parallel Key 8x7x32	D G1/2 Manifold Mount 4-M8, G1/4	Omit Standard Opposite R	00 Omit Blue Black Silver grey	Omit N Big radial force 0 No case drain F Free Running LS Low Speed
	50		C Shaft Ø25.4,parallel Key 6.35x6.35x31.75	M M22 × 1.5 Manifold Mount			
	80		E Shaft Ø25.4,spined tooth SAE 6B	S 4-M8, M14 × 1.5			
	100		R Short shaft Ø25.4,parallel key 6.35x6.35x31.75	S 7/8-14 O-ring manifold			
	125		B Shaft Ø32,parallel Key 10x8x45	S 4-5/16-18UNC, 7/16-20UNF			
	160		F Shaft Ø31.75,spined tooth 14-DP12/24	P 1/2-14 NPTF			
	200		FD Long shaft Ø31.75,spined tooth 14-DP12/24	P Manifold 4-5/16-18UNC, 7/16-20UNF			
	250		G Shaft Ø31.75,parallel Key 7.96x7.96x31.75	R PT(Rc)1/2 Manifold 4-M8, PT(Rc)1/4			
	315		T Cone-Shaft Ø28.56,parallel Key B5x5x14				
	375						



Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function
BMRS	36	2-Ø13.5Rhomb-flange, pilot Ø82.5 × 2.8 4-Ø13.5Rhomb-flange, pilot Ø82.5 × 2.8 4-3/8-16 Square-flange, pilot Ø44.4 × 2.8 4-M10 Square-flange, pilot Ø44.4 × 2.8	K Shaft Ø25.4,Woodruff Key Ø25.4 × 6.35	G G1/2, G1/4	Omit Standard Opposite R	00 Omit Blue Black Silver grey	Omit N Big radial force 0 No case drain F Free Running LS Low Speed
	50		S Sub-shaft Ø25.4,spined tooth SAE 6B	S 7/8-14 O-ring 7/16-20UNF (G1/4)			
	80		A Shaft Ø25 , parallel key 8 × 7 × 32	P 1/2-14 NPTF, 7/16-20UNF (G1/4)			
	100		R Shaft Ø25.4, parallel key 6.35 × 6.35 × 31.75	T 3/4-16 O-ring, 7/16-20UNF			
	125		H Sub-shaft Ø25.4,Pin hole Ø10.3	R PT(Rc)1/2, PT(Rc)1/4			
	160		H1 Shaft Ø25.4, pin hole Ø8	B4 Ø10 O-ring manifold			
	200		D Shaft Ø22.22, parallel key 6.35 × 6.35 × 25.4	B5 4x5/16-18, 7/16-20UNF			
	250		I Shaft Ø22.22, spined tooth 13-DP16/32	Ø10 O-ring manifold 4xM8, G1/4			
	315		T2 Cone shaft Ø25.4 , woodruff key Ø25.4 × 6.35	M1 M18 × 1.5, M10 × 1			
	375		P Shaft Ø25,parallel Key 8 × 7 × 28	M2 M20 × 1.5, M10 × 1			
	J Shaft Ø25,parallel Key 7 × 7 × 32	M3 M22 × 1.5, M10 × 1					

Note:When the table is used, please fill the code of left rows in dash area and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us.



OK SERIES HYDRAULIC MOTOR

OK series motor adapt the advanced Geroler gear set design with shaft distribution flow, which can automatically compensate in operating with high pressure, provide reliable and smooth operation, high efficiency and long life.

Characteristic features:

- *Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, provide smooth, reliable operation and high efficiency.
- *Shaft seal can bear high pressure of back and the motor can be used in parallel or in series.
- *Special design in the driver-linker and prolong operating life
- *Special design for distribution system can meet the requirement of low noise of unit.
- *Compact volume and easy installation

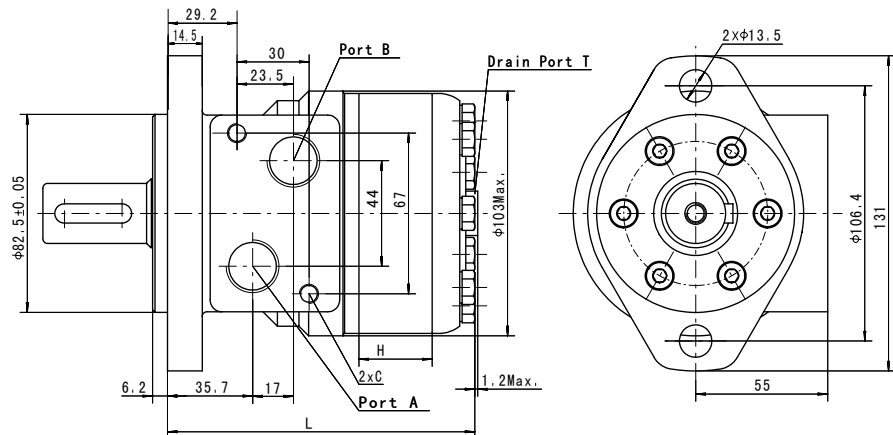
Main Specification

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

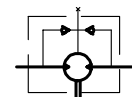
Code	Displacement [cm/rev]	Max.Speed [rpm]	Max.Torque [Nm]		Max.output [kW]		Max.pressure [MPa]		Max.Oil Flow[L/min]
		cont.	cont.	int.	cont.	int.	cont.	int.	
OK 36	36	1111	66	83	9	10.4	14	17.5	40
OK 50	51.7	780	100	129	9	10.4	14	17.5	40
OK 80	81.5	744	158	196	10.4	12.6	14	17.5	60
OK 100	102	595	200	242	10.8	12.8	14	17.5	60
OK 125	127.2	480	248	298	10.8	12.5	14	17.5	60
OK 160	157.2	382	315	384	10.4	11.5	14	17.5	60
OK 200	194.5	301	339	419	8.8	10.2	12.5	15.5	60
OK 250	253.3	238	403	474	8.1	9.4	11	14	60
OK 315	317.5	191	398	498	7.4	7.8	9	12.5	60
OK 375	381.4	162	373	466	6.2	7.1	7.5	9	60

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

Type	H	L
OK36	7	105
OK50	10	108
OK80	16	114
OK100	20	118
OK125	25	123
OK160	30.5	128.5
OK200	38.1	136
OK250	50	148
OK315	62	160
OK375	74	172



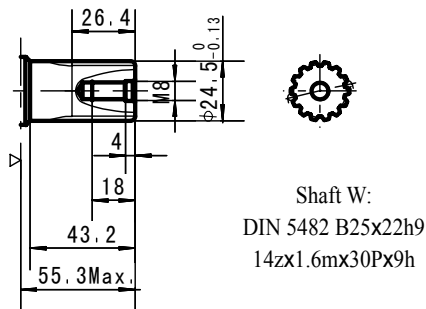
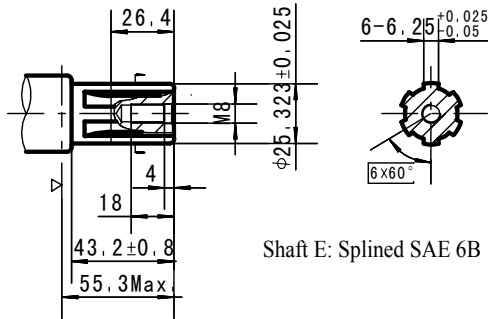
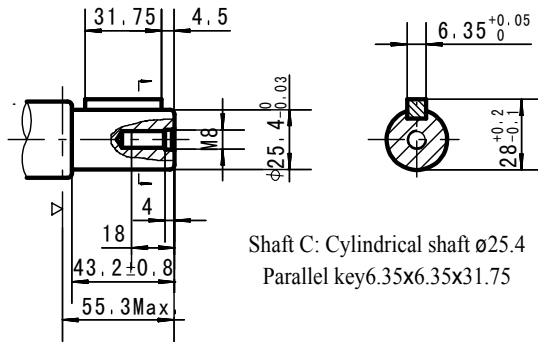
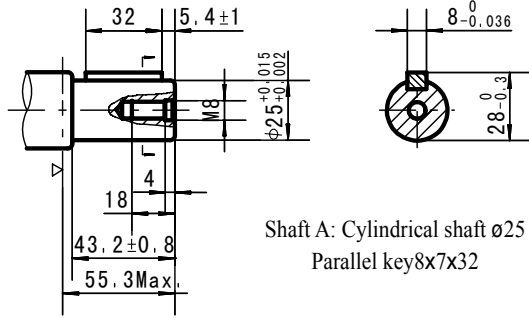
Code	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (16.7)	1/2-14NPTF (15)	PT(RC)1/2 (15)
C	4-M8 (13)	4-M8 (13)	4-5/16-18UNC(13)	4-5/16-18UNC(13)	4-M8 (13)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 (9.7)



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



SHAFT EXTENSIONS FOR OK MOTORS



▷ Motor Mounting Surface

Order Information

OK 1 2 3 4 5 6 7 8

Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function
36	50	2-Ø13.5 Rhomb-flange, pilot Ø82.5x6.2	A Shaft $\phi 25$, parallel key 8x7x32 C Shaft $\phi 25.4$, parallel key 6.35x6.35x31.75 E Shaft $\phi 25.4$, splined key SEA 6B W Shaft $\phi 24.5$, splined B25x22 T Cone shaft $\phi 28.56$, parallel key B5x5x14	D G1/2 Manifold 4xM8, G1/4 M M22x1.5 Manifold 4xM8, M14x1.5 S 7/8-14 O-ring manifold P 4x5/16-18UNC, 7/16-20UNF R 1/2-14NPTF manifold PT(Rc)1/2 manifold 4xM8, PT(Rc)1/4	Omit R	OO Omit B S	Standard Free Running No case drain
125	160						



BMH SERIES HYDRAULIC MOTOR

BMH series motor adapt the advanced Geroler gear set design with shaft distribution flow, which can automatically compensate in operating with high pressure, provide reliable and smooth operation, high efficiency and long life.

Characteristic features:

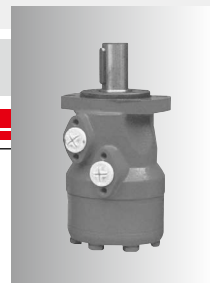
- *Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, provide smooth, reliable operation and high efficiency.
- *Shaft seal can bear high pressure of back and the motor can be used in parallel or series.
- *Special design in the driver-linker and prolong operating life.
- *Special design for distribution system can meet the requirement of low noise of unit.
- *Compact volume and easy installation.

Main Specifaion

Type		BMH 200	BMH 250	BMH 315	BMH 400	BMH 500
Geometric displacement (cm ³ /rev.)		203.2	255.9	316.1	406.4	489.2
Max. speed (rpm)	cont.	366	290	236	183	155
	int.	439	348	282	220	184
Max. torque (N•m)	cont.	510	621	740	850	830
	int.	579	702	827	990	1040
	peak	651	790	980	1092	1170
Max. output (kW)	cont.	16	16	14	12.5	11
	int.	18.5	18.5	15.5	15	14
Max. pressure drop (MPa)	cont.	17.5	17.5	17.5	15.5	12.5
	int.	20	20	20	19	16
	peak	22.5	22.5	22.5	21	18
Max. flow (L/min)	cont.	75	75	75	75	75
	int.	90	90	90	90	90
Weight (kg)		10.5	11	11.5	12.3	13

Type		Max.inlet pressure	Max.return pressure with drain line
BMH200-500 (MPa)	cont.	200	175
	int.	225	200
	peak	250	225

- * 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.
- * Technical data BMH with 35mm cylindrical, 1 1/4 in splined and 35mm tapered shaft.



Performance Data

BMH 200 [203.2cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

3.5	7	10.5	14	17.5	20
-----	---	------	----	------	----

Flow (L/min)	Pressure (MPa)					
	3.5	7	10.5	14	17.5	20
5	98 25	194 25	284 22			
10	101 43	204 41	301 36	391 29	482 14	
20	99 100	201 97	304 93	402 85	509 69	576 56
30	97 145	197 143	300 139	402 130	510 114	579 101
40	90 200	190 200	292 200	399 188	507 168	578 153
50	82 248	183 246	284 244	392 235	500 213	571 199
60	73 292	174 290	274 287	384 279	493 260	563 244
70	63 352	163 350	264 349	374 338	481 318	554 301
Max.cont. 75	59 366	157 365	259 363	366 355	475 335	547 319
80	53 381	150 381	253 380	358 371	466 352	538 338
Max.int. 90	39 443	140 437	241 434	348 426	456 407	526 392

BMH 250 [255.9cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

3.5	7	9	12	14.5	17.5	20
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Flow (L/min)	Pressure (MPa)						
	3.5	7	9	12	14.5	17.5	20
5	121 19	246 19	318 18	398 14			
10	130 34	258 33	331 31	425 29	515 23	595 12	
20	130 78	258 77	332 76	432 73	520 65	621 53	702 42
30	122 115	251 113	327 111	429 105	520 96	621 84	700 75
40	115 157	240 157	323 156	422 150	513 139	616 127	698 114
50	105 196	232 195	314 192	411 185	505 173	606 159	687 147
60	94 232	220 230	302 226	401 218	496 206	596 192	676 180
70	81.4 274	209 274	288 274	389 266	484 252	582 238	666 222
Max.cont. 75	72 290	203 289	280 287	381 279	475 266	574 251	659 236
80	66 303	194 302	273 298	371 290	467 279	566 264	651 249
Max.int. 90	49 348	178 347	256 345	355 337	453 325	552 309	634 292

BMH 315 [316.1cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

3.5	7.5	10	13.5	15.5	17.5	20
-----	-----	----	------	------	------	----

Flow (L/min)	Pressure (MPa)						
	3.5	7.5	10	13.5	15.5	17.5	20
5	155 16	325 13					
10	163 27	342 24	454 18	556 14			
20	169 63	349 61	469 55	582 48	664 40	733 32	809 19
30	165 93	344 89	470 82	580 77	669 67	740 59	824 46
40	154 126	337 126	465 119	577 111	663 99	737 88	827 73
50	141 159	325 155	455 148	568 139	656 126	728 115	824 98
60	121 187	312 186	440 179	555 169	643 154	715 143	812 124
70	103 222	298 222	425 215	541 205	631 187	703 176	800 157
Max.cont. 75	94 236	287 233	417 224	529 215	623 196	696 184	792 166
80	82 246	277 244	406 236	518 228	611 210	688 197	784 174
Max.int. 90	62 282	256 280	386 275	496 266	593 248	669 234	767 209

BMH 400 [406.4cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

3.5	6	10.5	12.5	15.5	19
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Flow (L/min)	Pressure (MPa)					
	3.5	6	10.5	12.5	15.5	19
5	196 13	348 13	516 10			
10	205 22	363 21	546 21	702 17	859 11	
20	209 50	366 49	543 46	708 41	874 36	988 31
30	201 73	357 72	542 70	706 63	864 56	984 51
40	195 99	346 98	532 96	701 86	858 77	973 71
50	173 123	332 122	518 118	687 107	848 97	958 90
60	154 146	319 144	501 141	668 128	833 115	944 106
70	138 174	305 173	480 169	649 156	814 141	925 130
Max.cont. 75	128 183	294 181	466 177	637 163	802 149	911 138
80	113 192	277 191	451 188	621 174	786 158	899 144
Max.int. 90	90 220	256 220	433 215	595 202	767 183	881 165

Torque (N·m) 593
Speed (rpm) 248

□ cont.
■ int.



Performance Data

BMH 500 [489.2cm³/rev.]

Pressure (MPa)

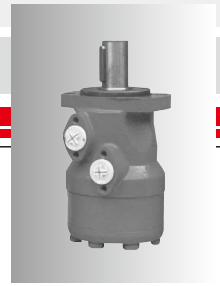
Max.cont. Max.int.

2.5	5	8.5	10	12.5	16
-----	---	-----	----	------	----

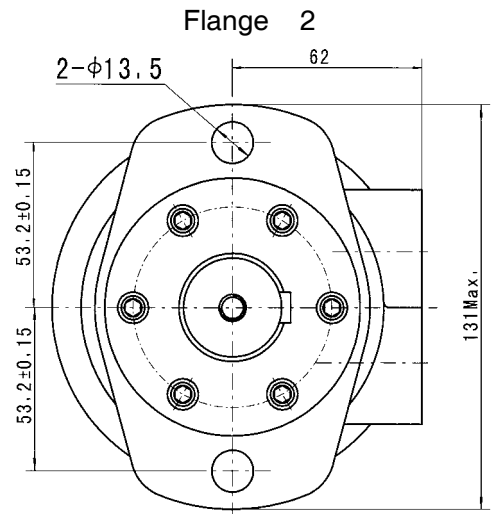
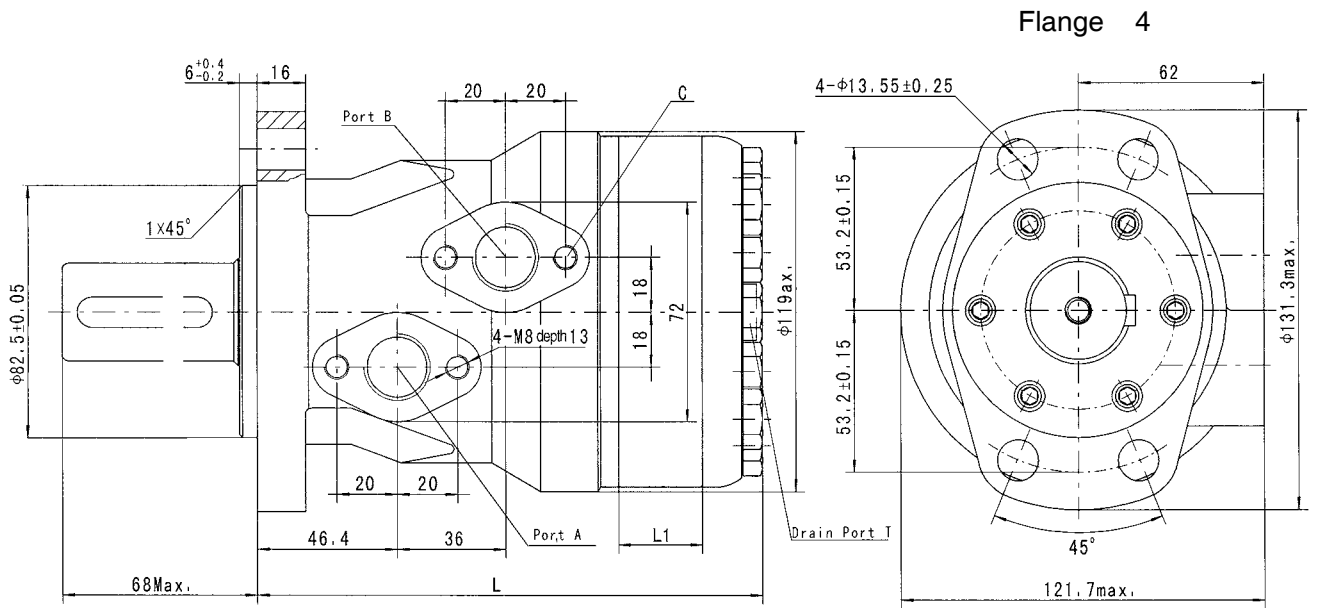
Flow (L/min)	5	165 11	317 11	516 8			
	10	178 20	335 19	555 17	669 15	791 13	969 9
	20	177 42	331 42	559 41	673 38	799 36	988 29
	30	172 64	320 63	553 61	663 57	792 53	983 47
	40	163 85	309 85	541 83	654 79	783 75	971 67
	50	146 103	296 103	523 103	635 97	768 93	954 85
	60	121 124	275 124	502 123	614 117	747 113	934 103
	70	97 148	256 148	482 148	597 140	729 134	917 122
	Max.cont. 75	79 155	240 155	469 155	582 152	714 144	902 130
	80	60 166	226 166	453 166	570 159	701 153	884 139
Max.int. 90	34 184	201 183	421 182	550 177	673 166	869 155	

cont.
 int.

Torque (N•m) **673**
 Speed (rpm) **166**



BMH DIMENSIONS AND MOUNTING DATA

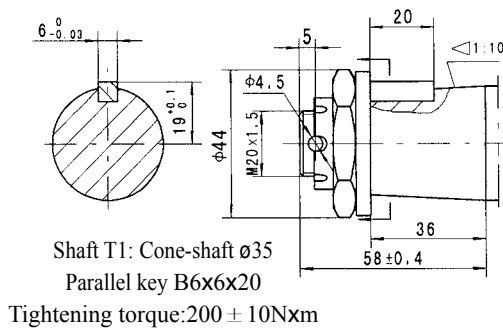
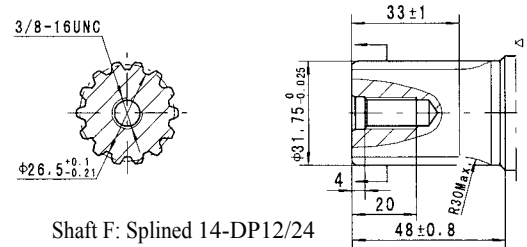
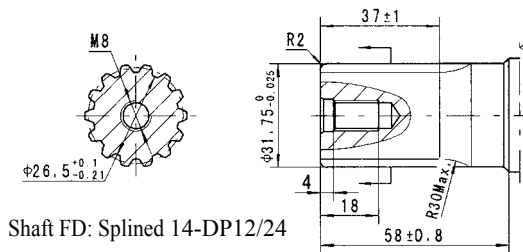
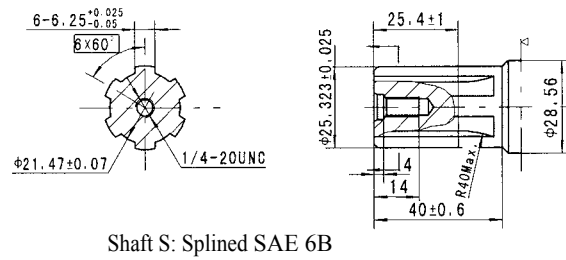
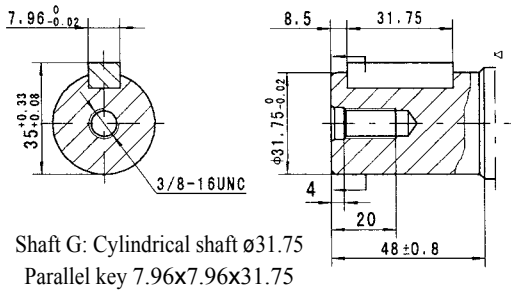
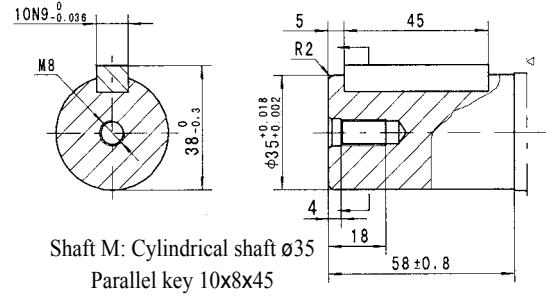
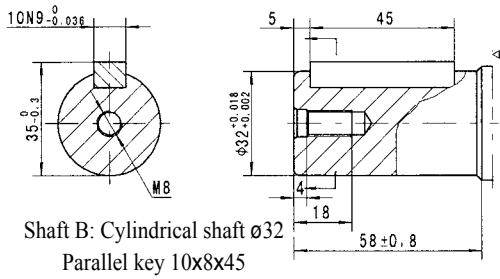


Model	L	L1
BMH-160	162	21
BMH-200	168	27
BMH-250	175	34
BMH-315	184	42
BMH-400	195	54
BMH-500	206	65

Code	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (15)	1/2-14NPTF (15)	PT(RC)1/2 (15)
C	4-M8 (13)	4-M8 (13)	4-5/16-18UNC(13)	4-5/16-18UNC(13)	4-M8 (13)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)	7/16-20UNF (12)	PT(RC)1/4 1/4



BMH SHAFT EXTENSIONS DIMINSIONS DATA

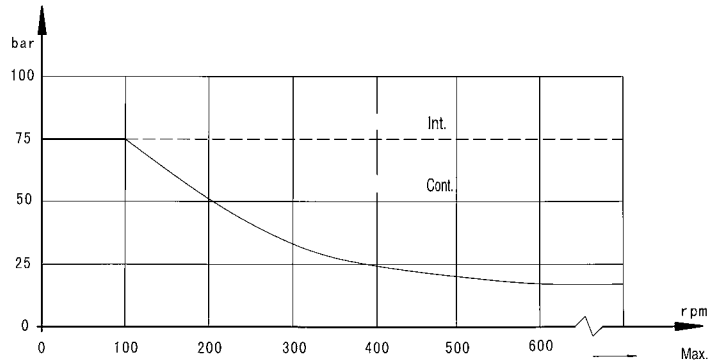
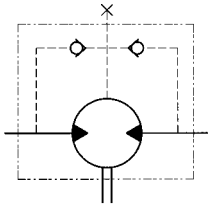




BMH series Hydraulic Motor

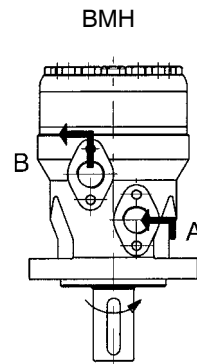
Permissible shaft seal pressure

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

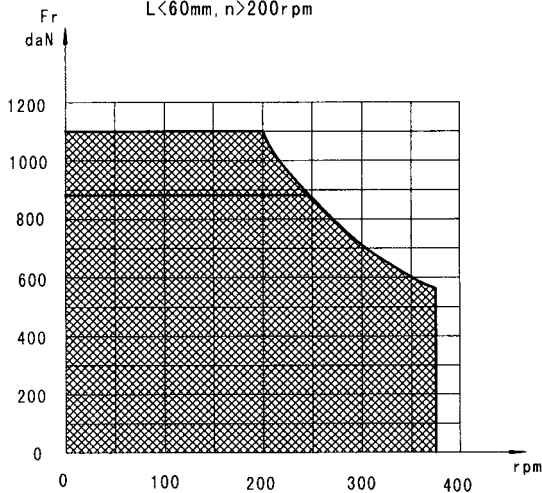
When facing shaft end of motor, shaft to rotate:
 Clockwise when port "A" is pressurized.
 Counter-clockwise port "B" is pressurized.



Status of the shaft's radial force

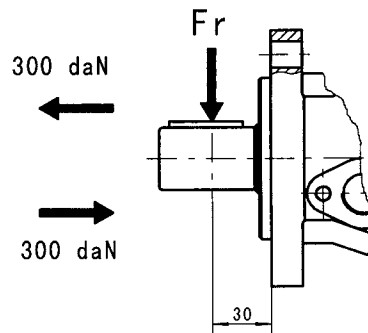
$$F_r = \frac{1100}{n} \times \frac{25000}{103.5+L} \text{ daN}$$

$L < 60\text{mm}, n > 200\text{rpm}$



— shaft $\phi 1''$ ($\phi 25.4\text{mm}$) and shaft SAE 6B

The drawing is the Possible load when $L=30\text{mm}$.



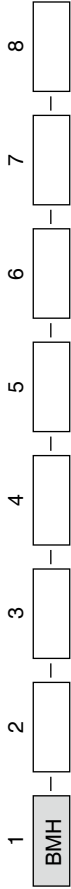
F_r =Radial Force (daN)

L =Distance (mm)

n =Speed (rpm)



Order Information



Pos.1	2	3	4	5	6	7	8
Code	Flange		Output shaft	Ports and drain port	Rotation direction	Paint	Unusually function
160	4	4 × Ø13.5 Rhomb × flange	B	D	Omit	00	Standard
200			B Shaft Ø32 , parallel key 10 × 8 × 45				
250	2	2 × Ø13.5 Rhomb × flange	M	M	R	B	No drain
315			M Shaft Ø35, parallel key 10 × 8 × 45				
400	2	2 × Ø13.5 Rhomb × flange	F	S	R	S	Running
500			F Shaft Ø31.75, splined key 14-DP12/24				
			FD				
			G				
			T1				
			S				

Note: When the table is used, please fill the code of left rows in dash area and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us.



BMS SERIES HYDRAULIC MOTOR

BMS series motor adapt the advanced Geroler gear set design with disc distribution flow and high pressure. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

Characteristic features:

- * Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, provide smooth and reliable operation and high efficiency.
- * The output shaft adapts in tapered roller bearings that permit high axial and radial forces. The case can offer capacities of high pressure and high torque in the wide of applications.
- * Advanced design in disc distribution flow, which can automatically compensate in operating with high volume efficiency and long life, provide smooth and reliable operation.

Main Specification

Type		BMS BMSE 80	BMS BMSE 100	BMS BMSE 125	BMS BMSE 160	BMS BMSE 200	BMS BMSE 250	BMS BMSE 315	BMS BMSE 375
Geometric displacement (cm ³ /rev.)		80.6	100.8	125	157.2	200	252	314.5	370
Max. speed (rpm)	cont.	800	748	600	470	375	300	240	200
	int.	988	900	720	560	450	360	280	240
Max. torque (N•m)	cont.	190	240	310	316	400	450	560	536
	int.	240	300	370	430	466	540	658	645
	peak	260	320	400	472	650	690	740	751
Max. output (kW)	cont.	15.9	18.8	19.5	15.6	15.7	14.1	14.1	11.8
	int.	20.1	23.5	23.2	21.2	18.3	17.0	18.9	17
Max. pressure drop (MPa)	cont.	17.5	17.5	17.5	15	14	12.5	12	10
	int.	21	21	21	21	16	16	14	12
	peak	22.5	22.5	22.5	22.5	22.5	20	18.5	14
Max. flow (L/min)	cont.	65	75	75	75	75	75	75	75
	int.	80	90	90	90	90	90	90	90
Max. inlet pressure (MPa)	cont.	25	25	25	25	25	25	25	25
	int.	30	30	30	30	30	30	30	30
Weight (kg)		9.8	10	10.3	10.7	11.1	11.6	12.3	12.6

- * 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

BMS 80 [80.6cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	21	22.5
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Flow (L/min)	Max.cont.							Max.int.						
	3.5	7	10.5	14	17.5	21	22.5	3.5	7	10.5	14	17.5	21	22.5
15	35	80	120	158	195	235	249	180	174	168	164	158	151	143
30	35	80	120	158	195	240	260	362	352	346	338	330	322	310
40	35	79	119	155	193	234	250	482	473	464	453	444	434	415
50	30	77	117	153	192	232	248	602	594	587	569	560	551	522
60	28	77	117	153	192	232	247	724	713	707	683	673	664	629
65	25	75	114	152	190	230	245	790	785	770	760	742	720	704
80	22	70	110	140	170	200	220	980	965	950	920	891	860	830

BMS 100 [100.8cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	21	22.5
--	-----	---	------	----	------	----	------

Flow (L/min)	Max.cont.							Max.int.						
	3.5	7	10.5	14	17.5	21	22.5	3.5	7	10.5	14	17.5	21	22.5
15	48	95	150	200	250	289	310	146	144	139	135	130	120	105
30	45	94	146	198	250	295	317	291	289	278	274	269	258	242
40	43	89	142	196	248	293	316	387	384	374	359	350	335	320
50	40	88	135	194	247	292	315	486	483	473	462	450	430	420
60	37	88	132	185	244	289	312	588	584	574	562	550	538	520
75	35	80	130	180	240	286	310	740	735	720	705	696	676	653
90	30	75	124	170	236	277	303	850	840	810	787	770	750	747

BMS 125 [125cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	21	22.5
--	-----	---	------	----	------	----	------

Flow (L/min)	Max.cont.							Max.int.						
	3.5	7	10.5	14	17.5	21	22.5	3.5	7	10.5	14	17.5	21	22.5
15	55	120	176	245	309	349	375	112	110	103	96	93	90	84
30	55	120	175	250	324	375	408	222	220	217	208	200	199	190
40	55	120	175	250	324	370	408	302	298	292	284	276	268	260
50	50	115	176	248	320	370	406	379	373	368	363	350	339	328
60	45	113	171	245	324	368	406	456	448	443	439	425	406	393
75	45	110	167	240	314	370	401	570	563	555	546	533	515	503
90	40	105	162	237	309	365	398	685	676	670	659	644	625	610

BMS 160 [157.2cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	21	22.5
--	-----	---	------	----	------	----	------

Flow (L/min)	Max.cont.							Max.int.						
	3.5	7	10.5	14	17.5	21	22.5	3.5	7	10.5	14	17.5	21	22.5
15	70	140	205	305	371	430	473	91	88	84	78	76	74	58
30	75	150	214	321	380	427	490	185	182	176	168	164	162	152
40	70	150	215	320	378	425	488	248	244	239	229	224	217	204
50	65	145	215	316	378	425	482	312	308	304	294	288	280	270
60	65	145	214	315	375	424	482	375	371	365	357	346	336	323
75	60	138	208	311	375	420		470	465	458	447	436	426	
90	56	130	200	308	370	414		564	559	551	541	526	517	

Torque (N•m) 309
Speed (rpm) 644

□ cont.
■ int.



Performance Data

BMS 200 [200cm³/rev.]

		Pressure (MPa)					
		3.5	7	10.5	14	17.5	22.5
Flow (L/min)	15	89 73	190 71	295 68	400 64	484 60	608 52
	30	87 148	190 146	294 143	399 140	485 135	600 127
	40	86 193	188 191	292 189	397 186	483 181	594 172
	50	80 247	184 245	290 243	395 240	480 235	590 226
	60	74 298	178 295	286 293	390 290	475 284	582 273
	Max.cont.	75	58 372	160 369	275 365	375 362	460 358
Max.int.	90	49 440	148 435	260 430	355 422	445 411	555 401

BMS 250 [252cm³/rev.]

		Pressure (MPa)					
		3.5	7	10.5	14	17.5	22.5
Flow (L/min)	15	117 58	230 55	355 52	450 51	554 47	652 46
	30	117 118	225 117	348 112	446 109	560 107	657 106
	40	115 160	225 156	348 152	442 150	552 146	650 142
	50	110 202	220 200	340 198	438 196	546 195	645 192
	60	105 242	220 239	338 338	435 234	542 231	642 229
	Max.cont.	75	95 300	215 296	293 332	430 286	537 282
Max.int.	90	90 360	205 354	348 348	420 340	530 332	632 326

BMS 315 [314.5cm³/rev.]

		Pressure (MPa)					
		3.5	7	10.5	12	14	18.5
Flow (L/min)	15	160 48	320 47	465 45	555 43	650 40	748 38
	30	165 94	322 92	468 90	560 89	658 86	752 85
	40	160 125	310 123	457 120	546 118	642 116	741 115
	50	155 158	305 156	450 153	538 150	637 147	736 145
	60	152 175	302 174	442 170	532 164	632 162	732 159
	Max.cont.	75	145 236	295 234	436 230	525 227	628 225
Max.int.	90	132 285	280 282	430 280	520 276	622 273	723 270

BMS 375 [370cm³/rev.]

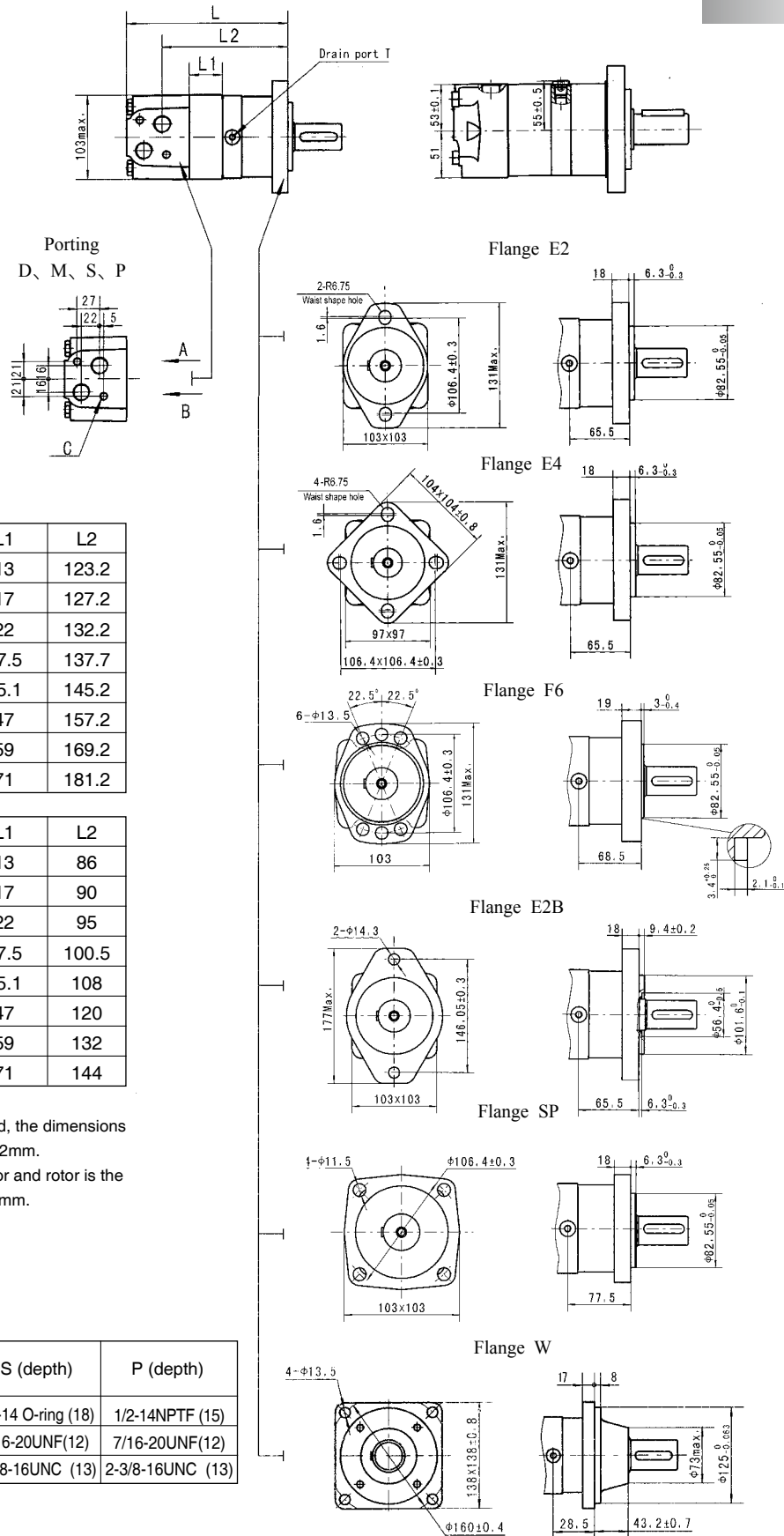
		Pressure (MPa)					
		3.5	7	9	10	12	14
Flow (L/min)	15	185 40	362 39	474 38	512 37	588 35	660 33
	30	184 80	364 78	475 77	514 76	590 74	661 72
	40	180 106	362 104	473 103	513 102	588 100	659 97
	50	160 133	360 131	472 130	511 129	586 128	658 125
	60	150 157	359 156	471 155	510 154	585 152	657 150
	Max.cont.	75	130 200	353 198	465 196	504 195	584 194
Max.int.	90	105 238	350 235	462 234	500 232	580 230	647 227

Torque (N•m) 520
Speed (rpm) 276

□ cont.
■ int.



BMS DIMENSIONS AND MOUNTING DATA



Model	L	L1	L2
BMS-80	167	13	123.2
BMS-100	171	17	127.2
BMS-125	176	22	132.2
BMS-160	181.5	27.5	137.7
BMS-200	189	35.1	145.2
BMS-250	201	47	157.2
BMS-315	213	59	169.2
BMS-375	225	71	181.2

Model	L	L1	L2
BMS-80-W	129.4	13	86
BMS-100-W	133.4	17	90
BMS-125-W	138.4	22	95
BMS-160-W	143.9	27.5	100.5
BMS-200-W	151.4	35.1	108
BMS-250-W	163.4	47	120
BMS-315-W	175.4	59	132
BMS-375-W	187.4	71	144

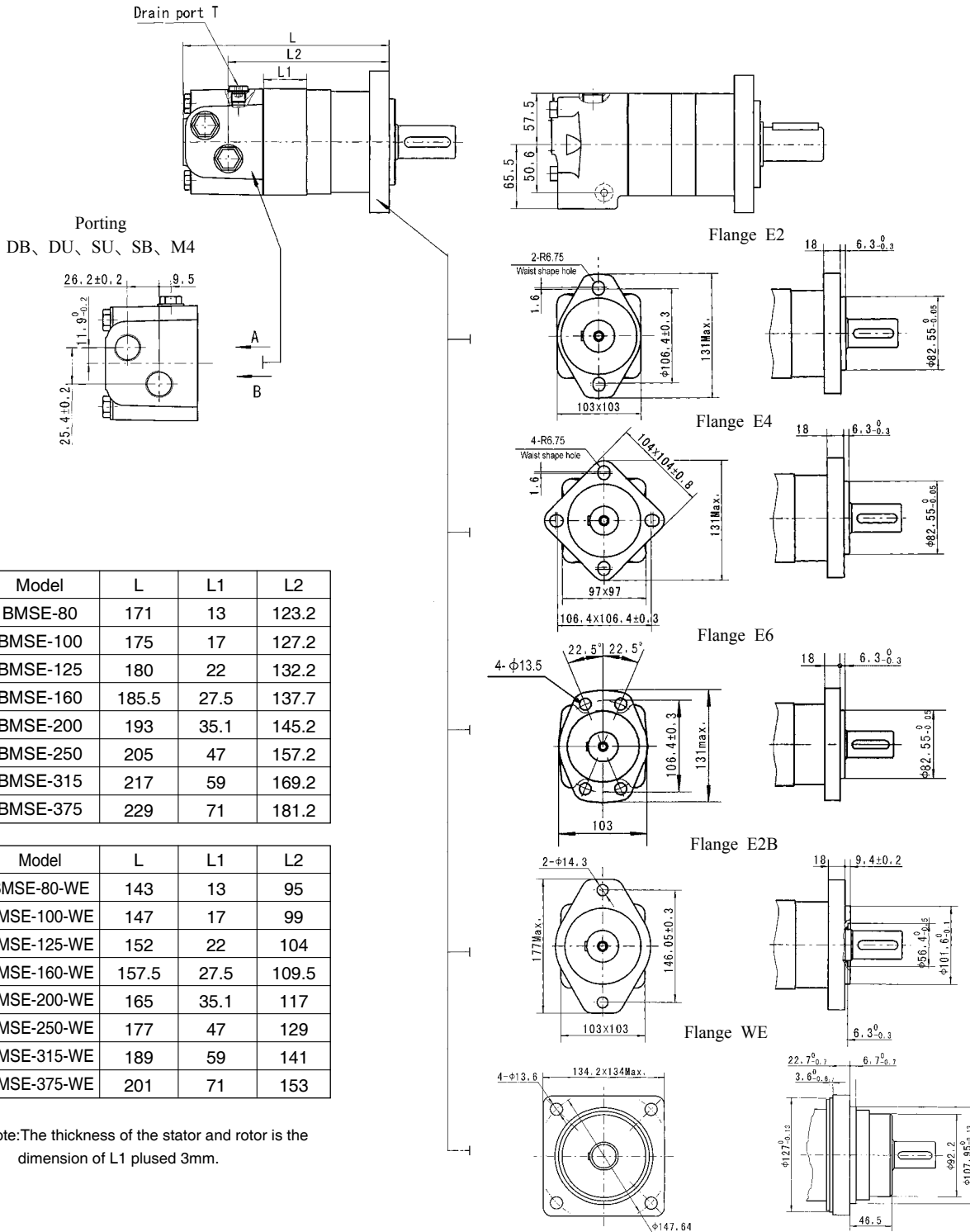
Note:1) If the mounting SP is used, the dimensions of L and L2 should plus 12mm.

2) The thickness of the stator and rotor is the dimension of L1 plused 3mm.

Code Mounting	D (depth)	M (depth)	S (depth)	P (depth)
P(A,B)	G1/2(18)	M22x1.5(18)	7/8-14 O-ring (18)	1/2-14NPTF (15)
T	G1/4(12)	M14x1.5(12)	7/16-20UNF(12)	7/16-20UNF(12)
C	2-M10(13)	2-M10 (13)	2-3/8-16UNC (13)	2-3/8-16UNC (13)



BMSE DIMENSIONS AND MOUNTING DATA



Model	L	L1	L2
BMSE-80	171	13	123.2
BMSE-100	175	17	127.2
BMSE-125	180	22	132.2
BMSE-160	185.5	27.5	137.7
BMSE-200	193	35.1	145.2
BMSE-250	205	47	157.2
BMSE-315	217	59	169.2
BMSE-375	229	71	181.2

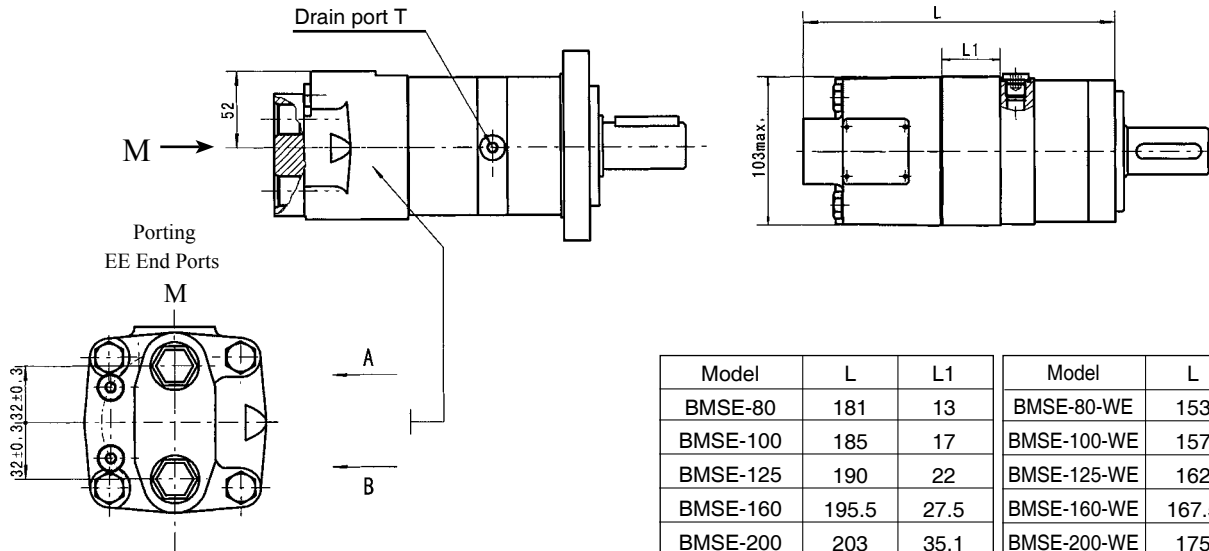
Model	L	L1	L2
BMSE-80-WE	143	13	95
BMSE-100-WE	147	17	99
BMSE-125-WE	152	22	104
BMSE-160-WE	157.5	27.5	109.5
BMSE-200-WE	165	35.1	117
BMSE-250-WE	177	47	129
BMSE-315-WE	189	59	141
BMSE-375-WE	201	71	153

Note: The thickness of the stator and rotor is the dimension of L1 plus 3mm.

Code	DB (depth)	DU (depth)	SU (depth)	SB (depth)	M4 (depth)
P(A,B)	G1/2 (18)	G1/2 (18)	7/8-14 O-ring (18)	7/8-14 O-ring (18)	M22 x 1.5 (18)
T	G1/4 (12)	7/16-20UNF(12)	7/16-20UNF(12)	G1/4 (12)	M14 x 1.5 (12)



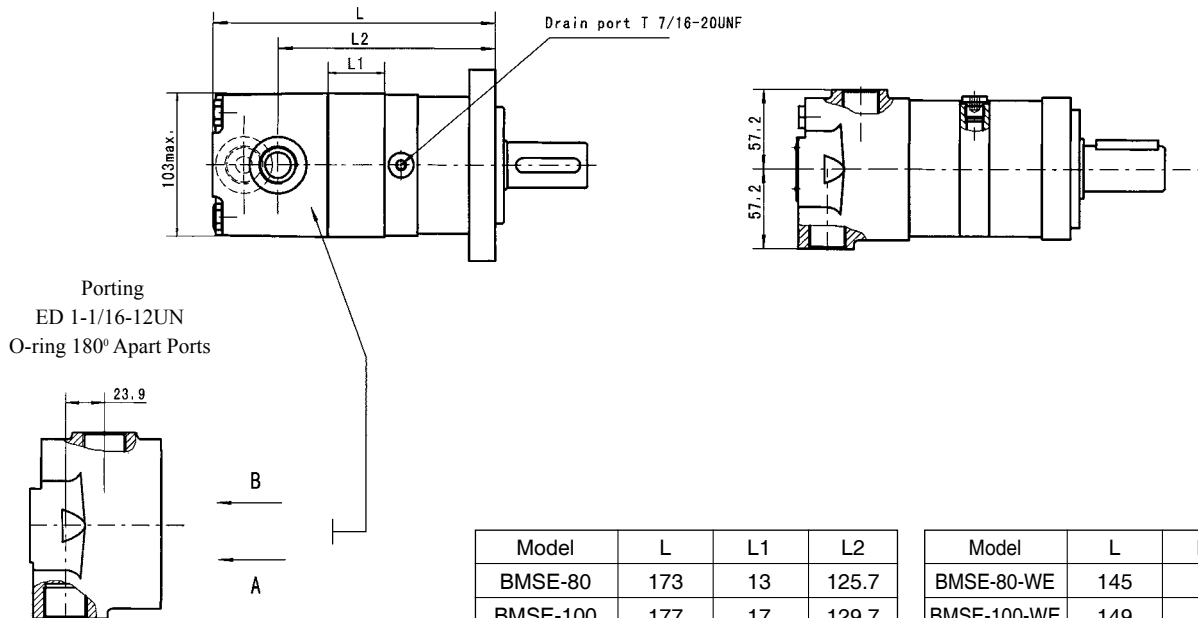
BMSE DIMENSIONS AND MOUNTING DATA



Model	L	L1	Model	L	L1
BMSE-80	181	13	BMSE-80-WE	153	13
BMSE-100	185	17	BMSE-100-WE	157	17
BMSE-125	190	22	BMSE-125-WE	162	22
BMSE-160	195.5	27.5	BMSE-160-WE	167.5	27.5
BMSE-200	203	35.1	BMSE-200-WE	175	35.1
BMSE-250	215	47	BMSE-250-WE	187	47
BMSE-315	227	59	BMSE-315-WE	199	59
BMSE-375	239	71	BMSE-375-WE	211	71

Note: The thickness of the stator and rotor is the dimension of L1 plus 3mm.

Code	EE-D (depth)	EE-M2 (depth)	EE-S2 (depth)
P(A,B)	G1/2 (18)	M22 x 1.5 (18)	7/8-14 O-ring (18)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)



Model	L	L1	L2
BMSE-80	173	13	125.7
BMSE-100	177	17	129.7
BMSE-125	182	22	134.7
BMSE-160	187.5	27.5	140.2
BMSE-200	195	35.1	147.7
BMSE-250	207	47	159.7
BMSE-315	219	59	171.7
BMSE-375	231	71	183.7

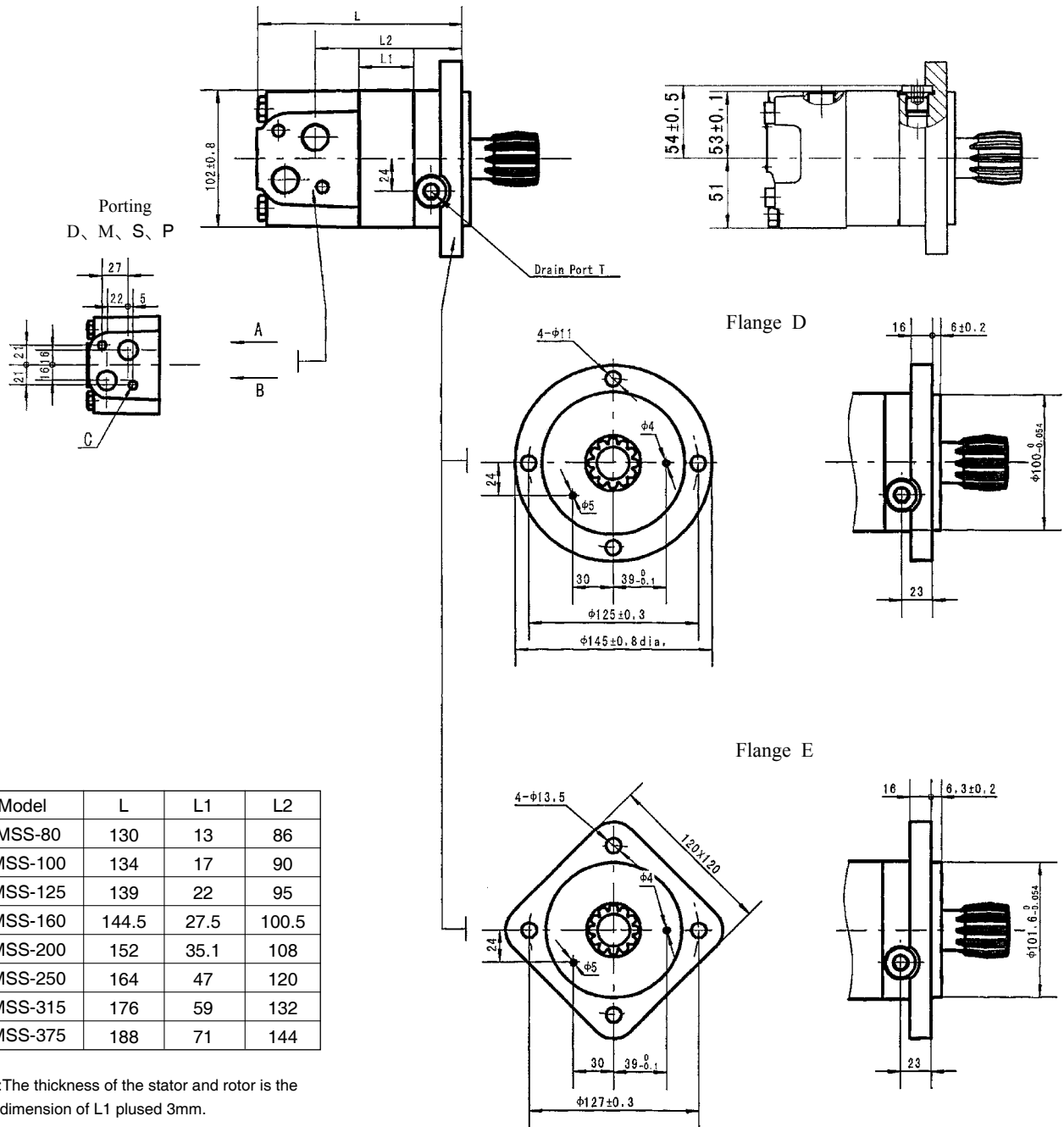
Model	L	L1	L2
BMSE-80-WE	145	13	97.5
BMSE-100-WE	149	17	101.5
BMSE-125-WE	153	22	106.5
BMSE-160-WE	158.5	27.5	112
BMSE-200-WE	166	35.1	119.5
BMSE-250-WE	179	47	131.5
BMSE-315-WE	191	59	143.5
BMSE-375-WE	203	71	155.5

Note: The thickness of the stator and rotor is the dimension of L1 plus 3mm.

Code	ED (depth)
P(A,B)	1-1/16-12UN O-ring (18)
T	7/16-20UNF(12)



BMSS DIMENSIONS AND MOUNTING DATA



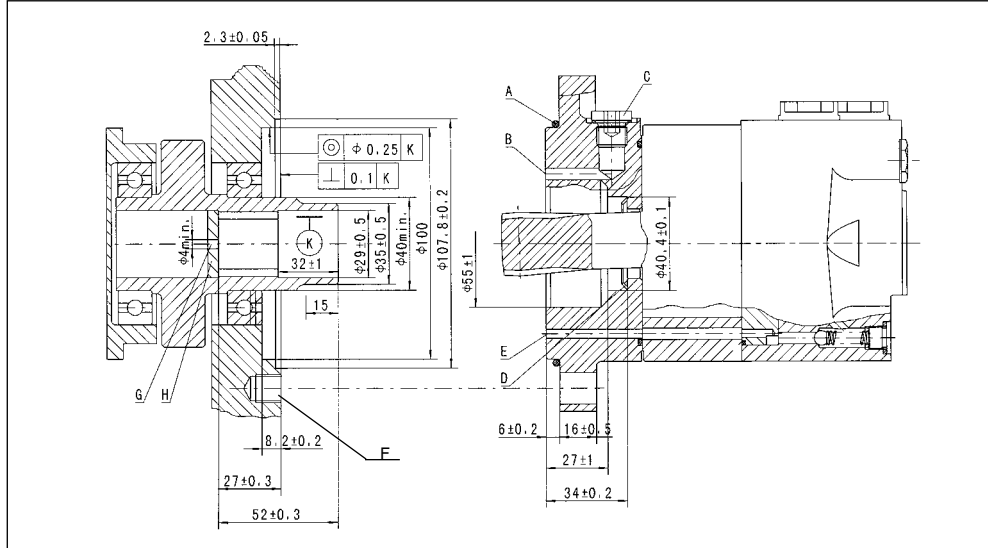
Model	L	L1	L2
BMSS-80	130	13	86
BMSS-100	134	17	90
BMSS-125	139	22	95
BMSS-160	144.5	27.5	100.5
BMSS-200	152	35.1	108
BMSS-250	164	47	120
BMSS-315	176	59	132
BMSS-375	188	71	144

Note: The thickness of the stator and rotor is the dimension of L1 plus 3mm.

Code Mounting	D (depth)	M (depth)	S (depth)	P (depth)
P(A,B)	G1/2 (18)	M22 x 1.5 (18)	7/8-14 O-ring (18)	1/2-14NPTF (15)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)	7/16-20UNF(12)
C	2-M10 (13)	2-M10 (13)	2-3/8-16UNC (13)	2-3/8-16UNC (13)



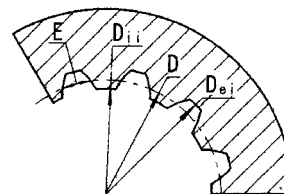
BMSS DIMENSIONS AND MOUNTING DATA



- A: O-ring:100x3
- B: External drain channel
- C: Drain connection G 1/4;12 mm deep
- D: Conical seal ring
- E: Internal drain channel
- F: M10;min. 15mm deep
- G: Oil circulation hole
- H: Hardened stop plate

INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

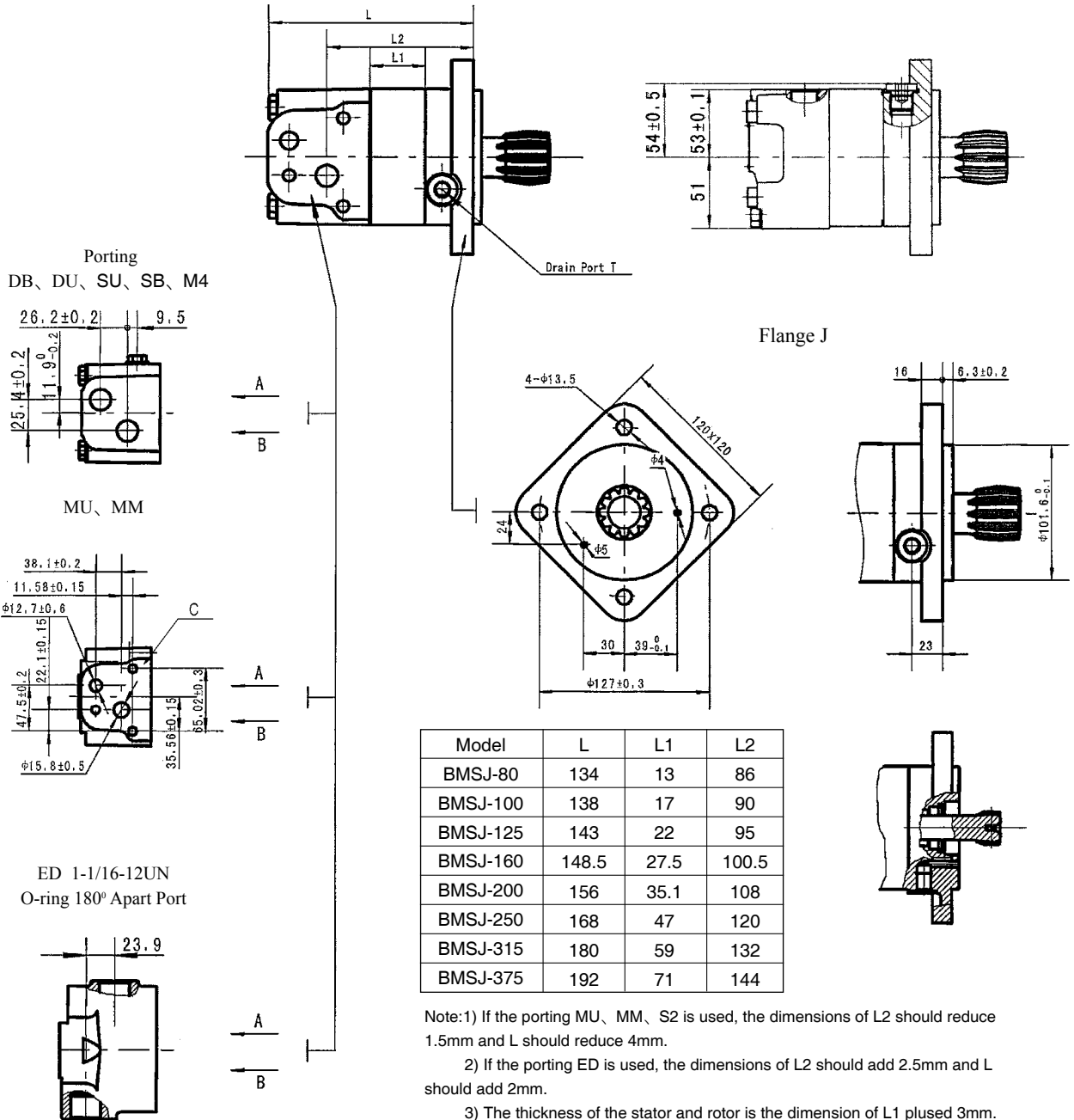
Fillet Root Side Fit		mm
Number of Teeth	Z	12
Diametral Pitch	DP	12/24
Pressure Angle	α_o	30°
Pitch Dia.	D	ø25.4
Major Dia.	D_{ei}	ø28 ⁰ _{-0.1}
Minor Dia.	D_{ii}	ø23 ^{+0.033} ₀
Space Width [Circular]	E	4.308±0.02



Hardening Specification: HRC 62±2
Effective case depth 0.7±0.2



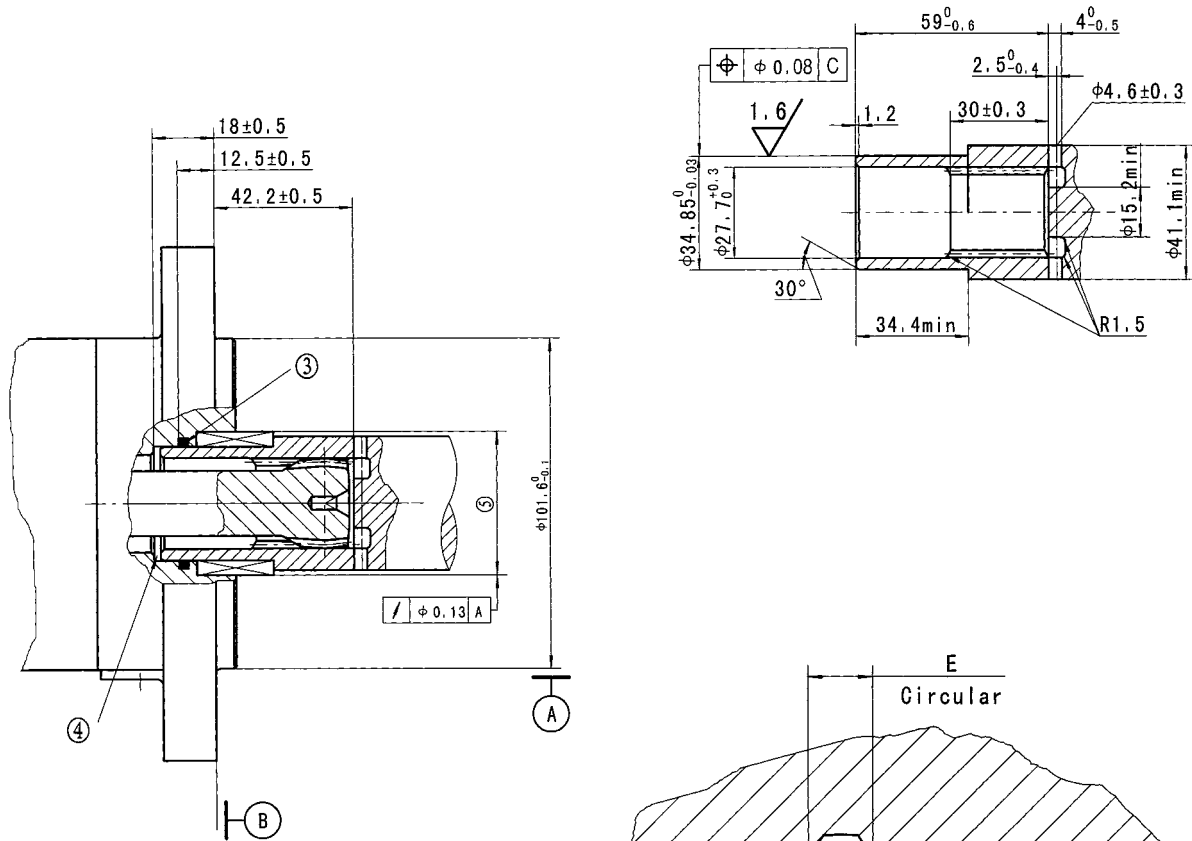
BMSJ DIMENSIONS AND MOUNTING DATA



Code Mounting	DB (depth)	DU (depth)	SU (depth)	SB (1depth)	M4 (depth)	MU	MM	ED (depth)
P(A,B)	G1/2 (18)	G1/2 (18)	7/8-14 O-ring (18)	7/8-14 O-ring (18)	M22 x 1.5 (18)	φ12.7、φ15.8	φ12.7、φ15.8	1-1/16-12UN (18)
T	G1/4 (12)	7/16-20UNF(12)	7/16-20UNF(12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)	G1/4 (12)	7/16-20UNF(12)
C			--			3 x 3/8-16UNC	3 x M10	--



BMSJ DIMENSIONS AND MOUNTING DATA



INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

Fillet Root Side Fit		mm
Number of Teeth	Z	12
Diametral Pitch	DP	12/24
Pressure Angle	α_D	30°
Pitch Dia.	D	$\phi 25.4$
Major Dia.	D_{ei}	$\phi 27.6^{+0.14}_0$
Minor Dia.	D_i	$\phi 23.1^{+0.12}_0$
Space Width [Circular]	E	4.282 ± 0.036
Dimension between two pins($\phi 3.38$)	M_o	19.02-19.19

① Internal spline in mating part to be per data. Specification material to be ASTM A304, 8620H. Vacuum degassed alloy steel carburize to a hardness of 58-62HRC with case depth (to 50HRC) of 0.75-1 [.030-.040] (dimensions apply after heat treat).

② Mating part to have critical dimensions as shown, Oil holes must be provided and open for proper oil circulation.

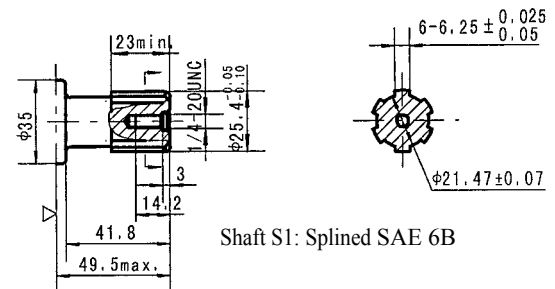
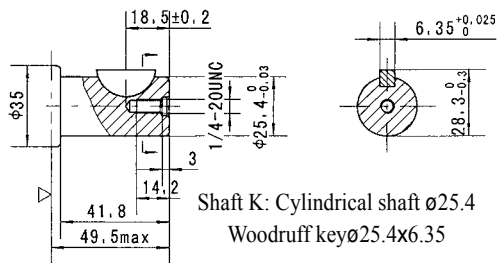
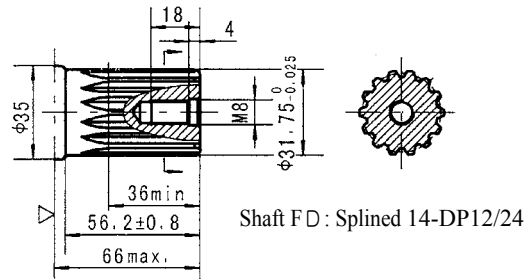
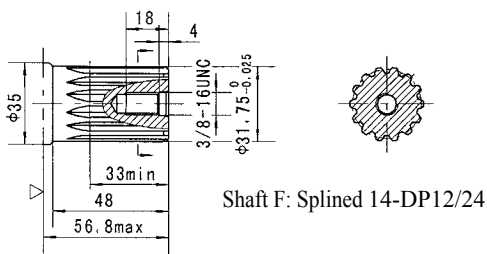
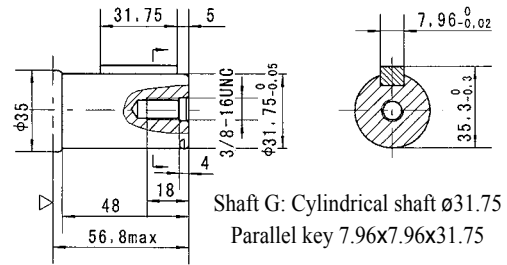
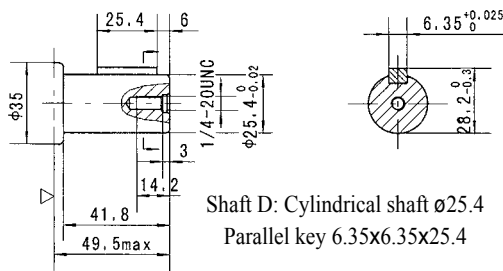
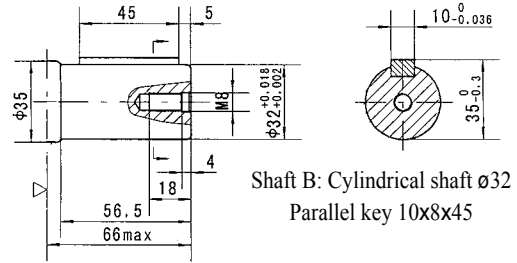
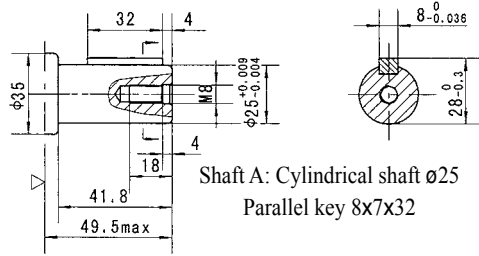
③ Some means of maintaining clearance between shaft and mounting flange must be provided.

④ Seal to be furnished with motor for proper oil circulation thru splines.

⑤ Counterbore designed to adapt to a standard sleeve bearing 35.010-35.040 [1.3784-1.3795] ID by 44.040-44.070 [1.7339-1.7350] O.D.(Oilite Bronze Sleeve Bearing AAM3544-22).

C This surface to be diameter of output shaft.

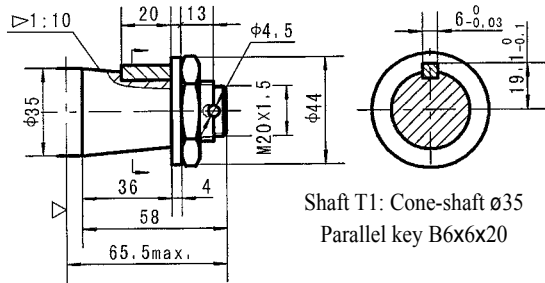
SHAFT EXTENSIONS FOR BMS(E) MOTORS



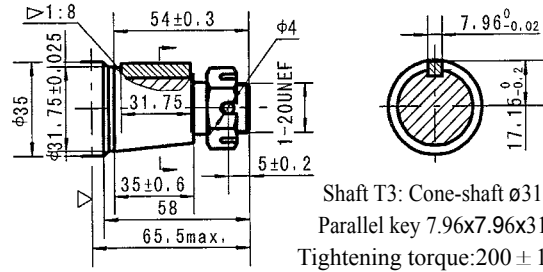
▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)



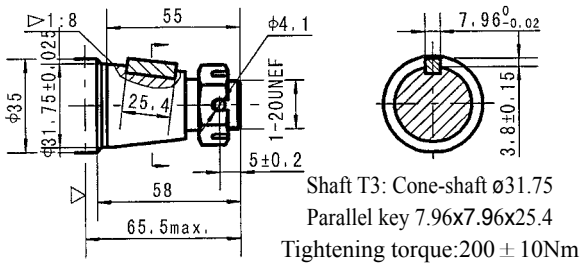
SHAFT EXTENSIONS FOR BMS(E) MOTORS



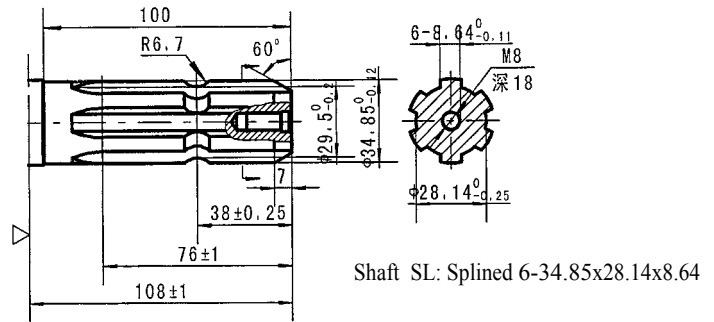
Shaft T1: Cone-shaft ø35
Parallel key B6x6x20



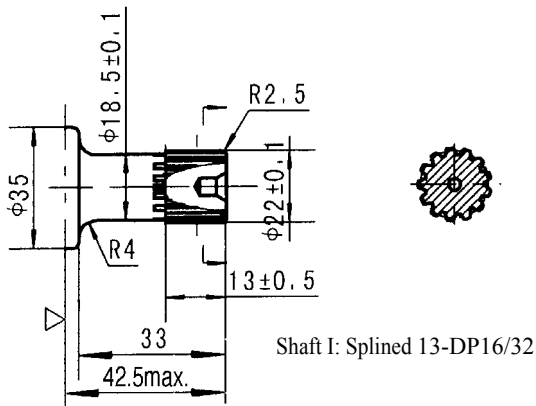
Shaft T3: Cone-shaft ø31.75
Parallel key 7.96x7.96x31.75
Tightening torque: 200 ± 10Nm



Shaft T3: Cone-shaft ø31.75
Parallel key 7.96x7.96x25.4
Tightening torque: 200 ± 10Nm



Shaft SL: Splined 6-34.85x28.14x8.64



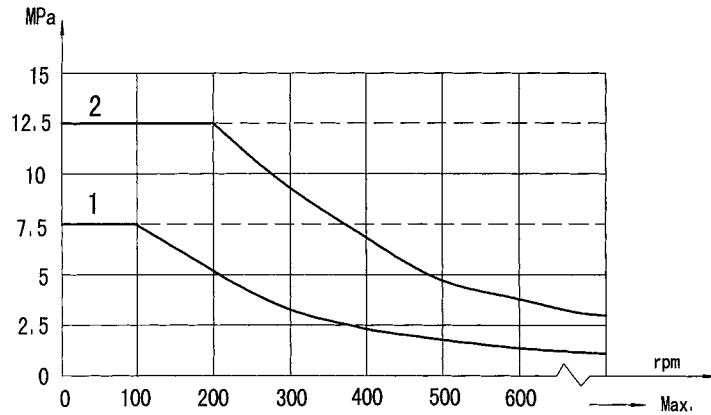
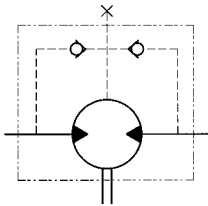
Shaft I: Splined 13-DP16/32

- ▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)
Note: Mounting SP is the same with shaft mode T1、D、B、F and G.



BMS(E) Series Hydraulic Motor

Permissible shaft seal pressure

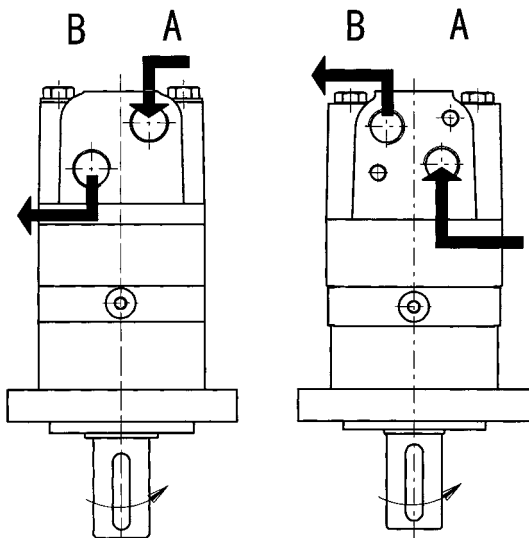


Note: 1. Chart for standard shaft seal;
2. Chart for high pressure shaft seal.

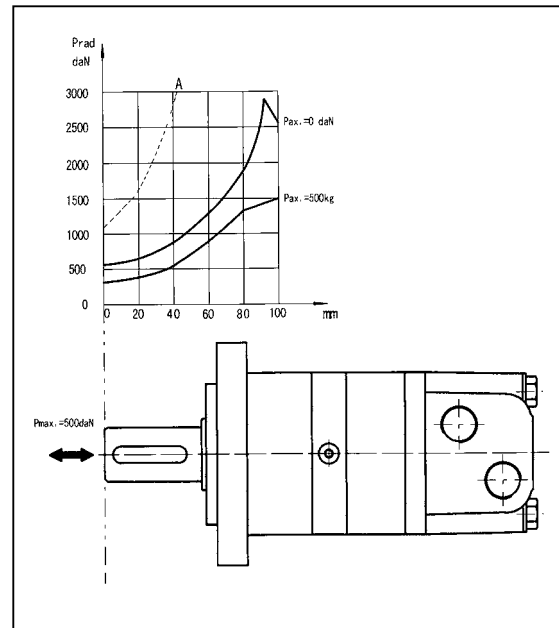
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Standard 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.



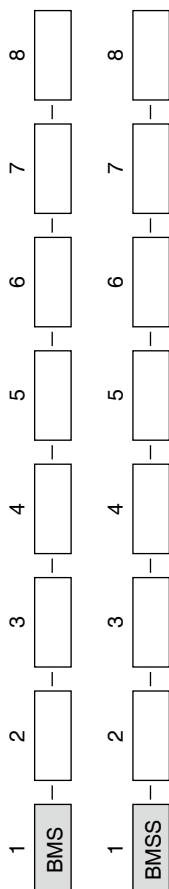
Axial and Radial forces



The output shaft runs in tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage, The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.



Order Information

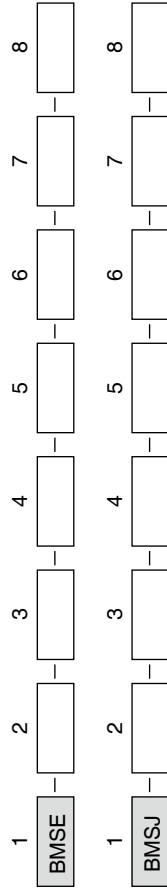


Pos.1	2	3	4	5	6	7	8	
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function	
BMS	80	E2 2-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	A Shaft Ø25 , parallel key 8 × 7 × 32 B Shaft Ø32 , parallel key 10 × 8 × 45 D Shaft Ø25.4 , parallel key 6.35 × 6.35 × 25.4 G Shaft Ø31.75 , parallel key 7.96 × 7.96 × 31.75 F Shaft Ø31.75 , parallel key 7.96 × 7.96 × 31.75 FD Long Shaft Ø31.75 , splined tooth 14-DP12/24 SL splined tooth 14-DP12/24 shaft Ø34.85,Splined key 6-34.85 × 28.14 × 8.64	D G1/2 Manifold Mount 2-M10 , G1/4 M M22 × 1.5 Manifold Mount 2-M10 , M14 × 1.5 S 7/8-14UNF O-ring manifold 2-3/8-16 , 7/16-20UNF P 1/2-14NPTF manifold 2-3/8-16UNC , 7/16-20UNF	Standard Opposite R	00 Omit B S	No paint Blue Black Silver grey	Omit Standard Free Running Low Speed
	100	E4 4-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	T1 Cone-shaft Ø35 , parallel key B6 × 6 × 20 T3 Cone-shaft Ø31.75 , parallel key 7.96 × 7.96 × 31.75 S1 Shaft Ø25.4 ,splined tooth SAE 6B I Sub-shaft Ø22 , splined tooth 13-DP16/32					
	125	F6 6-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 2.6						
	160	W 4-Ø13.5 Wheel-flange Ø160 , pilot Ø125 × 8						
	200	E2B 2-Ø14.3 Rhomb-flange Ø146.05, pilot Ø101.6 × 9.4						
	250	SP 4-Ø11.5 Square-flange Ø106.4, pilot Ø82.5 × 6.3						
	315							
	BMSS	375	D 4-Ø11 Circle-flange Ø125 , pilot Ø100 × 6 E 4-Ø13.5 Square-flange Ø127 , pilot Ø101.6 × 6.3	Omit Short shaft 12-DP12/24				

Note:When the table is used, please fill the code of left rows in the table and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us. SP for T1, D, B, F, G. Shaft T1, D, B, FD, G for flange SP code T2, D1, B1, F1, G1. The specific dimensions see installation diagram provides additional.



Order Information



Pos.1	2	3	4	5	6	7	8					
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function					
BMSE	80	E2 2-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5×6.3	A Shaft Ø25 , parallel key 8 × 7 × 32 B Shaft Ø32 , parallel key 10 × 8 × 45 K Shaft Ø25.4, Woodruff key Ø25.4 × 6.35	MU 1/2" ,5/8" Crosshole Manifold 3 × 3/8-16UNC,7/16-20UNF MM 1/2" ,5/8" Crosshole Manifold 3 × M10,G1/4 EE-D G1/2,G1/4 EE-M2 M22 × 1.5,M14 × 1.5 EE-S2 7/8-14UNF O-ring,7/16-20 UNF ED 1-1/16-12UN O-ring,7/16-20 UNF DB G1/2,G1/4 DU G1/2;7/16-20 UNF SB 7/8-14UNF O-ring,G1/4 SU 7/8-14UNF O-ring,7/16-20 UNF M4 M22 × 1.5,M14 × 1.5	Standard Opposite Omit R	No paint Blue Black Silver grey	Omit F LS Standard Free Running Low Speed					
	100	E4 4-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	G Shaft Ø31.75 , parallel key 7.96 × 7.96 × 31.75									
	125	E2B 2-Ø14.3 Rhomb-flange Ø146.05, pilot Ø101.6 × 9.4	F Shaft Ø31.75 , splined tooth 14-DP12/24									
	160	E6 4-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	T4 Cone-shaftØ31.75 , parallel key 7.96 × 7.96 × 25.4									
	200	WE 4-Ø13.6Wheel-flangeØ147.6, pilot Ø107.95×6.4	S1 Shaft Ø25.4 ,splined tooth SAE 6B I Sub-shaft Ø22 , splined tooth 13-DP16/32									
	250											
	315											
	375											
	BMSJ		J 4-Ø13.5 Square-flange Ø127 , pilot Ø101.6 × 6.3					Omit Short shaft12- DP12/24				

Note:When the table is used, please fill the code of left rows in the table and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us. SP for T1, D, B, F, G. Shaft B, G, T4, F for flange WE code TB1, G1, T5, F2. The specific dimensions see installation diagram provides additional.



BMSY SERIES HYDRAULIC MOTOR

BMSY new series motor adapt the advanced Geroler gear set designed with disc distribution flow and high pressure. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

Characteristic features:

- * The motor has the same dimensions and mounting data as the hydraulic motors type BMS.
- * The motor is described with 15-20% higher technical data (Max. torque and Max. pressure drop), thereby higher power. The new motor is suitable for vehicles with greater loads and pressure drop.

Main Specification

Type		BMSY 80	BMSY 100	BMSY 125	BMSY 160	BMSY 200	BMSY 250	BMSY 315	BMSY 400	BMSY 475
Geometric displacement (cm ³ /rev.)		80.6	100.8	125	154	194	243	311	394	475
Max. speed (rpm)	cont.	800	748	600	470	375	300	240	185	155
	int.	988	900	720	560	450	360	280	225	185
Max. torque (N•m)	cont.	225	290	365	485	586	708	880	880	910
	int.	250	320	400	540	645	806	960	960	960
Max. output (kW)	cont.	16	18	18	18.1	18.1	18	17	11	9
	int.	20	22	23	25	24	23.8	20.2	12	11
Max. pressure drop (MPa)	cont.	20.5	20.5	20.5	21	21	20	20	16	14
	int.	22.5	22.5	22.5	22.5	22.5	22.5	22.5	17.5	15
	peak	29.5	29.5	29.5	28	27	27	26	21	17.5
Max. flow (L/min)	cont.	65	75	75	75	75	75	75	75	75
	int.	80	90	90	90	90	90	90	90	90
Max. inlet pressure (MPa)	cont.	25	25	25	25	25	25	25	25	25
	int.	30	30	30	30	30	30	30	30	30
Weight (kg)		9.8	10	10.3	10.7	11.1	11.6	12.3	13.2	14.3

- * 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

BMSY80 [80.6cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	20.5	22.5
--	-----	---	------	----	------	------	------

Flow (L/min)	Max.cont.							Max.int.						
	3.5	7	10.5	14	17.5	20.5	22.5							
15	35	80	120	158	195	228	249	180	174	168	164	158	151	143
30	35	80	120	158	195	232	260	362	352	346	338	330	322	310
40	35	79	119	155	193	227	250	487	480	468	457	446	438	425
50	30	77	117	153	192	224	248	612	603	592	581	572	558	542
60	28	77	117	153	192	224	243	735	726	718	703	687	673	646
Max.cont.	26	75	116	151	188	217	236	794	786	773	760	744	722	706
Max.int.	24	72	109	142	176	206	227	981	968	955	925	893	870	832

BMSY100 [100.8cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	20.5	22.5
--	-----	---	------	----	------	------	------

Flow (L/min)	Max.cont.							Max.int.						
	3.5	7	10.5	14	17.5	20.5	22.5							
15	48	95	150	200	250	282	310	146	144	139	135	130	120	105
30	45	94	146	198	250	290	317	291	289	278	274	269	258	242
40	43	89	142	196	248	288	316	387	384	374	359	350	335	320
50	40	88	135	194	247	286	315	486	483	473	462	450	430	420
60	37	88	132	185	244	283	312	588	584	574	562	550	538	520
Max.cont.	35	80	130	180	240	279	310	740	735	720	705	696	676	653
Max.int.	30	75	124	170	236	271	303	850	840	810	787	770	750	747

BMSY125 [125cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	20.5	22.5
--	-----	---	------	----	------	------	------

Flow (L/min)	Max.cont.							Max.int.						
	3.5	7	10.5	14	17.5	20.5	22.5							
15	55	120	176	245	309	345	375	115	113	110	104	98	90	84
30	55	120	175	250	315	364	404	231	228	223	214	202	188	172
40	53	118	178	250	315	364	403	312	309	290	289	278	262	235
50	50	115	176	248	315	362	397	391	386	378	365	352	339	308
60	45	113	171	241	308	358	397	469	461	450	437	425	400	372
Max.cont.	45	110	167	240	306	352	389	588	574	560	544	526	505	481
Max.int.	40	105	162	237	301	343	378	710	696	680	661	646	628	610

BMSY160 [154cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	21	22.5
--	-----	---	------	----	------	----	------

Flow (L/min)	Max.cont.							Max.int.						
	3.5	7	10.5	14	17.5	21	22.5							
15	70	142	215	298	372	435	476	93	91	89	85	80	76	58
30	73	151	225	312	382	456	492	189	187	181	176	170	162	153
40	75	152	228	314	383	454	488	252	250	246	239	234	228	212
50	70	148	225	305	372	445	480	313	310	306	298	293	285	272
60	68	143	218	296	370	442	480	378	376	370	362	353	346	332
Max.cont.	62	140	211	291	365	439	475	475	469	461	450	441	432	414
Max.int.	59	131	202	286	357	425	460	567	561	554	543	532	520	509

TORQUE(N*m) 301
SPEED (r/min) 646

□ cont.
■ int.



Performance Data

BMSY200 [194cm³/rev.]

		Pressure (MPa)						Max.cont.	Max.int.
		3.5	7	10.5	14	17.5	21		
Flow (L/min)	15	87	179	273	371	471	562	610	
		74	73	71	68	64	60	48	
	30	91	190	288	386	489	572	618	
		150	148	143	140	134	128	119	
	40	94	193	296	394	498	584	645	
		198	195	192	188	183	178	167	
50	90	191	292	389	493	580	634		
	248	246	241	236	230	223	212		
60	85	185	279	382	483	575	622		
	300	295	288	281	273	263	251		
Max.cont.	75	78	176	271	370	472	561	610	
		374	370	364	360	352	340	331	
Max.int.	90	68	163	265	361	456	545	599	
		443	440	435	428	424	413	400	

BMSY250 [243cm³/rev.]

		Pressure (MPa)						Max.cont.	Max.int.
		3.5	7	10.5	14	17.5	20		
Flow (L/min)	15	110	231	351	462	585	681	778	
		59	58	56	53	50	46	35	
	30	116	236	359	475	597	700	790	
		119	117	114	108	102	92	80	
	40	118	241	363	480	599	706	796	
		162	159	156	150	143	134	121	
50	111	234	352	472	591	693	788		
	203	201	197	191	182	173	158		
60	106	224	345	462	582	685	772		
	244	242	237	230	220	208	194		
Max.cont.	75	101	214	340	454	570	670	760	
		303	299	294	285	272	260	244	
Max.int.	90	93	209	335	447	559	657	749	
		363	359	354	348	340	328	303	

BMSY315 [311cm³/rev.]

		Pressure (MPa)						Max.cont.	Max.int.
		3.5	7	10.5	14	17.5	20		
Flow (L/min)	15	148	304	456	613	762	879	978	
		48	47	45	43	41	39	27	
	30	155	314	465	635	778	884	988	
		95	93	91	89	86	82	67	
	40	160	321	479	650	796	906	997	
		127	125	121	117	115	109	91	
50	155	314	465	638	780	886	988		
	159	157	153	149	145	142	128		
60	151	306	453	620	765	886	976		
	187	185	181	176	169	157	143		
Max.cont.	75	146	300	445	613	755	875	966	
		238	236	232	227	224	220	196	
Max.int.	90	135	284	436	601	740	863	952	
		286	283	278	272	265	257	232	

BMSY400 [394cm³/rev.]

		Pressure (MPa)					Max.cont.	Max.int.
		3.5	7	10.5	14	16		
Flow (L/min)	15	186	379	578	779	896	986	
		37	36	35	33	31	29	
	30	190	388	590	791	905	991	
		75	73	71	68	65	61	
	40	195	394	596	797	912	998	
		99	97	95	93	90	85	
50	191	388	587	785	904	983		
	125	123	118	114	109	102		
60	186	388	587	785	904	983		
	149	146	142	137	131	122		
Max.cont.	75	181	372	576	770	891	973	
		187	183	177	171	164	153	
Max.int.	90	176	367	571	766	883	965	
		226	221	214	208	199	183	

BMSY475 [475cm³/rev.]

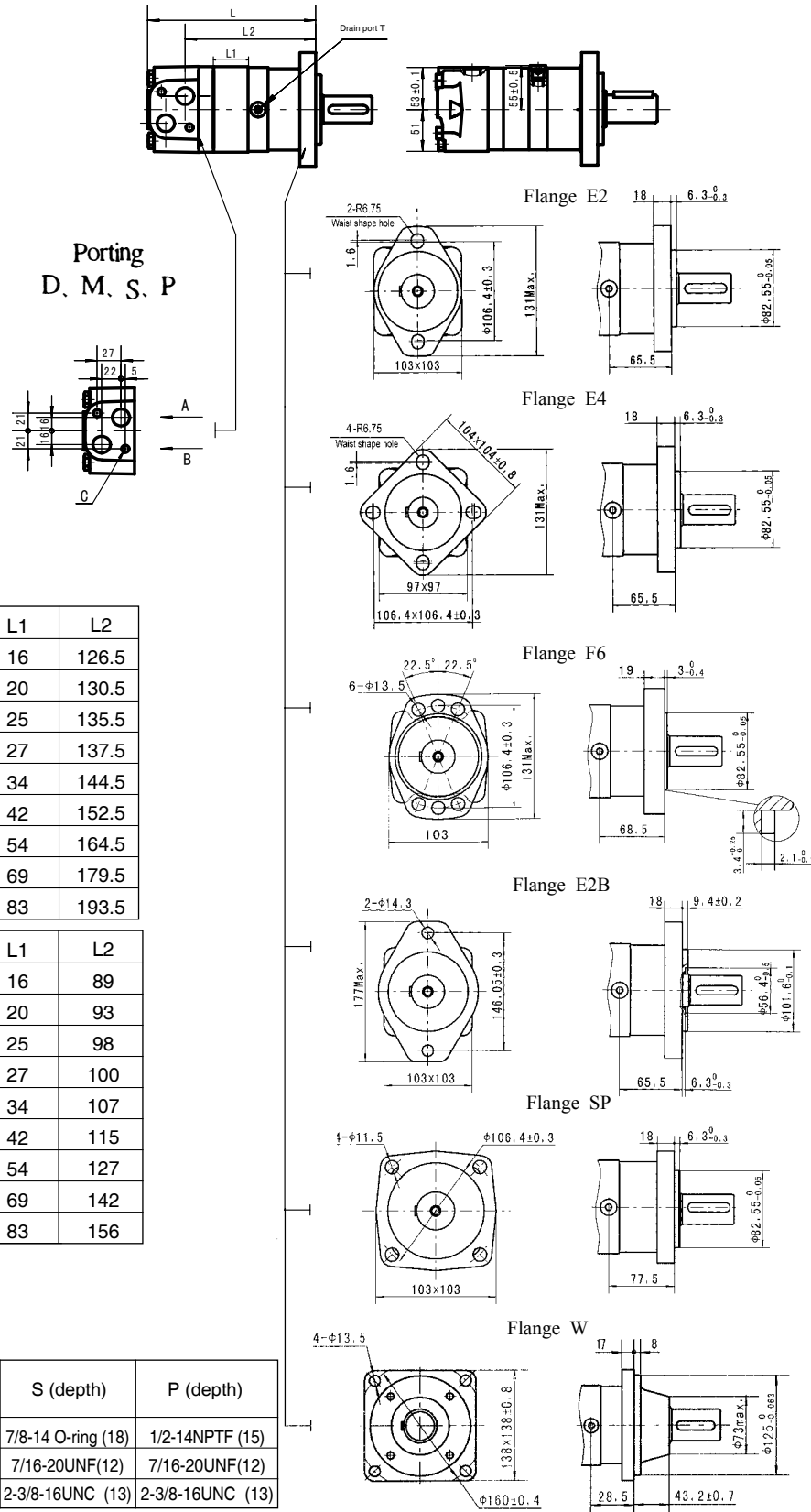
		Pressure (MPa)					Max.cont.	Max.int.
		3.5	7	10.5	14	15		
Flow (L/min)	15	218	439	661	892	995		
		30	29	28	27	25		
	30	223	450	676	910	1002		
		61	60	58	56	53		
	40	228	461	689	927	1017		
		82	80	77	74	68		
50	224	456	682	920	1008			
	103	101	97	92	86			
60	220	451	677	913	998			
	123	121	118	112	105			
Max.cont.	75	212	443	664	901	980		
		155	153	147	140	132		
Max.int.	90	196	421	643	877	959		
		186	184	178	170	157		

TORQUE (N·m) 766
SPEED (rpm) 208

□ cont.
■ int.



BMSY DIMENSIONS AND MOUNTING DATA



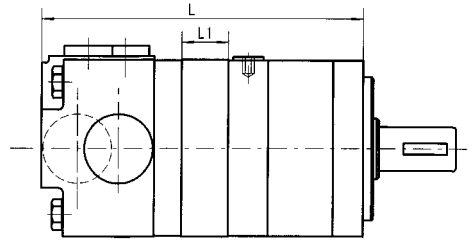
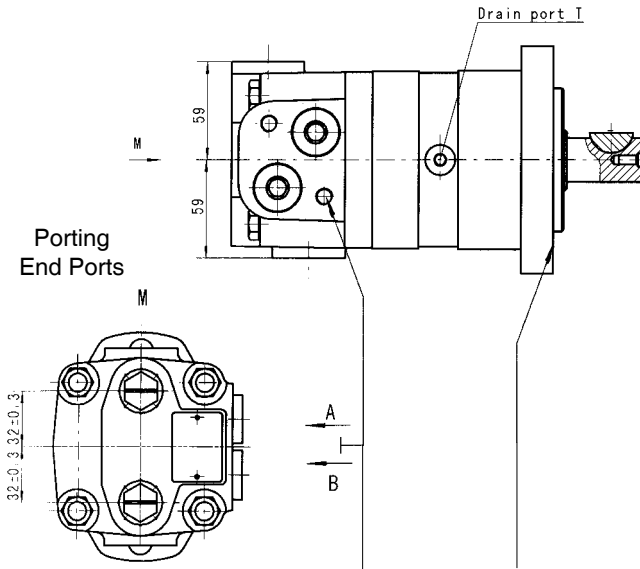
Model	L	L1	L2
BMSY-80	170	16	126.5
BMSY-100	174	20	130.5
BMSY-125	179	25	135.5
BMSY-160	181	27	137.5
BMSY-200	188	34	144.5
BMSY-250	196	42	152.5
BMSY-315	208	54	164.5
BMSY-400	223	69	179.5
BMSY-475	237	83	193.5

Model	L	L1	L2
BMSY-80-W	132.5	16	89
BMSY-100-W	136.5	20	93
BMSY-125-W	141.5	25	98
BMSY-160-W	143.5	27	100
BMSY-200-W	150.5	34	107
BMSY-250-W	158.5	42	115
BMSY-315-W	170.5	54	127
BMSY-400-W	185.5	69	142
BMSY-475-W	199.5	83	156

Code Mounting	D (depth)	M (depth)	S (depth)	P (depth)
P(A,B)	G1/2(18)	M22x1.5(18)	7/8-14 O-ring (18)	1/2-14NPTF (15)
T	G1/4(12)	M14x1.5(12)	7/16-20UNF(12)	7/16-20UNF(12)
C	2-M10(13)	2-M10 (13)	2-3/8-16UNC (13)	2-3/8-16UNC (13)



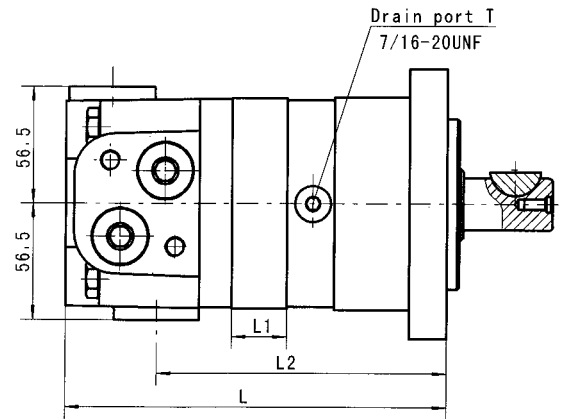
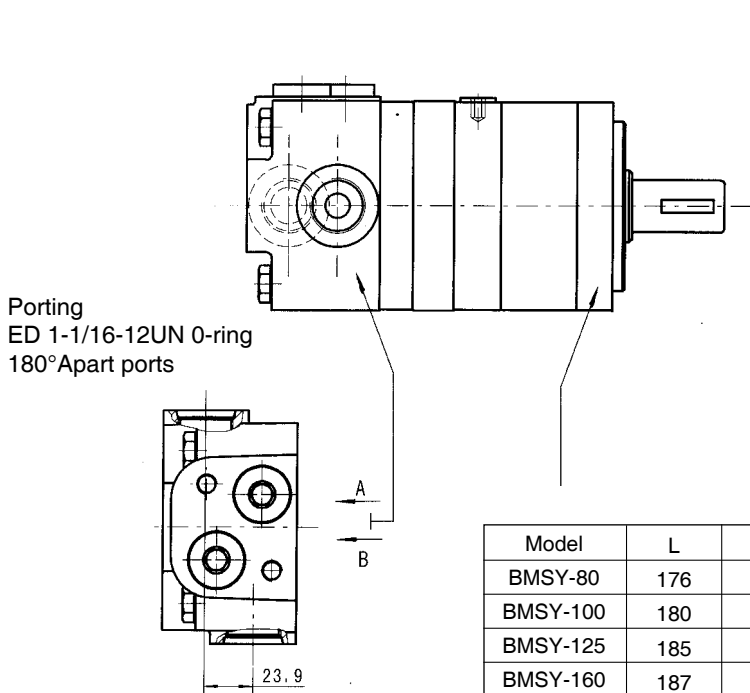
BMSY DIMENSIONS AND MOUNTING DATA



End Ports P(A/B)

Model	L	L1	Model	L	L1
BMSY-80	176	16	BMSY-80-WE	148	16
BMSY-100	180	20	BMSY-100-WE	152	20
BMSY-125	185	25	BMSY-125-WE	157	25
BMSY-160	187	27	BMSY-160-WE	159	27
BMSY-200	194	34	BMSY-200-WE	166	34
BMSY-250	202	42	BMSY-250-WE	174	42
BMSY-315	214	54	BMSY-315-WE	186	54
BMSY-400	229	69	BMSY-400-WE	201	69
BMSY-475	243	83	BMSY-475-WE	215	83

Code	EE-D (depth)	EE-M2 (depth)	EE-S2 (depth)
P(A,B)	G1/2 (18)	M22 x 1.5 (18)	7/8-14 O-ring (18)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)

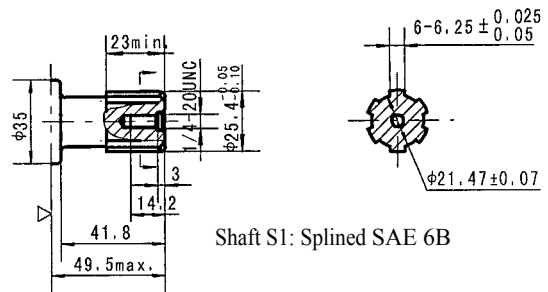
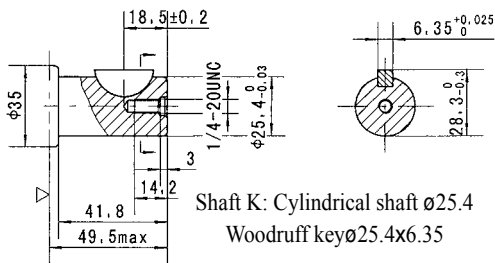
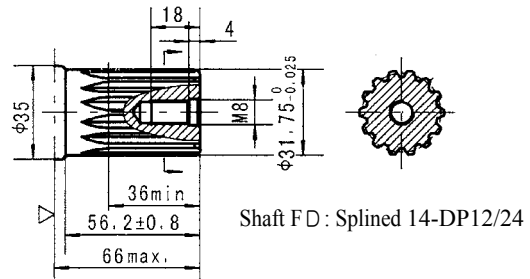
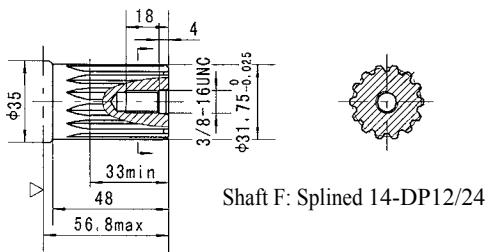
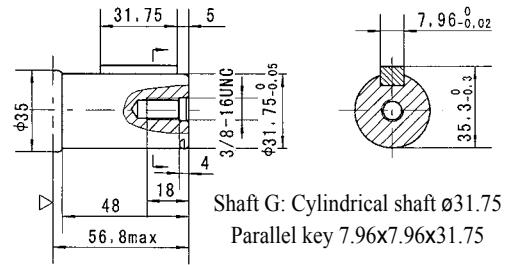
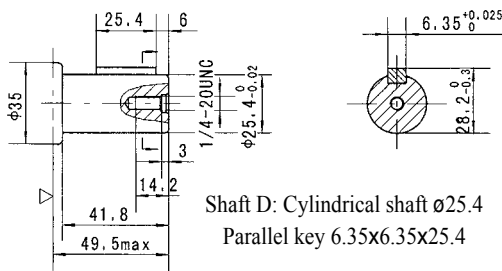
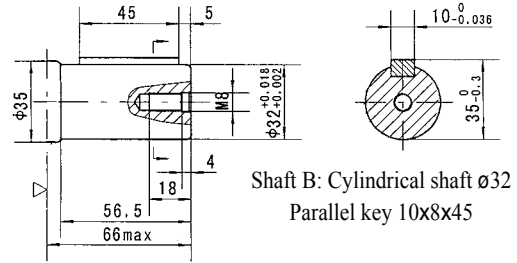
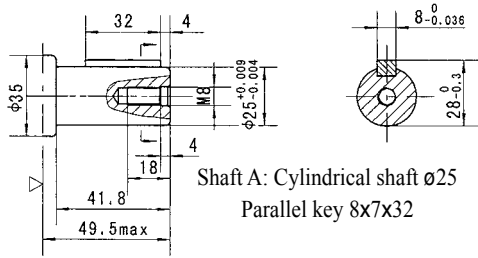


Code	ED (depth)
P(A,B)	1-1/16-12UN (18)
T	7/16-20UNF (12)

Model	L	L1	L2
BMSY-80	176	16	130
BMSY-100	180	20	134
BMSY-125	185	25	139
BMSY-160	187	27	141
BMSY-200	194	34	148
BMSY-250	202	42	156
BMSY-315	214	54	168
BMSY-400	229	69	183
BMSY-475	243	83	197

Model	L	L1	L2
BMSY-80-WE	148	16	102
BMSY-100-WE	152	20	106
BMSY-125-WE	157	25	111
BMSY-160-WE	159	27	113
BMSY-200-WE	166	34	119
BMSY-250-WE	178	42	127
BMSY-315-WE	190	54	139
BMSY-400-WE	205	69	154
BMSY-475-WE	219	83	168

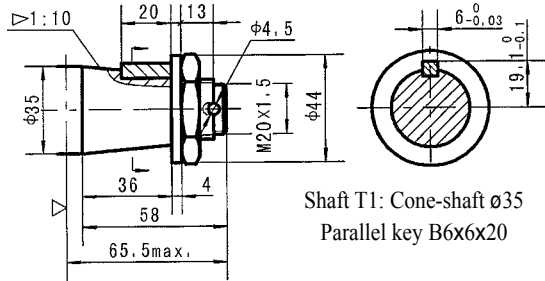
SHAFT EXTENSIONS FOR BMSY MOTORS



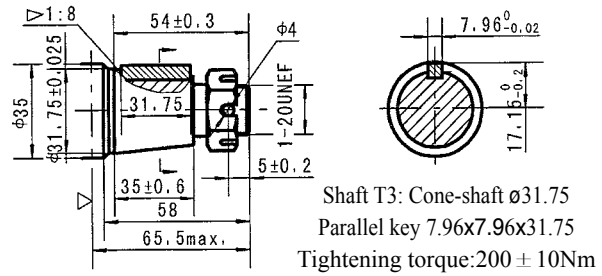
▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)



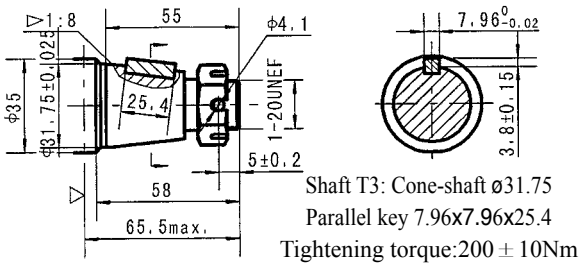
SHAFT EXTENSIONS FOR BMSY MOTORS



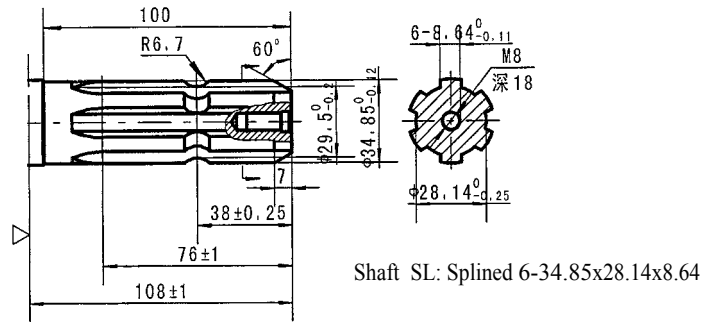
Shaft T1: Cone-shaft ø35
Parallel key B6x6x20



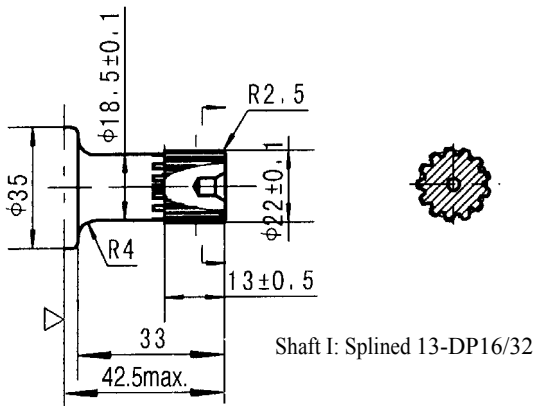
Shaft T3: Cone-shaft ø31.75
Parallel key 7.96x7.96x31.75
Tightening torque:200 ± 10Nm



Shaft T3: Cone-shaft ø31.75
Parallel key 7.96x7.96x25.4
Tightening torque:200 ± 10Nm



Shaft SL: Splined 6-34.85x28.14x8.64



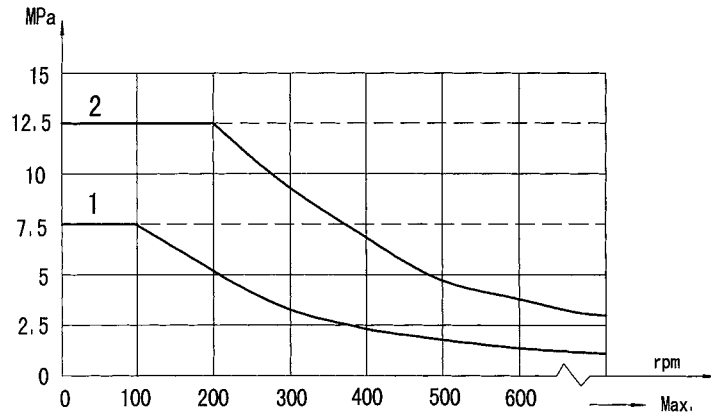
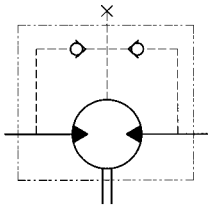
Shaft I: Splined 13-DP16/32

- ▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)
Note:Mounting SP is the same with shaft mode T1、D、B、F and G.



BMSY Series Hydraulic Motor

Permissible shaft seal pressure

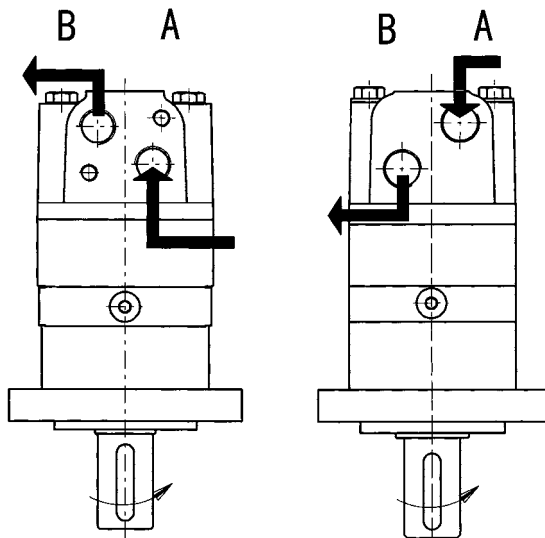


Note: 1. Chart for standard shaft seal;
2. Chart for high pressure shaft seal.

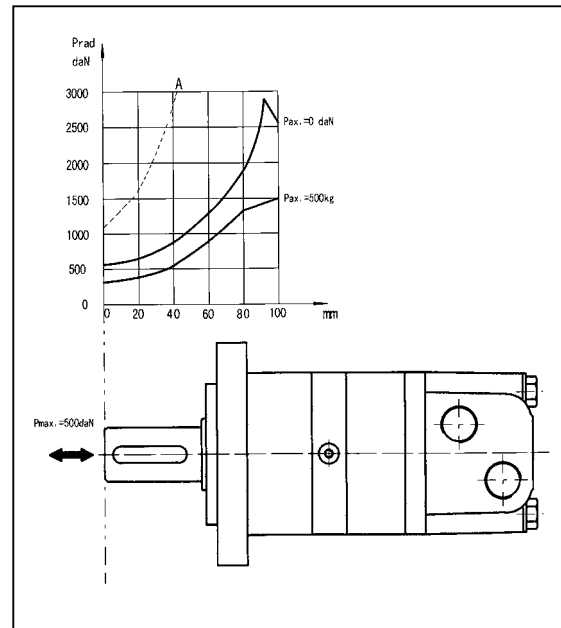
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Standard 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.



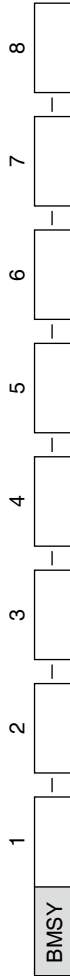
Axial and Radial forces



The output shaft runs in tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage, The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.



Order Information



Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange , Pilot , Port	Output Shaft	Ports and Drain Port	Rotation direction	Paint	Unusually function
	80	2-Ø13.5 Rhomb-flange Ø106.4, Pilot Ø82.5 × 6.3	A Shaft Ø25 Parallel key 8 × 7 × 32 B Shaft Ø32 Parallel key 10 × 8 × 45 D Shaft Ø25.4 Parallel key 6.35 × 6.35 × 25.4	D G1/2 Manifold Mount 2-M10,G1/4 M M22 × 1.5 Manifold Mount 2-M10, M14 × 1.5			
	100	E2	G Parallel key 7.96 × 7.96 × 31.75 Shaft Ø31.75,	S 7/8-14UNF O-ring manifold			
	125	E4	F Shaft Ø31.75, Splined key 14-DP12/24	F 2-3/8-16, 7/16-20UNF			
	160	F6	FD Long Shaft Ø31.75,	P 1/2-14NPTF manifold			
	200	W	SL Splined key 14-DP12/24 Shaft Ø34.85,	2-3/8-16UNC, 7/16-20UNF	Omit Standard Opposite	Omit F LS	Standard Free Running Low Speed
	250		T1 Splined key 6-34.85 × 28.14 × 8.64	EE-D G1/2,G1/4(end port)		No paint Blue Black Silver Grey	
	315	E2B	T3 Cone-shaft Ø35, parallel key B6 × 6 × 20 Cone-shaft Ø31.75,	EE-M2 M22 × 1.5, M14 × 1.5(end port) EE-S2 7/8-14UNF O-ring, 7/16-20 UNF(end port)			
	400		S1 Parallel key 7.96 × 7.96 × 31.75	ED 1-1/16-12UN O-ring, 7/16-20 UNF(180° Apart ports)			
	475	SP	I Shaft Ø25.4, Splined key SAE 6B Splined key 13-DP16/32				

Note: When the table is used, please fill the code of left rows in the table and give us, which the code information consists of construction, displacement, mounting flange, output shaft and ports. The informations of mounting flange, output shaft and ports are the same as BMS series. The SP flange afflies to shafts of T1, D, B, F, G. If the specification is not in the table or you have specific requirements, please contact us.



BMT SERIES HYDRAULIC MOTOR

BMT series motor adapt the advanced Geroler gear set design with disc distribution flow and high pressure. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

Characteristic features:

- * Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, provide smooth and reliable operation and high efficiency.
- * The output shaft adapts in tapered roller bearings that permit high axial and radial forces. Can offer capacities of high pressure and high torque in the wide of applications.
- * Advanced design in disc distribution flow, which can automatically compensate in operating with high volume efficiency and long life, provide smooth and reliable operation.

Main Specifaion

Type		BMT 160	BMT 200	BMT 230	BMT 250	BMT 315	BMT 400	BMT 500	BMT 630	BMT 800
Geometric displacement (cm ³ /rev.)		161.1	201.4	232.5	251.8	326.3	410.9	523.6	629.1	801.8
Max. speed (rpm)	cont.	625	625	536	500	380	305	240	196	154
	int.	780	750	643	600	460	365	285	233	185
Max. torque (N•m)	cont.	470	590	670	730	950	1080	1220	1318	1464
	int.	560	710	821	880	1140	1260	1370	1498	1520
	peak	669	838	958	1036	1346.3	1450.3	1643.8	1618.8	1665
Max. output (kW)	cont.	27.7	34.9	34.7	34.5	34.9	31.2	28.8	25.3	22.2
	int.	32	40	40	40	40	35	35	27.5	26.8
Max. pressure drop (MPa)	cont.	20	20	20	20	20	18	16	14	12.5
	int.	24	24	24	24	24	21	18	16	13
	peak	28	28	28	28	28	24	21	19	16
Max. flow (L/min)	cont.	100	125	125	125	125	125	125	125	125
	int.	125	150	150	150	150	150	150	150	150
Max. inlet pressure (MPa)	cont.	21	21	21	21	21	21	21	21	21
	int.	25	25	25	25	25	25	25	25	25
	peak	30	30	30	30	30	30	30	30	30
Weight (kg)		19.5	20	20.4	20.5	21	22	23	24	25

- * 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

BMT 160 [161.1cm³/rev.]

Pressure (MPa)

	Max.cont.						Max.int.
	4	8	10	12	16	20	24
10	88	176	228	275	361	447	535
	60	59	58	56	54	50	44
20	89	181	234	277	372	459	557
	121	120	117	114	109	103	95
40	91	180	235	277	381	471	573
	249	246	243	236	230	223	212
60	82	178	235	277	381	470	572
	371	367	362	356	349	340	330
80	78	173	229	276	379	466	567
	492	489	485	478	470	462	447
Max.cont.	70	160	218	269	370	455	558
100	614	611	606	598	590	582	570
	58	148	211	261	359	448	552
Max.int.	770	764	758	750	741	731	715

BMT 200 [201.4cm³/rev.]

Pressure (MPa)

	Max.cont.						Max.int.
	4	8	10	12	16	20	24
10	124	233	289	340	454	560	669
	47	46	45	42	39	37	33
20	125	239	298	347	468	576	696
	95	94	92	90	87	84	75
40	120	241	296	352	475	589	716
	195	193	191	187	183	178	167
60	116	237	295	352	478	589	718
	297	295	292	287	282	276	263
80	108	231	289	350	474	586	716
	395	393	389	384	377	370	359
100	99	227	286	344	471	580	712
	493	490	486	482	475	467	460
Max.cont.	84	208	276	333	459	566	697
125	615	611	607	602	595	588	572
	70	194	260	324	447	554	682
Max.int.	743	740	735	727	717	706	682

BMT 250 [251.8cm³/rev.]

Pressure (MPa)

	Max.cont.						Max.int.
	4	8	10	12	16	20	24
10	138	286	355	419	559	689	824
	38	38	37	36	34	32	31
20	143	296	364	432	580	708	853
	76	75	74	72	70	67	62
40	139	301	372	440	593	723	884
	156	154	152	149	146	142	134
60	132	294	372	441	592	727	888
	237	236	233	229	224	219	207
80	128	283	364	433	587	721	887
	317	316	314	308	303	299	284
100	126	282	355	427	582	716	879
	396	394	391	387	381	373	359
Max.cont.	116	260	340	414	568	703	864
	495	492	488	483	476	469	454
Max.int.	88	242	320	397	552	686	847
	592	589	585	580	572	565	545

BMT 315 [326.3cm³/rev.]

Pressure (MPa)

	Max.cont.						Max.int.
	4	8	10	12	16	20	24
10	184	363	453	545	734	891	1062
	30	29	28	27	26	25	23
20	189	380	472	562	757	917	1109
	60	59	58	56	54	52	50
40	191	381	484	570	774	954	1149
	121	120	118	115	112	109	104
60	189	376	493	573	772	962	1154
	183	181	179	175	172	168	158
80	179	369	479	565	768	954	1153
	244	242	239	236	231	227	217
100	169	357	467	562	758	942	1143
	305	304	301	298	294	289	276
Max.cont.	147	336	447	544	745	920	1127
	380	378	375	371	367	362	349
Max.int.	119	318	432	526	713	894	1097
	458	456	453	449	444	431	425

Torque (N•m) 552
Speed (rpm) 572



Performance Data

BMT 400 [410.9cm³/rev.]

Pressure (MPa)

		Max.cont.					Max.int.	
		3	6	9	12	15	18	21
Flow (L/min)	10	176	367	560	715	885	1050	1209
		24	23	22	21	20	19	18
	20	179	370	565	726	899	1071	1236
		49	48	47	44	42	40	38
	40	176	370	567	733	919	1091	1263
		96	95	93	90	87	83	79
	60	174	361	563	729	920	1095	1269
	145	143	139	135	131	127	121	
Max.cont.	80	166	353	553	719	912	1084	1263
		193	191	188	184	180	176	170
Max.int.	100	150	339	538	708	896	1067	1252
		242	240	238	234	228	224	218
Max.cont.	125	135	309	524	688	873	1045	1221
		302	300	298	294	289	285	278
Max.int.	150	126	292	508	666	852	1020	1197
		364	362	358	354	350	346	339

BMT 500 [523.6cm³/rev.]

Pressure (MPa)

		Max.cont.					Max.int.	
		3	6	9	12	14	16	18
Flow (L/min)	10	222	451	692	892	1050	1193	1340
		18	18	18	17	16	15	13
	20	231	464	714	918	1070	1220	1377
		37	36	35	34	33	32	30
	40	230	466	727	941	1094	1244	1422
		75	74	73	72	70	68	64
	60	225	457	714	941	1088	1245	1409
	113	112	111	109	107	105	101	
Max.cont.	80	213	431	696	927	1076	1244	1401
		151	150	149	147	145	143	138
Max.int.	100	194	420	680	901	1063	1224	1383
		189	188	187	185	183	181	177
Max.cont.	125	182	398	641	877	1024	1199	1352
		237	236	235	233	231	229	225
Max.int.	150	147	369	618	853	1004	1167	1325
		284	283	282	280	278	276	272

BMT 630 [629.1cm³/rev.]

Pressure (MPa)

		Max.cont.					Max.int.	
		3	6	9	10.5	12	14	16
Flow (L/min)	10	233	520	795	902	1074	1194	1363
		14	14	13	13	13	11	11
	20	237	554	837	953	1117	1239	1407
		28	27	27	26	26	24	22
	40	239	553	860	987	1171	1308	1483
		62	62	61	60	59	56	54
	60	223	544	863	978	1172	1318	1498
	94	94	92	91	90	86	82	
Max.cont.	80	220	537	854	965	1172	1314	1497
		123	122	121	119	118	114	110
Max.int.	100	208	522	832	945	1156	1303	1488
		156	155	153	152	150	147	142
Max.cont.	125	201	499	810	931	1137	1292	1472
		196	196	194	192	191	187	183
Max.int.	150	174	492	785	921	1121	1277	1454
		233	232	231	230	227	223	217

BMT 800 [801.8cm³/rev.]

Pressure (MPa)

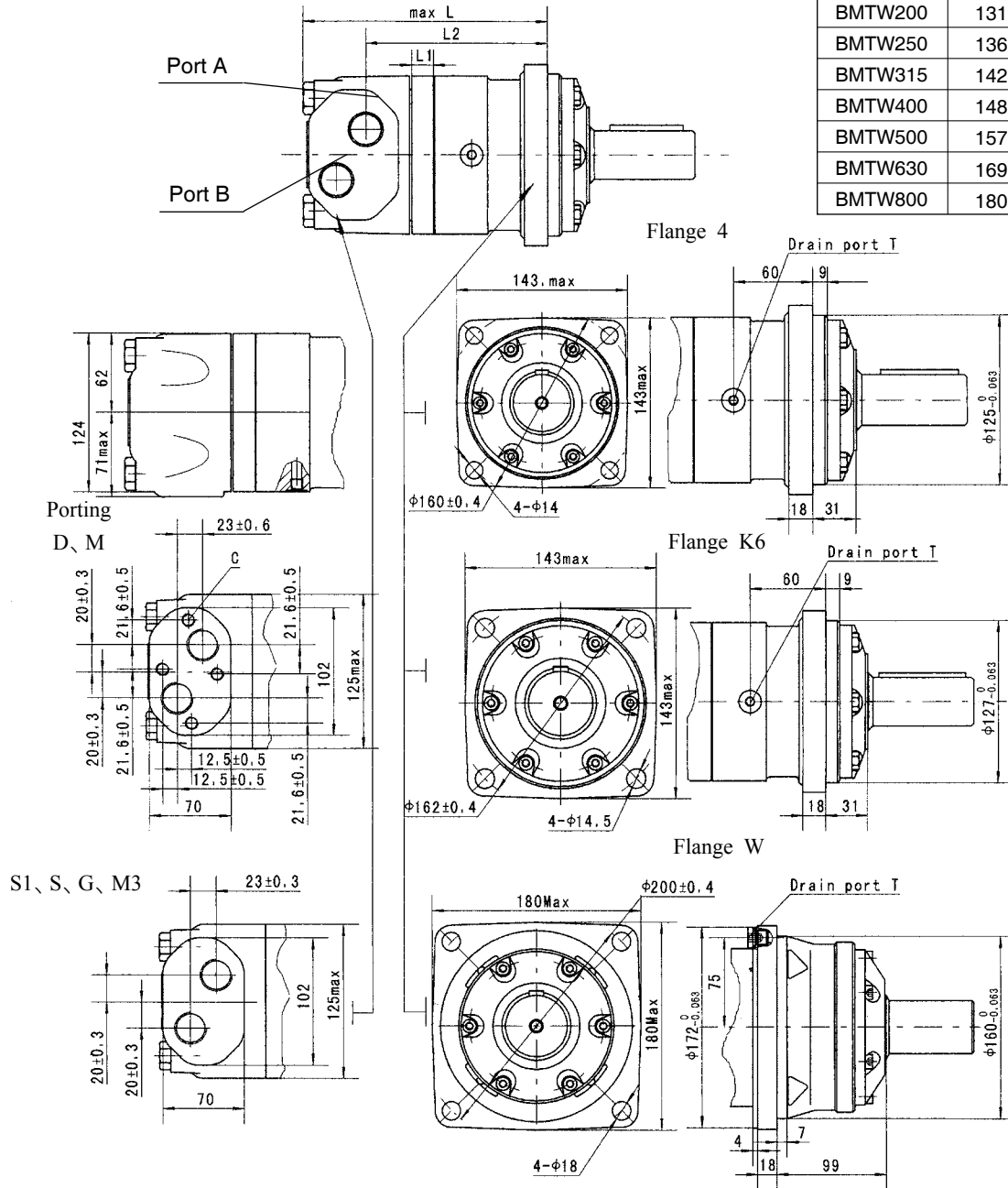
		Max.cont.					Max.int.
		3	6	9	10.5	12.5	13
Flow (L/min)	10	346	677	1003	1159	1365	1390
		12	12	11	11	11	10
	20	356	692	1034	1183	1404	1458
		24	24	24	23	22	18
	40	365	703	1066	1236	1459	1516
		50	50	49	48	46	40
	60	354	703	1060	1237	1464	1520
	74	73	71	71	68	63	
Max.cont.	80	332	686	1050	1226	1464	1514
		99	98	98	96	93	86
Max.int.	100	305	654	1025	1207	1445	1506
		125	123	123	121	118	110
Max.cont.	125	280	622	989	1181	1422	1487
		154	153	153	150	149	140
Max.int.	150	247	590	953	1156	1406	1476
		185	184	183	181	179	172

Torque (N•m) 1121
Speed (rpm) 227



BMT DIMENSIONS AND MOUNTING DATA

Model	L	L1	L2
BMTW160	127	17	77
BMTW200	131	21	81
BMTW250	136	14	86
BMTW315	142	20	91
BMTW400	148	27	98
BMTW500	157	35	106
BMTW630	169	47	118
BMTW800	180	58	129



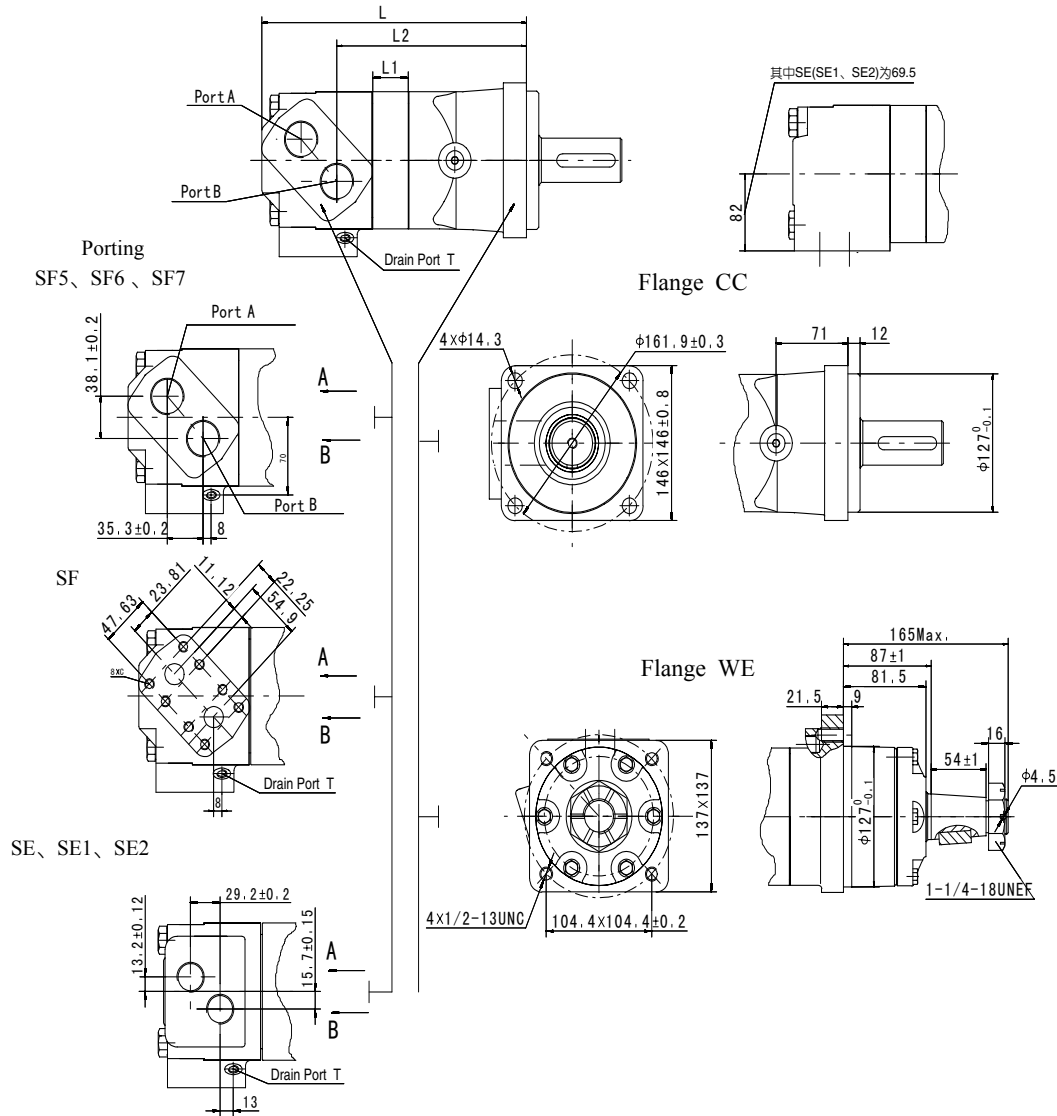
Model	L	L1	L2
BMT160	193	17	142.5
BMT200	197	21	146.5
BMT250	204	14	152.5
BMT315	210	20	158.5
BMT400	217	27	165.5
BMT500	225	35	173.5
BMT630	237	47	185.5
BMT800	248	58	196.5

Content	Code					
	D (depth)	M (depth)	S (depth)	G (depth)	M3 (depth)	S1 (depth)
P(A,B)	G3/4 (18)	M27 x 2 (18)	1-1/16-12UN (18)	G3/4 (18)	M27 x 2 (18)	1-1/16-12UN (18)
T	G1/4 (12)	M14 x 1.5 (12)	9/16-18UNF (12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)
C	4-M10(10)	4-M10(10)	--	--	--	--

Note: 1) The thickness of the stator and rotor for disp. from 160 to 200 is the dimension of L1 adding on 3mm.
 2) The thickness of the stator and rotor for disp. from 250 to 800 is the dimension of L1 adding on 7mm.



BMTE DIMENSIONS AND MOUNTING DATA



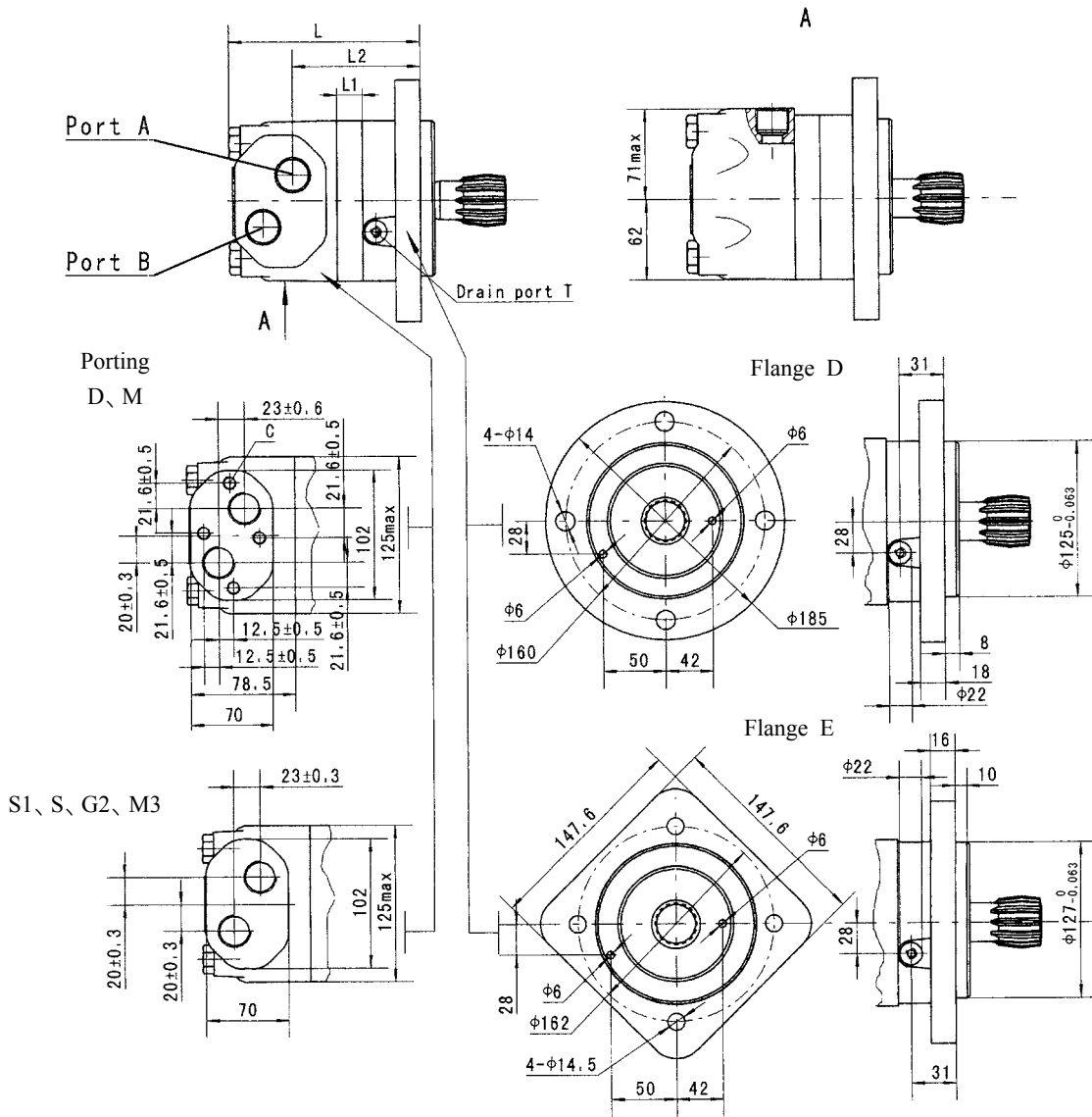
Model	L	L1	L2
BMTE230	238.5	12	164.5
BMTE250	240.5	14	166.5
BMTE315	246.5	20	172.5
BMTE400	253.5	27	179.5
BMTE500	261.5	35	187.5
BMTE630	273.5	47	199.5
BMTE800	284.5	58	210.5

Note: 1) The data for the port of SF (SF5 and SF6 and SF7)
 2) The data for the port of SE (SE1 and SE2) and flange WE: L-70 and L2-59.
 3) The thickness of the stator and rotor for disp. from 315 to 800 is the dimension of L1 adding on 7mm.

Content	Code						
	SF5 (depth)	SF6 (depth)	SF7 (depth)	SF (depth)	SE (depth)	SE1 (depth)	SE2 (depth)
P(A,B)	1-5/16-12UN (18)	M33 x 2 (18)	G1 (18)	3/4" (18)	1-1/16-12UN (18)	1-1/16-12UN (18)	G3/4 (18)
T	7/16-20UNF (12)	M14 x 1.5 (12)	G1/4 (12)	7/16-20UNF (12)	9/16-18UNF (12)	7/16-20UNF (12)	G1/4 (12)
C	--	--	--	8 x 3/8-16UNC	--	--	--



BMTS DIMENSIONS AND MOUNTING DATA



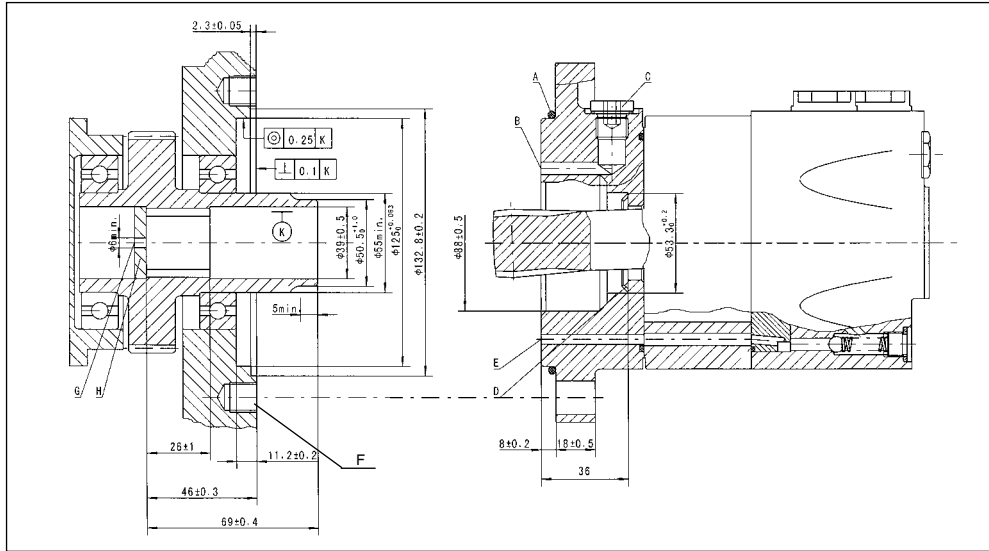
Model	L	L1	L2
BMT160	148	17	96.5
BMT200	152	21	100.5
BMT250	157	14	109
BMT315	163	20	115
BMT400	170	27	122
BMT500	178	35	130
BMT630	190	47	142
BMT800	201	58	153

Content	Code					
	D (depth)	M (depth)	S (depth)	G (depth)	M3 (depth)	S1 (depth)
Mounting P(A,B)	G3/4 (18)	M27 x 2 (18)	1-1/16-12UN (18)	G3/4 (18)	M27 x 2 (18)	1-1/16-12UN (18)
T	G1/4 (12)	M14 x 1.5 (12)	9/16-18UNF (12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)
C	4-M10(10)	4-M10(10)	--	--	--	--

Note: 1) The thickness of the stator and rotor for disp. from 160 to 200 is the dimension of L1 adding on 3mm.
 2) The thickness of the stator and rotor for disp. from 250 to 800 is the dimension of L1 adding on 7mm.



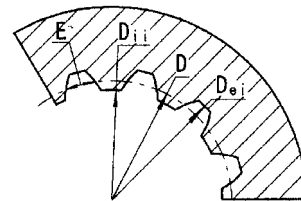
BMTS MOUNTING DATA



- A: O-ring:125x3
- B: External drain channel
- C: Drain connection G 1/4;12 mm deep
- D: Conical seal ring
- E: Internal drain channel
- F: M12;min. 18mm deep
- G: Oil circulation hole
- H: Hardened stop plate

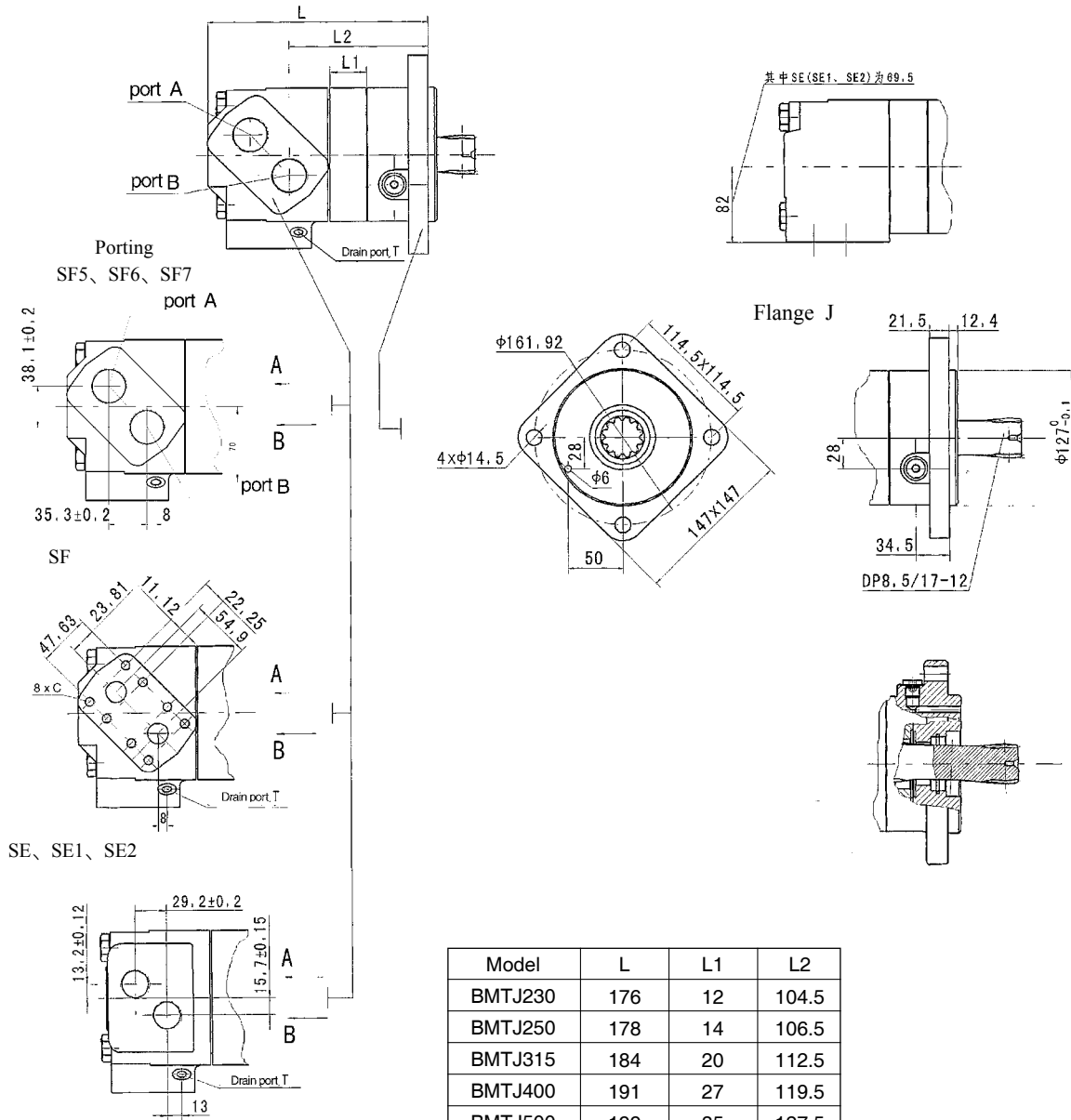
INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

Fillet Root Side Fit		mm
Number of Teeth	Z	16
Diametral Pitch	DP	12/24
Pressure Angle	α_D	30°
Pitch Dia.	D	$\phi 33.8656$
Major Dia.	D_{ei}	$\phi 38.4^{+0.25}_0$
Minor Dia.	D_i	$\phi 32.15^{+0.04}_0$
Space Width [Circular]	E	4.516 ± 0.037



Hardening Specification: HRC 62 ± 2
Effective case depth 0.7 ± 0.2

BMTJ DIMENSIONS AND MOUNTING DATA



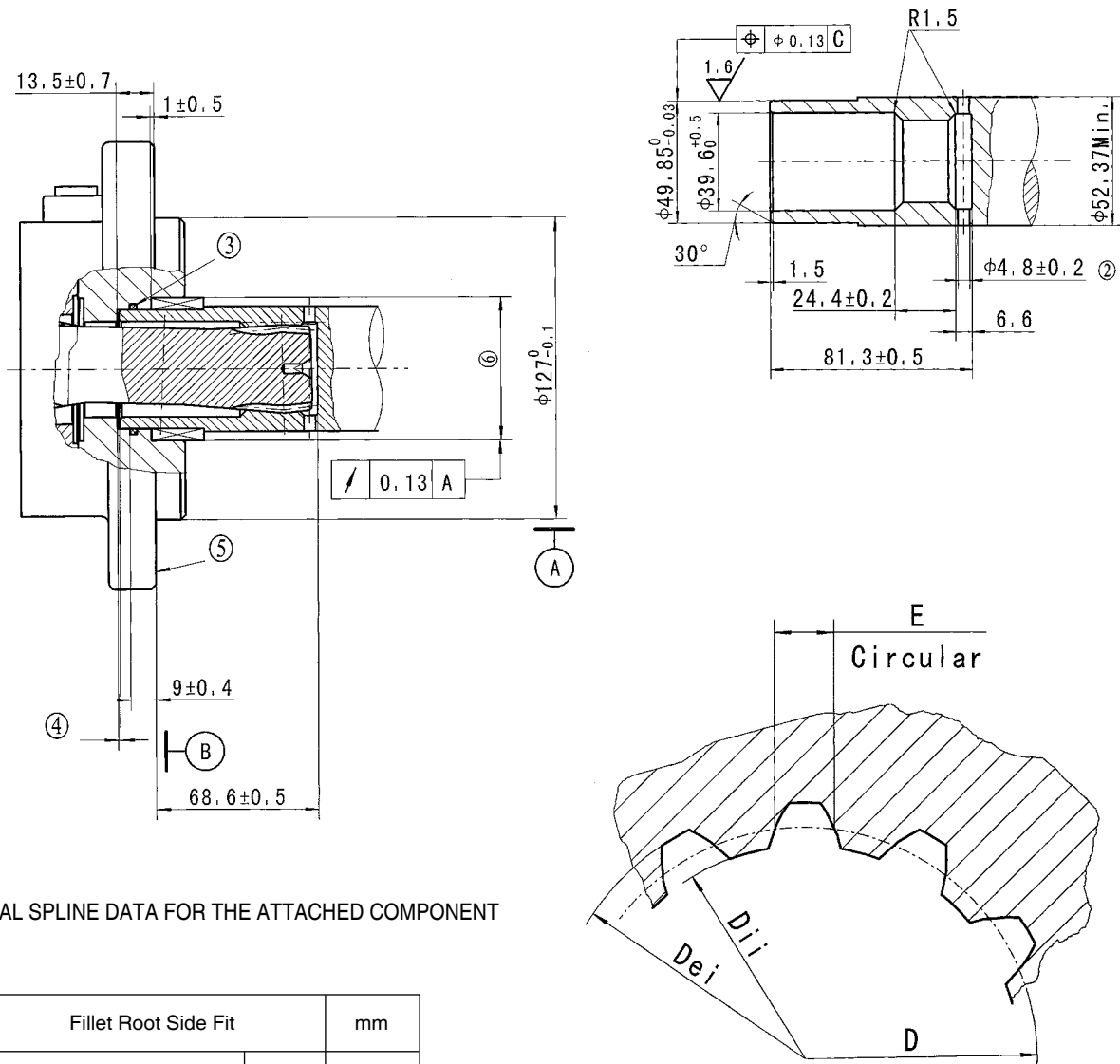
Model	L	L1	L2
BMTJ230	176	12	104.5
BMTJ250	178	14	106.5
BMTJ315	184	20	112.5
BMTJ400	191	27	119.5
BMTJ500	199	35	127.5
BMTJ630	211	47	139.5
BMTJ800	222	58	150.5

Note: 1) The data for the port of SF (SF5 and SF6 and SF7).
 2) The data for the port of SE (SE1 and SE2) and flange WE: L-70 and L2-59.
 3) The thickness of the stator and rotor is the dimension of L1 adding on 7mm.

Content	Code						
	SF5 (depth)	SF6 (depth)	SF7 (depth)	SF (depth)	SE (depth)	SE1 (depth)	SE2 (depth)
P(A,B)	1-5/16-12UN (18)	M33 x 2 (18)	G1 (18)	3/4" (18)	1-1/16-12UN (18)	1-1/16-12UN (18)	G3/4 (18)
T	7/16-20UNF (12)	M14 x 1.5 (12)	G1/4 (12)	7/16-20UNF (12)	9/16-18UNF (12)	7/16-20UNF (12)	G1/4 (12)
C	--	--	--	8 x 3/8-16UNC	--	--	--



BMTJ DIMENSIONS AND MOUNTING DATA



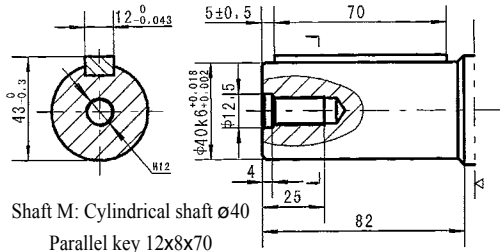
INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

Fillet Root Side Fit		mm
Number of Teeth	Z	12
Diametral Pitch	DP	8.5/17
Pressure Angle	D	30°
Pitch Dia.	α_D	$\phi 35.858823$
Major Dia.	D_{ei}	$\phi 38.97^{+0.20}_0$
Minor Dia.	D_i	$\phi 33.3^{+0.18}_0$
Space Width [Circular]	E	5.866 ± 0.032
Dimension between two pins($\phi 4$)	M_e	$26.929-27.084$

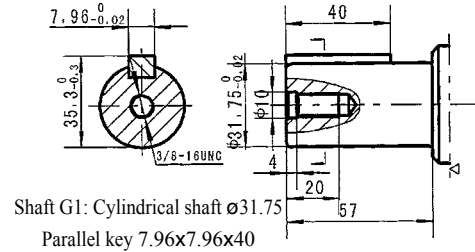
- ① Internal spline in mating part to be as follows: Material to be ASTM A304, 8620H. Carborize to a hardness of 60-64HRC with case depth (to 50HRC) of 0.75-1 [0.030-.040] (dimensions apply after heat treat).
- ② Mating part to have critical dimensions as shown, Oil holes must be provided and open for proper oil circulation.
- ③ Some means of maintaining clearance between shaft and mounting flange must be provided.
- ④ Seal to be furnished with motor for proper oil circulation thru splines.
- ⑤ Similar to SAE "C" Four Bolt Flange
- ⑥ Counterbore designed to adapt to a standard sleeve bearing 50.010-50.038 [1.9689-1.9700] ID by 60.51-60.079 [2.3642-2.3653] O.D. (Oilite bronze sleeve bearing).
- C This surface to be diameter of output shaft.



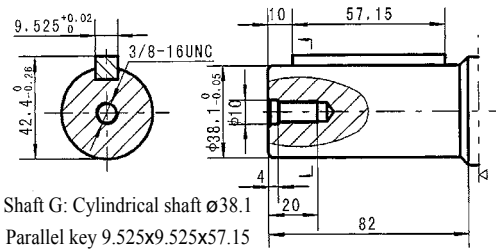
SHAFT EXTENSIONS FOR BMT(E) MOTORS



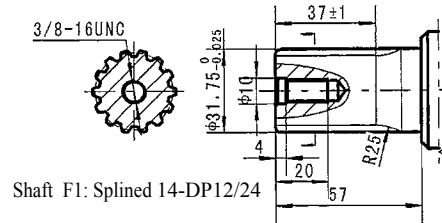
Shaft M: Cylindrical shaft $\phi 40$
Parallel key 12x8x70



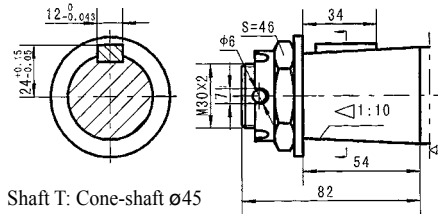
Shaft G1: Cylindrical shaft $\phi 31.75$
Parallel key 7.96x7.96x40



Shaft G: Cylindrical shaft $\phi 38.1$
Parallel key 9.525x9.525x57.15

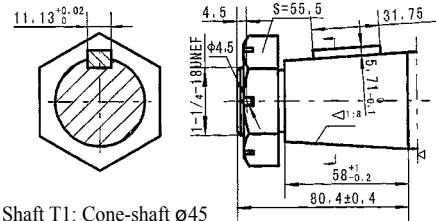


Shaft F1: Splined 14-DP12/24



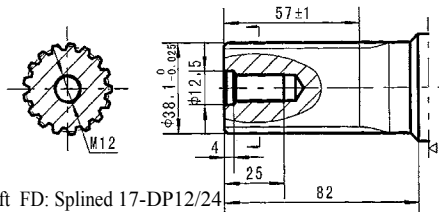
Shaft T: Cone-shaft $\phi 45$
Parallel key B12x8x28

Tightening torque: $500 \pm 10\text{Nm}$

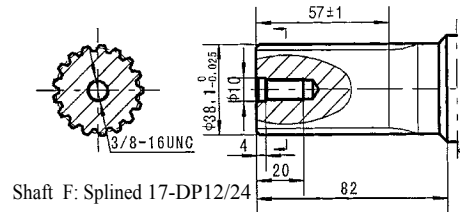


Shaft T1: Cone-shaft $\phi 45$
Parallel key 11.13x11.13x31.75

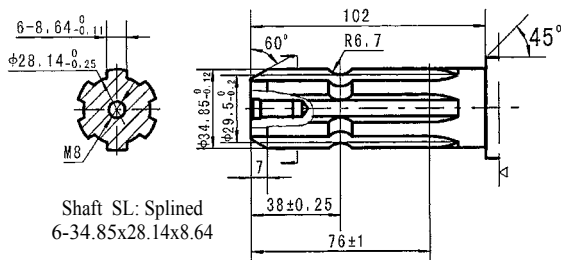
Tightening torque: $500 \pm 10\text{Nm}$



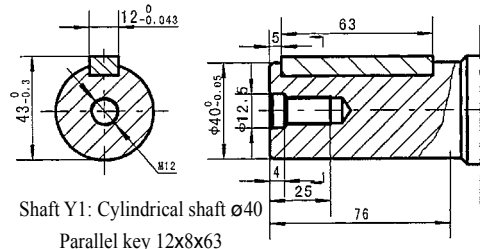
Shaft FD: Splined 17-DP12/24



Shaft F: Splined 17-DP12/24



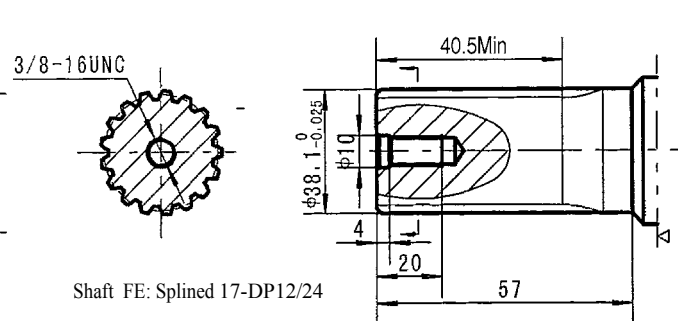
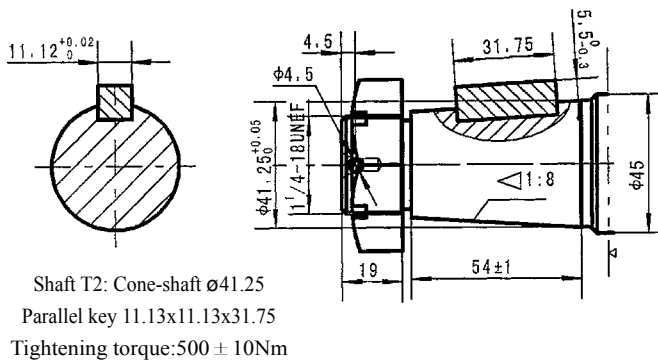
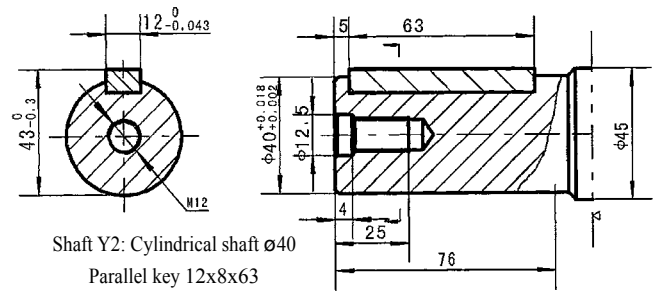
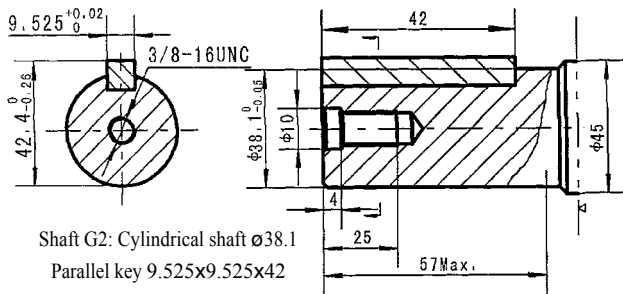
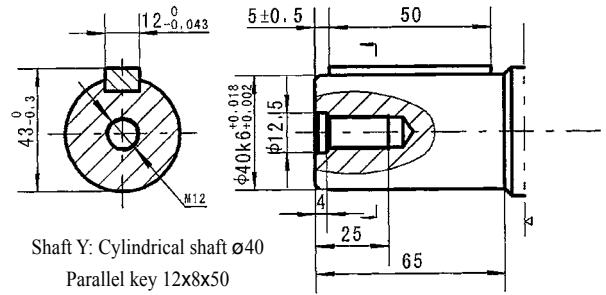
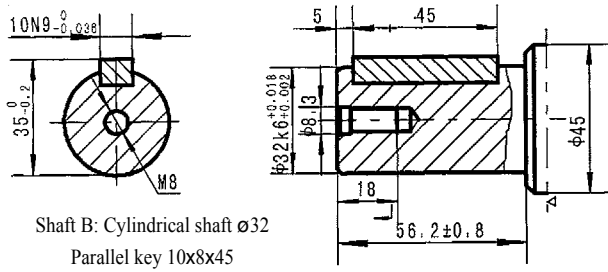
Shaft SL: Splined
6-34.85x28.14x8.64



Shaft Y1: Cylindrical shaft $\phi 40$
Parallel key 12x8x63

▷ Motor Mounting Surface

SHAFT EXTENSIONS FOR BMT(E) MOTORS

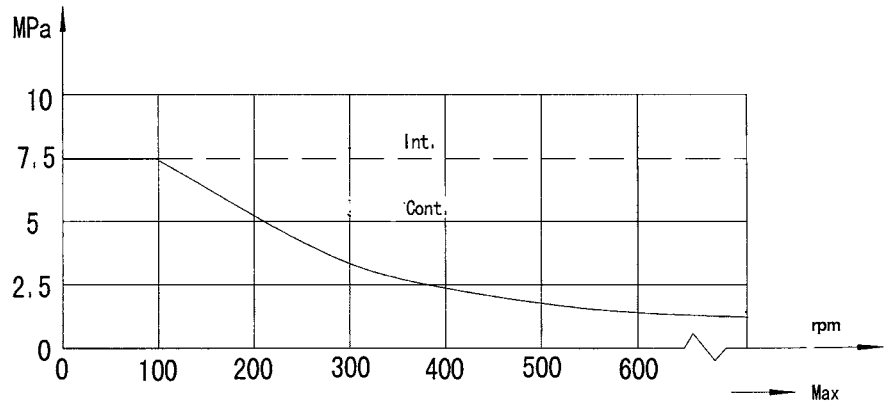
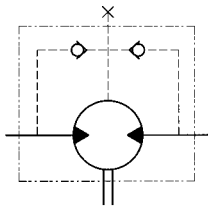


▷ Motor Mounting Surface



BMT Series Hydraulic Motor

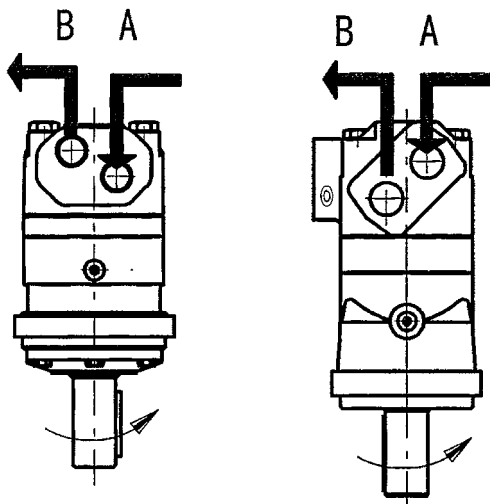
Permissible shaft seal pressure



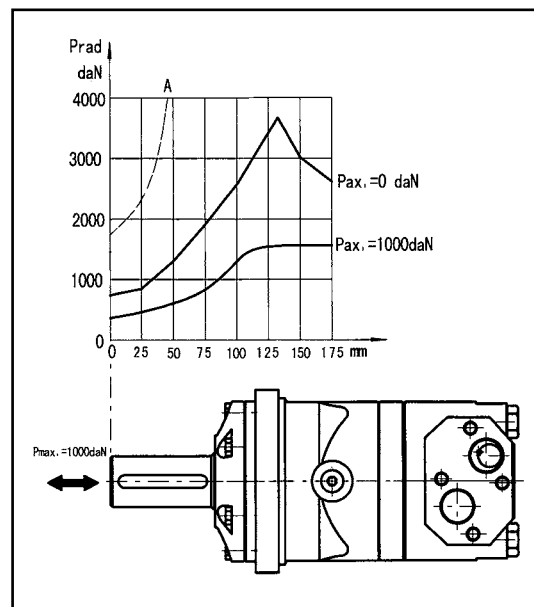
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Standard direction of shaft rotation: Standard

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



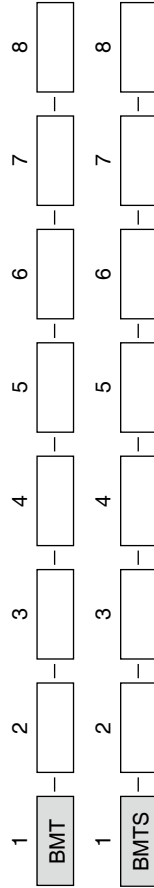
Axial and Radial forces



The output shaft runs in tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage, The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.



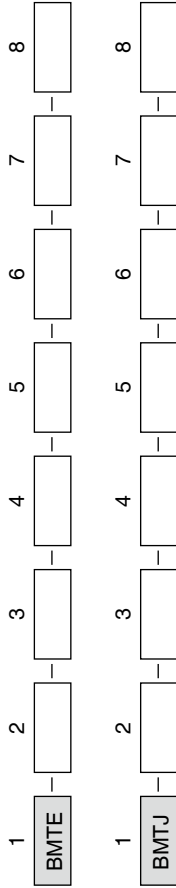
Order Information



Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function
BMT	160 200 250 315 400 500 630 800	4 4-Ø14 Square-flange Ø160, pilot Ø125 × 9	M Shaft Ø40, parallel key 12 × 8 × 70	D G3/4 Manifold Mount, 4-M10, G1/4	Omit Standard	00 Omit	Omit F LS
			G Shaft Ø38.1, parallel key 9.52 × 9.52 × 57.15				
			F Shaft Ø38.1, splined tooth 17-DP12/24				
			FD Shaft Ø38.1, splined tooth 17-DP12/24				
			T Cone-shaft 1:10 Ø45, parallel key B12 × 8 × 28				
			T1 Cone-shaft 1:8 Ø45, parallel key 11.13 × 11.13 × 31.75				
			SL shaft Ø34.85, Splined key				
			G1 Splined key 6-34.85 × 28.14 × 8.64				
			F1 shaft Ø31.75, parallel key 7.96 × 7.96 × 40				
			F1 Shaft Ø31.75, splined tooth 14-DP12/24				
BMTS		D 4-Ø14 Circle-flange Ø160, pilot Ø125 × 8	Omit Short shaft 16-DP12/24	M3 M27 × 2, M14 × 1.5	Omit R	B S	Free Running Low Speed
		E 4-Ø14.5 Square-flange Ø162, pilot Ø127 × 10					



Order Information



Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function
BMTE	230 250 315 400 500	CC 4-Ø14.3 Square-flange Ø161.9, pilotØ127 × 12	G2 Shaft Ø38.1 ,parallel key 9.52 × 9.52 × 42	SF 3/4" ,Manifold Mount,8-3/8-16UNC, 7/16-20UNF SF5 1-5/16-12UN O-ring,7/16-20 UNF SF6 M33 × 2,M14 × 1.5 SF7 G1,G1/4 SE 1-1/16-12UN O-ring,9/16-18UNF SE1 1-1/16-12UN O-ring,7/16-20 UNF SE2 G3/4,G1/4	Omit R Standard Opposite	00 Omit B S No paint Blue Black Silver grey	Omit F LS Standard Free Running Low Speed
			FE Shaft Ø38.1 ,splined tooth 17-DP12/24				
			Y1 ShaftØ40,parallel key 12 × 8 × 63				
	Y2 ShaftØ40,parallel key 12 × 8 × 63						
	T2 Cone-shaft 1:8 Ø41.25 , parallel key 11.13 × 11.13 × 31.75						
	T3 Cone-shaft 1:8 Ø41.25 , parallel key 11.13 × 11.13 × 31.75						
BMTJ		J 4-Ø14.5 Square-flange Ø161.9 pilot Ø127 × 12.4	Omit Short shaft 12-DP8.5/17				

Note:When the table is used, please fill the code of left rows in the table and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports . If the specification is not in the table or you have specific requirements, please contact us .



BMV SERIES HYDRAULIC MOTOR

BMV series motor adapt the advanced Geroler gear set designed with disc distribution flow and high pressure. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

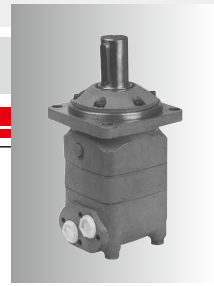
Characteristic features:

- * Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, provide smooth and reliable operation and high efficiency.
- * The output shaft adapts in tapered roller bearings that permit high axial and radial forces. The case can offer capacities of high pressure and high torque in the wide of applications.
- * Advanced design in disc distribution flow, which can automatically compensate in operating with high volume efficiency and long life, provide smooth and reliable operation.

Main Specificaion

Type		BMV 315	BMV 400	BMV 500	BMV 630	BMV 800	BMV 1000
Geometric displacement (cm ³ /rev.)		333	419	518	666	801	990
Max. speed (rpm)	cont.	510	500	400	320	250	200
	int.	630	600	480	380	300	240
Max. torque (N•m)	cont.	920	1180	1460	1660	1880	2015
	int.	1110	1410	1760	1940	2110	2280
	peak	1290	1640	2050	2210	2470	2400
Max. output (kW)	cont.	38.0	47.0	47.0	40.0	33.0	28.6
	int.	46.0	56.0	56.0	56.0	44.0	40.0
Max. pressure drop (MPa)	cont.	20	20	20	18	16	14
	int.	24	24	24	21	18	16
	peak	28	28	28	24	21	18
Max. flow (L/min)	cont.	160	200	200	200	200	200
	int.	200	240	240	240	240	240
Weight (kg)		31.8	32.6	33.5	34.9	36.5	38.6

- * 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

BMV 315 [333cm³/rev.]

Pressure (MPa)		Max.cont.					Max.int.	
		3.5	7	10	14	18	20	24

Flow (L/min)	Pressure (MPa)						
	3.5	7	10	14	18	20	24
10	140	294	440	610	742	845	1000
	26	24	23	22	20	17	14
20	153	314	466	636	787	895	1070
	55	54	53	52	51	48	44
50	149	312	465	654	815	935	1112
	145	144	142	140	137	133	127
75	143	304	458	642	816	940	1119
	220	218	215	211	207	202	195
100	136	297	452	636	810	936	1108
	294	292	290	287	283	278	270
125	123	286	442	626	799	921	1093
	368	366	364	361	357	352	345
150	114	275	435	615	788	906	1078
	445	443	441	437	430	422	410
160	107	268	430	608	780	895	1070
	475	473	470	466	460	452	439
200	82	249	412	593	758	871	1047
	596	594	590	584	576	565	544

BMV 400 [419cm³/rev.]

Pressure (MPa)		Max.cont.					Max.int.	
		3.5	7	10	14	18	20	24

Flow (L/min)	Pressure (MPa)						
	3.5	7	10	14	18	20	24
10	183	385	568	776	968	1101	1292
	20	20	19	18	17	16	14
20	196	398	590	815	1010	1152	1346
	44	44	43	42	40	39	37
50	200	402	603	842	1040	1186	1430
	114	113	113	112	110	108	103
75	195	394	596	838	1043	1188	1432
	175	173	170	166	163	1579	152
100	172	385	593	827	1036	1184	1425
	236	235	233	231	227	223	215
125	167	374	583	816	1021	1177	1413
	296	294	291	288	282	275	268
150	158	361	559	801	1008	1165	1390
	355	354	352	349	344	335	324
175	143	346	553	784	989	1145	1377
	416	414	411	407	403	396	388
200	118	331	536	770	969	1128	1356
	475	473	469	463	455	448	439
240	82	301	506	740	943	1104	1332
	571	569	565	548	539	530	520

BMV 500 [518cm³/rev.]

Pressure (MPa)		Max.cont.					Max.int.	
		3.5	7	10	14	18	20	24

Flow (L/min)	Pressure (MPa)						
	3.5	7	10	14	18	20	24
10	242	468	696	959	1190	1353	1607
	17	17	16	16	15	13	11
20	245	501	738	1003	1232	1394	1658
	36	35	35	34	33	32	29
50	240	500	758	1025	1270	1449	1743
	93	92	91	90	88	85	80
75	233	498	752	1030	1288	1475	1766
	140	139	137	135	132	127	120
100	228	491	748	1026	1289	1472	1760
	189	187	185	182	178	173	166
125	220	483	742	1014	1280	1460	1745
	237	236	234	231	227	223	216
150	201	465	723	1008	1250	1429	1736
	287	286	284	281	276	270	260
175	182	446	711	997	1238	1406	1715
	335	334	332	329	325	320	310
200	161	423	676	974	1218	1385	1697
	384	383	381	378	374	366	354
240	120	378	622	921	1172	1340	1650
	461	459	457	454	450	444	432

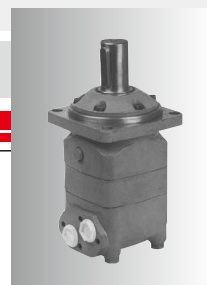
BMV 630 [666cm³/rev.]

Pressure (MPa)		Max.cont.					Max.int.	
		3.5	6	9	12	15	18	21

Flow (L/min)	Pressure (MPa)						
	3.5	6	9	12	15	18	21
10	280	522	812	1100	1268	1549	1784
	14	13	13	12	12	11	10
20	288	552	839	1101	1315	1607	1864
	28	28	27	27	26	24	22
50	289	555	868	1137	1364	1682	1956
	72	72	71	69	68	66	62
75	270	548	863	1120	1352	1680	1964
	109	108	106	104	102	99	94
100	264	538	856	1093	1350	1674	1965
	146	145	143	141	138	135	130
125	251	516	837	1071	1336	1659	1950
	184	183	181	179	177	173	168
150	240	495	817	1063	1330	1650	1928
	221	220	219	217	215	212	205
175	210	485	796	1052	1300	1636	1908
	259	258	257	254	250	246	241
200	182	469	751	1018	1280	1611	1883
	297	297	295	293	290	284	273
240	130	416	712	978	1237	1563	1835
	358	357	355	351	346	340	332

Torque (N·m) 1340
Speed (rpm) 444

□ cont.
■ int.



Performance Data

BMV 800 [801cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

2.5	5	8	10	13	16	18
-----	---	---	----	----	----	----

Flow (L/min)	Pressure (MPa)						
	2.5	5	8	10	13	16	18
10	278	565	830	1095	1405	1712	1915
	11	10	10	9	8	8	7
20	282	571	845	1150	1456	1783	1994
	23	22	22	21	20	18	16
50	288	582	856	1162	1463	1790	2001
	60	59	57	56	54	52	48
75	269	580	855	1165	1465	1786	1993
	91	90	89	87	84	81	77
100	251	566	840	1140	1448	1767	1985
	122	121	120	118	115	111	105
125	242	535	824	1118	1427	1739	1976
	153	152	150	147	143	139	133
150	236	526	808	1102	1401	1714	1959
	185	183	181	178	174	169	163
175	215	504	793	1079	1377	1698	1936
	216	214	212	209	206	203	196
Max.cont. 200	197	468	765	1063	1362	1681	1913
	247	245	243	240	237	232	225
Max.int. 240	118	388	713	1020	1318	1637	1838
	297	296	295	293	288	283	277

□ cont.
 □ int.

BMV 1000 [990cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

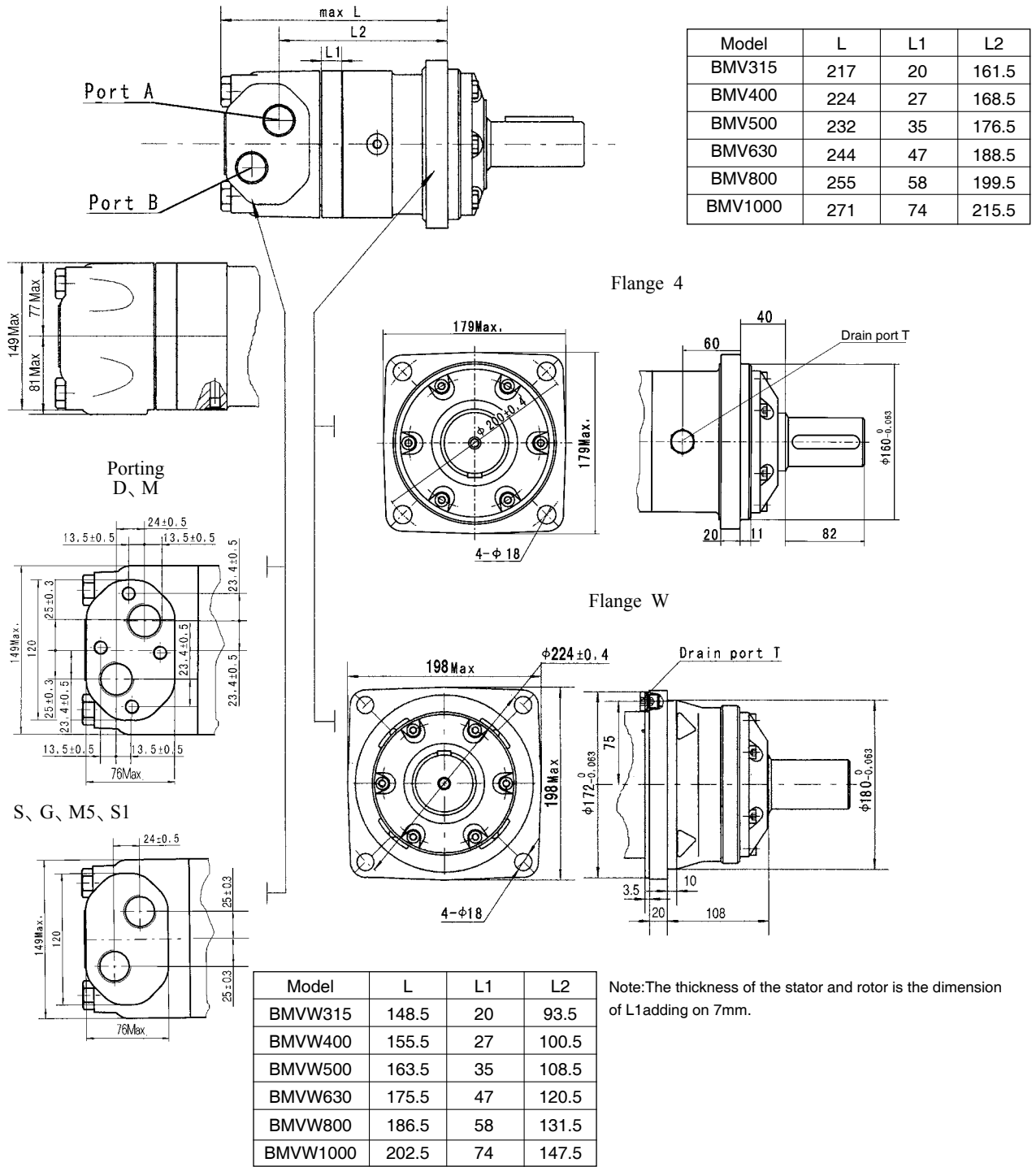
2.5	5	7	10	14	16
-----	---	---	----	----	----

Flow (L/min)	Pressure (MPa)					
	2.5	5	7	10	14	16
10	312	640	971	1400	1978	2259
	9	9	9	8	7	6
20	320	648	978	1410	1980	2270
	28	27	26	25	23	21
50	326	655	992	1422	2015	2280
	47	46	45	43	41	38
75	318	642	987	1425	2003	2276
	72	71	70	68	66	63
100	309	634	983	1418	1994	2243
	98	97	95	93	90	86
125	303	624	975	1409	1988	2224
	123	122	120	117	114	110
150	278	602	961	1368	1963	2208
	149	148	146	144	140	133
175	264	580	946	1338	1925	2159
	174	172	170	166	162	155
Max.cont. 200	230	556	912	1300	1891	2105
	199	196	193	190	185	178
Max.int. 240	166	513	867	1267	1825	2034
	240	237	233	229	225	218

Torque (N•m) 1825
 Speed (rpm) 225



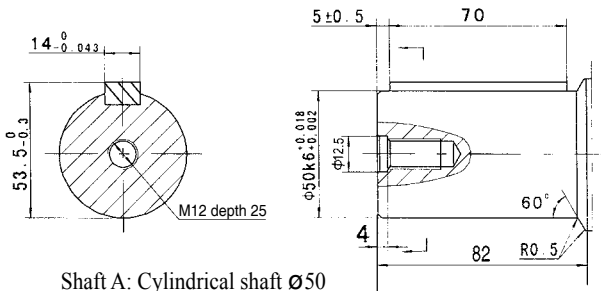
BMV DIMENSIONS AND MOUNTING DATA



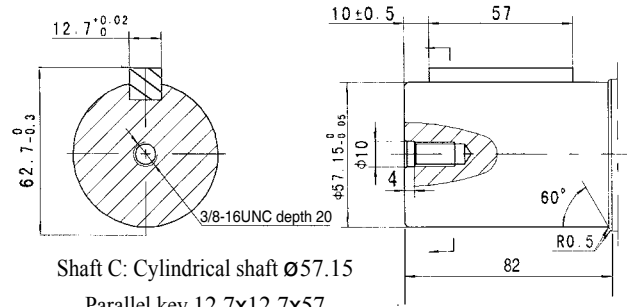
Content	Code					
	D (depth)	M (depth)	S (depth)	G (depth)	M5 (depth)	S1 (depth)
P(A,B)	G1 (18)	M33 x 2 (18)	1-5/16-12UN(18)	G1 (18)	M33 x 2 (18)	1-5/16-12UN(18)
T	G1/4 (12)	M14 x 1.5 (12)	9/16-18UNF(12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)
C	4-M12 (10)	4-M12 (10)	--	--	--	--



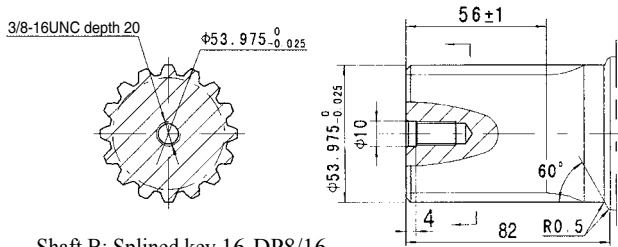
BMV SHAFT EXTENSIONS DIMENSIONS DATA



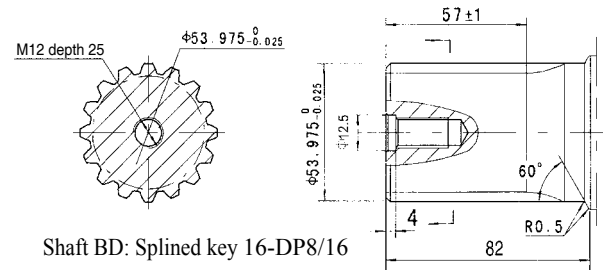
Shaft A: Cylindrical shaft Ø50
Parallel key 14x9x70



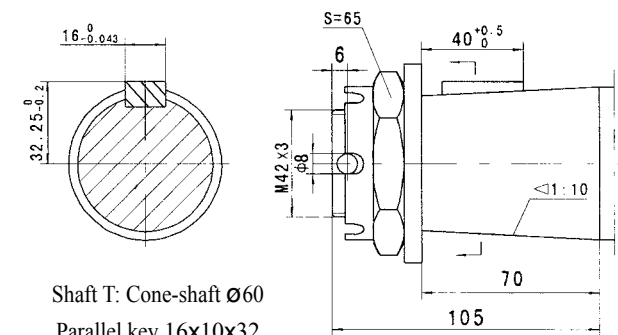
Shaft C: Cylindrical shaft Ø57.15
Parallel key 12.7x12.7x57



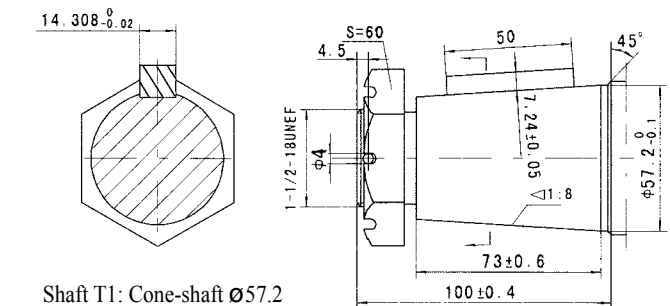
Shaft B: Splined key 16-DP8/16



Shaft BD: Splined key 16-DP8/16



Shaft T: Cone-shaft Ø60
Parallel key 16x10x32
Tightening torque: 750 ± 50Nm

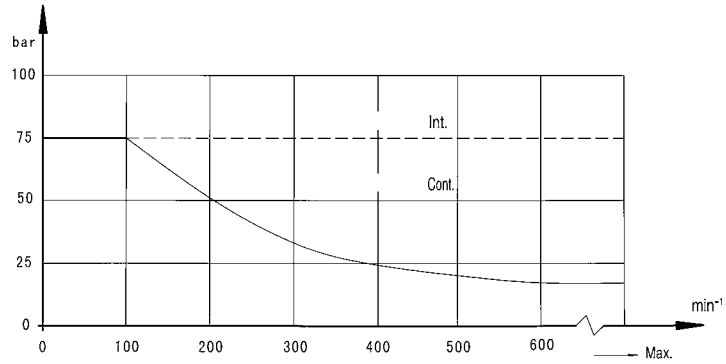
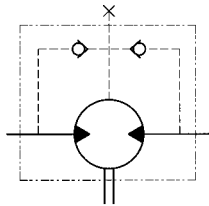


Shaft T1: Cone-shaft Ø57.2
Parallel key 14.308x14.308x50
Tightening torque: 750 ± 50Nm



BMV Series Hydraulic Motor

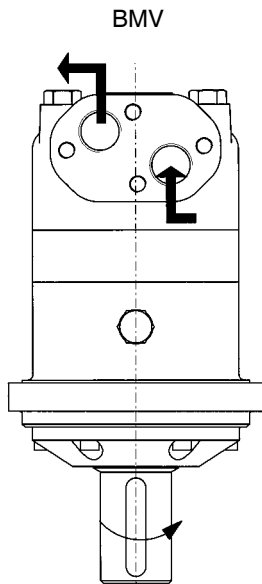
Permissible shaft seal pressure



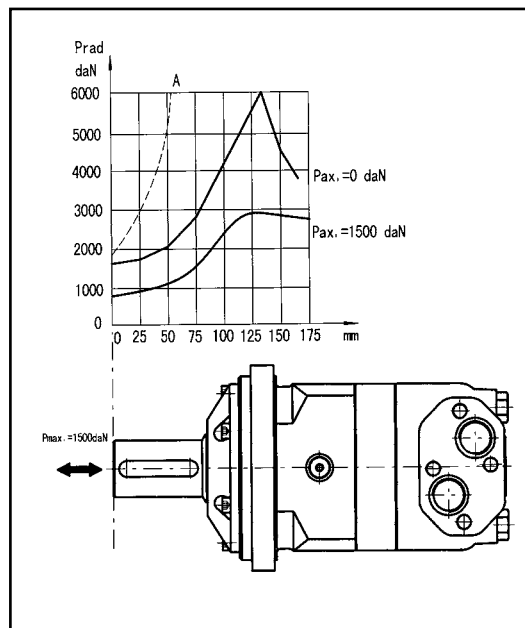
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Standard 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.



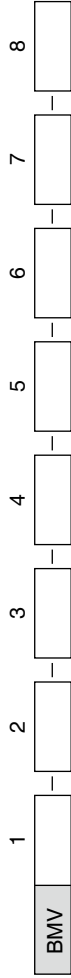
Axial and Radial forces



The output shaft runs in tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load. Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage, The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.



Order Information



Pos.1	2	3	4	5	6	7	8
Code	Displacement	Flange	Output shaft	Ports and drain port	Rotation direction	Paint	Unusually function
	315	4-Ø18 Square-flange Ø200, pilot Ø160 × 11	A Shaft Ø50 , parallel key 14 × 9 × 70	D G1 Manifold 4 × M12, G1/4 M M33 × 2 Manifold 4 × M12, M14 × 1.5	Omit Standard	00 No paint	Omit
	400		BD Shaft Ø53.975, splined key 16-DP8/16				
	500	4-Ø18 Wheel-flange Ø224, pilot Ø180 × 10	B Shaft Ø53.975, splined key 16-DP8/16	S 1-5/16-12UN, 9/16-18UNF G G1, G1/4	R Opposite	Blue	Standard
Omit	630		C Shaft Ø57.15, parallel key 12.7 × 12.7 × 57.15				
	800		T Cone shaft Ø60, parallel key 16 × 10 × 32	M5 M33 × 2, M14 × 1.5 S1 1-5/16-12UN(18), 7/16-20UNF(12)		Black	
	1000		T1 Cone shaft Ø60, parallel key 14.308 × 14.308 × 50.8				

Note: When the table is used, please fill the code of left rows in dash area and give us, which the code information consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us.



BME2 SERIES HYDRAULIC MOTOR

BME2 series motor adapt the advanced Geroler gear set designed with high speed distribution flow and high pressure, and have good stability in low speed , and can keep high volume efficiency. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

Characteristic features:

* Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, provide smooth and reliable operation and high efficiency.

* The output shaft adapts in needle roller bearings that permit high axial and radial forces. The case can offers capacities of high pressure and high torque in the wide of applications.

* Advanced design in high speed distribution flow, which can automatically compensate in operating with high volume efficiency and long life , provide smooth and reliable operation.

* Lowest leakage rate, most accurate timing methods. Commutator rotates 6x faster than shaft speed. It make the distribution in a high precision reduces life-cycle cost, maintain high volume efficiencies and can run very smoothly at low speed, gear box not required.

Main Specification

Type		BME2 65	BME2 80	BME2 100	BME2 125	BME2 160	BME2 200	BME2 230	BME2 250	BME2 295	BME2 315	BME2 375
Geometric displacement (cm ³ /rev.)		66.8	81.3	101.6	127	157.2	193.6	226	257	287.8	314.5	370
Max. speed (rpm)	cont.	667	543	439	350	283	229	247	216	196	178	152
	int.	842	689	553	441	355	289	328	287	254	235	199
Max. torque (N•m)	cont.	126	157	191	245	307	382	378	381	393	448	439
	int.	176	215	268	335	422	520	528	543	547	587	613
Max. output (kW)	cont.	8.3	8.8	7.9	8.9	8.9	9	9.9	9.3	8.7	8	7.6
	int.	13.9	14.4	13.5	14.1	15.6	15.7	17.9	16.5	15.6	14.3	14
Max. pressure drop (MPa)	cont.	14	14	14	14	14	14	12	11	10	10	9
	int.	19	19	19	19	19	19	165	15.5	14.5	13.5	12.5
	peak	20	20	20	20	20	20	18	18	17	16	16
Max. flow (L/min)	cont.	45	45	45	45	45	45	57	57	57	57	57
	int.	57	57	57	57	57	57	75	75	75	75	75

* 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

BME2 65 [66.8 cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

	3.5	7	10.5	14	19	
Flow (L/min)	2	26 22	54 16	83 4		
	5	27 69	56 62	87 53	118 42	
	10	29 145	60 141	91 132	123 122	171 95
	15	30 221	62 216	94 207	126 196	176 149
	20	28 295	58 290	91 279	122 261	174 232
	25	24 368	55 365	90 352	121 341	172 312
	34	22 501	54 493	89 478	119 457	171 423
	Max.cont.	20 667	52 660	85 642	115 621	168 587
	Max.int.	15 842	46 835	80 814	112 789	163 735

BME2 80 [81.3 cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

	3.5	7	10.5	14	19	
Flow (L/min)	2	33 18	70 14	106 4		
	5	35 55	72 51	111 44	150 25	
	10	36 121	75 118	114 113	155 107	215 88
	15	37 181	77 178	116 171	157 162	215 148
	20	35 242	74 238	112 231	151 223	206 205
	25	35 303	71 298	108 289	148 275	202 261
	34	31 411	69 407	105 396	145 382	198 373
	Max.cont.	23 543	62 537	100 521	139 513	12 501
	Max.int.	18 689	55 681	98 665	134 649	186 618

BME2 100 [101.6 cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

	3.5	7	10.5	14	19	
Flow (L/min)	2	40 15	82 11	126 4		
	5	41 44	83 36	150 28	206 12	
	10	42 97	91 95	138 94	177 81	230 54
	15	42 147	91 144	138 137	185 124	257 93
	20	38 195	88 192	136 182	180 169	244 138
	25	39 244	89 241	142 230	191 221	268 194
	34	31 331	79 328	131 323	179 308	250 273
	Max.cont.	21 439	70 436	119 433	168 419	241 383
	Max.int.	10 553	60 545	109 534	158 527	232 491

BME2 125 [127 cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

	3.5	7	10.5	14	19	
Flow (L/min)	2	52 12	150 9	158 3		
	5	55 35	112 31	170 22	221 15	290 10
	10	57 78	117 75	180 69	242 63	335 46
	15	56 116	118 113	180 109	245 99	331 76
	20	55 155	117 153	178 147	242 136	331 110
	25	52 593	111 188	177 182	238 172	325 151
	34	43 264	105 262	169 254	231 244	326 220
	Max.cont.	38 350	95 348	159 346	219 331	314 301
	Max.int.	21 441	176 439	141 431	280 417	302 384

Torque (N·m) 158
Speed (rpm) 527

□ cont.
■ int.



Performance Data

BME2 160 [157.2 cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

	3.5	7	10.5	14	19
2	64 10	132 8	199 2		
5	68 28	138 26	208 19	281 10	
10	71 62	147 60	221 56	303 53	419 38
15	72 93	148 91	225 87	307 79	426 61
20	71 126	148 123	223 118	305 110	422 95
25	62 157	140 155	218 152	296 141	415 129
34	56 214	134 211	211 206	287 197	408 181
Max.cont. 45	47 283	127 281	205 275	281 266	391 241
Max.int. 57	36 355	97 352	182 346	260 336	370 311

BME2 200 [193.6 cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

	3.5	7	10.5	14	19
2	80 9	163 7	245 3		
5	88 23	178 21	266 18	352 12	
10	89 49	181 48	275 43	378 39	517 27
15	91 76	188 73	280 68	382 63	520 44
20	89 101	182 98	275 95	374 86	517 69
25	78 127	170 125	271 121	376 113	518 101
34	64 173	158 171	268 165	363 156	502 143
Max.cont. 45	51 229	157 227	252 221	351 212	494 196
Max.int. 57	36 289	138 286	231 279	330 271	469 256

BME2 230 [226 cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

	3.5	7	10.5	12	16.5
2	97 7	191 4	280 2		
5	101 18	199 14	301 8	348 4	
10	103 43	214 42	325 40	378 36	527 29
15	104 65	215 63	327 59	375 52	528 47
20	101 86	210 84	321 81	371 75	524 66
25	95 108	201 106	316 102	364 94	511 87
34	82 147	188 145	308 141	358 135	501 128
45	55 197	158 195	276 191	329 186	485 176
Max.cont. 57	19 247	130 244	256 240	301 230	451 221
Max.int. 75		65 328	183 323	250 311	401 303

BME2 250 [257 cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

	3.5	7	10.5	11	15.5
2	112 6	207 3	309 1		
5	115 18	218 14	320 8	348 4	
10	113 39	235 38	358 35	379 31	543 23
15	113 58	234 56	357 53	381 45	542 3
20	111 77	233 75	356 72	376 65	541 48
25	109 97	228 95	354 89	371 81	532 69
34	91 131	213 128	346 123	364 116	521 103
45	89 174	211 172	345 165	361 157	518 135
Max.cont. 57	73 216	208 213	339 205	342 197	487 184
Max.int. 75		74 287	198 284	301 278	441 267

Torque (N·m) 250
Speed (rpm) 311

□ cont.
■ int.



Performance Data

BME2 295[287.8 cm³/rev.]

Pressure (MPa)

Max.int.

3.5	7	11	14.5
-----	---	----	------

Flow (L/min)	5	121 15	243 14	368 10	509 5
	10	125 33	253 31	381 27	529 20
	15	129 51	261 50	393 47	547 41
	20	127 68	259 67	390 63	545 55
	25	126 86	255 84	386 80	539 69
	34	123 116	248 114	380 110	531 98
	45	115 154	234 153	368 148	522 136
	Max.cont.	108 196	227 194	359 187	514 176
	Max.int.	75	211 254	349 246	506 231

BME2 315[314.5 cm³/rev.]

Pressure (MPa)

Max.int.

3.5	7	11	13.5
-----	---	----	------

Flow (L/min)	5	136 11	281 8	427 3	
	10	139 30	287 29	438 26	574 20
	15	141 47	295 46	448 43	587 40
	20	138 62	287 61	442 58	587 53
	25	131 78	280 75	431 71	567 66
	34	117 106	269 104	423 98	557 91
	45	114 141	253 138	397 132	535 125
	Max.cont.	86 178	219 173	383 168	505 162
	Max.int.	75	108 235	287 231	416 219

BME2 375[370 cm³/rev.]

Pressure (MPa)

Max.int.

3.5	7	9	12.5
-----	---	---	------

Flow (L/min)	5	151 10	315 7	412 3	
	10	155 25	324 24	427 21	606 18
	15	162 40	331 39	439 37	613 32
	20	158 53	326 52	434 49	602 45
	25	151 67	316 65	424 62	589 58
	34	141 91	309 89	417 85	580 80
	45	138 121	300 119	408 115	572 107
	Max.cont.	118 152	281 150	393 144	550 136
	Max.int.	75	258 199	369 191	518 183

Torque (N·m) 506
Speed (rpm) 231

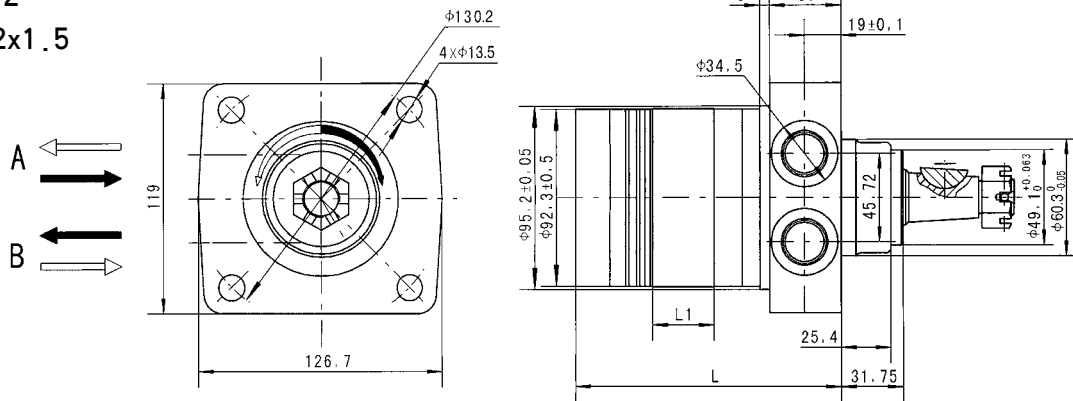
□ cont.
■ int.



BME2 DIMENSIONS AND MOUNTING DATA

Wheel Mount

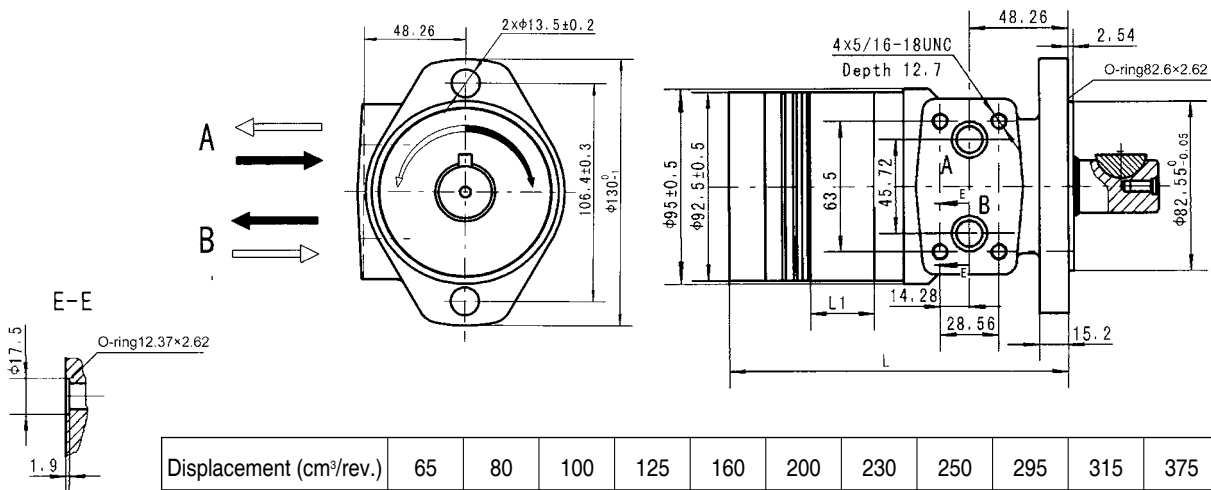
Code: Port A、B
 WS 7/8-14 O-ring
 WD G1/2
 WM M22x1.5



Displacement (cm ³ /rev.)	65	80	100	125	160	200	230	250	295	315	375
L1(mm)	13	16	20	25	30.5	38.1	44	50	56	62	74
L(mm)	119	122	126	131	136.5	144	150	156	162	168	180
Weight(kg)	7.4	7.5	7.8	8	8.3	8.7	9.2	9.6	10	10.3	10.8

Code:HM Manifold

A、B Port Ø12.7

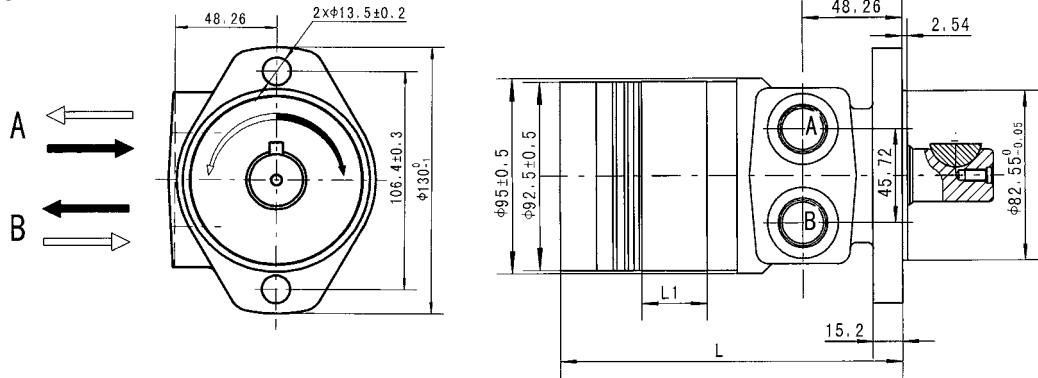


Displacement (cm ³ /rev.)	65	80	100	125	160	200	230	250	295	315	375
L1(mm)	13	16	20	25	30.5	38.1	44	50	56	62	74
L(mm)	149	152	156	161	166.5	174	180	186	192	198	210
Weight(kg)	6.4	6.5	6.8	7	7.3	7.7	8.2	8.6	9	9.3	9.8



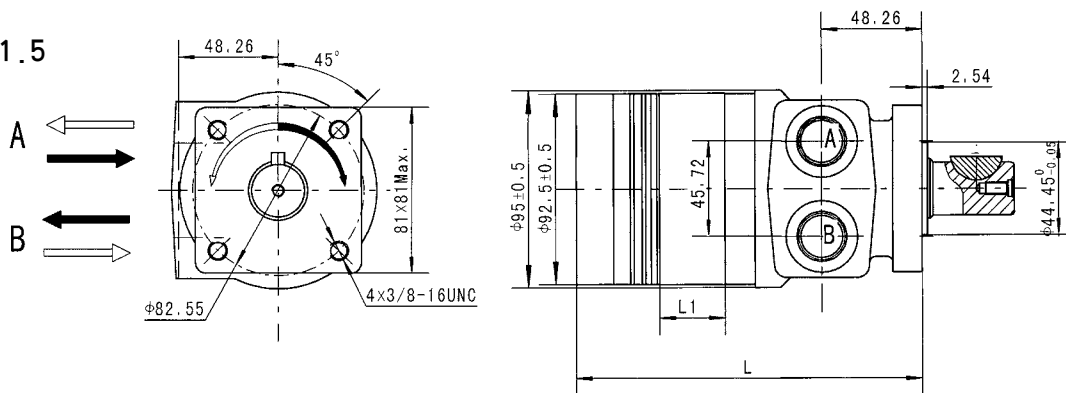
BME2 DIMENSIONS AND MOUNTING DATA

Code: Port A、B
 HS 7/8-14UNF
 HP 1/2-14NPTF
 HD G1/2
 HG M22x1.5



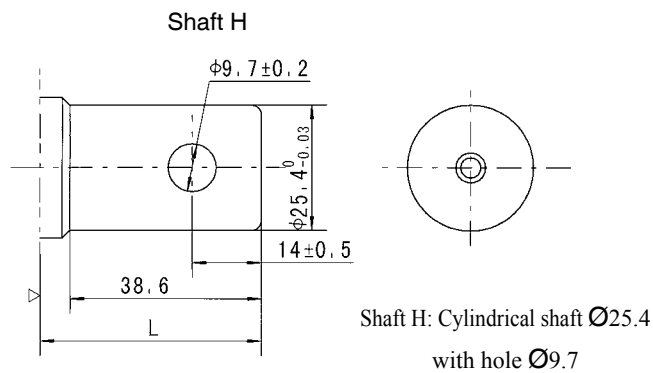
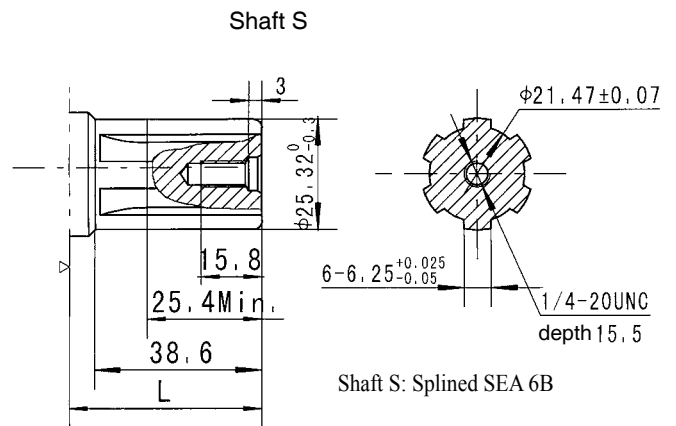
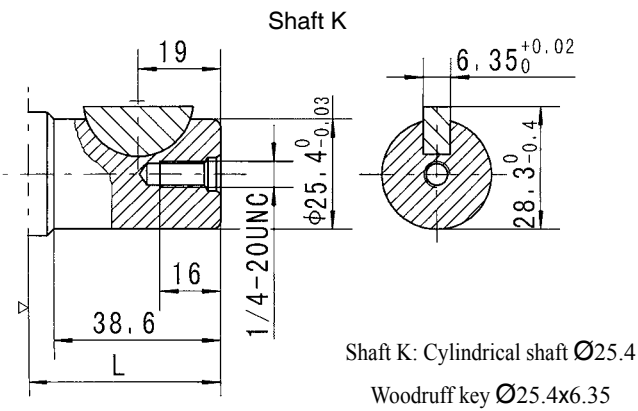
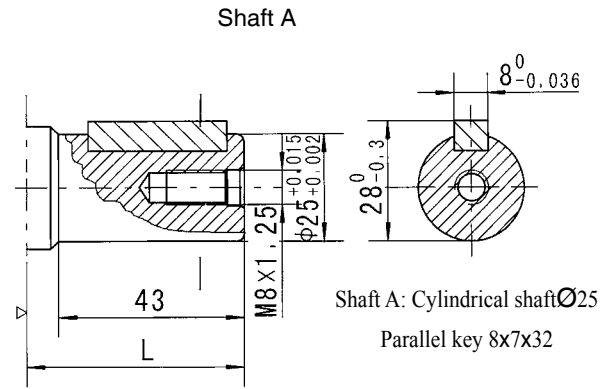
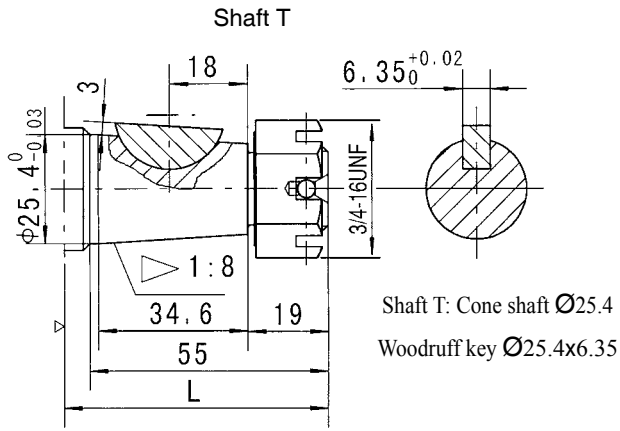
Displacement (cm ³ /rev.)	65	80	100	125	160	200	230	250	295	315	375
L1(mm)	13	16	20	25	30.5	38.1	44	50	56	62	74
L(mm)	149	152	156	161	166.5	174	180	186	192	198	210
Weight(kg)	6.4	6.5	6.8	7	7.3	7.7	8.2	8.6	9	9.3	9.8

Code: Port A、B
 H4S 7/8-14UNF
 H4P 1/2-14NPTF
 H4D G1/2
 H4G M22x1.5



Displacement (cm ³ /rev.)	65	80	100	125	160	200	230	250	295	315	375
L1(mm)	13	16	20	25	30.5	38.1	44	50	56	62	74
L(mm)	149	152	156	161	166.5	174	180	186	192	198	210
Weight(kg)	6.4	6.5	6.8	7	7.3	7.7	8.2	8.6	9	9.3	9.8

BME2 SHAFT EXTENSIONS DIMENSIONS DATA



Dimension L

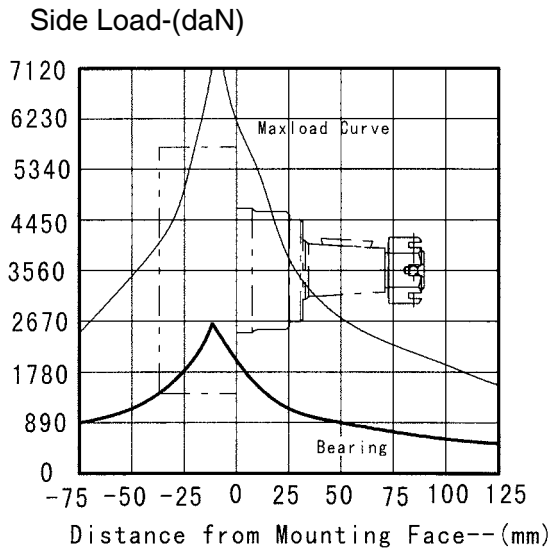
Shaft Mounting	T	A	K	S	H
WS	90.2	78.2	73.9	73.9	73.9
HS/HP					
H4S/H4P	61	49	44.7	44.7	44.7
HM					

▷ Motor Mounting Surface

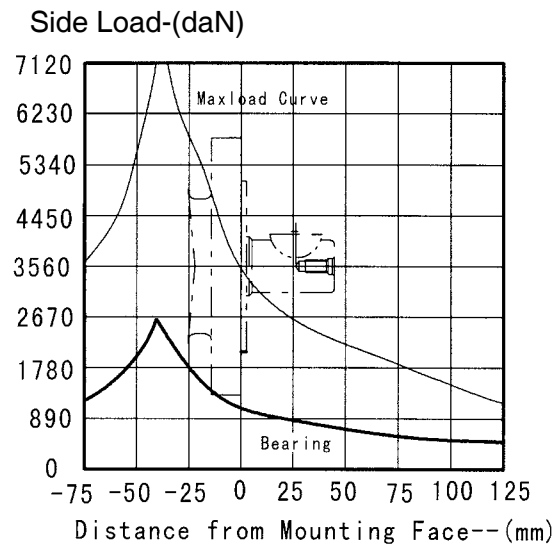


Permissible Shaft Loads

BME2 for Wheel Mounting



BME2 for Other Mounting



The bearing curve represents allowable bearing loads for an L_{10} bearing life at 3×10^6 revolutions, The maximum load curve is defined by bearing static load capacity, This curve should not be exceeded at any time including shock loads.



Order Information



Pos.1	2	3	4	5	6	7
Code	Disp.	Flange, Pilot, Ports	Output Shaft	Rotation Direction	Paint	Unusually Function
	WS	4-Ø13.5 Wheel - flange, Pilot Ø60.3 × 7 Port 7/8-14 O-ring	T Cone-Shaft Ø25.4, Woodruff key Ø25.4 × 6.35 A Cylindrical Shaft Ø25, Parallel key 8 × 7 × 32 K Cylindrical Shaft Ø25.4, Woodruff key Ø25.4 × 6.35 S Shaft Ø25.4, Splined key SAE 6B H Cylindrical Shaft Ø25.4, Pin Hole Ø9.7	Omit Standard R Opposite	00 Omit Blue Black Silver grey	
	WD	4-Ø13.5 Wheel - flange, Pilot Ø60.3 × 7 Port G1/2				
	WM	4-Ø13.5 Wheel - flange, Pilot Ø60.3 × 7 Port M22×1.5				
	65	2-Ø13.5 Rhomb-flange, Pilot Ø82.5 × 2.54				
	80	Port 1/2" Manifold mount 4 × 5/8-18				
	100	2-Ø13.5 Rhomb-flange, Pilot Ø82.5 × 2.54				
	125	Port 7/8-14 O-ring				
	160	2-Ø13.5 Rhomb-flange, Pilot Ø82.5 × 2.54				
	200	Port 1/2-14 NPFT Pipe				
	230	2-Ø13.5 Rhomb-flange, Pilot Ø82.5 × 2.54				
	250	Port G1/2				
	295	2-Ø13.5 Rhomb-flange, Pilot Ø82.5 × 2.54				
	315	Port M22x1.5				
	375	4-3/8-16 Square- flange, Pilot Ø44.4 × 2.54 Port 7/8-14 O-ring				
	H4P	4-3/8-16 Square- flange, Pilot Ø44.4 × 2.54				
	H4D	Port 1/2-14 NPFT Pipe				
	H4G	4-3/8-16 Square- flange, Pilot Ø44.4 × 2.54 Port G1/2				
	H4G	4-3/8-16 Square- flange, Pilot Ø44.4 × 2.54 Port M22x1.5				

Note: When the table is used, please fill the code of left rows in the table and give us, which the code information consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us.



BMJ SERIES HYDRAULIC MOTOR

BMJ series motor adapt the advanced Geroler gear set designed with high speed distribution flow and high pressure, and have good stability in low speed , and can keep high volume efficiency. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

Characteristic features:

* Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, provide smooth and reliable operation and high efficiency.

* The output shaft adapts in needle roller bearings that permit high axial and radial forces. The case can offers capacities of high pressure and high torque in the wide of applications.

* Advanced design in high speed distribution flow, which can automatically compensate in operating with high volume efficiency and long life , provide smooth and reliable operation.

* Lowest leakage rate, most accurate timing methods. Commutator rotates 6x faster than shaft speed. It make the distribution in a high precision reduces life-cycle cost, maintain high volume efficiencies and can run very smoothly at low speed, gear box not required.

Main Specification

Type		BMJ 65	BMJ 80	BMJ 100	BMJ 125	BMJ 160	BMJ 200	BMJ 230	BMJ 250	BMJ 295	BMJ 315	BMJ 375
Geometric displacement (cm ³ /rev.)		66.8	81.3	101.6	127	157.2	193.6	226	257	287.8	314.5	370
Max. speed (rpm)	cont.	667	543	439	350	283	229	247	216	196	178	152
	int.	842	689	553	441	355	289	328	287	254	235	199
Max. torque (N•m)	cont.	126	157	191	245	307	382	378	381	393	448	439
	int.	176	215	268	335	422	520	528	543	547	587	613
Max. output (kW)	cont.	8.3	8.8	7.9	8.9	8.9	9	9.9	9.3	8.7	8	7.6
	int.	13.9	14.4	13.5	14.1	15.6	15.7	17.9	16.5	15.6	14.3	14
Max. pressure (MPa)	cont.	14	14	14	14	14	14	12	11	10	10	9
	int.	19	19	19	19	19	19	165	15.5	14.5	13.5	12.5
	peak	20	20	20	20	20	20	18	18	17	16	16
Max. flow (L/min)	cont.	45	45	45	45	45	45	57	57	57	57	57
	int.	57	57	57	57	57	57	75	75	75	75	75

* 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.



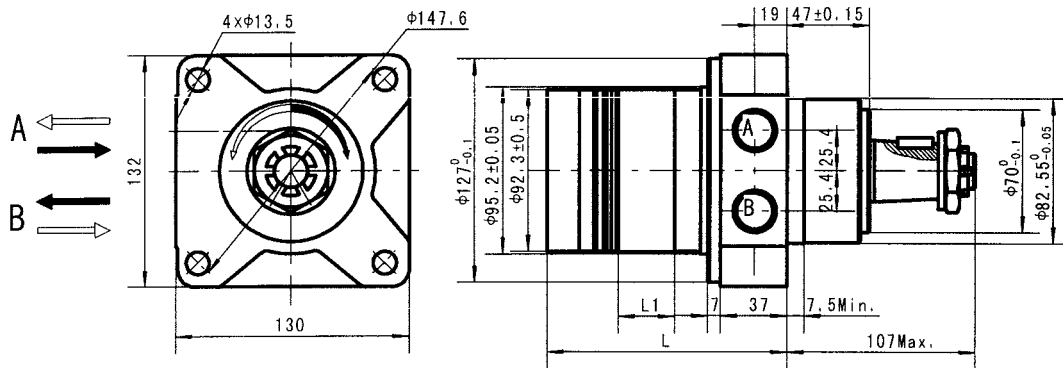
BMJ DIMENSIONS MOUNTING DATA

Wheel Mount

Code : WS Ports A、B 7/8-14 O-Ring

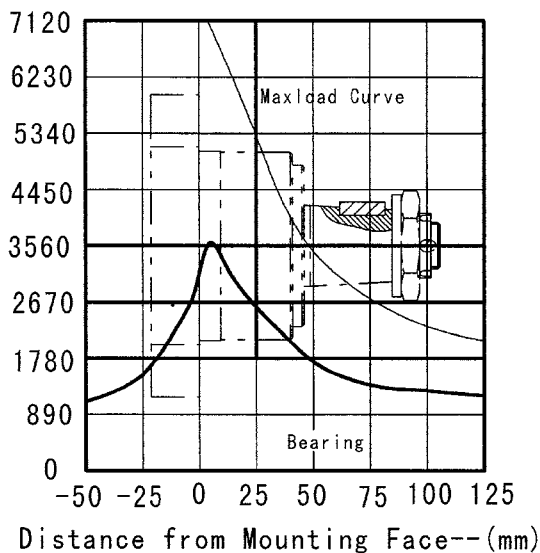
Code : WD Ports A、B G1/2

Code : WM Ports A、B M22x1.5



Displacement (cm ³ /rev.)	65	80	100	125	160	200	230	250	295	315	375
L1(mm)	13	16	20	25	30.5	38.1	44	50	56	62	74
L(mm)	115	118	122	127	132.5	140	146	152	158	164	176
Weight(kg)	9	9.1	10.4	10.6	10.9	11.3	11.8	12.2	12.6	12.9	13.4

Side Load-(daN)

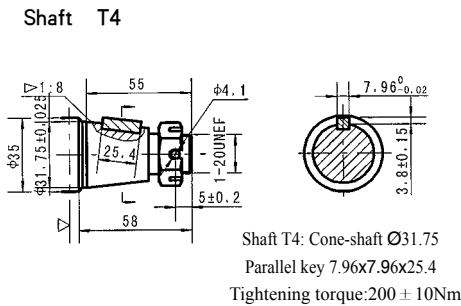
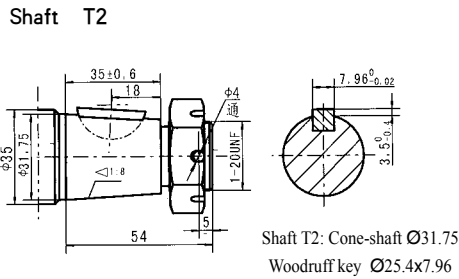
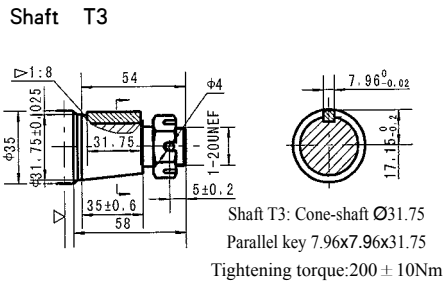
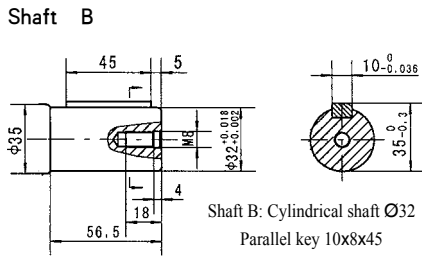
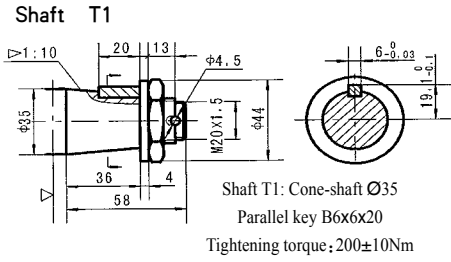


The bearing curve represents allowable bearing loads for an L₁₀ bearing life at 3×10⁶ revolutions.

The maximum load curve is defined by bearing static load capacity, This curve should not be exceeded at any time including shock loads.



BMJ Shaft Extensions For Dimensions Data



▷ Motor Mounting Surface

Order Information



Pos.1	2	3	4	5	6	7
Code	Disp.	Flange , Pilot , Ports	Output Shaft	Rotation direction	Paint	Unusually function
	65 80 100 125 160 200 230 250 295 315 375	WS 4-Ø13.5 Wheel-flange, Pilot Ø82.55 × 7, Port 7/8-14 O-ring WD 4-Ø13.5 Wheel-flange, Pilot Ø82.55 × 7, Port G1/2 WM 4-Ø13.5 Wheel-flange, Pilot Ø82.55 × 7, Port M22x1.5	T1 Cone-Shaft Ø35, Parallel key B6 × 6 × 20 T2 Cone-Shaft Ø31.75, Woodruff key ø25.4 × 7.96 T3 Cone-Shaft Ø31.75, Parallel key 7.96 × 7.96 × 31.75 T4 Cone-Shaft Ø31.75, Parallel key 7.96 × 7.96 × 25.4 B Cylindrical Shaft Ø32, Parallel key 10 × 8 × 45	Omit R Standard Opposite	00 Omit B S No paint Blue Black Silver Grey	Omit Standard

Note: When the table is used, please fill the code of left rows in the table and give us, which the code information consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us.



BMER SERIES HYDRAULIC MOTOR

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Characteristic features:

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- * The output shaft adapts in needle roller bearings that permit high axial and radial forces. The case can offers capacities of high pressure and high torque in the wide of applications.
- * Advanced design in high speed distribution flow, which can automatically compensate in operating with high volume efficiency and long life , provide smooth and reliable operation.
- * Lowest leakage rate, most accurate timing methods. Commutator rotates 6x faster than shaft speed. It make the distribution in a high precision reduces life-cycle cost, maintain high volume efficiencies and can run very smoothly at low speed, gear box not required.

Main Specifaion

Type		BMER 125	BMER 160	BMER 200	BMER 230	BMER 250	BMER 300	BMER 350	BMER 375	BMER 475	BMER 540	BMER 750
Geometric displacement (cm ³ /rev.)		118	156	196	228	257	296	345	371	462	540	745
Max. speed (rpm)	cont.	360	375	330	290	290	250	220	200	160	140	100
	int.	490	470	425	365	350	315	270	240	195	170	120
Max. torque (N•m)	cont.	325	450	530	625	700	810	905	990	1085	980	1050
	int.	380	525	600	710	790	930	1035	1140	1180	1240	1180
	peak	450	590	750	870	980	1120	1285	1360	1260	1380	1370
Max. output (kW)	cont.	12.0	15.0	15.5	16.0	17.5	18.0	17.5	16.5	14.5	11.5	8.0
	int.	14.0	17.5	18.0	19.0	20.0	21.0	20.0	19.0	16.5	15.0	10.0
Max. pressure drop (MPa)	cont.	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	17.5	14	10.5
	int.	24	24	24	24	24	24	24	24	19	17.5	12
	peak	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	20.5	20.5	14
Max. flow (L/min)	cont.	45	60	70	70	75	80	80	75	75	75	75
	int.	60	75	85	85	90	95	95	90	90	90	90

*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

BMER125 [118cm³/rev.]

Pressure (MPa)

	1.75	3.5	7	10.5	14	17.5	20.5	24
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Flow (L/min)	Max.cont.								Max.int.							
	2	4	8	15	25	34	45	53	2	4	8	15	25	34	45	53
2	20	50	96	137					14	13	11	7				
4	24	53	110	166	221				28	26	24	19	13			
8		55	113	174	225	266	294	336		60	54	50	45	39	35	26
15		53	114	180	234	275	326	348		115	110	100	96	90	84	76
25		48	110	164	226	272	323	352		194	185	173	168	160	155	149
34			108	166	220	278	315	373			276	260	244	232	225	217
45			98	160	215	271	308	369			362	350	342	325	322	303
53			90	152	208	265	304				423	418	404	399	371	
60			82	141	205	260	300				488	472	455	442	421	

BMER160 [156cm³/rev.]

Pressure (MPa)

	1.75	3.5	7	10.5	14	17.5	20.5	24
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Flow (L/min)	Max.cont.								Max.int.							
	2	4	8	15	25	34	45	53	2	4	8	15	25	34	45	53
2	35	74	146	218	298				8	4	3	3	2			
4	29	78	157	235	316	370	424		22	19	18	16	14	13	8	
8	35	78	158	236	312	373	450	526	47	44	42	40	37	34	32	27
15	37	74	155	234	310	368	440	517	93	90	86	84	82	79	75	69
25		68	152	227	308	364	436	499		155	151	147	142	137	131	124
34		68	152	227	308	364	436	499		214	213	210	204	198	191	184
45		64	143	218	296	360	425	481		282	280	275	268	263	256	245
53			135	216	293	357	421	476			330	327	322	315	306	296
60			122	207	284	350	416	467			379	376	368	362	356	345
68			109	196	273	345	416	467			423	419	414	406	395	385
75			104	188	270	337	403	454			472	466	460	450	437	427

BMER200 [196cm³/rev.]

Pressure (MPa)

	1.75	3.5	7	10.5	14	17.5	20.5	24
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Flow (L/min)	Max.cont.								Max.int.							
	2	4	8	15	25	34	45	53	2	4	8	15	25	34	45	53
2	39	88	132	286	370				8	4	4	3	2			
4	42	85	188	270	361	427	506		16	14	13	11	10	9	6	
8	43	90	192	291	367	450	529	600	35	32	29	28	27	25	23	19
15	38	92	196	298	381	462	530	602	74	71	68	64	60	58	55	50
25		82	188	283	377	456	528	605		124	121	117	113	108	103	92
34		79	183	270	362	447	515	591		170	169	167	160	154	146	135
45			163	259	352	441	510	593			223	218	212	208	199	189
53			149	256	350	440	501	582			260	258	254	248	241	230
60			132	248	336	432	497	575			299	292	284	276	272	263
68			120	230	330	412	486	570			336	332	327	319	310	301
75			108	208	311	403	480				375	372	365	358	350	
85				184	280	380	462				425	420	411	390		

BMER230 [228cm³/rev.]

Pressure (MPa)

	1.75	3.5	7	10.5	14	17.5	20.5	24
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Flow (L/min)	Max.cont.								Max.int.							
	2	4	8	15	25	34	45	53	2	4	8	15	25	34	45	53
2	44	90	182	291	374				6	4	3	2	1			
4	48	100	216	310	405	484	549		15	13	11	11	9	7	3	
8	50	104	212	320	421	518	603	700	31	29	27	25	23	20	16	10
15	44	106	207	318	426	529	623	712	63	61	58	55	52	47	41	34
25		101	209	324	428	532	620	705		103	100	96	92	87	81	71
34		88	205	316	421	522	623	702		145	143	139	133	126	120	109
45			186	294	422	507	595	688			192	187	182	176	170	160
53			175	290	393	496	584	678			226	221	215	208	203	194
60			152	270	390	485	569	661			256	253	248	242	235	222
68			140	265	351	482	563	642			292	288	283	278	273	256
75			124	235	344	448	552				324	321	314	308	300	
85				207	335	442	546				366	360	351	338		

Torque (N•m) 380
Speed (rpm) 411

□ cont.
■ int.



镇江大力液压马达股份有限公司

ZHENJIANG DALI HYDRAULIC MOTOR CO., LTD.

BMER250 [257cm³/rev.]

Pressure (MPa)

	1.75	3.5	7	10.5	14	17.5	20.5	24
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Flow (L/min)	Max.cont.								Max.int.				
	2	4	8	15	25	34	45	53	60	68	75	85	90
2	48 5	111 2											
4	54 12	113 11	237 10	362 9	471 8	570 6	642 3						
8	54 27	115 26	244 24	366 22	482 20	587 18	688 14						
15	50 57	113 56	256 54	367 51	485 48	591 45	692 43	794 37					
25	44 95	114 93	241 90	360 86	488 82	593 77	699 72	782 63					
34		95 129	226 125	348 121	481 116	590 111	686 106	774 96					
45		77 174	215 173	346 170	468 166	572 161	674 155	779 143					
53		66 203	200 202	325 200	448 196	564 190	657 184	756 175					
60			180 232	296 229	438 225	550 220	642 215	741 202					
68			162 262	294 261	415 257	548 250	637 241	730 228					
75			137 290	274 289	388 388	520 280	618 273	726 260					
85			130 328	261 326	370 322	509 316	604 307						
90			85 348	224 347	358 344	490 336							

BMER300 [296cm³/rev.]

Pressure (MPa)

	1.75	3.5	7	10.5	14	17.5	20.5	24
--	------	-----	---	------	----	------	------	----

Flow (L/min)	Max.cont.								Max.int.				
	2	4	8	15	25	34	45	53	60	68	75	85	95
2	50 3	93 1											
4	62 11	141 10	294 9	429 8	502 7	618 4							
8	63 22	147 21	298 20	432 19	565 16	667 13	761 9	819 5					
15	66 48	144 47	305 45	427 43	568 39	671 33	810 28	894 20					
25	59 82	138 81	289 80	420 76	552 71	676 64	791 56	932 44					
34		48 113	130 112	297 110	393 107	562 102	689 96	805 86	926 73				
45			96 150	268 149	385 148	527 143	636 135	753 124	880 112				
53			76 177	242 176	383 175	524 173	631 165	758 152	900 138				
60			64 200	225 199	362 198	506 193	627 186	753 174	892 162				
68				200 225	333 224	470 220	630 212	750 201	882 194				
75					178 251	322 250	464 464	610 240	741 232	870 215			
85					140 285	316 284	455 278	570 270	728 257				
95					106 316	260 314	431 311	552 307	700 292				

BMER350 [345cm³/rev.]

Pressure (MPa)

	1.75	3.5	7	10.5	14	17.5	20.5	24
--	------	-----	---	------	----	------	------	----

Flow (L/min)	Max.cont.								Max.int.				
	2	4	8	15	25	34	45	53	60	68	75	85	95
2	63 4	133 4											
4	64 10	135 9	290 8	440 7									
8	68 21	146 20	310 20	458 19	589 18	735 16	847 12						
15	72 42	150 41	314 40	468 39	627 37	769 35	880 32	984 26					
25	63 70	148 69	313 68	470 66	628 63	765 60	892 55	1018 46					
34	52 97	133 96	304 95	455 93	619 89	760 85	905 78	1034 68					
45		100 129	261 128	442 127	583 125	736 118	887 112	1028 101					
53		85 152	247 150	418 148	566 145	715 139	880 132	1024 118					
60		65 171	233 170	410 169	550 167	712 162	842 155	996 143					
68			218 195	387 194	543 190	696 185	825 175	976 162					
75			206 215	373 214	515 515	680 206	822 197	966 183					
85			176 243	355 242	510 239	679 234	808 227						
95				353 272	509 269	645 265							

BMER375 [371cm³/rev.]

Pressure (MPa)

	1.75	3.5	7	10.5	14	17.5	20.5	24
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Flow (L/min)	Max.cont.								Max.int.				
	2	4	8	15	25	34	45	53	60	68	75	85	90
2	75 3												
4	83 8	160 8	330 7	488 6	636 5	761 3							
8	81 18	170 17	356 17	527 16	679 14	822 12	948 9	1060 5					
15	76 39	162 38	356 37	533 35	683 32	845 29	978 25	1102 18					
25	68 65	156 64	350 62	524 59	680 55	857 48	994 44	1138 35					
34	58 90	148 89	339 87	506 83	690 77	841 71	993 63	1145 53					
45		121 120	302 119	478 117	650 113	813 108	972 100	1134 90					
53		95 141	282 140	466 138	628 134	785 128	934 120	1103 105					
60		75 161	264 161	428 160	592 158	766 155	925 151	1070 141					
68			232 182	422 180	585 176	756 169	901 161	1066 148					
75			207 201	380 200	556 556	738 190	865 181	1012 165					
85			175 228	370 226	526 221	700 216	832 206						
90			148 242	316 240	500 237	654 226							

Torque (N•m) 645
Speed (rpm) 265

cont.
int.



BMER475 [462cm³/rev.]
Pressure (MPa)

Flow (L/min)	Pressure (MPa)						
	1.75	3.5	7	10.5	14	17.5 (Max.cont.)	20.5 (Peak)
2	93 2	186 1					
4	98 7	202 6	405 5	608 5	805 4		
8	98 15	206 14	430 13	652 13	844 12	1005 10	1180 8
15	94 31	202 30	441 28	654 28	875 26	1056 23	1238 20
25	94 52	202 51	441 48	654 45	875 43	1056 39	1238 35
34	75 72	180 71	420 68	660 65	850 61	1085 55	1266 44
45		144 96	380 95	627 93	835 90	1062 84	1261 73
53		116 113	346 112	573 111	795 107	1008 102	1212 90
60		82 128	318 128	539 127	790 124	975 119	1186 110
68		58 146	272 145	520 144	740 141	955 136	1156 125
75 (Max.cont.)			230 161	480 160	702 702	920 153	1116 140
85			200 182	454 180	662 177	876 168	
90 (Max.int.)			150 194	378 193	615 190	840 182	

BMER540 [540cm³/rev.]
Pressure (MPa)

Flow (L/min)	Pressure (MPa)						
	1.75	3.5	7	10.5	14 (Max.cont.)	17.5 (Max.int.)	
2	105 2	198 2					
4	125 6	231 5	470 5	688 4	932 4	1136 3	
8	134 13	238 13	496 12	749 11	966 11	1175 8	
15	122 27	230 26	505 26	750 25	981 24	1218 21	
25	100 44	225 43	500 42	774 41	986 39	1220 35	
34	80 62	212 61	481 60	748 58	977 54	1243 49	
45		173 82	437 82	714 81	936 79	1190 75	
53		142 97	416 97	678 96	938 94	1170 89	
60		106 110	380 110	664 109	896 108	1158 106	
68		85 125	357 124	616 124	870 123	1108 120	
75 (Max.cont.)			318 138	600 137	826 826	1100 132	
85			292 154	538 153	780 152		
90 (Max.int.)			214 169	486 168	755 168		

Torque (N·m) 486
Speed (rpm) 168

BMER750 [745cm³/rev.]
Pressure (MPa)

Flow (L/min)	Pressure (MPa)					
	1.75	3.5	7	10.5	12 (Max.cont.)	14 (Max.int.)
2	145 2	280 1				
4	160 4	321 4	654 4	960 3	1115 3	1312 2
8	162 9	335 9	688 9	1026 8	1159 8	1347 7
15	156 19	330 19	694 18	1047 18	1184 17	1376 16
25	142 32	320 31	688 30	1046 30	1179 29	1373 27
34	110 44	288 44	658 42	1021 41	1169 40	1366 37
45	71 60	242 59	620 59	982 58	1143 58	1345 55
53		202 70	568 69	941 68	1105 67	1308 66
60		140 79	527 78	898 77	1086 76	1286 74
68		100 90	486 90	852 89	1034 88	1251 87
75 (Max.cont.)		65 99	425 99	812 98	980 97	1178 96
83			395 110	745 109	906 108	
90 (Max.int.)			298 120	660 119	800 117	

□ cont.
■ int.



BMER-1 DIMENSIONS MOUNTING DATA

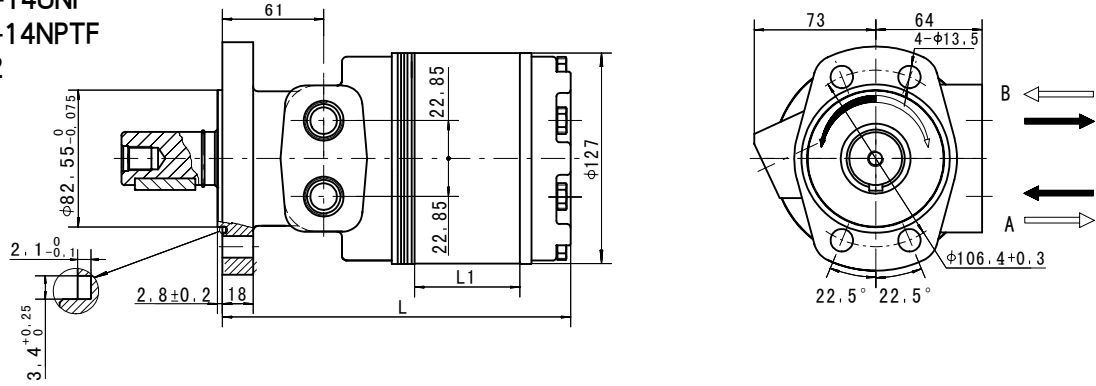
Magneto Mount 4-Hole

Code: Port A、B

MS 7/8-14UNF

MP 1/2-14NPTF

MD G1/2



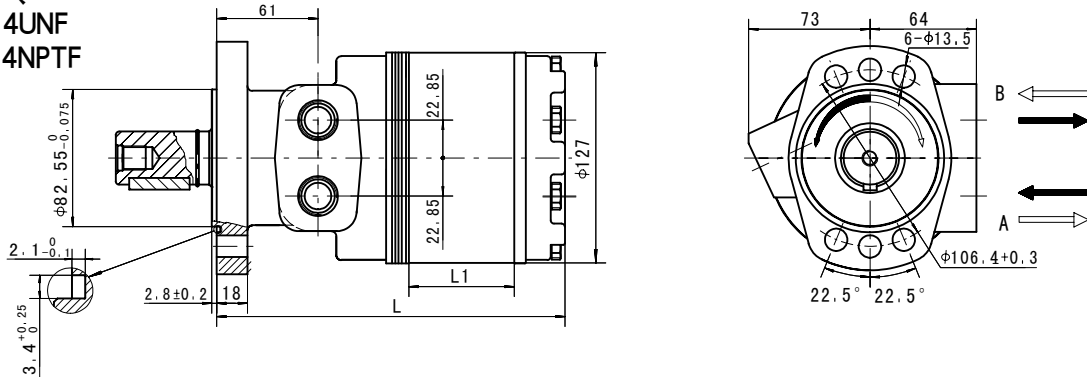
Magneto Mount 6-Hole

Code: Port A、B

FS 7/8-14UNF

FP 1/2-14NPTF

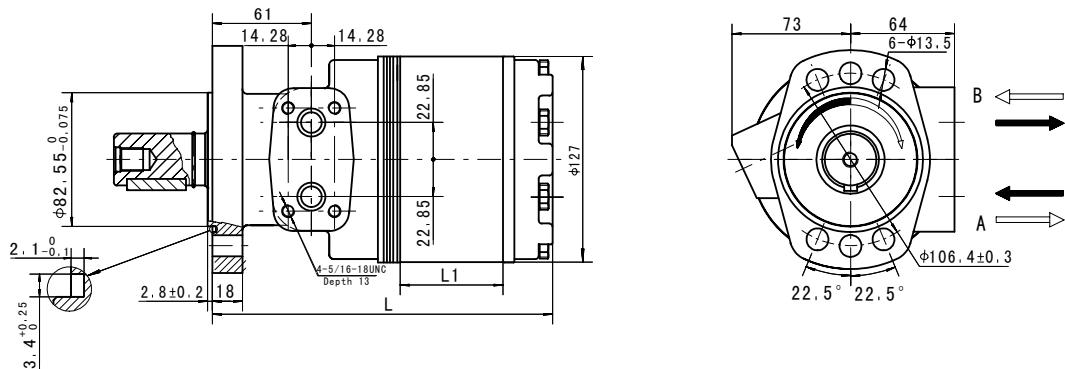
FD G1/2



Magneto Mount 6-Hole

Code: Manifold Port A、B

FH Ø12.7



Displacement (cm ³ /rev.)	125	160	200	230	250	300	350	375	475	540	750
L1(mm)	10.2	13.5	17	19.5	22	25.4	29.5	31.8	39.4	47.3	63.5
L(mm)	157	160	163.5	166	168.5	172	176	178.5	186	194	210
Weight(kg)	10.6	10.9	11.2	11.3	11.4	11.6	12	12.5	13	13.5	15



BMER-1 DIMENSIONS MOUNTING DATA

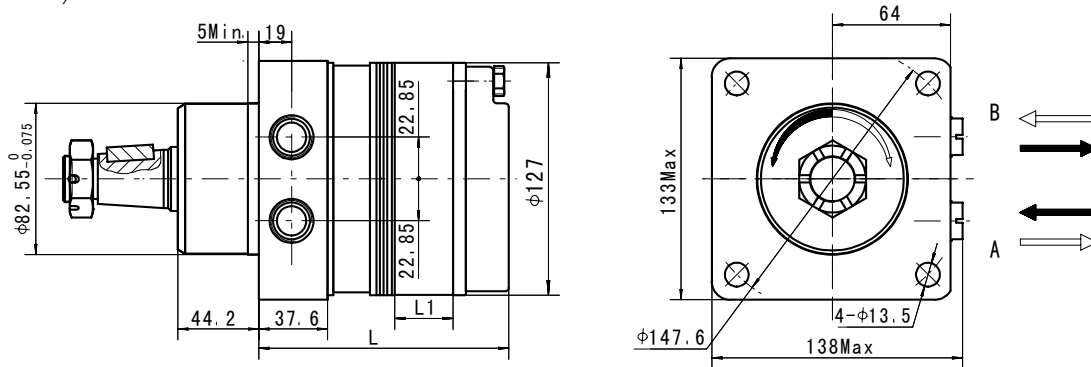
Wheel Mount

Code: Port A、B

WS 7/8-14UNF

WP 1/2-14NPTF

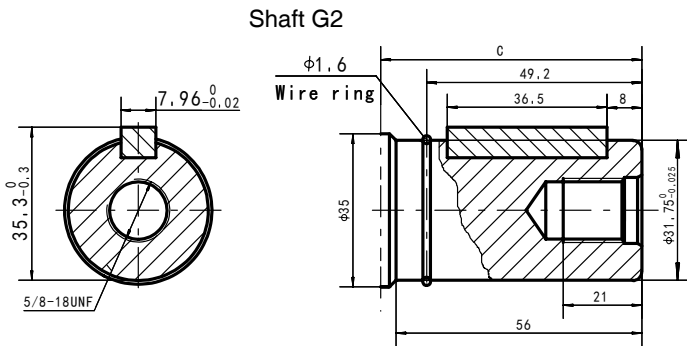
WD G1/2



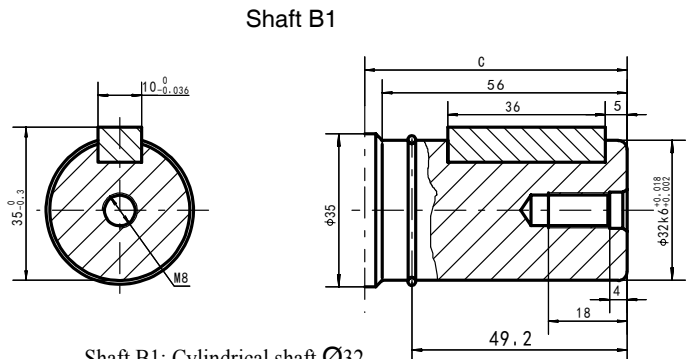
Displacement (cm ³ /rev.)	125	160	200	230	250	300	350	375	475	540	750
L1(mm)	10.2	13.5	17	19.5	22	25.4	29.5	31.8	39.4	47.3	63.5
L(mm)	119	122	125.5	128	130.5	134.5	138	140.5	148	156	176
Weight(kg)	12	12.1	12.3	12.4	12.6	13	13.2	13.5	14	14.6	16



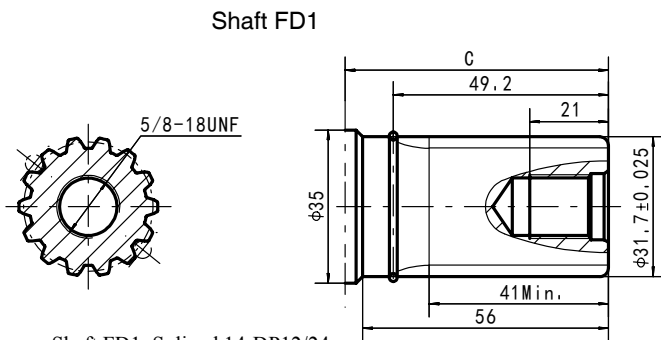
BMER-1 SHAFT EXTENSIONS DIMENSIONS DATA



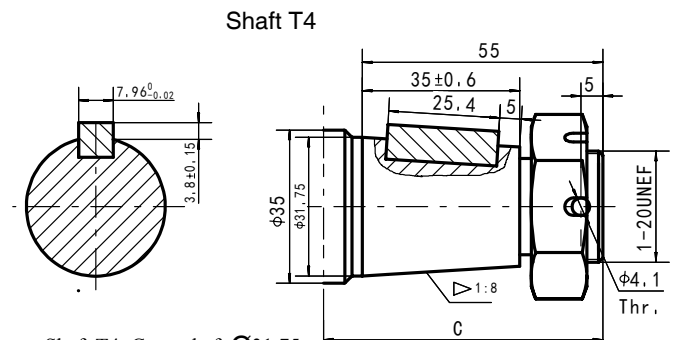
Shaft G2: Cylindrical shaft $\varnothing 31.75$
Parallel key 7.96x7x36.5



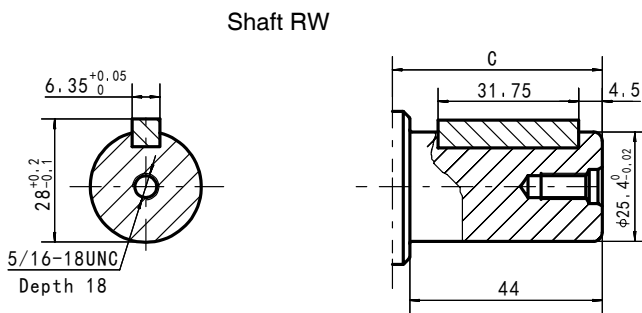
Shaft B1: Cylindrical shaft $\varnothing 32$
Parallel key 10x8x36



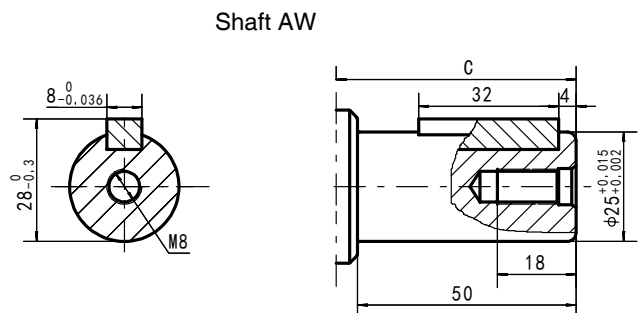
Shaft FD1: Splined 14-DP12/24
Flat root side fit
to fit ANSI B92.1 1996



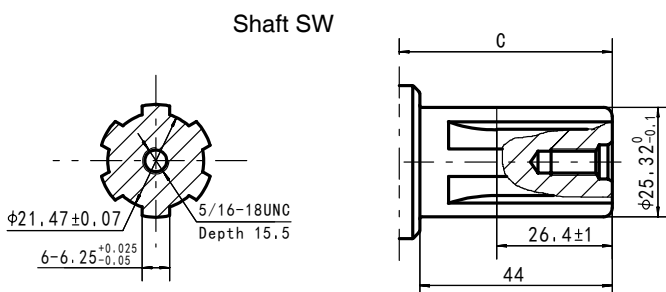
Shaft T4: Cone-shaft $\varnothing 31.75$
Parallel key 7.96x7.96x25.4
Tightening torque: 200±10Nm



Shaft RW: Cylindrical shaft $\varnothing 25.4$
Parallel key 6.35x6.35x31.75



Shaft AW: Cylindrical shaft $\varnothing 25$
Parallel key 8x7x32



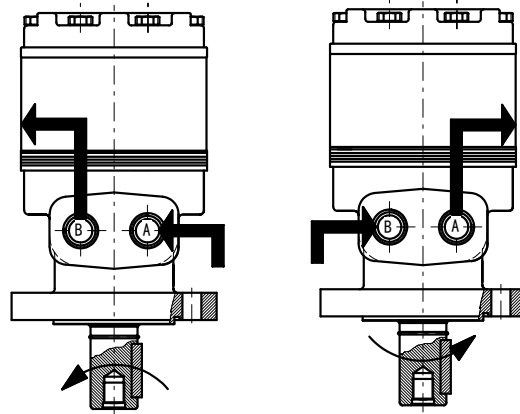
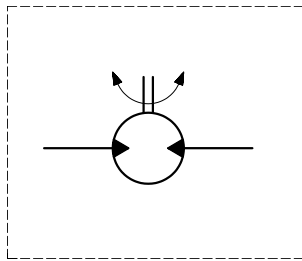
Shaft SW: Splined SAE 6B

From Mounting Flange to Shaft End		
Dimension C		
Shaft Code	Magneto Mount (mm)	Wheel Mount (mm)
G2	61	103
B1	61	103
FD1	61	103
T4	65	107
RW	50	91
AW	56	97
SW	50	91



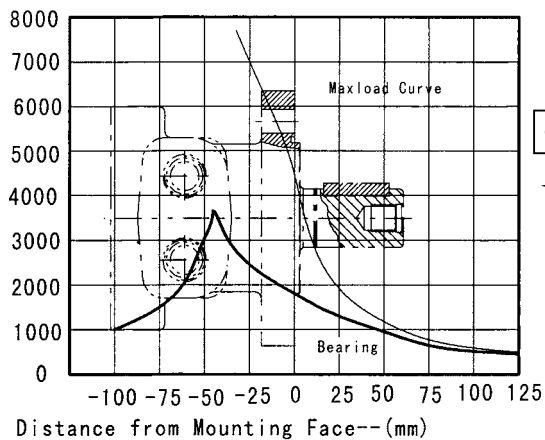
BMER-1 Series Hydraulic Motor

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

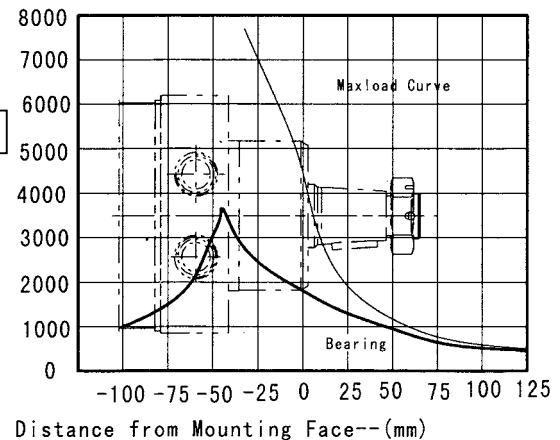


Axial and Radial forces

BMER-1 for M#/F# Mounting
 Side Load-(daN)



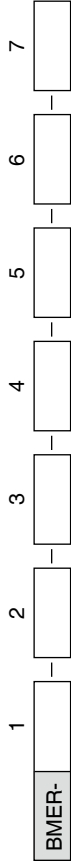
BMER-1 for W# Mounting
 Side Load-(daN)



The bearing curve represents allowable bearing loads for an L¹⁰ bearing life at 3x10⁶ revolutions.
 The maximum load curve is defined by bearing static load capacity. This curve should not be exceeded at any time including shock loads.



Order Information



Pos.1	2	3	4	5	6	7		
Code	Disp.	Flange , Pilot , Ports	Output Shaft	Rotation direction	Paint	Unusually function		
1	MS	4-Ø13.5 Magneto Mount,Pilot Ø82.55x2.8, Ports 7/8-14 O-ring	G2 Shaft Ø31.75 , parallel key 7.96x7.96x31.75 B1 ShaftØ32, Parallel key 10x8x45 FD1 Shaft Ø31.75, splined key 14-DP 12/24 T4 Cone-Shaft.Ø31.75, Parallel key 7.96x7.96x25.4 RW Shaft Ø25.4 , parallel key 6.35x6.35x31.75 AW Shaft Ø25 , parallel key 8x7x32 SW Shaft Ø25.4 ,splined key SAE 6B	None R Standard Reverse Timed	00 None B S	No paint Blue Black Silver Grey	None Standard	
	MP	4-Ø13.5 Magneto Mount,Pilot Ø82.55x2.8, Ports 1/2-14NPTF						
	MD	4-Ø13.5 Magneto Mount,Pilot Ø82.55x2.8, Ports G1/2						
	FS	6-Ø13.5 Magneto Mount,Pilot Ø82.55x2.8, Ports 7/8-14 O-ring						
	FP	6-Ø13.5 Magneto Mount,Pilot Ø82.55x2.8, Ports 1/2-14NPTF						
	FD	6-Ø13.5 Magneto Mount,Pilot Ø82.55x2.8, Ports G1/2						
	FH	6-Ø13.5 Magneto Mount,Pilot Ø82.55x2.8, Manifold Ports 1/2						
	WS	4-Ø13.5 Wheel Mount, Pilot Ø82.55x5, Ports 7/8-14 O-ring						
	WP	4-Ø13.5 Wheel Mount, Pilot Ø82.55x5, Ports 1/2-14NPTF						
	WD	4-Ø13.5 Wheel Mount, Pilot Ø82.55x5, Ports G1/2						
		125						
		160						
		200						
		230						
	250							
	300							
	350							
	375							
	475							
	540							
	750							

Note: When the table is used, please fill the code of left rows in dash area and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us.



BMK6 SERIES HYDRAULIC MOTOR

BMK6 series motor adapt the advanced Geroler gear set designed with disc distribution flow and high pressure. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

Characteristic features:

- * Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, provide smooth and reliable operation and high efficiency.
- * Advanced design in disc distribution flow, which can automatically compensate in operating with high volume efficiency and long life, provide smooth and reliable operation.
- * Shaft seal can bear high pressure of back.
- * The output shaft adapts in tapered roller bearings that permit high axial and radial forces. The case can offers capacities of high pressure and high torque in the wide of applications.

Main Specifaicon

Type		BMK6 200	BMK6 250	BMK6 315	BMK6 400	BMK6 500	BMK6 630	BMK6 800	BMK6 1000
Geometric displacement (cm ³ /rev.)		195.6	246.1	311.6	391.3	490.8	623	802.4	981.6
Max. speed (rpm)	cont.	765	610	480	382	304	240	186	152
	int.	865	830	690	570	455	360	280	230
Max. torque (N·m)	cont.	565	710	920	1160	1445	1480	1580	1675
	int.	840	1080	1325	1625	1880	1890	1880	1860
Max. pressure drop (MPa)	cont.	20	20	20	20	20	17.5	14	14
	int.	30	30	30	30	27.5	22.5	15.5	14
	peak.	30	30	30	30	30	24	17.5	17
Max. flow (L/min)	cont.	150	150	150	150	150	150	150	150
	int.	170	205	225	225	225	225	225	225
Weight (kg)		26.3	26.8	27.3	28	28.8	29.6	30.5	32

*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

BMK6 200 [195.6cm³/rev.]
Pressure (MPa)

Flow (L/min)	Pressure (MPa)									
	1.75	3.5	7	10.5	14	17.5	20	24	27.5	30
2	30	73	160							
8	36	76	168	262	345	438	465			
15	36	81	174	270	365	455	510	580	640	
30	37	85	175	275	370	465	540	615	700	765
45	37	85	180	280	375	470	535	650	740	805
60	38	80	178	282	380	475	565	660	750	825
75	32	78	175	275	378	480	565	670	760	840
90	26	75	172	270	375	475	565	660	765	
105	22	70	170	270	370	470	560	660	760	
120	20	67	166	265	365	465	560	660	755	
135	14	65	160	260	360	465	560	655	750	
150	10	60	155	258	356	450	550	650		
170		60	155	255	350	450	545	640		

BMK6 250 [246.1cm³/rev.]
Pressure (MPa)

Flow (L/min)	Pressure (MPa)									
	1.75	3.5	7	10.5	14	17.5	20	24	27.5	30
2	46	92								
8	51	103	215	335	440	550	560			
15	52	105	220	340	455	570	640	745	850	960
30	55	110	232	352	470	600	685	790	900	1020
45	58	110	235	355	475	610	705	840	940	1050
60	53	110	230	350	480	615	705	845	955	1080
75	45	105	230	355	485	620	710	850	960	1080
90	45	105	225	350	480	615	710	845	955	
105	40	100	220	340	475	610	705	840	950	
120	38	95	210	340	470	590	700	830	940	
135	35	85	205	325	460	580	690	820		
150	30	80	200	320	450	570	680	815		
170		65	190	315	440	560	675	750		
185			185	310	430	545	670			
205			175	300	418	536	562			

BMK6 315 [311.6cm³/rev.]
Pressure (MPa)

Flow (L/min)	Pressure (MPa)									
	1.75	3.5	7	10.5	14	17.5	20	24	27.5	30
2	65	126								
8	68	135	280	410	540	650	750	880		
15	70	135	285	435	565	690	810	940	1010	1035
30	70	135	295	440	600	740	880	990	1100	1180
45	70	140	300	460	610	750	900	1035	1165	1300
60	70	140	300	460	615	775	920	1055	1200	1325
75	65	135	295	455	615	780	920	1065	1215	
90	60	130	290	450	615	780	920	1070	1220	
105	50	125	280	445	605	770	915	1070	1205	
120	45	120	280	440	600	765	910	1055		
135	40	115	275	435	585	760	900	1050		
150	35	110	270	420	570	755	880	1030		
190		100	245	375	520	685	820			
225			220	350	500	640	770			

BMK6 400 [391.3cm³/rev.]
Pressure (MPa)

Flow (L/min)	Pressure (MPa)									
	1.75	3.5	7	10.5	14	17.5	20	24	27.5	30
2	90	172	360							
8	95	180	370	555	730	885	1025	1195		
15	95	185	375	560	740	930	1070	1265	1380	1625
30	98	185	380	575	760	960	1135	1315	1455	1625
45	95	185	385	580	765	970	1145	1335	1530	
60	90	180	380	580	770	975	1155	1345		
75	85	180	380	580	775	980	1160	1355		
90	80	175	375	570	765	975	1155			
105	70	165	360	560	760	965	1150			
120	65	160	355	550	745	950	1140			
135	55	155	340	545	735	940	1120			
150	45	145	320	530	730	925				
190		130	300	515	730	915				
225			285	500	710	895				



镇江大力液压马达股份有限公司

ZHENJIANG DALI HYDRAULIC MOTOR CO., LTD.



BMK6 500 [490.8cm³/rev.]
Pressure (MPa)

Flow (L/min)	Pressure (MPa)								
	1.75	3.5	7	10.5	14	17.5	20	24	27.5
4	120	230	470	685					
8	125	240	475	705	940	1165	1375		
15	125	235	480	720	960	1190	1400	1625	1880
30	125	235	485	735	975	1215	1445	1685	
45	125	235	485	735	975	1215	1450		
60	120	235	480	730	975	1220	1460		
75	110	225	470	725	970	1220			
90	100	220	465	720	965	1215			
105	95	205	460	710	960	1210			
120	90	195	450	700	950	1205			
135	85	175	435	680	935	1170			
Max.cont.	70	155	420	665	920	1150			
Max.int.		130	360	580	865				
225			320	555	800				

BMK6 630 [623cm³/rev.]
Pressure (MPa)

Flow (L/min)	Pressure (MPa)								
	1.75	3.5	7	10.5	14	17.5	20	22.5	
4	130	245	500	750					
8	135	265	540	805	1050				
15	140	280	585	865	1085	1425			
30	145	295	605	925	1270	1480	1780	1890	
45	145	295	610	920	1330	1465	1770		
60	135	285	605	915	1330	1465			
75	130	275	595	915	1325				
90	115	260	585	905	1310				
105	100	255	575	895	1305				
120	85	235	560	880	1280				
135	75	220	540	855					
Max.cont.	50	200	525	84					
Max.int.			465	795					
225			430	740					

BMK6 800 [802.4cm³/rev.]
Pressure (MPa)

Flow (L/min)	Pressure (MPa)									
	1.75	3.5	5	7	8.5	10.5	12	14	15.5	17.5
4	172	345	530	690	860					
8	180	355	540	725	955	1080	1275	1360		
15	185	370	565	758	980	1130	1265	1420	1655	1880
30	190	385	590	795	1005	1200	1330	1580	1740	
45	190	385	590	800	1015	1200	1380	1550		
60	185	380	580	790	1015	1200	1345			
75	176	370	575	782	1000	1185	1365			
90	165	360	560	765	990	1170				
105	150	340	555	750	972	1155				
120	132	325	545	735	945	1130				
135	105	302	525	710	911					
Max.cont.	80	270	500	680	880					
Max.int.		300	475	660	855					
225			423	612	830					

BMK6 1000 [981.6cm³/rev.]
Pressure (MPa)

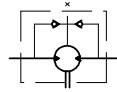
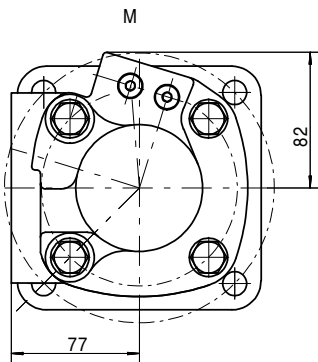
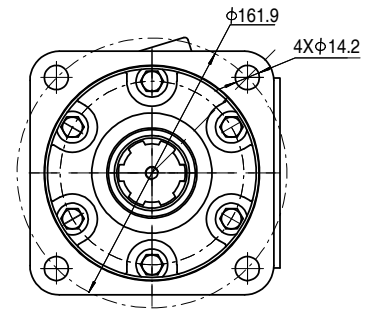
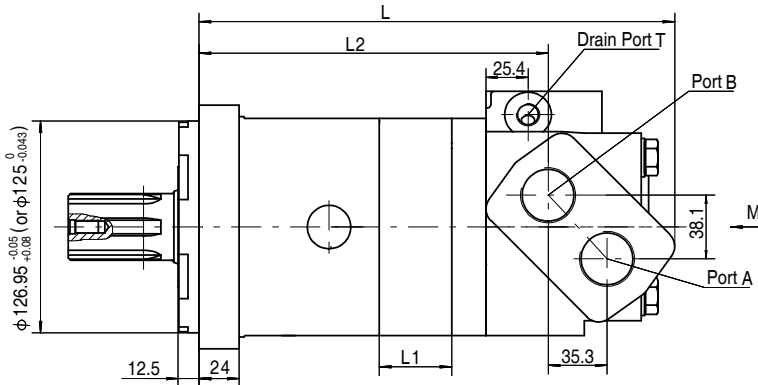
Flow (L/min)	Pressure (MPa)							
	1.75	3.5	5	7	8.5	10.5	12	14
4	225	460	640	875	1085			
8	230	470	695	945	1170	1415	1560	1675
15	240	485	715	965	1200	1445	1580	1780
30	240	495	720	995	1235	1480	1640	1860
45	240	495	720	1000	1250	1490	1700	
60	235	490	715	990	1245	1500		
75	225	475	710	980	1230	1485		
90	215	460	705	960	1215	1465		
105	200	445	690	940	1195	1440		
120	185	420	665	920	1155			
135	150	390	635	890	1120			
Max.cont.	110	360	605	860	1080			
Max.int.		320	575	820	1045			
225			515	800	1020			

Torque (N·m) 423
Speed (rpm) 280

□ cont.
■ int.

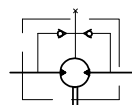
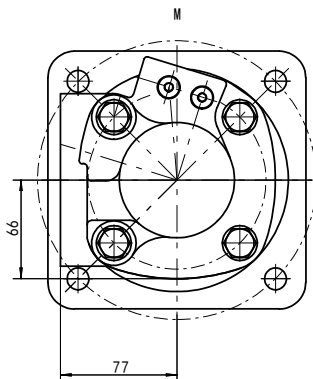
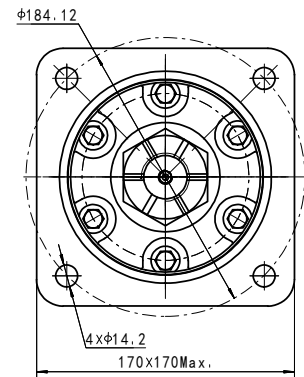
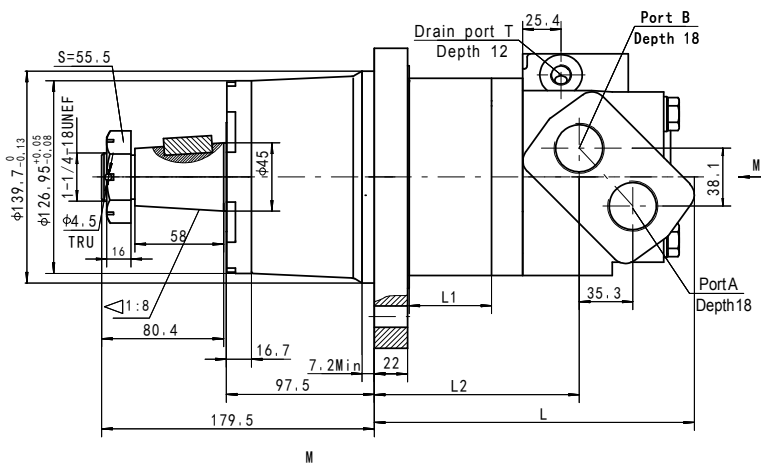


BMK6 DIMENSIONS MOUNTING DATA



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

Model	L	L1	L2
BMK6-200	265	21.7	187.5
BMK6-250	271	27.3	193.1
BMK6-315	278	34.5	200.3
BMK6-400	287	43.4	209.2
BMK6-500	298	54.4	220.2
BMK6-630	313	69.1	234.9
BMK6-800	333	89	254.8
BMK6-1000	353	108.9	274.7

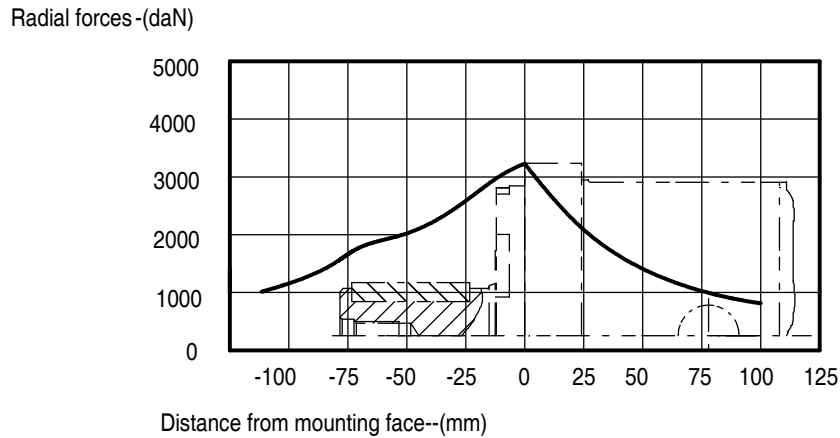


Direction of shaft rotation: Standard
 When facing shaft end of motor, shaft to rotate:
 Clockwise when port "A" is pressurized
 Counter-clockwise when port "B" is pressurized

Model	L	L1	L2
BMK6-200	179	21.7	102.5
BMK6-250	185	27.3	108
BMK6-315	192	34.5	115.5
BMK6-400	201	43.4	124.5
BMK6-500	212	54.4	135.5
BMK6-630	226.7	69.1	150.2
BMK6-800	246.5	89	170
BMK6-1000	266.5	108.9	190



BMK6 for CC Mounting Radial forces

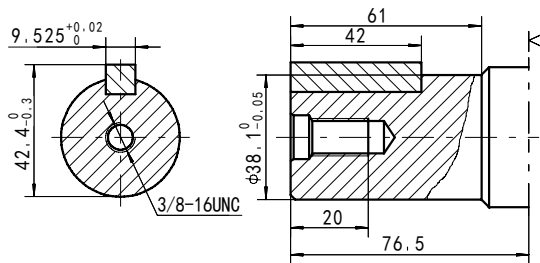


The bearing curve represents allowable bearing loads for an B10 bearing life (2000 hours or 12x10⁶ revolutions at 100rpm) at rated output torque. Other speed load multiply a load values.

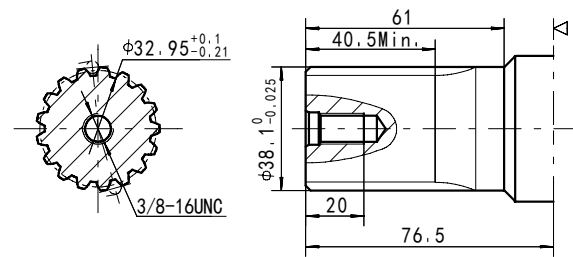
The maximum load curve is defined by bearing static load capacity.

This curve should not be exceeded at any time including shock loads.

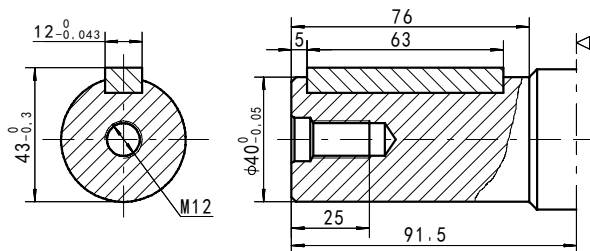
BMK6 Shaft Extensions For Dimensions Data



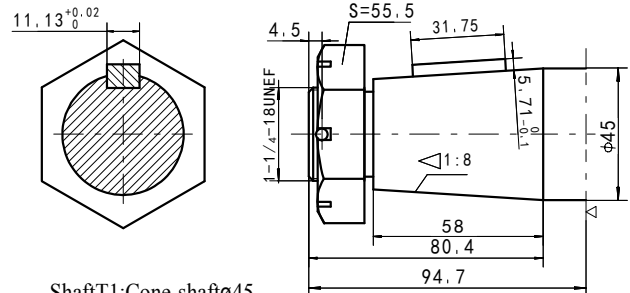
Shaft G2: Cylindrical shaft ø38.1
Parallel key 9.525x9.525x42
Max.Torque: 1350Nm



Shaft FE: Splined 17-DP12/24
Max.Torque: 1350Nm



Shaft Y1: Cylindrical shaft ø40
Parallel key 12x8x63
Max.Torque: 1400Nm



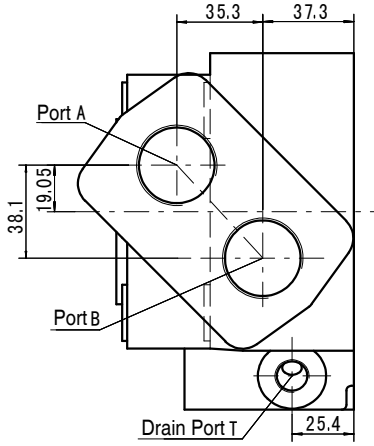
Shaft T1: Cone-shaft ø45
Parallel key 11.13x11.13x31.75
Tightening torque: 500±10Nm
Max. torque 2100Nm

◁ Motor Mounting Surface CC Flange

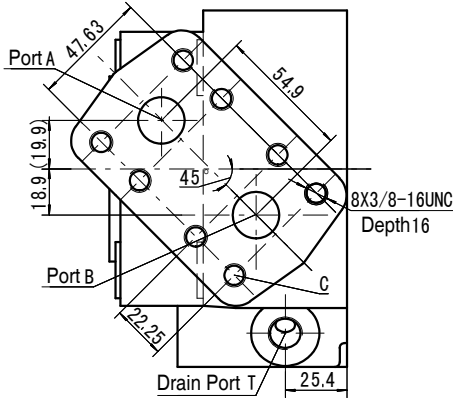


DIMENSIONS of PORTS FOR BMK6

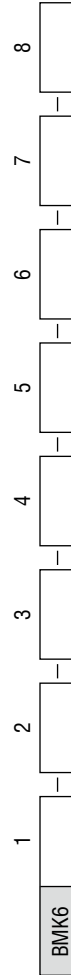
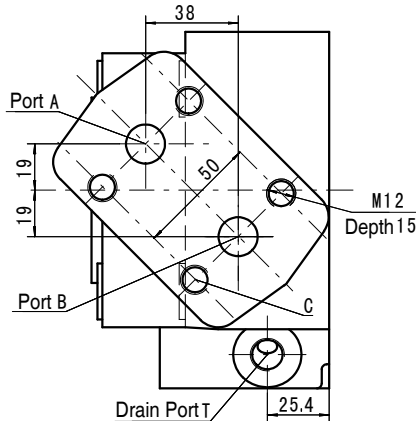
Port: SF5、SF6、SF7、SF8



Port: SF



Port: SF0



Order Information

Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange	Output Shaft	Port and Drain Port	Rotation Direction	Paint	Unusually Function
	200 250 315 400 500 630 800 1000	CC CC1 W	G2 FE Y1 T1	SF SF0 SF5 SF6 SF7 SF8	Omit Standard Opposite R	00 Omit B S	Omit Standard Blue Black Silver grey
		4-φ14.2 Square-flange φ161.9, pilot φ127×12.5 4-φ14.2 Square-flange φ161.9, pilot φ125×12.5 4-φ14.2 Wheel-flange φ184.12, Pilot 139.7	Shaft φ38.1, parallel key 9.52×3.02×57.15 Shaft φ38.1, splined tooth 7-DP1224 Shaft φ40, parallel key 12×8×63 Cone-shaft 1.8 φ45, parallel key 11.13X11.13X31.75	3/4" Manifold Mount 8×3/8-16UNC, 7/16-20UNF φ16 Manifold Mount 4×M12, M14×1.5 1-5/16-12UN, 7/16-20UNF M33×2, M14×1.5 G1, G1/4 G3/4, G1/4			

Note: When the table is used, please fill the code of left rows in dash area and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us.

Code	Type						
	Mounting	SF5 (depth)	SF6 (depth)	SF7 (depth)	SF8 (depth)	SF (depth)	SF0 (depth)
P(A,B)		1-5/16-12UN(18)	M33X2(18)	G1(18)	G3/4(18)	φ19.05	φ16
T		7/16-20UNF(12)	M14X1.5(12)	G1/4(12)	G1/4(12)	7/16-20UNF(12)	M14X1.5(12)
C		-	-	-	-	8X3/8-16UNC	4XM12



BMR-BK01 SERIES HYDRAULIC MOTOR WITH BRAKE

BMR-BK01 Series hydraulic motor with brake extending BMR series motor range. This motor has an integrated holding brake.

Characteristic features:

- *Advanced manufacturing devices for the Geroler gear set , which use low pressure of start-up , provide smooth , reliable operation and high efficiency .
- *Shaft seal can bear high pressure of back and the motor can be use in parallel or in series .
- *Special design in the driver-linker and prolong operating life .
- *Special design for distribution system can meet the requirement of low noise of unit .
- *Compact volume and easy installation .
- *Small volume and radial dimension,high holding torque,power brake,low weight and easy to install.

Main Specification

Type		BMR -BK01 50	BMR -BK01 80	BMR -BK01 100	BMR -BK01 125	BMR -BK01 160	BMR -BK01 200	BMR -BK01 250	BMR -BK01 315	BMR -BK01 375
Geometric displacement (cm ³ /rev.)		51.7	81.5	102	128	157	195	253	318	381
Max. speed (rpm)	rated	490	479	478	421	341	276	212	169	141
	cont.	509	502	497	459	372	301	231	184	166
	int.	603	598	574	574	465	376	289	230	192
Max. torque (N•m)	rated	104	164	205	256	316	335	437	456	465
	cont.	103	203	254	317	391	359	437	456	465
	int.	88.6	160	200	250	308	333	473	502	520
Max. output (KW)	rated	5.3	8.2	10.3	11.3	11.3	9.7	9.7	8.1	6.9
	cont.	5.5	10.7	13.2	15.2	15.2	11.3	10.6	8.8	8.1
	int.	5.6	10	12	15	15	13.1	14.3	12.1	10.5
Max. Pressure drop (MPa)	rated	14	14	14	14	14	12	12	10	8.5
	cont.	14	17.5	17.5	17.5	17.5	13	12	10	8.5
	int.	17.5	20	20	20	20	17.5	13	11	9.5
Max. Flow (L/min)	rated	26	40	50	55	55	55	55	55	55
	cont.	27	42	52	60	60	60	60	60	65
	int.	32	50	60	75	75	75	75	75	75
Min. opening pressure (MPa)	1.7—2.2									
Max. inlet pressure (MPa)	25									
Max. brake release port pressure (MPa)	25									
Max. static torque (Nm)	500—550									
Weight (kg)	11.7	11.9	11.9	12.2	12.5	13	13.5	14	14	14.5

*Rated speed and rated torque:output value of speed and torque under rated flow and rated pressure.

*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.

*Such kind of brake is only used in static paring brake.Dynamic braking in not recommended.

When the motor integrated with brake is working, the pressure at releasing port must be more than 2.2MPa. In the status of braking, the pressure at releasing port must be less than 1.7 MPa, optimally 0 MPa. It is attention in use that the back pressure of the oil circuit is the best 0 MPa.



BK2 SERIES HYDRAULIC BRAKE

Introduction

BK2 series brake is one kind of hydraulic wet disc brake. The brake force is caused by the spring, and hydraulic pressure releases the brake force.

Features as follows:

- * BK2 series adopts the special friction disc and high strength spring design: long life endurance, low noise, high braking reliability.
- * with 4 Drain port design, the brake can be used in different applications.
- * compact structure, easy mounting.
- * it can be used preferentially together with BMP, BMR, BMS series hydraulic motor.

Application

BK2 series hydraulic brake stays in braking condition since delivery out of the factory. During normal operation, there exists the braking force in the brake disc, only if the pressure of hydraulic system, that the brake links, is lower than the pressure required by the release of brake, the spring force shall keep the brake in braking condition.

BK2 series hydraulic brake is widely used in heavy duty machinery, such as engineering machinery, cranes, off-highway machinery vehicles, construction machinery, material handling machinery, agricultural machinery, mining, sanitation machinery, timber industries. They are also used in winches and in hydrostatic drive systems for automatization engines.

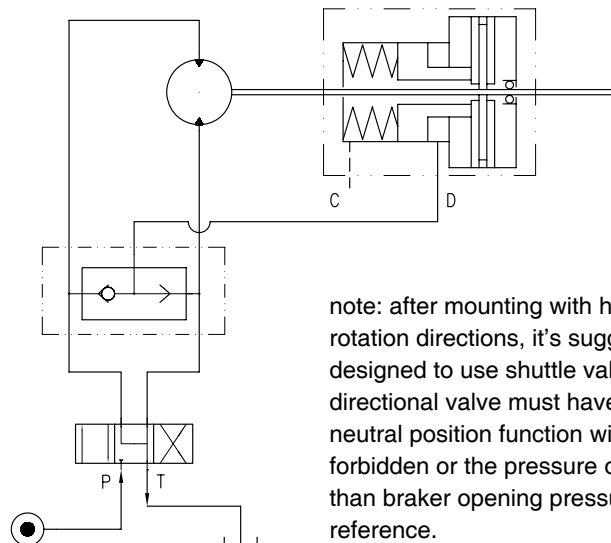
Special Note: such kind of brake is only used in static parking brake. Dynamic braking is not recommended.

Intruction Manual

一、 In order to make the BK2 series brake work under the best situation, we recommend the normal requirements as follows:

- 1.Assembly: 1st of all, we have to mount the brake BK2 with hydraulic motor, and then fill the brake with lubrication oil through the drain port, and then mount with other parts.
- 2.Fluid type: Mineral based-HM(GB/T763.2-87) (ISO6743/4) or HLP(DIN51524).
- 3.Temperature range:normal -20°C-90°Cthe best optimal situation 20°C-60°C
- 4.Viscosity range: 20~75mm²/s; the best optimal situation 42~74mm²/s at 40°C.
- 5.Filtration: nominal filtration of 25 micron, ISO code 20/16.
- 6.Maintenance: changed after the first 50~100h; then after every 500~1000h.

Typical Applications Drawing



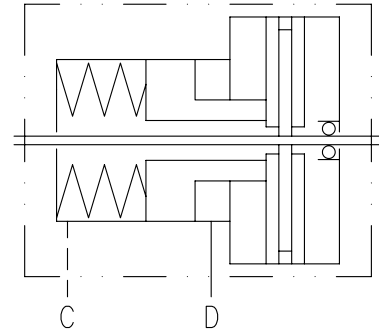
note: after mounting with hydraulic motor, if the motor needs both rotation directions, it's suggested that the hydraulic system is designed to use shuttle valve, and the neutral position of the directional valve must have off-load function(type Y or H), the neutral position function without off-load function (type O) is forbidden or the pressure of the outlet port in the system is larger than braker opening pressure. Please check the drawing for reference.



Specification Data

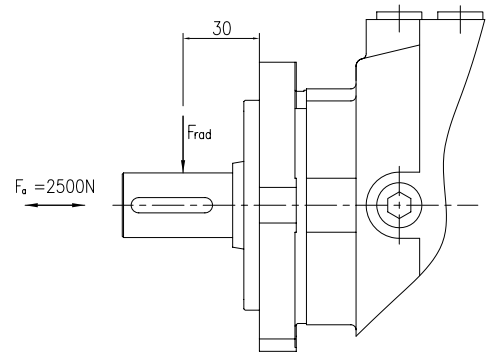
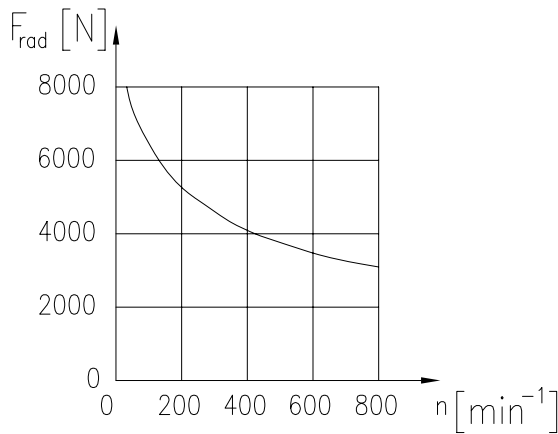
Item	BK2-1	BK2-2
Min. static Torque [Nm]	200~230	410~450
Min. Opening Pressure [MPa]	1.7~2.3	
Max. Opening Pressure [MPa]	30	
Min. oil quantity for brake releasing [cm ³]	7~8	
Oil volume [cm ³]	50~120	
Max. pressure in drain space [MPa]	0.05	
Weight [kg]	9	9.5

*Static torque is obtained at working pressure 0 MPa

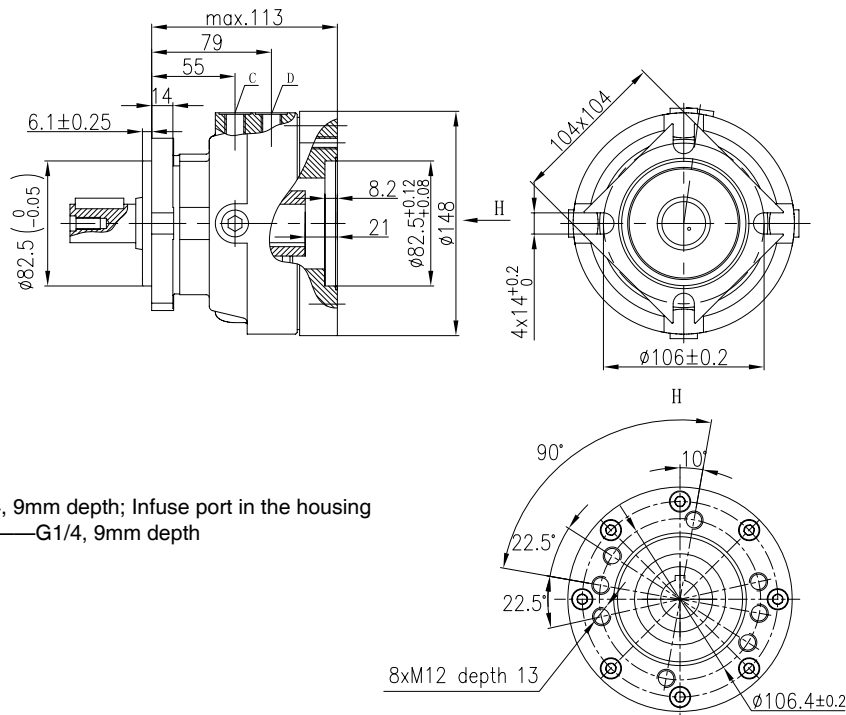


symble drawing

Load Curve



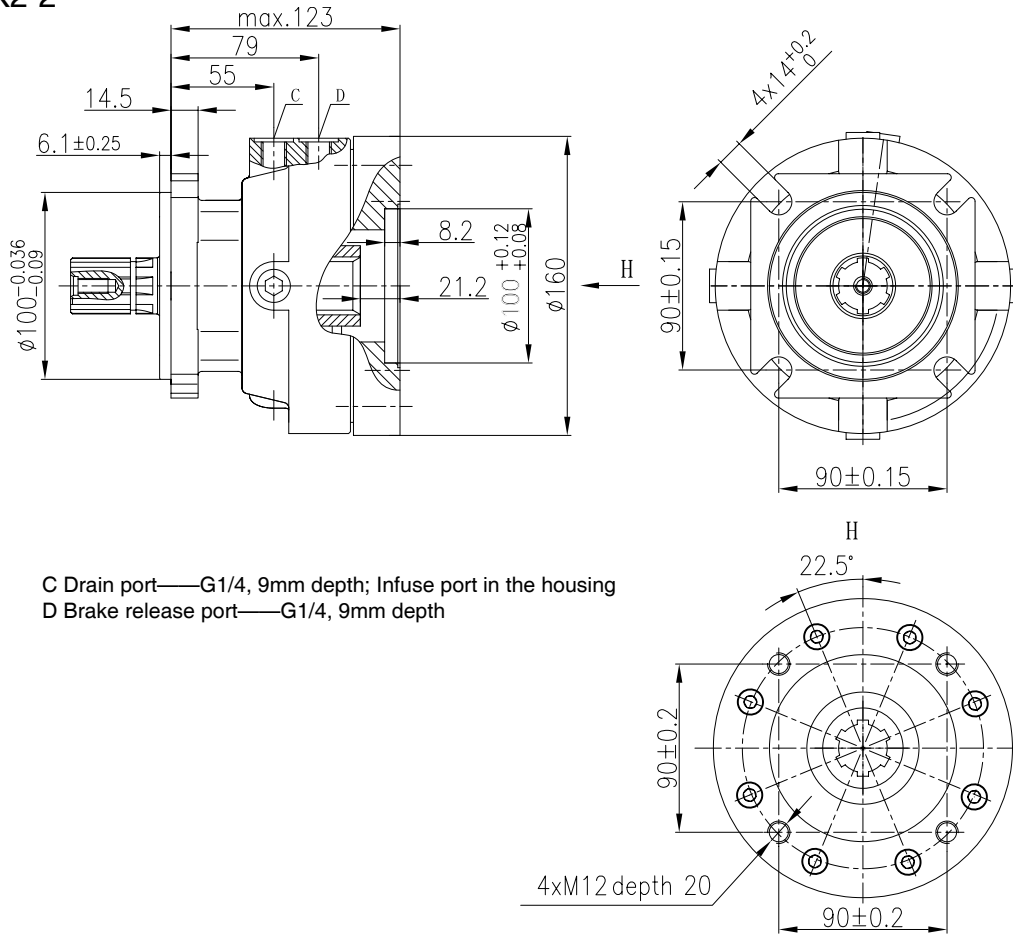
Mounting Data Model BK2-1



C Drain port—G1/4, 9mm depth; Infuse port in the housing
D Brake release port—G1/4, 9mm depth



Model BK2-2

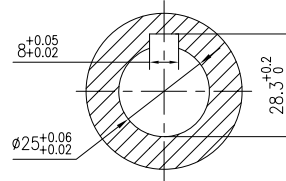
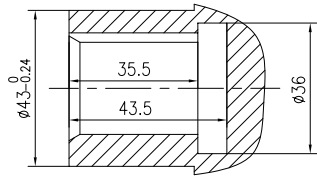


C Drain port—G1/4, 9mm depth; Infuse port in the housing
D Brake release port—G1/4, 9mm depth

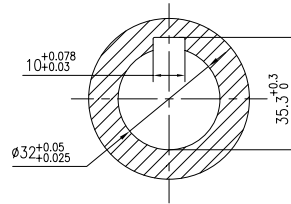
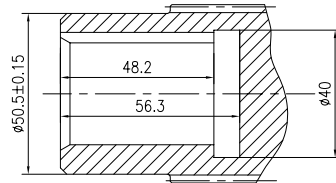


INPUT & OUTPUT SHAFT DATA
INPUT SHAFT HOLES

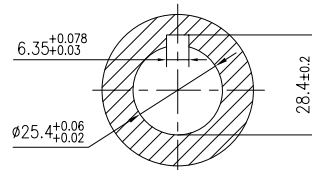
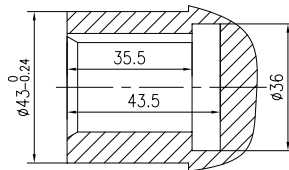
A



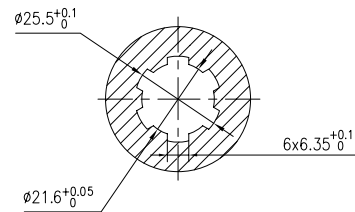
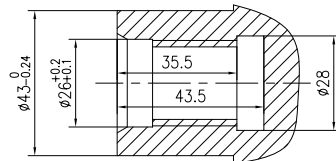
B



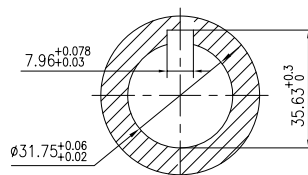
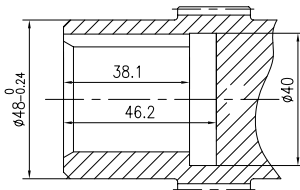
C



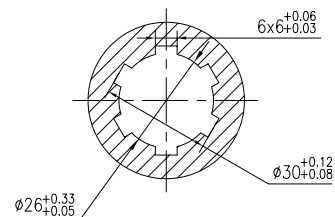
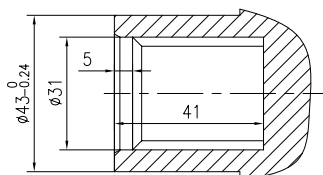
E



G



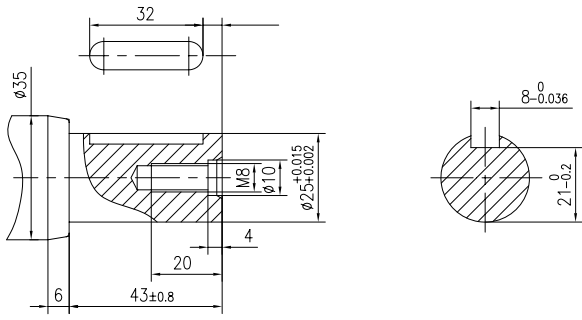
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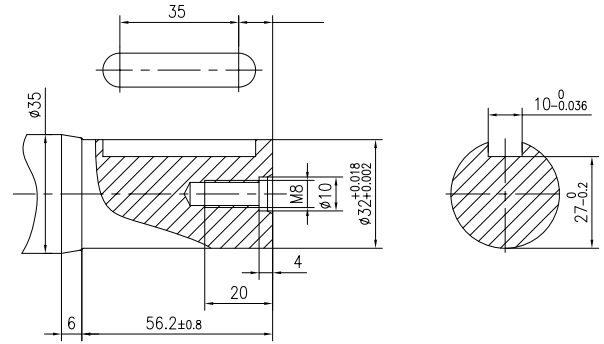


OUTPUT SHAFT EXTENSIONS

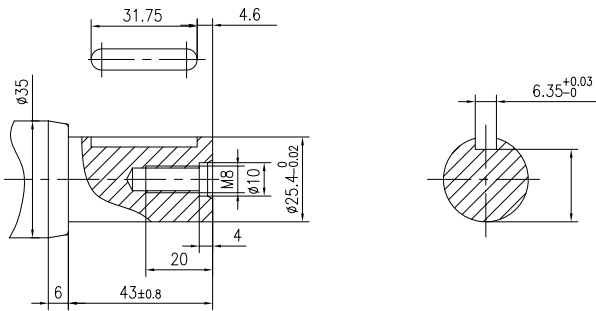
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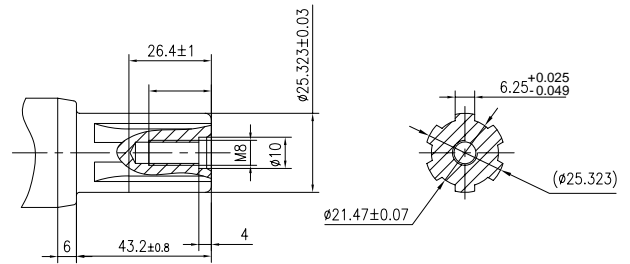
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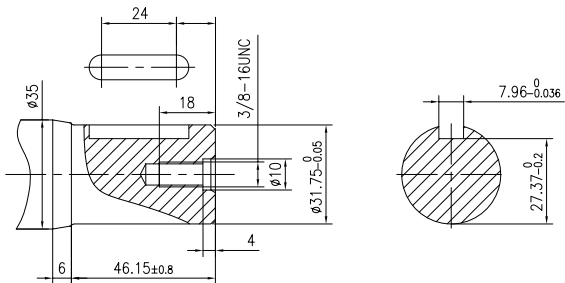
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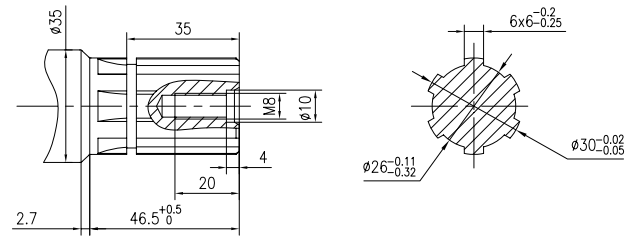
E



G



N



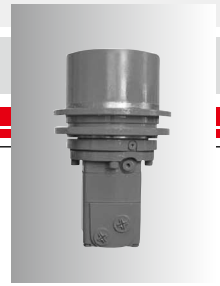


Order Information

1	2	3	4	5	6	7
BK						

Pos.1	2	3	4	5	6	7
Series Structure Code	Torque	Input Shaft holes	Output Shaft extensions	Paint	Unusually function	
1	Torque200--230Nm	210	A Shaft ϕ 25, Parallel key 8x7x32 B Shaft holes ϕ 32, Parallel key 10x8x45	A Shaft ϕ 25, Parallel key 8x7x32 B Shaft ϕ 32, Parallel key 10x8x45	No Paint Blue Black Sliver Grey	omit B S
	Torque410--450Nm	430	C Shaft holes ϕ 25.4, Parallel key 6.35x6.35x31.75 E Shaft holes ϕ 25.4, splined key SAE 6B G Shaft holes ϕ 31.75, Parallel key 7.96x7.96x31.75	C Shaft ϕ 25.4, Parallel Key6.35x6.35x31.75 E Shaft ϕ 25.4, splined key SAE 6B G Shaft ϕ 31.75, Parallel Key7.96x7.96x31.75	omit omit omit	omit omit omit
2	Torque410--450Nm	430	J Shaft holes Splined 6-30x26x6 K Shaft holes Splined 6-30x26x8	N Shaft Splined 6-30x26x6 J Shaft Splined 6-30x26x8		

Note: When the table is used, pls fill the code with right rows in the table and give us, which the code information is consist of construction, torque, input Shaft holes, output Shaft extensions, Paint .if the specification is not in the table or you have specific requirements, please contact us.



WGB SERIES PLANETARY GEARBOX

Introduction

WGB Series planetary gearbox is used in tracklayers , wheel driving vehicles , different kinds of self-mobile machineries, and such kind of transmission & lifting machinery as winches, cylinder machinery , etc. By adopting special orbital motor and compact structure design, the planetary gearbox can be installed inside the wide groove of the pedrail or wheel, or inside the drum of the winches or the cylinder machinery; the design is simple with reasonable space, and easy mounting. WGB Series planetary gearbox is suitable for open and close hydraulic loop system.

WGB Series planetary gearbox is widely used in self-mobile equipment, such as engineering machinery, lifting machinery, road machinery vehicles, construction machinery, convey machinery, agricultural machinery, mine machinery, sweeping & cleaning machinery, wood machinery, etc., it's also used in winches, and automatization engine's static hydraulic driving system. The features are shown as follows:

- * Adopt special sealing system. Special design of composite sealing, being used in the radial and axial sealing in & between rotating and fixed parts;
- * Adopt built-in multi-disk parking brake system which is also the spring-load parking brake ,hydraulic pressure releases brake force; on the condition that the pressure of hydraulic system decreases lower than the required pressure of the release brake, it will safely stop rotation completely.
- * Compact structure, easy mounting.
- * To be preemptively used together with BMR, BMS series hydraulic orbital motors.

Instruction Manual

In order to keep the hydraulic system operating under optimal condition, the normal requirements are shown as follows:

1. Hydraulic oil: HM mineral oil(ISO 6743/4)(GB/T763.2-87) or HLP mineral oil(DIN 51524).
2. Oil temperature: normal operation temperature: $-20^{\circ}\text{C}\sim 90^{\circ}\text{C}$; optimal temperature scope : $20^{\circ}\text{C}\sim 60^{\circ}\text{C}$;
3. Oil viscosity: $20\sim 75\text{mm}^2/\text{s}$; optimal viscosity scope : $42\sim 74\text{mm}^2/\text{s}$ at the temperature of 40°C ;
4. Oil cleanness: oil filtration precision: $25\mu\text{m}$; solid contamination level has to be lower than 20/16;

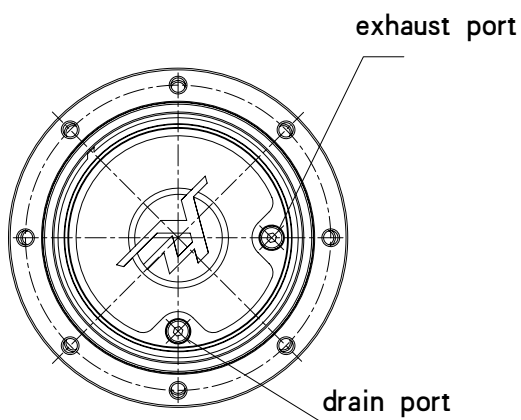
In order to keep the planetary gearbox operating under the best condition, the normal requirements are shown as follows:

1. Lubrication oil: CKC220 mineral gear oil(ISO 12925-1)(GB/T5903);
2. Oil viscosity: $220\text{mm}^2/\text{s}$ at the temperature of 40°C ;
3. Maintenance period: 1st maintenance should be carried out 50-200 hours after initial operation; afterwards normal maintenance should be carried out every 500~1000 hours.
4. We suggest that MOBIL GEAR630, ESSO SPARTAN EP220, SHELL OMALA EP220 be used.

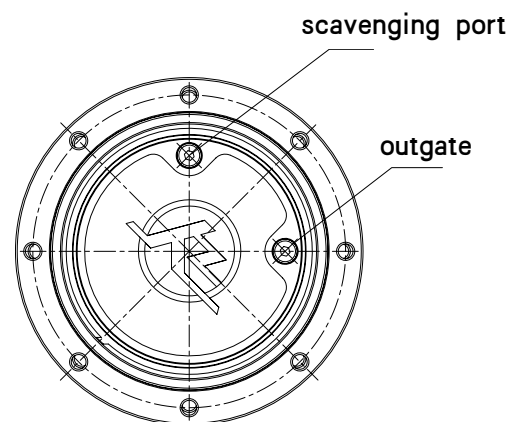
How to change the oil for planetary gearbox:

No lubricate oil in the gearbox lubricate the gearbox before it be used.

1. As shown in Drawing A, dismantle two port plugs , discharge the lubrication oil out of the planetary gearbox. and then clean the planetary housing with the detergent supplied by lubrication oil supplier.
2. As shown in Drawing B, fill more hydraulic oil. More oil till lubrication oil flows out of the drain port; fasten two plugs till the ports are sealed.



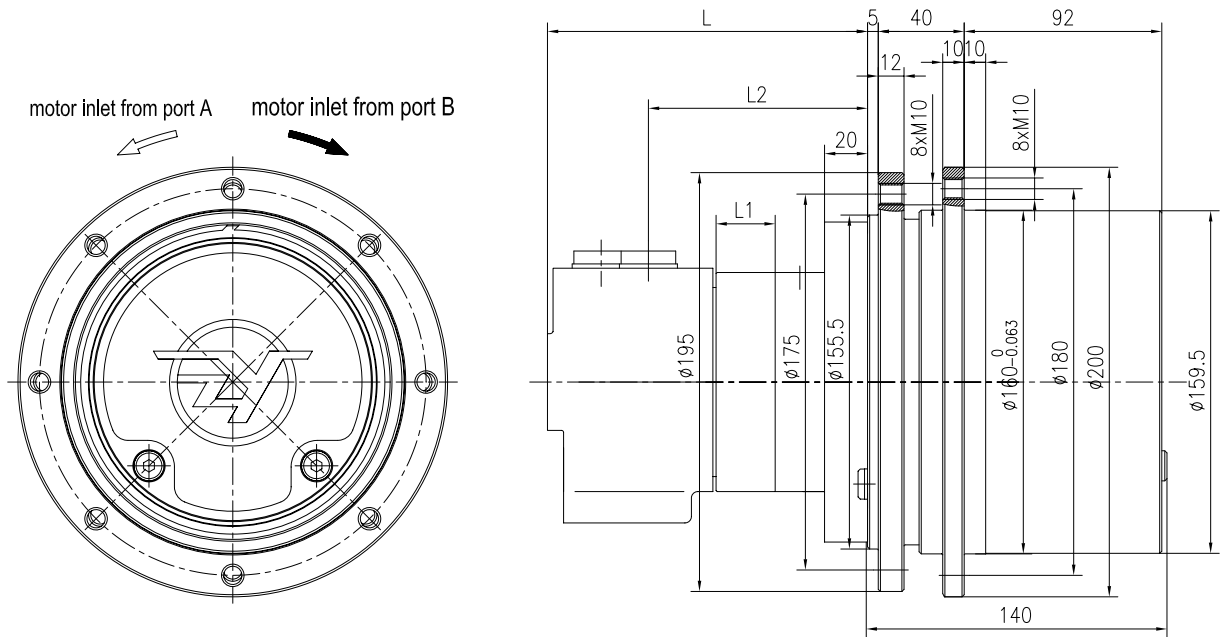
Drawing A



Drawing B



WGB Series with BMS or BMSY
Main Specifications:



Motor information

	BMS80	BMS100	BMS125	BMS160	BMS200	BMS250	BMS315	BMS375
L1(mm)	13	17	22	27.5	35.1	47	59	71
L2(mm)	89	93	98	103.5	111.1	123	135	147
L(mm)	134.5	138.5	143.5	149	157	169	181	193

WGB150 WITH BMS 125, Main specifications as follows

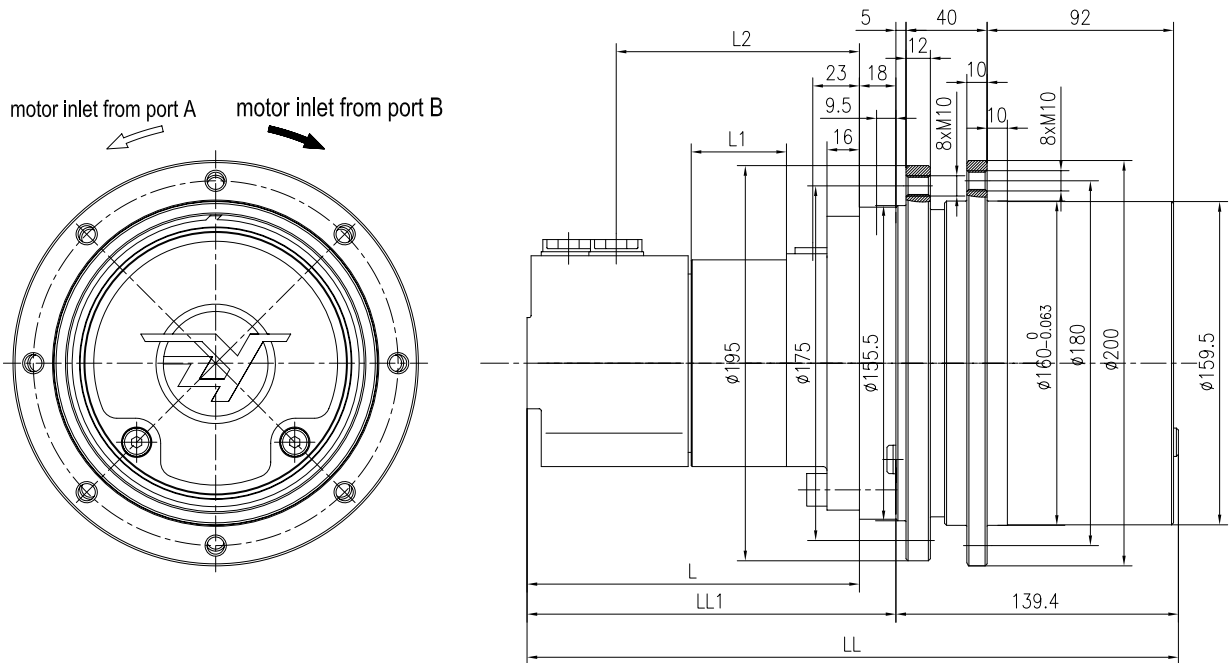
Main specifications of WGB 150

WGB150		5.75	4.6	3.28
specification Motor	Motor BMS125	125	125	125
	pressure drop MPa	15.4	15.4	16.2
	flow L/min	73.3	73.3	69.7
	torque N·m	260.9	260.9	274.4
	speed rpm	539.5	539.5	512.9
Output speed rpm		93.8	117.3	156.4
Output torque N·m		1500	1200	900
Output power kW		14	14	14

Main specifications of the non-standard motor with WGB150 will be calculated upon hydraulic motor.
The max. output torque of WGB 150 is 1500 Nm, the max. output power is 14 kW.



WGB Series with BMSS or BMSYS



Motor information

	BMSS80	BMSS100	BMSS125	BMSS160	BMSS200	BMSS250	BMSS315	BMSS375
L1(mm)	13	17	22	27.5	35.1	47	59	71
L2(mm)	82	86	91	96.5	104.1	116	128	140
L (mm)	127	131	136	141.5	149	161	173	185
LL1(mm)	145	149	154	159.5	167	179	191	203
LL(mm)	248.4	288.4	293.4	298.9	306.4	318.4	330.4	342.4

WGB 300 WITH BMSS 250, Main specifications as follows

Main specifications of WGB 300

WGB300		5.75	4.6	3.28
specification Motor	Motor BMSS250	252	252	252
	pressure drop MPa	15.3	15.3	15.2
	flow L/min	95.0	95.0	95.6
	torque N·m	521.7	521.7	518.3
	speed rpm	346.8	346.8	349.1
Output speed rpm		60.3	75.4	106.4
Output torque N·m		3000	2400	1700
Output power kW		18	18	18

Main specifications of the non-standard motor with WGB 300 will be calculated upon hydraulic motor. The max. output torque of WGB 300 is 3000 Nm, the max. output power is 18 kW.



HGB SERIES PLANETARY GEARBOX

Introduction

HGB series planetary gearbox is one speed reducer for various machinery, adopting the compact design of combining hydraulic orbital motor and speed reducer, design structure is simple, with reasonable mounting space, easy for mounting. This kind of gearbox fits all kinds of hydraulic loop system.

HGB series planetary gearbox is widely used various machinery, such as engineering machinery, lifting machinery, road machinery vehicles, construction machinery, convey machinery, agricultural machinery, mine machinery, sweeping & cleaning machinery, wood machinery, etc., it's also used in winches, and automatization engine's static hydraulic driving system. The features are shown as follows:

- * Compact structure, easy mounting.
- * Small volume, strong power.
- * To be preemptively used together with BMR, BMH, BMS series hydraulic orbital motors.

Instruction Manual

In order to keep the hydraulic system operating under optimal condition, the normal requirements are shown as follows:

1. Hydraulic oil: HM mineral oil(ISO 6743/4)(GB/T763.2-87) or HLP mineral oil(DIN 51524).
2. Oil temperature: normal operation temperature: -20°C ~ 90°C ; optimal temperature scope : 20°C ~ 60°C ;
3. Oil viscosity: $20\sim 75\text{mm}^2/\text{s}$; optimal viscosity scope : $42\sim 74\text{mm}^2/\text{s}$ at the temperature of 40°C ;
4. Oil cleanness: oil filtration precision: $25\mu\text{m}$; solid contamination level has to be lower than 20/16;

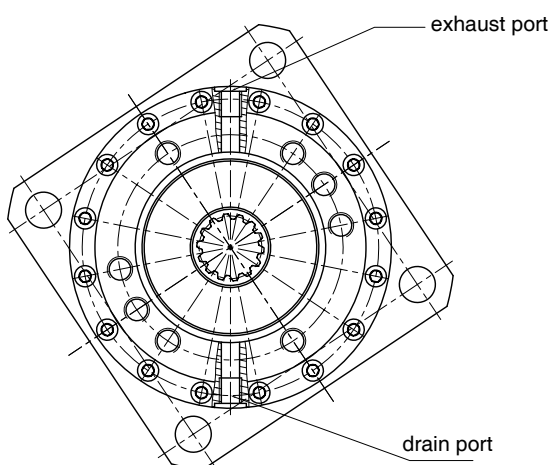
In order to keep the planetary gearbox operating under the best condition, the normal requirements are shown as follows:

1. Lubrication oil: CKC220 mineral gear oil(ISO 12925-1)(GB/T5903);
2. Oil viscosity: $220\text{mm}^2/\text{s}$ at the temperature of 40°C ;
3. Maintenance period: 1st maintenance should be carried out 50-200 hours after initial operation; afterwards normal maintenance should be carried out every 500~1000 hours.
4. We suggest that MOBIL GEAR630, ESSO SPARTAN EP220, SHELL OMALA EP220 be used.

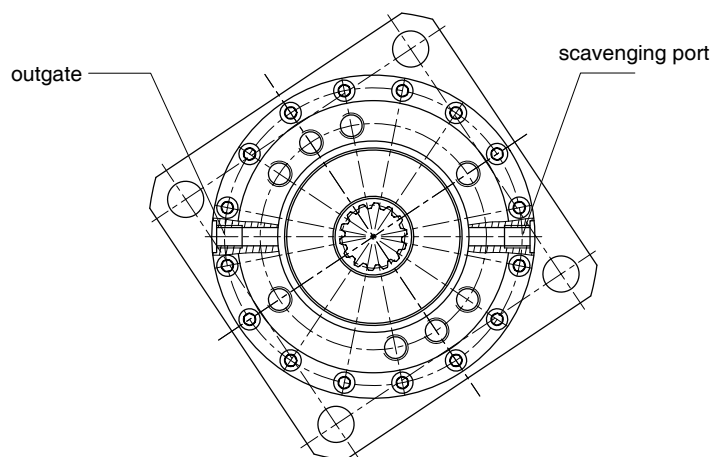
How to change the oil for planetary gearbox:

No lubricate oil in the gearbox lubricate the gearbox before it be used.

1. As shown in Drawing A, dismantle two port plugs , discharge the lubrication oil out of the planetary gearbox. and then clean the planetary housing with the detergent supplied by lubrication oil supplier.
2. As shown in the Drawing , fill more hydraulic oil till lubrication oil flows out of the drain port; fasten two plugs till the ports are sealed.



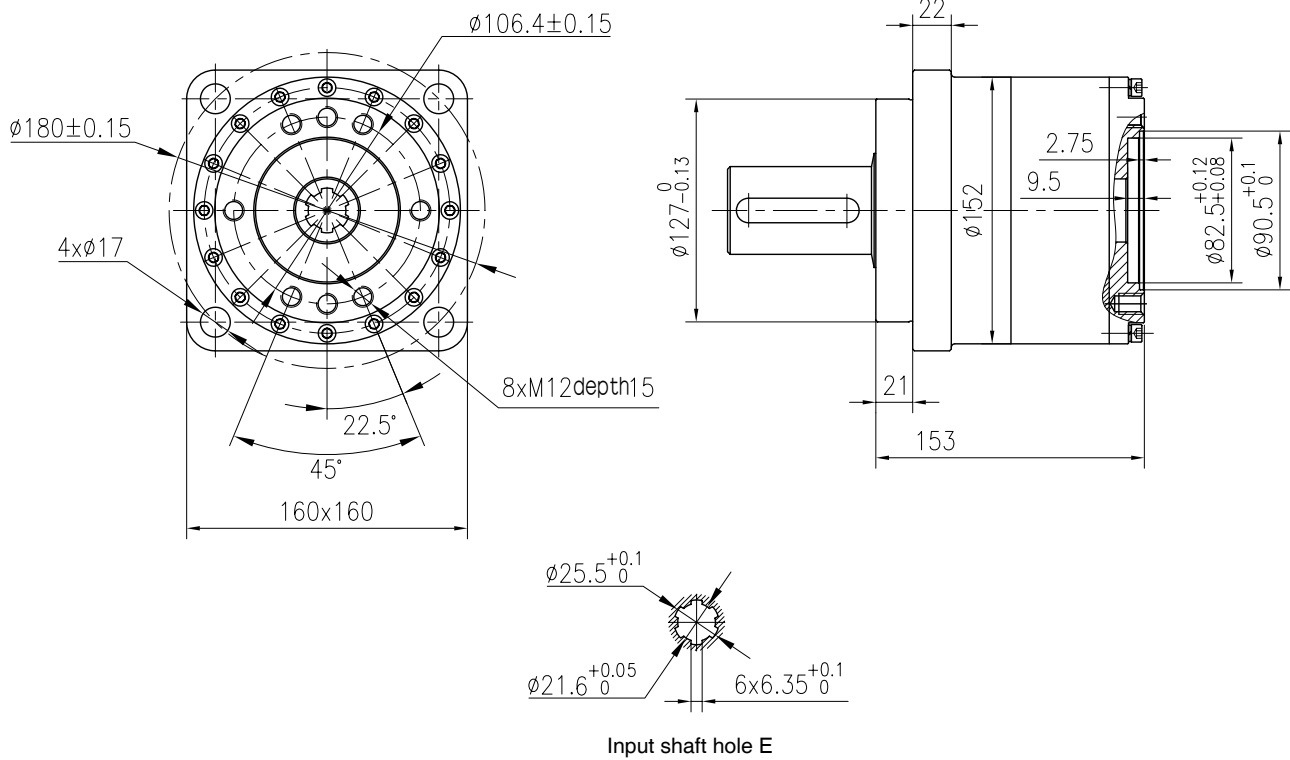
Drawing A



Drawing B

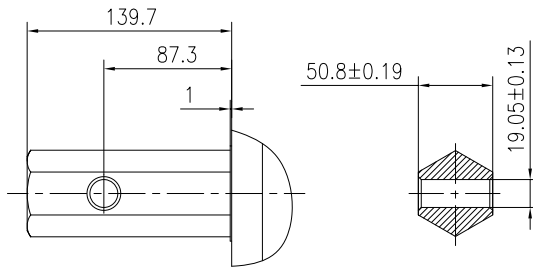


Main mounting and specification data

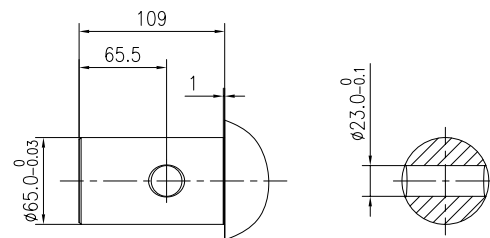


Output shaft extensions

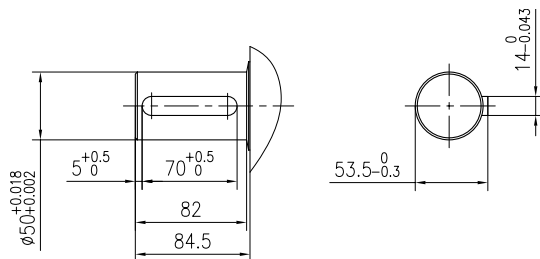
shaft H1



shaft H2



shaft A



Main specifications of the BMR,BMP,BMH and BMS motor with HGB will be calculated upon hydraulic motor.

The rotation direction of input and output of HGB planetary gearbox is reverse. The speed reduction ratio is 3.65. The max. output torque of HGB is 2000 Nm, the max. output power is 15 kW.



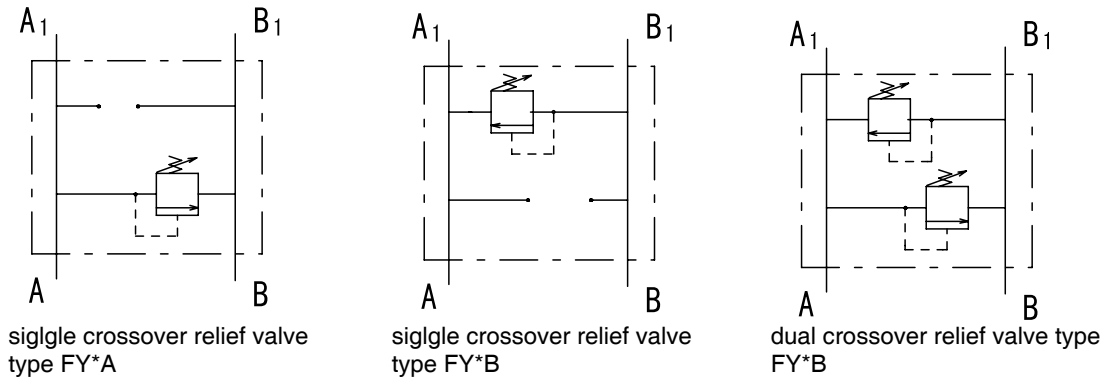
Order Information

1	2	3	4	5	6	7	8	9
HGB								

Pos.1	2	3	4	5	6	7	8	9
Series code	Ratio code	Input hole code	Output shaft code	Motor code	Motor displacement code	Motor port & drain port code	Paint	Special function
				BMP -E shaft BMR-E shaft	P R	G1/2 manifold mounting 4xM8,G1/4; M22x1.5 manifold mounting 4xM8,M14x1.5 7/8-14UNF O-ring manifold mounting 4x5/16-18UNC,7/16-20UNF 1/2-14NPTF manifold mounting 4x5/16-18UNC,7/16-20UNF	No paint Blue Black Grey	
Omit	3.65	E	Hexangular 50 φ65 φ50	BMH-S shaft	H	G1/2 manifold mounting 4xM8,G1/4 M22x1.5 manifold mounting 4xM8,M14x1.5 7/8-14UNF O-ring manifold mounting 4xM8,7/16-20UNF 1/2-14NPTF manifold mounting 4xM8,7/16-20UNF	No paint Blue Black Grey	00 Omit B S
				BMS-S1 shaft	S	G1/2 manifold mounting 2xM10,G1/4 M22x1.5 manifold mounting 2xM10,M14x1.5 7/8-14UNF O-ring manifold mounting 2x3/8-16,7/16-20UNF 1/2-14NPTF manifold mounting 2x3/8-16,7/16-20UNF		

Note: from the order code, please choose the colorful code in the right column, and provide us with the information in regard to structure, ratio, input shaft hole, output shaft extension, motor code, displacement code, motor port & drain port code and the paint, etc. If the specification is not in the table or you have special requirements, please contact us.

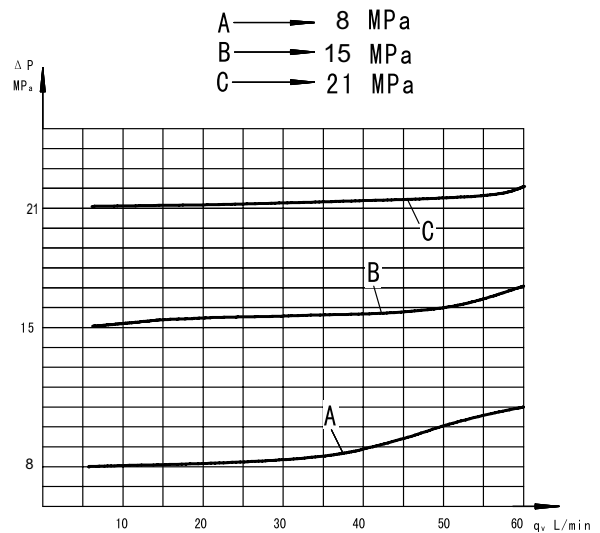
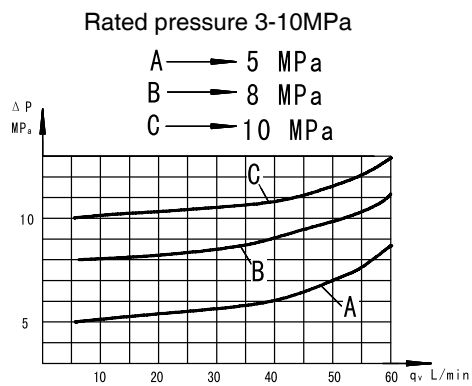
CROSSOVER RELIEF VALVE



Specification data

Parameters	Type				
	FYRHD	FYSHD	FYSD	FYRH	FYSH
Flow Rate (L/min)	60				
Pressure Range (MPa)	[3-10];[8-21]				
Weight (kg)	1.7	1.8	1.8	1.55	1.65

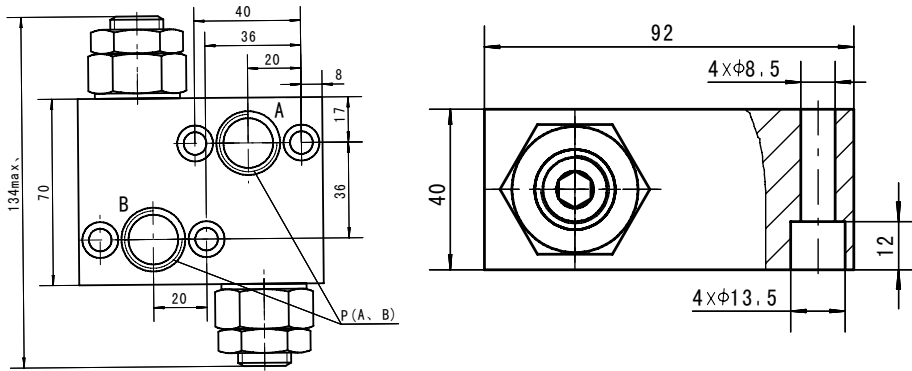
Rated pressure 8-21MPa





CROSSOVER RELIEF VALVES FOR BMR SERIES HYFRANLIC MOTORS

Dual crossover relief valve type FYRHD



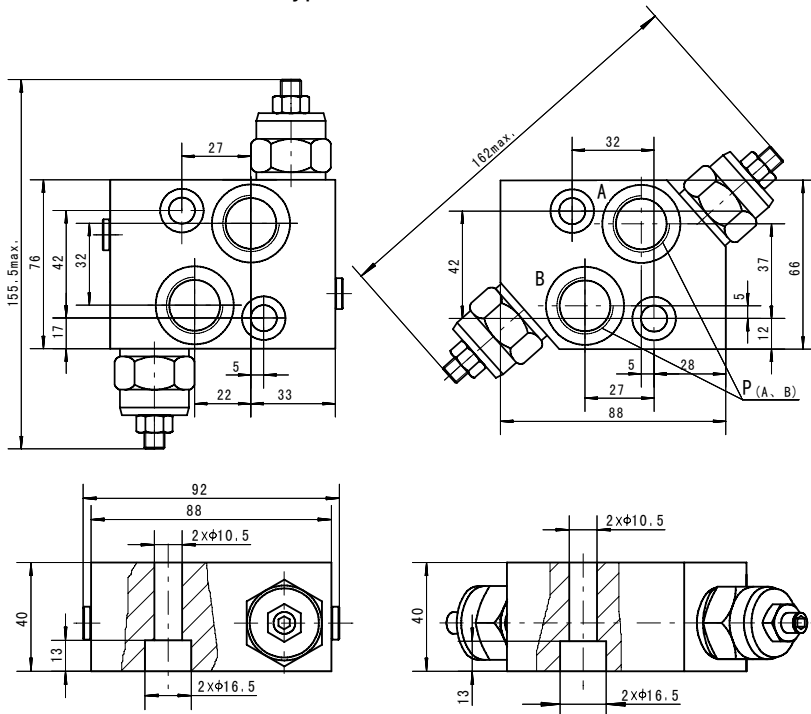
Code	P(A, B)(depth)
D	G1/2(18)
M	M22×1.5(18)
S	7/8-14UNF(18)
P	1/2-14NPTF(18)

Note:FYRHD Blocks are installed directly on BMR and BMP Motors with four bolts 5/16-18UNC,40mm long or M8×40-8.8,DIN912.

CROSSOVER RELIEF VALVES FOR BMS SERIES HYFRANLIC MOTORS

Dual crossover relief valve type FYSD

Dual crossover relief valve type FYSHD



Code	P(A, B)(depth)
D	G1/2(18)
M	M22×1.5(18)
S	7/8-14UNF(18)

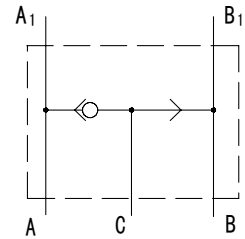
Note:FYSHD Blocks are installed directly on BMS Motors with two bolts 3/8-16UNC,40mm long or M10×40-8.8,DIN912.



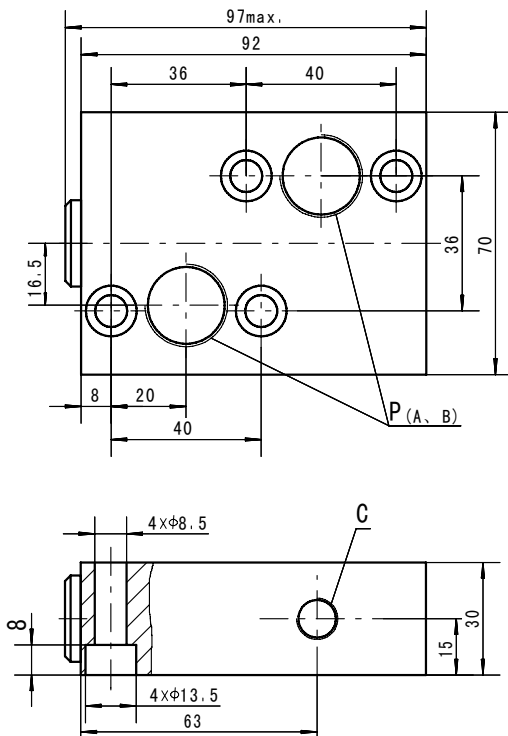
SWITCH VALVE

Specification Data

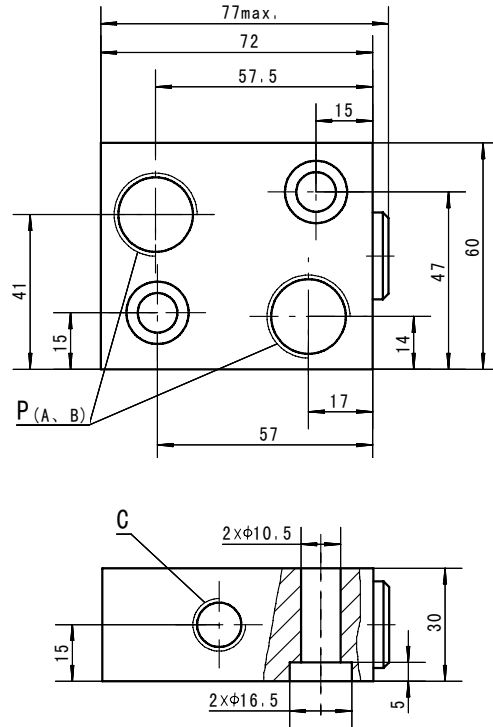
Parameters	Type	
	FSR	FSS
FlowRate (L/min)	60	
RatedPressure (MPa)	25	
Weight (Kg)	0.9	0.7



Switch valve FSR



Switch valve FSS



Code	P(A, B)(depth)	C(depth)
D	G1/2(17)	G1/4(14)
M	M22x1.5(17)	M14x1.5(14)
S	7/8-14UNF(17)	7/16-20UNF(12.7)

Note:FSR Blocks are installed directly on BMR and BMP Motors with four bolts 5/16-18UNC, 35mm long orM835-8.8;FSS Blocks are installed directly on BMS Motors with two bolts3/8-16UNC,35mm long or M1040-8.8DIN912



Order Information

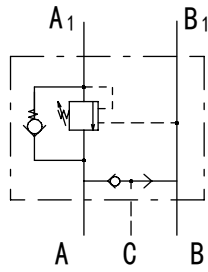


Pos.1	2	3	4	5	6	7
Type	Housing Type	Number of Spool	Pressure settings MPa	Flow Rate L/min	Ports	Paint
Y Crossover Relief Valves	RH SH S	A Ports A one valve-single B Port B one valve-single D Two valves-dual	10 3-10 standard settings 21 8-21 standard settings	60 Omit	D G1/2 M M22x1.5 S 7/8-14UNF P 1/2-14NPTF	00 No Paint Omit Blue B Black S Silver grey
S Switch Valve	R S					

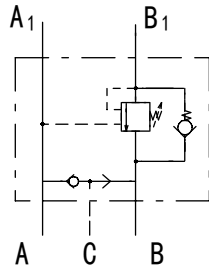
Note: from the order code , please choose the right code for valve type, motor housing type, number of spool, pressure settings, flow rate, ports and paint information. If you can't find any specification here, or if you have special requirements, please contact us.



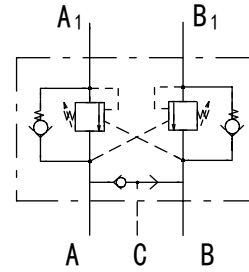
OVERCENTER VALVE WITH BRAKE PORT



Overcenter Valve FPRA



Overcenter Valve FPRB

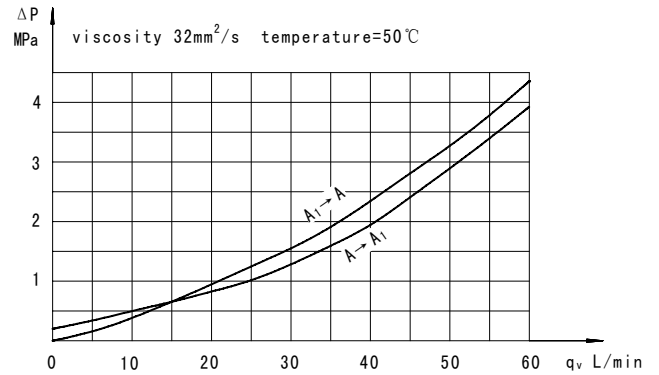


Overcenter Valve FPRD

Specifications

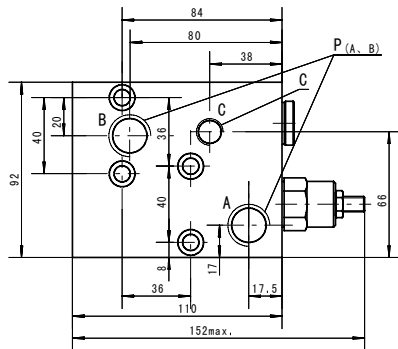
Specifications	model	
	FPRA(B)	FPRD
flow (L/min)	60	
pressure (Mpa)	7-25	
pilof ratio	4.25:1	
weight (kg)	3.30	3.35

pressure drop

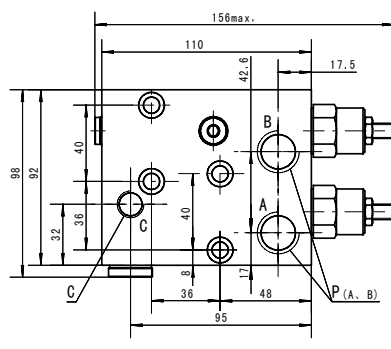


OVERCENTER VALVE FOR BMR MOTOR

Overcenter valve FPRA

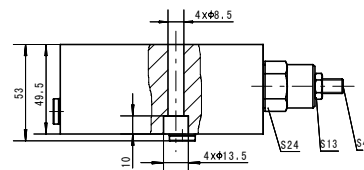
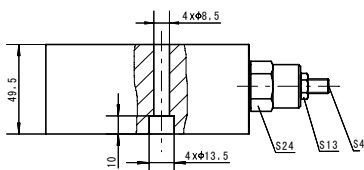


Overcenter valve FPRD



code	P(A, B)(depth)	C(depth)
D	G1/2(18)	G1/4(14)
M	M22x1.5(18)	M14x1.5(14)
S	7/8-14UNF(18)	7/16-20UNF(14)

Note: Valve FPR(D) is used together with BMP or BMR motor, 4 bolts thread; 5/16-18UNC or M8x50 grade 8.8





Order Information

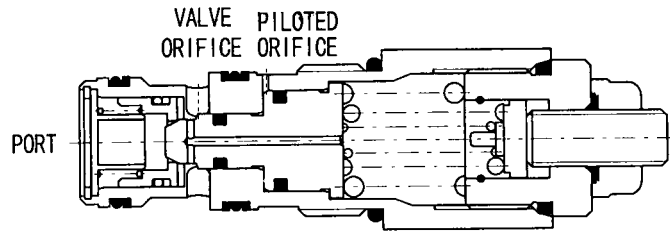
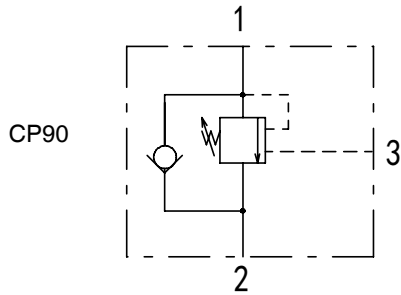


Pos.1	2	3	4	5	6	7
Type	Motor housing Type	Number of spool	Pressure settings MPa	Flow Rate L/min	Ports, Brake port	Paint
P	R	A	7-25	Omit	G1/2, G1/4 M22x1.5, M14x1.5 7/8-14UNF, 7/16-20UNF	00 Omit B S
	BMR	B		60		No Paint Blue Black Silver grey
		D				

Note: from the order code, please choose the right code for valve type, motor housing type, number of spool, pressure settings, port braking port and paint information. If you can't find any specification here or if you have special requirements, please contact us.



CARTRIDGE TYPE OVERCENTER VALVE



OPERATION

The check valve allows free flow from port ② to port ① while a direct-acting, pilot-assisted relief valve controls flow from port ① to port ②, Pilot assist at port ③ lowers the effective setting of the relief valve at a rate determined, by the pilot ratio

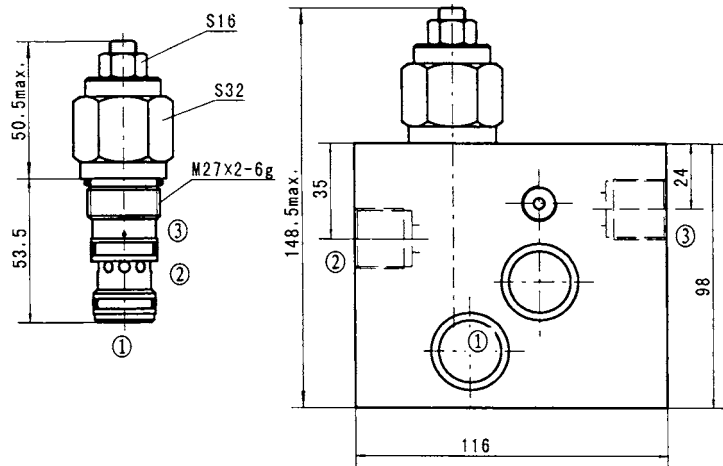
FEATURES

Counterbalance valves should be set at least 13 times the maximum load induced pressure, Backpressure at port ② adds to the effective relief setting at a ratio of ① plus the pilot ratio times the backpressure

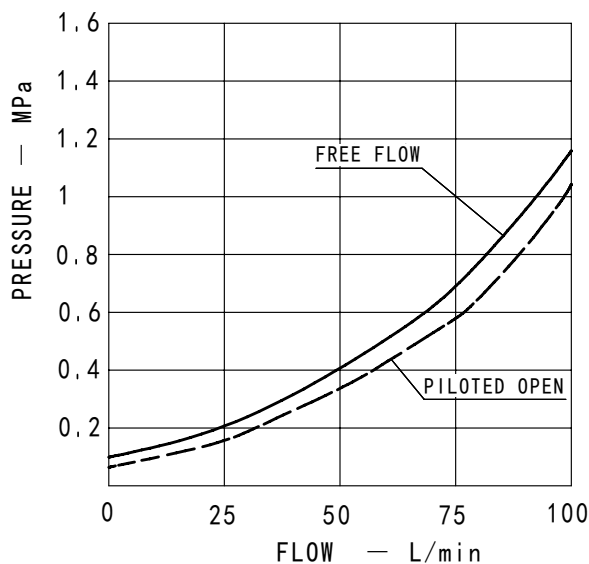
SPECIFICATIONS

Maximum Pressure: 27MPa
 Relief valve setting: 35MPa
 Rated Flow: 90L/min
 Leakage: 5 drops/min
 Temperature: -20°C ~ 90°C

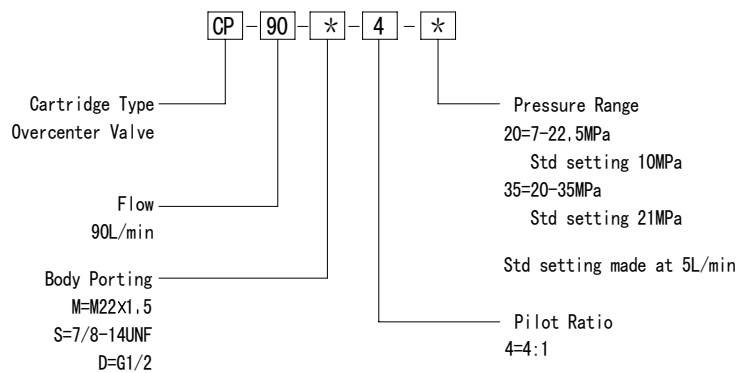
DIMENSIONS



PRESSURE DROP CURVE



ORDER INFORMATION





Along with the products improvement, Zhenjiang hydraulics will enrich and update the technical information in the catalogue. We try our best to provide the accurate information, but we will not be responsible for the incorrectness caused by unintentional negligence.



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