



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 36	BMP 50	BMP 80	BMP 100	BMP 125	BMP 160	BMP 200	BMP 250	BMP 315	BMP 400	BMP 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 36 [36cm³/rev.]

Pressure (MPa)

	3	6	7	8	10	11	12.5	16.5
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Flow (L/min)	Max.cont.								Max.int.	
	3	6	7	8	10	11	12.5	16.5		
8	13	25	29	34	43	48				
15	13	25	29	34	43	48	56	75		
20	13	24	29	34	43	48	56	76		
30	12	24	29	34	43	48	56	76		
35	12	23	28	34	43	48	56	76		
40	12	23	28	32	41	47	55	75		
45	11	22	26	32	41	46	54	74		
55	6	15	22	28	37	44	52	71		
60	3	11	18	20	30	38	49	67		
Max.int.	1650	1640	1626	1603	1571	1536	1502	1446		

BMP 50 [51.7cm³/rev.]

Pressure (MPa)

	3	6	8	10	12.5	14	16	17.5
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Flow (L/min)	Max.cont.								Max.int.	
	3	6	8	10	12.5	14	16	17.5		
8	20	41	56	69	89	95				
15	19	40	56	71	91	100	112	120		
20	18	39	55	71	92	101	117	128		
30	17	38	55	71	91	98	116	124		
35	17	38	54	69	89	98	117	124		
45	14	36	53	67	88	98	114	123		
55	12	33	50	65	85	96	111	121		
60	10	32	47	64	83	94	108	119		
Max.int.	1440	1430	1416	1395	1367	1351	1335	1312		

BMP 80 [77.7cm³/rev.]

Pressure (MPa)

	3	6	8	10	12.5	14	16	17.5
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Flow (L/min)	Max.cont.								Max.int.	
	3	6	8	10	12.5	14	16	17.5		
8	32	62	85	104	129	144				
15	32	63	84	107	126	144	165			
20	31	63	84	107	132	146	168	185		
30	31	62	83	106	131	146	168	186		
35	30	59	81	102	130	144	167	185		
45	25	58	79	100	126	142	165	182		
55	23	57	78	97	124	140	161	179		
60	20	53	75	94	120	137	160	177		
Max.int.	948	940	931	920	906	890	871	854		

BMP 100 [96.2cm³/rev.]

Pressure (MPa)

	3	6	8	10	12.5	14	16	17.5
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Flow (L/min)	Max.cont.								Max.int.	
	3	6	8	10	12.5	14	16	17.5		
8	40	77	105	130	161	180				
15	39	77	106	130	160	180	208			
20	36	74	104	128	161	179	205	227		
30	33	72	103	125	160	177	203	225		
35	30	70	98	122	159	176	202	224		
45	29	67	95	118	155	174	200	220		
55	25	64	93	116	152	170	198	217		
60	22	60	91	114	149	167	194	213		
Max.int.	771	763	755	744	735	724	708	693		

Torque (N·m) 87
Speed (rpm) 920

□ cont.
■ int.

Performance Data

BMP 125 [120.2cm³/rev.]

Pressure (MPa)

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

BMP 160 [157.2cm³/rev.]

Pressure (MPa)

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

BMP 200 [194.5cm³/rev.]

Pressure (MPa)

	3	6	8	10	12.5	14	16	17.5
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Flow (L/min)	Max.cont.								Max.int.							
	3	6	8	10	12.5	14	16	17.5	3	6	8	10	12.5	14	16	17.5
8	79	164	207	250	320	360										
15	40	39	38	35	28	22										
	78	162	205	250	322	361	410									
20	76	75	74	71	66	61	51									
	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)

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

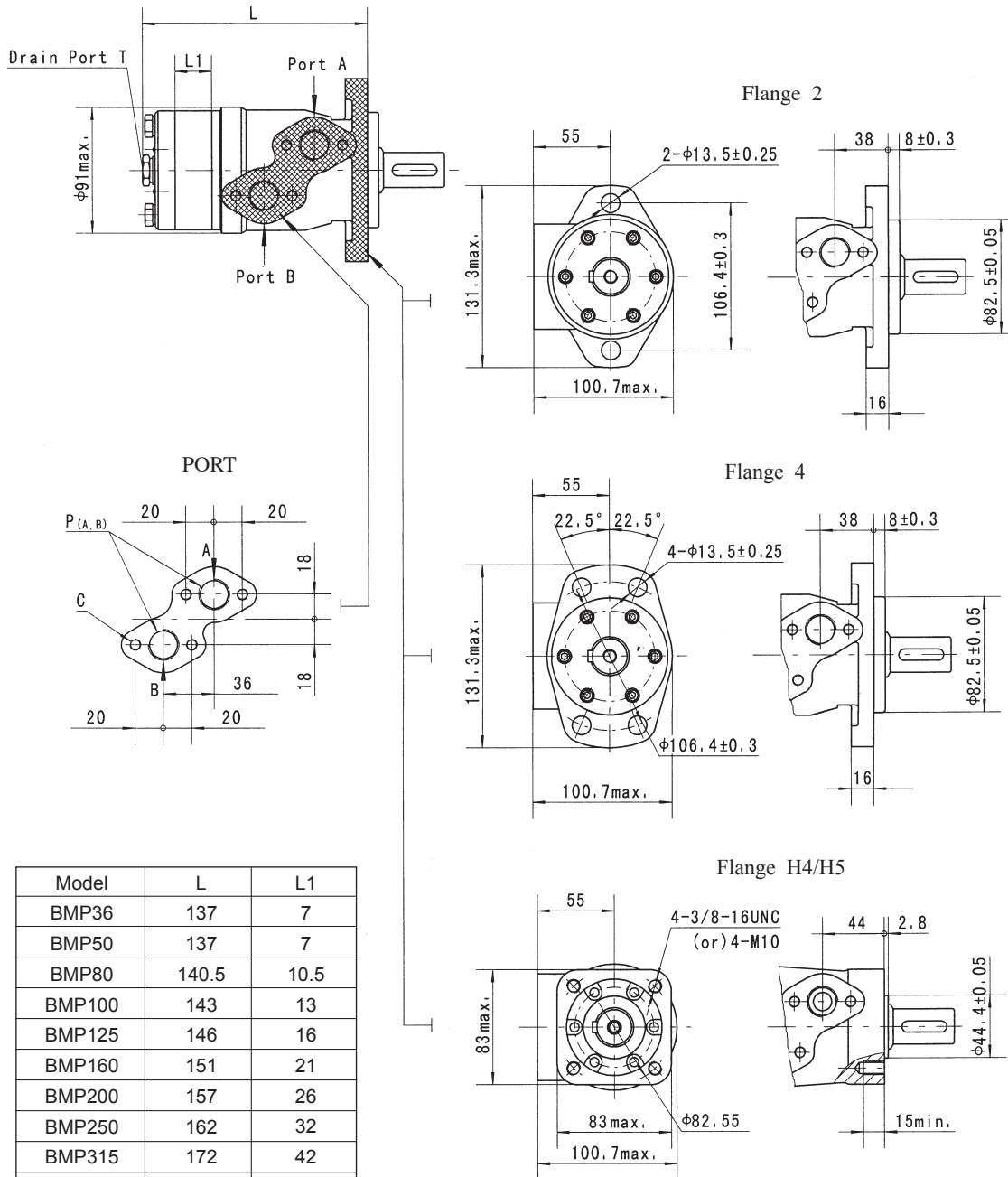
Flow (L/min)	Pressure (MPa)							
	1.5	3	4.5	6	7	8	9	
4	96 7	194 6	285 4					
8	98 15	201 15	304 14	391 14	443 12	512 9	574 7	
15	96 30	192 30	284 29	380 28	421 26	496 23	550 22	
20	96 40	191 40	280 40	372 39	418 37	493 33	546 31	
30	91 61	185 60	272 60	360 58	412 56	486 53	541 50	
40	86 81	172 80	261 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)

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