



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 36	BMR 50	BMR 80	BMR 100	BMR 125	BMR 160	BMR 200	BMR 250	BMR 315	BMR 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)

		Max.cont. Max.int.								
		2	3	5	7	9	10	12.5	14.0	16.5
Flow (L/min)	4	10	16	25	37	46	50			
		105	100	92	80	71	58			
	8	9	15	25	37	47	50	63	71	83
		208	200	188	175	158	149	134	120	108
	15	8	14	23	36	45	51	64	72	82
		403	392	380	365	348	326	318	302	274
	20	6	13	22	35	44	50	64	72	82
		540	531	518	500	483	462	450	435	412
	30	6	12	21	32	42	47	63	70	80
		810	798	780	763	742	722	705	694	668
Max.cont.	40	5	11	19	30	41	45	61	68	79
		1092	1080	1069	1056	1042	1028	1011	984	957
Max.int.	45	4	10	17	29	40	44	59	66	77
		1230	1215	1194	1170	1150	1128	1100	1070	1020

BMR 50 [51.7cm³/rev.]

Давление (MPa)

		Max.cont. Max.int.								
		5	7	9	10	12	14	16	17.5	
Расход (л/мин)	5	35	45	61	67	77	88			
		93	84	76	73	69	46			
	10	36	46	62	69	80	95	108	120	
		186	178	166	162	153	136	118	97	
	15	35	49	63	73	88	100	109	123	
		283	277	269	261	250	230	211	185	
	20	34.5	47	61	69	83	96	109	126	
		377	375	365	361	346	330	302	270	
	30	33	44	60	67	80	95	108	126	
		576	569	561	554	542	531	500	465	
40	30	41	58	66	79	92	106	122		
	760	758	753	750	738	724	700	670		
45	29.5	40	57	65	78	90	105	121		
	856	853	849	845	835	815	796	770		
Max.cont.	50	26	37	53	60	73	85	99	114	
		950	940	925	906	880	852	832	801	
Max.int.	60	20	33	48	56	69	81	95	109	
		1138	1124	1100	1075	1056	1028	1006	970	

BMR 80 [81.5cm³/rev.]

Pressure (MPa)

		Max.cont. Max.int.								
		5	7	9	10	12	14	16	17.5	20
Flow (L/min)	5	50	64	88	108	133				
		59	56	50	44	38				
	10	54	77	99	108	129	150	173		
		118	113	106	97	86	79	56		
	20	57	78.0	102	111	134	155	177	196	225
		238	234	227	216	203	190	178	154	135
	30	54	75	100	108	131	152	176	195	223
		360	352	340	332	316	302	290	274	250
	40	48	73	96	105	127	148	172	190	220
		480	470	458	445	430	418	403	388	359
50	42	70	93	102	124	147	170	188	218	
	604	595	582	570	556	540	521	504	487	
Max.cont.	60	37	66	89	98	121	144	166	184	213
		726	715	704	692	678	663	647	622	594
70	32	60	83	95	116	140	160	177	208	
	845	834	820	802	789	767	754	730	705	
Max.int.	75	21	50	78	90	111	135	154	171	200
		910	895	881	867	852	830	806	787	756

BMR 100 [102cm³/rev.]

Pressure (MPa)

		Max.cont. Max.int.								
		5	7	9	10	12	14	16	17.5	20
Flow (L/min)	5	66	92	120	135	156				
		45	42	38	34	27				
	10	68	96	125	138	159	188	212		
		93	90	86	81	74	57	42		
	20	65	94.0	123	137	155	186	210	238	274
		189	185	180	173	165	158	150	139	118
	30	63	92	120	133	153	185	209	235	270
		286	281	275	266	257	246	237	225	207
	40	57	88	117	130	152	185	208	233	267
		385	378	365	355	345	332	320	314	297
50	48	79	110	123	150	183	204	228	260	
	482	477	470	460	448	435	420	405	389	
Max.cont.	60	38	70	105	120	144	178	200	220	252
		580	572	560	548	535	523	510	500	478
70	32	65	100	118	141	176	197	215	246	
	678	670	660	648	638	626	615	606	580	
Max.int.	75	23	59	93	111	136	170	192	210	240
		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
							Max.cont.		Max.int.

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

BMR 160 [157.2cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5	20
							Max.cont.		Max.int.

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

BMR 200 [194.5cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5	20
							Max.cont.		Max.int.

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

BMR 250 [253.5cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5	20
							Max.cont.		Max.int.

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

□ 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

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

BMR 375 [381.4cm³/rev.]

Pressure (MPa)

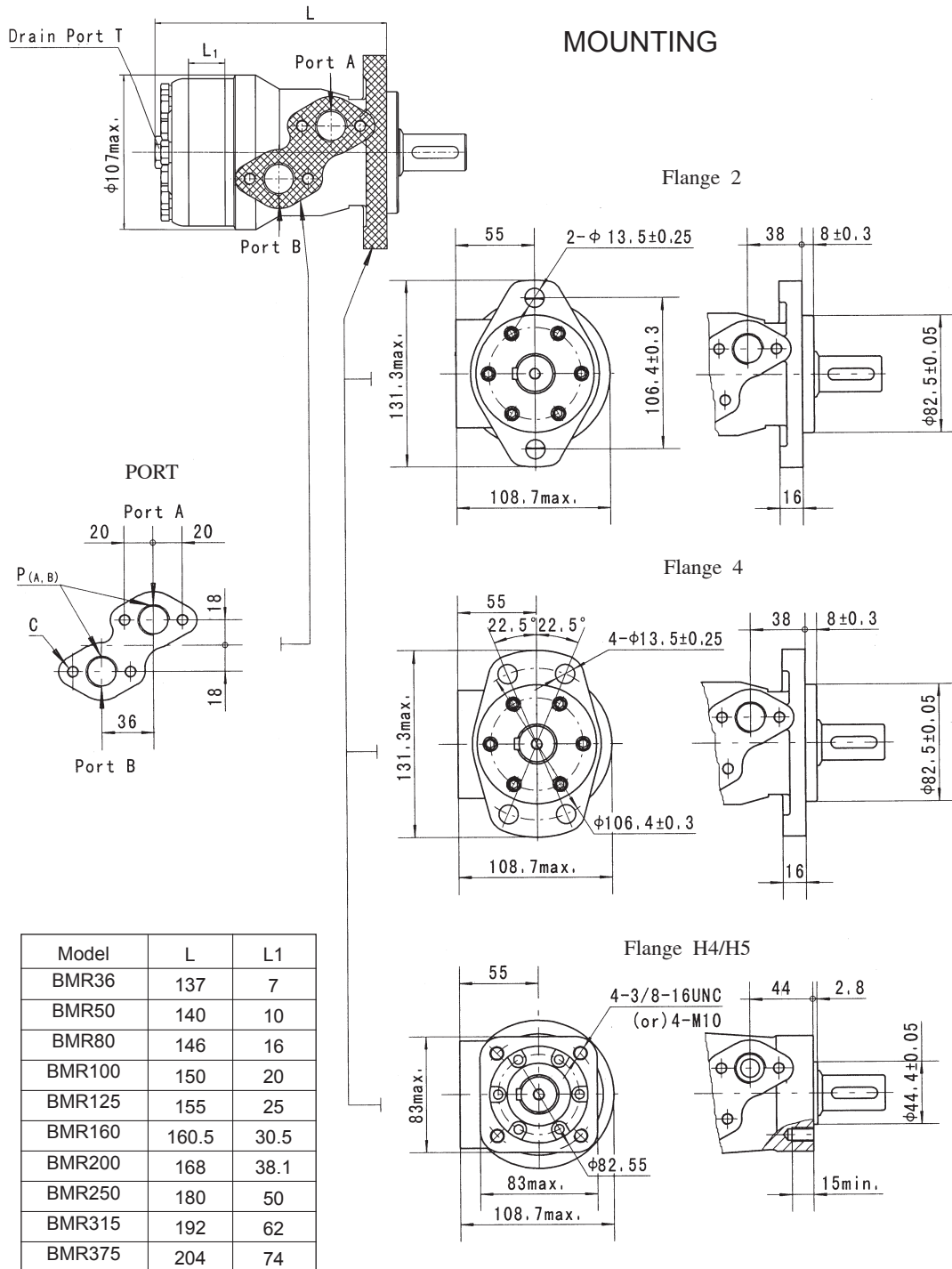
	3	4.5	5.5	6.5	8	10	12.5	14

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

Torque (N·m) 481
Speed (rpm) 200

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)