

■ BMR INTRODUCTION



This series of motor, with its shell made of ductile cast iron of adequate intensity, can be applied to situations with less load and interval operation, widely to agriculture, forestry, plastics, machine tools and min machines, such as the mould height adjustment of the injection molding machine, the cleaner, the sawmill the worktable etc.

■ BMR CHARACTERISTICS

1. The output shaft, with the deep groove ball bearing, can bear certain axial force and radial force.
2. With the axial oil distribution structure, it is of smaller size and less weight.
3. With two inner check valves, no drain connection.
4. With cycloid group with the roller, it has a small friction and high mechanical efficiency.

■ BMR TECHNICAL DATA

Type	BMR	BMR	BMR	BMR	BMR	BMR	BMR	BMR	BMR
	BMRW	BMRW	BMRW	BMRW	BMRW	BMRW	BMRW	BMRW	BMRW
	50	80	100	125	160	200	250	315	400
Displacement.(ml/r)	51.7	80.5	100.5	126.3	160.8	200.9	252.6	321.5	401.9
Max.Pressure.Drop (Mpa)	cont.	14	14	14	14	14	11	9	7
	int.	17.5	17.5	17.5	17.5	17.5	14	11	9
	peak.	20	20	20	20	20	16	13	11
Max.torque (Nm)	cont.	93	152	194	237	310	369	380	380
	int.	118	189	236	296	378	450	470	470
	peak.	135	216	270	338	433	509	540	540
Speed.Range(cont.)(r/min)	10-775	10-750	10-600	10-475	10-375	10-300	10-240	10-190	10-160
Max.Flow(cont.)(L/min)	40	60	60	60	60	60	60	60	60
Max.Output.Power(cont.)	7	10	10	10	10	8	6	5	4
Weight(Kg)	6.5	6.9	7.0	7.3	7.5	8.0	8.5	9.0	11

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

■ BMR PERFORMANCE DATA

BMR 50[51.7ml/r]
Pressure (Mpa)

Flow(L/min)	Pressure (Mpa)							
	5	7	9	10	12	14	16	17.5
5	34	44	58	65	75	88		
	94	85	77	77	72	50		
	188	179	167	163	154	137	119	98
10	34	48	62	72	87	100	108	122
	285	279	271	263	252	232	213	187
	34	46	60	68	82	95	109	125
20	379	377	367	363	348	332	304	272
	32	43	59	66	79	94	107	121
	578	571	563	556	544	533	502	467
Max.cont.	30	40	57	65	78	91	105	120
	762	760	755	752	740	726	702	672
	29	39	56	64	77	89	104	120
45	858	855	851	847	837	817	798	772
	25	36	52	59	72	84	98	113
	952	942	927	908	882	854	834	803

BMR 100[100.5ml/r]
Pressure (Mpa)

Flow(L/min)	Pressure (Mpa)							
	5	7	9	10	12	14	16	17.5
5	64	90	118	134	154			
	49	48	46	42	38			
	65	93	122	134	155	183	210	
10	96	94	93	91	80	60	48	
	62	93	121	135	153	184	208	236
	192	188	184	178	171	168	158	146
20	61	90	118	130	150	180	200	232
	296	294	290	290	288	282	270	258
	55	86	115	126	146	181	206	228
40	387	380	369	361	356	348	338	320
	46	77	108	121	146	181	200	221
	484	479	472	463	452	445	428	410
Max.cont.	34	62	98	110	136	170	186	199
	583	567	569	555	540	536	528	516
	30	63	97	110	138	170	190	210
70	680	672	662	650	640	635	620	606
	20	54	90	106	130	165	188	200
	728	720	710	695	681	667	650	634

BMR 160[160.8ml/r]
Pressure (Mpa)

Flow(L/min)	Pressure (Mpa)							
	5	7	9	10	12	14	16	17.5
5	100	142	188	207				
	29	26	21	19				
	104	146	191	211	245	282	330	
10	62	60	58	49	45	32	25	
	102	148	194	218	251	290	338	368
	124	120	118	114	109	104	99	94
20	96	141	186	215	248	288	335	364
	183	181	179	176	166	158	144	132
	87	136	180	206	248	286	330	358
40	246	242	240	235	231	219	200	155
	70	126	172	198	238	278	320	350
	309	307	300	295	287	278	262	247
Max.cont.	58	111	168	191	232	271	312	342
	371	367	359	354	346	338	323	306
	47	104	160	190	228	267	301	338
70	435	430	421	415	403	393	381	365
	34	91	150	180	221	261	291	328
	470	463	450	441	431	420	405	389

Torque: 150Nm
Speed: 450r/min

Cont.
Int.

BMR 80[80.5ml/r]
Pressure (Mpa)

Flow(L/min)	Pressure (Mpa)							
	5	7	9	10	12	14	16	17.5
5	48	58	84	106	129			
	61	58	52	46	40			
	50	74	96	106	126	145	170	
10	122	116	112	108	106	99	60	
	54	76	100	109	131	152	174	193
	243	239	231	219	206	192	176	152
20	50	72	96	104	128	148	172	191
	362	358	356	350	349	335	325	300
	45	70	95	104	125	146	171	188
40	484	480	478	476	470	468	440	438
	41	68	91	101	122	145	168	186
	610	608	606	603	600	598	550	520
Max.cont.	35	65	88	96	120	142	164	182
	726	723	720	718	710	700	698	680
	30	58	81	93	114	136	158	175
70	845	834	820	802	789	767	754	730
	19	48	76	88	108	132	151	168
	910	895	881	867	852	830	806	787

BMR 125[126.3ml/r]
Pressure (Mpa)

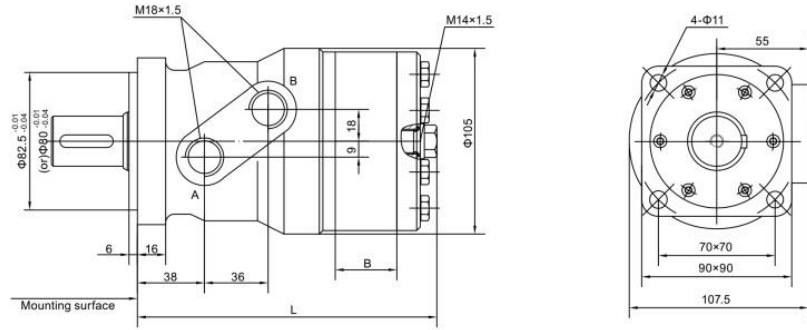
Flow(L/min)	Pressure (Mpa)							
	5	7	9	10	12	14	16	17.5
5	74	106	140	163				
	37	32	27	21				
	81	114	152	172	200	220	250	
10	78	77	74	59	45	29	20	
	80	114	150	170	200	221	254	292
	157	156	154	151	146	142	120	114
20	78	112	149	169	198	220	252	290
	232	230	228	222	220	218	199	170
	77	111	147	168	196	218	250	288
40	312	311	307	300	298	284	270	252
	62	105	143	165	195	223	254	287
	391	388	384	380	372	362	346	330
Max.cont.	52	98	136	160	191	220	250	282
	470	468	464	459	448	434	412	405
	41	90	130	156	187	215	242	278
70	548	544	540	541	538	535	530	496
	32	79	126	148	180	208	234	262
	586	583	578	570	560	546	532	520

BMR 200[200.9ml/r]
Pressure (Mpa)

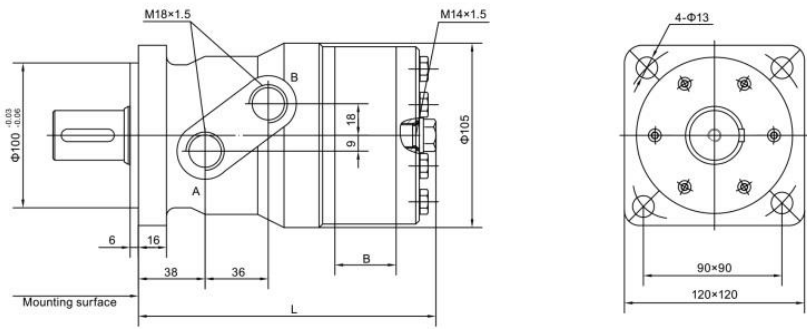
Flow(L/min)	Pressure (Mpa)							
	5	7	9	10	12	14	16	17.5
5	129	176	230	256				
	24	22	18	13				
	133	182	236	261	310	352	400	
10	49	47	45	43	38	33	24	
	131	181	232	256	308	354	400	431
	99	97	94	92	88	83	74	64
20	126	176	229	252	308	353	400	430
	149	147	144	141	135	126	113	105
	112	168	224	248	304	350	393	423
40	200	197	194	191	185	174	160	151
	94	154	220	243	294	343	384	414
	252	249	246	243	238	228	212	194
Max.cont.	78	144	213	236	287	339	382	410
	304	301	298	294	286	276	262	243
	67	135	206	228	277	326	375	408
70	355	353	349	340	329	316	300	288
	58	125	197	220	270	321	360	398
	382	379	373	362	350	337	322	312

■ BMR Installation

Square flange A、A1



Square flange A2 III



Type	BMR-50	BMR-80	BMR-100	BMR-125	BMR-160	BMR-200	BMR-250	BMR-315	BMR-400
L	142	147	150.5	155	161	168	177	189	203
L1	150	155	158.5	163	169	176	185	197	211
B	9	14	17.5	22	28	35	44	56	70

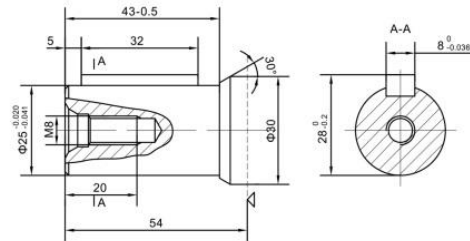
■ BMR PORTS CODE

Code	Ports	P(A、B)(deep)	C (deep)	T (deep)
Y		G1/2 (15)	M8 (13)	M14 x 1.5 (12)
Y1		M18 x 1.5 (15)	M8 (13)	M14 x 1.5 (12)
Y2		M22 x 1.5 (15)	M8 (13)	M14 x 1.5 (12)
Y4		ZG3/8 (15)	M8 (13)	M14 x 1.5 (12)
Y5		7/8-14UNF (15)	—	M14 x 1.5 (12)
Y7		ZG1/2 (15)	M8 (13)	M14 x 1.5 (12)
Y8		NPT1/2 (15)	M8 (13)	M14 x 1.5 (12)
Y9		NPTF1/2 (15)	5/16-18UNC (13)	7/16-20UNF (12)
Y10		G1/2 (15)	M8 (13)	G1/4 (12)
Y15		7/8-14UNF (15)	5/16-18UNC (13)	7/16-20UNF (12)

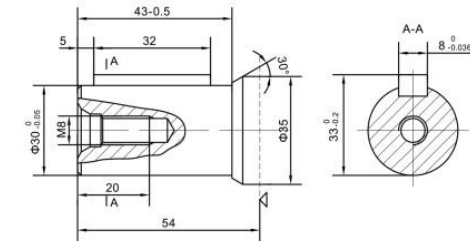
Note:P(A、B)—Ports, C—Mounting Thread (—Indicates no this thread), T—Drain connetion

■ BMR SHAFT VERSION

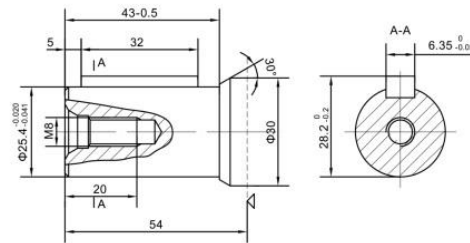
P1: Φ25 Cylindrical shaft, parallel key8 × 7 × 32



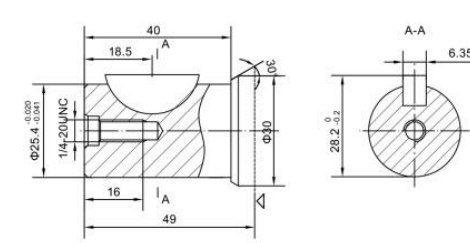
P2: Φ30 Cylindrical shaft, parallel key8 × 7 × 32



P3: Φ25.4 Cylindrical shaft, parallel key6.35 × 6.35 × 32



P4: Φ25.4 Cylindrical shaft, Woodruff key Φ25.4 × 6.35



◁ : Motor mounting surface

■ BMR SHAFT VERSION

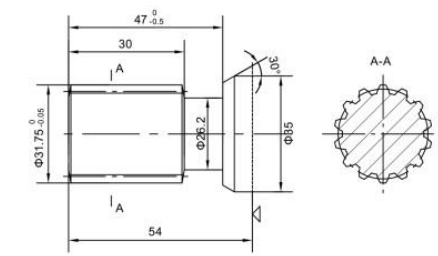
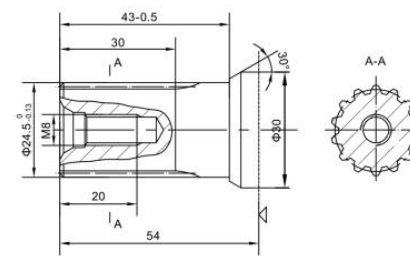
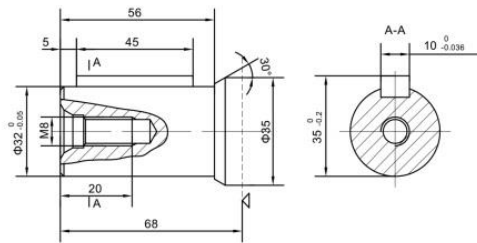
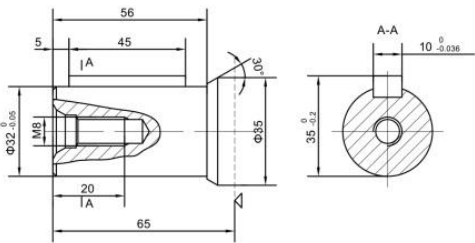
■ BMR SHAFT VERSION

P5: $\Phi 32$ Cylindrical shaft, parallel key $10 \times 8 \times 45$

P52: $\Phi 32$ Cylindrical shaft, parallel key $10 \times 8 \times 45$

K4: $\Phi 24.5$ involute splined shaft B25 $\times 22$ DIN5482 m: 1.6 Z:14

K10: $\Phi 31.75$ involute splined shaft 14-DP12/24 $a=30^\circ$

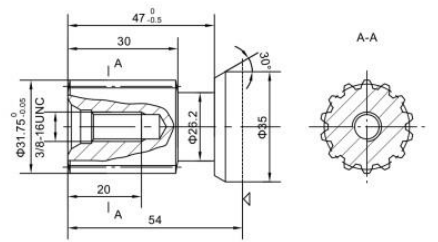
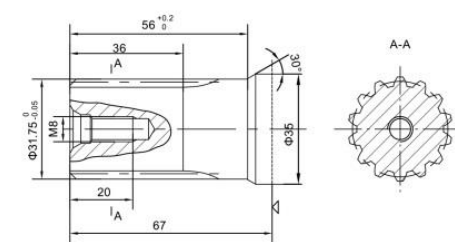
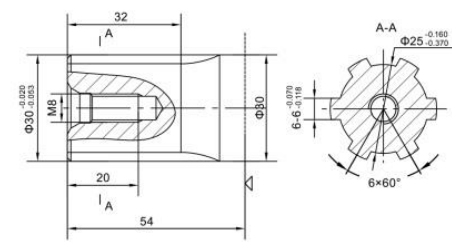
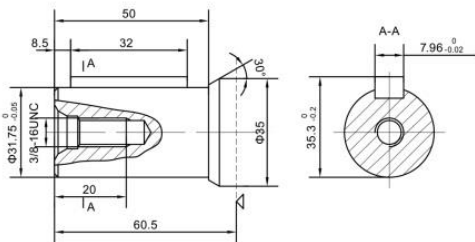


P6: $\Phi 31.75$ Cylindrical shaft, parallel key $7.96 \times 7.96 \times 32$

H1: $\Phi 30$ Splined shaft, 6-30 $\times 25 \times 6$

K13: $\Phi 31.75$ involute splined shaft 14-DP12/24 $a=30^\circ$

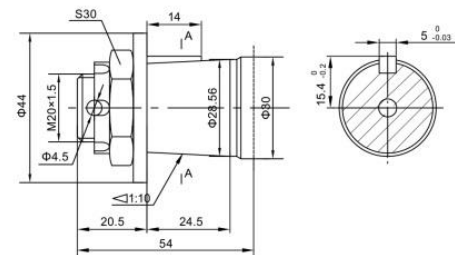
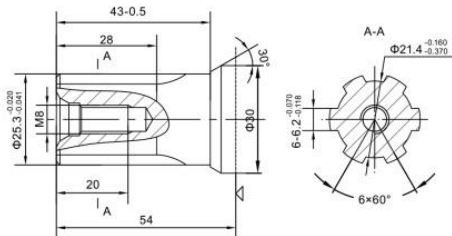
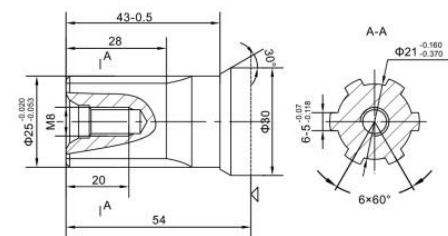
K14: $\Phi 31.75$ involute splined shaft 14-DP12/24 $a=30^\circ$



H2: $\Phi 25$ Splined shaft, 6-25 $\times 21 \times 5$

H3: $\Phi 25.3$ Splined shaft, 6-25.3 $\times 21.4 \times 6.2$

Z1: $\Phi 28.56$ Tapered shaft, taper 1:10, parallel key $5 \times 5 \times 14$



◁ : Motor mounting surface

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