

■ 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 interbval 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 structur, 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
	BMRS	BMRS	BMRS	BMRS	BMRS	BMRS	BMRS	BMRS	BMRS
	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)	Max.cont.							Max.int.		
	5	7	9	10	12	14	16	17.5		
5	34	44	58	65	75	88				
10	94	85	77	77	72	50				
15	35	45	61	68	79	94	107	119		
20	188	179	167	163	154	137	119	98		
30	34	48	62	72	87	100	108	122		
40	285	279	271	263	252	232	213	187		
45	34	46	60	68	82	95	109	125		
50	379	377	367	363	348	332	304	272		
Max.cont.	32	43	59	66	79	94	107	121		
50	578	571	563	556	544	533	502	467		
Max.int.	30	40	57	65	78	91	105	120		
50	762	760	755	752	740	726	702	672		
50	29	39	56	64	77	89	104	120		
50	858	855	851	847	837	817	798	772		
50	25	36	52	59	72	84	98	113		
50	952	942	927	908	882	854	834	803		

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

Flow(L/min)	Max.cont.							Max.int.		
	5	7	9	10	12	14	16	17.5		
5	48	58	84	106	129					
10	61	58	52	46	40					
20	50	74	96	106	126	145	170			
30	122	116	112	108	106	99	60			
40	54	76	100	109	131	152	174	193		
50	243	239	231	219	206	192	176	152		
60	50	72	96	104	128	148	172	191		
70	362	358	356	350	349	335	325	300		
80	45	70	95	104	125	146	171	188		
90	484	480	478	476	470	468	440	438		
100	41	68	91	101	122	145	168	186		
110	610	608	606	603	600	598	550	520		
120	35	65	88	96	120	142	164	182		
130	726	723	720	718	710	700	698	680		
140	30	58	81	93	114	136	158	175		
150	845	834	820	802	789	767	754	730		
160	19	48	76	88	108	132	151	168		
170	910	895	881	867	852	830	806	787		

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

Flow(L/min)	Max.cont.							Max.int.		
	5	7	9	10	12	14	16	17.5		
5	64	90	118	134	154					
10	49	48	46	42	38					
20	65	93	122	134	155	183	210			
30	96	94	93	91	80	60	48			
40	62	93	121	135	153	184	208	236		
50	192	188	184	178	171	168	158	146		
60	61	90	118	130	150	180	200	232		
70	296	294	290	290	288	282	270	258		
80	55	86	115	126	146	181	206	228		
90	387	380	369	361	356	348	338	320		
100	46	77	108	121	146	181	200	221		
110	484	479	472	463	452	445	428	410		
120	34	62	98	110	136	170	186	199		
130	583	567	569	555	540	536	528	516		
140	30	63	97	110	138	170	190	210		
150	680	672	662	650	640	635	620	606		
160	20	54	90	106	130	165	188	200		
170	728	720	710	695	681	667	650	634		

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

Flow(L/min)	Max.cont.							Max.int.		
	5	7	9	10	12	14	16	17.5		
5	74	106	140	163						
10	37	32	27	21						
20	81	114	152	172	200	220	250			
30	78	77	74	59	45	29	20			
40	80	114	150	170	200	221	254	292		
50	157	156	154	151	146	142	120	114		
60	78	112	149	169	198	220	252	290		
70	232	230	228	222	220	218	199	170		
80	77	111	147	168	196	218	250	288		
90	312	311	307	300	298	284	270	252		
100	62	105	143	165	195	223	254	287		
110	391	388	384	380	372	362	346	330		
120	52	98	136	160	191	220	250	282		
130	470	468	464	459	448	434	412	405		
140	41	90	130	156	187	215	242	278		
150	548	544	540	541	538	535	530	496		
160	32	79	126	148	180	208	234	262		
170	586	583	578	570	560	546	532	520		

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

Flow(L/min)	Max.cont.							Max.int.		
	5	7	9	10	12	14	16	17.5		
5	100	142	188	207						
10	29	26	21	19						
20	104	146	191	211	245	282	330			
30	62	60	58	49	45	32	25			
40	102	148	194	218	251	290	338	368		
50	124	120	118	114	109	104	99	94		
60	96	141	186	215	248	288	335	364		
70	183	181	179	176	166	158	144	132		
80	87	136	180	206	248	286	330	358		
90	246	242	240	235	231	219	200	155		
100	70	126	172	198	238	278	320	350		
110	309	307	300	295	287	278	262	247		
120	58	111	168	191	232	271	312	342		
130	371	367	359	354	346	338	323	306		
140	47	104	160	190	228	267	301	338		
150	435	430	421	415	403	393	381	365		
160	34	91	150	180	221	261	291	328		
170	470	463	450	441	431	420	405	389		

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

Flow(L/min)	Max.cont.							Max.int.		
	5	7	9	10	12	14	16	17.5		
5	129	176	230	256						
10	24	22	18	13						
20	133	182	236	261	310	352	400			
30	49	47	45	43	38	33	24			
40	131	181	232	256	308	354	400	431		
50	99	97	94	92	88	83	74	64		
60	126	176	239	252	308	353	400	430		
70	149	147	144	141	135	126	113	105		
80	112	168	224	248	304	350	393	423		

■ BMR PERFORMANCE DATA

BMR 250[252.6ml/r]
Pressure (Mpa)

Flow(L/min)	Max.cont.						Max.int.	
	5	7	9	10	11	12	14	
5	172	240	300	338	352			
	20	19	18	16	15			
10	173	242	308	340	351	405	462	
	42	38	36	33	33	28	22	
20	170	238	301	339	350	402	460	
	79	77	75	72	71	69	61	
30	160	231	298	330	347	398	455	
	117	114	111	109	108	103	95	
40	141	221	298	327	342	394	445	
	157	155	153	150	148	146	135	
50	122	206	287	321	332	382	438	
	196	193	190	177	175	170	163	
Max.cont. 60	101	190	278	312	328	369	424	
	236	233	230	227	225	221	208	
70	86	176	262	298	302	353	416	
	276	273	270	266	264	255	245	
Max.int. 75	60	163	254	286	291	345	410	
	297	294	290	286	282	277	266	

BMR 315[321.5ml/r]
Pressure (Mpa)

Flow(L/min)	Max.cont.				Max.int.	
	3	5	7	9	10	11
5	110	199				
	14	12				
10	108	190	272	360	400	451
	31	30	29	28	26	25
20	110	196	279	356	398	448
	61	60	59	57	55	53
30	106	186	270	355	390	442
	91	90	89	86	84	82
40	100	179	262	350	382	436
	123	122	120	117	112	110
50	92	169	252	342	373	432
	154	153	151	147	140	136
Max.cont. 60	86	159	241	339	369	428
	185	184	182	177	172	170
70	77	146	235	324	342	412
	217	216	213	208	201	200
Max.int. 75	66	132	212	303	332	402
	232	231	228	222	216	214

BMR 400[401.9ml/r]
Pressure (Mpa)

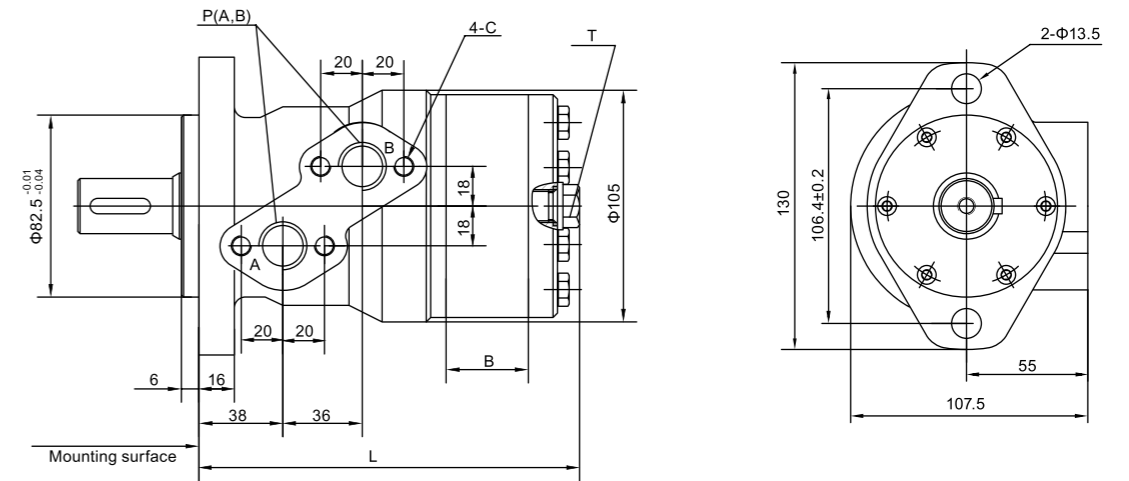
Flow(L/min)	Max.cont.					Max.int.
	3	4	6	7	8	9
5	152					
	12					
10	154	205	308	349		
	24	21	18	17		
20	150	201	302	340	392	441
	49	48	47	46	44	41
30	146	198	296	331	387	438
	73	74	73	72	70	67
40	140	191	290	321	381	421
	98	97	96	95	94	92
50	132	182	281	315	376	402
	122	121	118	115	112	110
Max.cont. 60	128	176	272	312	362	389
	146	145	143	140	138	132
70	110	171	259	301	341	379
	170	168	166	162	160	154
Max.int. 75	98	162	232	292	320	356
	182	180	178	176	174	170

Torque: 232Nm
Speed: 178r/min

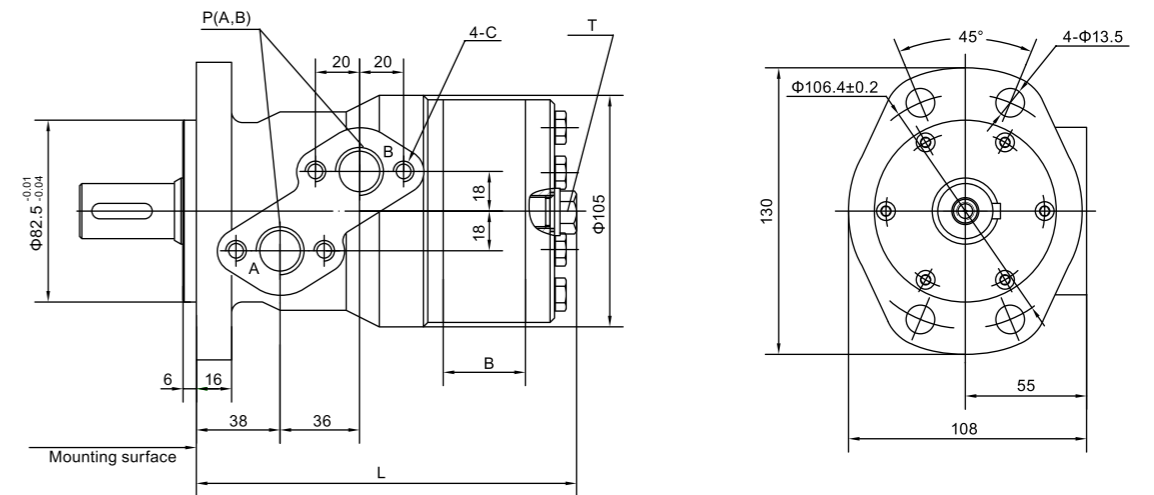
Cont.
Int.

■ BMR Installation

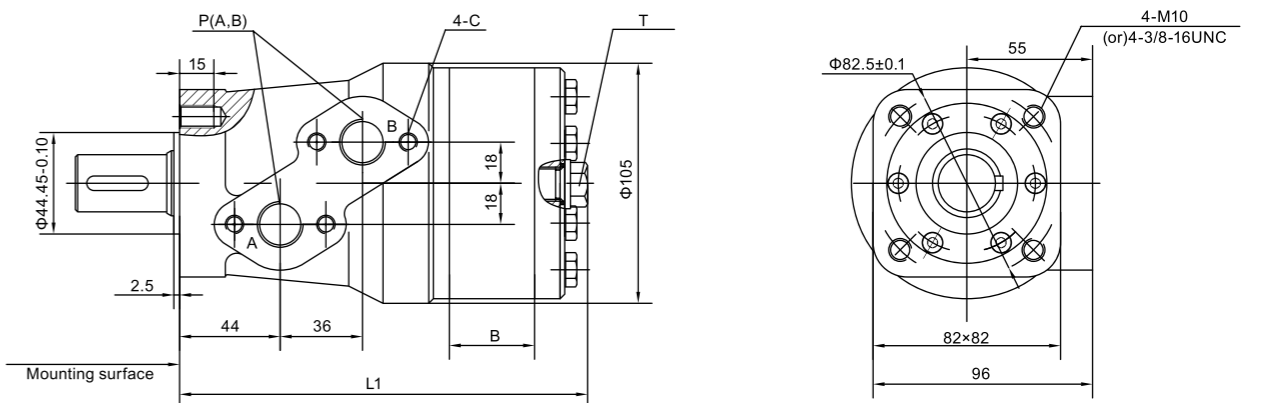
2-hole oval flange A II



4-hole oval flange A IV



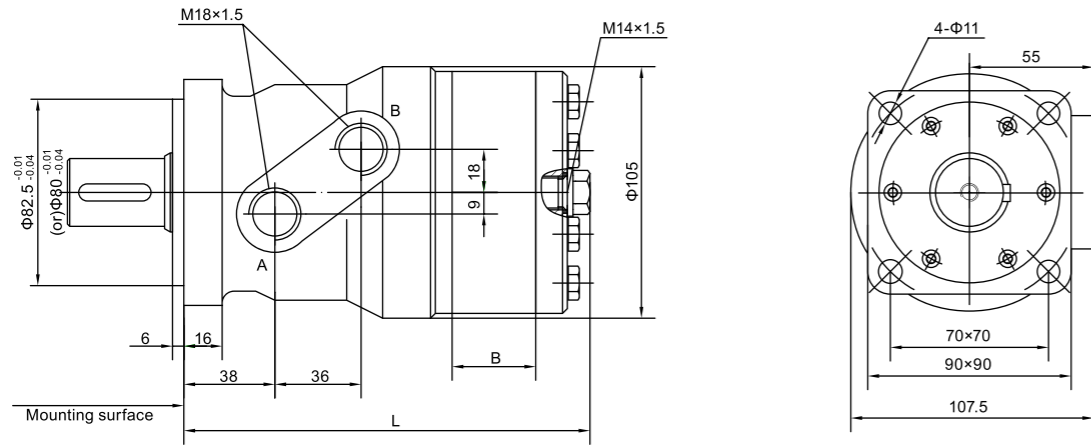
Square flange C, C1



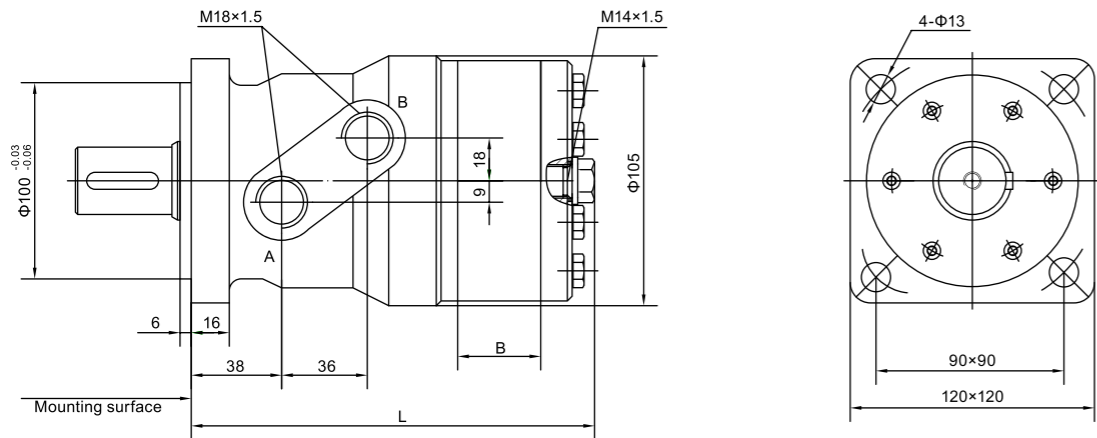
Note: C, C1 mounting are assembling to BMRS' shaft.

■ 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

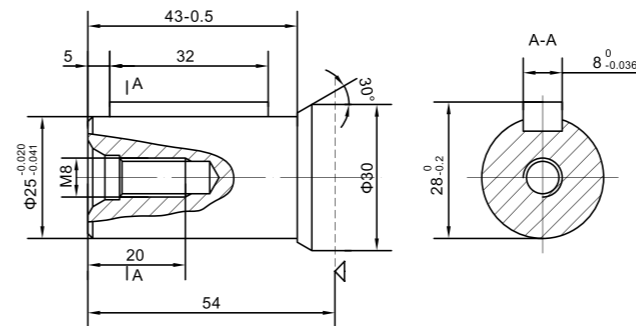
■ BMR PORTS CODE

Code	Ports	P(A、B)(deep)	C (deep)	T (deep)
Y		G1/2 (15)	M8 (13)	M14 × 1.5 (12)
Y1		M18 × 1.5 (15)	M8 (13)	M14 × 1.5 (12)
Y2		M22 × 1.5 (15)	M8 (13)	M14 × 1.5 (12)
Y4		ZG3/8 (15)	M8 (13)	M14 × 1.5 (12)
Y5		7/8-14UNF (15)	—	M14 × 1.5 (12)
Y7		ZG1/2 (15)	M8 (13)	M14 × 1.5 (12)
Y8		NPT1/2 (15)	M8 (13)	M14 × 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)

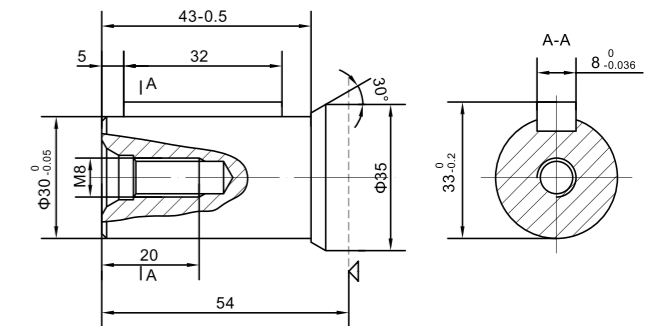
Note:P(A、B)--Ports, C--Mounting Thread (—Indicates no this thread), T--Drain connettion

■ BMR SHAFT VERSION

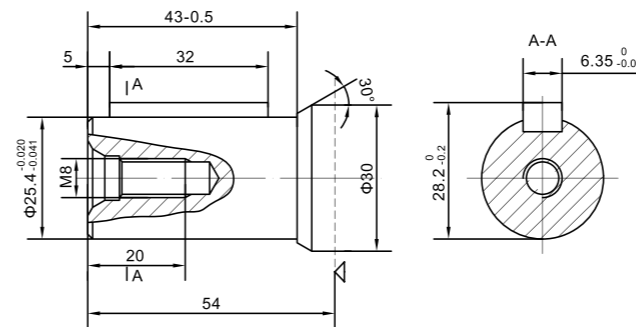
P1: Φ25 Cylindrical shaft, parallel key8 × 7 × 32



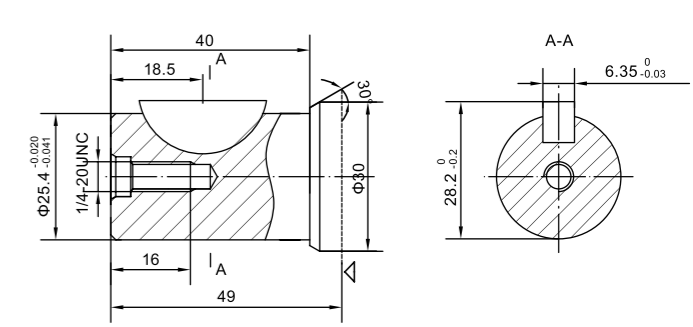
P2: Φ30 Cylindrical shaft, parallel key8 × 7 × 32



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



P4: Φ25.4 Cylindrical shaft, Woodruff keyΦ 25.4 × 6.35



◁ : Motor mounting surface

