

■ BMH ORDERING CODE

1	2	3	4	5	6	7
BMH	-		/		-	

Pos.1	Series	Disp	Output	Flange	Code	Ports		Special features	7		
						Ports(A,B)(deep)	Drain port T (deep)				
BMH	200	250	P1	6-φ 13.5 Oval flange, pilot φ 82.5 x 6	Y	G1/2(15)	G1/4(12)	Omit	Standard	L	
			P2								
			P3								
			P4								
			P5								
	315	400	500	P6	A1V	Y5	7/16-14UNF(15)	7/16-20UNF(12)	Omit	Standard	Opposite
				P7							
				H3							
				K1							
				K2							
				K11							

■ INTRODUCTION

This series of motor are small volume,economical type,which is designed with Spool Valve,which adapt the gerotor gear set design and provide compact volume,high power and low weight.

■ CHARACTERISTICS

- 1 Advanced manufacturing devices for the Gerotor gear set, which provide small volume, high efficiency and long life.
- 2 Shaft seal can bear high pressure of motor of which can be used in parallel or in series.
- 3 Advanced construction design,high power and low weight.

■ TECHNICAL DATA

TYPE	BMP-50	BMP-80	BMP-100	BMP-125	BMP-160	BMP-200	BMP-250	BMP-315	BMP-400
	BMPH-50	BMPH-80	BMPH-100	BMPH-125	BMPH-160	BMPH-200	BMPH-250	BMPH-315	BMPH-400
Displacement(ml/r)	52.9	79.3	98.2	120.9	158.7	196.4	241.8	317.3	392.9
Max.Pressure.Drop (Mpa)	cont.	12.5	12.5	12.5	12.5	11.5	11	10	9
	int.	16.5	16.5	16.5	16.5	16	15	14	11
	peak.	20	20	20	20	20	20	16	13
Max.torque (N.m)	cont.	78	120	149	180	219	262	300	338
	int.	104	157	197	238	305	358	417	413
	peak.	130	215	268	336	430	506	537	537
Speed.Range(cont.)(r/min)	10-800	10-770	10-615	10-480	10-385	10-310	10-250	10-195	10-155
Max.Flow(cont.)(L/min)	40	60	60	60	60	60	60	60	60
Max.Output.Power(cont.)(Kw)	7	10	10	10	10	8	6	5	4
Weight (kg)	5.6	5.7	5.9	6.0	6.2	6.4	6.6	6.9	7.4

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

BMP PERFORMANCE DATA

BMP 50[52.9ml/r]
Pressure (Mpa)

Flow(L/min)	Pressure (Mpa)						
	3	6	8	10	12.5	14	16.5
8	20	41	56	69	84		
15	19	40	56	71	82	100	112
20	18	39	55	70	79	99	117
30	17	38	55	69	78	96	116
35	17	38	54	67	76	94	117
40	15	36	53	63	71	91	114
50	13	34	52	60	68	87	113
60	10	32	47	58	61	81	108
75	1150	1143	1126	1111	1079	1065	1043

BMP 100[98.2ml/r]
Pressure (Mpa)

Flow(L/min)	Pressure (Mpa)						
	3	6	8	10	12.5	14	16.5
8	39	74	103	128	157		
15	38	75	104	128	156	181	203
20	34	71	101	125	153	179	200
30	31	69	100	122	151	177	198
35	28	67	95	119	149	176	197
40	27	64	92	115	146	174	192
50	23	61	90	113	141	170	190
60	20	57	88	111	134	167	184
75	13	51	80	103	130	160	180

BMP 160[158.7ml/r]
Pressure (Mpa)

Flow(L/min)	Pressure (Mpa)						
	3	6	8	10	11.5	14	16
8	58	116	166	208			
15	56	116	168	210	225	288	297
20	53	112	166	210	223	284	295
30	49	110	158	200	221	280	300
35	45	106	156	196	219	274	305
45	40	98	150	192	217	270	302
55	36	95	144	187	215	264	300
60	29	90	140	184	213	260	298
70	15	76	120	168	210	246	290

Torque: 168Nm
Speed: 459r/min

Cont.
Int.

BMP 80[79.3ml/r]
Pressure (Mpa)

Flow(L/min)	Pressure (Mpa)						
	3	6	8	10	12.5	14	16.5
8	31	60	81	101	126		
15	30	57	81	101	125	143	162
20	30	56	80	100	123	141	160
30	29	55	78	99	121	139	159
35	28	54	76	94	120	138	157
40	27	51	72	90	112	134	155
50	25	50	70	89	108	128	153
60	23	46	68	87	104	124	146
75	18	38	62	82	100	121	141

BMP 125[120.9ml/r]
Pressure (Mpa)

Flow(L/min)	Pressure (Mpa)						
	3	6	8	10	12.5	14	16.5
8	47	94	132	162			
15	47	96	132	161	188	229	266
20	45	93	130	161	185	226	268
30	43	92	128	159	182	221	264
35	39	88	125	155	180	219	238
40	37	87	125	155	180	219	238
50	30	80	118	148	171	202	229
60	26	74	112	141	164	198	225
75	15	62	102	128	160	196	220

BMP 200[196.4ml/r]
Pressure (Mpa)

Flow(L/min)	Pressure (Mpa)						
	3	6	8	10	11	13	15
8	76	161	204	247			
15	75	158	200	245	268	330	364
20	73	154	199	243	266	328	362
30	67	150	197	241	264	324	360
35	63	146	190	228	260	318	358
40	60	143	187	226	258	315	352
50	51	136	177	220	256	312	342
60	44	123	160	208	251	308	332
75	18	92	141	188	248	290	325

BMP PERFORMANCE DATA

BMP 250[241.8ml/r]
Pressure (Mpa)

Flow(L/min)	Pressure (Mpa)						
	3	6	8	10	12.5	14	16.5
8	93	186					
15	90	190	262	310	399	430	
20	83	82	78	77	71	66	
30	81	176	255	305	390	420	
35	73	172	246	300	386	417	
45	65	162	238	296	370	412	
55	60	156	232	289	362	410	
60	56	143	221	279	357	406	
75	31	125	201	263	341	386	

BMP 315[317.3ml/r]
Pressure (Mpa)

Flow(L/min)	Pressure (Mpa)						
	3	5	7	9	10	11	12
8	122	214					
15	117	208	286	361	400	440	
20	108	203	276	356	391	431	
30	100	195	268	342	386	423	
35	96	186	261	338	380	413	
45	88	178	251	333	370	405	
55	76	165	236	320	360	400	
60	66	152	222	301	341	392	
75	40	116	198	276	320	311	

BMP 400[392.9ml/r]
Pressure (Mpa)

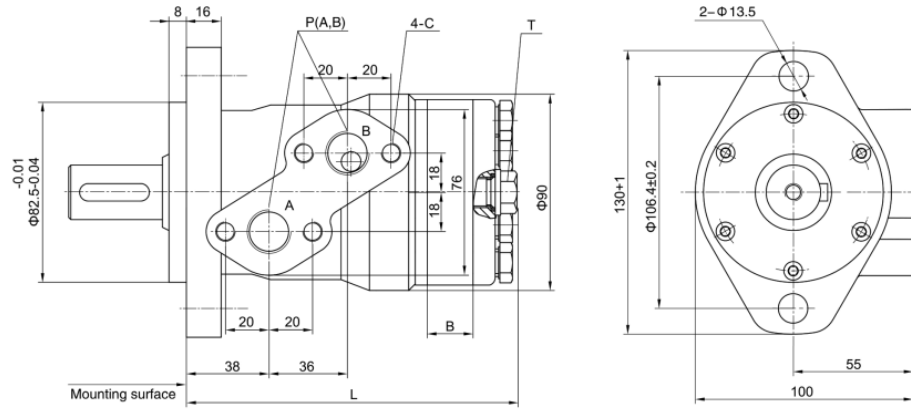
Flow(L/min)	Pressure (Mpa)								
	3	4	5	6	7	8	9	10	11
8	160	210							
15	158	207	254	314	360	407	453		
20	149	202	249	311	355	403	446		
30	135	199	246	304	348	395	438		
35	125	192	241	301	342	389	429		
45	112	172	232	289	334	375	421		
55	105	158	215	276	328	357	401		
60	100	140	201	252	313	334	389		
75	54	128	181	231	302	311	378		

Torque: 231Nm
Speed: 172r/min

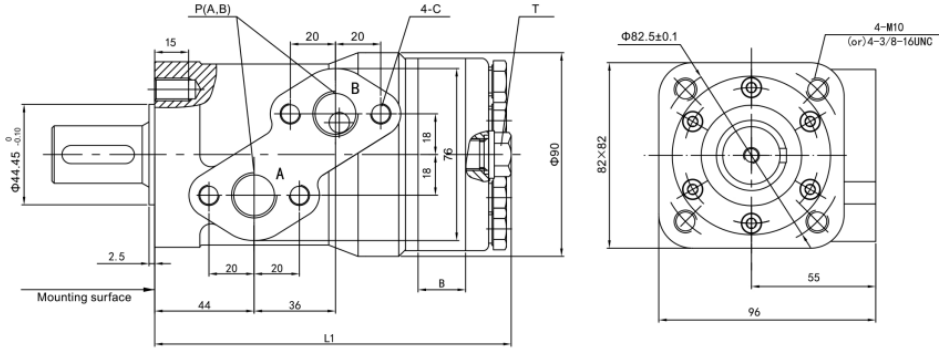
Cont.
Int.

BMP Installation

2-hole oval flange A II



Square flange C,C1



Note: C, C1 mounting are assembling to BMPH shaft.

TYPE	BMP-50	BMP-80	BMP-100	BMP-125	BMP-160	BMP-200	BMP-250	BMP-315	BMP-400
L	141	145	147	150	155	160	166	176	186
L1	148	151	154	157	162	167	173	183	193
B	7	11	13	16	21	26	32	42	52

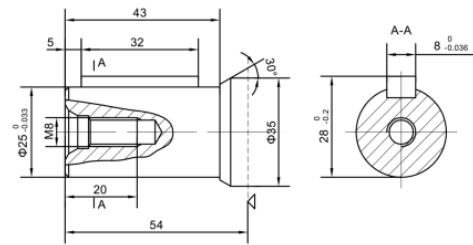
BMP PORTS CODE

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)	M8 (13)	M14 × 1.5 (12)
Y10		G1/2 (15)	M8 (13)	G1/4 (12)
Y15		7/8-14UNF (15)	5/16-18UNC (13)	7/16-20UNF (12)

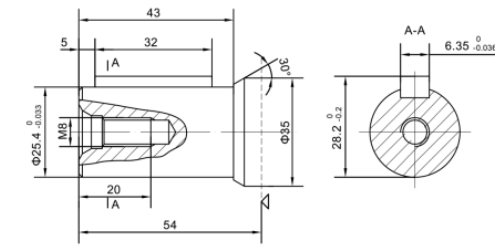
Note:P(A, B)--Ports, C--Mounting Thread (—Indicates no this thread) , T--Drain connettion

BMP SHAFT VERSION

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



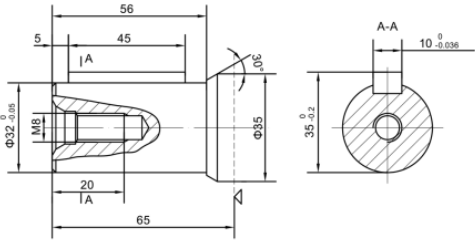
P3: Φ25.4 Cylindrical shaft, parallel key6.35 × 6.35 × 32



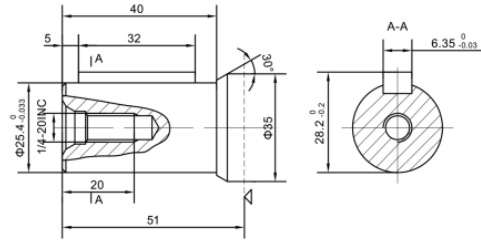
◁ : Motor mounting surface

■ BMP SHAFT VERSION

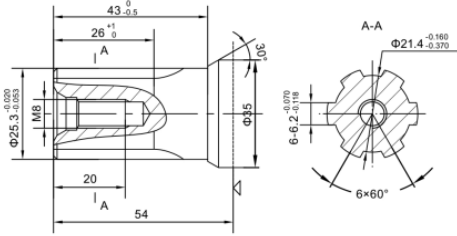
P5: $\Phi 32$ Cylindrical shaft, parallel key $10 \times 8 \times 45$



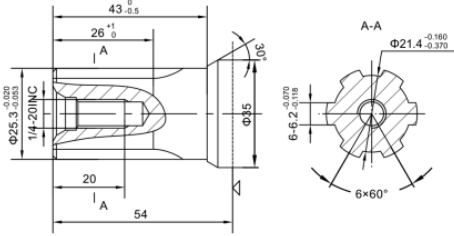
P33: $\Phi 25.4$ Cylindrical shaft, parallel key $6.35 \times 6.35 \times 32$



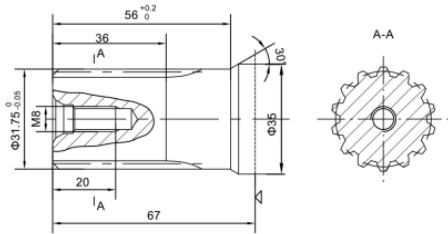
H3: $\Phi 25.3$ Splined shaft, 6–25.3 \times 21.4 \times 6.2



H33: $\Phi 25.3$ Splined shaft, 6–25.3 \times 21.4 \times 6.2



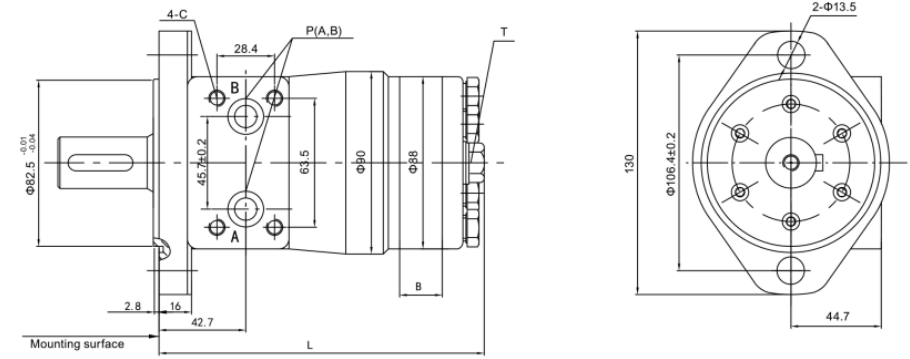
K13: $\Phi 31.75$ involute splined shaft 14–DP12/24 $\alpha=30^\circ$



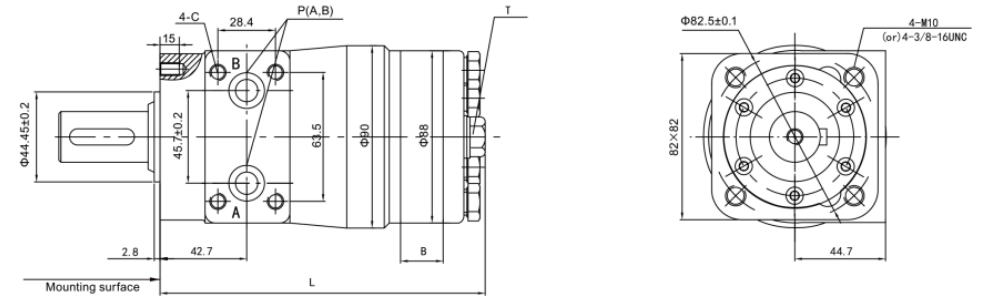
: Motor mounting surface

■ BMPH Installation

2-hole oval flange A II



Square flange C,C1



TYPE	BMPH-50	BMPH-80	BMPH-100	BMPH-125	BMPH-160	BMPH-200	BMPH-250	BMPH-315	BMPH-400
L	148	151	154	157	162	167	173	183	193
B	7	11	13	16	21	26	32	42	52