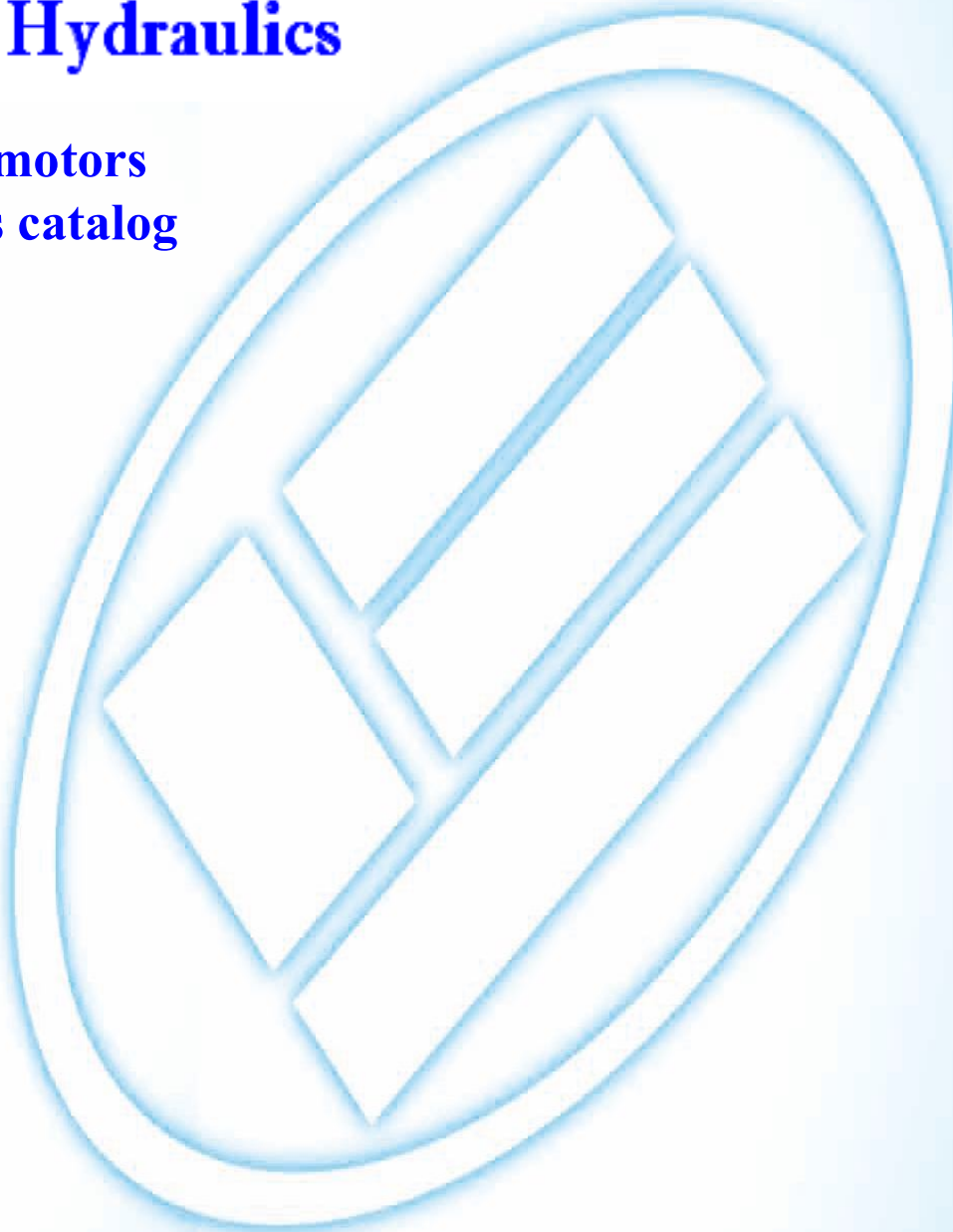




LIKE
Hydraulics

**Orbital motors
& valves catalog**



济宁力科液压有限责任公司

■ JI NING LI KE HYDRAULICS CO., LTD ■

Add: No.8 Jidai Road Jining City Shandong Province
E-mail: snowpeal@hotmail.com Tel: +86-537-2228507

C Version

Introduction of LIKE Hydraulics



Jining Like Hydraulics co.,Ltd is located in Jining city of Shandong province in China, the hometown of Confucius and Mencius. It has very convenient transports by flying, shipping and other ways.

As the earliest manufacturer of orbital motors and power steering units in China, Like Hydraulics is advanced in design, process and quality assurance, we can offer many kinds of different hydraulic motor and power steering units types, displacements and sizes. We devote our all energy to be the best supplier for customers.

Wide range of hydraulic motors & valves

BM2



BM1 H Port



BM1 Line Port



BM1 S Port



HMM



BM4



BM3



Wheel Motor



Motor with
Speed sensor



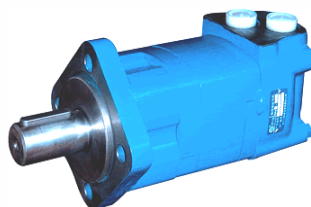
BM6W



BM5 bearingless



BM5



BM6 bearingless



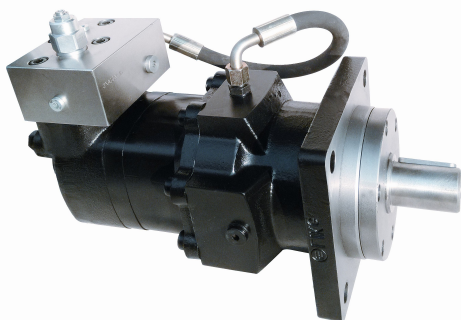
BMT



BMV



BM6B



Motor Application

Motor Application

The hydraulic motors have advantages of small volume, high efficiency, low noise, etc. and be used in wide fields, such as: Construction equipment, Agricultural equipment, Plastic equipment, Mining equipment, Material Lifting equipment, Forestry equipment, Lawn and turf equipment, Machine tools and stationary equipment, Marine equipment, etc.

- HMM is a mini-motor with high speed
- BM1 is a small volume ,spool valve type motor ,with bearing design
- BM2 is a medium volume ,spool valve type motor , with bearing design
- BM3 is a medium volume ,spool valve type motor, with 2 radial ball-bearings design, and can bear bigger radial force
- BM4 is a spool valve type motor, which can bear higher pressure than BM3
- BM5 is a large volume, disc valve ,high pressure motor, with radial ball-bearings design, and can bear greater load
- BM6 is a large volume, disc valve ,high pressure motor, with radial ball-bearings design, and can bear greater load, and has higher torque than BM5
- BMT is a large volume, disc valve, high pressure motor,with radial ball-bearings design, which can bear greater load, and is shorter than BM6
- BMV is a large volume, disc valve, high pressure motor,with radial ball-bearings design, which can bear greater load , and can high torque in the wide of application.
- ZD is one kind of hydraulic wet disc brake, and hydraulic pressure releases the brake force. It adopts the friction disc and high strength spring design :long life endurance, low noise and high braking reliability.
- Bearingless motor is Short motor without bearings
- Wheel motor is a recessed mounting flange, with radial bearing design, which can bear great load
- Motor with speed sensor can indicate the speed of motor

Usage Guide

Dear consumer:

In order to make the hydraulic motor working in optimal situation, we sincerely recommend the following:

1. A simultaneous max speed and max pressure is not recommended
2. The motor can be used in parallel or series. But drain line is necessary when back pressure is over 5 Mpa.
3. Filtering and oil cleanliness :a return filter should be installed in the system with a fineness in the range of 10~30 um, and a piece of magnet should be installed at the bottom of tank to prevent grits into the system. the max solid contamination grade of oil is no more than 19/16.
4. The optimum operating situation should be at the 1/3~2/3 of the continuous operating situation.
5. Make sure the motor is always filled with oil before operating.
6. In order to obtain longer life of motor, we recommend user to operate motor at first for 30 minutes under 30% of rated pressure .
7. Max. operating temperature: 80℃.
8. Recommended fluid: Anti-wear type of hydraulic oil.

Viscosity :37-73cst. Filtration: ISO19/16

Conversion Factors

$$1 \text{ Nm} = [8.851 \text{ lbf.in}]$$

$$1 \text{ N} = [0.2248 \text{ lbf}]$$

$$1 \text{ MPa} = [10 \text{ bar}]$$

$$1 \text{ bar} = [14.50 \text{ psi}]$$

$$1 \text{ mm} = [0.0394 \text{ in}]$$

$$1 \text{ cm}^3 = [0.061 \text{ in}^3]$$

$$1 \text{ L} = [61 \text{ in}^3]$$

$$1 \text{ L} = [0.22 \text{ UK gal}]$$

$$1 \text{ L} = [0.264 \text{ US gal}]$$

$$^{\circ}\text{F} = [1.8 \text{ }^{\circ}\text{C} + 32]$$

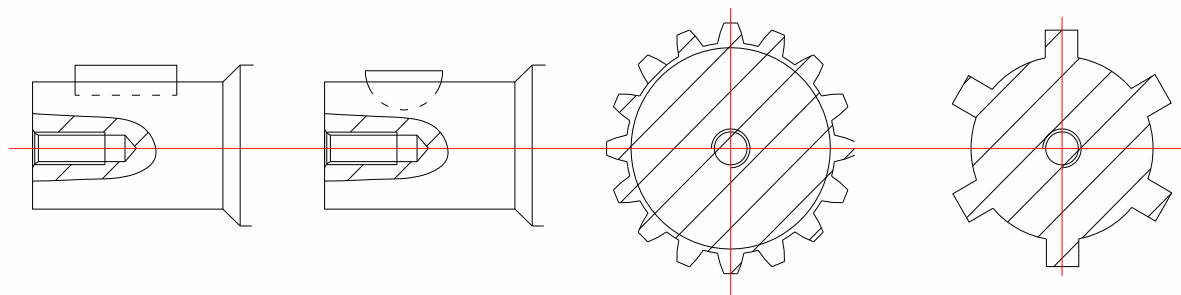
Shaft key type

Parallel key

Woodruff key

Involute spline key

Rectangle spline key



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HMM motor

HMM series motor is mini-motor with high speed, very compact design, spool valve, economical type motor.

Characteristic features:

- Compact design of spool and gear set, which provide mini volume, high power and low weight..
- Credible design for shaft seal, which can bear high pressure and be used in parallel or in series.
- Direction of shaft rotation and speed can be controlled easily and smoothly.



Main Specification

Type		8	12.5	20	32	40	50
Displacement (ml/r)		8.2	12.9	19.9	31.6	39.8	50.3
Flow (LPM)	Cont.	16	20	20	20	20	20
	Int..	20	25	25	25	25	25
Speed (RPM)	Cont.	1950	1550	1000	630	500	400
	Int..	2450	1940	1250	800	630	500
Pressure (MPa)	Cont.	10	10	10	10	9	7
	Int..	14	14	14	14	14	14
Torque (N*m)	Cont.	11	16	25	40	45	46
	Int..	15	23	35	57	70	88

Note: 1.Continuous data: The Max. Value of operating motor continuously.

2.Intermittent Data: The Max. Value of operating motor in 6 seconds per minute.

3.A simultaneous max. RPM and max. pressure is not recommended.

4.The Conversion Factors is on the page 4, consult it please

5.Optimum operating situation should be at the 1/3 ~ 2/3 of the continuous operating situation.

HMM Performance Data

□ cont.
■ Int.

HMM-8

		压力 ΔP (Mpa)					
		3.5	5	7	10	12	14
流量 Flow (LPM)	2	3	5	8	10	12	14
	4	228	218	206	156	111	58
	8	3	5	7	11	13	15
	12	474	471	463	426	391	331
	15	3	15	7	11	13	15
	20	953	946	926	884	855	816
流量 Flow (LPM)	2	2	5	7	10	13	15
	4	1444	1426	1402	1360	1324	1288
	8		4	7	10	12	14
	12		1912	1900	1861	1833	1780
	15			0	6	10	11
	20			2432	2395	2350	2328

Torque 11 Nm
Speed 2328 rpm

HMM-12.5

		压力 ΔP (Mpa)					
		3.5	5	7	10	12	14
流量 Flow (LPM)	2	6	8	11	16	19	
	4	140	136	119	68	35	
	8	6	8	12	17	19	23
	12	296	289	274	229	200	145
	15	5	8	12	17	20	24
	20	605	596	583	543	514	469
流量 Flow (LPM)	2	5	8	11	16	20	24
	4	912	905	895	859	834	784
	8	5	7	11	16	19	23
	12	1152	1144	1136	1102	1078	1036
	15	3	7	10	15	19	22
	20	1542	1532	1521	1500	1482	1437
流量 Flow (LPM)	25	2	6	9	14	18	22
		1910	1891	1878	1848	1828	1788

HMM-20

		压力 ΔP (Mpa)						
		1.7	3.5	5	7	10	12	14
流量 Flow (LPM)	2	3	9	14	19	26	30	
	4	99	96	89	74	42	21	
	8	4	9	14	19	26	31	36
	12	197	191	182	178	134	112	74
	15	4	9	13	19	27	31	36
	20	398	395	391	377	340	319	288
流量 Flow (LPM)	2	3	8	12	18	26	31	37
	4	596	594	588	579	545	523	493
	8	3	8	12	17	25	30	36
	12	745	741	738	728	695	684	660
	15	1	6	11	19	24	29	35
	20	998	995	991	985	962	916	885
流量 Flow (LPM)	25		4	9	14	23	28	33
			1247	1245	1242	1189	1180	1176

HMM-32

		压力 ΔP (Mpa)						
		2	3.5	5	7	10	12	14
流量 Flow (LPM)	2	7	15	21	28	40		
	4	61	57	52	47	16		
	8	7	15	21	29	41	48	36
	12	126	121	114	106	82	67	74
	15	7	15	21	29	41	49	36
	20	250	244	239	231	207	194	288
流量 Flow (LPM)	2	6	13	20	28	40	48	37
	4	378	374	369	362	338	322	493
	8	4	12	18	27	39	47	36
	12	476	472	468	462	441	429	660
	15	3	10	17	25	37	46	35
	20	633	630	627	619	601	585	1885
流量 Flow (LPM)	25	1	8	15	23	35	28	33
		791	789	787	783	766	1180	1176

HMM-40

		压力 ΔP (Mpa)					
		3	5	7	8.5	10	12
流量 Flow (LPM)	2	16	27	36	44	51	
	4	45	40	34	28	17	
	8	16	27	37	44	52	62
	12	96	93	85	79	65	52
	15	15	26	36	44	52	63
	20	197	195	182	176	166	154
流量 Flow (LPM)	2	14	25	35	43	51	62
	4	293	287	282	277	268	257
	8	13	24	34	42	50	62
	12	371	365	360	355	347	338
	15	10	21	31	39	48	59
	20	497	492	487	480	472	463
流量 Flow (LPM)	25	7	19	29	37	44	56
		622	617	612	607	600	591

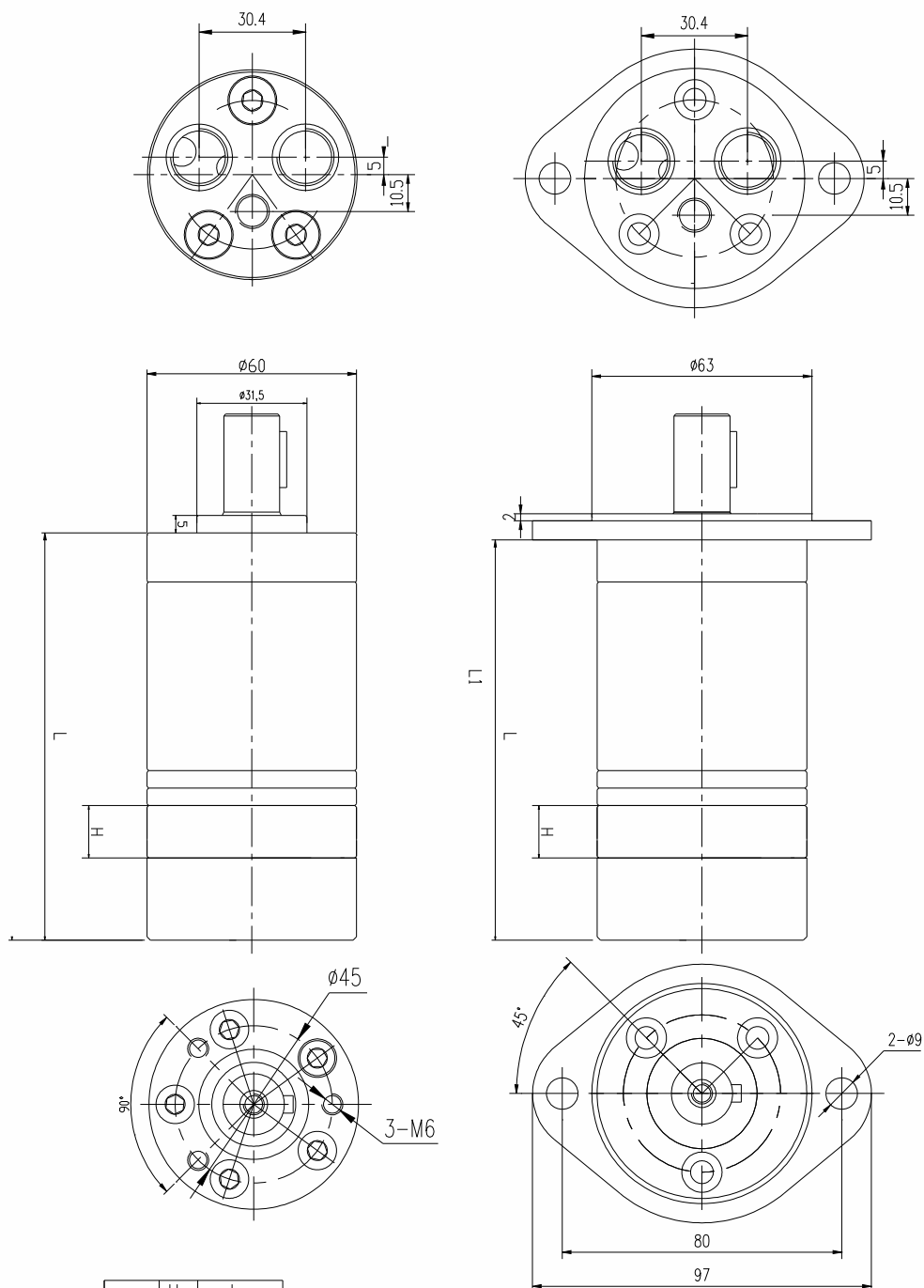
HMM-50

		压力 ΔP (Mpa)				
		1.5	3	5	7	10
流量 Flow (LPM)	2	11	23	36	50	
	4	37	33	27	22	
	8	11	22	36	50	70
	12	76	73	68	63	55
	15	11	21	35	50	71
	20	157	154	149	145	137
流量 Flow (LPM)	2	11	20	33	49	71
	4	237	234	231	226	218
	8	10	18	32	47	69
	12	296	295	294	288	282
	15	8	14	29	44	64
	20	395	395	393	390	381
流量 Flow (LPM)	25	4	10	25	40	59
		498	496	494	490	484

HMM Dimension and Mounting Data---Figuration

Factor: mm

Figuration A :Oil port on the bottom

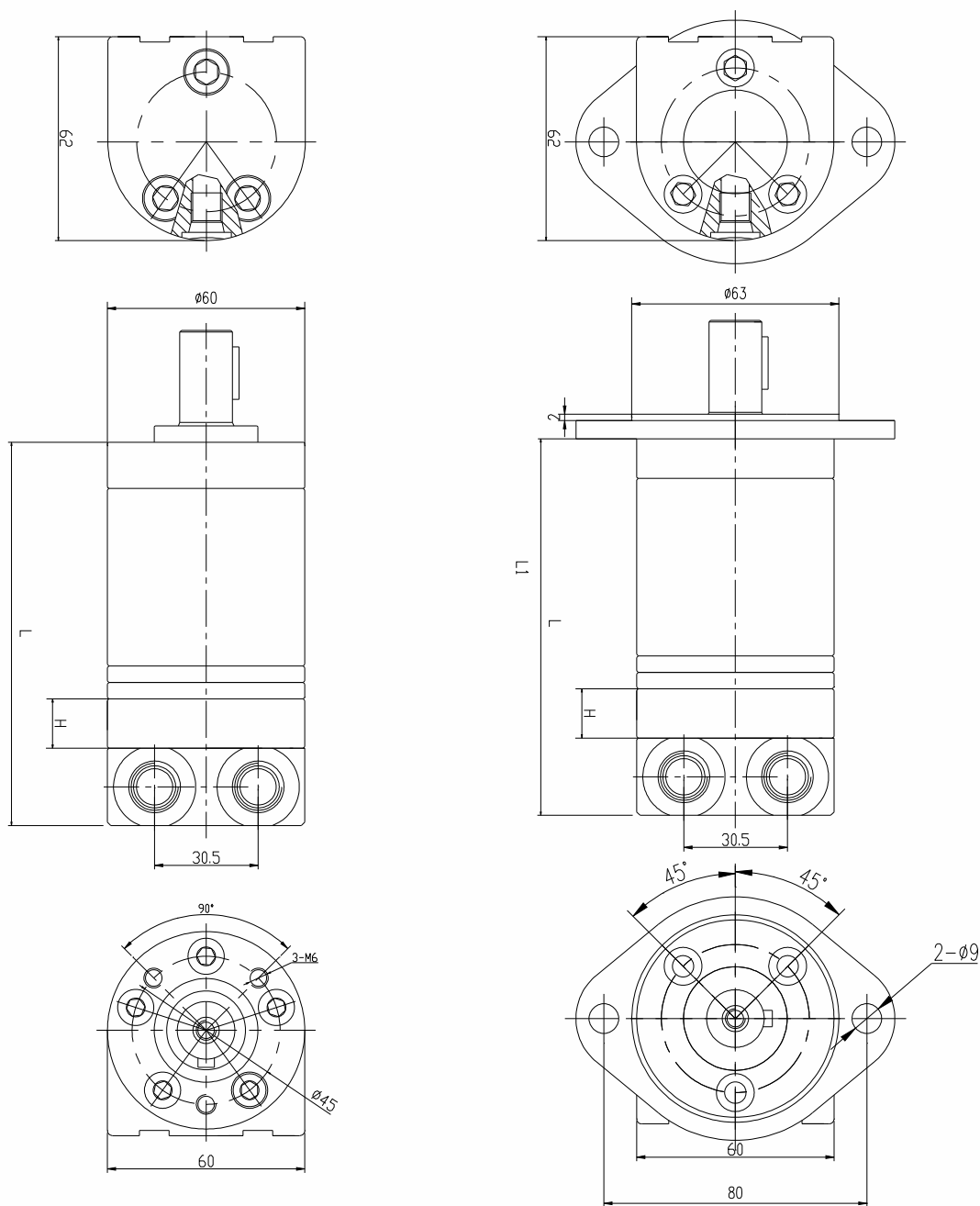


	H	L
8	5.8	107.8
12	9	111
20	14.5	116.5
32	23	121
40	29	131
50	37	139

HMM Dimension and Mounting Data---Figuration

Factor: mm

Figuration B : Oil port on the side

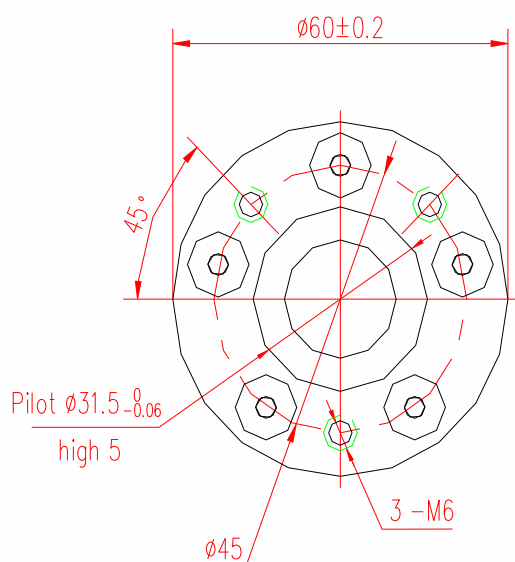


排量	H	L
8	5.8	107.8
12	9	111
20	14.5	116.5
32	23	121
40	29	131
50	37	139

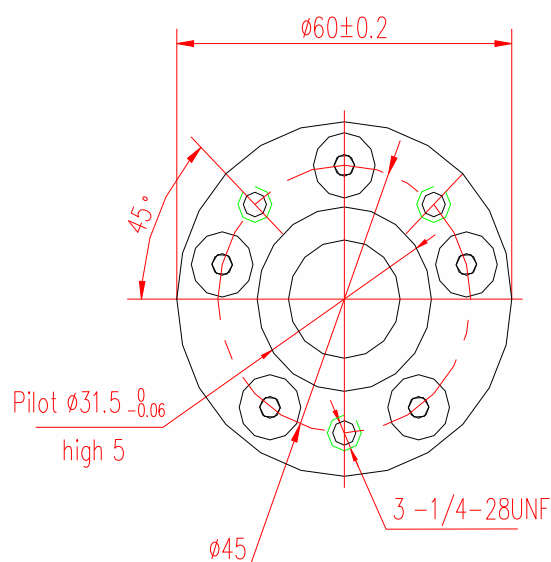
HMM Dimension and Mounting Data---Mounting Flange

Factor: mm

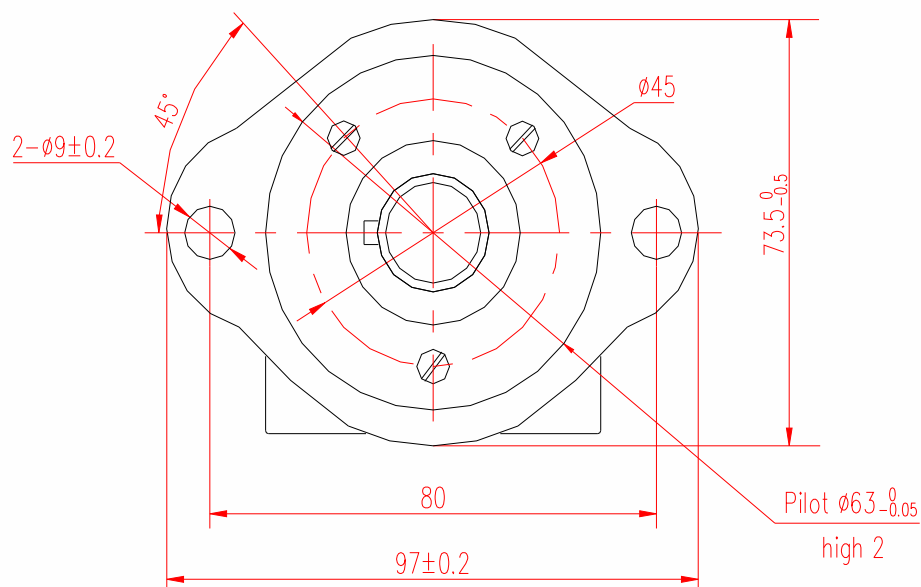
Flange A



Flange B

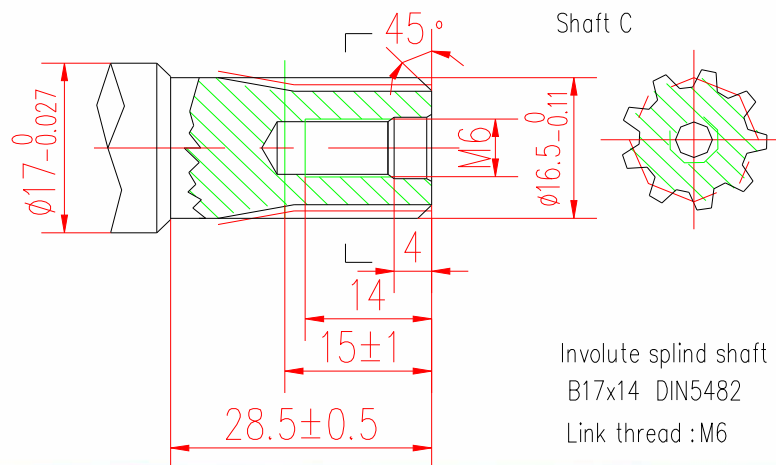
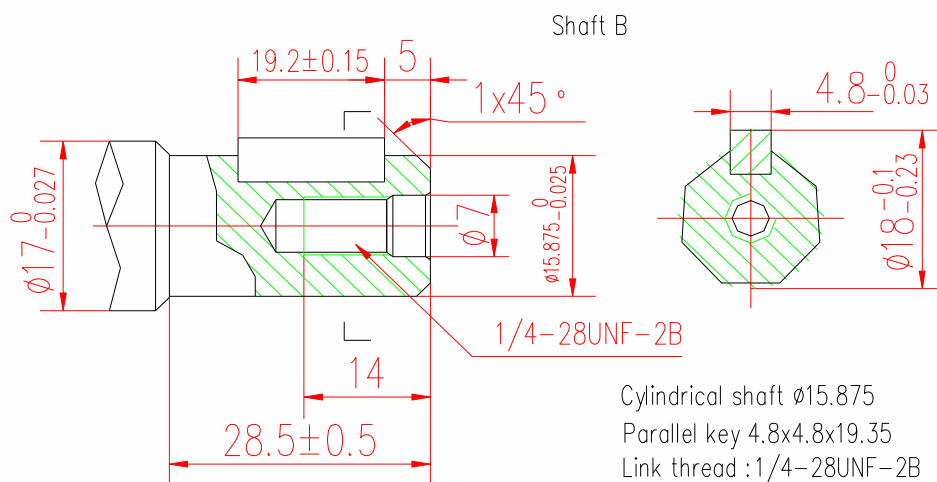
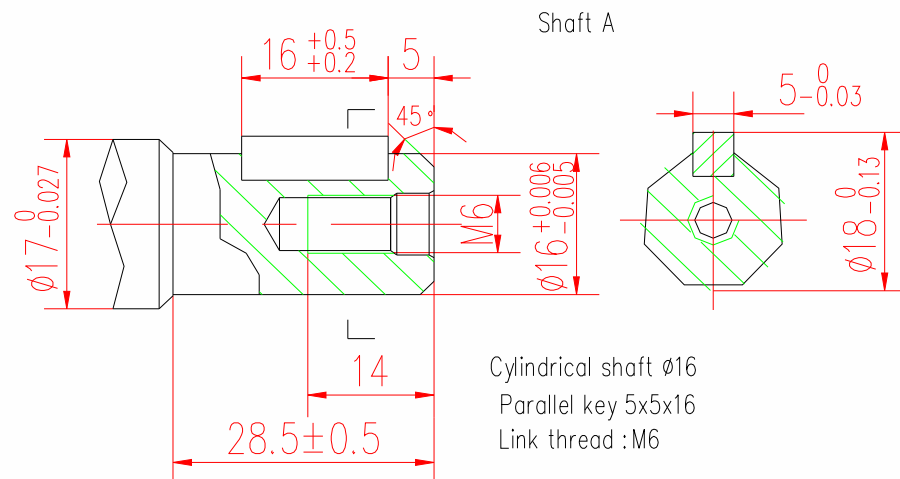


Flange C



HMM Dimension and Mounting Data---Shaft

Factor: mm



HMM Code number and Order information

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

HMM		1	2	3	4	5	6	7					
pos 1		2		3		4		5		6		7	
Figuration		Displacemet (ml/r)		Flange&Pilot (mm)		Shaft&key (mm)		Oil port		Drain port		Special	
A	oil port on the bottom	A	8	A	circle-flange, 3-M6 bolts distributing circle $\varnothing 45$, pilot $\varnothing 31.5 \times 5$	A	cylinder shaft; $\varnothing 16 \times 28.5$ parallel key: $5 \times 5 \times 16$ link thread :M6	A	2-G3/8	A	None	A	None
B	oil port on the side	B	12.5	B	circle-flange, 3-1/4-28UNF bolts distributing circle $\varnothing 45$, pilot $\varnothing 31.5 \times 5$	B	cylinder shaft; $\varnothing 15.875 \times 28.5$, parallel key: $4.8 \times 4.8 \times 19.35$, link thread :1/4-28UNF-2B	B	9/16-18UNF	B	G1/8	B	
		C	16	C	rhombus flange, 2- $\varnothing 9$ center space 80, pilot $\varnothing 63 \times 2$	C	Involute splind shaft: B17x14 DIN5482, Link thread :M6			C	3/8-24UNF	C	
		D	20										
		E	32										
		F	40										
		G	50										

Order example: HMMACAABBA

BM1 motor

BM1 series motor is a small volume, spool valve, economical type motor.

Characteristic features:

- Compact design of spool and gear set, which provide small volume, high power and low weight..
- Credible design for shaft seal, which can bear high pressure and be used in parallel or in series.
- Direction of shaft rotation and speed can be controlled easily and smoothly.
- Best combination of efficiency and economy in medium load applications.



Main Specification

Displacement (ml/r)		50	63	80	100	125	160	200	250	315	400
Flow (LPM)	Cont.	45	45	60	60	60	60	60	60	60	60
	Int..	50	50	75	75	75	75	75	75	75	75
Speed (RPM)	Cont.	879	720	740	589	475	370	296	237	189	149
	Int..	975	755	827	673	594	463	370	297	236	185
Pressure (MPa)	Cont.	12.5	12.5	12.5	12.5	12.5	12.5	11	11	10	8.5
	Int..	16.5	16.5	16.5	16.5	16.5	16.5	16.5	14	12.5	10.5
Torque (N*m)	Cont.	81	101	129	161	202	245	286	360	406	435
	Int..	108	134	171	213	268	342	390	456	505	533

Note: 1.Continuous data: The Max. Value of operating motor continuously.

2.Intermittent Data: The Max. Value of operating motor in 6 seconds per minute.

3.A simultaneous max. RPM and max. pressure is not recommended.

4.The Conversion Factors is on the page 4, consult it please

5.Optimum operating situation should be at the 1/3 ~ 2/3 of the continuous operating situation.

BM1 Performance Data

□ cont.
■ Int.

Bm1-50 50ml/r

		ΔP (Mpa)							
		3	6	7	8	10	11	12.5	16.5
Flow (LPM)	8	18	36	42	50	60	72	79	102
	15	150	147	144	140	137	127	122	90
	20	19	37	43	48	61	73	83	105
	30	290	285	283	276	275	265	256	230
	45	17	37	42	50	62	72	80	107
	60	388	385	381	375	372	365	352	332
	75	15	36	42	50	63	70	81	108
	90	584	578	570	566	560	555	546	516
Flow (LPM)	8	15	35	42	50	63	68	80	106
	15	680	675	670	662	654	646	640	610
	20	14	34	40	48	62	70	80	107
	30	878	868	863	856	849	840	830	798
	45	13	35	40	48	63	69	79	
	60	970	960	955	950	942	935	925	
	75								
	90								

Bm1-63 63ml/r

		ΔP (Mpa)							
		3	6	7	8	10	11	12.5	16.5
Flow (LPM)	8	22	46	54	62	76	91	98	126
	15	125	124	123	121	118	116	113	72
	20	22	46	54	60	76	91	104	132
	30	233	231	229	227	224	222	219	185
	45	20	46	54	63	78	90	100	134
	60	310	309	307	305	301	298	294	263
	75	20	45	53	63	79	88	102	135
	90	465	463	462	460	457	455	451	409
Flow (LPM)	8	19	44	53	63	79	84	100	133
	15	543	540	539	537	533	531	528	484
	20	18	42	50	60	78	88	100	134
	30	705	702	700	698	695	693	689	633
	45	16	44	50	60	79	82	97	
	60	781	778	776	774	770	768	764	
	75								
	90								

Bm1-80 80ml/r

		ΔP (Mpa)							
		3	6	7	8	10	11	12.5	16.5
Flow (LPM)	8	28	60	70	80	100	110	128	168
	15	97	93	92	89	84	80	75	50
	20	28	61	70	80	100	114	128	170
	30	184	181	178	174	169	166	160	140
	45	27	60	70	80	100	112	129	170
	60	246	243	240	238	234	230	223	205
	75	26	60	69	79	100	110	128	170
	90	370	366	363	360	354	350	345	323
Flow (LPM)	8	25	58	67	77	100	110	126	170
	15	432	426	424	420	415	411	405	385
	20	23	53	65	77	95	108	124	168
	30	554	550	546	541	536	530	524	503
	45	20	55	65	75	95	105	123	168
	60	616	608	606	603	599	593	585	560
	75	19	53	62	75	95	108	122	168
	90	741	732	727	722	717	712	707	675
Flow (LPM)	8	16	47	60	70	90	104	121	
	15	825	820	815	810	808	804	795	
	20								
	30								
	45								
	60								
	75								
	90								

Bm1-100 100ml/r

		ΔP (Mpa)							
		3	6	7	8	10	11	12.5	16.5
Flow (LPM)	8	35	74	88	100	126	140	160	210
	15	78	75	73	70	64	68	56	35
	20	35	74	85	100	126	140	160	212
	30	150	145	144	141	137	133	129	110
	45	34	74	88	100	125	145	161	212
	60	197	195	193	190	189	183	178	160
	75	33	71	85	95	123	138	158	212
	90	295	294	293	290	288	283	279	259
Flow (LPM)	8	29	70	81	95	120	135	155	212
	15	347	345	344	342	337	335	330	310
	20	30	66	80	93	120	133	155	208
	30	445	443	442	439	435	432	426	405
	45	25	66	79	93	118	134	152	207
	60	498	495	493	491	485	480	476	456
	75	22	65	75	93	116	132	152	207
	90	599	594	589	587	584	577	573	548
Flow (LPM)	8	20	58	75	88	113	129	150	
	15	674	666	663	660	655	653	648	
	20								
	30								
	45								
	60								
	75								
	90								

Torque 82Nm
Speed 768 rpm

Bm1-125 125ml/r

		ΔP (Mpa)							
		3	6	7	8	10	11	12.5	16.5
Flow (LPM)	8	44	94	112	128	158	180	200	263
	15	60	59	58	56	53	50	45	25
	20	44	95	111	127	160	178	205	265
	30	118	116	115	114	110	108	105	85
	45	42	95	108	128	158	175	202	268
	60	159	157	156	153	150	145	142	129
	75	40	92	108	125	156	178	198	265
	90	236	235	233	230	225	220	218	206
Flow (LPM)	8	38	87	107	122	154	174	195	268
	15	226	223	223	222	268	265	262	247
	20	37	85	102	120	152	173	194	265
	30	355	352	351	349	345	341	339	322
	45	33	85	98	120	149	170	192	260
	60	395	392	390	388	385	384	380	365
	75	32	83	98	117	148	165	191	259
	90	476	470	468	465	461	459	454	436
Flow (LPM)	8	25	75	95	110	142	160	185	
	15	594	588	585	582	577	570	565	
	20								
	30								
	45								
	60								
	75								
	90								

Bm1-160 160ml/r

		ΔP (Mpa)							
		3	6	7	8	10	11	14	16.5
Flow (LPM)	8	56	120	143	160	200	226	245	334
	15	47	46	45	44	42	40	38	24
	20	56	120	135	160	202	226	245	341
	30	93	93	92	90	88	86	83	75
	45	55	120	143	160	203	226	245	343
	60	120	118	117	116	115	114	114	104
	75	54	118	140	160	200	225	242	340
	90	185	184	183	181	178	176	175	163
Flow (LPM)	8	53	115	138	157	199	220	242	337
	15	214	213	212	211	208	207	205	196
	20	52	112	135	156	198	220	238	335
	30	277	275	274	273	270	268	265	256
	45	45	110	132	153	195	215	233	330
	60	308	307	305	303	300	298	296	288
	75	44	106	130	150	192	214	230	329
	90	368	366	365	364	362	360	357	347
Flow (LPM)	8	32	95	120	142	183	205	221	
	15	462	458	457	456	453	451	448	
	20								
	30								
	45								
	60								
	75								
	90								

BM1 Performance Data- Continue

☐ cont.
☒ Int.

Bm1-200 200ml/r

		ΔP (Mpa)						
		3	6	7	8	10	11	15
Flow (LPM)	8	75 38	155 37	178 36	204 35	255 33	283 29	385 12
	15	72 74	152 72	180 71	206 70	259 68	265 66	390 57
	20	71 99	151 98	178 97	205 95	255 94	285 91	390 81
	30	70 148	149 147	175 146	200 145	254 142	285 138	388 126
	35	68 173	146 172	172 171	200 168	250 165	280 163	383 154
	45	63 220	142 219	170 218	195 216	248 213	278 211	382 200
	50	58 245	138 243	166 242	195 241	242 238	273 236	378 225
	60	56 295	135 294	165 293	190 292	240 289	270 286	375 276
	75	42 370	122 365	150 364	178 362	226 359		

Bm1-250 250ml/r

		ΔP (Mpa)						
		3	6	7	8	10	11	14
Flow (LPM)	8	94 30	195 29	225 28	259 27	326 25	357 24	
	15	90 60	193 59	225 58	260 57	326 55	360 53	455 48
	20	89 78	191 78	225 77	258 76	320 74	355 73	455 65
	30	84 118	188 117	220 117	250 116	320 114	354 112	452 103
	35	82 135	184 134	218 132	252 131	316 127	350 125	448 120
	45	79 179	179 178	215 177	246 176	310 174	345 172	442 163
	50	74 199	174 196	210 195	243 194	306 192	338 191	438 184
	60	70 236	171 235	206 235	239 234	300 230	336 228	432 222
	75	55 292	155 295	190 295	221 294	280 292	312 291	

Bm1-315 315ml/r

		ΔP (Mpa)					
		3	6	7	8	10	12.5
Flow (LPM)	8	115	244	282	312	388	
		25	24	22	17	13	
	15	116	243	284	324	406	503
		46	46	45	43	40	20
	20	114	242	282	325	405	505
		62	62	61	57	56	44
	30	109	238	276	320	400	500
		93	93	92	90	88	76
	35	105	232	273	314	398	498
		109	108	107	105	103	93
	45	100	225	268	310	390	490
		140	140	138	136	135	125
	50	92	218	262	306	384	486
		156	155	154	153	150	140
	60	89	215	258	300	378	478
		188	187	186	184	180	170
	75	69	195	236	278	355	
		236	235	233	232	228	

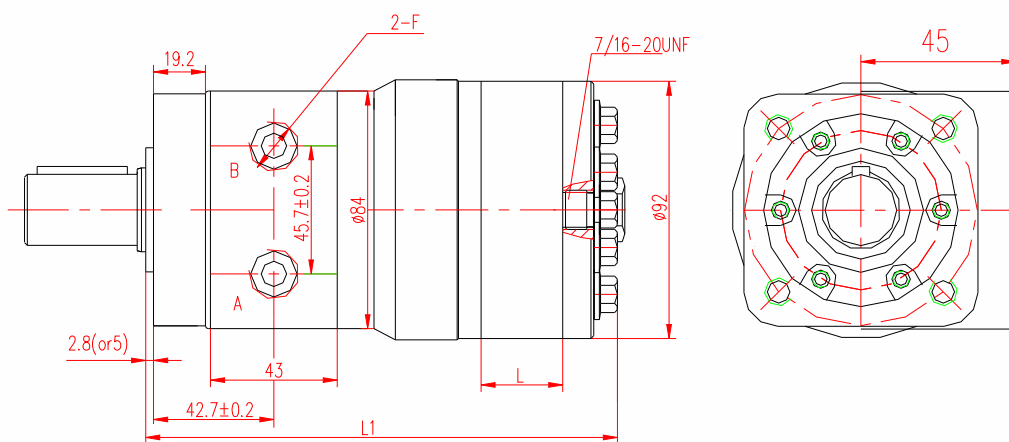
Bm1-400 400ml/r

		ΔP (Mpa)					
		3	6	7	8	8.5	12.5
Flow (LPM)	8	147	305	355			
		19	18	17			
	15	147	308	359	406	435	531
		38	37	35	33	32	26
	20	144	305	358	408	435	510
		49	49	47	45	43	37
	30	137	300	352	400	433	528
		73	73	72	70	68	63
	35	135	294	345	395	425	525
		85	85	84	82	81	73
	45	130	286	339	390	420	515
		110	110	108	106	105	100
	50	117	278	330	382	410	503
		124	124	122	120	119	113
	60	112	274	326	378	402	500
		148	148	147	146	145	138
	75	88	246	298	350	376	
		185	185	184	182	180	

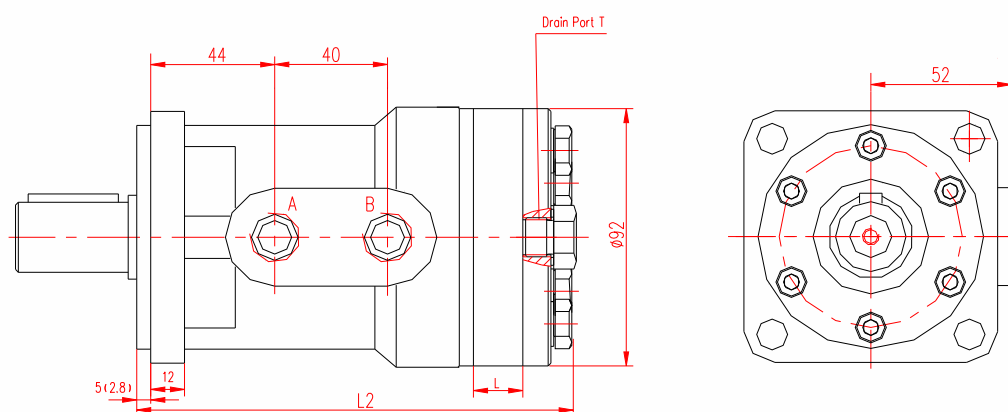
All the datas were tested at 50°C with anti-wear hydraulic oil,
Actual data may vary slightly from unit to uniu in production.

Factor: mm

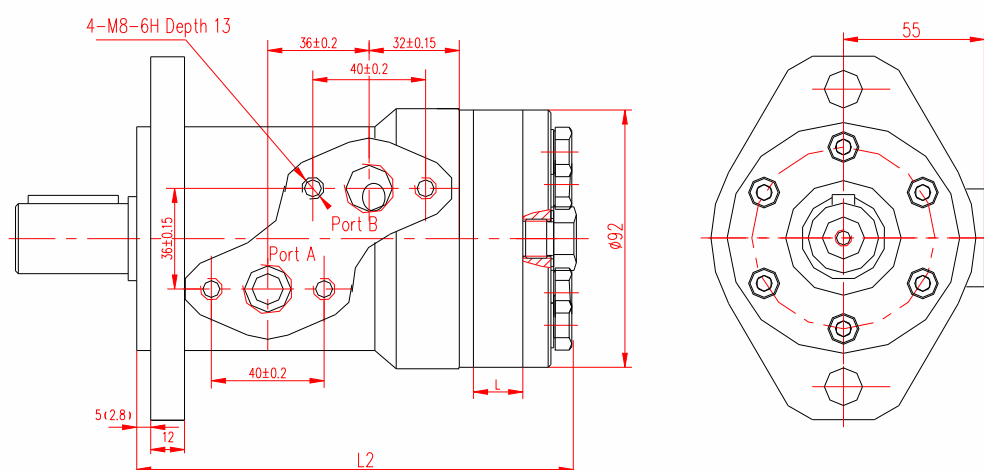
H type



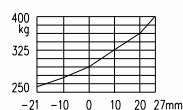
L type



S type



Shaft Load Capacity:
Radial Load: 400Kg Max.
Axis Load : 200Kg Max.



Displacement	50	63	80	100	125	160	200	250	315	400
L	9	11.3	14.5	17.8	23	29	37	46	57	72
L1	143	146	147.5	151	156	162	170	179.5	190.5	205
L2	148	151	152.5	156	161	167	175	184.5	195.5	210

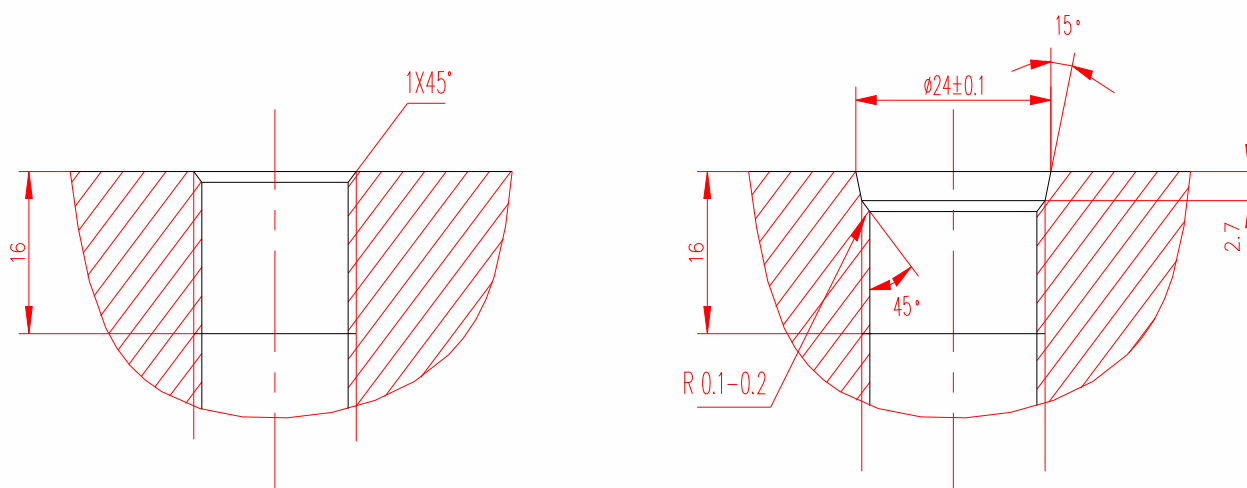
Standard Direction of The Motor Rotation:

CW-----When A Port pressurized, Viewed From the Shaft End.

BM1 Dimension and Mounting Data----Oil port

If you have any other special demand about the figuration,port,dimension and mounting type,please contact us ,we can design specially.

Factor: mm



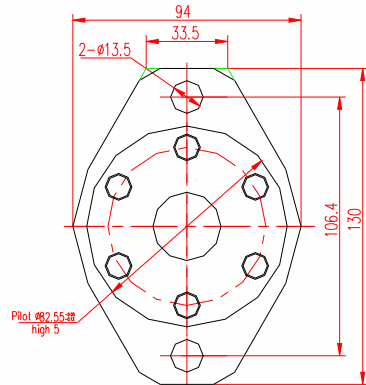
A: G1/2"
B: M22X1.5
D: 1/2-14NPTF
E: PT 1/2
F: M20X1.5

C: 7/8-14UNF-2B

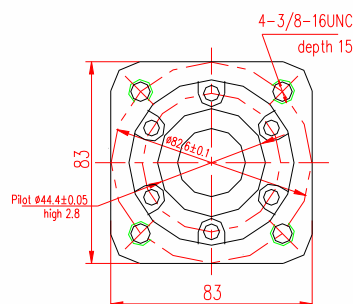
BM1 Dimension and Mounting Data---Mounting Flange

Factor: mm

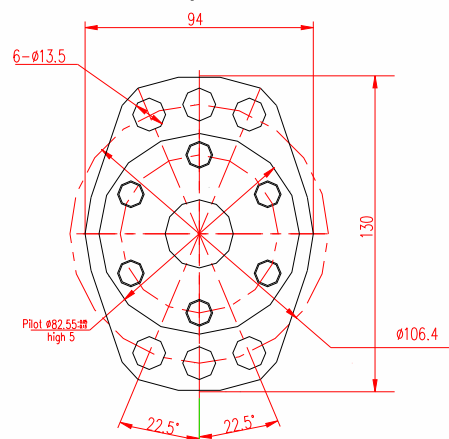
flange A



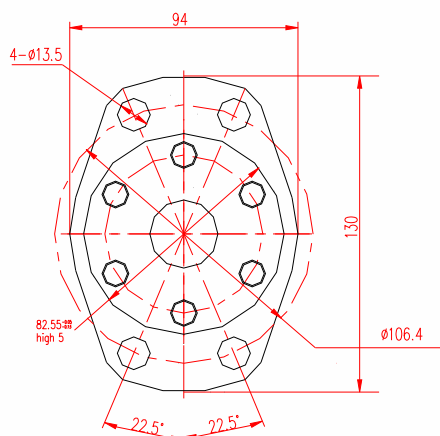
flange B



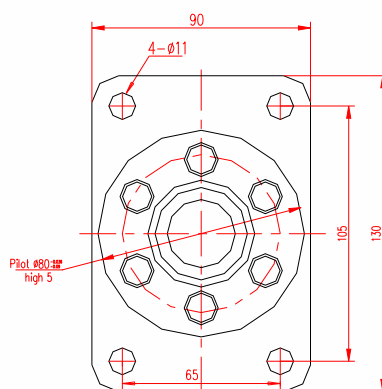
flange C



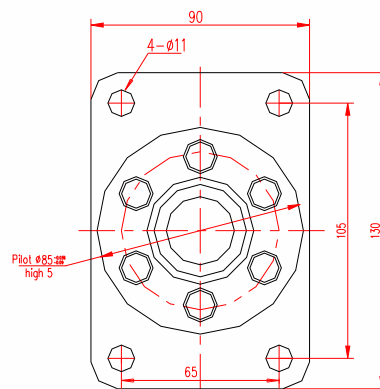
flange D



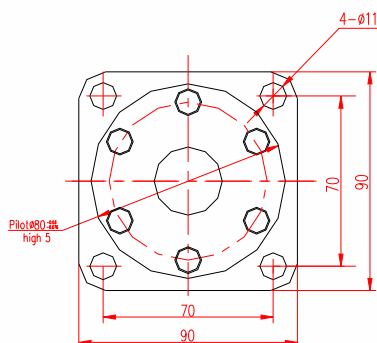
flange E



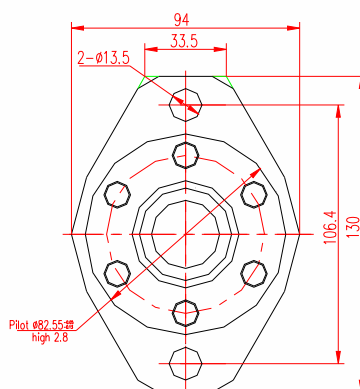
flange F



flange G

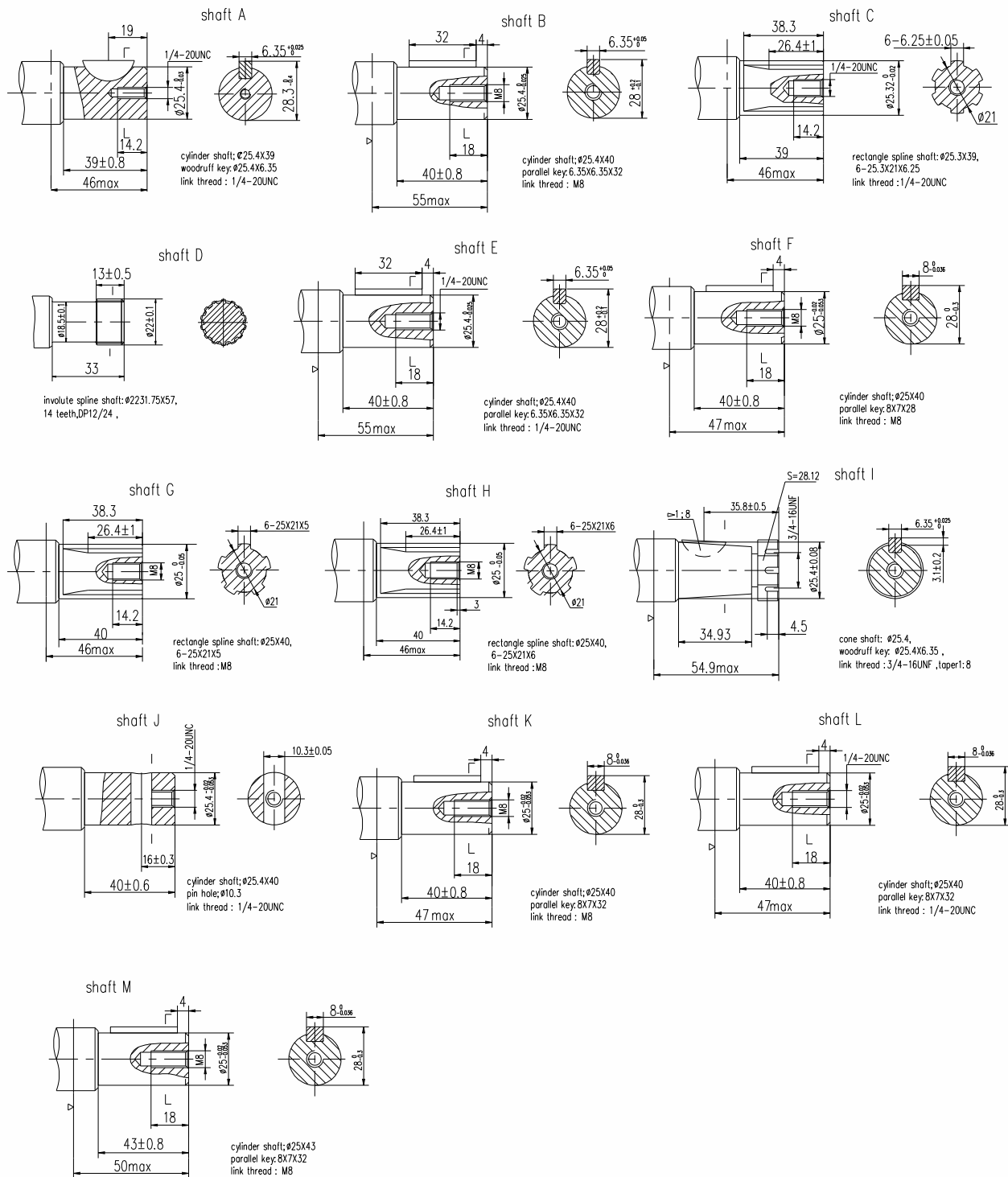


flange H



BM1 Dimension and Mounting Data---Shaft

Factor: mm



BM1 Code number and Order information

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

BM1	1	2	3	4	5	6	7	8
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pos 1	2	3	4	5	6	7	8
Figuration	Displacement (ml/r)	Flange&Pilot (mm)	Shaft&key (mm)	Oil port	Link thread on port surface	Drain port	Special
H 	A 50	A rhombus flange, 2- ϕ 13.5 bolt center space 106.4, pilot ϕ 82.5X5	A cylinder shaft; ϕ 25.4X39 woodruff key: ϕ 25.4X6.35 link thread :1/4-20UNC	A 2-G1/2	A None	A None	A standard
L 	B 63	B square flange 83X83, 4-3/8-16UNC bolt distributing circle ϕ 82.55 , pilot ϕ 44.4X2.8	B cylinder shaft; ϕ 25.4X40 parallel key: 6.35X6.35X32, link thread : M8	B 2- M22X1.5	B 4-M8	B M14X1.5	B add 2 radial bearing
S 	C 80	C 6 bolt rhombus flange, 6- ϕ 13.5 bolt distributing circle ϕ 106.4, pilot ϕ 82.5X5	C rectangle spline shaft: ϕ 25.3X39, 6-25.3X21.5X6.25, link thread :1/4-20UNC	C 2-7/8- 14UNF SAE	C 4-5/16- UNC	C G1/4	C
	D 100	D 4 bolt rhombus flange, 4- ϕ 13.5 bolt distributing circle ϕ 106.4, pilot ϕ 82.5X5	D involute spline shaft: ϕ 22X33,13teeth ,DP16/32	D 2-1/2- 14NPTF	D	D 7/16- 20UNF	D
	E 125	E rectangle flange 130X90 ,4- ϕ 11 bolt distributing 105X65 , pilot ϕ 80X5	E cylinder shaft; ϕ 25.4X40 parallel key:6.35X6.35X32 , link thread :1/4-20UNC	E 2-PT 1/2	E	E M10X1	E
	F 160	F rectangle flange 130X90 ,4- ϕ 11 bolt distributing 105X65 , pilot ϕ 85X5	F cylinder shaft; ϕ 25X40 parallel key:8X7X28 link thread :M8	F 2- M20X1.5	F	F ZG1/4	F
	G 200	G square flange 90X90 , 4- ϕ 11 bolt distributing 70X70, pilot ϕ 80X5	G rectangle spline shaft: ϕ 25X40, 6-25X21X5 link thread :M8	G	G	G	G
	H 250	H rhombus flange, 2- ϕ 13.5 bolt center space 106.4, pilot ϕ 82.5X2.8	H rectangle spline shaft: ϕ 25X40, 6-25X21X6 link thread :M8	H	H	H	H
	I 315	I	I cone shaft: ϕ 25.4,taper:1:8 woodruff key: ϕ 25.4X6.35	I	I	I	I
	J 400	J	J cylinder shaft; ϕ 25.4 pin hole: ϕ 10.3	J	J	J	J

Next page is continuing

BM1 Code number and Order information ---continue

BM1	1	2	3	4	5	6	7	8
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pos 1		2		3		4		5		6		7		8	
Figuration		Displacement (ml/r)		Flange&Pilot (mm)		Shaft&key (mm)		Oil port		Link thread on port surface		Drain port		Special	
H	parallel port 	A	50	A	rhombus flange, 2- $\varnothing$ 13.5 bolt center space 106.4, pilot $\varnothing$ 82.5X5	K	cylinder shaft; $\varnothing$ 25X40 parallel key:8X7X32 link thread :M8	A	2-G1/2	A	None	A	None	A	standard
L	Line port 	B	63	B	square flange 83X83, 4-3/8-16UNC bolt distributing circle $\varnothing$ 82.55 , pilot $\varnothing$ 44.4X2.8	L	Cylinder shaft; $\varnothing$ 25X40 parallel key:8X7X32 link thread :1/4-20unf	B	2-M22X1.5	B	4-M8	B	M14X1.5	B	add 2 radial bearing
S	S-port 	C	80	C	6 bolt rhombus flange, 6- $\varnothing$ 13.5 bolt distributing circle $\varnothing$ 106.4, pilot $\varnothing$ 82.5X5	M	cylinder shaft; $\varnothing$ 25X43 parallel key:8X7X32 link thread :M8	C	2-7/8-14UNF SAE	C	4-5/16-UNC	C	G1/4	C	
		D	100	D	4 bolt rhombus flange, 4- $\varnothing$ 13.5 bolt distributing circle $\varnothing$ 106.4, pilot $\varnothing$ 82.5X5			D	2-1/2-14NPTF	D		D	7/16-20UNF	D	
		E	125	E	rectangle flange 130X90 , 4- $\varnothing$ 11 bolt distributing 105X65 , pilot $\varnothing$ 80X5			E	2-PT 1/2	E		E	M10X1	E	
		F	160	F	rectangle flange 130X90 , 4- $\varnothing$ 11 bolt distributing 105X65 , pilot $\varnothing$ 85X5			F	2-M20X1.5	F		F	ZG1/4	F	
		G	200	G	square flange 90X90 , 4- $\varnothing$ 11 bolt distributing 70X70, pilot $\varnothing$ 80X5			G		G		G		G	
		H	250	H	rhombus flange, 2- $\varnothing$ 13.5 bolt center space 106.4, pilot $\varnothing$ 82.5X2.8			H		H		H		H	
		I	315	I				I		I		I		I	
		J	400	J				J		J		J		J	

Order example: BM1HABCDCCB

BM2 motor

BM2 series motor is a medium, spool valve type motor. can bear higher pressure than BM1.

Characteristic features:

- It adapts the gerolord design. Has higher efficiency than BM1 motor.
- Credible design for shaft seal, which can bear high pressure, and be used in parallel or in series.
- Direction of shaft speed can be controlled easily and smoothly.
- Best efficiency and economy in medium load applications.



Main Specification

Displacement (ml/r)		50	63	80	100	125	160	200	250	315	400	500
Flow (LPM)	Cont.	40	40	60	60	60	60	60	60	60	60	60
	Int..	50	50	75	75	75	75	75	75	75	75	75
Speed (RPM)	Cont.	755	630	750	600	475	375	300	240	190	160	110
	Int..	970	790	940	750	600	470	375	300	240	200	128
Pressure (MPa)	Cont.	14	14	17.5	17.5	17.5	16.5	13	11	8.5	8.5	8
	Int..	17.5	17.5	20	20	20	20	17.5	14	11.5	11.5	9
Torque (N*m)	Cont.	100	124	190	240	292	363	358	352	360	420	464
	Int..	126	156	220	280	340	430	448	470	470	548	580

Note: 1. Continuous data: The Max. Value of operating motor continuously.

2. Intermittent Data: The Max. Value of operating motor in 6 seconds per minute.

3. A simultaneous max. RPM and max. pressure is not recommended.

4. The Conversion Factors is on the page 4, consult it please

5. The optimum operating situation should be at the 1/3 ~ 2/3 of the continuous operating situation.

BM2 Performance Data

□ cont.
■ Int.

Bm2-50 50ml/r

		ΔP (Mpa)							
		5	7	9	10	12	14	16	17.5
Flow (LPM)	5	35	45	60	66	78	89		
		95	85	75	74	70	45		
		185	175	165	162	150	130	110	120
10		35	49	65	75	88	100	110	120
		282	276	265	260	250	230	210	185
		34	45	65	69	85	95	110	125
20		375	374	365	360	345	330	308	275
		34	45	60	69	80	98	109	125
		475	466	460	450	436	420	395	360
25		35	45	60	68	80	95	109	125
		575	570	561	552	541	531	500	465
		32	42	59	66	80	93	107	125
30		665	663	655	654	635	623	598	560
		30	41	58	66	79	92	105	122
		760	758	753	750	738	725	700	670
40		29	40	58	65	78	90	105	120
		855	855	850	845	835	814	800	782

Bm2-63 63ml/r

		ΔP (Mpa)							
		5	7	9	10	12	14	16	17.5
Flow (LPM)	5	41	60	76	83	98	112		
		76	67	59	58	55	36		
		146	138	130	125	120	102	132	150
10		43	61	80	92	110	125	138	150
		222	218	209	202	190	160	145	130
		43	57	82	87	105	120	129	152
20		295	294	288	284	272	245	223	195
		48	56	76	86	100	122	130	153
		375	368	363	355	312	328	255	205
25		44	56	74	85	100	120	136	157
		454	450	443	431	427	419	395	367
		40	53	74	83	100	117	134	156
30		525	523	517	516	501	492	472	442
		37	52	73	82	98	115	132	153
		600	598	594	592	583	572	553	529
40		28	48	70	80	93	100	125	145
		675	675	671	667	659	643	632	617

Bm2-80 80ml/r

		ΔP (Mpa)							
		5	7	9	10	12	14	16	17.5
Flow (LPM)	10	56	78	98	107	130	148	170	180
		115	108	105	100	91	75	53	45
		50	82	105	118	132	160	180	188
20		238	235	226	223	208	195	173	162
		48	75	96	115	130	150	178	190
		364	360	356	345	330	320	300	283
30		45	72	97	105	128	149	177	189
		487	482	475	472	460	446	420	409
		42	70	90	98	125	147	171	187
40		615	615	606	599	590	568	547	535
		40	63	85	95	118	142	169	185
		740	724	720	715	705	688	668	657
50		36	58	82	90	112	139	165	179
		860	852	840	837	820	810	790	776
		29	56	77	85	110	133	162	177
60		925	915	910	899	886	870	855	837

Torque 105 Nm
Speed 800 rpm

Bm2-100 100ml/r

		ΔP (Mpa)							
		5	7	9	10	12	14	16	17.5
Flow (LPM)	10	73	99	123	139	160	183	210	223
		99	95	86	85	75	62	52	45
		68	95	123	143	165	199	220	238
20		199	195	187	182	175	163	150	138
		65	95	120	140	165	194	220	240
		299	294	288	285	278	263	249	235
30		59	88	119	135	161	192	218	238
		400	398	387	385	380	366	350	336
		55	85	118	125	157	185	217	235
40		499	495	488	484	475	463	451	436
		48	79	110	119	150	180	216	235
		599	595	587	585	579	568	550	536
50		43	70	100	112	142	170	200	229
		699	692	687	683	679	668	645	636
		39	63	98	105	140	167	198	227
60		748	740	737	735	720	715	695	686

Bm2-125 125ml/r

		ΔP (Mpa)							
		5	7	9	10	12	14	16	17.5
Flow (LPM)	10	90	122	160	175	205	237	259	270
		72	71	65	63	55	42	22	14
		85	119	158	172	208	250	278	292
20		155	152	150	145	138	122	109	90
		42	108	158	165	206	242	277	291
		236	235	233	225	218	206	192	170
30		79	105	150	161	205	238	275	289
		315	312	309	307	302	298	273	254
		75	95	145	158	196	238	265	285
40		399	395	393	390	380	368	355	337
		60	95	139	155	183	223	254	279
		475	475	470	468	463	450	428	416
50		60	83	125	150	178	212	252	262
		555	552	550	549	545	538	515	500
		55	80	122	145	172	205	245	261
60		595	593	590	585	582	577	552	537

Bm2-160 160ml/r

		ΔP (Mpa)							
		5	7	9	10	12	14	16	17.5
Flow (LPM)	10	115	160	205	220	262	300	340	362
		57	56	52	50	43	38	34	27
		115	160	206	230	265	320	355	380
20		119	115	110	108	102	95	84	76
		105	158	202	220	261	305	344	378
		184	180	177	172	165	153	134	130
30		100	145	195	218	256	299	340	375
		247	245	238	236	230	217	199	185
		92	142	188	209	250	295	336	366
40		307	305	300	298	290	280	261	244
		84	137	180	199	240	286	330	360
		369	367	365	361	355	342	334	304
50		65	120	165	180	223	282	320	350
		436	435	430	427	415	402	336	366
		60	117	158	175	220	272	314	342
60		465	462	459	456	447	432	415	395

BM2 Performance Data- Continue

□ cont.
■ Int.

Bm2-200 200ml/r

		ΔP (Mpa)						
		5	7	9	10.5	12	14	17.5
Flow (LPM)	10	149	205	255	290	328	370	443
		50	48	45	43	40	30	23
20		140	202	250	323	330	411	448
		99	96	93	90	85	78	65
30		130	192	242	307	325	376	445
		150	148	140	136	131	122	105
40		125	186	233	305	314	390	436
		200	196	193	188	181	170	149
50		120	177	225	295	305	382	427
		250	247	242	238	231	218	192
60		110	166	220	285	292	373	419
		300	295	290	288	282	268	236
70		98	150	205	244	278	330	410
		350	348	342	338	330	318	282
75		85	141	199	235	268	323	400
		375	372	366	362	356	342	310

Bm2-250 250ml/r

		ΔP (Mpa)							
		3	5	7	8	10	11	14	17.5
Flow (LPM)	10	115	182	252	295	350	380	470	535
		40	39	38	35	32	30	23	16
20		110	178	252	295	352	385	470	548
		80	79	75	75	69	67	57	48
30		100	170	250	285	349	380	469	546
		120	119	116	115	110	106	95	80
40		90	159	232	269	330	366	460	530
		159	156	155	153	150	147	130	110
50		80	148	216	252	320	352	453	520
		200	198	195	194	162	160	152	147
60		75	130	200	235	305	340	433	505
		240	240	238	236	232	228	210	180
70		50	117	190	220	290	320	412	495
		280	278	278	275	270	267	250	215
75		42	105	180	210	280	310	405	486
		300	299	298	297	294	288	272	239

Bm2-315 315ml/r

		ΔP (Mpa)						
		3	5	6.5	8	9	13	13.5
Flow (LPM)	10	135	215	279	343	385	515	550
		32	28	26	25	24	23	22
20		135	216	288	350	380	508	552
		60	59	58	57	56	52	50
30		125	205	275	340	375	494	543
		93	91	90	89	88	80	79
40		115	195	266	335	366	485	526
		122	120	119	118	117	105	104
50		90	170	252	320	352	474	511
		153	152	151	148	146	137	132
60		80	160	230	305	334	457	492
		190	185	190	178	175	160	156
70		58	135	215	285	320	442	470
		222	220	216	212	205	190	180
75		55	125	205	269	308	426	469
		234	232	230	227	225	208	200

Bm2-400 400ml/r

		ΔP (Mpa)						
		3	5	6.5	8	9	13	13.5
Flow (LPM)	10	170	252	370	440	485	595	620
		24	23	22	20	19	17	16
20		170	281	365	436	480	590	615
		48	47	45	44	42	40	36
30		154	278	355	426	470	580	610
		72	70	68	66	63	60	59
40		144	273	350	410	466	576	606
		95	94	90	83	80	76	70
50		137	269	344	406	460	570	600
		121	119	116	112	108	101	95
60		135	265	330	390	445	555	670
		145	140	134	130	118	110	105
70		120	245	315	370	435	545	650
		170	169	165	160	154	150	145
75		115	235	300	350	425	525	630
		180	176	170	165	162	158	153

Bm2-500 500ml/r

		ΔP (Mpa)					
		3	5	6.5	8	9	13
Flow (LPM)	10	200	345	462	582	635	755
		29	27	26	24	22	20
20		199	340	455	575	625	745
		39	38	37	36	34	30
30		190	328	447	566	626	739
		59	58	57	56	54	50
40		188	319	437	556	616	729
		78	77	76	75	73	70
50		180	310	427	546	606	718
		97	96	95	95	93	90
60		175	300	416	532	597	702
		118	117	115	114	112	110
70		170	290	413	521	586	690
		138	137	135	133	131	130
75		160	278	402	511	575	678
		158	157	155	152	150	149

All the datas were tested at 50°C with anti-wear hydraulic oil, actual data may vary slightly from unit to unit production.

Factor: mm



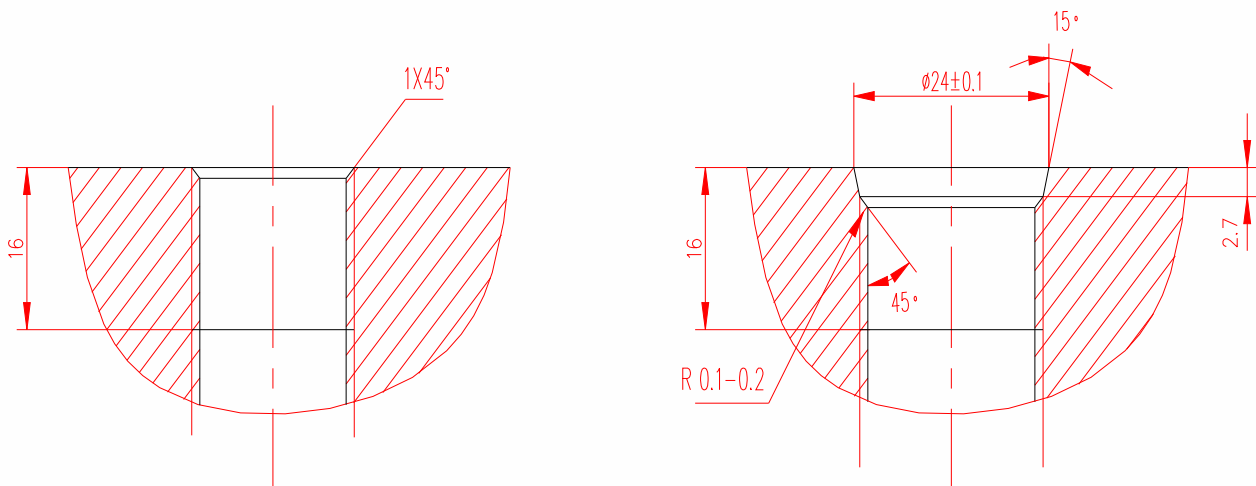
A graph showing the relationship between mass (m) and displacement (x) for a spring. The vertical axis represents mass in kg, ranging from 250 to 400. The horizontal axis represents displacement in mm, ranging from -21 to 27. A straight line is plotted, indicating a linear relationship. The line passes through the points $(0, 300)$ and $(27, 400)$.

CW-----When A Port pressurized, Viewed From the Shaft End.

BM2 Dimension and Mounting Data----Oil port

If you have any other special demand about the figuration,port,dimension and mounting type,please contact us ,we can design specially.

Factor: mm



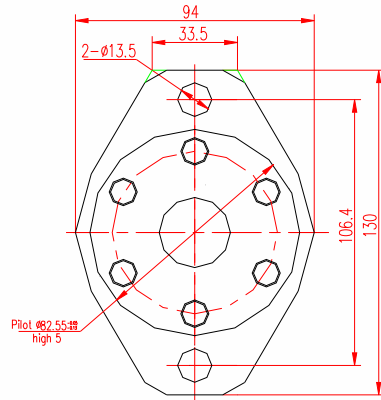
A: G1/2"
B: M22X1.5
D: 1/2-14NPTF
E: PT 1/2
F: M20X1.5

C: 7/8-14UNF-2B

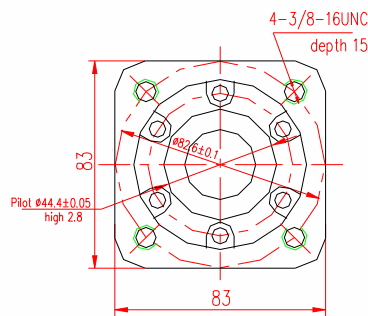
BM2 Dimension and Mounting Data---Mounting Flange

Factor: mm

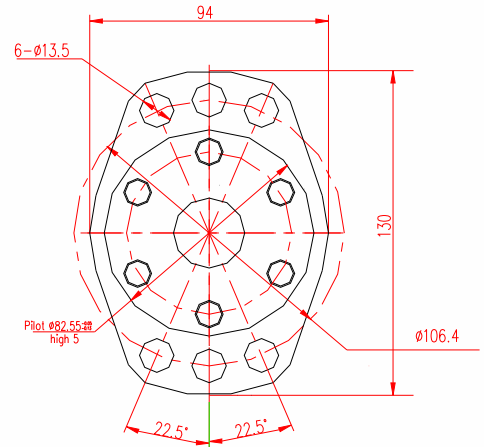
flange A



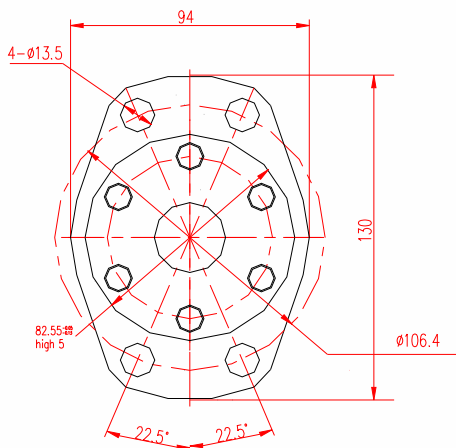
flange B



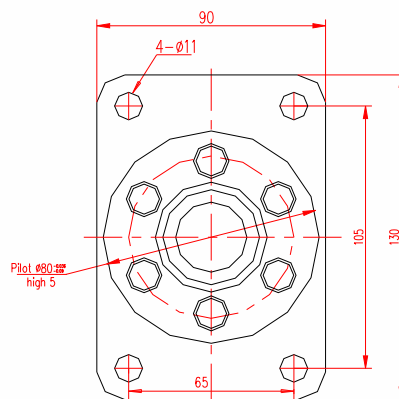
flange C



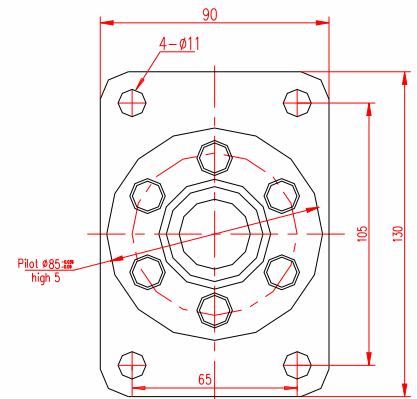
flange D



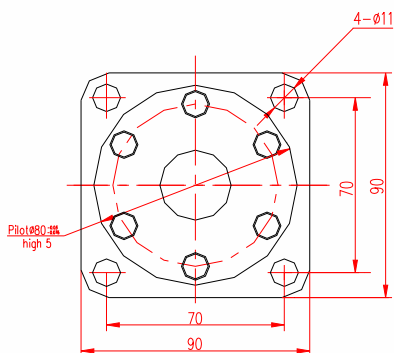
flange E



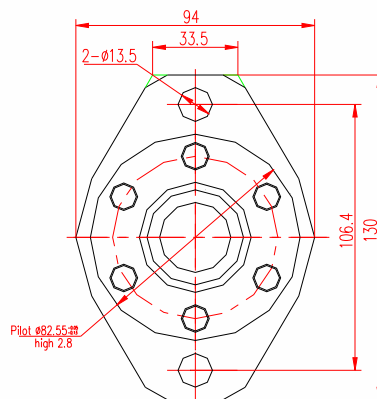
flange F



flange G

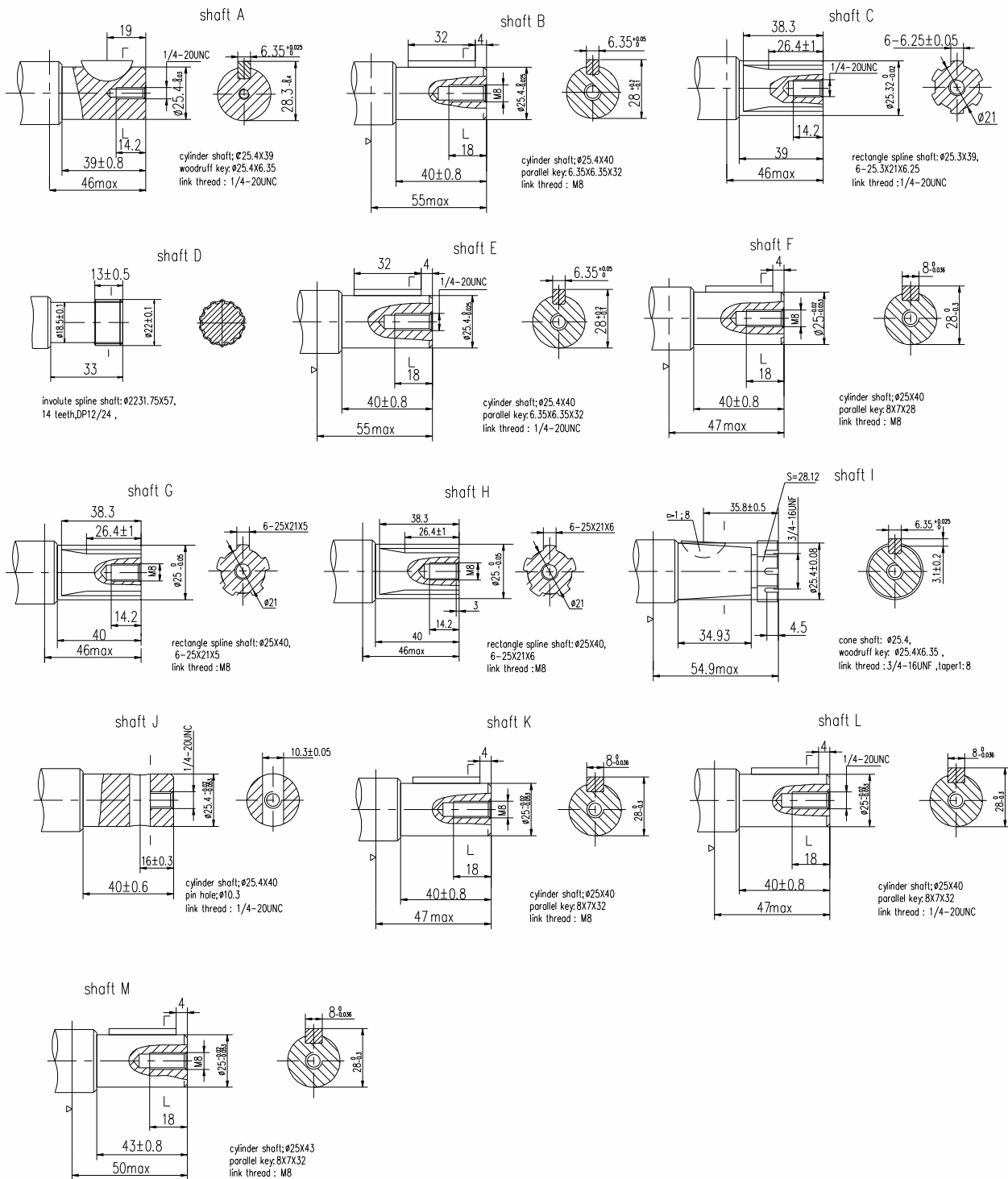


flange H



BM2 Dimension and Mounting Data---Shaft

Factor: mm



BM2 Code number and Order information

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

BM2		1		2		3		4		5		6		7		8	
pos 1		2		3		4		5		6		7		8			
Figuration		Displacement (ml/r)		Flange&Pilot (mm)		Shaft&key (mm)		Oil port		Link thread on port surface		Drain port		Special			
H	parallel port 	A	50	A	rhombus flange, 2- $\varnothing$ 13.5 bolt center space 106.4, pilot $\varnothing$ 82.5X5	A	cylinder shaft; $\varnothing$ 25.4X39 woodruff key: $\varnothing$ 25.4X6.35 link thread :1/4-20UNC	A	2-G1/2	A	None	A	None	A	standard		
L	Line port 	B	63	B	square flange 83X83, 4-3/8-16UNC bolt distributing circle $\varnothing$ 82.55 , pilot $\varnothing$ 44.4X2.8	B	cylinder shaft; $\varnothing$ 25.4X40 parallel key:6.35X6.35X32 link thread : M8	B	2-M22X1.5	B	4-M8	B	M14X1.5	B	add 2 radial bearing		
S	S-port 	C	80	C	6 bolt rhombus flange, 6- $\varnothing$ 13.5 bolt distributing circle $\varnothing$ 106.4, pilot $\varnothing$ 82.5X5	C	rectangle spline shaft: $\varnothing$ 25.3X39, 6-25.3X21.5X6.25 link thread :1/4-20UNC	C	2-7/8-14UNF SAE	C	4-5/16-UNC	C	G1/4	C			
		D	100	D	4 bolt rhombus flange, 4- $\varnothing$ 13.5 bolt distributing circle $\varnothing$ 106.4, pilot $\varnothing$ 82.5X5	D	involute spline shaft: $\varnothing$ 22X33, 13 teeth ,DP16/32	D	2-1/2-14NPTF	D		D	7/16-20UNF	D			
		E	125	E	rectangle flange 130X90 ,4- $\varnothing$ 11 bolt distributing 105X65 , pilot $\varnothing$ 80X5	E	cylinder shaft; $\varnothing$ 25.4X40 parallel key:6.35X6.35X32 link thread :1/4-20UNC	E	2-PT 1/2	E		E	M10X1	E			
		F	160	F	rectangle flange 130X90 ,4- $\varnothing$ 11 bolt distributing 105X65 , pilot $\varnothing$ 85X5	F	cylinder shaft; $\varnothing$ 25X40 parallel key:8X7X28 link thread :M8	F	2-M20X1.5	F		F	ZG1/4	F			
		G	200	G	square flange 90X90 , 4- $\varnothing$ 11 bolt distributing 70X70, pilot $\varnothing$ 80X5	G	rectangle spline shaft: $\varnothing$ 25X40, 6-25X21X5 link thread :M8	G		G		G		G			
		H	250	H	rhombus flange, 2- $\varnothing$ 13.5 bolt center space 106.4, pilot $\varnothing$ 82.5X2.8	H	rectangle spline shaft: $\varnothing$ 25X40, 6-25X21X6 link thread :M8	H		H		H		H			
		I	315	I		I	cone shaft: $\varnothing$ 25.4,taper:1:8 woodruff key: $\varnothing$ 25.4X6.35	I		I		I		I			
		J	400	J		J	cylinder shaft; $\varnothing$ 25.4 pin hole: $\varnothing$ 10.3										
		K	500	K		K	cylinder shaft; $\varnothing$ 25X40 parallel key:8X7X32 link thread :M8										

Next page is continuing

31

BM2 Code number and Order information---continue

BM2		1		2		3		4		5		6		7		8	
pos 1		2		3		4		5		6		7		8			
Figuration		Displacement (ml/r)		Flange&Pilot (mm)		Shaft&key (mm)		Oil port		Link thread on port surface		Drain port		Special			
H	parallel port 	A	50	A	rhombus flange, 2- $\varnothing$ 13.5 bolt center space 106.4, pilot $\varnothing$ 82.5X5	L	Cylinder shaft; $\varnothing$ 25X40 parallel key:8X7X32 link thread :1/4-20UNC	A	2-G1/2	A	None	A	None	A	standard		
L	Line port 	B	63	B	square flange 83X83, 4-3/8-16UNC bolt distributing circle $\varnothing$ 82.55 , pilot $\varnothing$ 44.4X2.8	M	cylinder shaft; $\varnothing$ 25X43 parallel key:8X7X32 link thread :M8	B	2-M22X1.5	B	4-M8	B	M14X1.5	B	add 2 radial bearing		
S	S-port 	C	80	C	6 bolt rhombus flange, 6- $\varnothing$ 13.5 bolt distributing circle $\varnothing$ 106.4, pilot $\varnothing$ 82.5X5			C	2-7/8-14UNF SAE	C	4-5/16-UNC	C	G1/4	C			
		D	100	D	4 bolt rhombus flange, 4- $\varnothing$ 13.5 bolt distributing circle $\varnothing$ 106.4, pilot $\varnothing$ 82.5X5			D	2-1/2-14NPTF	D		D	7/16-20UNF	D			
		E	125	E	rectangle flange 130X90 , 4- $\varnothing$ 11 bolt distributing 105X65 , pilot $\varnothing$ 80X5			E	2-PT 1/2	E		E	M10X1	E			
		F	160	F	rectangle flange 130X90 , 4- $\varnothing$ 11 bolt distributing 105X65 , pilot $\varnothing$ 85X5			F	2-M20X1.5	F		F	ZG1/4	F			
		G	200	G	square flange 90X90 , 4- $\varnothing$ 11 bolt distributing 70X70, pilot $\varnothing$ 80X5			G		G		G		G			
		H	250	H	rhombus flange, 2- $\varnothing$ 13.5 bolt center space 106.4, pilot $\varnothing$ 82.5X2.8			H		H		H		H			
		I	315	I				I		I		I		I			
		J	400														
		K	500														

Order example: BM2HABCDCCB

BM2W wheel motor

BM2W series motor is the wheel motor, with radial bearing, which can bear bigger radial force

Characteristic features:

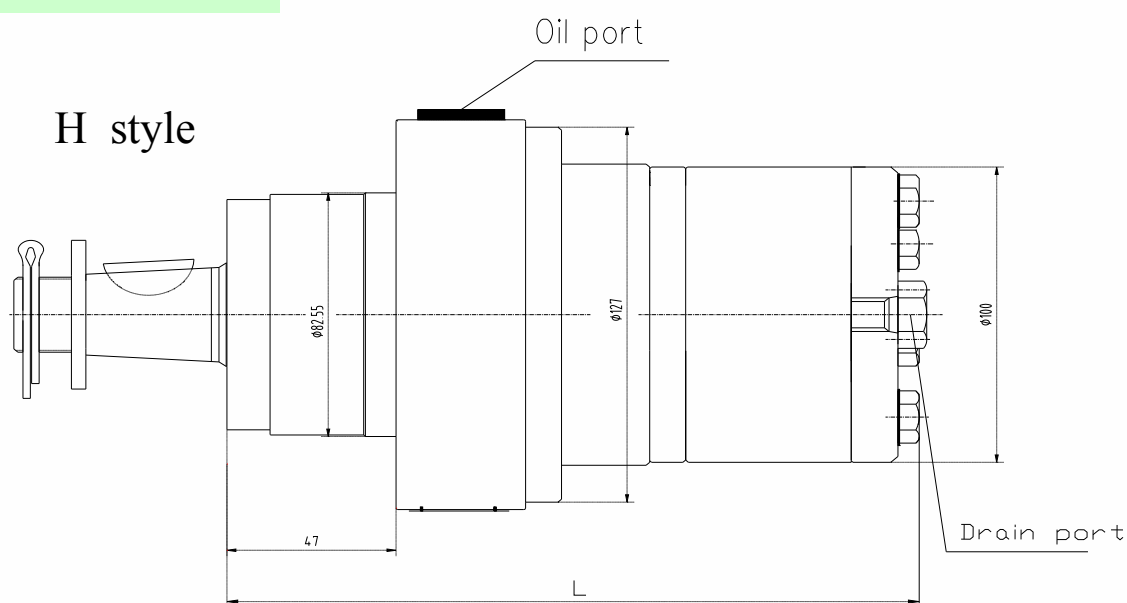
- It adopts the gerotor design. Has higher efficiency.
- Credible design for shaft seal, which can bear high pressure, and be used in parallel or in series.
- Direction of shaft speed can be controlled easily and smoothly.
- Best efficiency and economy in medium load applications.



Main Specification

The main specification and performance data are same as BM2, please refer to the BM2.

BM2W Figuration



Disp (ml/r)	50	63	80	100	125	160	200	250	315	400	500
L(mm)	157	160	163	166	171	177	185	194	205	220	238

Factor: mm

Technical drawing showing three views (A, B, C) of a mechanical assembly.

View A: Side view showing two stacked components. The total height is 46 ± 0.1 .

View B: Front view showing two stacked components. The total height is 46 ± 0.1 . The central hole is labeled $2-G1/2$ with a depth of 19.

View C: Top view showing the assembly. The total width is 26.6 and the total height is 46 ± 0.1 . The central hole is labeled $0\text{-Ring } \varnothing 12.37 \times 2.62$. The four screws are labeled $4-M6$ with a depth of 13.

shaft A

shaft B

shaft C

shaft D

cone shaft: $\phi 31.75$,
woodruff key ϕ
25.4x7.96, link
thread: 1-20UNEF,
taper 1:8

BM2W Code number and Order information

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

BM2W	1	2	3	4	5	6	7	8
------	---	---	---	---	---	---	---	---

pos 1		2		3		4		5		6		7		8	
Figuration		Displacement (ml/r)		Flange& Pilot (mm)		Shaft&key (mm)		Oil port		Link thread on port surface		Drain port		Special	
H	standard	A	50	A	standard	A	cone shaft;Φ31.75X57, taper: 1: 8 , woodruff key: φ25.4X7.96, link thread :1-20UNEF	A	2-7/8-14UNF SAE	A	None	A	None	A	None
		B	63			B	cone shaft;Φ35X57, taper:1: 10, parallel key:6X6X21 link thread :M20X1.5	B	2-G1/2	B	4-M6	B	M14X1.5		
		C	80			C	cylinder shaft:Φ31.75X56, parallel key:7.96X7.96X36 , link thread :M12	C	O-Ring 2- φ 12. 37X2. 62			C	G1/4		
		D	100			D	cone shaft;Φ31.75X57, taper:1: 8, parallel key:7.96X32 link thread :1/4-20UNEF					D	7/16-20UNF		
		E	125												
		F	160												
		G	200												
		H	250												
		I	315												
		J	400												
		K	500												

Order example: BM2WHDABAABA

BM3 motor

BM3 motor is a spool valve with 2 radial ball-bearing type motor.
and can bear bigger radial force

Characteristic features:

- Supported by double ball-bearing, the shaft can carry bigger radial force than BM2 motor.
- Credible design for shaft seal, which can bear high pressure and be used in parallel or in series.
- Direction of shaft rotation and speed can be controlled easily and smooth
- Best combination of efficiency and economy in medium duty applications.



Main Specification

Displacement (ml/r)		100	160	200	250	315	400
Flow (LPM)	Cont.	58	58	58	58	58	58
	Int..	68	68	68	68	68	68
转速 (RPM) Speed	Cont.	551	344	276	220	175	140
	Int..	646	404	323	258	205	162
Pressure (MPa)	Cont.	14	14	12.5	11	9	9
	Int..	17	17	15	13	11	10
Torque (N*m)	Cont.	178	285	318	350	360	418
	Int..	216	346	382	413	425	464

Note: 1.Continuous data: The Max. Value of operating motor continuously.

2.Intermittent Data: The Max. Value of operating motor in 6 seconds per minute.

3.A simultaneous max. RPM and max. pressure is not recommended.

4.The Conversion Factors is on the page 4, consult it please

5.Optimum operating situation should be at the 1/3 ~ 2/3 of the continuous operating situation.

BM3 Performance Data

□ cont.
■ Int.

Bm3-100 100ml/r

流量 Flow (LPM)	压力 ΔP (Mpa)						
	3	5	7	8	10	12.5	15
8	35 75	59 74	83 72	97 70	121 69	147 66	
16	35 150	60 147	85 144	98 141	125 138	148 133	173 128
22	34 207	59 202	84 198	98 194	125 189	147 183	170 178
30	33 282	57 276	82 270	95 267	123 264	143 258	168 248
36	32 338	55 331	80 324	93 320	120 317	140 309	165 295
45	30 423	52 414	78 405	90 400	113 396	136 387	165 370
55	25 517	49 506	76 495	88 489	108 484	134 473	162 456
65		46 611	75 598	85 585	105 578	132 572	

Bm3-160 160ml/r

流量 Flow (LPM)	压力 ΔP (Mpa)						
	3	5	7	8	10	12.5	15
8	56 47	94 46	134 45	155 44	193 42		
16	56 94	95 93	135 91	156 90	195 85	238 82	
22	55 138	94 137	135 135	155 134	193 130	236 125	278 120
30	54 176	93 175	135 173	154 170	193 166	235 160	275 156
36	53 212	92 211	133 210	153 209	191 205	232 200	270 195
45	52 264	90 263	130 260	150 259	187 255	228 250	265 243
55	50 323	86 322	125 319	147 318	180 313	224 308	260 300
65		82 382	120 380	141 378	176 370	216 360	212 350

Bm3-200 200ml/r

流量 Flow (LPM)	压力 ΔP (Mpa)						
	3	5	7	8	10	11	12.5
8	70 38	118 37	167 35	193 34	242 30	258 26	
16	72 75	120 74	170 72	195 71	245 68	260 66	294 60
22	71 103	120 102	168 100	193 99	244 95	253 94	292 88
30	70 141	118 140	166 138	191 137	242 134	251 131	288 126
36	68 169	115 168	162 166	187 164	237 160	248 156	280 150
45	65 212	110 211	156 209	182 208	232 204	242 200	276 196
55		105 258	152 256	180 255	230 250	238 248	270 242
65		100 306	145 305	175 302	225 300	231 295	265 290

Bm3-250 250ml/r

流量 Flow (LPM)	压力 ΔP (Mpa)						
	3	5	7	8	10	11	12.5
8	87 30	147 29	208 28	242 27	302 25		
16	88 60	150 59	210 58	245 57	306 55	323 50	362 48
22	86 83	150 82	210 80	243 78	304 75	320 73	360 70
30	84 113	148 112	208 110	240 109	300 105	315 103	355 100
36	80 135	143 134	203 132	235 131	295 127	310 125	351 120
45	75 169	140 168	200 166	230 165	290 160	305 158	347 152
55		135 206	195 205	225 203	284 200	298 198	340 193
65		130 244	190 243	220 240	280 238	290 235	340 231

Torque 176 Nm
Speed 370 rpm

Bm3-315 315ml/r

流量 Flow (LPM)	压力 ΔP (Mpa)					
	3	4	6	8	10	12.5
8	110 24	148 23	225 21	305 17	380 13	
16	111 48	148 47	227 45	308 42	380 38	450 32
22	110 66	147 65	226 63	307 61	379 58	448 50
30	109 90	145 89	222 87	305 85	377 81	444 77
36	105 107	141 106	219 104	300 102	372 100	440 97
45	100 134	137 133	215 131	295 128	367 125	433 120
55		130 164	210 162	290 160	360 157	426 153
65			200 190	285 189	350 185	420 176

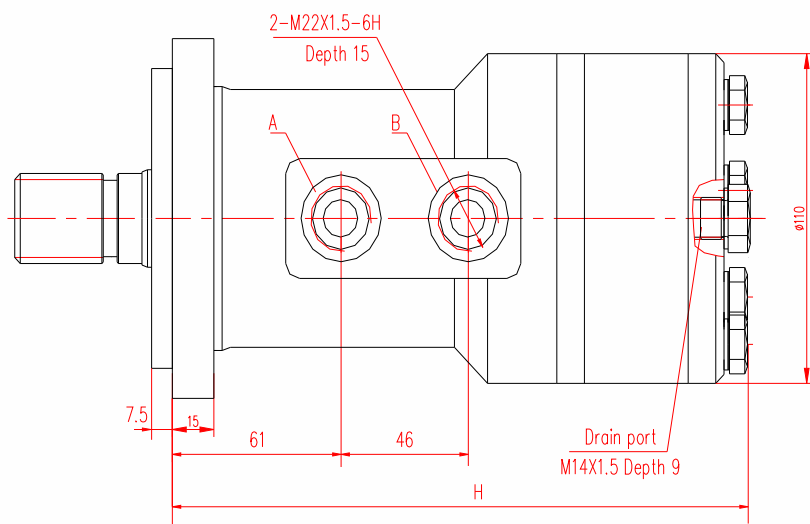
Bm3-400 400ml/r

流量 Flow (LPM)	压力 ΔP (Mpa)					
	3	4	6	8	9	11
8	139 19	188 18	286 17	387 15	435 12	
16	139 38	190 37	288 35	390 33	436 32	513 30
22	138 53	188 52	288 50	390 48	435 47	510 45
30	137 71	186 70	286 68	388 66	433 64	508 60
36	135 85	182 84	282 82	385 80	430 78	505 73
45	130 106	176 105	277 103	380 100	424 98	498 95
55	123 129	170 128	270 126	372 124	416 123	490 120
65		160 150	260 148	360 146	402 142	480 138

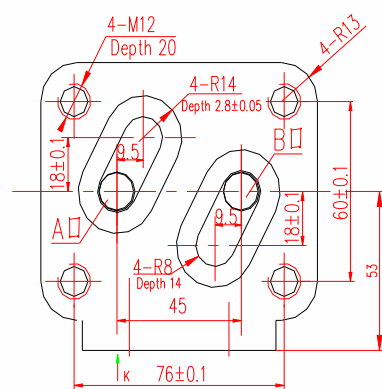
BM3 Dimension and Mounting Data- ---Figuration

Factor: mm

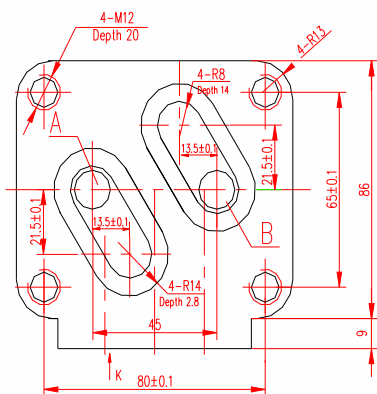
Figuration A:
Line port



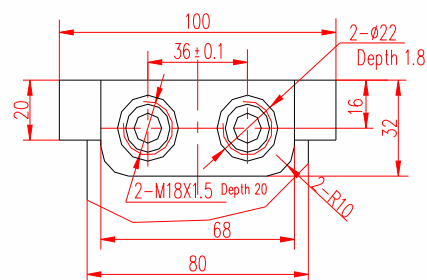
Figuration B:
Manifold Mount Port Face I



Figuration C:
Manifold Mount Port Face I

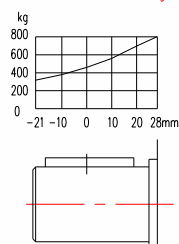


K direction



Shaft Load Capacity:

Radial Load: 800Kg Max.
Axis Load : 300Kg Max.



Displacement	100	160	200	250	315	400
H	185	194	200	207.5	217.5	230

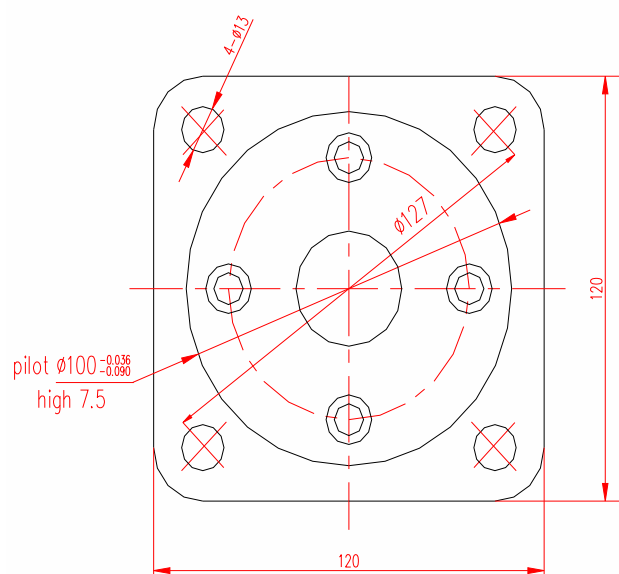
Standard Direction of The Motor Rotation:

CW----When A Port pressurized, Viewed From the Shaft End.

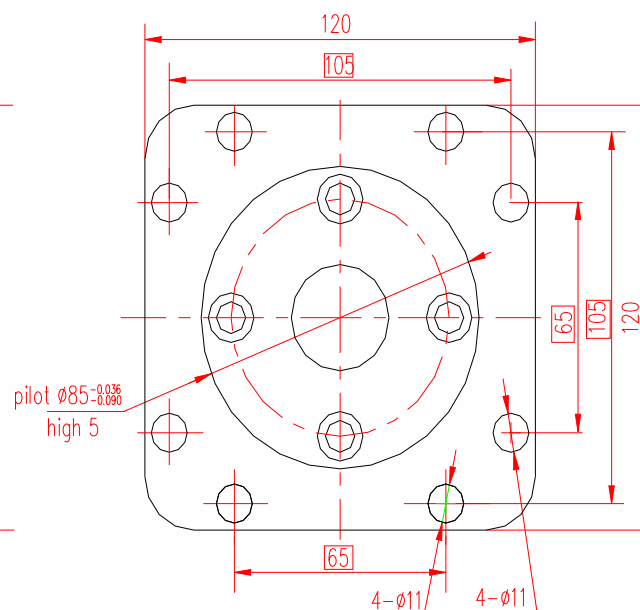
BM3 Dimension and Mounting Data----Mounting Flange

Factor: mm

Flange A

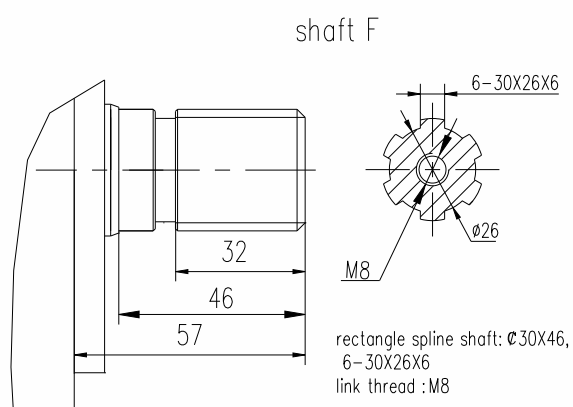
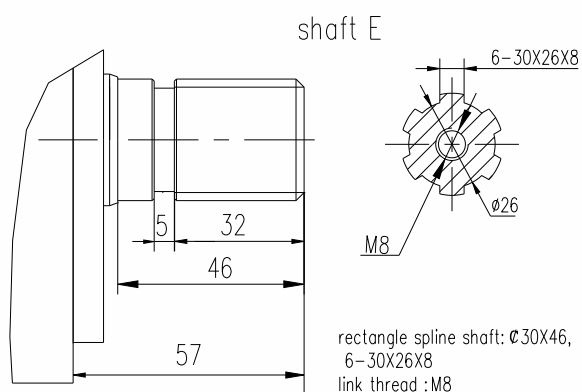
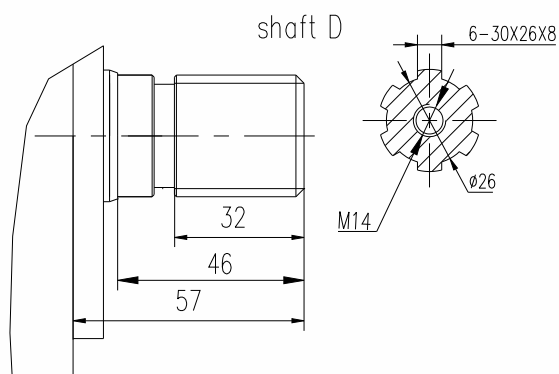
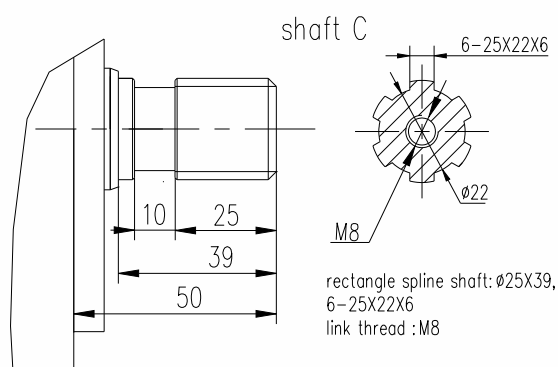
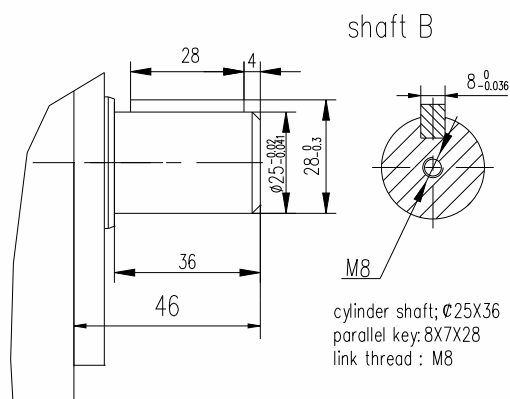
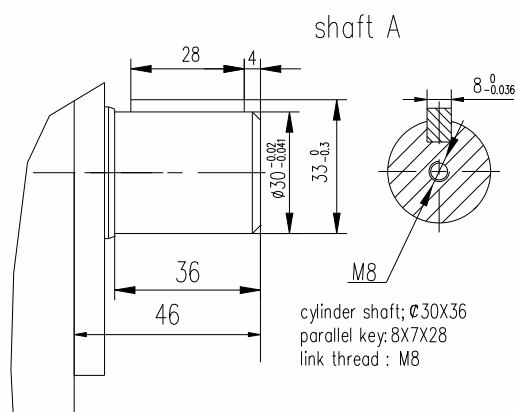


Flange B



BM3 Dimension and Mounting Data---Shaft

Factor: mm



BM3 Code number and Order information

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

BM3	1	2	3	4	5	6	7	8
-----	---	---	---	---	---	---	---	---

pos 1		2		3		4		5		6		7		8	
Figuration		Displacement (ml/r)		Flange&Pilot (mm)		Shaft&key (mm)		Oil port		Link thread on port surface		Drain port		Special	
A	line port	A	100	A	square flange, 4- ϕ 13 bolts distribution circle ϕ 127 , pilot ϕ 100X7.5	A	cylinder shaft; ϕ 30X36 parallel key:8X7X28 link thread : M8	A	2- M22X1.5	A	None	A	None	A	NONE
B	Manifold Mount Port Face I	B	160	B	square flange, 8- ϕ 11 bolts ,pilot ϕ 85X5	B	cylinder shaft; ϕ 25X36 parallel key:8X7X28 link thread : M8	B	2- ϕ 13	B	4-M12, center space 76X60	B	M14X1.5	B	
C	Manifold Mount Port Face II	C	200			C	rectangle spline shaft; ϕ 25X39, 6-25X22X6, link thread :M8			C	4-M12, center space 80X65	C		C	
		D	250			D	rectangle spline shaft: ϕ 30X46, 6-30X26X8 link thread :M14			D		D		D	
		E	315			E	rectangle spline shaft: ϕ 30X46, 6-30X26X8 link thread :M8			E		E		E	
		F	400			F	rectangle spline shaft: ϕ 30X46, 6-30X26X6 link thread :M8			F		F		F	

Order example: BM3ABABAAA

BM4 motor

BM4 is a large spool valve ,high pressure motor,
with radial ball-bearings design, and can bear greater load,
Characteristic features:

- The motor can be used in high pressure and high torque
- Double taper roller bearings permit high radial loads.
- Credible design for shaft seal , which can bear high pressure



Main Specification

Displacement (ml/r)		195	245	310	395	490	625	800
Flow (LPM)	cont.	75	80	80	80	80	80	80
	int.	100	100	100	100	100	100	100
Speed (RPM)	cont.	390	320	250	200	156	120	100
	int.	487	390	300	240	200	150	120
Pressure (MPa)	cont.	14	14	14	14	14	12.5	10
	int.	17.5	15	15	15	15	13	12
Torque (N.m)	cont.	400	435	554	697	870	998	1023
	int.	510	502	663	798	1056	1178	1379

Note: 1.Continuous data: The Max. Value of operating motor continuously.

2.Intermittent Data: The Max. Value of operating motor in 6 seconds per minute.

3.A simultaneous max. RPM and max. pressure is not recommended.

4.The Conversion Factors is on the page 4, consult it please

5.Optimum operating situation should be at the 1/3 ~ 2/3 of the continuous operating situation.

BM4 Performance Data

□ cont.
■ Int.

BM4-195 195ml/r

压力 ΔP (Mpa)

3.5 7 10.5 14 17.5 20

流量 Flow (LPM)

5	96 25	193 25	282 22			
10	100 43	203 41	300 36	390 29	480 14	
20	98 100	200 97	302 93	400 85	508 69	575 56
30	96 145	195 143	298 139	400 130	509 114	578 101
40	89 200	189 200	290 200	397 188	505 168	577 153
50	80 248	182 246	283 244	390 235	498 213	570 199
60	72 292	173 290	274 287	384 279	493 260	563 244
70	62 352	162 350	262 349	373 338	480 318	552 301
75	58 366	155 365	258 363	365 355	473 335	545 319
80	52 381	149 381	252 380	356 371	465 352	536 338
90	38 443	138 437	240 434	346 426	455 407	525 392

BM4 Performance Data

□ cont.
■ Int.

BM4-245

		压力 ΔP (Mpa)						
		3.5	7	9	12	14	17.5	20
流量 Flow (LPM)	5	122 19	248 19	318 18	401 15			
	10	129 37	258 36	334 34	426 32	456 31	596 27	
	20	127 77	256 77	332 76	430 74	454 66	594 54	693 44
	30	124 115	252 114	328 112	426 106	455 97	596 86	695 76
	40	114 158	242 158	322 156	421 152	458 142	602 128	690 115
	50	106 196	234 196	316 193	412 186	451 175	598 162	688 147
	60	96 232	222 231	305 227	403 218	448 208	596 192	678 180
	70	83 275	214 274	290 274	392 268	443 254	582 237	669 221
	75	75 290	206 290	282 288	382 280	438 266	573 252	661 236
	80	70 303	195 303	275 297	370 291	436 280	568 264	650 248
	90	52 350	180 348	258 346	355 340	430 325	552 308	634 293

BM4-310

流量 Flow (LPM)	压力 ΔP (Mpa)						
	3.5	7.5	10	13.5	15	17.5	20
5	154 16	325 13					
10	162 29	343 26	455 20	557 16			
20	168 62	350 61	468 55	582 48	629 41	733 32	806 20
30	166 93	345 90	472 83	581 77	630 68	742 62	823 48
40	155 126	338 126	463 120	576 112	627 100	738 90	825 75
50	142 159	326 156	456 150	569 142	623 125	729 116	824 99
60	121 186	312 186	440 180	556 170	645 155	714 142	813 125
70	105 223	300 222	426 216	540 206	632 189	704 178	802 160
75	96 237	289 234	420 225	530 215	624 198	696 186	795 168
80	84 245	278 244	408 236	519 228	612 212	689 198	785 176
90	63 282	258 280	388 275	496 266	593 248	668 234	760 209

BM4-395

		压力 ΔP (Mpa)					
		3.5	6	10.5	12.5	15	19
流量 Flow (LPM)	5	196 12	349 11	518 10			
	10	205 23	362 22	545 21	701 18	804 12	
	20	208 49	365 48	542 46	707 41	812 37	985 33
	30	202 73	356 72	541 70	706 64	806 56	984 52
	40	196 99	345 98	530 96	702 87	802 78	972 72
	50	174 124	332 122	519 118	687 107	796 98	957 92
	60	155 147	320 144	500 142	668 130	792 116	945 107
	70	138 174	305 173	480 170	647 155	790 142	923 130
	75	132 183	295 182	467 178	634 165	788 150	912 138
	80	114 193	278 192	452 188	622 175	772 158	895 146
90	92 220	255 220	436 215	596 203	752 185	882 166	

BM4-490

	Speed 240					
	压力	ΔP (Mpa)				
	2.5	5	8.5	10	12.5	16
5	164 9	318 9	517 8			
10	178 19	335 18	556 17	669 16	790 14	968 10
20	178 42	330 42	560 41	672 38	798 36	986 30
30	173 63	320 63	552 61	661 58	792 54	981 48
40	162 85	310 85	542 83	654 79	782 75	972 68
50	146 103	298 102	524 102	635 98	769 94	955 86
60	122 124	276 123	503 123	615 118	746 113	933 104
70	98 147	256 147	482 147	598 142	728 136	918 124
75	80 156	241 155	470 155	583 152	715 144	901 132
80	62 166	223 166	456 166	572 158	700 153	882 141
90	36 176	202 175	422 172	550 166	672 160	870 158

Torque 593 Nm
Speed 248 rpm

BM4-625

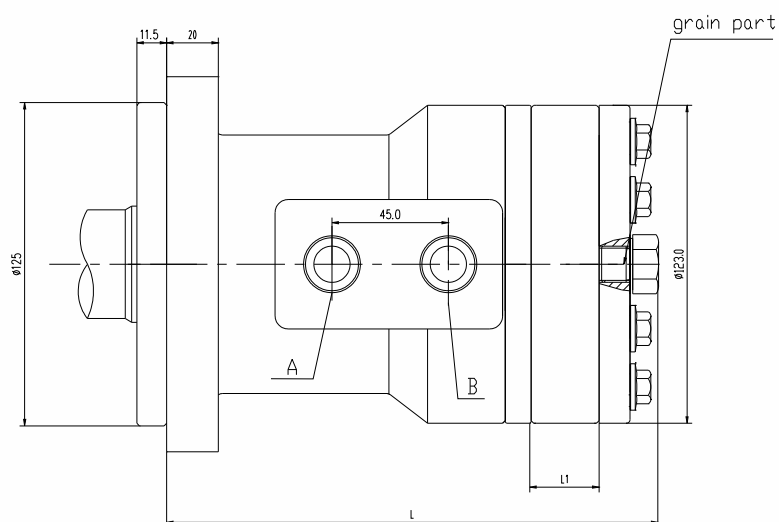
		压力 ΔP (Mpa)					
		3.5	5	7	8.5	10.5	14
流量 Flow (LPM)	5	250 7	380 7	510 6	640 5	755 4	
	10	260 15	395 14	535 13	670 12	795 10	1060 8
	20	275 30	425 30	570 28	710 27	850 25	1065 22
	30	295 45	450 44	605 44	755 43	925 42	1270 37
	40	297 60	450 59	610 58	765 56	920 55	1330 52
	50	285 76	445 75	605 75	760 73	915 70	1325 67
	60	285 93	440 92	595 91	755 90	915 88	1325 84
	70	280 106	430 105	585 105	745 102	905 100	1320 95
	75	275 116	415 115	575 114	735 113	895 112	1315 106
	80	240 124	400 123	560 122	720 121	880 119	1300 114
	90	225 142	380 141	540 139	700 138	855 137	1250 131

BM4-800

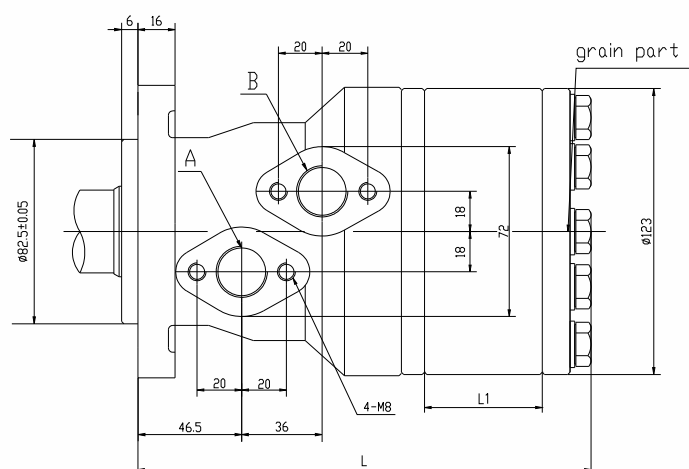
	压力 ΔP (Mpa)					
	3.5	5	7	8.5	10.5	13
5	420 6	590 6	775 5	958 4		
10	420 12	594 12	790 11	972 10	1176 9	1407 7
20	435 24	608 23	840 23	1020 21	1204 20	1428 17
30	420 36	596 35	830 35	1005 34	1204 33	1412 29
40	390 48	595 47	796 47	975 46	1190 45	1410 43
50	380 60	545 59	780 58	960 56	1176 54	
60	360 74	525 73	765 71	945 70	1172 69	
70	340 84	515 83	750 82	932 80	1163 77	
75	325 92	510 91	732 89	910 88	1140 87	
80	315 96	475 96	722 95	865 93	1126 91	
90		460 106	700 104	860 102		

Factor: mm

H type



S type



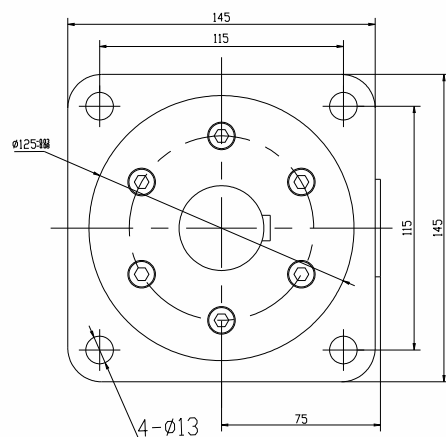
BM4 缩短型

排 量	195	245	310	395	490	625	800
L1(mm)	21.7	27.3	34.5	45	54.4	69	90
L (mm)	179.7	185.3	192.5	203	212.4	227	248

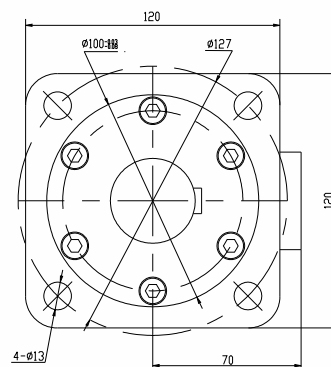
BM4 Dimension and Mounting Data---Mounting Flange

Factor: mm

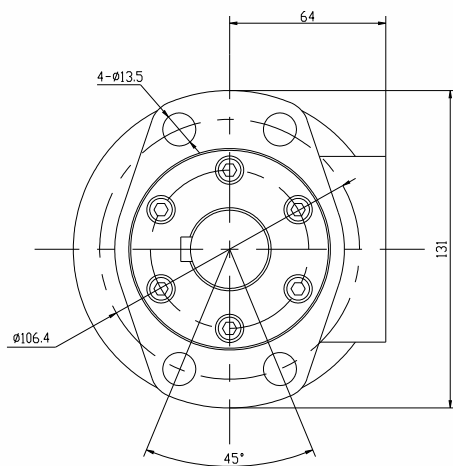
flange A



flange B



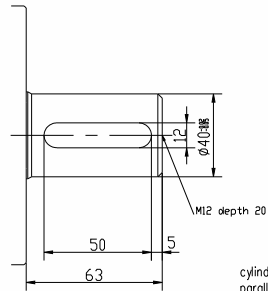
flange C



BM4 Dimension and Mounting Data---Shaft

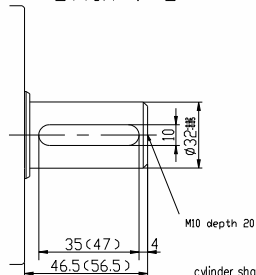
Factor: mm

shaft A



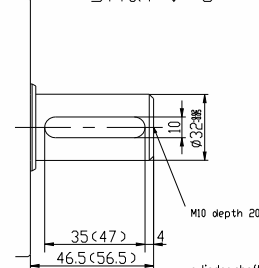
cylinder shaft: $\phi 40 \times 61$,
parallel key: 12X8X50,
link thread: M12

shaft B



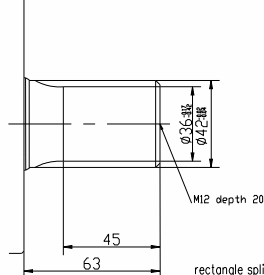
cylinder shaft: $\phi 32 \times 45$,
parallel key: 10X8X35,
link thread: M10

shaft C



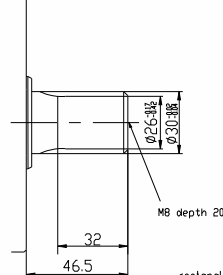
cylinder shaft: $\phi 32 \times 55$,
parallel key: 10X7X47,
link thread: M10

shaft D



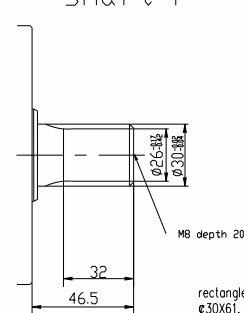
rectangle spline shaft:
 $\phi 42 \times 61, 8-42 \times 36 \times 7$,
link thread: M12

shaft E



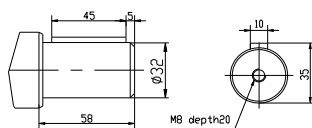
rectangle spline shaft: $\phi 30 \times 61$,
6-30X25X6,
link thread: M8

shaft F



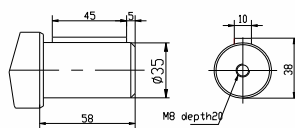
rectangle spline shaft:
 $\phi 30 \times 61, 6-30 \times 25 \times 8$,
link thread: M8

shaft G



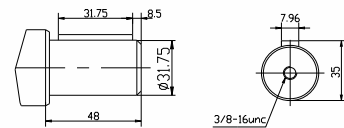
cylinder shaft: $\phi 32 \times 57$,
parallel key: 10X8X45,
link thread: M8

shaft H



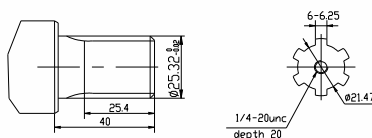
cylinder shaft: $\phi 35 \times 56$,
parallel key: 10X8X45,
link thread: M8

shaft I



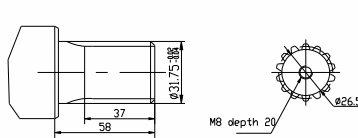
cylinder shaft: $\phi 31.75 \times 47$,
parallel key: 7.96X7.96X32,
link thread: 3/8-16UNC

shaft J



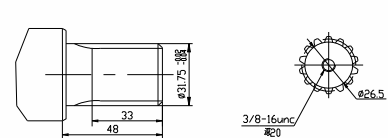
rectangle spline shaft:
 $\phi 25.3 \times 40$,
6-25.3X21.5X6.25,
link thread: 1/4-20UNC

shaft K



involute spline shaft:
 $\phi 31.75 \times 58$,
14 teeth, DP12/24,
link thread: M8

shaft L



involute spline shaft:
 $\phi 31.75 \times 48$,
14 teeth, DP12/24,
link thread: 3/8-16UNC

BM4 Code number and Order information

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

BM4		1		2		3		4		5		6		7		8	
pos 1		2		3		4		5		6		7		8			
Figuration		Displacement (ml/r)		Flange&Pilot (mm)		Shaft&key (mm)		Oil port		Link thread on port surface		Drain port		Special			
H	Line port	A	195	A	square flange 145X145, 4- Φ 13 distributing 115X115,pilot Φ 125X7	A	cylinder shaft: Φ 40X61, parallel key:12X8X50, link thread :M12	A	2-M22X1.5	A	NONE	A	NONE	A	NONE		
S	S-port	B	245	B	square flange 120X120, 4- Φ 13 distributing circle Φ 127, pilot Φ 100X7	B	cylinder shaft: Φ 32X45, parallel key:10X8X35, link thread :M10	B	2-7/8- 14UNF SAE	B	4-M8	B	M14X1.5				
		C	310	C	rhombus flange ,4- Φ 13.5 distributing circle Φ 106.4 ,pilot Φ 82.5X6	C	cylinder shaft: Φ 32X55, parallel key:10X7X47, link thread :M10	C	2-G1/2	C	4- 5/16- UNC	C	G1/4				
		D	395			D	rectangle spline shaft: Φ 42X61, 8-42X36X7 , link thread :M12	D	2-1/2- 14NPTF			D	7/16- 20UNF				
		E	490			E	rectangle spline shaft: Φ 30X61, 6-30X25X6 , link thread :M8	E	2-PT1/2			E	PT1/4				
		F	625			F	rectangle spline shaft: Φ 30X61, 6-30X25X8 , link thread :M8										
			800			G	cylinder shaft: Φ 32X57, parallel key:10X8X45, link thread :M8										
						H	cylinder shaft: Φ 35X56, parallel key:10X8X45, link thread :M8										
						I	cylinder shaft: Φ 31.75X47, parallel key:7.96X7.96X32, link thread:3/8-16UNC										
						J	rectangle spline shaft: Φ 25.3X40, 6-25.3X21.5X6.25 , link thread :1/4-20UNC										
						K	involute spline shaft: Φ 31.75X58, 14 teeth,DP12/24 , link thread :M8										
						L	involute spline shaft: Φ 31.75X48, 14 teeth,DP12/24 , link thread:3/8-16UNC										

Order example: BM4AABCBA

48

BM4W wheel motor

BM4W series motor is the wheel motor, with double radial bearing, which can bear bigger radial force than BM2W.

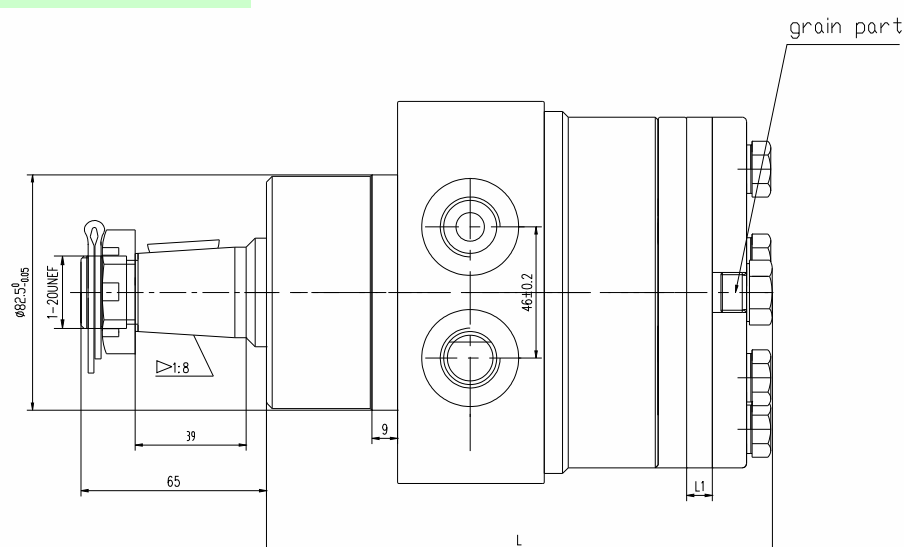
Characteristic features:

- It adopts the gerolator design. Has higher efficiency.
- Credible design for shaft seal, which can bear high pressure, and high torque in the wide of applications.
- can be controlled easily and smoothly.and run very smooth at low speed,gear box is not required.
- Best efficiency and economy in heavy load applications.

Main Specification

The main specification and performance data are same as BM4, please refer to the BM4.

BM4W Figuration



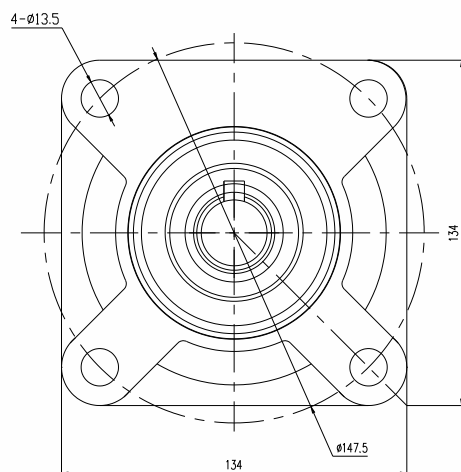
Disp	80	195	245	310	395	490	625	800
L1 (mm)	9	21.7	27.3	34.5	45	54.4	69	90
L (mm)	178.5	191.2	197	204	214.5	224	238.5	259.5

BM4W Dimension and Mounting Data

Factor: mm

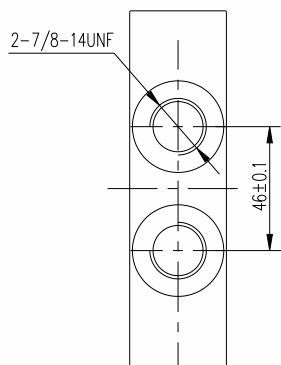
BM4W flange

Flange A



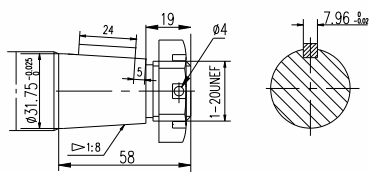
BM4W oil port

A

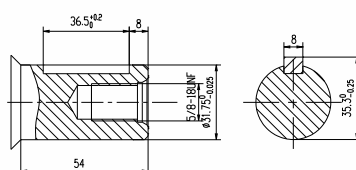


BM4W shaft

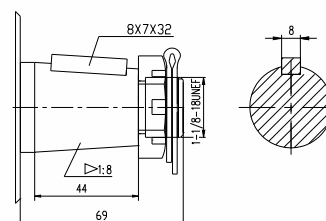
shaft A



shaft B



shaft C



BM4W Code number and Order information

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

BM4W	1	2	3	4	5	6	7	8
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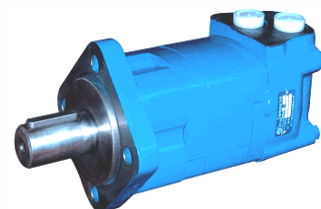
pos 1		2		3		4		5		6		7		8	
Figuration		Displacement (ml/r)		Flange& Pilot (mm)		Shaft&key (mm)		Oil port		Link thread on port surface		Drain port		Special	
H	standard	A	195	A	standard	A	cone shaft; $\varnothing 31.75 \times 58$, taper: 1: 8 , parallel key: 7.963X24X7, link thread :1-20UNEF	A	2-7/8-14UNF SAE	A	None	A	None	A	None
		B	245			B	cylindershaft; $\varnothing 31.75 \times 54$, parallel key: 8X7X36.5, link thread :5/8-18UNEF	B	2-M14X1.5			B	7/16-20UNF		
		C	310			C	cone shaft; $\varnothing 38.1 \times 69$, taper: 1: 8, parallel key: 8X7X32 link thread :1-1/8-18UNEF								
		D	395												
		E	490												
		F	625												
		G	800												

BM5 motor

BM5 is a large volume, disc valve, high pressure motor, with radial bearings design, and can bear greater load.

Characteristic features:

- **Advanced design in disc distribution flow, which can provide better performance at low speed.**
- **The valve can automatically compensate for the wear, so the volumetric efficiency is high .**
- **Double taper roller bearings permit high radial loads. The motors can be used on heavier vehicles in traction drive applications.**



Main Specification

Displacement (ml/r)		80	100	125	160	200	250	280	305	400	500
Flow (LPM)	Cont.	75	75	75	75	75	75	75	75	75	75
	Int..	85	95	95	115	115	115	115	115	130	130
Speed (RPM)	Cont.	850	675	552	430	345	276	246	226	180	144
	Int..	956	855	700	660	529	423	378	347	308	246
Pressure (MPa)	Cont.	17.5	17.5	17.5	17.5	17.5	17.5	17.5	15	15	12
	Int..	28	28	28	25	25	25	25	21	17.5	15
Torque (N*m)	Cont.	178	223	278	356	445	557	592	580	715	720
	Int..	285	356	445	509	636	755	779	763	840	860

Note: 1.Continuous data: The Max. Value of operating motor continuously.

2.Intermittent Data: The Max. Value of operating motor in 6 seconds per minute.

3.A simultaneous max. RPM and max. pressure is not recommended.

4.The Conversion Factors is on the page 4, consult it please

5.Optimum operating situation should be at the 1/3 ~ 2/3 of the continuous operating situation.

BM5 Performance Data

□ cont.
■ Int.

Bm5-80 80ml/r

		压力 ΔP (Mpa)							
		3.5	7	10	14	17	21	24	28
流量 Flow (LPM)	4	35	75	103	145	176	208	220	245
		46	42	38	35	30	23	14	2
	8	35	75	105	152	180	216	236	257
		97	90	86	83	78	69	60	49
	16	35	75	105	150	186	217	249	265
		195	187	182	178	170	162	148	132
	24	35	75	105	152	188	222	256	289
		284	280	270	263	258	245	232	210
	32	35	75	103	155	190	230	265	287
		388	380	371	360	359	345	328	300
流量 Flow (LPM)	45	30	70	101	149	186	228	262	282
		538	535	530	518	510	482	470	430
	60	30	70	97	147	183	229	258	278
		720	716	710	679	670	635	599	569
	75	25	65	95	146	179	221	242	269
		899	878	860	856	842	801	756	723
	85	22	60	90	140	172	218	225	238
		956	948	926	905	893	885	852	801

Bm5-100 100ml/r

		压力 ΔP (Mpa)							
		3.5	7	10	14	17	21	24	28
流量 Flow (LPM)	4	45	89	130	175	208	246		
		33	32	30	24	16	6		
	8	46	90	135	180	215	251	278	
		75	72	68	55	53	38	30	
	16	46	93	140	185	220	269	295	318
		152	150	146	140	128	112	99	82
	24	46	93	140	188	231	270	305	356
		230	225	218	212	201	176	172	150
	32	42	93	142	186	233	278	310	372
		315	310	300	290	275	240	238	225
流量 Flow (LPM)	45	40	90	141	190	228	285	340	389
		440	435	426	410	400	368	355	340
	61	35	90	138	185	230	290	330	369
		590	582	570	560	538	510	490	475
	75	35	85	136	178	228	280	315	356
		725	716	702	678	660	641	622	603
	85	32	80	130	176	225	275	307	
		820	815	805	792	778	759	710	
	95	24	75	122	169	225	268	310	
		920	918	901	887	869	842	808	

Bm5-125 125ml/r

		压力 ΔP (Mpa)							
		3.5	7	10	14	17	21	24	28
流量 Flow (LPM)	4	55	115	172	221	280	325	360	
		29	25	21	17	14	10	4	
	8	57	115	172	221	285	326	362	412
		61	58	52	46	42	40	31	25
	16	56	116	174	235	295	345	379	446
		124	120	116	110	106	99	93	83
	24	58	118	180	238	302	352	402	486
		185	183	176	166	154	149	140	126
	32	55	120	180	240	312	361	408	508
		246	240	235	230	222	218	210	200
流量 Flow (LPM)	45	50	115	175	236	310	360	406	502
		356	340	335	330	321	311	298	286

Bm5-160 160ml/r

		压力 ΔP (Mpa)							
		3.5	7	10	14	17	21	24	
流量 Flow (LPM)	4	65	131	191	260	318	384	428	
		23	20	19	13	9	3	2	
	8	70	135	196	265	335	404	460	
		47	45	42	36	36	34	28	
	16	70	140	208	286	360	440	502	
		98	95	91	85	83	78	50	
	24	74	145	216	293	372	450	521	
		145	142	139	128	125	116	107	
	32	74	150	220	300	373	459	526	
		198	196	191	180	182	175	161	
流量 Flow (LPM)	45	70	150	221	305	380	458	530	
		282	279	276	265	254	240	236	

Bm5-200 200ml/r

		压力 ΔP (Mpa)							
		3.5	7	10	14	17	21	24	
流量 Flow (LPM)	4	79	160	198	305	370	440		
		16	14	12	7	5	2		
	8	86	165	245	325	420	522	570	
		37	35	34	27	24	20	13	
	16	90	175	256	345	438	523	596	
		78	76	75	68	66	60	53	
	24	91	180	268	360	448	542	610	
		116	114	113	105	103	98	90	
	32	91	185	270	371	460	550	620	
		160	156	154	150	146	136	130	
流量 Flow (LPM)	45	91	186	280	376	466	550		
		226	222	219	215	209	202		
	60	80	186	271	375	465	550		
		304	300	293	286	280	272		
	75	75	176	268	370	460			
		382	376	370	361	350			
	85	68	168	260	360	458			
		425	420	412	408	400			
	95	60	160	256	355	445			
		482	476	470	459	449			
流量 Flow (LPM)	115	44	145	235	330				
		578	570	564	549				

Bm5-250 250ml/r

		压力 ΔP (Mpa)							
		3.5	7	10	14	17	21	24	
流量 Flow (LPM)	4	105	210	312	410	524	630		
		13	11	10	6	4	3		
	8	109	215	320	425	545	650	740	
		29	27	25	21	19	15	12	
	16	115	225	336	450	565	676	765	
		63	57	57	52	51	49	46	
	24	115	230	342	465	580	690	780	
		94	90	87	81	77	72	66	
	32	115	235	356	475	600	706		
		129	125	121	115	112	105		
流量 Flow (LPM)	45	110	235	356	480	600			
		183	180	176	170	165			
	60	95	230	350	470	580			
		240	236	234	230	220			
	75	90	215	336	465				
		303	300	296	290				
	85	80	210	325	455				
		340	336	330	320				
	95	75	200	320	445				
		385	378	375	365				
流量 Flow (LPM)	115	60	185	305	428				
		463	458	456	448				

BM5 Performance Data--Continue

☐ cont.
☒ Int.

Bm5-280 280ml/r

压力	△P	(Mpa)				
3.5	7	10	14	17	21	

流量 Flow (LPM)	4	8	16	24	32	45	60	75	85	95	115
	124 13	239 11	354 10	459 7	560 1						
	124 27	248 25	358 23	477 21	588 16	705 12					
	129 57	257 55	376 52	500 48	620 44	748 37					
	133 84	266 82	386 78	514 72	643 65	772 61					
	133 113	271 111	393 109	528 99	652 93						
	129 160	271 157	390 155	532 145	661 135						
	115 213	258 207	388 202	523 192							
	101 265	243 257	375 253	514 240							
	95 300	237 295	351 289	496 283							
	87 335	230 327	330 323	461 316							
	69 399	209 393	314 390								

Bm5-305 305ml/r

压力	△P	(Mpa)				
3.5	7	10	14	17	21	

流量 Flow (LPM)	4	8	16	24	32	45	60	75	85	95	115
	135 12	260 10	386 9	500 6	610 1						
	135 25	270 23	390 21	520 19	640 15	768 11					
	140 52	280 50	410 48	545 44	675 40	815 34					
	145 77	290 75	420 72	560 66	700 60	832 56					
	145 104	295 102	428 100	575 91	710 85						
	140 147	295 144	425 142	580 133	720 124						
	125 195	281 190	423 185	570 176							
	110 243	265 236	408 232	560 220							
	104 275	258 271	382 265	540 260							
	95 307	250 300	359 296	502 290							
	75 366	228 361	342 358								

Torque 502Nm
Speed 290 rpm

Bm5-400 400ml/r

压力	△P	(Mpa)				
3.5	7	10	14	17		

流量 Flow (LPM)	4	8	16	24	32	45	60	75	85	95	115
	175 9	350 8	496 7	665 6	820 4						
	180 19	360 18	510 17	695 14	830 11						
	190 39	375 37	542 36	730 34	866 29						
	190 58	385 56	550 54	750 50	880 46						
	190 80	390 78	560 74	765 70							
	190 113	390 112	560 108	755 102							
	180 150	380 148	542 144								
	165 188	370 186	532 180								
	154 211	358 210	522 208								
	140 238	340 236	512 232								
	120 288	320 284	498 278								

Bm5-500 500ml/r

压力	△P	(Mpa)				
3.5	7	10	12	14	17	

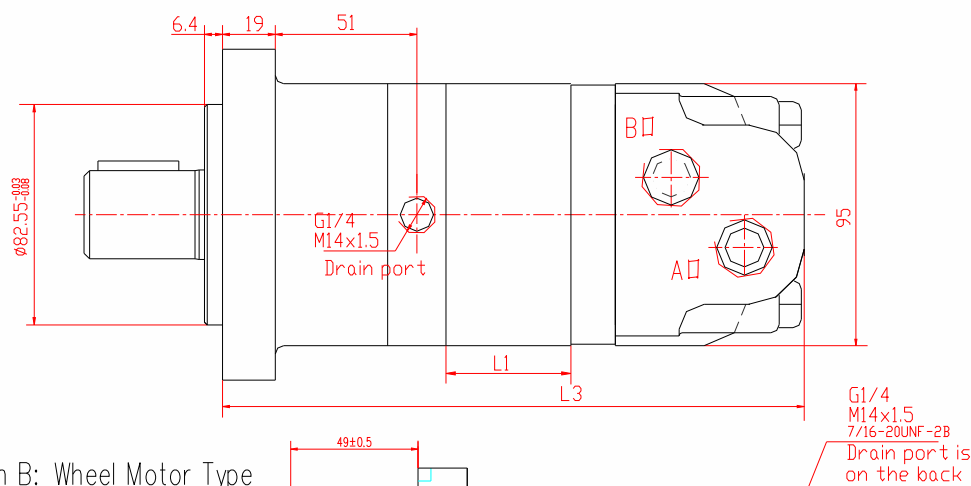
流量 Flow (LPM)	4	8	16	24	32	45	60	75	85	95	115
	225 6	440 5	430 5								
	235 14	460 12	715 10	790 11	900 10	1017 8					
	240 30	480 28	720 26	835 25	950 24	1020 18					
	240 45	485 43	725 40	845 39	930 36	1025 32					
	240 60	490 58	730 55	855 52	925 50						
	225 88	480 87	560 86	730 85							
	210 117	465 115	715 114								
	190 142	445 140	445 138								
	175 161	435 159	685 156								
	165 182	420 179	675 176								
	125 230	385 277	510 224								

All the datas were tested at 50℃ with anti-wear hydraulic oil,actual data may vary slightly from unit to uniu iproduction.

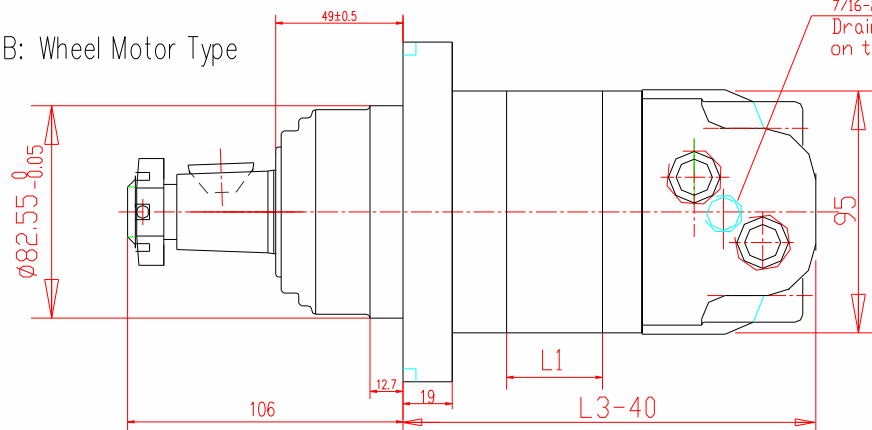
BM5 Dimension and Mounting Data- ---Figuration

Factor: mm

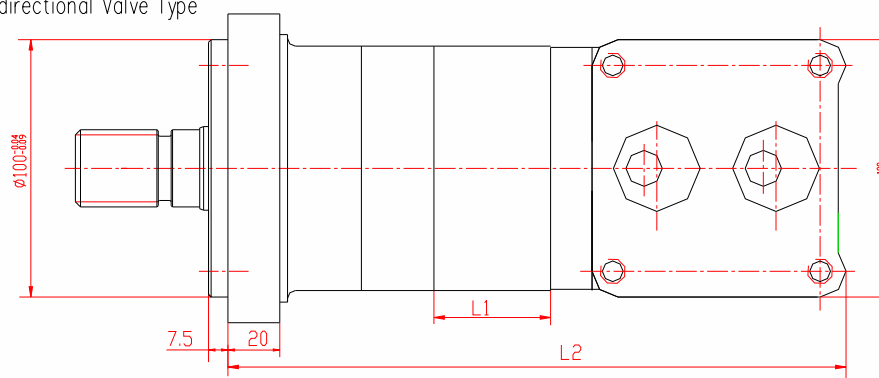
Figuration A : Standard Type



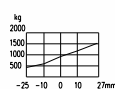
Figuration B: Wheel Motor Type



Figuration C: connect with
directional Valve Type



25.4 Shaft Load Capacity:
Radial Load: 1500kg Max.



Displacement	80	100	125	160	200	250	280	305	400
L1	15	18.5	23	29	36	45	51.2	56	72
L2	208	212	216.5	222.5	229.5	238.5	245	249.5	265.5
L3	180	183.5	188	194	201	210	216	221	237

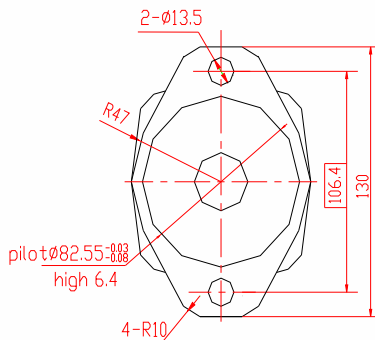
Standard Direction of The Motor Rotation:

CW- --- When A Port pressurized, Viewed From the Shaft End.

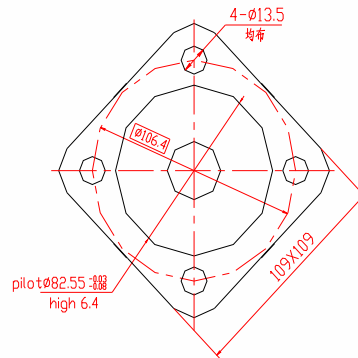
BM5 Dimension and Mounting Data---Mounting Flange

Factor: mm

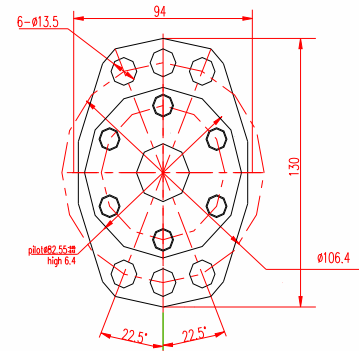
Flange A



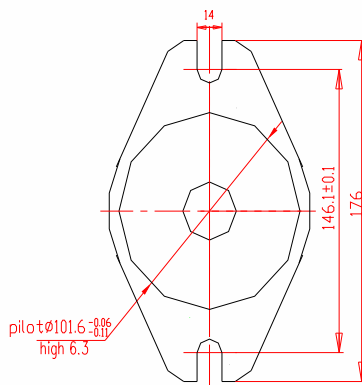
Flange B



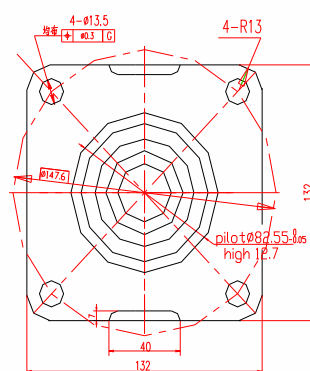
Flange C



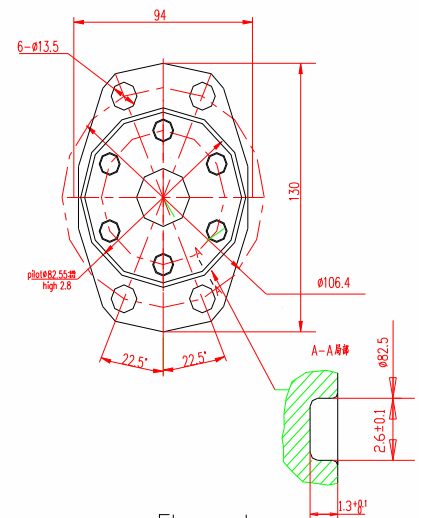
Flange D



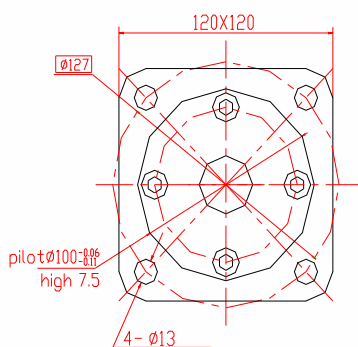
Flange E



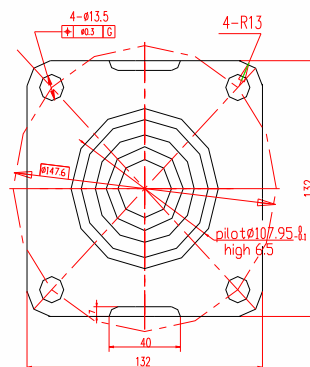
Flange F



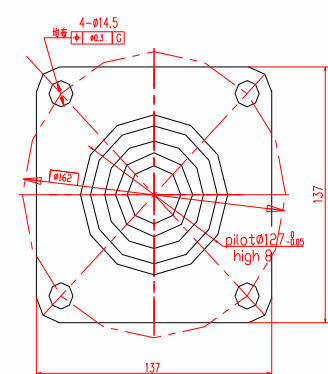
Flange G



Flange H

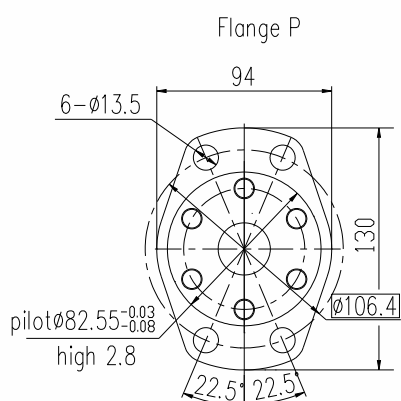
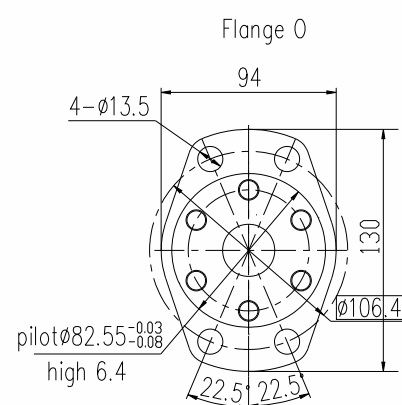
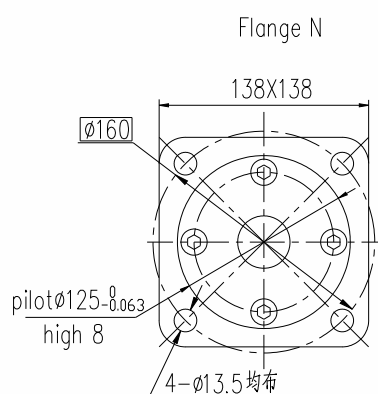
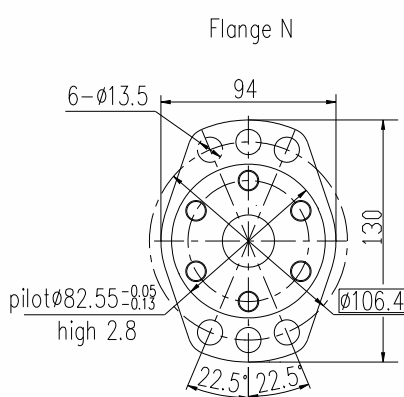
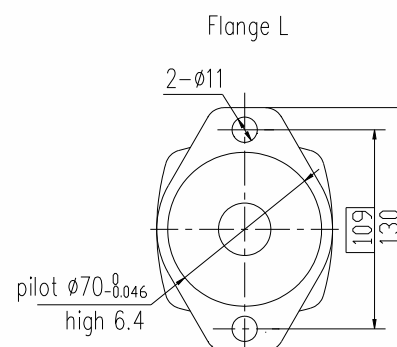
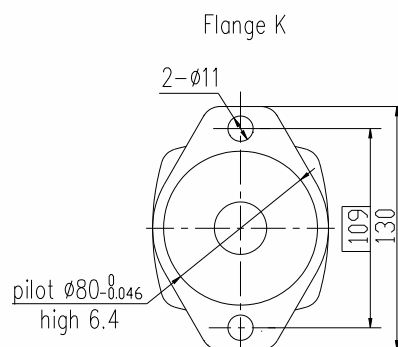
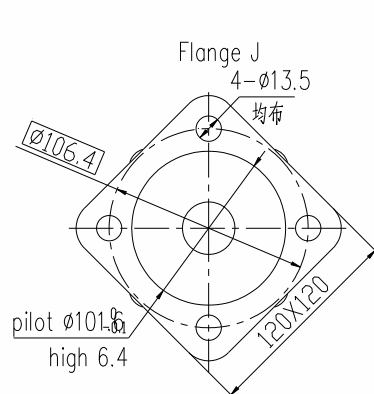


Flange I



BM5 Mounting Flange ---Continue

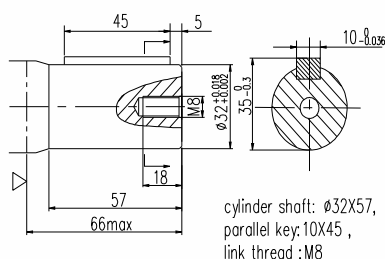
Factor: mm



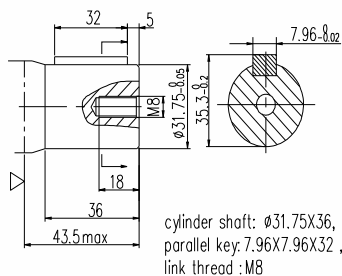
BM5 Dimension and Mounting Data---Shaft

Factor: mm

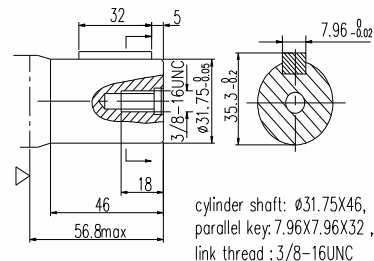
shaft A



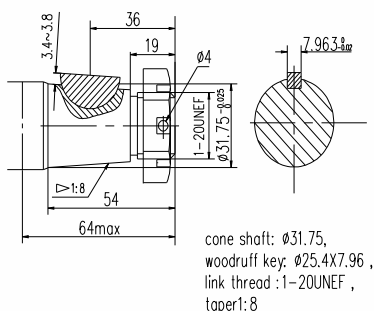
shaft B



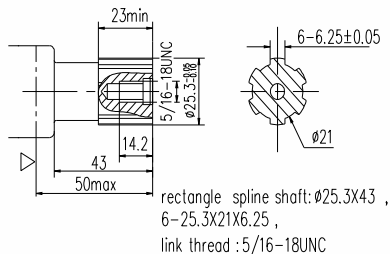
shaft C



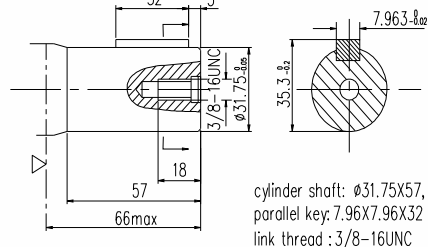
shaft D



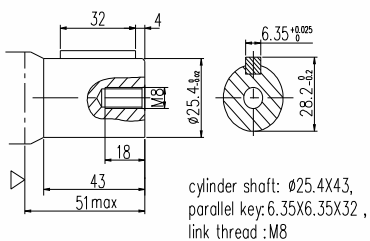
shaft E



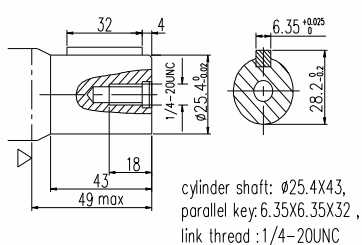
shaft F



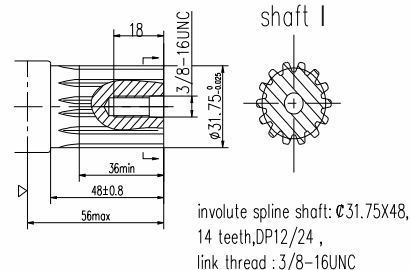
shaft G



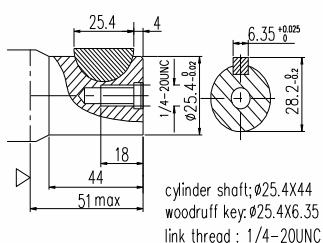
shaft H



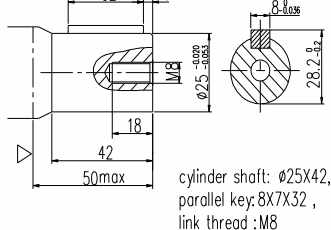
shaft I



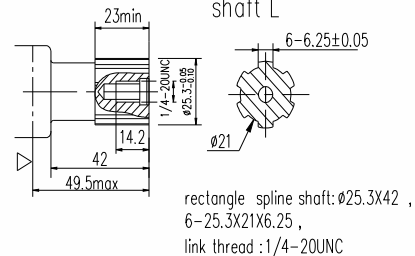
shaft J



shaft K



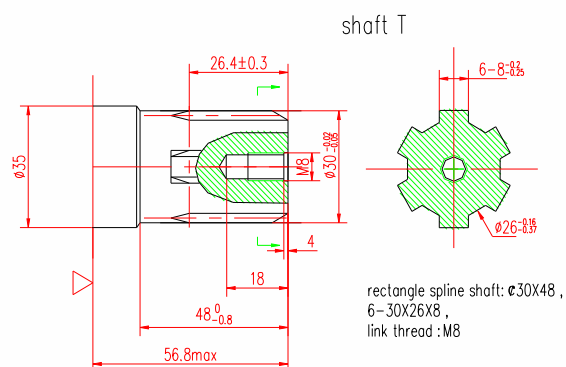
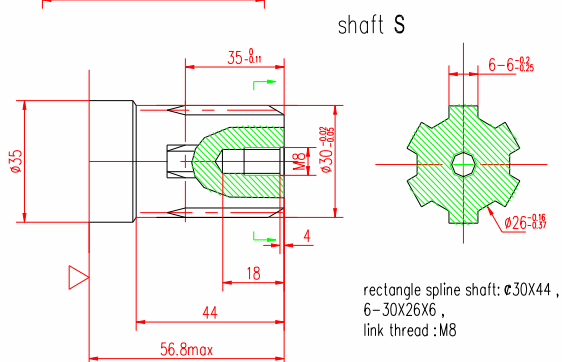
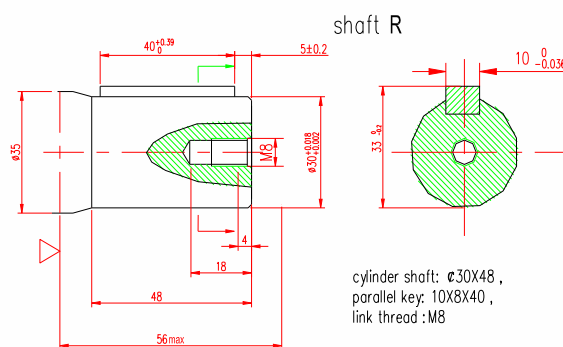
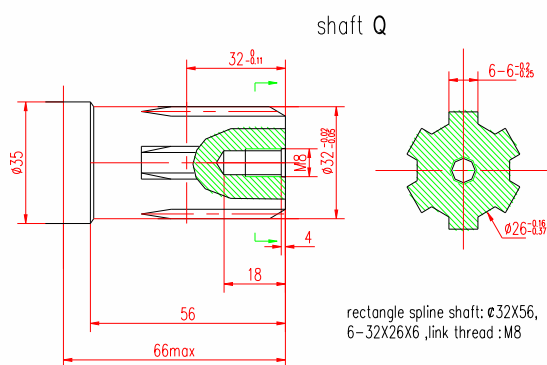
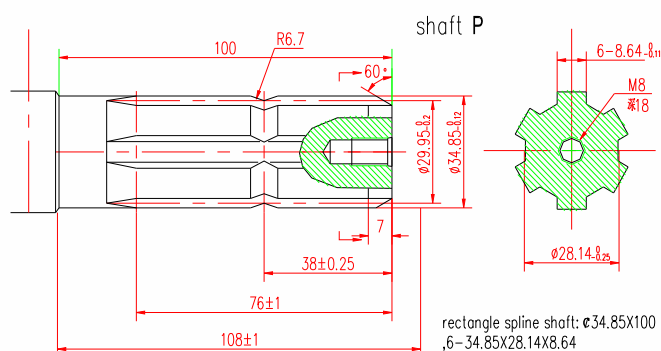
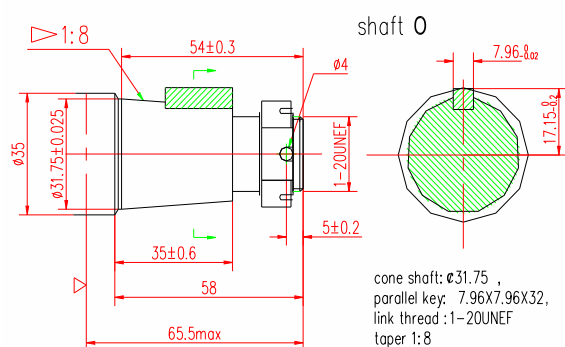
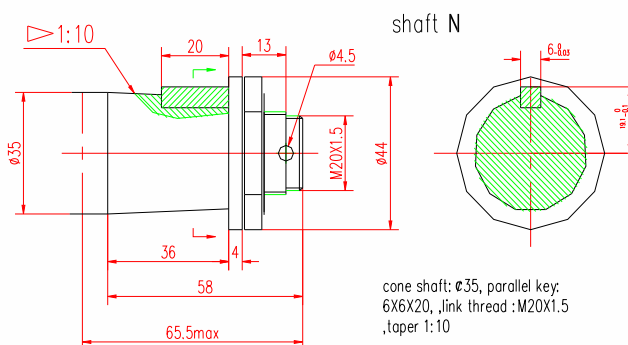
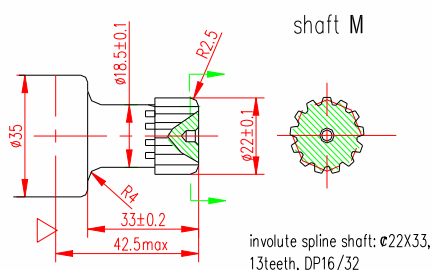
shaft L



Next page is continuing

BM5 Dimension and Mounting Data---Shaft Continue

Factor: mm



Factor: mm



BM5 Code number and Order information

BM5	1	2	3	4	5	6	7	8
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pos 1		2		3		4		5		6		7		8	
Figuration		Displacement(ml/r)		Flange&Pilot (mm)		Shaft&key (mm)		back housing		Oil port		Link thread on port surface		Drain port	
A	standard	A	80	A	rhombus flange, 2- $\varnothing$ 13.5 bolt center space 106.4, pilot $\varnothing$ 82.5X6.4	A	cylinder shaft: $\varnothing$ 32X57, parallel key:10X8X45 ,link thread :M8	A	refer to drawing page	A	2-M22X1.5	A	None	A	None
B	wheel motor type	B	100	B	square flange 109X109, 4- $\varnothing$ 13.5 distributing circle $\varnothing$ 106.4 , pilot $\varnothing$ 82.5X6.4	B	cylinder shaft: $\varnothing$ 31.75X46, parallel key: 7.963X7.963X32 , link thread :M8	B	refer to drawing page	B	2-G1/2	B	2-M10	B	M14X1.5
C	connect direction Valve Type	C	125	C	6 bolt rhombus flange,6- $\varnothing$ 13.5 distributing circle $\varnothing$ 106.4 , pilot $\varnothing$ 82.5X6.4	C	cylinder shaft: $\varnothing$ 31.75X46, parallel key:7.963X7.963X32, link thread : 3/8- 16UNC	C	refer to drawing page	C	2-1/2- 14NPTF	C	2-3/8- 16UNC	C	G1/4
D		D	160	D	rhombus flange, 2-14 distributing circle $\varnothing$ 146.1, pilot $\varnothing$ 101.57X6.3	D	cone shaft: $\varnothing$ 31.75, woodruff key: $\varnothing$ 25.4X7.963 , link thread :1-20UNEF, taper 1:8	D	refer to drawing page	D	2-7/8- 14UNF SAE	D	3-M10	D	7/16- 20UNF
E		E	200	E	wheel motor square flange 132X132 , 4- $\varnothing$ 13.5 distributing circle $\varnothing$ 147.6, pilot $\varnothing$ 82.5X12.7	E	rectangle spline shaft: $\varnothing$ 25.3X43, 6-25.3X21X6.25 , link thread :5/16- 18UNC	E	refer to drawing page	E	2- $\varnothing$ 12.7	E	3-3/8- 16UNC	E	M10X1
F		F	305	F	4 bolt rhombus flange, 4- $\varnothing$ 13.5 distributing circle $\varnothing$ 106.4 ,pilot $\varnothing$ 82.55X2.8, with seal groove	F	cylinder shaft: $\varnothing$ 31.75X57, parallel key: 7.963X7.963X32 ,link thread :3/8-16UNC	F	refer to drawing page	F	2-1-1/16- 12UN			F	PT1/4
G		G	400	G	square flange 120X120, 4- $\varnothing$ 13 distributing circle $\varnothing$ 127 , pilot $\varnothing$ 100X7.5	G	Cylinder shaft: $\varnothing$ 25.4X43, parallel key:6.35X6.35X32 , link thread :M8			G	2- $\varnothing$ 12				
H		H	500	H	wheel motor square flange 132X132 , 4- $\varnothing$ 13.5 distributing circle $\varnothing$ 147.6, pilot $\varnothing$ 107.85X6.4	H	cylindershaft: $\varnothing$ 25.4X43 , parallel key:6.35X6.35X32, link thread :1/4-20UNC			H	2- $\varnothing$ 14				
I		I		I	wheel motor square flange 137X137 , 4- $\varnothing$ 14.5 distributing circle $\varnothing$ 161.9, pilot $\varnothing$ 127X8	I	involute spline shaft: $\varnothing$ 31.75X48, 14teeth, DP12/24 , link thread :3/8-16UNC								
J		J		J	square flange 120X120, 4- $\varnothing$ 13.5 distributing circle $\varnothing$ 127 , pilot $\varnothing$ 101.5X6.4	J	cylinder shaft: $\varnothing$ 25.4X39, woodruffkey: $\varnothing$ 25.4X6.35, link thread : 1/4-20UNC								

Next page is continuing

BM5 Code number and Order information---continue

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

BM5		1		2		3		4		5		6		7		8						
pos 1		2		3				4				5		6		7		8				
Figuration		Displace ment(ml/r)		Flange&Pilot (mm)				Shaft&key (mm)				back housing		Oil port		Link thread on port surface		Drain port				
A	standard	A	80	K	rhombus flange, 2- $\varnothing$ 11 bolt center space $\varnothing$ 109 , pilot $\varnothing$ 80X7				K	cylinder shaft: $\varnothing$ 25X42 ,parallel key: 8X7X32 ,link thread :M8				A	refer to drawing page	A	2-M22X1.5		A	None	A	None
B	wheel motor type	B	100	L	rhombus flange, 2- $\varnothing$ 11distributing circle $\varnothing$ 109 , pilot $\varnothing$ 70X7				L	rectangle spline shaft: $\varnothing$ 25.3X42, 6-25.3X21X6.25 ,link thread : 1/4-20UNC				B	refer to drawing page	B	2-G1/2		B	2-M10	B	M14X1.5
C	connect direction Valve Type	C	125	M	6 bolt rhombus flange, 6- $\varnothing$ 13.5 distributing circle $\varnothing$ 106.4 ,pilot $\varnothing$ 82.5X2.8				M	involute spline shaft: $\varnothing$ 22X33, 13teeth, DP16/32				C	refer to drawing page	C	2-1/2- 14NPTF		C	2-3/8- 16UNC	C	G1/4
D		D	160	N	wheel motor square flange 138X138, 4- $\varnothing$ 13.5distributing circle $\varnothing$ 160 ,pilot $\varnothing$ 125X8				N	cone shaft: $\varnothing$ 35, parallel key: 6X6X20, ,link thread :M20X1.5 ,taper 1:10				D	refer to drawing page	D	2-7/8- 14UNF SAE		D	3-M10	D	7/16- 20UNF
E		E	200	O	4 bolt rhombus flange, 4- $\varnothing$ 13.5 distributing circle $\varnothing$ 106.4 , pilot $\varnothing$ 82.55X6.4				O	cone shaft: $\varnothing$ 31.75 ,link thread : 1-20UNEF ,parallel key: 7.96X7.96X32 ,taper 1:8				E	refer to drawing page	E	2- $\varnothing$ 12.7		E	3-3/8- 16UNC	E	M10X1
F		F	305	P	4 bolt rhombus flange,4- $\varnothing$ 13.5 distributing circle $\varnothing$ 106.4 , pilot $\varnothing$ 82.55X2.8				P	rectangle spline shaft: $\varnothing$ 34.85X100 , 6- 34.85X28.14X8.64				F	refer to drawing page	F	2-1-1/16- 12UN				F	PT1/4
G		G	400						Q	rectangle spline shaft: $\varnothing$ 32X56, 6- 32X26X6 , link thread :M8						G	2- ϕ 12					
H		H	500						R	cylinder shaft: $\varnothing$ 30X48 ,parallel key: 10X8X40 ,link thread :M8						H	2- ϕ 14					
I		I							S	rectangle spline shaft: $\varnothing$ 30X44 , 6- 30X26X6 , link thread :M8												
J		J							T	rectangle spline shaft: $\varnothing$ 30X48 , 6-30X26X8 , link thread :M8												

Order example: BM5AABCDCCB

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BM5S bearingless motor

BM5S is the bearingless motor of BM5, large volume, disc valve, high pressure motor.

Characteristic features:

- Advanced design in disc distribution flow, which can provide better performance at low speed.
- The valve can automatically compensate for the wear, so the volumetric efficiency is high.



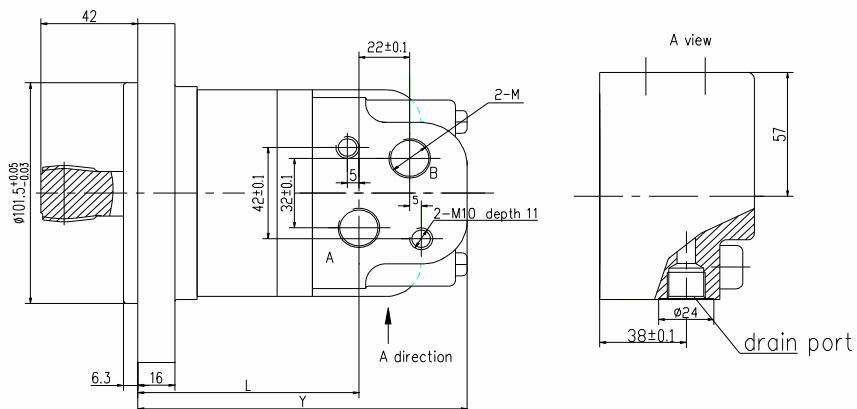
Main Specification

The main specification and performance data are same as BM5, please refer to the BM5.

BM5S Dimension and Mounting Data- ---Figuration

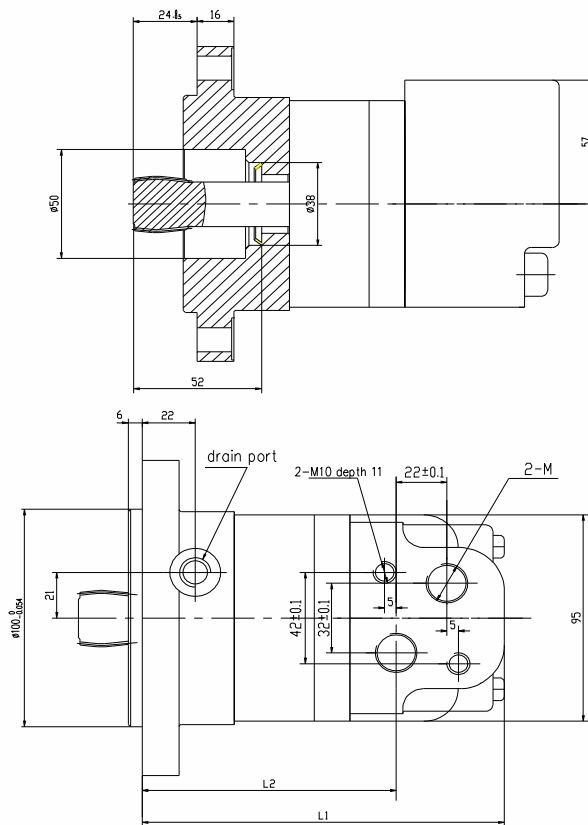
Factor: mm

Figuration A



Disp(ml/r)	80	100	160	200	250	305	400	280	500
Y	123.5	126.5	138	146	155	164	181	160.2	199
L	75.5	78.5	90	98	107	116	123	112.2	151

Figuration B

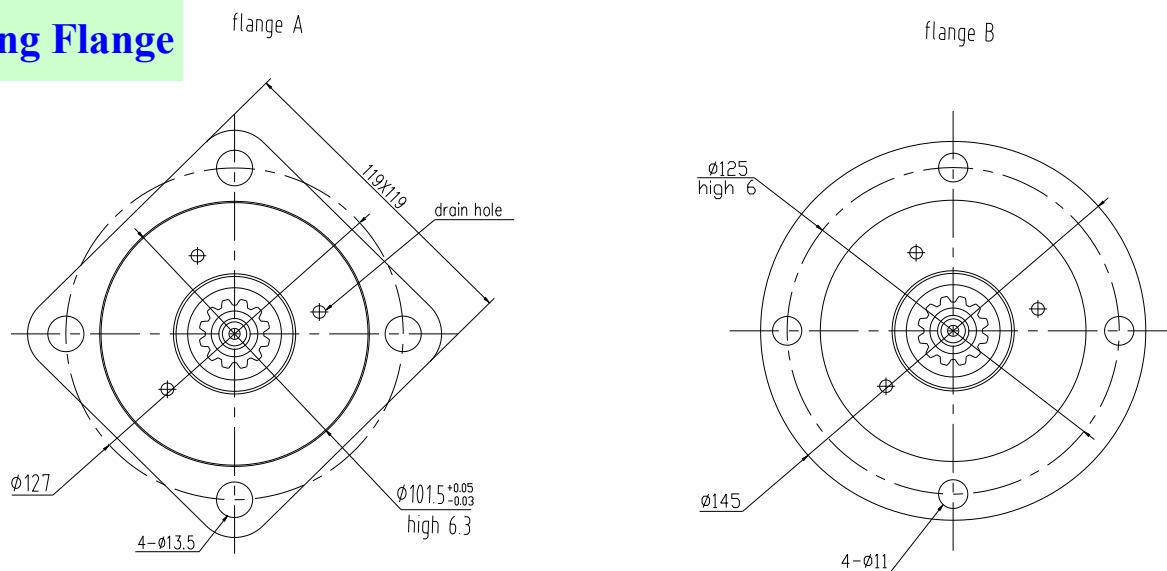


Disp(ml/r)	80	100	160	200	250	305	400	280	500
L1	138	141	152.5	160.5	169.5	178.5	195.5	174.5	213.5
L2	90	93	104.5	112.5	121.5	130.5	137.5	126.5	165.5

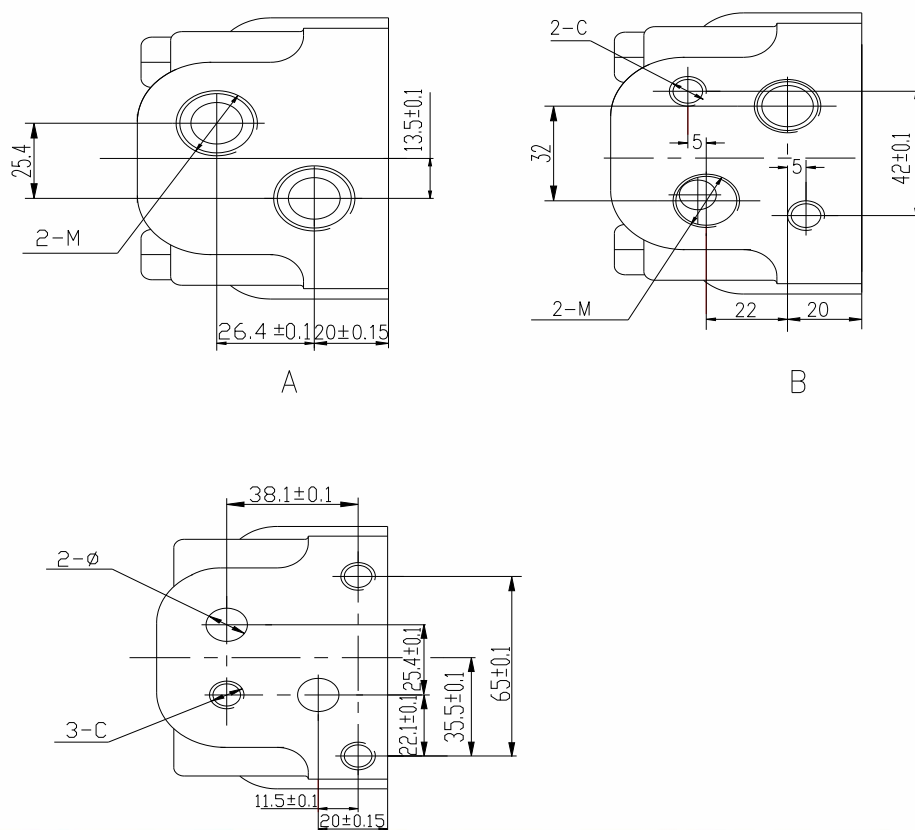
BM5S Dimension -- Mounting flange and back housing

Factor: mm

Mounting Flange



Back housing



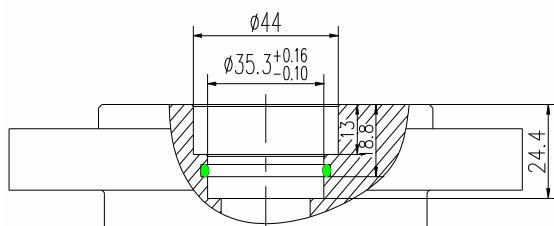
BM5S Dimension -- shaft

Factor: mm

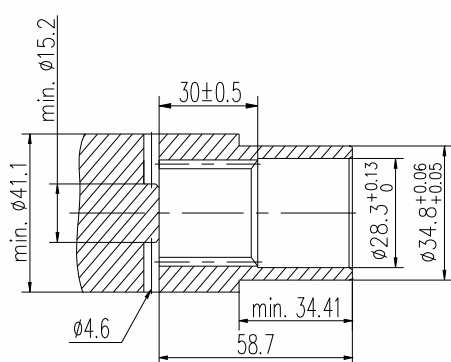
shaft A

external involute spline data

Pitch	12/24
Pressure angle	30°
Number of teeth	12
Pitch dia.	ø25.4
Major dia.	ø26.6 ^{+0.20} ₀
Minor dia.	ø22 ^{+0.20} ₀
Tooth thickness	4.3 ^{-0.124} _{-0.162}
Pin dia.	ø3.087
measurement between pins	30.1 ^{+0.118} _{+0.064}



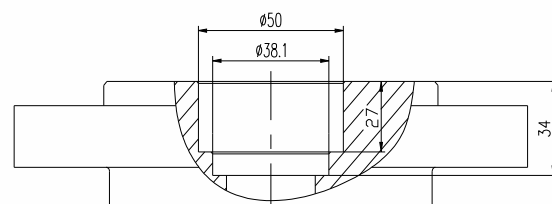
dimensions of the aAttaAched compPonent



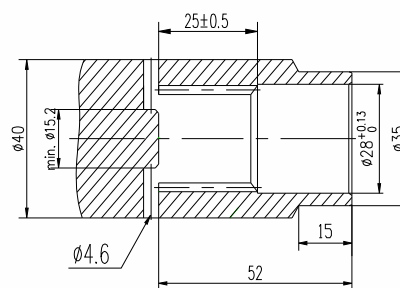
shaft B

external involute spline data

Pitch	12/24
Pressure angle	30°
Number of teeth	12
Pitch dia.	ø25.4
Major dia.	ø26.6 ^{+0.20} ₀
Minor dia.	ø22 ^{+0.20} ₀
Tooth thickness	4.3 ^{-0.124} _{-0.162}
Pin dia.	ø3.087
measurement between pins	30.1 ^{+0.118} _{+0.064}



dimensions of the aAttaAched compPonent



BM5S Code number and Order information

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

BM5S		1	2	3	4	5	6	7	8						
pos 1		2		3		4		5		6		7		8	
Figuration		Displacement (ml/r)		Flange & Pilot (mm)		Shaft (mm)		back housing		Oil port		Link thread on port surface		Drain port	
A	refer to the drawing page	A	80	A	square flange 119X119, 4- $\varnothing$ 13.5 distributing $\varnothing$ 127 , pilot $\varnothing$ 101.5X6.4	A	refer to the drawing page	A	refer to the drawing page	A	2-M22X1.5	A	None	A	None
B	refer to the drawing page	B	100	B	circinal flange, 4- $\varnothing$ 11 distributing $\varnothing$ 125, pilot $\varnothing$ 100 X6	B	refer to the drawing page	B	refer to the drawing page	B	2-G1/2	B	2-M10	B	M14X 1.5
		C	125					C	refer to the drawing page	C	2- $\varnothing$ 12	C	2-3/8-16UNC	C	G1/4
		D	160											D	7/16-20UNF
		E	200												
		F	305												
		G	400												
		H	500												

Order example: BM5SBCBBAABA

BM6 motor

BM6 is a large volume,disc valve ,high pressure motor, with radial ball-bearings design, and can bear greater load, and has higher torque than BM5.

Characteristic features:

- The motor can be used in high pressure, so it's max. torque is higher than BM5 motor.
- Advanced design in disc distribution flow, which can provide improved performance at low speed.
- The valve can automatically compensate for the wear, so the volumetric efficiency is high .
- Double taper roller bearings permit high radial loads. The motors can be used on heavier vehicles in traction drive applications.



Main Specification

Displacement (ml/r)		195	245	310	395	490	625	800	985
Flow (LPM)	Cont.	150	150	150	150	150	150	150	150
	Int..	170	210	225	225	225	225	225	225
Speed (RPM)	Cont.	775	615	485	383	307	241	184	153
	Int..	866	834	698	563	454	355	276	230
Pressure (MPa)	Cont.	20.5	20.5	20.5	20.5	17	14	12	12
	Int..	31	31	31	31	27.5	17	14	14
Torque (N*m)	Cont.	575	735	930	1169	1215	1330	1380	1570
	Int..	860	1180	1335	1655	1885	1380	1650	1875

3.A simultaneous max. RPM and max. pressure is not recommended.

4.The Conversion Factors is on the page 4, consult it please

5.Optimum operating situation should be at the 1/3 ~ 2/3 of the continuous operating situation.

BM6 Performance Data

□ cont.
■ Int.

Bm6-195 195ml/r

流量 Flow	压力 ΔP (Mpa)								
	3.5	7	10.5	14	17	21	24	27.5	31
15	80	175	271	366	454	521	589	654	
	76	74	71	65	62	45	32	18	
30	86	179	274	371	464	545	626	704	779
	153	148	144	130	119	116	99	82	65
45	85	180	279	374	476	565	654	751	825
	230	226	221	212	202	186	168	148	118
61	79	179	280	376	475	574	664	760	845
	307	303	300	290	283	258	236	214	181
76	80	179	281	380	480	574	671	769	860
	385	379	373	365	355	332	305	280	246
91	80	174	274	375	474	575	669	770	
	462	456	450	439	430	412	388	363	
106	74	176	271	375	474	570	669	770	
	539	532	525	513	502	475	448	420	
121	70	169	269	369	470	570	670	763	
	617	609	602	590	575	541	510	480	
136	70	163	264	364	465	565	664	763	
	692	684	674	660	645	600	564	527	
151	70	164	261	364	466	559	660		
	770	759	745	733	717	666	624		
170	65	161	259	360	461	555	655		
	866	854	844	825	808	749	702		

Bm6-245 245ml/r

流量 Flow	压力 ΔP (Mpa)								
	3.5	7	10.5	14	17	20.5	24	27.5	31
15	106	227	346	461	577	643	751	853	960
	60	56	54	48	42	39	30	12	6
30	110	237	354	475	596	701	800	905	1018
	120	116	113	104	95	81	67	48	35
45	110	235	360	482	607	721	840	955	1075
	182	179	175	165	157	141	123	107	90
61	112	236	360	487	611	730	844	960	1181
	244	240	236	228	221	202	184	163	144
76	105	232	354	485	614	735	853	980	1100
	306	301	297	287	277	256	238	217	197
91	104	231	356	482	612	735	861	979	
	365	361	357	348	338	314	290	270	
106	102	227	352	483	611	733	855	980	
	426	421	416	403	375	355	335	320	
121	91	216	346	470	600	725	850	975	
	489	481	474	461	447	422	395	370	
136	80	210	334	460	580	710	840		
	550	544	537	524	510	480	454		
151	80	202	330	456	580	700	800		
	612	606	600	585	570	538	507		
170	66	202	326	446	575	685	755		
	688	682	674	685	640	606	571		
189		195	316	441	555	670			
		758	749	731	710	675			
208		191	311	431	551	665			
		834	824	804	783	742			

Torque 570 Nm
Speed 540 rpm

Bm6-310 310ml/r

流量 Flow	压力 ΔP (Mpa)								
	3.5	7	10.5	14	17	21	24	27.5	31
15	136	292	431	573	684	801	934	1020	1070
	47	45	42	38	32	24	17	10	3
30	140	300	451	596	732	870	985	1100	1235
	95	92	87	81	73	63	54	44	32
45	140	306	461	612	760	909	1045	1180	1330
	143	140	135	129	120	110	99	88	75
61	140	302	462	615	771	920	1060	1200	1350
	192	188	184	178	167	154	140	124	109
76	135	296	457	617	772	925	1075	1220	
	241	236	232	226	216	200	182	165	
91	130	296	456	614	774	929	1078	1226	
	289	282	278	273	260	248	232	215	
106	130	290	450	609	768	928	1073	1220	
	336	333	327	320	308	295	276	257	
121	125	285	444	600	763	918	1060		
	384	381	375	367	354	341	320		
136	120	276	434	590	748	912	1050		
	430	421	416	410	396	383	360		
151	115	271	424	578	743	902	1035		
	478	466	461	456	441	427	403		
189	110	245	384	523	682	836			
	597	582	576	570	551	534			
227		220	364	513	647	796			
		698	691	684	661	641			

Bm6-395 395ml/r

流量 Flow	压力 ΔP (Mpa)								
	3.5	7	10.5	14	17	20.5	24	27.5	31
15	188	378	563	743	923	1083	1276	1371	1635
	37	36	34	32	28	21	13	5	1
30	188	383	578	763	953	1137	1316	1456	1635
	75	73	71	67	64	54	44	32	20
45	188	388	583	773	968	1152	1341	1540	
	114	111	108	104	99	90	80	78	
61	183	383	583	773	968	1156	1345		
	153	150	146	143	131	125	115		
76	183	383	583	778	973	1161	1356		
	192	188	186	181	174	161	151		
91	173	373	573	768	968	1156			
	228	228	224	219	211	203			
106	168	368	568	763	963	1151			
	267	265	260	254	247	235			
121	163	358	558	753	947	1146			
	305	303	298	291	281	268			
136	158	343	548	733	933	1131			
	345	339	335	328	316	300			
151	153	328	538	733	917				
	385	379	374	367	358				
189	133	303	518	733	913				
	481	474	468	459	448				
227		283	502	721	891				
		569	561	551	537				

BM6 Performance Data-Continue

□ cont.
■ Int.

Bm6-490 490ml/r

流量 Flow (LPM)	压力 ΔP (Mpa)							
	3.5	7	10.5	14	17	20.5	24	27.5
15	235	486	725	962	1195	1408	1643	1880
30	30	29	28	27	25	21	17	12
45	235	486	734	973	1213	1442	1680	
61	60	59	57	54	51	45	38	
76	235	485	733	974	1218	1450		
91	91	89	87	84	79	71		
106	234	480	728	973	1217	1456		
121	122	121	118	114	109	100		
136	225	470	723	972	1217			
151	152	150	147	144	139			
189	220	469	719	968	1210			
227	184	181	180	176	171			
	209	459	708	957	1205			
	214	211	208	204	198			
	194	448	700	947	1200			
	244	241	237	232	226			
	175	433	683	937	1170			
	275	272	265	260	255			
	160	423	673	917	1145			
	306	303	295	290	284			
	130	364	588	857				
	382	379	365	362				
		323	546	800				
		454	442	435				

Bm6-625 625ml/r

流量 Flow (LPM)	压力 ΔP (Mpa)							
	3.5	5	7	8.5	10.5	12	14	17
15	275	425	570	709	849	954	1063	1190
30	24	24	23	22	21	18	16	15
45	295	450	604	754	923	1093	1267	1355
61	45	44	44	43	42	39	37	36
76	295	448	609	764	918	1123	1327	1375
91	72	71	71	70	68	66	64	63
106	285	445	604	759	914	1118	1323	1370
121	94	93	92	91	89	87	85	83
136	280	439	594	754	914	1118	1324	1372
151	119	118	117	116	115	112	110	107
189	264	429	585	744	904	1108	1317	1365
227	143	142	140	139	138	135	132	130
	255	414	574	734	893	1103	1312	1360
	168	166	165	164	162	159	156	153
	240	400	559	719	878	1088	1297	1345
	192	190	188	187	185	182	179	176
	220	379	539	698	853	1047		
	216	214	213	212	210	207		
	200	360	519	679	833	1012		
	240	239	238	237	236	233		
		310	469	629	788			
		298	296	294	290			
		254	430	588	742			
		355	353	350	345			

Bm6-800 800ml/r

流量 Flow	压力 ΔP (Mpa)						
	3.5	5	7	8.5	10.5	12	14
15	434	607	838	1018	1238	1377	1646
30	18	17	17	16	15	14	13
45	419	395	828	1003	1238	1412	1606
61	36	35	35	34	33	31	29
76	379	564	794	970	1187	1358	
91	55	55	54	54	53	51	
106	339	519	758	937	1167		
121	75	74	72	71	70		
136	324	498	728	897	1135		
151	93	92	90	89	87		
189	314	468	698	857	1076		
227	111	110	109	108	105		
	309	448	648	797	1016		
	129	128	127	125	123		
	279	419	608	746			
	148	146	145	143			
	269	398	547	695			
	166	165	165	164			
	249	348	497	631			
	184	183	182	180			
		299	438	576			
		230	228	225			
			378	516			
			276	273			

Bm6-985 985ml/r

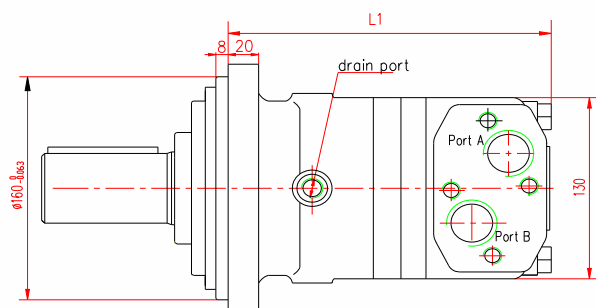
流量 Flow	压力 ΔP (Mpa)						
	3.5	5	7	8.5	10.5	12	14
15	484	774	964	1203	1443	1567	1786
30	15	15	14	14	13	13	12
45	494	749	994	1233	1477	1637	1871
61	30	30	29	28	27	26	25
76	494	749	1000	1248	1492	1696	
91	45	45	44	43	42	41	
106	489	739	995	1243	1497		
121	61	61	60	59	58		
136	475	730	983	1233	1481		
151	77	76	76	75	74		
189	460	704	959	1217	1466		
227	92	92	91	90	89		
	444	700	949	1197	1446		
	107	107	106	105	103		
	425	674	923	1156			
	123	122	121	120			
	394	645	893	1120			
	138	138	137	135			
	365	609	864	1080			
	153	152	151	150			
	325	585	829	1047			
	191	190	189	188			
		525	809	1020			
		230	229	226			

All the datas were tested at 50°C with anti-wear hydraulic oil, actual data may vary slightly from unit to uniu iproduction.

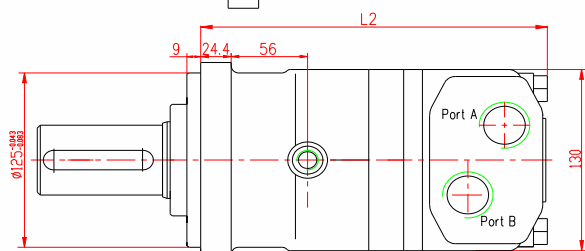
BM6 Dimension and Mounting Data- ---Figuration

Factor: mm

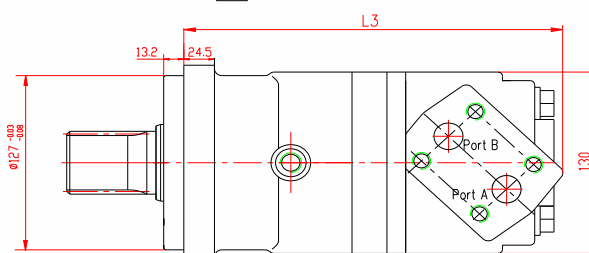
figuration A:
large flange type



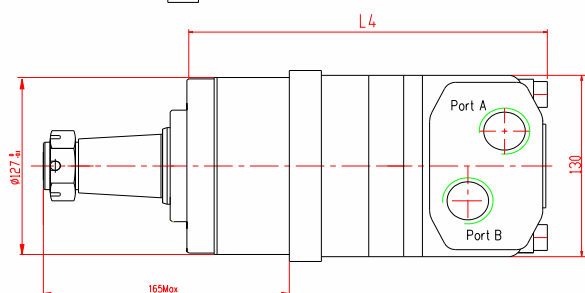
figuration B:
standard type



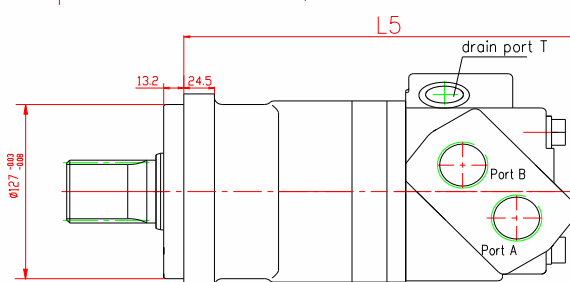
figuration C:
rhombus back
housing type



figuration D:
wheel motor



figuration E:
internal drain style



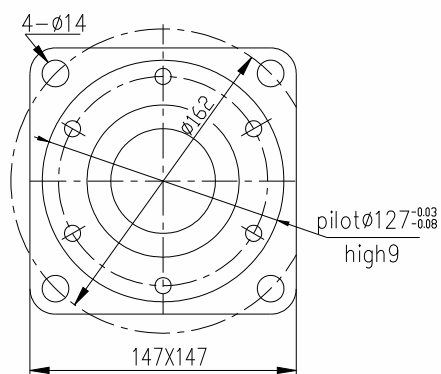
dimension

Disp	195	245	310	395	490	625	800	985
L1	230	235.5	243	253	263	277	298	317
L2	245	250.5	257.7	268	277.5	292	313	332
L3	258	263	270	280	290	305	326	345
L4	254.7	260.3	267.6	276.4	287.4	302.1	323	341.8
L5	266	271	278	288	298	313	333	352

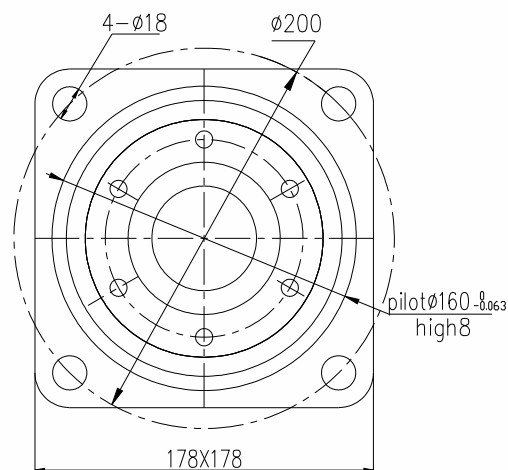
BM6 Dimension and Mounting Data---Mounting Flange

Factor: mm

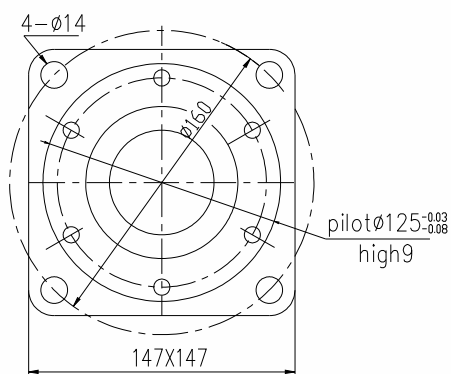
Flange A



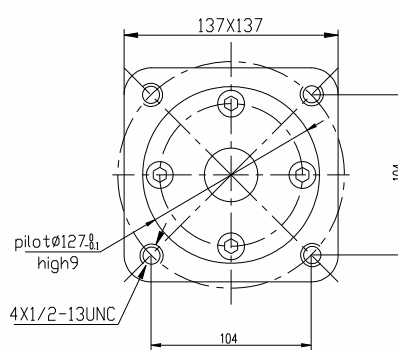
Flange B



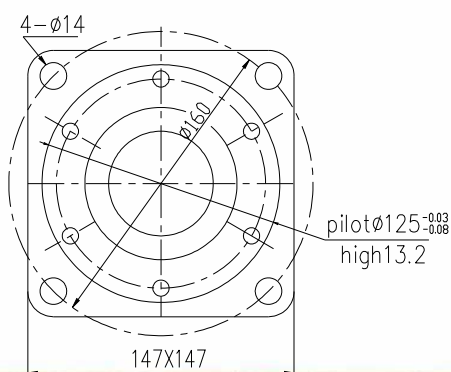
Flange C



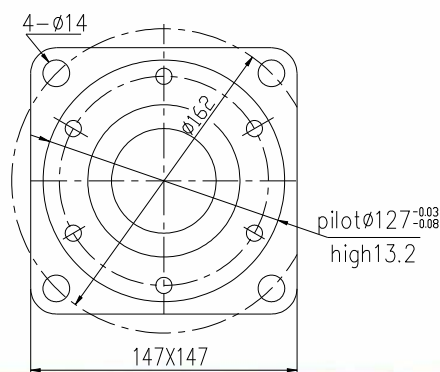
Flange D



Flange E



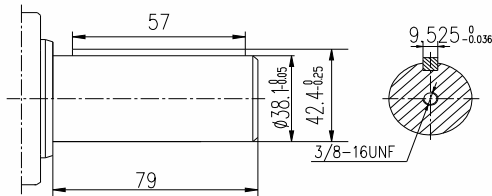
Flange F



BM6 Dimension and Mounting Data---Shaft

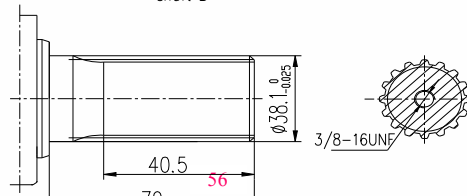
Factor: mm

shaft A



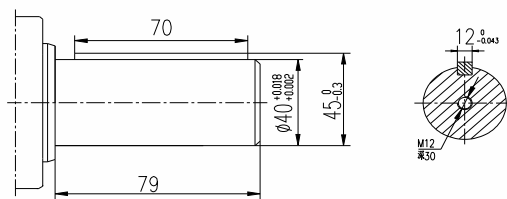
cylinder shaft: $\phi 38.1 \times 79$,
parallel key: $9.525 \times 9.525 \times 57$,
link thread: $3/8-16UNC$

shaft B



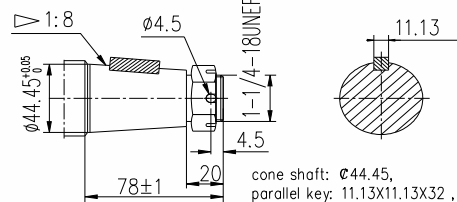
involute spline: $\phi 38.1 \times 79$,
17teeth, DP12/24,
link thread: $3/8-16UNC$

shaft C



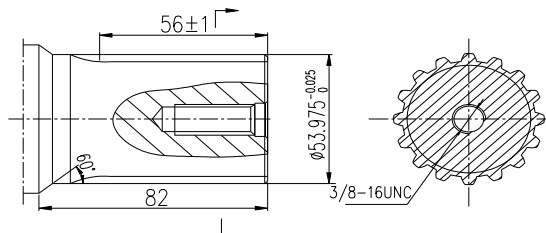
cylinder shaft: $\phi 40 \times 79$,
parallel key: $12 \times 8 \times 70$,
link thread: M12

shaft D



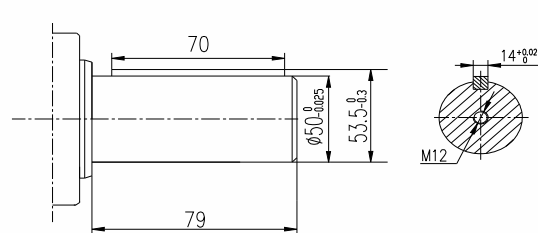
cone shaft: $\phi 44.45$,
parallel key: $11.13 \times 11.13 \times 32$,
link thread: $1-1/4-18UNEF$,
taper: 1:8

shaft E



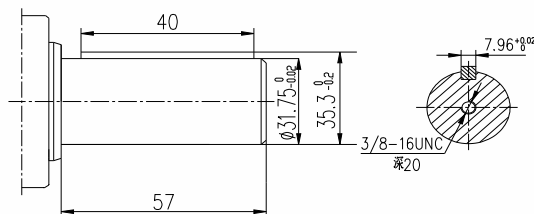
involute spline: $\phi 53.975 \times 56$,
16teeth, DP8/16,
link thread: $3/8-16UNC$

shaft F



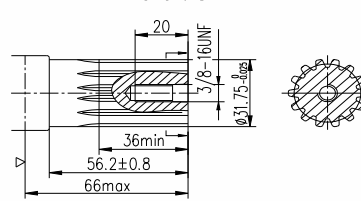
cylinder shaft: $\phi 50 \times 79$,
parallel key: $14 \times 9 \times 70$,
link thread: M12

shaft F



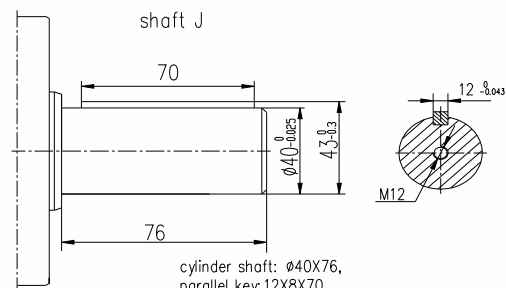
cylinder shaft: $\phi 31.75 \times 57$,
parallel key: $7.96 \times 7.96 \times 40$,
link thread: $3/8-16UNC$

shaft G



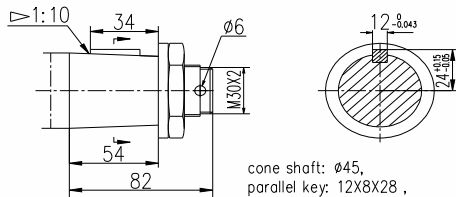
involute spline: $\phi 31.75 \times 57$,
14teeth, DP12/24,
link thread: $3/8-16UNC$

shaft J



cylinder shaft: $\phi 40 \times 76$,
parallel key: $12 \times 8 \times 70$,
link thread: M12

shaft I



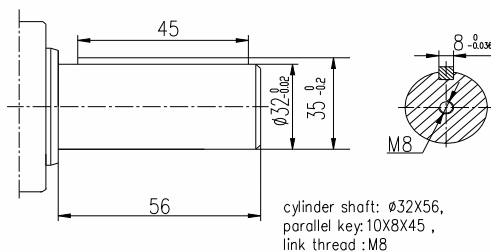
cone shaft: $\phi 45$,
parallel key: $12 \times 8 \times 28$,
link thread: M30X2,
taper: 1:10

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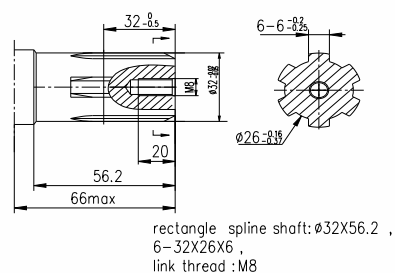
BM6 Dimension and Mounting Data----Shaft Continue

Factor: mm

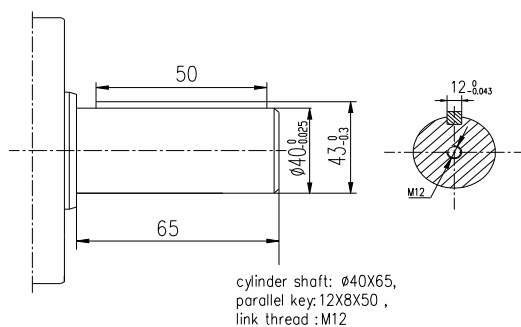
shaft K



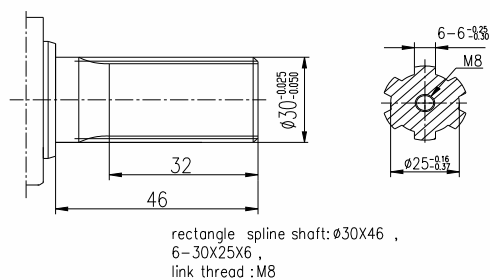
shaft L



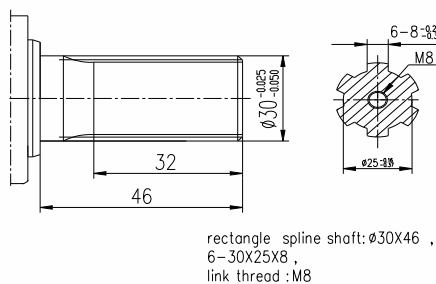
shaft M



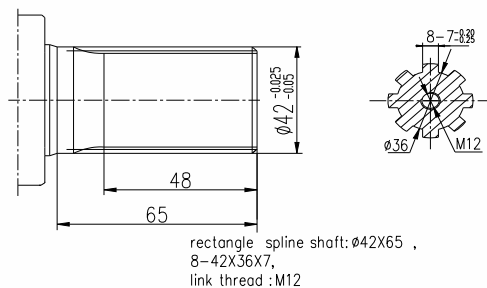
shaft N



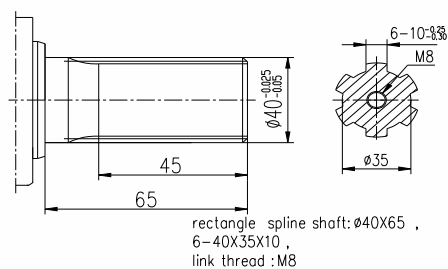
shaft O



shaft P

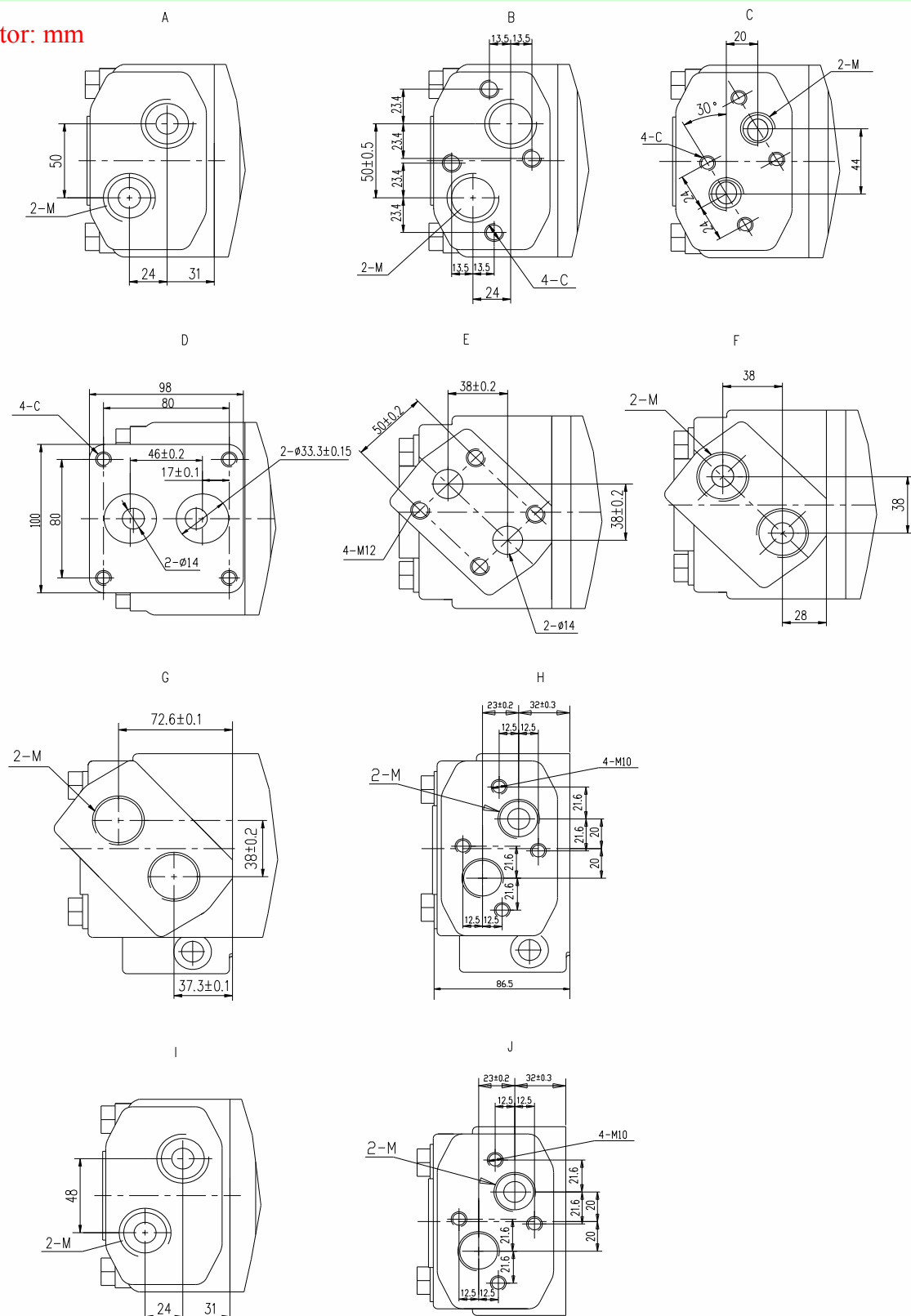


shaft Q



BM6 Dimension and Mounting Data----Back housing

Factor: mm



BM6 Code number and Order information

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

BM6		1		2		3		4		5		6		7		8	
pos 1		2		3		4		5		6		7		8			
Figuration		Displacement (ml/r)		Flange&Pilot (mm)		Shaft&key (mm)		back housing		Oil port		Link thread on port surface		Drain port			
A	large flange type	A	195	A	square flange 147X147, 4- $\varnothing$ 14 distributing circle $\varnothing$ 162, pilot $\varnothing$ 127X9	A	cylinder shaft: $\varnothing$ 38.1X79, parallel key:9.525X9.525X57, link thread :3/8-16UNC	A	refer to drawing page	A	2-G3/4	A	None	A	None		
B	standard	B	245	B	square flange178X178, 4- $\varnothing$ 18 distributing circle $\varnothing$ 200, pilot $\varnothing$ 160X8	B	involute spline : $\varnothing$ 38.1x79, 17teeth, DP12/24 , link thread :3/8-16UNC	B	refer to drawing page	B	2-M27X2	B	4-M12	B	M14X1.5		
C	rhombus back housing type	C	310	C	square flange147X147 , 4- $\varnothing$ 14 distributing circle $\varnothing$ 160 , pilot $\varnothing$ 125X9	C	cylinder shaft: $\varnothing$ 40X79, parallel key:12X8X70 , link thread :M12	C	refer to drawing page	C	2-M30X1.5	C	4-M10	C	G1/4		
D	wheel motor type	D	395	D	wheel motor square flange137X137, 4-1/2-13UNC distributing104X104, pilot $\varnothing$ 127X9	D	cone shaft: $\varnothing$ 44.45, parallel key: 11.13X11.13X32 , link thread :1-1/4-18UNEF , taper1:8	D	refer to drawing page	D	2-1-1/16-12UN	D		D	7/16-20UNF		
E	internal drain style	E	490	E	square flange 147X147, 4- $\varnothing$ 14 distributing circle $\varnothing$ 160 , pilot $\varnothing$ 125X13.2	E	involute spline shaft: $\varnothing$ 53.97X56, 16 teeth , DP8/16 , link thread :3/8-16UNC	E	refer to drawing page	E	2-M33X2	E		E	M10X1		
F		F	625	F	square flange 147X147, 4- $\varnothing$ 14 distributing circle $\varnothing$ 162 , pilot $\varnothing$ 127X13.2	F	cylinder shaft: $\varnothing$ 50X79 ,parallel key:14X9X70 , link thread :M12	F	refer to drawing page	F	2-1-5/16-12UN	F		F	PT1/4		
G		G	800			G	cylinder shaft: $\varnothing$ 31.75X57, parallel key:7.96X7.96X40 , link thread : 3/8-16UNC	G	refer to drawing page	G	2-G1	G					
H		H	985			H	involute spline shaft: $\varnothing$ 31.75X57, 14 teeth, DP12/24 , link thread :3/8-16UNC	H	refer to drawing page	H	2-3/4"						
I		I				I	cone shaft: $\varnothing$ 45 , parallel key:12X8X28 , link thread :M30X2, taper1:10	I	refer to drawing page	I	2- Φ 14						
J		J				J	cylinder shaft: $\varnothing$ 40X76, parallel key: 12X8X70 , link thread: M12	J	refer to drawing page	J	2-PT3/4						

Next page is continuing

BM6 Code number and Order information---continue

BM6		1		2		3		4		5		6		7		8					
pos 1		2		3				4				5		6		7		8			
Figuration		Displacement (ml/r)		Flange&Pilot (mm)				Shaft&key (mm)				back housing		Oil port		Link thread on port surface		Drain port			
A	large flange type	A	195	A	square flange 147X147, 4- $\varnothing$ 14 distributing circle $\varnothing$ 162, pilot $\varnothing$ 127X9				K	cylinder shaft $\varnothing$ 32X56 , parallel key: 10X8X45 , link thread :M8				A	refer to drawing page	A	2-G3/4	A	None	A	None
B	standard	B	245	B	square flange178X178, 4- $\varnothing$ 18 distributing circle $\varnothing$ 200, pilot $\varnothing$ 160X8				L	rectangle spline shaft: $\varnothing$ 32X56.2, 6-32X25X6 , link thread :M8				B	refer to drawing page	B	2-M27X2	B	4-M12	B	M14X 1.5
C	rhombus back housing type	C	310	C	square flange147X147 , 4- $\varnothing$ 14 distributing circle $\varnothing$ 160 , pilot $\varnothing$ 125X9				M	cylinder shaft: $\varnothing$ 40X65 , parallel key:12X8X50 , link thread :M12				C	refer to drawing page	C	2-M30X1.5	C	4-M10	C	G1/4
D	wheel motor type	D	395	D	square flange 125X125 4-M14, distributing circle $\varnothing$ 125, pilot $\varnothing$ 105.5X7				N	rectangle spline shaft: $\varnothing$ 30X46 , 6-30X25X6 , link thread :M8				D	refer to drawing page	D	2-1-1/16-12UN	D		D	7/16-20UNF
E	internal drain type	E	490	E	square flange 147X147, 4- $\varnothing$ 14 distributing circle $\varnothing$ 160 , pilot $\varnothing$ 125X13.2				O	rectangle spline shaft: $\varnothing$ 30X46 , 6-30X25X8 , link thread :M8				E	refer to drawing page	E	2-M33X2	E		E	M10X1
F		F	625	F	square flange 147X147, 4- $\varnothing$ 14 distributing circle $\varnothing$ 162 , pilot $\varnothing$ 127X13.2				P	rectangle spline shaft: $\varnothing$ 42X65 , 8-42X36X7 , link thread :M12				F	refer to drawing page	F	2-1-5/16-12UN	F		F	PT1/4
G		G	800	G	rhombus flange, 2- $\varnothing$ 14 bolt center space 140 , pilot $\varnothing$ 100X9				Q	rectangle spline shaft: $\varnothing$ 40X65, 6-40X35X10 , link thread :M8						G	2-G1	G			
H		H	985	H	square flange120X120, 4- $\varnothing$ 13 distributing circle90X90, pilot $\varnothing$ 100X6											H	2-3/4"				
I		I		I	wheel motor square flange137X137, 4-1/2-13UNC distributing104X104, pilot $\varnothing$ 127X9											I	2- $\varnothing$ 14				
J		J														J	2-PT3/4				

Order example: BM6AABCDCCB

BM6S bearingless motor

BM6S is the bearingless motor of BM6, large volume, disc valve, high pressure motor.

Characteristic features:

- Advanced design in disc distribution flow, which can provide better performance at low speed.
- The valve can automatically compensate for the wear, so the volumetric efficiency is high.
- Double taper roller bearings permit high radial loads. The motors can be used on heavier vehicles in traction drive applications.



Main Specification

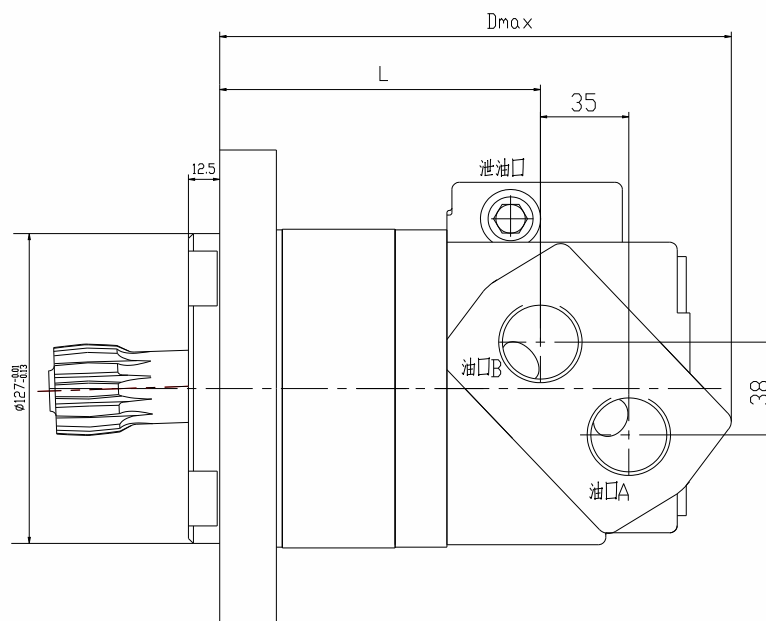
The main specification and performance data are same as BM6, please refer to the BM6.

BM6S Dimension and Mounting Data- ---Figuration and flange

Factor: mm

Figuration

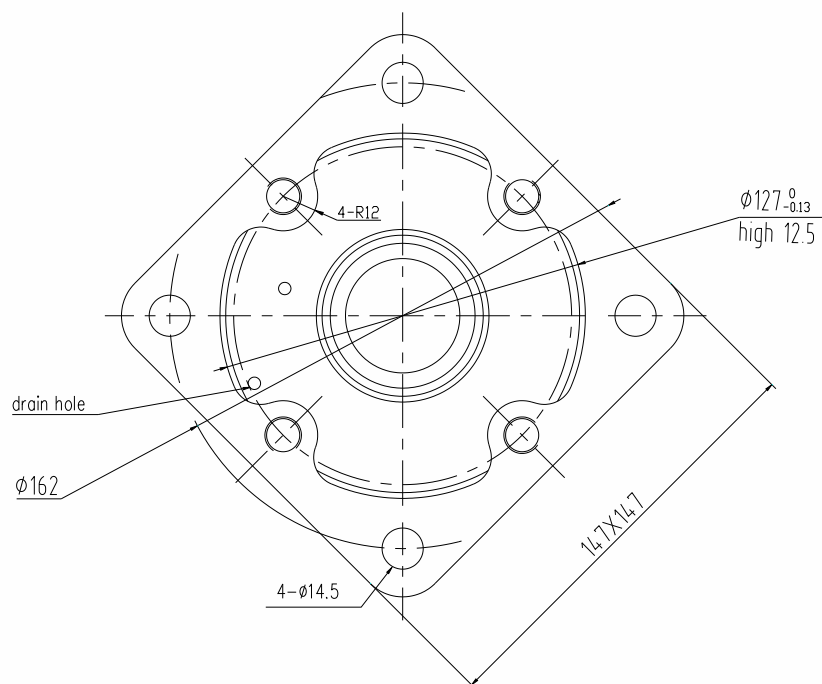
Figuration A



Disp(ml/r)	195	245	310	390	490	625	800	985
L	105	111	118	127	138	153	174	193
Dmax	188	194	200	210	221	235	256	275

Mounting Flange

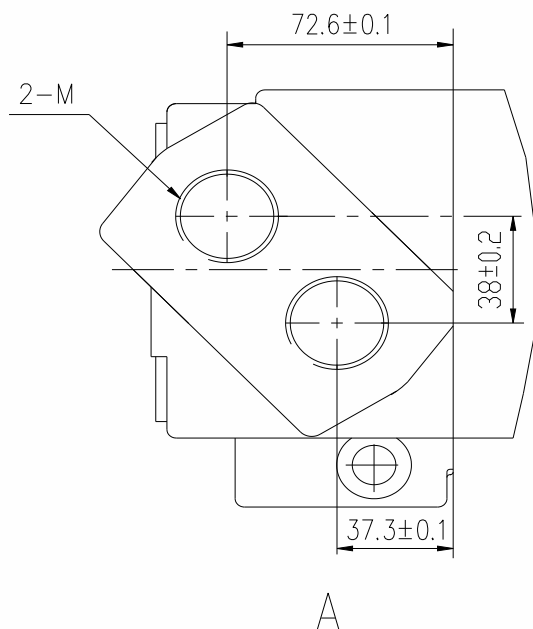
flange A



BM6S Dimension ---back housing and shaft

Factor: mm

Back housing

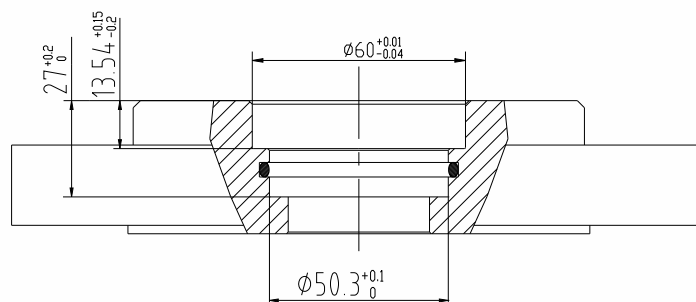


Shaft

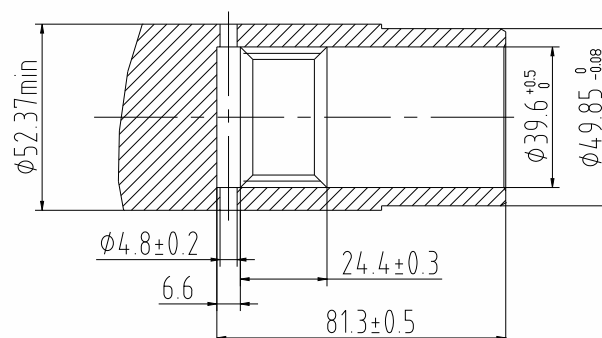
shaft A

external involute spline data

Pitch	8.5/17
Pressure angle	30°
Number of teeth	12
Pitch dia.	ø35.86
Major dia.	ø38.4 ^{+0.13} _{-0.08}
Minor dia.	ø31.5 ^{+0.30} _{+0.02}
Tooth thickness	5.7 ^{+0.02} _{-0.06}
Pin dia.	ø4.572
measurement between pins	42.9 ^{+0.01} _{-0.06}



dimensions of the attached component



BM6S Code number and Order information

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

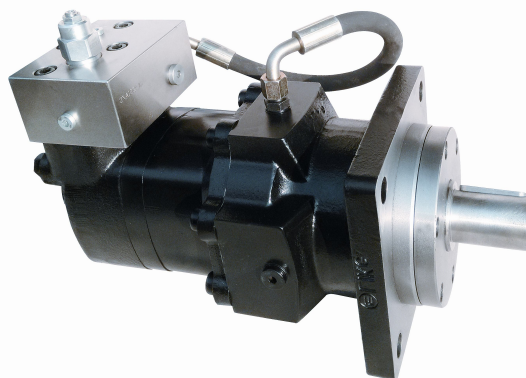
BM6S	1	2	3	4	5	6	7	8
------	---	---	---	---	---	---	---	---

pos 1		2		3		4		5		6		7		8	
Figuration		Displacement (ml/r)		Flange&Pilot (mm)		Shaft (mm)		back housing		Oil port		Link thread on port surface		Drain port	
A	standard	A	195	A	square flange 147X147, 4- $\varnothing$ 14.5 distributing $\varnothing$ 162, pilot $\varnothing$ 127X12.5	A	refer to the drawing page	A	refer to the drawing page	A	2-G1	A	None	A	None
B		B	245							B	2-M33X2	B	4-M12	B	M14X1.5
		C	310							C	2-1-5/16- 12UN	C	4-M10	C	G1/4
		D	395											D	9/16- 18UNF
		E	490												
		F	625												
		G	800												
		H	985												

Order example: BM6SABAAABBC

BM6B Brake motor

BM6B motor is BM6 brake motor with multi-disc brake that is released by a hydraulic pressure ,and has good brake performance ,the motor has same work performance as BM6 when the brake is released.



Main Specification

Displacement (ml/r)	195	245	310	395	490	625
Release pressure (bar)	25	25	25	25	25	25
BrakeTorque (NM)	<=800	<=800	<=800	<=800	<=800	<=800
Max pressure (bar)	205	205	205	205	170	140
Max Flow (LPM)	150	150	150	150	150	150

Note:

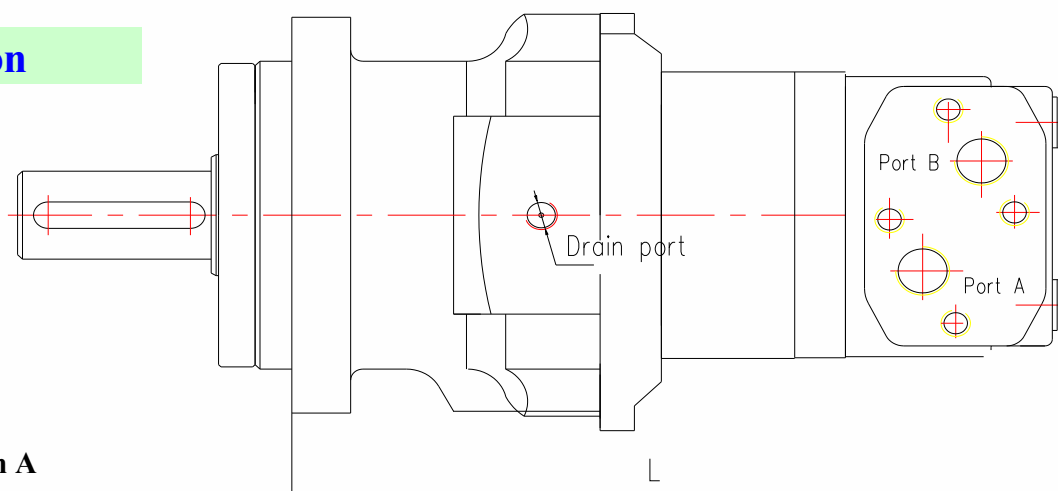
- 1、 Don' t work over the max pressure
- 2、 The drain port must be connected to the return circuit
- 3、 Don' t brake when the motor is dynamic status
- 4、 If the system has pilot pump,use pilot oil to open the brake, otherwise , the working pressure don' t exceed 150 bar.
- 5、 The oil temperature don' t exceed 80℃
- 6、 Oil recommended: Anti-wear hydraulic oils , viscosity at least 13cSt in working .

BM6B Dimension and Mounting Data

----Figuration and Mounting Flange

Factor: mm

Figuration



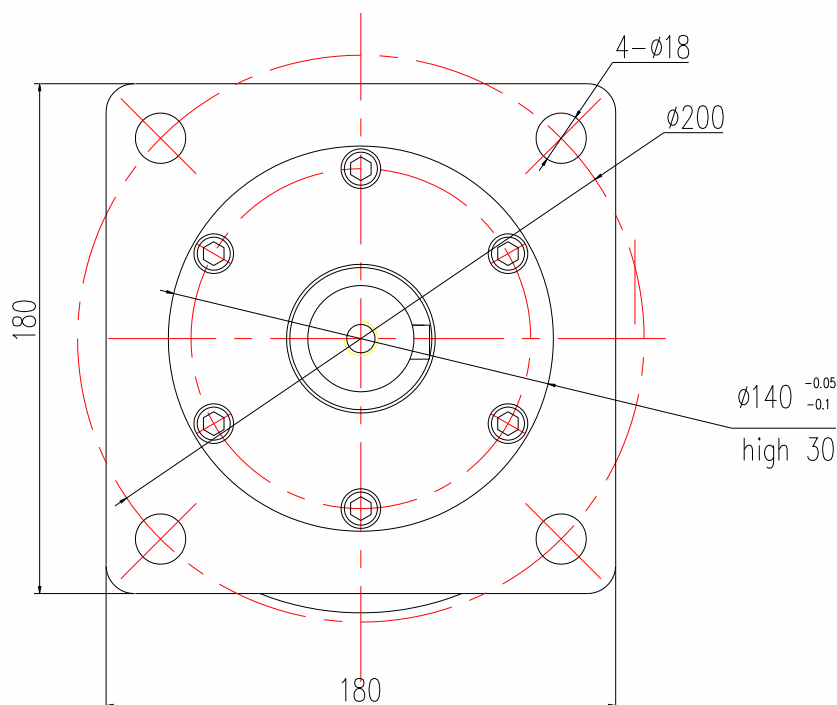
Figuration A

Dimension

Displacemnet	195	245	310	395	490	625
L	293	199	306	316	325	340

1、 view from shaft end, port A pressuring --CW

Flange

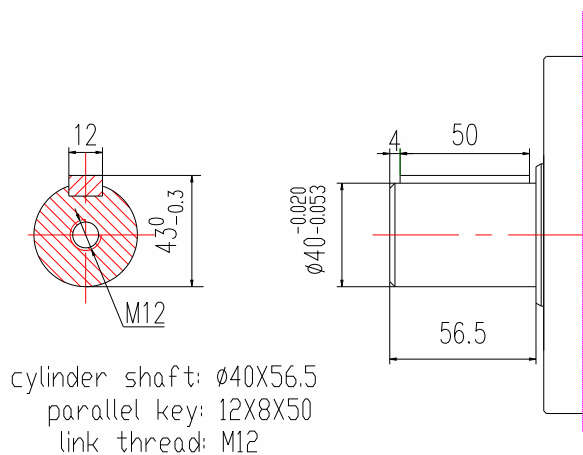


Flange A

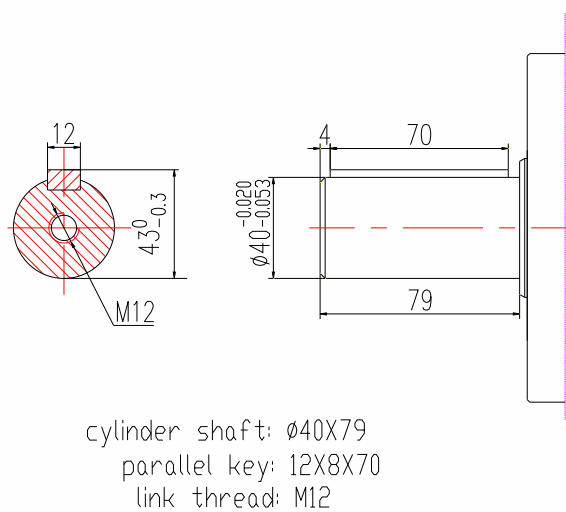
BM6B Dimension and Mounting Data----Shaft

Factor: mm

Shaft A



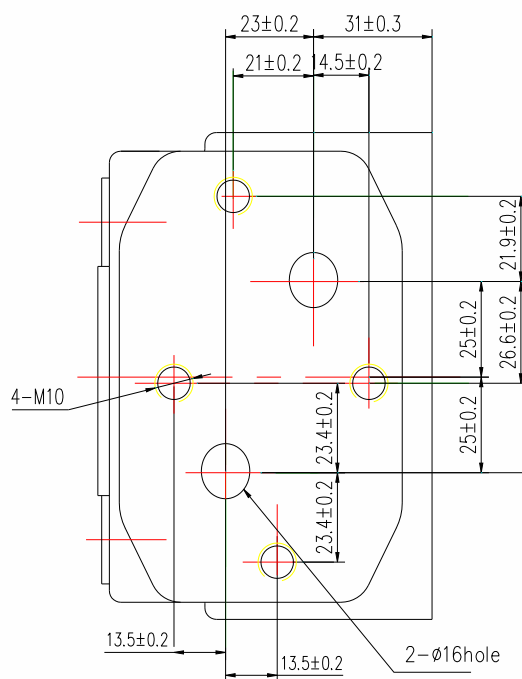
Shaft B



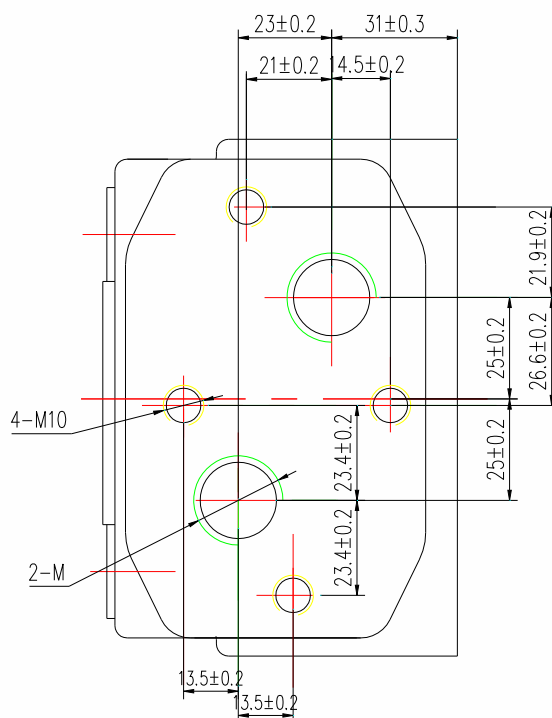
BM6B Dimension and Mounting Data----Back housing

Factor: mm

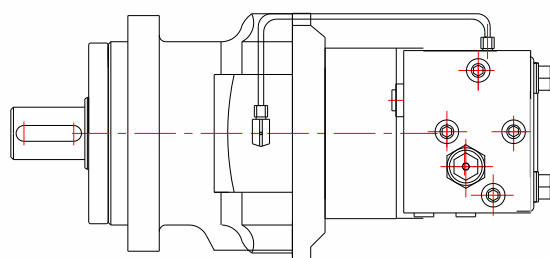
Housing A



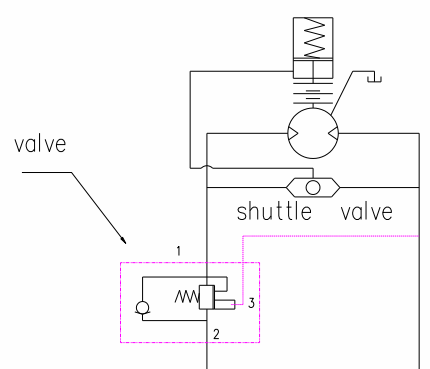
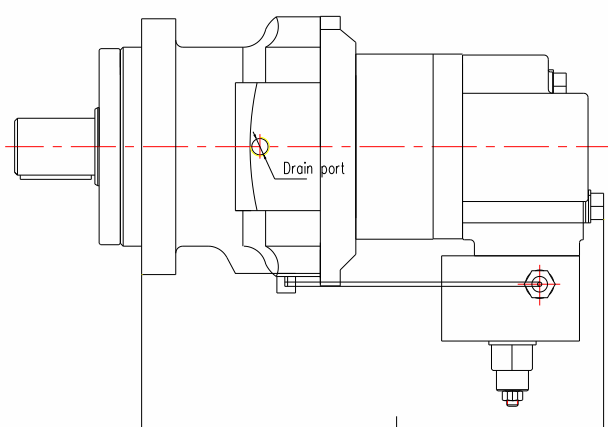
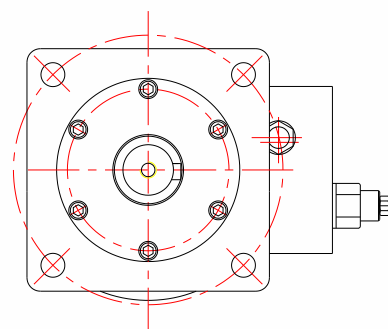
Housing B



BM6B Dimension and Mounting Data ----Figuration with Valve



valve



- 1.Release pressure 30~150 Bar
- 2.Max pressure of valve is 90 bar

BM6B Code number and Order information

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

BM6B	1	2	3	4	5	6	7	8
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pos 1		2		3		4		5		6		7		8	
Figuration		Displacement (ml/r)		Flange&Pilot (mm)		Shaft (mm)		back housing		Oil port		Drain port and port		Valve	
A	standard	A	195	A	square flange 180*180, 4-Φ18 distributing circleΦ200, pilotΦ140*30	A	refer to the drawing page	A	refer to the drawing page	A	2-Φ14	A	None	A	None
		B	245			B	refer to the drawing page	B	refer to the drawing page	B	2-M22X1.5	B	M14X1.5	B	With valve
		C	310							C	2-G1	C	G1/4	C	
		D	395											D	
		E	490												
		F	625												

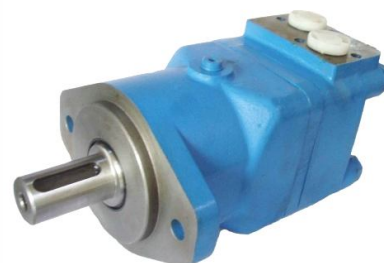
Order example: BM6BABAAABBB

BMT motor

BMT is a large volume disc valve ,high pressure motor, with radial ball-bearings design, and can bear greater load.

Characteristic features:

- The motor can be used in high pressure and high torque
- Advanced design in disc distribution flow, which can provide improved performance at low speed.
- The valve can automatically compensate for the wear, so the volumetric efficiency is high .
- Double taper roller bearings permit high radial loads. The motors can be used on heavier vehicles in traction drive applications.



Main Specification

Displacement (ml/r)		250	315	400	500	630	800
Flow (LPM)	cont.	125	125	125	125	125	125
	int.	150	150	150	150	150	150
Speed (RPM)	cont.	495	380	302	237	196	154
	int.	592	458	364	284	233	185
Pressure (MPa)	cont.	20	20	18	16	14	12.5
	int.	24	24	21	18	16	13
Torque (N.m)	cont.	727	962	1095	1245	1318	1464
	int.	888	1154	1269	1409	1498	1520

Note: 1.Continuous data: The Max. Value of operating motor continuously.

2.Intermittent Data: The Max. Value of operating motor in 6 seconds per minute.

3.A simultaneous max. RPM and max. pressure is not recommended.

4.The Conversion Factors is on the page 4, consult it please

5.Optimum operating situation should be at the 1/3 ~ 2/3 of the continuous operating situation.

BMT Performance Data

□ cont.
■ Int.

BMT-250 (ml/r)

		连续最大 Max. cont.				断续最大 Max. int.			
		4	8	10	12	16	20	24	
流量 Flow (LPM)	10	138	286	355	419	559	689	824	
		38	38	37	36	34	32	31	
	20	143	296	364	432	580	708	853	
		76	75	74	72	70	67	62	
	40	139	301	372	440	593	723	884	
		156	154	152	149	146	142	134	
	60	132	294	372	441	592	727	888	
		237	236	233	229	224	219	207	
	80	128	283	364	433	587	721	887	
		317	316	314	308	303	299	284	
连续最大 Max. int.	100	126	282	355	427	582	716	879	
		396	394	391	387	381	373	359	
断续最大 Max. int.	125	116	260	340	414	568	703	864	
		495	492	488	483	476	469	454	
连续最大 Max. int.	150	88	242	320	397	552	686	847	
		592	589	585	580	572	565	545	

BMT-315 (ml/r)

		连续最大 Max. cont.				断续最大 Max. int.			
		4	8	10	12	16	20	24	
流量 Flow (LPM)	10	184	363	453	545	734	891	1062	
		30	29	28	27	26	25	23	
	20	189	380	472	562	757	917	1109	
		60	59	58	56	54	52	50	
	40	191	381	484	570	774	954	1149	
		121	120	118	115	112	109	104	
	60	189	376	493	573	772	962	1154	
		183	181	179	175	172	168	158	
	80	179	369	479	565	768	954	1153	
		244	242	239	236	231	227	217	
连续最大 Max. int.	100	169	357	467	562	758	942	1143	
		305	304	301	298	294	289	276	
断续最大 Max. int.	125	147	336	447	544	745	920	1127	
		380	378	375	371	367	362	349	
连续最大 Max. int.	150	119	318	432	526	713	894	1097	
		458	456	453	449	444	431	425	

BMT-400 (ml/r)

		连续最大 Max. cont.				断续最大 Max. int.			
		3	6	9	12	15	18	21	
流量 Flow (LPM)	10	176	367	560	715	885	1050	1209	
		24	23	22	21	20	19	18	
	20	179	370	565	726	899	1071	1235	
		49	48	47	44	42	40	38	
	40	176	370	567	733	918	1091	1263	
		96	95	93	90	87	83	79	
	60	174	361	563	729	920	1096	1269	
		145	143	139	135	131	127	121	
	80	166	353	553	719	912	1084	1263	
		193	191	188	184	180	176	170	
连续最大 Max. int.	100	150	339	538	708	896	1067	1252	
		242	240	238	234	228	224	218	
断续最大 Max. int.	125	135	309	524	688	872	1045	1221	
		302	300	298	294	289	285	278	
连续最大 Max. int.	150	126	292	508	666	851	1020	1197	
		364	362	358	354	350	346	339	

BMT-500 (ml/r)

		连续最大 Max. cont.				断续最大 Max. int.			
		3	6	9	12	14	16	18	
流量 Flow (LPM)	10	222	451	693	892	1050	1193	1340	
		18	18	18	17	16	15	13	
	20	231	464	714	918	1070	1220	1377	
		37	36	35	34	33	32	30	
	40	230	466	727	941	1094	1244	1422	
		75	74	73	72	70	68	64	
	60	225	457	714	941	1088	1245	1409	
		113	112	111	109	107	105	64	
	80	213	431	696	927	1076	1244	1401	
		151	150	149	147	145	143	138	
连续最大 Max. int.	100	194	420	680	901	1063	1224	1383	
		189	188	187	185	183	181	177	
断续最大 Max. int.	125	182	398	641	877	1024	1199	1352	
		237	236	235	233	231	229	225	
连续最大 Max. int.	150	147	369	618	853	1004	1167	1325	
		284	283	282	280	278	276	272	

Torque 526 Nm
Speed 449 rpm

BMT-630 (ml/r)

		连续最大 Max. cont.				断续最大 Max. int.			
		3	6	9	10.5	12	14	16	
流量 Flow (LPM)	10	233	520	795	902	1074	1194	1363	
		14	14	13	13	13	11	11	
	20	237	554	837	953	1117	1239	1407	
		28	27	27	26	26	24	22	
	40	239	553	860	987	1171	1308	1483	
		62	62	61	60	59	56	54	
	60	223	544	862	978	1172	1318	1498	
		94	94	92	91	90	86	82	
	80	220	537	854	965	1172	1314	1497	
		123	122	121	119	118	114	110	
连续最大 Max. int.	100	208	522	832	945	1156	1303	1488	
		156	155	153	152	150	147	142	
断续最大 Max. int.	125	201	499	810	931	1137	1292	1472	
		196	196	194	192	191	187	183	
连续最大 Max. int.	150	174	492	785	921	1121	1277	1454	
		233	232	231	230	227	223	217	

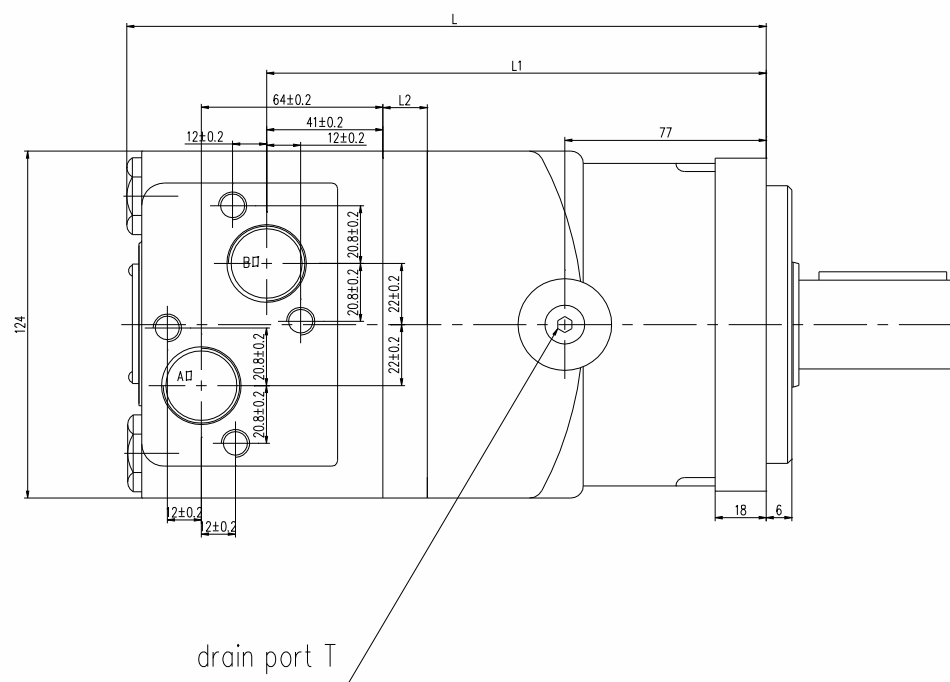
BMT-800 (ml/r)

		连续最大 Max. cont.				断续最大 Max. int.			
		3	6	9	10.5	12.5	13		
流量 Flow (LPM)	10	346	677	1003	1159	1365	1390		
		12	12	11	11	11	10		
	20	356	692	1034	1183	1404	1458		
		24	24	24	23	22	18		
	40	365	703	1066	1236	1459	1516		
		50	50	49	48	46	40		
	60	354	703	1060	1237	1464	1520		
		74	73	71	71	68	63		
	80	332	686	1050	1226	1462	1514		
		99	98	98	96	93	86		
连续最大 Max. int.	100	305	654	1025	1207	1445	1506		
		125	123	123	121	118	11		
断续最大 Max. int.	125	280	622	989	1181	1422	1487		
		154	153	153	150	149	140		
连续最大 Max. int.	150	247	590	953	1156	1406	1476		
		185	184	183	181	179	172		

BMT Dimension and Mounting Data- ---Figuration

Factor: mm

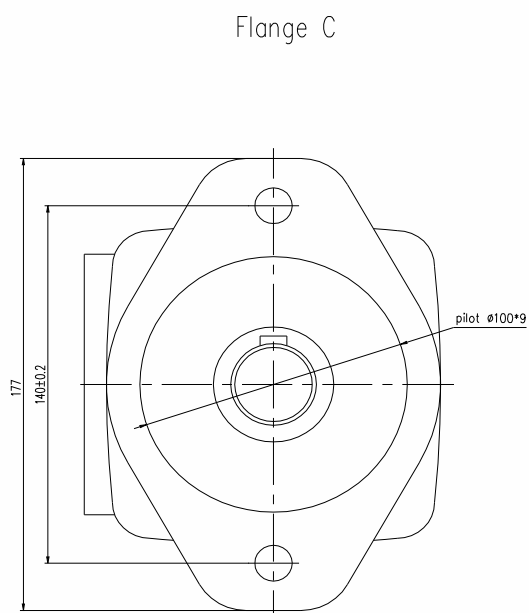
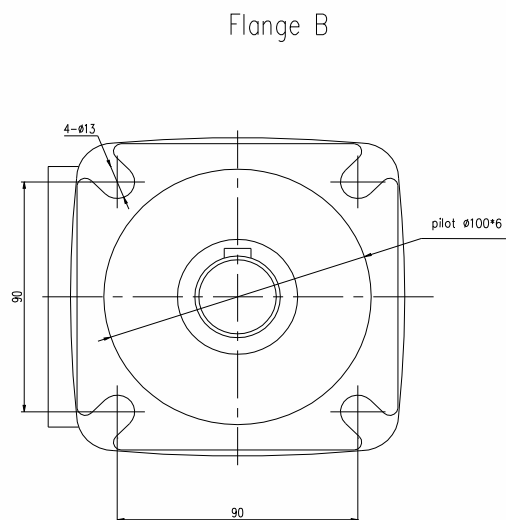
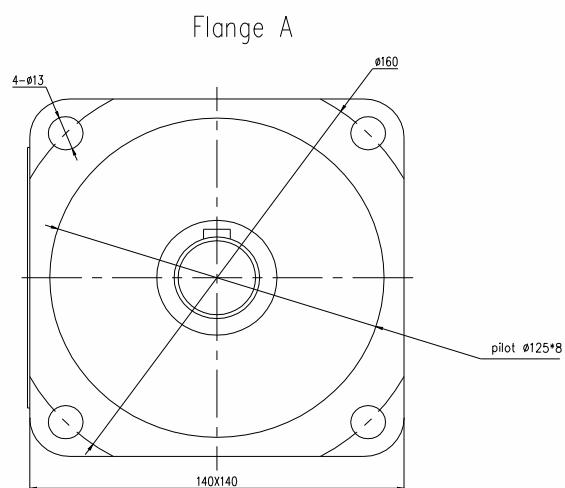
Figuration A:
Standard type



dispacement	L	L1	L2
BMT250	229.5	180	14.7
BMT315	235.5	185.5	20.3
BMT400	242.5	193	27.5
BMT500	250.5	201	35.5
BMT630	261.5	211.5	47.4
BMT800	277	227	62

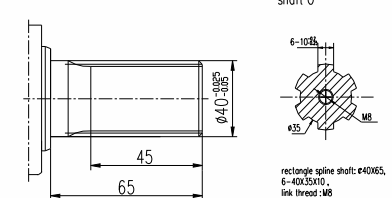
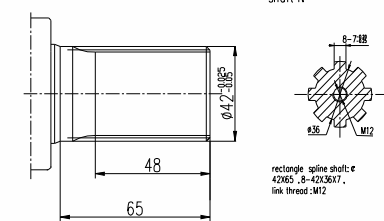
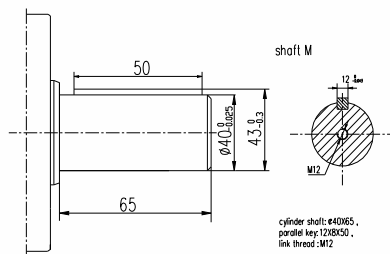
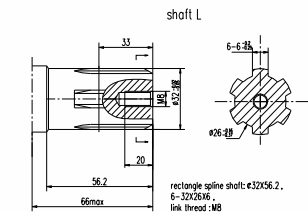
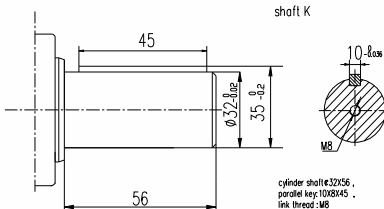
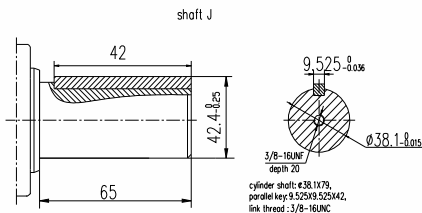
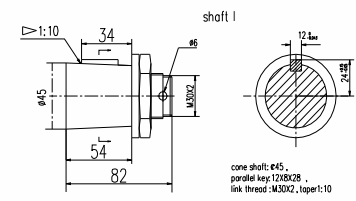
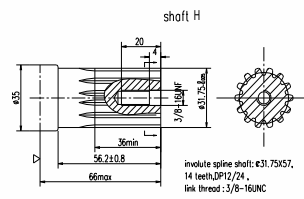
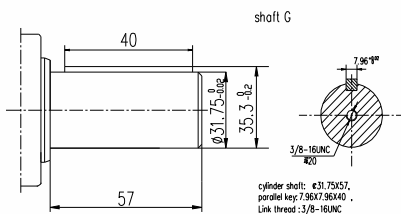
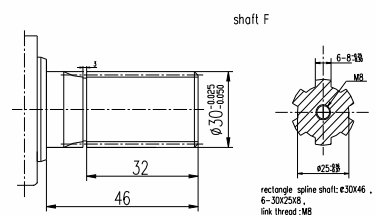
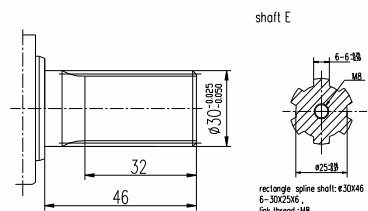
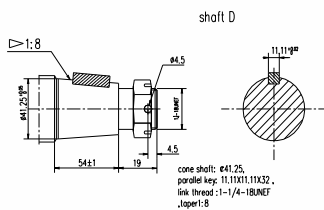
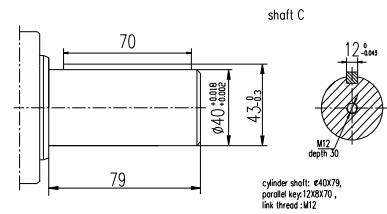
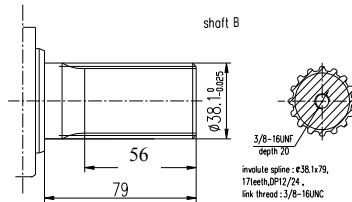
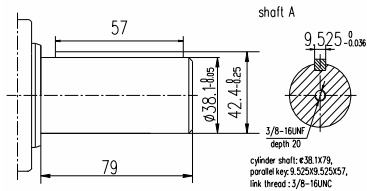
BMT Dimension and Mounting Data---Mounting Flange

Factor: mm



BMT Dimension and Mounting Data---Shaft

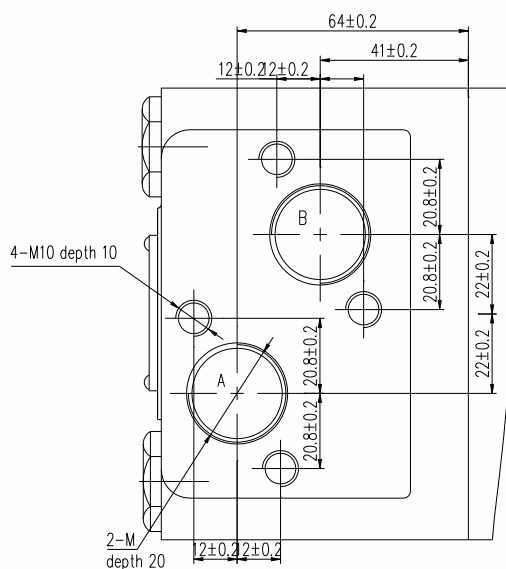
Factor: mm



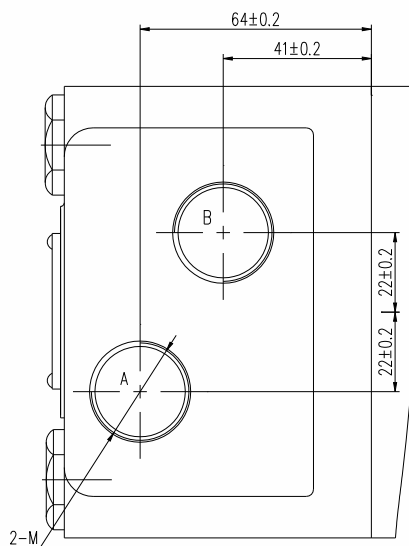
BMT Dimension and Mounting Data---Back housing

Factor: mm

A type



B type



BMT Code number and Order information

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

BMT	1	2	3	4	5	6	7	8
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pos 1		2		3		4		5		6		7		8	
Figuration		Displacement (ml/r)		Flange&Pilot (mm)		Shaft&key (mm)		back housing		Oil port		Link thread on port surface		Drain port	
A	standard	A	250	A	square flange 140X140, 4- ϕ 13 distributing circle ϕ 160, pilot ϕ 125X8	A	cylinder shaft: ϕ 38.1X79, parallel key: 9.525X9.525X57, link thread : 3/8-16UNC	A	refer to drawing page	A	2-G3/4	A	NONE	A	NONE
		B	315	B	square flange120X120, 4- ϕ 13 , distributing circle 90X90, pilot ϕ 100X6	B	involute spline shaft: ϕ 38.1x79, 17 teeth ,DP12/24 , link thread:3/8-16UNC	B	refer to drawing page	B	2-M27X2	B	4-M12	B	G1/4
		C	400	C	rhombus flange , 2- ϕ 14 center space 140, pilot ϕ 100X9	C	cylinder shaft: ϕ 40X79, parallel key 12X8X70 , link thread:M12			C	2-M30X1.5	C	4-M10	C	M14X1.5
		D	500	D	square flange with front cover 140X140, 4- ϕ 13 distributing circle ϕ 160, pilot ϕ 125X9	D	cone shaft: ϕ 41.25, parallel key: 11.11X11.11X32 , link thread : 1-1/4-18UNEF , taper 1:8			D	2-1-1/16-12UN			D	7/16-20UNF
		E	630			E	rectangle spline shaft: ϕ 30X46 ,6-30X25X6 , link thread :M8			E	2-M33X2				
		F	800			F	rectangle spline shaft: ϕ 30X46 , 6-30X26X8 , link thread :M8			F	2-1-5/16-12UN				
						G	cylinder shaft: ϕ 31.75X57, parallel key:7.96X7.96X40, link thread:3/8-16UNC			G	2-G1				
						H	involute spline shaft: ϕ 31.75X57, 14 teeth,DP12/24 , link thread:3/8-16UNC			H	2-3/4"				

Next page is continuing

BMT Code number and Order information---continue

BMT		1		2		3		4		5		6		7		8	
pos 1		2		3		4		5		6		7		8			
Figuration		Displacement (ml/r)		Flange & Pilot (mm)		Shaft & key (mm)		back housing		Oil port		Link thread on port surface		Drain port			
A	standard	A	250	A	square flange 140X140, 4- $\varnothing$ 13 distributing circle $\varnothing$ 160, pilot $\varnothing$ 125X8	I	cone shaft: $\varnothing$ 45 ,parallel key:12X8X28 , link thread:M30X2, taper 1:10	A	refer to drawing page	A	2-G3/4	A	NONE	A	NONE		
		B	315	B	square flange 120X120, 4- $\varnothing$ 13 , distributing circle 90X90, pilot $\varnothing$ 100X6	J	cylinder shaft: $\varnothing$ 38.1X65, parallel key:9.525X9.525X42, link thread : 3/8-16UNC	B	refer to drawing page	B	2-M27X2	B	4-M12	B	G1/4		
		C	400	C	rhombus flange , 2- $\varnothing$ 14 center space 140, pilot $\varnothing$ 100X9	K	cylinder shaft $\varnothing$ 32X56 ,parallel key:10X8X45, link thread :M8			C	2-M30X1.5	C	4-M10	C	M14X1.5		
		D	500	D	square flange with front cover 140X140, 4- $\varnothing$ 13 distributing circle $\varnothing$ 160, pilot $\varnothing$ 125X9	L	rectangle spline shaft : $\varnothing$ 32X56.2, 6-32X25X6 , link thread :M8			D	2-1-1/16-12UN			D	7/16-20UNF		
		E	630			M	cylinder shaft: $\varnothing$ 40X65 , parallel key:12X8X50 , link thread :M12			E	2-M33X2						
		F	800			N	rectangle spline shaft: $\varnothing$ 42X65 , 8-42X36X7 , link thread :M12			F	2-1-5/16-12UN						
						O	rectangle spline shaft , $\varnothing$ 40X65, 6-40X35X10 , link thread :M8			G	2-G1						
										H	2-3/4"						

Order example: BMTAABCBAAB

BMTS bearingless motor

BMTS is the bearingless motor of BMT, large volume, disc valve , high pressure motor.

Characteristic features:

- **Advanced design in disc distribution flow, which can provide better performance at low speed.**
- **The valve can automatically compensate for the wear, so the volumetric efficiency is high .**
- **Double taper roller bearings permit high radial loads. The motors can be used on heavier vehicles in traction drive applications.**

Main Specification

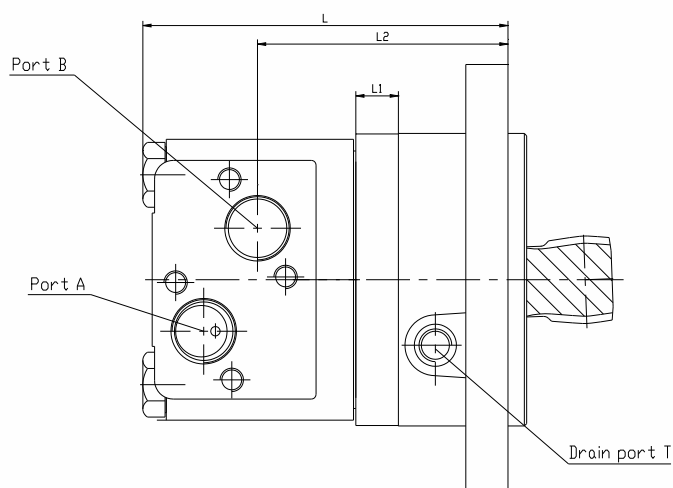
The main specification and performance data are same as BMT, please refer to the BMT .

BMTS Dimension and Mounting Data- ---Figuration and flange

Factor: mm

Figuration

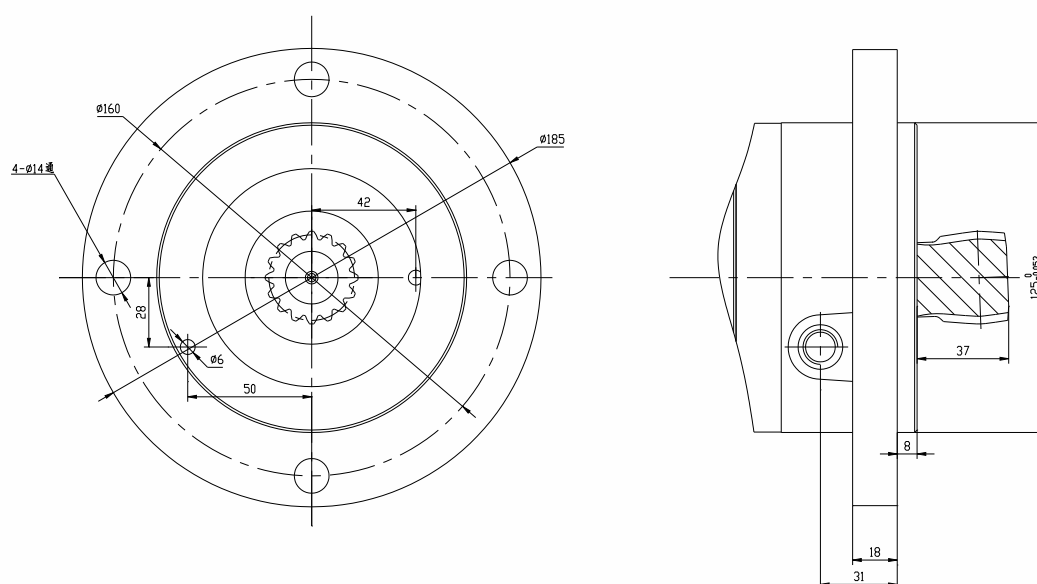
Figuration A



Disp	160	200	250	315	400	500	630	800
L	148	152	157	163	170	178	190	201
L1	17	21	14	20	27	35	47	58
L2	96.5	100.5	109	115	122	130	142	153

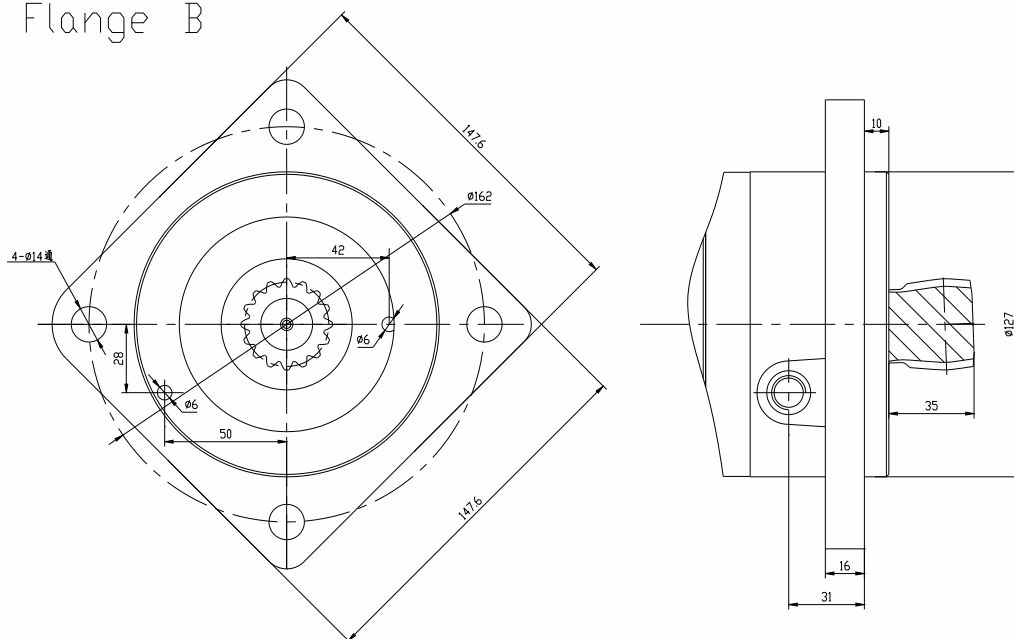
Mounting Flange

Flange A



Factor: mm

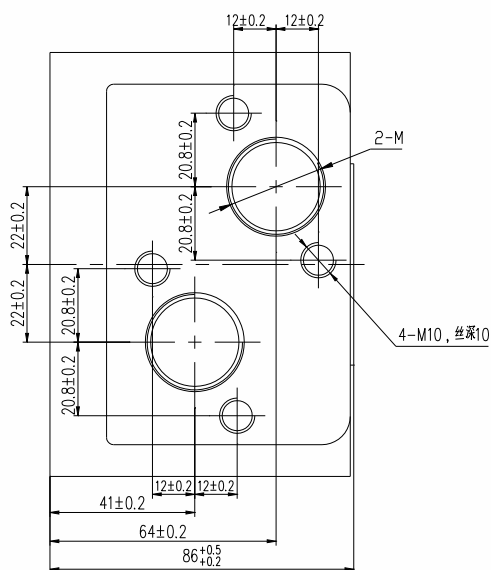
Flange B



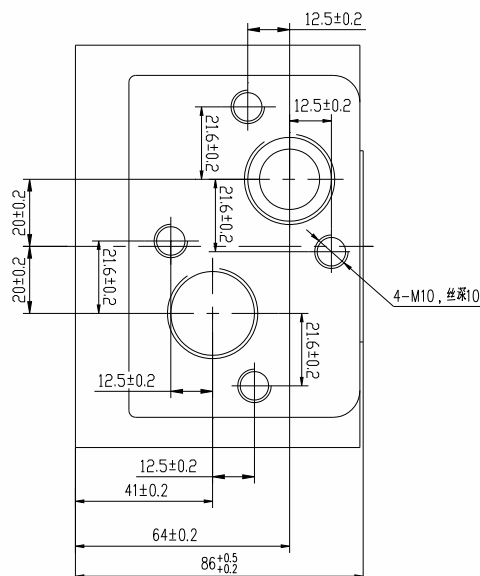
BMTS Dimension ---back housing and shaft

Back housing

Porting A



Porting B



Shaft

Factor: mm

Internal Spline Data For The Attached Component

Pitch	12/24
Pressure angle	30°
Number of teeth	16
Pitch dia.	ø33.8656
Major dia.	ø38.4 ^{+0.25} ₀
Minor dia.	ø32.15 ^{+0.04} ₀
Space Width	4.516±0.037

BMTS Code number and Order information

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

BMTS		1	2	3	4	5	6	7	8						
pos 1		2		3		4		5		6		7		8	
Figuration		Displacement (ml/r)		Flange&Pilot (mm)		Shaft (mm)		back housing		Oil port		Link thread on port surface		Drain port	
A	standard	A	195	A	4- $\varnothing$ 14 Circle- flange $\varnothing$ 160, pilot $\varnothing$ 125X8	A	refer to the drawing page	A	refer to the drawing page	A	2-G1	A	None	A	None
B		B	245	B	4- $\varnothing$ 14.5 Square- flange $\varnothing$ 162,pilot $\varnothing$ 127X10					B	2-M33X2	B	4-M10	B	M14X1.5
		C	310							C	2-1-5/16- 12UN			C	G1/4
		D	395							D	2-G3/4			D	9/16-18UNF
		E	490							E	2-1-1/16- 12UN			E	7/16- 20UNF
		F	625												
		G	800												

Order example: BMT SABAAABBC

BMV motor

● BMV is a disc valve, high pressure motor, with radial ball-bearings design and efficient performance. which can bear greater load than BMT. Its volume is bigger than BMT.

Characteristic features:

- The motor can be used in high pressure and high torque
- Advanced design in disc distribution flow, which can provide improved performance at low speed.
- The valve can automatically compensate for the wear, so the volumetric efficiency is high.
- Double taper roller bearings permit high radial loads. The motors can be used on heavier vehicles in traction drive applications.



Main Specification

Displacement (ml/r)		315	400	500	630	800	1000
Flow (LPM)	cont.	160	200	200	200	200	200
	int.	200	240	240	240	240	240
Speed (RPM)	cont.	510	500	400	320	250	200
	int.	630	600	480	380	300	240
Pressure (MPa)	cont.	21	21	21	21	21	21
	int.	25	25	25	25	25	25
Torque (N.m)	cont.	920	1180	1460	1660	1880	2015
	int.	1110	1410	1760	1940	2110	2280

Note: 1. Continuous data: The Max. Value of operating motor continuously.

2. Intermittent Data: The Max. Value of operating motor in 6 seconds per minute.

3. A simultaneous max. RPM and max. pressure is not recommended.

4. The Conversion Factors is on the page 4, consult it please

5. Optimum operating situation should be at the 1/3 ~ 2/3 of the continuous operating situation.

BMV Performance Data

□ cont.
■ Int.

BMV-315 (ml/r)

		连续最大 Max. cont.							断续最大 Max. int.						
		3.5	7	10	14	18	20	24	3.5	7	10	14	18	20	24
流量 Flow (LPM)	10	140	294	440	610	742	845	1000	26	24	23	22	20	17	14
	20	153	314	466	636	787	895	1070	55	54	53	52	51	48	44
	50	149	312	465	654	815	935	1112	145	144	142	140	137	133	127
	75	143	304	458	642	816	940	1119	220	218	215	211	217	202	195
	100	136	297	452	636	810	936	1108	294	292	290	287	283	278	270
连续最大 Max. int.	125	123	286	442	626	799	921	1093	368	366	364	361	357	352	345
	150	114	275	435	615	788	906	1078	445	443	441	437	430	422	410
断续最大 Max. int.	160	107	268	430	608	780	895	1070	475	473	470	466	460	452	439
	200	82	249	412	593	758	871	1047	596	594	590	584	576	565	544

BMV-400 (ml/r)

		连续最大 Max. cont.							断续最大 Max. int.						
		3.5	7	10	14	18	20	24	3.5	7	10	14	18	20	24
流量 Flow (LPM)	10	183	385	568	776	968	1101	1292	20	20	19	18	17	16	14
	20	196	398	590	815	1010	1152	1346	44	44	43	42	40	39	37
	50	200	402	603	842	1040	1186	1430	114	113	113	112	110	108	103
	75	195	394	596	838	1043	1188	1432	175	173	170	166	163	1579	152
	100	172	385	593	827	1036	1184	1425	236	235	233	231	227	223	215
连续最大 Max. int.	125	167	374	583	816	1021	1177	1413	296	294	291	288	282	275	268
	150	158	361	559	801	1008	1165	1390	355	354	352	349	344	335	324
断续最大 Max. int.	175	143	346	553	784	989	1145	1377	416	414	411	407	403	396	388
	200	118	331	536	770	969	1128	1356	475	473	469	463	458.3	453.3	439
断续最大 Max. int.	240	82	301	506	740	954.7	1174	1332	571	569	565	548	539	530	520

BMV-500 (ml/r)

		连续最大 Max. cont.							断续最大 Max. int.						
		3.5	7	10	14	18	20	24	3.5	7	10	14	18	20	24
流量 Flow (LPM)	10	242	468	696	959	1190	1353	1607	17	17	16	16	15	13	11
	20	245	501	738	1003	1232	1394	1658	36	35	35	34	33	32	29
	50	240	500	758	1025	1270	1449	1743	93	92	91	90	88	85	80
	75	233	498	752	1030	1288	1475	1766	140	139	137	135	132	127	120
	100	228	491	748	1026	1289	1472	1760	189	187	185	182	178	173	166
连续最大 Max. int.	125	220	483	742	1014	1280	1460	1745	237	236	234	231	227	223	216
	150	201	465	723	1008	1250	1429	1736	287	286	284	281	276	270	260
断续最大 Max. int.	175	182	446	711	997	1238	1406	1715	335	334	332	329	325	320	310
	200	161	423	676	974	1218	1385	1697	384	383	381	378	374	366	354
断续最大 Max. int.	240	120	378	622	921	1172	1340	1650	461	459	457	454	450	444	432

BMV-630 (ml/r)

		连续最大 Max. cont.							断续最大 Max. int.						
		3.5	6	9	12	15	18	21	3.5	6	9	12	15	18	21
流量 Flow (LPM)	10	280	522	812	1100	1268	1549	1784	14	13	13	12	12	11	10
	20	288	552	839	1101	1315	1607	1864	28	28	27	27	26	24	22
	50	289	555	868	1137	1364	1682	1956	72	72	71	69	68	66	62
	75	270	548	863	1120	1352	1680	1964	109	108	106	104	102	99	94
	100	264	538	856	1093	1350	1674	1965	146	145	143	141	138	135	130
连续最大 Max. int.	125	251	516	837	1071	1336	1659	1950	184	183	181	179	177	173	168
	150	240	495	817	1063	1330	1650	1928	221	220	219	217	215	212	205
断续最大 Max. int.	175	210	485	796	1052	1300	1636	1908	259	258	257	254	250	246	241
	200	182	469	751	1018	1280	1611	1883	297	297	295	293	290	284	273
断续最大 Max. int.	240	130	416	712	978	1237	1563	1835	358	357	355	351	346	340	332

Torque: 1340 N.m
speed: 444 rpm

cont.

Int.

BMV-800 (ml/r)

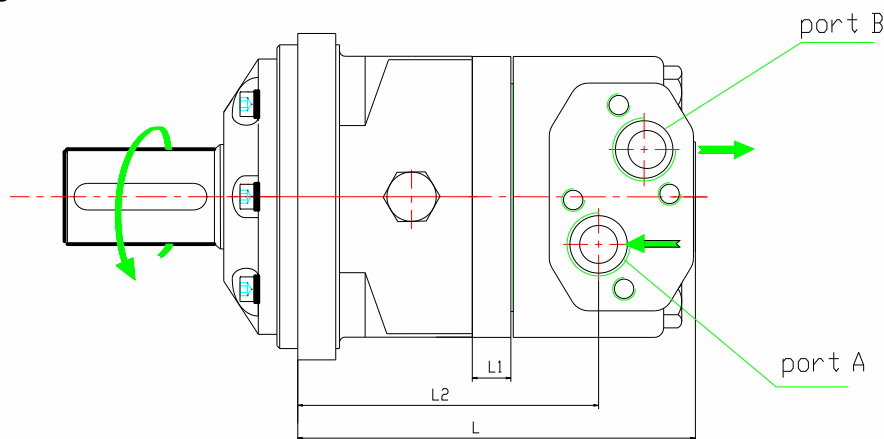
		2.5	5	8	10	13	16	18
流量 Flow (LPM)	10	278 11	565 10	830 10	1095 9	1405 8	1712 8	1915 7
	20	282 23	571 22	845 22	1150 21	1456 20	1783 18	1994 16
	50	288 60	582 59	856 57	1162 56	1463 54	1790 52	2001 48
	75	269 91	580 90	855 89	1165 87	1465 84	1786 81	1993 77
	100	251 122	566 121	840 120	1140 118	1448 115	1767 111	1985 105
	125	242 153	535 152	824 150	1118 147	1427 143	1739 139	1976 133
	150	236 185	526 183	808 181	1102 178	1401 174	1714 169	1959 163
	175	215 216	504 214	793 212	1079 209	1377 206	1698 203	1936 196
	200	197 247	468 245	765 243	1063 240	1362 237	1681 232	1913 225
	240	118 297	388 296	713 295	1020 293	1318 288	1637 283	1838 277

BMV-1000 (ml/r)

		2.5	5	7	10	14	16
流量 Flow (LPM)	10	312 9	640 9	971 9	1400 8	1978 7	2259 6
	20	320 28	648 27	978 26	1410 25	1980 23	2270 21
	50	326 47	655 46	992 45	1422 43	2015 41	2280 38
	75	318 72	642 71	987 70	1425 68	2003 66	2276 63
	100	309 98	634 97	983 95	1418 93	1994 90	2243 86
	125	303 123	624 122	975 120	1409 117	1988 114	2224 110
	150	278 149	602 148	961 146	1368 144	1963 140	2208 133
	175	264 174	580 172	946 170	1338 166	1925 162	2159 155
	200	230 199	556 196	912 193	1300 190	1891 185	2105 178
	240	166 240	513 237	867 233	1267 229	1825 225	2034 218

BMV Dimension and Mounting Data- ---Figuration

Figuration A:



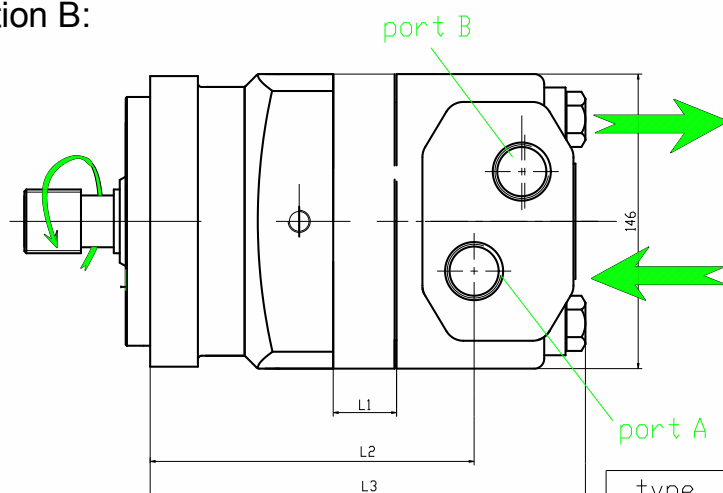
Standrad rotation viewed form shaft
end

Port A pressurized-----CW

Port A pressurized-----CW

type	L1	L2	L
BMV315	23.8	161.8	212.8
BMV400	31	169	220
BMV500	39	177	228
BMV630	50.9	188.9	239.9
BMV800	65.5	203.5	254.5
BMV1000	81.5	219.5	270.5

Figuration B:



Standrad rotation viewed form shaft
end

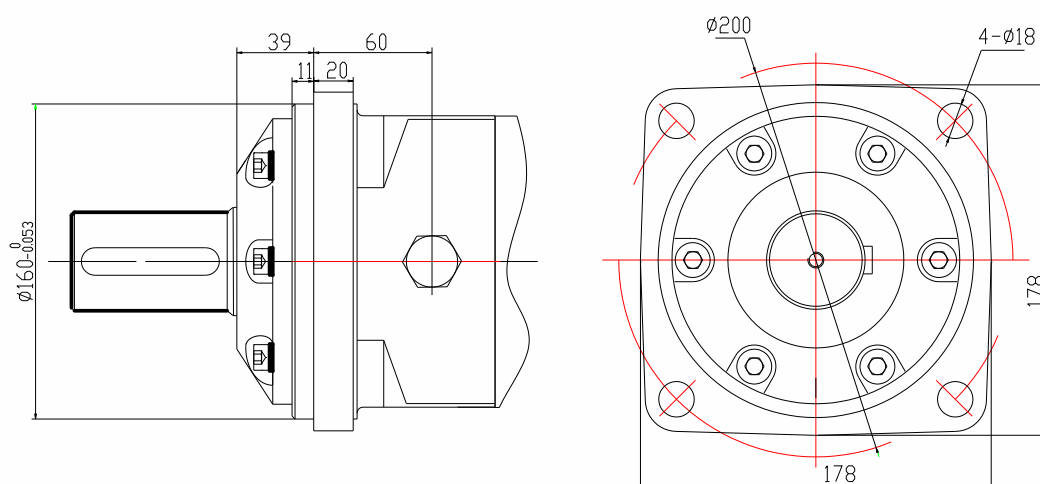
Port A pressurized-----CW

Port A pressurized-----CW

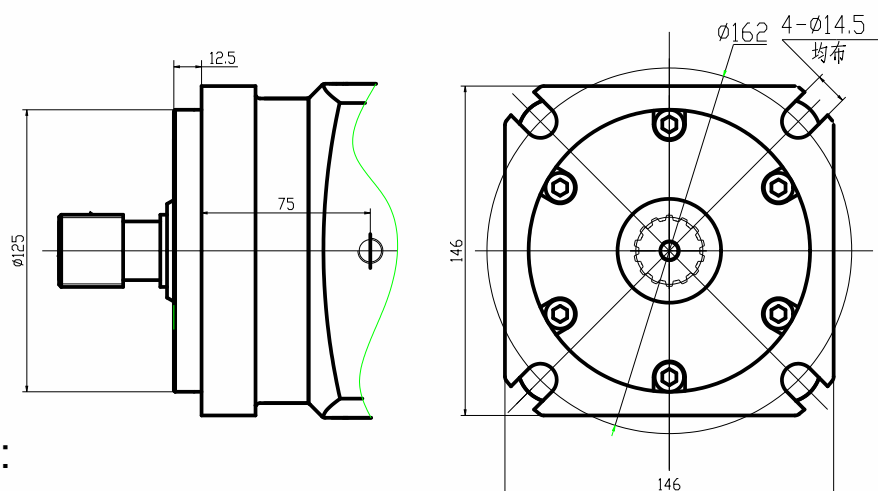
type	L1(mm)	L2(mm)	L3(mm)
BMV 315	24.8	156	212
BMV 400	32	163	219
BMV 500	40	171	227
BMV 630	52	183	239
BMV 800	66.5	200	256
BMV 1000	82.5	216	272

BMV Dimension and Mounting Data----Mounting Flange

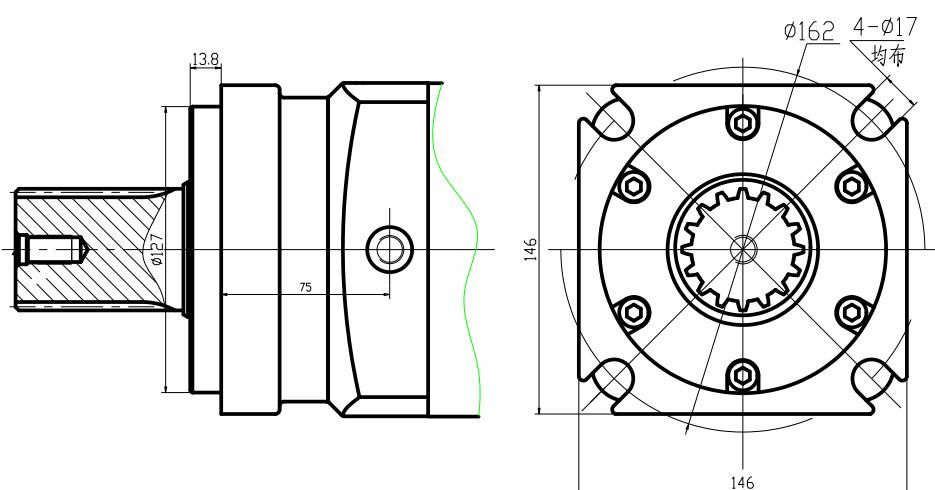
Flange A:



Flange B:

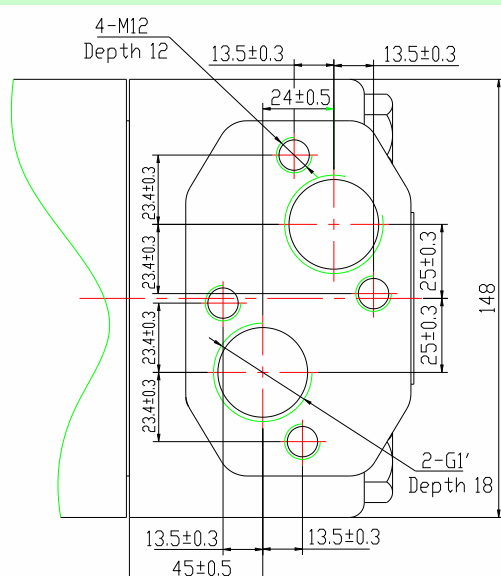


Flange C:

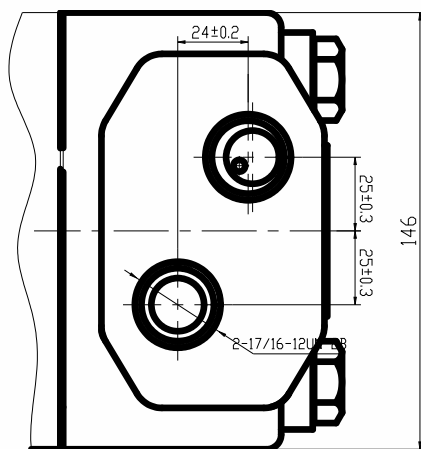


BMV Dimension and Mounting Data----Back housing

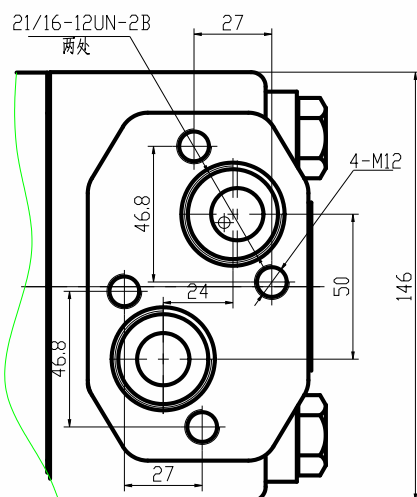
A type:



B type:

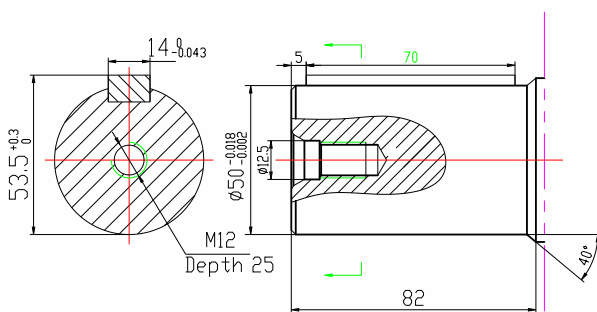


C type:



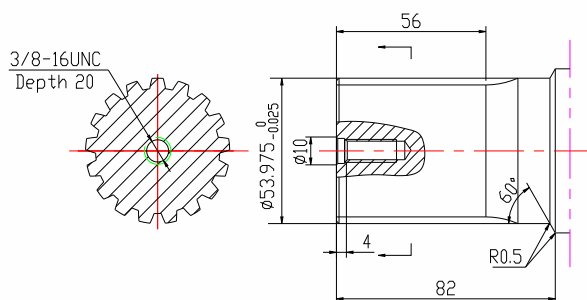
BMV Dimension and Mounting Data---Shaft

shaft A:



cylinder shaft: $\phi 50$
parallel key: 14X9X70, link
thread :M12

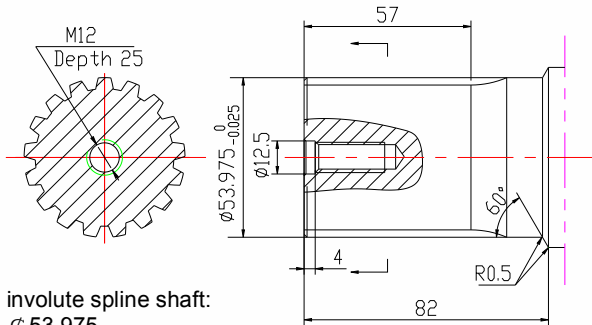
shaft B:



involute spline shaft: $\phi 53.975$
16teeth, DP8/16, =effective length 56
link thread: 3/8-16UNC depth 20

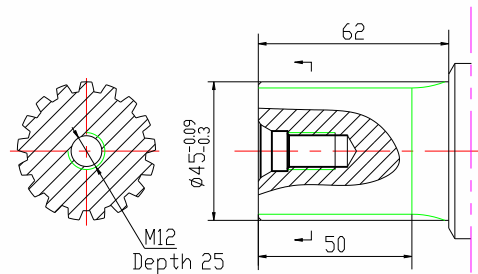
BMV Dimension and Mounting Data---Shaft

shaft C:



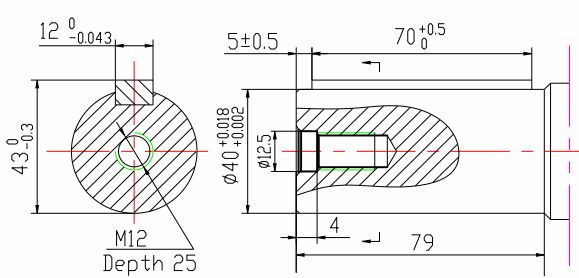
involute spline shaft:
 $\phi 53.975$
 16teeth ,DP8/16 ,
 effective length 57
 link thread: M12
 depth 25

shaft D:



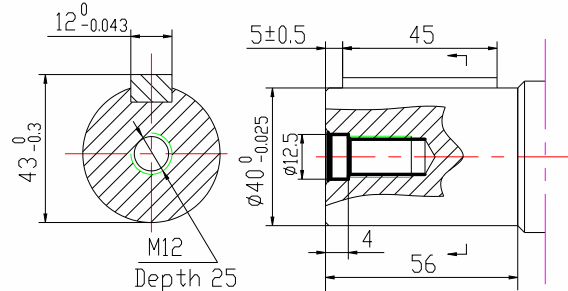
involute spline shaft: $\phi 45 \times 62$, 17teeth ,m2.5,
 effective length 50
 link thread: M12 depth 25

shaft E:



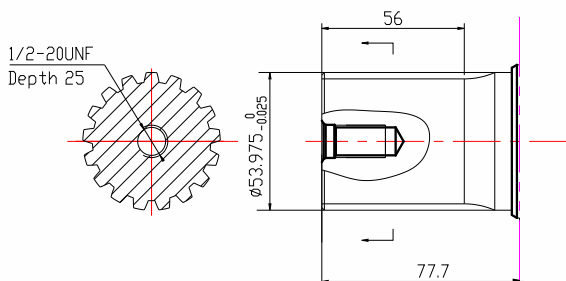
cylinder shaft: $\phi 40 \times 79$,
 parallel key: 12X8X70,
 link thread :M12 depth 25

shaft F:



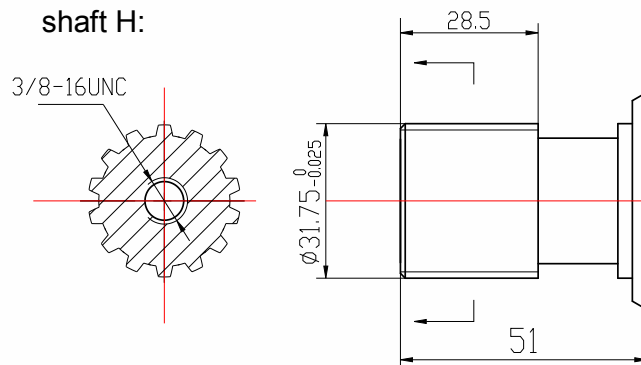
cylinder shaft: $\phi 40 \times 56$,
 parallel key: 12X8X45,
 link thread :M12 depth 25

shaft G:



involute spline shaft: $\phi 53.975$
 16teeth ,DP8/16 , =effective length 56
 link thread:1/2-20UNC depth 25

shaft H:



involute spline shaft: $\phi 31.75 \times 51$, 14teeth ,DP12/24
 effective length 28.5
 link thread:3/8-16UNC depth 20

BMV Code number and Order information

BMV	1	2	3	4	5	6	7	8
-----	---	---	---	---	---	---	---	---

pos 1		2		3		4		5		6		7		8	
Figuration		Displacement (ml/r)		Flange & Pilot (mm)		Shaft & key (mm)		back housing		Oil port		Link thread on port surface		Drain port	
A	standard	A	315	A	square flange 178X178, 4- ϕ 18 distributing circle ϕ 200, pilot ϕ 160X11	A	cylinder shaft: ϕ 50X79, parallel key: 14X9X70, link thread :M12	A	refer to drawing page	A	2-G1	A	4-M12	A	NONE
B	standard	B	400	B	square flange 146X146, 4- ϕ 14.5 distributing circle ϕ 162, pilot ϕ 125X12.5	B	involute spline shaft: ϕ 53.975x81, 16teeth ,DP8/16 , effective length 56 link thread:3/8-16UNC depth 20	B	refer to drawing page	B	2-M27X2	B	4-M10	B	G1/4
C	standard	C	500	C	square flange 146X146, 4- ϕ 17 distributing circle ϕ 162, pilot ϕ 127X13.8	C	involute spline shaft: ϕ 53.975x81, 16teeth ,DP8/16 , effective length 57 link thread: M12 depth 25	C	refer to drawing page	C	2-M30X1.5	C		C	M14X1.5
		D	630	D		D	involute spline shaft: ϕ 45x62, 17teeth ,m2.5, effective length 50 link thread: M12 depth 25			D	2-1-1/16-12UN			D	7/16-20UNF
		E	800	E		E	cylinder shaft: ϕ 40X79, parallel key: 12X8X70, link thread :M12 depth 25			E	2-M33X2			E	9/16-18UNF
		F	1000	F		F	cylinder shaft: ϕ 40X56, parallel key: 12X8X45, link thread :M12 depth 25			F	2-1-5/16-12UN				
						G	involute spline shaft: ϕ 53.975x77.7, 16teeth ,DP8/16 , effective length 56 link thread:1/2-20UNC depth 25			G	2-G3/4				
						H	involute spline shaft: ϕ 31.5x51, 14teeth ,DP12/24 , effective length 28.5 link thread:3/8-16UNC depth 20								

Order example: BMV AAACBAAB

If you have any other special demand about the figuration,dimension and mounting type,please contact us ,we can design specially.

ZD Hydraulic Brake

ZD 80 series , ZD 100 series , ZD 125 series Hydraulic Brakes are multi-disc brake design, and widely applied in heavy load machines, such as engineering machines, cranes, agricultural machines, environmental sanitation machines etc.



Characters:

- 1. multi-disc brake and Compact design, excellent performance**
- 2. ZD Hydraulic Brakes can be independently used without motors**
- 3. Low noise, easy operation and installation**

Main Specification

ZD 80 series performance

Items	1	2	3	4	5
Brake torque	220N. M	310N. M	400N. M	500N. M	600N. M
Max releasing pressure	200bar				
full – releasing pressure	20bar	20bar	20bar	31bar	31bar
releasing flow	5. 9ml				

ZD 100 series performance

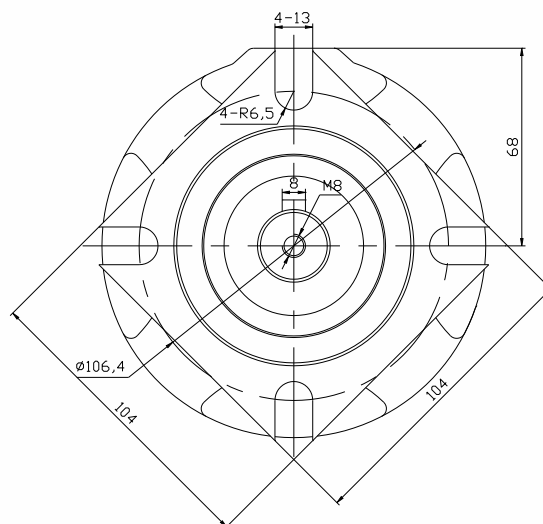
Items	1	2	3	4	5
Brake torque	310N. M	400N. M	500N. M	680N. M	820N. M
Max releasing pressure	200bar				
Fulll- releasing pressure	20bar	20bar	20bar	31bar	31bar
releasing flow	7.3ml				

ZD 125 series performance

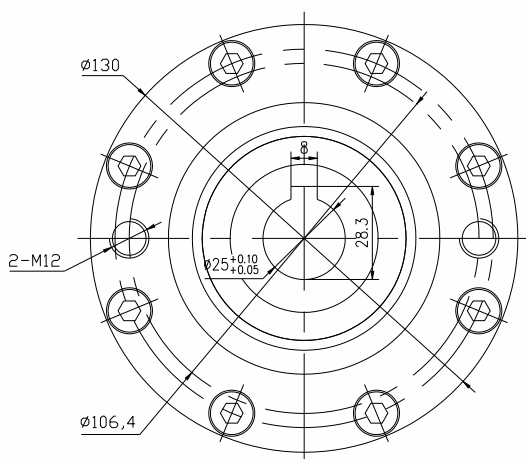
Brake torque	Max releasing pressure	full -releasing pressure	releasing flow
1200N. M	220bar	25bar	14ml

Figuration A:

Install the flange

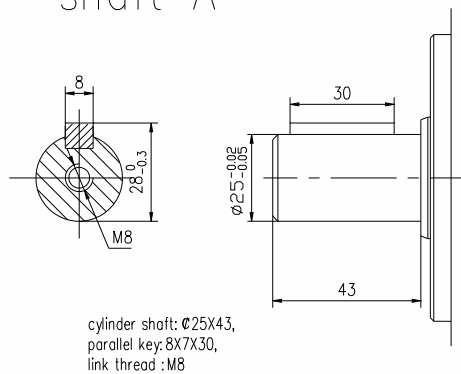


A 向

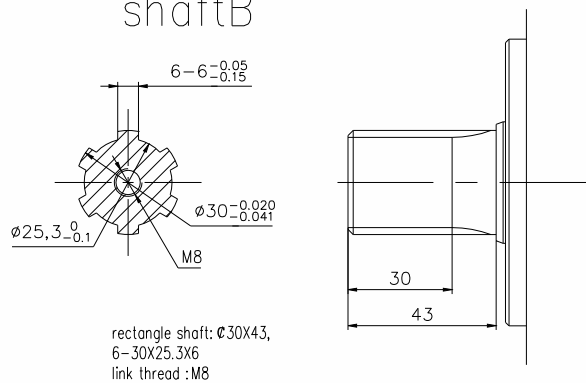


ZD80 dimensions—shaft

shaft A



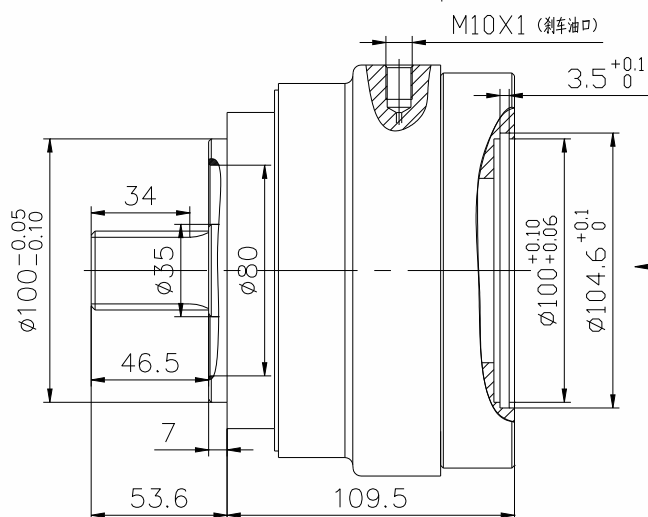
shaftB



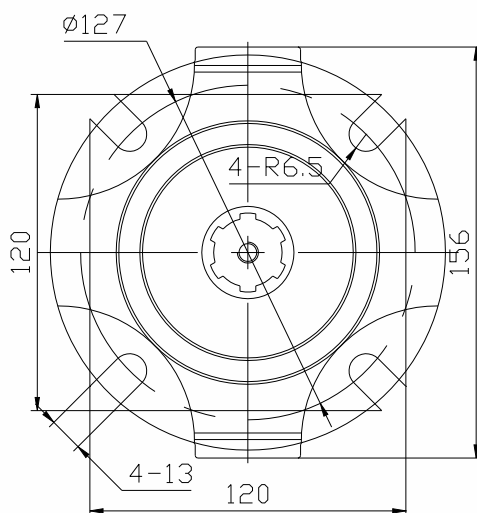
ZD100 dimensions—figuration and flange

Figuration A:

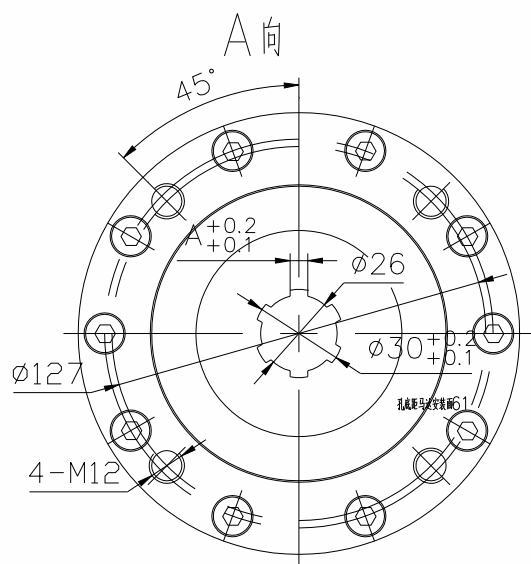
Install the output



Install the flange

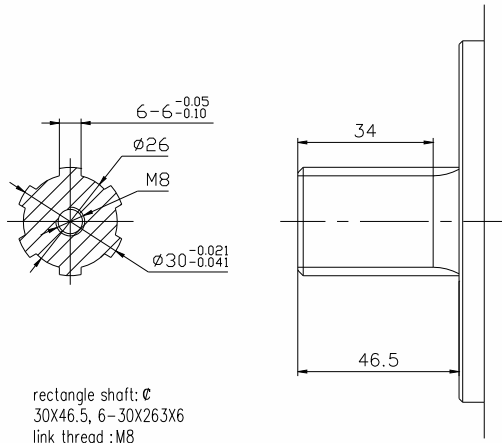


The motor input

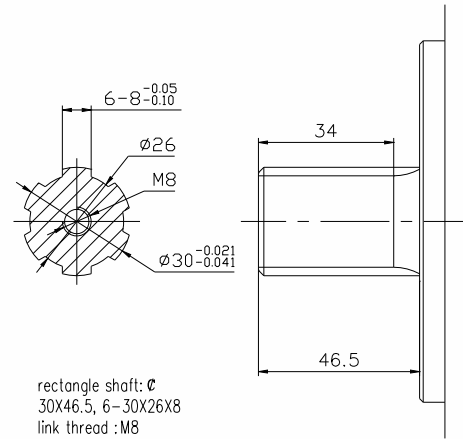


ZD100 dimensions—shaft

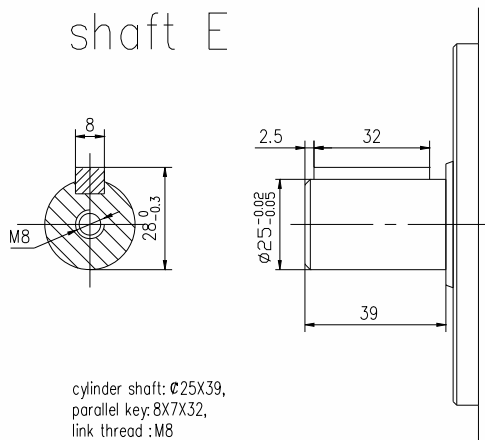
shaft C



shaft D



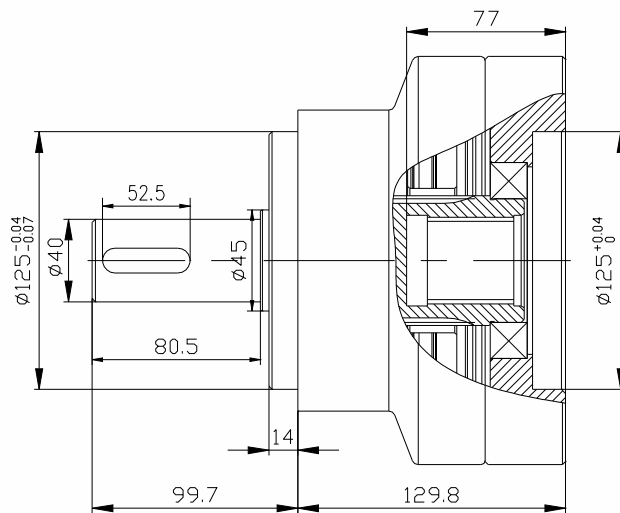
shaft E



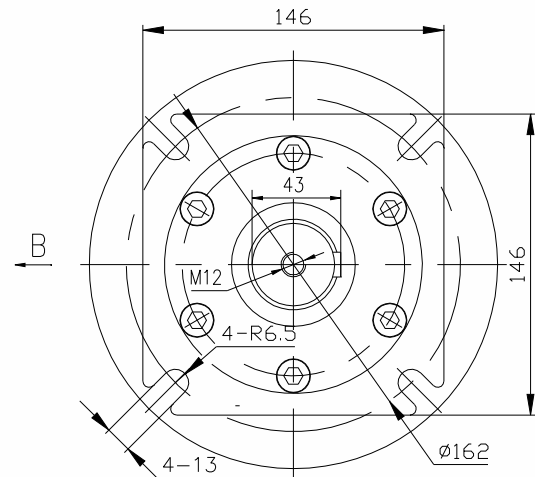
ZD125 dimensions—figuration and flange

Figuration A:

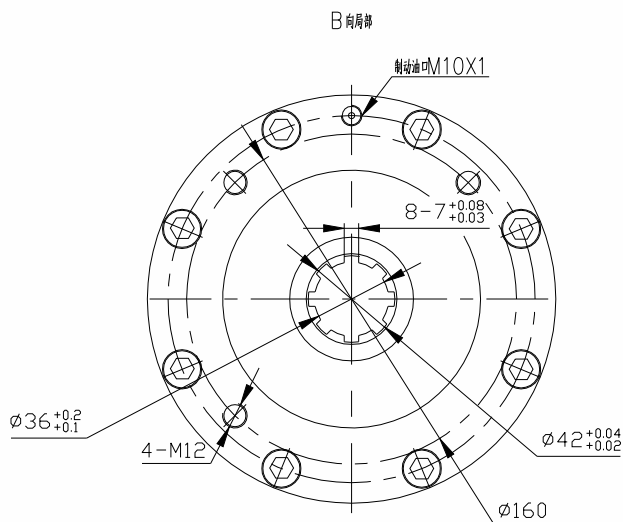
Install the output



Install the flange



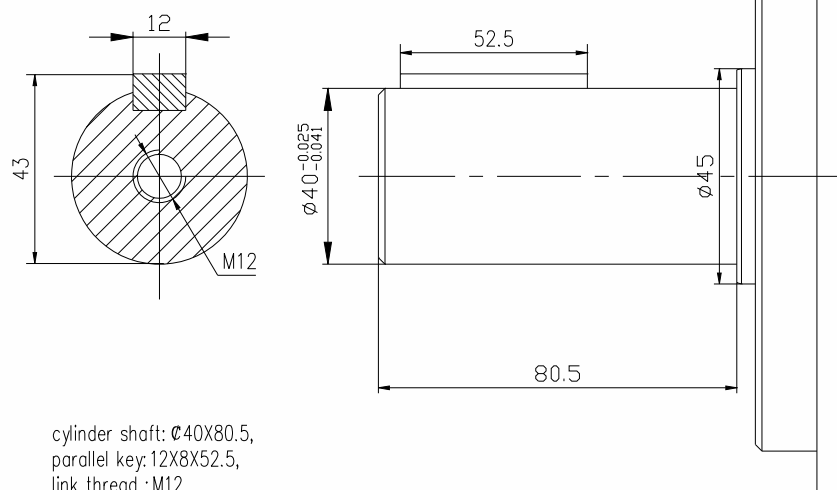
The motor input





ZD125 dimensions—shaft

shaft F



ZD Code number and Order information

ZD	1	2	3	4	5
----	---	---	---	---	---

pos 1		2		3		4		5	
series		外形		Brake torque		shaft		Brake port	
A	80	A	refer to drawing page	A	220N. M	A	cylinder shaft Φ 25X43 parallel key 8X7X30 link thread : M8	A	M10X1
B	100	B		B	310N. M	B	rectangle spline shaft Φ 30X43 6-30X25.3X6 link thread : M8		
C	125	C		C	400N. M	C	rectangle spline shaft Φ 30X46.5 6-30X26X6 link thread : M8		
				D	500N. M	D	rectangle spline shaft Φ 30X46.5 6-30X26X8 link thread : M8		
				E	600N. M	E	cylinder shaft Φ 25X39 parallel key 8X7X32 link thread : M8		
				F	680N. M	F	cylinder shaft Φ 40X80.5 parallel key 12X8X52.5 link thread : M12		
				G	820N. M				
				H	1200N. M				

订货实例: ZD ABCAA

Motor with speed sensor

This series motor is designed with speed sensor, which can indicate the speed of motor, the electric output signal is a standard voltage signal.

Characteristic features:

- The sensor is with high accuracy
- Output signal is a standard voltage signal
- The sensor can be installed and replaced easy



Main Specification

Operating voltage range: 4.5--24 VDC

Operating temperature: -20--80 °C

Operating frequency range: 0--10 KHz

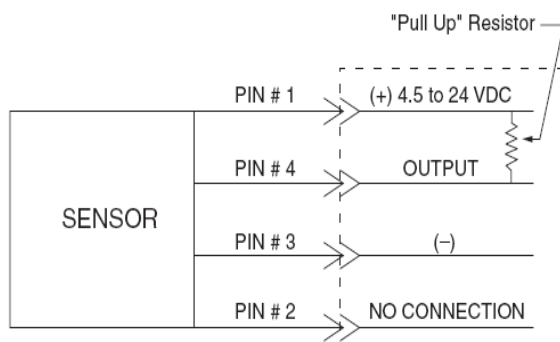
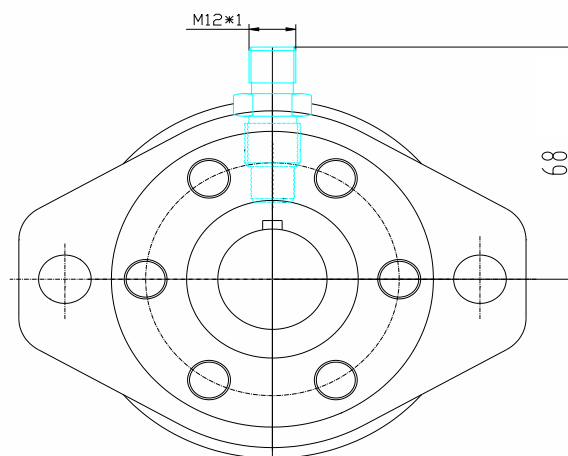
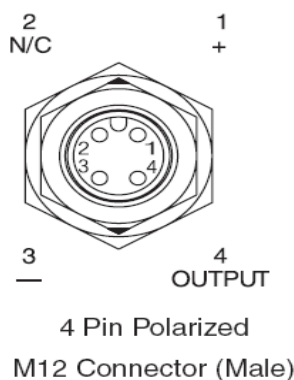
Max sink current: 0--20 mA

sensor output: 30 Pulses per revolution

which can be doubled electronically

Output is NPN: Open Collector

Connection: 4 Pin Polarized , M12



Motor with speed sensor Code number and Order information

The code number is adding the letter “-EM ” in the end of the motor which you want to add the speed sensor.

for example, you want a BM2 motor with speed sensor,the code is adding the letter “-EM ” in the end of the BM2 code (BM2 code refer to the BM2 ordering information). So it will be:

BM2	1	2	3	4	5	6	7	8	-EM
-----	---	---	---	---	---	---	---	---	-----

And if you have any other special demand about the figuration, dimension and mounting type, please contact us ,we can design specially.

Our other products

SCU: Hydraulic Steering Control Units

FLD: Flow Divider Valves



Large Displacement SCU



Low Input torque SCU



Standard SCU



Short SCU



Integra SCU



Small Displacement SCU



Flow Amplifying SCU



Steering Columns



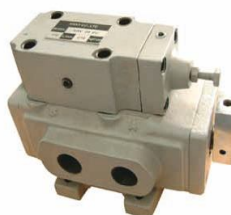
Valve Blocks



FLD Flow Divider Valves



Manually Operated
Brake Pumps



Manually Operated
Directional
Valves -06 Series



Manually Operated
Directional
Valves -03 Series

Best service for you , Best partner with you!

精品—力科创造

济宁力科液压有限责任公司

JI NING LI KE HYDRAULICS CO., LTD