Fei Yue Hydraulic Parts Factory

www.fyhydraulics.com



BM1/BMP/OMP

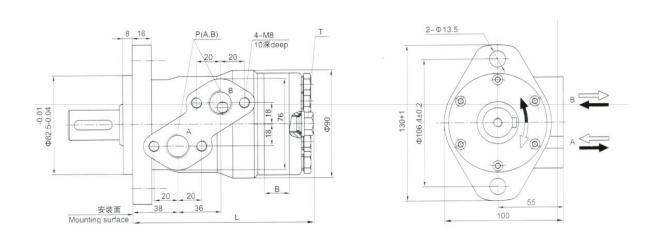
Hydraulic Orbital Motor

BM1/BMP/OMP series hydraulic orbital motor are small volume, economical type, which is designed with shaft distribution flow, which adapt the gerotor gear set design and provide compact volume, high power and low weigth.



Characteristic Features:

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

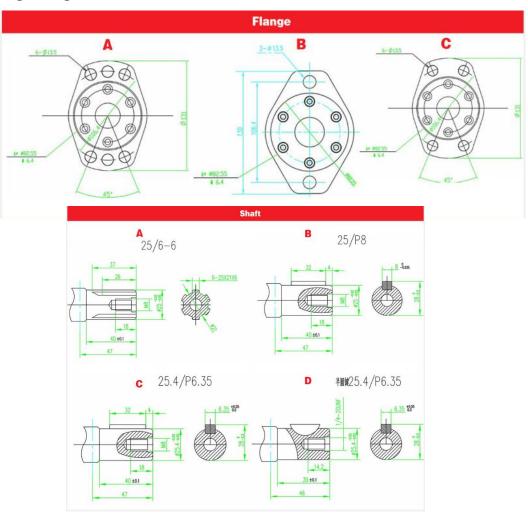


BM1/BMP/OMP series hydraulic orbital motor Specific parameter value

True		BM1	BM1	BM1	BM1						
Type		BMP	BMP	BMP	BMP						
Displaceme	ent(ml/r)	50	63	80	100	125	160	200	250	315	400
Flow	Continuous	45	45	60	60	60	60	60	60	60	60
(LPM)	Intermittent	50	50	75	75	75	75	75	75	75	75
Speed	Continuous	879	720	740	589	475	370	296	237	189	149
(RPM)	Intermittent	975	755	827	673	594	463	370	297	236	185
Pressure	Continuous	12.5	12.5	12.5	12.5	12.5	12.5	11	11	11	10
(MPA)	Intermittent	16.5	16.5	16.5	16.5	16.5	16.5	16.5	14	12.5	10.5
Torque	Continuous	81	101	129	161	202	245	286	360	406	435
(N*.m)	Intermittent	108	134	171	213	268	342	390	456	505	533

- 1. Continuous pressure: Max. value of operating motor continuously.
- 2.Intermittent pressure:Max.value of operating motor in 6 seconds per minute .
- 3.Peak pressure:Max.value of operating motor in 0.6 second per minute.
- 4. The optimum operating situation should be at the 1/3-2/3 of the continuous operating situation.

Mounting Flange & Shaft



BM2/BMR/OMR

Hydraulic Orbital Motor

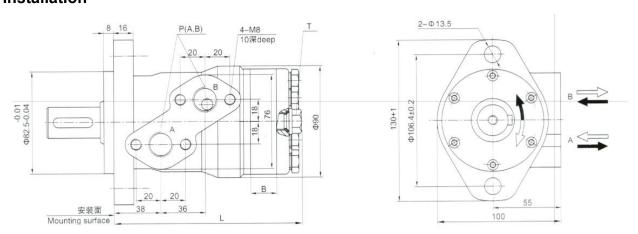


BMR series motor adapt the advanced gerotor gear set design with shaft distribution flow, which can automatically compensate in operating with high pressure, provide reliable and smooth operation, high efficiency and long life.

BM2/BMR/OMR series hydraulic orbital motor Specific parameter value

Т	YPE	BM2	BM2	BM2	BM2	ВМ2						
1	TIFE		BMR	BMR	BMR	BMR	BMR	BMR	BMR	BMR	BMR	BMR
Displace	ement(ml/r)	50	63	80	100	125	160	200	250	315	400	500
Flow	Continuous	40	40	60	60	60	60	60	60	60	60	60
(LPM)	Intermittent	50	50	75	75	75	75	75	75	75	75	75
Speed	Continuous	755	630	750	600	475	375	300	240	190	160	110
(RPM)	Intermittent	970	790	940	750	600	470	375	300	240	200	128
Pressure	Continuous	14	14	17.5	17.5	17.5	16.5	13	11	8.5	8.5	8
(MPA)	Intermittent	17.5	17.5	20	20	20	20	17.5	14	11.5	11.5	9
Torque	Continuous	100	124	190	240	292	363	358	352	360	420	464
(N*.m)	Intermittent	126	156	220	280	340	430	448	470	470	548	580

BMR Installation



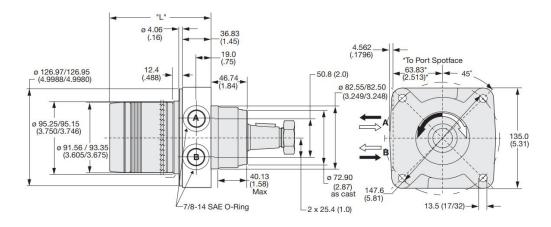
BMJ

Hydraulic Orbital Motor

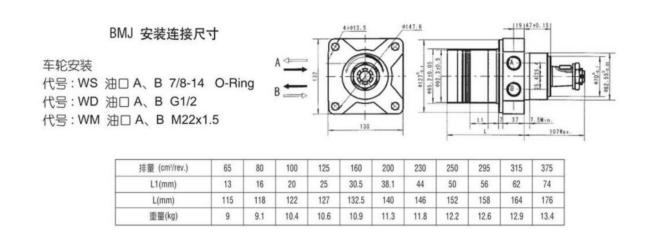


The **BMJ** Series Hydraulic Wheel Motor marries drive train a larger, heavier duty roller bearing and shaft. This compact, economical wheel motor has intermittent pressures to 2750 psi and torques to 5700 lb-in.

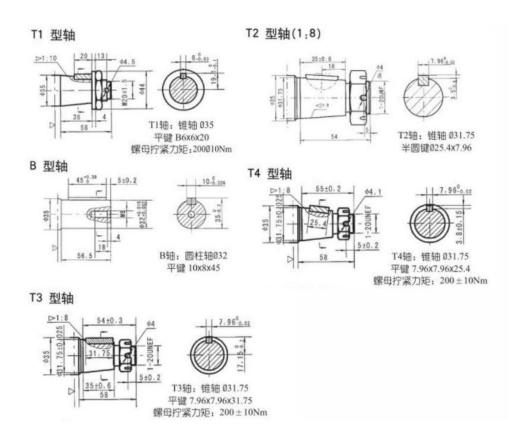
Fei Yue **BMJ** Orbital motor replacement for PARKER TG-475cc Hydraulic Wheel Motor, quality very good and price much more excellent.



Mounting Flange



Mounting Shaft



Specifications sheet

Pos.1	2		3		4	旋向工况	
结构 代码	排量		法兰、止口、油口	轴伸			
无	65 80 100 125 160 200 230 250 295 315 375	WS WD WM	4-013.5 车轮法兰,止口 082.55×7, 油口 7/8-14 0-ring 4-013.5 车轮法兰,止口 082.55×7, 油口 G1/2 4-013.5 车轮法兰,止口 082.55×7, 油口 M22×1.5	T1 T2 T3 T4 B	035链轴.平键 86×6×20 031.75链轴.半圆键 025.4×7.96 031.75链轴.平键 7.96×7.96×31.75 031.75链轴.平键 7.96×7.96×25.4 032直轴.平键 10×8×45	无 R	标准反向

Application:
winches
crane drives
wheel motors for military vehicles
self-driven cranes
excavators
conveyor and feeder drives
mixer and agitator drives
roll mills
drum drives for digesters etc..

BM5/BMS

Hydraulic Orbital Motor

BM5/BMS-2 holes motors



BM5/BMS series motor adapt the advanced Gerotor gear set design with disc distribution flow and high pressure. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

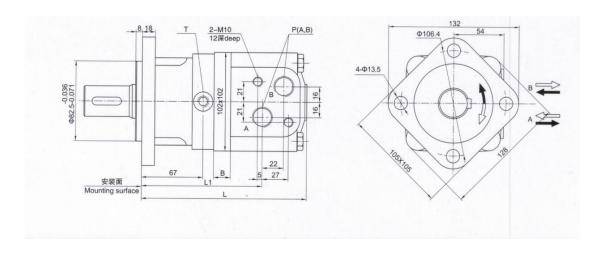
BM5/BMS Main specification

т	WDE	BM5	BM5	BM5							
1	ТҮРЕ		BMS	BMS	BMS						
Displacen	nent(ml/r)	80	100	125	160	200	250	280	305	400	500
Flow	Continuous	75	75	75	75	75	75	75	75	75	75
(LPM)	Intermittent	75	95	95	115	115	115	115	115	115	115
Speed	Continuous	799	742	576	460	365	294	270	246	183	148
(RPM)	Intermittent	908	924	720	713	577	462	420	365	287	230
Pressure	Continuous	21	21	21	21	21	20	20	20	16	12
	Intermittent	30	30	30	26	26	26	24	24	17	14
(MPA)	Peak	30	30	30	30	30	30	30	30	20	17
Torque	Continuous	235	295	385	460	550	650	720	750	800	830
	Intermittent	320	380	540	570	660	820	888	870	920	940
(N*.m)	Peak	320	380	540	635	765	957	962	1000	1020	1057

Note:

- 1. Continuous Data: The Max. Value of operation motor continuously.
- 2. Intermittent Data: The Max. Value of operation motor in 6 seconds per minute.
- 3. A simultaneous max, RPM and max. pressure is not recommended.
- 4. The optimum operating situation should be at the 1/3-2/3 of the continuous operating situation.

BM5/BMS Installation



BMV/BMVE

Hydraulic Orbital Motor



BMV/BMVE series hydraulic motor is a kind of advanced hydraulic motor with planar flow distribution structure. The series of motors use inlaid column rotary stator pair. It has the characteristics of high working pressure, good efficiency and long working life. On the basis of the standard structure, the deformation design can be carried out according to the user's needs. Characteristic features:

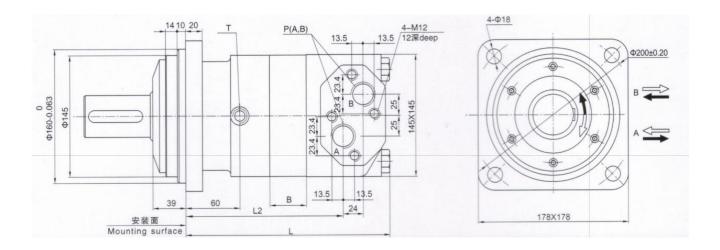
- 1. Advanced design of stator parameters, low starting pressure, high efficiency and good retention.
- 2. High working, pressure and high output torque. Tapered roller bearing structure, strong ability to bearing shaft and radial load, so that the motor can directly drive the working mechanism, expand the scope of use.
- 3.Advanced planar flow distribution structure ensures high accuracy of motor flow distribution, strong automatic compensation function after wear, high volume efficiency, long life of motor, stable speed of motor and stable load speed characteristics.

Ту	pe	BMV BMVE 315	BMV BMVE 400	BMV BMVE 500	BMV BMVE 630	BMV BMVE 800	BMV BMVE 1000
Displaceme	ent(cm3/rev.)	333	419	518	666	801	990
	Rated	335	270	215	170	140	105
Speed (rpm)	Continuous	510	500	400	320	250	200
	Intermittent	630	600	480	380	300	240
	Rated	730	1020	1210	1422	1590	2015
	Continuous	920	1180	1460	166	1880	2015
Torque (N.m)	Intermittent	1110	1410	1760	1940	2110	2280
	Peak value	1290	1640	2050	2210	2470	2400
Output	Continuous	38	47	47	40	33	28.6
power(kW)	Intermittent	46	56	56	56	44	40
	Rated	16	16	16	16	14	14
Max.inlet	Continuous	20	20	20	18	16	14
pressure (MPa)	Intermittent	24	24	24	21	18	16
	Peak value	28	28	28	24	21	18
	Rated	110	110	110	110	110	110
Flow (L/min)	Continuous	160	200	200	200	200	200
	Intermittent	200	240	240	240	240	240
	Rated	21	21	21	21	21	21
Inlet pressure	Continuous	21	21	21	21	21	21
(MPa)	Intermittent	25	25	25	25	25	25
	Peak value	30	30	30	30	30	30
Weig	ht(kg)	31.8	32.6	33.5	34.9	36.5	38.6

Note:

- $1. \\ Rated speed and torque \ refer to the output value \ under \ rated \ flow \ and \ pressure.$
- 2. Continuous value refers to the maximum value that the displacement motor can work continuously.
- 3.Intermittent value refers to the maximum value of the displacement motor working for 6 seconds in a minute.
- 4.Peak value is the maximum of 0.6 seconds in a minute for the displacement motor.

BMV/BMVE Installation



Mounting Flange

Flange Drain port T 179Max. 60.0 40.0 4-Ø18.0

BMT

Hydraulic Orbital Motor

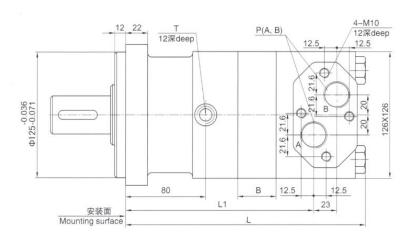


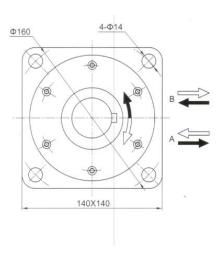
BMT series motor adapt the advanced gerloer gear set design with disv distribution flow and high pressure. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

Characteristic feature:

- 1.Advanced manufacturing devices for the geroler gear set, which use low pressure of start-up, provide smooth and reliable operation and high efficiency.
- 2.Advanced design in distribution flow, which can automatically compensate in operating with high volume efficiency and long life, provide smooth and reliable operation.

BMT Installation





BMT Main Specification

DIVIT IVIAITI SP										
Туре	2	BMT	BMT 2	BMT	BMT	BMT	BMT	BMT	BMT	BMT
Турс		160	00	230	250	315	400	500	630	800
Geome displacement(161.1	201.4	232.5	251.8	326.3	410.9	523.6	629.1	801.8
	Rated	470	475	412	381	294	228	183	150	121
Max.speed (rpm)	Continuous	625	625	536	500	380	305	240	196	154
	Intermittent	780	750	643	600	460	365	285	233	185
	Rated	379	471	530	582	758	896	1063	1156	1207
Max.torque(N.m)	Continuous	470	590	670	730	950	1080	1220	1318	1464
wax.torque(1v.m)	Intermittent	560	710	821	880	1140	1260	1370	1498	1520
	Peak value	669	838	958	1036	1346.3	1450.3	1643.8	1618.8	1665
	Rated	18.7	23.4	23.2	23.2	23.2	21.4	20.4	18.2	15.3
Max.output(KW)	Continuous	27.7	34.9	34.7	34.5	34.9	31.2	28.8	25.3	22.2
Max.output(KW)	Intermittent	32	40	40	40	40	35	35	27.5	26.8
	Rated	16	16	16	16	16	15	14	12	10.5
M	Continuous	20	20	20	20	20	18	16	14	12.5
Max.pressure difference(Mpa)	Intermittent	24	24	24	24	24	21	18	16	13
up.w/	Peak value	28	28	28	28	28	24	21	19	16
	Rated	80	100	100	100	100	100	100	100	100
Max.inlet(L/min)	Continuous	100	125	125	125	125	125	125	125	125
Witax.iiiiCt(L/iiiiii)	Intermittent	125	150	150	150	150	150	150	150	150
	Rated	21	21	21	21	21	21	21	21	21
M. The	Continuous	21	21	21	21	21	21	21	21	21
Max.inlet pressure(MPa)	Intermittent	25	25	25	25	25	25	25	25	25
probaro(mi u)	Peak value	30	30	30	30	30	30	30	30	30
Weight((Kg)	19.5	20	20.4	20.5	21	22	23	24	25

NOTE:

- 1. Continuous pressure: Max.value of operating motor continuously
- 2.Intermittent pressure: Max.value of operating motor in 6 seconds perminute.
- 3.Peak pressure: Max.value of operating motor in 0.6 second per minute.

Flange

Flange 4 Drain porl T A -143Max.-60.0 -- 9.0 0 ø125.0 143Max. 4-Ø14.0 -31.0 **¢**160.0±0.4 18.0-C Flange D B Flange K6 31.0 Drain port T 60.0ø6.0 4-Ø14.0 28.0 ø127.0 Ø6.0 ø160.0 50.0 42.0 8.0 -- 18.0 -- ø22.0 4-Ø14.0 ø162.0±0.4 -31.0 18.0 --**Shaft** B A 5.0 -70.0 **-** 12.0 ∮ Ø38.1 Ø10. 43.0-Ø40k6 Ø12.5 8-16UNC 20.0 4.0 -4.0 → 25.0 82 82shaft F: Splined 17-DP12/24 Shaft M:Cylindrical shaft Ø40 Parallel key12x8x70

BMM/OMM

Hydraulic Orbital Motor



BMM

The BMM/OMM series orbital hydraulic motor is a micro shaft distribution motor that can be installed in a small space. It adopts integral rotary stator, 4/5 tooth structure, compact structure, light weight and high power density. Its characteristics:

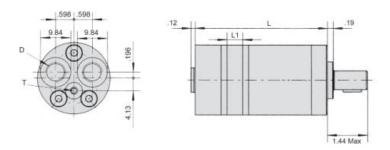
The whole type of rotary stator adopts the world's most advanced processing technology to ensure the small size, high efficiency, high speed and long life.

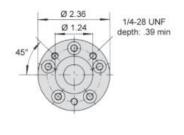
The shaft seal can bear high pressure and can be used in series or in parallel.

Advanced structural design and high power density.

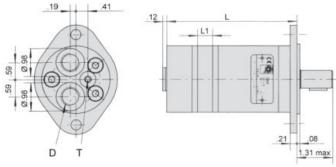
BMM/OMM Installation

U - Circle Flange









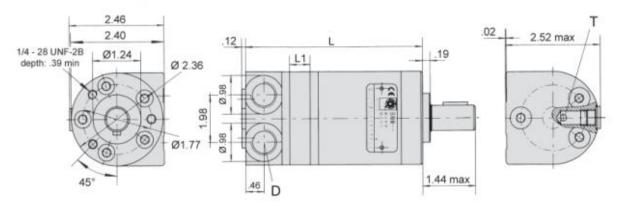
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116		D) [m	m
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	0/	/	Ц
45°	7		
	2 x Ø.35		

MODEL	U Mo	ount	F Mount			
MODEL	L	L1	L	L1		
BMM 8	4.09"	.13"	4.21"	.13"		
BMM 12.5	4.17"	.21"	4.29"	.21"		
BMM 20	4.29"	.33"	4.40"	.33"		
BMM 32	4.48"	.53"	4.62"	.53"		
BMM 40	4.64"	.67"	4.76"	.67"		
BMM 50	4.80"	.84"	4.92"	.84"		

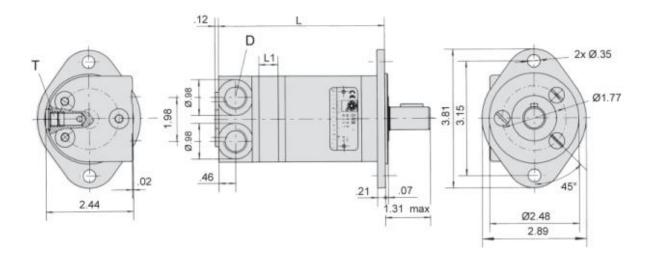
Port Sizes	U Mount	F Mount
D	9/16 - 18 SAE	9/16 - 18 SAE
Т	3/8 - 24 SAE	3/8 - 24 SAE

BMM/OMM Side Port Installation Data

U - Circle Flange



F - 2-Bolt



MODEL	U Mo	ount	F Mount			
MODEL	L	L1	L	L1		
BMM 8	4.13"	.13"	4.29"	.13"		
BMM 12.5	4.21"	.21"	4.37"	.21"		
BMM 20	4.33"	.33"	4.48"	.33"		
BMM 32	4.52"	.53"	4.68"	.53"		
BMM 40	4.64"	.67"	4.80"	.67"		
BMM 50	4.84"	.84"	5.00"	.84"		

Ports	U Mount	F Mount
D	9/16 - 18 SAE	9/16 - 18 SAE
Т	3/8 - 24 SAE	3/8 - 24 SAE



BMER

Hydraulic Orbital Motor

BMER series orbital hydraulic motor is an advanced hydraulic motor with high-speed distribution structure. The series of motors use inlaid-column rotary stator. It has the characteristics of high working pressure, high working efficiency, good stability at low speed, high volume efficiency, good efficiency and long working life. On the basis of the standard structure, the multi-functional variant design can be designed according to the user's needs. Its characteristics are:

The advanced design of rotor stator parameters has the advantages of low starting pressure, high efficiency and good retention

High working pressure and high output torque. With needle roller bearing structure, bearing axle and strong radial load capacity, the motor can directly drive the working mechanism and expand the scope of use.

Advanced high-speed flow distribution structure ensures high accuracy of motor flow distribution, strong automatic compensation ability after wear, high volume efficiency, long life of motor, stable speed of motor and stable load speed characteristics.

The valve distribution system has the characteristics of low leakage. The rotating speed of the valve plate is six times of the output speed, which makes the motor have high flow distribution accuracy, strong automatic compensation ability after wear and tear, and ensures high volume efficiency. The motor has the characteristics of smooth movement at low speed.

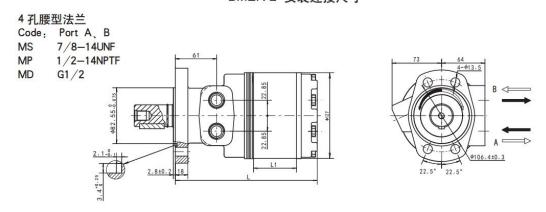
BMER Main Specification

Туре	,	BMER						
		160	200	250	300	350	475	750
Displacen	nent	156	196	257	296	345	462	745
Max.Speed (rpm)	Continuous	375	330	290	250	220	160	100
	Intermittent	470	425	350	315	270	195	120
	Continuous	450	530	700	810	905	1085	1050
Max.Turque (N.m)	Intermittent	525	600	790	930	1035	1180	1180
	Peak value	590	750	980	1120	1285	1260	1370
Max.Power (KW)	Continuous	15.0	15.5	17.5	18.0	17.5	14.5	8.0
	Intermittent	17.5	18.0	20.0	21.0	20.0	16.5	10.0
	Continuous	20.5	20.5	20.5	20.5	20.5	17.5	10.5
Max.Pressure (Mpa)	Intermittent	24	24	24	24	24	19	12
	Peak value	27.6	27.6	27.6	27.6	27.6	20.5	14
Max.Flow (L/min)	Continuous	60	70	75	80	80	75	75
	Intermittent	75	85	90	95	95	90	90

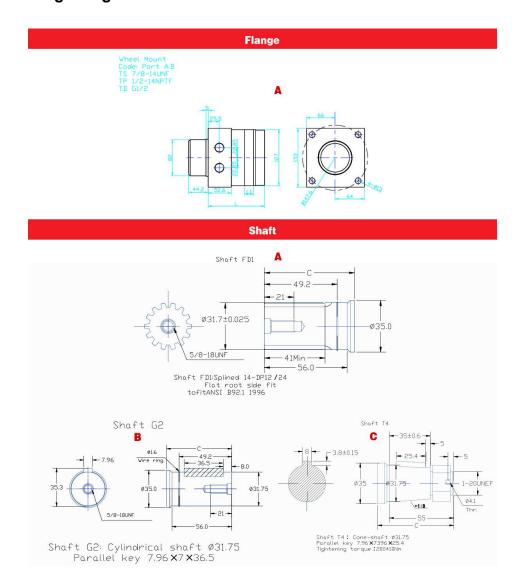
- 1.Rated speed and torque refer to the output value under rated flow and pressure.
- 2.Continuous value refers to the maximum value that the displacement motor can work continuously.
- 3.Intermittent value refers to the maximum value of the displacement motor working for 6 seconds in a minute.
- 4. Peak value is the maximum of 0.6 seconds in a minute for the displacement motor.

BMER Installation

BMER-2 安装连接尺寸



BMT Mounting Flange & Shaft



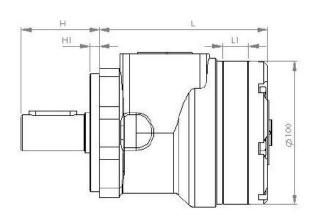
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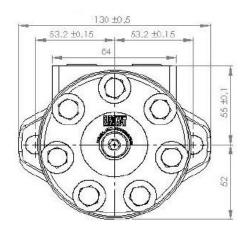
Hydraulic Orbital Motor

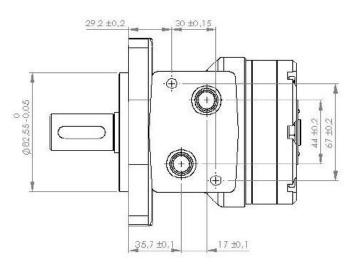


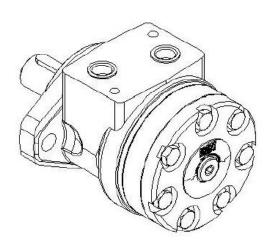
Hydraulic Motor OK series are small volume, economical type, which is designed with shaft distribution flow, which adapt the Gerotor gear set design and provide compact volume, high power and low weight.

OK Installation









OK Main Specification

ТҮРЕ		OK 50	OK 80	OK 100	OK 125	OK 160	OK 200	OK 250	OK 300	OK 400
Displacement(ml/r)		51.5	80.30	99.8	125.5	159.6	199.80	250.10	315.70	397
Flow (LPM)	Continuous	40	60	60	60	60	60	60	60	60
	Picco-Peak	50	75	75	75	75	75	75	75	75
Speed (RPM)	Continuous	775	750	600	475	375	300	240	190	150
	Intermittent	970	940	750	600	470	375	300	240	185
Output (KW)	Continuous	9	10.4	10.8	10.8	10.4	8.8	8.1	7.4	6.2
	Intermittent	10.4	12.6	12.8	12.5	11.5	10.2	9.4	7.8	7.1
Pressure (MPA)	Continuous	140	140	140	140	140	125	110	90	75
	Intermittent	175	175	175	175	175	155	140	125	90
	Picco-Peak	225	225	225	225	225	225	200	150	120
Torque (N*.m)	Continuous	10	15.7	19.8	25	32	34	40	40	40
	Intermittent	13	19.5	24	30	39	42	47	50	50
	Picco-Peak	17	27	32	37	46	56	64	65	65

Intermittent operation: the permisssible values may occur for max. 10% of every minute

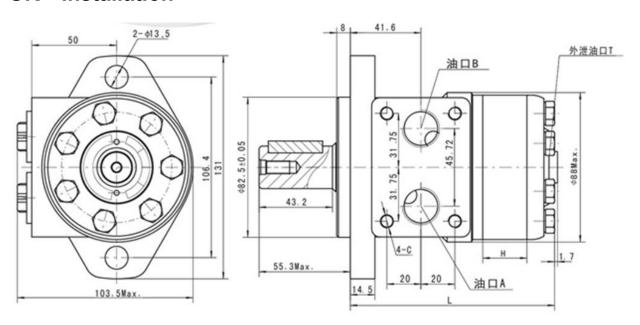
OZ

Hydraulic Orbital Motor

OZ series Hydraulic motor are small volume, economical type, which is designed with shaft distribution flow, which adapt the Gerotor gear set design and provide compact volume, high power and low weight.



OK Installation



OK Main Specification

ТҮРЕ		OZ	ΟZ	ΟZ	OZ	ΟZ	OZ	ΟZ	ΟZ	ΟZ	OZ
		36	50	80	100	125	160	200	250	315	400
Displacement(ml/r)		37	51.7	77.7	96.2	117.90	155.50	189.90	231	311.70	386.20
Flow (LPM)	Continuous	40	40	40	40	40	40	40	40	40	40
Speed (RPM)	Continuous	108 1	774	515	416	339	257	211	173	128	104
Output (KW)	Continuous	5.2	5.2	5.2	5.2	5.2	5.2	5.2	4.6	3.4	3.4
	Intermittent	8.6	8.6	8.6	8.6	8.6	8.6	8.6	7	5.8	5.8
Pressure (MPA)	Continuous	10.5	10.5	10.5	10.5	10.5	10.5	10.5	9	7	7
	Intermittent	14	14	14	14	14	14	14	11.5	10.5	10.5
Torque (N*.m)	Continuous	51	73	106	140	162	216	264	281	312	392
	Intermittent	68	96	143	178	218	288	351	351	433	582
Intermittent operation:the permisssiblevalues may occur for max.10% of every minute											