● INM Series Hydraulic Motors

1. Brief Introduction

INM series motors are a result of the many years' of experience based on Italy technology, and incorporate a number of design variations with respect to the technology intended to increase the strength of the motor casings and the load capacity of the internal dynamic components. The result is the series of motors with high continuous power ratings, both because of the reduced internal specific loads, and because of the high mechanical and volumetric efficiency that contribute in reducing the amount of heat produced and therefore also the negative effects associated with it. The main characteristics are as follows:

(1) The side loading between the piston and swiveling cylinder has been eliminated; the hydrostatic balance is built between the piston feet; the pistons transmit load to the shaft via a rolling bearing. All above reduces the friction loss in the load transmission. Therefore INM series hydraulic motor features high mechanical efficiency and high starting torque (above 0.92).

(2) Rotary axial distributor (patent technology) ensures simply and reliable performance, good sealing capability, low leakage. The plastic piston ring between pistons and cylinder reduces the leakage, so the volumetric efficiency of motor is very high (more than 0.99).

(3) Due to the reduced friction loss in structure and improved sealing capability, so the motor can operate at low speeds with a high degree of speed stability, even if at 1r/min of speed. Hereby the speed control range is wide (the speed control ratio is up to 1000).

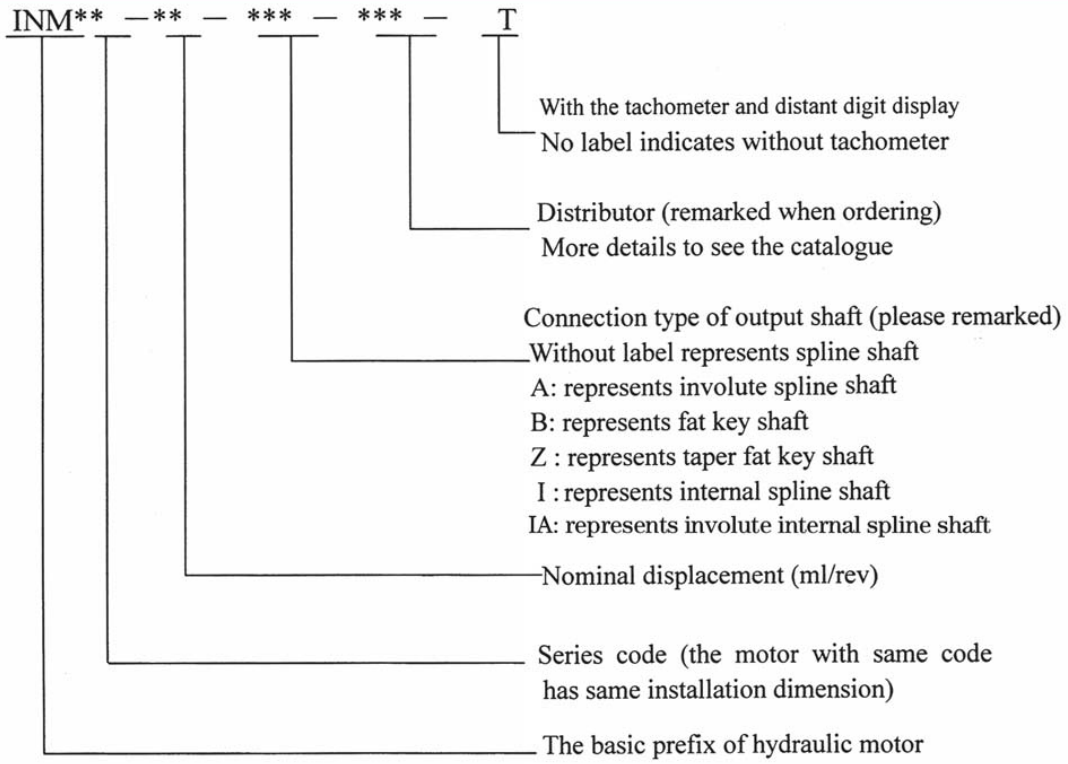
(4) The pistons and bearing sleeve is matched well via supporting ring to eliminate the clearance. So the series motors can run in pump condition. When the inlet port and outlet port is closed, the motors could run in freewheeling condition.

(5) The working pressure of the series motor is very high, and the maximum pressure is up to 45MPa. The motor also features light weight, small size and high specific power,

(6) Because of simple structure, reasonable design, and using large load capacity bearing, the series motors has many excellent features as follow good reliability, long lifetime and low noise. transmission shaft endure radial load. Circumrotate way could be reverse.

Due to above these advantages, it has been widely applied in all kinds of hydraulic transmission system such as plastic injection machine, ship and deck machinery, construction machinery and equipment, hoist and transport vehicle, heavy metallurgical machinery, petroleum and mine machine, light industry equipment, lath, light industry equipment and drilling machine etc. In particular, it can be well available in driving screw rod of injection machine, hoisting winches and capstan, and driving various slew drives.

2. Model options



3. Options example

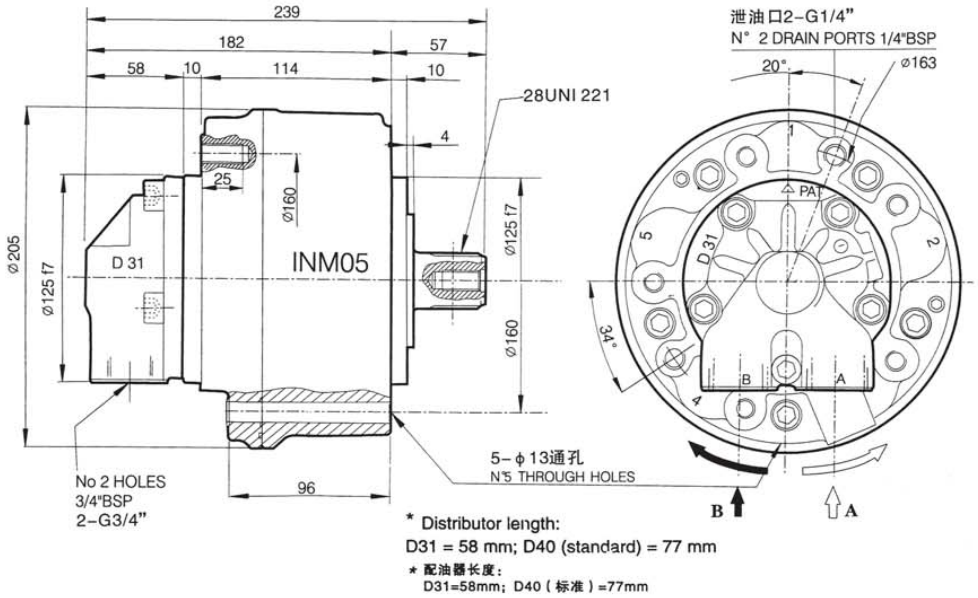
INM2-400BD31 represents that the motor is the 2 series unit of INM hydraulic motor. The nominal displacement is 400ml/rev, the output shaft is flat key shaft, and distributor model is D31 without tachometer. Please fill in the complete code options when ordering. If there are any specific requests, please noted in detail in delivery contract or contact our company

4. INM系列液压马达技术性能参数

型 号 TYPE	理论排量 (ml/r) THEORIC DISPLACEMENT	额定压力 (MPa) RATED PRESSURE	尖峰压力 (MPa) PEAK PRESSURE	额定扭矩 (N·m) RATED TORQUE	单位扭矩 (N·m/Mpa) SPECIFIC TORQUE	连续转速 (r/min) CONT SPEED	最高转速 (r/min) Max. SPEED	重 量 (kg) WEIGHT
INM05-60	59	25	45	235	9.4	1~700	1000	22
INM05-75	74	25	42.5	295	11.8	1~700	1000	
INM05-90	86	25	37.5	343	13.7	1~700	1000	
INM05-110	115	25	40	458	18.3	1~650	900	
INM05-130	129	25	37.5	513	20.5	1~650	900	
INM05-150	151	25	32.5	600	24	1~650	900	
INM05-170	166	25	32.5	660	26.4	1~600	800	
INM05-200	191	25	28	760	30.4	1~600	800	
INM1-100	99	25	42.5	385	15.4	1~550	1000	31
INM1-150	154	25	40	600	24	1~550	1000	
INM1-175	172	25	37.5	670	26.8	1~550	900	
INM1-200	201	25	35	785	31.4	1~550	800	
INM1-250	243	25	35	950	38	1~450	700	
INM1-300	290	25	30	1130	45.2	1~350	650	
INM1-320	314	25	28	1225	49	1~350	600	
INM1-350	340	25	28	1327	53	1~300	600	
INM2-200	192	25	42.5	750	30	0.7~550	800	51
INM2-250	251	25	42.5	980	39.2	0.7~550	800	
INM2-300	304	25	40	1188	47.5	0.7~500	750	
INM2-350	347	25	37.5	1355	54.2	0.7~500	750	
INM2-420	425	25	35	1658	66.3	0.7~450	750	
INM2-500	493	25	35	1923	76.9	0.7~450	700	
INM2-600	565	25	30	2208	88.3	0.7~450	700	
INM2-630	623	25	28	2433	97.3	0.7~400	650	
INM3-425	426	25	42.5	1660	66.4	0.5~500	650	87
INM3-500	486	25	42.5	1895	75.8	0.5~450	600	
INM3-600	595	25	40	2320	92.8	0.5~450	575	
INM3-700	690	25	35	2700	108	0.5~400	500	
INM3-800	792	25	35	3100	124	0.5~400	500	
INM3-900	873	25	35	3400	136	0.5~350	400	
INM3-1000	987	25	28	3850	154	0.5~300	350	
INM4-600	616	25	40	2403	96.1	0.4~400	550	120
INM4-800	793	25	40	3100	124	0.4~350	550	
INM4-900	904	25	37.5	3525	141	0.4~325	450	
INM4-1000	1022	25	35	4000	160	0.4~300	400	
INM4-1100	1116	25	35	4350	174	0.4~275	400	
INM4-1300	1316	25	28	5125	205	0.4~225	350	
INM5-800	807	25	42.5	3150	126	0.3~325	450	
INM5-1000	1039	25	42.5	4050	162	0.3~300	450	175
INM5-1200	1185	25	40	4625	185	0.3~300	400	
INM5-1300	1340	25	40	5225	209	0.3~300	400	
INM5-1450	1462	25	37.5	5700	228	0.3~275	350	
INM5-1600	1634	25	37.5	6350	254	0.3~250	300	
INM5-1800	1816	25	35	7075	283	0.3~250	300	
INM5-2000	2007	25	35	7825	313	0.3~200	250	
INM6-1700	1690	25	45	6600	264	0.2~250	400	275
INM6-2100	2127	25	40	8300	332	0.2~225	350	
INM6-2500	2513	25	35	9800	392	0.2~200	300	
INM6-3000	3041	25	30	11875	475	0.2~175	250	
INM7-1200	1214	25	30	4125	165	0.2~325	380	310
INM7-2000	2007	25	35	7975	319	0.2~350	450	
INM7-2500	2526	25	35	10050	402	0.2~300	350	
INM7-3000	2985	25	35	11877	475	0.2~250	300	
INM7-3300	3290	25	35	13075	523	0.2~220	275	
INM7-3600	3611	25	32	14350	574	0.2~200	250	
INM7-4300	4298	25	30	17100	684	0.2~175	225	

5. INM05系列液压马达安装连接尺寸图及性能曲线

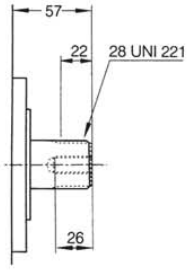
DIMENSIONS



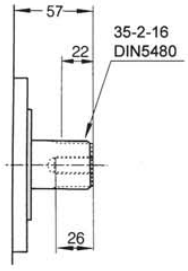
* Distributor length:
D31 = 58 mm; D40 (standard) = 77 mm
* 配油器长度：
D31=58mm；D40（标准）=77mm

SHAFTS 轴伸型式

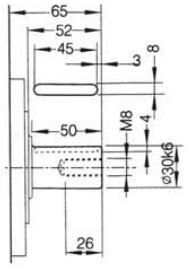
Splined
矩形外花键



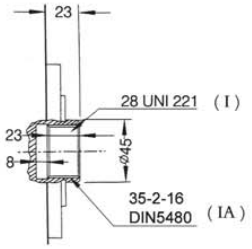
Splined A
渐开线外花键 A



Cylindrical B
圆柱平键 B

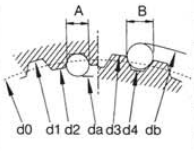


Internal spline I、IA
内花键 I、IA



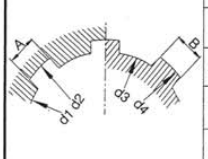
SPLINE DATA – 花键参数

35-2-16 DIN 5480



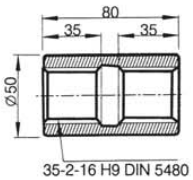
d0	Ø32.0	
d1	Ø35.0 $^{+0.520}_{+0}$	H14
d2	Ø31.0 $^{+0.160}_{+0}$	H11
A	Ø3.5	
da	Ø27.711	H11
d3	Ø34.6 $^{-0}_{-0.160}$	h11
d4	Ø30.6 $^{-0}_{-0.520}$	h14
B	Ø4.0	
db	Ø39.000	f8

28 UNI 221(6-28-34) DIN 5463



d1	Ø28.0 $^{+0.021}_{+0}$	H7
d2	Ø341 $^{+0.160}_{+0}$	H11
A	7.0 $^{+0.028}_{+0.013}$	F7
d3	Ø28.0 $^{-0.007}_{-0.020}$	g6
d4	Ø34.0 $^{-0.055}_{-0.160}$	h14
B	7.0 $^{-0.013}_{-0.026}$	f7

ADAPTORS
联轴器



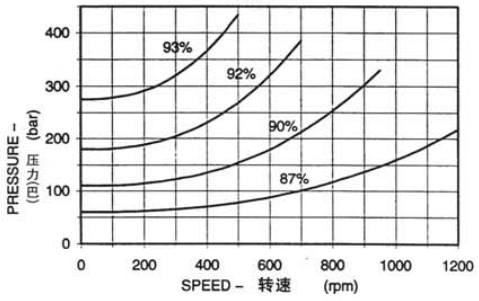
PERFORMANCE

The graphs indicate the typical performance characteristics of the 150 cc motor operating with mineral oil with viscosity 40 cSt at 50 ℃.

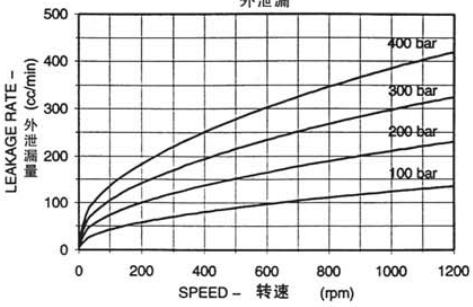
特性曲线

下列图表为排量150cc的马达，在工作液采用矿物油，粘度40cSt,油温50℃工作时的典型特性曲线。

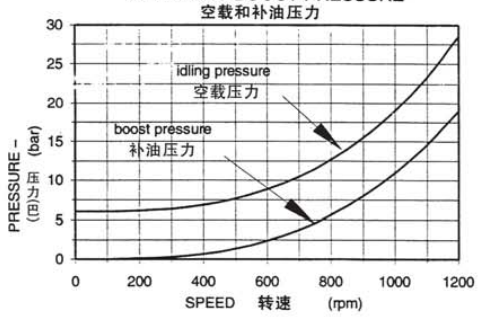
MECHANICAL EFFICIENCY
机械效率



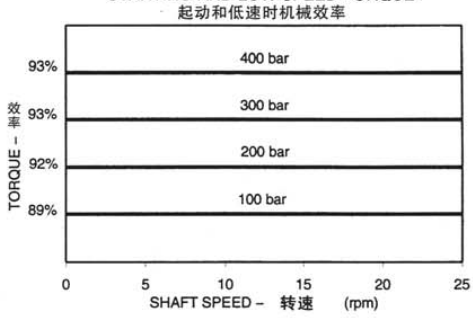
VOLUMETRIC EFFICIENCY
外泄漏



IDLING AND BOOST PRESSURE
空载和补油压力



STARTING AND LOW SPEED TORQUE
起动和低速时机械效率



BEARING LIFETIME

The graph refers to the motor with the optional roller bearings (option H).
Note that the average lifetime of a bearing (B_{50} lifetime) is approximately 5 times the B_{10} lifetime.

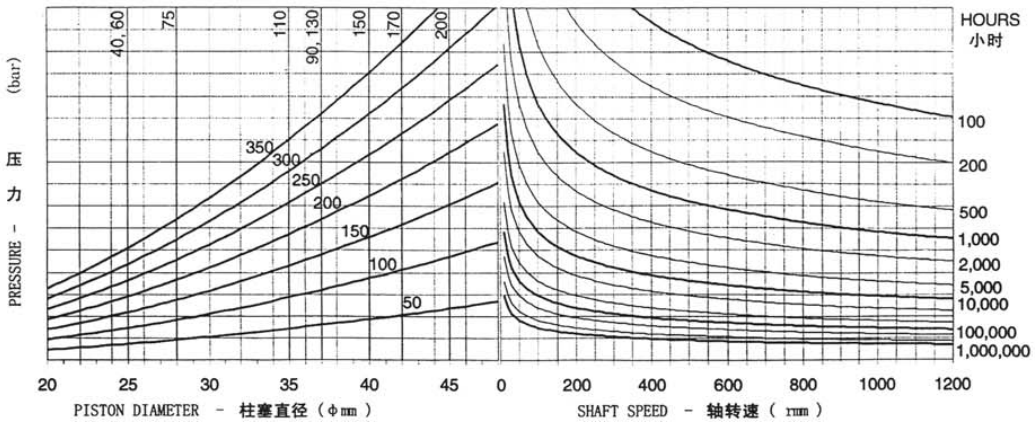
轴承寿命

该图表适用配置滚柱轴承（代号H）的马达。

注意轴承平均寿命（B_{50}寿命）大约是B_{10}寿命的5倍。

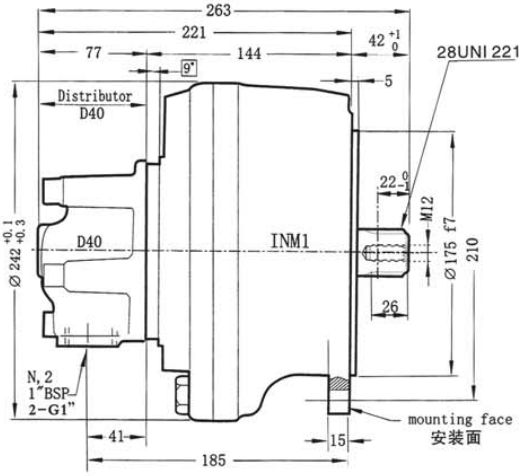
MOTOR DISPLACEMENT – 马达排量

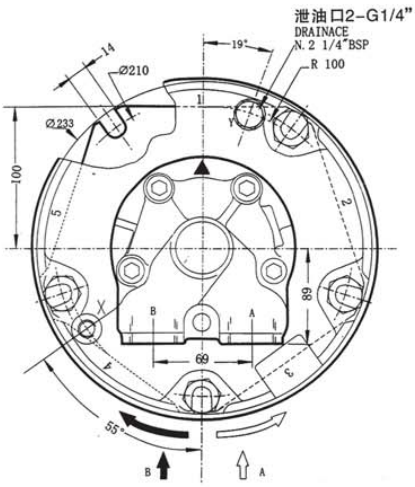
B10 LIFETIME – B10寿命



6. INM1系列液压马达 INM1 Series Hydraulic Motors

DIMENSIONS



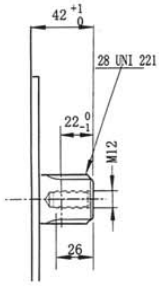


Flange and shaft dimensions are the same as for GM1、M1 and P1 series motors

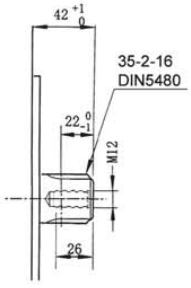
法兰和轴承尺寸与GM1、M1 和 P1马达系列相同

SHAFTS 轴伸型式

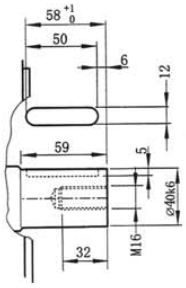
Splined
矩形外花键



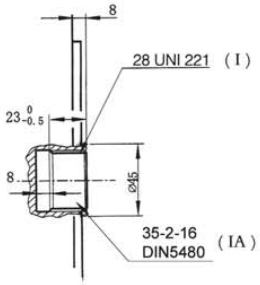
Splined A
渐开线外花键 A



Cylindrical B
圆柱平键 B

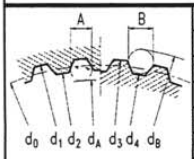


Internal spline I、IA
内花键 I、IA



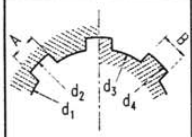
SPLINE DATA – 花键参数

35-2-16 DIN 5480



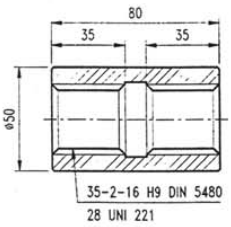
d0	Ø32.0
d1	Ø35.0 +0.520 +0 H14
d2	Ø31.0 +0.160 +0 H11
A	Ø3.5
da	Ø27.711 H11
d3	Ø34.6 -0 -0.160 h11
d4	Ø30.6 -0 -0.520 h14
B	Ø4.0
db	Ø39.000 f8

28 UNI 221 (6-28-34 DIN 5463)



d1	Ø28.0 +0.021 +0 H7
d2	Ø341. +0.160 +0 H11
A	7.0 +0.028 F7
d3	Ø28.0 -0.007 -0.020 g6
d4	Ø34.0 -0.065 -0.160 h14
B	7.0 -0.028 f7

ADAPTORS
联轴器



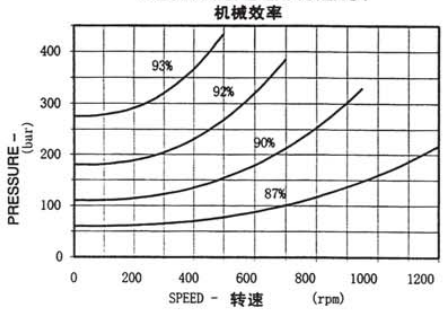
PERFORMANCE

The graphs indicate the typical performance characteristics of the 150 cc motor operating with mineral oil with viscosity 40 cSt at 50 ℃.

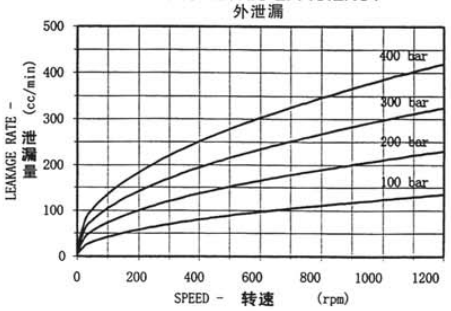
特性曲线

下列图表为排量150cc的马达，在工作液采用矿物油，粘度40cSt,油温50℃工作时的典型特性曲线。

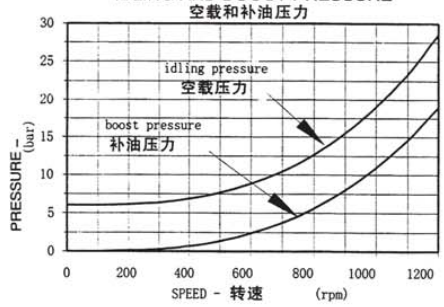
MECHANICAL EFFICIENCY
机械效率



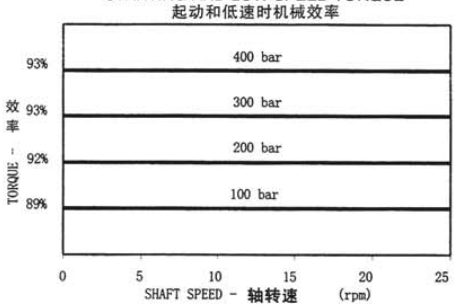
VOLUMETRIC EFFICIENCY
外泄漏



IDLING AND BOOST PRESSURE
空载和补油压力



STARTING AND LOW SPEED TORQUE
起动和低速时机械效率



BEARING LIFETIME

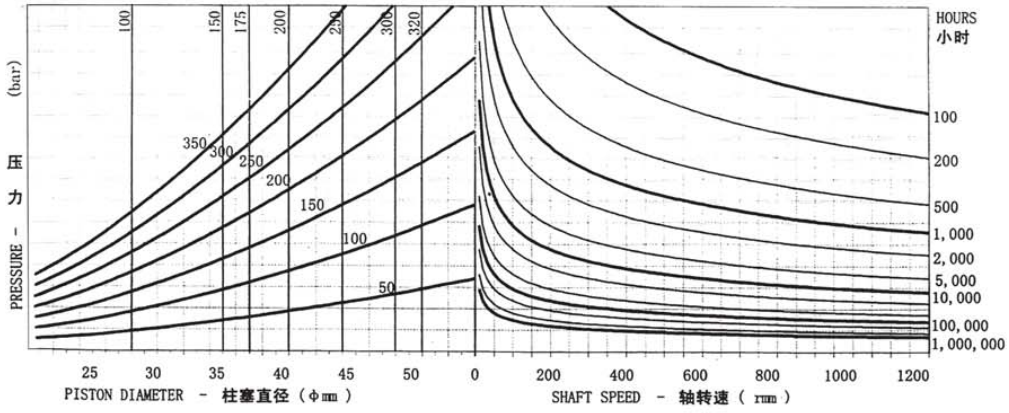
The graph refers to the motor with the optional roller bearings (option H) recommended for most applications. Note that the average lifetime of a bearing (B_{50} lifetime) is approximately 5 times the B_{10} lifetime.

轴承寿命

该图表适用配置滚柱轴承（代号H）的马达，大多数情况下推荐使用。
注意轴承平均寿命（B_{50}寿命）大约是B_{10}寿命的5倍。

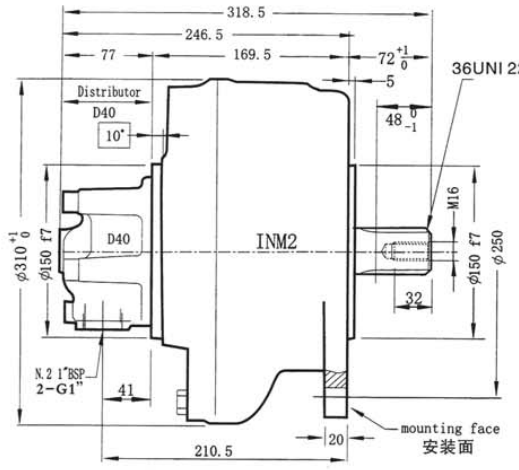
MOTOR DISPLACEMENT - 马达排量

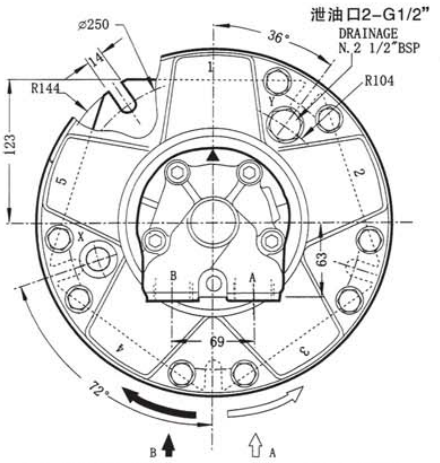
B10 LIFETIME - B10寿命



7. INM2系列液压马达 INM2 Series Hydraulic Motors

DIMENSIONS



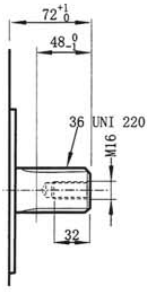


Flange and shaft dimensions are the same as for GM2、M3 and P3 series motors.

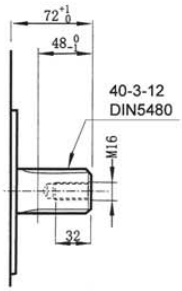
法兰和轴承尺寸与GM2、M3 和 P3马达系列相同

SHAFTS 轴伸型式

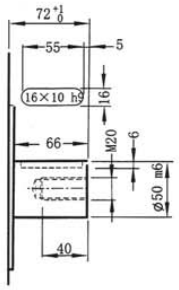
Splined
矩形外花键



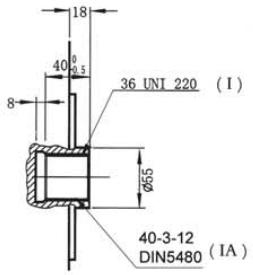
Splined A
渐开线外花键 A



Cylindrical B
圆柱平键 B



Internal spline I、IA
内花键 I、IA

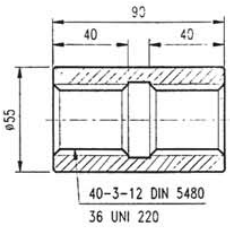


SPLINE DATA – 花键参数

40-3-12 DIN 5480		
d0	ø36.0	
d1	ø40.0 -0.620	H14
d2	ø34.0 -0.160	H11
A	ø5.25	
da	ø28.964	H11
d3	ø39.4 -0 -0.160	h11
d4	ø33.4 -0 -0.620	h14
B	ø6.0	
db	ø45.989	f8

36 UNI 220 (DIN 5462)		
d1	ø36.0 +0.025 +0	H7
d2	ø40.0 +0.160 +0	H11
A	7.0 +0.028	F7
d3	ø36.0 -0.009 -0.025	g6
d4	ø40.0 -0.065 -0.160	d11
B	7.0 -0.028	f7

ADAPTORS
联轴器



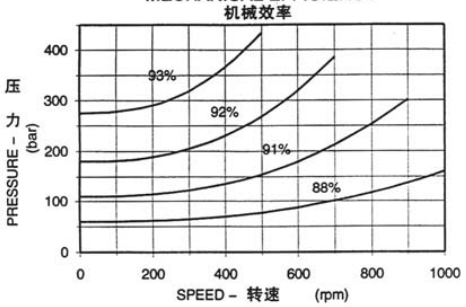
PERFORMANCE

The graphs indicate the typical performance characteristics of the 300cc motor operating with mineral oil with viscosity 40 cSt at 50 °C.

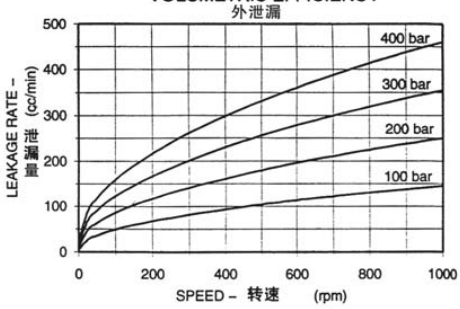
特性曲线

下列图表为排量300cc的马达，在工作液采用矿物油，粘度40cSt,油温50℃工作时的典型特性曲线。

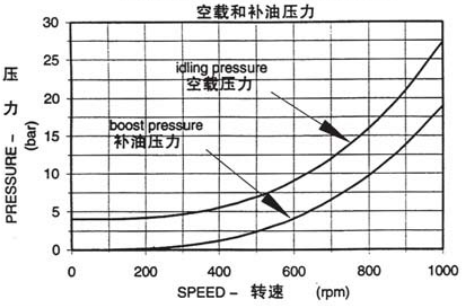
MECHANICAL EFFICIENCY
机械效率



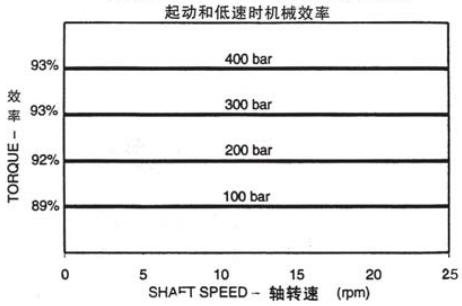
VOLUMETRIC EFFICIENCY
外泄漏



IDLING AND BOOST PRESSURE
空载和补油压力



STARTING AND LOW SPEED TORQUE
起动和低速时机械效率



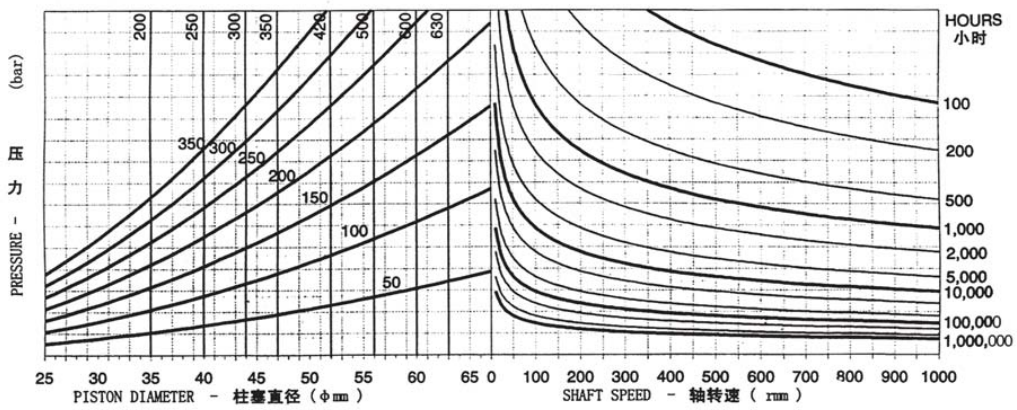
BEARING LIFETIME

The graph refers to the motor with the optional roller bearings (option H) recommended for most applications. Note that the average lifetime of a bearing (B_{50} lifetime) is approximately 5 times the B_{10} lifetime.

轴承寿命

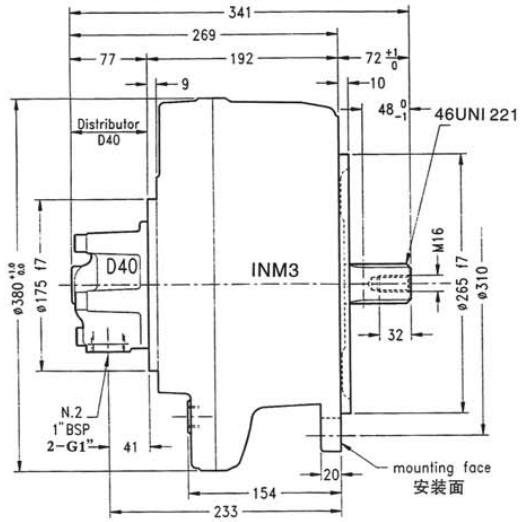
该图表适用配置滚柱轴承（代号H）的马达，大多数情况下推荐使用。
注意轴承平均寿命（B_{50}寿命）大约是B_{10}寿命的5倍。

MOTOR DISPLACEMENT – 马达排量
B10 LIFETIME – B10寿命



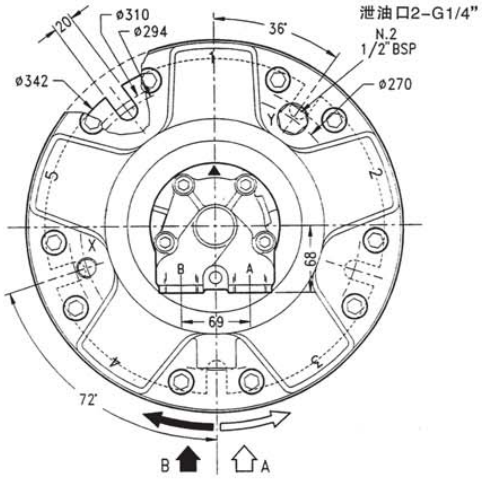
8. INM 3系列液压马达 INM3 Series Hydraulic Motors

Flange dimensions are as in M5 series motors, shaft dimensions are as in M3 series motors



Available also GM3 complitely interch.

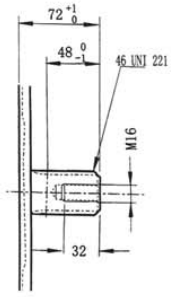
法兰和轴承尺寸与 M5系列马达系列相同。
轴尺寸与M3系列马达相同。



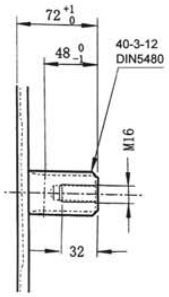
外形尺寸尺寸完全适用GM3，

SHAFTS 轴伸型式

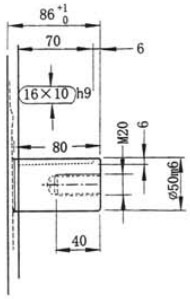
Splined
矩形外花键



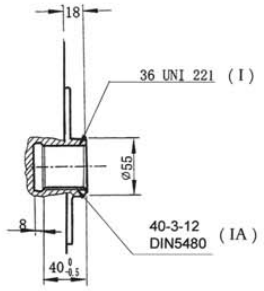
Splined A
渐开线外花键 A



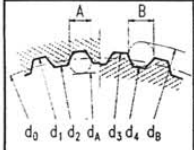
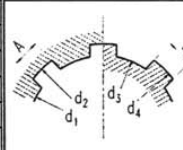
Cylindrical B
圆柱平键 B



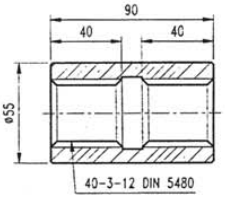
Internal spline I、IA
内花键 I、IA



SPLINE DATA – 花键参数

40–3–12 DIN 5480			46 UNI 221 (8–46–54 DIN 5463)		
	d0	ø 36.0		d1	ø 46.0 +0.030 +0 H7
	d1	ø 40.0 +0.620 +0 H14		d2	ø 54.0 +0.190 +0 H11
	d2	ø 34.0 +0.160 +0 H11		A	9.0 +0.028 F7
	A	ø 5.25		d3	ø 46.0 -0.009 -0.025 g6
	da	ø 28.964 H11		d4	ø 54.0 -0.100 -0.290 d11
	d3	ø 39.4 -0 -0.160 h11		B	9.0 -0.028 f7
	d4	ø 33.4 -0 -0.620 h14			
	B	ø 6.0			
	db	ø 45.989 f8			

ADAPTORS
联轴器



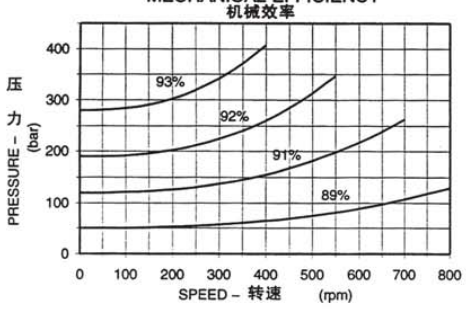
PERFORMANCE

The graphs indicate the typical performance characteristics of the 600cc motor operating with mineral oil with viscosity 40 cSt at 50 ℃.

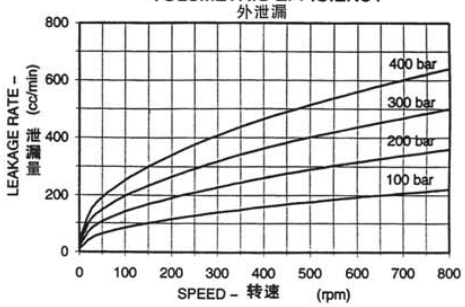
特性曲线

下列图表为排量600cc的马达，在工作液采用矿物油，粘度40cSt,油温50℃工作时的典型特性曲线。

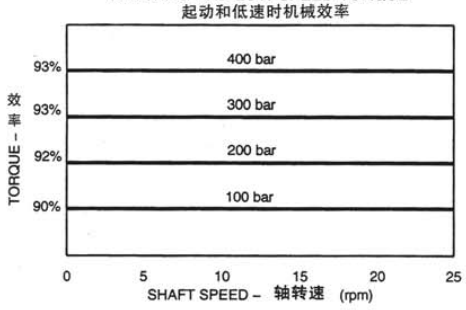
MECHANICAL EFFICIENCY
机械效率



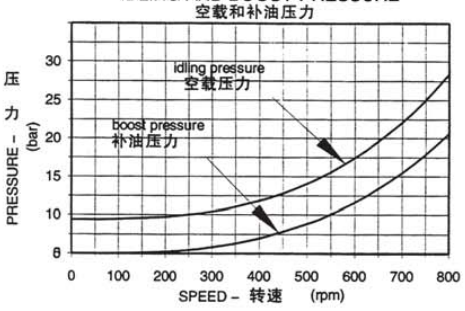
VOLUMETRIC EFFICIENCY
外泄漏



STARTING AND LOW SPEED TORQUE
起动和低速时机械效率



IDLING AND BOOST PRESSURE
空载和补油压力



BEARING LIFETIME

The graph refers to the motor with the standard roller bearings.
Note that the average lifetime of a bearing (B_{50} lifetime) is approximately 5 times the B_{10} lifetime.

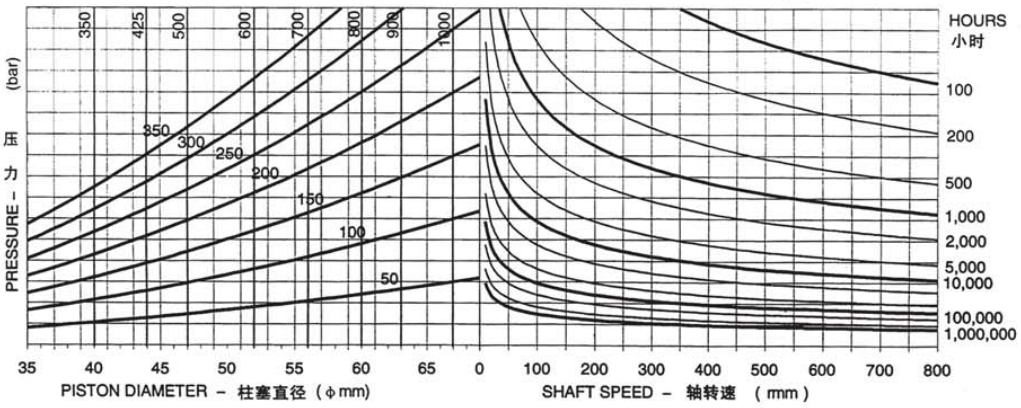
轴承寿命

该图表适用配置滚柱轴承的马达。

注意轴承平均寿命（B_{50}寿命）大约是B_{10}寿命的5倍。

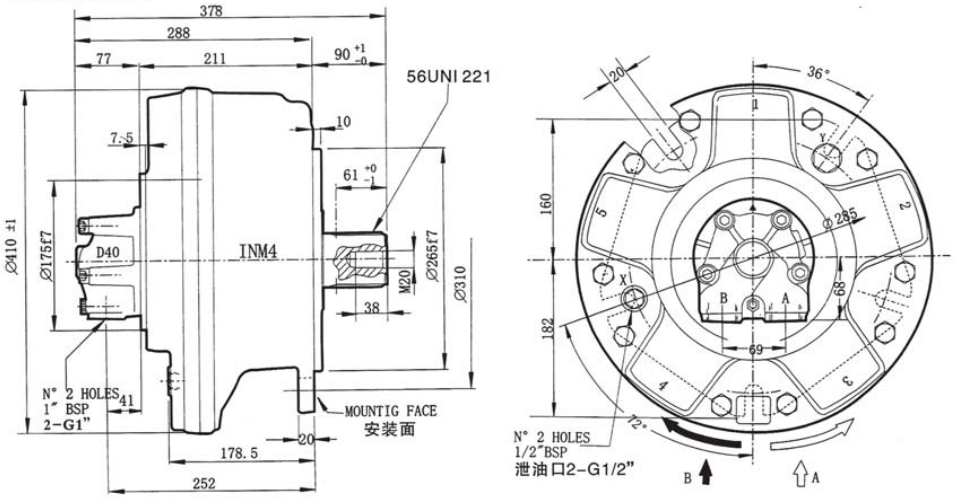
MOTOR DISPLACEMENT – 马达排量

B10 LIFETIME – B10寿命



9. INM 4系列液压马达 INM4 Series Hydraulic Motors

DIMENSIONS

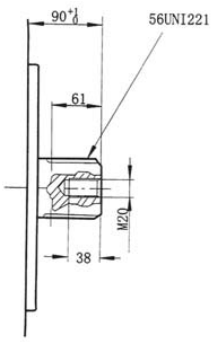


Flange and shaft dimensions are as in GM4、M5 series motors

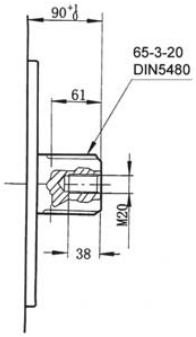
法兰和轴承尺寸与 GM4、M5 马达系列相同

SHAFTS 轴伸型式

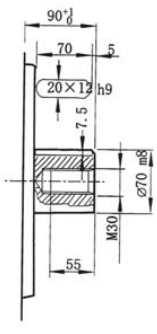
Splined
矩形外花键



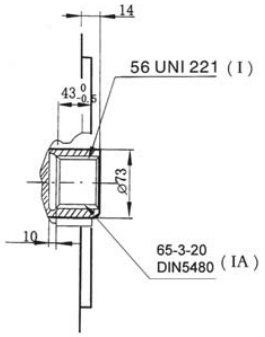
Splined A
渐开线外花键 A



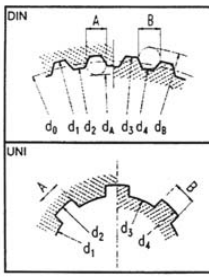
Cylindrical B
圆柱平键 B



Internal spline I、IA
内花键 I、IA

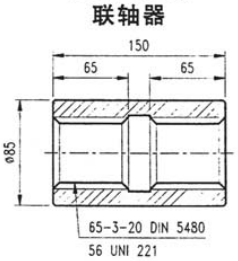


SPLINE DATA – 花键参数



	65-3-20 DIN 5480	55-2-26 DIN 5482	55-3-17 DIN 5480	56 UNI 221
d0	Ø60.0	Ø52.0	Ø51.0	d1 Ø56.0 +0.030 +0 H7
d1	Ø65.0 +0.740 +0 H14	Ø55.0 +0.300 +0 H12	Ø55.0 +0.740 +0 H14	d2 Ø65.0 +0.190 +0 H11
d2	Ø59.0 +0.190 +0 H11	Ø50.0 +0.160 +0 H11	Ø49.0 +0.160 +0 H11	A Ø10.0 +0.028 +0.013 F7
A	Ø5.25	Ø3.5	Ø5.25	d3 Ø56.0 -0.010 -0.029 g6
da	Ø54.101 H11	Ø46.902 H10	Ø43.807 H11	d4 Ø65.0 -0.100 -0.190 d11
d3	Ø64.4 -0 -0.190 h11	Ø54.5 -0 -0.190 h11	Ø54.4 -0 -0.190 h11	B Ø10.0 -0.028 -0.013 f7
d4	Ø58.4 -0 -0.740 h14	Ø49.0 -0 -0.300 h12	Ø48.4 -0 -0.620 h14	
B	Ø6.0	Ø3.5	Ø6.0	
db	Ø70.999 f8	Ø56.953 e9	Ø60.873 f8	

ADAPTORS 联轴器



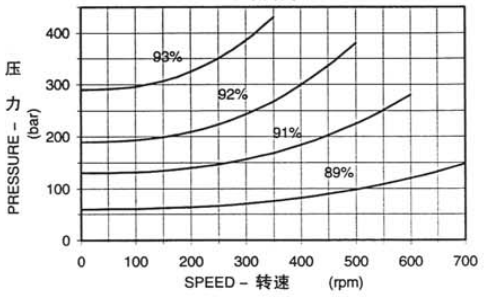
PERFORMANCE

The graphs indicate the typical performance characteristics of the 900 cc motor operating with mineral oil with viscosity 40 cSt at 50 ℃.

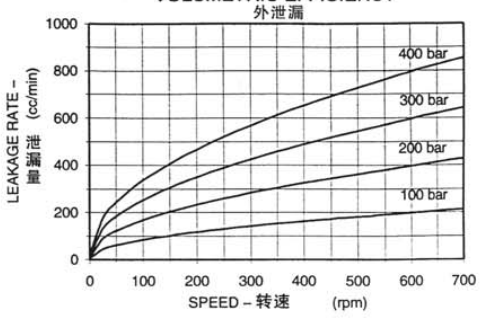
特性曲线

下列图表为排量900cc的马达，在工作液采用矿物油粘度40cSt,油温50℃工作时的典型特性曲线。

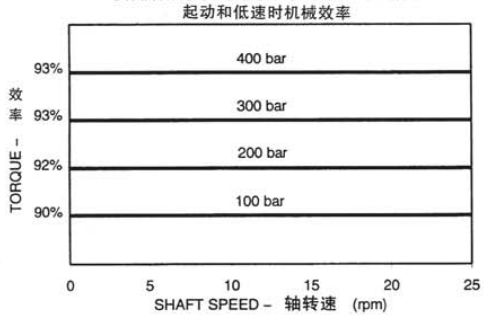
MECHANICAL EFFICIENCY
机械效率



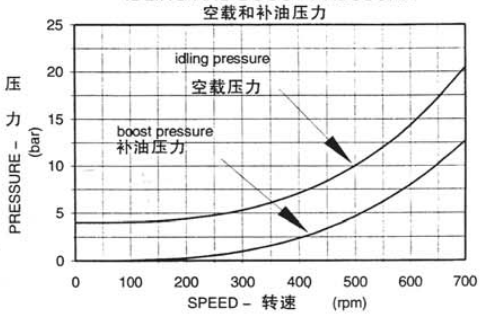
VOLUMETRIC EFFICIENCY
外泄漏



STARTING AND LOW SPEED TORQUE
起动和低速时机械效率



IDLING AND BOOST PRESSURE
空载和补油压力



BEARING LIFETIME

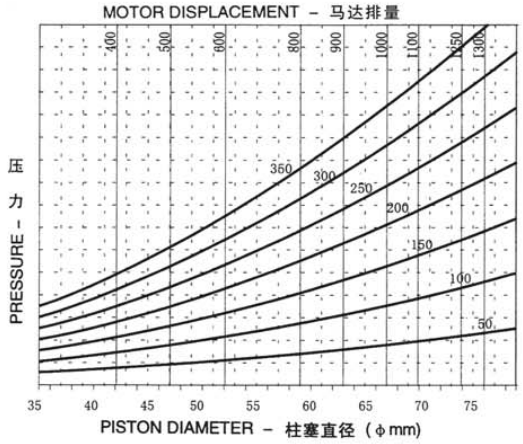
轴承寿命

The graph refers to the motor with the standard roller bearings.
Note that the average lifetime of a bearing (B_{50} lifetime) is approximately 5 times the B_{10} lifetime.

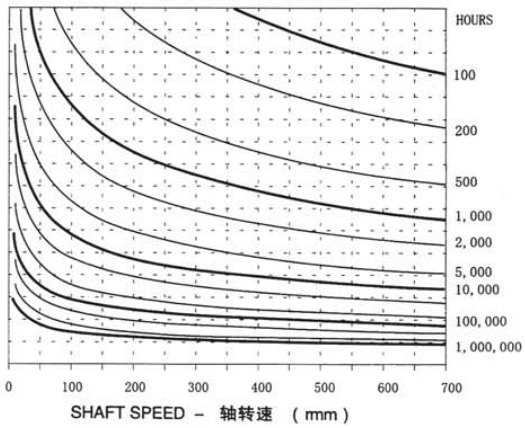
该图表适用配置滚柱轴承的马达。

注意轴承平均寿命（B_{50}寿命）大约是B_{10}寿命的5倍

MOTOR DISPLACEMENT – 马达排量

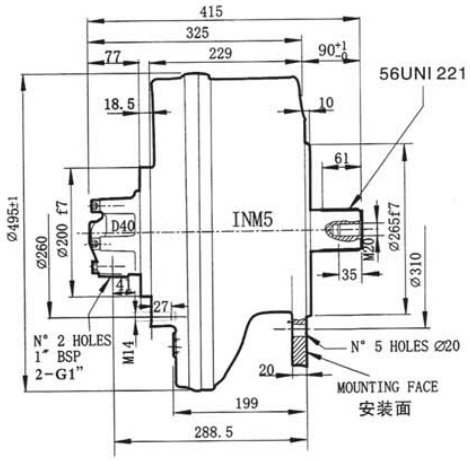


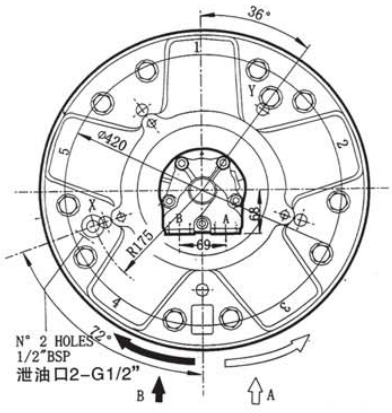
B10 LIFETIME – B10寿命



10. INM 5系列液压马达 INM5 Series Hydraulic Motors

DIMENSIONS



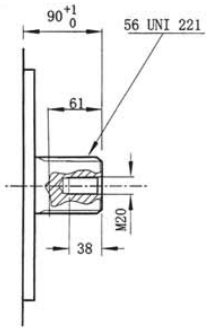


Flange and shaft dimensions are as in GM5、M5 series motors

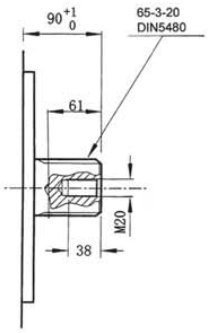
法兰和轴承尺寸与GM5、M5 马达系列相同

SHAFTS 轴伸型式

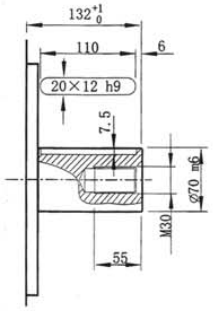
Splined
矩形外花键



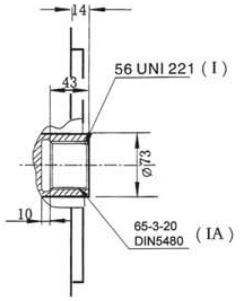
Splined A
渐开线外花键 A



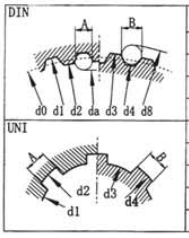
Cylindrical B
圆柱平键 B



Internal spline I、IA
内花键 I、IA

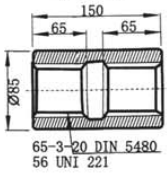


SPLINE DATA – 花键参数



	65-3-20 DIN 5480		55-2-26 DIN 5482		55-3-17 DIN 5480		56UNI221		
d0	Ø60.0		Ø52.0		Ø51.0		d1	Ø56.0 +0.030 +0	H7
d1	Ø65.0 +0.740 +0	H14	Ø55.0 +0.300 +0	H12	Ø55.0 +0.740 +0	H14	d2	Ø65.0 +0.190 +0	H11
d2	Ø59.0 +0.190 +0	H11	Ø50.0 +0.160 +0	H11	Ø49.0 +0.160 +0	H11	A	10.0 +0.028 +0.013	F7
A	Ø5.25		Ø3.5		Ø5.25		d3	Ø56.0 -0.010 -0.029	g6
da	Ø54.101	H11	Ø46.902	H10	Ø43.807	H11	d4	Ø65.0 -0.100 -0.190	d11
d3	Ø64.4 -0 -0.190	h11	Ø54.5 -0 -0.190	h11	Ø54.4 -0 -0.190	h11	B	10.0 -0.013 -0.028	f7
d4	Ø58.4 -0 -0.740	h14	Ø49.0 -0 -0.300	h12	Ø48.4 -0 -0.620	h14			
B	Ø6.0		Ø3.5		Ø6.0				
db	Ø70.999	f8	Ø56.953	e9	Ø60.873	f8			

ADAPTORS 联轴器



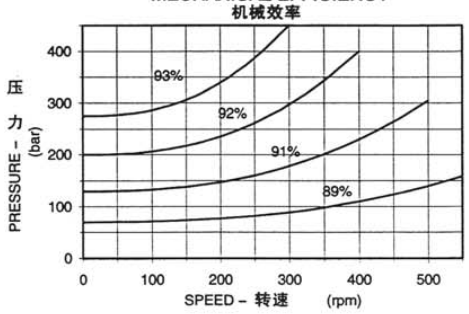
PERFORMANCE

The graphs indicate the typical performance characteristics of the 1200cc motor operating with mineral oil with viscosity 40 cSt at 50 ℃.

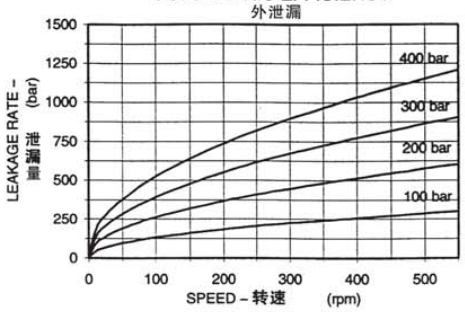
特性曲线

下列图表为排量1200cc的马达，在工作液采用矿物油，粘度40cSt,油温50℃工作时的典型特性曲线。

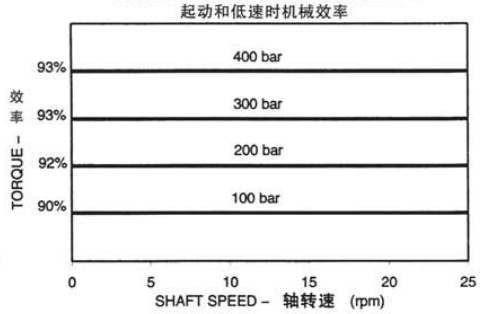
MECHANICAL EFFICIENCY
机械效率



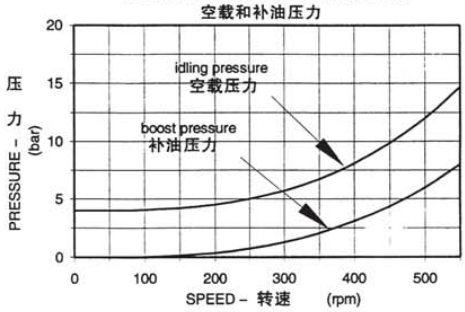
VOLUMETRIC EFFICIENCY
外泄漏



STARTING AND LOW SPEED TORQUE
起动和低速时机械效率



IDLING AND BOOST PRESSURE
空载和补油压力



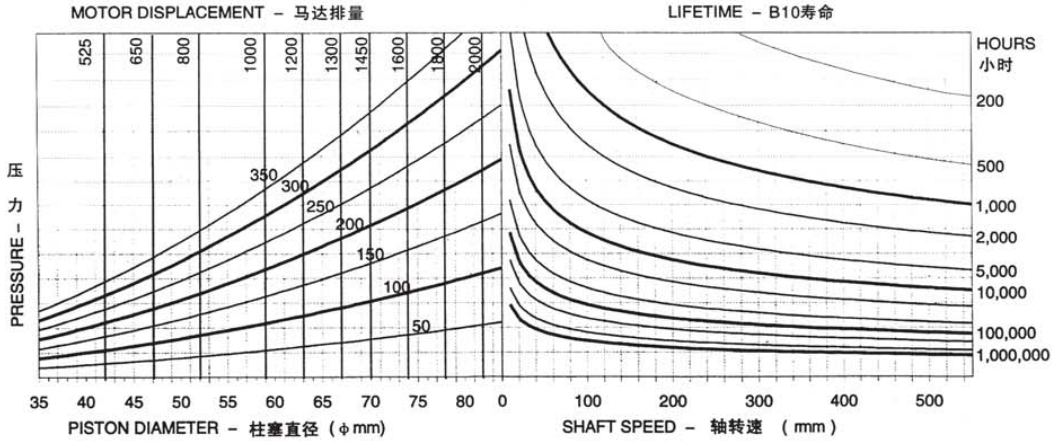
BEARING LIFETIME

The graph refers to the motor with the standard roller bearings.
Note that the average lifetime of a bearing (B_{50} lifetime) is approximately 5 times the B_{10} lifetime.

轴承寿命

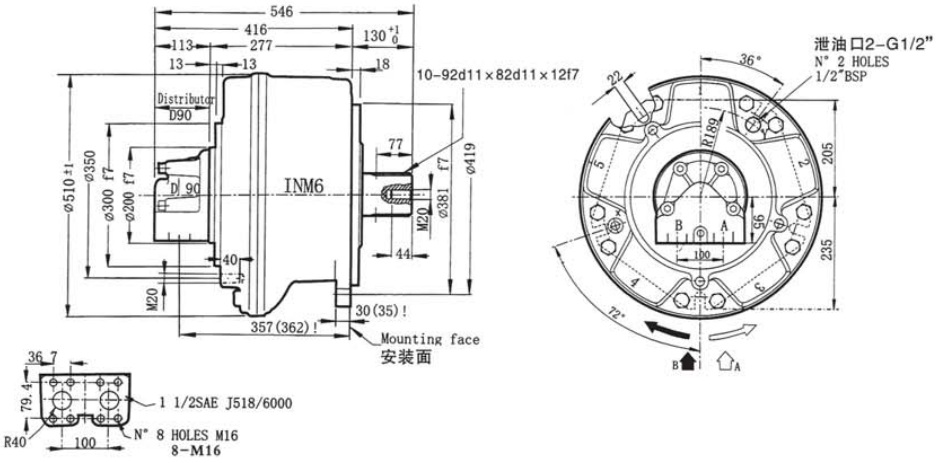
该图表适用配置滚柱轴承的马达。

注意轴承平均寿命（B_{50}寿命）大约是B_{10}寿命的5倍。



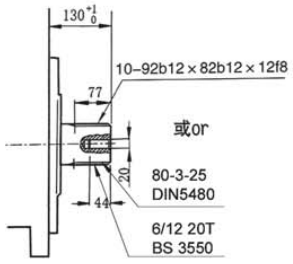
11. INM 6系列液压马达 INM6 Series Hydraulic Motors

DIMENSIONS

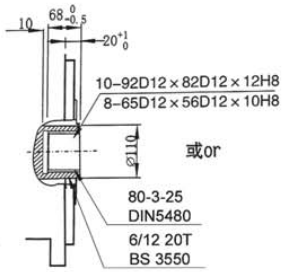


SHAFTS 轴伸型式

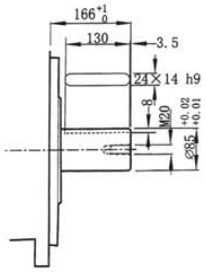
Splined
矩形外花键、渐开线外花键 A



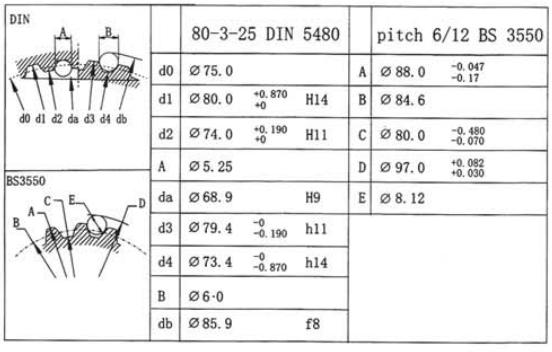
Internal spline I、IA
内花键 I、IA
BEARING OPTION E ONLY
只能配置E型轴承



Cylindrical B
圆柱平键 B
BEARING OPTION E ONLY
只能配置E型轴承

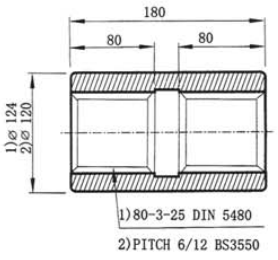


SPLINE DATA – 花键参数



	80-3-25 DIN 5480		pitch 6/12 BS 3550	
d0	Ø 75.0	A	Ø 88.0	-0.047 -0.17
d1	Ø 80.0 +0.870 +0 H14	B	Ø 84.6	
d2	Ø 74.0 +0.190 +0 H11	C	Ø 80.0	-0.480 -0.070
A	Ø 5.25	D	Ø 97.0	+0.082 +0.030
da	Ø 68.9 H9	E	Ø 8.12	
d3	Ø 79.4 -0 -0.190 h11			
d4	Ø 73.4 -0 -0.870 h14			
B	Ø 6.0			
db	Ø 85.9 f8			

ADAPTORS
联轴器



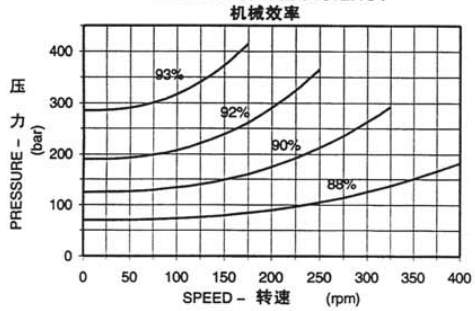
PERFORMANCE

The graphs indicate the typical performance characteristics of the 2500cc motor operating with mineral oil with viscosity 40 cSt at 50 ℃.

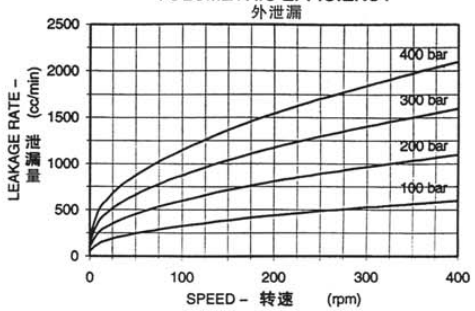
特性曲线

下列图表为排量2500cc的马达，在工作液采用矿物油，粘度40cSt,油温50℃工作时的典型特性曲线。

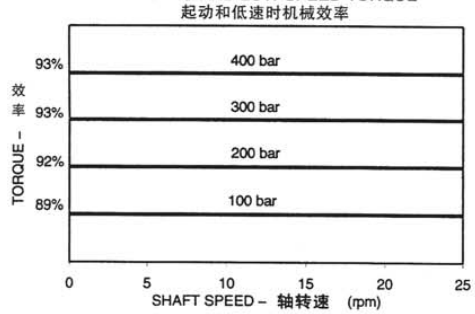
MECHANICAL EFFICIENCY
机械效率



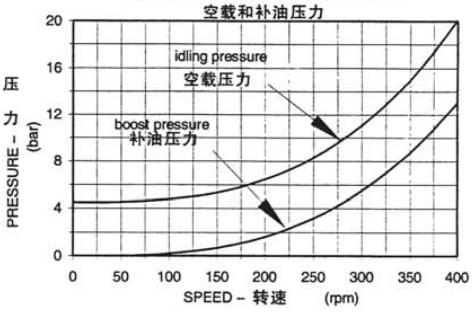
VOLUMETRIC EFFICIENCY
外泄漏



STARTING AND LOW SPEED TORQUE
起动和低速时机械效率



IDLING AND BOOST PRESSURE
空载和补油压力



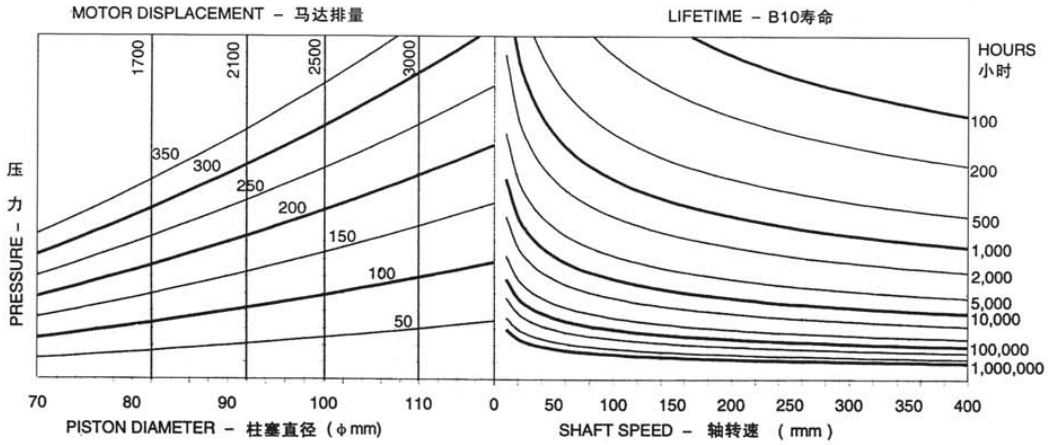
BEARING LIFETIME

The graph refers to the motor with the standard spherical roller bearings.
Note that the average lifetime of a bearing (B_{50} lifetime) is approximately 5 times the B_{10} lifetime.

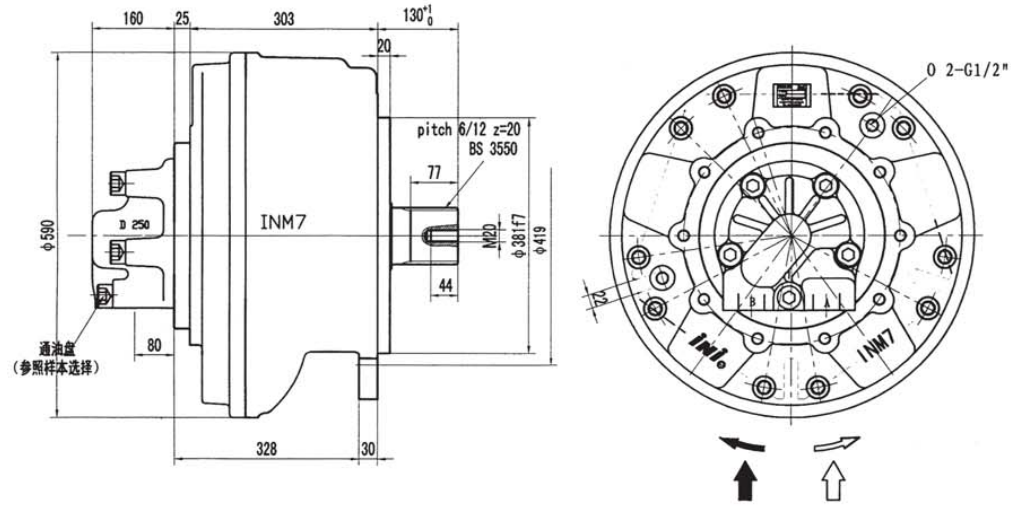
轴承寿命

该图表适用配置滚柱轴承的马达。

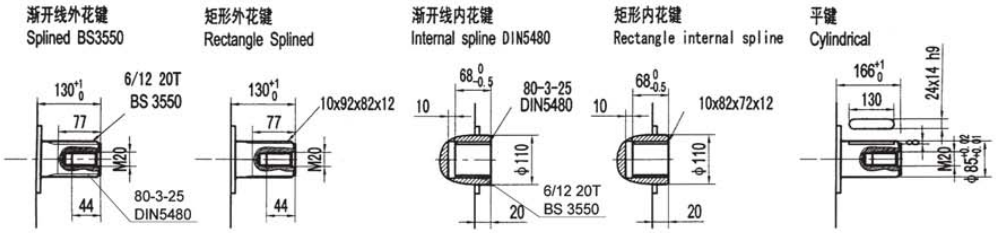
注意轴承平均寿命（B_{50}寿命）大约是B_{10}寿命的5倍。



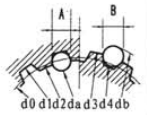
12. INM7系列液压马达安装连接尺寸图
INM7 SERIES HYDRAULIC DIMENSIONS OF CONNECTION



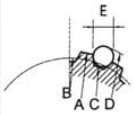
输出轴样式 SHAFTS



花键参数 SPLINE DATA



80-3-25 DIN 5480	
d0	φ75.0
d1	φ80.0 H14
d2	φ74.0 H11
A	φ5.25
da	φ68.9 H9
d3	φ79.4 h11
d4	φ73.4 h14
B	φ6.0
db	φ85.9 f8



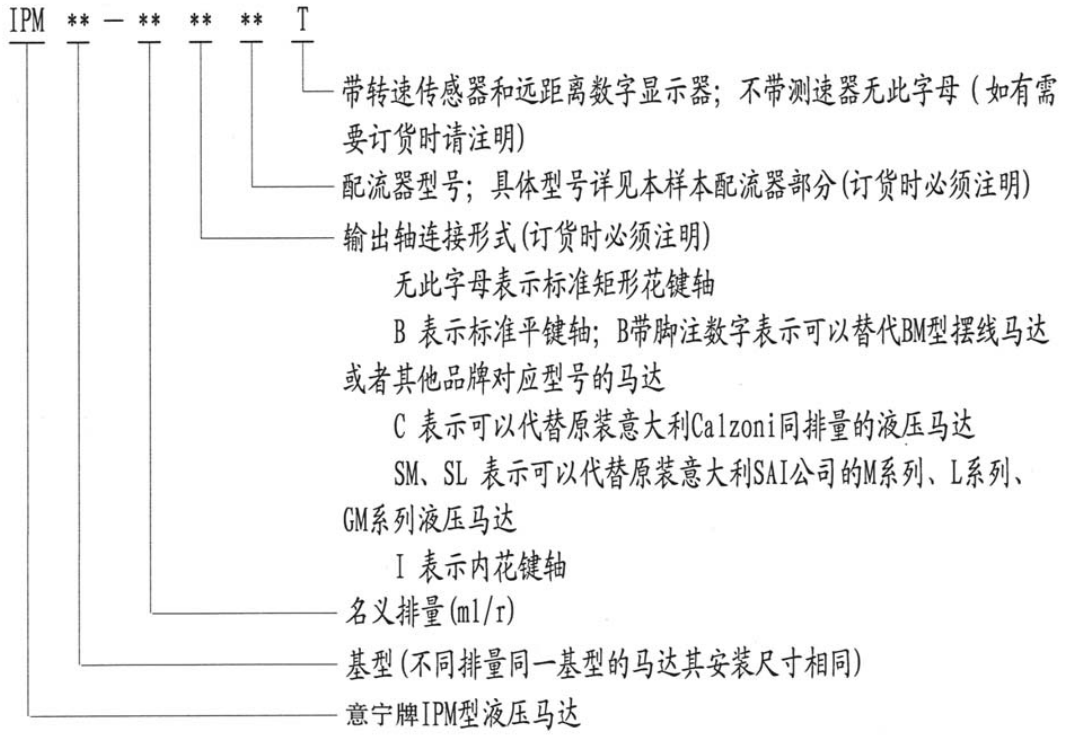
pitch 6/12 BS 3550	
A	φ88.0 -0.047 -0.17
B	φ84.6
C	φ80.0 -0.480 -0.070
D	φ97.0 +0.082 +0.030
E	φ8.12

五、IPM系列液压马达

1.概述

IPM系列马达是本公司吸收了国内外同类产品的诸多优点，并结合自身十几年的实践经验而开发出来的新型产品。它具有同系列产品排量范围广，可替换性强（大量非标定做产品可供选择，可以代替国内外其他品牌），结实耐用，美观大方等特点。

2.型号说明



3.型号举例

IPM3-300D31表示基型为3系列的IPM马达，名义排量为300ml/r，输出轴为标准矩形外花键轴，配流器型号为D31，不带测速装置。订货时请按此填写完整的型号，若有特殊要求请在订货合同中详细说明。

注：1.我公司生产的IPM系列液压马达可以代替相同排量的Intermot、Calzoni、Staffa、SAI等国外品牌以及英特姆、必乐士、中意等国内品牌。
2.如客户有特殊的非标准安装尺寸的液压马达定做，我公司可以提供技术支持，订货前请与我公司取得联系。

● IPM Series Hydraulic Motors

1. Brief Introduction

IPM series motors are new products, developed by combining advantages of similar products at home and abroad with practical experience of our company accumulated over one decade. PM series motors are characterized by wide range of displacement, great interchangeability (We produce lots of non-standards products, which can replace similar products at home and abroad.), great durability and good design.

2. Model options

IPM ** — ** ** ** T

- T — With the tachometer and distant digit display, no label indicates without tachometer
- ** — Distributor (please remarked), more details to see the catalogue
- ** — Connection type of output shaft (please remarked)
  - No symbol means standard rectangle spline shaft
  - B means standard flat key shaft; B with footnote means the same installation dimension as the BM series orbit motor.
  - C means the same installation dimension as the Calzoni hydraulic motor.
  - SM、SL means the same installation as M series, L series hydraulic motor produced by SAI ITALY.
  - I means inside spline shaft.
- ** — Nominal displacement (ml/rev)
- ** — Series code (the motor with same code has same installation dimension)
- IPM — The basic prefix of hydraulic motor

3. Options example

IPM3-300D31 represents that the motor is the 3 series unit of IPM hydraulic motor, The nominal displacement is 300ml/rev, the output shaft is standard rectangle spline shaft, and distributor model is D31 without tachometer. Please fill in the complete code options when ordering. If there are any specific requests, please noted in detail in delivery contract or contact our company.

Notes:

1. IPM series motors can replace motors of same displacement produced by intermot, Calzoni, Staffa , SAI, and domestic brands, such as BIGNOZZI and Zhongyi.
2. If customers want to purchase hydraulic motors with non-standard installing dimension, we can offer technical support to customers. Please contact us before place an order.

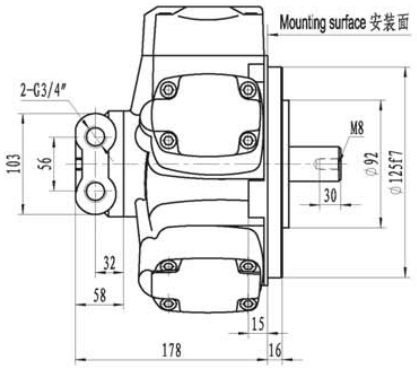
4. IPM系列液压马达技术性能参数

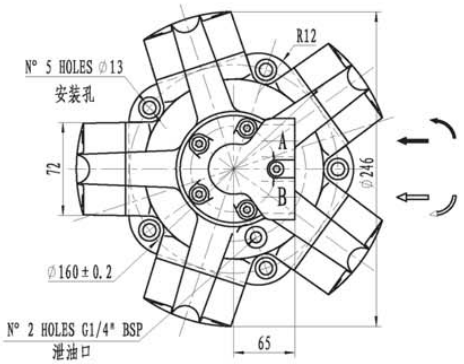
型号 TYPE	理论排量(ml/r) THEORIC DISPLACEMENT	额定压力(MPa) RATED PRESSURE	尖峰压力(MPa) PEAK PRESSURE	额定扭矩(N·m) RATED TORQUE	单位扭矩(N·m/MPa) SPECIFIC TORQUE	转速范围(r/min) SPEED RANGE	最大功率(kW) Max POWER	重量(kg) WEIGHT
IPM1-50	56	20	28	178	8.90	15-1000	15	23
IPM1-63	64	20	28	203	10.15	15-900		
IPM1-80	76.9	20	28	244	12.20	15-800		
IPM1-100	100	20	25	318	15.90	15-750		
IPM1-125	124	16	24	305	19.06	15-650		
IPM1-150	157	16	24	398	24.88	15-500		
IPM1-160	179	16	24	456	28.50	15-450		
IPM1-200	194	16	24	492	30.75	15-400		
IPM2-125	124	20	28	394	19.70	8-700	22	31
IPM2-150	151	20	28	480	24.00	8-650		
IPM2-175	180	16	25	457	28.56	8-600		
IPM2-200	206	16	25	523	32.69	8-550		
IPM2-250	235	16	25	598	37.38	8-500		
IPM2-280	276	16	24	702	43.88	8-450		
IPM2-300	318	16	24	809	50.56	8-400		
IPM3-175	181	20	30	578	28.90	7-800	36	39
IPM3-200	201	20	30	640	32.00	7-700		
IPM3-250	254	20	30	810	40.50	7-600		
IPM3-300	289	20	30	920	46.00	7-500		
IPM3-350	339	16	25	864	54.00	6-420		
IPM3-400	403	16	25	1027	64.19	6-350		
IPM3-420	427	16	25	1088	68.00	6-330		
IPM3-450	451	16	25	1148	71.75	6-300		
IPM4-400	397	20	30	1265	63.25	5-500	52	66
IPM4-450	452	20	30	1440	72.00	5-480		
IPM4-500	490	20	30	1562	78.10	5-450		
IPM4-600	593	20	30	1890	94.50	5-420		
IPM4-650	660	16	25	1680	105.00	5-400		
IPM4-700	706	16	25	1800	112.50	5-380		
IPM4-750	754	16	25	1921	120.06	5-350		
IPM4-800	815	16	25	2064	129.00	5-300		
IPM5-700	713	20	30	2268	113.40	4-400	68	84
IPM5-750	763	20	30	2428	121.40	4-380		
IPM5-800	815	20	30	2594	129.70	4-350		
IPM5-850	868	16	25	2196	137.25	4-340		
IPM5-900	895	16	25	2278	142.38	4-320		
IPM5-1000	1009	16	25	2774	173.38	4-300		
IPM6-700	714	20	30	2260	113.00	4-400	78	98
IPM6-800	792	20	30	2520	126.00	4-400		
IPM6-900	904	20	30	2860	143.00	4-380		
IPM6-1000	992	20	30	3140	157.00	4-320		
IPM6-1100	1116	20	30	3540	177.00	3-300		
IPM6-1200	1247	16	25	3168	198.00	3-280		
IPM6-1300	1315	16	25	3344	209.00	3-250		

型号 TYPE	理论排量(ml/r) THEORIC DISPLACEMENT	额定压力(MPa) RATED PRESSURE	尖峰压力(MPa) PEAK PRESSURE	额定扭矩(N·m) RATED TORQUE	单位扭矩(N·m/MPa) SPECIFIC TORQUE	转速范围(r/min) SPEED RANGE	最大功率(kW) Max POWER	重量(kg) WEIGHT
IPM6-1400	1406	16	25	3568	223.00	3-230	78	98
IPM6-1500	1481	16	25	3760	235.00	3-210		
IPM6-1600	1597	16	25	4064	254.00	3-200		
IPM7-1400	1413	20	30	4500	225.00	2-300	95	158
IPM7-1600	1648	20	30	5248	262.40	2-250		
IPM7-1800	1815	18	28	5184	288.00	2-220		
IPM7-2000	2035	16	25	5168	323.00	2-200		
IPM7-2200	2268	16	25	5776	361.00	2-180		
IPM7-2400	2480	16	25	6304	394.00	2-160		
IPM8-2450	2449	20	30	7780	389.00	2-200	128	307
IPM8-2550	2559	20	30	8140	407.00	2-200		
IPM8-2800	2845	18	28	8136	452.00	1-175		
IPM8-3000	3023	16	25	7696	481.00	1-150		
IPM8-3300	3333	16	25	8480	530.00	1-150		
IPM8-3500	3526	16	25	8976	561.00	1-130		
IPM8-4000	3998	16	25	10176	636.00	1-130		
IPM9-3550	3560	20	28	11320	566.00	1-160	145	392
IPM9-3700	3720	20	28	11840	592.00	1-160		
IPM9-4000	4136	20	28	13160	658.00	1-150		
IPM9-4400	4396	16	25	11184	699.00	1-150		
IPM9-4800	4846	16	25	12336	771.00	1-125		
IPM9-5000	5127	16	25	13040	815.00	1-120		
IPM9-5500	5514	16	25	14032	877.00	1-120		
IPM9-5800	5814	16	25	14800	925.00	1-110		
IPM9-6300	6322	16	25	16096	1006.00	1-110		
IPM10-6000	6056	20	28	19276	963.80	1-110	160	720
IPM10-6500	6437	20	28	20489	1024.45	1-105		
IPM10-7000	7096	20	28	22587	1129.35	1-100		
IPM10-7500	7508	16	25	19118	1194.88	1-95		
IPM10-8000	8074	16	25	20560	1285.00	1-90		
IPM10-8500	8512	16	25	21696	1356.00	1-90		
IPM11-9000	8953	20	28	28470	1423.50	0.5-100	220	900
IPM11-9500	9559	20	28	30398	1519.90	0.5-95		
IPM11-10000	10028	20	28	31889	1594.45	0.5-90		
IPM11-11000	10507	16	25	26730	1670.63	0.5-85		
IPM11-11500	11331	16	25	28826	1801.63	0.5-85		
IPM11-12000	12186	16	25	31001	1937.56	0.5-80		
IPM12-14000	14389	20	28	45757	2287.85	0.5-75	250	1800
IPM12-15500	15667	20	28	49821	2491.05	0.5-70		
IPM12-16500	16460	20	28	52342	2617.10	0.5-70		
IPM12-17000	17000	20	28	54060	2703.00	0.5-70		
IPM12-18000	18387	20	28	58470	2923.50	0.5-65		
IPM12-18500	18957	16	25	48226	3014.13	0.5-65		
IPM12-19500	19536	16	25	49700	3106.25	0.5-65		
IPM12-20000	19829	16	25	50446	3152.88	0.5-65		
IPM12-21500	21325	16	25	54250	3390.63	0.5-65		
IPM12-23000	22857	16	25	58194	3637.13	0.5-60		

IPM1系列液压马达 IPM1 Series Hydraulic Motors

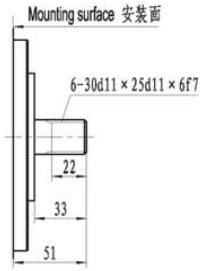
DIMENSIONS



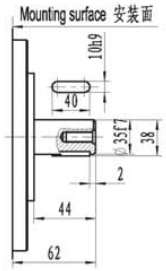


SHAFTS 轴伸型式

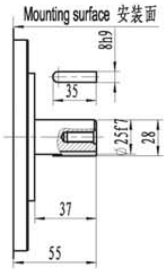
Standard external splined IPM1-**
标准外花键



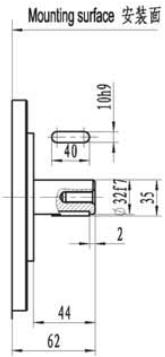
Standard cylindrial IPM1-**B
标准平键



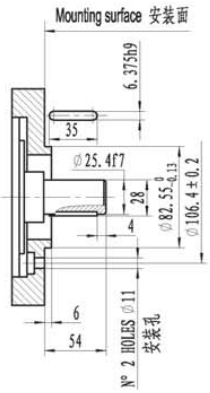
IPM1-**B28



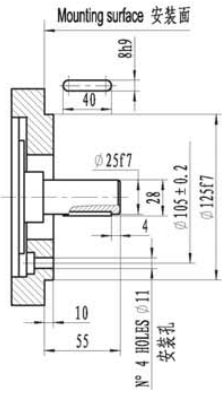
IPM1-**B31



IPM1-**B3

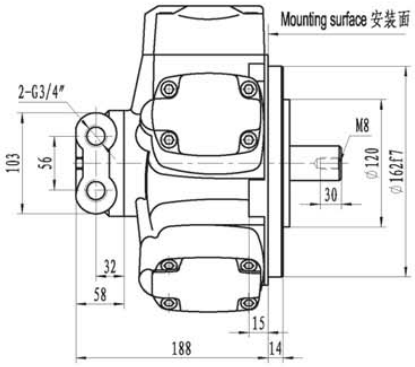


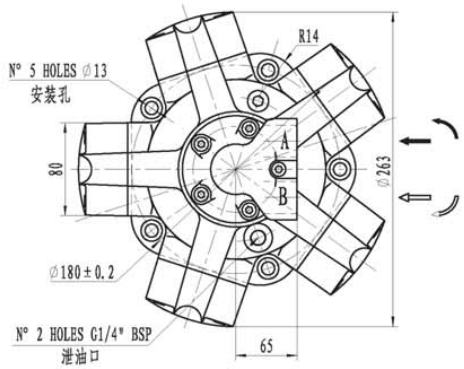
IPM1-**B11



IPM2系列液压马达 IPM2 Series Hydraulic Motors

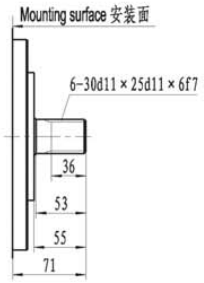
DIMENSIONS



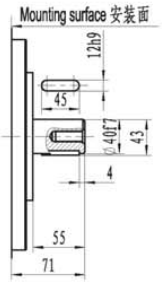


SHAFTS 输出轴样式

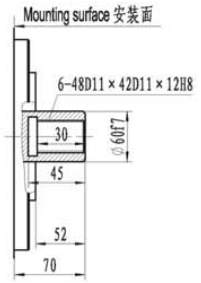
Standard external splined IPM2-** 标准外花键



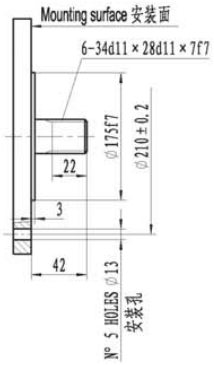
Standard cylindrial IPM2-**B 标准平键



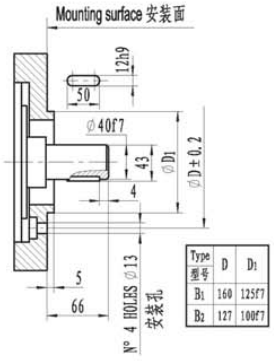
Standard internal splined IPM2-**I 标准内花键



IPM2-**SL1

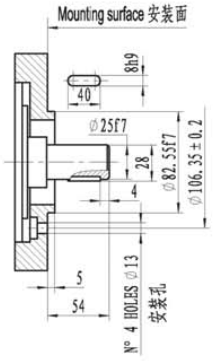


IPM2-**B1、B2

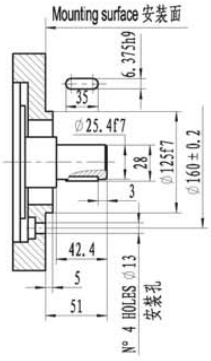


Type 型号	D	D1
B1	160	125f7
B2	127	100f7

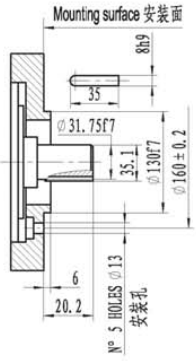
IPM2-**B24



IPM2-**B3

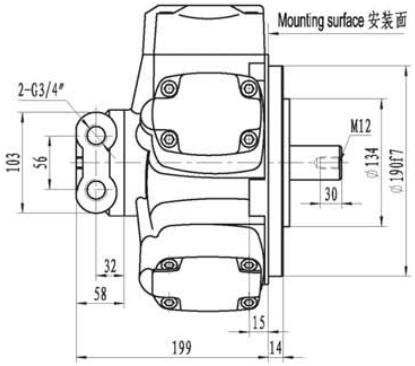


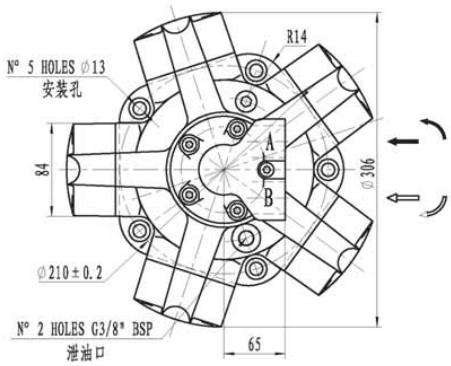
IPM2-**B14



IPM3系列液压马达 IPM3 Series Hydraulic Motors

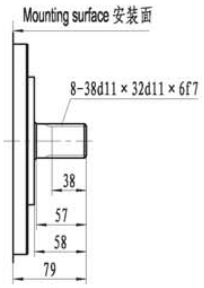
DIMENSIONS



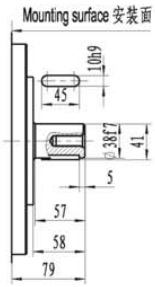


SHAFTS 输出轴样式

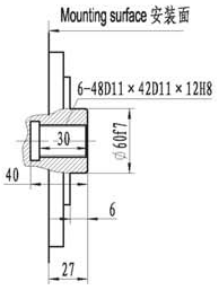
Standard external splined IPM3-**
标准外花键



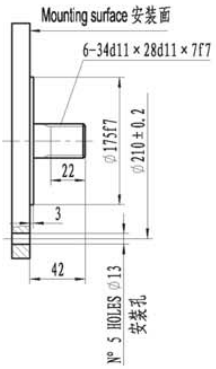
Standard cylindrial IPM3-**B
标准平键



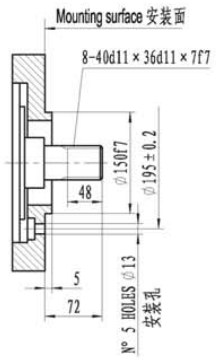
Standard internal splined IPM3-**I
标准内花键



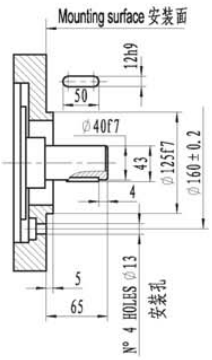
IPM3-**SL1



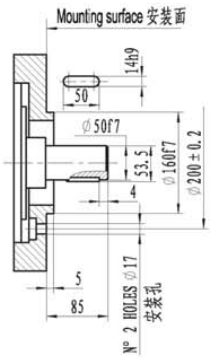
IPM3-**SL2



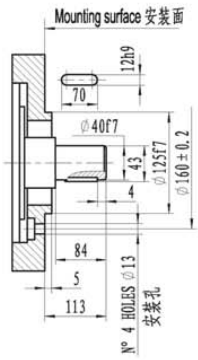
IPM3-**B1



IPM3-**B2

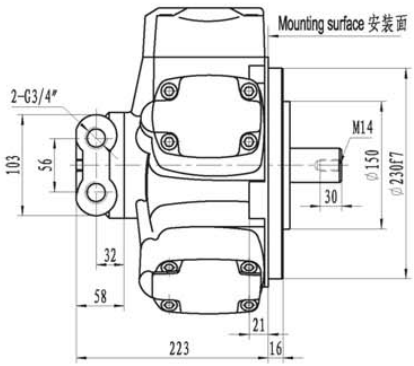


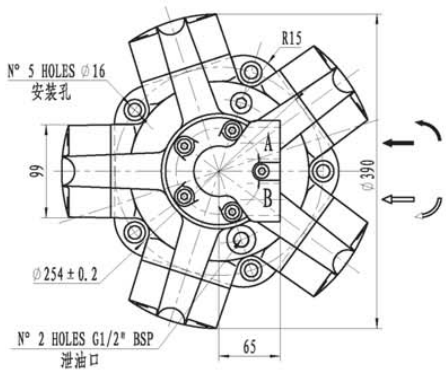
IPM3-**B5



IPM4系列液压马达 IPM4 Series Hydraulic Motors

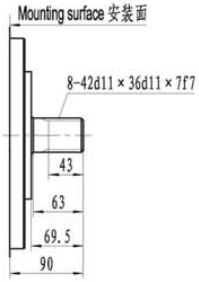
DIMENSIONS



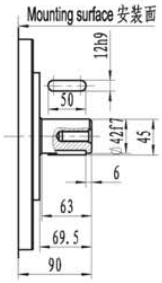


SHAFTS 输出轴样式

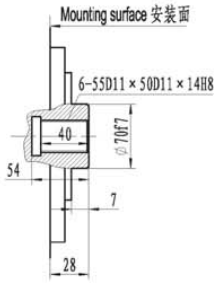
Standard external splined IPM4-**
标准外花键



Standard cylindrial IPM4-**B
标准平键

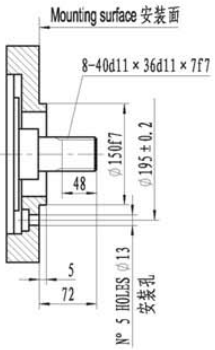


Standard internal splined IPM4-**I
标准内花键

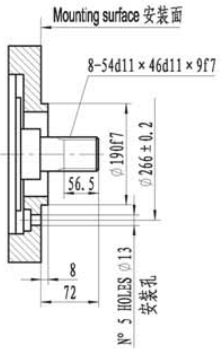


IPM4-**SL3

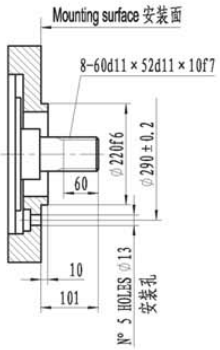
IPM4-**SL2



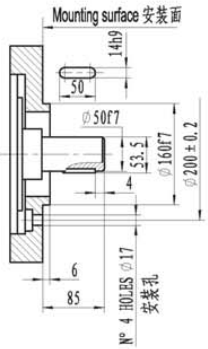
IPM4-**N



IPM4-**N1

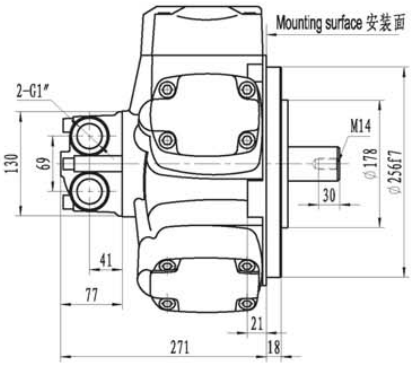


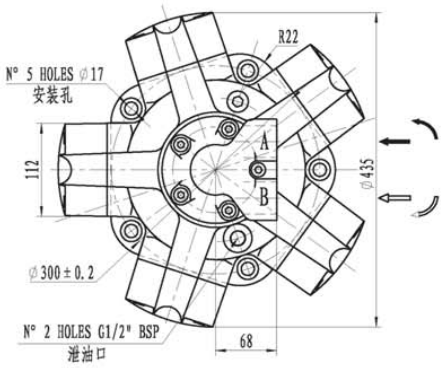
IPM4-**B2



IPM5系列液压马达 IPM5 Series Hydraulic Motors

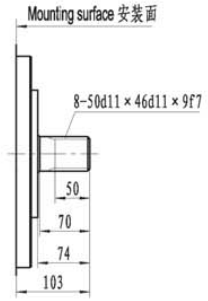
DIMENSIONS



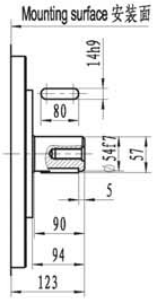


SHAFTS 输出轴样式

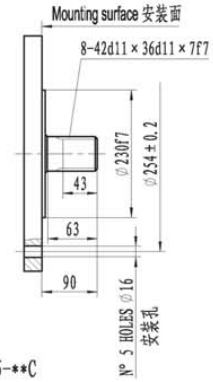
Standard external splined IPM5-**
标准外花键



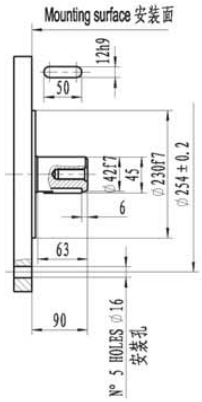
Standard cylindrial IPM5-**B
标准平键



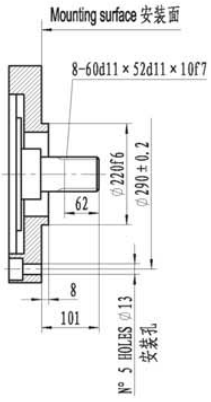
IPM5-**-4



IPM5-**-4B

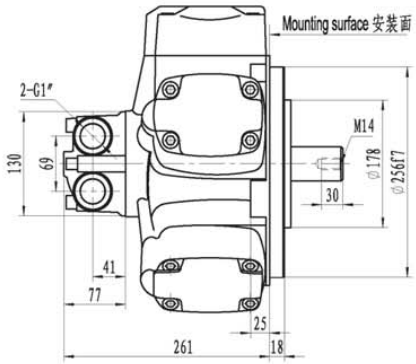


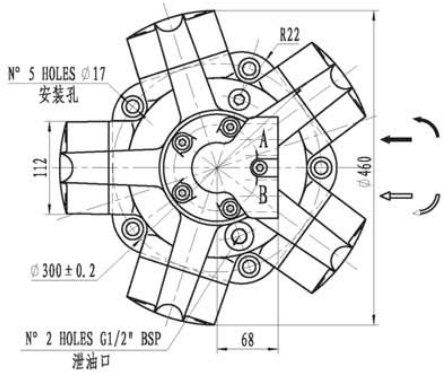
IPM5-**C



IPM6系列液压马达 IPM6 Series Hydraulic Motors

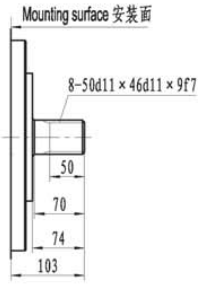
DIMENSIONS



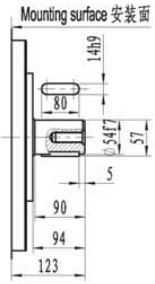


SHAFTS 输出轴样式

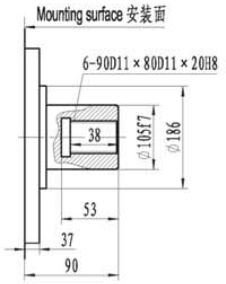
Standard external splined IPM6-**
标准外花键



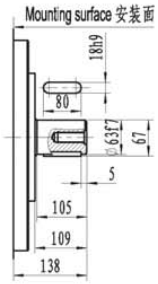
Standard cylindrial IPM6-**B
标准平键



Standard internal splined IPM6-**I
标准内花键

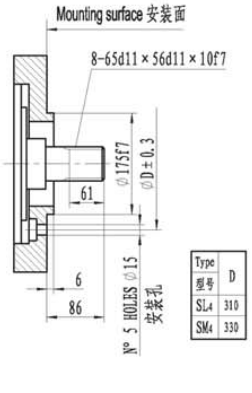


IPM6-**D

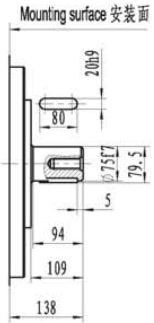


IPM6-**SL3

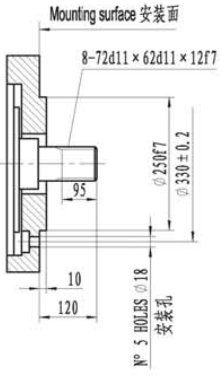
IPM6-**SL4、SM4



IPM6-**B29

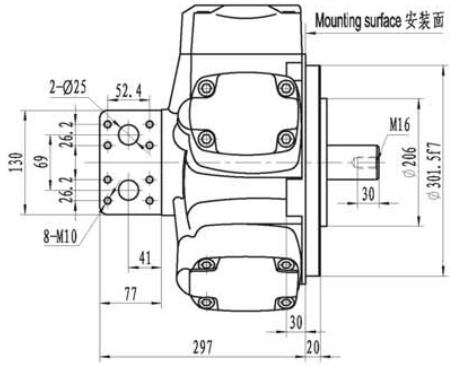


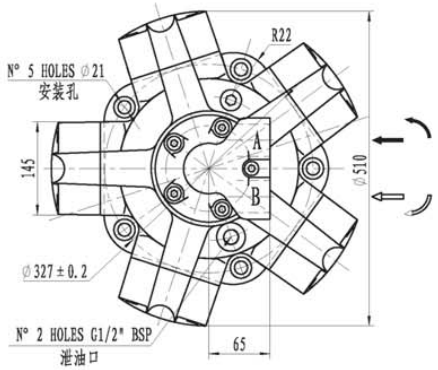
IPM6-**K



IPM7系列液压马达 IPM7 Series Hydraulic Motors

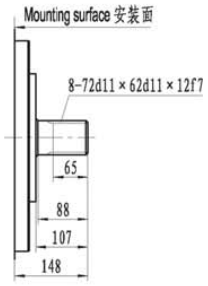
DIMENSIONS



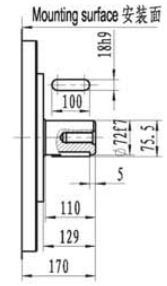


SHAFTS 输出轴样式

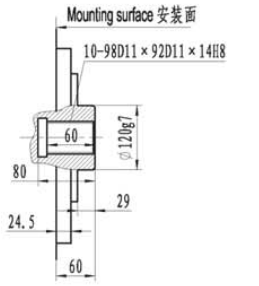
Standard external splined IPM7-** 标准外花键



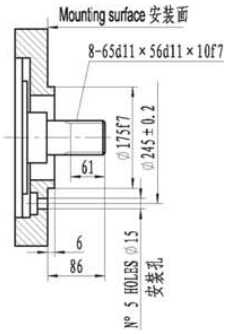
Standard cylindrial IPM7-**B 标准平键



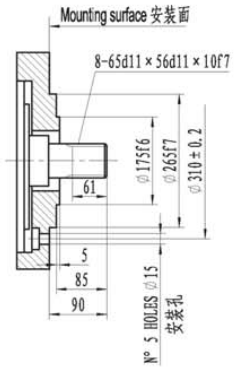
Standard internal splined IPM7-**I 标准内花键



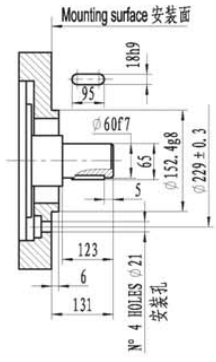
IPM7-**SM4



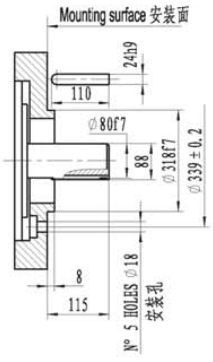
IPM7-**SL5



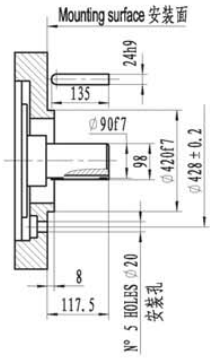
IPM7-**B6



IPM7-**B17

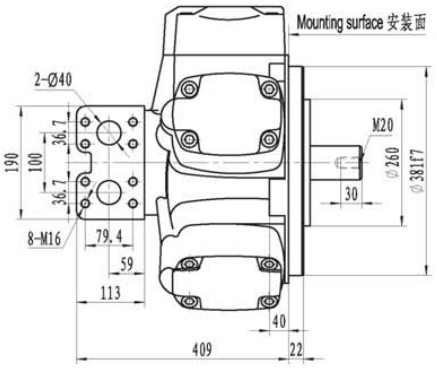


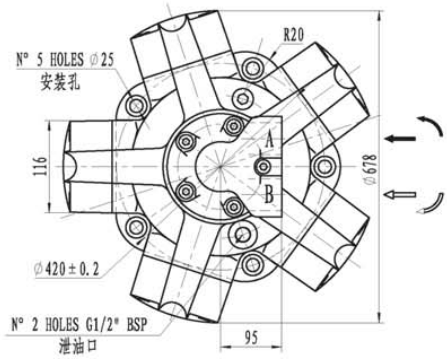
IPM7-**B18



IPM8系列液压马达 IPM8 Series Hydraulic Motors

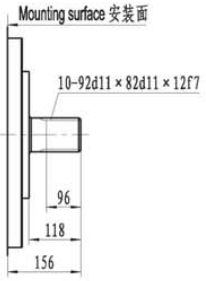
DIMENSIONS



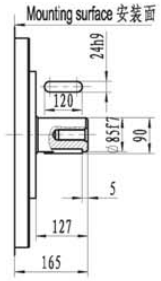


SHAFTS 输出轴样式

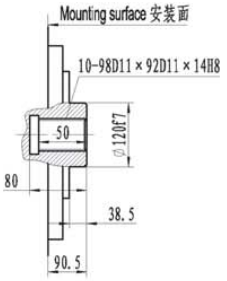
Standard external splined IPM8-**
标准外花键



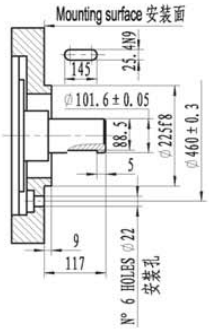
Standard cylindrial IPM8-**B
标准平键



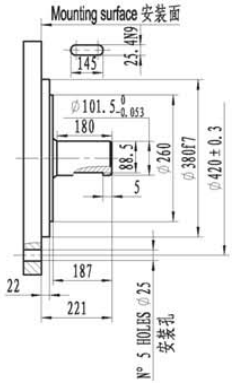
Standard internal splined IPM8-**I
标准内花键



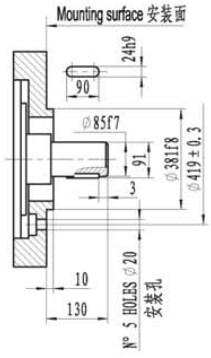
IPM8-**B8



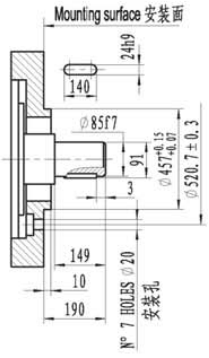
IPM8-**B10



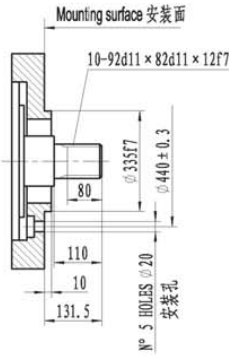
IPM8-**B21



IPM8-**B22

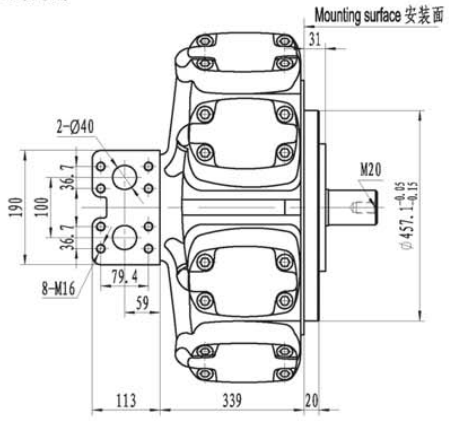


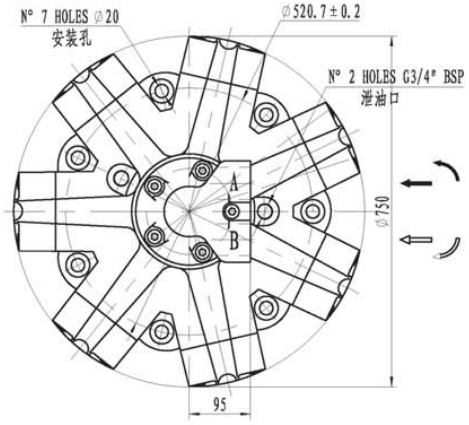
IPM8-**N1



IPM9系列液压马达 IPM9 Series Hydraulic Motors

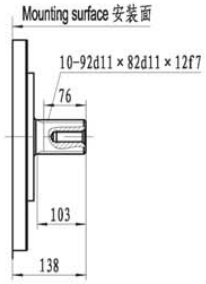
DIMENSIONS



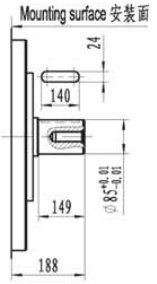


SHAFTS 输出轴样式

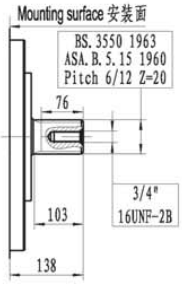
Standard external splined IPM9-**
标准外花键



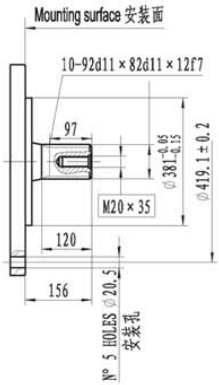
Standard cylindrial IPM9-**B
标准平键



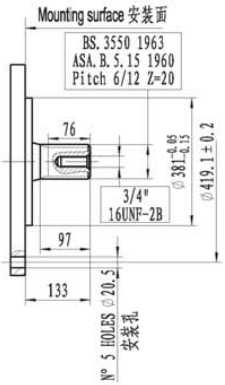
IPM9-**A



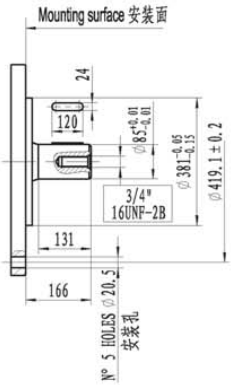
IPM9-**-8



IPM9-**A1

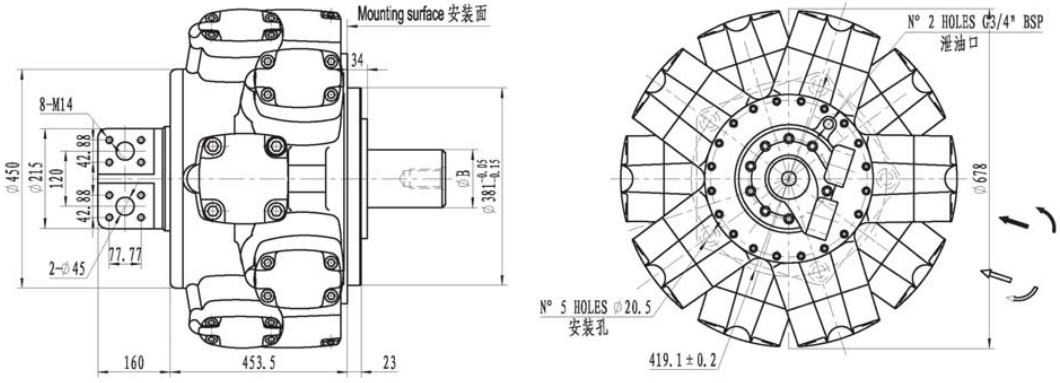


IPM9-**B1



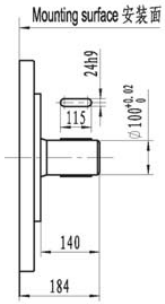
IPM10系列液压马达 IPM10 Series Hydraulic Motors

DIMENSIONS

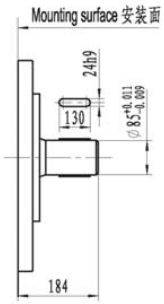


SHAFTS 输出轴样式

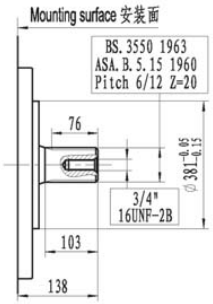
Standard cylindrial IPM10-**B
标准平键



IPM10-**B1

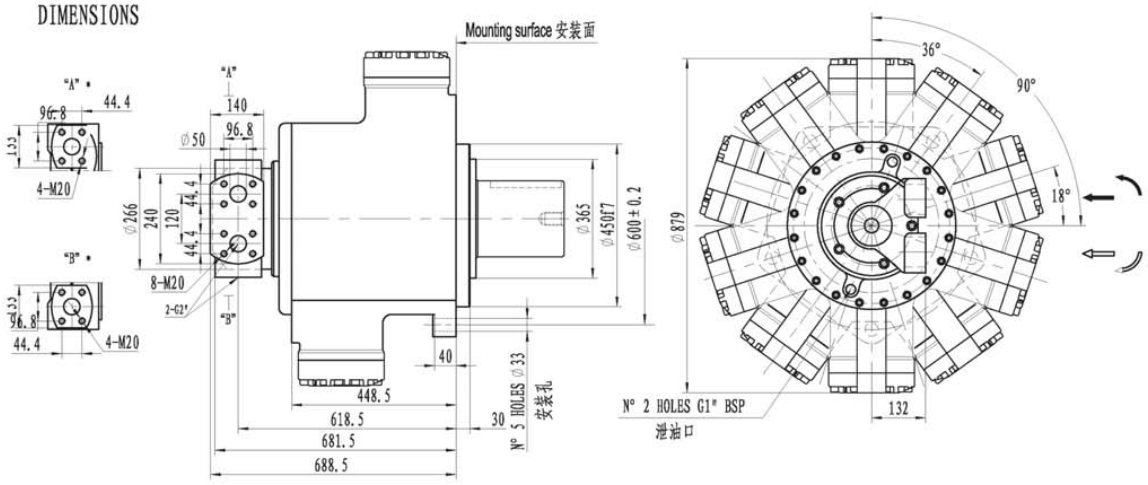


Standard external splined IPM10-**A
标准渐开线外花键



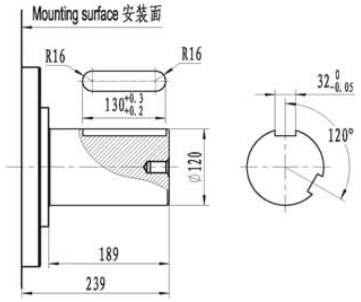
IPM11系列液压马达 IPM11 Series Hydraulic Motors

DIMENSIONS

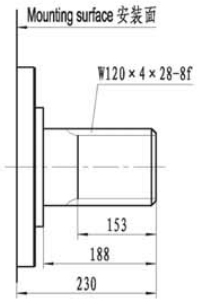


SHAFTS 输出轴样式

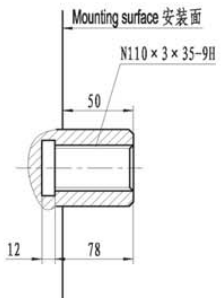
Standard cylindrial IPM11-**B
标准平键



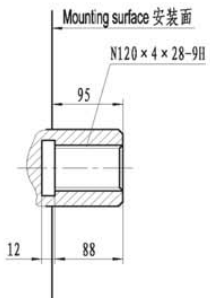
Standard external splined IPM11-**
标准外花键



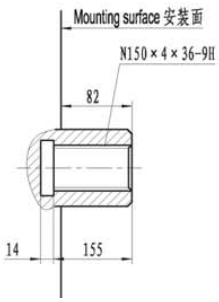
Standard internal splined IPM11-**I
标准内花键



IPM11-**I2

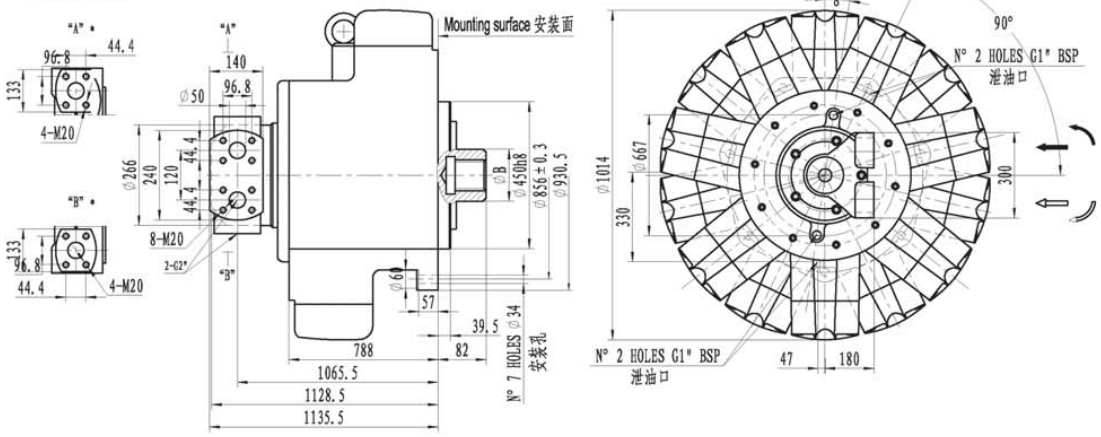


IPM11-**I3



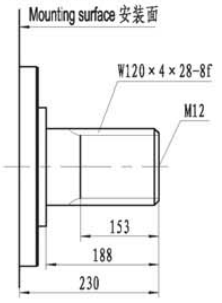
IPM12系列液压马达 IPM12 Series Hydraulic Motors

DIMENSIONS

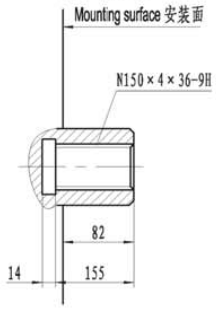


SHAFTS 输出轴样式

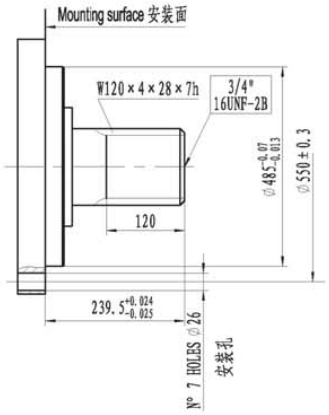
Standard external splined IPM12-**A
标准外渐开线花键



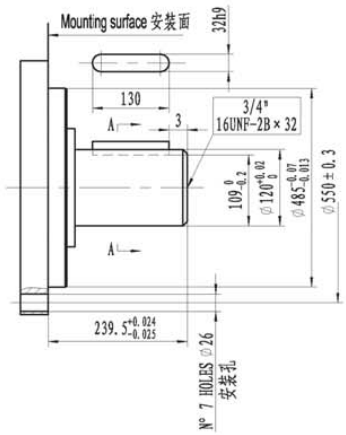
Standard internal splined IPM12-**I
标准内花键



IPM12-**A



IPM12-**B



IMB系列径向静压平衡液压马达----压力更高、转速更快、功率更大

其主要特点:

- 连杆曲面与偏心轮相对运动设计成静压平衡，解决了曲轴连杆式大功率液压马达曲拐被液柱压垮问题，因而该马达具有更高压力、更快转速、更大功率的性能输出。
- 连杆球头与柱塞内球窝采用特殊工艺及静压平衡结构，降低球铰副摩擦，从而减少柱塞与缸壁运动中侧向力。使缸壁、柱塞磨损更小。
- 柱塞密封环采用作功时涨，回程时缩结构，减少了一半接触摩擦使马达发热更少，密封环更加耐用。
- 采用静压平衡轴配油器，使配油轴始终在通油器非接触状态下转动，寿命长，同时大流道孔配油阻力小，噪声更低。
- 性能和参数已达到国外同类产品。

由于IMB系列液压马达具有以上特点，因而可广泛应用于船舶甲板机械、矿山建筑工程机械、塑料机械、重型冶金机械的高负荷工况，外形尺寸和性能参数与英国Staffa公司HMB系列马达一致，可替代进口。

产品标识说明

**** - *** - *** - ***
1 2 3 4

1) 意宁静液压低速大扭矩马达代号
2) 型号
3) 名义排量
4) 输出轴形式
a、P 表示为平键轴(数字表示轴的形式)
b、T表示为平键锥轴
c、S表示为外花键轴,(1-BS3550标准轴，2-DIN5480)
d、Q表示为内花键轴

型号举例

IMB 325 5400 P3

马达代号	IMB
型号	325
排量	5400ml/r
平键轴	P3

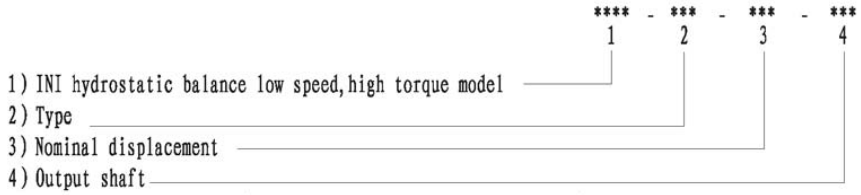
IMB hydrostatic balance hydraulic motor----higher pressure、higher speed、higher power

Main characteristics:

- The hydrostatic balance is built between the con-rod and eccentric sets, solve the problem of higher-power hydraulic motor of shaft con-rod be overwhelmed by the roller, so this motor have higher pressure、higher speed、higher power.
- Using special treatment process and hydrostatic balance between the con-rod and piston, reduce the friction loss in the load transmission, reduce the force between piston and cylinder wall, then reduce the friction loss between the piston and cylinder wall.
- The piston seal ring using special structures to reduce the friction and improve the volumetric efficiency.
- Using the hydrostatic balance shaft distributor, the distributor can rotary without connection , improve the volumetric efficiency and reduce the noise and the resistence.
- Characteristics and data is similar with Staffa.

Due to above these advantages, it has been widely applied in all kinds of hydraulic transmission system such an ship and deck machinery construction machinery and equipment、plastic injection machine、heavy metallurgical machinery. shape and characteristics data is similar to Staffa and HMB, so IMB can instand of imports.

Ordering Code



1) INI hydrostatic balance low speed, high torque model
2) Type
3) Nominal displacement
4) Output shaft

a、P-Parallel keyed shaft (numbers stand for the kinds of shaft)
b、T-Taper key shaft
c、S-Spline Shaft (1 stand for BS3550 standard shaft, 2 stand for DIN5480)
d、Q-Internal Spline Shaft

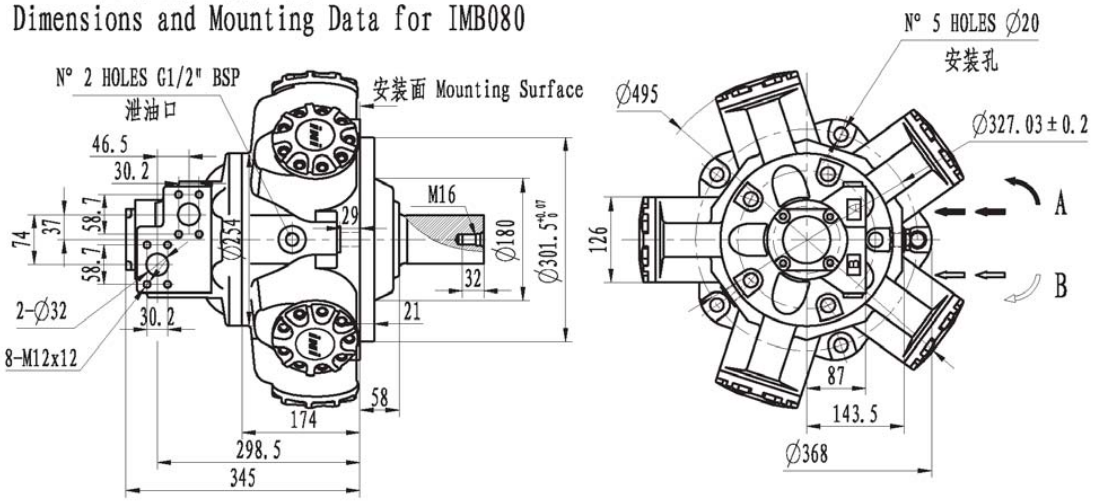
Example

IMB 325 5400 P3

Model	IMB
Type	325
Displacement	5400ml/r
Parallel keyed shaft	P3

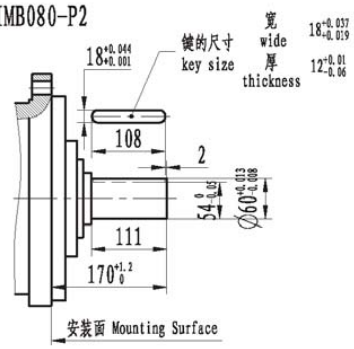
型号 TYPE	理论排量 (ml/r) THEORIC DISPLACEMENT	额定压力 (MPa) RATED PRESSURE	尖峰压力 (MPa) PEAK PRESSURE	额定扭矩 (N.m) RATED TORQUE	单位扭矩 (N.m/MPa) SPECIFIC TORQUE	最高转速 (r/min) MAX. SPEED	额定功率 (Kw) RATED PW	重量 (kg) WEIGHT
IMB080-1000	988	23	29	3324	145	300	90	144
IMB080-1100	1088	23	29	3661	159	300	90	
IMB080-1250	1237	23	29	4162	181	280	90	
IMB100-1400	1385	23	29	4660	203	260	100	144
IMB100-1600	1630	23	29	5484	238	240	100	
IMB125-1400	1459	23	29	4909	213	300	95	235
IMB125-1600	1621	23	29	5454	237	270	95	
IMB125-1800	1864	23	29	6271	273	235	95	
IMB125-2000	2027	23	29	6820	297	220	95	
IMB200-2400	2432	23	29	8182	356	220	120	285
IMB200-2800	2757	23	29	9276	403	195	120	
IMB200-3100	3080	23	29	10362	451	175	120	
IMB270-3300	3291	23	29	11072	481	160	130	420
IMB270-3600	3575	23	29	12028	523	145	130	
IMB270-4000	3973	23	29	13367	581	130	130	
IMB270-4300	4313	23	29	14511	631	120	130	
IMB325-4500	4538	23	29	15268	664	115	130	420
IMB325-5000	4992	23	29	16795	730	105	130	
IMB325-5400	5310	23	29	17865	777	100	130	
IMB400-5500	5510	23	29	18135	788	120	175	495
IMB400-6000	5996	23	29	19735	858	120	175	
IMB400-6500	6483	23	29	21337	928	120	175	
IMB400-6800	6807	23	29	22404	974	120	175	

IMB080系列安装联接尺寸图
Dimensions and Mounting Data for IMB080

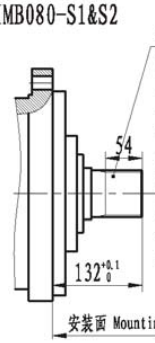


输出轴样式 SHAFTS

IMB080-P2



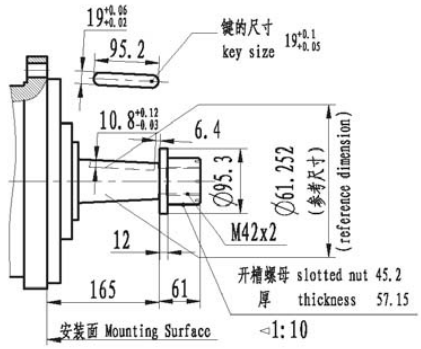
IMB080-S1&S2



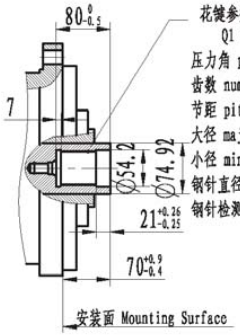
花键参数 spline data:

S1 BS 3550	
压力角 pressure angle	30°
齿数 number of teeth	14
节距 pitch	6/12
大径 major diameter	62.553/62.425
分度圆 form diameter	55.052
小径 minor diameter	54.084/53.525
钢针直径 pin diameter	8.128
钢针检测直径 diameter over pins	71.593/71.544
S2 DIN 5480 W70x3x30x22x7h	

IMB080-T1



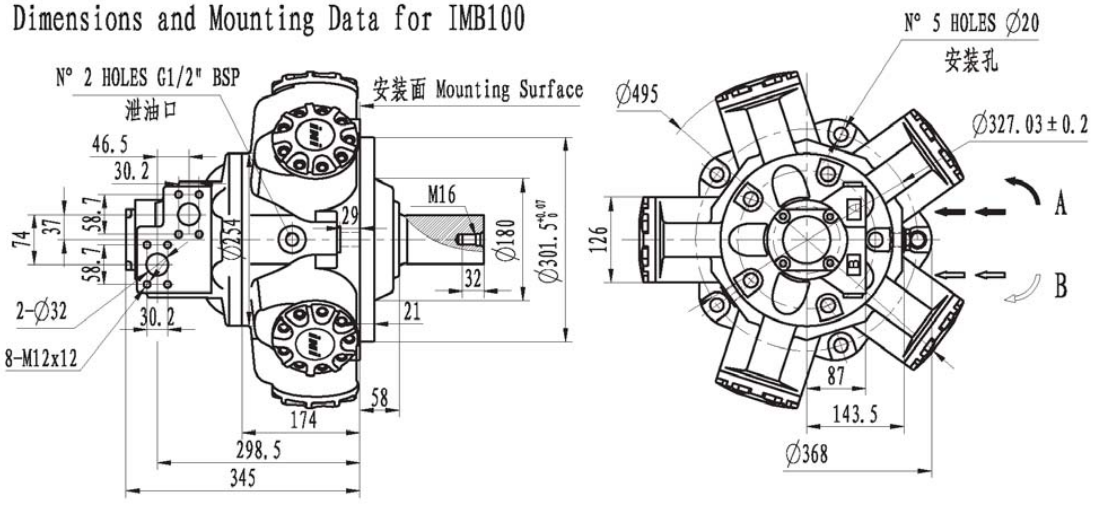
IMB080-Q1



花键参数 spline data:
Q1 BS 3550

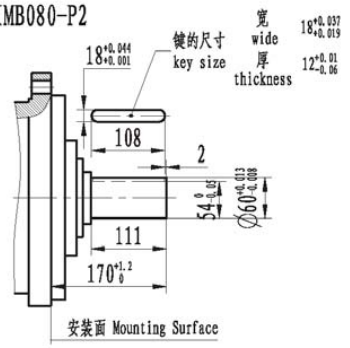
压力角 pressure angle	30°
齿数 number of teeth	24
节距 pitch	12/24
大径 major diameter	53.246/52.916
小径 minor diameter	48.811/48.684
钢针直径 pin diameter	3.658
钢针检测直径 diameter over pins	45.626/45.550

IMB100系列安装联接尺寸图
Dimensions and Mounting Data for IMB100

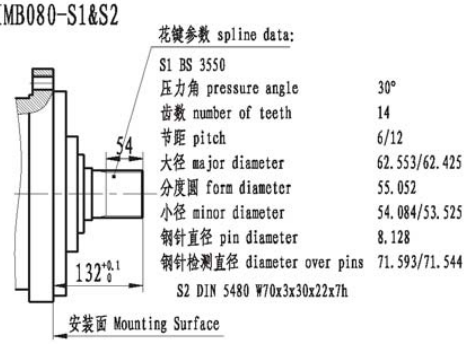


输出轴样式 SHAFTS

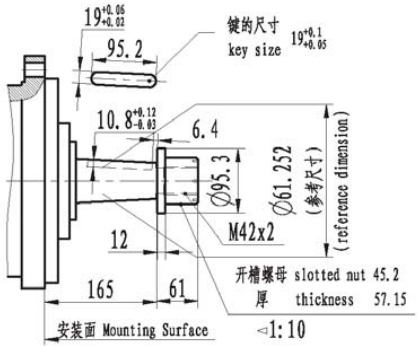
IMB080-P2



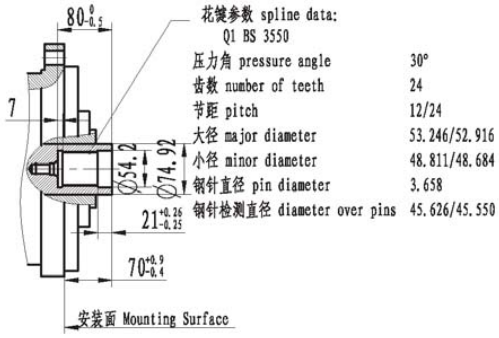
IMB080-S1&S2



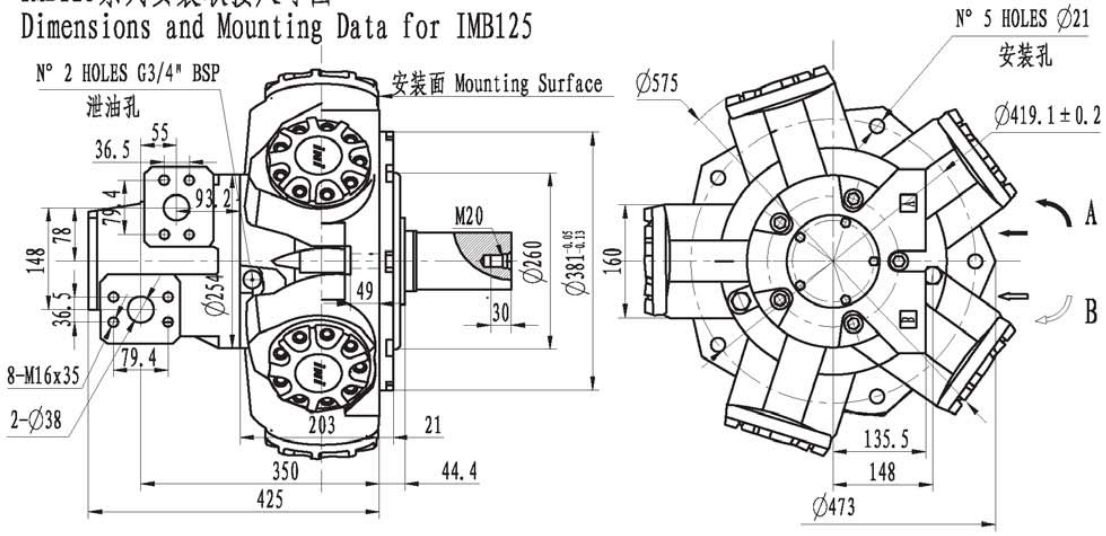
IMB080-T1



IMB080-Q1

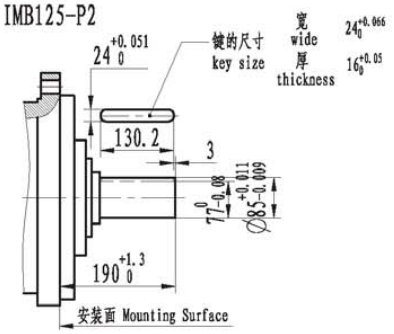


IMB125系列安装联接尺寸图
Dimensions and Mounting Data for IMB125

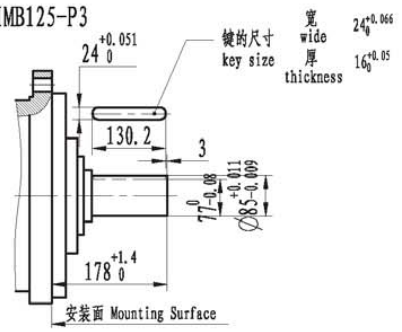


输出轴样式 SHAFTS

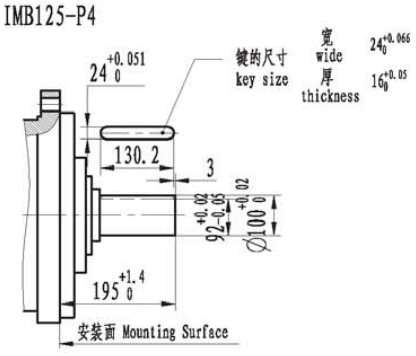
IMB125-P2



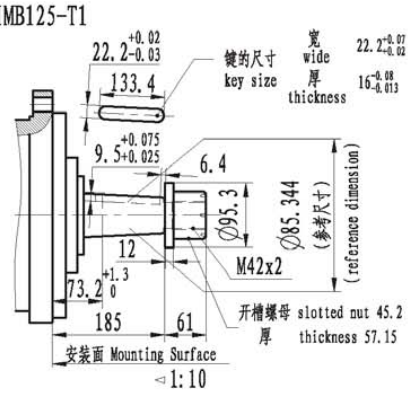
IMB125-P3



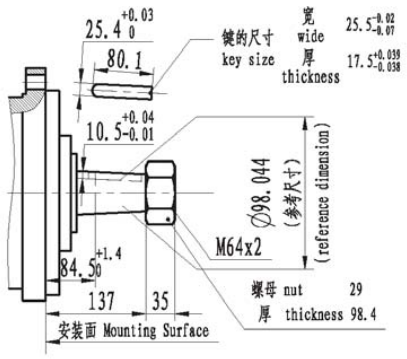
IMB125-P4



IMB125-T1

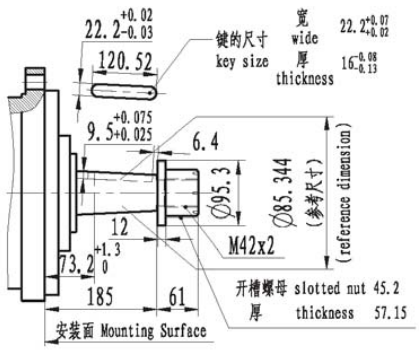


IMB125-T2



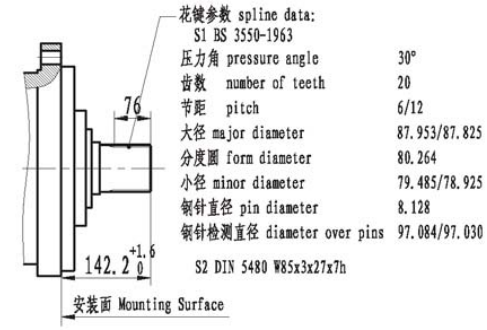
1:10

IMB125-T3

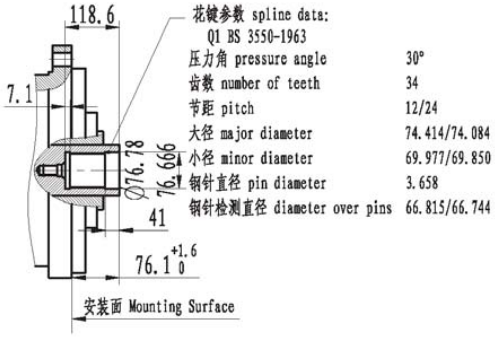


1:10

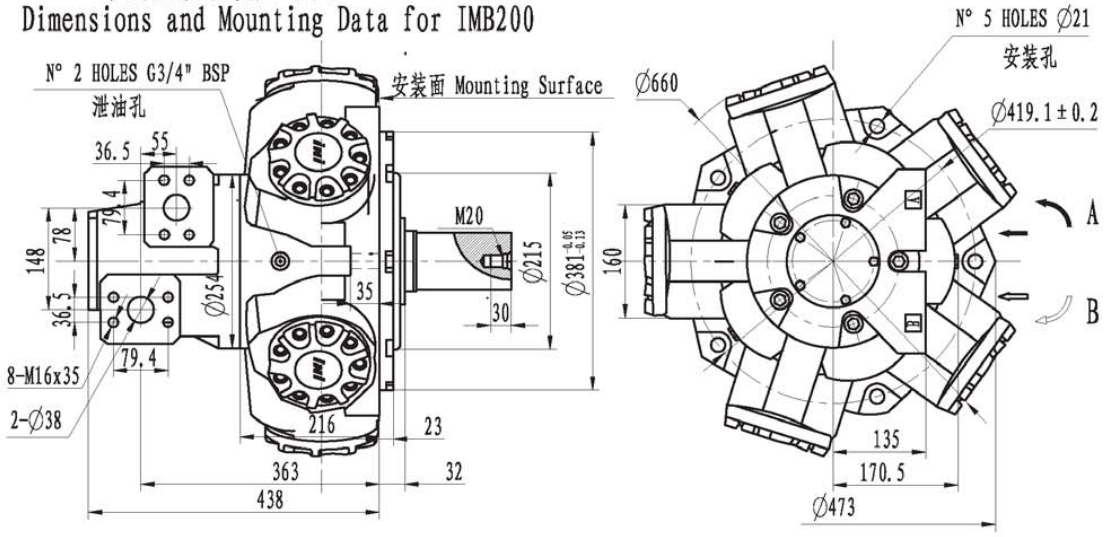
IMB125-S1&S2



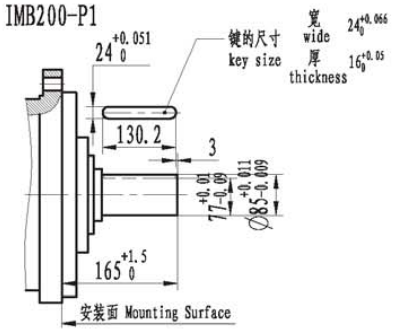
IMB125-Q1

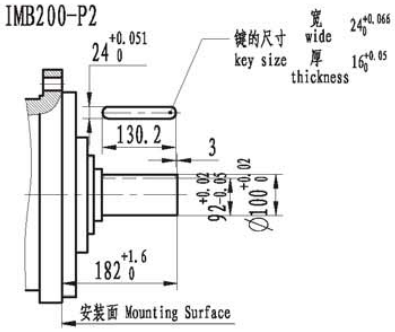


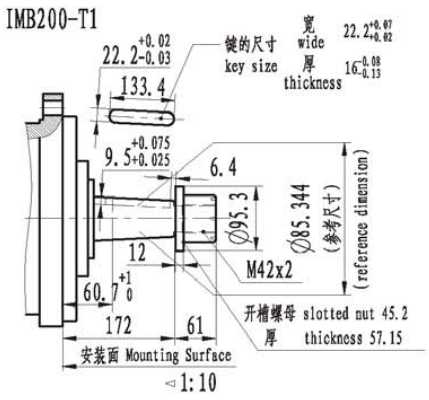
IMB200系列安装联接尺寸图
Dimensions and Mounting Data for IMB200

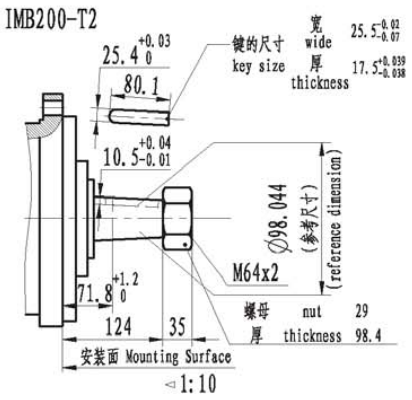


输出轴样式 SHAFTS

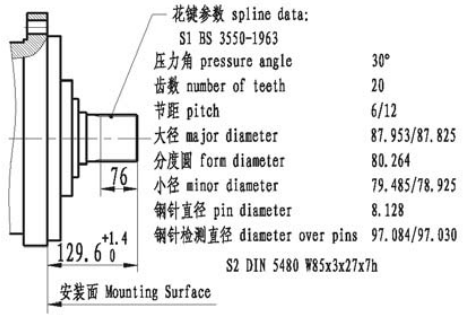




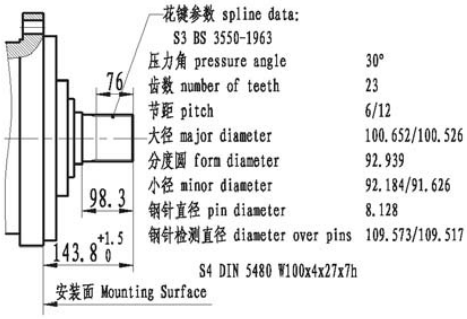




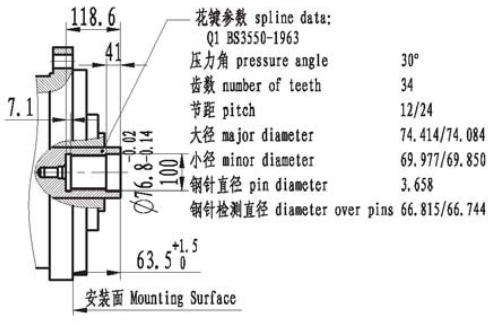
IMB200-S1&S2



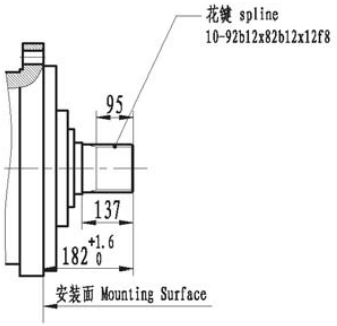
IMB200-S3&S4



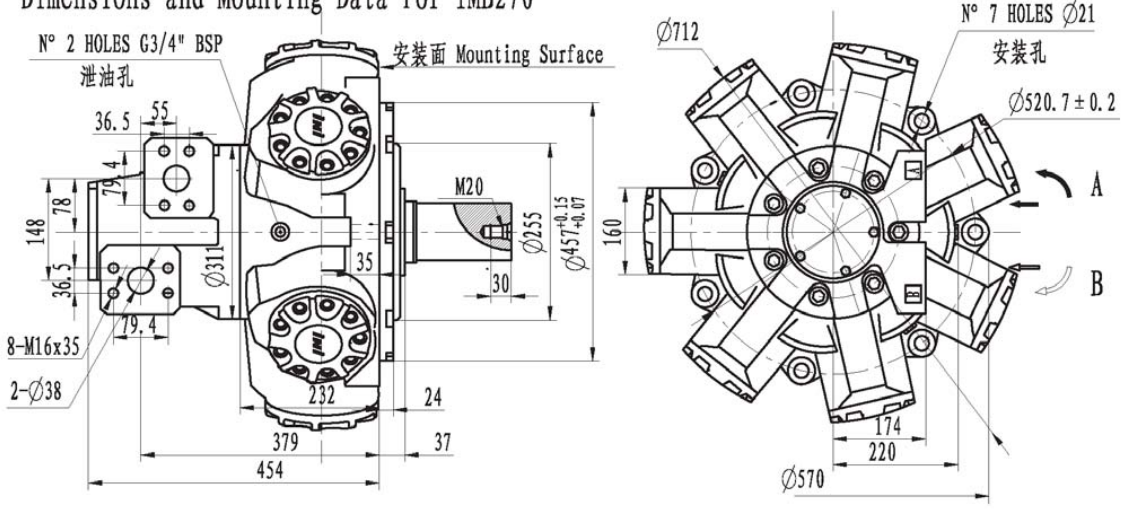
IMB200-Q1



IMB200-S5

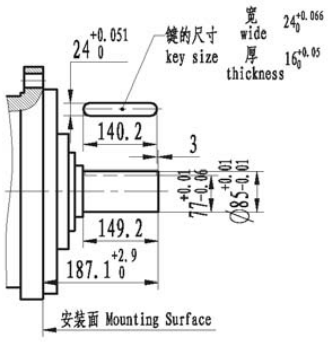


IMB270系列安装联接尺寸图
Dimensions and Mounting Data for IMB270

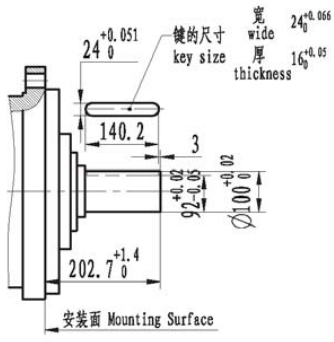


输出轴样式 SHAFTS

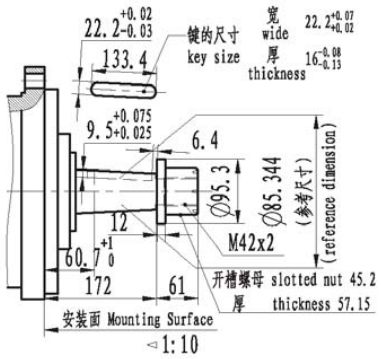
IMB270-P3



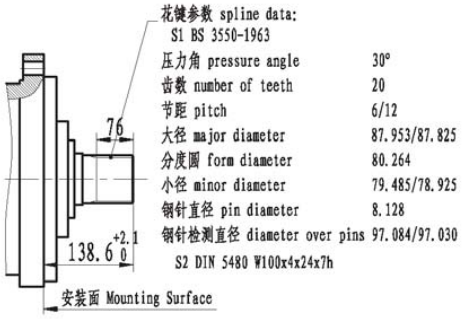
IMB270-P2



IMB270-P1

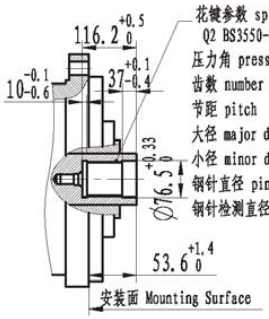


IMB270-S1&S2



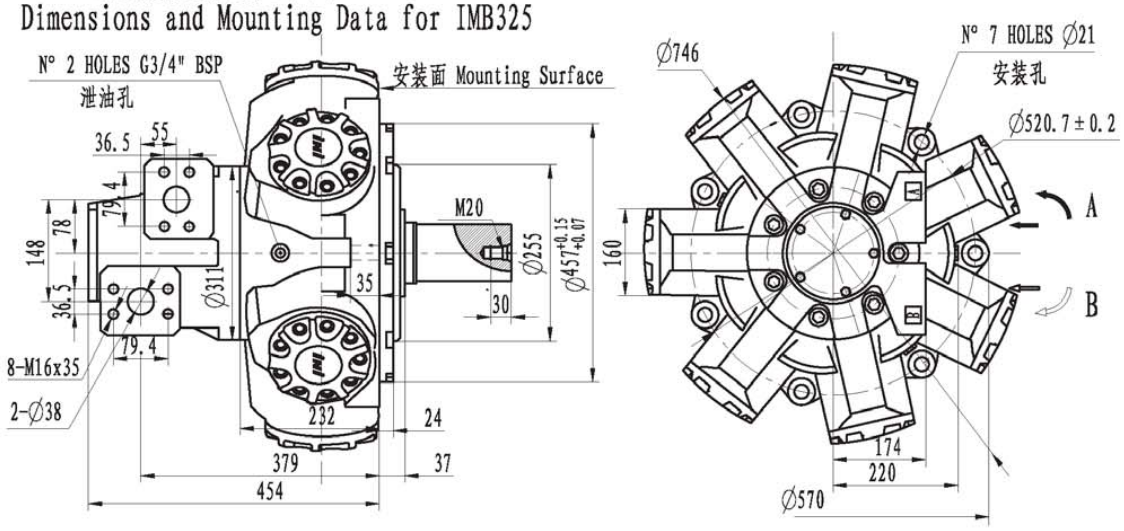
花键参数 spline data: S1 BS 3550-1963	
压力角 pressure angle	30°
齿数 number of teeth	20
节距 pitch	6/12
大径 major diameter	87.953/87.825
分度圆 form diameter	80.264
小径 minor diameter	79.485/78.925
钢针直径 pin diameter	8.128
钢针检测直径 diameter over pins	97.084/97.030
S2 DIN 5480 W100x4x24x7h	

IMB270-Q1



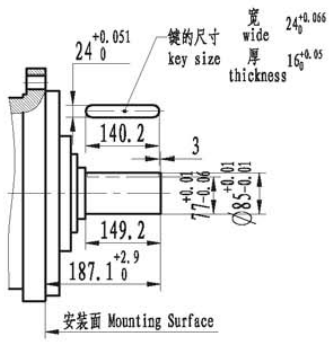
花键参数 spline data: Q2 BS3550-1963	
压力角 pressure angle	30°
齿数 number of teeth	34
节距 pitch	12/24
大径 major diameter	74.414/74.084
小径 minor diameter	69.977/69.850
钢针直径 pin diameter	3.658
钢针检测直径 diameter over pins	66.815/66.744

IMB325系列安装联接尺寸图
Dimensions and Mounting Data for IMB325

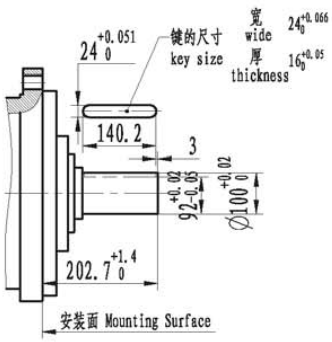


输出轴样式 SHAFTS

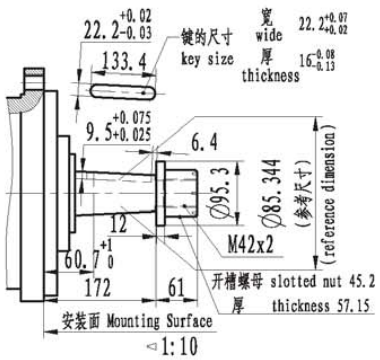
IMB325-P3



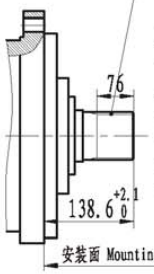
IMB325-P2



IMB325-P1

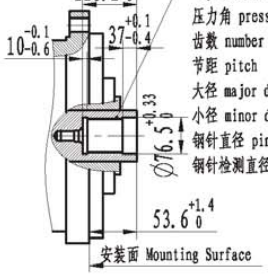


IMB325-S1&S2



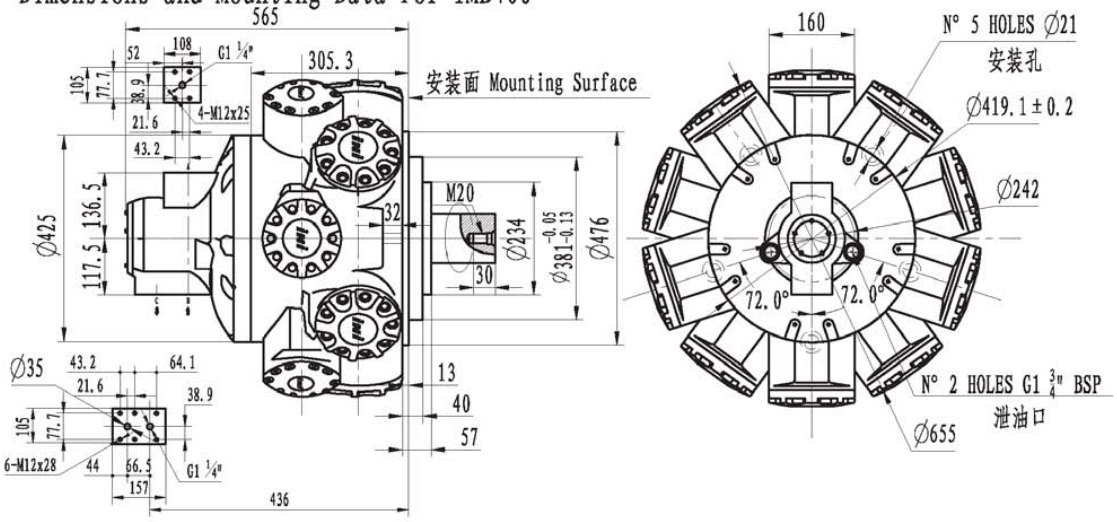
花键参数 spline data: S1 BS 3550-1963	
压力角 pressure angle	30°
齿数 number of teeth	20
节距 pitch	6/12
大径 major diameter	87.953/87.825
分度圆 form diameter	80.264
小径 minor diameter	79.485/78.925
钢针直径 pin diameter	8.128
钢针检测直径 diameter over pins	97.084/97.030
S2 DIN 5480 W100x4x24x7h	

IMB325-Q1



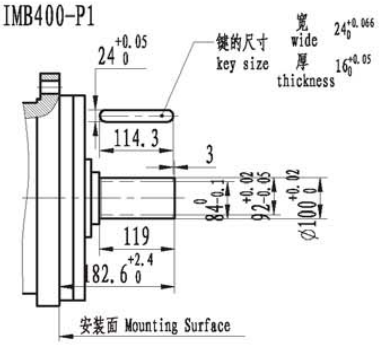
花键参数 spline data: Q2 BS3550-1963	
压力角 pressure angle	30°
齿数 number of teeth	34
节距 pitch	12/24
大径 major diameter	74.414/74.084
小径 minor diameter	69.977/69.850
钢针直径 pin diameter	3.658
钢针检测直径 diameter over pins	66.815/66.744

IMB400系列安装联接尺寸图
Dimensions and Mounting Data for IMB400

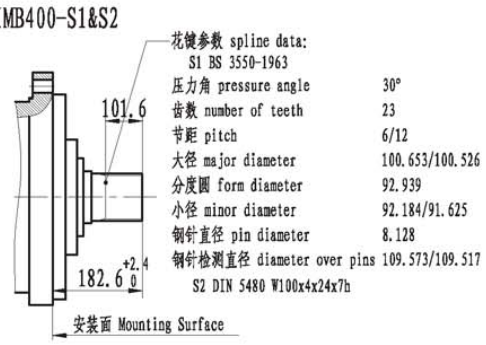


输出轴样式 SHAFTS

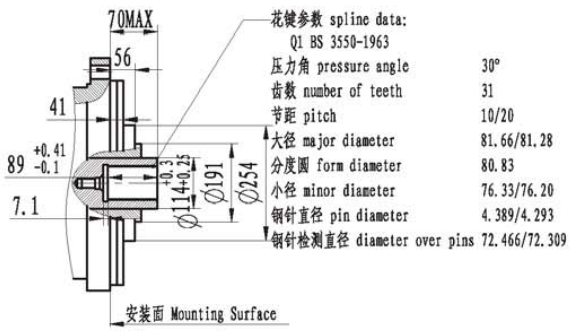
IMB400-P1



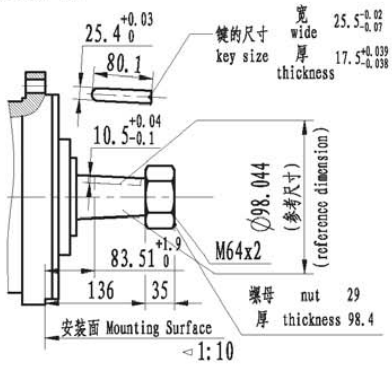
IMB400-S1&S2



IMB400-Q1



IMB400-T1



IMBP 系列马达是我公司吸收了国内外曲轴连杆式液压马达和平面配流的优点，大大地提高了液压马达的压力等级和容积效率。该系列马达具有可靠性好、效率高、寿命长、噪音低转速范围宽等一系列特点，可应用于船舶、矿山、建筑冶金、石油、煤矿、地质钻深、塑料行业等各种机械的液压传动系统中。

其主要特点:

- IMBP系列液压马达采用平面配流，泄漏少，容积效率高。
- IMBP系列液压马达在连杆和曲轴运动副间设计成静压平衡结构，使摩擦副得到良好的润滑，改善了轴的受力。
- 由于摩擦功损失和发热减少，马达的机械效率和启动效率得到提高，从而也提高了马达的工作受力。
- 该系列马达的曲轴采用了分体结构，提高了曲轴的使用寿命。
- 该系列马达的关键部位采用特殊材料和热处理工艺，有效的提高了马达的使用寿命。
- 该系列马达的外形尺寸和性能参数与英国STP公司HMB系列马达一致，可替代进口

产品标识说明

**** - *** - *** - *** - ***
1 2 3 4 5

1）意宁平面配流静压平衡低速大扭矩液压马达代号
2）型号
3）名义排量
4）输出轴形式
输出轴形式与IMB系列相同
5）配油器种类，订货时若不注明，按图示配置（见本公司2011年样本中各配流器型号及尺寸）

型号举例

IMBP 200 2400 P1

马达代号	IMBP
型号	200
排量	2400ml/r
平键轴	P1

IMBP series hydraulic motor absorbs the advantages of crankshaft connecting rod hydraulic motor and plate distributor from both home and abroad , improve volumetric efficiency and grade of pressure. This series motor featured compact and elegant figure, a high volumetric efficiency and power, low noise and good operating performance. Therefore, it has been widely applied to ship, construction, petroleum, mining, geological drilling, ship and deck machiney.

Main characteristics:

- Adopt plate distirbutor , lower drain , a high volumetric efficiency.
- Static pressure balance structure between shaft joint and connecting rod, thereby, it well smoothes the fiction joint and releases shaft pressure.
- Because of the decrease of the fiction work and heat loss, mechanical and starting efficiency increase, the motor's working force also improves.
- The shaft of this series employs fission structure to prolong motor life.
- All the key parts of this series use special material and employ special heat treatment, therefore, efficiently prolong motor life.
- As the dimension and performance data of this series are the same as HMB series of British Staffa Company, it could replace HMB .

Ordering Code

**** - *** - *** - *** - ***
1 2 3 4 5

1) INI plate distributor hydrostatic balance crankshaft and connecting rod low speed high torque hydraulic motor
2) Series
3) Nominal Displacement
4) Output shaft
shaft is similar to the IMB
5) Distributor(Please see the dimension and type of distributors in catalogue of 2011)

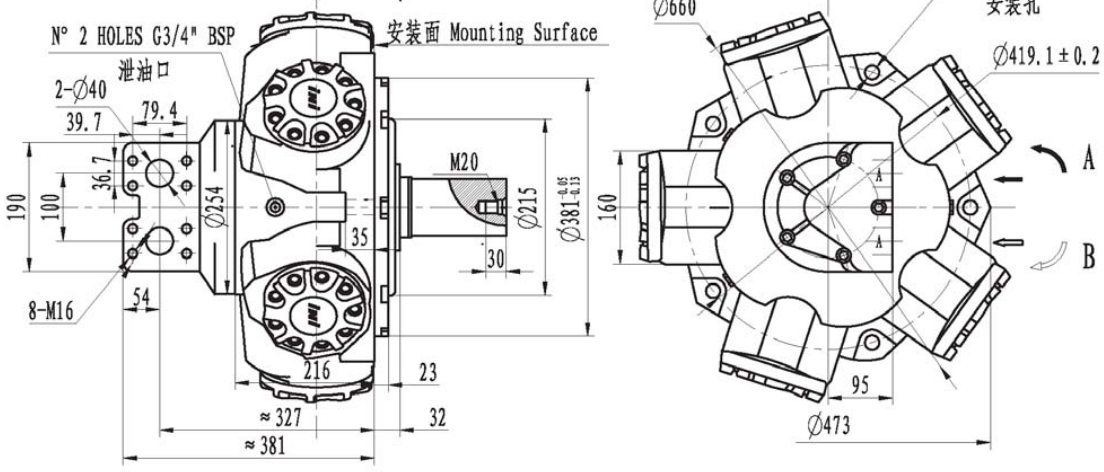
Example

IMBP 200 2400 P1

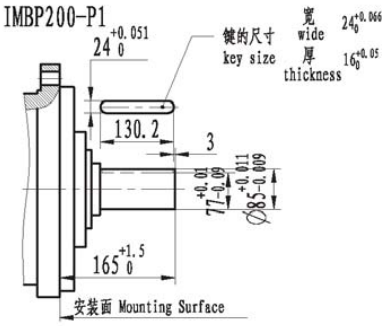
Model	IMBP
Type	200
Displacement	2400ml/r
Parallel keyed shaft	P1

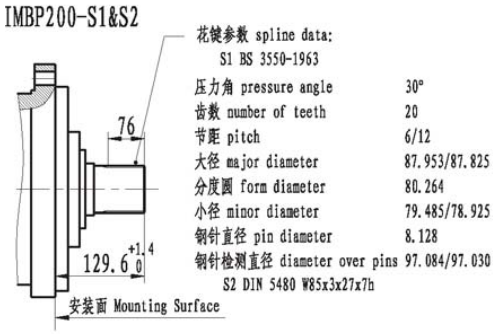
型号 TYPE	理论排量 (ml/r) THEORIC DISPLACEMENT	额定压力 (MPa) RATED PRESSURE	尖峰压力 (MPa) PEAK PRESSURE	额定扭矩 (N.m) RATED TORQUE	单位扭矩 (N.m/MPa) SPECIFIC TORQUE	最高转速 (r/min) MAX. SPEED	额定功率 (Kw) RATED PW	重量 (kg) WEIGHT
IMBP200-2400	2432	23	29	8182	356	220	120	285
IMBP200-2800	2757	23	29	9276	403	195	120	
IMBP200-3100	3080	23	29	10362	451	175	120	
IMBP270-3300	3291	23	29	11072	481	160	130	420
IMBP270-3600	3575	23	29	12028	523	145	130	
IMBP270-4000	3973	23	29	13367	581	130	130	
IMBP270-4300	4313	23	29	14511	631	120	130	

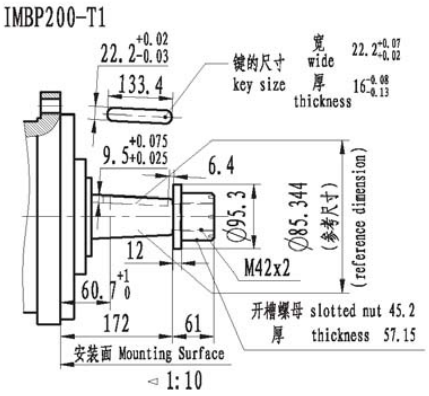
IMBP200系列安装联接尺寸图
Dimensions and Mounting Data for IMBP200



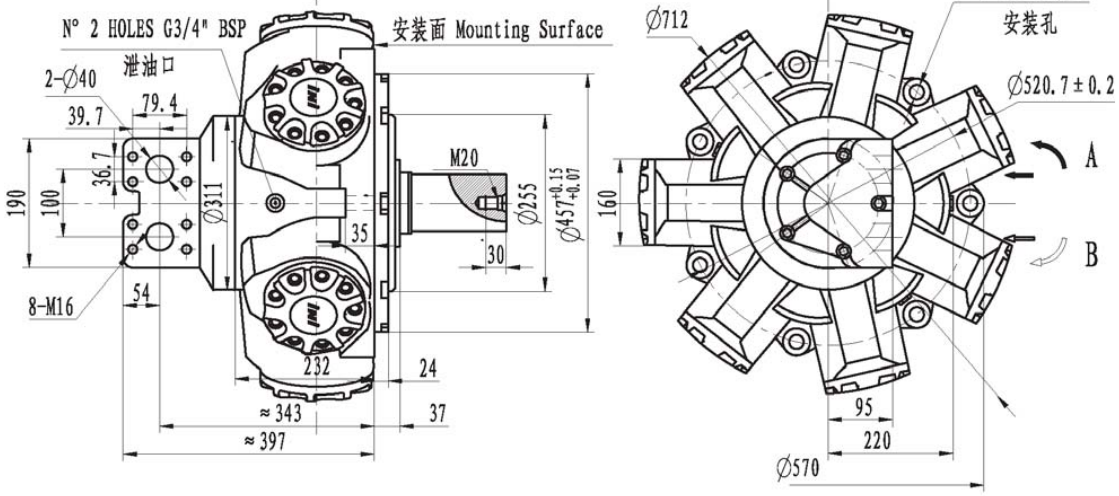
输出轴样式 SHAFTS





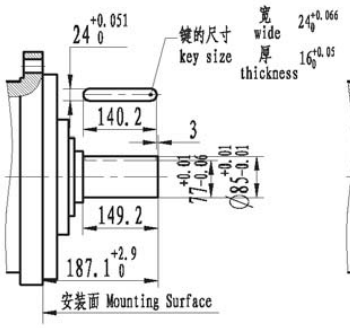


IMBP270系列安装联接尺寸图
Dimensions and Mounting Data for IMBP270

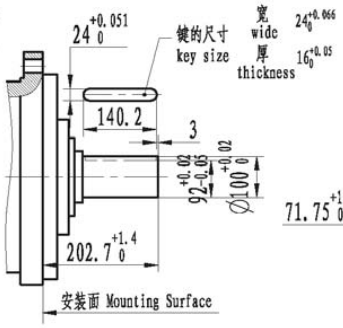


输出轴样式 SHAFTS

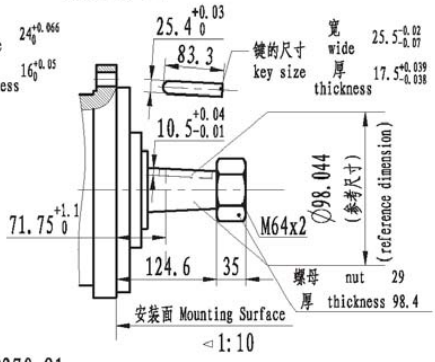
IMBP270-P3



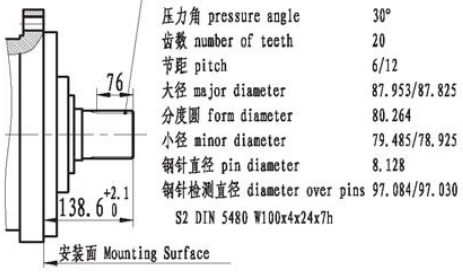
IMBP270-P2



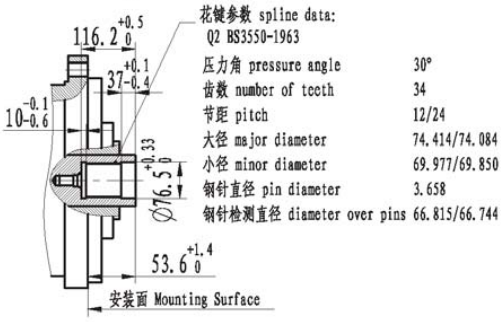
IMBP270-T1



IMBP270-S1&S2



IMBP270-Q1



IMC系列液压马达继承了IMB系列静压平衡的优点，具有同IMB系列同样的高效率、高启动扭矩、高容积效率等。

IMC系列液压马达具有双排量功能，可以从较宽范围的排量中选择适合于特殊应用需要的排量。可以通过远程控制或手动切换安装在马达上的方向控制阀来实现排量的切换，并且可以在马达运转中简单和轻松的实现。

其主要特点:

- 有两档排量，因而当泵供油流量不变情况下，马达可得两种转速
- 低速大扭矩
- 高效率
- 运转平稳
- 宽排量范围可供选择
- 可在运转时进行排量切换
- 电液或机械控制排量切换

主要运用:

起锚机、起重、卷扬机械及车辆的液压驱动等

产品标识说明

**** - *** - *** - *** - *** - ***
1 2 3 4 5 6

1) INI 两档变量低速大扭矩液压马达代号
2) 型号
3) 大排量
4) 小排量
5) 输出轴形式
a、P 表示为平键轴(数字表示轴的形式)
b、T表示为平键锥轴
c、S表示为外花键轴,(1-BS3550标准轴，2-DIN5480)
d、Q表示为内花键轴
6) 变量方式
无控制阀
EK电磁控制阀
MK手动控制阀

型号举例

IMC 200 2900 1500 S1 L1A

两档变量马达	IMC
型号	200
大排量	2900ml/r
小排量	1500ml/r
轴	S1
变量控制方式	L1A 无控制阀

The IMC series hydraulic motor inherits the IMB series hydrostatic balance motor structure,high efficiency,high starting torque, high volumetric efficiency,etc.

The IMC series two-speed hydraulic motor enables users to select the required displacement for a wide range of special working conditiongs.Users can switch the displacement by using a remote control or by manual control-using the control valve mounted on the motors.The displacement can easily be changed while the motor is still running.

Its main characteristics are as follows:

- two-speed, so when the pump flow is constant, the motor has two-speed.
- Low speed & High-torque
- High Efficiency
- Stable Running
- Wide range of Displacement
- Switchable Displacement while the motor is running
- Switch realized with electro hydraulic or mechanical control

Main Application:

capstan, hoist, windless machinery, hydraulic drive for automobiles, etc,

Ordering Code

**** - *** - *** - *** - *** - *** -
1 2 3 4 5 6

1) IMC model of dual speed motor
2) Type
3) Large Displacement
4) Small Displacement
5) Output Shaft
a、P-Parallel keyed shaft(numbers stand for the kinds of shaft)
b、T-Taper key shaft
c、S-Spline Shaft(1 stand for BS3550 standard shaft, 2 stand for DIN5480)
d、Q-Internal Spline Shaft
6) Variable Control
Null Control Valve
Electromagnetic Control Valve
Manual Control Volve

Example

IMC 200 2900 1500 S1 L1A-**

two-speed motor	IMC
type	200
large displacement	2900ml/r
small displacement	1500ml/r
shaft	S1
variable control	L1A null control valve

名义排量 NOMINAL DISPLACEMENT	1600	1500	1400	1300	1200	1100	1000	900	800	700	600	500	400	300	200	100
排量 ml/r DISPLACEMENT	1580	1481	1383	1284	1185	1086	987	889	790	691	592	494	395	296	197	98/0
单位扭矩 N.M/Mpa SPECIFIC TORQUE	225	212	198	184	169	155	140	125	108	94	78	68	45	30	18	0
最大持续转速 r/min MAX. CONT. SPEED	260	270	280	300	330	370	405	485	540	540	540	540	540	540	540	900
最大持续功率 KW MAX. CONT. POWER	99	98	96	93	90	84	82	79	74	69	57	46	35	23	10	0
最大断续功率 KM MAX. CONT. POWER	120	117	113	109	105	100	97	93	87	81	68	54	40	28	14	0
最大持续压力 Mpa MAX. CONT. PRESSURE	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	15
最大断续压力 Mpa MAX. TOP. PRESSURE	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	15

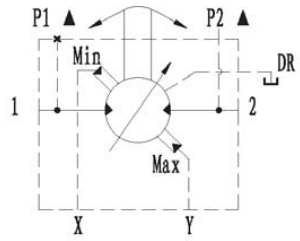
IMC100排量的选择范围 IMC100 Displacement Options

大排量 Large displacement: 1600, 1500, 1400, 1300, 1200, 1100, 1000, 900, 800:

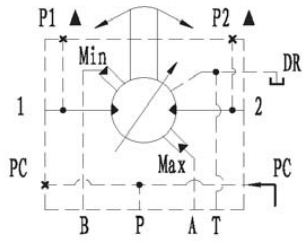
小排量 Small displacement: 1100, 1000, 800, 700, 600, 500, 400, 300, 200, 100

控制原理图 Functional Symbols

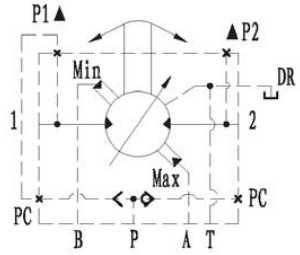
-L1A-



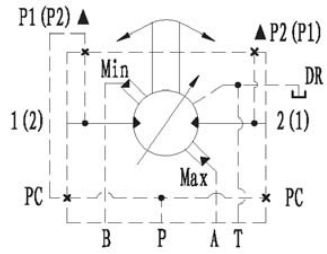
-L1B-



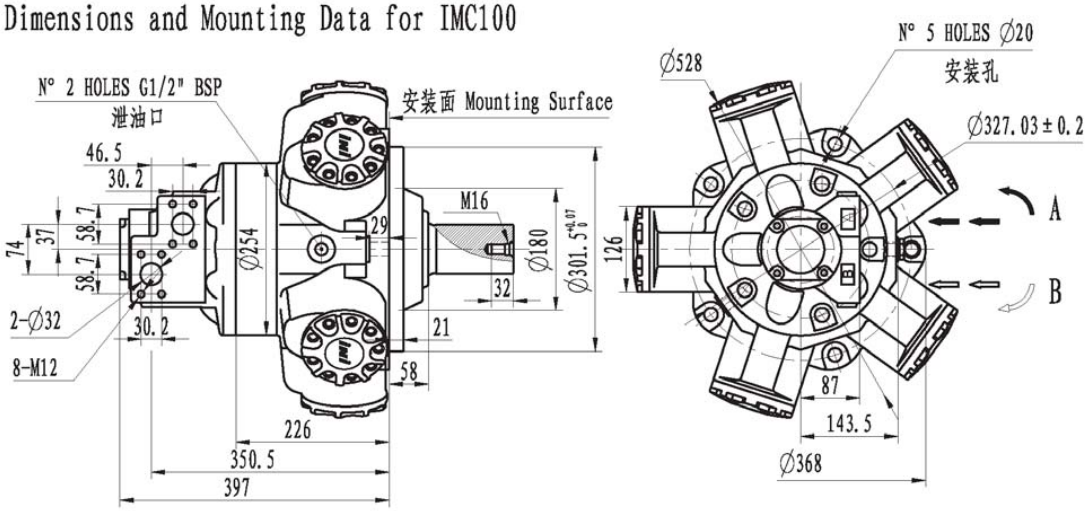
-L1C-



-L1D-

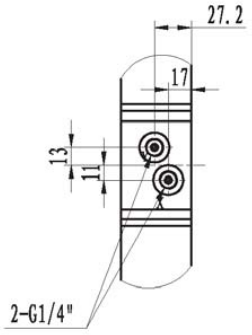


IMC100系列安装联接尺寸图
Dimensions and Mounting Data for IMC100

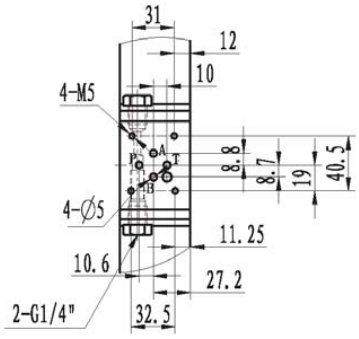


变量控制方法的安装尺寸 Variable Control's Mounting Data

L1A 的安装尺寸
L1A Mounting Data

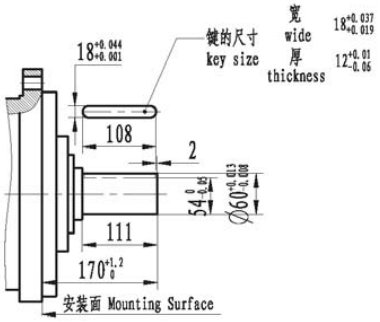


L1B&L1C&L1D 的安装尺寸
L1B&L1C&L1D Mounting Data

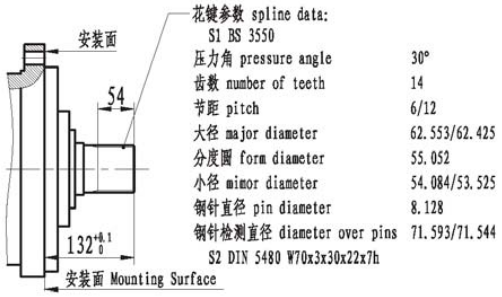


输出轴样式 SHAFTS

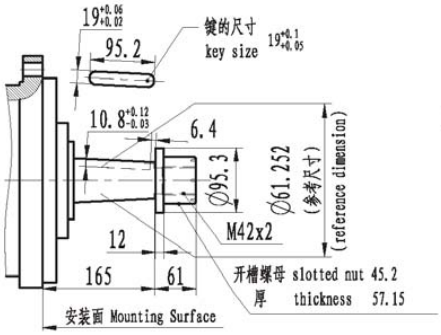
IMC100-P2



IMC100-S1&S2

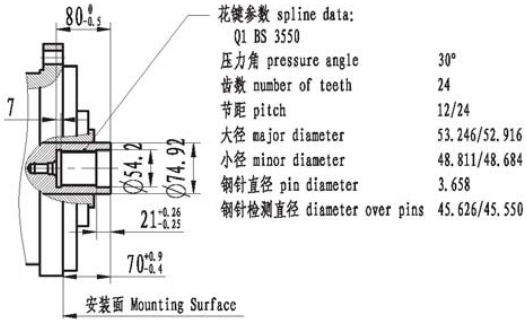


IMC100-T1



1:10

IMC100-Q1



名义排量 NOMINAL DISPLACEMENT	2100	2000	1800	1600	1500	1300	1200	1000	830	670	510	350	190	110
排量 ml/r DISPLACEMENT	2066	1973	1811	1649	1487	1325	1163	1001	839	677	515	353	191	109/0
单位扭矩 N.M/Mpa SPECIFIC TORQUE	293	281	258	231	206	180	154	125	100	79	57	39	6	0
最大持续转速 r/min MAX. CONT. SPEED	170	175	190	210	230	265	305	350	395	485	540	540	540	900
最大持续功率 KW MAX. CONT. POWER	91	89	83	77	71	66	60	55	48	42	33	16	3	0
最大断续功率 KM MAX. CONT. POWER	106	104	99	95	90	85	79	73	65	57	44	28	5	0
最大持续压力 Mpa MAX. CONT. PRESSURE	21	21	21	21	21	21	21	21	21	21	21	21	21	15
最大断续压力 Mpa MAX. TOP. PRESSURE	25	25	25	25	25	25	25	25	25	25	25	25	25	15

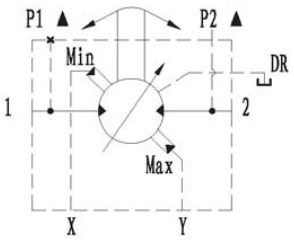
IMC125排量的选择范围 IMC125 Displacement Options

大排量 Large Displacement: 2100, 2000, 1800, 1600

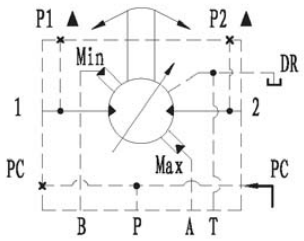
小排量 Small Displacement: 1600, 1500, 1300, 1200, 1000, 830, 670, 510, 350, 190, 110

控制原理图 Functional Symbols

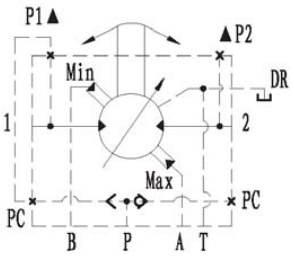
-F01-L1A-
-F02-L1A-



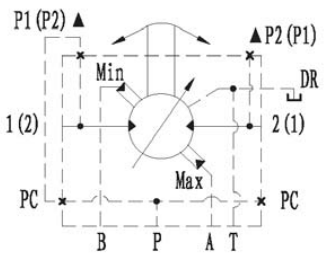
-F01-L1B-
-F02-L1B-



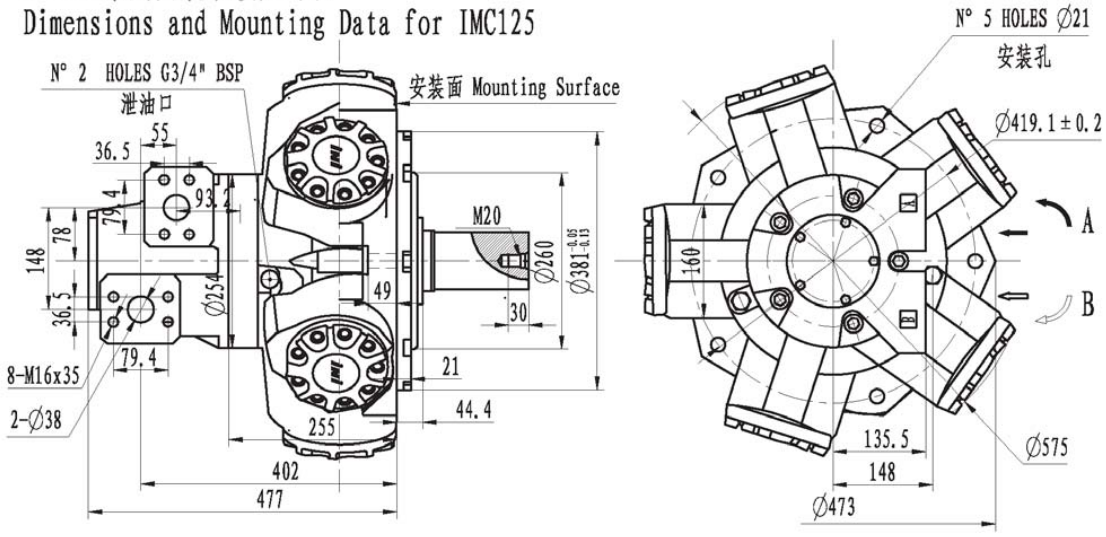
-F01-L1C-
-F02-L1C-



-F01-L1D-
-F02-L1D-

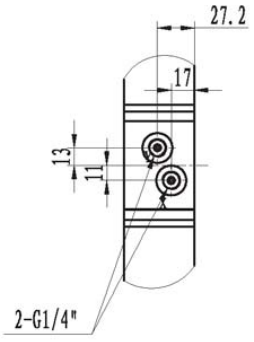


IMC125系列安装联接尺寸图
Dimensions and Mounting Data for IMC125

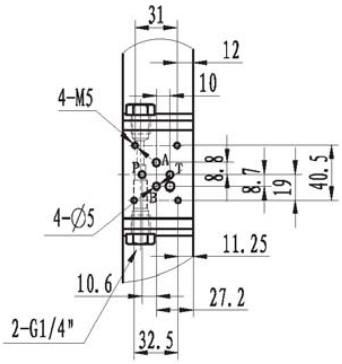


变量控制方法的安装尺寸 Variable Control's Mounting Data

L1A 的安装尺寸
L1A Munting Data

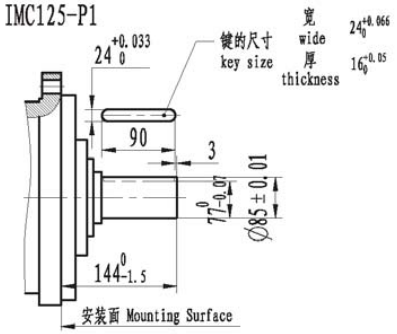


L1B&L1C&L1D 的安装尺寸
L1B&L1C&L1D Mounting Data

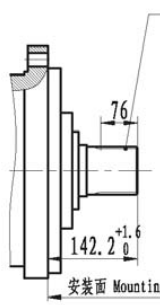


输出轴形式 SHAFTS

IMC125-P1

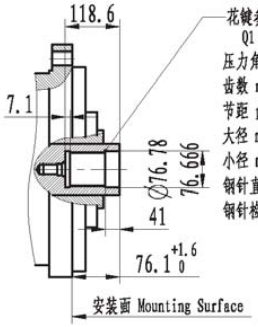


IMC125-S1&S2



花键参数 spline data: S1 BS 3550-1963	
压力角 pressure angle	30°
齿数 number of teeth	20
节距 pitch	6/12
大径 major diameter	87.953/87.825
分度圆 form diameter	80.264
小径 minor diameter	79.485/78.925
钢针直径 pin diameter	8.128
钢针检测直径 diameter over pins	97.084/97.030
S72 DIN 5480 W85x3x27x7h	

IMC125-Q1



花键参数 spline data: Q1 BS 3550-1963	
压力角 pressure angle	30°
齿数 number of teeth	34
节距 pitch	12/24
大径 major diameter	74.414/74.084
小径 minor diameter	69.977/69.850
钢针直径 pin diameter	3.658
钢针检测直径 diameter over pins	66.815/66.744

名义排量 NOMINAL DISPLACEMENT	3100	2900	2800	2600	2400	2300	2100	2000	1800	1600	1500	1300	1200	1000	830	670	510	350	190	110
排量 ml/r DISPLACEMENT	3080	2958	2796	2634	2472	2310	2148	1973	1811	1649	1487	1325	1163	1001	839	677	515	353	191	109/0
单位扭矩 N.M/Mpa SPECIFIC TORQUE	447	422	400	375	351	326	300	281	258	231	206	180	154	125	100	79	57	30	6	0
最大持续转速 r/min MAX. CONT. SPEED	110	115	125	135	140	150	160	175	190	210	230	265	305	350	395	485	540	540	540	900
最大持续功率 KW MAX. CONT. POWER	131	131	131	124	117	111	96	89	83	77	71	66	60	55	48	42	33	16	3	0
最大断续功率 KM MAX. CONT. POWER	146	146	146	139	131	124	116	104	99	95	90	85	79	73	65	57	44	28	5	0
最大持续压力 Mpa MAX. CONT. PRESSURE	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	15
最大断续压力 Mpa MAX. TOP. PRESSURE	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	15

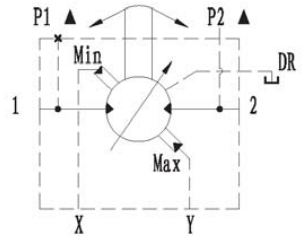
IMC200排量的选择范围 IMC200 Displacement Options

大排量 Large Displacement: 3100, 2900, 2800, 2600, 2400, 2300, 2100, 2000, 1800, 1600

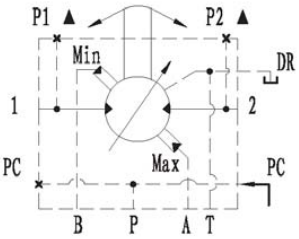
小排量 Small Displacement: 2300, 2100, 2000, 1800, 1600, 1500, 1300, 1200, 1000, 830, 670, 510, 350, 190, 110

控制原理图 Functional Symbols

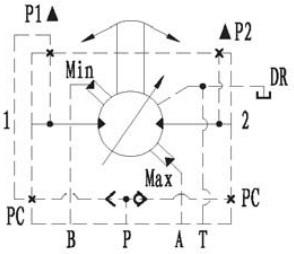
-L1A-



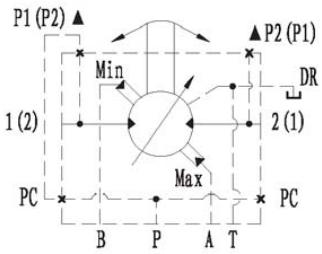
-L1B-



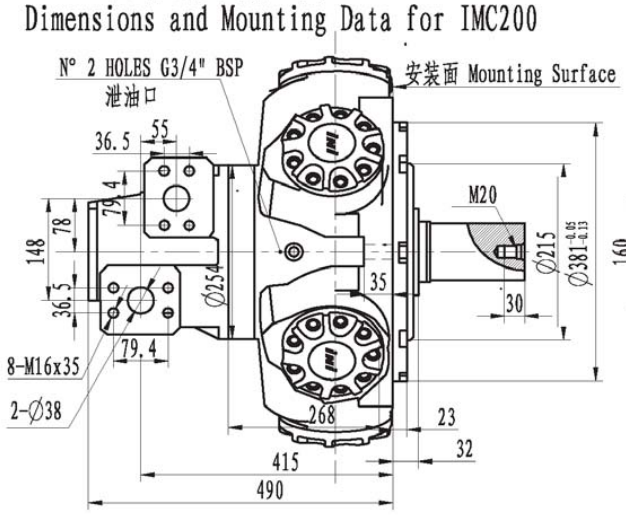
-L1C-

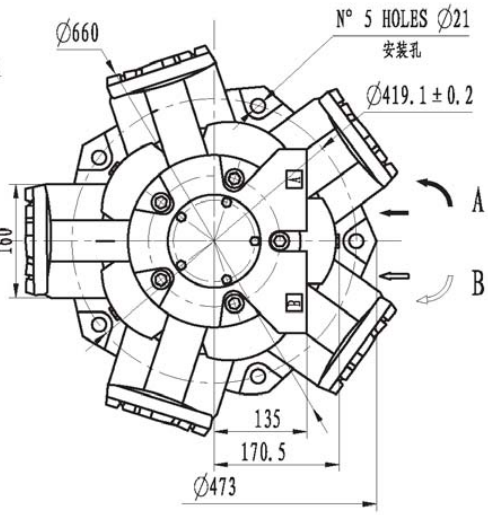


-L1D-



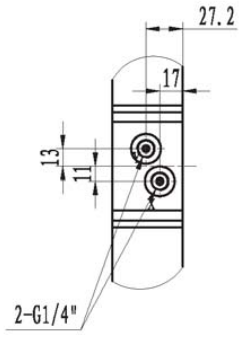
IMC200系列安装联接尺寸图
Dimensions and Mounting Data for IMC200



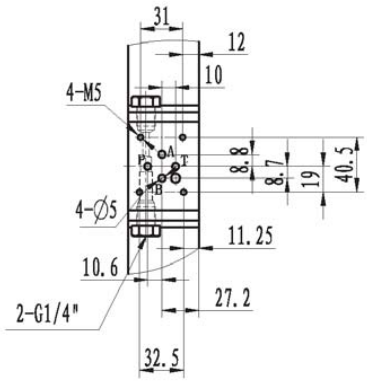


变量控制方法的安装尺寸 Variable Control's Mounting Data

L1A 的安装尺寸
L1A Munting Data

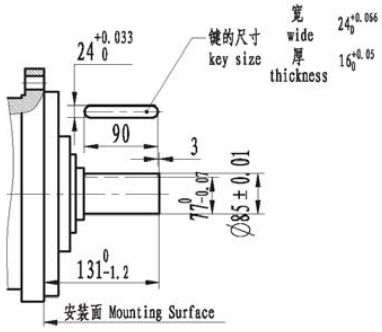


L1B&L1C&L1D 的安装尺寸
L1B&L1C&L1D Mounting Data

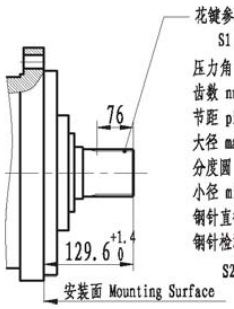


输出轴样式 SHAFTS

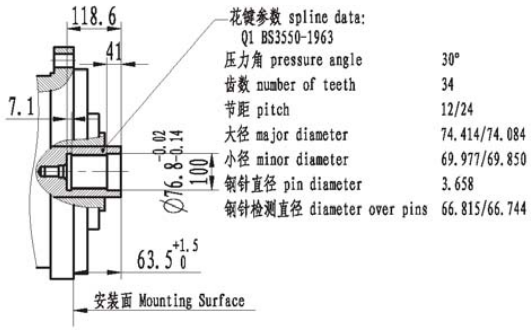
IMC200-P1



IMC200-S1&S2



IMC200-Q1



名义排量 NOMINAL DISPLACEMENT	4600	4100	3600	3300	3000	2600	2300	1900	1600	1400	970	680	340	170
排量 ml/r DISPLACEMENT	4597	4086	3632	3291	2951	2610	2270	1930	1649	1362	965	681	340	170/0
单位扭矩 N.M/Mpa SPECIFIC TORQUE	657	585	514	460	419	356	310	259	210	168	108	73	24	0
最大持续转速 r/min MAX. CONT. SPEED	108	120	135	145	165	180	215	240	290	315	315	315	315	900
最大持续功率 KW MAX. CONT. POWER	123	115	104	97	90	83	76	68	59	48	37	25	8	0
最大断续功率 KM MAX. CONT. POWER	153	149	142	136	129	122	112	102	91	81	68	47	12	0
最大持续压力 Mpa MAX. CONT. PRESSURE	21	21	21	21	21	21	21	21	21	21	21	21	21	15
最大断续压力 Mpa MAX. TOP. PRESSURE	25	25	25	25	25	25	25	25	25	25	25	25	25	15

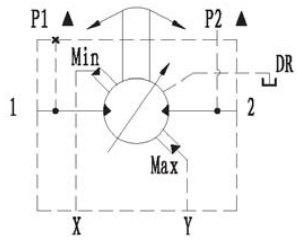
IMC270排量的选择范围 IMC270 Displacement Options

大排量 Large Diplacement: 4600, 4100, 3600, 3300

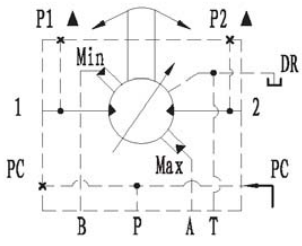
小排量 Small Displacement: 3300, 3000, 2600, 2300, 1900, 1600, 1400, 970, 680, 340, 170

控制原理图 Functional Symbols

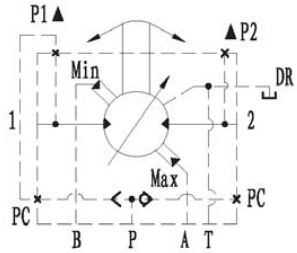
-L1A-



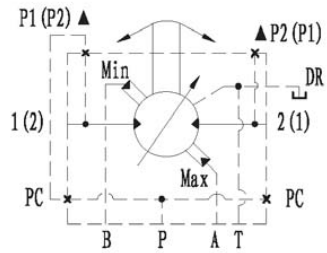
-L1B-



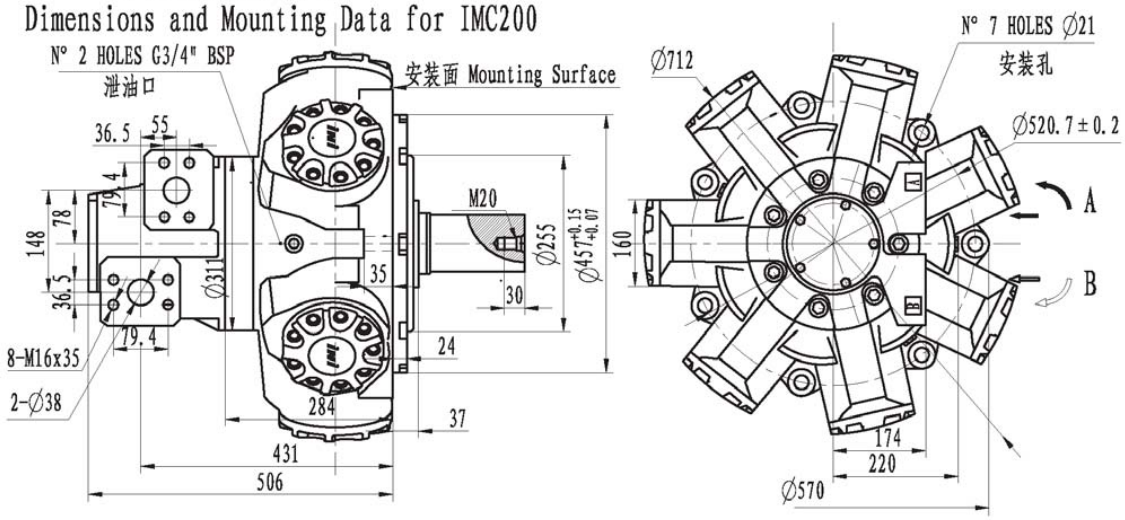
-L1C-



-L1D-

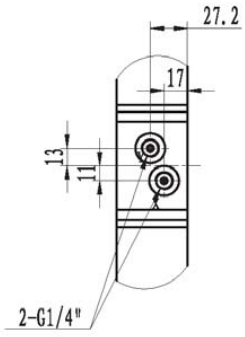


IMC270系列安装联接尺寸图
Dimensions and Mounting Data for IMC200

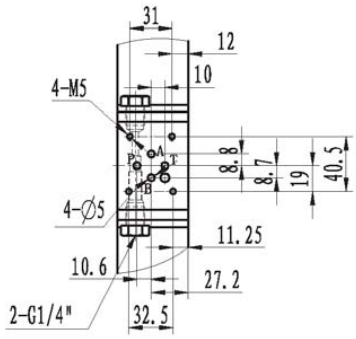


变量控制方法的安装尺寸 Variable Control's Mounting Data

L1A 的安装尺寸
L1A Munting Data

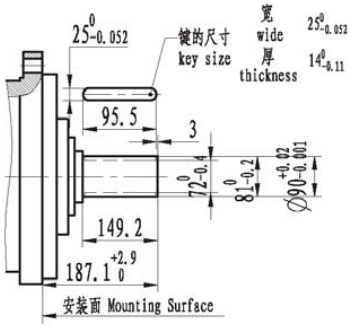


L1B&L1C&L1D 的安装尺寸
L1B&L1C&L1D Mounting Data

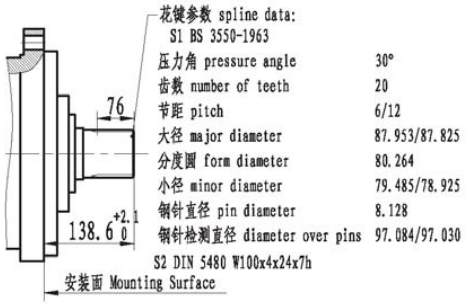


输出轴样式 SHAFTS

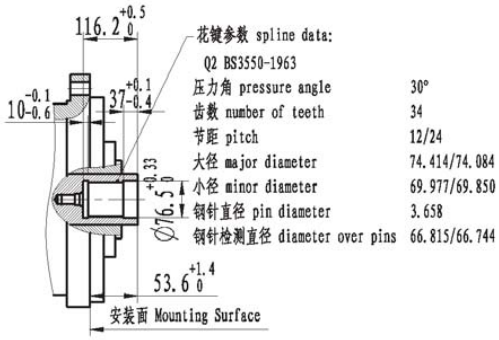
IMC270-P1



IMC270-S1&S2



IMC270-Q1



名义排量 NOMINAL DISPLACEMENT	5300	5100	4900	3600	3300	3000	2600	2300	1900	1600	1500	1400
排量 ml/r DISPLACEMENT	5335	5108	4937	3632	3291	2951	2610	2270	1930	1646	1532	1362
单位扭矩 N.M/Mpa SPECIFIC TORQUE	763	731	706	514	460	419	356	310	259	210	196	168
最大持续转速 r/min MAX. CONT. SPEED	90	105	110	135	145	165	180	215	240	290	315	315
最大持续功率 KW MAX. CONT. POWER	123	123	123	104	97	90	83	76	68	59	54	48
最大断续功率 KM MAX. CONT. POWER	153	153	153	142	136	129	122	112	102	91	87	81
最大持续压力 Mpa MAX. CONT. PRESSURE	21	21	21	21	21	21	21	21	21	21	21	15
最大断续压力 Mpa MAX. TOP. PRESSURE	25	25	25	25	25	25	25	25	25	25	25	15

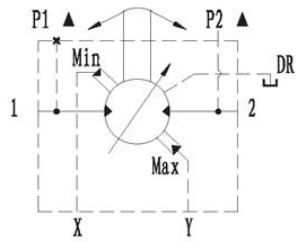
IMC325排量的选择范围 IMC325 Displacement Options

大排量 Large Displacement: 5300, 5100, 4900;

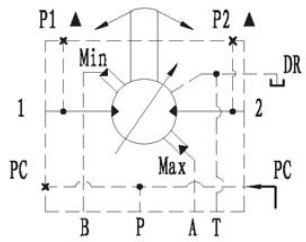
小排量 Small Displacement: 3600, 3300, 3000, 2600, 2300, 1900, 1600, 1500, 1400

控制原理图 Functional Symbols

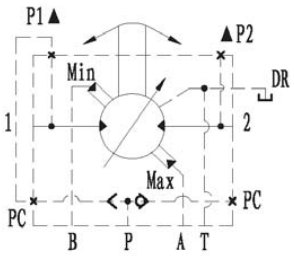
-L1A-



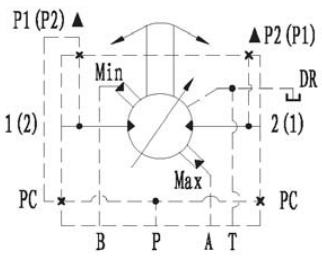
-L1B-



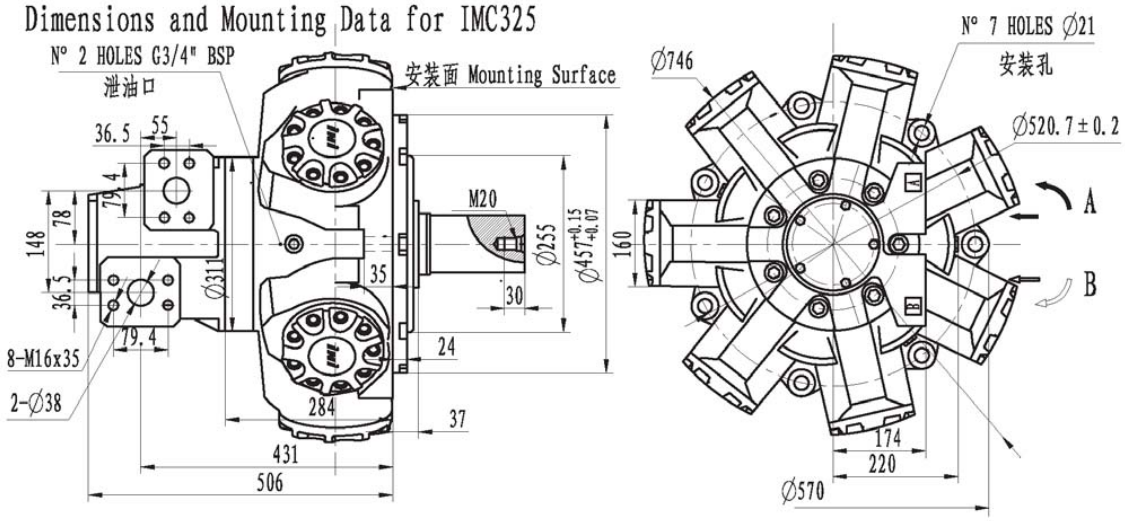
-L1C-



-L1D-

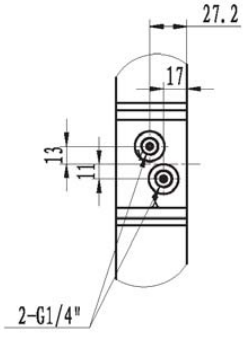


IMC325系列安装联接尺寸图
Dimensions and Mounting Data for IMC325

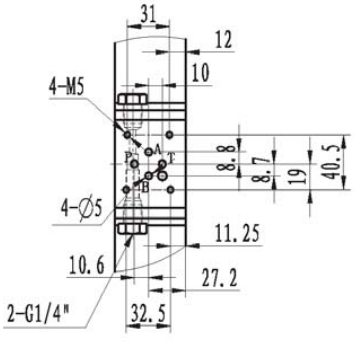


变量控制方法的安装尺寸 Variable Control's Mounting Data

L1A 的安装尺寸
L1A Munting Data

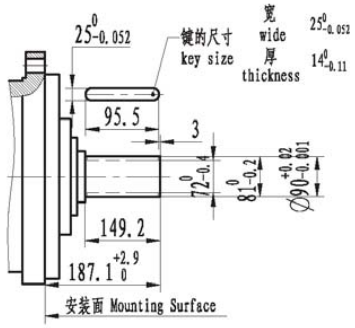


L1B&L1C&L1D 的安装尺寸
L1B&L1C&L1D Mounting Data

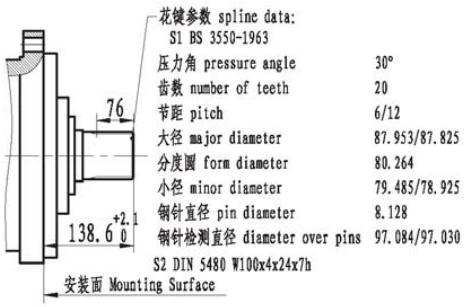


输出轴样式 SHAFTS

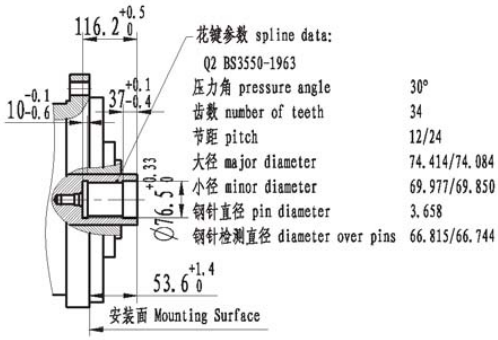
IMC325-P1



IMC325-S1&S2



IMC325-Q1



产品主要特点

1.采用高科技复合材料，并通过工艺改进解决了前往马达球窝与球塞配合精度低等问题，改进后马达压力比原先提高2倍、摩擦系数降低1倍、寿命则延长4倍左右。

2.马达采用先进的平面配流（专利）技术，简单可靠、密封性好、泄漏少、马达容积效率由92%提高到98%以上。

3.定子内曲线全由进口加工中心、数控机床加工，由于曲面精度与表面粗糙度的提高合马达机械效率同比提高约20%。

产品适用范围

QJM型液压马达可与各种油泵、阀及液压附件配套组成液压传动装置，由于它在设计上采取了各种措施，故可适应各种机器的工况。该型马达具有重量轻、体积小、调整范围大，可有级变量、机械制动器可自动启闭、低速稳定性好、工作可靠、耐冲击、效率高、寿命长等一系列优点。目前已广泛应用于建筑工程、起重运输、冶金重型、石油、煤矿、船舶、机床、轻工注塑、地质勘探等部门。可直接驱动履带行走、轨道轮子驱动、各种回转提升机械、勘探钻孔、带式输送、物料搅拌、路面切割、船舶推进、塑料预塑等机构。

工作原理

QJM系列马达工作时，高压油由马达进油口进入，再经配流器进入缸体、缸孔推动球塞组件沿着定子滚道环的曲线轨道，在0°至30°上作升程运动。球塞组件对曲线轨道产生作用力，而曲线轨道对球塞组件产生反作用力，该反作用力的切向分力又作用到缸体上，由此驱动缸体产生转矩，通过传动轴输出。球塞组件在升程苛作至300时进油结束。当进入30°至60°时，缸体、缸孔通过配流器与回油孔（低压腔）接通，作回程运动，至60°时，组件回程工作结束，至此该组组件的一次工作（升、回程）全部结束。接着又进入下一次升、回程工作。其余组件工作同样类推。回流路线，低压油经配流器的回油孔、马达出油口流回油箱。

● 如何合理选型

●同一基型的液压马达，压力等级有3种，其额定压力分别为10、16、20MPa，尖峰压力分别为16、25、31.5MPa，如何合理选择种比较适合主机工况型号呢？首先应考虑提高传动效率，对传动功率较小、转速低，扭矩大的工况，此时影响传动总效率的主要因素是容积效率，对传动功率相同的液压装置，降低系统工作压力能显著提高容积效率，因此这时应选用额定压力为10MPa型号，同时实际工作压力还应选得低些，当传动功率越小，转速越低时工作压力越低越有利。相反对传动功率大，转速较高的工况，此时影响传动总效率的主要因素是机械效率，因此这时应选用额定压力为16或20MPa的型号。其次对于有低速稳定性要求的工况，选型中应注意液压马达排量越大，低速稳定性越好，它还与工作压力有关，工作压力越低低速稳定性越好。

●排量相同的几个不同基型的液压马达，如何选择一种合理的型号呢？这与使用工况和使用寿命要求有关，对于短期间隙运转、整个大修期间累计工作时间较短的机械，可以选用基型编号较小的型号，而对于第天累计运转时间长，使用寿命又要求较长的机械，应尽可能选用基型编号较大的型号，必要时应选用高压的型号，但在较低的压力条件下使用，此时能显著提高使用寿命，因为QJM型液压马达的使用寿命与使用压力的3.3次方成反比，也就是使用压力降低一半、寿命可提高10倍。

● 对系统工作介质的和过滤的要求

● QJM液压马达的工作介质可以采用液压油或机械油等矿物油。当采用低凝液压油时，工作温度范围：-40℃～80℃，用机械油时工作温度范围0℃～60℃。

对油液粘度要求：（50℃时）额定压力在10MPa以下16～28mm²/S
16MPa以下28～35mm²/S
20MPa以下35～43mm²/S

一般建议选用46号抗磨液压油。

●工作介质必须清洁，滤油精度可按配套油泵要求选定。

● 型号说明

□ □ QJM □ □ □ L

1表示定量 2表示2级变量
3表示3级变量

变量控制方式：FS表示滑阀手动
Ls表示螺杆手动 无符号表示液动

径向球塞轴转液压马达
壳转液压马达用QKM表示

基型编号，相同基型，主要外型尺主要零件相同

排量（L/r）

宁波力士威迩液压传动有限公司生产

无字母表示标准型
Z、表示带支承，注脚数字表示种类
Ze、表示传动轴轴承外置式
T、表示通孔，注脚数字表示通孔直么
S、表示带自控式制动器
Se、表示带外控式制动器，矩形花键孔输出
SeZ表示带外控式制动器，平键轴输出
SeZH表示带外控式制动器，矩形花键轴输出
F、表示带阀组
A、表示花键尺寸与本系列马达的花键尺寸不同
D、表示壳转单出轴

● 型号说明举例

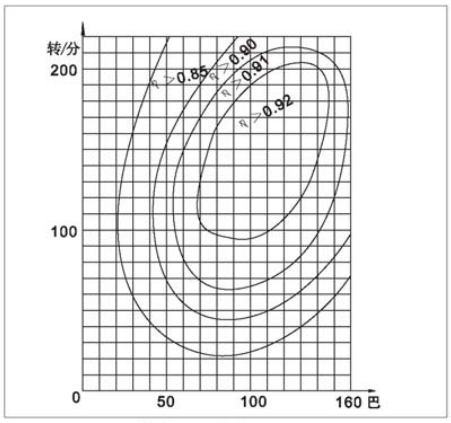
2LS QJM21-0.63 SZL表示双速手动螺杆控制变量的径向轴转球塞液压马达，基型为21，排量为0.63升/转，带自控式制动器、平键轴输出具有宁波力士威迩公司特点马达。

● QJM型各基型的额定流量(=额定转速x排量)

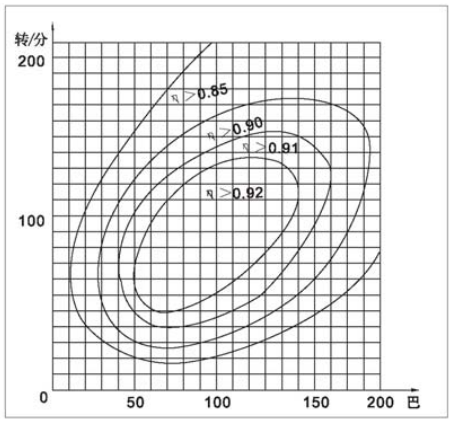
Flow rate of QJM motors(=rated speedxdisplacment)

基型 Series	QJM001	QJM01	QJM11	QJM12	QJM21	QJM31	QJM32	QJM42	QJM52	QJM62
额定流量 flow rate L/min	50	63	80	80	100	125	160	250	320	400
外径 outer diameter mm	Φ140	Φ180	Φ240	Φ240	Φ300	Φ320	Φ320	Φ350	Φ420	Φ485

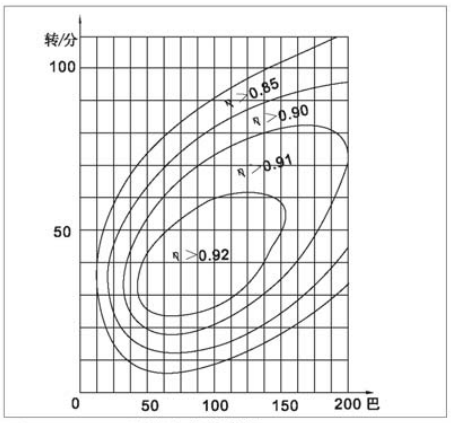
● 效率特性曲线 Performance Curve of Efficiency



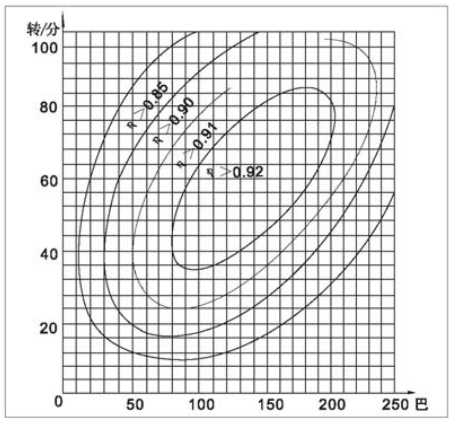
1QJM11-0.5L型效率特性曲线
Model 1QJM11-0.5L performance curve of efficiency



1QJM21-0.63L型效率特性曲线
Model 1QJM21-0.63L performance curve of efficiency



1QJM32-1.25L型效率特性曲线
Model 1QJM32-1.25L performance curve of efficiency



2QJM42-2.5L型效率特性曲线
Model 2QJM42-2.5L performance curve of efficiency

● 1QJM※※——※※L型液压马达技术参数（理论参数未考虑效率）

Technical data of 1QJM※※——※※L series fixed displacement hydraulic motor

型 号 Type	排量 Displacement (L/rev)	压力 Pressure(MPa)		转速范围 Rotational Speed range (r/min)	额定输出扭矩 Rated output (N.m)	最大功率 Max.power
		额定 Rated	尖锋 Peak			
1QJM001-0.063L	0.064	10	16	8-600	95	1.4
1QJM001-0.08L	0.083	10	16	8-500	123	1.8
1QJM001-0.10L	0.104	10	16	8-400	154	2.3
1QJM002-0.2L	0.2	10	16	5-320	295	4.3
1QJM01-0.1L	0.10	10	16	8-400	148	2.2
1QJM01-0.16L	0.163	10	16	8-350	241	3.6
1QJM01-0.2L	0.203	10	16	8-320	300	4.4
1QJM02-0.32L	0.326	10	16	5-320	483	7.1
1QJM02-0.4L	0.406	10	16	5-320	600	8.8
1QJM11-0.32L	0.339	10	16	5-400	468	5.9
1QJM1A-0.4L	0.404	10	16	5-400	598	7.5
1QJM11-0.5L	0.496	10	16	5-320	734	9.2
1QJM11-0.63L	0.664	10	16	4-250	983	12.4
1QJM1A1-0.63L	0.664	10	16	4-250	983	12.4
1QJM21-0.4L	0.404	16	25	2-400	957	10.0
1QJM21-0.5L	0.496	16	25	2-320	1175	12.3
1QJM21-0.63L	0.664	16	25	2-250	1572	16.5
1QJM21-0.8L	0.808	16	25	2-200	1913	20.0
1QJM21-1.0L	1.01	10	16	2-160	1495	15.8
1QJM21-1.25L	1.354	10	16	2-125	2004	21
1QJM21-1.6L	1.65	10	16	2-100	2442	25.6
1QJM12-1.0L	1.0	10	16	4-200	1480	18.6
1QJM12-1.25L	1.33	10	16	4-160	1968	24.8
1QJM32-0.63L	0.635	20	31.5	3-300	1880	19.8
1QJM32-0.8L	0.808	20	31.5	3-250	2368	24.8
1QJM32-1.0L	1.06	20	31.5	2-250	3138	33.0
1QJM32-1.25L	1.295	20	31.5	2-200	3833	40.0
1QJM32-1.6L	1.649	20	31.5	2-200	4881	51.2
1QJM32-2.0L	2.03	16	25	2-200	4807	50.5
1QJM32-2.5L	2.71	16	16	1-160	4011	42
1QJM32-3.2L	3.3	10	16	1-125	1884	51.2
1QJM32-4.0L	4.0	10	16	1-100	5920	62.0
1QJM42-2.0L	2.11	20	31.5	1-250	6246	52.5
1QJM42-2.5L	2.56	20	31.5	1-250	7578	63.5
1QJM42-3.2L	3.24	10	16	1-200	4850	40.8
1QJM42-4.0L	4.0	10	16	1-160	5920	50.0
1QJM42-4.5L	4.6	10	16	1-125	6808	57.0
1QJM52-2.5L	2.67	20	31.5	1-200	7903	66.2
1QJM52-3.2L	3.24	16	31.5	1-200	9590	80.5
1QJM52-4.0L	4.0	10	25	1-200	9472	80.0
1QJM52-5.0L	5.23	10	16	1-160	7740	65.0
1QJM52-6.3L	6.36	20	16	1-125	9413	79.0
1QJM62-4.0L	4.0	20	31.5	0.5-150	11840	74.5
1QJM62-5.0L	5.18	20	31.5	0.5-105	15333	96.5
1QJM62-6.3L	6.27	16	25	0.5-125	14847	93.5
1QJM62-8L	7.85	10	16	0.5-100	11618	73.0
1QJM62-10L	10.15	10	16	0.5-80	15022	95.0

注：1.各型带支承和带阀组液压马达其技术参数与上表中对应的标准型液压马达技术参数相同。
2.1QJM322-**L型马达其技术参数与上表中1QJM32标准相同。

Note:1.The technical parameters of various sorts of types hydraulic motors with bearing have the same data as standard type hydraulic motors.
2.Technical parameters of 1QJM322-**L motors are the same as those of 1QJM32 above listed.

● 2QJM※※——※※L型液压马达技术参数（理论参数未考虑效率）

Technical data of 2QJM※※——※※L series variable displacement hydraulic motor

型 号 Type	排量 Displacement (L/rev)	压力 Pressure(MPa)		转速范围 Rotational Speed range (r/min)	额定输出扭矩 Rated output torque (N.m)	最大功率 Max.power
		额定 Rated	尖锋 Peak			
2QJM02-0.4L	0.406,0.203	10	16	5-320	600,300	8.8
2QJM11-0.4L	0.404,0.202	10	16	5-400	598,299	7.5
2QJM11-0.5L	0.496,0.248	10	16	5-320	734,367	9.2
2QJM11-0.63L	0.664,0.332	10	16	4-250	938,492	12.4
2QJM21-0.32L	0.317,0.1585	16	25	2-320	751,376	8.0
2QJM21-0.5L	0.496,0.248	16	25	2-320	1175,588	12.4
2QJM21-0.63L	0.664,0.332	16	25	2-250	1572,786	16.5
2QJM21-1.0L	1.01,0.505	10	16	2-160	1495,748	15.8
2QJM21-1.25L	1.354,0.677	10	16	2-125	2004,1002	21
2QJM21-1.6L	1.65,0.825	10	16	2-100	2442,1221	25.6
2QJM32-0.63L	0.635,0.318	20	31.5	3-500	1880,940	19.8
2QJM32-1.0L	1.06,0.53	20	31.5	2-400	3138,1519	33.0
2QJM32-1.25L	1.295,0.648	20	31.5	2-320	3833,1917	40.2
2QJM32-1.6L	1.649,0.825	20	31.5	2-250	4881,2441	51.2
2QJM32-1.6/1.4L	1.6,0.4	20	31.5	2-250	4736,1184	49.6
2QJM32-2.0L	2.03,1.015	16	25	2-200	4807,2404	50.5
2QJM32-2.5L	2.71,1.355	10	16	1-160	4011,2006	42.0
2QJM32-3.2L	3.3,1.65	10	16	1-125	4844,2442	51.2
2QJM32-4.0L	4.0,2.0	10	16	1-100	5920,2960	62.0
2QJM42-2.0L	2.11,1.055	20	31.5	1-320	6246,3123	52.55
2QJM42-2.5L	2.56,1.28	20	31.5	1-250	7578,3789	63.5
2QJM42-3.2L	3.24,1.62	10	16	1-200	4850,2425	40.8
2QJM42-4.0L	4.0,2.0	10	16	1-160	5920,2960	50.0
2QJM42-4.5L	4.6,2.3	10	16	1-125	6808,3404	66.0
2QJM52-2.5L	2.67,1.335	20	31.5	1-320	7903,3952	66.2
2QJM52-3.2L	3.24,1.62	20	31.5	1-250	9590,4795	80.5
2QJM52-4.0L	4.0,2.0	16	25	1-200	9472,4736	80.0
2QJM52-5.0L	5.23,2.615	10	16	1-160	7740,3870	85.0
2QJM52-6.3L	6.36,3.18	10	16	1-125	9413,4707	79.0
2QJM62-4.0L	4.0,2.0	20	31.5	0.5-200	11840,5920	74.5
2QJM62-5.0L	5.18,2.59	20	31.5	0.5-160	15333,7667	96.5
2QJM62-6.3L	6.27,3.135	16	25	0.5-125	14847,7424	93.5
2QJM62-8.0L	7.85,3.925	10	16	0.5-100	11618,5809	73.0
2QJM62-10L	10.15,5.075	10	16	0.5-80	15022,7511	95.0
3QJM32-1.25L	1.295,0.648,0.324	20	31.5	2-320	3833,1917,959	40.2
3QJM32-1.6L	1.649,0.825,0.413	20	31.5	2-250	4881,2441,1221	51.2

注：1.各型带支承和带阀组变量液压马达的技术参数与上表中对应的变量液马达技术参数相同。

Note:1.The technical parameters of various sorts of varable hydraulic motors with bearing and oil passing valve have the same data as variable hydraulic motors.

● 外形联接尺寸 External Coupling Dimension

型 号	L	L1	L2	L3	L4	L5	L7	L8	L9	L10	L11	L12	D	D1	D2	D3	D4	Z-D5	D6	D7	MA	MB	MC	ME	a°	K 对花键轴要求	重量 (kg)
1QJM001-**L	101	58	38	5	20	43	20	37	–	37	35±0.3	63	Φ140	–	Φ60	Φ110g6	Φ128±0.3	12-Φ6.5	–	M18x1.5	–	M16x1.5	–	–	10°	6— 48H11x42H11x12D9 48b12x42b12x12d9	7
	130	80	38	3	30	62	20	–	–	–	–	–	Φ180	Φ100	Φ70	Φ130g7	Φ165±0.3	12-Φ9	Φ58	–	M27x2	M16x1.5	–	–	10°	6— 48H11x42H11x12D9 48b12x42b12x12d9	15
1QJM02-**L	162	99	38	3	34	62	20	–	–	–	–	–	Φ180	Φ105	Φ70	Φ130g7	Φ165±0.3	12-Φ9	Φ58	–	M27x2	M16x1.5	–	–	10°	6— 48H11x42H11x12D9 48b12x42b12x12d9	24
1/2QJM11-**L	132	82	33	3	32	87	18	–	–	–	–	–	Φ240	Φ150	Φ110	Φ160g7	Φ220±0.3	12-Φ11	Φ69	–	M33x2	M16x1.5	M12×1.5	–	10°	6— 70H11x62H11x16D9 70b12x62b12x16d9	28
1/2QJM1A1-**L	134	82	25	11	38	87	18	–	–	–	–	–	Φ240	Φ150	Φ60h8	Φ200g7	Φ220±0.3	12-Φ11	Φ69	–	M33x2	M16x1.5	–	–	10°	8— 42H11x36H11x7D9 42b12x36b12x7d9	28
1/2QJM12-**L	165	123	33	2	39	84	20	–	–	–	–	–	Φ240	Φ140	Φ110	Φ160g7	Φ220±0.3	12-Φ11	Φ69	–	M33x2	M16x1.5	M12×1.5	–	10°	6— 90H11x80H11x20D9 90b12x80b12x20d9	39
1QJM21-**L 1LSQJM21-**L	168	99	29	14	38	100	20	110	58	48	–	150	Φ304	Φ150	Φ110	Φ160g7	Φ283±0.3	12-Φ11	Φ89	M33x2	M33x2	M22x1.5	M12×1.5	–	10°	6— 90H11x80H11x20D9 90b12x80b12x20d9	50
1QJM32-**L 1LSQJM32-**L	215	138	43	10	55	115	22	95	–	52	71	165	Φ320	Φ165	Φ120	Φ170g7	Φ299±0.3	12-Φ13	Φ79	M33x2	M33x2	M22x1.5	M12×1.5	–	10°	10— 98H11x92H11x14D9 98b12x92b12x14d9	70 78
1QJM42-**L 1LSQJM42-**L	209	160	16	12	35	124	22	151	73	105	104	204	Φ350	Φ190	Φ140	Φ200g7	Φ320±0.3	12-Φ13	Φ100	Φ40	M42x2	M22x1.5	M16×1.5	M16	10°	10— 112H11x102H11x16D9 112b12x102b12x16d9	90 100
1QJM42-**AL	207	158	23	5	35	124	22	–	–	–	–	–	Φ340	Φ190	Φ120	Φ170g7	Φ320±0.3	12-Φ13	Φ100	–	M42x2	M22x1.5	–	–	10°	10— 98H11x92H11x14D9 98b12x92b12x14d9	90
1/2QJM31-**L	183	100	43	14	55	115	22	–	–	–	–	–	Φ320	Φ165	Φ120	Φ170g7	Φ299±0.3	12-Φ13	Φ79	–	M33x2	M22x1.5	M12×1.5	–	10°	10— 98H11x92H11x14D9 98b12x92b12x14d9	60
1QJM52-**L 1LSQJM52-**L	238	175	30	6	45	135	24	144	73	101	105	220	Φ420	Φ220	Φ160	Φ315g7	Φ360±0.3	6-Φ22	Φ110	Φ40	M48x2	M22x1.5	M16×1.5	M16	6°	10— 120H11x112H11x18D9 120b12x112b12x18d9	150 160
1QJM62-**L 1LSQJM62-**L	264	182	29	11	45	165	24	144	73	101	123	255	Φ485	Φ255	Φ170	395g7	Φ435±0.3	6-Φ22	Φ128	Φ48	M48x2	M22x1.5	M16x1.5	M16	6°	10— 120H11x112H11x18D9 120b12x112b12x18d9	200 212

● 1QJM※※——※※L型液压马达安装联接要求：

1、各型液压马达均允许在任何方向上安装使用

2、因QJM液压马达转子呈浮动状态，故安装时花键连接必须留轴向间隙2~3毫米，以保证转子体可以在轴向自由窜动见图，并且液压马达花键孔与工作机构花键轴必须对中，并保证两者松动配合。对花键处和安装定位机座的技术要求见图。

3、液压马达在机器中安装并连接好管路后，应用手或扳手盘动液压马达，此时转子应灵活，不得有卡住或重轻现象。

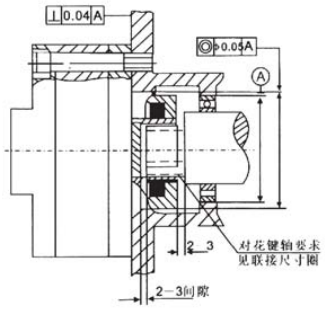
4、因配油轴与定子刚性连接，故该型马达出油管允许用钢管连接。

5、泄漏油管

①泄漏油管的最高位置或油箱的油液高度应高于马达壳体的最高水平位置，以防马达壳体内的油液排空。

②泄漏油管路及接头的孔径一般应大于Φ12，并必须直接与油箱接通，不允许与主回油路连通（若需过滤应单独用粗滤油器），使壳体内压力不超过0.2MPa，若有特殊要求应与我公司联系，协商解决。

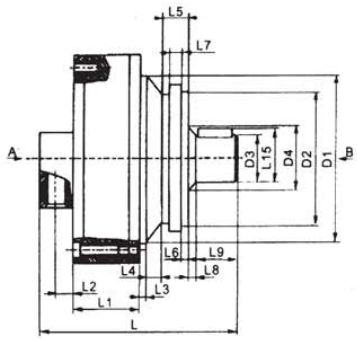
6、严格保证联联油口的清洁度，不允许任何固体异物进入。



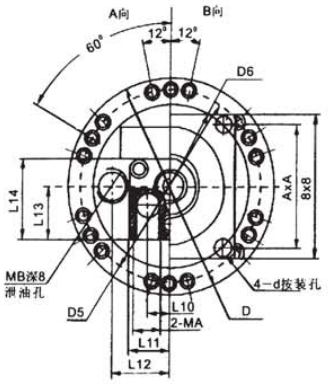
● ½QJM※※——※※Z（Z_3、Ze_3）L型液压马达技术参数(理论参数未考虑效率)

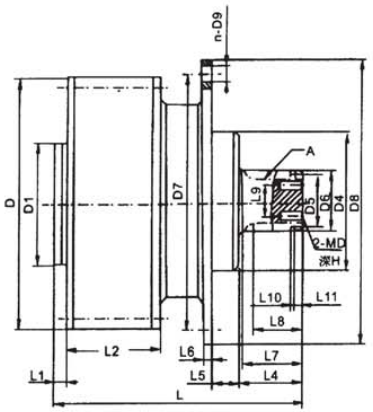
½QJM※※——※※Z(Z_3、Ze_3)L Type of Hydraulic Motor Technical Parameters

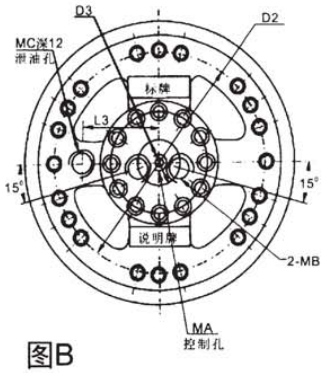
型 号 Type	排量 Displacement (L/rev)	压力 Pressure(MPa)		转速范围 Rotational Speed range (r/min)	额定输出扭矩 Rated output Torque(N.m)	最大功率 Max.power
		额定 Rated	尖锋 Peak			
1QJM001-0.063ZL	0.064	10	16	8-600	95	1.4
1QJM001-0.08ZL	0.083	10	16	8-500	123	1.8
1QJM001-0.10ZL	0.104	10	16	8-400	154	2.3
1QJM002-0.2ZL	0.2	10	16	5-320	295	4.3
1QJM02-0.32ZL	0.324	10	16	5-320	483	7.1
1QJM02-0.4ZL	0.406	10	16	5-320	600	8.8
1QJM11-0.32ZL	0.339	10	16	5-500	468	5.9
1QJM11-0.4ZL	0.404	10	16	5-400	598	7.5
1QJM11-0.5ZL	0.496	10	16	5-320	734	9.2
1QJM11-0.63ZL	0.664	10	16	4-250	983	12.4
1QJM12-1.0ZL	1.0	10	16	4-200	1480	18.6
1QJM12-1.25ZL	1.33	10	16	4-160	1968	24.8
½QJM21-0.4Z(Ze_3)L	0.4,0.2	16	25	2-400	957,479	10.0
½QJM21-0.5Z(Ze_3)L	0.496,0.258	16	25	2-320	1175,588	12.3
½QJM21-0.63Z(Ze_3)L	0.664,0.332	16	25	2-250	1572,786	16.5
½QJM21-0.8Z(Ze_3)L	0.808,0.404	16	25	2-200	1913,957	20.0
½QJM21-1.0Z(Ze_3)L	1.01,0.505	10	16	2-160	1495,748	15.8
½QJM21-1.25Z(Ze_3)L	1.354,0.667	10	16	2-125	2004,1002	21
½QJM21-1.6Z(Ze_3)L	1.65,0.825	10	16	2-100	2442,1221	25.6
½QJM32-0.63Z(Z_3Ze_3	0.639,0.318	20	31.5	3-300	1880,940	19.8
½QJM32-1.0Z(Z_3Ze_3)L	1.06,0.503	20	31.5	2-250	3138,1519	33.0
½QJM32-1.25Z(Z_3Ze_3)L	1.295,0.648	20	31.5	2-200	3833,1917	40.2
½QJM32-1.6Z(Z_3Ze_3)L	1.649,0.825	20	31.5	2-200	4881,2441	51.2
½QJM32-2.0Z(Z_3Ze_3)L	2.03,1.015	16	25	2-200	4807,2404	50.5
½QJM32-2.5Z(Z_3Ze_3)L	2.71,1.355	10	16	1-160	4011,2006	42.0
½QJM32-3.2Z(Z_3Ze_3)L	3.3,1.65	10	16	1-125	4884,2442	51.2
½QJM52-2.5ZL	2.67,1.335	20	31.5	1-200	7903,3952	66.2
½QJM52-3.2ZL	3.24,1.62	20	31.5	1-200	9590,4795	80.5
½QJM52-4.0ZL	4.0,2.0	16	25	1-200	9472,4736	80.0
½QJM52-5.0ZL	5.23,2.165	10	16	1-160	7740,3870	65.0
½QJM52-6.3ZL	6.36,3.18	10	16	1-125	9413,4707	79.0
½QJM62-4.0ZL	4.0,2.0	20	31.5	0.5-150	11840,5920	74.5
½QJM62-5.0ZL	5.18,2.59	20	31.5	0.5-125	15333,7667	96.5
½QJM62-6.3ZL	6.27,3.135	16	25	0.5-125	14847,7424	93.5
½QJM62-8.0ZL	7.85,3.925	10	16	0.5-100	11618,5809	73.0
½QJM62-10ZL	10.15,5.075	10	16	0.5-80	15022,7511	95.0



图A







图B

● 图A外型联接尺寸 External Coupling Dimension

型 号	L	L_1	L_2	L_3	L_4	L_5	L_6	L_7	L_8	L_9	L_{10}	L_{11}	L_{12}	L_{13}	L_{14}	L_{15}	D	D_1	D_2	D_3	D_4	D_5	D_6	d	MA	MB	AxA	BxB	bxL	花 键	重量 (Kg)
1QJM001-**ZL	237	68	17	6	16	70	48	12	3	40	17.5	31.5	43	32	49	28	140	110g70	75g7	25h8	35^{H7}_{k6}	128	–	11	M18x1.5	M16x1.5	70x70	90x90	8x36	–	10
1QJM002-**ZL	257	88	19	6	16	70	48	12	3	40	38	63	43	32	49	27.5	140	110g7	75g7	25h8	35^{H7}_{k6}	128	–	11	M18x1.5	M16x1.5	70x70	90x90	8x36	–	12
1QJM02-**ZL	290	102	22	–	52	32	5	18	3	56.5	28	50	60	41	82	43	180	–	125g7	40k6	–	165	160	13.5	G3/4"	M12x1.5	–	140x140	12x45	–	24
1QJM11-**ZL	353	82	–	15	–	–	156	20	–	74	–	–	87	–	–	–	240	164	–	60f7	–	220	240	22	M32x2	M16x1.5	–	–	18x60	–	40
1QJM12-**ZL	472	123	40	–	–	–	10	20	30	82	70	150	87	40	65	54	240	–	160h7	50h7	60	220	200	18	G"	M16x1.5	141.5x141.5	178x178	14x72	–	70

● 图B外型联接尺寸 External Coupling Dimension

型 号	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	D	D1	D2	D3	D4	D5	D6	D7	D8	N-D9	MA	MB	MC	MD	平 键	花 键	重量 (KG)
½ QJM21-**Z3L	328	26	99	100	81	55	16	78	66	38	-	-	304	150	283	69	295f9	-	65f7	335	379	6-18	M12x1.5	M33x2	M22x1.5	2-M12深20	C18x75	-	75
½ QJM21-**Ze3L	378	26	113	100	81	38	16	78	66	38	-	-	304	150	283	69	220f9	-	65f7	260	300	6-18	M12x1.5	M33x2	M22x1.5	2-M12深20	C18x75	-	80
½ QJM32-**ZL	395	24.5	144	115	101	30	25	100	70	40	2.65	3	320	165	299	79	250f7	79	82b11	300+0.3	335	7-18 均布	M12x1.5	M33x2	M22x1.5	2-M12深25	-	10-82b11x72b11x12f9	106
½ QJM32-**Ze3L	446	24.5	138	115	81	55	16	78	66	-	-	-	320	165	299	79	295f9	-	65f7	300+0.3	379	6-18	M12x1.5	M33x2	M22x1.5	中央孔M16 深25	C18x75	-	140
½ QJM32-**Z3L	363.5	24.5	138	115	81	55	16	78	66	38	-	-	320	165	299	79	295f9	-	65f7	335±0.3	379	6-18	M12x1.5	M33x2	M22x1.5	2-M12深25	C18x75	-	108
½ QJM52-**ZL	516	27	176	135	131	10	30	731	131	-	-	-	420	220	360	100	290f7	-	78h7	340±0.3	370	8-20	M16x1.5	M48x2	M22x1.5	中央孔M16 深40	C22x132	-	190
½ QJM62-**ZL	487	42	162	165	157	5	20	155	152	-	-	-	485	255	435	128	400f8	-	101.55	490	530	8-22	M16x1.5	M48x2	M22x1.5	-	A25.4x120	-	240

●½QJM※※——※※SL型自控式带制动器液压马达技术参数(理论参数未考虑高效率)

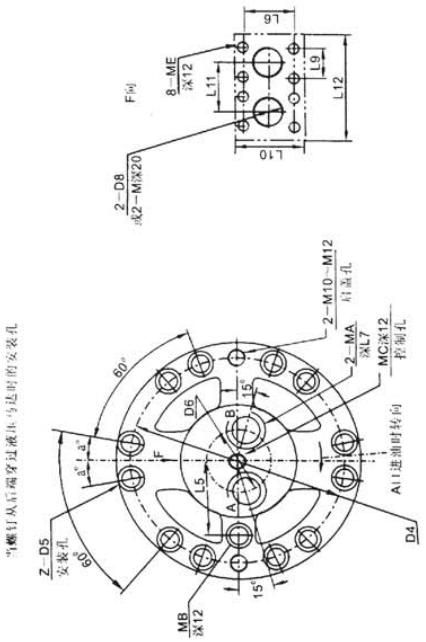
Technical data of ½QJM※※——※※SL series hydraulic motor with brake

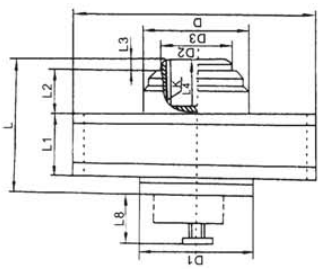
型 号 Type	排量 Displacement (L/rev)	压力 Pressure(MPa) 额定 Rated	压力 Pressure(MPa) 尖锋 Peak	转速范围 Rotational Speed range (r/min)	额定输出扭矩 Rated output torque (N.m)	制动器开启压力 Open brake Pressure (Mpa)	制动器制动扭矩 Brake torque (N.m)
1QJM11-0.32SL	0.317	10	16	5-400	468	4~6	
1QJM11-0.40SL	0.404	10	16	5-400	598		
1QJM11-0.50SL	0.496	10	16	5-320	734		
1QJM11-0.63SL	0.664	10	16	4-250	983	3~5	400~600
2QJM11-0.40SL	0.404,0.202	10	16	5-400	598,299		
2QJM11-0.50SL	0.496,0.248	10	16	5-320	734,347		
2QJM11-0.63SL	0.664,0.332	10	16	4-200	983,492		
1QJM21-0.32SL	0.317	16	25	2-500	751		
1QJM21-0.40SL	0.404	16	25	2-400	957		
1QJM21-0.50SL	0.496	16	25	2-320	1175	4~6	
1QJM21-0.63SL	0.664	16	25	2-250	1572		
1QJM21-0.8SL	0.808	16	25	2-200	1913		1000~1400
1QJM21-1.0SL	1.01	10	16	2-160	1495		
1QJM21-1.25SL	1.354	10	16	2-125	2004	3~5	
1QJM21-1.6SL	1.65	10	16	2-100	2442		
2QJM21-0.32SL	0.317,0.1585	16	25	2-500	751,376		
2QJM21-0.40SL	0.404,0.202	16	25	2-400	957,479		
2QJM21-0.50SL	0.496,0.248	16	25	2-320	1175,588	4~7	
2QJM21-0.63SL	0.664,0.332	16	25	2-250	1572,786		
2QJM21-0.83SL	0.808,0.404	16	25	2-200	1913,957		1000~1400
2QJM21-1.0SL	1.01,0.505	10	16	2-160	1495,748		
2QJM121-1.25SL	1.354,0.667	10	16	2-125	2004,1002	3~5	
2QJM21-1.6SL	1.65,0.825	10	16	2-100	2242,1221		

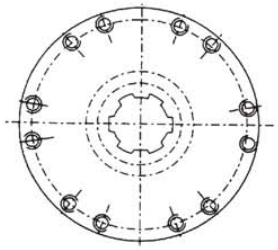
● 1/2QJM※※——※※SL型自控式带制动器液压马达技术参数(理论参数未考虑高效率)

Technical data of 1/2QJM※※ ※※SL series hydraulic motor with brake

型号 Type	排量 Displacement (L/rev)	压力 Pressure(MPa)		转速范围 Rotational Speed range (r/min)	额定输出扭矩 Rated output torque (N.m)	制动器开启压力 Open brake Pressure (Mpa)	制动器制动扭矩 Brake torque (N.m)
		额定 Rated	尖锋 Peak				
1/2 QJM32-0.63SL	0.635,0.318	20	31.5	3-300	1880	4~7	
1/2 QJM32-0.8SL	0.808,0.404	20	31.5	2-250	2368	4~7	
1/2 QJM32-1.0SL	1.06,0.53	20	31.5	2-250	3138	4~7	
1/2 QJM32-1.25SL	1.295,0.648	20	31.5	2-200	3833	3~5	
1/2 QJM32-1.6SL	1.649,0.825	20	31.5	2-200	4881	3~5	≥2500
1/2 QJM32-2.0SL	2.03,1.015	16	25	2-200	4807	3~5	
1/2 QJM32-2.5SL	2.71,1.355	10	16	1-160	4011	3~5	
1/2 QJM32-3.2SL	3.3,1.65	10	16	1-125	4884	3~5	
1/2 QJM32-4.0SL	4.0,2.00	10	16	1-100	5920	3~5	
1/2 QJM32-0.63S L	635,0.318	20	31.5	3-500	1880	4~7	
1/2 QJM32-0.8S$_2$L	0.808,0.404	20	31.5	3-400	2368	4~7	
1/2 QJM32-1.0S$_2$L	0.993,0.497	20	31.5	2-400	3138	4~7	
1/2 QJM32-1.25S L	1.295,0.648	20	31.5	2-320	3833	3~5	
1/2 QJM32-1.6S$_2$L	1.649,0.825	20	31.5	2-250	4881	3~5	≥4000
1/2 QJM32-2.0S$_2$L	2.03,1.015	16	25	2-200	4807	3~5	
1/2 QJM32-2.5S$_2$L	2.71,1.355	10	16	1-160	4011	3~5	
1/2 QJM32-3.2S$_2$L	3.3,1.65	10	16	1-125	4884	3~5	
1/2 QJM32-4.0S$_2$L	4.0,2.0	10	16	1-100	5920	3~5	
1/2 QJM42-2.0SL	2.11,1.055	20	31.5	1-250	6246	4~7	
1/2 QJM42-2.5SL	2.56,1.28	20	31.5	1-250	7578	4~7	
1/2 QJM42-3.2SL	3.28,1.64	10	16	1-200	4850	4~6	≥5000
1/2 QJM42-4.0SL	4.0,2.0	10	16	1-160	5920	3~5	
1/2 QJM42-4.5SL	4.56,2.28	10	16	1-125	6808	3~5	
1/2 QJM52-2.5SL	2.67,1.335	20	31.5	1-200	7903	4~7	
1/2 QJM52-3.2SL	3.24,1.62	20	31.5	1-200	9590	4~7	
1/2 QJM52-4.0SL	4.0,2.0	16	25	1-200	9472	4~6	≥6000
1/2 QJM52-5.0SL	5.23,2.615	16	25	1-160	7740	3~5	
1/2 QJM52-6.3SL	6.36,3.18	16	25	1-125	9413	3~5	







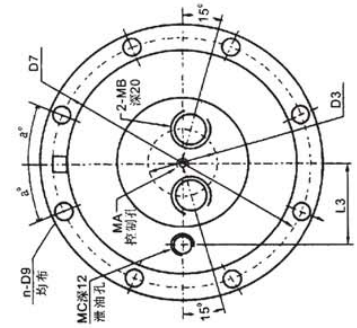
● 外形联接尺寸 External Coupling Dimension

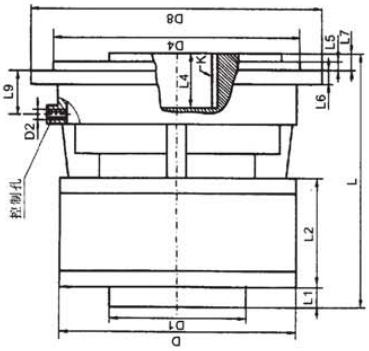
型 号	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	D	D1	D2	D3	D4	Z-D5	D6	D7	D8	MA	MB	MC	Z-MD	ME	a°	K 对花键轴要求	重量 (kg)
1/2QJM11-*SL	146.5	97	20	11.5	28	87	-	20	-	-	-	-	-	Φ240	Φ150	Φ100	Φ160g7	Φ220±0.3	12-Φ11	Φ69	-	-	M32x2	M16x1.5	M12x1.5	-	-	10°	6—70H11x62H11x16D9/70b12x62b12x16d9	35
1/2QJM11-*SL	168	117	17	7	31	100	-	20	-	-	-	-	-	Φ304	Φ150	Φ110	Φ160g7	Φ220±0.3	12-Φ11	Φ69	-	-	M33x2	M22x1.5	M12x1.5	-	-	10°	6—90H11x80H11x20D9/90b12x80b12x20d9	53
1/2QJM21-*SL	184	127	12	13	32	100	-	20	-	-	-	-	-	Φ304	Φ150	Φ110	Φ160g7	Φ283±0.3	12-Φ11	Φ69	-	-	M33x2	M22x1.5	M12x1.5	-	-	10°	6—90H11x80H11x20D9/90b12x80b12x20d9	55
1/2QJM32-**SL	231	140	58	3	55	115	-	20	-	-	-	-	-	Φ320	Φ165	Φ170	Φ280g7	Φ299±0.3	12-Φ13	Φ79	-	-	M33x2	M22x1.5	M12x1.5	-	-	10°	10—98H11x92H11x14D9/98b12x92b12x14d9	86
1/2QJM32-**SL	252	167																												
1/2QJM42-*SL	229	187	16	3	35	124	20	22	-	-	-	-	-	Φ350	Φ190	Φ140h8	Φ200g7	Φ320±0.3	12-Φ13	Φ100	-	-	M42x2	M22x1.5	M12x1.5	6-M12	-	10°	10—112H11x102H11x16D9/112b12x102b12x16d9	108
1/2QJM52-*SL	266	178	56	3	55	135	-	24	-	-	-	-	-	Φ420	Φ220	Φ160	Φ315g7	Φ360±0.3	10-Φ22	Φ110	-	-	M48x2	M22x1.5	M12x1.5	-	-	6°	10—120H11x112H11x18D9/120b12x112b12x18d9	167
1/2QJM11-*SL	156	103	25	10	28	87	-	20	-	-	-	-	-	Φ240	Φ150	Φ100	Φ160g7	Φ220±0.3	12-Φ11	Φ69	-	-	M33x2	M16x1.5	M12x1.5	-	-	10°	6—70H11x62H11x16D9/70b12x62b12x16d9	35

● 1/2QJM※※——※※ SeL型外控式带制动器液压马达技术参数（理论参数未考虑效率）

Technical data of out control 1/2QJMS※※——※※SeL series hydraulic motor with brake

型 号 Type	排量 Displacement (L/rev)	压力 Pressure(MPa)		转速范围 Rotational Speed range (r/min)	额定输出扭矩 Rated output torque (N.m)	制动器开启压力 Open brake Pressure (Mpa)	制动器制动扭矩 Brake torque (N.m)
		额定 Rated	尖锋 Peak				
1 QJM12-0.8SeL	0.808	10	16	4-250	1076	1.3≤P≤6.3	≥1800
1 QJM12-1.0SeL	0.993	10	16	4-200	1332		
1 QJM12-1.25SeL	1.328	10	16	4-160	1771		
1/2 QJM21-0.32SeL	0.317	16	25	2-500	751,376	2.5≤P≤6.3	≥2500
1/2 QJM21-0.40SeL	0.404,0.202	16	25	2-400	957,479		
1/2 QJM21-0.50SeL	0.496,0.248	16	25	2-320	1175,588		
1/2 QJM21-0.63SeL	0.664,0.332	16	25	2-250	1572,786		
1/2 QJM21-0.80SeL	0.808,0.404	16	25	2-200	1913,957		
1/2 QJM21-1.0SeL	1.01,0.505	10	16	2-160	1495,748		
1/2 QJM21-1.25SeL	1.354,0.677	10	16	2-125	2004,1002		
1/2 QJM21-1.6SeL	1.65,0.825	10	16	2-100	2442,1221		
1/2 QJM32-0.63SeL	0.635,0.318	20	31.5	3-300	1880,940		≥6000
1/2 QJM32-0.8SeL	0.808,0.404	20	31.5	3-250	2368,1184		
1/2 QJM32-1.0SeL	0.993,0.497	20	31.5	2-250	3138,1569		
1/2 QJM32-1.25SeL	1.328,0.664	20	31.5	2-200	3833,1942		
1/2 QJM32-1.6SeL	1.616,0.808	20	31.5	2-200	4881,2441		
1/2 QJM32-2.0SeL	2.03,1.015	16	25	2-200	4807,2404		
1/2 QJM32-2.5SeL	2.71,1.355	10	16	1-160	4011,2006		
1/2 QJM32-3.2SeL	3.3,1.65	10	16	1-125	4884,2442		
1/2 QJM32-4.0SeL	4.0,2.0	10	16	1-100	5920,2960		
1/2 QJM42-2.0SeL	2.11,1.055	20	31.5	1-250	6246,3123	2.1≤P≤6.3	≥9000
1/2 QJM42-2.5SeL	2.56,1.28	20	31.5	1-250	7578,3789		
1/2 QJM42-3.2SeL	3.3,1.65	10	16	1-200	4884,2442		
1/2 QJM42-4.0SeL	4.0,2.0	10	16	1-160	5920,2960		
1/2 QJM42-4.5SeL	4.56,2.28	10	16	1-125	6808,3404		
1/2 QJM52-2.5SeL	2.67,1.355	20	31.5	1-200	7903,3952	2.2≤P≤6.3	≥10000
1/2 QJM52-3.2SeL	3.24,1.62	20	31.5	1-200	9590,4795		
1/2 QJM52-4.0SeL	4.0,2.0	16	25	1-200	9472,4736		
1/2 QJM52-5.0SeL	5.23,2.615	10	16	1-160	7740,3870		
1/2 QJM52-6.3SeL	6.36,3.18	10	16	1-125	9413,4707		





● 外形联接尺寸 External Coupling Dimension

型 号	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	D	D1	D2	D3	D4	D6	D7	D8	n-D9	MA	MB	MC	平键	a°	K 对花键轴要求	重量 (kg)
1QJM12-**SeL	288	17	121	87	60	12	13	25	-	33	-	Φ240	Φ150	M16x1.5	Φ69	Φ290g7	-	Φ307±0.2	Φ327	8-Φ11	-	2-M33x2	M16x1.5	-	22.5°	6— 90H11x80H11x20D9 / 90b12x80b12x20d9	50
1QJM21-**SeL	245	27	102	100	60	18.5	16	24	-	36	-	Φ304	Φ150	M18x1.5	Φ69	Φ310g7	-	Φ330±0.2	Φ360	8-Φ13	M12x1.5	2-M33x2	M22x1.5	-	22.5°	6— 90H11x80H11x20D9 / 90b12x80b12x20d9	95
1/2QJM32-**SeL	271	24	140	115	55	13	16	19	-	35	-	Φ320	Φ165	M16x1.5	Φ79	Φ335g7	-	Φ354±0.2	Φ380	8-Φ13	M12x1.5	2-M33x2	M22x1.5	-	15°	10— 98H11x92H11x14D9 / 98b12x92b12x14d9	120
1/2QJM42-**SeL	278	21	160	124	35	15	18	22	-	45	-	Φ350	Φ190	M16x1.5	Φ100	Φ395f6	-	Φ418±0.2	Φ445	12-Φ17	M16x1.5	2-M42x2	M22x1.5	-	15°	10— 112H11x102H11x16D9 / 112b12x102b12x16d9	150
1/2QJM52-**SeL	318	27	175	135	45	17	18	22	-	45	-	Φ420	Φ220	M16x1.5	Φ110	Φ395f6	-	Φ418±0.2	Φ445	12-Φ17	M16x1.5	2-M48x2	M22x1.5	-	15°	10— 120H11x112H11x18D9 / 120b12x112b12x18d9	200

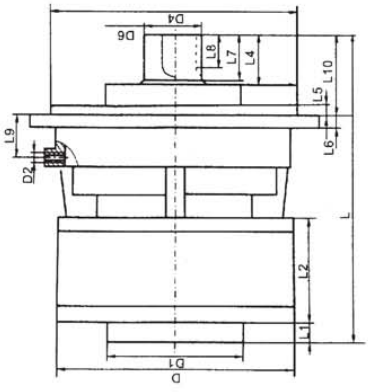
● 1/2QJM※※——※※SeZ(SeZH) L型外控式带制动器液压马达技术参数(理论参数未考虑效率)

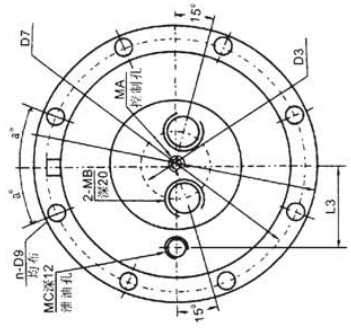
Technical data of 1/2QJM※※—※※SeZ(SeZH)L hydraulic motor with bearing and outside brake

型 号 Type	排量 Displacement (L/rev)	压力 Pressure(MPa)		转速范围 Rotational Speed range (r/min)	额定输出扭矩 Rated output torque (N.m)	制动器开启压力 Open brake Pressure (Mpa)	制动器制动扭矩 Brake torque (N.m)
		额定 Rated	尖锋 Peak				
1 QJM12-0.8SeZL	0.808	10	16	4-200	1076	1.3≤P≤6.3	≥1800
1 QJM12-1.0SeZL	0.993	10	16	4-200	1332		
1 QJM12-1.25SeZL	1.328	10	16	4-160	1771		
1/2 QJM21-0.32SeZL	0.317,0.1585	16	25	2-500	751,376	2.5≤P≤6.3	≥2500
1/2 QJM21-0.4SeZL	0.404,0.202	16	25	2-400	957,478		
1/2 QJM21-0.5SeZL	0.496,0.248	16	25	2-320	1175,588		
1/2 QJM21-0.63SeZL	0.664,0.332	16	25	2-250	1572,786		
1/2 QJM21-0.8SeZL	0.808,0.404	16	25	2-200	1913,956		
1/2 QJM21-1.0SeZL	1.01,0.505	10	16	2-160	1495,748		
1/2 QJM21-1.25SeZL	1.354,0.677	10	16	2-125	2004,1002		
1/2 QJM21-1.6SeZL	1.65,0.825	10	16	2-100	2442,1221		
1/2 QJM32-0.63SeZL	0.635,0.318	20	31.5	3-500	1880,940		
1/2 QJM32-0.8SeZL	0.808,0.404	20	31.5	3-400	2368,1184		
1/2 QJM32-1.0SeZL	0.993,0.497	20	31.5	2-400	3138,1519		
1/2 QJM32-1.25SeZL	1.328,0.664	20	31.5	2-320	3833,1917		
1/2 QJM32-1.6SeZL	1.616,0.808	20	31.5	2-250	4881,2441		
1/2 QJM32-2.0SeZL	2.03,1.015	16	25	2-200	4807,2404		≥6000
1/2 QJM32-2.5SeZL	2.71,1.335	10	16	4-160	4011,2006		
1/2 QJM32-3.2SeZL	3.3,1.65	10	16	1-125	4884,2442		
1/2 QJM32-4.0SeZL	4.0,2.0	10	16	1-100	5920,2960		
1/2 QJM42-2.0SeZL	2.11,1.055	20	31.5	1-320	6246,3123	2.1≤P≤6.3	≥9000
1/2 QJM42-2.5SeZL	2.56,1.28	20	31.5	1-250	7578,3789		
1/2 QJM42-3.2SeZL	3.3,1.65	10	16	1-200	4884,2442		
1/2 QJM42-4.0SeZL	4.0,2.0	10	16	1-160	5920,2960		
1/2 QJM42-4.5SeZL	4.56,2.28	10	16	1-125	6808,3404		
1/2 QJM52-2.5SeZL	2.67,1.335	20	31.5	1-320	7903,3952		
1/2 QJM52-3.2SeZL	3.24,1.62	20	31.5	1-250	9590,4795		
1/2 QJM52-4.0SeZL	4.0,2.0	16	25	1-200	9472,4736		
1/2 QJM52-5.0SeZL	5.23,2.615	10	16	1-160	7740,3870		
1/2 QJM52-6.3SeZL	6.36,3.18	10	16	1-125	9413,4707		

注：1/2QJM※※——※※SeZH L的技术参数与上表中相应排量的液压马达技术参数相同。

Note:Technical data of 1/2QJM※※—※※SeZH L hudraulic motor have the same data as 1/2QJM※※—※※SeZ L hydraulic motors.





图B

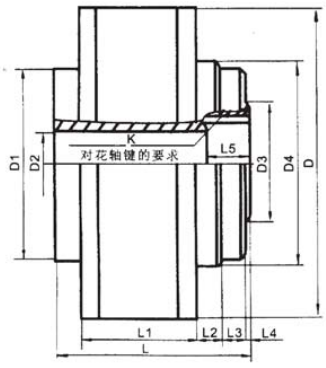
● 图B外型联接尺寸 External Coupling Dimension

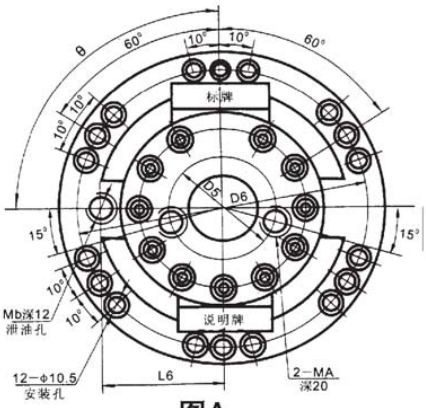
型号TYPE	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	D	D1	D2	D3	D4	D6	D7	D8	n-D9	MA	MB	MC	a°	平键	花 键	重量(kg)
1QJM12-**SeZL	350	17	121	87	66	10	13	62	-	24	96	Φ240	Φ150	M16x1.5	Φ 69	Φ250g7	Φ60h7	Φ 265+02	Φ285	8-Φ11	-	2-M33x2	M16x1.5	22.5°	18x60	-	60
1QJM12-**SeZHL	370	17	121	87	62	12	13	58	39	24	100	Φ240	Φ150	M16x1.5	Φ 69	Φ290g7	-	Φ 307+0.5	Φ327	8-Φ11	-	2-M33x2	M16x1.5	22.5°	-	6-80b12x90b12x20d9	60
1QJM21-**SeZL	410	27	102	100	69.5	14	16	65	-	36	113	Φ304	Φ150	M18x1.5	Φ 69	Φ310g7	Φ70h7	Φ 330+0.2	Φ360	8-Φ 3	M12x1.5	2-M33x2	M22x1.5	22.5°	A20x16	-	80
½QJM32-**SeZL	416	24	140	115	81	13	16	78	-	35	136	Φ320	Φ165	M16x1.5	Φ 79	Φ335g7	Φ70h7	Φ 354+0.2	Φ380	12-Φ13	M12x1.5	2-M33x2	M22x1.5	15°	C20x70	-	95
½QJM32-**SeZHL	410	24	140	115	75	13	16	72	55	35	114	Φ320	Φ165	M16x1.5	Φ 79	Φ335g7	-	Φ 354+0.2	Φ380	12-Φ13	M12x1.5	2-M33x2	M22x1.5	15°	-	10-98b12x92b12x14d9	95
½QJM42-**SeZL	466	21	160	124	75	12	18	71	50	44	135	Φ350	Φ190	M16x1.5	Φ100	Φ365g7	-	Φ 398+0.2	Φ430	12-Φ17	M16x1.5	2-M42x2	M22x1.5	15°	-	10-112b12x102b12x16d9	120
½QJM42-**SeZHL	456	21	160	124	75	15	18	71	50	37	120	Φ350	Φ190	M16x1.5	Φ100	Φ365g7	-	Φ 398+0.2	Φ430	12-Φ17	M16x1.5	2-M42x2	M22x1.5	15°	-	10-112b12x102b12x16d9	120
½QJM52-**SeZL	532	27	175	135	141	17	18	136	-	45	184	Φ420	Φ220	M16x56	Φ110	Φ395f6	Φ78h7	Φ 418+0.2	Φ445	12-Φ17	M16x1.5	2-M48x2	M22x1.5	15°	C22x132	-	150
½QJM52-**SeZHL	471	27	175	135	71	17	18	-	45	45	114	Φ420	Φ220	M16x56	Φ110	Φ395f6	-	Φ 418+0.2	Φ445	12-Φ17	M16x1.5	2-M48x2	M22x1.5	15°	-	12-112b12x112b12x20d9	150

● 1/2QJM※※——※※T※※L型通孔液压马达技术参数(理论参数未考虑效率)

Technical data of QJM hydraulic with through hole motor

型 号 Type	排量 Displacement (L/rev)	压力 Pressure(MPa)		转速范围 Rotational Speed Range(r/min)	额定输出扭矩 Rated output Torque (N.m)	通孔直径 Through hole dia mm
		额定 Rated	尖锋 Peak			
1QJM01-0.1T40L	0.1	10	16	8-400	148	40
1QJM01-0.16T40L	0.163	10	16	8-350	241	
1QJM01-0.2T40L	0.203	10	16	8-320	300	
1QJM11-0.32T50L	0.317	10	16	5-400	468	50
1QJM11-0.4T50L	0.404	10	16	5-400	598	
1QJM11-0.5T50L	0.5	10	16	5-320	734	
1/2QJM21-0.32T65L	0.317,0.159	16	25	2-630	751,376	65
1/2QJM21-0.5T65L	0.496,0.248	16	25	2-400	1175,588	
1/2QJM21-0.63T65L	0.664,0.332	16	25	2-320	1572,786	
1/2QJM21-1.0T65L	1.01,0.505	10	16	2-250	1495,748	
1/2QJM21-1.25T65L	1.354,0.677	10	16	2-200	2004,1002	
1/2QJM32-0.63T75L	0.635,0.318	20	25	1-300	1880,940	75
1/2QJM32-1.0T75L	1.06,0.53	20	25	1-250	3138,519	
1/2QJM32-1.25T75L	1.30,0.65	20	25	2-200	3833,1917	
1/2QJM32-2.0T75L	2.03,1.02	16	25	2-200	4807,2404	
1/2QJM32-2.5T75L	2.71,1.36	10	16	1-160	4011,2006	
1/2QJM42-2.5T80L	2.56,1.24	20	31.5	1-125	7578,3789	80
1/2QJM52-3.2T80L	3.24,1.62	20	31.5	1-200	9590,4795	
1/2QJM52-4.0T80L	4.0,2.0	16	25	1-200	9472,4736	
1/2QJM52-5.0T80L	5.23,6.15	10	16	1-160	7740,3870	
1/2QJM52-6.3T80L	6.36,3.18	10	16	1-100	9413,4707	
1/2QJM62-4.0T125L	4.0,2.0	20	31.5	0.5-150	11840,5920	125
1/2QJM62-5.0T125L	5.18,2.59	20	31.5	0.5-125	15333,7667	
1/2QJM62-6.3T125L	6.27,3.135	16	25	0.5-125	14847,7424	
1/2QJM62-8.0T125L	7.85,3.925	10	16	0.5-100	11618,5809	
1/2QJM62-10T125L	10.15,5.075	10	16	0.5-80	15022,7501	

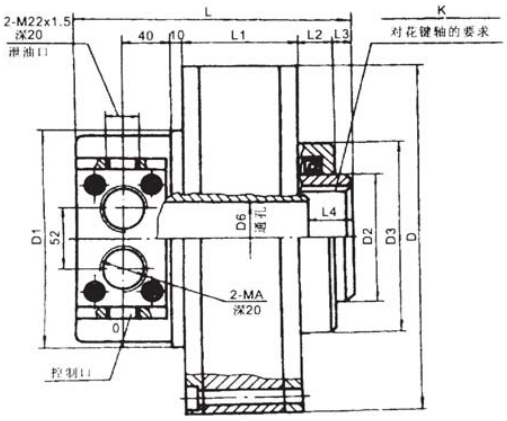




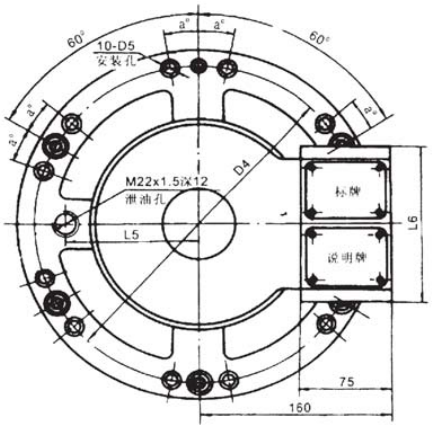
图A

● 图A外型联接尺寸 External Connection Dimension

型号 Type	L	L1	L2	L3	L4	L5	L6	θ	D	D1	D2	D3	D4	D5	D6	MA	MB	k 对花键轴要求	重量 (Kg)
1QJM01-* *T40L	130	79	15	23	3	30	53	180°	Φ180	Φ130	Φ40	Φ110	Φ130g6	Φ70	Φ165	M22x1.5	M12x1.5	6-48H11x42H11x12D9 / 48b12x42b12x12d9	15
1QJM11-* *T50L	139	87	16	17	3	28	87	90°	Φ240	Φ150	Φ50	Φ100	Φ160g6	Φ80	Φ220	M22x1.5	M16x1.5	6-70H11x62H11x16D9 / 70b12x62b12x12d9	26



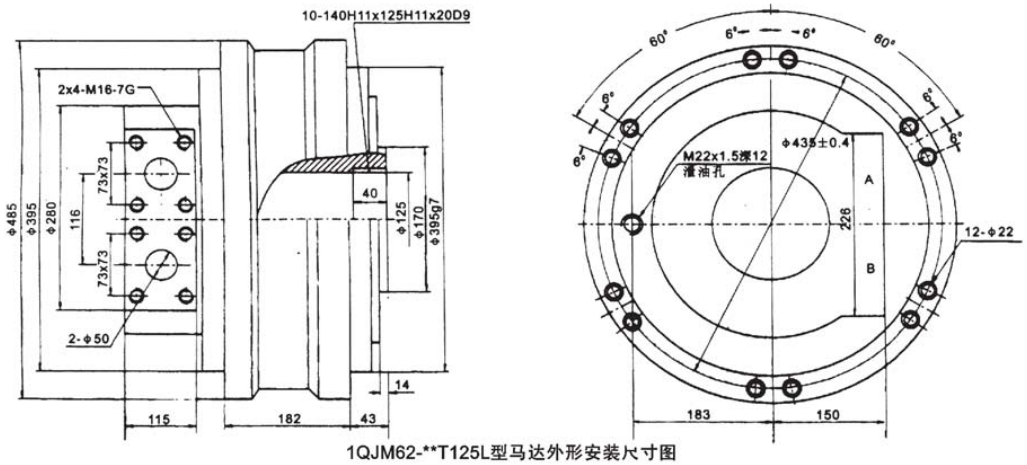
图B



● 图B外形联接尺寸 External Connection Dimension

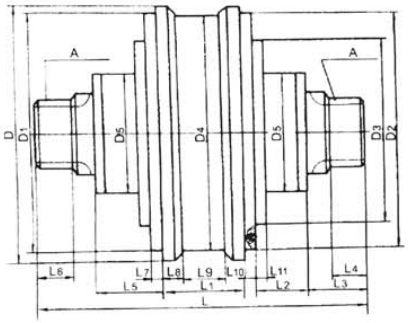
型号Type	L	L1	L2	L3	L4	L5	L6	D	D1	D2	D3	D4	D5	D6	MA	a °	K 对花键轴要求	重量 (kg)
2QJM21-**T50L	229	99	29	14	36	100	156	Φ300	Φ148	Φ110	Φ160g6	Φ283	Φ11	Φ50	M27x2	10 °	6- 98H11x92H11x14D9 / 98b12x92b12x14d9	60
2QJM21-**T65L	230	98	29	14	37	110	146	Φ304	Φ186	Φ110	Φ160g6	Φ283	Φ11	Φ65	M33x2	10 °	6- 98H11x92H11x14D9 / 98b12x92b12x14d9	64
2QJM32-**T75L	273	138	43	10	41	115	146	Φ320	Φ186	Φ120	Φ170g6	Φ299	Φ13	Φ75	M33x2	10 °	6- 98H11x92H11x14D9 / 98b12x92b12x14d9	88
2QJM42-2.5T80L	292	160	16	30	40	124	146	Φ350	Φ190	Φ140	Φ200h8	Φ320	Φ13	Φ80	M33x2	10 °	6- 112H11x102H11x16D9 / 112b12x102b12x16b9	120
2QJM52-2.5T80L	367	175	30	24	45	135	190	Φ420	Φ220	Φ160	Φ315g7	Φ360	6-Φ22	Φ80	M48x2	6 °	6- 120H11x112H11x16D9 / 120b12x112b12x18d9	162

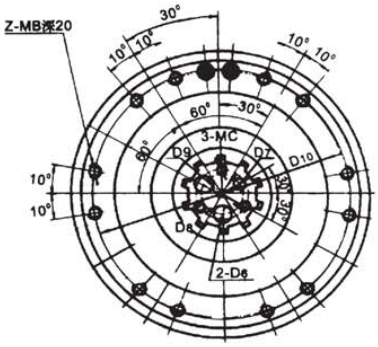
注：2QJM52-2.5T80L马达控制口和泄油口与上图所示对调



1QJM62-**T125L型马达外形安装尺寸图

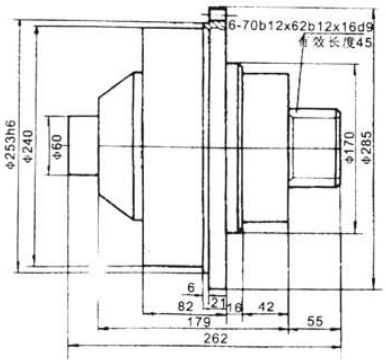
型号(Type)	型号(Type)	排量 Displacement (L/rev)	压力 Pressure(MPa)		转速范围 Rotational Speed range (r/min)	额定输出扭矩 Rated output torque (N.m)
			额定(Rated)	尖锋(Peak)		
1QKM11-0.32L	1QKM11-0.32D	0.317	10	16	5-400	468
1QKM11-0.4L	1QKM11-0.4D	0.404	10	16	5-400	598
1QKM11-0.5L	1QKM11-0.5D	0.496	10	16	5-320	734
1QKM11-0.63L	1QKM11-0.63D	0.664	10	16	4-250	983
1QKM32-2.5L	1QKM32-2.5D	2.71	10	16	1-160	4011
1QKM32-3.2L	1QKM32-3.2D	3.3	10	16	1-125	4884
1QKM32-4.0L	1QKM32-4.0D	4.0	10	16	1-100	5920
1QKM42-3.2L	1QKM42-3.2D	3.24	10	16	1-200	4850
1QKM42-4.0L	1QKM42-4.0D	4.0	10	16	1-160	5920
1QKM42-4.5L	1QKM42-4.5D	4.6	10	16	1-125	5808
1QKM52-5.0L	1QKM52-5.0D	5.23	10	16	1-160	7740
1QKM52-6.3L	1QKM52-6.3D	6.36	10	16	1-125	9413
1QKM62-4.0L	–	4.0	20	31.5	0.5-150	11840
1QKM62-5.0L	–	5.18	20	31.5	0.5-125	15333
1QKM62-6.3L	–	6.27	16	25	0.5-125	14847
1QKM62-8.0L	–	7.85	10	16	0.5-100	11618
1QKM62-10L	–	10.15	10	16	0.5-80	15022





QKM外型联接尺寸

型号(Type)	L	L_1	L_2	L_3	L_4	L_5	L_6	L_7	L_8	L_9	L_{10}	L_{11}	D	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	Z-MB	MC	A	重量
1QKM32-**L	510	146	83	99	58	83	58	18	–	–	18	–	ϕ320	ϕ280	ϕ280	–	–	ϕ178	ϕ25	ϕ16	ϕ60±0.3	ϕ43±0.2	ϕ299±0.3	12-M12	M16	6-90b12x80b12x20d9	105
1QKM42-**L	550	156	65	132	60	65	60	–	37	82	–	24	ϕ376f7	–	–	ϕ214	ϕ340	ϕ182	ϕ28	ϕ18	ϕ68±0.3	ϕ50±0.4	ϕ346±0.3	9-M16	M16	10-98b12x92b12x14d9	129
1QKM52-**L	548	134	111	96	60	111	60	20	27	80	20	20	ϕ430	ϕ400e8	ϕ400e8	ϕ315	ϕ398	ϕ205	ϕ28	ϕ16	ϕ68±0.3	ϕ50±0.4	ϕ370±0.3	12-M16	M16	10-98b12x92b12x14d9	194
1QKM62-**L	665	175	120	125	100	120	100	20	48	79	20	33	ϕ485	ϕ395g7	ϕ395g7	ϕ320	ϕ464	ϕ262	ϕ28	ϕ20	ϕ68±0.3	ϕ50±0.4	ϕ435±0.3	12-M20	M16	10-112b12x102b12x16d9	250



1QKM11-**L