

产品适用范围

QJM型系列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，可适应各种机器工况。该液压马达具有重量轻、体积小、调速范围大，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。目前广泛应用于矿山建筑工程、冶金设备、石油、煤矿、船舶、地质勘探等行业。

QJM型液压马达结构原理

QJM型系列液压马达的配油轴是与后盖刚性连接的，转子体以配油轴作径向支承，以定子球形滚道和钢球作轴向支承，转子出轴是内花键，要求工作机构传动轴与它松动配合，这样转子体是浮动的，配油轴是刚性的，故允许用钢管连接进出口。压力油经配油轴中通道（或变速阀）分配到各通道高压腔的配油窗口进入各活塞缸孔。活塞在压力油作用下，通过钢球以正压力N作用到定子上，定子以同值的反作用力N'作用到钢球上。N'可分解为径向和切向2个分力，径向力为油压力所平衡，切向力F通过活塞作用于转子体。这样转子体在F力的推动下绕配油轴旋转，因同一瞬间有几只活塞处于压力油的作用下，所以能产生很大扭矩。当活塞随转子体旋转到定子曲面的顶点后，活塞在定子曲面的推动下向轴心回程，将活塞缸中工作油经配油轴窗口排回低压流通，如此往复即完成将压力能转换成机械能的任务，使液压马达不断旋转。改变两个通油口的油流方向，即可使反向旋转。改变进入液压马达的流量即可改变转速，实现无级调速目的。有级变量液压马达排量的变化，是油装置在液压马达配油轴中的变速阀位置的改变来实现的。变速阀的位置可以用手动机构或先导阀来控制，（先导阀由用户自备）。

QJM型液压马达主要特点

1. 该型马达的滚动体用一只钢球代替了一般内曲线液压马达所用的两只以上滚轮和横梁，因而结构简单，工作可靠，体积小，重量轻；
2. 运动付惯量小，钢球结实可靠，故该型马达可以在冲击负载下连续工作；
3. 摩擦付少，配油轴与转子内力平衡，球塞付通过自润滑复合材料制成的球垫传力，并具有静压平衡和良好润滑条件，采用自动补偿磨损的软性塑料活塞环密封高压油，因而具有较高的机械和容积效率，能在很低的转速下稳定运转，起动力矩较大；
4. 因结构具有的特点，该马达所需回油背压较低，一般需0.3-0.8Mpa，转速越高，背压应越大；
5. 该型马达具二级和三级变量，因而具有较大的调速范围。
6. 结构简单，拆修方便，对油液清洁度无特殊要求，油液的过滤精度可按配套油泵的要求选定。

Product overview

QJM series hydraulic motor can constitute hydraulic transmission device with different oil pumps, valves and hydraulic parts, which can meet the requirements on all conditions. QJM hydraulic motor has the characteristics of light weight, small volume, wide speed regulation range, perfect stability performance at low speed, tolerance of stamping, high efficiency, long lifetime, etc. Now it is widely used in constructional engineering, metallurgical equipment, petroleum, coal mine, ship, geological prospecting, etc.

QJM series hydraulic motor's structure principle

QJM hydraulic motor's oil distribution shaft is rigid connected with rear cover, rotor block uses oil distribution shaft as radial support, uses stator spherical rollaway nest and steel ball as axial support. Rotor's output shaft is internal spline, rotor block is floating, oil distribution shaft is rigid, so it permits to use steel pipe connection in and out of oil mouth. Pressure oil is assigned to the distribution port of each channel's high pressure chamber by the variable valves, and then the pressure oil will flow into each piston cylinder hole. Under the effect of pressure oil, the piston uses the ball with positive pressure N to effect on the stator. And the stator uses the same value number of reaction force N' to effect on the steel ball. N' can be divided into two component force radial and tangential. Tangential force F uses the piston to effect on the rotor block. Driven by the tangential force F, the rotor block rotates around the oil distribution shaft. As at the same moment, there is a few piston under the pressure oil effect, so it can produce large torque.

QJM series hydraulic motor main characteristics

1. Because the rolling body of this motor is replaces by a steel ball rather than two or more rollers and beams. Therefore, QJM series hydraulic motor has such features as: simple structure, reliable performance, small volume and light weight.
2. Small kinematics' pair inertia and hard steel ball make this motor continuously work under the strong impact load.
3. QJM series hydraulic motor has higher mechanical and volumetric efficiency. It can operate stably at low speed, and it has large starting torque.
4. Because of the characteristics of the structure, this motor's requirement of oil return backpressure is lower, general need is 0.3-0.8 Mpa, the higher the speed, the greater the backpressure.
5. As this model has variable displacements dual and trinal speeds, it has greater speed range.
6. Simple structure and easy maintenance. It has no special requirement for the cleanliness of the oil. And the oil filtration precision can be selected according to the requirement of the matching oil pump.

如何合理选型

1. 同一基型编号的液压马达，压力等级有3种，其额定压力分别为10、16、20Mpa，如何合理选择一种比较适合主机工况的型号呢？首先应考虑提高传动效率，对传动功率小，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提高容积效率，因此这时应选择用额定压力为10Mpa的型号，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，因此这是应选用额定压力为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，它还工作压力有关，工作压力越低低速稳定性越好。
2. 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，可以选用基型号编号较小的型号，而对于每天累计运转时间长，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成3.3次方反比，也就是使用压力降低一半，寿命可提高10倍。
3. 设计中用到的几个计算公式：

(1) 液压马达实际输出扭矩：

$$M=159(P_1-P_2) \cdot q \cdot \eta_m (N \cdot m)$$

式中：P₁、P₂分别为液压马达的入口和出口压力(Mpa)

η，液压马达转速(r/min)

Q，液压马达流量(L/rev)

η_m，液压马达机械效率

η_v，液压马达容积效率

(2) 液压马达输出功率：

$$N = \frac{M \cdot n}{9550} \eta_m \cdot \eta_v (KW) = \frac{Q(P_1 - P_2)}{60} \eta_m \cdot \eta_v (KW)$$

式中：P₁、P₂分别为液压马达的入口和出口压力(Mpa)

Q，液压马达排量(L/rev)

η_m，液压马达机械效率

(3) 液压马达转速：

$$N = \frac{Q}{q} \eta_v (r/min)$$

How to select model reasonably?

1. The same basic type number hydraulic motor's pressure rating have three types, and there are 10, 16, 20 Mpa. How to reasonably choose a model is more suitable to the host condition? First of all is to consider to improve the transmission efficiency. For the small transmission power, low speed and high torque working conditions, to influence the total transmission efficiency's major factor is volume efficiency. For the same transmission power of hydraulic devices, to reduce the system's working pressure can improve volume efficiency, therefore, to choose the model of 10 Mpa rated pressure to use is reasonable. And the practical working pressure should choose smaller. When the transmission power is smaller and the speed is slower, the working pressure is the lower the better. Instead, for the big transmission power and high speed working conditions, to influence the total transmission efficiency's major factor is mechanical efficiency. Therefore, to choose the model of 16 or 20 Mpa rated pressure to use is reasonable. Secondly, for the working condition of low speed stability requirements, please pay attention to the motor's displacement in selection model, the displacement the bigger, the stability at low speed the better. It is also relevant to the working pressure, the working pressure the smaller, the stability at low speed the better.

2. The hydraulic motor of the same displacement and the different basic type. How to choose a reasonable model? It is relevant to the using working conditions and service life. For the short period clearance running and the shorter cumulative working hours of machinery in the overhaul period, can choose the model whose basic type number is smaller. However, for the machinery of long time cumulative running and the long life requirement, should choose the basic type number as bigger as possible. When necessary, should choose high pressure model. But use under the low pressure conditions, it can remarkably improve the service life. Because QJM series hydraulic motor's service life is 3.3 power inversely proportional to the using pressure. That is to say to reduce a half of using pressure, the life can enhance ten times.

3. several calculation formulas used in the design:

(1) hydraulic motor actual output torque:

$$M=159(P_1-P_2) \cdot q \cdot \eta_m (N \cdot m)$$

in the formula: P₁---- hydraulic motor's inlet pressure (Mpa)

P₂---- hydraulic motor's exit pressure (Mpa)

η---- rotate speed of hydraulic motor (r/min)

Q---- the flow of the hydraulic motors (L/rev)

η_m---- hydraulic motor's mechanical efficiency

η_v---- hydraulic motor volume efficiency

(2) Out put power of hydraulic motor:

in the formula: P₁---- hydraulic motor's inlet pressure (Mpa)

P₂---- hydraulic motor's exit pressure (Mpa)

Q---- displacement of hydraulic motor (L/rev)

η_m---- hydraulic motor's mechanical efficiency

(3) Rotate speed of hydraulic motor

$$N = \frac{Q}{q} \eta_v (r/min)$$

型号说明 Description of model



型号说明举例 Example of model selection

2FS QJM21-0.63SZ 表示双速手动滑阀控制变量的径向轴转球塞液液压马达, 基型为21系列, 排量0.63L/rev, 带自控式制动器, 带支承型, 平键轴输出。

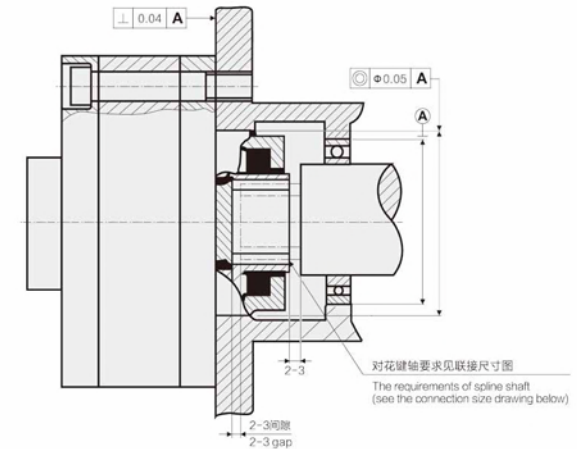
2FS QJM21-0.63SZ---- double speed manual valve control with variables sphere piston hydraulic motor, basic type is 21 series, displacement is 0.63L/rev, with brake, bearing, flat key shaft output.

1QJM**---**型安装联接要求

- 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 (见下图), 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、因配油与定子刚性连接, 故该型马达进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, 以防马达壳体内部的油液排空。
 - (2) 泄漏油管路及接头的孔径一般应大于 $\Phi 12$, 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 0.5Mpa, 若有特殊要求应与我公司联系, 协商解决。
- 6、严格保证联接油口的清洁度, 防止任何固体异物进入。

1QJM**-----**Installation Requirement

1. All kinds of hydraulic motor can be installed and used in any direction.
2. As the rotor of QJM motor is in floating status, 2-3 mm distance should be left before connecting the spline to ensure the unrestricted movement of rotor in the shaft direction. (as shown in drawing). The splined hole of motor and the splined shaft of operating mechanism should be aligned and kept in loose coordination. For technical requirements on the spline and locating seat, see the following drawing.
3. After mounting the hydraulic motor in the machine and connecting the pipeline, turn the motor by hand or a spanner. The rotor should be flexible and free from block or unbalance.
4. As the oil feed shaft and stator are in rigid connection, the oil pipeline of this model can be connected with steel pipe.
5. leakage oil pipe
 - (1) The top line of the drain pipe should be higher than that of the motor body, in case emptying oil storage.
 - (2) The bore diameter of the leakage oil pipe and the joint should be generally bigger than $\Phi 12$. The pipe can be directly connected to the oil tank. If filtrated, please use separate strained oil filter. The pressure of inner shell should not exceed 0.5 Mpa. If you have special requirements, please contact with us.
6. Strictly maintain the cleanness of the oil port, and keep away any solid particles away.



标准型定量液压马达 1QJM ** - **

QJM series fixed displacement hydraulic motor

型号 Type	排量 Displacement (ml/r)	压力 Pressure (MPa)		额定扭矩 Rated Torque (N.m)	单位扭矩 Specific torque (N.m/MPa)	转速范围 Speed range (r/min)	重量约 Weight≈ (kg)
		额定压力 Rated	尖峰压力 Peak				
1QJM001-0.063	64	10	16	95	9.5	8-500	7
1QJM001-0.08	83	10	16	123	12.3	8-400	
1QJM001-0.10	104	10	16	154	15.4	8-350	
1QJM01-0.1	100	10	16	148	14.8	8-400	15
1QJM01-0.16	163	10	16	241	24.1	8-350	
1QJM01-0.2	203	10	16	300	30	8-320	
1QJM02-0.32	326	10	16	483	48.3	5-320	24
1QJM02-0.4	406	10	16	600	60	5-300	
1QJM11-0.32	339	10	16	468	46.8	5-350	28
1QJM1A1-0.4	404	10	16	598	59.8	5-350	
1QJM11-0.5	496	10	16	734	73.4	5-300	
1QJM11-0.63	664	10	16	983	98.3	5-200	
1QJM1A1-0.63	664	10	16	983	98.3	5-200	
1QJM12-1.0	1000	10	16	1480	148	5-180	39
1QJM12-1.25	1330	10	16	1968	196.8	5-140	
1QJM21-0.4	404	16	25	957	59.8	3-350	50
1QJM21-0.5	496	16	25	1175	73.4	3-280	
1QJM21-0.63	664	16	25	1572	98.3	3-200	
1QJM21-0.8	808	16	25	1913	119.6	3-160	
1QJM21-1.0	1010	10	16	1495	149.5	3-160	
1QJM21-1.25	1354	10	16	2004	200.4	3-125	
1QJM21-1.6	1650	10	16	2442	244.2	3-100	
1QJM32-0.63	635	20	31.5	1880	94	3-300	
1QJM32-0.8	808	20	31.5	2368	118.4	3-250	
1QJM32-1.0	1060	20	31.5	3138	156.9	3-250	
1QJM32-1.25	1295	20	31.5	3833	191.7	3-200	
1QJM32-1.6	1649	20	31.5	4881	244.1	3-200	
1QJM32-2.0	2030	16	25	4807	300.4	2-180	
1QJM32-2.5	2710	10	16	4011	401.1	2-140	
1QJM32-3.2	3300	10	16	4884	488.4	2-100	
1QJM32-4.0	4000	10	16	5920	592	2-80	
1QJM42-2.0	2110	20	31.5	6246	312.3	2-250	100
1QJM42-2.5	2560	20	31.5	7578	378.9	2-250	
1QJM42-3.2	3240	10	16	4850	485	2-180	
1QJM42-4.0	4000	10	16	5920	592	2-150	
1QJM42-4.5	4600	10	16	6808	680.8	2-100	
1QJM52-2.5	2670	20	31.5	7903	395.2	2-200	
1QJM52-3.2	3240	20	31.5	9590	479.5	2-200	
1QJM52-4.0	4000	16	25	9472	592	2-180	
1QJM52-5.0	5230	10	16	7740	774	1-150	
1QJM52-6.3	6360	10	16	9413	941.3	1-120	
1QJM62-4.0	4000	20	31.5	11840	592	1-140	210
1QJM62-5.0	5180	20	31.5	15333	766.7	1-120	
1QJM62-6.3	6270	16	25	14847	927.9	1-120	
1QJM62-8.0	7850	10	16	11618	1161.8	1-100	
1QJM62-10	10150	10	16	15022	1502.2	1-80	

注：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。
Note: The technical data of the QJM series hydraulic motor with bearing or valve group is the same as the standard type hydraulic motor's in the table above.

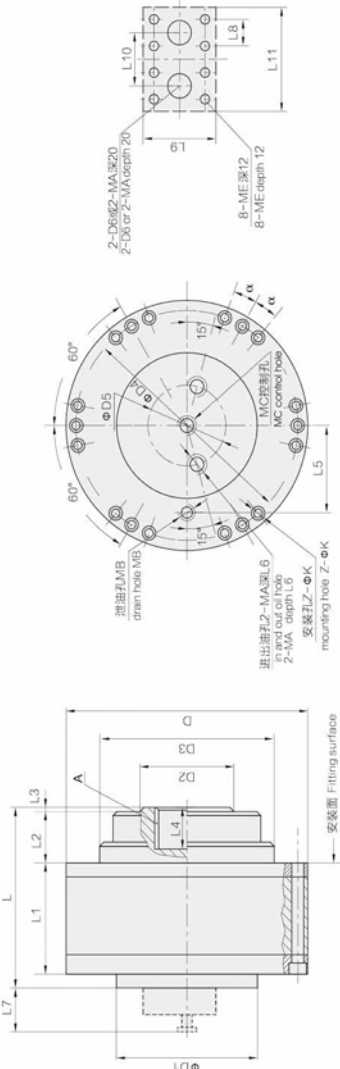
标准型变量液压马达 2QJM ** - **

QJM series variable displacement hydraulic motor

型号 Type	排量 Displacement (ml/r)	压力 Pressure (MPa)		额定扭矩 Rated torque (N.m)	单位扭矩 Specific torque (N.m/MPa)	转速范围 Speed range (r/min)	重量约 Weight≈ (kg)	
		额定压力 Rated	尖峰压力 Peak					
2QJM02-0.4	406/203	10	16	600/300	60/30	5-300	24	
2QJM11-0.4	404/202	10	16	598/299	60/30	5-350	28	
2QJM11-0.5	496/248	10	16	734/367	73/36	5-300		
2QJM11-0.63	664/332	10	16	983/492	98/49	5-200		
2QJM21-0.32	317/158	16	25	751/376	47/23	3-400	50	
2QJM21-0.5	496/248	16	25	1175/588	73/37	3-280		
2QJM21-0.63	664/332	16	25	1572/786	98/49	3-200		
2QJM21-1.0	1010/505	10	16	1495/748	150/75	3-160		
2QJM21-1.25	1354/677	10	16	2004/1002	200/100	3-125		
2QJM21-1.6	1650/825	10	16	2442/1221	244/122	3-100	80	
2QJM32-0.63	635/318	20	31.5	1880/940	94/47	3-300		
2QJM32-1.0	1060/530	20	31.5	3138/1569	157/78	3-250		
2QJM32-1.25	1295/648	20	31.5	3833/1917	192/96	3-200		
2QJM32-1.6	1649/825	20	31.5	4881/2441	244/122	3-200		
2QJM32-2.0	2030/1015	16	25	4807/2404	300/150	2-180		
2QJM32-2.5	2710/1355	10	16	4011/2006	401/201	2-140		
2QJM32-3.2	3300/1650	10	16	4884/2442	488/244	2-100		
2QJM32-4.0	4000/2000	10	16	5920/2960	592/296	2-80		
2QJM42-2.0	2110/1055	20	31.5	6246/3123	312/156	2-250		100
2QJM42-2.5	2560/1280	20	31.5	7578/3789	379/190	2-250		
2QJM42-3.2	3240/1620	10	16	4850/2425	485/242	2-180		
2QJM42-4.0	4000/2000	10	16	5920/2960	592/296	2-150		
2QJM42-4.5	4600/2300	10	16	6808/3404	681/340	2-100		
2QJM52-2.5	2670/1335	20	31.5	7903/3952	395/197	2-200	160	
2QJM52-3.2	3240/1620	20	31.5	9590/4795	480/240	2-200		
2QJM52-4.0	4000/2000	16	25	9472/4736	592/296	2-180		
2QJM52-5.0	5230/2615	10	16	7740/3870	774/387	1-150		
2QJM52-6.3	6360/3180	10	16	9413/4707	941/471	1-120		
2QJM62-4.0	4000/2000	20	31.5	11840/5920	592/296	1-140		210
2QJM62-5.0	5180/2590	20	31.5	15333/7667	766/383	1-120		
2QJM62-6.3	6270/3135	16	25	14847/7424	928/464	1-120		
2QJM62-8.0	7850/3925	10	16	11618/5809	1162/581	1-100		
2QJM62-10	10150/5075	10	16	15022/7511	1502/751	1-80		

注：各型带支承和带阀组变量液压马达其技术参数与上表中对应的液压马达技术参数相同。
Note: The technical data of the QJM variable hydraulic motors with bearing and valve group is the same as the hydraulic motor's in the table above.

外形安装图 Installation



型号 Model	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	D	D1	D2	D3	D4	Z-OK	D5	D6	MA	MB	MC	ME	α	A
1QJM01-**	101	68	29	5	27.5	43	20	37	-	37	35	63	φ140	-	φ60	φ110g6	φ128	12-φ6.5	-	M18x1.5	-	M12x1.5	-	-	10°	6-48H11 x 42H11 x 1209
1QJM01-**	130	80	37	3	30	62	20	-	-	-	-	-	φ180	φ105	φ70	φ130g7	φ165	12-φ9	φ58	M27 x 2	M12 x 1.5	-	-	10°	6-48H11 x 42H11 x 1209	
1QJM02-**	162	99	38	3	34	62	20	-	-	-	-	-	φ180	φ105	φ70	φ130g7	φ165	12-φ9	φ58	M27 x 2	M12 x 1.5	-	-	10°	6-48H11 x 42H11 x 1209	
1/2QJM11-**	136	82	33	3	32	87	18	-	-	-	-	-	φ240	φ150	φ100	φ160g7	φ220	12-φ11	φ69	M33 x 2	M16 x 1.5	M12 x 1.5	-	10°	6-70H11 x 62H11 x 1609	
1QJM11-**	134	82	25	11	38	87	18	-	-	-	-	-	φ240	φ150	φ60	φ200g7	φ220	12-φ11	φ69	M33 x 2	M16 x 1.5	M12 x 1.5	-	10°	8-42H11 x 62H11 x 1609	
1/2QJM12-**	175	122	33	2	39	87	20	-	-	-	-	-	φ240	φ150	φ110	φ160g7	φ220	12-φ11	φ69	M33 x 2	M16 x 1.5	M12 x 1.5	-	10°	6-90H11 x 80H11 x 2009	
2LSQJM21-**	168	99	29	14	38	100	20	110	-	48	58	150	φ304	φ150	φ110	φ160g7	φ283	12-φ11	φ69	M33 x 2	M22 x 1.5	M12 x 1.5	-	10°	6-90H11 x 80H11 x 2009	
1/2QJM32-**	215	138	43	9	55	115	22	95	-	52	71	165	φ322	φ165	φ120	φ170g7	φ299	12-φ13	φ79	M33 x 2	M22 x 1.5	M12 x 1.5	-	10°	10-98H11 x 92H11 x 1609	
2LSQJM32-**	209	160	16	12	35	124	22	151	73	105	104	204	φ350	φ160	φ140	φ200g7	φ320	12-φ13	φ100	M42 x 2	M22 x 1.5	M16 x 1.5	-	10°	10-120H11 x 102H11 x 1609	
1/2QJM42-**	207	158	23	5	35	124	22	-	-	-	-	-	φ340	φ160	φ120	φ170g7	φ320	12-φ13	φ100	M42 x 2	M22 x 1.5	-	-	10°	10-98H11 x 92H11 x 1609	
2LSQJM42-**	238	175	30	6	45	135	24	144	73	101	105	220	φ420	φ220	φ160	φ315g7	φ360	6-φ22	φ110	M48 x 2	M22 x 1.5	M16 x 1.5	-	6°	10-120H11 x 112H11 x 1609	
1/2QJM52-**	264	184	35	11	45	162	24	144	73	101	123	255	φ485	φ255	φ170	φ395g7	φ435	6-φ22	φ128	M48 x 2	M22 x 1.5	M16 x 1.5	-	6°	10-120H11 x 112H11 x 1609	
2LSQJM62-**	264	184	35	11	45	162	24	144	73	101	123	255	φ485	φ255	φ170	φ395g7	φ435	6-φ22	φ128	M48 x 2	M22 x 1.5	M16 x 1.5	-	6°	10-120H11 x 112H11 x 1609	

带支承型液压马达 1/2 QJM ** - ** Z/Z3/Ze3

QJM series hydraulic motor with bearing

型号 Type	排量 Displacement (ml/r)	压力 Pressure (MPa)		额定扭矩 Rated torque (N.m)	转速范围 Speed range (r/min)	重量约 Weight ≈ (kg)
		额定压力 Rated	尖峰压力 Peak			
1 QJM001-0.063Z	64	10	16	95	8-500	10
1 QJM001-0.08Z	83	10	16	123	8-400	
1 QJM001-0.10Z	104	10	16	154	8-350	
1 QJM002-0.2Z	200	10	16	295	5-320	12
1 QJM02-0.32Z	326	10	16	483	5-320	
1 QJM02-0.4Z	406	10	16	600	5-300	24
1 QJM11-0.32Z	339	10	16	468	5-350	
1 QJM11-0.4Z	404	10	16	598	5-350	
1 QJM11-0.5Z	496	10	16	734	5-300	40
1 QJM11-0.63Z	664	10	16	983	5-200	
1 QJM12-1.0Z	1000	10	16	1480	5-180	
1 QJM12-1.25Z	1330	10	16	1968	5-140	70
1/2 QJM21-0.4 Z3/Ze3	400/200	16	25	957/479	3-350	
1/2 QJM21-0.5 Z3/Ze3	496/248	16	25	1175/588	3-280	
1/2 QJM21-0.63 Z3/Ze3	664/332	16	25	1572/786	3-200	80
1/2 QJM21-0.8 Z3/Ze3	808/404	16	25	1913/957	3-160	
1/2 QJM21-1.0 Z3/Ze3	1010/505	10	16	1495/748	3-160	
1/2 QJM21-1.25 Z3/Ze3	1354/677	10	16	2004/1002	3-125	110 (Z, Z3)
1/2 QJM21-1.6 Z3/Ze3	1650/825	10	16	2442/1221	3-100	
1/2 QJM32-0.63 Z/Z3/Ze3	635/318	20	31.5	1880/940	3-300	
1/2 QJM32-1.0 Z/Z3/Ze3	1060/530	20	31.5	3138/1569	3-250	140 (Ze3)
1/2 QJM32-1.25 Z/Z3/Ze3	1295/648	20	31.5	3833/1917	3-200	
1/2 QJM32-1.6 Z/Z3/Ze3	1649/825	20	31.5	4881/2441	3-200	
1/2 QJM32-2.0 Z/Z3/Ze3	2030/1015	16	25	4807/2404	2-180	190
1/2 QJM32-2.5 Z/Z3/Ze3	2710/1355	10	16	4011/2006	2-140	
1/2 QJM32-3.2 Z/Z3/Ze3	3300/1650	10	16	4884/2442	2-100	
1/2 QJM52-2.5Z	2670/1335	20	31.5	7903/3952	2-200	240
1/2 QJM52-3.2Z	3240/1620	20	31.5	9590/4795	2-200	
1/2 QJM52-4.0Z	4000/2000	16	25	9472/4736	2-180	
1/2 QJM52-5.0Z	5230/2615	10	16	7740/3870	1-150	1-140
1/2 QJM52-6.3Z	6360/3180	10	16	9413/4707	1-120	
1/2 QJM62-4.0Z	4000/2000	20	31.5	11840/5920	1-140	
1/2 QJM62-5.0Z	5180/2590	20	31.5	15333/7667	1-120	1-100
1/2 QJM62-6.3Z	6270/3135	16	25	14847/7424	1-120	
1/2 QJM62-8.0Z	7850/3925	10	16	11618/5809	1-100	
1/2 QJM62-10Z	10150/5075	10	16	15022/7511	1-80	

图2外形安装图 Installation

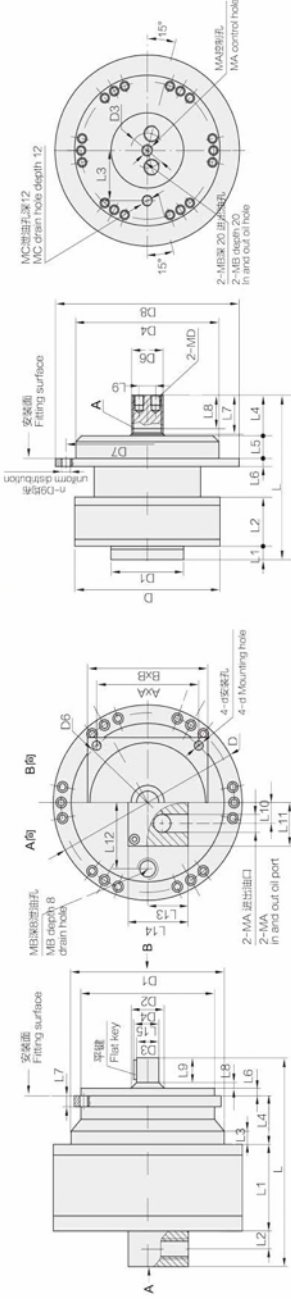


图1

型号 Model	L	L1	L2	L3	L4	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	D	D1	D2	D3	D4	D6	D7	D8	n-D9	MA	MB	池油口 Inlet oil port	A×A	B×B	平键 Flat key
1QJM001--*Z	242	73	17	6	44	48	9	3	40	19	32	43	32	49	28	φ140	φ110	φ75g7	φ25h8	φ30	φ59	φ11	M18×1.5	M12×1.5	M18×1.5	M12×1.5	70×70	96×96	8×36	
1QJM002--*Z	262	93	17	6	44	48	9	3	40	19	32	43	32	49	28	φ140	φ110	φ75g7	φ25h8	φ30	φ59	φ11	M18×1.5	M12×1.5	M18×1.5	M12×1.5	70×70	96×96	8×36	
1QJM002--*Z	283	103	22	21	80	6	18	3.5	56.5	28	50	62	41	82	43	φ181	φ130	φ125g7	φ40f7	φ55	φ160	φ13.5	G3/4"	M12×1.5	M12×1.5	113×113	140×140	12×45		
1QJM11--*Z	264	85	-	-	95	6	18	3.5	56.5	-	-	87	-	43	φ240	-	φ125g7	φ40f7	φ50	φ160	φ13.5	M33×2	M33×2	M16×1.5	M16×1.5	113×113	140×140	12×45		
1QJM12--*Z	423	121	-	-	162	10	20	30	82	-	-	87	-	54	φ240	-	φ160g7	φ50f7	φ60	φ200	φ18	M33×2	M33×2	M16×1.5	M16×1.5	141.5×141.5	178×178	14×72		

图2

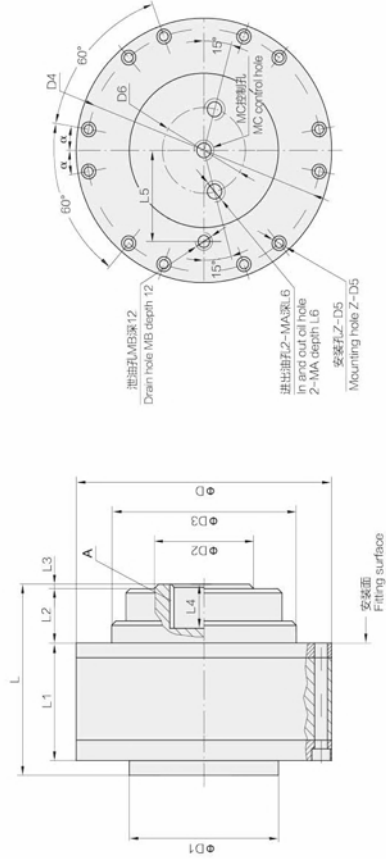
型号 Model	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	D	D1	D3	D4	D6	D7	D8	n-D9	MA	MB	MC	MD	平键 Flat key	花键 A Spline A
1 QJM21--*Z3	328	26	99	100	81	55	16	78	-	38	φ304	φ150	φ69	φ196g9	φ65f7	φ335	φ279	6-φ18	M12x1.5	M33x2	M22x1.5	2-M12x20	C18x75	-
2 QJM21--*Z63	388	26	103	100	81	38	16	78	-	38	φ304	φ150	φ69	φ220g9	φ65f7	φ260	φ300	6-φ18	M12x1.5	M33x2	M22x1.5	2-M12x20	C18x75	-
2 QJM32--*Z	395	24.5	141	115	101	30	21	100	70	40	φ322	φ165	φ79	φ250f7	-	φ300	φ335	6-φ18	M12x1.5	M33x2	M22x1.5	2-M12x25	-	10-80x17x26x1x126
1 QJM32--*Z63	446	24.5	142	115	81	55	19	78	-	-	φ322	φ165	φ79	φ295g9	φ65f7	φ335	φ379	6-φ18	M12x1.5	M33x2	M22x1.5	中央孔 M16 深25	C18x75	-
2 QJM32--*Z3	366	24.5	138	115	81	57	16	78	-	38	φ322	φ165	φ79	φ295g9	φ65f7	φ335	φ379	6-φ18	M12x1.5	M33x2	M22x1.5	2-M12x25	C18x75	-
2 QJM52--*Z	516	27	179	135	135	10	25	132	-	40	φ420	φ220	φ110	φ295f7	φ78f7	φ340	φ370	8-φ20	M16x1.5	M48x2	M22x1.5	2-M12x25	C22x130	-
2 QJM52--*Z	497	34.5	189.5	162	157	10	20	155	-	50	φ485	φ255	φ128	φ101.6f7	φ490	φ530	8-φ22	M16x1.5	M48x2	M22x1.5	2-M12x25	C25.4x150	-	

自控制制动液压马达 $\frac{1}{2}$ QJM ** - ** S/S2

QJM series hydraulic motor with brake

型号 Type	排量 Displacement (ml/r)	压力 Pressure (MPa)		额定扭矩 Rated torque (N.m)	转速范围 Speed range (r/min)	制动器开启压力 Brake Open (MPa)	制动扭矩 Brake torque (N.m)	重量约 Weight (kg)			
		额定压力 Rated	尖峰压力 Peak								
1 QJM11-0.32S	317	10	16	468	5-350	4≤P≤7	400-600	35			
2 QJM11-0.4S	404/202	10	16	598/299	5-350	3≤P≤5					
2 QJM11-0.5S	496/248	10	16	734/367	5-300						
2 QJM11-0.63S	664/332	10	16	983/492	5-200	4≤P≤6	1000-1400	55			
2 QJM21-0.32S	317/158	16	25	751/376	3-400						
2 QJM21-0.4S	404/202	16	25	957/479	3-350						
2 QJM21-0.5S	496/248	16	25	1175/588	3-280						
2 QJM21-0.63S	664/332	16	25	1572/786	3-200						
2 QJM21-0.8S	808/404	16	25	1913/957	3-160						
2 QJM21-1.0S	1010/505	10	16	1495/748	3-160	3≤P≤5					
2 QJM21-1.25S	1354/677	10	16	2004/1002	3-125						
2 QJM21-1.6S	1650/825	10	16	2442/1221	3-100	4≤P≤7	≥2500 (S)	90			
2 QJM32-0.63 S/S2	635/318	20	31.5	1880/940	3-300						
2 QJM32-0.8 S/S2	808/404	20	31.5	2368/1184	3-250						
2 QJM32-1.0 S/S2	1060/530	20	31.5	3138/1569	3-250						
2 QJM32-1.25 S/S2	1295/648	20	31.5	3833/1917	3-200						
2 QJM32-1.6 S/S2	1649/825	20	31.5	4881/2441	3-200						
2 QJM32-2.0 S/S2	2030/1015	16	25	4807/2404	2-180						
2 QJM32-2.5 S/S2	2710/1355	10	16	4011/2006	2-140						
2 QJM32-3.2 S/S2	3300/1650	10	16	4884/2442	2-100						
2 QJM32-4.0 S/S2	4000/2000	10	16	5920/2960	2-80						
2 QJM42-2.0S	2110/1055	20	31.5	6246/3123	2-250				4≤P≤6	≥5000	110
2 QJM42-2.5S	2560/1280	20	31.5	7578/3789	2-250						
2 QJM42-3.2S	3280/1640	10	16	4850/2425	2-180						
2 QJM42-4.0S	4000/2000	10	16	5920/2960	2-150	3≤P≤5					
2 QJM42-4.5S	4560/2280	10	16	6808/3404	2-100						
2 QJM52-2.5S	2670/1335	20	31.5	7903/3952	2-200	4≤P≤6	≥6000	170			
2 QJM52-3.2S	3240/1620	20	31.5	9590/4795	2-200						
2 QJM52-4.0S	4000/2000	16	25	9472/4736	2-180						
2 QJM52-5.0S	5230/2615	16	25	7740/3870	1-150	3≤P≤5					
2 QJM52-6.3S	6360/3180	16	25	9413/4707	1-120						

外形安装图 Installation



型号 Model	L1	L2	L3	L4	L5	L6	D	D1	D2	D3	D4	Z-D5	D6	MA	MB	MC	α	A
$\frac{1}{2}$ QJM11-***S	149	20	12.5	28	87	20	φ240	φ150	φ100	φ160g7	φ220	12-φ11	φ69	M33x2	M16x1.5	M12x1.5	10°	6-70H11x62H11x16D9
$\frac{1}{2}$ QJM21-***S	184.5	12	13	32	100	20	φ304	φ150	φ110	φ160g7	φ283	12-φ11	φ69	M33x2	M22x1.5	M12x1.5	10°	6-90H11x80H11x20D9
$\frac{1}{2}$ QJM32-***S	232	140.5	4	55	115	20	φ322	φ165	φ120	φ280g7	φ299	12-φ13	φ79	M33x2	M22x1.5	M12x1.5	10°	10-98H11x82H11x14D9
$\frac{1}{2}$ QJM32-***S2	252	164.5	4	55	115	20	φ322	φ165	φ120	φ280g7	φ299	12-φ13	φ79	M33x2	M22x1.5	M12x1.5	10°	10-98H11x82H11x14D9
$\frac{1}{2}$ QJM42-***S	233.5	191	3.5	35	124	22	φ350	φ180	φ140	φ200g7	φ320	12-φ13	φ100	M42x2	M22x1.5	M16x1.5	10°	10-112H11x102H11x16D9
$\frac{1}{2}$ QJM52-***S	266	178	3	55	135	24	φ420	φ220	φ160	φ315g7	φ360	6-φ22	φ110	M48x2	M22x1.5	M16x1.5	6°	10-120H11x112H11x16D9

外控式制动液压马达 $\frac{1}{2}$ QJM ** - ** Se

QJM series hydraulic motor with external control brake

型号 Type	排量 Displacement (ml/r)	压力 Pressure (MPa)		额定扭矩 Rated torque (N.m)	转速范围 Speed range (r/min)	制动器开启压力 Brake Open (MPa)	制动扭矩 Brake touque (N.m)	重量约 Weight (kg)			
		额定压力 Rated	尖峰压力 Peak								
1 QJM12-0.8Se	808	10	16	1076	5-200	1.3 ≤ P ≤ 6.3	≥ 1800	50			
1 QJM12-1.0Se	993	10	16	1332	5-180						
1 QJM12-1.25Se	1328	10	16	1771	5-140						
$\frac{1}{2}$ QJM21-0.32Se	317/158	16	25	751/376	3-400	2.5 ≤ P ≤ 6.3	≥ 2500	95			
$\frac{1}{2}$ QJM21-0.4Se	404/202	16	25	957/479	3-350						
$\frac{1}{2}$ QJM21-0.5Se	496/248	16	25	1175/588	3-280						
$\frac{1}{2}$ QJM21-0.63Se	664/332	16	25	1572/786	3-200						
$\frac{1}{2}$ QJM21-0.8Se	808/404	16	25	1913/957	3-160						
$\frac{1}{2}$ QJM21-1.0Se	1010/505	10	16	1495/748	3-160						
$\frac{1}{2}$ QJM21-1.25Se	1354/677	10	16	2004/1002	3-125						
$\frac{1}{2}$ QJM21-1.6Se	1650/825	10	16	2442/1221	3-100						
$\frac{1}{2}$ QJM32-0.63Se	635/318	20	31.5	1880/940	3-300				2.5 ≤ P ≤ 6.3	≥ 6000	120
$\frac{1}{2}$ QJM32-0.8Se	808/404	20	31.5	2368/1184	3-250						
$\frac{1}{2}$ QJM32-1.0Se	993/497	20	31.5	3138/1569	3-250						
$\frac{1}{2}$ QJM32-1.25Se	1328/664	20	31.5	3833/1942	3-200						
$\frac{1}{2}$ QJM32-1.6Se	1616/808	20	31.5	4881/2441	3-200						
$\frac{1}{2}$ QJM32-2.0Se	2030/1015	16	25	4807/2404	2-180						
$\frac{1}{2}$ QJM32-2.5Se	2710/1355	10	16	4011/2006	2-140						
$\frac{1}{2}$ QJM32-3.2Se	3300/1650	10	16	4884/2442	2-100						
$\frac{1}{2}$ QJM32-4.0Se	4000/2000	10	16	5920/2960	2-80						
$\frac{1}{2}$ QJM42-2.0Se	2110/1055	20	31.5	6246/3123	2-250	2.1 ≤ P ≤ 6.3	≥ 9000	150			
$\frac{1}{2}$ QJM42-2.5Se	2560/1280	20	31.5	7578/3789	2-250						
$\frac{1}{2}$ QJM42-3.2Se	3300/1650	10	16	4884/2442	2-180						
$\frac{1}{2}$ QJM42-4.0Se	4000/2000	10	16	5920/2960	2-150						
$\frac{1}{2}$ QJM42-4.5Se	4560/2280	10	16	6808/3404	2-100	2.2 ≤ P ≤ 6.3	≥ 10000	200			
$\frac{1}{2}$ QJM52-2.5Se	2670/1335	20	31.5	7903/3952	2-200						
$\frac{1}{2}$ QJM52-3.2Se	3240/1620	20	31.5	9590/4795	2-200						
$\frac{1}{2}$ QJM52-4.0Se	4000/2000	16	25	9472/4736	2-180						
$\frac{1}{2}$ QJM52-5.0Se	5230/2615	10	16	7740/3870	1-150						
$\frac{1}{2}$ QJM52-6.3Se	6360/3180	10	16	9413/4707	1-120						

外控式制动并带支承型液压马达 1/2 QJM ** - ** SeZ/SeZH

QJM series hydraulic motor with external control brake and bearing

型号 Type	排量 Displacement (ml/r)	压力 Pressure (MPa)		额定扭矩 Rated torque (N.m)	转速范围 Speed range (r/min)	制动器开启 压力 Brake Open (MPa)	制动扭矩 Brake torque (N.m)	重量约 Weight (kg)
		额定压力 Rated	尖峰压力 Peak					
1 QJM12-0.8SeZ (H)	808	10	16	1076	5-200	1.3 ≤ P ≤ 6.3	≥ 1800	60
1 QJM12-1.0SeZ (H)	993	10	16	1332	5-180			
1 QJM12-1.25SeZ (H)	1328	10	16	1771	5-140			
1/2 QJM21-0.32SeZ (H)	317/158	16	25	751/376	3-400	2.5 ≤ P ≤ 6.3	≥ 2500	80
1/2 QJM21-0.4SeZ (H)	404/202	16	25	957/479	3-350			
1/2 QJM21-0.5SeZ (H)	496/248	16	25	1175/588	3-280			
1/2 QJM21-0.63SeZ (H)	664/332	16	25	1572/786	3-200			
1/2 QJM21-0.8SeZ (H)	808/404	16	25	1913/957	3-160			
1/2 QJM21-1.0SeZ (H)	1010/505	10	16	1495/748	3-160			
1/2 QJM21-1.25SeZ (H)	1354/677	10	16	2004/1002	3-125			
1/2 QJM21-1.6SeZ (H)	1650/825	10	16	2442/1221	3-100			
1/2 QJM32-0.63SeZ (H)	635/318	20	31.5	1880/940	3-300			
1/2 QJM32-0.8SeZ (H)	808/404	20	31.5	2368/1184	3-250			
1/2 QJM32-1.0SeZ (H)	993/497	20	31.5	3138/1569	3-250			
1/2 QJM32-1.25SeZ (H)	1328/664	20	31.5	3833/1942	3-200			
1/2 QJM32-1.6SeZ (H)	1616/808	20	31.5	4881/2441	3-200			
1/2 QJM32-2.0SeZ (H)	2030/1015	16	25	4807/2404	2-180			
1/2 QJM32-2.5SeZ (H)	2710/1355	10	16	4011/2006	2-140			
1/2 QJM32-3.2SeZ (H)	3300/1650	10	16	4884/2442	2-100			
1/2 QJM32-4.0SeZ (H)	4000/2000	10	16	5920/2960	2-80			
1/2 QJM42-2.0SeZ (H)	2110/1055	20	31.5	6246/3123	2-250	2.1 ≤ P ≤ 6.3	≥ 9000	120
1/2 QJM42-2.5SeZ (H)	2560/1280	20	31.5	7578/3789	2-250			
1/2 QJM42-3.2SeZ (H)	3300/1650	10	16	4884/2442	2-180			
1/2 QJM42-4.0SeZ (H)	4000/2000	10	16	5920/2960	2-150			
1/2 QJM42-4.5SeZ (H)	4560/2280	10	16	6808/3404	2-100			
1/2 QJM52-2.5SeZ (H)	2670/1335	20	31.5	7903/3952	2-200			
1/2 QJM52-3.2SeZ (H)	3240/1620	20	31.5	9590/4795	2-200			
1/2 QJM52-4.0SeZ (H)	4000/2000	16	25	9472/4736	2-180			
1/2 QJM52-5.0SeZ (H)	5230/2615	10	16	7740/3870	1-150			
1/2 QJM52-6.3SeZ (H)	6360/3180	10	16	9413/4707	1-120			

图2外形安装图 Installation

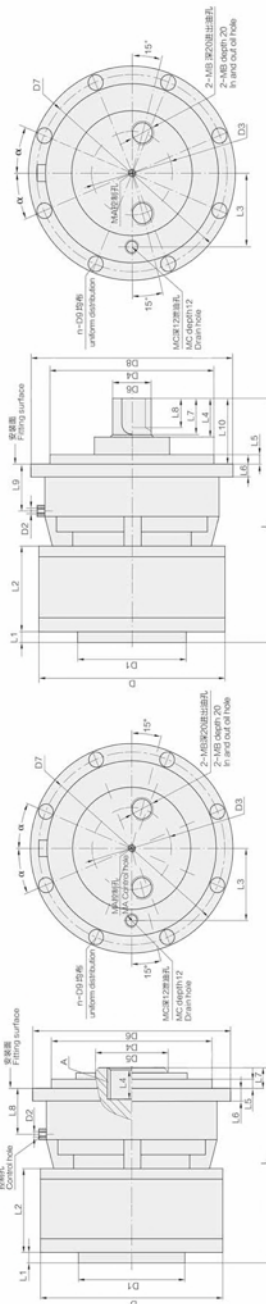


图1外形安装图 Installation

型号 Model	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	D	D1	D2	D3	D4	D5	D6	D7	D8	D9	n-D9	MA	MB	MC	MC	α	MC	MC	MC	A	
																																1 QJM12-0.8SeZ
1/2 QJM12-1.0SeZ	358	18	121	87	62	10	13	58	39	28	96	φ240	φ150	φ166x1.5	φ69	φ250g7	-	φ285	φ285	φ285	φ300	φ330	8-φ13	M12x1.5	M33x2	M16x1.5	M22x1.5	M22x1.5	22.5°	M33x2	M22x1.5	6-90H11x80H11x20D9
1/2 QJM12-1.25SeZ	409	26	102	100	60	10	16	24	36	36	113	φ322	φ165	φ166x1.5	φ79	φ335g7	φ120	φ380	φ380	φ354	φ354	8-φ13	M12x1.5	M42x2	M22x1.5	M22x1.5	M22x1.5	22.5°	M42x2	M22x1.5	10-98H11x92H11x14D9	
1/2 QJM12-1.6SeZ	462	24	140	115	81	13	16	78	-	35	120	φ322	φ165	φ166x1.5	φ79	φ335g7	φ140	φ445	φ418	φ418	φ418	12-φ17	M16x1.5	M48x2	M22x1.5	M22x1.5	M22x1.5	15°	M48x2	M22x1.5	10-128H11x102H11x16D9	
1/2 QJM12-2.0SeZ	330	27	175	135	45	17	18	22	45	40	121	φ420	φ220	φ168x1.5	φ110	φ395f6	φ150	φ445	φ418	φ418	φ418	12-φ17	M16x1.5	M48x2	M22x1.5	M22x1.5	M22x1.5	15°	M48x2	M22x1.5	10-120H11x128H11x18D9	

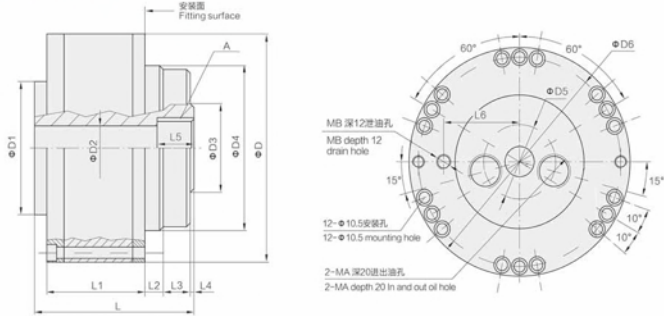
图2

内部通孔型液压马达 $\frac{1}{2}$ QJM ** - ** T **

QJM series hydraulic motor with through hole

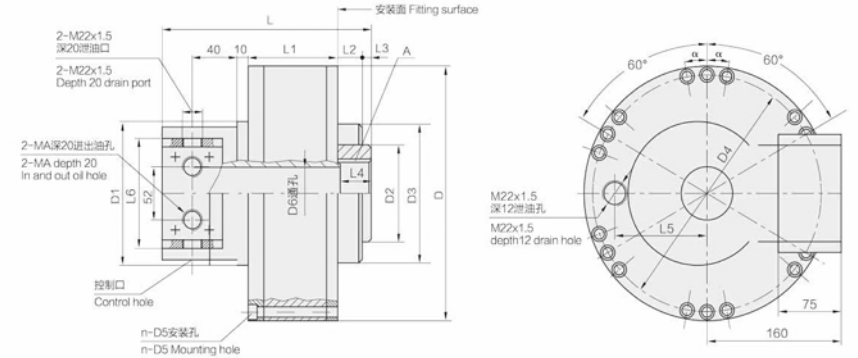
型号 Type	排量 Displacement (ml/r)	压力 Pressure (MPa)		额定扭矩 Rated torque (N.m)	转速范围 Speed range (r/min)	通孔直径 Hole Dia. (mm)	重量约 Weight ≈ (kg)		
		额定压力 Rated	尖峰压力 Peak						
1 QJM01-0.1T40	100	10	16	148	8-400	40	15		
1 QJM01-0.16T40	163	10	16	241	8-350				
1 QJM01-0.2T40	203	10	16	300	8-320				
1 QJM11-0.32T50	317	10	16	468	5-350	50	26		
1 QJM11-0.4T50	404	10	16	598	5-350				
1 QJM11-0.5T50	500	10	16	734	5-300				
$\frac{1}{2}$ QJM21-0.32T65	317/158	16	25	751/376	3-400	65	65		
$\frac{1}{2}$ QJM21-0.5T65	496/248	16	25	1175/588	3-280				
$\frac{1}{2}$ QJM21-0.63T65	664/332	16	25	1572/786	3-200				
$\frac{1}{2}$ QJM21-1.0T65	1010/505	10	16	1495/748	3-160				
$\frac{1}{2}$ QJM21-1.25T65	1354/677	10	16	2004/1002	3-125				
$\frac{1}{2}$ QJM32-0.63T75	635/318	20	25	1880/940	3-300			75	88
$\frac{1}{2}$ QJM32-1.0T75	1060/530	20	25	3138/519	3-250				
$\frac{1}{2}$ QJM32-1.25T75	1300/650	20	25	3833/1917	3-200				
$\frac{1}{2}$ QJM32-2.0T75	2030/1015	16	25	4807/2404	2-180				
$\frac{1}{2}$ QJM32-2.5T75	2710/1355	10	16	4011/2006	2-140				
$\frac{1}{2}$ QJM42-2.5T80	2560/1280	20	31.5	7578/3789	2-250	80	120		
$\frac{1}{2}$ QJM52-3.2T80	3240/1620	20	31.5	9590/4795	2-200				
$\frac{1}{2}$ QJM52-4.0T80	4000/2000	16	25	9472/4736	2-180			80	162
$\frac{1}{2}$ QJM52-5.0T80	5230/2615	10	16	7740/3870	1-150				
$\frac{1}{2}$ QJM52-6.3T80	6360/3180	10	16	9413/4707	1-120				
$\frac{1}{2}$ QJM62-4.0T125	4000/2000	20	31.5	11840/5920	1-140				
$\frac{1}{2}$ QJM62-5.0T125	5180/2590	20	31.5	15333/7667	1-120				
$\frac{1}{2}$ QJM62-6.3T125	6270/3135	16	25	14847/7424	1-120				
$\frac{1}{2}$ QJM62-8.0T125	7850/3925	10	16	11618/5809	1-100				
$\frac{1}{2}$ QJM62-10T125	10150/5075	10	16	15022/7511	1-80				

外形安装图 Installation



型号 Model	L	L1	L2	L3	L4	L5	L6	D	D1	D2	D3	D4	D5	D6	MA	MB	A
1QJM01-**T40	130	80	15	23	3	30	62	φ181	φ100	φ40	φ70	φ130g6	φ70	φ165	M22×1.5	M12×1.5	6-48H11×42H11×12D9
1QJM11-**T50	152	82	16	17	3	28	87	φ240	φ150	φ50	φ100	φ160g6	φ80	φ220	M22×1.5	M16×1.5	6-70H11×62H11×16D9

外形安装图 Installation



型号 Model	L	L1	L2	L3	L4	L5	L6	D	D1	D2	D3	D4	n-D5	D6	MA	α	A
$\frac{1}{2}$ QJM21-**T65	230	101	29	14	37	110	146	φ304	φ186	φ110	φ160g6	φ283	12-φ11	φ65	M33x2	10°	10-98H11x92H11x14D9
$\frac{1}{2}$ QJM32-**T75	280	138	43	9	47	115	146	φ322	φ186	φ120	φ170g6	φ299	12-φ13	φ75	M33x2	10°	10-98H11x92H11x14D9
$\frac{1}{2}$ QJM42-2.5T80	292	160	16	30	40	124	146	φ350	φ190	φ140	φ200h8	φ320	12-φ13	φ80	M33x2	10°	10-112H11x102H11x16D9
$\frac{1}{2}$ QJM52-**T80	367	175	30	24	45	135	190	φ420	φ220	φ160	φ315g7	φ360	6-φ22	φ80	M48x2	6°	10-120H11x112H11x18D9

1QJM62-**T125 型马达外形安装图 Installation

