



JM系列膜片联轴器

SERIES JM DIAPHRAGM COUPLINGS

2020年7月版 July, 2020 Edition



宁波伟隆港口机械有限公司

NINGBO WEILONG PORT MACHINERY CO., LTD.

宁波伟隆传动机械有限公司

NINGBO WEILONG TRANSMISSION MACHINERY CO., LTD.

一、概述

膜片联轴器是国内外广泛采用的新型联轴器。JM系列膜片联轴器是我公司早年与机械部上海材料研究所共同研制成功的新产品，通过十余年的推广应用及改进完善，使产品性能大大提高，并派生了多种系列规格，供不同需要的选择。

JM膜片联轴器属金属弹性元件挠性联轴器，主要依靠金属膜片来联接主、从动轴传递转矩，具有弹性减振、无噪声、不需润滑的优点，它能补偿主、从动轴之间由于制造误差、安装误差，承载变形以及温升变化的影响等所引起的轴向、径向、角向偏移，是当今替代齿式联轴器及一般联轴器的理想产品。

JM系列膜片联轴器具有如下特点：

具有明显减震作用，无噪声，无磨损。

传动效率高，可达99.86%，特别适用于中、高速大功率传动。

能补偿两轴线不对中的位置偏差，挠性大，允许两轴有一定的轴向、径向和角向位移。

适应在温差大(-80℃ ~ +300℃)和恶劣环境中工作，并能在有冲击、振动条件下安全运行。

结构简单，重量轻，体积小，拆装维护方便，不必移动机器即可装拆(指带中间轴型式)。

能准确传递转速，运转无转差，可用于精密机械的传动。

JM系列膜片挠性联轴器被广泛应用于冶金、矿山、石油、化工、电力、船舶、起重运输、纺织、轻工、农机、印刷机械和水泵、风机、机床等行业的机械设备中传递动力。

目前，我公司生产五大系列上百个规格的膜片联轴器，欢迎广大新老用户选用，并希望您提出要求和反馈使用意见，我公司将竭诚为您服务。

I . General

Diaphragm(disc) coupling is a new type coupling to be widely used abroad. It is applied in many imported equipments in our country. JM series diaphragm coupling is a new product developed by Shanghai Material Research Institute and our company.

It can compensate for paralleled as well as angular misalignment between prime mover and driven machine caused by Deformation due to load and temperature vary. Belonging to the flexible coupling with metallic elastic element, JM series diaphragm couplings rely on the metallic diaphragm to connect prime mover and driven machine, and to transmit the torque. It contains some advantages such as flexibly relieving shock, no noise and no lubricating needed. It is good substitute product for gear couplings and other general couplings.

The main characteristics of JM series Diaphragm Coupling:

Obvious dampen shock and no noise, no wearing.

High transmitted efficiency and be available to high speed and superpower transfer motion.

Good ability for compensating the misalignment of two axes. The allowing angular displacement is two times as much as the gear couplings. Low reaction pressure and high flexibility as the radial shifting as well as permitting some axial, angular or radial deviation.

Operating safely under -80℃ ~ 300℃ and bad condition with shock and vibration.

Simple construction, light weight and small size. Easy assembly and disassemble without moving machine. As well as No maintenance required and lubricating.

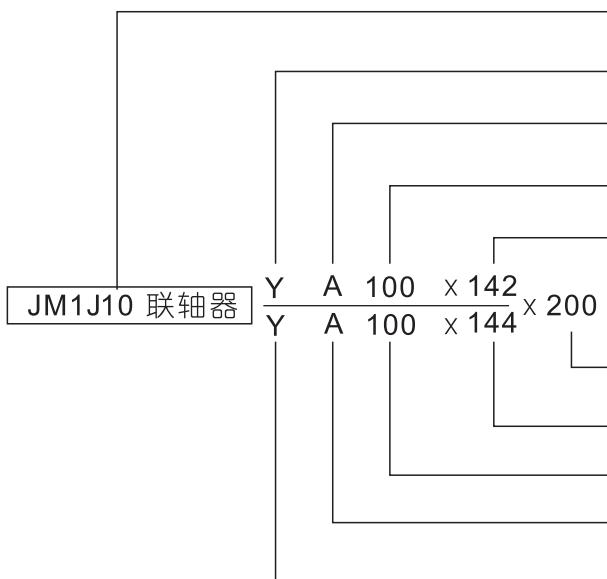
Accurate transmitting revolution and no slipping. It can be used on precision machinery.

JM series diaphragm coupling is widely used for transmitting power in various kinds of mechanical equipments such as metallurgy, mining, petroleum, chemical industry, agricultural machinery, printing machinery, pump, blower fan and machine too, etc.

At present, hundreds of specifications in five majors series diaphragm couplings are supplied by our company. The warm welcome will be given to the new and old customers for selecting them. further more, we are sincerely in hopes of gaining your feedback information and requirements, and we will try our best to give you the best service!

二、JM系列膜片联轴器的标记方法

订购联轴器时，应按以下示例的方法标注所需联轴器的型号和规格：



标记示例：

欲订购JM1J10型联轴器，中间轴长200；
已知：

主动端：Y型轴孔，A型键槽，
 $d_1 = 100 \text{ mm}$, $L_1 = 142 \text{ mm}$
从动端：Y型轴孔，A型键槽，
 $d_2 = 110 \text{ mm}$, $L_2 = 144 \text{ mm}$,

标记为：

JM1J10 联轴器 $\frac{YA100 \times 142}{YA110 \times 144} \times 200$

订购时应完整地标注联轴器的型号、规格和尺寸

表 1 圆柱形轴孔与轴伸的配合(推荐)

Table 1: Fitting of the cylindrical bore and shaft extension (suggested)

直径 Diameter d(mm)	配合代号 Fitting code	
>6—30	H7/j6	根据使用要求，也可选用如下配合 Can also be used depending on application requirement H7/n6 H7/p6 H7/r6
>30—50	H7/k6	
>50	H7/m6	

注：选用过盈大于表1中规定的配合时，应验算联轴器轮毂的强度。

II. The Mark Of JM Series Diaphragm Coupling

The following code should be used for ordering the specified type and size of curved tooth coupling:

联轴器型号 (Coupling Type)

主动端轴孔型式 (Driving shaft Bore Type)

主动端键槽型式 (Driving Keyway Type)

主动端轴孔配合直径 (Driving shaft Bore Diameter)

主动端轴孔配合长度 (Driving shaft Bore Length)

主、从动端轴端间距离(中间轴长C)
(the intermedia axis length length C)

从动端轴孔配合长度 (Driving shaft Bore Length)

从动端轴孔配合直径 (Driving shaft Bore Diameter)

从动端键槽型式 (Driving Keyway Type)

从动端轴孔型式 (Driving shaft Bore Type)

Ordering example:

If a coupling of type JM1J10 is requested, and the intermediate axis length is 200 and the following data are known:

Driving end:

Shaft Bore Y type,
Key way is A type,
 $d_1=100\text{mm}$, $L_1 = 142 \text{ mm}$;

Driven end:

Bore Y type, Key way is A type,
 $d_2=110\text{mm}$ and $L_2=144\text{mm}$.

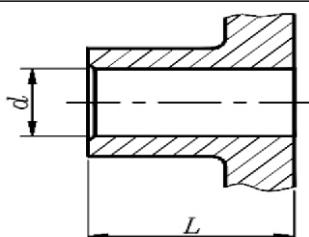
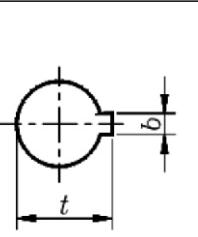
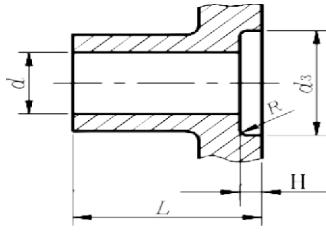
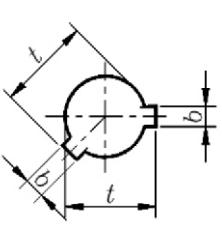
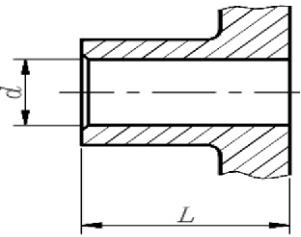
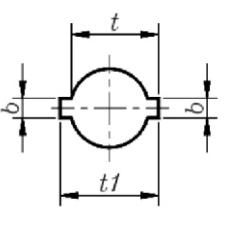
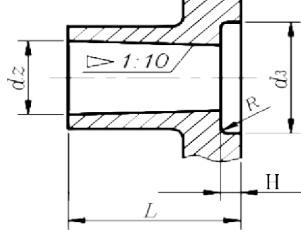
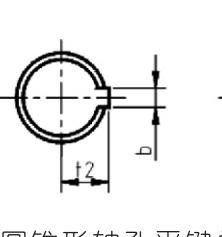
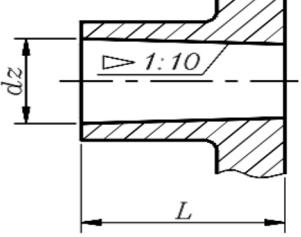
should be labeled:

COUPLING JM1J10 $\frac{YA100 \times 142}{YA110 \times 144} \times 200$

Please state out type, size, specifications of coupling completely when you are ordering

Note: If a shrink fit more heavy than that shown in the table is used the strength of the hub of coupling shall be checked.

表2 联轴器轴孔及其联接的型式和代号 Table 2 Type and Code of Coupling Bore and its Connection

轴孔型式和代号 Shaft Bore Type & Code	键槽型式和代号 Connection Type and Code
 Y型-长圆柱形轴孔 Type Y—Long Cylindrical Bore	 A型-平键单键槽 Type A—Flat Key, Single Keyway
 J型-有沉孔的短圆柱形轴孔 Type J—Short Cylindrical Bore with Counter Bore	 B型-120° 布置平键双键槽 Type B—Flat Key, Double Keyways Apart from 120° Each Other
 J ₁ 型-无沉孔的短圆柱形轴孔 Type J ₁ —Short Cylindrical Bore without Counter Bore	 B ₁ 型-180° 布置平键双键槽 Type B ₁ —Flat Key, Double Keyway Apart from 180° Each Other
 Z型-有沉孔的长圆锥形轴孔 Type Z—Long Tapered Bore with Counter Bore	 C型-圆锥形轴孔平键单键槽 Type C—Flat Key, Single Key way for Tapered Bore
 Z ₁ 型-无沉孔的长圆锥形轴孔 Type Z ₁ —Long Tapered Bore without Counter Bore	矩形花键联接轴孔按GB/T 1444 圆柱直齿渐开线花键按GB/T3478.1 Square Splined Bore in accordance with GB/T 1444. Cylindrical Evolute Spline in accordance with GB/T 3478.1

约定：圆柱形轴孔的尺寸精度为H7，键槽宽度b选用GB1095《平键 键槽的剖面尺寸》标准值，宽度b的尺寸精度为该标准规定的Js9。圆锥形轴孔的键槽型式和尺寸则按GB/T3852-1997《联轴器轴孔和联接型式及尺寸》的规定。若用户所需轴孔、键槽的尺寸和配合与上述约定不符，务必在订货时说明。

Note: If there is no special indication fitting accuracy of cylindrical shaft bore is H7, the width "b" of the keyway is selected as standard value from GB1095<Section Dimensions of the key, and key way>, and the tolerance of width "b" is specified as Js9. The keyway type and dimensions of tapered bore is specified in GB/T3852-1997 <Type and Dimensions of shaft bore and connection of the coupling>. If the requested dimensions and fitting of shaft bore and keyway do not meet the above mentioned standards it must be noted when ordering

三、JM系列联轴器的选用方法

联轴器是根据负荷情况、计算转矩、轴孔直径、工作转速来选择的。
(选定联轴器的型号后应对轴和键的强度作校核计算)

计算转矩 T_c 由下式求出：

$$T_c = K_1 K_2 K_3 T = K_1 K_2 K_3 \cdot 9550 \frac{P_w}{n} = K_1 K_2 K_3 \cdot 7020 \frac{P_H}{n} \leq T_n$$

式中：
 T —— 理论转矩，N·m；
 P_w —— 驱动功率，kw；
 n —— 工作转速，r/min；
 T_c —— 计算转矩，N·m；
 T_n —— 公称转矩，N·m；
 P_H —— 驱动功率，HP；
 K_1 —— 工况系数，考虑传动系统由于载荷变化、冲击载荷、工作环境等因素对联轴器在实际传递转矩时的影响系数。
 K_2 —— 起动系数，由起动频率而引起的附加载荷系数。
 K_3 —— 安装偏差系数，考虑联轴器安装时的轴向偏差、角向偏差对转矩的影响，详见第9页。

当根据最大计算转矩 T_c 选得的联轴器，其允许最大轴孔不能满足轴伸尺寸的要求时，应改选为能同时满足转矩和轴伸尺寸的联轴器规格。

K_1 —— 工况系数

原动机	工作机			
	I类	II类	III类	IV类
电动机，汽轮机	1.3	1.5	2	3
4缸以上内燃机	1.5	2	2.5	3.5
1—3缸内燃机	3	3.5	4.5	5

K_2 —— 起动系数

每小时起动次数	<120	120~240	>240
K_2	1.0	1.3	1.6

工作机分类

- I类：转矩变化很小机械：如离心泵、小型发电机、皮带输送机、通风机、液体搅拌机。
- II类：转矩变化中等机械：如车床、轴流风机、链式输送机、锅炉给水泵、旋转式压缩机。
- III类：转矩变化和冲击载荷大机械：往复泵、绞盘机、活塞式压缩机（四缸以上）、起重机、挖掘机、水泥搅拌机。
- IV类：转矩变化大并有强烈冲击载荷机械：轧钢机传动装置、剪床、冲床、船用螺旋桨、破碎机。

III. Selection Method of JM Series Diaphragms

Selection of the type of coupling refer to load case, calculated torque T_c , bore diameter and the shaft speed.

Formula for finding T_c list below:

Where
 T —— Theoretical torque, in N·m;
 P_w —— Driving power, in kw ;
 n —— Running speed, in r/min
 T_c —— Calculating torque, N · m;
 T_n —— Nominal torque, N · m;
 P_H —— Driving Power, HP;
 K_1 —— Working condition coefficient, considering transmission the effect coefficient of coupling transferring torque by loading verify, striking loading, working conditions;
 K_2 —— Starting coefficient, attachment loading produced by starting frequency.
 K_3 —— Installing deviation coefficient, considering the effect of the deviation of axial and angular to torque, see page 9 .

If the maximum allowable bore of the selected coupling with refer to the max T_c cannot meet the shaft length required, the type of coupling should be adjusted to meet the both requirements of the torque and shaft size.

working condition coefficient K_1 ,

Kind of prime mover	Driven machine			
	1	2	3	4
Motor Or Turbine	1.3	1.5	2	3
Engine (cylinders:4 Or More)	1.5	2	2.5	3.5
Engine(Cylinders: 3 Or Less)	3	3.5	4.5	5

Starting (braking, commutation) coefficient K_2

starting times every hour	<120	120~240	>240
K_2	1.0	1.3	1.6

Classification of driven machine

Kind 1:Slight variable for torque:

e.g: pump, small generator, belt conveyor, ventilation, liquid mixer.

kind 2: Medial variable for torque:

e.g: Machine tool, axial blower fan, chain conveyor, water pump for boiler, rotary compressor.

kind 3: Variable torque and large shock loads:

e.g: reciprocating pump, capstan machine, piston compressor (with more than 4 cylinders), crane excavator, cement mixer.

kind 4: Large variable torque and strong shock loads:

e.g: Driving device for mill, shearing machine, punch, marine propeller, crusher.

四、JM1J型膜片联轴器的结构型式、基本参数和尺寸

IV. Type JM1J diaphragm coupling's construction, basic parameters and dimensions

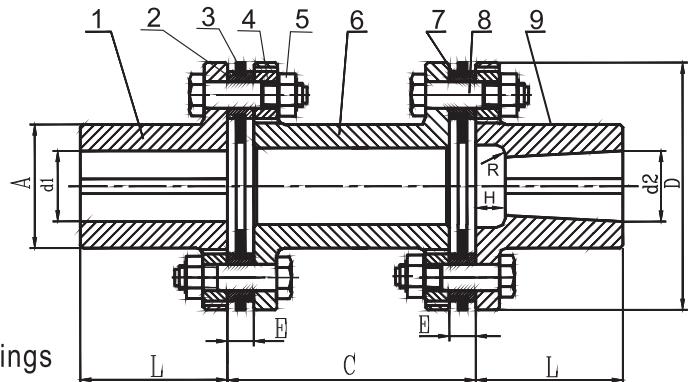


图1 JM1J型膜片联轴器结构图

Fig.1 Structure for Type JM1J Diaphragm couplings

1.半联轴器 2.压紧座 3.膜片 4.垫圈 5.螺母 6.中间轴 7.压紧圈 8.螺栓 9.半联轴器

1.haft-coupling 2.clamp 3.diaphragm 4.washers 5.nut 6.intermediary shaft 7.clamp ring 8.bolt 9.haft-coupling

表3

Table3 (mm)

型号 Type	公称 转矩 Torque Tn N·m	许用 转速 Speed [n] r/min	轴孔 直径 Bore d1,d2 Max	轴孔 长度 Length of bore L 参考Ref.	主要尺寸 Primary Dimension						转动 惯量 Rotary Inertia I ≈kg·m ²	无孔 质量 Mass m ≈kg
					D	A	C (min)	E	H	R		
JM1J1	63	6000	28	52	84	42	80	9	25	1.5	0.001	3
JM1J2	125	5100	38	52	94	53	80	9	25	1.5	0.0015	4
JM1J3	315	4900	50	62	126	70	105	13	30	2	0.0056	8
JM1J4	500	4900	65	62	145	90	115	13	30	2	0.0204	12
JM1J5	800	4600	70	82	162	100	115	13	35	2.5	0.0585	17
JM1J6	1250	4300	75	82	174	105	117	14	35	2.5	0.0945	20
JM1J7	2000	4300	90	112	194	125	125	14	40	2.5	0.1545	30
JM1J8	3150	4000	95	112	210	135	136	14	40	3	0.3675	39
JM1J9	4000	4000	110	112	230	155	150	16	45	3	0.4455	50
JM1J10	6300	3800	120	142	260	170	162	18	50	3	0.717	73
JM1J11	10000	3800	130	142	280	180	178	18	50	3	1.209	92
JM1J12	12500	3400	140	142	300	195	195	21	55	4	2.25	112
JM1J13	18000	3000	160	172	330	225	210	23	55	4	3.345	156
JM1J14	25000	3000	175	172	355	245	225	25	60	4	4.02	198
JM1J15	40000	2700	190	172	390	260	248	28	70	5	7.23	257
JM1J16	63000	2500	220	212	440	305	294	28	80	5	14.145	386
JM1J17	80000	2300	240	212	465	330	330	48	90	5	20.415	457
JM1J18	100000	2300	250	212	485	345	345	52	90	5	27.6	578
JM1J19	112000	2200	260	252	505	360	385	60	100	5	34.725	672
JM1J20	140000	2200	280	252	550	400	395	64	100	6	42.3	818
JM1J21	200000	2000	320	302	600	450	435	70	110	6	99.87	1182
JM1J22	224000	1800	360	302	670	500	470	76	110	6	113.58	1506
JM1J23	280000	1600	370	352	732	520	520	76	120	6	128.4	1680
JM1J24	355000	1500	380	352	796	560	600	80	120	8	165.45	2150
JM1J25	450000	1400	400	410	875	600	630	80	130	8	228.15	2445
JM1J26	560000	1300	420	410	915	640	700	86	130	8	420.75	3130
JM1J27	710000	1200	450	470	965	710	750	86	140	8	514.05	3680
JM1J28	900000	1200	480	470	1020	750	780	90	140	10	570.15	4754
JM1J29	1120000	1100	500	550	1170	800	800	90	150	10	645.6	5529
JM1J30	1400000	1000	530	550	1240	860	836	90	150	10	679.5	6800

注：1、用户有需要各种非标准轴孔、键槽、轴孔配合长度的，请在订货时标明，本厂均承接制造。
2、诚告用户：随着工艺与材料的改进，在保证各型号联轴器的主要性能参数和装配尺寸不变的情况下，今后产品尺寸会有修正，届时恕不另行通知。

Note: 1. If custom requires the different size of bore, keyway and fitting length, we will be pleasure to do it. But make description clearly in purchasing specification.
2. Notice: All details subject to parameter alterations without notice, adaption to new standard or new scientific knowledge.

五、JM型膜片联轴器的结构型式、基本参数和尺寸

V-Type JM diaphragm coupling's construction, basic parameters and dimensions

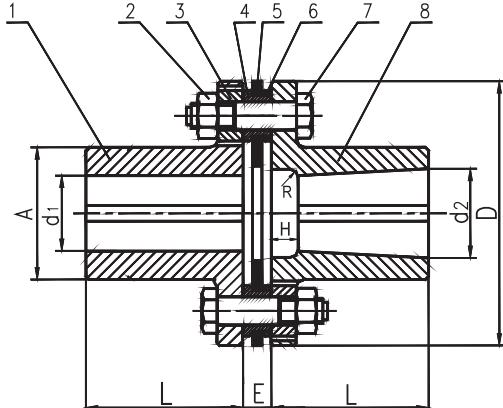


图2 JM型膜片联轴器结构图

Fig.2 Structure for Type JM Diaphragm couplings

1.半联轴器 2.螺母 3.垫圈 4.压紧座 5.膜片 6.压紧圈 7.螺栓 8.半联轴器

1.haft-coupling 2.nut 3.washers 4.clamp 5.diaphragm 6.clamp ring 7.bolt 8. haft-coupling

表 4

table4

(mm)

型号 Type	公称 转矩 Nominal Torque Tn N·m	许用 转速 Speed [n] r/min	轴孔 直径 Bore d1,d2 Max	轴孔 长度 Length of bore L 参考 Ref.	主要尺寸 Primary Dimension					转动 惯量 Rotary Inertia I ≈ kg · m ²	无孔 质量 Mass m ≈ kg
					D	A	E	H	R		
JM1	63	6000	28	52	84	42	9	25	1.5	0.0007	2
JM2	125	5100	38	52	94	53	9	25	1.5	0.001	3
JM3	315	4900	50	62	126	70	13	30	2	0.0037	5
JM4	500	4900	65	62	145	90	13	30	2	0.0136	8
JM5	800	4600	70	82	162	100	13	35	2.5	0.039	12
JM6	1250	4300	75	82	174	105	14	35	2.5	0.063	14
JM7	2000	4300	90	112	194	125	14	40	2.5	0.103	22
JM8	3150	4000	95	112	210	135	14	40	3	0.245	29
JM9	4000	4000	110	112	230	155	16	45	3	0.297	36
JM10	6300	3800	120	142	260	170	18	50	3	0.478	57
JM11	10000	3800	130	142	280	180	18	50	3	0.806	70
JM12	12500	3400	140	142	300	195	21	55	4	1.50	82
JM13	18000	3000	160	172	330	225	23	55	4	2.23	114
JM14	25000	3000	175	172	355	245	25	60	4	2.68	144
JM15	40000	2700	190	172	390	260	28	70	5	4.82	188
JM16	63000	2500	220	212	440	305	28	80	5	9.43	299
JM17	80000	2300	240	212	465	330	48	90	5	13.61	353
JM18	100000	2300	250	212	485	345	52	90	5	18.4	445
JM19	112000	2200	260	252	505	360	60	100	5	23.15	495
JM20	140000	2200	280	252	550	400	64	100	6	28.2	605
JM21	200000	2000	320	302	600	450	70	110	6	66.58	889
JM22	224000	1800	360	302	670	500	76	110	6	75.72	1115
JM23	280000	1600	370	352	732	520	76	120	6	85.6	1291
JM24	355000	1500	380	352	796	560	80	120	8	110.3	1656
JM25	450000	1400	400	410	875	600	80	130	8	152.1	1881
JM26	560000	1300	420	410	915	640	86	130	8	280.5	2410
JM27	710000	1200	450	470	965	710	86	140	8	342.7	2831
JM28	900000	1200	480	470	1020	750	90	140	10	380.1	3657
JM29	1120000	1100	500	550	1170	800	90	150	10	430.4	4253
JM30	1400000	1000	530	550	1240	860	90	150	10	465	5231

注：1、本系列联轴器的径向、角向补偿量相对较小，一般仅适用于精密机械的传动。

2、用户有需要各种非标准轴孔、键槽、轴孔配合长度的，请在订货时标明，本厂均承接制造。

Note: 1.The radial and angle compensation of series JM coupling is small, they are general suit for fine machinery transmission.
2.If customers require the different size of bore、keyway and fitting length, we will be pleasure to do it. But make description clearly in purchasing specification.

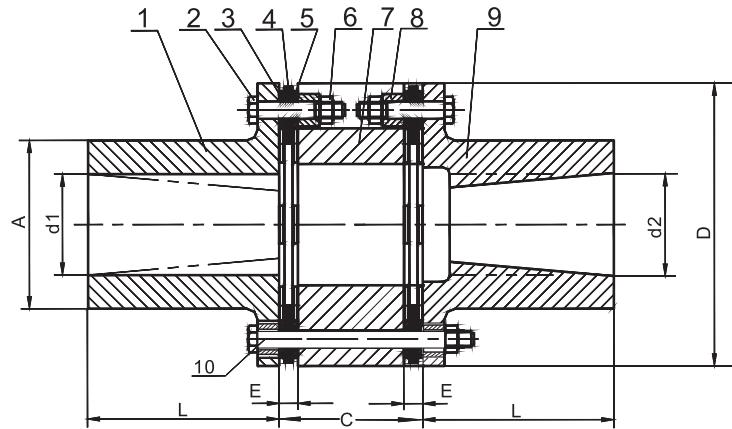
六、JMB型膜片联轴器的结构型式、基本参数和尺寸

VI. Type JMB diaphragm coupling's construction, basic parameters and dimensions



图3 JMB型膜片联轴器结构图

Fig.3 Structure for Type JM1J couplings



1.半联轴器 2.螺栓 3.压紧座 4.膜片 5.压紧圈 6.螺母 7.中间轴 8.垫圈 9.半联轴器 10.长螺栓

1.haft-coupling 2. bolt 3.clamp 4. diaphragm 5. clamp ring 6. nut 7. intermediary shaft 8. washers 9. haft-coupling 10.Long bolt

表5

Table5 (mm)

型号 Type	公称 转矩 Tn N·m	许用 转速 Speed [n] r/min	轴孔 直径 Bore d1,d2 Max	轴孔 长度 Length of bore L 参考 Ref.	主要尺寸 Primary Dimension					转动 惯量 Rotary Inertia I ≈ kg·m ²	无孔 质量 Mass m ≈ kg	
					D	A	C (min)	E	H			
JMB 5	800	4600	70	82	162	100	64	13	35	2.5	0.039	12
JMB 6	1250	4300	75	82	174	105	64	14	35	2.5	0.063	14
JMB 7	2000	4300	90	112	194	125	70	14	40	2.5	0.103	22
JMB 8	3150	4000	95	112	210	135	70	14	40	3	0.245	29
JMB 9	4000	4000	110	112	230	155	80	16	45	3	0.297	36
JMB 10	6300	3800	120	142	260	170	80	18	50	3	0.478	57
JMB 11	10000	3800	130	142	280	180	94	18	50	3	0.806	70
JMB 12	12500	3400	140	142	300	195	100	21	55	4	1.5	82
JMB 13	18000	3000	160	172	330	225	100	23	55	4	2.33	114
JMB 14	25000	3000	175	172	355	245	125	25	60	4	2.68	144
JMB 15	40000	2700	190	172	390	260	135	28	70	5	4.82	188
JMB 16	63000	2500	220	212	440	305	135	28	80	5	9.43	299
JMB 17	80000	2300	240	212	465	330	175	48	90	5	13.61	353
JMB 18	100000	2300	250	212	485	345	180	52	90	5	18.4	445
JMB 19	112000	2200	260	252	500	360	200	60	100	5	23.15	495
JMB 20	140000	2200	280	252	550	400	205	64	100	6	28.2	605
JMB 21	200000	2000	320	302	600	450	220	70	110	6	66.58	889
JMB 22	224000	1800	360	302	670	500	230	76	110	6	75.72	1115
JMB 23	280000	1600	370	352	732	520	240	76	120	6	85.6	1291
JMB 24	355000	1500	380	352	796	560	250	80	120	8	110.3	1656
JMB 25	450000	1400	400	410	875	600	250	80	130	8	152.1	1881
JMB 26	560000	1300	420	410	915	640	260	86	130	8	280.5	2410
JMB 27	710000	1200	450	470	965	710	265	86	140	8	342.7	2831
JMB 28	900000	1200	480	470	1020	750	275	90	140	10	380.1	3657
JMB 29	1120000	1100	500	550	1170	800	280	90	150	10	430.4	4253
JMB 30	1400000	1000	530	550	1240	860	280	90	150	10	465	5231

注：1、用户有需要各种非标准轴孔、键槽、轴孔配合长度的，请在订货时标明，本厂均承接制造。
2、诚告用户：随着工艺与材料的改进，在保证各型号联轴器的主要性能参数和装配尺寸不变的情况下，今后产品尺寸会有修正，届时恕不另行通知。

Note: 1. If custom requires the different size of bore、keyway and fitting length, we will be pleasure to do it. But make description clearly in purchasing specification.

2. Notice: All details subject to parameter alterations without notice, adaption to new standard or new scientific knowledge.

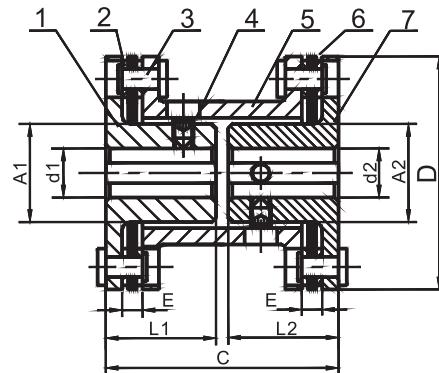
七、JMC型膜片联轴器的结构型式、基本参数和尺寸

VII. Type JMC diaphragm coupling and its construction, basic parameters and dimensions



图4 JMC型膜片联轴器结构图

Fig.5 Structure for Type JMC Diaphragm couplings



1.半联轴器 2.垫圈 3.铆钉 4.螺钉 5.中间轴 6.膜片 7.半联轴器

1.haft-coupling 2. washers 3.rivet 4.bolt 5.intermediary shaft 6.diaphragm 7.haft-coupling

表 6

table6 (mm)

型号 Type	公称 转矩 Torque T_n N · m	许用 转速 Speed [n] (r/min)	轴孔直径 Diameter of Bore d_1, d_2		轴孔 长度 Length of bore L_1, L_2	主要尺寸 Primary Dimension				转动惯量 Rotary Inertia I $\approx kg \cdot m^2$	无孔 质量 Mass m $\approx kg$
			From	To		D	A	E	C		
JMC01	6.3	7000	6	8	24	50	28	4		0.002	0.5
JMC02	10	8000	7	12	27	58	34	5		0.003	1
JMC03	16	9000	8	16	27	64	40	5		0.005	2

八、JMD型膜片联轴器的结构型式、基本参数和尺寸

VIII. Type JMD diaphragm coupling and its construction, basic parameters and dimensions



图5 JMD型膜片联轴器结构图

Fig.4 Structure for Type JMD couplings

1.半联轴器 2.螺钉 3.铆钉 4.垫圈 5.中间轴 6.膜片 7.半联轴器

1.haft-coupling 2. bolt 3.maoding 4.washers 5.intermediary shaft 6.diaphragm 7.haft-coupling

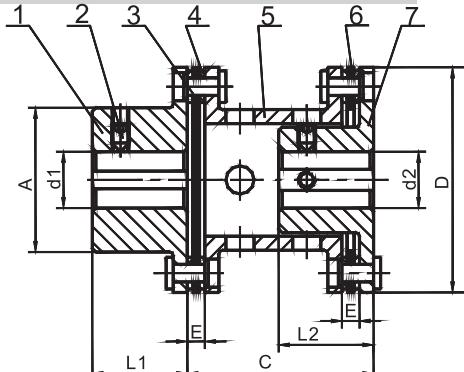


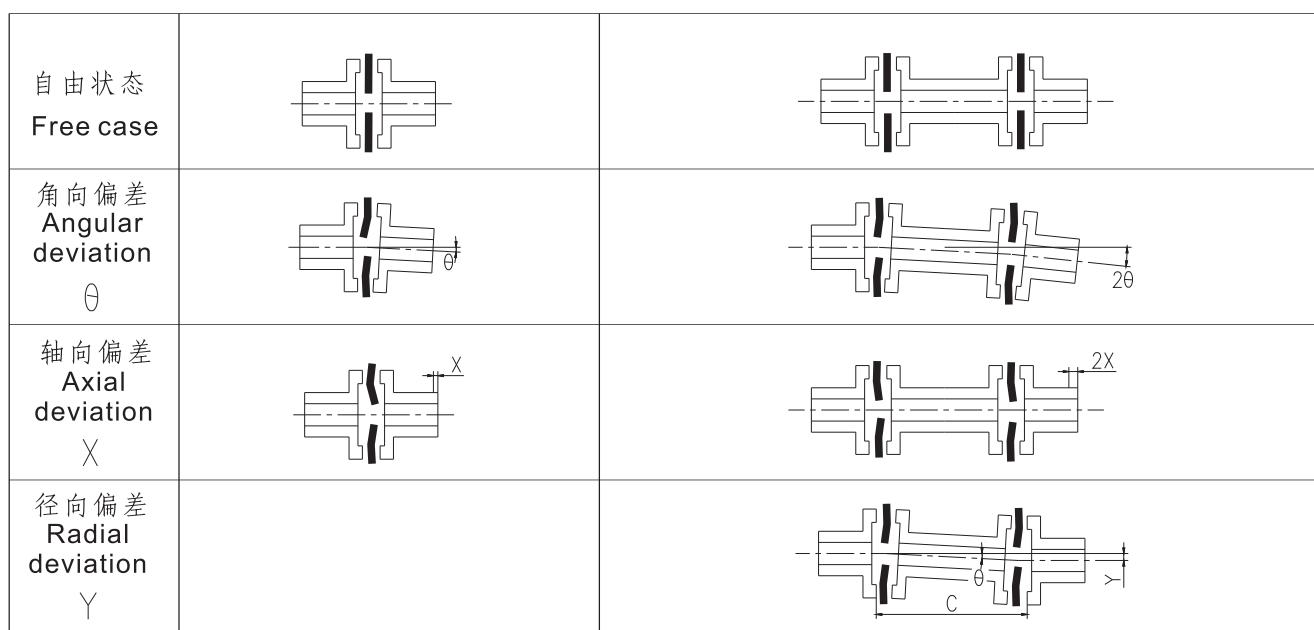
表 7

table7 (mm)

型号 Type	公称 转矩 Torque T_n N · m	许用 转速 Speed [n] (r/min)	轴孔直径 Diameter of Bore d_1, d_2		轴孔 长度 Length of bore L_1, L_2	主要尺寸 Primary Dimension				转动惯量 Rotary Inertia I $\approx kg \cdot m^2$	无孔 质量 Mass m $\approx kg$
			From	To		D	A	E	$C_{(min)}$		
JMD01	6.3	7000	6	18	24	50	28	4	35	0.002	0.5
JMD02	10	8000	7	20	27	58	34	5	38	0.003	1
JMD03	16	9000	8	24	27	64	40	5	44	0.005	2

九、JM、JM1J系列膜片联轴器的安装偏差说明

IX. Installing deviations of series JM、JM1J coupling



说明：

本样本所列的各种规格膜片联轴器的许用轴向位移见附表1~附表4；许用角向位移见附表5~附表7。实际的安装偏差不能大于相应的许用值。

由角向位移形成的许用径向位移的计算： $Y=C \times \tan \theta$

实际联轴器选用时须考虑各种安装偏差的综合因素，其计算转矩中的安装偏差系数：**K3=K4×K5**（第4页）
K4—角向偏差系数，见图7；
K5—轴向偏差系数，见图8。

Note:

For all kinds of coupling in this manual, the permissible axial displacement see appendices A.table1~A.table4; the permissible angular displacement see A.table5~ A. table7. the installing displacement must be less than the permissible value.

the relation between angular displacement to permissible radial displacement is the function as:

$$Y=C \times \tan \theta$$

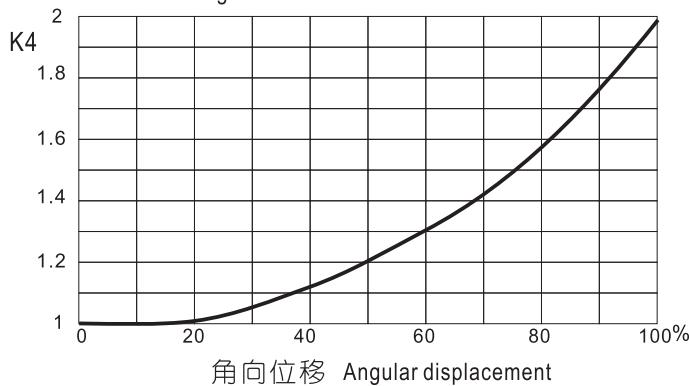
When selecting the coupling, the deviations have to be considered. when calculating torque T_c (page4) , the install deviation coefficient need to be considering:

$$K3=K4 \times K5$$

K4—angular deviation coefficient, see fig7;

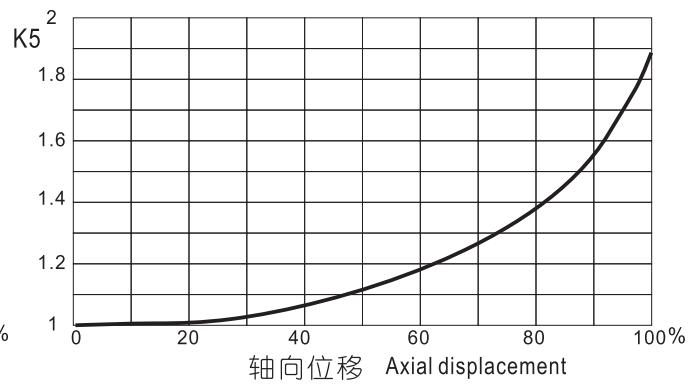
K5—Axial deviation coefficient, see fig8.

图figure7 角向偏差系数 K4
Angular deviation coefficient



JM1J型膜片联轴器，所选用的中间轴长度大于10倍轴孔径时，工作转速必须低于临界转速，具体事项与企业技术部门联系。

图figure8 轴向偏差系数 K5
Axial deviation coefficient



To series JM1J coupling, when the diameter of intermediate sleeve is more than ten times of the diameter of the shaft bore, the working rotatory speed has to be less than the permissible speed. for detail please contact the company's technical department.

十、JM系列联轴器的安装和维护

JM系列联轴器的安装与维护详见本公司《JM系列膜片式联轴器安装使用说明书》，该说明书在产品包装箱中提供。

X. Installation of and maintenance

For installation of and maintenance of JM couplings, please refer to the «JM couplings installation and maintenance manual» which is provided in the package boxes with the products.

附录表 Appendices

附表1 JM型膜片联轴器的许用轴向位移[X] (mm)
A.Tab. 1 Axial compensating value of the Couplings Type JM

型号 Type	许用轴向位移[X] Axial compensating value
JM1 ~ JM3	1.0
JM4 ~ JM6	1.2
JM7 ~ JM9	1.5
JM10 ~ JM12	1.7
JM13 ~ JM15	2.0
JM16 ~ JM18	2.2
JM19 ~ JM24	2.5
JM25 ~ JM30	3.0

附表2 JM1J型膜片联轴器的许用轴向位移[X] (mm)
A.Tab. 2 Axial compensating value of the Couplings Type JM1J

型号 Type	许用轴向位移[2X] Axial compensating value
JM1J1 ~ JM1J3	2.0
JM1J4 ~ JM1J6	2.5
JM1J7 ~ JM1J9	3.0
JM1J10 ~ JM1J12	3.5
JM1J13 ~ JM1J15	4.0
JM1J16 ~ JM1J18	4.5
JM1J19 ~ JM1J22	5.0
JM1J23 ~ JM1J26	5.5
JM1J27 ~ JM1J30	6.0

附表3 JMB型膜片联轴器的许用轴向位移[X] (mm)
A.Tab. 3 Axial compensating value of the Couplings Type JMB

型号 Type	许用轴向位移[2X] Axial compensating value
JMB5 ~ JMB6	2.5
JMB7 ~ JMB9	3.0
JMB10 ~ JMB12	3.5
JMB13 ~ JMB15	4.0
JMB16 ~ JMB18	4.5
JMB19 ~ JMB22	5.0
JMB23 ~ JMB26	5.5
JMB27 ~ JMB30	6.0

附表4 JMD、JMC型膜片联轴器的许用轴向位移[X] (mm)
A.Tab. 4 Axial compensating value of the Couplings Type JMD,JMC

型号 Type	JMD01 ~ JMD03	JMC01 ~ JMC03
许用轴向位移[2X] Axial compensating value	2.0	2.0

附表5 JM型膜片联轴器的许用角向位移[θ]
A.Tab. 5 Angle compensating value of the Couplings Type JM

型号 Type	JM1~JM6	JM7 ~ JM10	JM11 ~ JM30
许用角向位移 (°) Angle compensating value	1°	45'	30'

附表6 JM1J、JMB型膜片联轴器的许用角向位移[θ]
A.Tab. 6 Angle compensating value of the Couplings Type JM1J、JMB

型号 Type	许用角向位移 (°) Angle compensating value
JM1J1 ~ JM1J5 、 JMB5	2°
JM1J6 ~ JM1J9 、 JMB6 ~ JMB9	1.5°
JM1J10 ~ JM1J30 、 JMB10 ~ JMB30	1°

附表7 JMD、JMC型膜片联轴器的许用角向位移[θ]
A.Tab. 7 Angle compensating value of the Couplings Type JMD 、 JMC

型号 Type	许用角向位移 (°) Angle compensating value
JMD01 ~ JMD03	2°
JMC01 ~ JMC03	2°

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DC curved tooth drum coupling



ML、MLPK梅花形弹性联轴器
ML&MLPK jaw coupling



JM、JM1J膜片联轴器
JM&JM1J disc(diaphragm) coupling



PGCLK鼓形齿式联轴器
PGCLK curved tooth drum coupling



SWP、SWC十字轴式万向联轴器
SWP&SWC carden universal coupling



AQ系列钢球式安全联轴器
AQ steel-ball safety coupling



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地址: 中国宁波市东钱湖创新工业园四香路1号

电话: (86)574-83066266

传真: (86)574-88372264

邮编: 315121

电子信箱: weilong@weilongme.com.cn

公司网站: <http://www.weilongme.com.cn>

服务热线:(86)574-88373131

Addr: No.1,Sixiang Road, Industry Zone,
Dongqianhu Tourism Zone,Ningbo,China

Tel: (86)574-83066266

Fax: (86)574-88372264

P.C.: 315121

E-mail: weilong@weilongme.com.cn

Web-site: <http://www.weilongme.com.cn>

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