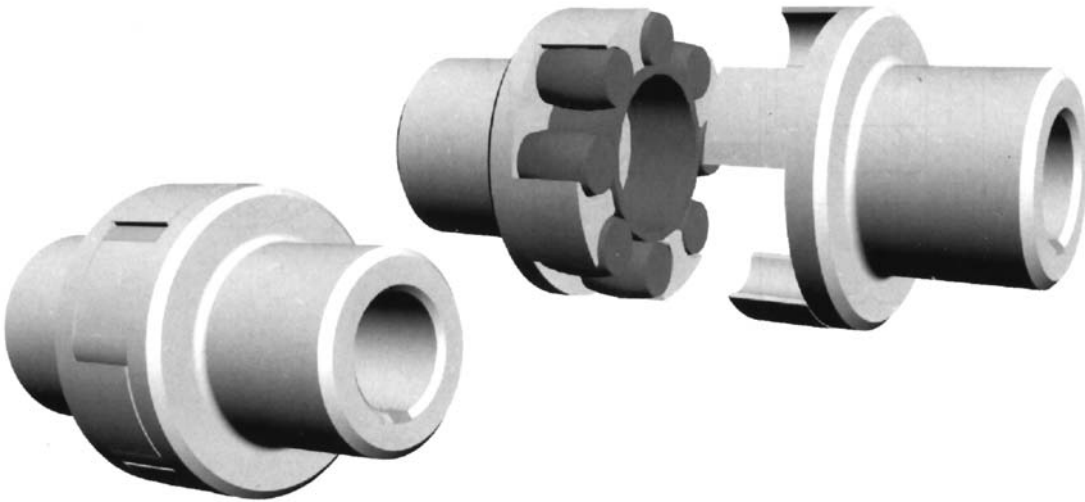


梅花形弹性联轴器(GB/T5272-2002) The plum blossom coupling(GB/T5272-2002)



梅花型弹性联轴器是由两个带凸爪的形状相同的半联轴器和弹性元件组成，利用梅花形弹性元件置于两半联轴器凸爪之间，以实现两半联轴器的联接。

具有补偿两轴相对偏移、减震、缓冲、径向尺寸小、结构简单、无需润滑、承载能力较高、维护方便等特点，但更换弹性元件时，两半联轴器需沿轴向移动。

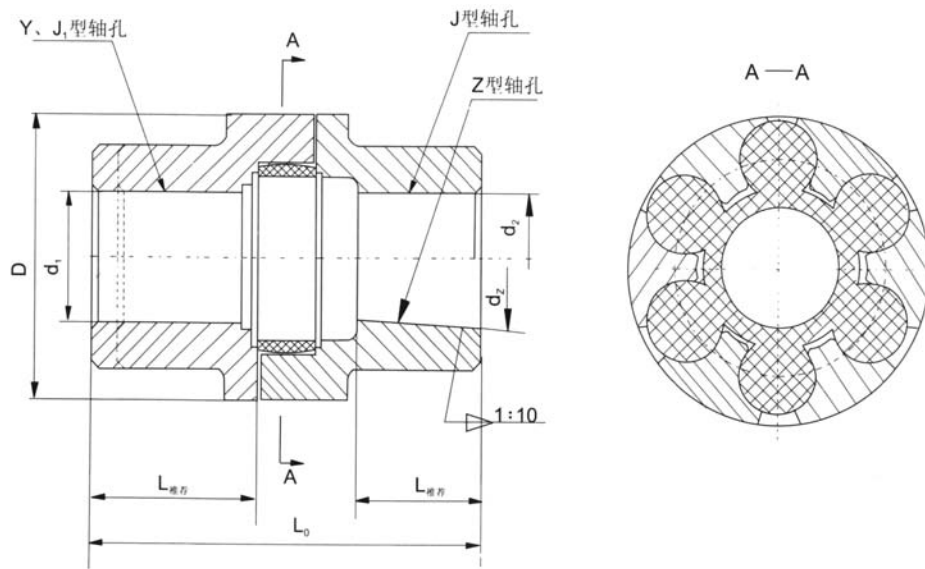
适用于两轴线、启动频繁、正反转变换、中低速、中小传动功率的传动轴系，要求工作可靠性高的工作场合，不适用于重载及轴向尺寸受限制、更换弹性元件困难的部位。

The resilient shaft coupling of plum blossom type is composed of the two same half-couplings with claws and elastic cell. That elastic cell is placed between the two claws of half-coupling, which makes the two half-coupling connected.

The plum blossom coupling has the features of relative offset compensation of the two shafts, Shock absorption, buffering, small radius dimension, simple structure, needless lubricating, higher bearing capacity convenient maintenance and so on. But when replacing the elastic cell, you need move the two half-couplings by the axial direction.

The plum blossom coupling is applicable to the transmission shafting which has the characters of two shafts, and frequent startup, positive and negative running, intermediate and low speed, middle and small transmission power. It can works in the place which needs high operating reliability. It is unfit for the position of Heavy load, restrictions in axial direction dimension and difficulties to repace the elastic cell

LM型梅花联轴器（基本型） LM plum blossom coupling (basic model)

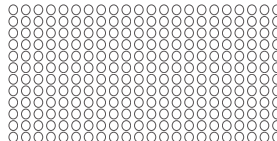


LM型梅花联轴器结构图
Structure diaphragm of the LM type plum blossom coupling

LM型梅花联轴器基本参数及主要尺寸

Basic parameters and main dimensions of LM type plum blossom coupling

型号 Model number	公称扭矩Tn (N*m) Nominal torque Tn N*m	许用转速 r/min Allowable rotating speed (n r/min)	轴孔直径mm Shaft hole diameters (mm)	轴孔长度 Shaft hole diameters (mm)			L ₀ mm	D mm	弹性件 型号 Model number of elastic cell	转动惯量 moment of inertial kg*m ²	质量 Mass m kg
	弹性件硬度 Rigidity of elastic cell			Y型	J ₁ 、Z型	L _{推荐} L _{recommend}					
			b/Hb	L							
			60 ± 5								
LM1	25	15300	12.14	32	27	35	86	50	MT1	0.0002	0.66
			16.18.19	42	30						
			20.22.24	52	38						
			25	62	44						
LM2	100	12000	16.18.19	42	30	38	95	70	MT2	0.0004	0.93
			20.22.24	52	38						
			25.28	62	44						
			30	82	60						
LM3	140	10900	20.22.24	52	38	40	103	85	MT3	0.0009	1.41
			25.28	62	44						
			30.32	82	60						
LM4	250	9000	22.24	52	38	45	114	105	MT4	0.0020	2.18
			25.28	62	44						
			30.32.35.38	82	60						
			40								



型号 Model number	公称扭矩Tn (N*m) Nominal torque Tn N*m	许用转速 r/min Allowable rotating speed (n r/min)	轴孔直径mm Shaft hole diameters (mm)	轴孔长度 Shaft hole diameters (mm)			L ₀ mm	D mm	弹性件 型号 Model number of elastic cell	转动惯量 moment of inertial kg*m ²	质量 Mass m kg
	弹性件硬度 Rigidity of elastic cell			Y型	J ₁ 、Z型	L _{推荐} Lrecommend					
			b/Hb	L							
			60 ± 5								
LM5	400	7300	25.28	62	44	50	127	125	MT5	0.0050	3.60
			30.32.35.38	82	60						
			40.42.45	112	84						
LM6	630	6100	30.32.35.38	82	60	55	143	145	MT6	0.0114	6.07
			40.42.45.48	112	84						
LM7	1120	5300	35*.38*	82	60	60	159	170	MT7	0.0232	9.09
			40*.42*.45.48 50.55	112	84						
LM8	1800	4500	45*.48*.50 55.56	112	84	70	181	200	MT8	0.0468	13.56
			60.63.65*	142	107						
LM9	2800	3800	50*.55*.56	112	84	80	208	230	MT9	0.1041	21.40
			60.63.65.70. 71.75	142	107						
			80	172	132						
LM10	4500	3300	60*.63*.65*70 71.75	142	107	90	230	260	MT10	0.2105	32.03
			80.85.90.95	172	132						
			100	212	167						
LM11	6300	2900	70*.71*.75*	142	107	100	260	300	MT11	0.4338	49.52
			80*.85*.90.95	172	132						
			100.110.120	212	167						
LM12	11200	2500	80*.85*.90*.95*	172	132	115	297	360	MT12	0.8205	73.45
			100.110.120. 125	212	167						
			130	252	202						
LM13	12500	2100	90*.95*	172	132	125	323	400	MT13	1.6718	103.86
			100*.110*.120*. 125*	212	167						
			130.140.150	252	202						

注： 1、质量、转动惯量按L推荐最小轴孔计算近似值；

Note: 1.The approximate values of mass and the moment of inertia are calculated according to the L recommend minimum shaft hole of rotating.

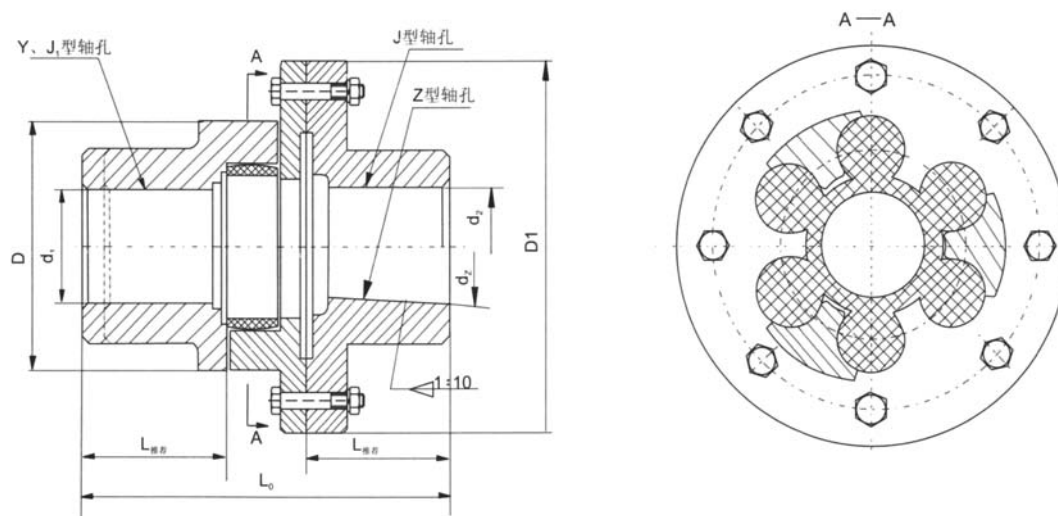
2、带*轴孔可以用于Z型轴孔；

2.The shaft holes with symbol *can used for Z type shaft holes；

3、a、b为二种材料的硬度代号。

3.Letters "a" , "b" are the rigidity designators of the two materials.

LMD单法兰型梅花联轴器 LMD plum blossom coupling with single flange

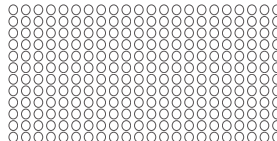


LMD型梅花联轴器结构图
Structure diagram of the LMD type plum blossom coupling

LMD型梅花联轴器基本参数与主要尺寸

Basic parameters and main dimensions of LMD type plum blossom coupling

型号 Model number	公称扭矩Tn (N*m) Nominal torque Tn N*m	许用转速 r/min Allowable rotating speed (n r/min)	轴孔直径mm Shaft hole diameters (mm)	轴孔长度 Length of shaft hole (mm)			L ₀	D	D ₁	弹性件 型号 Model number of elasticcell	转动惯量 moment of inertial kg*m ²	质量 Mass m kg
	弹性件硬度 Rigidity of elastic cell			Y型	J ₁ 、Z型	L推荐 Lrecom mend						
	b/Hb		L									
	60 ± 5											
LMD1	25	8500	12.14	32	27	35	92	50	90	MT1	0.0008	1.21
			16.18.19	42	30							
			20.22.24	52	38							
			25	62	44							
LMD2	100	7600	16.18.19	42	30	38	101.5	70	110	MT2	0.0014	1.65
			20.22.24	52	38							
			25.28	62	44							
			30	82	60							
LMD3	140	6900	20.22.24	52	38	40	110	85	125	MT3	0.0024	2.36
			25.28	62	44							
			30.32	82	60							
LMD4	250	6200	22.24	52	38	45	122	105	150	MT4	0.0050	3.56
			25.28	62	44							
			30.32.35.38	82	60							
			40	112	84							
LMD5	400	5000	25.28	62	44	50	138.5	125	185	MT5	0.0135	6.36
			30.32.35.38	82	60							
			40.42.45	112	84							
LMD6	630	4100	30.32.35.38	82	60	55	155	145	205	MT6	0.0329	10.77



型号 Model number	公称扭矩Tn (N*m) Nominal torque Tn N*m	许用转速 r/min Allowable rotating speed (n r/min)	轴孔直径mm Shaft hole diameters (mm)	轴孔长度 Length of shaft hole (mm)			L ₀	D	D ₁	弹性件 型号 Model number of elastic cell	转动惯量 moment of inertial kg*m ²	质量 Mass m kg
	弹性件硬度 Rigidity of elastic cell			Y型	J ₁ 、Z型	L _{推荐} L _{recom} mend						
			b/H _B	L								
			60 ± 5									
			40.42.45.48	112	84							
LMD7	1120	3700	35*.38*	82	60	60	172	170	240	MT7	0.0581	15.30
			40*.42*.45. 48.50.55	112	84							
LMD8	1800	3100	45*.48*.50. 55.56	112	84	70	195	200	270	MT8	0.1175	22.72
			60.63.65	142	107							
LMD9	2800	2800	50*.55*.56*	112	84	80	224	230	305	MT9	0.2333	34.44
			60.63.65.70 71.75	142	107							
			80	172	132							
LMD10	4500	2500	60*.63*.65* 70.71.75	142	107	90	248	260	350	MT10	0.4594	51.36
			80.85.90.95	172	132							
			100	212	167							
LMD11	6300	2200	70*.71*.75*	142	107	100	284	300	400	MT11	0.9777	81.30
			80*.85*90. 95	172	132							
			100.110.120	212	167							
LMD12	11200	1900	80*.85*.90* 95*	172	132	115	321	360	460	MT12	1.751	115.53
			100.110.120. 125	212	167							
			130	252	202							
LMD13	12500	1600	90*.95*	172	132	125	348	400	500	MT13	3.3667	161.79
			100.110.120. 125	212	167							
			130	252	202							

注： 1、质量、转动惯量按L推荐最小轴孔计算近似值；

Note: 1.The approximate values of mass and the moment of inertia are calculated according to the L recommend minimum shaft hole of rotating.

2、带*轴孔可以用于Z型轴孔；

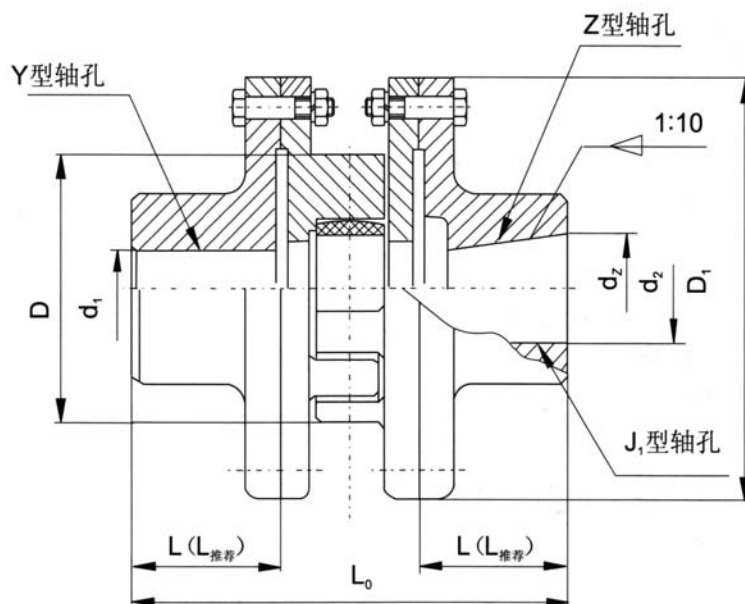
2.The shaft holes with symbol *can be used for Z type shaft holes;

3、a、b为二种材料的硬度代号。

3.Letters "a" , "b" are the rigidity designators of the two materials.

LMS双法兰型梅花联轴器

LMS plum blossom coupling with double flanges

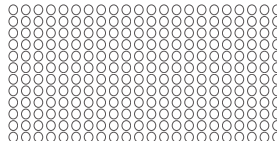


LMS型梅花联轴器结构
Structure diagram of the LMS type plum blossom coupling

LMS型梅花联轴器基本参数与主要尺寸

Basic parameters and main dimensions of LMS type plum blossom coupling

型号 Model number	公称扭矩Tn (N*m) Nominal torque Tn N*m	许用转速 r/min Allowable rotating speed (n r/min)	轴孔直径mm Shaft hole diameters (mm)	轴孔长度 Length of shaft hole (mm)			L ₀	D	D ₁	弹性件 型号 Model number of elastic cell	转动惯量 moment of inertial kg*m ²	质量 Mass m kg
	弹性件硬度 Rigidity of elastic cell			Y型	J ₁ 、Z型	L _{推荐} L _{recom} mend						
	b/Hb		L									
	60 ± 5											
LMS1	25	8500	12.14	32	27	35	98	50	90	MT1	0.0013	1.33
			16.18.19	42	30							
			20.22.24	52	38							
			25	62	44							
LMS2	100	7600	16.18.19	42	30	38	10	70	110	MT2	0.0021	1.74
			20.22.24	52	38							
			25.28	62	44							
			30	82	60							
LMS3	140	6900	20.22.24	52	38	40	117	85	125	MT4	0.0034	2.33
			25.28	62	44							
			30.32	82	60							
LMS4	250	6200	22.24	52	38	45	130	105	150	MT4	0.0064	3.38
			25.28	62	44							
			30.32.35.38	82	60							
			40	112	84							



型号 Model number	公称扭矩Tn (N*m) Nominal torque Tn N*m	许用转速 r/min Allowable rotating speed (n r/min)	轴孔直径mm Shaft hole diameters (mm)	轴孔长度 Length of shaft hole (mm)			L ₀	D	D ₁	弹性件 型号 Model number of elasticcell	转动惯量 moment of inertial kg*m ²	质量 Mass m kg
	弹性件硬度 Rigidity of elastic cell			Y型	J ₁ 、Z型	L _{推荐} L _{recom} mend						
			b/Hb	L								
			60 ± 5									
LMS5	400	5000	25.28	62	44	50	150	125	185	MT5	0.0175	6.07
			30.32.35.38	82	60							
			40.42.45	112	84							
LMS6	630	4100	30.32.35.38	82	60	55	167	145	205	MT6	0.0444	10.47
			40.42.45.48	112	84							
LMS7	1120	3700	35*.38*	82	60	60	185	170	240	MT7	0.0739	14.22
			40*.42*.45. 48.50.55	112	84							
LMS8	1800	3100	45*.48*.50.55. 56	112	84	70	209	200	270	MT8	0.1493	21.16
			60.63.65	142	107							
LMS9	2800	2800	50*.55*.56*	112	84	80	240	230	305	MT9	0.2767	30.70
			60.63.65.70. 71.75	142	107							
			80	172	132							
LMS10	4500	2500	60*.63*.65*.70. 71.75	142	107	90	268	260	350	MT10	0.5262	44.55
			80.85.90.95	172	132							
			100	212	167							
LMS11	6300	2200	70*.71*.75*	142	107	100	308	300	400	MT11	1.1362	70.72
			80*.85*.90.95	172	132							
			100.110.120	212	167							
LMS12	11200	1900	80*.85*.90*.95*	172	132	115	345	360	460	MT12	1.9998	99.54
			100.110.120. 125	212	167							
			130	252	202							
LMS13	12500	1600	90*.95*	172	132	125	373	400	500	MT13	3.6719	137.53
			100.110.120. 125	212	167							
			130	252	202							

注： 1、质量、转动惯量按L推荐最小轴孔计算近似值；

Note: 1.The approximate values of mass and the moment of inertia are calculated according to the L recommend minimum shaft hole of rotating.

2、带*轴孔可以用于Z型轴孔；

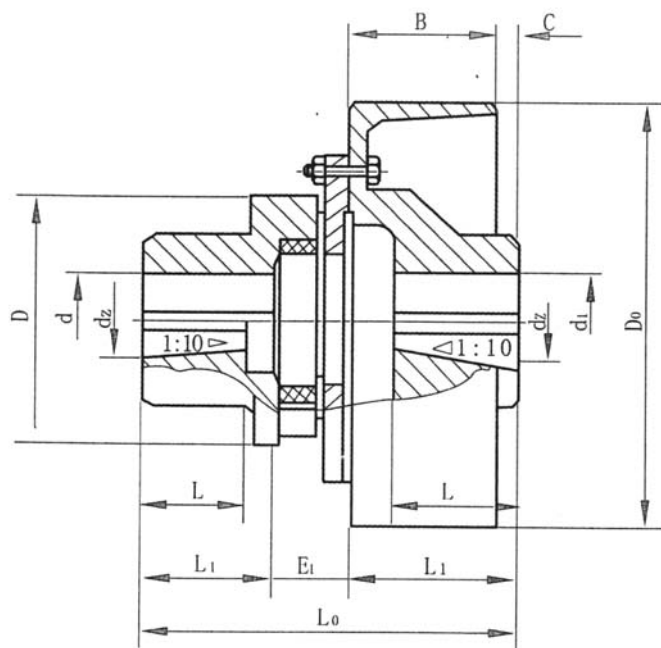
2.The shaft holes with symbol *can be used for Z type shaft holes;

3、a、b为二种材料的硬度代号。

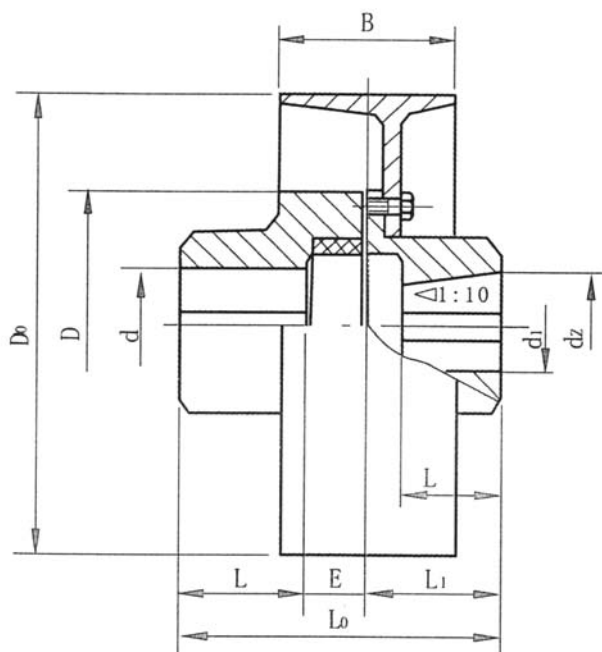
3.Letters "a", "b" are the rigidity designators of the two materials.

MLL-I型分体式制动轮梅花型弹性联轴器

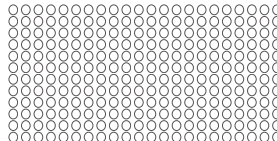
MLL-I型整体式制动轮梅花型弹性联轴器



MLL-I型梅花联轴器结构图
Structure diagram of the MLL-I type plum blossom coupling



MLL-II型梅花联轴器结构图
Structure diagram of the MLL-II type plum blossom coupling



带制动轮梅花型弹性联轴器主要参数与尺寸

型号 Model number	公称扭矩 T _n (N*m) Nominal torque T _n N*m	许用转速 r/min Allowable rotating speed (n r/min)	轴孔直径mm Shaft hole diameters (mm) d ₁ 、d ₂ 、d _z	轴孔长度 Length of shaft hole (mm)		D ₀	B	D	E E1	C	质量 Mass m kg
				YJ ₁ Z ₁ 型 L	Z ₁ J型 L L ₁						
MLL4-I-160	250	4750	25~42	62~112	44~84	160	70	105	27	30	9.5
MLL4-II-160					100				38.5		13.24
MLL4-I-200	250	3800	25~42	62~112	44~84	200	85	105	27	30	11.70
MLL4-II-200					100				38.5		14.79
MLL5-I-200	400	3800	30~48	82~112	60~84	200	85	125	33	30	14.1
MLL5-II-200					115				45		18.31
MLL6-I-200	630	3800	※ ※ 35~42~55	82~112	60~84	200	85	145	39	40	17.2
MLL6-II-200					115				52		22.43
MLL6-I-250	630	3050	※ ※ 35~42~55	82~112	60~84	250	105	145	39	40	22.1
MLL6-II-250					145				52		32.61
MLL7-I-250	1120	3050	※ ※ 45~48~65	112~142	84~107	250	105	170	41	40	29.5
MLL7-II-250					145				55		36.84
MLL7-I-315	1120	2400	※ ※ 45~48~75	112~142	84~107	315	135	170	41	40	36.2
MLL7-II-315					175				55		54.42
MLL8-I-315	1800	2400	※ ※ 50~55~75	112~142	84~107	315	135	200	48	40	45.7
MLL8-II-315					175				64		68.11
MLL8-I-400	1800	1900	※ ※ 50~55~75	112~142	84~107	400	170	200	48	40	90.13
MLL8-II-400					210				64		96.98
MLL9-I-400	2800	1900	※ ※ 60~65~95	142~172	107~132	400	170	230	50	39	111.18
MLL9-II-400					210				70		116.81
MLL9-I-500	2800	1500	※ ※ 60~65~95	142~172	107~132	500	210	230	50	54	118.9
MLL9-II-500					264				70		167.99
MLL10-I-500	4500	1500	※ ※ 70~80~110	142~212	107~167	500	210	260	60	54	155.32
MLL10-II-500					264				84		204.72
MLL11-I-630	6300	1200	※ ※ 80~95~120	172~212	132~167	630	265	300	67	52	231.10
MLL11-II-630					317				84		337.98
MLL12-I-710	11200	1050	※ ※ 90~125~130	172~252	132~202	710	300	360	73	60	332.18
MLL12-II-710					360				98		487.8
MLL13-I-800	12500	950	※ ※ 110~140	212~252	167~202	800	340	400	73	60	450.1
MLL13-II-800					400				98		730.7

注：使用Z、J型孔时要计算沉孔是否允许
“※”为锥孔许用

附表（Attached list）

LM型、LMD型、LMS型、MLL型允许误差

Permissible error of LM, LMD, LMS, LMZ types

型号 Model number				允许最大安装误差 Maximum permissible installation error		允许最大运转补偿量 Maximum permissible running compensation value		轴向间隙 X ± 10%mm Axial clearance	
				径向 Radial △Y mm	角向 Angel △a (°)	径向 Radial △Y mm	角向 Angel △a (°)		
LM1	LMD1	LMS1	—	0.2	1.0	0.5	2.0	1.2	
LM2	LMD2	LMS2	—	0.3		0.6			
LM3	LMD3	LMS3	—	0.4		0.8			1.5
LM4	LMD4	LMS4	—						
LM5	LMD5	LMS5	LMZ5						2.5
LM6	LMD6	LMS6	LMZ6	0.5	0.7	1	1.5	3.0	
LM7	LMD7	LMS7	LMZ7						
LM8	LMD8	LMS8	LMZ8						
LM9	LMD9	LMS9	LMZ9	0.7		1.5		4.0	
LM10	LMD10	LMS10	LMZ10		0.5				
LM11	LMD11	LMS11	LMZ11						
LM12	LMD12	LMS12	LMZ12	0.8	0.5	1.8	1.0	5.0	
LM13	LMD13	LMS13	LMZ13						
LM14	LMD14	LMS14	LMZ14						