

LK10 系列

LK10 Series

使用注意事项： CAUTIONS:

1. 此系列有3种不同硬度的弹性体，不同硬度弹性体允许扭矩及吸收偏差不同，选用时请注意。
2. 请务必遵守偏心，偏角，轴向的允许公差。
3. 螺栓类请务必以指定的扭矩拧紧。
4. 使用环境范围见下面弹性体参数表。弹性体虽具备耐水性和耐油性，但极度粘附的环境也会导致产品劣化，请避免此类情况。
5. 插入安装轴前，请勿拧紧夹紧螺栓或者加压螺栓。


1. There are three kinds of elastomers with different hardness in this series. The allowable torque and absorption deviation of elastomers with different hardness are different. Please pay attention to the selection.
2. Be sure to observe allowable tolerances of eccentricity, deflection and axis.
3. Bolts must be tightened with specified torque.
4. The scope of use is shown in the following table of elastomer parameters. Elastomers have water and oil resistance, but the environment of extreme adhesion can also lead to deterioration of products, please avoid such situations.
5. Do not tighten clamping bolts or pressure bolts before inserting them into the installation shaft.

安装方式： INSTALLATION:


1. 确认联轴器的加压螺栓有无松动，去除轴及联轴器内径面的锈迹，灰尘及油等。特别是，对联轴器摩擦系数有显著影响的各类润滑脂，绝不可有粘附，安装前，请把轴，孔清理干净。
Confirm whether the pressure bolt of the coupling is loose, and remove the rust, dust and oil on the shaft and the inner diameter of the coupling. In particular, all kinds of greases that have a significant impact on the friction coefficient of the coupling must not adhere. Before installation, please clean the shaft and hole.
2. 请将联轴器插入电动机轴。插入长度必须接近联轴器的边节长度，使夹紧端面跟轴有足够大接触面，保证足够摩擦力。
Please insert the coupling into the motor shaft. The insertion length must be close to the side section length of the coupling, so that the clamping end has a large enough contact surface with the shaft to ensure sufficient friction.
3. 在压紧螺栓处于松动状态下，请确认联轴器是否能沿轴向和旋转方向轻微移动。如果无法顺畅移动，请重新调整两轴的定心。该方法推荐用作左右同心度的简易确认方法，如果无法使用同样的确认方法，请使用其他测量方法确认安装精度。
When the pressure bolt is loose, make sure that the coupling can move slightly along the axis and rotation direction. If you can't move smoothly, adjust the centering of the two axes. This method is recommended as a simple method to confirm the left and right concentricity. If the same method cannot be used, please use other measuring methods to confirm the installation accuracy.
4. 确认联轴器能沿轴向和旋转方向顺畅移动后，请将压紧螺栓按对角顺序交叉拧紧。拧紧螺栓时，请使用经过校准的扭力扳手，按参数表上所列的螺栓紧固扭矩拧紧螺栓。
After confirming that the coupling can move smoothly along the axial direction and rotation direction, please tighten the compression bolts crosswise in diagonal sequence. When tightening the bolts, use the calibrated torque wrench to tighten the bolts according to the bolt tightening torque listed in the parameter table.
5. 作为压紧螺栓的初期防松措施，建议运行一段时间后，再次使用正确紧固扭矩进行再拧紧。
As the initial anti loose measure of the compression bolt, it is recommended to use the correct tightening torque again for retightening after a period of operation.

弹性体性能表 Elastomer Performance Table


弹性体硬度 Elastomer Hardness	颜色 Colour	材质 Material	允许使用温度范围[持续温度] Permissible temperature range Continuous temperature(°C)	允许使用温度范围[瞬间温度] Permissible temperature range Instantaneous temperature(°C)	使用外径范围 Outer Diameter Range	典型应用 Application
90 Sh-A	黄色(Y)图	聚氨酯 (Polyurethane)	-40°C to +90°C	-50°C to +120°C	14mm-105mm	伺服电机, 步进电机, 电子测量和控制系统的传动。 Drive of servo motor, stepping motor, electronic measurement and control system
98 Sh-A	红色(R)图	聚氨酯 (Polyurethane)	-30°C to +90°C	-40°C to +120°C	14mm-135mm	伺服电机, 步进电机, 定位, 主轴, 高载荷的传动。 Servo motor, stepping motor, positioning, spindle, high load transmission
64 Sh-D	绿色(G)图	聚氨酯 (Polyurethane)	-20°C to +110°C	-30°C to +120°C	55mm-105mm	伺服电机, 步进电机, 定位, 主轴 , 高载荷, 高扭转刚性的传动。 Servo motor, stepping motor, positioning, spindle, high load, high torsional rigid transmission



黄色(Y)图

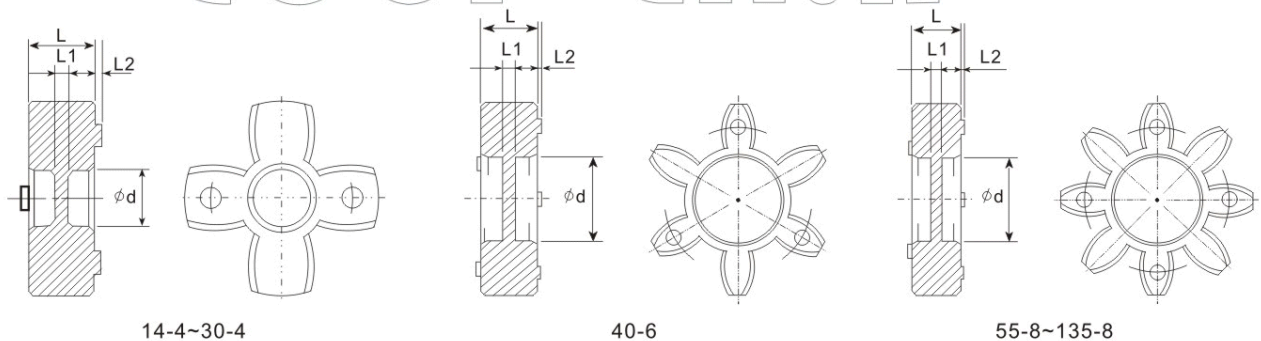


红色(R)图



绿色(G)图

梅花联轴器中间弹性体尺寸 Curved Jaw Dimensions



外型尺寸 Dimensions

单位 (unit): mm

弹性体型号 Model	L	L1	L2	φd
14-4	6.1	6.1	0.5	—
20-4	8.2	1.0	0.5	7.9
25-4	10.3	4.3	0.6	8.2
30-4	10.0	1.6	1.0	10.9
40-6	12.2	3.4	1.5	18.2
55-8	14.0	4.0	1.5	26.6
65-8	15.0	4.6	2.0	30.0
80-8	18.6	5.6	2.0	38.0
95-8	20.7	5.7	2.0	46.8
105-8	21.4	6.4	2.5	51.0
120-8	22.0	4.8	2.7	59.8
135-8	26.0	5.6	2.7	67.5

说明:

如需弹性体通孔,请定货时注明。

Note:

If elastomer through holes are required, please specify when ordering.

COUP-LINK®

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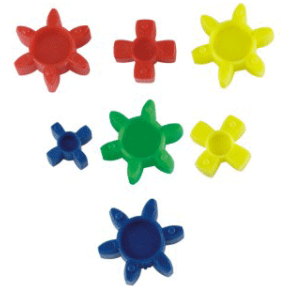
梅花弹性体胀套联轴器

Locking Assemblies Flexible Coupling (Curved jaw)

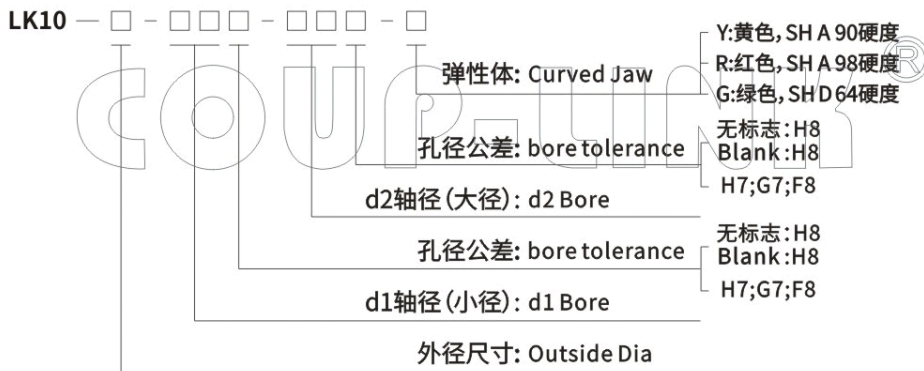
特点 Features

- 利用胀套联接的梅花弹性体联轴器
 - 零回转间隙, 拆装方便
 - 高灵敏度, 传递力矩大
 - 顺时针与逆时针回转特性完全相同
 - 可吸收振动、补偿径向、角向和轴向偏差
 - 常用于伺服电机、步进电机联接
- Using locking assemblies connect, curved jaw type flexible coupling
 - Zero backlash
 - Excellent response and high torque capacity
 - Identical clockwise and anticlockwise rotational characteristics
 - Can absorb vibration, parallel, angular misalignments and shaft end-play
 - For servo motor, step motor connection

主体: 铝合金材料
Body: Aluminum Alloy



选型举例: Ordering Information



胶体选配说明: 标准情况下, 胶体选配为:
LK10-30-LK10-135: 胶体配红色。

Note: Standard:
LK10-30-LK10-135: Red Insert.

例：LK10-55-19-24-R

LK10: 系列号, 材料为铝合金

55: 外径尺寸: 55mm

19: d1孔径为: 19mm,孔公差H8

24: d2轴径为: 24mm,孔公差H8

R: 弹性体为红色,SHA 98硬度

孔径公称请按照d1(小径)-d2(大径)的顺序标示

Example: LK10-55-19-24-R

LK10: Series NO, Material:Aluminum Alloy

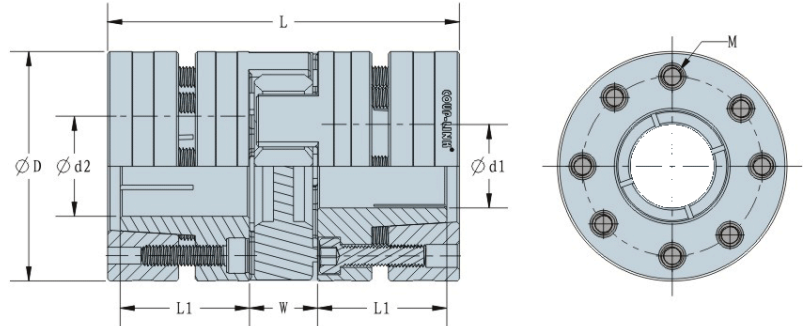
55: Outside Dia: 55mm

19: d1 Bore: 19mm,H8

24: d2 Bore: 24mm,H8

R: red, SHA 98

Please mark the bore diameter in the order of d1 (minor diameter) - d2 (major diameter)



外型尺寸 Dimensions

单位 (unit):mm

型号 Model	d1 · d2		ΦD	L	L1	W	M	拧紧力矩 Tightening Torque (N · m)
	最小孔径 Min · Bore	最大孔径 Max · Bore						
LK10-30-□□□-□□□-□	8	14	30	56	19	12	4-M3	1.5-1.9
LK10-40-□□□-□□□-□	11	20	40	72	25.5	15	6-M4	3.4-4.1
LK10-55-□□□-□□□-□	15	28	55	84	30.85	16.3	8-M5	7.0-8.5
LK10-65-□□□-□□□-□	20	38	65	96	35.75	18.5	8-M5	7.0-8.5
LK10-80-□□□-□□□-□	30	45	80	120	45.75	22.5	8-M6	14-15
LK10-95-□□□-□□□-□	38	50	95	132	50.25	25.5	8-M8	27-30
LK10-105-□□□-□□□-□	38	60	105	146	57	26	8-M8	27-30
LK10-120-□□□-□□□-□	40	65	120	166	66.15	27.7	8-M10	55-60
LK10-135-□□□-□□□-□	45	70	135	191	77.2	30.6	8-M10	55-60

说明:

- 1.对于上表以外的孔径,如需定货,可另行提供服务,请向本公司洽询。
- 2.对方安装轴公差为h7,h8级,如轴公差为其他公差,请提供公差要求由厂家定做。

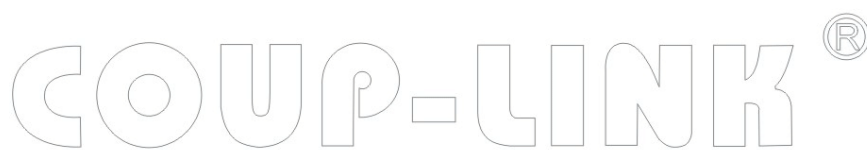
Note:

1. For other bore sizes which are not listed above, customized ones are available, please consult us.
2. Standard bore tolerance is for the shaft with tolerance h7 or h8, if other tolerance is required, please consult us.

标准孔径 Standard Bore Diameter

单位 (unit): mm

型号 Model	标准孔径 Standard Bore Diameter · d1·d2 (mm)																												
	8	9	9.525	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55	60	65	70	
LK10-30-□□□-□□□-□	•	•	•	•	•	•	•																						
LK10-40-□□□-□□□-□					•	•	•	•	•	•	•	•																	
LK10-55-□□□-□□□-□								•	•	•	•	•	•	•	•														
LK10-65-□□□-□□□-□												•	•	•	•	•	•	•	•										
LK10-80-□□□-□□□-□																	•	•	•	•	•	•	•						
LK10-95-□□□-□□□-□																					•	•	•	•					
LK10-105-□□□-□□□-□																					•	•	•	•	•	•	•		
LK10-120-□□□-□□□-□																					•	•	•	•	•	•	•	•	
LK10-135-□□□-□□□-□																							•	•	•	•	•	•	•



技术参数 Specifications

单位 (unit): mm

型号 Model	额定扭矩 Rated Torque (N.m)	最高转速 Max. Rotational Frequency (rpm)	惯性力矩 Moment of Inertia (Kg.m ²)	静态扭矩刚性 Static Torsional Stiffness (N.m/rad)	容许径向偏差 Errors of Eccentricity (mm)	容许角向偏差 Errors of Angularity (°)	容许轴向偏差 Errors of shaft End-play (mm)	重量 N.W. (g)
LK10-30-□□□-□□□-R	12.5	20000	1.4×10^{-5}	130	0.09	0.9	+1.0 0	95
LK10-40-□□□-□□□-R	21	15000	6.0×10^{-5}	1200	0.06	0.9	+1.2 0	230
LK10-55-□□□-□□□-R	60	13000	2.9×10^{-4}	2600	0.1	0.9	+1.4 0	579
LK10-65-□□□-□□□-R	160	10500	5.2×10^{-4}	4900	0.1	0.9	+1.5 0	714
LK10-80-□□□-□□□-R	325	8600	1.7×10^{-3}	6500	0.1	0.9	+1.8 0	1558
LK10-95-□□□-□□□-R	450	7500	4.1×10^{-3}	8900	0.1	0.9	+2.0 0	2734
LK10-105-□□□-□□□-R	525	6000	6.2×10^{-3}	25759	0.1	0.9	+2.1 0	3258
LK10-120-□□□-□□□-R	685	5500	1.3×10^{-2}	32117	0.1	0.9	+2.2 0	5186
LK10-135-□□□-□□□-R	940	5000	2.3×10^{-2}	38520	0.1	0.9	+2.6 0	7803
LK10-55-□□□-□□□-G	75	13000	2.9×10^{-4}	5030	0.07	0.8	+1.4 0	579
LK10-65-□□□-□□□-G	200	10500	5.2×10^{-4}	10260	0.08	0.8	+1.5 0	714
LK10-80-□□□-□□□-G	405	8600	1.7×10^{-3}	16300	0.09	0.8	+1.8 0	1558
LK10-95-□□□-□□□-G	560	7500	4.1×10^{-3}	26860	0.1	0.8	+2.0 0	2734
LK10-105-□□□-□□□-G	655	6000	6.2×10^{-3}	47630	0.1	0.8	+2.1 0	3258

说明:

1. 惯性力矩和重量按最大孔径计算。
2. 最高转速未考虑动平衡。
3. 各弹性数值为20°C时数值。

Note:

1. Moment of inertia and mass weight are based on the maximum shaft bores.
2. The maximum speed does not consider dynamic balance.
3. The elastic value is based on 20°C.

