

LK11 系列

LK11 Series

使用注意事项：

CAUTIONS:

1. 请务必遵守偏心，偏角，轴向的允许公差。
 2. 螺栓类请务必以指定的转矩拧紧。
 3. 联轴器左右内径的同心度通过使用专用夹具实现高精度组装。万一联轴器受到强烈冲击时，可能会无法保持组装精度而在使用中发生破损，请在操作过程中加以留意。
 4. 使用环境范围为-30°C-120°C。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. 弹性元件由薄薄的不锈钢膜片组成，使用时注意避免划伤。
1. Be sure to observe allowable tolerances of eccentricity, deflection and axis.
2. Bolts must be tightened with specified torque.
3. The concentricity of the left and right inner diameters of the coupling can be assembled accurately by using special fixtures. In case of strong impact on the coupling, the assembly accuracy may not be maintained and the coupling may be damaged in use, please pay attention to it during operation.
4. The use range is -30°C - 120°C. Despite water and oil resistance, extreme adhesion can also lead to deterioration of the product, avoid this kind of situation.
5. Plate springs consist of thin stainless steel diaphragms, when using, care should be taken to avoid scratches.

安装方式：

INSTALLATION:

确认联轴器的压紧螺栓有无松动，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。

Confirm whether the compression 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 have adhesion.

2. 对好键槽，请将联轴器插入电动机轴和从动轴。插入时，请勿在联轴器的弹性元件上施加过大的压缩和拉伸力，特别是在把联轴器安装至电动机后将联轴器插入从动轴时，可能会因错误操作而施加过大的压缩力，请注意。

For proper keyway, please insert the coupling into the motor shaft and driven shaft. When inserting, do not apply too much compression and tensile force on the elastic element of the coupling, especially when inserting the coupling into the driven shaft after installing the coupling to the motor, it may exert too much compression force due to wrong operation, please note.

3. 在加压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 compression bolt is loose, please confirm whether the coupling can move slightly along the axial direction and rotation direction. If it cannot move smoothly, please readjust the centering of the two shafts. This method is recommended as a simple confirmation method of left and right concentricity. If the same confirmation method cannot be used, please use other measurement methods to confirm the installation accuracy.

4. 调整好同轴度后，将键槽上面的加压螺栓拧紧。

After the coaxiality is adjusted, tighten the pressure bolt on the keyway.

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II. 多节键槽联接膜片联轴器

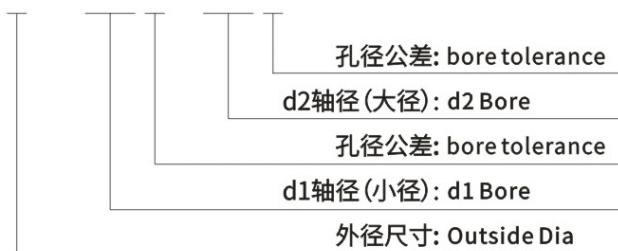
II. Keyway Type(Double Spring Plates)

特点 Features

- 利用键槽联接的膜片型联轴器
- 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
- 不锈钢膜片补偿径向、角向和轴向偏差
- 常用于伺服电机、步进电机联接
- Using keyway connect, spring plates coupling
- Zero backlash
- Excellent response and high torque capacity
- Identical clockwise and anticlockwise rotational characteristics
- Stainless steel spring plates absorb parallel, angular misalignments and shaft end-play
- For servomotor, stepmotor connection

一体化膜片组
LK11-56WP~LK11-104WP主体: 铁合金材料
Body: Steel一体化膜片组
LK11-115WP~LK11-178WP**选型举例： Ordering Information**

LK11 - □K - □□□ - □□□ WP



- 无标志:H8
Blank:H8
H7;G7;F8
无标志:H8
Blank:H8
H7;G7;F8

例：LK11-82K-14-20WP

LK11: 系列号, 材料为45#钢

82K: 外径尺寸: 82mm, 键槽联接

14: d1孔径为: 14mm, 孔公差H8

20: d2孔径为: 20mm, 孔公差H8

WP: 双膜片

孔径公称请按照d1(小径)-d2(大径)的顺序标示

Example: LK11-82K-14-20WP

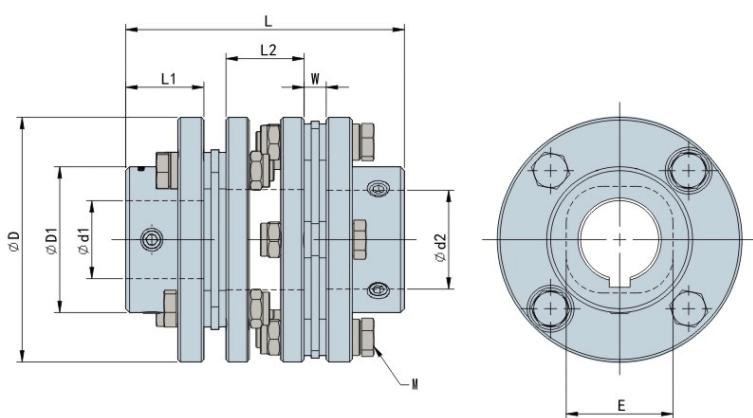
LK11: Series NO, Material: C45 steel

82K: Outside Dia: 82mm, keyway type

14: d1 Bore: 14 mm, H8

20: d2 Bore: 20mm, H8

WP: Double spring plates

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	ΦD1	L	L1	L2	W	E	M
	最小孔径 Min·Bore	最大孔径 Max·Bore								
LK11-56K-□□□-□□□WP	8	20	56	32	74	20	23	5.5	26	4-M5
LK11-62K-□□□-□□□WP	11	22	62	36	86	25	24	6	30.5	4-M6
LK11-68K-□□□-□□□WP	11	≤22	68	36	86	25	24	6	31	4-M6
		>22~25		40						
LK11-82K-□□□-□□□WP	14	≤28	82	45	100	29	26	8	38	4-M8
		>28~35		54						
LK11-94K-□□□-□□□WP	14	38	94	56	107	30	30	8.5	41	4-M8
LK11-104K-□□□-□□□WP	18	42	104	65	120	35	30	10	45	4-M8
LK11-115K-□□□-□□□WP	22	45	115	67	141	39.5	38	12	53	6-M10
LK11-126K-□□□-□□□WP	22	50	126	78	143	40	38	12.5	60	6-M10
LK11-144K-□□□-□□□WP	24	60	144	82	162	45	46	13	70	6-M12
LK11-152K-□□□-□□□WP	35	75	152	100	186	45	69	13.5	85	6-M12
LK11-178K-□□□-□□□WP	38	80	178	118	218	55	80	14	90	6-M12
LK11-190K-□□□-□□□WP	40	85	190	126	260	65	100	15	86	6-M14
LK11-210K-□□□-□□□WP	45	90	210	140	290	75	110	15	102	6-M16
LK11-225K-□□□-□□□WP	48	100	225	144	335	90	115	20	102	6-M16
LK11-262K-□□□-□□□WP	50	115	262	166	391	100	145	23	118	6-M20

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	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	60	65	70	75	80	85	90	95	100	110
LK11-56K-□□□-□□□WP	●	●	●	●	●	●	●	●	●	●																								
LK11-62K-□□□-□□□WP		●	●	●	●	●	●	●	●	●																								
LK11-68K-□□□-□□□WP		●	●	●	●	●	●	●	●	●	●	●	●																					
LK11-82K-□□□-□□□WP			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●													
LK11-94K-□□□-□□□WP			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●													
LK11-104K-□□□-□□□WP					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●												
LK11-115K-□□□-□□□WP						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●												
LK11-126K-□□□-□□□WP							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●												
LK11-144K-□□□-□□□WP								●	●	●	●	●	●	●	●	●	●	●	●	●	●	●												
LK11-152K-□□□-□□□WP									●	●	●	●	●	●	●	●	●	●	●	●	●	●												
LK11-178K-□□□-□□□WP										●	●	●	●	●	●	●	●	●	●	●	●	●												
LK11-190K-□□□-□□□WP											●	●	●	●	●	●	●	●	●	●	●	●												
LK11-210K-□□□-□□□WP												●	●	●	●	●	●	●	●	●	●	●												
LK11-225K-□□□-□□□WP													●	●	●	●	●	●	●	●	●	●												
LK11-262K-□□□-□□□WP														●	●	●	●	●	●	●	●	●												

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 Mass (g)
LK11-56K-□□□-□□□WP	25	15000	2.1×10^{-4}	7500	0.5	1.5	±1.2	576
LK11-62K-□□□-□□□WP	40	14500	4.2×10^{-4}	12500	0.5	1.5	±1.3	867
LK11-68K-□□□-□□□WP	60	14000	5.9×10^{-4}	13000	0.5	1.5	±1.4	1038
LK11-82K-□□□-□□□WP	100	11000	1.4×10^{-3}	39000	0.5	1.5	±2.2	1728
LK11-94K-□□□-□□□WP	180	9500	2.9×10^{-3}	78000	0.6	1.5	±2.6	2565
LK11-104K-□□□-□□□WP	250	8800	4.8×10^{-3}	115000	0.6	1.5	±3.0	3476
LK11-115K-□□□-□□□WP	330	8000	1.0×10^{-2}	170000	0.7	1.5	±3.2	5703
LK11-126K-□□□-□□□WP	420	6800	1.3×10^{-2}	200000	0.8	1.5	±3.2	6570
LK11-144K-□□□-□□□WP	700	6000	2.6×10^{-2}	350000	0.9	1.5	±3.6	9469
LK11-152K-□□□-□□□WP	800	5800	3.5×10^{-2}	750000	1.4	2	±3.6	10750
LK11-178K-□□□-□□□WP	1300	5100	7.7×10^{-2}	1420000	1.6	2	±3.8	18355
LK11-190K-□□□-□□□WP	2000	4700	1.1×10^{-1}	1690000	2.0	2	±3.8	23390
LK11-210K-□□□-□□□WP	3900	4300	1.9×10^{-1}	2340000	2.1	2	±3.8	34236
LK11-225K-□□□-□□□WP	4900	4000	2.5×10^{-1}	2970000	2.3	2	±3.8	39760
LK11-262K-□□□-□□□WP	7900	3400	5.2×10^{-1}	5390000	2.9	2	±3.8	61680

说明:

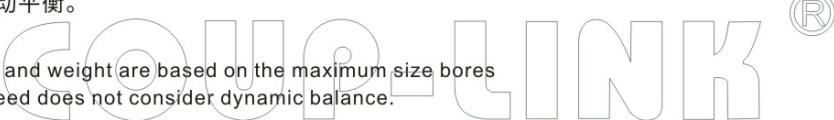
1. 惯性力矩和重量按最大孔径计算。

2. 最高转速未考虑动平衡。

Note:

1. Moment of inertia and weight are based on the maximum size bores

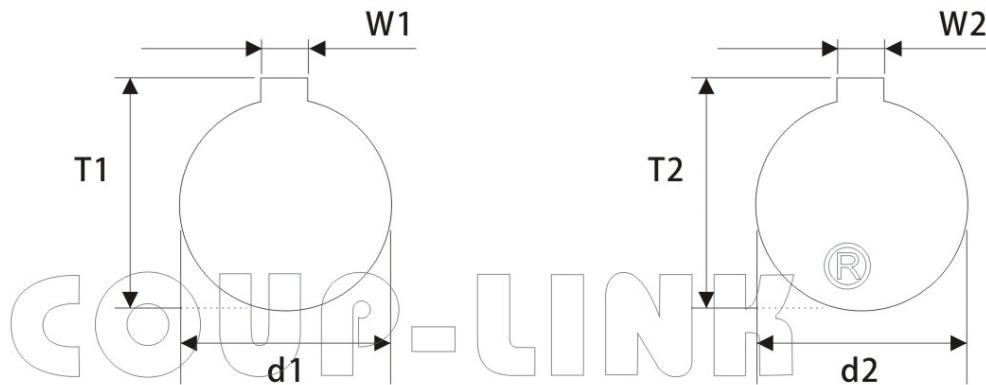
2. The maximum speed does not consider dynamic balance.



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选项:定位螺丝加键槽固定,键槽尺寸

LK11 Series Setscrew Keyway Type



单位 (unit): mm

键槽标准尺寸表(国标JS9): Standard Dimension Table of Keyway(Js9)

孔径 $\phi d_1 \phi d_2$ Bore	键槽宽度 Keyway W1.W2 (mm)	键槽高度 Keyway T1.T2 (mm)	孔径 $\phi d_1 \phi d_2$ Bore	键槽宽度 Keyway W1.W2 (mm)	键槽高度 Keyway T1.T2 (mm)
6	2	7	32	10	35.3
8	2	9	35	10	38.3
9	3	10.4	38	10	41.3
10	3	11.4	40	12	43.3
11	4	12.8	42	12	45.3
12	4	13.8	45	14	48.8
13	5	15.3	48	14	51.8
14	5	16.3	50	14	53.8
15	5	17.3	55	16	59.3
16	5	18.3	56	16	60.3
17	5	19.3	60	18	64.4
18	6	20.8	65	18	69.4
19	6	21.8	70	20	74.9
20	6	22.8	75	20	79.9
22	6	24.8	80	22	85.4
24	8	27.3	85	22	90.4
25	8	28.3	90	25	95.4
28	8	31.3	95	25	100.4
30	8	33.3	100	28	106.4