

## LX(HL)型弹性柱销联轴器 (GB/T5014—2003)

LX(HL)type elastic pin coupling with brake wheel

### 结构性能Design capability

- 弹性元件用尼龙，其强度和耐磨性较高，且适用于有腐蚀的环境。
- 钢制动轮外圆表面经淬火处理。
- 半联轴器轴孔和键槽型式及尺寸、标记方法均按GB/T3852—1997《联轴器轴孔和联结型式及尺寸》的规定。两个半联轴器轴孔型式可任意组合。
- 使用温度-20~70℃。
- 原型号指国标为GB5051—85系列产品。
- The material of elastic components is nylon so it has high hardness and resistance to wear and apply for the circumstance with causticity.
- Circle surface of metal brake ring operated by quenching.
- Mode, size and mark method of coupling hole and keyway accord with prescript of GB/T 3852—1997 《connecting mode and size of shaft hole》 2 half-coupling shaft hole can be arbitrary combined.
- Working temperature: From -20 to +70℃
- Original standard is international standard GB5051—85

### 标记说明 Mark descriptions

对于Z型，J型带沉孔的轴孔长度是指轴孔的配合长度(不含沉孔)即下图中L尺寸

For Z and J type hole with counterbore, it is length of fit not include counterbore, L value as the drawing below.

### 标记示例Mark sample

LX6弹性柱销联轴器

主动端: Y型轴孔A型键槽。d1=65mm, L=142mm

从动端: Y型轴孔A型键槽。d2=75mm, L=142mm

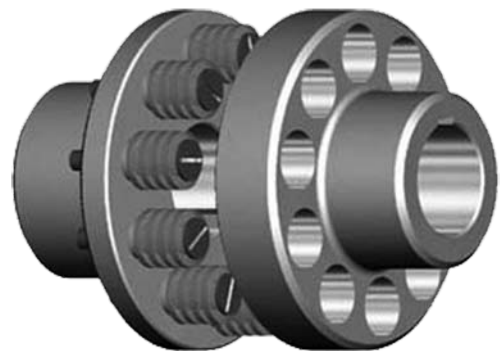
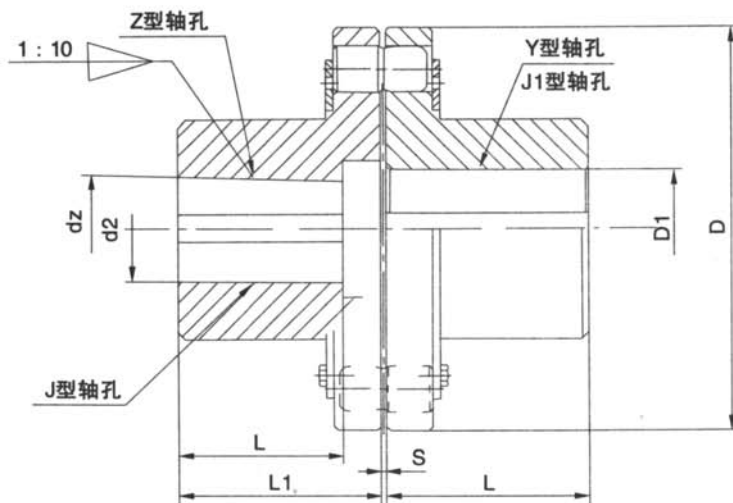
联轴器: LX6  $\frac{ZC30X60}{JB28X62}$  GB/T5014—2003

LX6 type elastic pin coupling

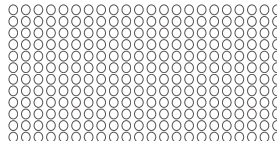
Driven end: Y type shaft hole, A type keyway, d1 is 65mm, L is 142mm

Driven end: Y type shaft hole, A type keyway, d2 is 75mm, L is 142mm

Coupling: LX6  $\frac{ZC30X60}{JB28X62}$  GB/T5014—2003



- 柱销材料为MC尼龙6
- 为改善柱销与孔的接触条件及补偿性能，柱销的一端制成鼓形。
- Material of pin is MC6 nylon
- In order to improve touch condition and compensate capacity, one end of pin should be made into drum shape



## LX型弹性柱销联轴器基本参数和主要尺寸

Base figure and main size of LX type elastic pin coupling

| 型号<br>Type | 原<br>型<br>号 | 公称扭矩<br>Nominal<br>torsion<br>N.m | 许用转速<br>Limited<br>rotational<br>Speed<br>rpm | 轴孔直径mm<br>Diameter of the<br>shaft hole<br>d1、d2、dz | 轴孔长度Length of shaft hole |         |     | D   | S   | 许用补偿量 Limited compensation |              |             | 重量<br>Weight<br>kg | 转动<br>惯量<br>Rotate<br>inertia<br>kg.m <sup>2</sup> |
|------------|-------------|-----------------------------------|-----------------------------------------------|-----------------------------------------------------|--------------------------|---------|-----|-----|-----|----------------------------|--------------|-------------|--------------------|----------------------------------------------------|
|            |             |                                   |                                               |                                                     | Y型                       | J、J1、Z型 |     |     |     | 轴向<br>Axial                | 径向<br>Radial | 角向<br>Angle |                    |                                                    |
|            |             |                                   |                                               |                                                     | L                        | L1      | L   |     |     | mm                         |              |             |                    |                                                    |
| LX1        | HL1         | 250                               | 8500                                          | 12 14                                               | 32                       | 27      | 32  | 90  | 2.5 | ±0.5                       | 0.15         | ≤0° 30′     | 0.002              | 2                                                  |
|            |             |                                   |                                               | 16、18 19                                            | 42                       | 30      | 42  |     |     |                            |              |             |                    |                                                    |
|            |             |                                   |                                               | 20 22 24                                            | 52                       | 38      | 52  |     |     |                            |              |             |                    |                                                    |
| LX2        | HL2         | 560                               | 6300                                          | 20 22、24                                            | 52                       | 38      | 52  | 120 | 2.5 | ±1                         | 0.15         | ≤0° 30′     | 0.009              | 5                                                  |
|            |             |                                   |                                               | 25 28                                               | 62                       | 44      | 62  |     |     |                            |              |             |                    |                                                    |
|            |             |                                   |                                               | 30 32、35                                            | 82                       | 60      | 82  |     |     |                            |              |             |                    |                                                    |
| LX3        | HL3         | 1250                              | 4750                                          | 30 32 35 38                                         | 82                       | 60      | 82  | 160 | 2.5 | ±1                         | 0.15         | ≤0° 30′     | 0.026              | 8                                                  |
|            |             |                                   |                                               | 40 42、45 48                                         | 112                      | 84      | 112 |     |     |                            |              |             |                    |                                                    |
| LX4        | HL4         | 2500                              | 3870                                          | 40 42 45 48                                         | 112                      | 84      | 112 | 195 | 3   | ±1.5                       | 0.15         | ≤0° 30′     | 0.109              | 22                                                 |
|            |             |                                   |                                               | 50 55、56                                            |                          |         |     |     |     |                            |              |             |                    |                                                    |
|            |             |                                   |                                               | 60 63                                               | 142                      | 107     | 142 |     |     |                            |              |             |                    |                                                    |
| LX5        | HL5         | 3150                              | 3450                                          | 50 55 56                                            | 142                      | 107     | 142 | 220 | 3   | ±1.5                       | 0.15         | ≤0° 30′     | 0.191              | 30                                                 |
|            |             |                                   |                                               | 60 63 65 70 71 75                                   | 142                      | 107     | 142 |     |     |                            |              |             |                    |                                                    |
| LX6        | HL6         | 6300                              | 2720                                          | 60 63 65 70                                         | 142                      | 107     | 142 | 280 | 4   | ±2                         | 0.20         | ≤0° 30′     | 0.543              | 53                                                 |
|            |             |                                   |                                               | 71 75 80                                            |                          |         |     |     |     |                            |              |             |                    |                                                    |
|            |             |                                   |                                               | 85                                                  | 172                      | 132     | 172 |     |     |                            |              |             |                    |                                                    |
| LX7        | HL7         | 11200                             | 2360                                          | 70 71、75                                            | 142                      | 107     | 142 | 320 | 4   | ±2                         | 0.20         | ≤0° 30′     | 1.314              | 98                                                 |
|            |             |                                   |                                               | 80 85 90 95                                         | 172                      | 132     | 172 |     |     |                            |              |             |                    |                                                    |
|            |             |                                   |                                               | 100 110                                             | 212                      | 167     | 212 |     |     |                            |              |             |                    |                                                    |
| LX8        | HL8         | 16000                             | 2120                                          | 80 85、90 95                                         | 212                      | 167     | 212 | 360 | 5   | ±2                         | 0.20         | ≤0° 30′     | 2.203              | 119                                                |
|            |             |                                   |                                               | 100 110 120 125                                     | 212                      | 167     | 212 |     |     |                            |              |             |                    |                                                    |
| LX9        | HL9         | 22400                             | 1850                                          | 100 110 120 125                                     | 212                      | 167     | 212 | 410 | 5   | ±2                         | 0.20         | ≤0° 30′     | 4.386              | 197                                                |
|            |             |                                   |                                               | 130、140                                             | 252                      | 202     | 252 |     |     |                            |              |             |                    |                                                    |
| LX10       | HL10        | 35500                             | 1600                                          | 110、120 125                                         | 212                      | 167     | 212 | 480 | 6   | ±2.5                       | 0.25         | ≤0° 30′     | 9.760              | 322                                                |
|            |             |                                   |                                               | 130 140 150                                         | 252                      | 202     | 252 |     |     |                            |              |             |                    |                                                    |
|            |             |                                   |                                               | 160 170、180                                         | 302                      | 242     | 302 |     |     |                            |              |             |                    |                                                    |
| LX11       | HL11        | 50000                             | 1400                                          | 130 140 150                                         | 252                      | 202     | 252 | 540 | 6   | ±2.5                       | 0.25         | ≤0° 30′     | 20.05              | 520                                                |
|            |             |                                   |                                               | 160 170、180                                         | 302                      | 242     | 302 |     |     |                            |              |             |                    |                                                    |
|            |             |                                   |                                               | 190 200、220                                         | 352                      | 282     | 352 |     |     |                            |              |             |                    |                                                    |
| LX12       | HL12        | 80000                             | 1220                                          | 160、170、180                                         | 302                      | 242     | 302 | 630 | 7   | ±2.5                       | 0.25         | ≤0° 30′     | 37.71              | 714                                                |
|            |             |                                   |                                               | 190 200 220                                         | 352                      | 282     | 352 |     |     |                            |              |             |                    |                                                    |
|            |             |                                   |                                               | 240、250、260                                         | 410                      | 330     | —   |     |     |                            |              |             |                    |                                                    |
| LX13       | HL13        | 125000                            | 1080                                          | 190 200、220                                         | 352                      | 282     | 352 | 710 | 8   | ±3                         | 0.25         | ≤0° 30′     | 71.37              | 1057                                               |
|            |             |                                   |                                               | 240 250 260                                         | 410                      | 330     | —   |     |     |                            |              |             |                    |                                                    |
|            |             |                                   |                                               | 280 300                                             | 410                      | 380     | —   |     |     |                            |              |             |                    |                                                    |
| LX14       | HL14        | 180000                            | 950                                           | 240、250、260                                         | 410                      | 330     | —   | 800 | 8   | ±3                         | 0.25         | ≤0° 30′     | 170.6              | 1956                                               |
|            |             |                                   |                                               | 280 300、320                                         | 470                      | 380     | —   |     |     |                            |              |             |                    |                                                    |
|            |             |                                   |                                               | 340                                                 | 550                      | 450     | —   |     |     |                            |              |             |                    |                                                    |

注：重量转动惯量是按J/Y轴孔组合型式和最小轴孔直径计算的。

Note: Weight and running inertias calculated as J/Y shaft hole assemble form and min shaft hole diameters.