SONG MING

# 上海松铭传动机械有限公司

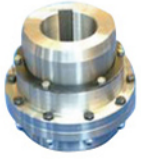
## SHANGHAI SONGMING TRANSMISSION MACHINERY CO.,LTD

# 公司简介 Company brief introduction

上海松铭传动机械有限公司是一家研究、设计、销售机械传动类产品的公司，供应产品有：WS/WSD/WSS/WSP万向节、SWP/SWC万向联轴器、ML梅花弹性联轴器、XL/XLD星型弹性联轴器、DJM/JMII/SJM/JMIIJ/ZJM弹性膜片联轴器、TL弹性柱销套联轴器、HL弹性柱销联轴器、ZL柱销齿式联轴器、制动轮式联轴器、铝合金联轴器、UL/LLA/LLB轮胎联轴器、SL十字滑块联轴器，KC/GL链条联轴器、JS蛇型弹簧联轴器、鼓型齿联轴器、凸缘联轴器、JQ夹壳联轴器、WH/SL滑块联轴器、联轴器配件（弹性体/轮胎体/铝合金外罩壳/联轴器膜片组/联轴器弹簧等）、Z型胀紧联结套及SPA/SPB/SPC/SPZ锥套皮带轮等产品，并承接非标传动零部件的定制加工。

产品咨询订购电话：18621008099

# 联轴器系列

| | | | | | |
|---|---|---|---|---|---|
|  YL |  JQ |  ML |  MLL |  MLS |  XL |
|  HL |  HLL |  TL |  ZL |  UL |  LLA |
|  DJM |  SJM |  ZJM |  NL |  CL |  GICL |
|  GICLZ |  GIICL |  NGCL |  WGC |  WGP |  WGT |
|  WH |  SL |  KC |  GL |  JS |  WSDWS |
|  WSS |  SWC |  SWC-WD |  SWP |  CD-1 |  CD-2 |

# 联轴器系列


STL


STL-J


SYN


SYNS


BW


SPA


SPB


SPC


SPZ


MT


GR


UL轮胎体


十字包


JS蛇形弹簧


Z1


Z2


Z3


Z4


Z5


Z6


Z7


Z8


Z9


Z10


Z11


Z12


Z13


Z14


Z15


Z16


Z17


Z18


Z19


Z20


Z21


Z22

## XL型星形弹性联轴器
## XL star type elastic Shaft coupling



### ◇特点

- 星形联轴器以工程塑料或聚氨酯为弹性元件，具有缓冲，减振，耐磨等特点，拆装方便，工作温度-20℃±80℃。
- 弹性体凸爪大的凹面，使渐开线齿上的表面压力很小，齿上即使承受过载，齿仍不会磨损或变形。
- 轴毂材料为粉末冶金，铸铁，球墨铸铁，钢或铝合金。
- 弹性体为聚胺脂材料，有4种不同的硬度可供选择（80A，90A，98A，64D），分别承受不同扭矩，其中90A为标准型。
- 具有良好的防振振性能。
- 具有防油，防尘，防砂，防潮等性能。
- 不同硬度的弹性体用不同的颜色来区分。
- 失效安全运行设计。
- 有多种的轴孔组合。
- 连接方式有键槽，花键，单双槽锁紧，锥形摩擦锁紧等多种方式。
- 有中间加长式，中间脱卸式，标准脱卸式，法兰式等各种变化形式可供选择。
- 可根据客户需求定制。
- 应用于通用机械，水工机械，工程机械，冶金机械，矿山机械，化工机械等多种场合。
-

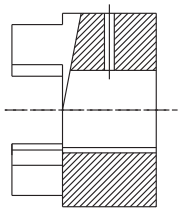
## XL型星形弹性联轴器
## XL star type elastic shaft coupling

### ◇轴套型式 Forms of shaft sleeve

由于星形弹性联轴器适用于许多不同的应用场合，因此有多种不同的轴套型式以供选择。这些型式的不同在于由键定位连接传动或胀紧套的摩擦夹紧力矩传动。

Rotox apply for many different situation, so there are kinds shaft sleeves for selecting. The differences is driven by keyway oriental connecting or driven by attrion clamp torque of locking devices.

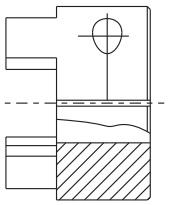
**1.0 型式　带键槽和固定螺钉**
**1.0 Type　with keyway and set screw**



键槽传动，许用力矩取决于键盘框框表面许用压力。适用于要求无齿隙的存在重负荷反转的场合。

Rated torque lies on rated pressure on keyset face. It apply for heavy loading with reverse rotate and without teeth space situation.

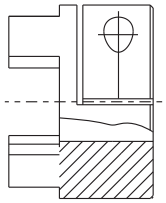
**2.0 型式　夹紧式，单槽，不带键槽**
**2.0 Type　Clamp, single trough, no keyway**



摩擦力夹紧连接传动，轴和轴套连接无间隙。许用力矩取决于轴径。规格XL2以下的联轴器的轴套为此型式。

Connected and driven by clamp of friction, limited torque lies on shaft diameter. This shaft sleeve is fit for the couplings whose specifications is below XL2’S.

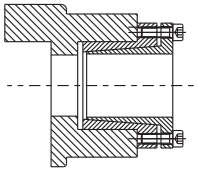
**2.5 型式　夹紧式，双槽，不带键槽**
**2.5 Type　Clamp, double troughs, without keyway**



摩擦力夹紧连接传动，轴和轴套连接无间隙。许用力矩取决于轴径。规格XL2以上的联轴器的轴套为此型式。

Connected and driven by friction. there is no clearance between shaft and shaft sleeve.Limited torque lies on shaft diameter. It is fit for the shaft coupling whose specification is above XL2’S.

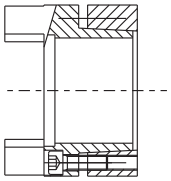
**4.0 型式　夹紧式，带KRZ11型胀紧套**
**4.0 Type　Clamp, with KRZ11 locking device**



胀紧套连接传动，轴和轴套连接无间隙。适用于更高的扭矩。

Connected and driven by locking devices. There is no clearance between shaft and shaft sleeve. It is fit for higher torques.

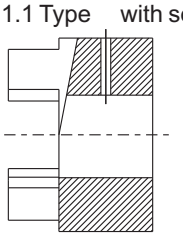
**6.0 型式　胀紧套夹紧式**
**6.0 Type　Clamp, by locking devices**



内置胀紧套连接的传动，适用于更高的扭矩，紧定螺钉置于弹性体侧。

Connected and driven by inner locking devices. Appry for higher torques locking bolts are placed in spider side.

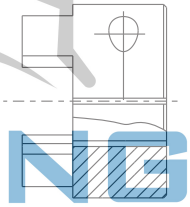
**1.1 型式　不带键槽，带固定螺钉**
**1.1 Type　with set screw and without keyway**



适用于要求无间隙的微小力矩递场合。（无防爆性能）

Appry for the situation that small torque driven without clearance.
(No explosion-protection performance)

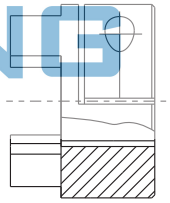
**2.1 型式　夹紧式，单槽，带键槽**
**2.1 Type　Clamp, single trough, with keyway**



摩擦力夹紧传动，避免或减少了反向间隙及键表面的接触压力，规格XL2以下的为此型式。

Connected and driven by friction, avoid and reduce touch pressure and reversal clearance. It is fit for the couplings whose specifications are below XL2’S.

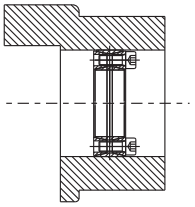
**2.6 型式　夹紧式，双槽，带键槽**
**2.6 Type　Clamp, double troughs, with keyways**



摩擦力夹紧传动，避免或减少了反向间隙及键表面的接触压力，规格XL2以上的为此型式。

Connected and driven by friction. avoid and reduce touch pressure and reversal clearance. It is fit for the shaft coupling whose specification is above XL2’S.

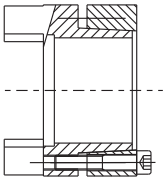
**5.0 型式　夹紧式，带KLZ2或Z3型胀紧套**
**5.0 Type　Clamp, with KLZ2 or Z3 locking devices**



胀紧套连接传动，轴和轴套连接无间隙，适用于更高的扭矩。胀紧套取决于轴径紧定螺钉可置于内侧或外侧。具体详见胀紧套样本。

Connected and driven by locking devices. There is no clearance. Appry for higher torque. Locking device is lie and shaft diameter set bolts can be place in inner side or outer side.

**6.5 型式　胀紧套夹紧式**
**6.5 Type　Clamp by locking devices**



与6.0型式相同，只是螺钉在外侧。例如中间轴的径向装拆。

There is no difference with 6.0 type. It’s bolts placed in outer side. For example, assemple and disassemble on axial of middle shaft.

可按客户要求做特殊设计
It can special designed upon requirements of clients.

## XL型星形弹性联轴器
## XL star type elastic shaft coupling

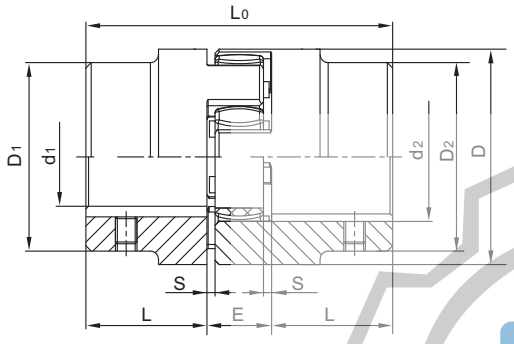
### ◇标记 Mark

XI4- 35 / 35

从动轴孔径 The aperture of the driven axle

主动轴孔径 The aperture of the initiative axle

型号规格 Type specification




XL 型星形弹性联轴器
XL star type elastic shaft coupling

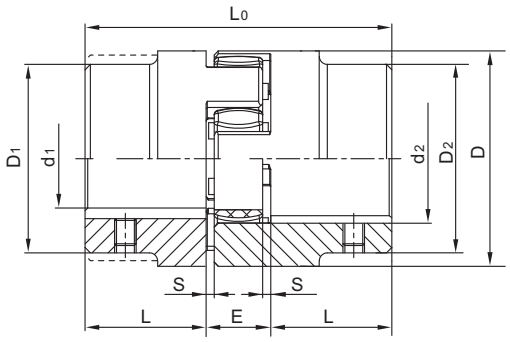
### ◇XL型星形弹性联轴器的基本参数及主要尺寸
Main size and parameters of XL star type elastic shaft coupling

| 型号 Type | 公称扭矩 Nominal torsion N.m | 许用转速 Limited rotational speed r/min | 轴孔直径 Diameter of the shaft hole d1、d2mm | 轴孔长度 Length of the shaft hole L mm | L0 mm | D mm | D1D2 mm | E mm | S mm | 转动惯量 Rotate inertia Kg.cm² | 重量 Weight kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| XL0 | 12.5 | 19000 | 6-16 | 18 | 50 | 30 | 30 | 13 | 1.5 | 0.00005 | 0.10 |
| XL1 | 17 | 19000 | 6-19 | 25 | 66 | 40 | 32 | 16 | 2 | 0.00008 | 0.30 |
| XL2 | 60 | 14000 | 8-24 | 30 | 78 | 55 | 40 | 18 | 2 | 0.0002 | 0.61 |
| XL3 | 160 | 11800 | 10-28 | 35 | 90 | 65 | 48 | 20 | 2.5 | 0.0007 | 1.00 |
| XL4 | 325 | 9500 | 12-38 | 45 | 114 | 80 | 66 | 24 | 3 | 0.002 | 2.08 |
| XL5 | 450 | 8000 | 14-42 | 50 | 126 | 95 | 75 | 26 | 3 | 0.004 | 3.21 |
| XL6 | 525 | 7100 | 15-48 | 56 | 140 | 105 | 85 | 28 | 3.5 | 0.006 | 4.41 |
| XL7 | 685 | 6300 | 20-55 | 65 | 160 | 120 | 98 | 30 | 4 | 0.012 | 6.64 |
| XL8 | 940 | 5600 | 22-65 | 75 | 185 | 135 | 115 | 35 | 4.5 | 0.025 | 10.31 |
| XL9 | 1920 | 4750 | 30-75 | 85 | 210 | 160 | 135 | 40 | 5 | 0.054 | 16.03 |
| XL10 | 3600 | 3750 | 40-90 | 100 | 245 | 200 | 160 | 45 | 5.5 | 0.139 | 27.50 |
| XL11 | 4950 | 3350 | 50-100 | 110 | 270 | 225 | 180 | 50 | 6 | 0.245 | 38.50 |
| XL12 | 7200 | 3000 | 60-110 | 120 | 295 | 255 | 200 | 50 | 6.5 | 0.435 | 54.0 |
| XL13 | 10000 | 2650 | 60-125 | 140 | 340 | 290 | 230 | 60 | 7 | 0.85 | 81.8 |
| XL14 | 12800 | 2380 | 60-140 | 155 | 375 | 320 | 255 | 65 | 7.5 | 1.4 | 109.7 |
| XL15 | 19200 | 2000 | 80-160 | 175 | 425 | 370 | 290 | 75 | 9 | 2.72 | 162.7 |
| XL16 | 28000 | 1800 | 85-180 | 195 | 475 | 420 | 325 | 85 | 10.5 | 4.95 | 230.8 |

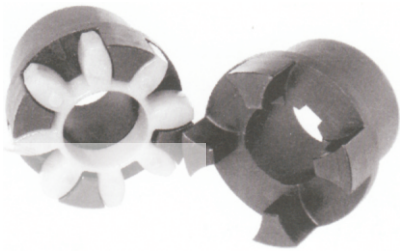
## XLD型扩大轴孔星形弹性联轴器
XLD type star elastic shaft coupling with enlarge hole

### ◇结构特点

- 轴套使用钢件，特别适用于重载荷的传动单元，如升降，轧钢机，建筑机械。
- 本联轴器与XL型相似，较适合于孔径较大的安装尺寸
- 。标记方法同XL型。
- 设计紧凑，转动惯量小。
- 表中是弹性体的硬度为90shA时的公称扭矩值。




XLD型扩大轴孔星形弹性联轴器
XLD type star elastic shaft coupling with enlarge hole



### ◇XLD型扩大轴孔星形弹性联轴器基本参数和主要尺寸
Base figure and main size of XLD type star elastic shaft coupling with enlarge hole

| 型号 Type | 公称扭矩 Nominal torsion N.m | 许用转速 Limited rotational speed r/min | 轴孔直径 Diameter of the shaft hole d1、d2mm | 轴孔长度 Length of the shaft hole L mm | L0 mm | D mm | D1 (D2) mm | D2 mm | E mm | S mm | 转动惯量 Rotate inertia Kg.cm² | 重量 Weight kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| XLD1 | 17 | 19000 | 6-25 | 25 | 66 | 40 | 32 | 40 | 16 | 2 | 0.00008 | 0.328 |
| XLD2 | 60 | 14000 | 8-35 | 30 | 78 | 55 | 40 | 55 | 18 | 2 | 0.0003 | 0.68 |
| XLD3 | 160 | 11800 | 10-40 | 35 | 90 | 65 | 48 | 65 | 20 | 2.5 | 0.0007 | 1.16 |
| XLD4 | 325 | 9500 | 12-48 | 45 | 114 | 80 | 66 | 78 | 24 | 3 | 0.002 | 2.27 |
| XLD5 | 450 | 8000 | 14-55 | 50 | 126 | 95 | 75 | 94 | 26 | 3 | 0.005 | 3.57 |
| XLD6 | 525 | 7100 | 15-60 | 56 | 140 | 105 | 85 | 104 | 28 | 3.5 | 0.008 | 4.80 |
| XLD7 | 685 | 6300 | 20-70 | 65 | 160 | 120 | 98 | 118 | 30 | 4 | 0.016 | 7.87 |
| XLD8 | 940 | 5600 | 22-75 | 75 | 185 | 135 | 115 | 134 | 35 | 4.5 | 0.031 | 10.89 |
| XLD9 | 1920 | 4750 | 30-90 | 85 | 210 | 160 | 135 | 158 | 40 | 5 | 0.068 | 17.73 |
| XLD10 | 3600 | 3750 | 40-100 | 100 | 245 | 200 | 160 | 180 | 45 | 5.5 | 0.159 | 29.60 |
| XLD11 | 4950 | 3350 | 50-110 | 110 | 270 | 225 | 180 | 200 | 50 | 6 | 0.277 | 43.0 |
| XLD12 | 7200 | 3000 | 60-125 | 120 | 295 | 255 | 200 | 230 | 55 | 6.5 | 0.51 | 58.6 |
| XLD13 | 10000 | 2650 | 60-145 | 140 | 340 | 290 | 230 | 265 | 60 | 7 | 1.0 | 88.4 |
| XLD14 | 12800 | 2360 | 60-165 | 155 | 375 | 320 | 256 | 300 | 65 | 7.5 | 1.7 | 120.8 |
| XLD15 | 19200 | 2000 | 80-190 | 175 | 425 | 370 | 290 | 345 | 75 | 9 | 3.35 | 179.1 |
| XLD16 | 28000 | 1800 | 85-220 | 195 | 475 | 420 | 325 | 400 | 85 | 10.5 | 6.37 | 261.0 |

## XL型带法兰星形弹性联轴器
## XL type star elastic coupling with flange

### ◇标记 Mark

XL5- CF / 35

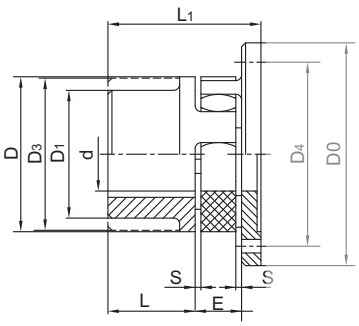
- 35 — 轴孔孔径 Dia of shaft hole
- CF — 结构型式 Design form
- XL5 — 型号 Type

### ◇结构特点

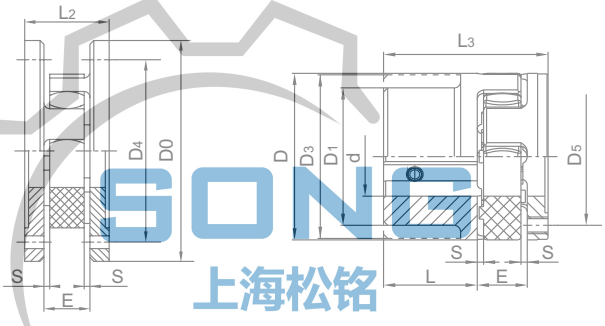
- 适用于重机械的法兰联结。
- CF型和CFN型适用于法兰和轴的联结。
- 双法兰结构DF型和DFN型可以不移动两端设备进行径向安装，可快速更换弹性体。
- CFN型和DFN型的外径较小。
- DFN型可以根据客户的特殊法兰定做。

### ◇Design feature

- Apply for flange connect in heavy machine.
- CF and CFN apply for connection between flange and shaft.
- DF and DFN type of flange structure can be installed on radial without moving the equipments on both ends. Spider can be instead under high speed.
- Diameter of CFN and DFN is less than other type.
- DFN type can be especial manufactured accord on the flange provided by client.

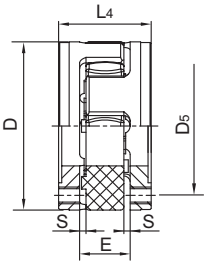



CF型
Design CF




DF型
Design DF

CFN型
Design CFN




DFN型
Design DFN

### ◇XL带法兰星形弹性联轴器基本参数和主要尺寸
Base figure and main size of XL type star elastic coupling with flange

| 型号 Type | 公称扭矩 Nominal torsion N.m | 许用转速 Limited rotational speed r/min | 轴孔直径 Diameter of the shaft hole d1、d2mm | 轴孔长度 Length of the shaft hole L mm | D | D0 | D1 | D3 | E | S | L1 (L3) | L2 (L4) | D4 | D5 | 联接螺栓 Connecting bolt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | (mm) | | | | | | | | (mm) | | |
| XL2 | 60 | 14000 | 8~35 | 30 | 55 | 80 | 40 | 55 | 18 | 2 | 56 | 34 | 65 | 45 | 8-M5 |
| XL3 | 160 | 11800 | 10~40 | 35 | 65 | 100 | 48 | 65 | 20 | 2.5 | 65 | 40 | 80 | 54 | 8-M6 |
| XL4 | 325 | 9500 | 12~48 | 45 | 80 | 115 | 66 | 78 | 24 | 3 | 79 | 44 | 95 | 66 | 8-M8 |
| XL5 | 450 | 8000 | 14~55 | 50 | 95 | 140 | 75 | 94 | 26 | 3 | 88 | 50 | 115 | 80 | 12-M8 |
| XL6 | 525 | 7100 | 15~60 | 56 | 105 | 150 | 85 | 104 | 28 | 3.5 | 96 | 52 | 125 | 90 | 12-M8 |
| XL7 | 685 | 6300 | 20~70 | 65 | 120 | 175 | 98 | 118 | 30 | 4 | 111 | 62 | 145 | 102 | 8-M10 |
| XL8 | 940 | 5600 | 22~75 | 75 | 135 | 190 | 115 | 134 | 35 | 4.5 | 126 | 67 | 160 | 116 | 12-M10 |
| XL9 | 1920 | 4750 | 30~90 | 85 | 160 | 215 | 135 | 158 | 40 | 5 | 144 | 78 | 185 | 136 | 15-M12 |
| XL10 | 3600 | 3750 | 40~100 | 100 | 200 | 260 | 160 | 180 | 45 | 5.5 | 165 | 85 | 225 | 172 | 15-M16 |
| XL11 | 4950 | 3350 | 50~110 | 110 | 225 | 285 | 180 | 200 | 50 | 6 | 185 | 100 | 250 | 195 | 15-M16 |
| XL12 | 7200 | 3000 | 60~125 | 120 | 255 | 330 | 200 | 230 | 55 | 6.5 | 201 | 107 | 290 | 218 | 12-M20 |
| XL13 | 10000 | 2650 | 60~145 | 140 | 290 | 370 | 230 | 265 | 60 | 7 | 230 | 120 | 325 | 252 | 15-M20 |
| XL14 | 12800 | 2360 | 60~165 | 155 | 320 | 410 | 256 | 300 | 65 | 7.5 | 254 | 133 | 360 | 282 | 15-M20 |
| XL15 | 19200 | 2000 | 80~190 | 175 | 370 | 460 | 290 | 345 | 75 | 9 | 288 | 151 | 410 | 325 | 15-M24 |
| XL16 | 28000 | 1800 | 85~220 | 195 | 420 | 520 | 325 | 400 | 85 | 10.5 | 320 | 165 | 465 | 375 | 18-M24 |

## XLDF(XLSF)单(双)法兰带轴套星形弹性联轴器
XLDF(XLSF) star coupling with single of double flange shaft sleeve

### ◇标记 Mark

XLSF- 5 35 / 30

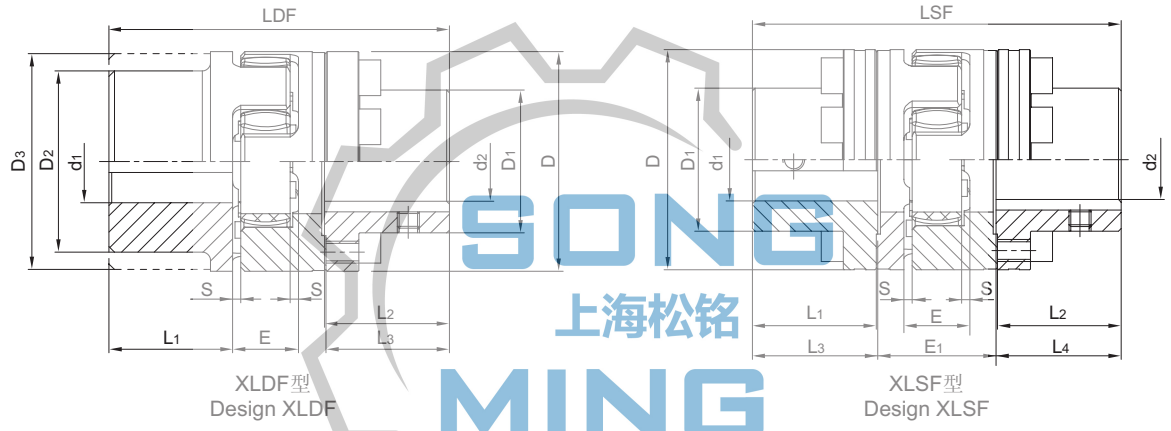
- 从动轴孔径 Hole diameter of driven shaft
- 主动轴孔径 Hole diameter of drive shaft
- 结构型式 Design form
- 型号 Type

### ◇结构特点

- 适用于重型机械的法兰连接
- 拆下法兰就可径向安装，非常方便
- 对于SF型，不必移动主动端及从动端设备进行弹性体更换
- 安装时需切断动力

### ◇Design feature

- Apply for flange connect in heavy machine.
- It can be easyly radial fitled with unload the flange.
- As for SF type the spider can be changed without move the equipments on drive and driven end.
- Please cut the power when installing.




### ◇XLDF、XLSF型带法兰星形弹性联轴器基本参数和主要尺寸
Base figure and main size of XLDF、XLSF star coupling with single or double flange shaft sleeve

| 型号 Type | | 公称扭矩 Nominal torsion N.m | 许用转速 Limited rotational speed r/min | 轴孔直径 Diameter of the shaft hole d1、d2mm | D | D1 | D2 | D3 | E | E1 | S | L1 (L2) | L3 (L4) | LDF | LSF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | (mm) | | | | | | | | | | |
| XLDF2 | XLSF2 | 60 | 14000 | 8-24 | 55 | 36 | 40 | 55 | 18 | 33 | 2 | 30 | 30.5 | 86 | 94 |
| XLDF3 | XLSF3 | 160 | 11800 | 8-28 | 65 | 42 | 48 | 65 | 20 | 39 | 2.2 | 35 | 35.5 | 100 | 110 |
| XLDF4 | XLSF4 | 325 | 9500 | 10-38 | 80 | 52 | 66 | 78 | 24 | 43 | 3 | 45 | 45.5 | 124 | 134 |
| XLDF5 | XLSF5 | 450 | 8000 | 10-42 | 95 | 62 | 75 | 94 | 26 | 48 | 3 | 50 | 51.0 | 138 | 150 |
| XLDF6 | XLSF6 | 525 | 7100 | 10-48 | 105 | 70 | 85 | 104 | 28 | 50 | 3.5 | 56 | 57.0 | 152 | 164 |
| XLDF7 | XLSF7 | 685 | 6300 | 15-55 | 120 | 80 | 98 | 118 | 30 | 60 | 4 | 65 | 66.0 | 176 | 192 |
| XLDF8 | XLSF8 | 940 | 5600 | 15-65 | 135 | 94 | 115 | 134 | 35 | 65 | 4.5 | 75 | 76.0 | 201 | 217 |
| XLDF9 | XLSF9 | 1920 | 4750 | 20-75 | 160 | 108 | 135 | 158 | 40 | 75 | 5 | 85 | 86.5 | 229 | 248 |
| XLDF10 | XLSF10 | 3600 | 3750 | 30-90 | 200 | 142 | 160 | 180 | 45 | 82 | 5.5 | 100 | 101.5 | 265 | 285 |
| XLDF11 | XLSF11 | 4950 | 3350 | 30-115 | 225 | 158 | 180 | 200 | 50 | 97 | 6 | 110 | 111.5 | 295 | 320 |
| XLDF12 | XLSF12 | 7200 | 3000 | 40-125 | 255 | 178 | 200 | 230 | 55 | 103 | 6.5 | 120 | 122.0 | 321 | 347 |
| XLDF13 | XLSF13 | 10000 | 2650 | 40-145 | 290 | 206 | 230 | 265 | 60 | 116 | 7 | 140 | 142.0 | 370 | 400 |
| XLDF14 | XLSF14 | 12800 | 2360 | 40-160 | 320 | 235 | 256 | 300 | 65 | 128 | 7.5 | 155 | 157.5 | 409 | 443 |
| XLDF15 | XLSF15 | 19200 | 2000 | 40-180 | 370 | 270 | 290 | 345 | 75 | 146 | 9 | 175 | 177.5 | 463 | 501 |
| XLDF16 | XLSF16 | 28000 | 1800 | 85-2000 | 420 | 315 | 325 | 400 | 85 | 159 | 10.5 | 195 | 198.0 | 515 | 555 |

## ML梅花形弹性联轴器
ML plum blossom type elastic shaft coupling

### ◇概述

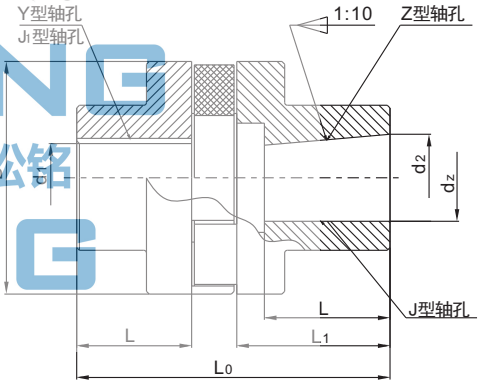
梅花形弹性联轴器是由两个带凸爪形状相同的半联轴器和弹性元件组成，利用梅花形弹性元件置于两半联轴器凸爪牙之间，以实现两半轴器的联接。具有补偿两轴相对偏移，减振，缓冲，径向尺寸小，结构简单，不用润滑，承载能力较高，维护方便等特点，但更换弹性元件时两半联轴器需沿轴向移动。适用于联接两同轴线，起动频繁，正反转变化，中低速中小功率，传动轴系，要求工作可靠性高的场合，不适用于重载及轴向尺寸受限制，更换弹性元件后两轴线对中困难的场合。

### ◇标记示例 The mark gives a demonstration

ML4型梅花形弹性联轴器
主动端：Z型轴孔，C型键槽，轴孔直径d1=35mm，轴孔长度L=62mm
从动端：Y型轴孔，B型键槽，轴孔直径d2=24mm，轴孔长度L=65mm

### ◇标记方法

联轴器(Shaft coupling)ML4 $\frac{ZC35\times62}{YB24\times65}$ GB/T5272-2002




ML 梅花形弹性联轴器
ML plum blossom type elastic shaft coupling

### ◇ML型梅花形弹性联轴器的基本参数及主要尺寸(GB/T5272-2002)

Base figure and main size of ML plum blossom type elastic shaft coupling (GB/T5272-2002)

| 型号 Type | 公称扭矩 N.m Nominal torsion 弹性体硬度 Hardness of Elastomer shA 80±5 | shB 92±5 | shD 60±5 | 许用转速 Limited rotational speedr(rpm) 铁 Iron | 钢 Steel | 轴孔直径mm d1.d2.dz Diameter of the shaft hole | 轴孔长度 mm Length of the shaft hole Y型 Type L | Z,J型 Type L | L0 mm | D mm | 许用补偿量 Limited compensation 轴向 Axial | 径向 Radial | 角向 Angle (°) | 转动惯量 Rotate inertia kg.m² | 重量 Weight kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | mm | | | | | | | | | |
| ML1 | 16 | 25 | 45 | 11500 | 15300 | 12.14 | 32 | 27 | 80 | 50 | 1.2 | 0.5 | 2.0 | 0.014 | 0.66 |
| | | | | | | 16.18.19 | 42 | 30 | 100 | | | | | | |
| | | | | | | 20.22.24 | 52 | 38 | 120 | | | | | | |
| ML2 | 63 | 100 | 200 | 8200 | 10900 | 20.22.24 | | | 127 | 70 | 1.5 | 0.8 | 2.0 | 0.075 | 1.55 |
| | | | | | | 25.28 | 62 | 44 | 147 | | | | | | |
| | | | | | | 30.32 | 82 | 60 | 187 | | | | | | |

## ML型梅花形弹性联轴器
## ML claw elastic shaft coupling

### ◇ML 型梅花形弹性联轴器的基本参数及主要尺寸(GB/T5272-2002)
Base figure and main size of ML plum blossom type elastic shaft coupling(GB/T5272-2002)

| 型号 Type | 公称扭矩 N.m Nominal torsion | | | 许用转速 Limited rotational speedr(rpm) | | 轴孔直径mm d1.d2.dz Diameter of the shaft hole | 轴孔长度 mm Length of the shaft hole | | L0 mm | D mm | 许用补偿量 Limited compensation | | | 转动惯量 Rotate inertia kg.m² | 重量 Weight kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 弹性体硬度 Hardness of Elastomer | | | | | | Y型 Type | Z,J型 Type | | | 轴向 Axial | 径向 Radial | 角向 Angle | | |
| | shA | shB | shD | 铁 Iron | 钢 Steel | | L | L | | | | | | | |
| | 80±5 | 92±5 | 60±5 | | | mm | | | | | | | (°) | | |
| ML3 | 90 | 140 | 280 | 6700 | 9000 | 22.24 | 52 | 38 | 128 | 85 | 2.0 | 0.8 | 2.0 | 0.178 | 2.5 |
| | | | | | | 25.28 | 62 | 44 | 148 | | | | | | |
| | | | | | | 30.32.35.38 | 82 | 60 | 188 | | | | | | |
| ML4 | 140 | 250 | 400 | 5500 | 7300 | 25.28 | 62 | 44 | 151 | 105 | 2.5 | 0.8 | 2.0 | 0.412 | 4.3 |
| | | | | | | 30.32.35.38 | 82 | 60 | 191 | | | | | | |
| | | | | | | 40.42 | 112 | 84 | 251 | | | | | | |
| ML5 | 250 | 400 | 710 | 4600 | 6100 | 30.32.35.38 | 82 | 60 | 197 | 125 | 3.0 | 1.0 | 1.5 | 0.73 | 6.2 |
| | | | | | | 40.42.45.48.50.55 | 112 | 84 | 257 | | | | | | |
| ML6 | 400 | 630 | 1120 | 4000 | 5300 | 30*.38* | 82 | 60 | 203 | 145 | 3.0 | 1.0 | 1.5 | 1.85 | 8.6 |
| | | | | | | 40*.42*.45.48.50.55 | 112 | 84 | 263 | | | | | | |
| ML7 | 710 | 1120 | 2240 | 3400 | 4500 | 45*.48*.50.55 | 112 | 84 | 265 | 170 | 3.5 | 1.0 | 1.5 | 3.88 | 14.0 |
| | | | | | | 60.63.65 | 142 | 107 | 325 | | | | | | |
| ML8 | 1120 | 1800 | 3550 | 2900 | 3800 | 50*.55* | 112 | 84 | 272 | 200 | 4.0 | 1.5 | 1.5 | 9.22 | 25.7 |
| | | | | | | 60.63.65.70.71.75 | 142 | 107 | 332 | | | | | | |
| ML9 | 1800 | 2800 | 5600 | 2500 | 3300 | 60*.63*.65*.70.75 | 142 | 107 | 334 | 230 | 4.5 | 1.5 | 1.0 | 18.95 | 41.0 |
| | | | | | | 80.85.90.95 | 172 | 132 | 394 | | | | | | |
| ML10 | 2800 | 4500 | 9000 | 2200 | 2900 | 70*.71*.75* | 142 | 107 | 344 | 260 | 5.0 | 1.5 | 1.0 | 39.68 | 59.0 |
| | | | | | | 80*.85*.90*.95* | 172 | 132 | 404 | | | | | | |
| | | | | | | 100.110 | 212 | 167 | 484 | | | | | | |
| ML11 | 4000 | 6300 | 12500 | 1900 | 2500 | 80*. 85*. 90*. 95* | 172 | 132 | 411 | 300 | 5.0 | 1.8 | 1.0 | 73.43 | 87.0 |
| | | | | | | 100.110.120 | 212 | 167 | 491 | | | | | | |
| ML12 | 7100 | 11200 | 20000 | 1600 | 2100 | 90*.95* | 172 | 132 | 417 | 360 | 5.0 | 1.8 | 1.0 | 178.45 | 140 |
| | | | | | | 100*.110*.120*.125* | 212 | 167 | 497 | | | | | | |
| | | | | | | 130 | 252 | 202 | 577 | | | | | | |
| ML13 | 8000 | 12500 | 25000 | 1400 | 1900 | 100*.110*.120*.125* | 212 | 167 | 497 | 400 | 5.0 | 1.8 | 1.0 | 208.75 | 160 |
| | | | | | | 130*.140*.150* | 252 | 202 | 577 | | | | | | |
| | | | | | | 160 | 302 | 242 | 677 | | | | | | |

注：1、轴孔直径带*号的可用于J型、Z型轴孔。
2、表中kg为联轴器总重量。

Note: 1. Shaft hole diameter with * can be use for the Model J、Z.
2. Kg in the form is the total weight of the shaft coupling.

## MLS 型双法兰型梅花形弹性联轴器
MLS type claw elastic shaft coupling with double-flange

### ◇标记说明 Mark explain

对于Z型、J型带沉孔的轴孔长度是指轴孔的配合长度（即下图中L1尺寸）

AS for Z and J type coupling with counterbore hole length is length of fit (as the datas in down drawings)

### ◇标记示例 The mark gives a demonstration

MLS3型梅花形弹性联轴器

MT3a弹性件硬度为shA80

主动端：Z型轴孔，C型键槽，轴孔直径$d_z$=30

轴孔长度L=60(不含沉孔长度)

从动端：Y型轴孔，B型键槽，轴孔直径$d_2$=25

轴孔长度L=62

MLS3联轴器 $\frac{Zc30\times60}{B25\times62}$ MT3a GB/T5272-2002

MLS3 type claw flexible couplings

The hardness of MT3a spider is shA80

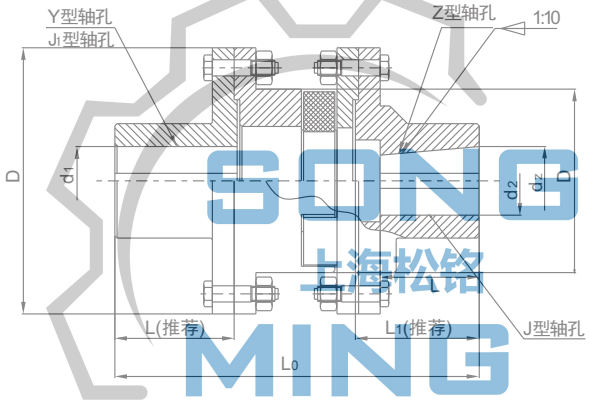
Drive end Z type shaft hole. C type key way diameter of shaft hole dz is 30mm

Length of shaft hole L is 60mm (counterbore is not included)

Briven end Y type shaft hole. B type key way, shaft hole diameter d2 is 25mm

Length of shaft hole L is 62mm

Marked as: MLS3 $\frac{Zc30\times60}{B25\times62}$ MT3a GB/T5272-2002




MLS 型双法兰型梅花形弹性联轴器
MLS type claw elastic shaft coupling with double-flange

### ◇MLS型双法兰型梅花弹性联轴器基本参数和主要尺寸(GB/T5272-2002)

Base figure and main size of MLS type claw elastic shaft coupling with double-flange (GB/T5272-2002)

| 型号 Type | 公称扭矩 N.m Nominal torsion | | 许用转速 Limited rotational speed rpm | 轴孔直径 Diameter of the shaft hole d1.d2.dz mm | 轴孔长度 mm Length of the shaft hole | | L、L1 推荐 Commend mm | L0 mm | D mm | D1 mm | 弹性件型号 Spider type | 质量 quality m/kg | 转动惯量 Rotate inertia kg.m² |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 弹性件硬度 Nominal torsion | | | | Y型 | J1、J、Z型 | | | | | | | |
| | a/shA | b/shD | | | L | L | | | | | | | |
| | 80±5 | 60±5 | | | | | | | | | | | |
| MLS1 | 25 | 45 | 8500 | 12.14 | 32 | 27 | 35 | 98 | 50 | 90 | MT1 $^{a}_{b}$ | 1.33 | 0.0013 |
| | | | | 16.18.19 | 42 | 30 | | | | | | | |
| | | | | 20.22.24 | 52 | 38 | | | | | | | |
| | | | | 25 | 62 | 44 | | | | | | | |
| MLS2 | 100 | 200 | 6900 | 20.22.24 | 52 | 38 | 40 | 117 | 70 | 110 | MT3 $^{a}_{b}$ | 2.33 | 0.0034 |
| | | | | 25.28 | 62 | 44 | | | | | | | |
| | | | | 30.32 | 82 | 60 | | | | | | | |
| MLS3 | 140 | 280 | 6200 | 22.24 | 52 | 38 | 45 | 130 | 85 | 125 | MT4 $^{a}_{b}$ | 3.38 | 0.0064 |
| | | | | 25.28 | 62 | 44 | | | | | | | |
| | | | | 30.32.35.38 | 82 | 60 | | | | | | | |
| | | | | 40 | 112 | 84 | | | | | | | |

## MLS 型双法兰型梅花形弹性联轴器
MLS type claw elastic shaft coupling with double-flange

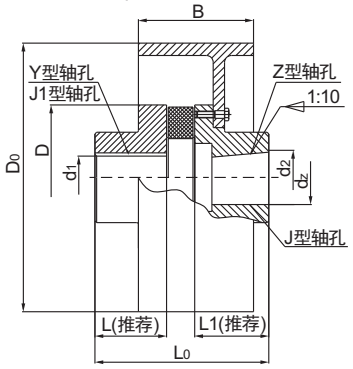
### ◇MLS型双法兰型梅花弹性联轴器基本参数和主要尺寸(GB/T5272-2002)
Base figure and main size of MLS type claw elastic shaft coupling with double-flange(GB/T5272-2002)

| 型号 Type | 公称扭矩 N.m Nominal torsion 弹性件硬度 Nominal torsion a/shA 80±5 | b/shD 60±5 | 许用转速 Limited rotational speed rpm | 轴孔直径 Diameter of the shaft hole d1.d2.dz mm | 轴孔长度 mm Length of the shaft hole Y型 L | J1、J、Z型 L | L、L1 推荐 Commend mm | L0 mm | D mm | D1 mm | 弹性件型号 Spider type | 质量 quality m/kg | 转动惯量 Rotate inertia kg.m² |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLS4 | 350 | 400 | 5000 | 25.28 | 62 | 44 | 50 | 150 | 105 | 150 | MT5 -a -b | 6.07 | 0.0175 |
| | | | | 30.32.35.38 | 82 | 60 | | | | | | | |
| | | | | 40.42.45 | 112 | 84 | | | | | | | |
| MLS5 | 400 | 710 | 4100 | 30.32.35.38 | 82 | 60 | 55 | 167 | 125 | 185 | MT6 -a -b | 10.47 | 0.0444 |
| | | | | 40.42.45.48 | 112 | 84 | | | | | | | |
| MLS6 | 630 | 1120 | 3700 | 35*.38* | 82 | 60 | 60 | 185 | 145 | 205 | MT7 -a -b | 14.22 | 0.0739 |
| | | | | 40*.42*.45.48.50.55 | 112 | 84 | | | | | | | |
| MLS7 | 1120 | 2240 | 3100 | 45*.48*.50.55.56 | | | 70 | 209 | 170 | 240 | MT8 -a -b | 21.16 | 0.1493 |
| | | | | 60.63.65 | 142 | 107 | | | | | | | |
| MLS8 | 1800 | 3550 | 2800 | 50*.55*.56* | 112 | 84 | 80 | 240 | 200 | 270 | MT9 -a -b | 30.70 | 0.2767 |
| | | | | 60.63.65.70.71.75 | 142 | 107 | | | | | | | |
| | | | | 80 | 172 | 132 | | | | | | | |
| MLS9 | 2800 | 5600 | 2500 | 60*.63*.65*.70.71.75 | 142 | 107 | 90 | 268 | 230 | 305 | MT10 -a -b | 44.55 | 0.5262 |
| | | | | 80.85.90.95 | 172 | 132 | | | | | | | |
| | | | | 100 | 212 | 167 | | | | | | | |
| MLS10 | 4500 | 9000 | 2200 | 70*.71*.75* | 142 | 107 | 100 | 308 | 260 | 350 | MT11 -a -b | 70.72 | 1.1362 |
| | | | | 80*.85*.90.95 | 172 | 132 | | | | | | | |
| | | | | 100.110.120 | 212 | 167 | | | | | | | |
| MLS11 | 6300 | 12500 | 1900 | 80*.85*.90*.95* | 172 | 132 | 115 | 345 | 300 | 400 | MT12 -a -b | 99.54 | 1.9998 |
| | | | | 100.110.120.125 | 212 | 167 | | | | | | | |
| | | | | 130 | 252 | 202 | | | | | | | |
| MLS12 | 11200 | 20000 | 1600 | 90*.95* | 172 | 132 | 125 | 373 | 360 | 460 | MT13 -a -b | 137.53 | 3.6719 |
| | | | | 100.110.120.125 | 212 | 167 | | | | | | | |
| | | | | 130 | 252 | 202 | | | | | | | |
| MLS13 | 12500 | 25000 | 15000 | 100*.110*.120*.125* | 212 | 167 | 135 | 383 | 400 | 500 | MT14 -a -b | 165.25 | 5.1581 |
| | | | | 130.140.150 | 252 | 202 | | | | | | | |
| | | | | 160 | 302 | 242 | | | | | | | |

1、质量、转动惯量按L推荐最小轴孔计算近似值。
2、带*号轴孔直径可用于Z型、J型轴孔。
3、a、b为二种材料的硬度代号
4、L0是两端轴孔长度均为L推荐时联轴器的全长
5、Y型为长圆柱形轴孔，J1型为无沉孔为短圆柱形轴孔，J型为有沉孔孔短圆柱形轴孔，Z型为有沉孔的圆锥形轴孔。

## LMZ-I型带制动轮梅花形弹性联轴器
LMZ-I type claw elastic shaft coupling

◇标记示例(Mark sample)：LMZ12-I-630YA110×115/Zc95×115




◇LMZ-I型带制动轮梅花形弹性联轴器基本参数和主要尺寸(GB/T5272-2002)/mm
Base figure and main size of LMZ-I、MLZ-I type claw elastic shaft coupling(GB/T5272-2002)/mm

| 型号 Type | 公称扭矩 N.m Nominal torsion | | 许用转速 Limited rotational speed rpm | 轴孔直径 Diameter of the shaft hole d1.d2.dz | L(推荐) Commend | L0 | D0 | B | D | 弹性件型号 Spider type | 重量 weight kg | 转动惯量 Rotate inertia I/kg.m² |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 弹性件硬度 Spider type hard ness | | | | | | | | | | | |
| | a/shA | b/shD | | | | | | | | | | |
| | 80±5 | 60±5 | | | | | | | | | | |
| LMZ5-I-160 | 250 | 400 | 4750 | 25.28.30.32.35.38 40.42.45 | 50 | 127 | 160 | 70 | 105 | MT5 -a -b | 6.602 | 0.019 |
| LMZ5-I-200 | | | 3800 | 25.28.30.32.35.38 40.42.45 | | | 200 | 85 | | | 9.204 | 0.044 |
| LMZ6-I-200 | 400 | 710 | | 30.32.35.38.40 42.45.48 | 55 | 143 | | | 125 | MT6 -a -b | 11.45 | 0.052 |
| LMZ7-I-200 | 630 | 1120 | | 35*.38*.40*.42* 45.48.50.55.56 | 60 | 159 | | | 145 | MT7 -a -b | 13.96 | 0.064 |
| LMZ7-I-250 | | | 3050 | 35*.38*.40*.42* 45.48.50.55.56 | | | 250 | 105 | | | 20.09 | 0.144 |
| LMZ8-I-250 | 1120 | 2240 | | 45*.48*.50.55.56 60.63.65 | 70 | 181 | | | 170 | MT8 -a -b | 24.65 | 0.175 |
| LMZ8-I-315 | | | 2400 | 45*.48*.50.55 56.60.63.65 | | | 315 | 135 | | | 34.13 | 0.374 |
| LMZ9-I-315 | 1800 | 3550 | | 50*.55*.56*.60.63 65.70.71.75.80 | 80 | 208 | | | 200 | MT9 -a -b | 41.67 | 0.45 |
| LMZ9-I-400 | | | 1900 | 50*.55*.56*.60.63 65.70.71.75.80 | | | 400 | 170 | | | 65.61 | 1.259 |
| LMZ10-I-400 | 2800 | 5600 | | 60*.63*.65*.70.71 75.80.85.90.95.100 | 90 | 230 | | | 230 | MT10 -a -b | 74.53 | 1.4 |
| LMZ10-I-500 | | | 1500 | 60*.63*.65*.70.71 75.80.85.90.95.100 | | | 500 | 210 | | | 110.6 | 3.427 |
| LMZ11-I-500 | 4500 | 9000 | | 70*.71*.75*.80*.85* 90.95.100.110.120 | 100 | 260 | | | 260 | MT11 -a -b | 121.7 | 3.715 |
| LMZ12-I-630 | 6300 | 12500 | 1200 | 80*.85*.90*.95* 100.110.120.125.130 | 115 | 297 | 630 | 265 | 300 | MT12 -a -b | 213.7 | 10.24 |
| LMZ13-I-710 | 11200 | 20000 | 1050 | 90*.95*.100*.110*.120* 125*.130.140.150 | 125 | 323 | 710 | 300 | 360 | MT13 -a -b | 341.6 | 19.99 |
| LMZ14-I-800 | 12500 | 25000 | 950 | 100*.110*.120*.125* 130*.140*.150.160 | 135 | 343 | 800 | 340 | 400 | MT14 -a -b | 510.1 | 39.36 |

注：1、质量、转动惯量是按材料为铸钢、L推荐、最大轴孔计算的近似值
2、带*号轴孔直径可用于Z、J型轴孔。
3、a、b为两种弹性材料硬度代号。