

◇ 结构特点

蛇形弹簧联轴器属于一种结构先进的金属弹性变刚度联轴器，它靠蛇形弹簧嵌入两半联轴节的齿槽内来传递扭矩，主要由两个半联轴节，两个半外罩，两个密封圈及蛇形弹簧片组成。

• 工作原理与使用寿命

联轴器以蛇形弹簧片轴向嵌入两半联轴节的齿槽内，来实现主动轴与从动轴的联接。运转时，是靠主动端齿面对簧片的周向作用力带动从动端，来传递扭矩，如此在很大程度上避免了共振现象发生，且簧片在传递扭矩时所产生的弹性变形，使机械系统能获得较好的减振效果，其平均减振率达36%以上。蛇形弹簧片采用优质弹簧钢制造经严格的加工、处理，具有良好的机械系性能，使联轴器的使用寿命比非金属弹性元件联轴器大为延长。

• 传递效率高，起动安全

传动效率可达99.47%，其短时超载能力为额定扭矩的两倍，运行安全可靠，

• 结构简单，拆装方便

零件少，体积小，重量轻，蛇形弹簧一般由2至4件组成，使拆装，维修比其它联轴器成为方便。

◇ Design Feature

Snake elastic coupling a kind of metal elastic rigidity coupling with advanced structure, composed by 2 half-coupling, 2 half-outer casing housing, 2 seal rings and snake springs.

• Operating principle and useful life

Snake springs are embedded on axial into 2 half-coupling's a lveolus, so that connection between drive and driven shaft comes true. The axial power from drive end working on tooth flanks drive the driven end, so torque can be transferred, at the same time, resonance phenomenon avoided on large degree. At the same time, the machinery system can get well vibration reduction by elastic deformation of springs when torque is being transferred; vibration reduction can reach to 36% on average. Snake springs are manufactured by high grade spring steel from strike machining and dealing with. It has well mechanical behavior. This kind coupling useful life is longer than other no-metal elastic part couplings.

• High transfer efficiency and safety starting

Transfer efficiency can reach to 99.47%, it can safe function on 2 times normal torque at fast over loading.

• Simple structure, it is convenient for disassemble.

Snake spring coupling composed by 2 to 4 parts, it is light with little parts and little volume. It is convenient for disassemble and revising than other coupling.

◇ 联轴器的标记

JS6型蛇形弹簧联轴器:

主动端: J1型轴孔, A型键槽, $d=50\text{mm}$, $L=76\text{mm}$

从动端: J1型轴孔, B型键槽, $d=63\text{mm}$, $K=76\text{mm}$

标记为: JS6联轴器, $\frac{J150 \times 76}{J1B63 \times 76}$ JB/T8896-2000

◇ Coupling mark

JS type snake spring coupling

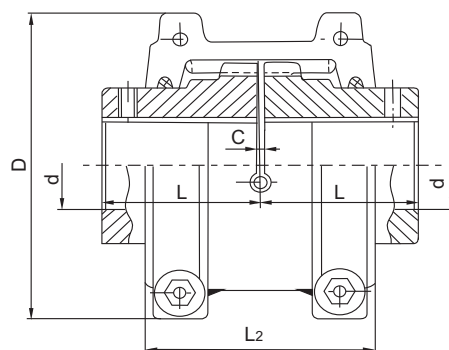
Drive end: J1 type shaft hole, A type keyway,
 d is 50mm, L is 76mm.

Drive ends: J1 type shaft hole, B type keyway,
 d is 63mm, L is 76mm

Marks as: JS6 coupling, $\frac{J150 \times 76}{J1B63 \times 76}$ JB/T8896-2000

◇ JS型 — 罩壳径向安装型(基本型)

JS Type— Housing fixed on Radial (this is basic type)



JS系列蛇形弹簧联轴器 (JB/T8869-2000)
JS series snake spring coupling (JB/T8869-2000)

JS系列蛇形弹簧联轴器 (JB/T8869-2000)

JS Grid coupling (JB/T8869-2000)

◇JS型蛇形弹簧联轴器主要尺寸和参数

Main sizes and parameters of JS snake spring coupling

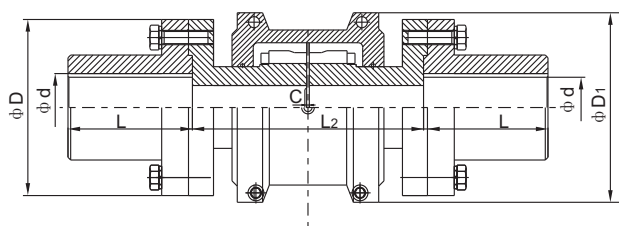
| 型号 Type | 公称扭矩 Nominal torsion | 许用转速 Limited rotational speed | 轴孔直径 d Diameter of the shaft hole | 轴孔长度 Length of the shaft hole L | L2 | D | D1 | 间隙 Clearance C | 重量 Weight | 转动惯量 Rotate inertia J | 润滑油 Lubrica- ting oil | |
|------------|----------------------------|--|---|--|-----|------|-----|----------------------|--------------|--------------------------------|-----------------------------|-------|
| | N.m | rpm | mm | | | | | | Kg | Kg.m ² | Kg | |
| JS1 | 45 | 4500 | 18.19.20.22.24.25.28 | 47 | 66 | 95 | - | 3 | 1.91 | 0.00141 | 0.0272 | |
| JS2 | 140 | | 22.24.25.28.30.32.35 | | 68 | 105 | | | 2.59 | 0.00223 | 0.0408 | |
| JS3 | 224 | | 25.28.30.35.38.40.42 | 50 | 70 | 115 | | | 3.36 | 0.00327 | 0.0544 | |
| JS4 | 400 | | 32.35.38.40.42.45.48.50 | 60 | 80 | 130 | | | 5.45 | 0.00727 | 0.068 | |
| JS5 | 630 | 4350 | 40.42.45.48.50.55.56 | 63 | 92 | 150 | | | 7.26 | 0.1009 | 0.0862 | |
| JS6 | 900 | 4125 | 48.50.55.56.60.63.65 | 76 | 95 | 160 | | | 10.44 | 0.0185 | 0.113 | |
| JS7 | 1800 | 3600 | 55.56.60.63.65.70.71.75.80 | 89 | 116 | 190 | | | 17.7 | 0.00451 | 0.172 | |
| JS8 | 3150 | 3600 | 65.70.71.75.80.85.90.95 | 98 | 122 | 210 | | | 25.42 | 0.0787 | 0.254 | |
| JS9 | 5600 | 2440 | 75.80.85.90.95.100.110 | 120 | 155 | 250 | 6 | 5 | 42.22 | 0.178 | 0.426 | |
| JS10 | 8000 | 2250 | 85.90.95.100.110.120 | 127 | 162 | 270 | | | 54.45 | 0.27 | 0.508 | |
| JS11 | 12500 | 2025 | 90.95.100.110.120.125.130.140 | 149 | 192 | 310 | | | 81.27 | 0.514 | 0.735 | |
| JS12 | 18000 | 1800 | 110.120.125.130.140.150.160.170 | 162 | 195 | 346 | | | 121 | 0.989 | 0.908 | |
| JS13 | 25000 | 1650 | 120.125.130.140.150.160.170.180.190.200 | 184 | 201 | 384 | | | 178 | 1.85 | 1.135 | |
| JS14 | 35500 | 1500 | 140.150.160.170.180.190.200 | 183 | 271 | 450 | | | 391 | 234.26 | 3.49 | 1.952 |
| JS15 | 50000 | 1350 | 160.170.180.190.200.220.240 | 198 | 279 | 500 | | | 431 | 316.69 | 5.82 | 2.815 |
| JS16 | 63000 | 1225 | 180.190.200.220.240.260.280 | 216 | 304 | 566 | | | 487 | 448.1 | 10.4 | 3.496 |
| JS17 | 90000 | 1100 | 200.220.240.250.260.280.300 | 239 | 322 | 630 | 555 | 619.71 | 18.3 | 3.76 | | |
| JS18 | 125000 | 1050 | 240.250.260.280.300.320 | 260 | 356 | 675 | 608 | 776.34 | 26.1 | 4.4 | | |
| JS19 | 160000 | 900 | 280.300.320.340.360 | 280 | 355 | 756 | 660 | 1058.27 | 43.5 | 5.63 | | |
| JS20 | 224000 | 820 | 300.320.340.360.380 | 305 | 432 | 845 | 751 | 13 | 1425.56 | 75.5 | 10.53 | |
| JS21 | 315000 | 730 | 320.340.360.380.400.420 | 325 | 490 | 920 | 822 | | 1786.49 | 113 | 16.07 | |
| JS22 | 400000 | 680 | 340.360.380.400.420.440.450 | 345 | 546 | 1000 | 905 | | 2268.64 | 175 | 24.06 | |
| JS23 | 500000 | 630 | 360.380.400.420.440.450.460.480 | 368 | 648 | 1087 | - | | 2950.82 | 339 | 33.82 | |
| JS24 | 630000 | 580 | 400.420.440.450.460 | 401 | 698 | 1180 | | | 3836.3 | 524 | 50.17 | |
| JS25 | 800000 | 540 | 420.440.450.460.480.500 | 432 | 762 | 1260 | | | 4686.19 | 711 | 67.24 | |

注: 1.若选择GB/T3852轴孔形式, 应与本公司技术部门协商; 2.重量、转动惯量按无孔计算。

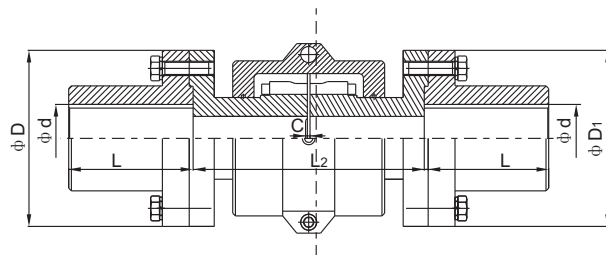
Note: 1. Please consult with our technology department when you select shaft hole as GB/T3852;

2. Calculating weight and running inertia as no hole status.

◇ JSS型—双法兰联接型 JSS type—double flange connection



JSS1型-JSS13型
Design JSS1-JSS13



JSS14型-JSS19型
Design JSS14-JSS19

◇ JSS型双法兰联接蛇形弹簧联轴器主要尺寸和参数

Main sizes and parameters of JSS type double-flange connecting snake spring coupling

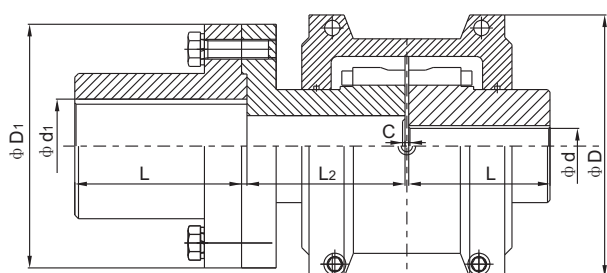
| 型号 Type | 公称扭矩 Nominal torsion | 许用转速 Limited rotational speed | 轴孔直径 d Diameter of the shaft hole | 轴孔长度 Length of the shaft hole L | 两轴端距离L2 space between L2 ends | | D | D1 | C | 重量 Weight | 润滑油 Lubrica- ting oil |
|------------|----------------------------|--|---|--|----------------------------------|---------------|-----|-------|--------|--------------|-----------------------------|
| | | | | | 最小 Least | 最大 Maximum | | | | | |
| | N.m | rpm | mm | | | | | | | Kg | |
| JSS1 | 45 | 3600 | 18.19.20.22.24.25.28.30.32.35 | 35 | 89 | 203 | 97 | 86 | 5 | 3.86 | 0.0272 |
| JSS2 | 140 | | 22.24.25.28.30.32.35.38.40.42 | 42 | | 216 | 106 | 94 | | 5.266 | 0.0408 |
| JSS3 | 224 | | 25.28.30.32.35.38.40.42.45.48.50.55.56 | 54 | | | 114 | 112 | | 8.44 | 0.0544 |
| JSS4 | 400 | | 32.35.38.40.42.45.48.50.55.60.63.65 | 60 | 111 | 135 | 125 | 12.53 | | 0.068 | |
| JSS5 | 630 | | 40.42.45.48.50.55.56.60.63.65.70.71.75.80 | 73 | 127 | 148 | 144 | 19.61 | | 0.0682 | |
| JSS6 | 900 | | 48.50.55.56.60.63.65.70.71.75.80.85 | 80 | | 159 | 152 | 24.56 | | 0.1135 | |
| JSS7 | 1800 | | 55.56.60.63.65.70.71.75.80.85.90.95 | 89 | 184 | 190 | 178 | 39.4 | 0.173 | | |
| JSS8 | 3150 | | 65.70.71.75.80.85.90.95.100.110 | 102 | | 211 | 209 | 60.38 | 0.254 | | |
| JSS9 | 5600 | 2440 | 75.80.85.90.95.100.110.120.125.130 | 90 | 203 | 251 | 250 | 6 | 98.97 | 0.427 | |
| JSS10 | 8000 | 2250 | 80.85.90.95.100.110.120.125.130.140.150 | 104 | 210 | 270 | 276 | | 137.58 | 0.508 | |
| JSS11 | 12500 | 2025 | 90.95.100.110.120.125.130.140.150.160.170 | 120 | 246 | 308 | 319 | | 196.58 | 0.735 | |
| JSS12 | 18000 | 1800 | 110.120.125.130.140.150.160.170.180.190 | 135 | 257 | 346 | 346 | | 296.69 | 0.908 | |
| JSS13 | 25000 | 1650 | 120.125.130.140.150.160.170.180.190.200 | 152 | 267 | 384 | 386 | 340.5 | 1.135 | | |
| JSS14 | 35500 | 1500 | 100.110.120.125.130.140.150 160.170.180.190.200.220.240.250 | 173 | 345 | 371 | 453 | 436 | 10 | 442.7 | 1.95 |
| JSS15 | 50000 | 1350 | 110.120.125.130.140.150.160.170 180.190.200.220.240.250.260.280 | 186 | 356 | 406 | 501 | 457 | | 552.06 | 2.81 |
| JSS16 | 63000 | 1220 | 125.130.140.150.160.170.180.190 200.220.240.250.260.270.280.290.300.320 | 220 | 384 | 444 | 566 | 527 | | 836.27 | 3.49 |
| JSS17 | 90000 | 1100 | 100.110.120.125.130.140.150 160.170.180.190.200.220.240 250.260.280.300.320 | 249 | 400 | 491 | 630 | 519 | | 1099.58 | 3.77 |
| JSS18 | 125000 | 1050 | 110.120.125.130.140.150.160 170.180.190.200.220.240.250 260.280.300.320.340.360 | 276 | 411 | 508 | 676 | 660 | | 1479.59 | 4.4 |
| JSS19 | 160000 | 900 | 110.120.125.130.140.150.160 170.180.190.200.220.240.250 260.280.300.320.340.360.380 | 305 | 444 | 567 | 757 | 711 | | 1856.86 | 5.63 |

注：.重量按无孔计算。Note: Calculating weight as no holes status.

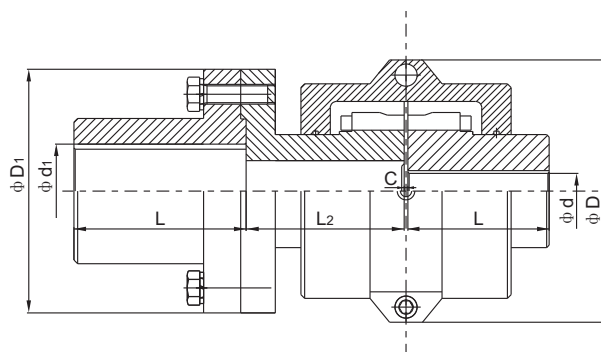
JSD型单法兰联接蛇形弹簧联轴器 (JB/T8869-2000)

JSD Grid coupling flange (JB/T8869-2000)

◇JSD型—单法兰联接型 JSD type—single flange connection



JSD1型-JSD13型
Design JSD1-JSD13



JSD14型-JSD19型
Design JSD14-JSD19

◇JSD型单法兰联接蛇形弹簧联轴器主要尺寸和参数

Main sizes and parameters of JSD type single flange connecting snake spring coupling

| 型号 Type | 公称扭矩 Nominal torsion | 许用转速 Limited rotational speed | 轴孔直径 d Diameter of the shaft hole | | 轴孔长度mm Length of the shaft hole | | 两轴端距离L2 space between L2 ends | | D | D1 | 间隙 clearance C | 重量 Weight | 润滑油 Lubrica- ting oil |
|------------|----------------------------|--|--------------------------------------|------------------------------|------------------------------------|-----------|----------------------------------|---------------|-----|-----|----------------------|--------------|-----------------------------|
| | | | 联接凸缘d1 Connecting flange | 半联轴器d half shaft coupling | 法兰L flange | 半联轴 器L | 最小 Least | 最大 Maximum | | | | | |
| | N.m | rpm | mm | | | | | | | | | Kg | |
| JSD1 | 45 | 3600 | 18.19.20.22.24 | | 35 | 47 | 45 | 102 | 97 | 86 | 3 | 2.9 | 0.0272 |
| | | | 25.28 | | | | | | | | | | |
| | | | 30.32.35 | - | | | | | | | | | |
| JSD2 | 140 | | 22.24.25.28 | | 41 | 50 | 45 | 109 | 106 | 94 | 3 | 3.9 | 0.0408 |
| | | | 30.32.35.38 | 30.32.35 | | | | | | | | | |
| | | | 40.42 | - | | | | | | | | | |
| JSD3 | 224 | | 25.28.30.32.35.38 | | 54 | 60 | 45 | 109 | 114 | 113 | 3 | 5.9 | 0.0544 |
| | | | 40.42.45.48.50.55.56 | 40.42 | | | | | | | | | |
| JSD4 | 400 | | 32.35.38 | | 60 | 60 | 56 | 109 | 115 | 125 | 3 | 8.98 | 0.068 |
| | | | 40.42.45.48.50.55.56 | 40.42.45 | | | | | | | | | |
| | | | 60.63.65 | 48.50 | | | | | | | | | |
| JSD5 | 630 | | 40.42.45.48 | | 73 | 63 | 64 | 166 | 148 | 114 | 3 | 13.5 | 0.0862 |
| | | | 50.55.56 | | | | | | | | | | |
| | | | 60.63.65.70.71.75.80 | - | | | | | | | | | |
| JSD6 | 900 | | 48.50.55.56 | | 79 | 76 | 64 | 166 | 159 | 152 | 3 | 17.5 | 0.113 |
| | | | 60.63.65.70.71.75 | 60.63.65 | | | | | | | | | |
| | | | 80.85 | - | | | | | | | | | |

◇JSD型单法兰联接型联轴器主要尺寸和参数

Main sizes and parameters of JSD type single flange connecting coupling

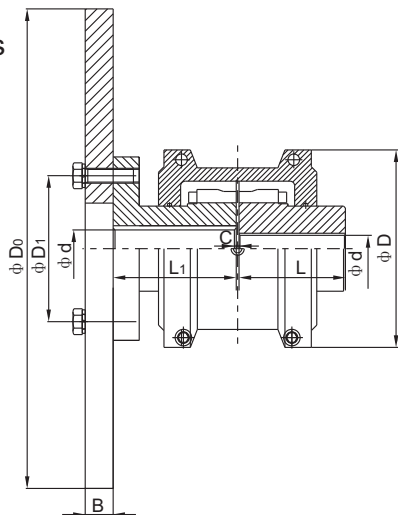
| 型号 Type | 公称扭矩 Nominal torsion | 许用转速 Limited rotational speed | 轴孔直径 d Diameter of the shaft hole | | 轴孔长度mm Length of the shaft hole | | 两轴端距离L2 space between L2 ends | | D | D1 | 间隙 clearance C | 重量 Weight | 润滑油 Lubrica- ting oil |
|------------|----------------------------|---|---|------------------------------|------------------------------------|-------|----------------------------------|---------------|-----|-----|----------------------|--------------|-----------------------------|
| | | | 联接凸缘d1 Connecting flange | 半联轴器d half shaft coupling | 法兰L flange | 半联轴器L | 最小 Least | 最大 Maximum | | | | | |
| | N.m | rpm | mm | | | | | | | | | Kg | |
| JSD7 | 1800 | 3600 | 55.56.60.63.65.70.71.75 | | 88 | 88 | 93 | 204 | 190 | 178 | 3 | 28.6 | 0.172 |
| | | | 80.85.90.95 | 80 | | | | | | | | | |
| JSD8 | 3150 | | 65.70.71.75.80.85.90.95 | | 98 | 100 | | | | | | 211 | 210 |
| | | 100.110 | - | | | | | | | | | | |
| JSD9 | 5600 | 2440 | 80.85.90.95 | | 120 | 90 | 103 | 205 | 251 | 251 | 5 | 70.8 | 0.426 |
| | | 100.110.120.125 | 100.110 | | | | | | | | | | |
| | | 130 | - | | | | | | | | | | |
| JSD10 | 8000 | 2250 | 90.95 | | 127 | 104 | 106 | | | | 6 | 95.7 | 0.508 |
| | | 100.110.120.125 | 100.110.120 | | | | | | | 270 | | 276 | |
| | | 130.140.150 | - | | | | | | | | | | |
| JSD11 | 12500 | 2025 | 95.100.110.120.125 | | 150 | 120 | 125 | | | | 6 | 139 | 0.735 |
| | | 130.140.150 | 130.140 | | | | | | | 308 | | 319 | |
| | | 160.170 | - | | | | | | | | | | |
| JSD12 | 18000 | 1800 | 110.120.125.130.140.150 | | 162 | 134 | 130 | | | | 10 | 190 | 0.907 |
| | | 160.170.180 | 160.170 | | | | | | | 346 | | 346 | |
| | | 190 | - | | | | | | | | | | |
| JSD13 | 25000 | 1650 | 120.125.130.140.150.160.170.180.190.200 | | 152 | 184 | 135 | | 384 | 359 | | 259 | 1.13 |
| JSD14 | 35500 | 1500 | 100.110.120.125.130.140.150.160.170.180 | | 173 | 183 | 175 | 186 | 453 | 426 | | 342.77 | 1.95 |
| | | 190.300.220 | 190.200 | | | | | | | | | | |
| | | 240.250 | - | | | | | | | | | | |
| JSD15 | 50000 | 1350 | 110.120.125 | 120.125 | 186 | 198 | 180 | 205 | 501 | 457 | | 434.48 | 2.81 |
| | | 130.140.150.160.170.180.190.200.220 | - | | | | | | | | | | |
| | | 240.250.260.280 | - | | | | | | | | | | |
| JSD16 | 63000 | 1220 | 125 | - | 220 | 216 | 194 | 224 | 566 | 527 | 10 | 641.96 | 3.49 |
| | | 130.140.150.160.170.180.190.200.220 | - | | | | | | | | | | |
| | | 240.250.260 | 240.250 | | | | | | | | | | |
| | | 280.300.320 | - | | | | | | | | | | |
| JSD17 | 90000 | 1100 | 100.110.120.125 | - | 249 | 239 | 202 | 247 | 630 | 590 | | 859.88 | 3.77 |
| | | 130.140.150.160.170.180.190.200.220.240.250.260 | - | | | | | | | | | | |
| | | 280.300.320 | 280 | | | | | | | | | | |
| JSD18 | 125000 | 1050 | 110.120.125 | - | 276 | 259 | 207 | 267 | 676 | 660 | 10 | 1127.71 | 4.4 |
| | | 130.140.150 | 150 | | | | | | | | | | |
| | | 160.170.180.190.200.220.240.250.260 | - | | | | | | | | | | |
| | | 280.300.320 | 280.300 | | | | | | | | | | |
| | | 340.360 | - | | | | | | | | | | |
| JSD19 | 160000 | 900 | 110.120.125.130.140.150 | - | 305 | 279 | 224 | 289 | 757 | 711 | | 12.4 | 5.63 |
| | | 160.170.180 | 170.180 | | | | | | | | | | |
| | | 190.200.220.240.250.260.280.300.320 | - | | | | | | | | | | |
| | | 340.360.380 | - | | | | | | | | | | |

注：重量按无孔计算 Note: Calculating weight as no holes status.

JSP型带制动盘型联轴器 (JB/T8869-2000)

JSP type coupling with brake plate (JB/T8869-2000)

◇JSP型—带制动盘 JSP type—with brake disks



JSP型带制动盘型联轴器 (JB/T8869-2000)

◇JSP型带制动盘型联轴器主要尺寸和参数

JSP type coupling with brake plate (JB/T8869-2000)

Main sizes and parameters of JSP type coupling with brake plate

| 型号 Type | 公称扭矩 Nominal torsion | 许用转速 Limited rotational speed | 制动盘 brake disk | | 轴孔直径d Diameter of the shaft hole | 两轴端距离L2 space between L2 ends | | D | D1 | C | 重量 Weight | 润滑油 Lubricating oil | |
|------------|----------------------------|--|-------------------|-----|---|----------------------------------|-----|-----|-----|---|--------------|------------------------|--------|
| | | | 直径D0 | 宽度B | | L | L1 | | | | | | |
| | N.m | rpm | mm | | | | | | | | | Kg | |
| JSP1 | 200 | 3800 | 315 | 30 | 20.22.24.25.28.30.35.38 40.42.45.48.50 | 63 | 88 | 150 | 125 | 3 | 9.579 | 0.086 | |
| JSP2 | 315 | 3200 | | | 25.28.30.32.35.38.40.42.45 48.50.55.56.60.63 | 76 | | 162 | 133 | | 12.349 | 0.1135 | |
| JSP3 | 630 | 2800 | | | 30.32.35.38.40.42.45.48.50 55.56.60.63.65.70.71.75 | 88 | | 193 | 152 | | 19.794 | 0.1725 | |
| JSP4 | 1000 | 2700 | 400 | | 35.38.40.42.45.48.50.55.56 60.63.65.70.71.75.80.85 | 98 | 119 | 212 | 179 | 6 | 28.42 | 0.254 | |
| JSP5 | 1800 | 2400 | | | 40.42.45.48.50.55.56.60.63 65.70.71.75.80.85.90.95.100 | 120 | | 250 | 216 | | 47.76 | 0.427 | |
| JSP6 | 2800 | 2200 | 450 | | 50.55.56.60.63.65.70.71.75 80.85.90.95.100.110 | 127 | | 146 | 270 | | 241 | 64.922 | 0.5085 |
| JSP7 | 4500 | 2000 | 500 | | 60.63.65.70.71.75.80.85.90 95.100.110.120.125 | 150 | | 149 | 308 | | 276 | 91.35 | 0.729 |
| JSP8 | 6300 | 1800 | 560 | | 70.71.75.80.85.90.95.100.110 120.125.130.140.150 | 162 | | 152 | 346 | | 295 | 131.66 | 0.908 |
| JSP9 | 9000 | 1600 | 630 | | 80.85.90.95.100.110.120.125 130.140.150.160.170.180 | 184 | | 158 | 384 | | 330 | 184.798 | 1.135 |
| JSP10 | 12500 | 1500 | 800 | | 90.95.100.110.120.125.130 140.150.160.170.180.190.200 | 182 | | 183 | 453 | | 368 | 253.332 | 1.9068 |
| JSP11 | 16000 | 1300 | 900 | | 100.110.120.125.130.140.150 160.170.180.190.200 | 198 | | 198 | 500 | | 400 | 336.414 | 2.8148 |

注：重量按无孔计算 Note: Calculating weight as no holes status.