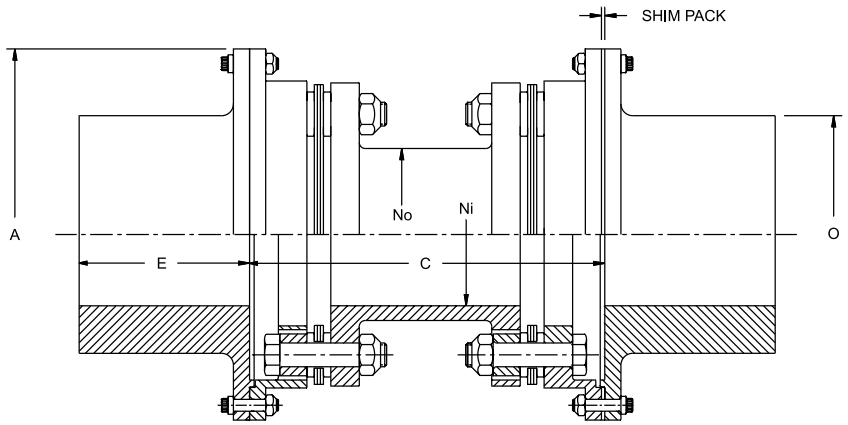
# KS Series with HT Disc Packs




**Conversion Factors**
(U.S. Customary to Metric)

| | | |
|---|---|---|
| 1 lb (mass) | = | 0.4536 kg |
| 1 inch | = | 25.4 mm |
| 1 in-lb | = | 0.113 Nm |
| 1 HP | = | 0.7457 kW |
| 1 lb-in$^2$ | = | 0.000293 kg-m$^2$ |

## Selection Data

| Size | Max.[1] Continuous Rating HP/100 RPM | Max.[1] Torque Rating | | Maximum Speed RPM | Max. Bore (in) | Total[2] Weight (lbs) | Total[2] WR$^2$ (lb-in$^2$) | Total Stiffness (lb-in/radx10$^6$) | Spacer Tube/in | | | Size |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Continuous (in-lb) | Peak (in-lb) | | | | | | K (lb-in/radx10$^6$) | Weight (lbs) | WR$^2$ (lb-in) | |
| **103** | 9.5 | 6000 | 8000 | 14200 | 2.88 | 22.0 | 61 | 0.3 | 11.2 | .24 | .27 | **103** |
| **153** | 32.4 | 20400 | 27200 | 12500 | 3.88 | 41.4 | 187 | 1.1 | 33.4 | .40 | .80 | **153** |
| **204** | 85.7 | 54000 | 72000 | 11100 | 4.63 | 69.1 | 420 | 2.8 | 111 | .80 | 2.66 | **204** |
| **254** | 124 | 78000 | 104000 | 9900 | 5.50 | 99.8 | 893 | 4.2 | 180 | .78 | 4.30 | **254** |
| **304** | 212 | 133500 | 178000 | 8700 | 6.50 | 152 | 1770 | 8.0 | 336 | 1.17 | 8.06 | **304** |
| **354** | 357 | 225000 | 300000 | 7500 | 7.50 | 240 | 3730 | 14 | 709 | 1.96 | 17.0 | **354** |
| **404** | 512 | 322500 | 430000 | 6600 | 9.00 | 344 | 6830 | 21 | 1020 | 2.21 | 24.3 | **404** |
| **454** | 607 | 383000 | 510000 | 6000 | 9.75 | 455 | 11400 | 27 | 1550 | 2.54 | 37.0 | **454** |
| **504** | 857 | 540000 | 720000 | 5600 | 10.75 | 576 | 16600 | 38 | 2620 | 3.67 | 62.6 | **504** |
| **554** | 1200 | 758000 | 1010000 | 4800 | 12.00 | 792 | 28400 | 50 | 3120 | 3.89 | 74.7 | **554** |
| **604** | 1570 | 990000 | 1320000 | 4600 | 13.00 | 992 | 40700 | 69 | 4800 | 5.21 | 115 | **604** |
| **705** | 3590 | 2265000 | 3020000 | 3860 | 15.75 | 1690 | 102000 | 160 | 12700 | 9.43 | 304 | **705** |
| **805** | 5500 | 3465000 | 4620000 | 3450 | 18.00 | 2440 | 185000 | 240 | 21200 | 12.6 | 507 | **805** |
| **905** | 6190 | 3900000 | 5200000 | 3100 | 20.00 | 3180 | 304000 | 300 | 27500 | 11.7 | 658 | **905** |

## Dimensions and Misalignment Capacities

| Size | A (in) | No (in) | Ni (in) | Typical Bore (in) | Typical E (in) | Typical O (in) | Min. C (in) | Misalignment Capacities | | Size |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Axial (in) | Angular (degrees) | |
| **103** | 5.44 | 2.25 | 2.00 | 2.0 | 1.94 | 3.81 | 4.63 | ± .080 | 0.20 | **103** |
| **153** | 6.81 | 3.00 | 2.69 | 2.5 | 2.38 | 4.81 | 5.75 | ± .115 | 0.25 | **153** |
| **204** | 7.81 | 3.88 | 3.38 | 3.0 | 3.00 | 5.75 | 6.38 | ± .100 | 0.20 | **204** |
| **254** | 9.31 | 4.88 | 4.50 | 3.5 | 3.56 | 6.75 | 6.50 | ± .120 | 0.20 | **254** |
| **304** | 10.62 | 5.50 | 5.00 | 4.0 | 4.12 | 7.75 | 7.75 | ± .140 | 0.20 | **304** |
| **354** | 12.28 | 6.25 | 5.50 | 4.5 | 4.62 | 9.00 | 9.25 | ± .160 | 0.20 | **354** |
| **404** | 13.94 | 7.00 | 6.25 | 5.0 | 5.25 | 10.12 | 10.88 | ± .180 | 0.20 | **404** |
| **454** | 15.56 | 8.00 | 7.25 | 5.5 | 5.88 | 11.38 | 11.25 | ± .200 | 0.20 | **454** |
| **504** | 16.69 | 8.75 | 7.75 | 6.0 | 6.38 | 12.25 | 12.25 | ± .230 | 0.20 | **504** |
| **554** | 18.69 | 9.25 | 8.25 | 6.5 | 7.00 | 13.62 | 13.75 | ± .250 | 0.20 | **554** |
| **604** | 20.00 | 10.00 | 8.75 | 7.0 | 7.62 | 14.62 | 14.63 | ± .270 | 0.20 | **604** |
| **705** | 24.00 | 12.25 | 10.38 | 8.5 | 9.00 | 17.50 | 17.88 | ± .230 | 0.15 | **705** |
| **805** | 26.88 | 13.75 | 11.50 | 9.5 | 10.00 | 19.50 | 20.13 | ± .260 | 0.15 | **805** |
| **905** | 30.00 | 16.00 | 14.25 | 11.0 | 11.50 | 22.00 | 21.38 | ± .340 | 0.15 | **905** |

To account for off-design fluctuating or continuous torques, an experience or application factor should be used. API 671 and KOP-FLEX recommends 1.5 minimum for general turbomachinery applications.

Mass elastic data based on couplings with typical bores and 18.00” shaft separation up to #705, and min. C for #805 and #905; design and data can be changed to meet specific requirements.

All major components are made of carbon steel.