

# UNIVERSAL JOINTS

**FORGED/CAST  
STEEL**

**UJNS/UJNL SERIES  
BOS-TRONG®**



A BOS-trong® joint is composed of two yokes and a center kit. BOS-trong joints may be purchased assembled, or as separate yokes and center kits. Individually boxed.

**AVAILABLE IN TWO SIZES  
EQUIPPED WITH NEEDLE BEARINGS  
PRECISION MACHINED FOR LONG, SMOOTH OPERATION  
CONTINUOUS OR INTERMITTENT SERVICE  
HIGH CAPACITY WITH MINIMUM SWING DIAMETER  
BROAD RANGE OF HOLE DIAMETERS  
AVAILABLE WITH ROUND, SQUARE OR HEXAGON HOLES  
COMPLETE WITH KEYWAY AND SETSCREW  
REPLACEABLE CENTER KITS  
FITTING FOR LUBRICATION**

## SELECTION

Universal Joints are used in many different types of applications and under a wide variety of operating conditions. No convenient method can be presented for determining ratings for all possible circumstances. Performance will be affected by vibration, shock loading, high temperature, dusty environment, etc.

The simplest solution to this problem is to provide approximate ratings of universal joints operating at various angles and speeds under normal service conditions.

The suggested ratings are for general use in applications where two joints are arranged at equal angles with the bearing pins of the intermediate yokes in line with each other.

Service torque ratings of the two sizes of BOS-trong® Needle Bearing universals are listed in tables. Ratings for intermediate speeds and/or angles not shown may be found by interpolation.

## LOAD DATA

APPROXIMATE TORQUE RATINGS (LB. INS.)

| Speed<br>RPM | UJNS Series   |      |      |      |      |      | UJNL Series   |      |      |      |      |      |
|--------------|---|------|------|------|------|------|---|------|------|------|------|------|
|              | Operating Angle*—Degrees (Deviation from Straight Line) |      |      |      |      |      | Operating Angle†—Degrees (Deviation from Straight Line) |      |      |      |      |      |
|              | Up to<br>3°   | 5°   | 8°   | 12°  | 20°  | 30°  | Up to<br>3°   | 5°   | 8°   | 12°  | 20°  | 30°  |
| 1800         | 610   | 515  | 440  | —    | —    | —    | 845   | 710  | 610  | —    | —    | —    |
| 1200         | 700   | 590  | 505  | 435  | —    | —    | 965   | 815  | 695  | 600  | —    | —    |
| 900          | 770   | 650  | 555  | 480  | 365  | —    | 1060  | 895  | 765  | 660  | 500  | —    |
| 600          | 880   | 740  | 635  | 545  | 415  | 260  | 1210  | 1020 | 875  | 755  | 575  | 355  |
| 300          | 1110  | 935  | 800  | 690  | 525  | 325  | 1530  | 1290 | 1100 | 950  | 725  | 450  |
| 200          | 1270  | 1070 | 915  | 790  | 600  | 370  | 1750  | 1480 | 1260 | 1090 | 825  | 515  |
| 100          | 1600  | 1350 | 1150 | 995  | 755  | 470  | 2210  | 1860 | 1590 | 1370 | 1040 | 645  |
| 50           | 2020  | 1700 | 1450 | 1250 | 950  | 590  | 2780  | 2350 | 2000 | 1730 | 1310 | 815  |
| 25           | 2540  | 2140 | 1830 | 1580 | 1200 | 745  | 3500  | 2960 | 2530 | 2180 | 1650 | 1020 |
| 10           | 3450  | 2900 | 2480 | 2140 | 1630 | 1010 | 4760  | 4010 | 3430 | 2960 | 2250 | 1390 |

Non Operating Flex angle—90°

\*Maximum Angles (Momentary)—45°

†Maximum Angles (Momentary)—35°