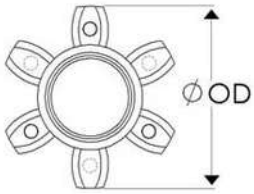
JD50/80-98R

Ruland JD50/80-98R, Jaw Coupling Spider, 98 Shore A Red, 3.125" (79.4 mm) OD, High Torque





Description

Ruland JD50/80-98R is a zero-backlash jaw coupling spider designed to fit Ruland hubs that have an 3.125" (79.4mm) OD. It is a component in a three-piece design consisting of two aluminum hubs and an elastomeric insert called the spider creating a lightweight low inertia coupling capable of speeds up to 8,000 RPM. This three-piece design allows for a highly customizable coupling that easily combines clamp or set screw hubs with inch, metric, keyed, and keyless bores. JD50/80-98R is made from polyurethane and has 98 Shore A hardness allowing for the highest torque capacity with limited compliance. Ruland jaw couplings have a balanced design for reduced vibration at high speeds. Hardware is metric and tests beyond DIN 912 12.9 standards for maximum torque capabilities. JD50/80-98R is RoHS3 and REACH compliant.

Product Specifications

Outer Diameter (OD)	3.125 in (79.4 mm)	**Rated Torque**	2,760 in-lb (311.84 Nm)
Angular Misalignment	0.8°	**Peak Torque**	5,520 in-lb (623.7 Nm)
Parallel Misalignment	0.008 in (0.20 mm)	**Torsional Stiffness**	1850 lb-in/Deg (209.02 Nm/Deg)
Moment of Inertia	0.217711 lb-in^2 (7.953 X 10^{-5} kg-m^2)	**Axial Motion**	0.060 in (1.52 mm)
Maximum Speed	8,000 RPM	**Full Bearing Support Required?**	Yes
Zero-Backlash?	Yes	**Approximate Assembly Force (lbf)**	850 lbf
Bearing Load at Max Parallel Misalignment (lbf)	85 lbf	**Weight (lbs)**	0.187700
Temperature	-10°F to 180°F (-23°C to 82°C)	**Material Specification**	Polyurethane 98 Shore A RED
Finish Specification	Plain	**Manufacturer**	Ruland Manufacturing
UPC	634529375976	**Country of Origin**	USA
Tariff Code	8483.60.8000	**UNSPC**	31163011
Note 1	Performance ratings are for guidance only. The user must determine suitability for a particular application.		
Note 2	Torque ratings for the couplings are based on the physical limitations/failure point of the spiders. Under normal/typical conditions the hubs are capable of holding up to the nominal torque of the spiders. In some cases especially when the smallest standard bores are used or where shafts are undersized slippage on the shaft is possible below the nominal torque of the spiders. Keyways are available to provide additional torque capacity in the shaft/hub connection when required. Please consult technical support for more assistance.		