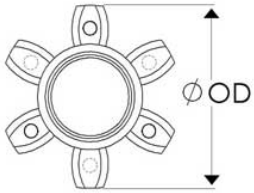
JD32/51-98R

Ruland JD32/51-98R, Jaw Coupling Spider, 98 Shore A Red, 2.000" (50.8mm) OD, High Torque





Description

Ruland JD32/51-98R is a zero-backlash jaw coupling spider designed to fit Ruland hubs that have an. It is a component in a three-piece design consisiting 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. JD32/51-98R is made from polyurethane and has 85 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. JD32/51-98R is RoHS3 and REACH compliant.

Product Specifications

Outer Diameter (OD)	2.000 in (50.8 mm)	**Rated Torque**	275 in-lb (31.08 Nm)
Angular Misalignment	0.8°	**Peak Torque**	550 in-lb (62.3 Nm)
Parallel Misalignment	0.005 in (0.13 mm)	**Torsional Stiffness**	250.0 lb-in/Deg (28.57 Nm/Deg)
Moment of Inertia	0.02190 lb-in^2 (6.409 X 10^{-6} kg-m^2)	**Axial Motion**	0.050 in (1.27 mm)
Maximum Speed	8,000 RPM	**Full Bearing Support Required?**	Yes
Zero-Backlash?	Yes	**Weight (lbs)**	0.046500
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	634529068915	**Country of Origin**	USA
Tariff Code	8483.60.8000	**UNSPC**	31163011
Recommended Gap Between Hubs	0.050 in (1.25 mm)		
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.		
Prop 65	This product does not require a warning.		

Installation Instructions

1. Align the bores of the jaw coupling hubs on the shafts that are to be joined and determine if the misalignment parameters are within the limits of the coupling.(*Angular Misialignment:* 0.8 deg, *Parallel Misalignment*: 0.005 in (0.13 mm), *Axial Motion*: 0.05 in (1.27 mm))
2. Fully tighten the screw(s) on the first hub to the recommended seating torque using a hex torque wrench.
3. Insert a spider into the jaws of the first hub until the raised points contact the base of the hub.
4. Insert the jaws of the second hub into the spider openings until the raised points contact the base of the second hub. Some force will be required to insert the second hub. This is normal.
5. Assure that a gap is maintained between the two hubs so there is no metal to metal contact. Fully tighten the screw(s) on the second hub to the recommended seating torque.