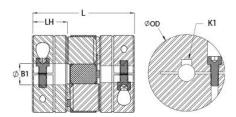




MJCC51-20-A

Ruland MJCC51-20-A, 20mm Jaw Coupling Hub, Aluminum, Clamp Style With Keyway, 50.8mm OD, 20.8mm Length





Description

Ruland MJCC51-20-A is a clamp zero-backlash jaw coupling hub with a 20mm bore, 6mm keyway, 50.8mm OD, and 20.8mm length. 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. Spiders are available in three durometers allowing the user to tailor coupling performance to their application. 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. MJCC51-20-A is machined from bar stock that is sourced exclusively from North American mills and is RoHS3 and REACH compliant. It is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

| selection Maximum Speed 8,000 RPM Moment of Inertia 4.21 x 10 ⁻⁵ kg-m² Full Bearing Support Required? Yes Recommended Inserts JD32/51-98R, JD32/51-92 Yes Zero-Backlash? Yes Balanced Design Yes Fail Safe? Yes Weight (lbs) 0.238500 Temperature -10°F to 180°F (-23°C to 82°C) Material Specification 2024-T351 Aluminum Bar Finish Bright Finish Specification Bright, No Plating Manufacturer Ruland Manufacturing Recommended Gap Between Hubs Country of Origin USA UPC 634529109052 UNSPC 31163011 Tariff Code 8483.60.8000 Note 1 Stainless steel hubs are available upon request. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular applic Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the spiders. Please of the spiders of the spiders of the spiders. Please of the spiders of the spiders of the spiders of the spiders of the spiders. Please of the spiders of the spiders of the spiders. Please of the spiders of the spiders of the spiders. Please of the spiders of the spiders of the spiders. Please of the spiders of the spiders of the spiders. Please of the spiders of the spiders of the spiders. Please of the spiders of the spiders of the spiders of the spiders of the spiders. Please of the spiders of the spiders of the spiders. Please of the spiders of the spiders of the spiders. Please of the spiders of the spiders of the spiders. | i roduct opecifications | | | |
|---|--------------------------------|---|-----------------------------|---|
| Hub Width (LH) 20.8 mm Length (L) 2.400 in (61.0 mm) Recommended Shaft Tolerance Forged Clamp Screw M5 Number of Screws 1 ea Screw Material Alloy Steel Screw Finish Black Oxide Hex Wrench Size Torque ratings vary with insert selection Maximum Speed 8,000 RPM Moment of Inertia 4.21 x 10 s kg-m² Full Bearing Support Required? Yes Recommended Inserts JD32/51-98R, JD32/51-922 Zero-Backlash? Yes Balanced Design Yes Fail Safe? Yes Weight (Ibs) 0.238500 Temperature -10°F to 180°F (-23°C to 82°C) Material Specification Bright, No Plating Manufacturer Ruland Manufacturing Recommended Gap Between Hubs Country of Origin USA UPC 634529109052 UNSPC 31163011 Tariff Code 8483.60.8000 Note 1 Stainless steel hubs are available upon request. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular applic Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the spiders. Ple consult technical support for more assistance. Prop 65 | Bore (B1) | 20 mm | Keyway (K) | 6 mm |
| The proper Clamp Screw M5 Number of Screws 1 ea Screw Material Alloy Steel Screw Finish Black Oxide Hex Wrench Size 4.0 mm Seating Torque 9.5 Nm Torque Specifications Torque ratings vary with insert selection insert selection Maximum Speed 8,000 RPM Moment of Inertia 4.212 x 10 ⁵ kg·m² Full Bearing Support Required? Yes Recommended Inserts JD32/51-98R, JD32/51-92 Yes Balanced Design Yes Fail Safe? Yes Weight (Ibs) 0.238500 Temperature -10°F to 180°F (-23°C to 82°C) Material Specification Bright, No Plating Manufacturer Ruland Manufacturing Recommended Gap Between Hubs Country of Origin USA UPC 634529109052 UNSPC 31163011 Tariff Code 8483.60.8000 Note 1 Stainless steel hubs are available upon request. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular applic normal/typical conditions the hubs are capable of holding up to the nominal torque of the spiders. Ple consult technical support for more assistance. Prop 65 | B1 Max Shaft Penetration | 20.8 mm | Outer Diameter (OD) | 2.000 in (50.8 mm) |
| Forged Clamp Screw M5 Number of Screws 1 ea Screw Material Alloy Steel Screw Finish Black Oxide 9.5 Nm Forque Specifications Torque ratings vary with insert selection Maximum Speed 8,000 RPM Moment of Inertia 4.212 x 10⁻⁵ kg-m² Full Bearing Support Required? Yes Recommended Inserts JD32/51-98R, JD32/51-92\Y Zero-Backlash? Yes Balanced Design Yes Fail Safe? Yes Weight (Ibs) 0.238500 Femperature -10°F to 180°F (-23°C to 82°C) Material Specification Bright, No Plating Manufacturer Ruland Manufacturing Recommended Gap Between Hubs Country of Origin USA UPC 31163011 Tariff Code 8483.60.8000 Note 1 Stainless steel hubs are available upon request. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular applic Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the spiders. Ple consult technical support for more assistance. Prop 65 | Bore Tolerance | +0.03 mm / -0.00 mm | Hub Width (LH) | 20.8 mm |
| Alloy Steel Screw Material Alloy Steel Screw Finish Black Oxide Hex Wrench Size 4.0 mm Seating Torque 9.5 Nm Torque Specifications Torque ratings vary with insert selection Maximum Speed 8,000 RPM Moment of Inertia 4.212 x 10⁻5 kg-m² Full Bearing Support Required? Yes Recommended Inserts JD32/51-98R, JD32/51-92N Zero-Backlash? Yes Balanced Design Yes Fail Safe? Yes Weight (lbs) 0.238500 Femperature -10°F to 180°F (-23°C to 82°C) Material Specification 2024-T351 Aluminum Bar Finish Bright Finish Specification Bright, No Plating Manufacturer Ruland Manufacturing Recommended Gap Between Hubs Country of Origin USA UPC 634529109052 JNSPC 31163011 Tariff Code 8483.60.8000 Note 1 Stainless steel hubs are available upon request. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular applic Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the spiders. Ple consult technical support for more assistance. Prop 65 ■ WARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of the spiders. Ple consult technical support for more assistance. | _ength (L) | 2.400 in (61.0 mm) | Recommended Shaft Tolerance | +0.000 mm / -0.013 mm |
| Text Wrench Size 4.0 mm Seating Torque Misalignment Selection Torque ratings vary with insert selection Maximum Speed 8,000 RPM Moment of Inertia 4.212 x 10.5 kg-m² Full Bearing Support Required? Yes Recommended Inserts JD32/51-98R, JD32/51-92N Zero-Backlash? Yes Balanced Design Yes Fail Safe? Yes Weight (lbs) 0.238500 Temperature -10°F to 180°F (-23°C to 82°C) Material Specification Bright Finish Specification Bright, No Plating Manufacturer Ruland Manufacturing Recommended Gap Between Hubs Country of Origin USA UPC 31163011 Tariff Code Stainless steel hubs are available upon request. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular applic Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the spiders. Ple consult technical support for more assistance. Prop 65 ■ WARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of | orged Clamp Screw | M5 | Number of Screws | 1 ea |
| Torque ratings vary with insert selection Maximum Speed 8,000 RPM Moment of Inertia 4.212 x 10 ⁻⁵ kg-m ² Full Bearing Support Required? Yes Recommended Inserts JD32/51-98R, JD32/51-92N Zero-Backlash? Yes Balanced Design Yes Fail Safe? Yes Weight (lbs) 0.238500 Femperature -10°F to 180°F (-23°C to 82°C) Material Specification 2024-T351 Aluminum Bar Finish Bright Finish Specification Bright, No Plating Manufacturer Ruland Manufacturing Recommended Gap Between Hubs Country of Origin USA UPC 634529109052 JNSPC 31163011 Tariff Code 8483.60.8000 Note 1 Stainless steel hubs are available upon request. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular applic Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the spiders. Place on the physical limitations/failure point of the spiders. Place on the physical limitations/failure point of the spiders. Place on the physical Ethylene Thiourea, known to the State of the State of the spiders. Place on the physical Ethylene Thiourea, known to the State of the spiders. Place on the physical Ethylene Thiourea, known to the State of the spiders. Place on the physical Ethylene Thiourea, known to the State of the spiders. Place on the physical Ethylene Thiourea, known to the State of the spiders. Place on the physical Ethylene Thiourea, known to the State of the spiders. Place on the physical Ethylene Thiourea, known to the State of the spiders. Place on the physical Ethylene Thiourea, known to the State of the spiders. Place on the physical Ethylene Thiourea, known to the State of the spiders. Place on the physical Ethylene Thiourea, known to the State of the spiders. Place on the physical Ethylene Thiourea, known to the State of the spiders. | Screw Material | Alloy Steel | Screw Finish | Black Oxide |
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| | Note 3 | normal/typical conditions the hubs are capable of holding up to the nominal torque of the spiders. Please | | |
| | Prop 65 | ⚠WARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to | | |

Installation Instructions

- Align the bores of the MJCC51-20-A jaw coupling hubs on the shafts that are to be joined and determine if the misalignment parameters are within the limits of the coupling. (See spider for misalignment parameters.)
- 2. Fully tighten the M5 screw(s) on the first hub to the recommended seating torque of 9.5 Nm using a

www.P65Warnings.ca.gov.

- 4.0 mm hex torque wrench.
- 3. Insert a spider into the jaws of one 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.