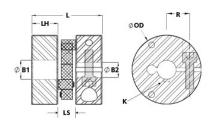




## MCPRSK56-18-A

Ruland MCPRSK56-18-A, Controlflex Coupling Hub, Aluminum, Clamp Style With Keyway, 56.0mm OD, 45.0mm Length





## **Description**

Ruland MCPRSK56-18-A is a Controlflex coupling hub with a 18mm bore, 6mm keyway, 56.0mm OD, and 45.0mm length. It is a component in a three-piece design consisting of two aluminum hubs mounted by pins to one acetal insert creating a lightweight low inertia coupling capable of speeds up to 10,000 RPM. This three-piece design allows for a highly customizable coupling that easily combines clamp hubs with inch, metric, keyed, and keyless bores. Hardware is metric and tests beyond DIN 912 12.9 standards for maximum torque capabilities. Controlflex couplings have a balanced design for reduced vibrations at high speeds, can accommodate all forms of misalignment, and are an excellent fit for encoders, tachometers, and light duty stepper servo positioning applications. MCPRSK56-18-A is RoHS3 and REACH compliant.

**Product Specifications** 

Bore (B1)         18 mm         B1 Max Shaft Penetration         15.0 mm           Keyway (K)         6 mm         Outer Diameter (OD)         2.205 in (56.0 mm           Bore Tolerance         +0.06 mm / +0.02 mm         Hub Width (LH)         15.0 mm           Length (L)         1.772 in (45.0 mm)         Space Between Hubs (LS)         0.590 in (15.0 mm           Forged Clamp Screw         M6         Screw Material         Alloy Steel           Hex Wrench Size         5.0 mm         Screw Finish         Black Oxide           Seating Torque         8.0 Nm         Screw Location (R)         19.3 mm           Number of Screws         1 ea         Rated Torque         7 Nm           Angular Misalignment         1.5°         Peak Torque         10 Nm	
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Angular Misalignment 1.5° Peak Torque 10 Nm	
Torsional Stiffness 7.20 Nm/Deg Axial Motion 1.00 mm	
Parallel Misalignment 1.5 mm Maximum Speed 10,000 RPM	
Recommended Inserts CPFRG35/56-AT Full Bearing Support Required? Yes	
Zero-Backlash? Yes Balanced Design Yes	
Weight (lbs)         0.210200         Temperature         -22°F to 175°F (-3	0°C to 80°C)
Material Specification6082 Aluminum BarFinishClear Anodized	
Finish Specification Clear Anodized Manufacturer Schmidt Kupplung	J
UPC 634529227206 Country of Origin Germany	
<b>Tariff Code</b> 8483.60.8000 <b>UNSPC</b> 31163022	
Note 1 Stainless steel hubs are available upon request.	
Note 2 Performance ratings are for guidance only. The user must determine suitability for a particu	lar application
Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the ins normal/typical conditions the hubs are capable of holding up to the rated torque of the inser	

Prop 65

**MARNING** This product can expose you to chemicals including Ethylene Thiourea and Nickel (metallic), known to the State of California to cause cancer, and Ethylene Thiourea known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="https://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>.

especially when the smallest standard bores are used or where shafts are undersized, slippage on the shaft is possible below the rated torque. Keyways are available to provide additional torque capacity in the

shaft/hub connection when required. Please consult technical support for more assistance.

## **Installation Instructions**

1. Align the bores of the MCPRSK56-18-A controlflex coupling hub on the shafts that are to be joined with the drive pins facing each other and determine if the misalignment parameters are within the limits of the coupling. (*Angular Misialignment:* 1.5°, *Parallel Misalignment:* 1.5 mm, *Axial Motion:* 1.0 mm)

- 2. Rotate the hubs on the shaft so the drive pins are 90° from each other.
- 3. Place the first hub at the end of the shaft. Tighten the clamp screw to 8.0 Nm using a 5.0 mm hex torque wrench.
- 4. Place an insert(s) with the standoffs facing the hub over the pins of the hub that was just installed.
- 5. Align the drive pins on the second hub to match the holes in the insert(s).
- 6. Verify that the space between hubs is 0.590 in, 15.0 mm.
- 7. Tighten the clamp screw on the second hub to the recommended seating torque of 8.0 Nm using a 5.0 mm hex torque wrench.