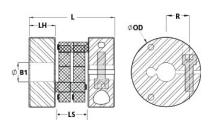




MCPRD56-14-A

Ruland MCPRD56-14-A, Controlflex Coupling Hub, Aluminum, Clamp Style, 56.0mm OD, 57.0mm Length





Description

Ruland MCPRD56-14-A is a Controlflex coupling hub with a 14mm bore, 56.0mm OD, and 57.0mm length. It is a component in a four-piece design consisting of two aluminum hubs mounted by pins to two acetal inserts creating a lightweight low inertia coupling capable of speeds up to 10,000 RPM. This four-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. MCPRD56-14-A is RoHS3 and REACH compliant.

Product Specifications

Hub Width (LH) 15.0 mm Length (L) 2.244 in (57.0 m Space Between Hubs (LS) 1.062 in (27.0 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 14 Nm Angular Misalignment 1.0° Peak Torque 18 Nm Torsional Stiffness 14.40 Nm/Deg Axial Motion 1.00 mm Parallel Misalignment 1.5 mm Maximum Speed 10,000 RPM Recommended Inserts CPFRG35/56-A Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (Ibs) 0.216100 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529225257 Country of Origin Germany Tariff Code 8483.60.8000 UNSPC 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 parti Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the in normal/typical conditions the hubs are capable of holding up to the rated torque of the ins especially when the smallest standard bores are used or where shafts are undersized, sl is possible below the rated torque. Keyways are available to provide additional torque of shaft/hub connection when required. Please consult technical support for more assistance Prop 65	Product Specifications			
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Space Between Hubs (LS) 1.062 in (27.0 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 14 Nm Angular Misalignment 1.0° Peak Torque 18 Nm Torsional Stiffness 14.40 Nm/Deg Axial Motion 1.00 mm Parallel Misalignment 1.5 mm Maximum Speed 10,000 RPM Recommended Inserts CPFRG35/56-A Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (Ibs) 0.216100 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529225257 Country of Origin Germany Tariff Code 8483.60.8000 UNSPC 31163022 Note 1 Stainless steel hubs are available upon request.	Outer Diameter (OD)	2.205 in (56.0 mm)	Bore Tolerance	+0.06 mm / +0.02 mm
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 14 Nm Angular Misalignment 1.0° Peak Torque 18 Nm Torsional Stiffness 14.40 Nm/Deg Axial Motion 1.00 mm Parallel Misalignment 1.5 mm Maximum Speed 10,000 RPM Recommended Inserts CPFRG35/56-A Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (lbs) 0.216100 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529225257 Country of Origin Germany Tariff Code 8483.60.8000 UNSPC 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 parti Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the in normal/typical conditions the hubs are capable of holding up to the rated torque of the ins especially when the smallest standard bores are used or where shafts are undersized, si is possible below the rated torque. Keyways are available to provide additional torque ca shaft/hub connection when required. Please consult technical support for more assistance Prop 65	Hub Width (LH)	15.0 mm	Length (L)	2.244 in (57.0 mm)
Screw Finish Screw Location (R) 19.3 mm Number of Screws 1 ea Rated Torque 14 Nm Angular Misalignment 1.0° Peak Torque 18 Nm Torsional Stiffness 14.40 Nm/Deg Axial Motion 1.00 mm Parallel Misalignment 1.5 mm Maximum Speed 10,000 RPM Recommended Inserts CPFRG35/56-A Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (lbs) 0.216100 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529225257 Country of Origin Germany Tariff Code 8483.60.8000 UNSPC 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 parti Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the in onrmal/typical conditions the hubs are capable of holding up to the rated torque of the ins especially when the smallest standard bores are used or where shafts are undersized, sl is possible below the rated torque. Keyways are available to provide additional torque ca shaft/hub connection when required. Please consult technical support for more assistance Prop 65	Space Between Hubs (LS)	1.062 in (27.0 mm)	Forged Clamp Screw	M6
Screw Location (R) 19.3 mm Number of Screws 1 ea Rated Torque 14 Nm Angular Misalignment 1.0° Peak Torque 18 Nm Torsional Stiffness 14.40 Nm/Deg Axial Motion 1.00 mm Parallel Misalignment 1.5 mm Maximum Speed 10,000 RPM Recommended Inserts CPFRG35/56-A Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (Ibs) 0.216100 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529225257 Country of Origin Germany Tariff Code 8483.60.8000 UNSPC 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 parti Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inormal/typical conditions the hubs are capable of holding up to the rated torque of the insespecially when the smallest standard bores are used or where shafts are undersized, sis possible below the rated torque. Keyways are available to provide additional torque cashaft/hub connection when required. Please consult technical support for more assistance Prop 65	Screw Material	Alloy Steel	Hex Wrench Size	5.0 mm
Rated Torque 14 Nm Angular Misalignment 1.0° Peak Torque 18 Nm Torsional Stiffness 14.40 Nm/Deg Axial Motion 1.00 mm Parallel Misalignment 1.5 mm Maximum Speed 10,000 RPM Recommended Inserts CPFRG35/56-A Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (lbs) 0.216100 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529225257 Country of Origin Germany Tariff Code 8483.60.8000 UNSPC 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 parti Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the in normal/typical conditions the hubs are capable of holding up to the rated torque of the ins especially when the smallest standard bores are used or where shafts are undersized, sl is possible below the rated torque. Keyways are available to provide additional torque ca shaft/hub connection when required. Please consult technical support for more assistance Prop 65	Screw Finish	Black Oxide	Seating Torque	8.0 Nm
Peak Torque 18 Nm Torsional Stiffness 14.40 Nm/Deg Axial Motion 1.00 mm Parallel Misalignment 1.5 mm Maximum Speed 10,000 RPM Recommended Inserts CPFRG35/56-A Full Bearing Support Required? Yes Balanced Design Yes Weight (lbs) 0.216100 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification Clear Anodized Manufacturer Country of Origin Germany Tariff Code 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 parti Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the in normal/typical conditions the hubs are capable of holding up to the rated torque of the ins especially when the smallest standard bores are used or where shafts are undersized, sl is possible below the rated torque. Keyways are available to provide additional torque ca shaft/hub connection when required. Please consult technical support for more assistance Prop 65	Screw Location (R)	19.3 mm	Number of Screws	1 ea
Axial Motion 1.00 mm Parallel Misalignment 1.5 mm Maximum Speed 10,000 RPM Recommended Inserts CPFRG35/56-A Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (Ibs) 0.216100 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529225257 Country of Origin Germany Tariff Code 8483.60.8000 UNSPC 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 parti Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the in normal/typical conditions the hubs are capable of holding up to the rated torque of the insespecially when the smallest standard bores are used or where shafts are undersized, slis possible below the rated torque. Keyways are available to provide additional torque cashaft/hub connection when required. Please consult technical support for more assistance. Prop 65	Rated Torque	14 Nm	Angular Misalignment	1.0°
Maximum Speed 10,000 RPM Recommended Inserts CPFRG35/56-A Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (lbs) 0.216100 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529225257 Country of Origin Germany Tariff Code 8483.60.8000 UNSPC 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 partifulation of the incommon of the incomm	Peak Torque	18 Nm	Torsional Stiffness	14.40 Nm/Deg
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Balanced Design Yes Weight (lbs) 0.216100 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529225257 Country of Origin Germany Tariff Code 8483.60.8000 UNSPC 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 parti Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the in normal/typical conditions the hubs are capable of holding up to the rated torque of the ins especially when the smallest standard bores are used or where shafts are undersized, sl is possible below the rated torque. Keyways are available to provide additional torque ca shaft/hub connection when required. Please consult technical support for more assistance Prop 65 ▲WARNING This product can expose you to chemicals including Ethylene Thiourea an	Maximum Speed	10,000 RPM	Recommended Inserts	CPFRG35/56-AT
Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529225257 Country of Origin Germany Tariff Code 8483.60.8000 UNSPC 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 parti Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the in ormal/typical conditions the hubs are capable of holding up to the rated torque of the ins especially when the smallest standard bores are used or where shafts are undersized, sl is possible below the rated torque. Keyways are available to provide additional torque ca shaft/hub connection when required. Please consult technical support for more assistance Prop 65 ■ WARNING This product can expose you to chemicals including Ethylene Thiourea an	Full Bearing Support Required?	Yes	Zero-Backlash?	Yes
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normal/typical conditions the hubs are capable of holding up to the rated torque of the insespecially when the smallest standard bores are used or where shafts are undersized, slis possible below the rated torque. Keyways are available to provide additional torque cat shaft/hub connection when required. Please consult technical support for more assistance. Prop 65 **WARNING** This product can expose you to chemicals including Ethylene Thiourea and the insertion of the insertion in the inserti	Note 2	Performance ratings are for guidance only. The user must determine suitability for a particular application.		
	Note 3	Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Under normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In some cases 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.		
	Prop 65	▲WARNING 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		

Installation Instructions

1. Align the bores of the MCPRD56-14-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:* 1.0°, *Parallel Misalignment:* 1.5 mm, *Axial Motion:* 1.0 mm)

cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

- 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 1.062 in, 27.0 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.