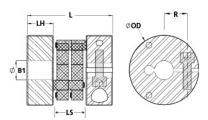




MCPRD19-10-A

Ruland MCPRD19-10-A, Controlflex Coupling Hub, Aluminum, Clamp Style, 19.0mm OD, 20.0mm Length





Description

Ruland MCPRD19-10-A is a Controlflex coupling hub with a 10mm bore, 19.0mm OD, and 20.0mm 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 25,000 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. MCPRD19-10-A is RoHS3 and REACH compliant.

Product Specifications

Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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 (n	i roduct opecifications			
Hub Width (LH) 5.64 mm Length (L) 0.787 in (20.0 mm) Space Between Hubs (LS) 0.347 in (8.8 mm) Forged Clamp Screw #2-56 Screw Material Alloy Steel Hex Wrench Size 5/64 in Screw Finish Black Oxide Seating Torque 0.4 Nm Screw Location (R) 6.4 mm Number of Screws 1 ea Rated Torque 0.6 Nm Angular Misalignment 1.0° Peak Torque 1.4 Nm Torsional Stiffness 0.56 Nm/Deg Axial Motion 0.3 mm Parallel Misalignment 0.4 mm Maximum Speed 25,000 RPM Recommended Inserts CPFRG12/19-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (Ibs) 0.006600 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Bar Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529224915 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 particular applit Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are available to provide additional torque capacity in the shaft/hub connection when required. Please consult technical support for more assistance. Prop 65	Bore (B1)	10 mm	B1 Max Shaft Penetration	5.6 mm
Space Between Hubs (LS) 0.347 in (8.8 mm) Forged Clamp Screw #2-56 Screw Material Alloy Steel Hex Wrench Size 5/64 in Screw Finish Black Oxide Seating Torque 0.4 Mm Number of Screws 1 ea Rated Torque 0.6 Nm Angular Misalignment 1.0° Peak Torque 1.4 Nm Torsional Stiffness 0.56 Nm/Deg Axial Motion 0.3 mm Parallel Misalignment 0.4 mm Maximum Speed 25,000 RPM Recommended Inserts CPFRG12/19-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (Ibs) 0.006600 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529224915 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 particular applit Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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	Outer Diameter (OD)	0.748 in (19.0 mm)	Bore Tolerance	+0.05 mm / +0.01 mm
Screw Material Alloy Steel Hex Wrench Size 5/64 in Screw Finish Black Oxide Seating Torque 0.4 Nm Screw Location (R) 6.4 mm Number of Screws 1 ea Rated Torque 0.6 Nm Angular Misalignment 1.0° Peak Torque 1.4 Nm Torsional Stiffness 0.56 Nm/Deg Axial Motion 0.3 mm Parallel Misalignment 0.4 mm Maximum Speed 25,000 RPM Recommended Inserts CPFRG12/19-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (Ibs) 0.006600 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Bar Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529224915 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 particular appli Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Un normal/typical conditions the hubs are available to provide additional torque capacity in the shaft/hub connection when required. Please consult technical support for more assistance. Prop 65	Hub Width (LH)	5.64 mm	Length (L)	0.787 in (20.0 mm)
Screw Finish Black Oxide Seating Torque 0.4 Nm Screw Location (R) 6.4 mm Number of Screws 1 ea Rated Torque 0.6 Nm Angular Misalignment 1.0° Peak Torque 1.4 Nm Torsional Stiffness 0.56 Nm/Deg Axial Motion 0.3 mm Parallel Misalignment 0.4 mm Maximum Speed 25,000 RPM Recommended Inserts CPFRG12/19-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (lbs) 0.006600 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Bar Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529224915 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 particular appli Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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	Space Between Hubs (LS)	0.347 in (8.8 mm)	Forged Clamp Screw	#2-56
Screw Location (R) 6.4 mm Number of Screws 1 ea Rated Torque 0.6 Nm Angular Misalignment 1.0° Peak Torque 1.4 Nm Torsional Stiffness 0.56 Nm/Deg Axial Motion 0.3 mm Parallel Misalignment 0.4 mm Maximum Speed 25,000 RPM Recommended Inserts CPFRG12/19-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (Ibs) 0.006600 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Bar Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529224915 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 particular appli Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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	Screw Material	Alloy Steel	Hex Wrench Size	5/64 in
Rated Torque 0.6 Nm Angular Misalignment 1.0° Peak Torque 1.4 Nm Torsional Stiffness 0.56 Nm/Deg Axial Motion 0.3 mm Parallel Misalignment 0.4 mm Maximum Speed 25,000 RPM Recommended Inserts CPFRG12/19-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (lbs) 0.006600 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Bar Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529224915 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 particular appli Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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	Screw Finish	Black Oxide	Seating Torque	0.4 Nm
Peak Torque 1.4 Nm Torsional Stiffness 0.56 Nm/Deg Axial Motion 0.3 mm Parallel Misalignment 0.4 mm Maximum Speed 25,000 RPM Recommended Inserts CPFRG12/19-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (Ibs) 0.006600 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Bar Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529224915 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 particular appli Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Un normal/typical conditions the hubs 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 (n	Screw Location (R)	6.4 mm	Number of Screws	1 ea
Axial Motion 0.3 mm Parallel Misalignment 0.4 mm Maximum Speed 25,000 RPM Recommended Inserts CPFRG12/19-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (lbs) 0.006600 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Bar Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529224915 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 particular applit on the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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	Rated Torque	0.6 Nm	Angular Misalignment	1.0°
Maximum Speed 25,000 RPM Recommended Inserts CPFRG12/19-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (lbs) 0.006600 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Bar Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529224915 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 particular applit Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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	Peak Torque	1.4 Nm	Torsional Stiffness	0.56 Nm/Deg
Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (lbs) 0.006600 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Bar Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529224915 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 particular appli Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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	Axial Motion	0.3 mm	Parallel Misalignment	0.4 mm
Balanced Design Yes Weight (lbs) 0.006600 Temperature -22°F to 175°F (-30°C to 80°C) Material Specification 6082 Aluminum Bar Clear Anodized Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529224915 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 particular appli Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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 (n	Maximum Speed	25,000 RPM	Recommended Inserts	CPFRG12/19-AT
Temperature -22°F to 175°F (-30°C to 80°C) Material Specification Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529224915 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 particular appli Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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	Full Bearing Support Required?	Yes	Zero-Backlash?	Yes
Finish Clear Anodized Finish Specification Clear Anodized Manufacturer Schmidt Kupplung UPC 634529224915 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 particular appli Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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	Balanced Design	Yes	Weight (lbs)	0.006600
Manufacturer Schmidt Kupplung UPC 634529224915 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 particular appli Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on is possible below the rated torque. Keyways are available to provide additional torque capacity in th 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 (n	Temperature	-22°F to 175°F (-30°C to 80°C)	Material Specification	6082 Aluminum Bar
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 particular appli Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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	Finish	Clear Anodized	Finish Specification	Clear Anodized
UNSPC 31163022 Note 1 Stainless steel hubs are available upon request. Performance ratings are for guidance only. The user must determine suitability for a particular appli Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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 (n	Manufacturer	Schmidt Kupplung	UPC	634529224915
Note 1 Stainless steel hubs are available upon request. Performance ratings are for guidance only. The user must determine suitability for a particular appli Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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	Country of Origin	Germany	Tariff Code	8483.60.8000
Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular appli Note 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Un normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on is possible below the rated torque. Keyways are available to provide additional torque capacity in th 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 (n	UNSPC	31163022		
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normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In so especially when the smallest standard bores are used or where shafts are undersized, slippage on 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 (not be a support of the inserts. In so especially when the inserts in some inserts are used or where shafts are undersized, slippage on is possible below the rated torque. Keyways are available to provide additional torque capacity in the shaft.	Note 2	Performance ratings are for guidance only. The user must determine suitability for a particular application.		
	Note 3	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		
	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 MCPRD19-10-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:* 0.4 mm, *Axial Motion:* 0.3 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 0.4 Nm using a 5/64 in 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 0.347 in, 8.8 mm.
- 7. Tighten the clamp screw on the second hub to the recommended seating torque of 0.4 Nm using a 5/64 in hex torque wrench.