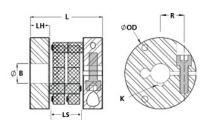




CPTDK35-12-A

Ruland CPTDK35-12-A, Controlflex Coupling Hub, Aluminum, Clamp Style With Keyway, 2.205" OD, 2.008" Length





Description

Ruland CPTDK35-12-A is a Controlflex coupling hub with a 0.7500" bore, 3/16" keyway, 2.205" OD, and 2.008" 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. CPTDK35-12-A has a thinner length than regular hubs allowing it to be used in confined spaces. 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. CPTDK35-12-A is RoHS3 and REACH compliant.

Product Specifications

Material Specification6082 Aluminum BarFinishClear AnodizedFinish SpecificationClear AnodizedManufacturerSchmidt KupplungUPC634529224502Country of OriginGermanyTariff Code8483.60.8000UNSPC31163022Note 1Stainless steel hubs are available upon request.Note 2Performance ratings are for guidance only. The user must determine suitability for a particular application.Note 3Torque 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					
Bore Tolerance +0.003 in / +0.001 in Hub Width (LH) 0.472 in Length (L) 2.008 in (51.0 mm) Space Between Hubs (LS) 1.062 in (27.0 mm) Forged Clamp Screw M5 Screw Material Alloy Steel Hex Wrench Size 4.0 mm Screw Finish Black Oxide Seating Torque 5.7 Nm Screw Location (R) 21 mm Number of Screws 1 ea Rated Torque 14 Nm Angular Misalignment 1.0° Peak Torque 16 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-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (lbs) 0.172700 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 634529224502 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 application or more along and 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. Under 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.	Bore (B1)	0.7500 in	B1 Max Shaft Penetration	0.984 in	
Length (L) 2.008 in (51.0 mm) Space Between Hubs (LS) 1.062 in (27.0 mm)	Keyway (K)	3/16 in	Outer Diameter (OD)	2.205 in (56.0 mm)	
Forged Clamp Screw M5 Screw Material Alloy Steel Hex Wrench Size 4.0 mm Screw Finish Black Oxide Seating Torque 5.7 Nm Screw Location (R) 21 mm Number of Screws 1 ea Rated Torque 14 Nm Angular Misalignment 1.0° Peak Torque 15 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-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (Ibs) 0.172700 Temperature -22°F to 175°F (-30°C to 80°C of Material Specification 6082 Aluminum Bar Finish Clear Anodized Manufacturer Schmidt Kupplung UPC 634529224502 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 application normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Under normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Under normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Under normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Under normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Under normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In some especially when the smallest standard bores are used or where shafts are undersized, slippage on the 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.	Bore Tolerance	+0.003 in / +0.001 in	Hub Width (LH)	0.472 in	
Hex Wrench Size 4.0 mm Screw Finish Black Oxide Seating Torque 5.7 Nm Screw Location (R) 21 mm Number of Screws 1 ea Rated Torque 14 Nm Angular Misalignment 1.0° Peak Torque 16 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-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (lbs) 0.172700 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 634529224502 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 application normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Under normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In some especially when the smallest standard bores are used or where shafts are undersized, slippage on the 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.	Length (L)	2.008 in (51.0 mm)	Space Between Hubs (LS)	1.062 in (27.0 mm)	
Seating Torque 5.7 Nm Screw Location (R) 21 mm Number of Screws 1 ea Rated Torque 14 Nm Angular Misalignment 1.0° Peak Torque 16 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-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (Ibs) 0.172700 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 634529224502 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 application normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Under normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Under normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. In some especially when the smallest standard bores are used or where shafts are undersized, slippage on the 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.	Forged Clamp Screw	M5	Screw Material	Alloy Steel	
Number of Screws 1 ea Rated Torque 14 Nm Angular Misalignment 1.0° Peak Torque 16 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-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (Ibs) 0.172700 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 634529224502 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 application normal/typical conditions the hubs are capable of holding up to the rated torque of the inserts. Under 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.	Hex Wrench Size	4.0 mm	Screw Finish	Black Oxide	
Angular Misalignment 1.0° Peak Torque 16 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-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (lbs) 0.172700 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 634529224502 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 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 especially when the smallest standard bores are used or where shafts are undersized, slippage on the 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.	Seating Torque	5.7 Nm	Screw Location (R)	21 mm	
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-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (lbs) 0.172700 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 634529224502 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 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 especially when the smallest standard bores are used or where shafts are undersized, slippage on the 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.	Number of Screws	1 ea	Rated Torque	14 Nm	
Parallel Misalignment Recommended Inserts CPFRG35/56-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (Ibs) 0.172700 Temperature -22°F to 175°F (-30°C to 80°C to	Angular Misalignment	1.0°	Peak Torque	16 Nm	
Recommended Inserts CPFRG35/56-AT Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Weight (Ibs) 0.172700 Temperature -22°F to 175°F (-30°C to 80°C	Torsional Stiffness	14.40 Nm/Deg	Axial Motion	1.00 mm	
Zero-Backlash?YesBalanced DesignYesWeight (Ibs)0.172700Temperature-22°F to 175°F (-30°C to 80°C to 80°	Parallel Misalignment	1.5 mm	Maximum Speed	10,000 RPM	
Weight (lbs)0.172700Temperature-22°F to 175°F (-30°C to 80°CMaterial Specification6082 Aluminum BarFinishClear AnodizedFinish SpecificationClear AnodizedManufacturerSchmidt KupplungUPC634529224502Country of OriginGermanyTariff Code8483.60.8000UNSPC31163022Note 1Stainless steel hubs are available upon request.Note 2Performance ratings are for guidance only. The user must determine suitability for a particular application.Note 3Torque 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 especially when the smallest standard bores are used or where shafts are undersized, slippage on the 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.	Recommended Inserts	CPFRG35/56-AT	Full Bearing Support Required?	Yes	
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Prop 65	Note 3	normal/typical conditions the especially when the smallest is possible below the rated to	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 of	can expose you to chemicals including Ethy	lene Thiourea and Nickel (metallic),	

Installation Instructions

1. Align the bores of the CPTDK35-12-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

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 www.P65Warnings.ca.gov.

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- 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 5.7 Nm using a 4.0 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 5.7 Nm using a 4.0 mm hex torque wrench.