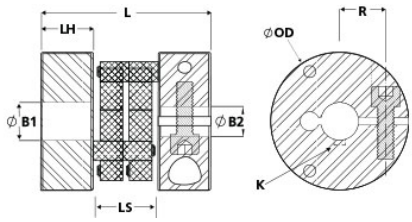
CPRDK23-12-A

Ruland CPRDK23-12-A, Controlflex Coupling Hub, Aluminum, Clamp Style With Keyway, 1.457" OD, 1.496" Length





Description

Ruland CPRDK23-12-A is a Controlflex coupling hub with a 0.7500" bore, 3/16" keyway, 1.457" OD, and 1.496" 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 15,000 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. CPRDK23-12-A is RoHS3 and REACH compliant.

Product Specifications

Bore (B1)	0.7500 in	**B1 Max Shaft Penetration**	0.728 in
Keyway (K)	3/16 in	**Outer Diameter (OD)**	1.457 in (37.0 mm)
Bore Tolerance	+0.003 in / +0.001 in	**Hub Width (LH)**	0.394 in
Length (L)	1.496 in (38.0 mm)	**Space Between Hubs (LS)**	0.708 in (18.0 mm)
Forged Clamp Screw	M4	**Screw Material**	Alloy Steel
Hex Wrench Size	3.0 mm	**Screw Finish**	Black Oxide
Seating Torque	3.0 Nm	**Screw Location (R)**	12.4 mm
Number of Screws	1 ea	**Rated Torque**	4 Nm
Angular Misalignment	1.0°	**Peak Torque**	6 Nm
Torsional Stiffness	3.40 Nm/Deg	**Axial Motion**	0.028 in
Parallel Misalignment	0.039 in	**Maximum Speed**	15,000 RPM
Recommended Inserts	CPFRG23/37-AT	**Full Bearing Support Required?**	Yes
Zero-Backlash?	Yes	**Balanced Design**	Yes
Weight (lbs)	0.059500	**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	634529223451	**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 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 cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.		

Installation Instructions

1. Align the bores of the CPRDK23-12-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*: 1.0 mm, *Axial Motion*: 0.7 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 3.0 Nm using a 3.0 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 0.708 in, 18.0 mm.
7. Tighten the clamp screw on the second hub to the recommended seating torque of 3.0 Nm using a 3.0 mm hex torque wrench.