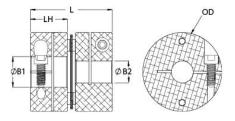


## DCS36-16-10-A

Ruland DCS36-16-10-A, 1" x 5/8" Single Disc Coupling, Aluminum, Clamp Style, 2.250" OD, 2.313" Length





## Description

Ruland DCS36-16-10-A is a clamp single disc coupling with 1.0000" x 0.6250" bores, 2.250" OD, and 2.313" length. It is zero-backlash and has a balanced design for reduced vibration at high speeds. The single disc design is comprised of two anodized aluminum hubs and two sets of thin stainless steel disc springs which can accommodate angular misalignment and axial motion, however does not allow for any parallel misalignment. DCS36-16-10-A is lightweight and has low inertia making it well suited for applications with speeds up to 10,000 RPM. Hardware is metric and tests beyond DIN 912 12.9 standards for maximum torque capabilities. Ruland manufactures DCS36-16-10-A to be torisionally rigid and an excellent fit for precise positioning stepper servo applications commonly found in semiconductor, solar, printing, machine tool, and test and measurement systems. It is machined from solid bar stock that is sourced exclusively from North American mills and RoHS3 and REACH compliant. DCS36-16-10-A is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

## **Product Specifications**

1.0000 in	Small Bore (B2)	0.6250 in
1.085 in	B2 Max Shaft Penetration	1.085 in
2.250 in	Bore Tolerance	+0.001 in / -0.000 in
2.313 in	Hub Width (LH)	1.050 in
+0.0000 in / -0.0005 in	Forged Clamp Screw	M6
Alloy Steel	Hex Wrench Size	5.0 mm
Black Oxide	Seating Torque	16 Nm
2 ea	Dynamic Torque Reversing	112.5 lb-in
1.0°	Dynamic Torque Non-Reversing	225 lb-in
0.00 in	Static Torque	450 lb-in
0.015 in	Torsional Stiffness	1000 lb-in/Deg
0.5130 lb-in <sup>2</sup>	Maximum Speed	10,000 RPM
Yes	Zero-Backlash?	Yes
Yes	Torque Wrench	<u>TW:BT-4C-3/8-140</u>
<u>Metric Hex Keys</u>	Material Specification	Hubs: 2024-T351 Aluminum Bar, Disc Springs: Type 302 Stainless Steel
-40°F to 200°F (-40°C to 93°C)	Finish Specification	Sulfuric Anodized MIL-A-8625 Type II, Class 2 and ASTM B580 Type B Black Anodize
Ruland Manufacturing	Country of Origin	USA
0.721500	UPC	634529091531
8483.60.8000	UNSPC	31163008
Stainless steel hubs are available upon request.		
Torque ratings are at maximum misalignment.		
Performance ratings are for guidance only. The user must determine suitability for a particular application.		
normal/typical conditions the hubs cases, especially when the smalles shaft is possible below the rated to	are capable of holding up to the rated at standard bores are used or where s rque of the disc springs. Keyways are	d torque of the disc springs. In some shafts are undersized, slippage on the e available to provide additional
	1.085 in 2.250 in 2.313 in +0.0000 in / -0.0005 in Alloy Steel Black Oxide 2 ea 1.0° 0.00 in 0.015 in 0.5130 lb-in <sup>2</sup> Yes Yes Metric Hex Keys -40°F to 200°F (-40°C to 93°C) Ruland Manufacturing 0.721500 8483.60.8000 Stainless steel hubs are available u Torque ratings are at maximum mis Performance ratings are for guidan Torque ratings for the couplings are normal/typical conditions the hubs cases, especially when the smalles shaft is possible below the rated to torque capacity in the shaft/hub con	1.085 in B2 Max Shaft Penetration   2.250 in Bore Tolerance   2.313 in Hub Width (LH)   +0.0000 in / -0.0005 in Forged Clamp Screw   Alloy Steel Hex Wrench Size   Black Oxide Seating Torque   2 ea Dynamic Torque Reversing   1.0° Dynamic Torque Reversing   0.00 in Static Torque   0.015 in Torsional Stiffness   0.5130 lb-in <sup>2</sup> Maximum Speed   Yes Zero-Backlash?   Yes Torque Wrench   Metric Hex Keys Material Specification   -40°F to 200°F (-40°C to 93°C) Finish Specification   Ruland Manufacturing Country of Origin   0.721500 UPC   8483.60.8000 UNSPC   Stainless steel hubs are available upon request.   Torque ratings are at maximum misalignment.   Performance ratings are for guidance only. The user must determine su   Torque ratings for the couplings are based on the physical limitations/fa   normal/typical conditions the hubs are capable of holding up to the rated   Torque ratings for the smallest standard bores are used or where es   shaft is possible below the r

**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 <u>www.P65Warnings.ca.gov</u>.

Installation Instructions

- Align the bores of the DCS36-16-10-A single disc coupling on the shafts that are to be joined and determine if the misalignment parameters are within the limits of the coupling. (*Angular Misialignment:* 1.0°, *Parallel Misalignment:* 0.00 in, *Axial Motion:* 0.015 in)
- 2. Fully tighten the M6 screw on the first hub to the recommended seating torque of 16 Nm using a 5.0 mm hex torque wrench.
- 3. Before tightening the screw on the second hub, rotate the coupling by hand to allow it to reach its free length.
- Tighten the screw on the second hub to the recommended seating torque. Make sure the coupling remains axially relaxed and the misalignment angle remains centered along the length of the coupling.
- 5. The shafts may extend into the relieved portion of the bore as long as it does not exceed the shaft penetration length of 1.085 in.