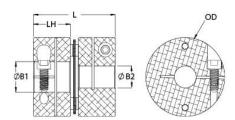




DCS32-16-12-A

Ruland DCS32-16-12-A, 1" x 3/4" Single Disc Coupling, Aluminum, Clamp Style, 2.000" OD, 1.813" Length





Description

Ruland DCS32-16-12-A is a clamp single disc coupling with 1.0000" x 0.7500" bores, 2.000" OD, and 1.813" 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. DCS32-16-12-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 DCS32-16-12-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. DCS32-16-12-A is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

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1.0000 in	Small Bore (B2)	0.7500 in					
0.874 in	B2 Max Shaft Penetration	0.874 in					
2.000 in	Bore Tolerance	+0.001 in / -0.000 in					
1.813 in	Hub Width (LH)	0.810 in					
+0.0000 in / -0.0005 in	Forged Clamp Screw	M5					
Alloy Steel	Hex Wrench Size	4.0 mm					
Black Oxide	Seating Torque	9.5 Nm					
2 ea	Dynamic Torque Reversing	87.5 lb-in					
1.0°	Dynamic Torque Non-Reversing	175 lb-in					
0.00 in	Static Torque	350 lb-in					
0.012 in	Torsional Stiffness	867 lb-in/Deg					
0.2479 lb-in ²	Maximum Speed	10,000 RPM					
Yes	Zero-Backlash?	Yes					
Yes	Torque Wrench	TW:BT-4C-3/8-86					
Metric Hex Keys	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					
0.416300	UPC	634529082577					
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 smaller shaft is possible below the rated to	are capable of holding up to the rated st standard bores are used or where s orque of the disc springs. Keyways are	d torque of the disc springs. In some shafts are undersized, slippage on the available to provide additional					
	0.874 in 2.000 in 1.813 in +0.0000 in / -0.0005 in Alloy Steel Black Oxide 2 ea 1.0° 0.00 in 0.012 in 0.2479 lb-in² Yes Yes Metric Hex Keys -40°F to 200°F (-40°C to 93°C) Ruland Manufacturing 0.416300 8483.60.8000 Stainless steel hubs are available Torque ratings are at maximum mi Performance ratings are for guidar Torque ratings for the couplings ar normal/typical conditions the hubs cases, especially when the smaller shaft is possible below the rated to torque capacity in the shaft/hub co	0.874 in B2 Max Shaft Penetration 2.000 in Bore Tolerance 1.813 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 0.00 in Static Torque 0.012 in Torsional Stiffness 0.2479 lb-in² Maximum Speed Yes Zero-Backlash? Yes Torque Wrench Metric Hex Keys Material Specification Ruland Manufacturing Country of Origin 0.416300 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 cases, especially when the smallest standard bores are used or where shaft is possible below the rated torque of the disc springs. Keyways are torque capacity in the shaft/hub connection when required. Please cons					

Prop 65

MARNING 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 DCS32-16-12-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:* 0.012 in)
- 2. Fully tighten the M5 screw on the first hub to the recommended seating torque of 9.5 Nm using a 4.0 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 0.874 in.