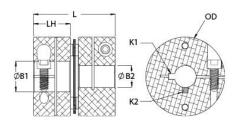




DCSK16-6-4-A

Ruland DCSK16-6-4-A, 3/8" x 1/4" Single Disc Coupling, Aluminum, Clamp Style With Keyway, 1.000" OD, 1.031" Length





Description

Ruland DCSK16-6-4-A is a clamp single disc coupling with 0.3750" x 0.2500" bores, 1.000" OD, 1.031" length, and 3/32" keyway on the 3/8" bore and no keyway on the 1/4" bore. 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. DCSK16-6-4-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 DCSK16-6-4-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. DCSK16-6-4-A is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

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Bore (B1)	0.3750 in	Small Bore (B2)	0.2500 in
Keyway (K1)	3/32 in	Keyway (K2)	NK
B1 Max Shaft Penetration	0.499 in	B2 Max Shaft Penetration	0.499 in
Bore Tolerance	+0.001 in / -0.000 in	Outer Diameter (OD)	1.000 in
Length (L)	1.031 in	Hub Width (LH)	0.467 in
Recommended Shaft Tolerance	+0.0000 in / -0.0005 in	Number of Screws	2 ea
Screw Material	Alloy Steel	Screw Finish	Black Oxide
Hex Wrench Size	2.5 mm	Seating Torque	2.1 Nm
Dynamic Torque Reversing	12.5 lb-in	Angular Misalignment	1.0°
Dynamic Torque Non-Reversing	25 lb-in	Parallel Misalignment	0.00 in
Static Torque	50 lb-in	Axial Motion	0.006 in
Torsional Stiffness	94 lb-in/Deg	Moment of Inertia	0.0088 lb-in ²
Maximum Speed	10,000 RPM	Full Bearing Support Required?	Yes
Torque Wrench	TW:BT-1R-1/4-18.3	Recommended Hex Key	Metric Hex Keys
Material Specification	Hubs: 2024-T351 Aluminum Bar, Disc Springs: Type 302 Stainless Steel	Temperature	-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	Manufacturer	Ruland Manufacturing
Country of Origin	USA	Weight (lbs)	0.064000
UPC	634529200735	Tariff Code	8483.60.8000
UNSPC	31163008		
Note 1	Stainless steel hubs are available upon request.		
Note 2	Torque ratings are at maximum misalignment.		
Note 3	Performance ratings are for guidance only. The user must determine suitability for a particular application.		
Note 4	Torque ratings for the couplings are based on the physical limitations/failure point of the disc springs. Under normal/typical conditions the hubs are capable of holding up to the rated torque of the disc springs. 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 of the disc springs. Keyways are available to provide additional torque capacity in the shaft/hub connection when required. Please consult technical support for more		

assistance.

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

- Align the bores of the DCSK16-6-4-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: 0.006 in)
- 2. Fully tighten the M3 screws on the first hub to the recommended seating torque of 2.1 Nm using a 2.5 mm hex torque wrench.
- 3. Before tightening the screws on the second hub, rotate the coupling by hand to allow it to reach its free length.
- Tighten the screws 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 0.499 in.