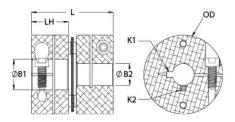




DCSK36-20-14-A

Ruland DCSK36-20-14-A, 1 1/4" x 7/8" Single Disc Coupling, Aluminum, Clamp Style With Keyway, 2.250" OD, 2.313" Length





Description

Ruland DCSK36-20-14-A is a clamp single disc coupling with 1.2500" x 0.8750" bores, 2.250" OD, 2.313" length, and 1/4" x 3/16" keyways. 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. DCSK36-20-14-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 DCSK36-20-14-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. DCSK36-20-14-A is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

| 1.2500 in | Small Bore (B2) | 0.8750 in |
|--|--|--|
| 1/4 in | Keyway (K2) | 3/16 in |
| 1.050 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 |
| 0.4940 lb-in ² | Maximum Speed | 10,000 RPM |
| Yes | Balanced Design | Yes |
| <u>TW:BT-4C-3/8-140</u> | Recommended Hex Key | Metric Hex Keys |
| Yes | 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 |
| 0.643300 | UPC | 634529205310 |
| 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. | | |
| | | ilure point of the disc springs. Under |
| | 1/4 in 1.050 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 0.4940 lb-in ² Yes TW:BT-4C-3/8-140 Yes -40°F to 200°F (-40°C to 93°C) Ruland Manufacturing 0.643300 8483.60.8000 Stainless steel hubs are available Torque ratings are at maximum m | 1/4 inKeyway (K2)1.050 inB2 Max Shaft Penetration2.250 inBore Tolerance2.313 inHub Width (LH)+0.0000 in / -0.0005 inForged Clamp ScrewAlloy SteelHex Wrench SizeBlack OxideSeating Torque2 eaDynamic Torque Reversing1.0°Dynamic Torque Non-Reversing0.00 inStatic Torque0.00 inStatic Torque0.015 inTorsional Stiffness0.4940 lb-in²Maximum SpeedYesBalanced DesignTW:BT-4C-3/8-140Recommended Hex KeyYesMaterial Specification-40°F to 200°F (-40°C to 93°C)Finish SpecificationRuland ManufacturingCountry of Origin0.643300UPC8483.60.8000UNSPCStainless steel hubs are available upon request.Torque ratings are at maximum misalignment. |

| | 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 <u>www.P65Warnings.ca.gov</u> . | |
| Installation Instructions | | |
| | Align the bores of the DCSK36-20-14-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. (<i>Angular Misialignment:</i> 1.0°, <i>Parallel Misalignment:</i> 0.00 in, <i>Axial Motion:</i> 0.015 in) 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. 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. The shafts may extend into the relieved portion of the bore as long as it does not exceed the shaft penetration length of 1.050 in for bore 1 and 1.085 in for bore 2. | |