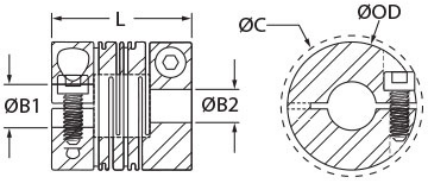
RSC8-4-2-A

Ruland RSC8-4-2-A, 0.250" x 0.125" Short Slit Coupling, Aluminum, Clamp Style, 0.512" OD, 0.661" length



Description

Ruland RSC8-4-2-A is a clamp style slit coupling with 0.2500" x 0.1250" bores, 0.512" OD, and 0.661" length. It is manufactured from a single piece of material and has two sets of intermittent slit cuts allowing for a maintenance-free coupling with high torsional stiffness in relation to comparable couplings, such as beam type. RSC8-4-2-A is commonly used in precise positioning applications found in semiconductor, medical, and test and measurement equipment. This short style slit coupling is ideal for compact installations where the long type may not fit. It is a suitable alternative to comparatively sized disc couplings due to the ability to accommodate all forms of misalignment whereas a single disc coupling has no accomodation for parallel misalignment. RSC8-4-2-A is zero-backlash, has a balanced design for reduced vibration at speeds up to 12,000 RPM, and can accommodate all forms of misalignment with light bearing loads. It is manufactured by Reliance Precision Ltd. in their County Cork, Ireland factory from 7075 aluminum for lightweight and low inertia. RSC8-4-2-A is inventoried by Ruland and RoHS3 and REACH compliant.

Product Specifications

Bore (B1)	0.2500 in	**Small Bore (B2)**	0.1250 in
B1 Max Shaft Penetration	0.276 in	**B2 Max Shaft Penetration**	0.276 in
Outer Diameter (OD)	0.512 in	**Bore Tolerance**	+0.001 in / -0.000 in
Length (L)	0.661 in	**Clearance Diameter (C) MAX**	0.571 in
Cap Screw	M1.6	**Screw Material**	18-8 300 Series Stainless Steel
Hex Wrench Size	1.5 mm	**Screw Finish**	Bright
Seating Torque	0.21 Nm	**Number of Screws**	2
Dynamic Torque Reversing	3.1 lb-in	**Angular Misalignment**	2.5°
Dynamic Torque Non-Reversing	4.9 lb-in	**Parallel Misalignment**	0.003 in
Peak Torque	7 in-lb	**Axial Motion**	0.012 in
Torsional Stiffness	7.1 lb-in/Deg	**Moment of Inertia**	0.0003574 lb-in²
Maximum Speed	12,000 RPM	**Full Bearing Support Required?**	Yes
Zero-Backlash?	Yes	**Balanced Design**	Yes
Material Specification	7075-T651 Extruded and Drawn Aluminum Bar	**Temperature**	-110°F to 175°F (-80°C to 80°C)
Finish Specification	SurTec 650	**Manufacturer**	Reliance Precision Limited
Country of Origin	Ireland	**Weight (lbs)**	0.009300
UPC	634529297391	**Tariff Code**	8483.60.8000
UNSPC	31163003		
Note 1	Performance ratings are for guidance only. The user must determine suitability for a particular application.		
Prop 65			

⚠**WARNING** This product can expose you to the chemical Nickel (metallic), known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.