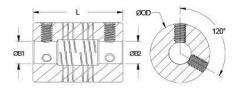




## FSMR38-20-18-SS

Ruland FSMR38-20-18-SS, 20mm x 18mm Six Beam Coupling, Stainless Steel, Set Screw Style, 38.1mm OD, 57.2mm Length





## Description

Ruland FSMR38-20-18-SS is a set screw style six beam coupling with 20mm x 18mm bores, 38.1mm OD, and 57.2mm length. It is machined from a single piece of material and features two sets of three spiral cuts. This gives it higher torque capacity, lower windup, and larger body sizes than single or four beam couplings and allows for use in light duty power transmission applications such as coupling a servo motor to a lead screw. FSMR38-20-18-SS is zero-backlash and has a balanced design for reduced vibration at high speeds of up to 6,000 RPM. All hardware is metric and tests beyond DIN 912 12.9 standards for maximum torque capabilities. FSMR38-20-18-SS is made from 303 stainless steel for increased torque capacity. It is machined from bar stock that is sourced exclusively from North American mills and RoHS3 and REACH compliant. FSMR38-20-18-SS is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

## **Product Specifications**

3 mm 1 mm 2 mm 2 mm 3 mm 3 mm 3 mm 3 mm 5 mm 5 Nm 5 Nm 19 Nm 28 Deg/Nm	Small Bore (B2) B2 Max Shaft Penetration Bore Tolerance Recommended Shaft Tolerance Screw Material Screw Finish Number of Screws Angular Misalignment Parallel Misalignment Axial Motion	18 mm 27.3 mm +0.025 mm / -0.000 mm +0.000 mm / -0.013 mm Alloy Steel Black Oxide 4 ea 3° 0.76 mm 0.38 mm
1 mm 2 mm 3 0 mm 2 Nm 37 Nm 35 Nm 35 Nm 49 Nm 28 Deg/Nm	Bore Tolerance Recommended Shaft Tolerance Screw Material Screw Finish Number of Screws Angular Misalignment Parallel Misalignment	+0.025 mm / -0.000 mm +0.000 mm / -0.013 mm Alloy Steel Black Oxide 4 ea 3° 0.76 mm
2 mm 3 0 mm 2 Nm 37 Nm 37 Nm 39 Nm 19 Nm 28 Deg/Nm	Recommended Shaft Tolerance Screw Material Screw Finish Number of Screws Angular Misalignment Parallel Misalignment	+0.000 mm / -0.013 mm Alloy Steel Black Oxide 4 ea 3° 0.76 mm
3 2 mm 2 Nm 37 Nm 75 Nm 19 Nm 28 Deg/Nm	Screw Material Screw Finish Number of Screws Angular Misalignment Parallel Misalignment	Alloy Steel Black Oxide 4 ea 3° 0.76 mm
9 mm 2 Nm 37 Nm 75 Nm 19 Nm 28 Deg/Nm	Screw Finish Number of Screws Angular Misalignment Parallel Misalignment	Black Oxide 4 ea 3° 0.76 mm
2 Nm 37 Nm 75 Nm 19 Nm 28 Deg/Nm	Number of Screws Angular Misalignment Parallel Misalignment	4 ea 3° 0.76 mm
87 Nm 75 Nm 19 Nm 28 Deg/Nm	Angular Misalignment Parallel Misalignment	3° 0.76 mm
75 Nm 19 Nm 28 Deg/Nm	Parallel Misalignment	0.76 mm
l9 Nm 28 Deg/Nm		
28 Deg/Nm	Axial Motion	0 38 mm
_		0.00 mm
	Moment of Inertia	83.407 x10 <sup>-6</sup> kg-m <sup>2</sup>
000 RPM	Full Bearing Support Required?	Yes
S	Torque Wrench	TW:BT-4C-3/8-64
etric Hex Keys	Material Specification	Type 303 Austenitic, Non-Magnetic Bar
0°F to 350°F (-40°C to 176°C)	Finish Specification	Bright, No Plating
land Manufacturing	Country of Origin	USA
37000	UPC	634529211496
83.60.8000	UNSPC	31163003
Torque ratings are at maximum misalignment.		
Performance ratings are for guidance only. The user must determine suitability for a particular application.		
Torque ratings for the couplings are based on the physical limitations/failure point of the machined beams. Under normal/typical conditions the hubs are capable of holding up to the rated torque of the machined beams. 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 machined beams. Please consult technical support for more assistance.		
own to the State of California to ca	ause cancer, and Ethylene Thiourea	known to the State of California to
la rc rc da h la rc rc da h	ric Hex Keys PF to 350°F (-40°C to 176°C) and Manufacturing 37000 3.60.8000 que ratings are at maximum misa formance ratings are for guidance que ratings for the couplings are ler normal/typical conditions the l ms. In some cases, especially wi ersized, slippage on the shaft is j anical support for more assistance <b>VARNING</b> This product can export with the State of California to case se birth defects or other reproduct	ric Hex Keys Material Specification   °F to 350°F (-40°C to 176°C) Finish Specification   and Manufacturing Country of Origin   87000 UPC   360.8000 UNSPC   opue ratings are at maximum misalignment.   formance ratings are for guidance only. The user must determine sui   opue ratings for the couplings are based on the physical limitations/fail   ler normal/typical conditions the hubs are capable of holding up to the   ms. In some cases, especially when the smallest standard bores are   ersized, slippage on the shaft is possible below the rated torque of the

Misialignment: 3°, Parallel Misalignment: 0.76 mm, Axial Motion: 0.38 mm)

- Fully tighten the M6 screws on one hub to the recommended seating torque of 7.2 Nm using a 3.0 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 27.3 mm.