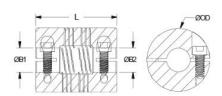




MWC25-10-7-A

Ruland MWC25-10-7-A, 10mm x 7mm Four Beam Coupling, Aluminum, Clamp Style, 25.0mm OD, 30.0mm Length





Description

Ruland MWC25-10-7-A is a clamp style four beam coupling with 10mm x 7mm bores, 25.0mm OD, and 30.0mm length. It is machined from a single piece of material and feature two sets of two spiral cuts. This gives it higher torque capacity, lower windup, and larger body sizes than single beam couplings. MWC25-10-7-A is zero-backlash and has a balanced design for reduced vibration at high speeds of up to 6,000 RPM. MW-series couplings have purely metric outer diameter and length dimensions and fit in a smaller envelope than the P-series allowing for easier interchanges from single beam couplings. This four beam spiral coupling 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. MWC25-10-7-A is made from 7075 aluminum for lightweight and low inertia. It is machined from bar stock that is sourced exclusively from North American mills and RoHS3 and REACH compliant. MWC25-10-7-A is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Droduct	Specifications
Product	Specifications

B1 Max Shaft Penetration 14.2 mm B2 Max Shaft Penetration 14.2 mm Duter Diameter (OD) 25.0 mm Bore Tolerance +0.025 mm / -0.000 mm / -0.000 mm -0.013 mm -0.000 mm +0.000 mm / -0.013 mm -0.000 mm -0.013 mm -0.000 mm / -0.000 mm -	i roduct opcomoduona				
Duter Diameter (OD) 25.0 mm Bore Tolerance +0.025 mm / -0.000 mm Length (L) 30.0 mm Recommended Shaft Tolerance +0.000 mm / -0.013 mm Recommended Shaft Tolerance 2.5 mm Screw Finish Black Oxide Screw Strew Str	Bore (B1)	10 mm	Small Bore (B2)	7 mm	
Length (L) 30.0 mm Recommended Shaft Tolerance 40.000 mm / -0.013 mm And Screw Material Alloy Steel Alloy A	B1 Max Shaft Penetration	14.2 mm	B2 Max Shaft Penetration	14.2 mm	
Cap Screw M3 Screw Material Alloy Steel Hex Wrench Size 2.5 mm Screw Finish Black Oxide Seating Torque 2.1 Nm Number of Screws 2 ea Dynamic Torque Reversing 0.78 Nm Angular Misalignment 3° Dynamic Torque Non-Reversing 1.55 Nm Parallel Misalignment 0.38 mm Static Torque 3.10 Nm Axial Motion 0.25 mm Torsional Stiffness 1.75 Deg/Nm Moment of Inertia 2.955 x10°6 kg-m² Maximum Speed 6,000 RPM Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Torque Wrench TW-BT-1R-1/4-18.3 Recommended Hex Key Metric Hex Keys Material Specification 7075-T651 Extruded and Drawn Aluminum Bar Finish Specification Bright, No Plating Manufacturer Ruland Manufacturing Country of Origin USA Weight (lbs) 0.067000 UNSPC 31163003 Note 1 Torque ratings are at maximum misalignment. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular application. Note 3 Torque ratings for the couplings are based on the physical limitations/failure point 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. Prop 65 AWARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	Outer Diameter (OD)	25.0 mm	Bore Tolerance	+0.025 mm / -0.000 mm	
Hex Wrench Size 2.5 mm Screw Finish Black Oxide Seating Torque 2.1 Nm Number of Screws 2 ea Dynamic Torque Reversing 0.78 Nm Angular Misalignment 3° Dynamic Torque Non-Reversing 1.55 Nm Parallel Misalignment 0.38 mm Static Torque 3.10 Nm Axial Motion 0.25 mm Torsional Stiffness 1.75 Deg/Nm Moment of Inertia 2.955 x10⁻⁶ kg-m² Maximum Speed 6,000 RPM Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Torque Wrench Material Specification 7075-T651 Extruded and Drawn Aluminum Bar Finish Specification Bright, No Plating Manufacturer Meight (lbs) 0.067000 JNSPC 31163003 Note 1 Torque ratings are at maximum misalignment. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular application. Note 3 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. Under normal/typical conditions the hubs are capable of holding up to the rated torque 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 consultechnical support for more assistance. Prop 65 AWARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	Length (L)	30.0 mm	Recommended Shaft Tolerance	+0.000 mm / -0.013 mm	
Seating Torque 2.1 Nm Number of Screws 2 ea Dynamic Torque Reversing 0.78 Nm Angular Misalignment 3° Dynamic Torque Non-Reversing 1.55 Nm Parallel Misalignment 0.38 mm Static Torque 3.10 Nm Axial Motion 0.25 mm Torsional Stiffness 1.75 Deg/Nm Moment of Inertia 2.955 x10⁻⁶ kg-m² Maximum Speed 6,000 RPM Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Torque Wrench TW:BT-1R-1/4-18.3 Recommended Hex Key Metric Hex Keys Material Specification 7075-T651 Extruded and Drawn Aluminum Bar Finish Specification Bright, No Plating Manufacturer Ruland Manufacturing Country of Origin USA Weight (Ibs) 0.067000 UNSPC 31163003 Note 1 Torque ratings are at maximum misalignment. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular application. Note 3 Torque ratings for the couplings are based on the physical limitations/failure point 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. 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 consultechnical support for more assistance. Prop 65 AMARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	Cap Screw	M3	Screw Material	Alloy Steel	
Dynamic Torque Reversing 0.78 Nm Angular Misalignment 3° Dynamic Torque Non-Reversing 1.55 Nm Parallel Misalignment 0.38 mm Static Torque 3.10 Nm Axial Motion 0.25 mm Torsional Stiffness 1.75 Deg/Nm Moment of Inertia 2.955 x10° kg-m² Maximum Speed 6,000 RPM Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Torque Wrench TW:BT-1R-1/4-18.3 Recommended Hex Key Metric Hex Keys Material Specification 7075-7651 Extruded and Drawn Aluminum Bar Finish Specification Bright, No Plating Manufacturer Ruland Manufacturing Country of Origin USA Weight (Ibs) 0.067000 JPC 634529212592 Tariff Code 8483.60.8000 JNSPC 31163003 Note 1 Torque ratings are at maximum misalignment. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular application. Note 3 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 consultechnical support for more assistance. Prop 65 AWARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	Hex Wrench Size	2.5 mm	Screw Finish	Black Oxide	
Dynamic Torque Non-Reversing 1.55 Nm Parallel Misalignment 0.38 mm Ozero-Backlash? Pes Balanced Design Temperature Country of Origin USA Weight (Ibs) Ozero-Backlash Note 1 Torque ratings are at maximum misalignment. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular application. Note 3 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. Please consultechnical support for more assistance. Prop 65 Avaning Torque Non-Reversing 1.55 Nm Parallel Misalignment 0.25 mm 0.25 mm 0.25 mm 0.25 mm 0.2955 x10 ⁻⁶ kg-m² Ves Balanced Design Yes Temperature -40°F to 225°F (-40°C to 107°C) Temperature -40°F to 225°F (-40°C to 107°C) Temperature Ruland Manufacturing 0.067000 DO.067000 JPC 634529212592 Tariff Code 8483.60.8000 JNSPC 31163003 Torque ratings are at maximum misalignment. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular application. Note 3 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 consultechnical support for more assistance. Prop 65	Seating Torque	2.1 Nm	Number of Screws	2 ea	
Static Torque 3.10 Nm Axial Motion 0.25 mm Torsional Stiffness 1.75 Deg/Nm Moment of Inertia 2.955 x10-6 kg-m² Maximum Speed 6,000 RPM Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Torque Wrench TW:BT-1R-1/4-18.3 Recommended Hex Key Metric Hex Keys Material Specification 7075-T651 Extruded and Drawn Aluminum Bar Finish Specification Bright, No Plating Manufacturer Ruland Manufacturing Country of Origin USA Weight (lbs) 0.067000 UPC 634529212592 Tariff Code 8483.60.8000 UNSPC 31163003 Note 1 Torque ratings are at maximum misalignment. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular application. Note 3 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 consultechnical support for more assistance. Prop 65 ■ WARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	Dynamic Torque Reversing	0.78 Nm	Angular Misalignment	3°	
Torsional Stiffness 1.75 Deg/Nm Moment of Inertia 2.955 x10 ⁻⁶ kg-m ² Maximum Speed 6,000 RPM Full Bearing Support Required? Yes Zero-Backlash? Yes Balanced Design Yes Torque Wrench TW:BT-1R-1/4-18.3 Recommended Hex Key Metric Hex Keys Material Specification 7075-T651 Extruded and Drawn Aluminum Bar Finish Specification Bright, No Plating Manufacturer Ruland Manufacturing Country of Origin USA Weight (lbs) 0.067000 USA Weight (lbs) 0.067000 UNSPC 31163003 Note 1 Torque ratings are at maximum misalignment. Note 2 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 consutechnical support for more assistance. Prop 65 MARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	Dynamic Torque Non-Reversing	1.55 Nm	Parallel Misalignment	0.38 mm	
Advanced Speed Advanced Speed Advanced Design Yes Advanced Design Advanced Design Yes Advanced Design Advanced	Static Torque	3.10 Nm	Axial Motion	0.25 mm	
Torque Wrench TW:BT-1R-1/4-18.3 Recommended Hex Key Metric Hex Keys Material Specification T075-T651 Extruded and Drawn Aluminum Bar Finish Specification Bright, No Plating Manufacturer Weight (Ibs) USA Weight (Ibs) USA Weight (Ibs) USA Weight (Ibs) Wote 1 Torque ratings are at maximum misalignment. Note 2 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. 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. Prop 65 MARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	Torsional Stiffness	1.75 Deg/Nm	Moment of Inertia	2.955 x10 ⁻⁶ kg-m ²	
Torque Wrench TW:BT-1R-1/4-18.3 Recommended Hex Key Metric Hex Keys 7075-T651 Extruded and Drawn Aluminum Bar Finish Specification Bright, No Plating Manufacturer Weight (lbs) JPC 634529212592 Tariff Code Weight (lbs) JNSPC 31163003 Note 1 Torque ratings are at maximum misalignment. Note 2 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 consultechnical support for more assistance. Prop 65 WARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	Maximum Speed	6,000 RPM	Full Bearing Support Required?	Yes	
Material Specification 7075-T651 Extruded and Drawn Aluminum Bar Finish Specification Bright, No Plating Weight (Ibs) 0.067000 UPC 634529212592 Tariff Code 8483.60.8000 UNSPC 31163003 Note 1 Torque ratings are at maximum misalignment. Note 2 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 consultechnical support for more assistance. Prop 65 WARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	Zero-Backlash?	Yes	Balanced Design	Yes	
Aluminum Bar Finish Specification Bright, No Plating Manufacturer Ruland Manufacturing Country of Origin USA Weight (lbs) 0.067000 JPC 634529212592 Tariff Code 8483.60.8000 JNSPC 31163003 Note 1 Torque ratings are at maximum misalignment. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular application. Note 3 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 consutechnical support for more assistance. Prop 65 MARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	Torque Wrench	TW:BT-1R-1/4-18.3	Recommended Hex Key	Metric Hex Keys	
Country of Origin USA Weight (lbs) 0.067000 8483.60.8000 UNSPC 31163003 Note 1 Torque ratings are at maximum misalignment. Note 2 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 consultechnical support for more assistance. Prop 65 MARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	Material Specification		Temperature	-40°F to 225°F (-40°C to 107°C)	
JPC	Finish Specification	Bright, No Plating	Manufacturer	Ruland Manufacturing	
Note 1 Torque ratings are at maximum misalignment. Note 2 Performance ratings are for guidance only. The user must determine suitability for a particular application. Note 3 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 consutechnical support for more assistance. Prop 65 ★WARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	Country of Origin	USA	Weight (lbs)	0.067000	
Note 1 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 consultechnical support for more assistance. Prop 65 MARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	UPC	634529212592	Tariff Code	8483.60.8000	
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 consultechnical support for more assistance. Prop 65 MARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	UNSPC	31163003			
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 consutechnical support for more assistance. Prop 65 MARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	Note 1	Torque ratings are at maximum misalignment.			
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 consutechnical support for more assistance. Prop 65 WARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to	Note 2	Performance ratings are for guidance only. The user must determine suitability for a particular application.			
California to cause cancer and birth defects or other reproductive harm. For more information go to	Note 3	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			
	Prop 65	⚠WARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to			

Installation Instructions

- Align the bores of the MWC25-10-7-A four beam coupling on the shafts that are to be joined and determine if the misalignment parameters are within the limits of the coupling. (*Angular Misialignment*: 3°, *Parallel Misalignment*: 0.38 mm, *Axial Motion*: 0.25 mm)
- 2. Fully tighten the M3 screw on one 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.
- 4. 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 14.2 mm.