## MDCS41-16-14-A

Ruland MDCS41-16-14-A, 16mm x 14mm Single Disc Coupling, Aluminum, Clamp Style, 41.3mm OD, 39.7mm Length

Description

Ruland MDCS41-16-14-A is a clamp single disc coupling with 16mm x 14mm bores, 41.3mm OD, and 39.7mm length. 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. MDCS41-16-14-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 MDCS41-16-14-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. MDCS41-16-14-A is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

| Product   | Specifications |
|-----------|----------------|
| Bore (B1) |                |

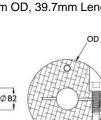
| Recommended Shaft Tolerance +0.000 mm / -0.013 mm Forged Clamp Screw M4   Screw Material Alloy Steel Hex Wrench Size 3.0 mm   Screw Finish Black Oxide Seating Torque 4.6 Nm   Number of Screws 2 ea Dynamic Torque Reversing 5.08 Nm   Angular Misalignment 1.0° Dynamic Torque Non-Reversing 10.15 Nm   Parallel Misalignment 0.00 mm Static Torque 20.3 Nm   Axial Motion 0.25 mm Torsional Stiffness 70.6 Nm/Deg   Moment of Inertia 2.805 x 10.5 kg-m² Maximum Speed 10,000 RPM   Full Bearing Support Required? Yes Zero-Backlash? Yes   Balanced Design Yes Torque Wrench TW:BT-1R-1/4-41.0   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 Suffuric Anodized MIL-A-8625 Type II, Class 2 and ASTM B580 Type B Black Anodize   Manufacturer Ruland Manufacturing Country of Origin USA   Weight (lbs) 0.255400 UPC 634529085325  | r roudet opcomeations          |  |                              |                                  |  |
|---|--------------------------------|--|------------------------------|----------------------------------|--|
| Outer Diameter (OD)   41.3 mm   Bore Tolerance   +0.03 mm /-0.00 mm     Length (L)   39.7 mm   Hub Wichth (LH)   18.0 mm     Recommended Shaft Tolerance   +0.000 mm /-0.013 mm   Forged Clamp Screw   M4     Screw Material   Alloy Steel   Hex Wrench Size   3.0 mm     Screw Material   Alloy Steel   Hex Wrench Size   3.0 mm     Screw Material   Black Oxide   Seating Torque Reversing   5.08 Nm     Angular Misalignment   1.0°   Dynamic Torque Reversing   10.15 Nm     Parallel Misalignment   0.00 mm   Static Torque   20.3 Nm     Axial Motion   0.25 mm   Torsional Stiffness   70.6 Nm/Deg     Moment of Inertia   2.805 x 10.5 kg-m²   Maximum Speed   10,000 RPM     Full Bearing Support Require?   Yes   Torque Wrench   TW/BT-1R-1/4-41.0     Recommended Hex Key   Matrial Elex 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 Anodize MIL-A-8625 Type B Black Anodize     Manufacturer  | Bore (B1)                      | 16 mm  | Small Bore (B2)              | 14 mm                            |  |
| Length (L) 39.7 mm Hub Width (LH) 18.0 mm   Recommended Shaft Tolerance +0.000 mm / -0.013 mm Forged Clamp Screw M4   Screw Material Alloy Steel Hex Wrench Size 3.0 mm   Screw Finish Black Oxide Seating Torque 4.6 Nm   Number of Screws 2 ea Dynamic Torque Reversing 5.08 Nm   Angular Misalignment 1.0° Dynamic Torque Reversing 10.15 Nm   Parallel Misalignment 0.00 mm Static Torque Roorsing 10.15 Nm   Axial Motion 0.25 mm Torsional Stiffness 70.6 Nm/Deg   Moment of Inertia 2.805 x 10 <sup>-5</sup> kg-m <sup>2</sup> Maximum Speed 10.000 RPM   Full Bearing Support Required? Yes Zero-Backlash? Yes   Balanced Design Yes Torque Wrench TW_BT-1R-1/4-41.0   Recommended Hex Key Metric Hex Keys Material 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) 0.255400 UPC 634529085325   Tariff Code 8438.60.8000 UNSPC<   | B1 Max Shaft Penetration       | 19.2 mm  | B2 Max Shaft Penetration     | 19.2 mm                          |  |
| Recommended Shaft Tolerance +0.000 mm / -0.013 mm Forged Clamp Screw M4   Screw Material Alloy Steel Hex Wrench Size 3.0 mm   Screw Finish Black Oxide Seating Torque 4.6 Nm   Number of Screws 2 ea Dynamic Torque Reversing 5.08 Nm   Angular Misalignment 1.0° Dynamic Torque Non-Reversing 10.15 Nm   Parallel Misalignment 0.00 mm Static Torque 20.3 Nm   Axial Motion 0.25 mm Torsional Stiffness 70.6 Nm/Deg   Moment of Inertia 2.805 x 10° kg·m² Maximum Speed 10.000 RPM   Full Bearing Support Required? Yes Zero-Backlash? Yes   Balanced Design Yes Torque Wrench TW:BT-1R-1/4-41.0   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) 0.255400 UPC 634529085325   | Outer Diameter (OD)            | 41.3 mm  | Bore Tolerance               | +0.03 mm / -0.00 mm              |  |
| Screw Material Alloy Steel Hex Wrench Size 3.0 mm   Screw Finish Black Oxide Seating Torque 4.6 Nm   Number of Screws 2 ea Dynamic Torque Reversing 5.08 Nm   Angular Misalignment 1.0° Dynamic Torque Non-Reversing 10.15 Nm   Parallel Misalignment 0.00 mm Static Torque 20.3 Nm   Axial Motion 0.25 mm Torsional Stiffness 70.6 Nm/Deg   Moment of Inertia 2.805 x 10.5 kg-m² Maximum Speed 10,000 RPM   Full Bearing Support Required? Yes Zero-Backlash? Yes   Balanced Design Yes Torque Wrench TW:BT-1R:1/4-41.0   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 Anodize MIL-A-8625 Type II, Class 2 and ASTM B580 Type B   Manufacturer Ruland Manufacturing Country of Origin USA   Weight (lbs) 0.255400 UPC 634529085325   Tariff Code 8483.60.8000 UNSPC 31163008   Note 1 Stain  | Length (L)                     | 39.7 mm  | Hub Width (LH)               | 18.0 mm                          |  |
| Screw Finish   Black Oxide   Seating Torque   4.6 Nm     Number of Screws   2 ea   Dynamic Torque Reversing   5.08 Nm     Angular Misalignment   1.0°   Dynamic Torque Reversing   10.15 Nm     Parallel Misalignment   0.00 mm   Static Torque   20.3 Nm     Axial Motion   0.25 mm   Torsional Stiffness   70.6 Nm/Deg     Moment of Inertia   2.805 x 10 <sup>5</sup> kg-m²   Maximum Speed   10,000 RPM     Full Bearing Support Required?   Yes   Zero-Backlash?   Yes     Balanced Design   Yes   Torque Wrench   TW:BT-1R-1/4-41.0     Recommended Hex Key   Metric Hex Keys   Material Specification   Hubs: 2024-7351 Aluminum Bar, Disc Springs: Type 302 Stainless Steel     Temperature   -40°F to 200°F (-40°C to 93°C)   Finish Specification   II. Class 2 and ASTM B580 Type B Black Anodize     Manufacturer   Ruland Manufacturing   Country of Origin   USA     Weight (Ibs)   0.255400   UPC   634529085325     Tariff Code   8483.60.8000   UNSPC   31163008     Note 1   Stainless steel hubs are available upon request.   | Recommended Shaft Tolerance    | +0.000 mm / -0.013 mm  | Forged Clamp Screw           | M4                               |  |
| Number of Screws   2 ea   Dynamic Torque Reversing   5.08 Nm     Angular Misalignment   1.0°   Dynamic Torque Non-Reversing   10.15 Nm     Parallel Misalignment   0.00 mm   Static Torque   20.3 Nm     Axial Motion   0.25 mm   Torsional Stiffness   70.6 Nm/Deg     Moment of Inertia   2.805 x 10 <sup>-5</sup> kg-m <sup>2</sup> Maximum Speed   10,000 RPM     Full Bearing Support Required?   Yes   Zero-Backlash?   Yes     Balanced Design   Yes   Torque Wrench   TW:BT-1R-1/4-41.0     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)   0.255400   UPC   634529085325     Tariff Code   8483.60.8000   UNSPC   31163008     Note 1   Stainless steel hubs are available upon request.   Note 3     Note 2   Torque ratings are  | Screw Material                 | Alloy Steel  | Hex Wrench Size              | 3.0 mm                           |  |
| Angular Misalignment 1.0° Dynamic Torque Non-Reversing 10.15 Nm   Parallel Misalignment 0.00 mm Static Torque 20.3 Nm   Axial Motion 0.25 mm Torsional Stiffness 70.6 Nm/Deg   Moment of Inertia 2.805 x 10 <sup>5</sup> kg-m <sup>2</sup> Maximum Speed 10,000 RPM   Full Bearing Support Required? Yes Zero-Backlash? Yes   Balanced Design Yes Torque Wrench TW:BT-1R-1/4-41.0   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   Maunfacturer Ruland Manufacturing Country of Origin USA   Weight (Ibs) 0.255400 UPC 634529085325   Tariff Code 8483.60.8000 UNSPC 31163008   Note 1 Stainless steel hubs are available upon request. 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. Inder normal/typica  | Screw Finish                   | Black Oxide  | Seating Torque               | 4.6 Nm                           |  |
| Parallel Misalignment 0.00 mm Static Torque 20.3 Nm   Axial Motion 0.25 mm Torsional Stiffness 70.6 Nm/Deg   Moment of Inertia 2.805 x 10 <sup>5</sup> kg-m <sup>2</sup> Maximum Speed 10,000 RPM   Full Bearing Support Required? Yes Zero-Backlash? Yes   Balanced Design Yes Torque Wrench TW:BT-1R-1/4-41.0   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 Suffuric Anodized MIL-A-8625 Type II, Class 2 and ASTM B580 Type B Black Anodize   Manufacturer Ruland Manufacturing Country of Origin USA   Weight (lbs) 0.255400 UPC 634529085325   Tariff Code 8483.60.8000 UNSPC 31163008   Note 1 Stainless steel hubs are available upon request. Note 2   Note 2 Torque ratings are for guidance only. The user must determine suitability for a particular application.   Note 4 Torque ratings are for guidance only. The user must determine suitability for a particular application.   Note 4 Torque ratings are for guidance only. The user must determine suitabilit  | Number of Screws               | 2 ea   | Dynamic Torque Reversing     | 5.08 Nm                          |  |
| Axial Motion0.25 mmTorsional Stiffness70.6 Nm/DegMoment of Inertia2.805 x 10 5 kg-m2Maximum Speed10,000 RPMFull Bearing Support Required?YesZero-Backlash?YesBalanced DesignYesTorque WrenchTW:BT-1R-1/4-41.0Recommended Hex KeyMetric Hex KeysMaterial SpecificationHubs: 2024-T351 Aluminum Bar, Disc Springs: Type 302 Stainless SteelTemperature-40°F to 200°F (-40°C to 93°C)Finish SpecificationSulfuric Anodized MIL-A-8625 Type II, Class 2 and ASTM B580 Type B Black AnodizeManufacturerRuland ManufacturingCountry of OriginUSAWeight (Ibs)0.255400UPC634529085325Note 1Stainless steel hubs are available upon request.31163008Note 2Torque ratings are at maximum misalignment.Note 3Note 3Performance ratings are for guidance only. The user must determine suitability for a particular application.Note 4Torque ratings for the couplings are based on the physical limitations/failure point 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. 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. 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. In some cases, especially when the smallest standard bores are used or where shafts are undersized, slippage on the shaft is pos  | Angular Misalignment           | 1.0°   | Dynamic Torque Non-Reversing | 10.15 Nm                         |  |
| Moment of Inertia 2.805 x 10 <sup>-5</sup> kg-m <sup>2</sup> Maximum Speed 10,000 RPM   Full Bearing Support Required? Yes Zero-Backlash? Yes   Balanced Design Yes Torque Wrench TW:BT-1R-1/4-41.0   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) 0.255400 UPC 634529085325   Tariff Code 8483.60.8000 UNSPC 31163008   Note 1 Stainless steel hubs are available upon request. Note 3 Performance ratings are for guidance only. The user must determine suitability for a particular application.   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. 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 conn  | Parallel Misalignment          | 0.00 mm  | Static Torque                | 20.3 Nm                          |  |
| Full Bearing Support Required?YesZero-Backlash?YesBalanced DesignYesTorque WrenchTW:BT-1R-1/4-41.0Recommended Hex KeyMetric Hex KeysMaterial SpecificationHubs: 2024-T351 Aluminum Bar,<br>Disc Springs: Type 302 Stainless<br>SteelTemperature-40°F to 200°F (-40°C to 93°C)Finish SpecificationSulfuric Anodized MIL-A-8625 Type<br>II, Class 2 and ASTM B580 Type B<br>Black AnodizeManufacturerRuland ManufacturingCountry of OriginUSAWeight (lbs)0.255400UPC634529085325Tariff Code8483.60.8000UNSPC31163008Note 1Stainless steel hubs are available upon request.Torque ratings are at maximum misalignment.Note 3Performance ratings are for guidance only. The user must determine suitability for a particular application.Note 4Torque ratings for the couplings are based on the physical limitations/failure point of the disc springs. Under<br>normal/typical conditions the hubs are available of holding up to the rated torque of the disc springs. In some<br>cases, especially when the smallest standard bores are used or where shafts are undersized, slippage on the<br>shaft is possible below the rated torque of the disc springs. Keyways are available to provide additional<br>torque capacity in the shaft/hub connection when required. Please consult technical support for more   | Axial Motion                   | 0.25 mm  | Torsional Stiffness          | 70.6 Nm/Deg                      |  |
| Balanced DesignYesTorque WrenchTW:BT-1R-1/4-41.0Recommended Hex KeyMetric Hex KeysMaterial SpecificationHubs: 2024-T351 Aluminum Bar,<br>Disc Springs: Type 302 Stainless<br>SteelTemperature-40°F to 200°F (-40°C to 93°C)Finish SpecificationSulfuric Anodized MIL-A-8625 Type<br>II, Class 2 and ASTM B580 Type B<br>Black AnodizeManufacturerRuland ManufacturingCountry of OriginUSAWeight (Ibs)0.255400UPC634529085325Tariff Code8483.60.8000UNSPC31163008Note 1Stainless steel hubs are available upon request.Torque ratings are at maximum misalignment.Note 2Torque ratings are for guidance only. The user must determine suitability for a particular application.Note 4Torque ratings for the couplings are based on the physical limitations/failure point of the disc springs. In some<br>cases, especially when the smallest standard bores are used or where shafts are undersized, slippage on the<br>shaft is possible below the rated torque of the disc springs. In some<br>cases, especially when the smallest standard bores are used or where shafts are undersized, slippage on the<br>shaft is possible below the rated torque of the disc springs. In some<br>cases, especially when the smallest standard bores are used or where shafts are undersized, slippage on the<br>shaft is possible below the rated torque of the disc springs. In some<br>cases, especially when the smallest standard bores are used or where shafts are undersized, slippage on the<br>shaft is possible below the rated torque of the disc springs. Keyways are available to provide additional<br>torque capacity in the shaft/hub connection when required. Please consult technical support for more | Moment of Inertia              | 2.805 x 10 <sup>-5</sup> kg-m <sup>2</sup>   | Maximum Speed                | 10,000 RPM                       |  |
| Recommended Hex KeyMetric Hex KeysMaterial SpecificationHubs: 2024-T351 Aluminum Bar,<br>Disc Springs: Type 302 Stainless<br>SteelTemperature-40°F to 200°F (-40°C to 93°C)Finish SpecificationSulfuric Anodized MIL-A-8625 Type<br>II, Class 2 and ASTM B580 Type B<br>Black AnodizeManufacturerRuland ManufacturingCountry of OriginUSAWeight (lbs)0.255400UPC634529085325Tariff Code8483.60.8000UNSPC31163008Note 1Stainless steel hubs are available upon request.Note 2Torque ratings are at maximum misalignment.Note 3Performance ratings are for guidance only. The user must determine suitability for a particular application.Note 4Torque ratings for the couplings are based on the physical limitations/failure point of the disc springs. Under<br>normal/typical conditions the hubs are capable of holding up to the rated torque of the disc springs. In some<br>cases, especially when the smallest standard bores are used or where shafts are undersized, slippage on the<br>shaft is possible below the rated torque of the disc springs. Keyways are available to provide additional<br>torque capacity in the shaft/hub connection when required. Please consult technical support for more   | Full Bearing Support Required? | Yes  | Zero-Backlash?               | Yes                              |  |
| Disc Springs: Type 302 Stainless<br>SteelTemperature-40°F to 200°F (-40°C to 93°C)Finish SpecificationSulfuric Anodized MIL-A-8625 Type<br>II, Class 2 and ASTM B580 Type B<br>Black AnodizeManufacturerRuland ManufacturingCountry of OriginUSAWeight (lbs)0.255400UPC634529085325Tariff Code8483.60.8000UNSPC31163008Note 1Stainless steel hubs are available upon request.Note 2Note 2Torque ratings are at maximum misalignment.Torque ratings for the couplings are based on the physical limitations/failure point of the disc springs. Under<br>normal/typical conditions the hubs are capable of holding up to the rated torque of the disc springs. In some<br>cases, especially when the smallest standard bores are used or where shafts are undersized, slippage on the<br>shaft is possible below the rated torque of the disc springs. Keyways are available to provide additional<br>torque capacity in the shaft/hub connection when required. Please consult technical support for more  | Balanced Design                | Yes  | Torque Wrench                | <u>TW:BT-1R-1/4-41.0</u>         |  |
| II, Class 2 and ASTM B580 Type B<br>Black AnodizeManufacturerRuland ManufacturingCountry of OriginUSAWeight (lbs)0.255400UPC634529085325Tariff Code8483.60.8000UNSPC31163008Note 1Stainless steel hubs are available upon request.III.Note 2Note 2Torque ratings are at maximum misalignment.III.Note 3Performance ratings are for guidance only. The user must determine suitability for a particular application.Note 4Torque ratings for the couplings are based on the physical limitations/failure point of the disc springs. Under<br>normal/typical conditions the hubs are capable of holding up to the rated torque of the disc springs. In some<br>cases, especially when the smallest standard bores are used or where shafts are undersized, slippage on the<br>shaft is possible below the rated torque of the disc springs. Keyways are available to provide additional<br>torque capacity in the shaft/hub connection when required. Please consult technical support for more   | Recommended Hex Key            | Metric Hex Keys  | Material Specification       | Disc Springs: Type 302 Stainless |  |
| Weight (lbs)0.255400UPC634529085325Tariff Code8483.60.8000UNSPC31163008Note 1Stainless steel hubs are available upon request.Note 2Torque ratings are at maximum misalignment.Note 3Performance ratings are for guidance only. The user must determine suitability for a particular application.Note 4Torque ratings for the couplings are based on the physical limitations/failure point of the disc springs. Under<br>normal/typical conditions the hubs are capable of holding up to the rated torque of the disc springs. In some<br>cases, especially when the smallest standard bores are used or where shafts are undersized, slippage on the<br>shaft is possible below the rated torque of the disc springs. Keyways are available to provide additional<br>torque capacity in the shaft/hub connection when required. Please consult technical support for more  | Temperature                    | -40°F to 200°F (-40°C to 93°C)   | Finish Specification         |                                  |  |
| Tariff Code8483.60.8000UNSPC31163008Note 1Stainless steel hubs are available upon request.Note 2Torque ratings are at maximum misalignment.Note 3Performance ratings are for guidance only. The user must determine suitability for a particular application.Note 4Torque ratings for the couplings are based on the physical limitations/failure point of the disc springs. Under<br>normal/typical conditions the hubs are capable of holding up to the rated torque of the disc springs. In some<br>cases, especially when the smallest standard bores are used or where shafts are undersized, slippage on the<br>shaft is possible below the rated torque of the disc springs. Keyways are available to provide additional<br>torque capacity in the shaft/hub connection when required. Please consult technical support for more   | Manufacturer                   | Ruland Manufacturing   | Country of Origin            | USA                              |  |
| 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  | Weight (Ibs)                   | 0.255400   | UPC                          | 634529085325                     |  |
| 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  | Tariff Code                    | 8483.60.8000   | UNSPC                        | 31163008                         |  |
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| 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  | Note 3                         | Performance ratings are for guidance only. The user must determine suitability for a particular application.   |                              |                                  |  |
|   | Note 4                         | 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 |                              |                                  |  |

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**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 MDCS41-16-14-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. (*Angular Misialignment:* 1.0°, *Parallel Misalignment:* 0.00 mm, *Axial Motion:* 0.25 mm)
- 2. Fully tighten the M4 screw on the first hub to the recommended seating torque of 4.6 Nm using a 3.0 mm hex torque wrench.
- 3. 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.
- 5. The shafts may extend into the relieved portion of the bore as long as it does not exceed the shaft penetration length of 19.2 mm.