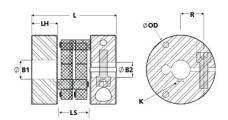




MCPRDK75-25-A

Ruland MCPRDK75-25-A, Controlflex Coupling Hub, Aluminum, Clamp Style With Keyway, 75.0mm OD, 73.0mm Length





Description

Ruland MCPRDK75-25-A is a Controlflex coupling hub with a 25mm bore, 8mm keyway, 75.0mm OD, and 73.0mm length. It is a component in a four-piece design consisting of two aluminum hubs mounted by pins to two acetal inserts creating a lightweight low inertia coupling capable of speeds up to 7,500 RPM. This four-piece design allows for a highly customizable coupling that easily combines clamp hubs with inch, metric, keyed, and keyless bores. Hardware is metric and tests beyond DIN 912 12.9 standards for maximum torque capabilities. Controlflex couplings have a balanced design for reduced vibrations at high speeds, can accommodate all forms of misalignment, and are an excellent fit for encoders, tachometers, and light duty stepper servo positioning applications. MCPRDK75-25-A is RoHS3 and REACH compliant.

Product Specifications

| eyway (K) 8 mm Outer Diameter (OD) 2.953 in (75.0 mm) ore Tolerance +0.07 mm / +0.02 mm Hub Width (LH) 18.0 mm ength (L) 2.874 in (73.0 mm) Space Between Hubs (LS) 1.456 in (37.0 mm) orged Clamp Screw M8 Screw Material Alloy Steel ex Wrench Size 6.0 mm Screw Finish Black Oxide eating Torque 24.0 Nm Screw Location (R) 25 mm umber of Screws 1 ea Rated Torque 30 Nm engular Misalignment 1.0° Peak Torque 40 Nm orsional Stiffness 21.00 Nm/Deg Axial Motion 1.50 mm erallel Misalignment 2.0 mm Maximum Speed 7,500 RPM ecommended Inserts CPFRG48/75-AT Full Bearing Support Required? Yes ero-Backlash? Yes Balanced Design Yes leight (lbs) 0.460800 Temperature -22°F to 175°F (-30°C to 80°C) eaterial Specification 6082 Aluminum Bar Finish Clear Anodized enish Specification Clear Anodized Manufacturer Schmidt Kupplung eriff Code 8483.60.8000 UNSPC 31163022 ete 1 Stainless steel hubs are available upon request. ote 2 Performance ratings are for guidance only. The user must determine suitability for a particular application. | i roddot opoomodnomo | | | |
|--|------------------------|--|--------------------------------|--------------------------------|
| ore Tolerance +0.07 mm / +0.02 mm Hub Width (LH) 18.0 mm ength (L) 2.874 in (73.0 mm) Space Between Hubs (LS) 1.456 in (37.0 mm) orged Clamp Screw M8 Screw Material Alloy Steel ex Wrench Size 6.0 mm Screw Finish Black Oxide ex Wrench Size 6.0 mm Screw Location (R) 25 mm umber of Screws 1 ea Rated Torque 30 Nm engular Misalignment 1.0° Peak Torque 40 Nm orsional Stiffness 21.00 Nm/Deg Axial Motion 1.50 mm exarallel Misalignment 2.0 mm Maximum Speed 7,500 RPM ecommended Inserts CPFRG48/75-AT Full Bearing Support Required? Yes ero-Backlash? Yes Balanced Design Yes leight (Ibs) 0.460800 Temperature -22°F to 175°F (-30°C to 80°C) eleight (Ibs) 0.460800 Temperature Schmidt Kupplung endish Specification Clear Anodized Manufacturer Schmidt Kupplung endish Specification Clear Anodized Manufacturer Schmidt Kupplung endiff Code 8483.60.8000 UNSPC 31163022 endet 1 Stainless steel hubs are available upon request. endet 2 Performance ratings are for guidance only. The user must determine suitability for a particular application. endet 2 Performance ratings are for guidance only. The user must determine suitability for a particular application. endet 2 Performance ratings are for guidance only. The user must determine suitability for a particular application. endet 2 Performance ratings are based on the physical limitations/failure point of the inserts. Under | Bore (B1) | 25 mm | B1 Max Shaft Penetration | 18.0 mm |
| ength (L) 2.874 in (73.0 mm) Space Between Hubs (LS) 1.456 in (37.0 mm) orged Clamp Screw M8 Screw Material Alloy Steel Black Oxide eating Torque 24.0 Nm Screw Location (R) 25 mm umber of Screws 1 ea Rated Torque 30 Nm ngular Misalignment 1.0° Peak Torque 40 Nm orsional Stiffness 21.00 Nm/Deg Axial Motion 1.50 mm arallel Misalignment 2.0 mm Maximum Speed 7,500 RPM ecommended Inserts CPFRG48/75-AT Full Bearing Support Required? Yes ero-Backlash? Yes Balanced Design Yes leight (lbs) 0.460800 Temperature -22°F to 175°F (-30°C to 80°C) aterial Specification 6082 Aluminum Bar Finish Clear Anodized Manufacturer Schmidt Kupplung PC 634529226117 Country of Origin Germany arriff Code 8483.60.8000 UNSPC 31163022 ote 1 Stainless steel hubs are available upon request. Deformance ratings are for guidance only. The user must determine suitability for a particular application to the inserts. Under | Keyway (K) | 8 mm | Outer Diameter (OD) | 2.953 in (75.0 mm) |
| briged Clamp Screw M8 Screw Material Alloy Steel ex Wrench Size 6.0 mm Screw Finish Black Oxide eating Torque 24.0 Nm Screw Location (R) 25 mm extended for Screws 1 ea Rated Torque 30 Nm engular Misalignment 1.0° Peak Torque 40 Nm ersional Stiffness 21.00 Nm/Deg Axial Motion 1.50 mm earallel Misalignment 2.0 mm Maximum Speed 7,500 RPM ecommended Inserts CPFRG48/75-AT Full Bearing Support Required? Yes ero-Backlash? Yes Balanced Design Yes eleight (Ibs) 0.460800 Temperature -22°F to 175°F (-30°C to 80°C) eaterial Specification 6082 Aluminum Bar Finish Clear Anodized enish Specification Clear Anodized Manufacturer Schmidt Kupplung eriff Code 8483.60.8000 UNSPC 31163022 enter 1 Stainless steel hubs are available upon request. enter 2 Performance ratings are for guidance only. The user must determine suitability for a particular application to the inserts. Under | Bore Tolerance | +0.07 mm / +0.02 mm | Hub Width (LH) | 18.0 mm |
| ex Wrench Size 6.0 mm Screw Finish Black Oxide eating Torque 24.0 Nm Screw Location (R) 25 mm umber of Screws 1 ea Rated Torque 30 Nm ngular Misalignment 1.0° Peak Torque 40 Nm orsional Stiffness 21.00 Nm/Deg Axial Motion 1.50 mm arallel Misalignment 2.0 mm Maximum Speed 7,500 RPM ecommended Inserts CPFRG48/75-AT Full Bearing Support Required? Yes ero-Backlash? Yes Balanced Design Yes leight (Ibs) 0.460800 Temperature -22°F to 175°F (-30°C to 80°C) aterial Specification 6082 Aluminum Bar Finish Clear Anodized inish Specification Clear Anodized Manufacturer Schmidt Kupplung PC 634529226117 Country of Origin Germany ariff Code 8483.60.8000 UNSPC 31163022 ote 1 Stainless steel hubs are available upon request. ote 2 Performance ratings are for guidance only. The user must determine suitability for a particular application ote 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Under | Length (L) | 2.874 in (73.0 mm) | Space Between Hubs (LS) | 1.456 in (37.0 mm) |
| eating Torque 24.0 Nm Screw Location (R) 25 mm umber of Screws 1 ea Rated Torque 30 Nm ngular Misalignment 1.0° Peak Torque 40 Nm orsional Stiffness 21.00 Nm/Deg Axial Motion 1.50 mm arallel Misalignment 2.0 mm Maximum Speed 7,500 RPM ecommended Inserts CPFRG48/75-AT Full Bearing Support Required? Yes ero-Backlash? Yes Balanced Design Yes feight (lbs) 0.460800 Temperature -22°F to 175°F (-30°C to 80°C) aterial Specification 6082 Aluminum Bar Finish Clear Anodized finish Specification Clear Anodized Manufacturer Schmidt Kupplung ero 634529226117 Country of Origin Germany ariff Code 8483.60.8000 UNSPC 31163022 ote 1 Stainless steel hubs are available upon request. ote 2 Performance ratings are for guidance only. The user must determine suitability for a particular application of 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Under | Forged Clamp Screw | M8 | Screw Material | Alloy Steel |
| umber of Screws 1 ea Rated Torque 30 Nm Ingular Misalignment 1.0° Peak Torque 40 Nm Ingular Misalignment 1.00° Axial Motion 1.50 mm Ingular Misalignment 2.0 mm Maximum Speed 7,500 RPM Ingular Misalignment 2.0 mm Maximum Speed | Hex Wrench Size | 6.0 mm | Screw Finish | Black Oxide |
| ngular Misalignment presional Stiffness 21.00 Nm/Deg Axial Motion 21.00 Nm/Deg Axial Motion 3.50 mm Axiallel Misalignment 2.0 mm Maximum Speed 7,500 RPM Axial Motion Axia | Seating Torque | 24.0 Nm | Screw Location (R) | 25 mm |
| prisional Stiffness 21.00 Nm/Deg Axial Motion 1.50 mm arallel Misalignment 2.0 mm Maximum Speed 7,500 RPM ecommended Inserts CPFRG48/75-AT Full Bearing Support Required? Yes ero-Backlash? Yes Balanced Design Yes reight (lbs) 0.460800 Temperature -22°F to 175°F (-30°C to 80°C) aterial Specification 6082 Aluminum Bar Finish Clear Anodized inish Specification Clear Anodized Manufacturer Schmidt Kupplung PC 634529226117 Country of Origin Germany ariff Code 8483.60.8000 UNSPC 31163022 ote 1 Stainless steel hubs are available upon request. ote 2 Performance ratings are for guidance only. The user must determine suitability for a particular application of the inserts. Under | Number of Screws | 1 ea | Rated Torque | 30 Nm |
| arallel Misalignment ecommended Inserts CPFRG48/75-AT Full Bearing Support Required? Yes ero-Backlash? Yes Balanced Design Yes reight (Ibs) 0.460800 Temperature -22°F to 175°F (-30°C to 80°C) aterial Specification 6082 Aluminum Bar Finish Clear Anodized sinish Specification Clear Anodized Manufacturer Schmidt Kupplung PC 634529226117 Country of Origin Germany ariff Code 8483.60.8000 UNSPC 31163022 ote 1 Stainless steel hubs are available upon request. Ote 2 Performance ratings are for guidance only. The user must determine suitability for a particular application of the inserts. Under | Angular Misalignment | 1.0° | Peak Torque | 40 Nm |
| recommended Inserts Pero-Backlash? Yes Balanced Design Yes Yes Yeight (Ibs) 0.460800 Temperature -22°F to 175°F (-30°C to 80°C) Atterial Specification Olear Anodized Manufacturer Schmidt Kupplung PC 634529226117 Country of Origin Germany Ariff Code Stainless steel hubs are available upon request. Ote 2 Performance ratings are for guidance only. The user must determine suitability for a particular application of the inserts. Under | Torsional Stiffness | 21.00 Nm/Deg | Axial Motion | 1.50 mm |
| Pero-Backlash? Yes Balanced Design Yes Veight (Ibs) 0.460800 Temperature -22°F to 175°F (-30°C to 80°C) Aterial Specification 6082 Aluminum Bar Finish Clear Anodized Inish Specification Clear Anodized Manufacturer Schmidt Kupplung PC 634529226117 Country of Origin Germany Ariff Code 8483.60.8000 UNSPC 31163022 Ote 1 Stainless steel hubs are available upon request. Ote 2 Performance ratings are for guidance only. The user must determine suitability for a particular application of the inserts. Under | Parallel Misalignment | 2.0 mm | Maximum Speed | 7,500 RPM |
| Veight (lbs)0.460800Temperature-22°F to 175°F (-30°C to 80°C)aterial Specification6082 Aluminum BarFinishClear Anodizedinish SpecificationClear AnodizedManufacturerSchmidt KupplungPC634529226117Country of OriginGermanyariff Code8483.60.8000UNSPC31163022ote 1Stainless steel hubs are available upon request.ote 2Performance ratings are for guidance only. The user must determine suitability for a particular applicationote 3Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Under | Recommended Inserts | CPFRG48/75-AT | Full Bearing Support Required? | Yes |
| aterial Specification 6082 Aluminum Bar Finish Clear Anodized Manufacturer Schmidt Kupplung PC 634529226117 Country of Origin Germany ariff Code 8483.60.8000 UNSPC 31163022 ote 1 Stainless steel hubs are available upon request. Ote 2 Performance ratings are for guidance only. The user must determine suitability for a particular application ote 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Under | Zero-Backlash? | Yes | Balanced Design | Yes |
| Clear Anodized Manufacturer Schmidt Kupplung PC 634529226117 Country of Origin Germany ariff Code 8483.60.8000 UNSPC 31163022 ote 1 Stainless steel hubs are available upon request. ote 2 Performance ratings are for guidance only. The user must determine suitability for a particular application ote 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Under | Weight (lbs) | 0.460800 | Temperature | -22°F to 175°F (-30°C to 80°C) |
| PC 634529226117 Country of Origin Germany ariff Code 8483.60.8000 UNSPC 31163022 ote 1 Stainless steel hubs are available upon request. ote 2 Performance ratings are for guidance only. The user must determine suitability for a particular application ote 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Under | Material Specification | 6082 Aluminum Bar | Finish | Clear Anodized |
| ariff Code 8483.60.8000 UNSPC 31163022 ote 1 Stainless steel hubs are available upon request. ote 2 Performance ratings are for guidance only. The user must determine suitability for a particular application ote 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Under | Finish Specification | Clear Anodized | Manufacturer | Schmidt Kupplung |
| ote 1 Stainless steel hubs are available upon request. ote 2 Performance ratings are for guidance only. The user must determine suitability for a particular application ote 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Under | JPC | 634529226117 | Country of Origin | Germany |
| ote 2 Performance ratings are for guidance only. The user must determine suitability for a particular application ote 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Under | Tariff Code | 8483.60.8000 | UNSPC | 31163022 |
| ote 3 Torque ratings for the couplings are based on the physical limitations/failure point of the inserts. Under | Note 1 | Stainless steel hubs are available upon request. | | |
| | Note 2 | Performance ratings are for guidance only. The user must determine suitability for a particular application. | | |
| | Note 3 | | | |

Prop 65

MARNING 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 www.P65Warnings.ca.gov.

especially when the smallest standard bores are used or where shafts are undersized, slippage on the shaft is possible below the rated torque. Keyways are available to provide additional torque capacity in the

shaft/hub connection when required. Please consult technical support for more assistance.

Installation Instructions

1. Align the bores of the MCPRDK75-25-A controlflex coupling hub on the shafts that are to be joined with the drive pins facing each other and determine if the misalignment parameters are within the limits of the coupling. (Angular Misialignment: 1.0°, Parallel Misalignment: 2.0 mm, Axial Motion: 1.5 mm)

- 2. Rotate the hubs on the shaft so the drive pins are 90° from each other.
- 3. Place the first hub at the end of the shaft. Tighten the clamp screw to 24.0 Nm using a 6.0 mm hex torque wrench.
- 4. Place an insert(s) with the standoffs facing the hub over the pins of the hub that was just installed.
- 5. Align the drive pins on the second hub to match the holes in the insert(s).
- 6. Verify that the space between hubs is 1.456 in, 37.0 mm.
- 7. Tighten the clamp screw on the second hub to the recommended seating torque of 24.0 Nm using a 6.0 mm hex torque wrench.