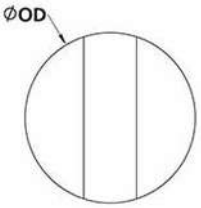
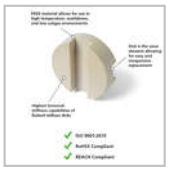
# OD8/13-PEK

Ruland OD8/13-PEK, Oldham Coupling Disk, PEEK, 0.500" (12.7mm) OD, High Temp. and Corrosion Resistance





## Description

Ruland OD8/13-PEK is an oldham coupling disk designed to fit hubs with an OD of 0.500" (12.7mm). It is a component of a three-piece design consisting of two anodized aluminum or stainless steel hubs press fit onto a center disk. This three-piece design allows for a highly customizable coupling that easily combines clamp or set screw hubs with inch, metric, keyed, and keyless bores. OD8/13-PEK is made from PEEK for high temperature and cleanroom environments. Oldham couplings can accommodate all forms of misalignment and are especially useful in applications with high parallel misalignment (up to 10% of the coupling OD). They operate with low bearing loads protecting sensitive system components such as bearings and have a balanced design for reduced vibration at speeds up to 6,000 RPM. OD8/13-PEK is RoHS3 and REACH compliant.

## Product Specifications

| | | | |
|---|---|---|---|
| **Outer Diameter (OD)** | 0.500 in (12.7 mm) | **Rated Torque** | 6 in-lb (0.68 Nm) |
| **Static Break Torque** | 45 in-lb (5.085 Nm) | **Angular Misalignment** | 0.5° |
| **Parallel Misalignment** | 0.004 in (0.10 mm) | **Max Parallel Misalignment** | 0.050 in (1.27 mm) |
| **Axial Motion** | 0.004 in (0.10 mm) | **Torsional Stiffness** | 7.4 lb-in/Deg (0.83 Nm/Deg) |
| **Moment of Inertia** | 0.00004 lb-in$^2$ (1.054 X 10$^{-8}$ kg-m$^2$) | **Maximum Speed** | 4,500 RPM |
| **Full Bearing Support Required?** | Yes | **Zero-Backlash?** | Yes |
| **UPC** | 634529216170 | **Country of Origin** | USA |
| **Material Specification** | PEEK | **Finish Specification** | Plain |
| **Manufacturer** | Ruland Manufacturing | **Temperature** | -10°F to 300°F (-23°C to 148°C) |
| **Weight (lbs)** | 0.001000 | **Tariff Code** | 8483.60.8000 |
| **UNSPC** | 31163015 | | |
| **Note 1** | Performance ratings are for guidance only. The user must determine suitability for a particular application. | | |
| **Note 2** | Torque ratings for the couplings are based on the physical limitations/failure point of the torque disks. Under normal/typical conditions the hubs are capable of holding up to the rated torque of the disks. 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 disks. Keyways are available to provide additional torque capacity in the shaft/hub connection when required. Please consult technical support for more assistance. | | |
| **Prop 65** | This product does not require a warning. | | |

**Installation Instructions**

1. Align the bores of the coupling on the shafts that are to be joined and determine if the misalignment parameters are within the limits of the coupling.(*Angular Misialignment:* 0.5 deg, *Parallel Misalignment*: 0.004 in (0.10 mm ), *Axial Motion*: 0.002 in (0.05 mm )
2. Rotate the hubs on the shaft so the drive tenons are located 90° from each other.
3. Place a torque disk so one groove fits over the drive tenons of a hub and center the disk by hand.
4. Insert a shim with the thickness of the coupling's axial motion rating into the groove of the torque disk.

5. Slide the tenons of the second hub into the mating groove in the disk until it touches the shim stock.
6. Fully tighten the screw(s) on each hub to the recommended seating torque using a hex wrench.
7. Remove the shim stock to leave a small gap between the top of the drive tenons and the torque disk to allow for axial movement.