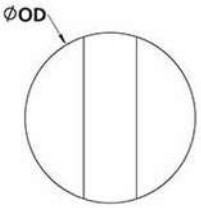
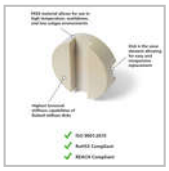
OD21/33-PEK

Ruland OD21/33-PEK, Oldham Coupling Disk, PEEK, 1.313" (33.3mm) OD, High Temp. and Corrosion Resistance







Description

Ruland OD21/33-PEK is an oldham coupling disk designed to fit hubs with an OD of 1.313" (33.3mm). 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. OD21/33-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. OD21/33-PEK is RoHS3 and REACH compliant.

Product Specifications

Outer Diameter (OD)	1.313 in (33.3 mm)	**Rated Torque**	70 in-lb (8.00 Nm)
Static Break Torque	960 in-lb (108.48 Nm)	**Angular Misalignment**	0.5°
Parallel Misalignment	0.008 in (0.20 mm)	**Max Parallel Misalignment**	0.131 in (3.33 mm)
Axial Motion	0.006 in (0.15 mm)	**Torsional Stiffness**	175.4 lb-in/Deg (19.82 Nm/Deg)
Moment of Inertia	0.00685 lb-in^2 (2.004 X 10^{-6} kg-m^2)	**Maximum Speed**	4,500 RPM
Full Bearing Support Required?	Yes	**Zero-Backlash?**	Yes
UPC	634529216156	**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)	0.027500	**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*: 0.008 in (0.20 mm), *Axial Motion*: 0.006 in (0.15 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.