Roll2Seal®

Self-Retaining Static Sealing Solution for Easy and Reliable Closure of Bores





Roll2Seal® is an all-new sealing solution developed by Parker Prädifa for easy and effective sealing of bores in non-pressurized applications. The clever design combined with an equally new assembly process enables simple and accurate installation of the seal, which rolls into its seat undamaged and without a lead-in chamfer.

The Principle: Rolling instead of Slipping

The seal with a triangular cross section rolls into its seat across sharp edges undamaged and without a lead-in chamfer.

- Self-retaining static seal
- Innovative seal design
- Seal is immune to unbroken edges of the bore
- No lead-in chamfer
- No deburring
- No lubrication required
- Space- and cost-saving
- Easy installation

- Suitable for repeated and overhead installation
- Available in pre-assembled condition
- Metal or plastic cover

Retaining Function

- Seal sits on a chamfer
- Assembly force is reversed
- Cover is pulled into the bore

Cost Reduction

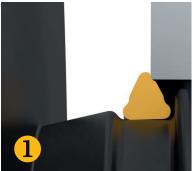
- No lead-in chamfer, no deburring
- No lubrication
- Minimal installation effort
- No costs incurred for retaining the cover in place (e.g. by screws) in non-pressurized systems

Applications

Practical applications are found

- where bores already exist for subsequent installation of additional component assemblies but require effective temporary or permanent sealing (e.g. for test runs or shipping),
- where lubrication during the assembly process is not possible,
- where no space is available for designing the seal as a flange seal,
- where non-pressurized systems require reliable sealing without screw connections.







Roll2Seal® – for Your Application

By means of Finite Elements simulation the required geometry can be adapted to the desired bore diameters and the assembly processed checked. The effects of varying friction conditions and material properties can be predicted as well.

The selection of the material depends on the thermal and mechanical requirements, beginning with PA6.6 for the seal carrier and NBR for the triangular seal as the most cost-efficient choices. The two-part sealing system is delivered in pre-assembled form. The Roll2Seal® concept provides design engineers with an alternative solution for radially sealing bores even without lead-in chamfers. By omitting this process step, this concept can either save costs or enable subsequent sealing of bores.

