



TECHNICAL INFORMATION

Piston Seals | Zurcon® Wynseal

Description

The Zurcon® Wynseal is a double-acting seal consisting of a special polyurethane seal ring and an O-Ring as energizing element. The particular characteristic of the seal is the special design of the seal edge profile. Two external seal edges act as primary seal for pressures from both sides and prevent any build-up of hydrodynamic pressure over the seal profile and the risk of the blow-by effect. The central back-up and sealing bulge increases the sealing effect*. Grooves are provided on both sides on the plane surfaces to provide activation of the energizing O-Ring. These ensure direct

pressure loading of the seal under all operating conditions. Since the installation groove is identical to that for the Turcon® Glyd Ring®, the seal is ideal for the standardization of cylinder construction if efficient and low cost seal elements are demanded in large quantities and the cylinder can be adapted to meet different operating conditions. It has to be taken into consideration that in this case the gap dimension has to be checked!

* Only from PW42 and the following Series No.; PW41 without sealing and supporting bulge.

Advantages

- High static and dynamic sealing effect
- High abrasion resistance
- Simple groove design, one-piece piston possible
- Suitable for grooves to ISO 7425, Part 1



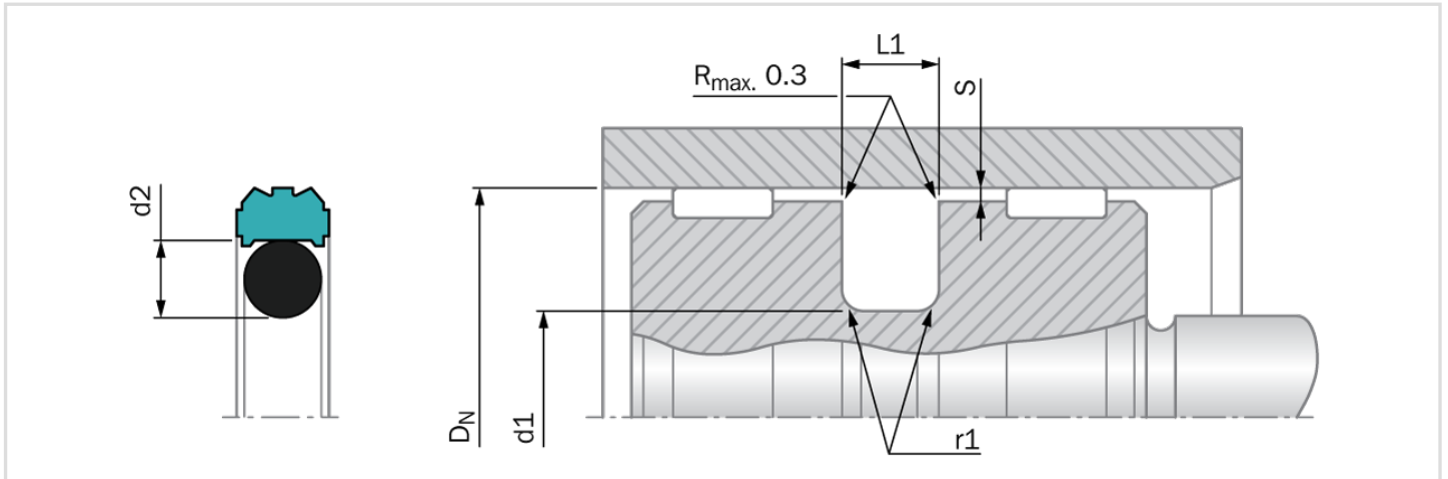
Technical Data

| | |
|-------------|--|
| Pressure | : Up to 25 MPa |
| Speed | : Up to 0.5 m/s |
| Temperature | : -35 °C to +110 °C (depending on O-Ring) |
| Media | : Mineral oil-based hydraulic fluids |
| Clearance | : The maximum permissible radial clearance S_{max} is shown in the table on the next page as a function of the operating pressure and functional diameter. |



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Installation dimensions - Standard recommendations

| Series No. | Groove Diameter d1 h9 | Groove Width L1 +0.2 | Radius r1 | Radial Clearance S _{max.} | O-Ring Cross-Section d2 |
|------------|--------------------------|-------------------------|--------------|---------------------------------------|----------------------------|
| PW40 | D _N - 4.9 | 2.2 | 0.4 | 0.20 | 1.78 |
| PW41 | D _N - 7.5 | 3.2 | 0.6 | 0.25 | 2.62 |
| PW42 | D _N - 11.0 | 4.2 | 1.0 | 0.25 | 3.53 |
| PW43 | D _N - 15.5 | 6.3 | 1.3 | 0.30 | 5.33 |
| PW44 | D _N - 21.0 | 8.1 | 1.8 | 0.30 | 7.00 |

Important Note

Installation suggestions, material recommendations, parameters and further data provided are always subject to the particular field of use and the application in which the seal is intended to be used, in particular the interaction of the seal with other components of the application. Therefore they neither constitute an agreement on the legal and factual nature nor a guarantee of quality. Technical changes and errors remain reserved.