

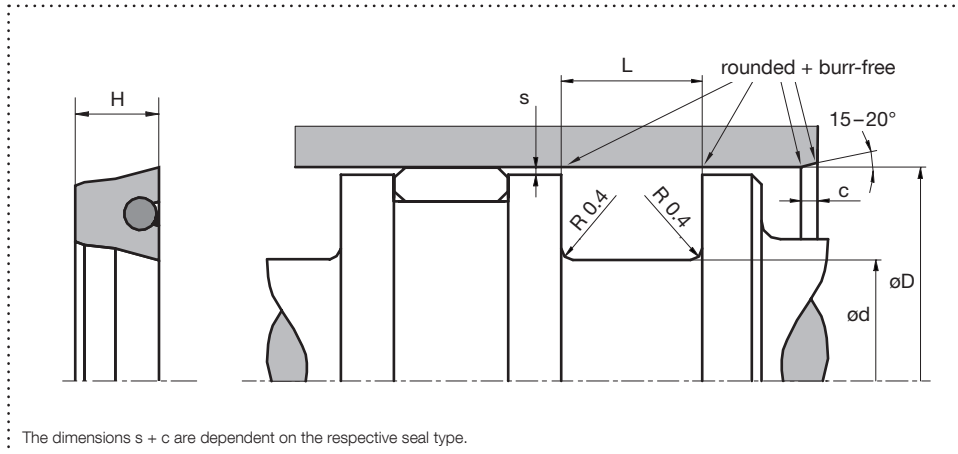


trygonal

Piston Seal TK21P

Hydraulics, single acting

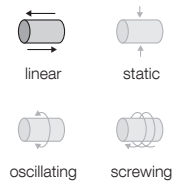
Housing design



Design

- O-ring supported symmetrical polyurethane piston seal
- With sharp-edged sealing lips for highly viscous liquids
- Excellent sealing effect due to the design
- For new developments the TS03P is preferable

Application



Brightened symbols:
Seal only for limited use.
Please contact us.

Surface finish

| Roughness | Rtmax (µm) | Ra (µm) | Material portion |
|-----------------|------------|-----------|---|
| Sliding surface | ≤ 2,5 | 0,1 – 0,5 | Ratio contact area: 50 – 95% at a cutting depth of 0.5 x Rz starting from Cref = 0% |
| Groove base | ≤ 6,3 | ≤ 1,6 | |
| Groove flanks | ≤ 15 | ≤ 3 | |

Standard dimensions

| øD H9 (mm) | ød h10 (mm) | L +0,2 (mm) | H (mm) | c (mm) | max. radial extrusion gap s ¹ (mm) | | | |
|---------------|-------------|-------------|--------|--------|---|---------|---------|---------|
| | | | | | 20 bar | 100 bar | 200 bar | 400 bar |
| ≥ 13 – ≤ 25 | D – 8 | 6,0 | 5,5 | 3,5 | 0,33 | 0,18 | 0,11 | 0,05 |
| > 25 – ≤ 50 | D – 10 | 7,0 | 6,5 | 4,0 | 0,37 | 0,22 | 0,16 | 0,10 |
| > 50 – ≤ 75 | D – 12 | 8,0 | 7,0 | 4,5 | 0,42 | 0,27 | 0,20 | 0,14 |
| > 75 – ≤ 150 | D – 15 | 10,0 | 9,0 | 5,0 | 0,46 | 0,31 | 0,25 | 0,19 |
| > 150 – ≤ 300 | D – 20 | 12,0 | 11,0 | 6,0 | 0,54 | 0,39 | 0,32 | 0,26 |
| > 300 – ≤ 500 | D – 25 | 18,0 | 17,0 | 8,5 | 0,61 | 0,46 | 0,39 | 0,33 |
| > 500 – ≤ 600 | D – 30 | 20,0 | 19,0 | 10,0 | 0,67 | 0,52 | 0,45 | 0,39 |

¹The specified extrusion gap is valid up to 70 °C, higher temperatures require lower values.

Material and application parameters

| Sealing element | Preload element | Temp. (°C) | max. sliding speed (m/s) | max. pressure ² |
|-----------------|-----------------|------------|--------------------------|----------------------------|
| HPU premium | NBR70 | -30 – +100 | 0,5 | 400 bar (40 MPa) |
| HPU diet | NBR70 | -20 – +100 | 0,5 | 400 bar (40 MPa) |
| HPU lubric | NBR70 | -20 – +100 | 0,7 | 400 bar (40 MPa) |
| HPU taiga | MVQ70 | -50 – +100 | 0,5 | 400 bar (40 MPa) |

² Pressure values as a function of the gap dimension.

The specified application parameters are generally valid values and must not be used simultaneously with the application. An order can be placed by specifying the profile type, material and specified housing design dimensions.

Our applied technical advice, either oral, written or through tests is given according to our best knowledge. However, this information is to be considered as non-obligatory instruction, also in terms of any protective rights of a third party, and does not exempt you from testing our product in reference to its suitability for the intended process and purpose. Utilisation, application and processing of the products occur entirely outside of our control and are therefore exclusively your responsibility. However, should a case of liability come into question, it will be limited to all damages in the value of the product which we delivered and you used. By all means, we do warrant the impeccable quality of our products in accordance with our general sales and delivery conditions.