

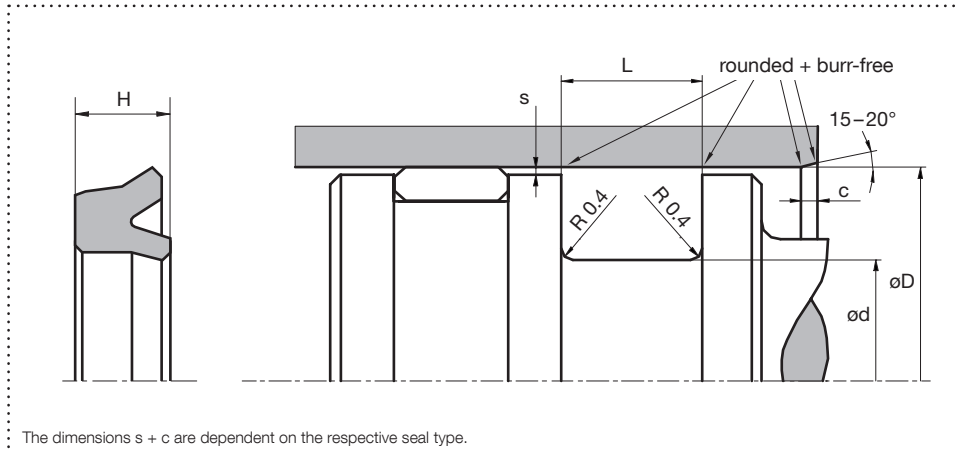


trygonal

# Piston Seal TK01RE

Hydraulics, single acting

## Housing design



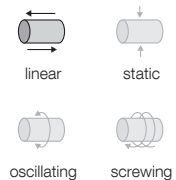
## Surface finish

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

## Design

- Asymmetrical piston seal on rubber base
- Firm fit on the inner diameter for stable hold in housing design
- Design with high sealing effect
- For single acting arrangement with guide ring

## Application



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

## Standard dimensions

| øD H9 (mm)    | ød h10 (mm) | L +0,2 (mm) | H (mm) | c (mm) | max. radial extrusion gap s <sup>1</sup> (mm) |         |         |
|---------------|-------------|-------------|--------|--------|-----------------------------------------------|---------|---------|
|               |             |             |        |        | 20 bar                                        | 100 bar | 160 bar |
| ≥ 13 – ≤ 25   | D – 8       | 6,0         | 5,8    | 3,5    | 0,23                                          | 0,16    | 0,14    |
| > 25 – ≤ 50   | D – 10      | 7,0         | 6,8    | 4,0    | 0,26                                          | 0,19    | 0,17    |
| > 50 – ≤ 75   | D – 12      | 8,0         | 7,8    | 4,5    | 0,29                                          | 0,22    | 0,20    |
| > 75 – ≤ 150  | D – 15      | 10,0        | 9,7    | 5,0    | 0,32                                          | 0,24    | 0,22    |
| > 150 – ≤ 300 | D – 20      | 12,0        | 11,7   | 6,0    | 0,35                                          | 0,27    | 0,25    |
| > 300 – ≤ 500 | D – 25      | 18,0        | 17,5   | 8,5    | 0,39                                          | 0,30    | 0,29    |
| > 500 – ≤ 750 | D – 30      | 20,0        | 19,5   | 10,0   | 0,40                                          | 0,34    | 0,32    |
| > 750         | D – 40      | 26,0        | 25,3   | 13,0   | 0,40                                          | 0,34    | 0,32    |

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

## Material and application parameters

| Sealing element | Temperature (°C) | max. sliding speed (m/s) | max. pressure <sup>2</sup> |
|-----------------|------------------|--------------------------|----------------------------|
| NBR standard    | -30 – +100       | 0,5                      | 160 bar (16 MPa)           |
| FPM diet br     | -20 – +200       | 0,5                      | 160 bar (16 MPa)           |
| EPDM spring     | -50 – +150       | 0,5                      | 160 bar (16 MPa)           |
| HNBR diet       | -25 – +150       | 0,5                      | 160 bar (16 MPa)           |
| MVQ diet we     | -60 – +200       | –                        | –                          |
| AFLAS® standard | -10 – +200       | 0,5                      | 160 bar (16 MPa)           |

<sup>2</sup>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.