

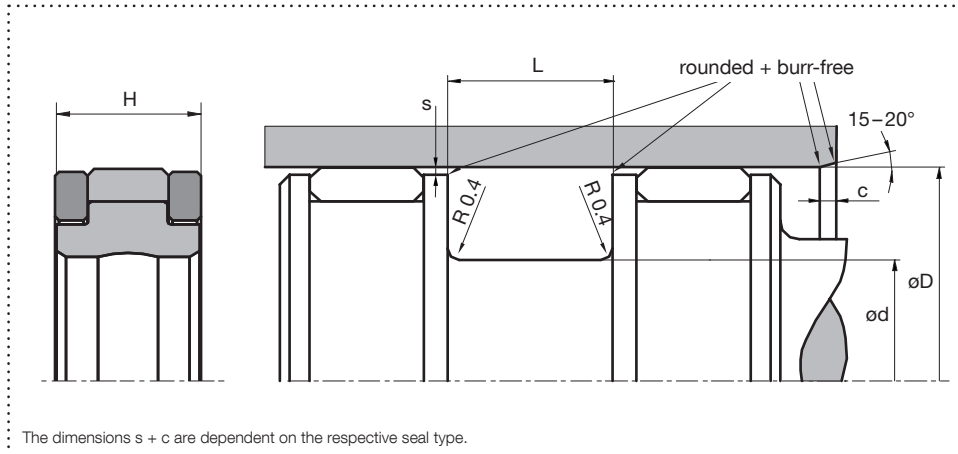


trygonal

# Piston Seal TK23F

Hydraulics, double acting

## Housing design



## Surface finish

| Roughness       | Rtmax (µm) | Ra (µm)    | Material portion                                                                          |
|-----------------|------------|------------|-------------------------------------------------------------------------------------------|
| Sliding surface | ≤ 2        | 0,05 – 0,3 | 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

- Preload element supported PTFE compact piston seal with integrated backup rings
- Low friction and good sliding properties
- Good chemical and thermal resistance
- Additional guide elements required

## Application



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

## Standard dimensions

| øD H9 (mm)    | ød h9 (mm) | L + 0,2 (mm) | H (mm) | c (mm) | s <sup>1</sup> (mm) |
|---------------|------------|--------------|--------|--------|---------------------|
| ≥ 20 – < 50   | D – 10     | 12,5         | 11,2   | 4      | 0,4                 |
| ≥ 50 – < 80   | D – 15     | 20           | 17,9   | 5      | 0,4                 |
| ≥ 80 – < 150  | D – 20     | 25           | 22,4   | 6      | 0,4                 |
| ≥ 150 – < 400 | D – 25     | 32           | 28,7   | 8,5    | 0,4                 |
| ≥ 400 – ≤ 750 | D – 30     | 36           | 32,3   | 10     | 0,4                 |
| > 750         | D – 40     | 40           | 35,9   | 13     | 0,4                 |

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

## Material and application parameters

| Sealing element   | Preload element          | Support ring                            | Temp. (°C) | max. sliding speed (m/s) | max. pressure <sup>2</sup> |
|-------------------|--------------------------|-----------------------------------------|------------|--------------------------|----------------------------|
| XHPU solid        | NBR standard             | POM/PA6G <sup>3</sup>                   | -30 – +100 | 1                        | 400 bar (40 Mpa)           |
| XHPU lubric       | NBR standard             | POM/PA6G <sup>3</sup>                   | -30 – +100 | 1,2                      | 400 bar (40 Mpa)           |
| PTFE glass wear   | NBR standard/FPM diet br | POM/PA6G <sup>3</sup> /Peek nature diet | -30 – +100 | 1,5                      | 400 bar (40 Mpa)           |
| PTFE bronze wear  | NBR standard/FPM diet br | POM/PA6G <sup>3</sup> /Peek nature diet | -30 – +100 | 1,5                      | 400 bar (40 Mpa)           |
| PTFE carbon slide | NBR standard/FPM diet br | POM/PA6G <sup>3</sup> /Peek nature diet | -20 – +200 | 1,5                      | 400 bar (40 Mpa)           |

<sup>2</sup> Pressure values as a function of the gap dimension. <sup>3</sup> ≤ ø280mm: POM ; > ø280mm: PA6G

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.