

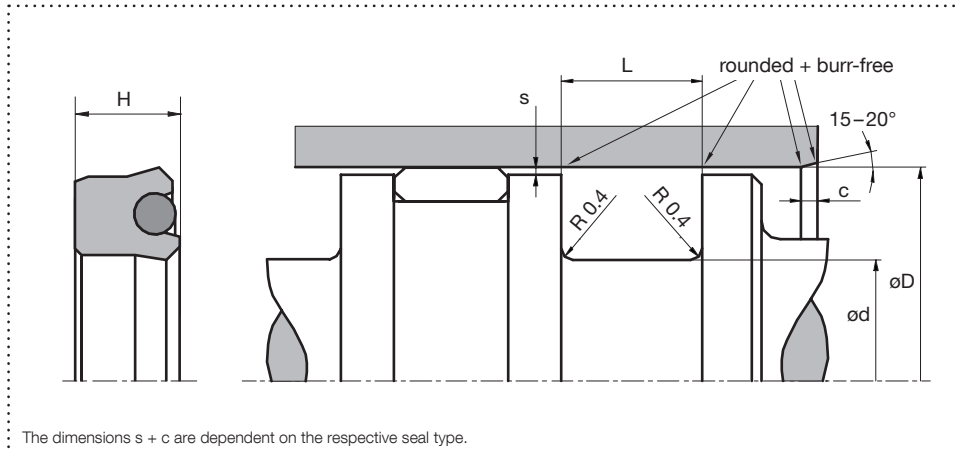


trygonal

# Piston Seal TK03P

## Hydraulics, single acting

### Housing design



### Design

- O-ring supported asymmetric piston seal made of polyurethane
- Firm fit on the inner diameter for stable hold in housing design
- Excellent sealing effect due to the design
- Main application in the short-stroke range

### 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 <sup>1</sup> (mm)			
					20 bar	100 bar	200 bar	400 bar
≥ 13 – ≤ 25	D – 8	6,0	5,8	3,5	0,33	0,18	0,11	0,05
> 25 – ≤ 50	D – 10	7,0	6,8	4,0	0,37	0,22	0,16	0,10
> 50 – ≤ 75	D – 12	8,0	7,8	4,5	0,42	0,27	0,20	0,14
> 75 – ≤ 150	D – 15	10,0	9,7	5,0	0,46	0,31	0,25	0,19
> 150 – ≤ 300	D – 20	12,0	11,7	6,0	0,54	0,39	0,32	0,26
> 300 – ≤ 500	D – 25	18,0	17,5	8,5	0,61	0,46	0,39	0,33
> 500 – ≤ 600	D – 30	20,0	19,5	10,0	0,67	0,52	0,45	0,39

<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	Temperature (°C)	max. sliding speed (m/s)	max. pressure <sup>2</sup>
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)

<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.