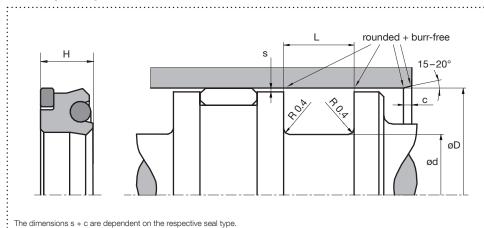


# Piston Seal TK04P

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%
Groove base	≤ 6,3	≤ 1,6	at a cutting depth of 0.5 x Rz
Groove flanks	≤ 15	≤ 3	starting from Cref = 0%

# Design

- O-ring and backup ring supported asymmetric piston seal made of polyurethane
- Suitable for large extrusion gaps and for higher pressure ranges
- Excellent sealing effect due to the design
- Standard design with rectangular backup ring

## Application



# Standard dimensions

		:	•	:	∃max. radial extrusion gap s¹ (mm)			
øD H9 (mm)	ød h10 (mm)	L +0,2 (mm)	H (mm)	c (mm)	20 bar	100 bar	400 bar	700 bar
≥ 13 – ≤ 25	D – 8	6,0	5,8	3,5	0,80	0,80	0,30	0,04
> 25 − ≤ 50	D – 10	7,0	6,8	4,0	1,00	1,00	0,37	0,04
> 50 − ≤ 75	D – 12	8,0	7,8	4,5	1,25	1,24	0,42	0,05
>75 -≤150	D – 15	10,0	9,7	5,0	1,50	1,47	0,46	0,05
> 150 - ≤ 300	D – 20	12,0	11,7	6,0	2,00	1,77	0,54	0,06
$> 300 - \le 500$	D – 25	18,0	17.5	8,5	2,50	2,06	0,62	0,06
$> 500 - \le 600$	D – 30	20,0	19.5	10,0	3,00	2,43	0,76	0,06

<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	Temperature (	°C) max. sliding speed (m/s)	max. pressure <sup>2</sup>
HPU premium	NBR70	POM/PA6G3	-30 - +100	0,5	700 bar (70 MPa)
HPU diet	NBR70	POM/PA6G <sup>3</sup>	-20 - +100	0,5	700 bar (70 MPa)
HPU lubric	NBR70	POM/PA6G <sup>3</sup>	-20 - +100	0,7	700 bar (70 MPa)
HPU taiga	MVQ70	POM/PA6G <sup>3</sup>	-40 - +100	0,5	700 bar (70 MPa)

 $^2$  Pressure values as a function of the gap dimension.  $^3 \leq \text{ø}280\text{mm}$ : POM ; > ø280\text{mm}: 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.