

Piston Seal TK01PE

Hydraulics, single acting

Housing design



The dimensions s + c are dependent on the respective seal type.

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%

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	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
$> 300 - \le 500$	D – 25	18,0	17,5	8,5	0,61	0,46	0,39	0,33
> 500 - ≤ 750	: D – 30	20,0	19,5	10,0	:0,67	0,52	0,45	:0,39 :
> 750	D – 40	26,0	25,3	13,0	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	Temperature (°C)	max. sliding speed (m/s)	max. pressure ²
HPU premium	-30 - +110	0,5	400 bar (40 MPa)
HPU diet	-20 - +110	0,5	400 bar (40 MPa)
HPU lubric	-20 - +110	0,7	400 bar (40 MPa)
HPU taiga	-50 – +110	0,5	400 bar (40 MPa)

²Pressure 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.

- Design
- Asymmetrical piston seal made of polyurethane
- 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

