

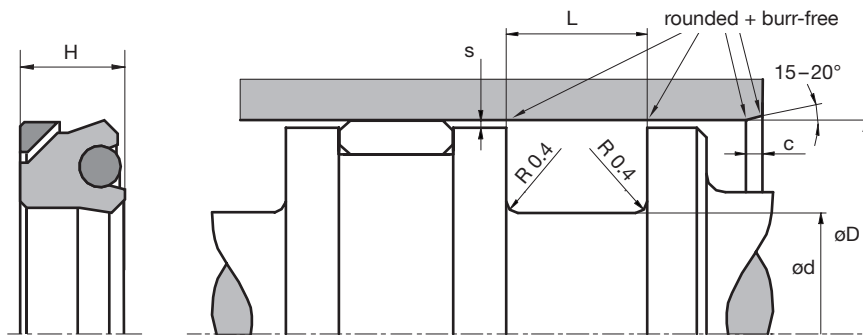


trygonal

Piston Seal TK04PD

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	$\leq 2,5$	0,1 – 0,5	Ratio contact area: 50 – 95% at a cutting depth of $0.5 \times R_z$ starting from $C_{ref} = 0\%$
Groove base	$\leq 6,3$	$\leq 1,6$	
Groove flanks	≤ 15	≤ 3	

Standard dimensions

$\varnothing D$ H9 (mm)	$\varnothing d$ h10 (mm)	L +0,2 (mm)	H (mm)	c (mm)	max. radial extrusion gap s^1 (mm)			
					20 bar	100 bar	400 bar	700 bar
$\geq 13 - \leq 25$	D – 8	6,0	5,8	3,5	0,80	0,80	0,30	0,04
$> 25 - \leq 50$	D – 10	7,0	6,8	4,0	1,00	1,00	0,37	0,04
$> 50 - \leq 75$	D – 12	8,0	7,8	4,5	1,25	1,24	0,42	0,05
$> 75 - \leq 150$	D – 15	10,0	9,7	5,0	1,50	1,47	0,46	0,05
$> 150 - \leq 300$	D – 20	12,0	11,7	6,0	2,00	1,77	0,54	0,06
$> 300 - \leq 500$	D – 25	18,0	17,5	8,5	2,50	2,06	0,62	0,06
$> 500 - \leq 600$	D – 30	20,0	19,5	10,0	3,00	2,43	0,76	0,06

¹The 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 ²
HPU premium	NBR70	POM/PA6G ³	-30 – +100	0,5	700 bar (70 MPa)
HPU diet	NBR70	POM/PA6G ³	-20 – +100	0,5	700 bar (70 MPa)
HPU lubric	NBR70	POM/PA6G ³	-20 – +100	0,7	700 bar (70 MPa)
HPU taiga	MVQ70	POM/PA6G ³	-40 – +100	0,5	700 bar (70 MPa)

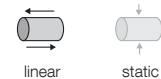
² Pressure values as a function of the gap dimension. ³ $\leq \varnothing 280\text{mm}$: POM ; $> \varnothing 280\text{mm}$: PA6G

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.

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
- Suitable for short installation spaces

Application



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

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