

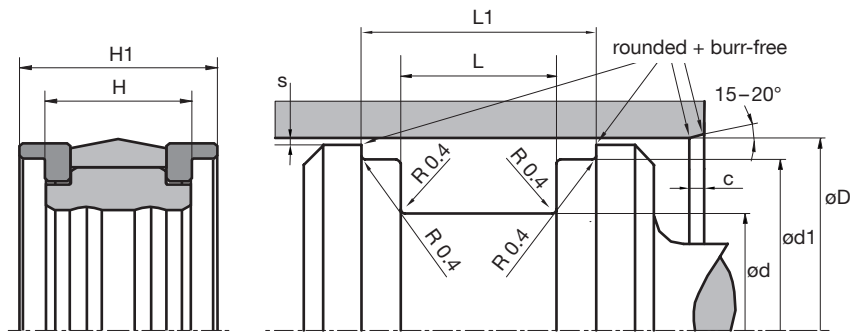


trygonal

Piston Seal TK09N

Hydraulics, double 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

ϕD H9 (mm)	ϕd h9 (mm)	$\phi d1$ h8 (mm)	L+0,2 (mm)	L1 (mm)	H (mm)	H1 (mm)	c (mm)	s ¹ (mm)
≥ 20 – < 50	D – 10	D – 3	12,5	20,5	11,2	19,1	4	0,35
≥ 50 – < 80	D – 15	D – 4	20	28	17,9	26,1	5	0,52
≥ 80 – < 150	D – 20	D – 5	25	36	22,4	33,6	6	0,65
≥ 150 – < 400	D – 25	D – 6	32	46	28,7	43,0	8,5	0,78
≥ 400 – < 600	D – 30	D – 8	36	50	32,3	46,7	10	1,00

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	NBR standard	POM/PA6G ³	-30 – +100	0,5	400 bar (40 MPa)
HPU diet	NBR standard	POM/PA6G ³	-20 – +100	0,5	400 bar (40 MPa)
HPU lubric	NBR standard	POM/PA6G ³	-20 – +100	0,7	400 bar (40 MPa)
HPU taiga	MVQ diet we	POM/PA6G ³	-40 – +100	0,5	400 bar (40 MPa)

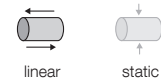
² Pressure values as a function of the gap dimension. ³ $\leq \phi 280\text{mm}$: POM ; $> \phi 280\text{mm}$: PA6G

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

- Preload element supports compact piston seal with guide elements
- Excellent static sealing effect
- Use with standard cylinders

Application



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