

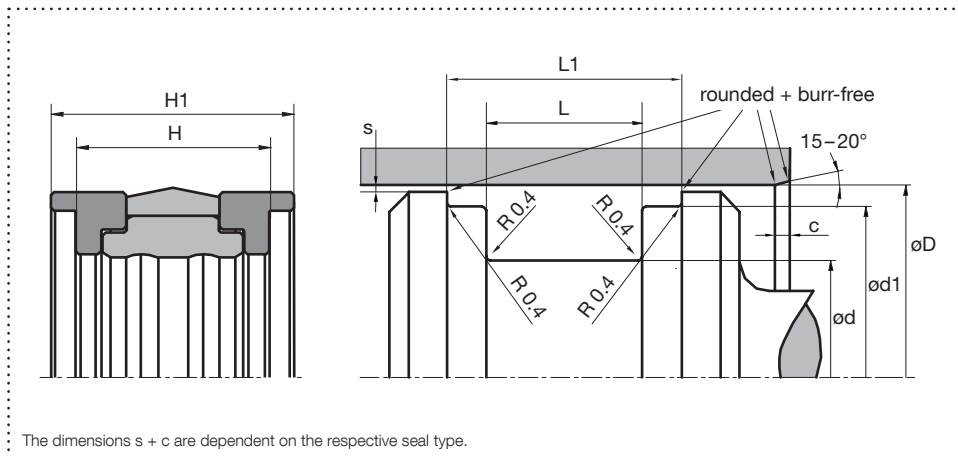


trygonal

# Piston Seal TK09H

## Hydraulics, double acting

### Housing design



### Design

- Preload element supports compact piston seal with guide elements
- Excellent static as well as dynamic sealing effect
- For high pressure ranges
- Application in the tunnel and mining industry

### Application



linear



static

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 h9 (mm)	ød1 h8 (mm)	L+0,2 (mm)	L1 (mm)	H (mm)	H1 (mm)	c (mm)	s <sup>1</sup> (mm)
≥ 20 – < 50	D – 10	D – 3	12,5	20,5	11,2	19,1	4	0,4
≥ 50 – < 80	D – 15	D – 4	20	28	17,9	26,1	5	0,4
≥ 80 – < 150	D – 20	D – 5	25	36	22,4	33,6	6	0,4
≥ 150 – < 400	D – 25	D – 6	32	46	28,7	43,0	8,5	0,4
≥ 400 – < 600	D – 30	D – 8	36	50	32,3	46,7	10	0,4

<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	Temp. (°C)	max. sliding speed (m/s)	max. pressure <sup>2</sup>
HPU premium	NBR standard	POM/PA6G <sup>3</sup>	-30 – +100	0,3	1500 bar (150 MPa)
HPU diet	NBR standard	POM/PA6G <sup>3</sup>	-20 – +100	0,3	1500 bar (150 MPa)
HPU lubric	NBR standard	POM/PA6G <sup>3</sup>	-20 – +100	0,4	1500 bar (150 MPa)
HPU taiga	MVQ diet we	POM/PA6G <sup>3</sup>	-40 – +100	0,3	1500 bar (150 MPa)

<sup>2</sup> Pressure values as a function of the gap dimension. <sup>3</sup> ≤ ø280mm: POM ; > ø280mm: 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.