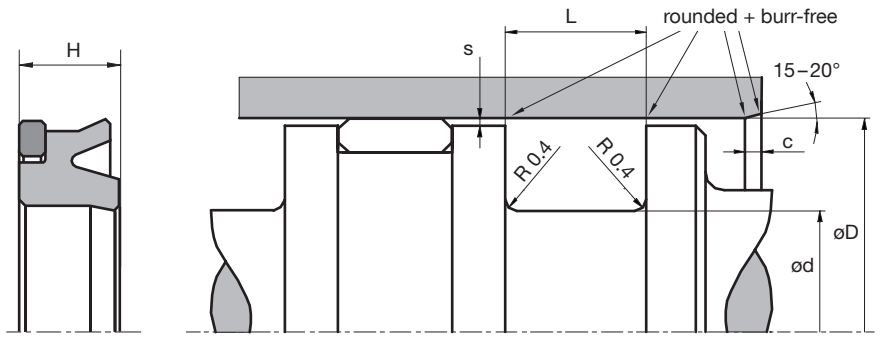
trygonal

Piston Seal TK02R

Hydraulics, single acting

Housing design

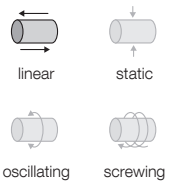


The dimensions s + c are dependent on the respective seal type.

Design

- Asymmetrical piston seal made of rubber with backup ring
- Suitable for large extrusion gaps and for higher pressure ranges
- Material adaptation possibilities for various applications
- Standard design with rectangular backup ring

Application



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 h10 (mm)	L +0,2 (mm)	H (mm)	c (mm)	max. radial extrusion gap s[1] (mm)		
					20 bar	100 bar	250 bar
≥ 13 – ≤ 25	D – 8	6,0	5,8	3,5	0,80	0,80	0,52
> 25 – ≤ 50	D – 10	7,0	6,8	4,0	1,00	1,00	0,66
> 50 – ≤ 75	D – 12	8,0	7,8	4,5	1,25	1,20	0,72
> 75 – ≤ 150	D – 15	10,0	9,7	5,0	1,50	1,40	0,78
> 150 – ≤ 300	D – 20	12,0	11,7	6,0	2,00	1,66	0,88
> 300 – ≤ 500	D – 25	18,0	17,5	8,5	2,50	1,91	1,00
> 500 – ≤ 750	D – 30	20,0	19,5	10,0	3,00	2,18	1,13
> 750	D – 40	26,0	25,3	13,0	3,00	2,18	1,13

[1]The specified extrusion gap is valid up to 70 °C, higher temperatures require lower values.

Material and application parameters

Sealing element	Support ring	Temperature (°C)	max. sliding speed (m/s)	max. pressure[2]
NBR standard	POM/PA6G[3]	-30 – +100	0,5	250 bar (25 Mpa)
FPM diet br	PTFE glass wear	-20 – +200	0,5	250 bar (25 Mpa)
EPDM spring	POM/PA6G[3]	-40 – +100	0,5	250 bar (25 Mpa)
EPDM spring	PTFE glass wear	-50 – +150	0,5	250 bar (25 Mpa)
HNBR diet	POM/PA6G[3]	-25 – +100	0,5	250 bar (25 Mpa)
HNBR diet	PTFE glass wear	-25 – +150	0,5	250 bar (25 Mpa)
AFLAS® standard	Peek nature diet	-10 – +200	0,5	250 bar (25 Mpa)

[2] Pressure values as a function of the gap dimension. [3] ≤ 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.