

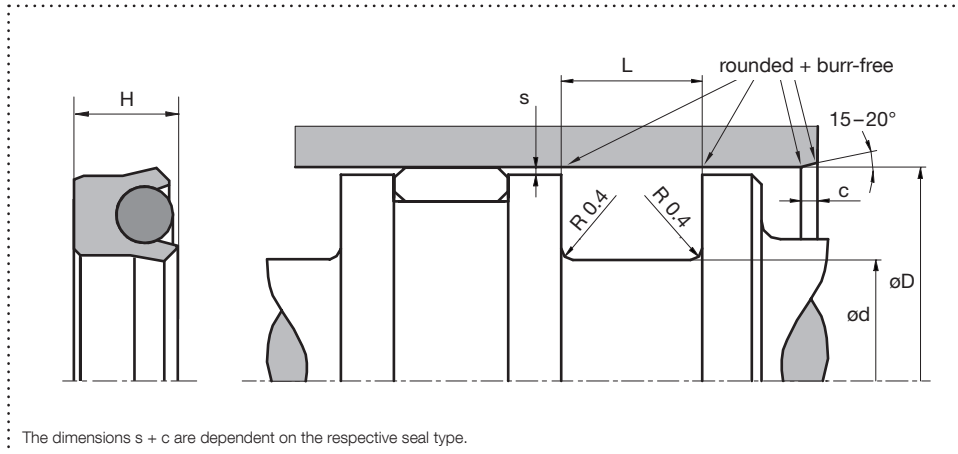


trygonal

# Piston Seal TK03F

## Hydraulics, single acting

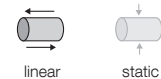
### Housing design (split housing design required)



### Design

- O-ring supported asymmetric piston seal made of PTFE
- For low friction and good dry running properties
- Material adaptation possibilities for various applications
- Reduced dead space for the food, pharmaceutical and chemical industries
- split housing design

### Application



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

### Surface finish

Roughness	Rtmax (µm)	Ra (µm)	Material portion
Sliding surface	≤ 2	0,05 – 0,3	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 <sup>1</sup> (mm)			
					20 bar	100 bar	200 bar	400 bar
≥ 13 – ≤ 25	D – 8	6,4	6,2	3,5	0,40	0,20	0,15	0,09
> 25 – ≤ 50	D – 10	8,5	8,2	4,0	0,45	0,22	0,17	0,10
> 50 – ≤ 75	D – 12	10,0	9,7	4,5	0,60	0,36	0,25	0,14
> 75 – ≤ 150	D – 15	12,3	11,9	5,0	0,75	0,40	0,33	0,18
> 150 – ≤ 300	D – 20	16,0	15,6	6,0	0,87	0,48	0,38	0,20
> 300 – ≤ 500	D – 25	19,8	19,3	8,5	0,87	0,48	0,38	0,20
> 500 – ≤ 600	D – 30	24,5	23,8	10,0	0,87	0,48	0,38	0,20

<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	Temp. (°C)	max. sliding speed (m/s)	max. pressure <sup>2</sup>
PTFE virgin diet	MVQ70	-55 – +200	1	200 bar (20 MPa)
PTFE glass wear	NBR70	-30 – +100	1	400 bar (40 MPa)
PTFE bronze wear	FPM75	-20 – +200	1	400 bar (40 MPa)
PTFE carbon slide	EPDM70	-50 – +150	1	400 bar (40 MPa)
UHMWPE diet	NBR70	-30 – +80	0,5	200 bar (20 MPa)
UHMWPE diet	FPM75	-20 – +80	0,5	200 bar (20 MPa)
UHMWPE diet	EPDM70	-50 – +80	0,5	200 bar (20 MPa)
UHMWPE diet	MVQ70	-55 – +80	0,5	200 bar (20 MPa)

<sup>2</sup> Pressure 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.