

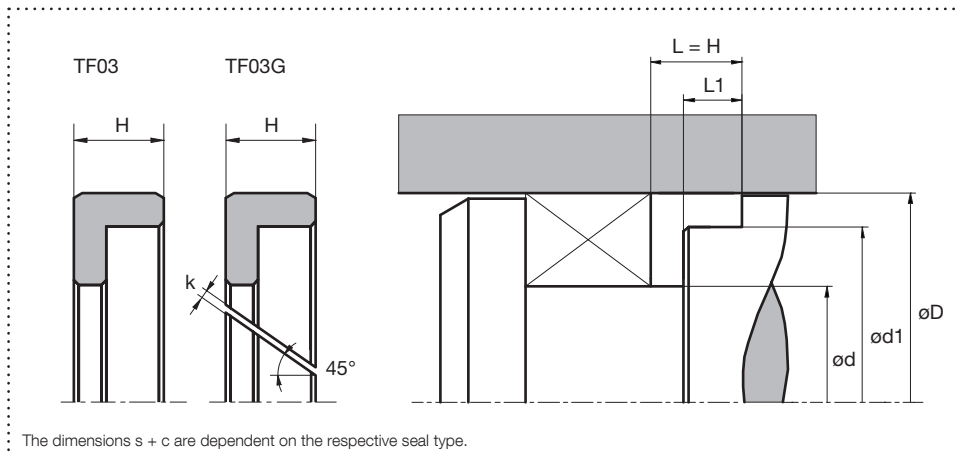


trygonal

# Guide Ring TF03/TF03G

## Hydraulics/Pneumatics

### Housing design



### Design

- Guide element for piston application
- Functions as a management and support ring
- Slotted design for closed installation spaces
- Endless design for open installation spaces

### Application



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

### Surface finish

Sealing element	PU/Elastomere		PTFE		Material portion
Roughness	Rtmax (µm)	Ra (µm)	Rtmax (µm)	Ra (µm)	
Sliding surface	≤ 2,5	0,1 – 0,5	≤ 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	≤ 6,3	≤ 1,6	
Groove flanks	≤ 15	≤ 3	≤ 15	≤ 3	

### Standard dimensions

øD H9 (mm)	ød1 h10 (mm)	ød1 h8 (mm)	L +0,2 (mm)	L1 +0,2 (mm)
≥ 20 – < 50	D – 10	D – 3	6,5	4
≥ 50 – < 80	D – 15	D – 4	8	4
≥ 80 – < 150	D – 20	D – 5	10,5	5,5
≥ 150 – ≤ 400	D – 25	D – 6	13,4	7
> 400 – ≤ 750	D – 30	D – 8	14,2	7
> 750	D – 40	D – 8	15	7

Standard design with cutting gap  $k > 0$  allowed, no support function. A  $k = 0$  Cutting gap width and a spiral groove are provided for support functions.

Cutting gap width s: Values depending on material and operating temperature. For detailed information see profile descriptions.

<sup>1</sup> The nominal width is usually determined by the sealing profile.

### Material and application parameters

Sealing element	Temperature (°C)	max. sliding speed (m/s)	Surface pressure <sup>2</sup>
PTFE glass wear	-200 – +200	4	3,0 N/mm <sup>2</sup>
PTFE bronze wear	-200 – +200	5	4,5 N/mm <sup>2</sup>
PTFE bronze wear 60%	-200 – +200	5	7,5 N/mm <sup>2</sup>
POM <sup>1</sup>	-50 – +100	4	25 N/mm <sup>2</sup>
PA6G <sup>1</sup>	-40 – +100	4	25 N/mm <sup>2</sup>
HGW 200	-40 – +130	4	125 N/mm <sup>2</sup>

<sup>1</sup> ≤ ø280mm: POM ; > ø280mm: PA6G <sup>2</sup> depending on application temperatures and permissible compression. For detailed information see profile description.

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.