

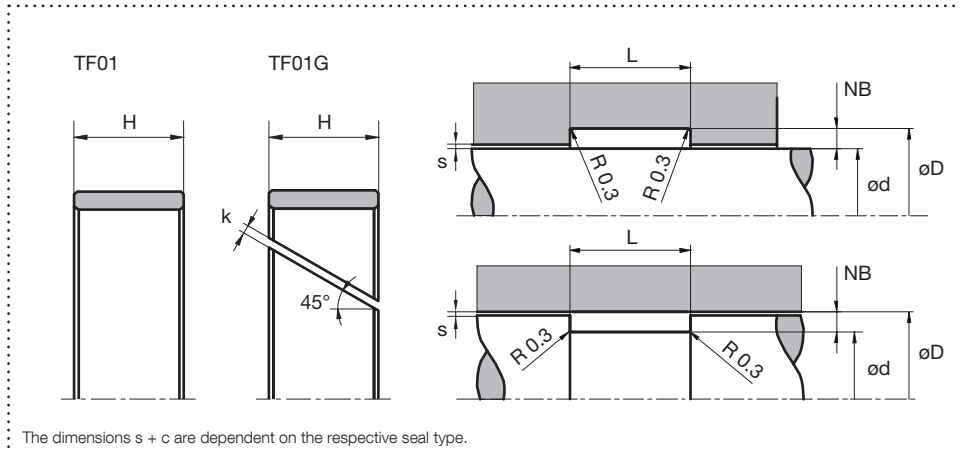


trygonal

Guide Ring TF01/TF01G

Hydraulics/Pneumatics

Housing design



Design

- Most common guide element for pistons and rods
- Slotted design for closed installation spaces
- Endless design for open installation spaces
- Attention must be paid to drag pressure

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

inside, dynamic surface		external, dynamic surface		NB (mm)	L +0,2 (mm)	H (mm)	s ¹ (mm)
ød f8 (mm)	øD H9 (mm)	øD H9 (mm)	ød f8 (mm)				
≥ 6 – < 30	d + 3	≥ 6 – < 30	D – 3	1,5	4	3,9	0,25 – 0,3
≥ 30 – < 50	d + 3	≥ 30 – < 50	D – 3	1,5	5,6	5,4	0,25 – 0,5
≥ 50 – < 100	d + 5	≥ 50 – < 100	D – 5	2,5	9,7	9,5	0,25 – 0,7
≥ 100 – ≤ 800	d + 5	≥ 100 – ≤ 800	D – 5	2,5	15	14,8	0,25 – 0,9
> 800	d + 8	> 800	D – 8	4	25	24,5	0,4 – 1,1

Gap width k: Values depending on material and application temperature. For detailed information see profile descriptions.

¹ For PTFE guide elements, the maximum gap dimension s should be 0.3 - 0.4 mm

Stretched length: $U_k = \pi \times (D - NB) - k$ for piston guide belt

$U_s = \pi \times (d + NB) - k$ for rod guiding belt

Cutting Gap 'k' = 0,008 x d + 2

Material and application parameters

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

² ≤ ø280mm: POM; > ø280mm: PA6G ³ 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.

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