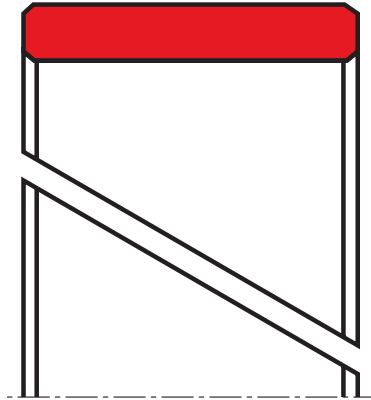


guide ring F01

seal spec



description

most common guide ring for rod or piston application. used in many standard cylinders, majority of applications require split version for installation into closed housings, non split design available (bushings).

application



not bolded symbols; please consult our technical for application limitations

category of profile

machined or molded/standard/trade product.

advantages

as a non-metallic guide element for pistons & rods, for standardised housings, amongst others, according to ISO 10766

- no seizure due to metal/plastic materials combination.
- medium load-bearing capacity.
- chamfered profile edges prevent pressing of edge into the corner radii of the housing groove.
- simple snap-in fitting.

application

earth moving equipment, industrial vehicles, agricultural machinery, cranes.

operating parameters & material

diameter range: up to 600 mm

material	temperature	max. surface speed	max. specific load
s-mart POM ²	-50 °C ... +100 °C	4,0 m/s	25 N/mm ²
s-mart PA ²	-40 °C ... +100 °C	4,0 m/s	25 N/mm ²
s-mart PTFE glass	-200 °C ... +200 °C	4,0 m/s	3 N/mm ²
s-mart PTFE bronze	-200 °C ... +200 °C	5,0 m/s	4,5 N/mm ²
s-mart TEX	-40 °C ... +130 °C	1,0 m/s	90 N/mm ²

the stated operation conditions represent general indications. it is recommended not to use all maximum values simultaneously. surface speed limits apply only to the presence of adequate lubrication film.

² POM up to ø260 mm, PA above ø260 mm

tolerance recommendation

seal housing tolerances

Ød	f8
ØD	H9

**surface quality**

surface roughness	Rtmax	Ra
sliding surface	$\leq 2,5 \mu\text{m}$	0,05 ... 0,3 μm
bottom of groove	$\leq 10,0 \mu\text{m}$	$\leq 2 \mu\text{m}$
groove face	$\leq 15,0 \mu\text{m}$	$\leq 3 \mu\text{m}$

manufacturing tolerance

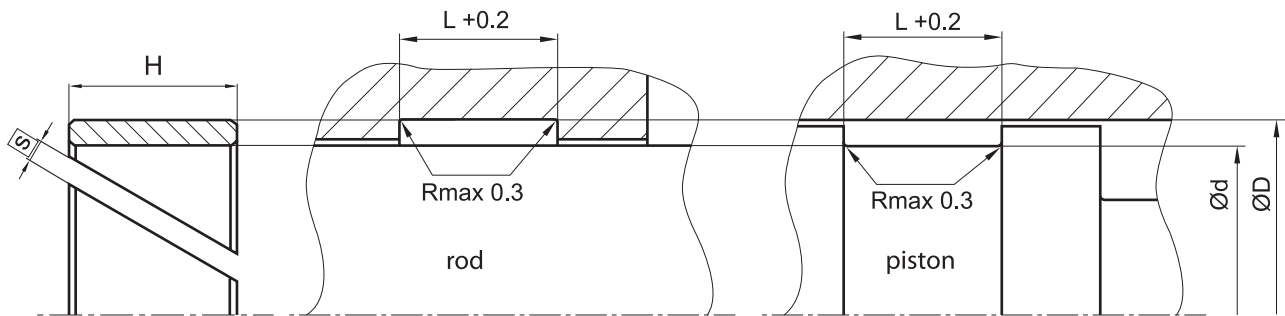
$\varnothing D$	production tolerance profile thickness	
	piston guide ring	rod guide ring
≤ 120	-0,1	-0,1
> 120	-0,15	

fitting & installation

Guide Ring F01 can be easily snapped into the housing groove. careful fitting is a prerequisite for correct function.

seal & housing recommendations

please note that we are able to produce those profiles to your specific need or any non standard housing. for detail measurements, please see seal-mart catalog...

**variations:**

- cutting gap width $s = \dots \text{mm}$
- endless

don't hesitate to contact our technical department for further information or for special requirements (temperature, speed etc.), so that suitable materials and/or designs can be recommended.