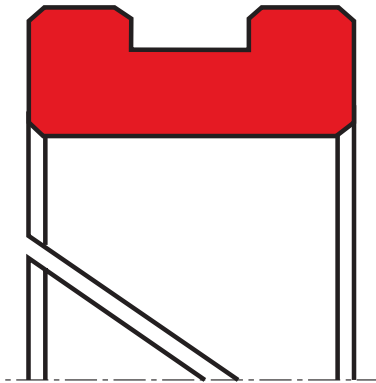


guide ring F08

seal spec



description

with groove on outside diameter, for rod application. split and non split design available.

guide ring type F08 is mainly used on piston rods. it provides guiding and bearing surfaces between rod and housing and prevents metal to metal contact between them.

the F08 consists of an extremely abrasion-resistant and low-friction POM-PTFE Bronze compound & other material. it can be used for hydraulic oil with a mineral oil base, for water-oil emulsions and for fire-resistant fluids as well as compressed air.

it has a U-shaped cross-section and is split with an angled butt joint. it can be spirally compressed inwards for fitting into the rod housing where it springs back out into corresponding installation grooves. the bearing groove arrangement secures it against axial movement.

application



not bolded symbols; please consult our technical for application limitations

guide ring rings can be used as single rings or multiple rings arranged adjacent to each other. the number of bearing rings depends on the expected side loads. the butt joints in adjacent bearings should be staggered.

due to its excellent dry running properties the guide ring F08 can also be applied behind a rod seal opposite the pressure side.

category of profile

machined only.

application:

- use in all hydraulic cylinders, simple installation and optimum bearing.
- standard hydraulic oil, oil-water, water-glycol, synthetic fluids.

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 |
| ØD1 | H10 |
| ØD | H8 |

surface quality

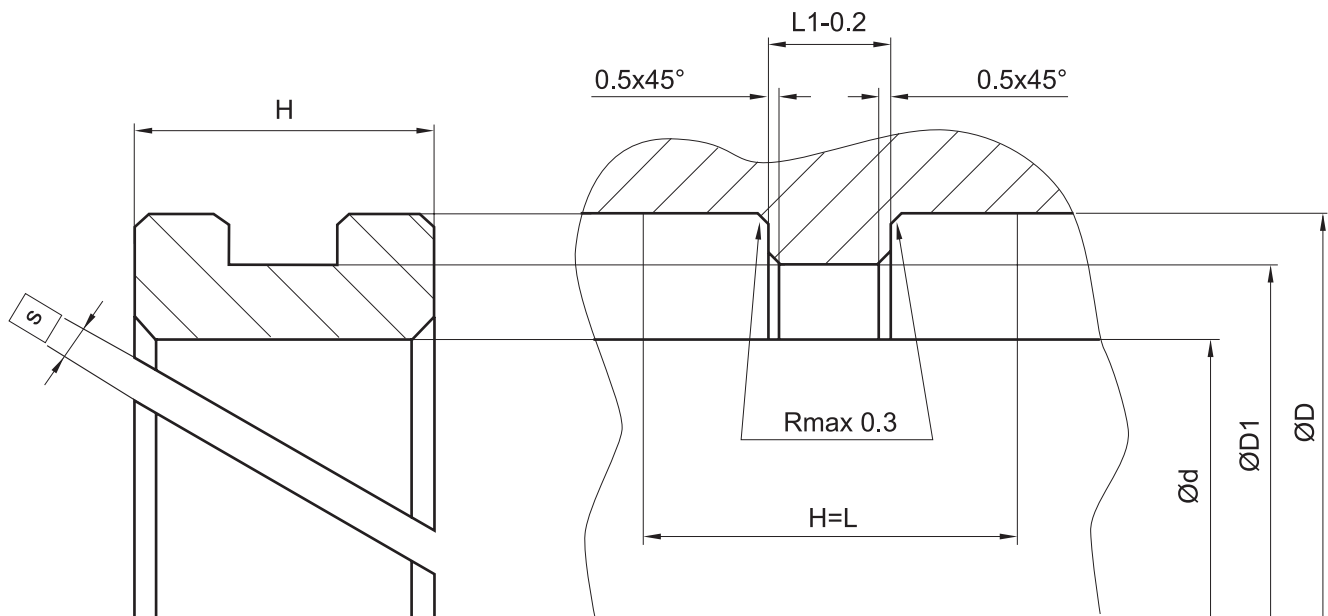
| surface roughness | Rtmax (µm) | Ra (µm) |
|-------------------|------------|-----------|
| sliding surface | ≤ 1,5 | 0,1 - 0,3 |
| bottom of groove | ≤ 6,3 | 0,8 |
| groove face | ≤ 15 | 3,2 |

**fitting & installation**

the split guide ring F08 is compressed spirally and can be snapped easily into corresponding grooves in the cylinder head.

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 $s = \dots mm$
- 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.