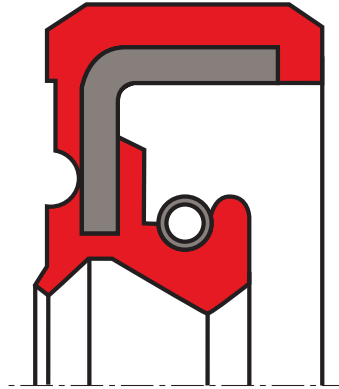


oil seal R61-F

seal spec



description

R61-F is a seal with completely rubber covered outer diameter. this type of seal is designed for pressures up to 1 MPa. in order to avoid a "pop-out" of the seal, we suggest to fit an axial retainer (e.g. circlip, shoulder, etc.). the additional dust lip protects the main sealing lip against dust and other fine solid contaminants and therefore this type is recommended for use in polluted environments. to achieve a long lifetime a suitable lubricant between the two sealing lips should be applied.

application



category of profile

molded/standard/trade product only.

single acting rotary shaft seal

high pressure oil seal

advantages

- good static sealing
- compensation of different thermal expansion
- reduced risk of fretting corrosion
- up to 1 MPa pressure at low peripheral speed
- effective protection against air side contaminants
- no need of back-up ring

area of application

- transmission systems (e.g. gearboxes)
- pumps
- hydraulic motors
- machinery industry

operating parameters & material

| sealing element* | material | | temperature | max. surface speed | max. pressure |
|-----------------------|----------------|-----------------|-------------------|--------------------|----------------|
| | metal insert** | spring** | | | |
| s-mart NBR 75 shore A | carbon steel | carbon steel | -20°C ... + 120°C | 5,0 m/s | 10 Bar (1 MPa) |
| s-mart FKM 75 shore A | carbon steel | stainless steel | -18°C ... + 220°C | 5,0 m/s | |

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.

* special grades and other materials (ACM, EACM, EPDM, HNBR, MVQ) on request

** metal insert, and spring as well, can be supplied in different materials on request.



surface quality

| surface roughness | Rtmax [μm] | Rz [μm] | Ra [μm] |
|-------------------|-------------------------|----------------------|----------------------|
| shaft | $\leq 6,3$ | $\leq 1,0-5,0$ | $\leq 0,2-0,8$ |
| bottom of groove | ≤ 25 | $\leq 10-25$ | $\leq 1,6-6,3$ |

hardness 45 ... 60 HRC

tolerance recommendation

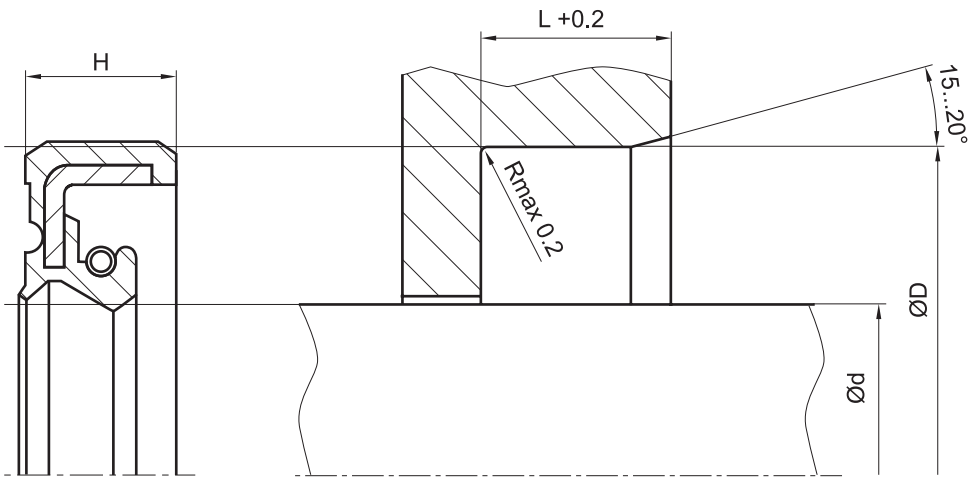
| seal housing tolerances | |
|-------------------------|--------|
| $\varnothing d$ | f8/h11 |
| $\varnothing D$ | H8 |

fitting & installation

suitable tool should be used for installation. It is recommended that the installation housing is designed to provide the rotary shaft seal with axial support.

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...



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.