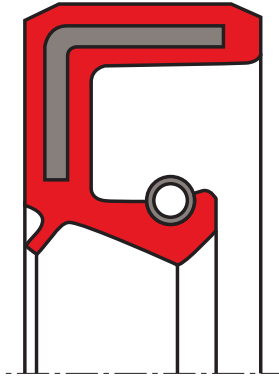


oil seal R61-V

seal spec



description

rotary seal in standard design according to DIN 3760 with a completely elastomer-encased metal insert & a spring-energised sealing lip. in addition, the standard design is available with a protective lip R61-V on the air side.

application



category of profile

molded/standard/trade product or machined with minor design change.

single acting rotary shaft seal

area of application

sealing of rotating machine elements such as shafts, hubs and axles

- transmission systems (e.g. gearboxes)
- pumps
- electrical motors
- machinery industry (e.g. tool machines)

advantages

- good static sealing
- compensation of different thermal expansion
- reduced risk of fretting corrosion
- higher bore surface roughness is allowed
- installation in split-housings
- modern lip design provides low radial forces

function

the R60-V /R61-V is a single action rotary shaft seal for rotating or pivoting shafts with optional protective lip sealing action (R61-V) on the side facing away from the medium, against dirt accumulation from the outside. the elastomer outer sheath provides good static sealing, good thermal expansion balance e.g. in light-metal housings, better sealing with greater roughness and secure sealing for split housing as well as good static sealing with thin fluid or gaseous media. FKM material is superior to the NBR material for high temperature applications, high peripheral speeds and chemically aggressive media. the combination of FKM material, the standard fully-encased metal insert and the spring made of non-rusting steel enable application in chemically aggressive media.

media

mineral oil and greases, synthetic oils and grases, engine, gear and ATF oils, fuels, aromatic and chlorinated hydrocarbons, broad chemicals and solvents resistance.

**operating parameters & material**

sealing element*	material		temperature	max. surface speed	max. pressure
	metal insert**	spring**			
s-mart FKM (available in 75 shore A, 80 shore A)	non-alloy steel DIN EN 10139	rust & acid-resistant steel DIN EN 1.4571 (AISI 304)	-30 °C ... +200 °C	30 m/s	0,5 bar (0,05 MPa)

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	≤6,3	≤1,0-5,0	≤0,2-0,8
bottom of groove	≤25	≤10-25	≤1,6-6,3

hardness 45 ... 60 HRC

tolerance recommendation

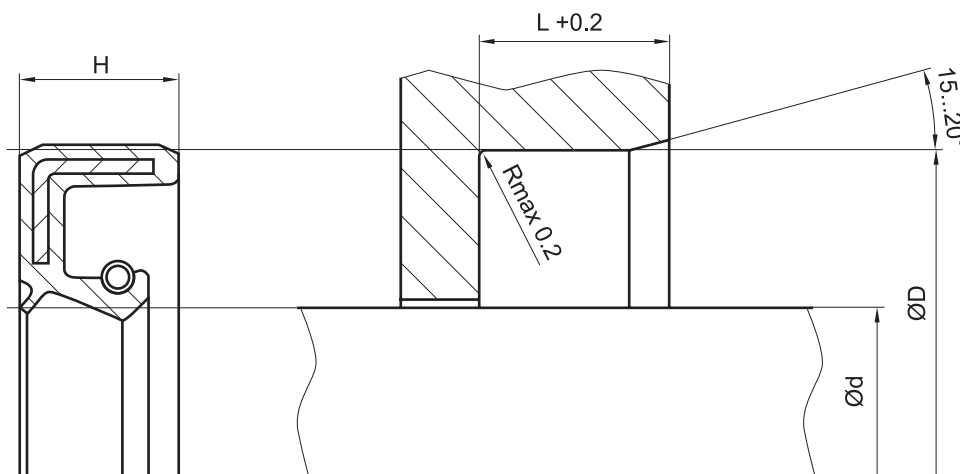
seal housing tolerances	
Ød	f8/h11
ØD	H8

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.