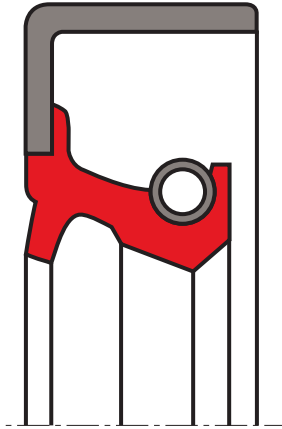


oil seal R63-A

seal spec



description

the R63-A is metal cased radial lip seals. 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. as the static sealing between housing and metallic shell is somewhat limited, low viscosity media can "creep". better performance can be achieved with epoxy based resin O.D. coating. this special treatment is on request.

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)
- heavy engineering applications

advantages

- effective protection against air side contaminants
- good radial stiffness, especially for large diameters
- good fitting stability avoiding pop-out of the seal
- modern lip design provides low radial forces
- cost effective for expensive elastomer materials

function

the R62-A/R63-A is a single action rotary shaft seal for rotating or pivoting shafts with optional protective lip sealing action (R63-A) on the side facing away from the medium, against dirt accumulation from the outside. tight and accurate fitting is achieved by the metal outer surface. the R62-A/R63-A model has limited sealing action with thin fluid or gaseous media and with split housings. to guarantee a high degree of static sealing on the outer surface, better surface treatment of the housing bore is required or an additional coat of paint should be applied to the outer surface.

media

good chemical resistance to diverse mineral oil and greases.

**operating parameters & material**

sealing element*	material		temperature	max. surface speed	max. pressure
	metal housing**	spring**			
s-mart NBR (available in 70 shore A, 72 shore A, 75 shore A)	mild steel DIN 1624 or non-alloy steel DIN EN 10139	spring steel DIN 17223 or non-alloy spring steel DIN EN 10270-1	-40 °C ... +100 °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 housing, 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

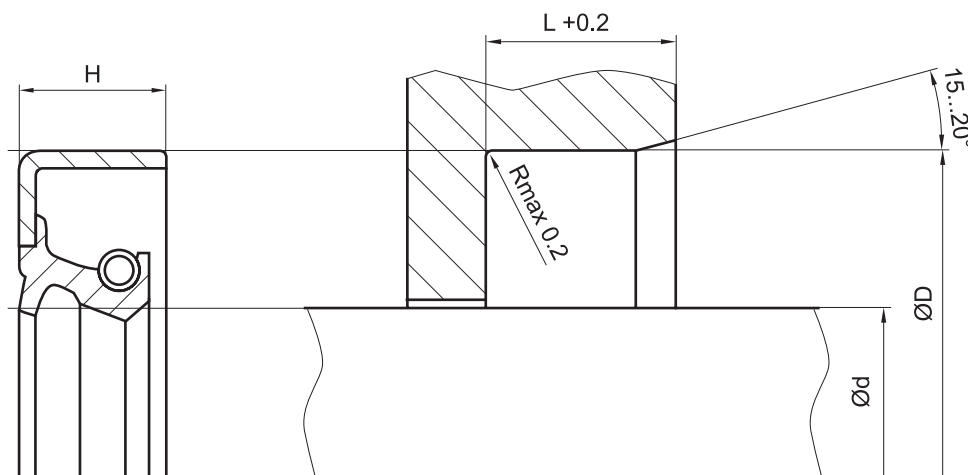
seal housing tolerances	
Ød	f8/h11
ØD	H8

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.