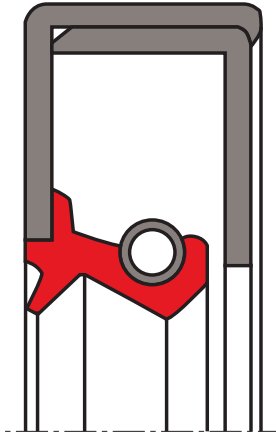


oil seal R65

seal spec



description

R65 is reinforced metal cased radial lip seals with dust lip. the supplementary metal inner ring provides a superior stiffness. this type is recommended for use in heavy 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 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

the R64/R65 is particularly suitable for large dimensions as well as difficult installation conditions and severe operating conditions.

- transmission systems (e.g. gearboxes)
- pumps
- electrical motors
- machinery industry (e.g. tool machines)
- heavy engineering applications (e.g. mills in steel industry)

advantages

- superior radial stiffness, especially for very large diameters
- very good fitting stability avoiding pop-out of the seal
- modern lip design provides low radial forces
- cost effective for expensive elastomer materials
- suitable for use in combination with axial seal (V-Ring)

function

the R64/R65 is a single action rotary shaft seal for rotating or pivoting shafts with optional protective lip sealing action (R65) on the side facing away from the medium, against dirt accumulation from the outside. the additional metal insert gives the rotary shaft seal more rigidity and the metal outer casing guarantees tight and accurate fitting. the R64/R65 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 various 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 (non-alloy steel DIN EN 10139)	spring steel DIN 17223 (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

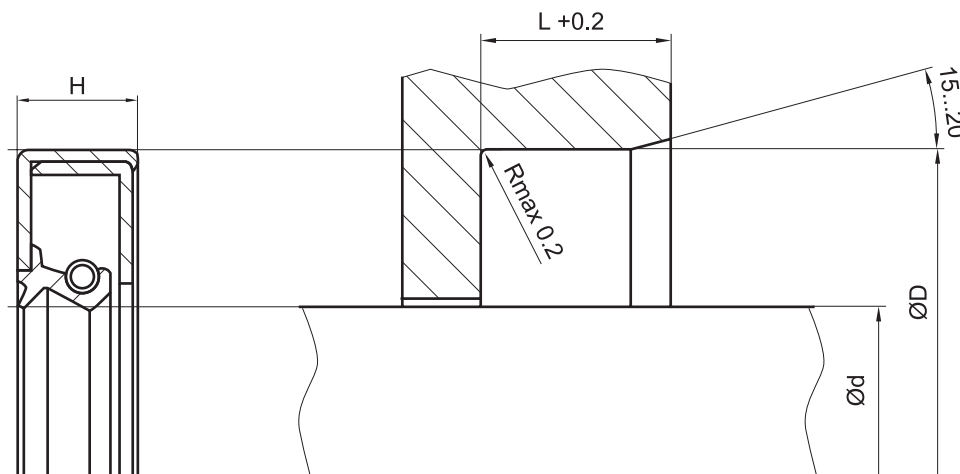
seal housing tolerances	
Ød	f8/h11
ØD	H8

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.