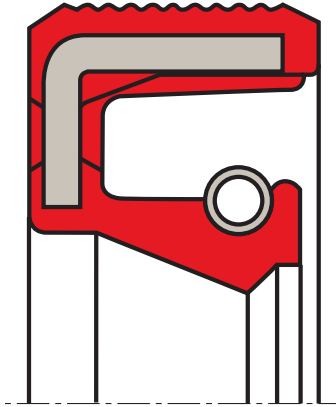


oil seal R72-A

seal spec



description

the R72 seals with completely rubber covered outer diameter. this type of seal is designed for pressures up to 0.5 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 (R73-A) 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 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
- up to 0.5 MPa pressure at moderate peripheral speed
- low lip and shaft wear at low pressure run
- effective protection against air side contaminants
- no need of back-up ring

function

the R72/R73-A is a rotary shaft seal for rotating or pivoting shafts with optional protective lip sealing action (R73-A) on the side facing away from the medium, against dirt accumulation from the outside. the grooved outer sheath provides improved static sealing for housings with greater thermal expansion because it has a higher degree of press fitting. it also prevents permanent skew of the rotary shaft seal. in addition, installation is facilitated because less press-fit force is required.

media

good chemical resistance to many mineral oil and synthetic lubricants (CLP, HLP, APGL etc.).

**operating parameters & material**

sealing element*	material		temperature	max. surface speed	max. pressure
	metal insert**	spring**			
s-mart NBR (70 shore A, NBR 72 shore A or NBR 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 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

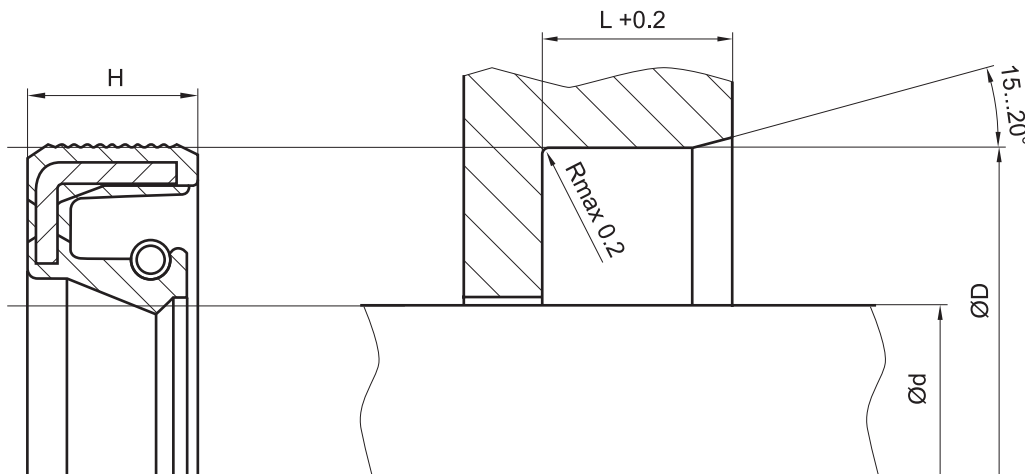
seal housing tolerances	
Ød	f8/h11
ØD	H8

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.