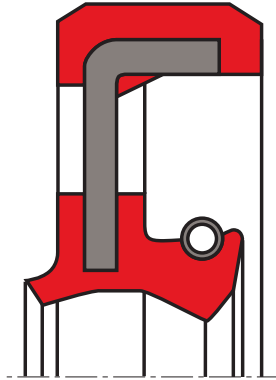


oil seal R61-R

seal spec



description

rotary shaft seal same as type R61-V in Y model with a protective lip on the air side, pressurisable. it has a shorter, more stable, spring-energised sealing lip.

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 when pressurized. the main application lies within the area of pressurized unit e.g. pumps and hydro-electric engines.

function

the R60-R/R61-R is a single action rotary shaft seal for rotating or pivoting shafts with optional protective lip sealing action (R61-R) on the side facing away from the medium, against dirt accumulation from the outside. pressure application of up to 10 bar (depending on the rotational speed) is possible due to the shorter, thicker, spring-energised sealing lip. 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.

operating parameters & material

material			temperature	max. surface speed	max. pressure***
sealing element*	metal insert**	spring**			
s-mart FKM (80 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	-30 °C ... +170 °C	35 m/s	10 bar (1 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.

*** depending on rotational speed

**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

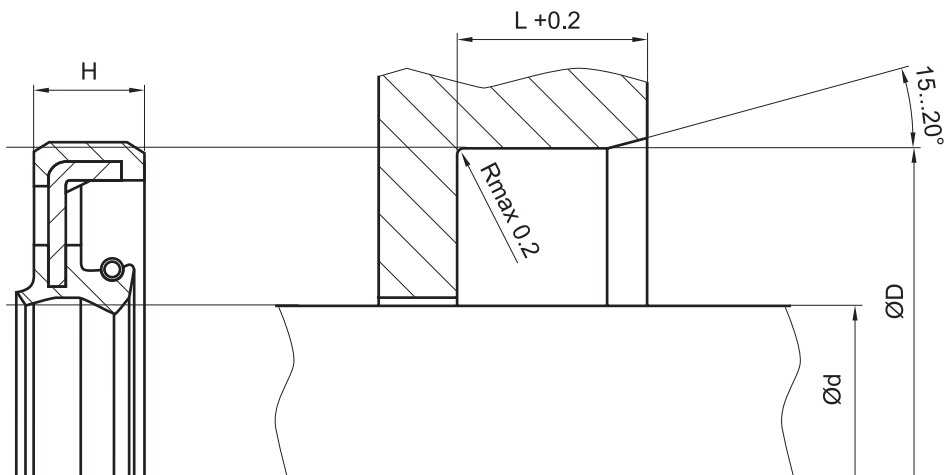
seal housing tolerances	
$\varnothing d$	f8/h11
$\varnothing D$	H8

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.