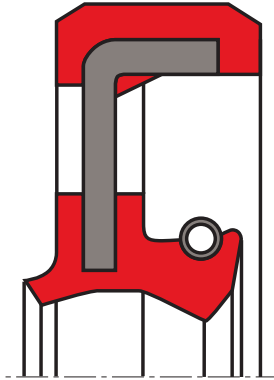


oil seal R61-Y

seal spec



description

rotary shaft seal equivalent to R61-A type in Y model with a protective lip on the air side, pressurisable. It has a shorter, stronger, 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 area application is in pressurised systems such as pumps and hydro-motors.

function

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

media

good chemical resistance to many mineral oils and greases.

operating parameters & material

sealing element*	material		temperature	max. surface speed	max. pressure
	metal insert**	spring**			
s-mart NBR (72 shore A & 80 shore A)	mild steel 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	10 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

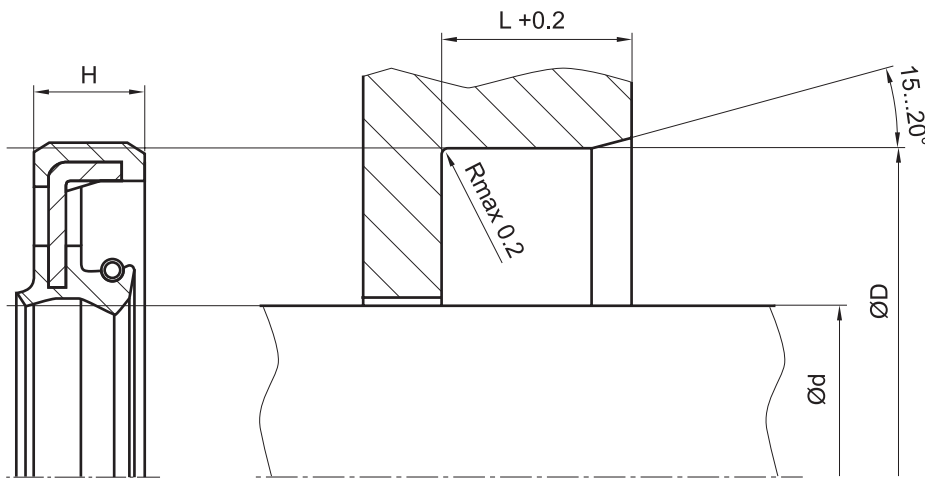
seal housing tolerances	
$\varnothing d$	f8/h11
$\varnothing D$	H8

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.