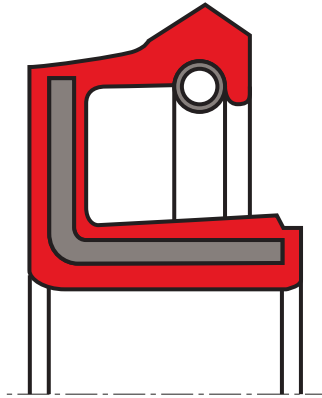


## oil seal R110

## seal spec



### description

the R110 rotary shaft seal is a special type with the sealing lip on the outside (exterior sealing). it consists of a metal insert with an elastomer inner sheath as well as a spring-energised sealing lip facing outwards

### 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 part, either against stationary or rotating housings, such as axle sealing in agricultural and construction machinery.

### function

the R110 is a single action rotary shaft seal for stationary or rotating housings. the elastomer inner sheath (shaft side) provides good static sealing, good thermal expansion balance, optimal sealing with greater roughness and thin fluid or gaseous media. as result of the centrifugal force at higher revolutions, the sealing lip of the R110 design is pressed outwards which intensifies the friction and sealing action.

### media

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

### operating parameters & material

material			temperature	max. surface speed	max. pressure
sealing element*	metal insert**	spring**			
s-mart NBR 70 shore A	(non-alloy steel DIN EN 10139)	(non-alloy spring steel DIN EN 10270-1)	-40 °C ... +100 °C	40 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



#### installation housing

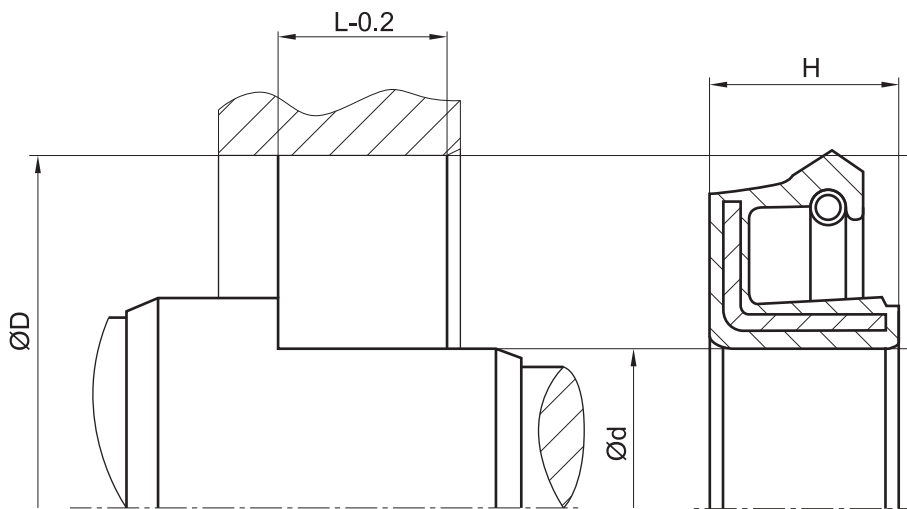
the installation housing of a R110 should be executed as for a standard shaft seal in accordance with DIN 3760. consideration must be given to the fact the static grip of the rotary shaft seal is on the shaft and the contact surface in the housing. the surface qualities must be observed accordingly.

#### 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.*