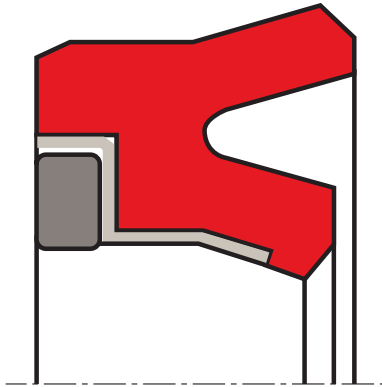


## rod seal S02-SA

## seal spec



### description

seal-mart U-ring with asymmetrical profile of the sealing lips, fabric reinforcement on the dynamic sealing side and back-up ring as a gap sealing component.

### application



not bolded symbols; please consult our technical for application limitations

### category of profile

molded/standard/trade product or machined with minor design change.

### single acting

the S02-SA seal is designed for use as a rod seal.

### area of application: hydraulics

heavy duty earth moving equipment, industrial vehicles, presses, mobile hydraulics, control and regulation equipment.

### advantages

single-acting rod seal for medium loads, predominantly for spare parts requirements.

### operating parameters & material

material		temperature	max. surface speed	max. pressure <sup>1</sup>
sealing element	back-up ring			
s-mart NBR (80 Shore A)	POM <sup>2</sup>	-30°C ... + 100°C	0,5 m/s	400 bar (40 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.

<sup>1</sup> pressure ratings are dependent on the size of the extrusion gap.

<sup>2</sup> POM up to ø260 mm, PA above ø260 mm

**gap dimension**

the decisive factor for the function of the seal is the largest gap dimension occurring during operation on the non-pressurised side of the seal.

operating pressure (Mpa)	$(\varnothing D - \varnothing d)/2$ mm	
	$\leq 8,0$ mm	$> 8,0$ mm
	max. permissible gap dimension	
16	0,60	0,65
26	0,50	0,55
32	0,40	0,45
40	0,35	0,40

**important note:**

the above data are maximum value and can't be used at the same time. e.g. the maximum operating speed depend on material type, pressure, temperature and gap value. temperature range also dependent on medium.

**surface quality**

surface roughness	Rtmax ( $\mu$ m)	Ra ( $\mu$ m)
running surface	$\leq 2.5$	0.05-0.30
bottom of groove	$\leq 6.3$	$\leq 1.6$
side of groove	$\leq 15$	$\leq 3.0$

**tolerance recommendation**

the admissible gap width, tolerances, guide play and deflection of the guide under load are to be taken into account when designing D2.

seal housing tolerances  
nominal  $\varnothing \leq 360$

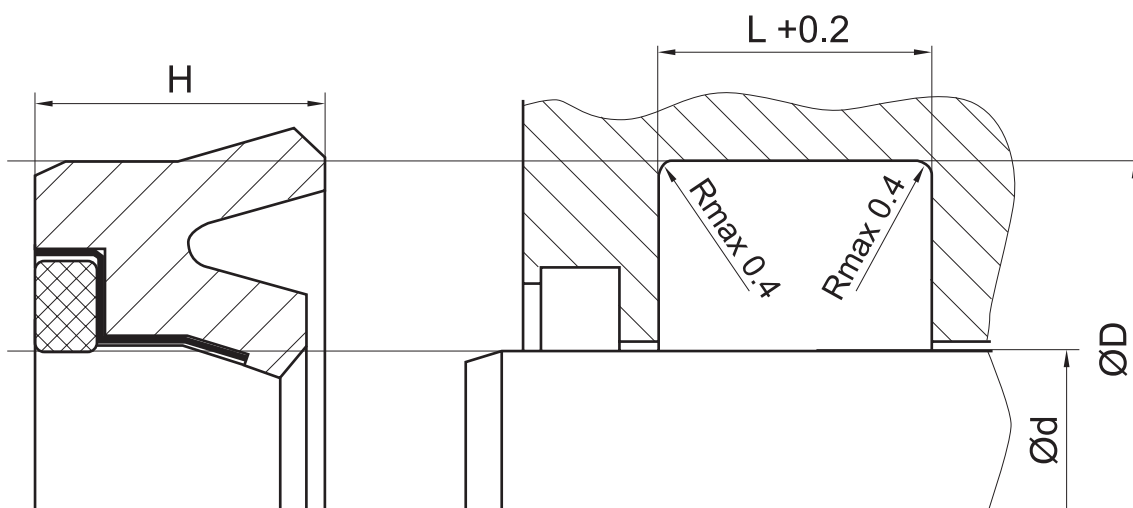
$\varnothing d$	f8
$\varnothing D$	H11

**fitting & installation**

careful fitting is a prerequisite for the correct function of the seal.

**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.