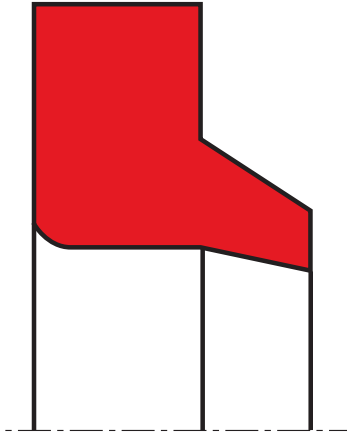


## wiper A09-A

## seal spec



### description

wiper with dimensioning according to common types used in USA. for housings according AN 6231, ANSI/B93.35.

- the design of the wiping edge assures that any dirt is wiped off reliably.
- pressure build-up on the trailing side is to be avoided if possible.
- dimensioning according to the types common in the USA.
- deviations from profile shapes are not possible; if this is required, the A02-A type must be used.

### application



*not bolded symbols; please consult our technical for application limitations*

### category of profile

machined only.

### single acting

### area of application: hydraulics

- reciprocating rods on hydraulic cylinders.
- push rods and valve stems.
- (materials must be selected according to operating requirements).
- for mounting space according to AN 6231, ANSI/B93.35 1978 specification NFPA-T3-197.3 R1.
- demanded in MS-33675 for MS-28776.

### function

A09-A wipers are designed to keep dust, dirt, sand and metal chips away from the sealing and guiding elements, thereby avoiding abrasive damage caused by external contamination.

**operating parameters & material**

diameter range: up to 600 mm

material	temperature	max. surface speed	hydrolysis	dry running	wear resistance
s-mart PU	-30 °C ... +110 °C	4 m/s	-	+	++
s-mart HPU	-20 °C ... +110 °C	4 m/s	++	+	++
s-mart LTPU	-50 °C ... +110 °C	4 m/s	-	+	++
s-mart SPU	-20 °C ... +110 °C	5 m/s	++	++	++
s-mart GPU	-30 °C ... +110 °C	4 m/s	++	+	++
s-mart NBR	-30 °C ... +100 °C	4 m/s	-	-	O
s-mart FKM	-20 °C ... +200 °C	4 m/s	-	-	O
s-mart EPDM <sup>2</sup>	-50 °C ... +150 °C	4 m/s	++	-	O
s-mart HNBR	-25 °C ... +150 °C	4 m/s	+	O	+
s-mart XPU	-30 °C ... +110 °C	4 m/s			
s-mart XHPU	-20 °C ... +110 °C	4 m/s			
s-mart XSPU	-20 °C ... +110 °C	5 m/s			

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>2</sup> attention: not suitable for mineral oils!

++ ... particularly suitable

+ ... suitable

o ... conditional suitable

- ... not suitable

for detailed information regarding chemical resistance please refer to our "list of resistance". for increased chemical and thermal resistance rubber materials are to be preferred, polyurethan materials increase wear resistance.

**surface quality**

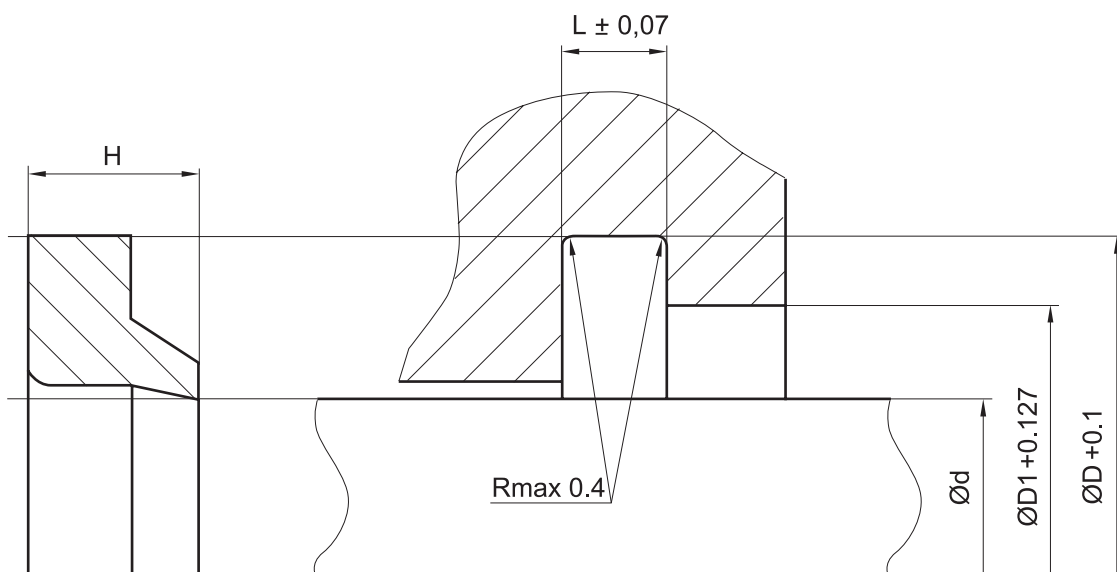
surface roughness	Rtmax (µm)	Ra (µm)
sliding surface	according to seal data	
bottom of groove	≤6,3	≤1,6
groove face	≤15	≤3

**mode of installation**

the prerequisites for perfect functioning are careful fitting and an accurately dimensioned mounting space. in general, wipers snap easily into their housings when distorted into a kidney shape (over 20mm diameter).

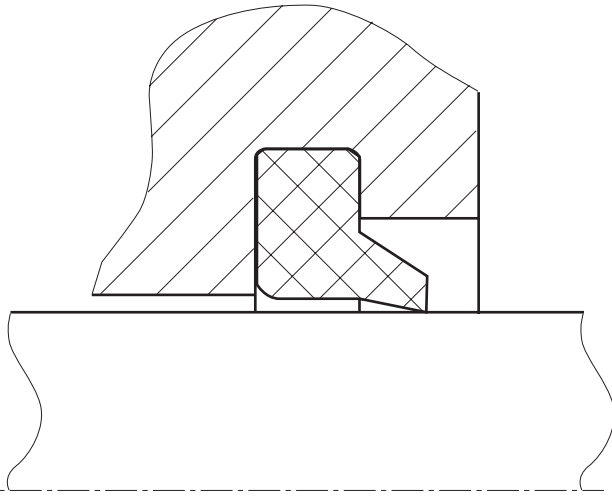
**seal & housing recommendations**

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...





**fitted:**



*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.*