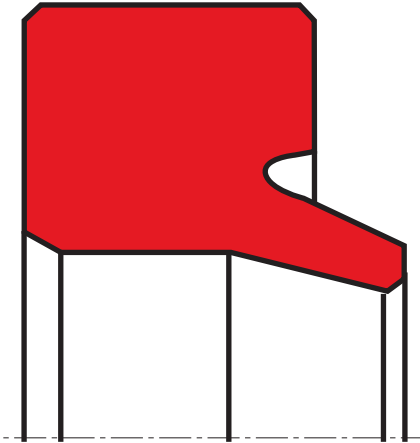


## wiper A02-I

## seal spec



### description

as profile A02-A, but without back support area special housing design according ISO 6195-Type C.

- the seal profile and close machining tolerances provide a good static seal for the outside diameter, assisting in the prevention of ingress of humidity and foreign matter via the outside diameter.
- the design of the wiping lip aids the recovery of residual oil film while exclusion of foreign matter is maintained.
- the provision of a support shoulder, along with relief grooves on the mating seal face, prevents tilting of the wiper and pressure build up on the trailing side.
- support shoulder not included in design A02-I.

### application



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

### category of profile

machined or molded/standard/trade product.

### single acting

#### area of application: hydraulics

- reciprocating rods on hydraulic cylinders.
- push rods and valve stems.
- (materials must be selected according to operating requirements).
- the A02-I design is to be used for mounting spaces according to ISO 6195-1986 type C.

### function:

A02-A and A02-I 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

o ... conditional suitable

+ ... 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

**tolerance recommendation**

seal housing tolerances		cs	R [mm]
L < 10 mm	0,2	≤ 5	max. 0,3
L ≥ 10 mm	0,3	>5.....≤ 7,5	max. 0,4
D1	H11	>7,5.....≤ 10	max. 0,6
D	H11	> 10	max. 0,8

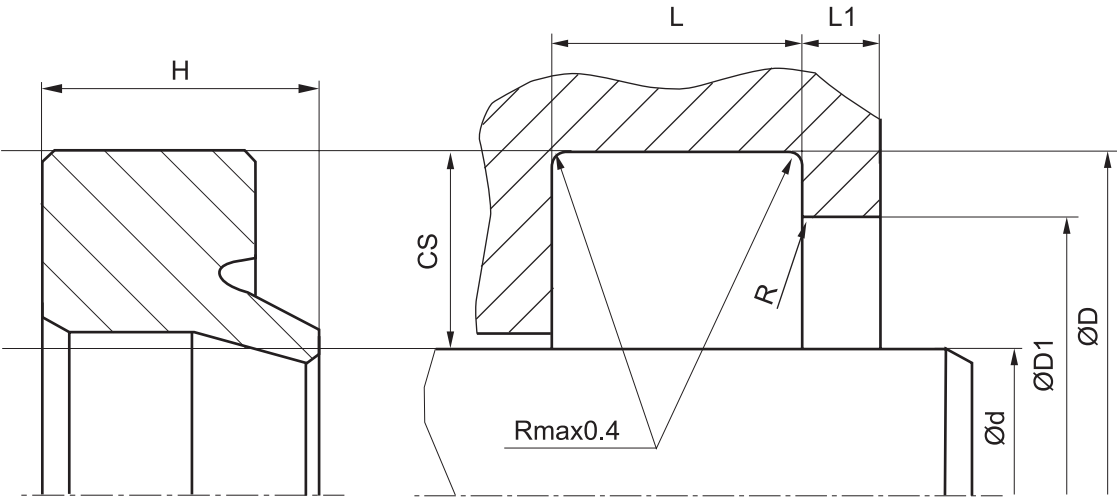
**mode of installation**

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...



ISO-wiper housing for A02-I:

d	cs	L	D1	L1 min
12..... ≤ 28	3	4	d+2.5	2
> 28..... ≤ 56	4	5	d+3	
> 56..... ≤ 110	5	6	d+3	
> 110..... ≤ 140	7.5	8.5	d+4	

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.