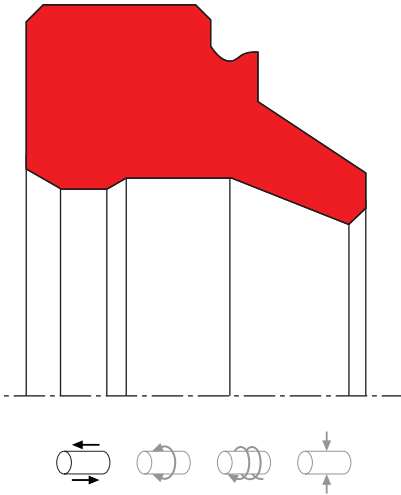


SEAL SPEC A01-A



description

wiper with interference fit on outside diameter, providing a technically accurate closure at the cylinder. wiping edge assures a reliable protection against penetration of dust and dirt whilst allowing backflow of residual oil film. back support area prevents tilting of wiper. for housings according ISO 6195-Type A.

- + 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.

category of profile

machined or molded/standard/trade product.

single acting

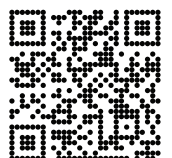
the A01-A seal is designed for use as a wiper.

area of application; hydraulics

- reciprocating rods on hydraulic cylinders.
- push rods and valve stems.
- materials must be selected according to operating requirements.
- the profile is suited for mounting space according to ISO 6195-1986 type C.

function

A01-A wipers are designed to keep dust, dirt, sand and metal chips from the sealing and guiding elements, thereby avoiding abrasive damage caused by external contamination.



operating parameter & material

sealing element	material energizer	back-up ring	temperature	max surface speed	hydrolysis	dry running	wear resistance
PU			-30 °C ... +110 °C	4 m/s	-	+	++
HPU			-20 °C ... +110 °C	4 m/s	++	+	++
LTPU			-50 °C ... +110 °C	4 m/s	-	+	++
SPU			-20 °C ... +110 °C	5 m/s	++	++	++
GPU			-30 °C ... +110 °C	4 m/s	++	+	++
NBR			-30 °C ... +100 °C	4 m/s	-	-	o
FKM			-20 °C ... +200 °C	4 m/s	-	-	o
EPDM			-50 °C ... +150 °C	4 m/s	++	-	o
HNBR			-25 °C ... +150 °C	4 m/s	+	o	+
XPU			-30 °C ... +110 °C	4 m/s			
XHPU			-20 °C ... +110 °C	4 m/s			
XSPU			-20 °C ... +110 °C	5 m/s			

attention: not suitable for mineral oils!

++ particularly suitable

+ suitable

o conditional suitable

- not suitable

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.

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

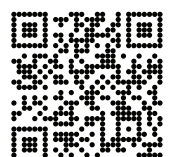
surface roughness	Rtmax (µm)	Ra (µm)
sliding surface	according to seal data	
bottom of groove	≤6,3	≤1,6
groove face	≤15	≤3

tolerance recommendation

seal housing tolerance		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

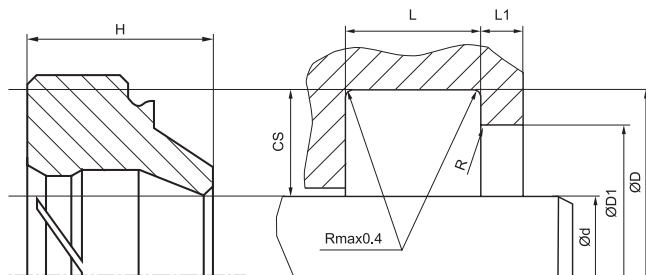
the prerequisites for perfect functioning are careful fitting and an accurately dimensioned mounting space. in general, wipers snap easily into their housings when distorted into a kidney shape (over 20mm diameter). when mounted in cylinders that cannot be dismantled, the rings can also be cut open. in such cases, an approx. 2-3% larger diameter should be chosen. when the wiper is installed, the two ends are snapped into place first, and then the entire ring is pressed in along the entire circumference. no gluing of the joining ends is required.



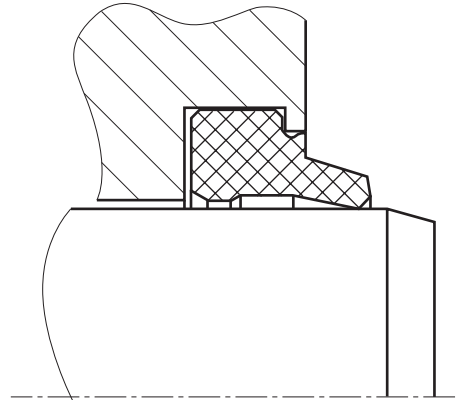
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seal & housing recommendations

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



H [mm]	L1 [mm]
≤ 7	1
10	1,5
13	2

the L1 measurement, which is dependent on the height of the wiper, is selected as follows

