



SEAL DATA SHEET

A01-A



3D Seals > Hydraulics & Pneumatics >

WIPER



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-TypeA



For symbols that are not bold, please consult our technical for application limitations.

- 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

Single Acting

The A01-A is designed for use as a rod 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.

Note

- This seal has the correct functioning dimension only when mounted. When slipping the seal over the piston rod, it may appear too large.

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 Parameters & Material

Diameter range: up to 600 mm

Material	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	++	+	'++
TPU	-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	-	-	0
FKM	-20 °C ... +110 °C	4 m/s	-	-	0
EPDM 2	-50 °C ... +150 °C	4 m/s	'++	-	0
HNBR	-50 °C ... +150 °C	4 m/s	+	0	+

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

1. Pressure ratings are dependent on the size of the extrusion gap.

2. 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	R_{tmax} (μm)	R_a (μm)
Sliding surface	According to seal data	
Bottom of Groove	≤ 6.3	≤ 1.6
Groove Face	≤ 15	≤ 3

Tolerance Recommendation

Seal Housing Tolerances	
L < 10 mm	0.2
L ≥ 10 mm	0.3
D1	H11
D	H11