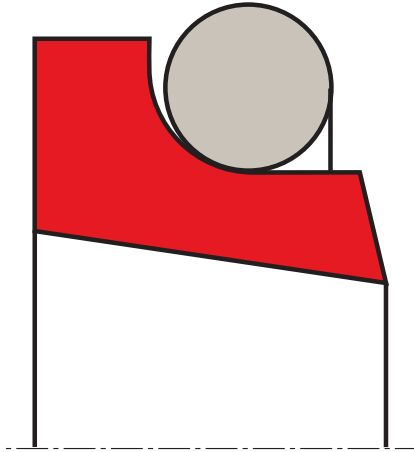


## wiper A25-F

## seal spec



### description

PTFE-wiper with O-ring as preloading element. PTFE part takes over wiping function, O-ring maintains equal contact pressure. good dry running properties, no "stick-slip". excellent chemical and thermal resistance (depends on O-ring ).

- 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 wiping part consists of PTFE with fillers selected to suit the respective application, and an O-ring as a preload element. the PTFE part takes over the wiping function, the O-ring maintains even contact pressure.
- the design of the wiping edge aids recovery of the residual oil film; any dirt is wiped off reliably.
- pressure build-up on the trailing side is to be avoided if possible.

### 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/pneumatics

- reciprocating, swiveling and coiling rods on hydraulic cylinders.
- push rods and valve stems.
- (materials must be selected according to operating requirements).

### advantages:

- small installation grooves.
- minimal break-out and dynamic sliding friction. therefore no stick-slip. steady movement is guaranteed even at low velocities.
- excellent sliding properties.
- high wear resistance, therefore long service life.
- available in diameters up to 2000 mm.

### function:

A25-F wipers are designed to keep dust, dirt, sand and metal chips from the sealing and guiding elements, thereby 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
sealing element	energizer					
s-mart PTFE glass	s-mart NBR (70 shore A)	-30 °C ... +100 °C	10 m/s	-	++	+
s-mart PTFE glass	s-mart FKM (75 shore A)	-20 °C ... +200 °C	10 m/s	-	++	+
s-mart PTFE bronze	s-mart NBR (70 shore A)	-30 °C ... +100 °C	10 m/s	-	++	+
s-mart PTFE bronze	s-mart FKM (75 shore A)	-20 °C ... +200 °C	10 m/s	-	++	+
s-mart PTFE carbon	s-mart NBR (70 shore A)	-30 °C ... +100 °C	10 m/s	-	++	+
s-mart PTFE carbon	s-mart FKM (75 shore A)	-20 °C ... +200 °C	10 m/s	-	++	+
s-mart XPU	s-mart NBR (70 shore A)	-30 °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.

++ ... 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**

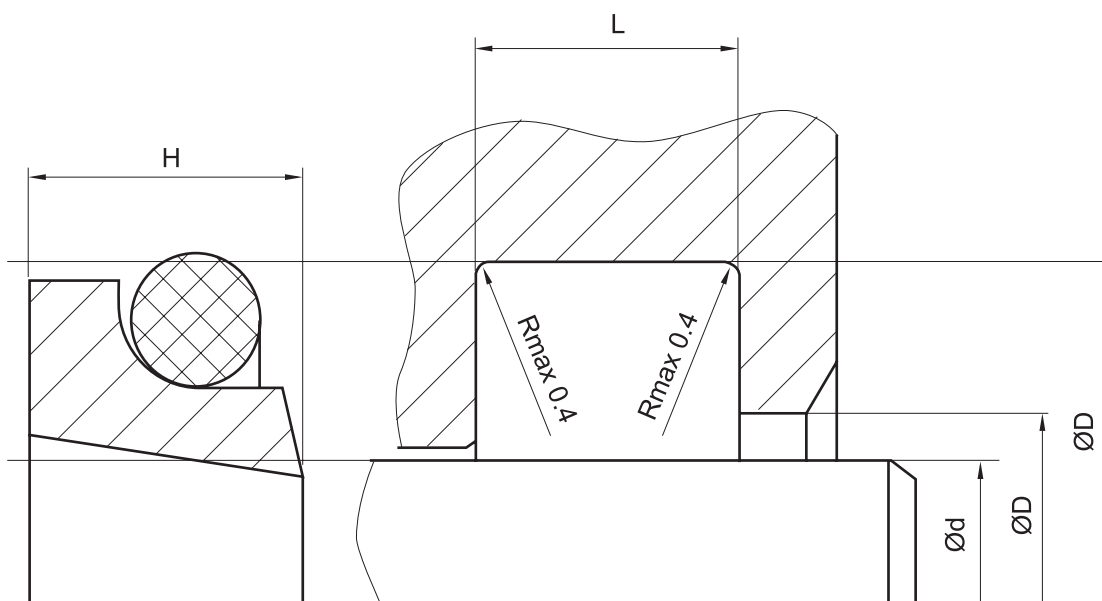
L	+0,2
ØD	H9

**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). a large insertion chamfer must be provided (20-30°, length = (D-d)/4).

**seal & housing recommendations**

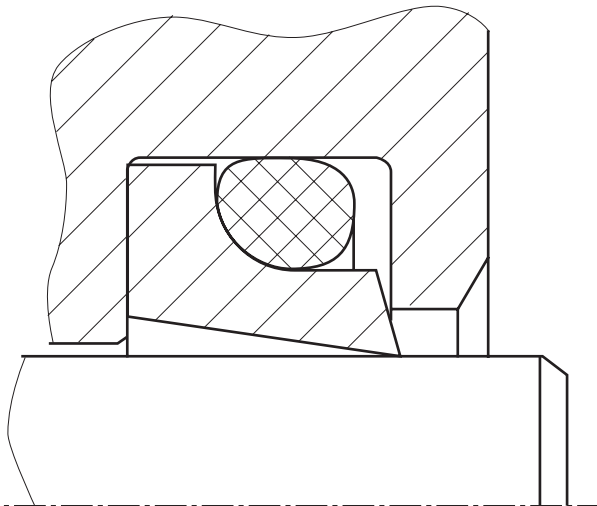
please note that we are able to produce those profiles to your specific need or any non standard housing. for detail measurements, please see seal-mart catalog...





recommended rod Ød range		L [mm]	ØD	ØD1	R max	O-ring cross-section
≥	<					
6	12	3,7	Ød + 4,8	Ø d +2,7	0,4	1,78
12	65	5	Ød + 6,8	Ø d +3,5	0,4	2,62
65	250	6	Ød + 8,8	Ø d +4,0	0,4	3,53
250	420	8,4	Ød + 12,2	Ø d +4,5	0,4	5,33
420	650	11	Ød + 16	Ø d +5,2	0,4	6,99
650	1000	14	Ød + 20	Ø d +6,6	0,4	8,4

**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.*