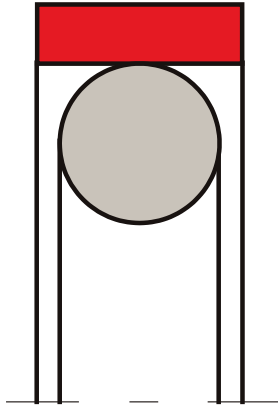


## piston seal K08-SF

## seal spec



### description

the piston sealing set profile K08-SF consists of a PTFE piston sealing ring and an O-ring. they are combined as a single unit and are appropriate for double-acting pistons in hydraulic & pneumatic cylinders.

profile K08-SF is particularly suitable for double-acting hydraulic & pneumatic pistons, e.g. in control cylinders, servo-assisted equipment, and in quick acting cylinders.

### application



### category of profile

machined or molded/standard/trade product.

### area of application: hydraulics & pneumatics

### advantages for hydraulics

double-acting piston seal for the lower pressure range with the properties of :

- low friction.
- low housing height.

### advantages for pneumatics

- assembly on one-piece piston.
- short assembled length.
- minimal break-out and dynamic slide friction. therefore no stick-slip. steady movement is guaranteed even at low velocities.
- low wear.
- high extrusion resistance.
- high temperature resistance.

### function

the K08-SF is a double acting piston seal. it is preferably used for existing housings which deviate from the norm. the reduced profile size of the PTFE sealing ring facilitates installation.

### operating parameters & material

material		temperature	max. surface speed	max. pressure <sup>1</sup>	area of application
sealing element	energizer				
s-mart PTFE carbon	NBR 70 Shore A	-30°C ... + 80°C	4,0 m/s	160 bar (16 MPa)	for pneumatic
S-mart PTFE bronze	NBR 70 Shore A	-30°C ... + 100°C	2,0 m/s	160 bar (16 MPa)	for hydraulic

### important note:

the above data are maximum values and can't be used at the same time. e.g. the maximum operating speed depend on material type, pressure, temperature and gap value. temperature range also dependent on medium.

<sup>1</sup> pressure ratings are dependent on the size of the extrusion gap.

### gap dimension

the largest gap dimension occurring on the non-pressurised side of the seal in operation is of vital importance for the function of the seal. we recommend a metal guide H8/f7.

**surface quality**

surface roughness	Rtmax (µm)	Ra (µm)
sliding surface	≤2,5	≤0,05-0,3
bottom of groove	≤6,3	≤1,6
groove face	≤15	≤3

**tolerance recommendation**

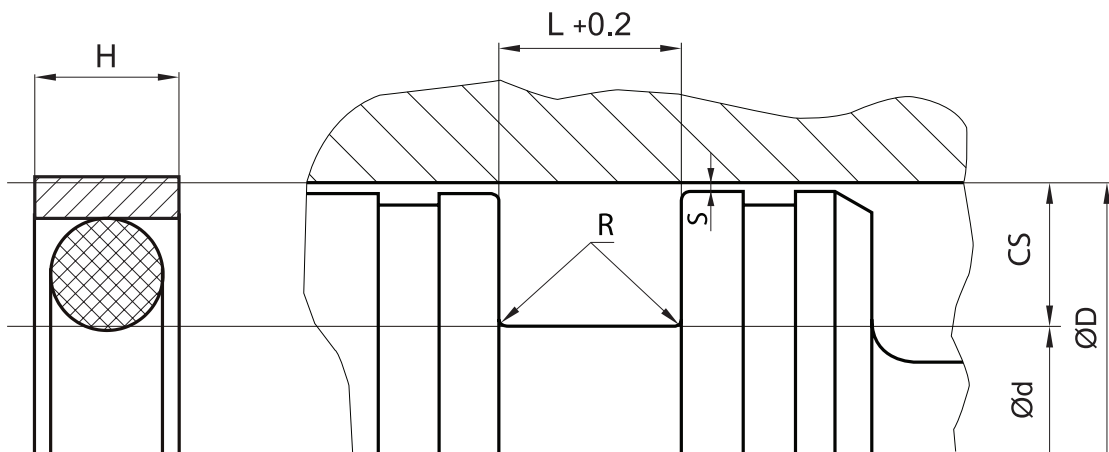
seal housing tolerance	
Ød	f7
ØD	H8

**fitting & installation**

Careful fitting is a prerequisite for the correct function of the seal.

**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...



ØD	R
ØD < 23	0,4
24 < ØD < 56	0,5
ØD > 57	0,8

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.