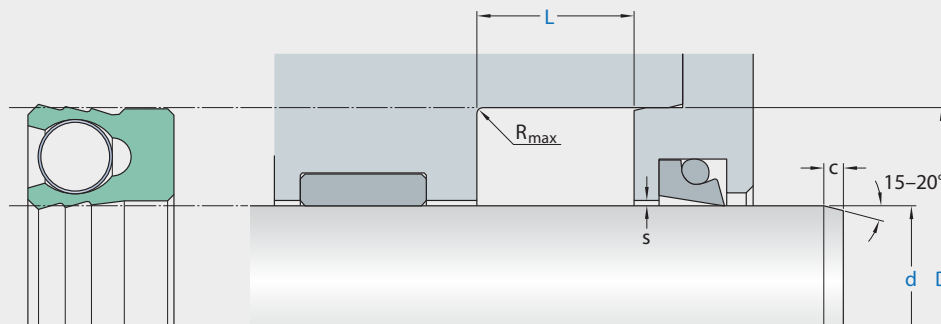


## S03-S



Ordering dimensions in blue

Surface roughness	$R_{tmax}$	$R_a$
Sliding surface	$\leq 2 \mu m$	0,05–0,2 $\mu m$
Bottom of groove	$\leq 6,3 \mu m$	$\leq 1,6 \mu m$
Groove face	$\leq 15 \mu m$	$\leq 3 \mu m$

Bearing area: 50–95% and a cutting depth of  $0,5 R_z$ , based on  $C_{ref} = 0\%$

Standard dimensions		D H10	L + 0,2	$R_{max}$	c	Maximal radial extrusion gap $s^*$				
d f8 over	incl.					20 bar	100 bar	200 bar	300 bar	400 bar
mm		mm								
6	10	d+4	3,5	0,4	3,5	0,25	0,12	0,10	0,08	0,07
10	30	d+6	5,0	0,4	3,0	0,35	0,17	0,12	0,10	0,08
30	120	d+10	8,0	0,4	4,0	0,45	0,22	0,17	0,12	0,10
120	200	d+15	11,5	0,4	5,0	0,75	0,40	0,33	0,25	0,18
200	250	d+20	13,0	0,4	6,0	0,87	0,48	0,38	0,28	0,20
250	500	d+25	18,5	0,4	8,5	0,87	0,48	0,38	0,28	0,20
500	1 600	d+30	23,0	0,4	10,0	0,87	0,48	0,38	0,28	0,20

### application



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

\* Extrusion gap values shown above are valid for a temperature of 70 °C, higher temperatures require lower values.

## operating parameters & material

diameter range: up to 600 mm

material		temperature	max. surface speed	max. pressure <sup>1</sup>	hydrolysis	dry running	wear resistance
sealing element	energizer						
Ecoflon 1	spring '1.4310	-200 °C ... +260 °C	1,0 m/s	100 bar (10 MPa)	++	++	O
Ecoflon 2	spring '1.4310	-200 °C ... +260 °C	1,0 m/s	160 bar (16 MPa)	++	++	+
Ecowear	spring '1.4310	-200 °C ... +80 °C	0,5 m/s	200 bar (20 MPa)	++	+	+

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

++ ... particularly suitable

o ... conditional suitable

+ ... suitable

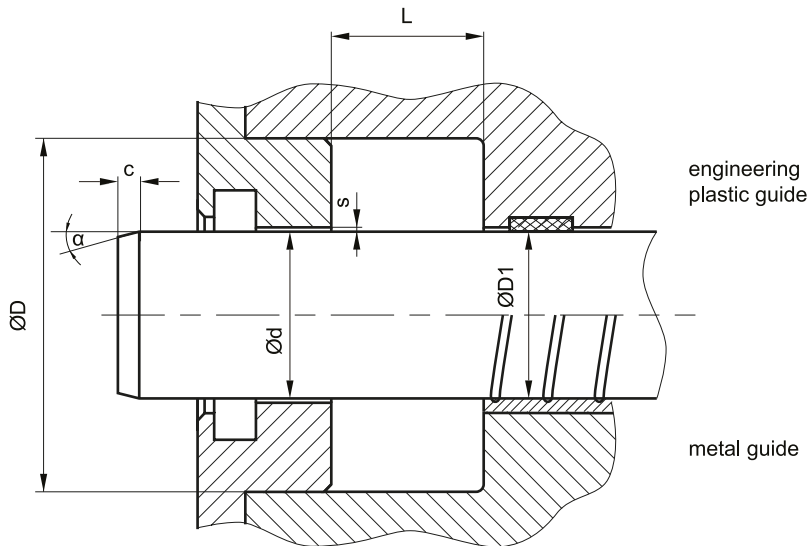
- ... not suitable

for detailed information regarding chemical resistance please refer to our "list of resistance". for decreased leakage rates elastomer materials (polyurethane or rubber) in other sealing systems are to be preferred.

## mode of installation

normally, an open mounting space is to be provided. the profile should not be snapped into place, as the spring may be damaged and normal function can no longer be ensured.

## recommended mounting space:



## recommended guide tolerance D1:

d f8 [mm]	p ≤ 100 [bar]	100 < p ≤ 200 [bar]	p > 200 [bar]
≤ 100	H10	H8	H8
> 100 ≤ 200	H10	H8	H7
>200	H9	H8	H7

## insertion chamfer:

in order to avoid damage to the rod seal during installation, the piston rod is to be chamfered and rounded as shown in the "recommended mounting space" drawing. the size of chamfer depends on the seal type and profile width.

cs (mm)	c (mm)	
	α = 15° ... 20°	α = 20° ... 30°
(2)	2	1
(3)	3	1,5
4	3,5	2
5	4	2,5
6	4,5	3
7,5	5	4
10	6	5
12,5	8,5	6,5
15	10	7,5
20	13	10