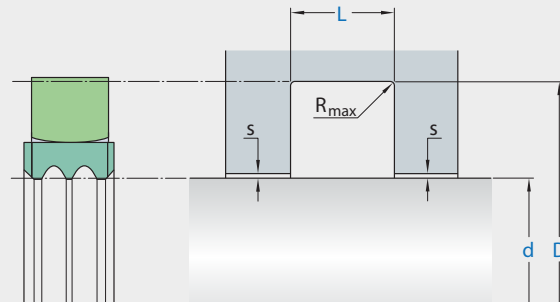


R09-FS



Ordering dimensions in blue

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

Hardness: On the surface min 55 HRC, hardened depth > 0,3 mm.
 Bearing area: 50–95% and a cutting depth of 0,5 R_z , based on $C_{ref} = 0\%$

application



not bolded symbols; please consult our technical for application limitations

Standard dimensions					Maximal radial extrusion gap s^*		
d	f8	D	L	R_{max}			
over	incl.	H9	+ 0,2		100 bar	200 bar	350 bar
mm					mm		
5	50	d + 10	5	0,4	0,25	0,2	0,10
50	60	d + 15	7,5	0,4	0,3	0,25	0,10
60	200	d + 20	10	0,4	0,3	0,25	0,15
200	300	d + 25	12,5	0,4	0,3	0,25	0,15
300	530	d + 30	15	0,4	0,45	0,3	0,2
530	650	d + 35	17,5	0,4	0,45	0,3	0,2
650	1 000	d + 40	20	0,4	0,5	0,35	0,25

* Extrusion gap values shown above are valid for a temperature of 80 °C, higher temperatures require lower values.

operating parameters & material*diameter range: up to 600 mm*

material		temperature	max. pressure ¹
sealing element	energizer		
Ecoflon 2	Ecorubber 1	-30 °C ... +100 °C	350 bar (35 MPa)
Ecoflon 2	Ecorubber 2	-20 °C ... +200 °C	350 bar (35 MPa)
Ecoflon 3	Ecorubber 1	-30 °C ... +100 °C	350 bar (35 MPa)
Ecoflon 3	Ecorubber 2	-20 °C ... +200 °C	350 bar (35 MPa)
Ecoflon 4	Ecorubber 1	-30 °C ... +100 °C	350 bar (35 MPa)
Ecoflon 4	Ecorubber 2	-20 °C ... +200 °C	350 bar (35 MPa)
Ecowear	Ecorubber 1	-30 °C ... +80 °C	350 bar (35 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.

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

surface quality

surface roughness	Rtmax (µm)	Ra (µm)
sliding surface	≤3	≤0,3
bottom of groove	≤10	≤1,8
groove face	≤16	≤3

tolerance recommendation

seal housing tolerances	
Ød	f7
ØD	H8