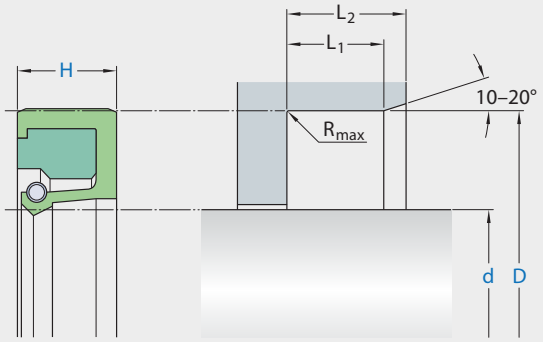
R01-R



Ordering dimensions in blue

Surface roughness	R_{tmax}	R_a
Sliding surface	≤ 2,5 µm	0,1–0,5 µm
Bottom of groove	≤ 6,3 µm	≤ 1,6 µm
Groove face	≤ 15 µm	≤ 3 µm

Hardness: Min 45 HRC (55 HRC recommended), hardened depth > 0,3 mm.
Bearing area: 50–95% and a cutting depth of 0,5 R_z based on C_{ref} = 0%

Standard dimensions d h11 over	incl.	D H8	H	L_1	L_2	R_{max}
mm						
5	60	d + 12	7,0	5,95	7,3	0,4
60	140	d + 15	8,0	6,8	8,3	0,4
140	300	d + 20	10,0	8,5	10,3	0,4
300	500	d + 30	12,0	10,3	12,3	0,8
500	800	d + 40	20,0	17	20,3	0,8
800		d + 50	22,0	18,7	22,3	0,8

application

operating parameters & material

diameter range: up to 600 mm

material		temperature	max. surface speed	max. pressure [1]
sealing element	back-up ring			
Ecorubber 1	Ecotal/Ecomid [2]	-30 °C ... +80 °C	10 m/s	0,5 bar (7 psi)
Ecorubber H	Ecotal/Ecomid [2]	-25 °C ... +80 °C	10 m/s	0,5 bar (7 psi)
Ecorubber 2	Metal	-20 °C ... +200 °C	15 m/s	0,5 bar (7 psi)
Ecorubber 3 [3]	Ecotal/Ecomid [2]	-50 °C ... +80 °C	10 m/s	0,5 bar (7 psi)
Ecorubber 3 [3]	Metal	-50 °C ... +150 °C	10 m/s	0,5 bar (7 psi)
Ecosil	Ecotal/Ecomid [2]	-50 °C ... +80 °C	5 m/s	0,2 bar (3 psi)
Ecosil	Metal	-60 °C ... +200 °C	5 m/s	0,2 bar (3 psi)

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.

[2] Ecotal up to ø260 mm, Ecomid above ø260 mm.

surface quality

surface roughness	Rtmax [µm]	Ra [µm]
shaft	≤6,3	≤0,2-0,8
bottom of groove	≤25	≤1,6-6,3

tolerance recommendation

seal housing tolerances	
Ød	f8
ØD	H8
ØD1	H11