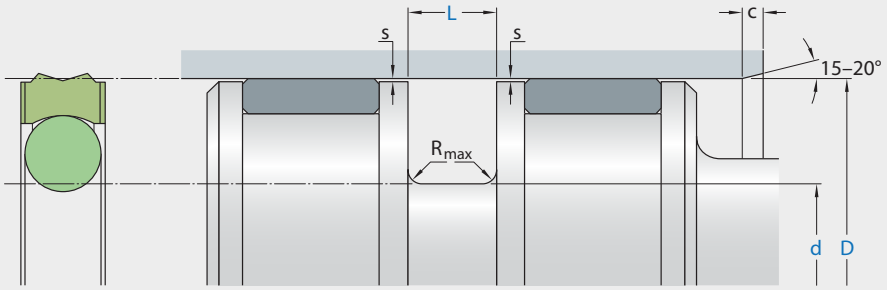
K08-P



Ordering dimensions in blue

Surface roughness	R_{tmax}	R_a
Sliding surface	≤ 2,5 µm	0,05–0,2 µm
Bottom of groove	≤ 6,3 µm	≤ 1,6 µm
Groove face	≤ 15 µm	≤ 3 µm

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

Standard dimensions D H9 over	incl.	d h10	L +0,2	R	c	OD	maximal radial extrusion gap s* 20 bar	100 bar	250 bar
mm							mm		
10	15	D – 4,9	2,2	0,4	2,5	1,78	0,35	0,22	0,13
15	40	D – 7,5	3,2	0,6	3,5	2,62	0,5	0,30	0,16
40	80	D – 11	4,2	1,0	4,5	3,53	0,6	0,34	0,18
80	133	D – 15,5	6,3	1,3	5,0	5,33	0,75	0,40	0,21
133	330	D – 21	8,1	1,8	6,0	7,00	0,85	0,45	0,24
330	600	D – 24,5	8,1	1,8	8,0	7,00	1,0	0,53	0,28

∗ Extrusion gap values shown above are valid fora temperature of 70 °C, higher temperatures require lower values.

application

not bolded symbols; please consult our technical for application limitations

operating parameters & material

diameter range: up to 600 mm

material		temperature	max. surface speed	max. pressure [1]	hydrolysis	dry running	wear resistance
sealing element	energizer						
ECOPUR	Ecorubber 1	-30 °C ... +100 °C	1 m/s	250 bar (25 MPa)	-	+	++
H-ECOPUR	Ecorubber 1	-20 °C ... +100 °C	1 m/s	250 bar (25 MPa)	-	+	++
T-ECOPUR	Ecorubber 1	-30 °C ... +100 °C	1 m/s	250 bar (25 MPa)	-	+	++
S-ECOPUR	Ecorubber 1	-20 °C ... +100 °C	1,4 m/s	250 bar (25 MPa)	-	++	++
G-ECOPUR	Ecorubber 1	-30 °C ... +100 °C	1 m/s	250 bar (25 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.

++ ... 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 in other systems are to be preferred, attention should be paid to restrictions for pressure range and wear resistance. for higher gliding speeds another system should be used (e.g. PTFE materials).

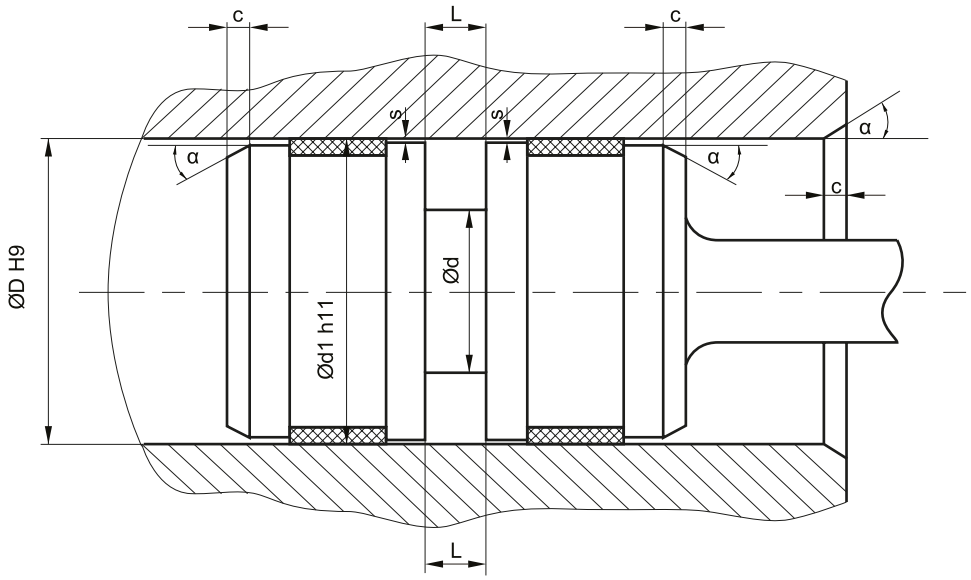
note on special materials:

as temperature limit and chemical resistance are determined by the preload element, the temperature range can be increased and the resistance to chemical influences improved, if a special material is used for the preload element.

mode of installation:

the seal can generally be snapped over the piston by hand without problems.

recommended mounting space:



insertion chamfer:

in order to avoid damage to the piston seal during installation, the piston and the housing 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)	
	$\alpha = 15^0 ... 20^0$	$\alpha = 20^0 ... 30^0$
2,45	2,5	1,5
3,75	3,5	2
5,5	4,5	3
7,75	5	3,5
10,5	6	5
12,25	8	6

instead of a chamfer, the piston can also be designed with a radius. recommended size of the radius is equal to size of chamfer (R=c).