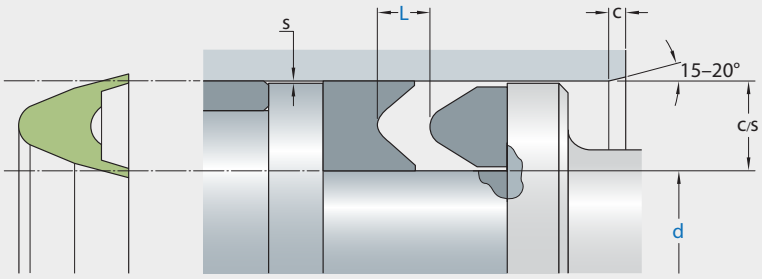
K24-P



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 of0,5 R_z based on C_{ref} = 0%

Standard dimensions
Minimum nominal inside diameter
d ≥ 22 mm.

This is not a standard profile and serves as a replacement for an existing installation space. New constructions should use standard profiles.

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
ECOPUR	-30 °C ... +110 °C	0,5 m/s	500 bar (50 MPa)	-	+	++
H-ECOPUR	-20 °C ... +110 °C	0,5 m/s	500 bar (50 MPa)	++	+	++
T-ECOPUR	-50 °C ... +110 °C	0,5 m/s	500 bar (50 MPa)	-	+	++
S-ECOPUR	-20 °C ... +110 °C	0,7 m/s	500 bar (50 MPa)	++	++	++
G-ECOPUR	-30 °C ... +110 °C	0,5 m/s	500 bar (50 MPa)	++	+	++
Ecorubber 1	-30 °C ... +100 °C	0,5 m/s	250 bar (25 MPa)	-	-	O
Ecorubber 2	-20 °C ... +200 °C	0,5 m/s	250 bar (25 MPa)	-	-	O
Ecorubber 3 [2]	-50 °C ... +150 °C	0,5 m/s	250 bar (25 MPa)	++	-	O
Ecorubber H	-25 °C ... +150 °C	0,5 m/s	250 bar (25 MPa)	+	O	+

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.

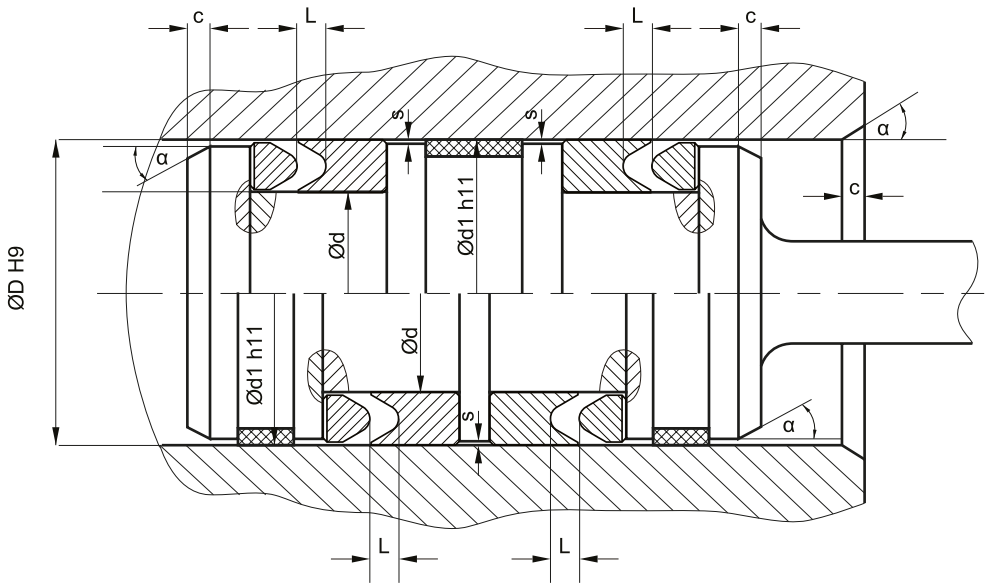
++ ... particularly suitable
o ... conditional suitable
+ ... suitable
- ... not suitable

for detailed information regarding chemical resistance please refer to our „list of resistance". for increased chemical and thermal resistance rubber materials are to be preferred, polyurethan materials increase wear resistance. for higher gliding speeds another system should be used (e.g. PTFE materials).

mode of installation

open housings are required, the pressure and the support element have to be in existence already.

recommended mounting space:



plastic guiderings (wearbands) have to feature a adequate cutting gap (recommendation: 2-5% of D). if metalic guides are used, spiral grooves shall be provided. in order to avoid drag pressure built up in case of back-to-back arrangement, the distance between the seals should be as small as possible.

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)	
	α = 15° ... 20°	α = 20° ... 30°
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

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).