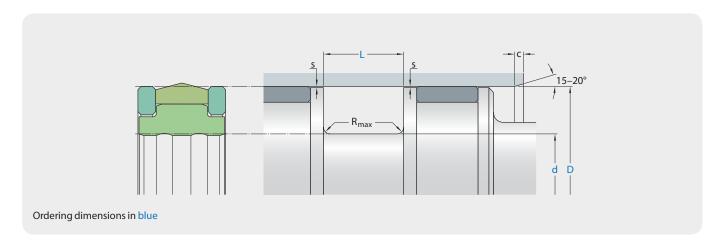


K23-N



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	\leq 3 μm			
Bearing area: 50–95% and a cutting depth of 0,5 R $_z$ based on $C_{ref}\!=\!0\%$					

Standa D H9 over	incl.	d h9	L + 0,2	R _{max}	С	s*
mm						
20 50 80	50 80 150	D-10 D-15 D-20	12,5 20 25	0,4 0,4 0,4	4 5 6	0,4 0,4 0,4
150 400	400 600	D – 25 D – 30	32 36	0,4 0,4	8,5 10	0,4 0,4
* Extrusi	* Extrusion gap values shown above are valid for a temperature of 70 °C, higher temperatures require lower values.					

application





not bolded symbols; please consult our technical for application limitations

	materia		temperature	max. surface	max. pressure 1	hydrolysis	dry running	wear resistance
sealing element	energizer	back-up ring		speed			running	resistance
ECOPUR	Ecorubber 1	Ecotal/Ecomid ²	-30 °C +100 °C	0,5 m/s	400 bar (40 MPa)	-	+	+
H-ECOPUR	Ecorubber 1	Ecotal/Ecomid ²	-20 °C +100 °C	0,5 m/s	400 bar (40 MPa)	-	+	+
S-ECOPUR	Ecorubber 1	Ecotal/Ecomid ²	-30 °C +100 °C	0,5 m/s	400 bar (40 MPa)	-	+	+
T-ECOPUR	Ecorubber 1	Ecotal/Ecomid ²	-20 °C +100 °C	0,7 m/s	400 bar (40 MPa)	-	+	+
G-ECOPUR	Ecorubber 1	Ecotal/Ecomid ²	-30 °C +100 °C	0,5 m/s	400 bar (40 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.

++ ... particularly suitable o ... conditional suitable

+ ... suitable - ... not suitable

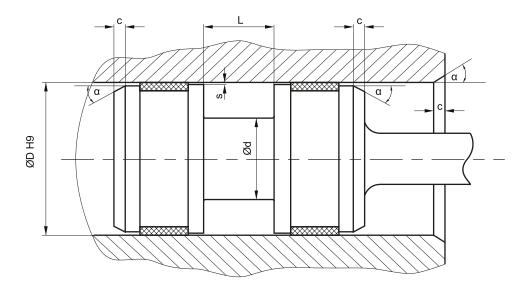
for detailed information regarding chemical resistance please refer to our "list of resistance". for increased chemical and thermal resistance resp. for higher gliding speeds PTFE-materials should be used (e.g. profile K09-F or a different sealing system).

other materials such as Viton, Silicone, EPDM, H-NBR, etc., can be used for the preload element, but they are only useful in specific cases (temperature or chemical influences). the temperature limits are determined by the guide- and support parts, using special materials can expand the temperature limits.

mode of installation

first of all the preload element should be slipped over the piston and snapped into the groove, then the first backup element should be placed into the groove, followed by the gliding part and then the second backup element. the installation of the backup elements as well as the gliding part is generally trouble-free, at installation of the preload element the material deformation should not exceed the value of 30%, otherwise the permanent deformation would be too large.

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.

()	c (mm)			
cs (mm)	$\alpha = 15^{\circ} 20^{\circ}$	$\alpha = 20^{\circ} 30^{\circ}$		
5	4	2,5		
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).

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

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