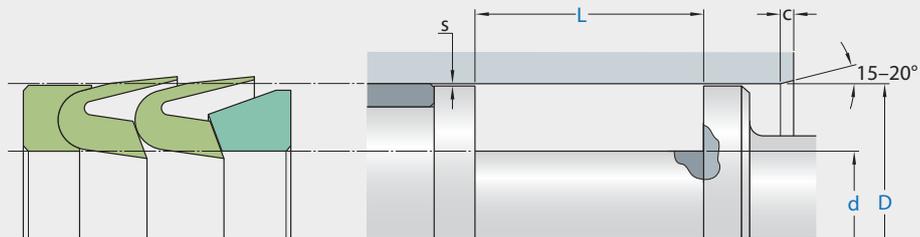


## K32-P



Ordering dimensions in blue

| Surface roughness | $R_{tmax}$       | $R_a$            |
|-------------------|------------------|------------------|
| Sliding surface   | $\leq 2,5 \mu m$ | $0,05-0,2 \mu m$ |
| Bottom of groove  | $\leq 6,3 \mu m$ | $\leq 1,6 \mu m$ |
| Groove face       | $\leq 15 \mu m$  | $\leq 3 \mu m$   |

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

| Standard dimensions |       |           |      |           |     |           |
|---------------------|-------|-----------|------|-----------|-----|-----------|
| D                   | H9    | d         | L    | $R_{max}$ | c   | $s^*$     |
| over                | incl. | h10       | +0,2 |           |     |           |
| mm                  |       |           |      |           |     |           |
| 25                  | 25    | D - 12    | 24   | 0,4       | 4,5 | 0,6       |
| 44                  | 44    | D - 15    | 29   | 0,4       | 5   | 0,38      |
| 44                  | 100   | D - 20    | 38   | 0,4       | 6   | 0,50      |
| 100                 | 150   | D - 25    | 47,5 | 0,4       | 8,5 | 0,63      |
| 150                 | 250   | D - 30/35 | 57   | 0,4       | 10  | 0,75/0,88 |
| 250                 | 500   | D - 40/45 | 76   | 0,4       | 13  | 1,00/1,13 |
| 500                 |       | D - 50    | 95   | 0,4       | 16  | 1,25      |

### application



*not bolded symbols; please consult our technical for application limitations*

\* Extrusion gap values shown above are valid for a temperature of 70 °C, higher temperatures require lower values.

## operating parameters & material

diameter range: up to 600 mm

| material                   |                 |                            | temperature        | max. surface speed | max. pressure <sup>1</sup> | hydrolysis | dry running | wear resistance |
|----------------------------|-----------------|----------------------------|--------------------|--------------------|----------------------------|------------|-------------|-----------------|
| thrust collar              | sealing element | back-up ring               |                    |                    |                            |            |             |                 |
| Ecotal/Ecomid <sup>2</sup> | ECOPUR          | Ecotal/Ecomid <sup>2</sup> | -30 °C ... +100 °C | 0,5 m/s            | 500 bar (50 MPa)           | -          | +           | +               |
| Ecotal/Ecomid <sup>2</sup> | H-ECOPUR        | Ecotal/Ecomid <sup>2</sup> | -20 °C ... +100 °C | 0,5 m/s            | 500 bar (50 MPa)           | +          | +           | +               |
| Ecotal/Ecomid <sup>2</sup> | T-ECOPUR        | Ecotal/Ecomid <sup>2</sup> | -40 °C ... +100 °C | 0,5 m/s            | 500 bar (50 MPa)           | -          | +           | +               |
| Ecotal/Ecomid <sup>2</sup> | S-ECOPUR        | Ecotal/Ecomid <sup>2</sup> | -20 °C ... +100 °C | 0,7 m/s            | 500 bar (50 MPa)           | +          | +           | +               |
| Ecotal/Ecomid <sup>2</sup> | G-ECOPUR        | Ecotal/Ecomid <sup>2</sup> | -30 °C ... +100 °C | 0,5 m/s            | 500 bar (50 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.

<sup>1</sup> pressure ratings are dependent on the size of the extrusion gap.

<sup>2</sup> Ecotal up to  $\varnothing 260$  mm, Ecomid above  $\varnothing 260$  mm.

++ ... particularly suitable

o ... conditional suitable

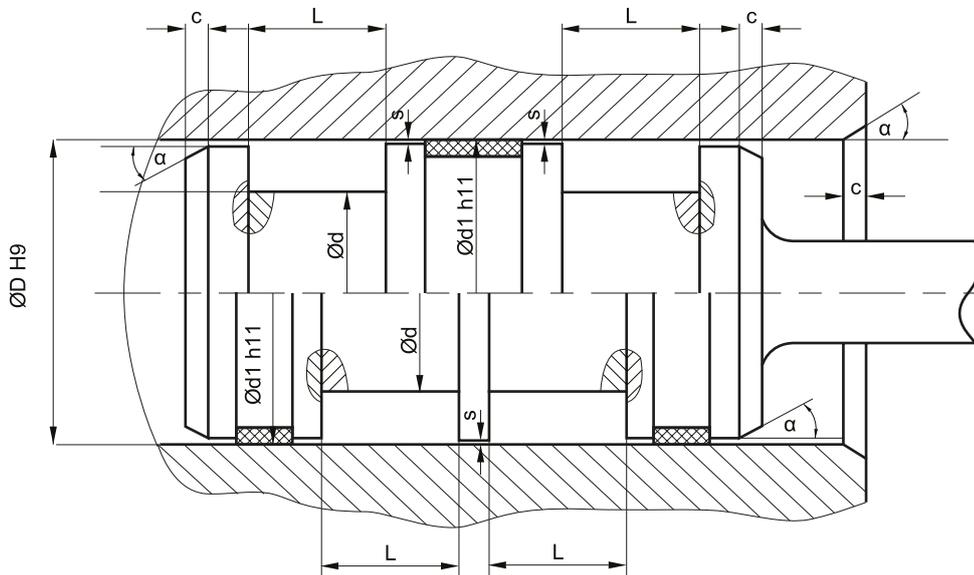
+ ... suitable

- ... not suitable

## mode of installation

open housings are required.

## recommended mounting space:



plastic guiderings (wearbands) have to feature a adequate cutting gap (recommendation: 2-5% of D). if metallic 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)                             |                                    |
|---------|------------------------------------|------------------------------------|
|         | $\alpha = 15^\circ \dots 20^\circ$ | $\alpha = 20^\circ \dots 30^\circ$ |
| 4       | 3,5                                | 2                                  |
| 5       | 4                                  | 2,5                                |
| 6       | 4,5                                | 3                                  |
| 8       | 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 ( $R=c$ ).