

# Piston seal K84

## **DESCRIPTION**

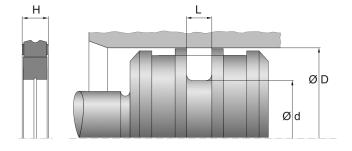
- Symmetrical
- Double-acting
- Profile ring as sealing and preloaded element
- Dimples on end face
- Tight fit on inner diameter
- · Material base element: TPU
- · Material rectangular ring: NBR

### **FUNCTION**

- Sealing of pistons
- For pressure load from both sides
- Second sealing edge supports sealing effect of the groove ring under static and dynamic load
- Nubs on end face allow quick activation

# **PRODUCT ADVANTAGES**

- Excellent sealing effect even in the low-pressure range
- · Good static and dynamic sealing effect
- Low friction
- · High wear resistance
- Generation of a hydrodynamic lubricant film even at low speeds
- Rapid pressure build-up (nubs on end faces)



- · Minimized stick-slip effect
- · High extrusion reliability
- Optimum force flow to the sealing edge via profile ring
- Market-leading, proprietary design with the widest range of applications in all industries and for a variety of requirements
- · Highest quality, durability and safety
- · Best results in total cost of ownership

## **APPLICATIONS**

- Mobile hydraulics
- For medium to heavy-duty applications

# **APPLICATION LIMITS**

- Temperature [°C]: -30 to 100
- Gliding speed [m/s]: max. 0,5
- Pressure [Mpa]: max. 40
- The values given here are maximum values and may not all be reached at the same time.

# **MEDIA RESISTANCE**

- Hydraulic oils according to DIN 51524 part 1-3
- Lubricating oils
- · Lubricating greases based on minor oils
- Flame-retardant hydraulic fluids HFA, HFB, HFC according to VCMA 24317

### **CONFORMITY AND CERTIFICATES**

 Please consult the material data sheet valid for the respective material for current information on approvals and certificates, as this information depends on the compound and cannot be listed exhaustively here.







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#### **DESIGN GUIDELINE**

- Cylinder housing and piston rod/piston must be chamfered to prevent damage
- Length and angle of the installation chamfers must be in accordance with installation space drawing
- Surface roughness of groove flanks Ra ≤ 3 μm
- Surface roughness of groove base Ra ≤ 1,8 μm
- Surface roughness of mating surface Ra ≤ 0,3 μm

#### **INSTALLATION GUIDELINE**

- Installation in a closed, cut groove
- Deburr sharp edges, provide with seamless chamfers and radii
- Clean the installation space carefully before installation, remove dust, dirt, metal chips, etc.
- Do not pull the seal over sharp edges, threaded tips or cavities (feather key grooves) during installation, cover with a mounting sleeve if necessary
- Heating the seal in oil at 80°C makes the sealing material more elastic and the seal is easier to install
- · Grease the piston seal before fitting the cylinder
- Marking on the profile ring to check against accidentally twisted installation

#### STORAGE ADVISE

- Storage temperature <25°C
- · No direct heat sources
- · No direct sunlight
- · No condensation in the storage room
- No exposure to ozone or ionizing radiation
- Recommendations based on the revision of ISO 2230 dated 16.09.1992

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