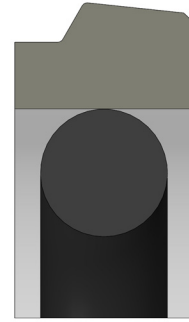


# PISTON SEAL KPOR31



**Single-action KPOR31 consists of a PTFE-bronze sealing element and an O-ring, which serves as a pre-tensioning element.**

The pre-tensioning in combination with a defined coating of the PTFE ring offers a good sealing effect at high dynamic loads or low operating pressures. It simultaneously exhibits very good static leak-tightness. The seal edge has an adapted geometry so that the fluid film adhering to the rod is conveyed back into the pressure chamber during the return stroke.

KPOR31 is often used in single-action cylinders due to their smooth operation.

## DIMENSIONS

The currently available dimensions can be found on our website and in our webshop at [www.dichtomatik.com](http://www.dichtomatik.com).

## APPLICATIONS

KPOR31 is suited for use in nearly all areas of mobile and stationary hydraulics. The single-action piston seal can be used in numerous

applications such as:

- Agricultural machinery
- Construction machinery
- Truck loading cranes
- Spray injection molding machines
- Handling devices
- Industrial trucks
- Standard cylinders
- Presses
- Switch valves
- And many more

## YOUR ADVANTAGES AT A GLANCE

- No stick-slip effect
- Reduced friction is achievable even at low speeds
- During relatively long operational breaks, the seal separates from the counter-surface without sticking
- Very good wear characteristics
- Usage in a high temperature range, depending on the O-ring material
- Recirculation of the fluid film thanks to an adapted seal edge geometry
- Standardized installation spaces



## CHARACTERISTICS

### Sealing Materials

The sealing element KPOR31 is made of PTFE-bronze. The O-ring is constructed from NBR70 Shore A.

### Mounting

For larger dimensions, the two-part piston seal can be easily installed in pierced grooves. Subsequent calibration is recommended.

### Media resistance

- Hydraulic oils in accordance with DIN 51524 Part 1-3
- Lubricating oils and greases based on mineral oil
- Flame retardant hydraulic fluids HFA, HFB, HFC

### Limits of operating use

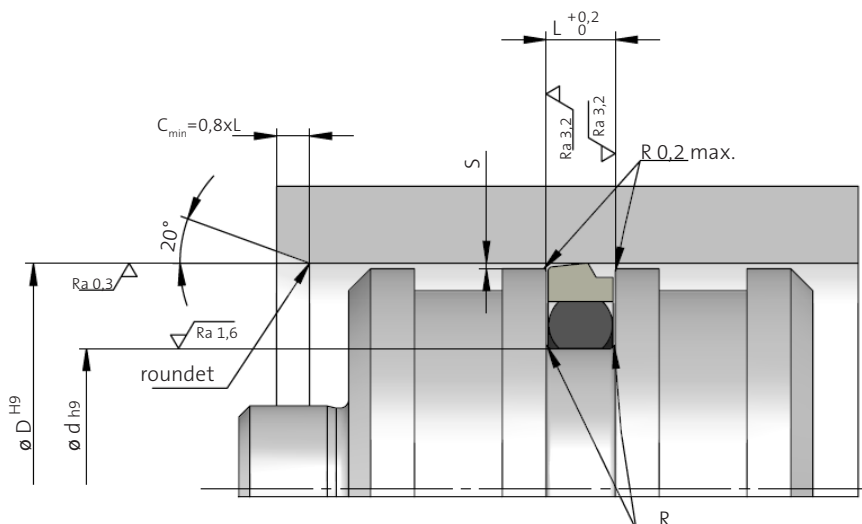
Pressure (MPa)	to 40
Temperature (°C)	-30 to +100
Glide speed (m/s)	≤15

### Design guideline

Ød	D-4,9	D-7,3	D-10,7	D-15,1	D-20,5	D-24	D-27,3	D-38
Height L	2,2	3,2	4,2	6,3	8,1	9,5	9,5	13,8
R	0,4	0,6	0,8	1,2	1,6	1,6	2,5	2,5

### Gap Smax. in operation

up to 20 MPa	0,2	0,25	0,3	0,35	0,5	0,7
up to 40 MPa	0,13	0,15	0,18	0,2	0,25	0,3



Installation spaces in accordance with ISO 7425/1

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