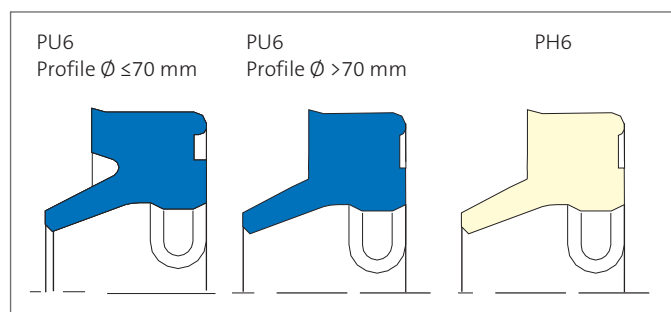


# MERKEL

## WIPER PU6 / PH6



Merkel Wiper PU6 / PH6 is a single-acting wiper made of polyurethane or Hytrel with supportive segments to avoid twisting, a slightly rounded wiper lip and a static sealing edge at the outside diameter.



### VALUE TO THE CUSTOMER

- No ingress of dirt and water spray via outside diameter
- Reliably wipes away dirt
- Leaves a residual film of oil on retracting rod
- No twisting and pressure build-up between seal and wiper
- Highly wear-resistant

#### Application

Single-acting wiper, mainly used in earth moving equipment, injection molding machines, presses, support cylinders in the mining industry.

#### Material

| Material     | Designation  | Color     |
|--------------|--------------|-----------|
| Polyurethane | 95 AU V149   | dark blue |
| Polyurethane | 95 AU V142   | dark blue |
| Hytrel       | 97 TPE TP106 | white     |



## TECHNICAL PROPERTIES

### Operating Conditions

| Material                | 95 AU V142 / 95 AU V149<br>97 TPE TP106 |
|-------------------------|-----------------------------------------|
| Hydraulic Oils, HL, HLP | −30 ... +110 °C                         |
| HFA Fluids              | +5 ... +50 °C                           |
| HFB Fluids              | +5 ... +50 °C                           |
| HFC Fluids              | −30 ... +40 °C                          |
| HFD Fluids              | –                                       |
| Water                   | +5 ... +50 °C                           |
| HETG (rape-seed oil)    | −30 ... +60 °C                          |
| HEES (synth. ester)     | −30 ... +80 °C                          |
| HEPG (glycol)           | −30 ... +40 °C                          |
| Mineral Greases         | −30 ... +110 °C                         |
| Sliding Speed           | 2 m/s                                   |

The figures given are maximum values and must not be applied simultaneously.

### Surface Finish

| Peak-to-valley Heights | $R_a$                      | $R_{max}$               |
|------------------------|----------------------------|-------------------------|
| Sliding Surface        | 0,05 ... 0,3 $\mu\text{m}$ | $\leq 2,5 \mu\text{m}$  |
| Groove                 | $\leq 1,6 \mu\text{m}$     | $\leq 6,3 \mu\text{m}$  |
| Groove Sides           | $\leq 3,0 \mu\text{m}$     | $\leq 15,0 \mu\text{m}$ |

Material content  $M_r > 50\%$  to max. 90 %, with cut depth  $c = R_z/2$  and reference line  $C_{ref} = 0\%$

### Tolerance Recommendation

| Nominal $\varnothing d$ [mm] | D   | D <sub>1</sub> |
|------------------------------|-----|----------------|
| 12 ... 200                   | H10 | H11            |

The tolerance for the  $\varnothing d$  is defined by the buffer seal.

### Installation Chamfers

Length and angle must be executed to suit the rod seal being used.

### Installation & Assembly

Careful installation is a prerequisite for the correct function of the wiper Merkel PU 6. Generally, wipers can be quickly and easily fitted by deforming them into a kidney shape. Please note the general remarks on the installation of hydraulic seals in our Technical Manual, chapter "Assembling hydraulic seals".

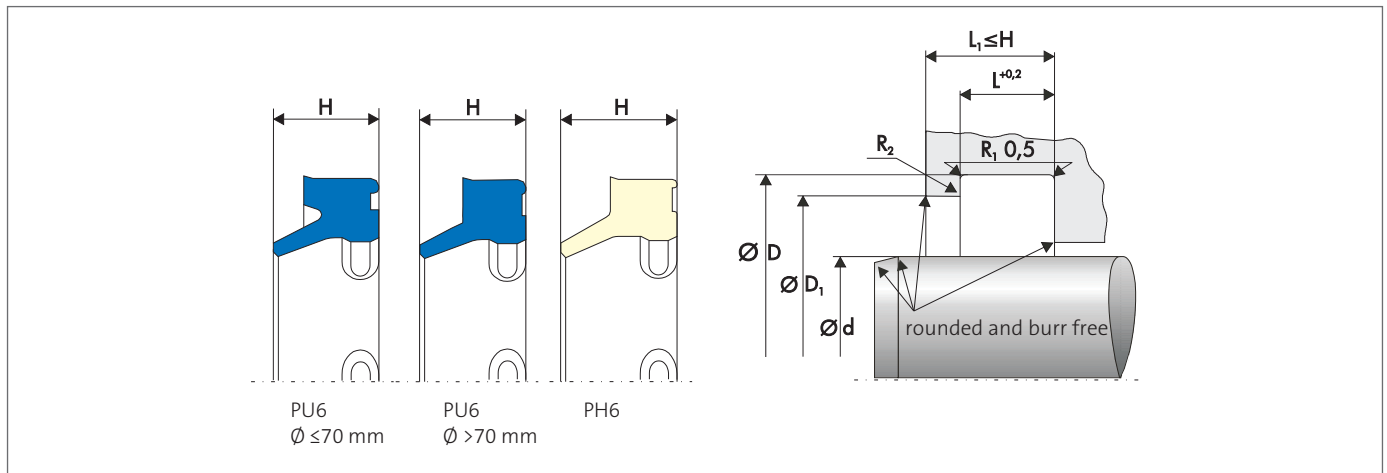
### Design Notes

Please note the general design remarks in our Technical Manual.



## GLAND DESIGN

### Installation Diagram



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