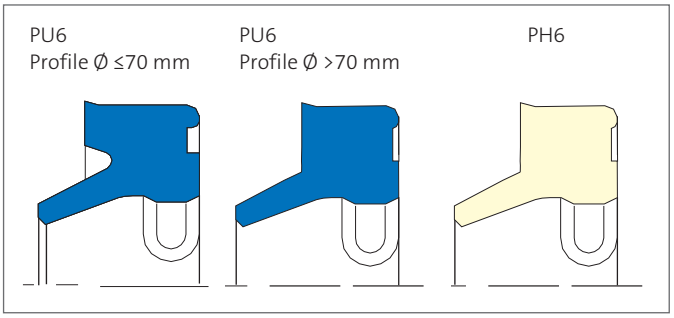
MERKEL WIPER PU6 / PH6

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.



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

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

TECHNICAL PROPERTIES

Operating Conditions

Material	95 AU V142 / 95 AU V149 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 µm	≤2,5 µm
Groove	≤1,6 µm	≤6,3 µm
Groove Sides	≤3,0 µm	≤15,0 µm

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

Tolerance Recommendation

Nominal Ø d [mm]	D	D_1
12 ... 200	H10	H11

The tolerance for the Ø 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