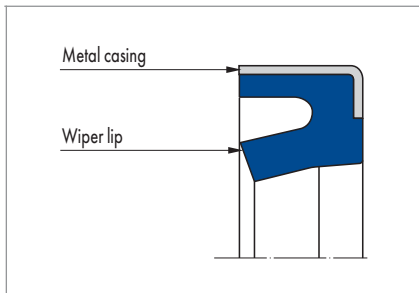


MERKEL WIPER AUPS



PRODUCT DESCRIPTION

Dirt wiper with metal housing; wiper lip flush with housing.

PRODUCT ADVANTAGES

Single-acting wiper for the protection of cylinders against ingress of dirt; especially also as protective component and sealing component for pivoting bearings, amongst others, in standardised housings according to ISO 6195 Type B.

- Secure seating in the housing (press fitting), no rotation with the shaft on pivoting motion
- Re-greasing of pivoting bearings possible without problems; lip opens at low overpressure; old grease can escape
- Low axial housing height, wiper lip not protruding
- Axially open, easy to manufacture housing

APPLICATION

- Earth moving equipment
- Industrial vehicles
- Loading platforms
- Agricultural machinery
- Cranes
- Support cylinders
- Pivoting pin seal

MATERIAL

Wiper

Material	Code	Hardness
Polyurethane	94 AU 925	94 Shore A

Metal housing

Material	Code	Hardness
unalloyed steel DIN 1624	–	–

OPERATING CONDITIONS

Running speed v	2 m/s
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Medium/ Temperature	94 AU 925
Hydraulic oils HL, HLP	-30 °C ... +110 °C
HFA fluids	+5 °C ... +50 °C
HFB fluids	+5 °C ... +50 °C
HFC fluids	-30 °C ... +40 °C
HFD fluids	–
Water	+5 °C ... +40 °C
HETG (rapeseed oil)	-30 °C ... +60 °C
HEES (synthetic ester)	-30 °C ... +60 °C
HEPG (glycol)	-30 °C ... +40 °C
Mineral greases	-30 °C ... +110 °C

DESIGN NOTES

Please observe our general design notes in → Technical Manual.

Surface quality

Peak-to-valley heights	R_a	R_{max}
Sliding surface	0,05 ... 0,3* μm	$\leq 2,5^*$ μm
Groove flanks	$\leq 1,6$ μm	$\leq 6,3$ μm
Groove base	$\leq 3,0$ μm	$\leq 15,0$ μm

Percentage contact area $M_v > 50\%$ up to max 90% at cutting depth $c = R_z/2$ and reference line $C_{ref} = 0\%$. * On usage as a wiper, surface roughness of the sliding surface to suit the sealing component used.

Tolerances

Nominal $\varnothing d$	D
30 ... 100 mm	H8

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

FITTING & INSTALLATION

Merkel Wiper AUPS wipers are pressed into axially open housings. Careful fitting is a prerequisite for the correct function of the wiper. → Technical Manual.

Lead-in chamfers

Length and angle are to be designed to suit the rod seal used.