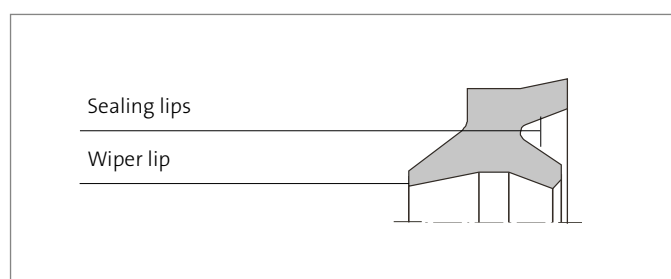


MERKEL DOUBLE WIPER P 9



Merkel Double Wiper P 9 Elastomer double wiper, particularly suitable for large diameters.



Applications

Inwardly, the Merkel double wiper P 9 exercises the wiper unction of a lip seal, and outwardly a wiper effect against soiling. In order to avoid a pressure build-up between the seal and the wiper, a pressure-relief borehole should be provided before the wiper. The Merkel double wiper P 9 is preferably used in conjunction with our rod sealing systems.

Material

Material	Designation	Color
Nitrile rubber	85 NBR B247	black

VALUE TO THE CUSTOMER

- Intermediate sizes possible without mold/tool
- High wiper effect against dirt
- Very good sealing effect against residual oil film on the exiting rod
- Wear-resistant



FEATURES AND BENEFITS

Operating conditions

Material	NBR
Hydraulic oils, HL, HLP	−30 ... +100 °C
HFA fluids	+5 ... +60 °C
HFB fluids	+5 ... +60 °C
HFC fluids	−30 ... +60 °C
HFD fluids	–
Water	+5 ... +100 °C
HETG (rape-seed oil)	−30 ... +80 °C
HEES (synth. ester)	−30 ... +80 °C
HEPG (glycol)	−30 ... +60 °C
Mineral greases	−30 ... +100 °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	*	*
Groove base	$\leq 1,6 \mu m$	$\leq 6,3 \mu m$
Groove sides	$\leq 3,0 \mu m$	$\leq 15,0 \mu m$

* Surface roughness of the sliding surface to suit the sealing component used.

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

Design notes

Please note the general design-related remarks in our Technical Manual.

Tolerance recommendation

Nominal- $\varnothing$ d [mm]	D	D ₁
20 ... 2.900	H10	H11

The tolerance of the diameter d is determined 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. Generally, wipers can be quickly and easily fitted by deforming into a kidney shape. Please note the general remarks on the installation of hydraulic seals in our Technical Manual.



FEATURES AND BENEFITS

Installation diagram

