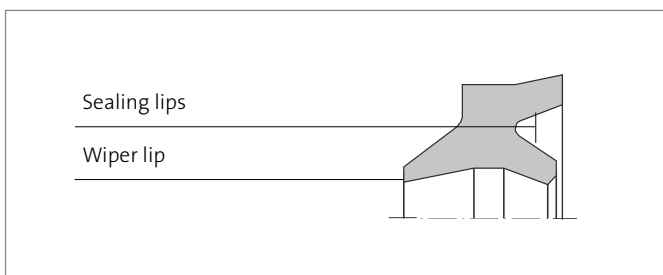


# MERKEL DOUBLE WIPER P 9



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



## Applications

Inwardly, the Merkel double wiper P 9 exercises the wiper function 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	$\leq 1,6 \mu\text{m}$	$\leq 6,3 \mu\text{m}$
Groove sides	$\leq 3,0 \mu\text{m}$	$\leq 15,0 \mu\text{m}$

\* 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- $\phi$ 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

