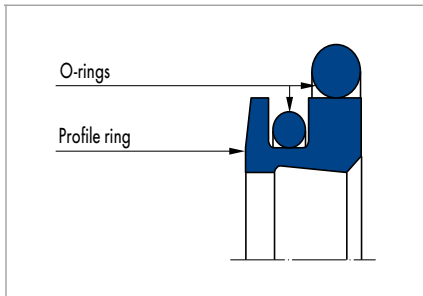


MERKEL DOUBLE WIPER PT 2



PRODUCT DESCRIPTION

Merkel Double Wiper PT 2 consisting of one profile ring made from PTFE with a sealing edge and a wiper edge, as well as two O-rings as sealing and pre-load components.

PRODUCT ADVANTAGES

Double wiper for improvement of total tightness. The Merkel Double Wiper PT 2 is mainly fitted in combination with our rod seals Merkel Omegat OMS-S. A pressure relieving bore is to be provided between seal and wiper

- Excellent regulation and positioning in operation
- Low friction, free of stick-slip
- Material variants for short stroke and high frequency; available on enquiry
- Especially suitable for large diameters

APPLICATION

- Presses
- Injection moulding machines
- Steel hydraulics engineering
- Rolling mills

MATERIAL

Profile ring

Material	Code	Hardness
PTFE bronze compound	PTFE B602	–

O-ring

Material	Code	Hardness
Nitrile rubber NBR	NBR	70 Shore A
Fluoro rubber	FKM	70 Shore A

OPERATING CONDITIONS

Running speed v	5 m/s
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Medium/ Temperature	85 NBR B247	85 FKM K664
Hydraulic oils HL, HLP	-30 °C ... +100 °C	-10 °C ... +200 °C
HFA fluids	+5 °C ... +60 °C	+5 °C ... +60 °C
HFB fluids	+5 °C ... +60 °C	+5 °C ... +60 °C
HFC fluids	-30 °C ... +60 °C	–
HFD fluids	–	+10 °C ... +200 °C
Water	+5 °C ... +100 °C	+5 °C ... +80 °C
HETG (rapeseed oil)	-30 °C ... +80 °C	-10 °C ... +80 °C
HEES (synthetic ester)	-30 °C ... +80 °C	-10 °C ... +100 °C
HEPG (glycol)	-30 °C ... +60 °C	-10 °C ... +80 °C
Mineral greases	-30 °C ... +100 °C	-10 °C ... +200 °C

DESIGN NOTES

Please observe our general design notes in → Technical Manual.

Surface quality

Peak-to-valley heights	R_a	R_{max}
Sliding surface	* μm	* μm
Groove base	$\leq 1,6 \mu\text{m}$	$\leq 6,3 \mu\text{m}$
Groove flanks	$\leq 3,0 \mu\text{m}$	$\leq 15,0 \mu\text{m}$

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

Tolerances

Nominal $\varnothing d$	D	D_1
100 ... 1200 mm	H8	H8

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

FITTING & INSTALLATION

Careful fitting is a prerequisite for the correct function of the Merkel Double Wiper PT 2. Generally, wipers can be quickly and easily fitted by deforming into a kidney shape. → Technical Manual. For diameters from >100 mm to 150 mm, a fitting tool is required. Under 100 mm, no fitting in plunge-cut groove is possible.

Lead-in chamfers

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