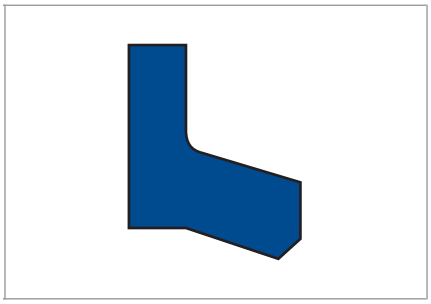
MERKEL HAT SEAL H WITHOUT SPRING



PRODUCT DESCRIPTION

Lip seal. Clamping flange for fixing in the housing.

PRODUCT ADVANTAGES

Single-acting rod seal for less important applications and spare parts requirements. We recommend more modern series for new designs.

APPLICATION

- Standard cylinders

MATERIAL

Material	Code	Hardness
Nitrile rubber NBR	88 NBR 101	88 Shore A

OPERATING CONDITIONS

Pressure p	1 MPa
Running speed v	0,5 m/s

Medium/Temperature	88 NBR 101
Hydraulic oils HL, HLP	–30 °C ... +100 °C
HFA fluids	+5 °C ... +60 °C
HFB fluids	+5 °C ... +60 °C
HFC fluids	–30 °C ... +60 °C
HFD fluids	–
Water	+5 °C ... +90 °C
HETG (rapeseed oil)	–30 °C ... +80 °C
HEES (synthetic ester)	–
HEPG (glycol)	–30 °C ... +60 °C
Mineral greases	–30 °C ... +100 °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	≤2,5 µm
Groove base	≤1,6 µm	≤6,3 µm
Groove flanks	≤3,0 µm	≤15,0 µm

Percentage contact area M_r >50% to max. 90% at cutting depth c = RZ/2 and reference line C ref = 0%

Admissible gap dimension

The most important factor for the function of the seal is the largest gap dimension encountered during operation on the non-pressurised side of the seal ➔ Technical Manual. x_2 ≤0,3.

Tolerances

The admissible gap width, tolerances, guide play and compressive deflection of the guide under load must be considered for the design of d2. ➔ Technical Manual.

Nominal Ø d	D	d
≤360 mm	H10	f8

FITTING & INSTALLATION

Careful fitting is a prerequisite for the correct function of the seal. ➔ Technical Manual.