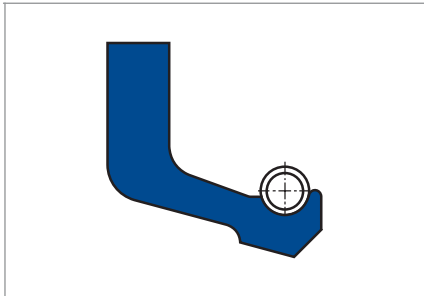


# MERKEL HAT SEAL H WITH SPRING



## PRODUCT DESCRIPTION

Lip seal, spring-loaded in some cases. 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 $\mu\text{m}$	$\leq 2,5 \mu\text{m}$
Groove base	$\leq 1,6 \mu\text{m}$	$\leq 6,3 \mu\text{m}$
Groove flanks	$\leq 3,0 \mu\text{m}$	$\leq 15,0 \mu\text{m}$

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.  $x_2 \leq 0,3$ .

### 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 $\varnothing d$	D	d
$\leq 360 \text{ mm}$	H10	f8

## FITTING & INSTALLATION

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