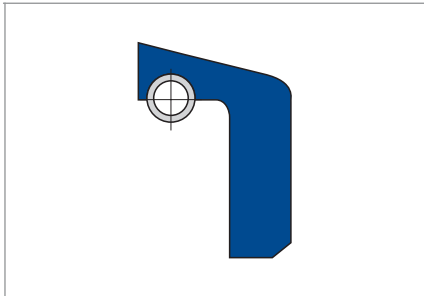


MERKEL CUP PACKING T WITH SPRING



PRODUCT DESCRIPTION

Spring-loaded lip seal.
Clamping flange for axial fixing in the housing.

PRODUCT ADVANTAGES

Single-acting piston seal for secondary applications and for spare parts requirement.

APPLICATION

- Standard cylinders

MATERIAL

Sealing component

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	$\leq 2,5 \mu\text{m}$
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 $c = R_z/2$ and reference line $C_{ref} = 0\%$.

Admissible gap dimension

The largest gap dimension occurring on the non-pressurised side of the seal in operation is of vital importance for the function of the seal. $x_2 \leq 0,5$. → Technical Manual.

Tolerances

Nominal $\varnothing D$	D	d
$\leq 550 \text{ mm}$	H11	h10

FITTING & INSTALLATION

The axial compression of the flange should be max. 10% of its thickness. Torque limiting is to be used. The metal clamping parts must not apply any force to the transition zone from clamping flange to sealing lip. To improve the fixing of the cup packing and sealing effect on the flat clamping side, the turning of one or two sealing grooves is recommended.