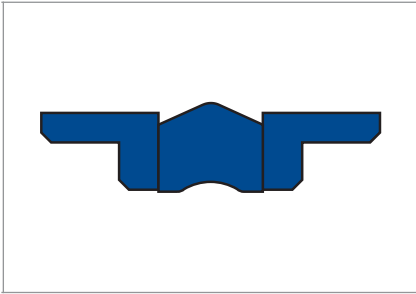


## MERKEL COMPACT SEAL T 19



### PRODUCT DESCRIPTION

Three-piece Merkel Compact Seal T 19 with two angled bushes (POM) and one sealing component of polyurethane.

### PRODUCT ADVANTAGES

The Merkel Compact Seal T 19 is used where a piston has pressure on both sides and is designed mainly for housings according to ISO 6547.

- Good guiding
- Highly wear-resistant
- Easy fitting
- Short

### APPLICATION

- Agricultural machinery
- Standard cylinders

### MATERIAL

#### Sealing component

Material	Code	Hardness
Novathan (polyurethane)	95 AU V142	95 Shore A

#### Angled bushes

Material	Code	Hardness
Polycetal POM	POM PO202	–

### OPERATING CONDITIONS

Pressure p	21 MPa
Running speed v	0,5 m/s

Medium/ Temperature	95 AU V142
Hydraulic oils HL, HLP	-30 °C ... +110 °C
HFA fluids	+5 °C ... +50 °C
HFB fluids	+5 °C ... +50 °C
HFC fluids	-30 °C ... +40 °C
HFD fluids	–
Water	+5 °C ... +50 °C
HETG (rapeseed oil)	-30 °C ... +60 °C
HEES (synthetic ester)	-30 °C ... +80 °C
HEPG (glycol)	-30 °C ... +50 °C
Mineral greases	-30 °C ... +110 °C

### DESIGN NOTES

Please observe our general design notes in → Technical Manual.

#### Surface quality

Peak-to-valley heights	R <sub>a</sub>	R <sub>max</sub>
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, >50% to max. 90% at cutting depth c = Rz/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. → Technical Manual.

#### Tolerances

When designing d<sub>2</sub>, the admissible gap width, tolerances, guide play and deflection of the guide under load are to be taken into account. → Technical Manual.

Nominal Ø D	D	d	d <sub>2</sub>	d <sub>3</sub>
25 ... 100 mm	H8	h9	h11	h8

### FITTING & INSTALLATION

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