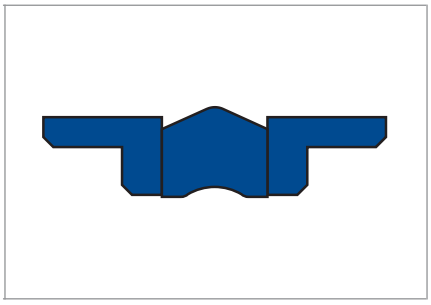
MERKEL COMPACT SEAL T 19



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
Polyacetal 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_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 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 d2, 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_2	d_3
25 ... 100 mm	H8	h9	h11	h8

FITTING & INSTALLATION

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