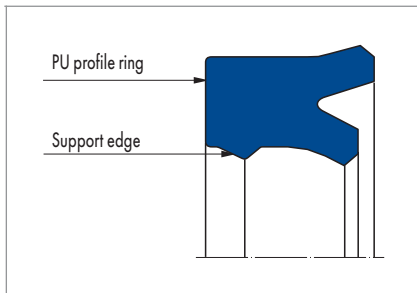


MERKEL U-RING T 22



PRODUCT DESCRIPTION

Merkel polyurethane U-ring with asymmetrical profile, shortened inner lip and second support edge and sealing edge as well as press fit at the outside diameter.

PRODUCT ADVANTAGES

Single-acting rod seal, also for standardised housings according to ISO 5597.

- Highly wear-resistant
- Good media resistance
- Wide operating temperature range
- Very good static and dynamic tightness
- (Note: low deformation value, therefore not suitable for sealing systems)

APPLICATION

- Earth moving equipment
- Mobile hydraulics
- Marine hydraulics
- Support cylinders

MATERIAL

Material	Code	Hardness
Polyurethane	95 AU V142	95 Shore A

OPERATING CONDITIONS

Pressure p	40 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	-40 °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

Admissible gap dimension

The decisive factor for the function of the seal is the largest gap dimension occurring during operation on the non-pressurised side of the seal. → Technical Manual.

Profile dimension	16 MPa	26 MPa	32 MPa	40 MPa
5,0 mm	0,50 mm	0,40 mm	0,35 mm	-
7,5 mm	0,55 mm	0,45 mm	0,40 mm	0,35 mm
10,0 mm	0,60 mm	0,50 mm	0,45 mm	0,40 mm
12,5 mm	0,60 mm	0,50 mm	0,45 mm	0,40 mm

Tolerances

The admissible gap width, tolerances, guide play and deflection of the guide under load are to be taken into account when designing D2. → Technical Manual.

Nominal Ø d	D	d
15 ... 160 mm	H10	f8

FITTING & INSTALLATION

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