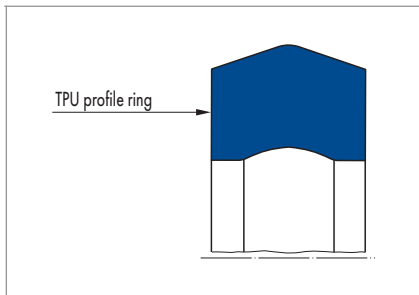


MERKEL COVER SEAL PU 83



PRODUCT DESCRIPTION

Single-piece, double-acting Merkel compact seal made from low temperature polyurethane for static sealing, outer sealing.

PRODUCT ADVANTAGES

- Interchangeable for O-ring housings and O-ring with back-up ring
- High reliability
- Simple and secure installation
- Simplified stockkeeping
- Gas-proof height

PRODUCT PROPERTIES

- Gap for breathing (pipe expansion)
- Short rate of increase of the pressure (end position damping)
- Higher operating pressure (up to 60 MPa)
- Alternating in situ operating pressure
- Nominal diameter up to 2000 mm

APPLICATION

- Cranes
- Construction machinery
- Industrial vehicles
- Forestry equipment
- Presses
- Injection moulding machines
- Wind power plants

MATERIAL

Material	Code
Polyurethane	95 AU V142/94 AU 925

OPERATING CONDITIONS

Pressure p	60 MPa
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Medium/ Temperature	95 AU V142/94 AU 925
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

The specified values are maximum values and must not be applied simultaneously.

DESIGN NOTES

Please observe our general design notes in → Technical Manual.

Surface quality

Peak-to-valley heights	R _a	R _{max}
Sliding surface	0,8 µm	3,2 µm
Groove base	1,6 µm	6,3 µm
Groove flanks	6,3 µm	20,0 µm
Lead-in chamfer*	0,8 µm	3,2 µm

* burr-free transition

Tolerances

For pressures up to 60 MPa

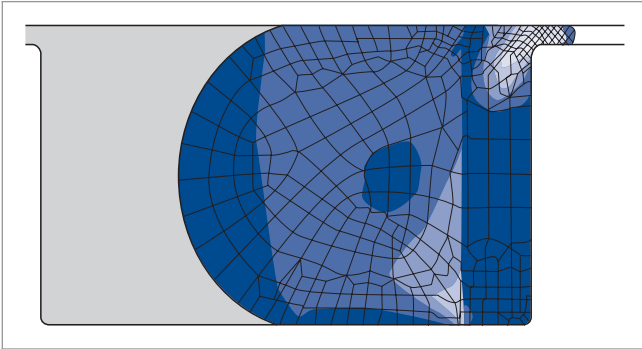
Nominal Ø d	D
≤800 mm	H7/f7
>800 mm	+0,1/-0,05/-0,15

FITTING & INSTALLATION

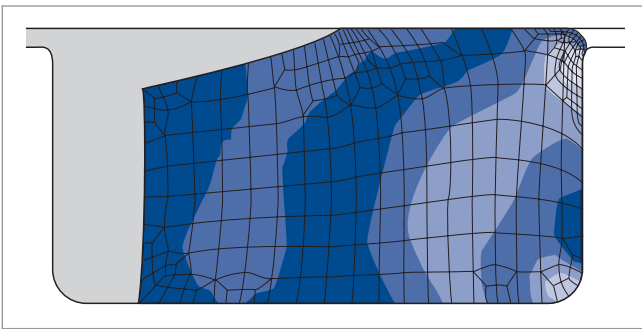
Careful fitting is a prerequisite for the correct function of the seal.
→ Technical Manual.

SPECIALITIES

Mode of operation



O-ring with PTFE back-up ring at 40 MPa operating pressure



Cover Seal at 40 MPa operating pressure