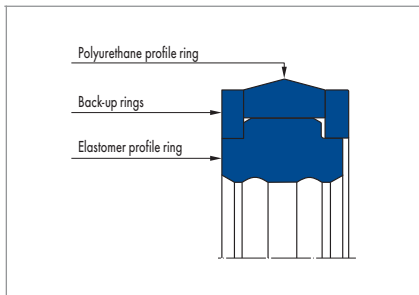


MERKEL COMPACT SEAL T 42



PRODUCT DESCRIPTION

Double-acting Merkel Compact Seal T 42 with back-up rings.

PRODUCT ADVANTAGES

Merkel Compact Seal T 42 for sealing pistons which can be pressurised on both sides in plungers, pushers and subsidiary cylinders in self-advancing support systems.

- Very good protection against extrusion even with pressure peaks
- High resistance to abrasion
- High contact pressure due to rubber profile ring

APPLICATION

- Mining

MATERIAL

Polyurethane profile ring

Material	Code	Hardness
Polyurethane	93 AU V167	93 Shore A

Back-up rings

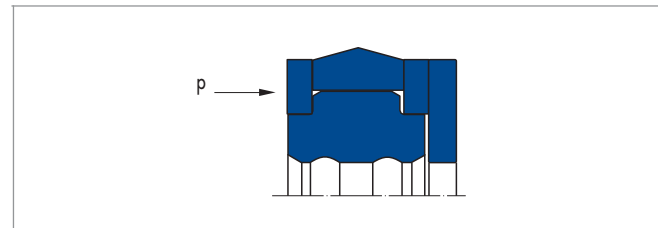
Material	Code	Hardness
Polyacetal	POM PO202	-

Elastomer profile ring

Material	Code	Hardness
Nitrile rubber	85 NBR B203/ 80 NBR B246	85/80 Shore A

OPERATING CONDITIONS

Pressure p	50 MPa
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* If a full-surface back-up ring is used on the side not subjected to high pressure, the use of up to 150 MPa is possible. The height of the backup-ring should be 5 mm.

Running speed v	0,1 m/s
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Medium/ Temperature	93 AU V167/NBR/POM PO202
HFA fluids	+5 °C ... +60 °C
HFD fluids	+5 °C ... +60 °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%

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
≤400 mm	H8	h9

FITTING & INSTALLATION

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

SPECIALITIES

Profile recommendation

D	S	L
<150 mm	7,5 mm	16,0 mm
150 ... 200 mm	10,0 mm	20,0 mm
>200 ... 400 mm	12,5 mm	20,0 mm
>400 mm	15,0 mm	25,0 mm