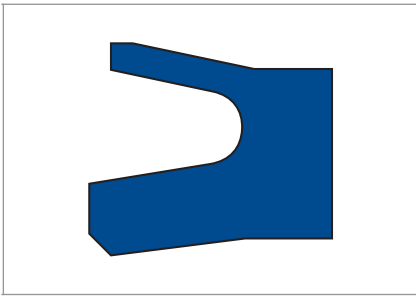


MERKEL U-RING NAPN



PRODUCT DESCRIPTION

Merkel U-ring with asymmetrical profile and special pneumatic sealing edge on the dynamic sealing lip.

PRODUCT ADVANTAGES

- The asymmetrical profile with the longer and thicker static sealing lip ensures secure seating in the bottom of the groove
- The special pneumatic sealing edge gives very good tightness with low friction and maintains an effective lubricating film
- Widely proven design
- Large supply range available
- Very good tribological properties (wear, friction and long service life)

APPLICATION

- Piston seal e.g. in the ISO cylinder (only FKM: for high-temperature applications)

MATERIAL

Material	Code	Hardness
Acrylonitrile-butadiene rubber	80 NBR 186349	80 Shore A
Fluoro elastomer	75 FKM 230553	75 Shore A

OPERATING CONDITIONS

Medium	Prepared, dried and de-oiled compressed air (after greasing for fitting)
Operating pressure p	≤1,0 MPa
Temperature T (NBR)	-25 ... +100 °C
Temperature T (FKM)	-5 ... +150 °C
Running speed v	≤1,0 m/s

DESIGN NOTES

Surface quality

Peak-to-valley heights	R _{max}	R _p /R _z
Cylinder barrel	≤4 μm	<0,5 μm
Groove base	≤10 μm	<0,5 μm

t_p (25% R_{max}) = 50 ... 75%

→ Technical Manual.

FITTING & INSTALLATION

Careful fitting is a prerequisite for the correct function of the seal
→ Technical Manual. Pneumatic U-rings can be snapped by hand into the housing grooves provided.