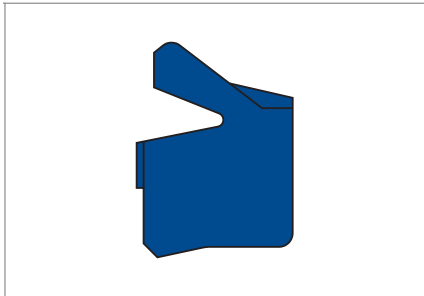


# MERKEL U-RING NAP 210



## PRODUCT DESCRIPTION

Compact 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.
- Large range
- Minimal axial space requirements
- Integrated pressure relief to prevent an intermediate pressure build-up

## APPLICATION

- Piston seal for pneumatic cylinders
- Piston seal for high-temperature cylinders (only FKM)

## MATERIAL

Material	Code	Hardness
Acrylonitrile-butadiene rubber	80 NBR 99079	80 Shore A
Fluoro elastomer	75 FKM 99104	75 Shore A

## OPERATING CONDITIONS

Medium	Prepared, dried and de-oiled compressed air (after greasing for fitting)
Operating pressure p	≤1,2 MPa
Temperature T (NBR)	-25 ... +100
Temperature T (FKM)	-5 ... +200
Running speed v	≤1,0 m/s

## DESIGN NOTES

Surface quality

Peak-to-valley heights	R <sub>max</sub>	R <sub>p</sub> /R <sub>v</sub>
Stange/Cylinder barrel	≤4 μm	<0,5 μm
Groove base	≤10 μm	<0,5 μm

t<sub>p</sub> (25% R<sub>max</sub>) = 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.