

# Merkel U-Ring NAP 300

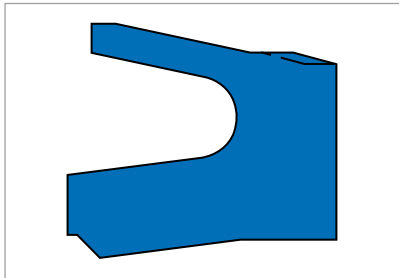


Fig. 1 Merkel U-Ring NAP 300

## 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
- Material with high wear resistance
- Good low temperature properties.

## Application

Piston seal e.g. for ISO pneumatic cylinders.

## Material

Material	Code	Hardness
High performance polyurethane	80 AU 941	80 Shore A

## Operating conditions

Medium	Prepared, dried and de-oiled compressed air (after greasing for fitting)
Operating pressure p	≤1,2 MPa (12 bar)
Temperature T	-35 ... +80 °C
Running speed v	≤1 m/s

## Design notes

### Surfaces

Surface roughness	R <sub>max</sub>	R <sub>p</sub> /R <sub>z</sub>
Cylinder barrel	≤4 µm	<0,5
	tp (25% R <sub>max</sub> ) = 50 ... 75%	
Groove base	≤10 µm	<0,5

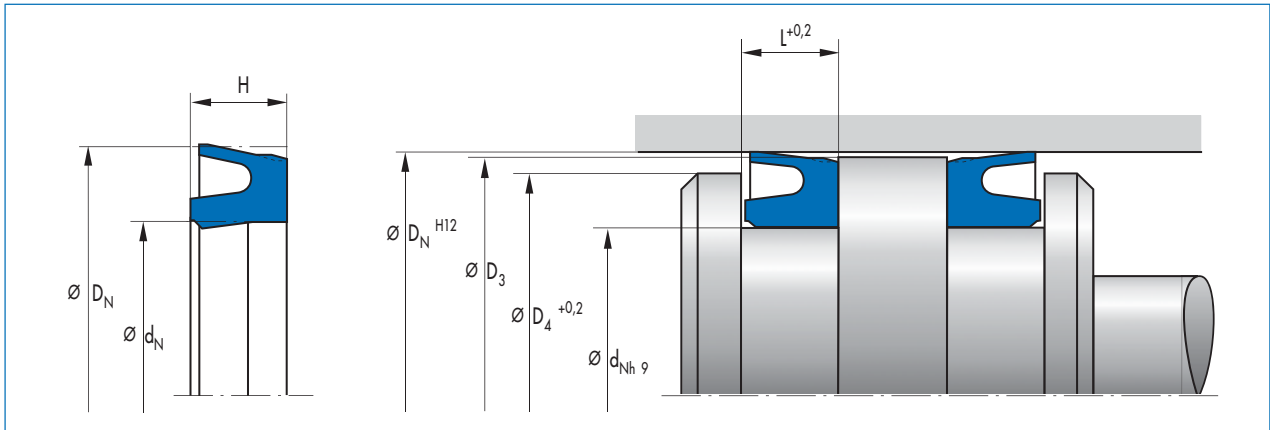
→ Technical Manual.

## 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.

Article list



$D_N$	$d_N$	$D_{3\ min}$	$D_{4\ min}$	H	L	Material	Article No.	
25	17	24,8	24	5,5	6	80 AU 941	432441	●
32	24	31,7	30,5	5,5	6	80 AU 941	433688	●
40	30	39,7	38,5	7	7,5	80 AU 941	433689	●
50	40	49,6	48,5	7	7,5	80 AU 941	406396	●
63	53	62,6	61,5	7	7,5	80 AU 941	406408	●
80	68	79,6	78,5	8,5	9,5	80 AU 941	406412	●
100	88	99,5	98	8,5	9,5	80 AU 941	433761	●
125	110	124,3	123	10	11	80 AU 941	406415	●

● Available from stock ○ On request: Tool is available, delivery at short notice