

Merkel U-Ring NAP 310

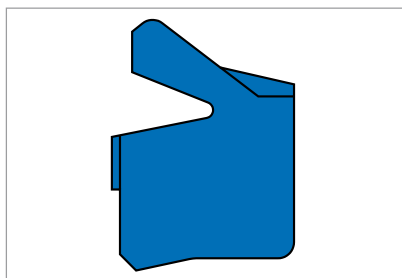


Fig. 1 Merkel U-Ring NAP 310

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
- 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 20994	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 _{max}	R _p /R _z
Cylinder barrel	≤4 µm tp (25% R _{max}) = 50 ... 75%	<0,5
Groove base	≤10 µm tp (25% R _{max}) = 50 ... 75%	<0,5

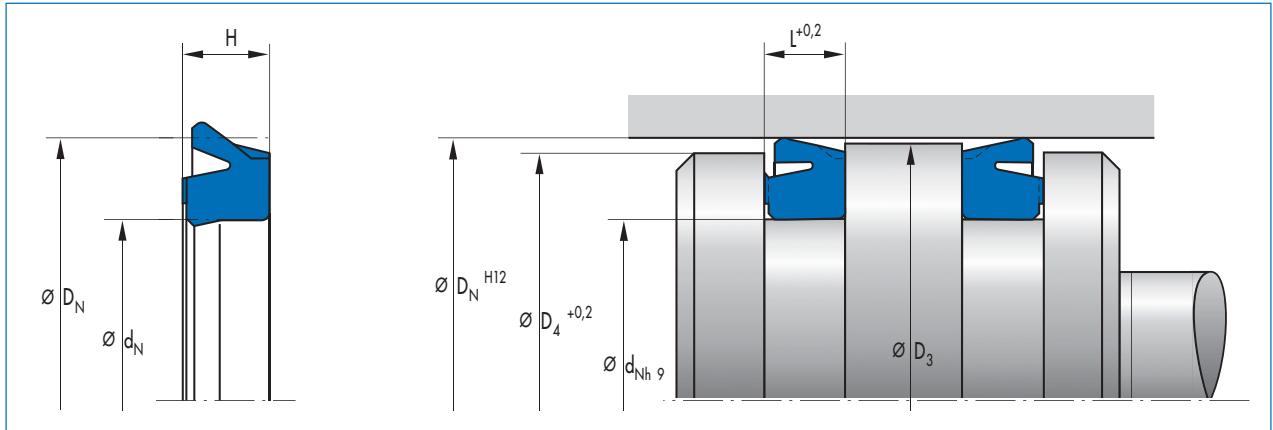
→ Technical Manual.

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	$D_{3 \text{ min}}$	$D_{4 \text{ min}}$	H	L	Material	Article No.	
8	4,8	7,85	7,6	2,45	2,7	80 AU 20994	49042868	●
10	6	9,85	9,6	2,45	2,7	80 AU 20994	433199	●
12	7	11,85	11,6	2,45	2,7	80 AU 20994	433200	●
16	10	15,85	15,6	2,45	2,7	80 AU 20994	415664	●
20	14	19,85	19,5	2,45	2,7	80 AU 20994	433202	●
25	19	24,85	24,4	4	4,2	80 AU 20994	415663	●
25	19	24,85	24,4	3,3	3,5	80 AU 20994	458854	●
32	24	31,7	31,4	3,3	3,5	80 AU 20994	433205	●
40	32	39,7	39,4	3,3	3,5	80 AU 20994	49041162	●
50	42	49,7	49,4	3,3	3,5	80 AU 20994	49041163	●
63	53	62,7	62,4	4,3	4,5	80 AU 20994	433212	●
80	70	79,7	79,4	4,3	4,5	80 AU 20994	433213	●
100	90	99,7	99,4	4,3	4,5	80 AU 20994	433214	●
125	105	124,75	123,7	8,1	8,5	80 AU 20994	422004	●
160	140	159,75	158,7	8,1	8,5	80 AU 20994	438908	●
200	180	199,75	198,7	8,1	8,5	80 AU 20994	438913	●

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