

# Merkel Compact Seal KDN

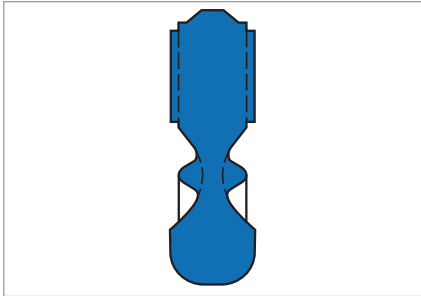


Fig. 1 Merkel Compact Seal KDN

## Product description

- Merkel Compact Seal can be pressurised on both sides with grooves on the front side for pressure activation.

## Product advantages

- The compact design permits short piston designs
- The rounded sealing profile and the flexible centre part give good tightness with low friction and maintain an effective lubricating film.

## Application

Short-stroke cylinders.

## Material

Material	Code	Hardness
Acrylonitrile-butadiene rubber	72 NBR 708	72 Shore A

## Operating conditions

Medium	Prepared, dried and de-oiled compressed air (after greasing for fitting)
Operating pressure p	≤1 MPa (10 bar)
Temperature T	-20 ... +100 °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

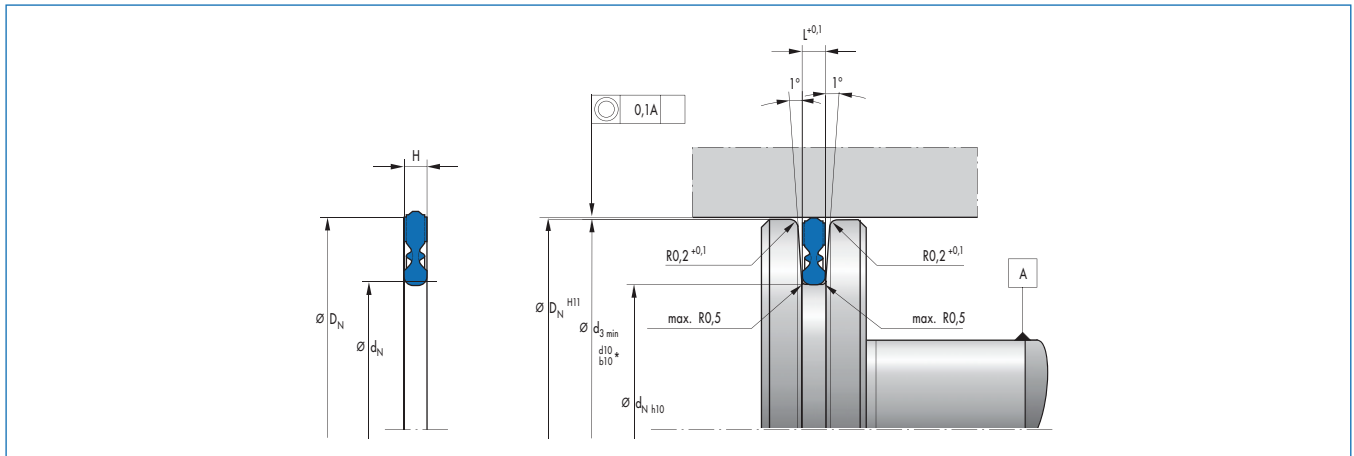
→ Technical Manual.

## Fitting & installation

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

Merkel Compact Seal KDN is snapped over the de-burred housing edge into the housing groove.

Article list



$D_N$	$d_N$	$D_{3\min}$	H	L	Material	Article No.	
12	5,1	12	1,8	1,8	72 NBR 708	49046430	●
16	8,9	16	2,1	2,1	72 NBR 708	49044391	●
20	12,9	20	2,1	2,1	72 NBR 708	49046431	●
25	17,9	25	2,1	2,1	72 NBR 708	429068	●
30	17,9	30	2,1	2,1	72 NBR 708	429070	●
32	19,9	32	2,1	2,1	72 NBR 708	502039	●
35	22,9	35	2,1	2,1	72 NBR 708	49046472	●
40	27,9	40	2,1	2,1	72 NBR 708	532581	●
50	37,9	50	2,1	2,1	72 NBR 708	429083	●
60	48	60	2,1	2,1	72 NBR 708	430632	●
63	51	63	2,1	2,1	72 NBR 708	527489	●
70	58	70	2,1	2,1	72 NBR 708	430634	●
80	68	80	2,1	2,1	72 NBR 708	429086	●
90	78,1	90	2,1	2,1	72 NBR 708	429527	●
100	88,1	100	2,1	2,1	72 NBR 708	429088	●
125	113,3	125	2,1	2,1	72 NBR 708	429090	●

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