



- Good wear resistance.
- High temperature resistance in case of suitable compound selection.
- Excellent media resistance in case of suitable compound selection.
- Suitable compounds available for special requirements of the chemical process industry.
- Suitable compounds available for special requirements of the food processing industry.
- Dimensions according to DIN ISO 6195, Type E.
- Product geometry prevents dirt deposits at the front face of the cylinder.
- Installation in closed and undercut housings.

The purpose of the profile A1 wiper ring is to prevent dust, dirt, grains of sand and metal swarf from penetrating. This is achieved by a special design which largely prevents the development of scratches, protects the guiding parts and extends the working life of the seals.

Oversized diameters ensure a tight fit in the groove thus preventing the penetration of foreign particles and dampness.

The profile A1 wiper ring provides a technically accurate closure at the cylinder; no screwings and brackets are required. No close tolerances are necessary and no metal inserts. The corrosion which may occur with metal-cased wipers will be prevented. For the groove close tolerances are not required.

If minor quantities or other diameters are required, these may be cut from the next largest size having the same cross-section (for further instruction please refer to "installation").

## Range of Application

The profile A1 wiper ring is designed for axially operated rods in hydraulic and pneumatic cylinders, plungers and rod-guidances.

Working temperature	-35 °C to +100 °C
Surface speed	≤ 2 m/s

## Compounds

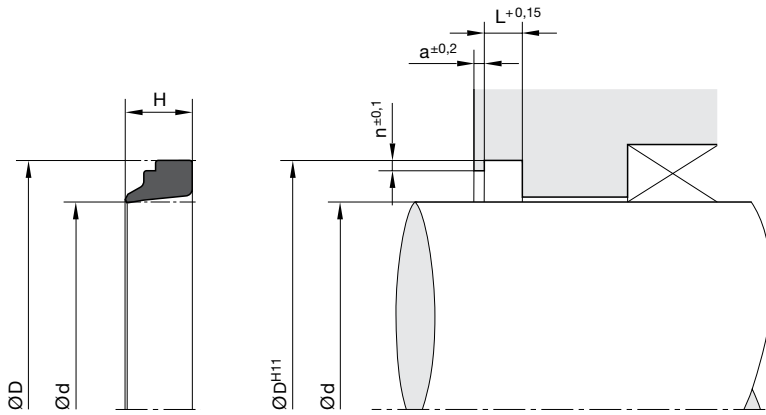
The standard material is a NBR-based elastomer compound with a hardness of approx. 90 Shore A.

The profile A1 (NBR) wiper ring is resistant to greases, lubricants, hydraulic oils, HFA-, HFB-, HFC-media, petrol, petroleum, water and lyes.

## Installation

The profile A1 wiper ring is supplied as a continuous ring. Any pressure on the back of the ring should be avoided. Intermediate sizes may easily be cut from the next largest ring with the same cross-section. The ring is to be cut at an angle of 90° to the new circumference length (+ 2 to 3 % in excess). Due to the excess length the two ends will fit closely together so that no gap will occur. Gluing is not necessary. The wiper can easily be pressed into the groove and will fit perfectly tight.

In case of special operating conditions (specific pressure loads, temperature, speed, use in water, HFA, HFB fluids etc.), please contact our consultancy service for a selection of the material and design best suited to your particular application requirements.

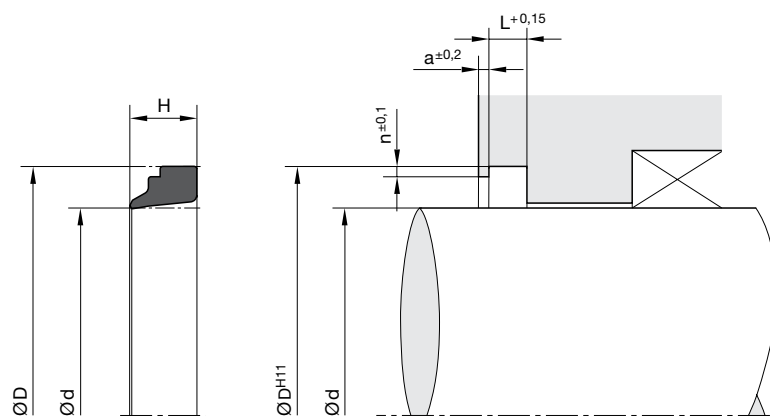


For surface finish, lead in chamfer and other installation dimensions see "General installation guidelines".

d	D	H	L	a	n	Order code
4	12	7	4	1	1	A1 0015 N3587
5	8	4	2.2	1	0.5	A1 0025 N3587
6	10	4	2.2	1	0.5	A1 0035 N3587
8	14	5	2.6	1	1	A1 0042 N3587
8	16	7	4	1	1	A1 0045 N3587
10	16	5	2.6	1	1	A1 1002 N3587
10	18	7	4	1	1	A1 1005 N3587
12	18	5	2.6	1	1	A1 1009 N3587
12	20	7	4	1	1	A1 1010 N3587
14	20	5	3.1	1	1	A1 1014 N3587
14	22	7	4	1	1	A1 1015 N3587
15	23	7	4	1	1	A1 1020 N3587
16	22	5	3.1	1	1	A1 1016 N3587
16	24	7	4	1	1	A1 1025 N3587
17	25	7	4	1	1	A1 1030 N3587
18	24	5	3.1	1	1	A1 1034 N3587
18	26	7	4	1	1	A1 1035 N3587
20	26	5	3.1	1	1	A1 2026 N3587
20	28	7	4	1	1	A1 2005 N3587
22	30	7	4	1	1	A1 2010 N3587
23	31	7	4	1	1	A1 2015 N3587
24	32	7	4	1	1	A1 2020 N3587
25	33	7	4	1	1	A1 2025 N3587
26	34	7	4	1	1	A1 2030 N3587
28	36	7	4	1	1	A1 2035 N3587
30	36	7	4	1	1	A1 3003 N3587
30	38	7	4	1	1	A1 3005 N3587
32	40	7	4	1	1	A1 3010 N3587
33	41	7	4	1	1	A1 3015 N3587
34	42	7	4	1	1	A1 3020 N3587
35	43	7	4	1	1	A1 3025 N3587
36	44	7	4	1	1	A1 3030 N3587
38	46	7	4	1	1	A1 3035 N3587
40	48	7	4	1	1	A1 4005 N3587

d	D	H	L	a	n	Order code
42	50	7	4	1	1	A1 4015 N3587
44	52	7	4	1	1	A1 4025 N3587
45	53	7	4	1	1	A1 4030 N3587
46	54	7	4	1	1	A1 4040 N3587
47	55	7	4	1	1	A1 4045 N3587
48	56	7	4	1	1	A1 4050 N3587
50	58	7	4	1	1	A1 5005 N3587
50	62	10	5.5	1.5	1.5	A1 5010 N3587
51	59	7	4	1	1	A1 5015 N3587
52	60	7	4	1	1	A1 5020 N3587
54	62	7	4	1	1	A1 5030 N3587
55	63	7	4	1	1	A1 5035 N3587
56	64	7	4	1	1	A1 5040 N3587
57	65	7	4	1	1	A1 5042 N3587
58	66	7	4	1	1	A1 5045 N3587
60	68	7	4	1	1	A1 6005 N3587
60	72	10	5.5	1.5	1.5	A1 6010 N3587
62	70	7	4	1	1	A1 6015 N3587
63	71	7	4	1	1	A1 6020 N3587
64	72	7	4	1	1	A1 6025 N3587
65	73	7	4	1	1	A1 6030 N3587
66	74	7	4	1	1	A1 6035 N3587
67	75	7	4	1	1	A1 6040 N3587
68	76	7	4	1	1	A1 6045 N3587
70	78	7	4	1	1	A1 7005 N3587
72	80	7	4	1	1	A1 7015 N3587
73	81	7	4	1	1	A1 7018 N3587
75	83	7	4	1	1	A1 7025 N3587
78	86	7	4	1	1	A1 7040 N3587
80	88	7	4	1	1	A1 8002 N3587
82	90	7	4	1	1	A1 8010 N3587
83	91	7	4	1	1	A1 8015 N3587
85	93	7	4	1	1	A1 8025 N3587
86	94	7	4	1	1	A1 8030 N3587

Further sizes on request.



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d	D	H	L	a	n	Order code
88	96	7	4	1	1	A1 8040 N3587
90	98	7	4	1	1	A1 9005 N3587
92	100	7	4	1	1	A1 9015 N3587
93	101	7	4	1	1	A1 9020 N3587
95	103	7	4	1	1	A1 9030 N3587
97	105	7	4	1	1	A1 9045 N3587
100	108	7	4	1	1	A1 A010 N3587
105	117	10	5.5	1.5	1.5	A1 A035 N3587
106	118	10	5.5	1.5	1.5	A1 A040 N3587
110	118	7	4	1	1	A1 B005 N3587
110	122	10	5.5	1.5	1.5	A1 B010 N3587
112	124	10	5.5	1.5	1.5	A1 B020 N3587
114	122	7	4	1	1	A1 B028 N3587
115	127	10	5.5	1.5	1.5	A1 B035 N3587
118	130	10	5.5	1.5	1.5	A1 B050 N3587
120	132	10	5.5	1.5	1.5	A1 C010 N3587
125	137	10	5.5	1.5	1.5	A1 C020 N3587
128	140	10	5.5	1.5	1.5	A1 C035 N3587
130	142	10	5.5	1.5	1.5	A1 D010 N3587
135	147	10	5.5	1.5	1.5	A1 D025 N3587
140	152	10	5.5	1.5	1.5	A1 E010 N3587
142	154	10	5.5	1.5	1.5	A1 E020 N3587
145	157	10	5.5	1.5	1.5	A1 E035 N3587
149	157	7	4	1	1	A1 E090 N3587
150	162	10	5.5	1.5	1.5	A1 F005 N3587
152	164	10	5.5	1.5	1.5	A1 F015 N3587
155	167	10	5.5	1.5	1.5	A1 F030 N3587
160	172	10	5.5	1.5	1.5	A1 G010 N3587
165	177	10	5.5	1.5	1.5	A1 G025 N3587
166	178	10	5.5	1.5	1.5	A1 G030 N3587
168	176	7	4	1	1	A1 G060 N3587
170	182	10	5.5	1.5	1.5	A1 H010 N3587
175	187	10	5.5	1.5	1.5	A1 H025 N3587
180	192	10	5.5	1.5	1.5	A1 J010 N3587

d	D	H	L	a	n	Order code
185	197	10	5.5	1.5	1.5	A1 J050 N3587
190	202	10	5.5	1.5	1.5	A1 K015 N3587
195	207	10	5.5	1.5	1.5	A1 K030 N3587
200	212	10	5.5	1.5	1.5	A1 L003 N3587
210	218	7	4	1	1	A1 L009 N3587
210	225	13	6.5	2	2	A1 L010 N3587
220	235	13	6.5	2	2	A1 M010 N3587
230	245	13	6.5	2	2	A1 M016 N3587
235	250	13	6.5	2	2	A1 M020 N3587
240	255	13	6.5	2	2	A1 N015 N3587
250	265	13	6.5	2	2	A1 N040 N3587
260	275	13	6.5	2	2	A1 O005 N3587
265	280	13	6.5	2	2	A1 O030 N3587
300	315	13	6.5	2	2	A1 Q010 N3587
305	320	13	6.5	2	2	A1 Q015 N3587
310	325	13	6.5	2	2	A1 Q020 N3587
315	330	13	6.5	2	2	A1 Q025 N3587
320	335	13	6.5	2	2	A1 Q030 N3587
340	355	13	6.5	2	2	A1 Q035 N3587
365	380	13	6.5	2	2	A1 Q050 N3587
400	415	13	6.5	2	2	A1 R020 N3587
450	465	13	6.5	2	2	A1 R015 N3587
500	515	13	6.5	2	2	A1 S015 N3587

Further sizes on request.