

# AM



## MATERIAL



<b>Type</b>	<b>Designation</b>	<b>Hardness</b>
Thermoplastic polyester resin	SEALITE 55	55 °ShD

## FIELD OF APPLICATION

<b>Pressure</b>	See table below
<b>Speed</b> ≤ 0.8 m/s	
<b>Temperature</b> -40°C ÷ +140°C (only for SEALITE element)	
<b>Fluids</b>	Hydraulic oils (mineral oil based) For other fluids contact our technical department

## MAX. PRESSURE [bar]

Gap [mm]	NBR 70 [bar]	NBR 90 [bar]	AM [bar]
0,05	190	330	500
0,10	130	270	400
0,15	110	230	350
0,20	100	210	300
0,25	90	190	270
0,30	80	170	240
0,35	75	160	220

NB: for the Gap calculation, it is necessary to consider the elastic deformation of metal elements under pressure loads.

## SURFACE ROUGHNESS

<b>Dynamic surface</b>	Ra ≤ 0.3 µm	Rt ≤ 2.5 µm
<b>Static surface</b>	Ra ≤ 1.6 µm	Rt ≤ 6.3 µm

Before assembly good cleanliness and lubrication are recommended.

The above data are maximum values, they may be maintained for short periods and can not be used at the same time simultaneously.

The function of ring type Aston Seals AM is to avoid the extrusion and damage of the O-Ring that normally occurs in the presence of large gaps or high pressure.

If pressure arises on only one side of the O-Ring, it will suffice to fit one antiextrusion ring on the unexposed side. Two backup rings are necessary if the pressure rises on both sides.

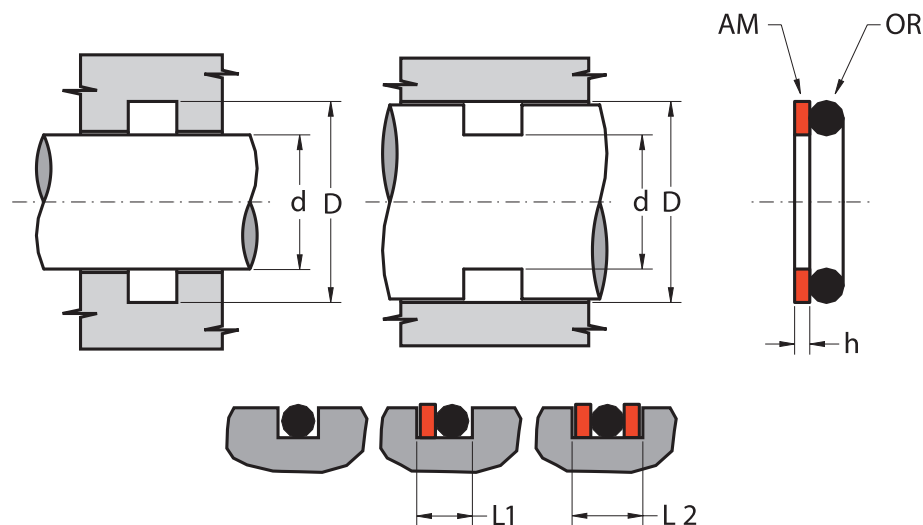
The AM ring hasn't a cut or spiral shape (typical of PTFE backup rings) that could help damage the O-Ring especially in the presence of high pressure.

Thanks to its elasticity, it can be installed very easily in a short time and without any auxiliaries.

The material used is a medium modulus thermoplastic polyester resin, mainly used in

the manufacturing of antiextrusion rings, that ensures an extra measure of performance and service life in application where properties such as abrasion resistance and tear strength are critical.

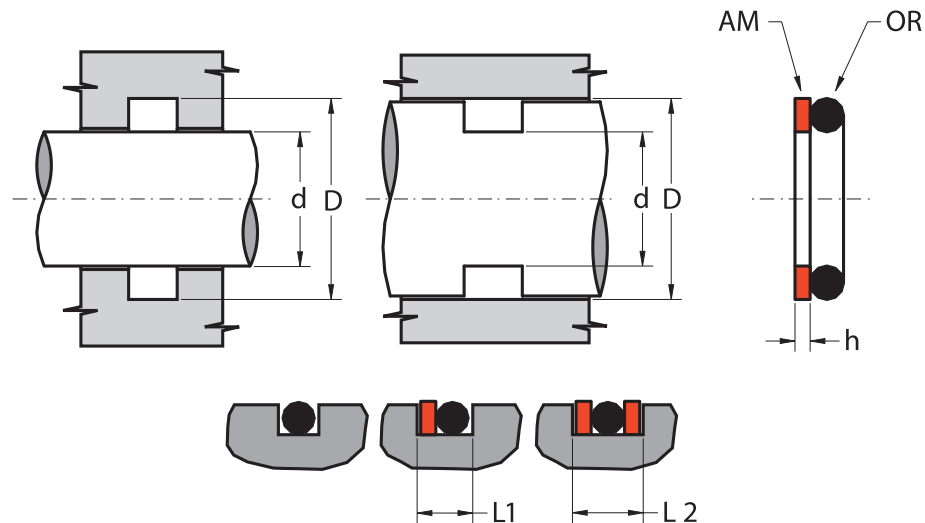
- Very high resistance against extrusion
- Uncut piece to avoid O-Ring damage
- Low cost solution
- Extended service life of sealing components
- Excellent wear-resistance
- No close tolerances are necessary
- Easy installation without expensive auxiliaries
- Good temperature resistance
- Easy installation without expensive auxiliaries



Part.	O-Ring	d <sup>f7</sup>	D <sup>H9</sup>	h	L1 <sup>+0.2</sup>	L2 <sup>+0.2</sup>
AM 3.8 6.5 1	4.1 x 1.6	3.8	6.5	1.0	3.1	4.1
AM 6 10.5 0.8	5.23 x 2.62	6	10.5	0.8	4.4	5.3
AM 10 14 1.3	9.3 x 2.4	10	14	1.3	4.5	5.8
AM 12 16 1.3	11.3 x 2.4	12	16	1.3	4.5	5.8
AM 16 20 1.3	15.3 x 2.4	16	20	1.3	4.5	5.8
AM 17 21 1.3	16.3 x 2.4	17	21	1.3	4.5	5.8
AM 20 25 1.3	19.2 x 3	20	25	1.3	5.3	6.6
AM 25 30 1.3	24.2 x 3	25	30	1.3	5.3	6.6
AM 25 32 1.3	24 x 4	25	32	1.3	6.7	8.2
AM 27 32 1.3	26.2 x 3	27	32	1.3	5.3	6.6
AM 29.3 35 1.4	28.17 x 3.53	29.3	35	1.4	6.0	7.5
AM 30 35 1.3	29.2 x 3	30	35	1.3	5.3	6.6
AM 33 38 1.3	32.2 x 3	33	38	1.3	5.3	6.6
AM 35 40 1.3	34.2 x 3	35	40	1.3	5.3	6.6
AM 36 41 1.75	34.5 x 3	36	41	1.75	5.75	7.5
AM 40 45 1.3	39.2 x 3	40	45	1.3	5.3	6.6
AM 40 50 1.7	39.2 x 5.7	40	50	1.7	9.5	11.5
AM 42.5 50 2	42 x 4.5	42.5	50	2.0	7.8	9.8
AM 43 48 1.3	42.2 x 3	43	48	1.3	5.3	6.6
AM 44.6 50.5 0.8	44.04 x 3.53	44.6	50.5	0.8	5.4	6.3
AM 45 50 1.3	44.2 x 3	45	50	1.3	5.3	6.6
AM 45 55 1.7	45.3 x 5.7	45	55	1.7	9.5	11.5
AM 50 55 1.3	49.5 x 3	50	55	1.3	5.3	6.6
AM 50 56.2 1.4	49.21 x 3.53	50	56.2	1.4	6.0	7.5

Part.	O-Ring	d <sup>f7</sup>	D <sup>H9</sup>	h	L1 <sup>+0.2</sup>	L2 <sup>+0.2</sup>
AM 50 60 1.7	49.2 x 5.7	50	60	1.7	9.5	11.5
AM 53 63 1.7	52.3 x 5.7	53	63	1.7	9.5	11.5
AM 54 59 1.4	53.1 x 3	54	59	1.4	5.4	6.8
AM 55 60 1.3	54.5 x 3	55	60	1.3	5.3	6.6
AM 55 65 1.7	54.2 x 5.7	55	65	1.7	9.5	11.5
AM 56.5 61 1.4	55.25 x 2.62	56.5	61	1.4	5.0	6.4
AM 58 63 1.3	57.0 x 3	58	63	1.3	5.3	6.6
AM 60 65 1.3	59.5 x 3	60	65	1.3	5.3	6.6
AM 60 67 1.5	59 x 4	60	67	1.5	6.9	8.4
AM 60 70 1.7	59.2 x 5.7	60	70	1.7	9.5	11.5
AM 64 70 1.4	63.5 x 3.53	64	70	1.4	6.0	7.5
AM 65 70 1.3	64.5 x 3	65	70	1.3	5.3	6.6
AM 65 75 1.7	64.2 x 5.7	65	75	1.7	9.5	11.5
AM 66 71 1.5	64.5 x 3	66	71	1.5	5.5	7.0
AM 66.4 72 1.4	65.09 x 3.53	66.4	72	1.4	6.0	7.4
AM 69 75 1.5	68.26 x 3.53	69	75	1.5	6.1	7.6
AM 70 75 1.3	69.5 x 3	70	75	1.3	5.3	6.6
AM 70 77 1.5	69 x 4	70	77	1.5	6.9	8.4
AM 70 80 1.7	69.2 x 5.7	70	80	1.7	9.5	11.5
AM 74 80 1.5	72.62 x 3.53	74	80	1.5	6.1	7.6
AM 74.1 81 1.5	74 x 4	74.1	81	1.5	6.8	8.3
AM 74.4 80 1.4	73.03 x 3.53	74.4	80	1.4	6.0	7.4
AM 75 80 1.3	74.6 x 3	75	80	1.3	5.3	6.6
AM 75 85 1.7	74.2 x 5.7	75	85	1.7	9.5	11.5

Part.	O-Ring	d <sup>f7</sup>	D <sup>H9</sup>	h	L1 <sup>+0.2</sup>	L2 <sup>+0.2</sup>
AM 79.4 85 1.3	78.97 x 3.53	79.4	85	1.3	6.0	7.5
AM 80 85 1.3	79.5 x 3	80	85	1.3	5.3	6.6
AM 80 87 1.5	79 x 4	80	87	1.5	6.9	8.4
AM 80 87.6 1.75	80 x 4.5	80	87.6	1.75	7.5	9.2
AM 80 90 1.7	79.2 x 5.7	80	90	1.7	9.5	11.5
AM 83 90 1.5	83 x 4	83	90	1.5	6.8	8.3
AM 84 90 1.4	82.14 x 3.53	84	90	1.4	6.0	7.5
AM 85 90 1.3	84.5 x 3	85	90	1.3	5.3	6.6
AM 85 95 1.7	84.1 x 5.7	85	95	1.7	9.5	11.5
AM 89.4 100 2.5	88 x 6	89.4	100	2.5	10.7	13.2
AM 90 95 1.3	89.5 x 3	90	95	1.3	5.3	6.6
AM 90 100 1.7	89.1 x 5.7	90	100	1.7	9.5	11.5
AM 93.5 100 1.4	91.67 x 3.53	93.5	100	1.4	6.0	7.4
AM 94.5 101 1.5	94.84 x 3.53	94.5	101	1.5	6.1	7.6
AM 95 100 1.3	94.5 x 3	95	100	1.3	5.3	6.6
AM 95 105 1.7	94.1 x 5.7	95	105	1.7	9.5	11.5
AM 100 105 1.3	99.5 x 3	100	105	1.3	5.3	6.6
AM 100 110 1.7	99.1 x 5.7	100	110	1.7	9.5	11.5
AM 103.5 110 1.5	102 x 4	103.5	110	1.5	6.7	8.2
AM 105 110 1.3	104.5 x 3	105	110	1.3	5.3	6.6
AM 105 115 1.7	104.1 x 5.7	105	115	1.7	9.5	11.5
AM 110 115 1.3	109.5 x 3	110	115	1.3	5.3	6.6
AM 110 120 1.7	109.1 x 5.7	110	120	1.7	9.5	11.5
AM 115 120 1.3	114.5 x 3	115	120	1.3	5.3	6.6



Part.	O-Ring	d <sup>f7</sup>	D <sup>H9</sup>	h	L1 <sup>+0.2</sup>	L2 <sup>+0.2</sup>
<b>AM 115 125 1.7</b>	114.3 x 5.7	115	125	1.7	9.5	11.5
<b>AM 116.3 125 1.7</b>	113.67 x 5.34	116.3	125	1.7	9.0	10.5
<b>AM 119 126 1.5</b>	118 x 4	119	126	1.5	6.9	8.4
<b>AM 120 125 1.3</b>	119.5 x 3	120	125	1.3	5.3	6.6
<b>AM 120 130 1.7</b>	119.3 x 5.7	120	130	1.7	9.5	11.5
<b>AM 125 130 1.3</b>	124.5 x 3	125	130	1.3	5.3	6.6
<b>AM 125 135 1.7</b>	124.3 x 5.7	125	135	1.7	9.5	11.5
<b>AM 130 140 1.7</b>	129.3 x 5.7	130	140	1.7	9.5	11.5
<b>AM 135 145 1.7</b>	134.3 x 5.7	135	145	1.7	9.5	11.5
<b>AM 140 150 1.7</b>	139.3 x 5.7	140	150	1.7	9.5	11.5
<b>AM 142 151 1.8</b>	139.7 x 5.34	142	151	1.8	9.1	10.6
<b>AM 145 155 1.7</b>	144.3 x 5.7	145	155	1.7	9.5	11.5
<b>AM 150 160 1.7</b>	149.3 x 5.7	150	160	1.7	9.5	11.5
<b>AM 152 161 1.8</b>	149.2 x 5.34	152	161	1.8	9.1	10.6
<b>AM 154 166 3</b>	155.6 x 6.99	154	166	3.0	12.5	15.5

