Your Partner for Sealing Technology

INFLATABLE SEALS

ADVANCED SEALING TECHNOLOGY
CUSTOMIZED SEALING SOLUTIONS

INFLATABLE SEAL

YOUR PARTNER FOR SEALING TECHNOLOGY

Advanced Sealing Technology designs, produces and delivers dedicated inflatable seal solutions among other sealing solutions. We are a one-stop shop providing the best in elastomer, thermoplastic, PTFE, mechanical and composite sealing technologies for applications in practically all industries.

With more then 30-years' experience, Advanced Sealing Technology engineers, support customers with design, prototyping, production, test and installation.

Advanced Sealing technology fulfills challenging service requirement, supplying standard parts in volume or a single custom-manufactured component.

Besides the inflatable profiles in our catalog, we have more profiles available or we design and produce the profile needed for your application.

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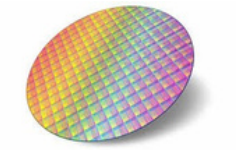
APPLICATION EXAMPLES

Powder and bulk solids handling and processing equipment:

Blenders, mixers, dryers, hoppers, valves, Pipe testing equipment etc.



Semiconductor and electronica:

Chip production equipment, electronica, Ultra clean systems/rooms, etc.

Glass machinery:

Medical glass preparation, transportation, clamping etc.

Food processing equipment:

All kind of food/chemical/oil tanks, filling equipment

Offshore and marine:

Hatches, jackets, mega yachts, FPSO turret system etc.

APPLICATION EXAMPLES

Transportation:

Doors, emission tests, clamps etc.

Nuclear:

Door and hatch sealing, gate seals, mining doors etc.

Flood protection:

Gates, flood doors, etc.

Energy:

Windmills, sun energy, fluid energy, steam energy, etc.

MATERIALS

Common Name - Base Polymer	EPDM or EP Rubber	Chloroprene	Nitrile NBR Buna-N	Natural Rubber NR	Butyl	Silicone	Fluor-silicone	FKM (Viton®)
ASTM Designation (ASTM D1418)	EP	CR	NBR	NR	HR	VMQ	FVMQ	FKM
Tensile Strength (psi)	>2000	>2000	>2000	>2000	>2000	>1200	>1200	>1400
Hardness Range (Durometer A)	40-90	20-80	50-95	50-70	40-75	40-80	40-70	70-90
Tear Resistance	G	G	F	G	G	F	P	F
Abrasion Resistance	G To E	VG	G	E	G	P	F	G
Compression Set	G	G	G	E	F	VG	E	E
Resilience Cold	G	G	G	G	P	E	G	F
Resilience Hot	VG	VG	G	F	V	E	E	E
Radiation Resistance	O	G	P	F To G	G	G	E	E
Impermeability to Gases	G	G	G	F	O	F	E	P
Acid Resistance								
Mild Dilute	E	E	F To G	F To P	E	E	E	O
Strong Concentrate	G	G	F To G	G	G	F	P	F

Solvent Resistance								
Aliphatic Hydrocarbons	P	F To G	E	P	P	P	G	E
Aromatic Hydrocarbons	P	P	P	P	P	P	E	E
Oxygenated (Ketones, etc)	G	P	P	P	G	P	F	F
Resistance to								
Swelling in lubricating Oil	P	G	V	P	P	P	E	O
Oil and Gasoline	P	G	E	P	P	F	G	E
Animal Oils	F	F	E	P	F	G	E	E
Water Absoroption	VG	G	V	V	V	E	E	E
Oxidation	E	VG	G	F To P	E	E	O	O
Ozone	O	VG	F	F To P	F To G	E	O	E
Sunlight Aging	O	VG	P	F To P	V	E	E	G
Heat Aging	VG	G	G	G To F	G	O	E	E
Low Temperature	VG	G	F To G	G	G	O	G	F
Flame	P	G	G	P	F	P	E	E

Vegetable Oils	F	G	G	P	F	P	E	E
Chlorinated Hydrocarbons	P	P	F	P	P	P To F	F	G

F for Fair | VG for Very Good | O for Outstanding

P for Poor | G for Good | E for Excellent

DESIGN INSTRUCTIONS

Selection of seals

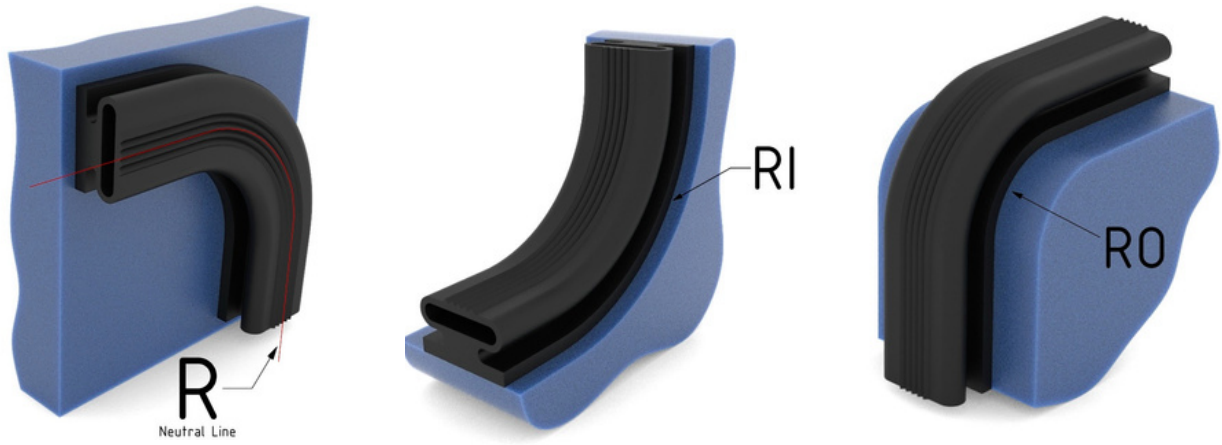
A very wide range of applications can be covered thanks to the large number of different profile geometries.

Inflatable seals can be used for axial acting and radial acting applications.

Radii

Both applications profiles do have their own limitations for radii. The design must be set accordingly to these limitations.

The simplest and cheapest design is to use a radius in the extruded profile. Not all radii can be made in all profiles or materials. Different materials behave different in the same dimensional corners. Therefor pre-moulded corners are available or can be made accordingly the customer requirements.



If for design reasons radii are not permissible, right angled corners can be manufactured with a limited number of profile cross-sections. However it is only possible for axial sealing. Please contact Advanced Sealing Technology for specific information for your application.

Sealing gaps

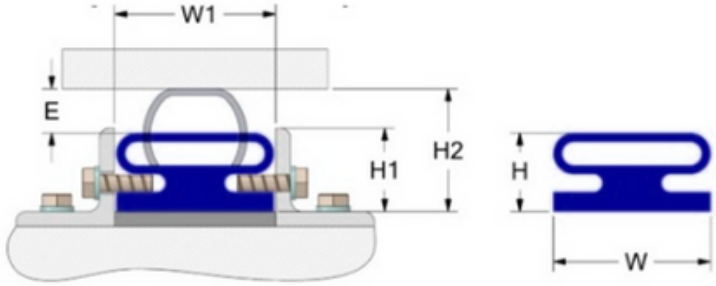
The maximum permissible gaps specified in the dimension tables should be used as a guideline.

The smaller the profile section, the smaller the permissible gap. The activation time is a result of the extension gap of the seal. Also, smaller gaps allow a higher internal pressure and so a higher system pressure to be sealed.

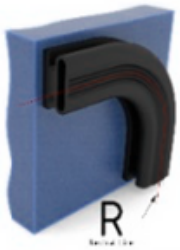
Surfaces

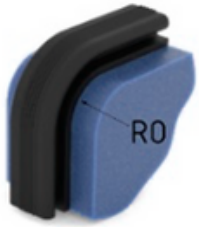
All sealing surfaces coming into contact with the seal must be smooth and have no burrs. Any weld peaks can make the seal fail. No pointed or sharp items must be allowed to come near the seal or come into contact with the seal. The recommended surface roughness is: Ra 0,8 – 1,6 mµ, Rmax 4 -10mµ.

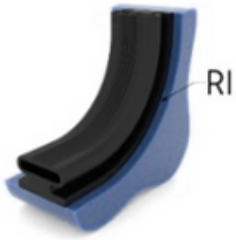
1010 STEM FLAT TOP PROFILE



Profile Ref.	Profile Dimensions		Groove Dimensions		
	WxH	E max.	W1 +0.2 / -0.0	H1	H2
	mm	mm	mm	mm	mm
AS068-1010	17.46 x 11.11	3.18	18.50	12.10	14.27
AS100-1010	25.40 x 12.70	6.35	26.90	13.70	19.05
AS125-1010	31.75 x 15.88	9.53	32.10	16.30	25.40
AS200-1010	50.80 x 22.23	19.05	51.10	22.40	41.28
AS300-1010	76.20 x 31.75	25.40	76.50	31.90	57.15
AS400-1010	101.60 x 41.27	34.93	103.40	42.20	76.20



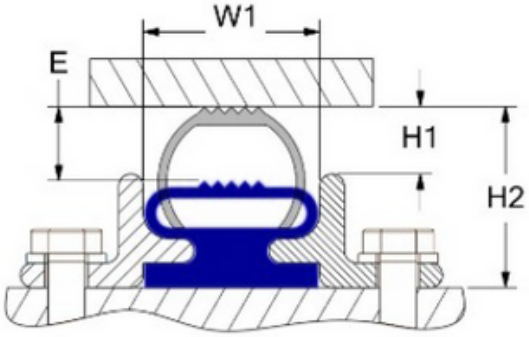


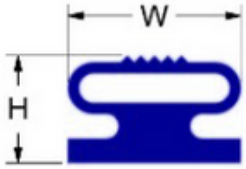


Profile Ref.	Raddi			Pressure Data	
	R Axial (fig.1)	RO (fig. 2)	RI (fig. 3)	Min. Internal pressure	Max. Internal pressure
	mm	mm	mm	Mpa	Mpa
AS068-1010	50.8	38.10	152.40	0.055	0.1
AS100-1010	63.50	44.45	177.80	0.055	0.1
AS125-1010	76.20	50.80	203.20	0.055	0.1
AS200-1010	114.30	101.60	298.45	0.055	0.1
AS300-1010	152.40	139.70	406.40	0.055	0.1
AS400-1010	220.00	203.20	457.20	0.055	0.1

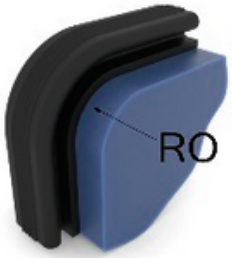
Profile Ref.	Air Connectors			
	AS-C1	AS-C2	AS-C3	AS-C4
	Plain Tube (mm)	Male Thread	Tube conn. Hose ID (mm)	Plain Tube- O-ring Bore (mm)
AS068-1010	4	M4	4	4
AS100-1010	4 – 6	M4 – M6	4 – 6	4 – 6
AS125-1010	4 – 8	M4 – M8	4 – 8	4 – 8
AS200-1010	4 – 12	M4 – M12	4 – 12	4 – 12
AS300-1010	4 – 16	M4– M16	4 – 16	4 – 16
AS400-1010	4 – 16	M4 – M16	4 – 16	4 – 16
Note:	AS-C2 can also be equipped with: 1/8 NPT, 1/8 BSP, 1/4 NPT or 1/4 BSP			
	Seal can also be equipped with any Flexible hose connection like: AS-C5-1, AS-C5-2			
	Want/Need another connector type? Please contact AST at info@advancedsealingtechnology.nl			

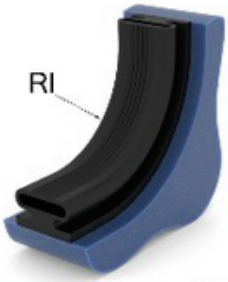
1011 STEM SHARP TOP





Profile Ref.	Profile Dimensions		Groove Dimensions		
	WxH	E max.	W1 +0.2 / -0.0	H1	H2
	mm	mm	mm	mm	mm
AS068-1011	17.46 x 12.11	3.18	18.50	12.10	15.27
AS100-1011	25.40 x 13.70	6.35	26.90	13.70	20.05
AS118-1011	30.16 x 22.22	7.92	32.50	21.50	30.16
AS125-1011	31.75 x 17.38	9.53	32.10	16.30	26.90
AS156-1011	39.68 x 25.40	9.53	40.20	28.00	38.10
AS200-1011	50.80 x 23.73	19.05	51.10	22.40	42.78
AS237-1011	60.32 x 34.92	15.88	62.00	36.30	53.18
AS300-1011	76.20 x 33.75	25.40	76.50	31.90	59.15
AS400-1011	101.60 x 43.27	34.93	103.40	42.20	78.20



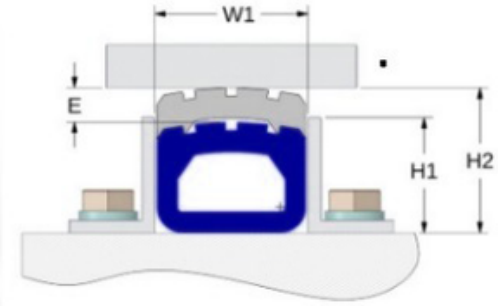


Profile Ref.	Raddi		
	R Axial (fig.1)	RO (fig. 2)	RI (fig. 3)
	mm	mm	mm
AS068-1011	50	38.00	152.00
AS100-1011	63.00	44.00	177.00
AS118-1011	130.00	85.00	123.00
AS125-1011	76.00	50.00	203.00
AS156-1011	168.00	101.00	139.00
AS200-1011	114.00	101.00	298.00
AS237-1011	241.00	107.00	168.00
AS300-1011	152.00	139.00	406.00
AS400-1011	101.00	203.00	457.00

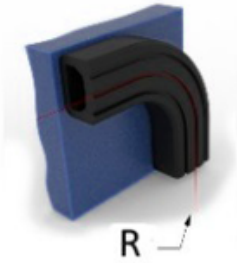
Pressure Data	
Min. Internal pressure	Max. Internal pressure
Mpa	Mpa
0.055	0.1
0.055	0.1
0.055	0.1
0.055	0.1
0.055	0.1
0.055	0.1
0.055	0.1
0.055	0.1
0.055	0.1

Profile Ref.	AIR Connectors			
	AS-C1	AS-C2	AS-C3	AS-C4
	Plain Tube (mm)	Male Thread	Tube conn. Hose ID (mm)	Plain Tube- O-ring Bore (mm)
AS068-1011	4	M4	4	4
AS100-1011	4 – 6	M4 – M6	4 – 6	4 – 6
AS118-1011	4 – 8	M4 – M8	4 – 8	4 – 8
AS125-1011	4 – 8	M4 – M8	4 – 8	4 – 8
AS156-1011	4 – 10	M4 – M10	4 – 10	4 – 10
AS200-1011	4 – 12	M4 – M12	4 – 12	4 – 12
AS237-1011	4 – 12	M4 – M12	4 – 12	4 – 12
AS300-1011	4 – 16	M4– M16	4 – 16	4 – 16
AS400-1011	4 – 16	M4 – M16	4 – 16	4 – 16
Note:	AS-C2 can also be equipped with: 1/8 NPT, 1/8 BSP, 1/4 NPT or 1/4 BSP			
	Seal can also be equipped with any Flexible hose connection like: AS-C5-1, AS-C5-2			
	Want/Need another connector type? Please contact AST at info@advancedsealingtechnology.nl			

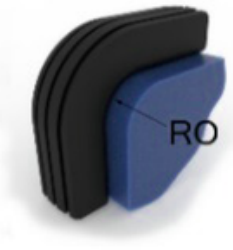
1020 CASTELLATED SQUARE PROFILE

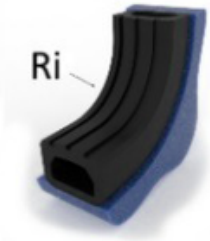


Profile Ref.	Profile Dimensions		Groove Dimensions		
	WxH	E max.	W1 +0.2 / -0.0	H1	H2
	mm	mm	mm	mm	mm
AS014-1020	14.00 x 10.00	3.00	15.00	10.70	13.00
AS016-1020	16.00 x 12.00	3.00	17.00	12.80	15.00
AS016.2-1020	16.00 x 18.00	3.50	16.80	19.00	21.50
AS022-1020	22.00 x 19.00	3.50	24.00	20.00	22.50
AS026-1020	26.00 x 19.00	4.50	27.30	20.00	23.50
AS027-1020	27.00 x 21.00	5.00	29.60	22.00	26.00
AS035-1020	35.00 x 26.00	8.00	36.30	27.00	34.00
AS035.2-1020	35.00 x 32.00	10.00	36.30	33.00	42.00



Neutral Line



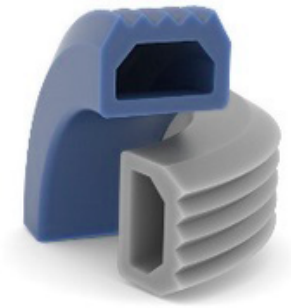


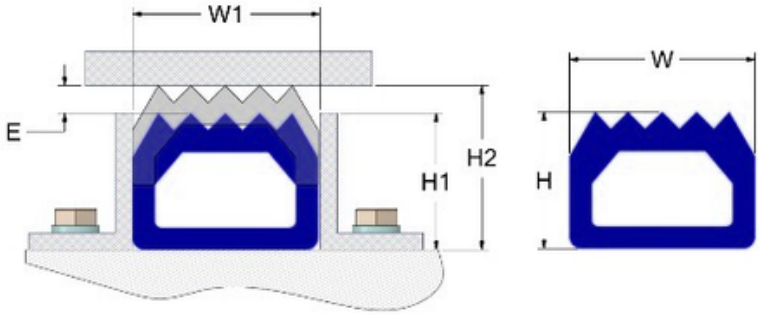
Profile Ref.	Raddi		
	R Axial (fig.1)	RO (fig. 2)	RI (fig. 3)
	mm	mm	mm
AS014-1020	44.45	34.80	44.45
AS016-1020	41.15	41.15	50.80
AS016.2-1020	21.75	53.85	82.55
AS022-1020	60.20	41.15	63.50
AS026-1020	67.56	60.20	85.60
AS027-1020	61.00	65.00	106.00
AS035-1020	83.00	70.00	101.00
AS035.2-1020	85.60	76.20	117.35

Pressure Data	
Min. Internal pressure	Max. Internal pressure
Mpa	Mpa
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3

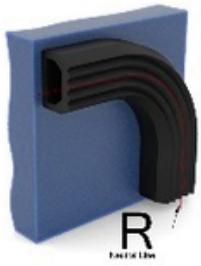
Profile Ref.	AIR Connectors			
	AS-C1	AS-C2	AS-C3	AS-C4
	Plain Tube (mm)	Male Thread	Tube conn. Hose ID (mm)	Plain Tube- O-ring Bore (mm)
AS014-1020	4 – 6	M4 – M6	4 – 6	4 – 6
AS016-1020	4 – 8	M4 – M8	4 – 8	4 – 8
AS016.2-1020	4 – 8	M4 – M8	4 – 8	4 – 8
AS022-1020	4 – 8	M4 – M8	4 – 8	4 – 8
AS026-1020	4 – 10	M4 – M10	4 – 10	4 – 10
AS027-1020	4 – 10	M4 – M10	4 – 10	4 – 10
AS035-1020	4 – 16	M4 – M16	4 – 16	4 – 16
AS035.2-1020	4 – 16	M4 – M16	4 – 16	4 – 16
Note:	AS-C2 can also be equipped with: 1/8 NPT, 1/8 BSP, 1/4 NPT or 1/4 BSP			
	Seal can also be equipped with any Flexible hose connection like: AS-C5-1, AS-C5-2			
	Want/Need another connector type? Please contact AST at info@advancedsealingtechnology.nl			

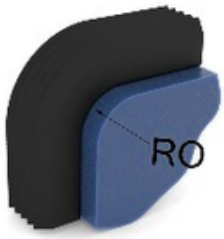
1021 CASTELLATED SHARP PROFILE

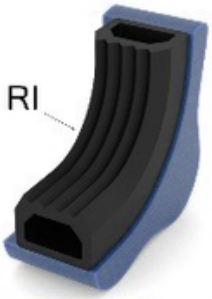




Profile Ref.	Profile Dimensions		Groove Dimensions		
	WxH	E max.	W1 +0.2 / -0.0	H1	H2
	mm	mm	mm	mm	mm
AS006-1021	6.50 x 5.00	1.50	7.00	5.50	6.50
AS010-1021	10.00 x 8.00	2.00	10.50	8.50	10.00
AS016-1021	16.00 x 14.00	3.50	17.00	14.50	17.50
AS020-1021	20.00 x 20.00	4.00	21.00	21.00	24.00
AS054-1021	54.00 x 40.00	8.00	55.00	41.00	48.00
AS080-1021	80.00 x 60.00	12.00	81.00	61.00	72.00
AS120-1021	120.00 x 80.00	16.00	121.00	81.00	96.00





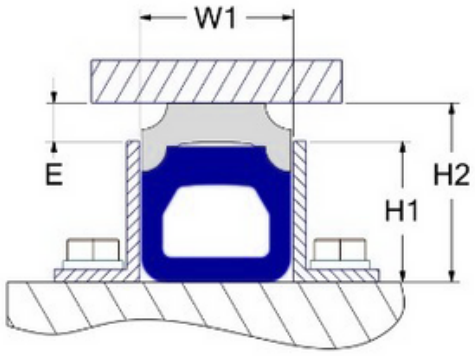


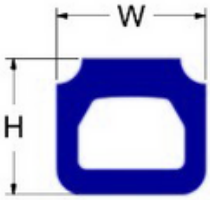
Profile Ref.	Raddi		
	R Axial (fig.1)	RO (fig. 2)	RI (fig. 3)
	mm	mm	mm
AS006-1021	19.00	22.00	25.50
AS010-1021	35.00	35.00	44.50
AS016-1021	41.50	41.50	54.00
AS020-1021	54.00	54.00	83.00
AS054-1021	140.00	120.00	165.00
AS080-1021	220.00	180.00	250.00
AS120-1021	280.00	240.00	330.00

Pressure Data	
Min. Internal pressure	Max. Internal pressure
Mpa	Mpa
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3

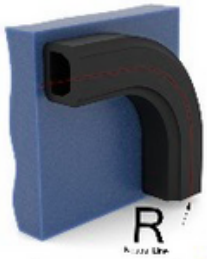
Profile Ref.	AIR Connectors			
	AS-C1	AS-C2	AS-C3	AS-C4
	Plain Tube (mm)	Male Thread	Tube conn. Hose ID (mm)	Plain Tube- O-ring Bore (mm)
AS006-1021	4	M4	4	4
AS010-1021	4 – 6	M4 – M6	4 – 6	4 – 6
AS016-1021	4 – 8	M4 – M8	4 – 8	4 – 8
AS020-1021	4 – 10	M4 – M10	4 – 10	4 – 10
AS054-1021	4 – 16	M4 – M16	4 – 16	4 – 16
AS080-1021	4 – 16	M4 – M16	4 – 16	4 – 16
AS120-1021	4 – 16	M4 – M16	4 – 16	4 – 16
Note:	AS-C2 can also be equipped with: 1/8 NPT, 1/8 BSP, 1/4 NPT or 1/4 BSP			
	Seal can also be equipped with any Flexible hose connection like: AS-C5-1, AS-C5-2			
	Want/Need another connector type? Please contact AST at info@advancedsealingtechnology.nl			

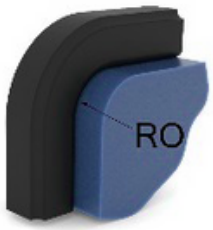
1022 CASTELLATED FLAT PROFILE

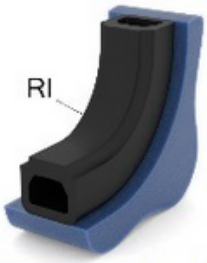




Profile Ref.	Profile Dimensions		Groove Dimensions		
	WxH	E max.	W1 +0.2 / -0.0	H1	H2
	mm	mm	mm	mm	mm
AS006-1022	6.50 x 5.00	1.50	7.00	5.50	6.50
AS014-1022	14.00 x 10.00	3.00	15.00	10.50	13.00
AS021-1022	21.00 x 24.00	5.00	22.00	25.00	29.00
AS035-1022	35.00 x 32.00	10.00	36.00	33.00	42.00
AS052-1022	52.50 x 48.00	15.00	53.50	49.00	63.00
AS070-1022	70.00 x 64.00	20.00	71.00	65.00	84.00
AS087-1022	87.50 x 80.00	25.00	88.50	81.00	105.00
AS105-1022	105.00 x 96.00	30.00	106.00	97.00	126.00





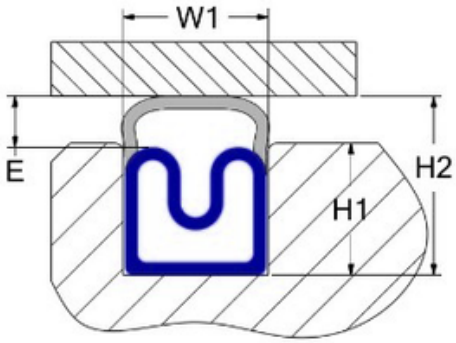


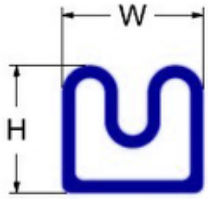
Profile Ref.	Raddi		
	R Axial (fig.1)	RO (fig. 2)	RI (fig. 3)
	mm	mm	mm
AS006-1022	19.05	22.10	25.40
AS014-1022	44.45	34.80	44.50
AS021-1022	38.10	53.85	95.55
AS035-1022	85.60	76.20	117.35
AS052-1022	132.00	120.00	178.00
AS070-1022	175.00	160.00	243.00
AS087-1022	220.00	200.00	304.00
AS105-1022	262.50	240.00	365.00

Pressure Data	
Min. Internal pressure	Max. Internal pressure
Mpa	Mpa
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3

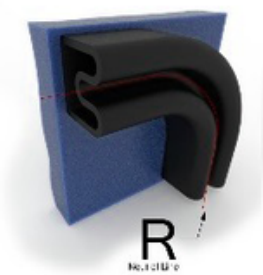
Profile Ref.	AIR Connectors			
	AS-C1	AS-C2	AS-C3	AS-C4
	Plain Tube (mm)	Male Thread	Tube conn. Hose ID (mm)	Plain Tube- O-ring Bore (mm)
AS006-1022	4	M4	4	4
AS014-1022	4 – 6	M4 – M6	4 – 6	4 – 6
AS021-1022	4 – 8	M4 – M8	4 – 8	4 – 8
AS035-1022	4 – 10	M4 – M10	4 – 10	4 – 10
AS052-1022	4 – 16	M4 – M16	4 – 16	4 – 16
AS070-1022	4 – 16	M4 – M16	4 – 16	4 – 16
AS087-1022	4 – 16	M4 – M16	4 – 16	4 – 16
AS105-1022	4 – 16	M4 – M16	4 – 16	4 – 16
Note:	AS-C2 can also be equipped with: 1/8 NPT, 1/8 BSP, 1/4 NPT or 1/4 BSP			
	Seal can also be equipped with any Flexible hose connection like: AS-C5-1, AS-C5-2			
	Want/Need another connector type? Please contact AST at info@advancedsealingtechnology.nl			

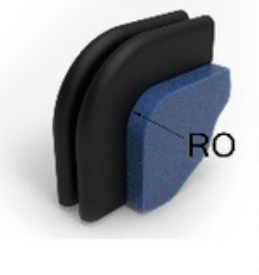
1030 FROGLEG PLAIN PROFILE

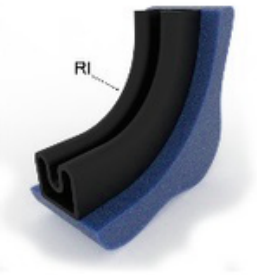




Profile Ref.	Profile Dimensions		Groove Dimensions		
	WxH	E max.	W1 +0.2 / -0.0	H1	H2
	mm	mm	mm	mm	mm
AS011-1030	11.00 x 10.00	4.00	11.50	10.50	14.00
AS016-1030	16.50 x 15.00	6.00	17.00	15.50	21.00
AS022-1030	22.00 x 20.00	8.00	22.50	20.50	28.00
AS027-1030	27.50 x 25.00	10.00	28.00	25.50	35.00
AS033-1030	33.00 x 30.00	12.00	33.50	31.00	42.00
AS049-1030	49.50 x 45.00	18.00	50.00	46.00	63.00
AS066-1030	66.00 x 60.00	24.00	66.50	61.00	84.00
AS099-1030	99.00 x 90.00	36.00	99.50	91.00	126.00





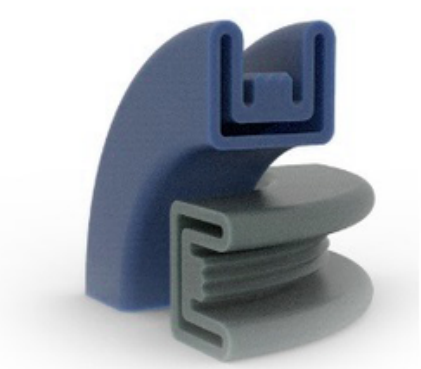


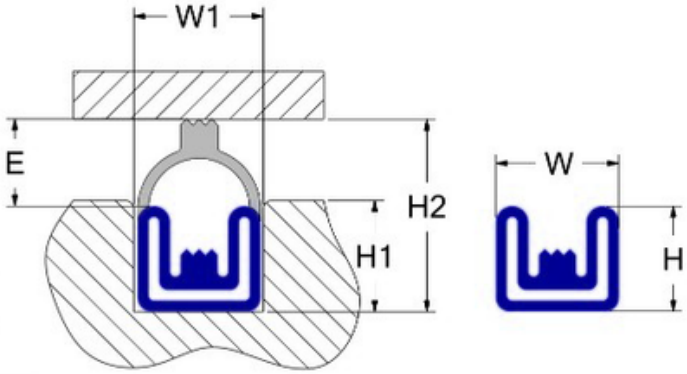
Profile Ref.	Raddi		
	R Axial (fig.1)	RO (fig. 2)	RI (fig. 3)
	mm	mm	mm
AS011-1030	70.00	110.00	160.00
AS016-1030	70.00	150.00	240.00
AS022-1030	90.00	200.00	320.00
AS027-1030	110.00	250.00	400.00
AS033-1030	135.00	300.00	480.00
AS049-1030	200.00	450.00	720.00
AS066-1030	265.00	600.00	960.00
AS099-1030	400.00	900.00	1440.00

Pressure Data	
Min. Internal pressure	Max. Internal pressure
Mpa	Mpa
0.12	0.17
0.12	0.17
0.12	0.17
0.12	0.17
0.12	0.17
0.12	0.17
0.12	0.17
0.12	0.17

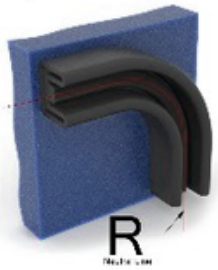
Profile Ref.	AIR Connectors			
	AS-C1	AS-C2	AS-C3	AS-C4
	Plain Tube	Male Thread	Male Thread-Tube combi	Plain Tube- O-ring
AS011-1030	4 – 6	M4 – M6	M4 – M6	4 – 6
AS016-1030	4 – 10	M4 – M10	M6 – M10	4 – 10
AS022-1030	4 – 16	M4 – M16	M6 – M16	4 – 16
AS027-1030	4 – 16	M4 – M16	M6 – M16	4 – 16
AS033-1030	4 – 16	M4 – M16	M6 – M16	4 – 16
AS049-1030	4 – 16	M4 – M16	M6 – M16	4 – 16
AS066-1030	4 – 16	M4 – M16	M6 – M16	4 – 16
AS099-1030	4 – 16	M4 – M16	M6 – M16	4 – 16
Note:	AS-C2 can also be equipped with: 1/8 NPT, 1/8 BSP, 1/4 NPT or 1/4 BSP			
	Seal can also be equipped with any Flexible hose connection like: AS-C5-1, AS-C5-2			
	Want/Need another connector type? Please contact AST at info@advancedsealingtechnology.nl			

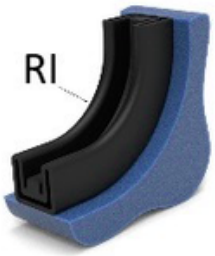
1031 FROGLEG CROWN PROFILE





Profile Ref.	Profile Dimensions		Groove Dimensions		
	WxH	E max.	W1 +0.2 / -0.0	H1	H2
	mm	mm	mm	mm	mm
AS014-1031	13.72 x 11.68	9.53	14.50	12.50	21.21
AS017-1031	16.67 x 11.11	9.40	17.00	11.40	22.23
AS023-1031	22.22 x 15.88	6.35	23.00	16.00	22.23
AS045-1031	44.45 x 34.93	31.75	45.50	35.50	66.68
AS060-1031	60.00 x 50.00	42.50	61.00	51.00	92.50
AS080-1031	80.00 x 70.00	59.50	81.00	71.00	129.50
AS100-1031	100.00 x 90.00	76.50	101.00	91.00	166.50



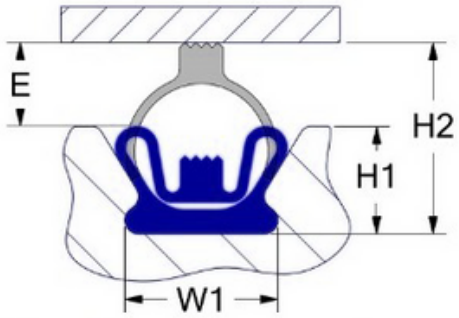


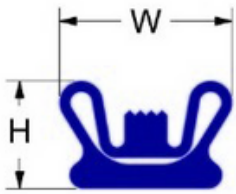
Profile Ref.	Raddi		
	R Axial (fig.1)	RO (fig. 2)	RI (fig. 3)
	mm	mm	mm
AS014-1031	50.8	38.10	152.40
AS017-1031	63.50	44.45	177.80
AS023-1031	85.00	63.50	254.00
AS045-1031	169.00	140.00	560.00
AS060-1031	228.00	200.00	800.00
AS080-1031	304.00	280.00	1120.00
AS100-1031	380.00	360.00	1440.00

Pressure Data	
Min. Internal pressure	Max. Internal pressure
Mpa	Mpa
0.08	0.17
0.08	0.17
0.08	0.17
0.08	0.17
0.08	0.17
0.08	0.17
0.08	0.17

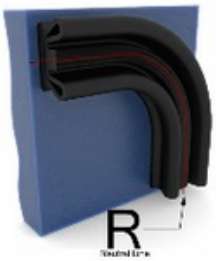
Profile Ref.	AIR Connectors			
	AS-C1	AS-C2	AS-C3	AS-C4
	Plain Tube	Male Thread	Male Thread-Tube combi	Plain Tube- O-ring
AS014-1031	4 – 6	M4 – M6	M4 – M6	4 – 6
AS017-1031	4 – 10	M4 – M10	M6 – M10	4 – 10
AS023-1031	4 – 16	M4 – M16	M6 – M16	4 – 16
AS045-1031	4 – 16	M4 – M16	M6 – M16	4 – 16
AS060-1031	4 – 16	M4 – M16	M6 – M16	4 – 16
AS080-1031	4 – 16	M4 – M16	M6 – M16	4 – 16
AS100-1031	4 – 16	M4 – M16	M6 – M16	4 – 16
Note:	AS-C2 can also be equipped with: 1/8 NPT, 1/8 BSP, 1/4 NPT or 1/4 BSP			
	Seal can also be equipped with any Flexible hose connection like: AS-C5-1, AS-C5-2			
	Want/Need another connector type? Please contact AST at info@advancedsealingtechnology.nl			

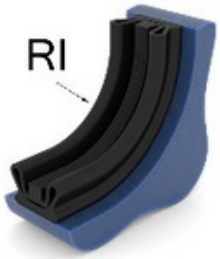
1032 SNAP-IN FROGLEG CROWN PROFILE





Profile Ref.	Profile Dimensions		Groove Dimensions		
	WxH	E max.	W1 +0.2 / -0.0	H1	H2
	mm	mm	mm	mm	mm
AS015-1032	15.88 x 12.70	9.53	16.30	13.10	22.63
AS017-1032	17.46 x 12.70	11.11	18.00	13.10	24.21
AS025-1032	25.40 x 15.88	12.70	16.30	16.30	29.00
AS050-1032	50.80 x 30.96	30.96	61.72	31.60	62.54

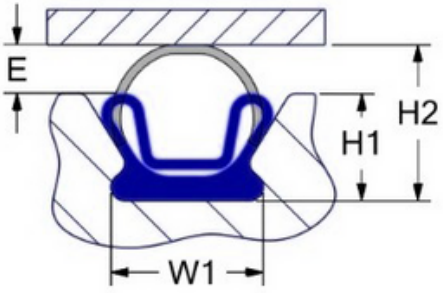


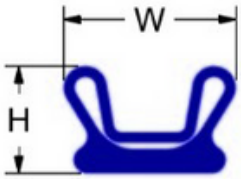


Profile Ref.	Raddi			Pressure Data	
	R Axial (fig.1)	RO (fig. 2)	RI (fig. 3)	Min. Internal pressure	Max. Internal pressure
	mm	mm	mm	Mpa	Mpa
AS015-1032	47.50	127.00	203.20	0.8	0.1
AS017-1032	50.80	127.00	203.20	0.87	0.17
AS025-1032	87.12	152.40	254.00	0.87	0.17
AS050-1032	127.00	203.20	406.60	0.87	0.17

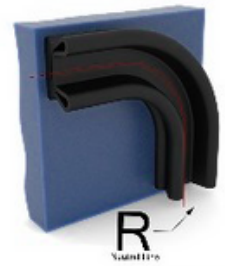
Profile Ref.	AIR Connectors	
	AS-C6-1	AS-C6-2
	Crimped hose 5x9.5mm	Crimped hose 6x12mm
AS015-1032	x	-
AS017-1032	x	-
AS025-1032	x	-
AS050-1032	-	x
Note:	Want/Need another connector type? Please contact AST at info@advancedsealingtechnology.nl	

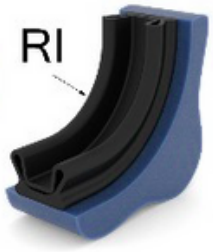
1033 SNAP-IN FROGLEG PLAIN PROFILE





Profile Ref.	Profile Dimensions		Groove Dimensions		
	WxH	E max.	W1 +0.2 / -0.0	H1	H2
	mm	mm	mm	mm	mm
AS015-1033	15.88 x 12.70	5.20	16.30	13.10	17.90
AS017-1033	17.46 x 12.70	6.30	18.00	13.10	19.00
AS025-1033	25.40 x 15.88	9.50	16.30	16.30	25.32
AS050-1033	50.80 x 30.96	20.50	61.72	31.60	51.50



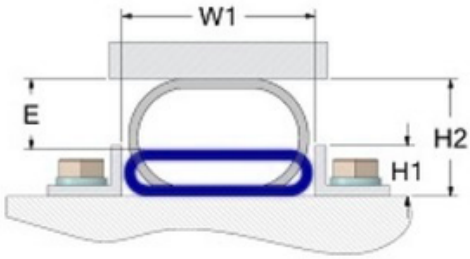


Profile Ref.	Raddi		
	R Axial (fig.1)	RO (fig. 2)	RI (fig. 3)
	mm	mm	mm
AS015-1033	47.50	127.00	203.20
AS017-1033	50.80	127.00	203.20
AS025-1033	87.12	152.40	254.00
AS050-1033	127.00	203.20	406.60

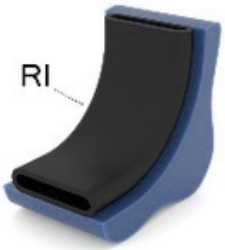
Pressure Data	
Min. Internal pressure	Max. Internal pressure
Mpa	Mpa
0.1	0.17
0.1	0.17
0.1	0.17
0.1	0.17

Profile Ref.	AIR Connectors	
	AS-C6-1	AS-C6-2
	Crimped hose 5x9.5mm	Crimped hose 6x12mm
AS015-1033	x	-
AS017-1033	x	-
AS025-1033	x	-
AS050-1033	-	x
Note:	Want/Need another connector type? Please contact AST at info@advancedsealingtechnology.nl	

1041 FLAT O-RING PROFILE



Profile Ref.	Profile Dimensions		Groove Dimensions		
	WxH	E max.	W1 +0.2 / -0.0	H1	H2
	mm	mm	mm	mm	mm
AS019-1041	19.05 x 6.35	4.76	20.00	7.00	11.01
AS032-1041	31.75 x 9.53	9.53	32.00	10.50	19.06
AS038-1041	38.10 x 12.70	11.11	38.00	13.50	23.81
AS050-1041	50.50 x 12.70	19.05	51.50	13.50	31.75
AS064-1041	63.50 x 12.70	22.23	64.50	13.50	34.93
AS076-1041	76.20 x 19.05	25.40	77.50	20.00	44.45
AS083-1041	82.55 x 12.70	25.40	83.50	13.50	38.10
AS102-1041	101.6 x 25.40	30.50	102.50	26.50	55.90
AS143-1041	143.26 x 30.73	44.45	144.50	32.00	75.18

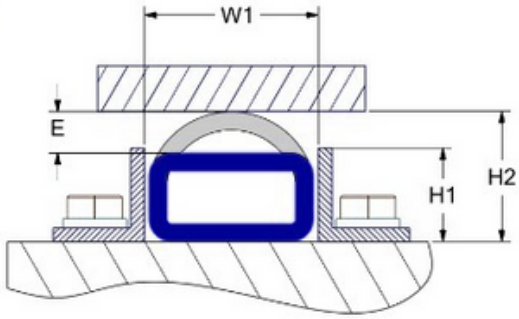


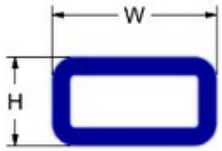
Profile Ref.	Raddi		
	R Axial (fig.1)	RO (fig. 2)	RI (fig. 3)
	mm	mm	mm
AS019-1041	50.00	38.00	150.00
AS032-1041	76.00	51.00	203.00
AS038-1041	98.00	82.00	265.00
AS050-1041	115.00	102.00	300.00
AS064-1041	136.00	124.00	362.00
AS076-1041	152.00	140.00	407.00
AS083-1041	167.00	163.00	425.00
AS102-1041	202.00	203.00	457.00
AS143-1041	252.00	249.00	501.00

Pressure Data	
Min. Internal pressure	Max. Internal pressure
Mpa	Mpa
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3

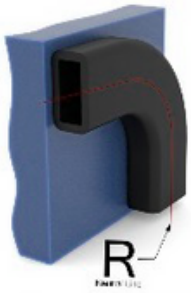
Profile Ref.	AIR Connectors			
	AS-C1	AS-C2	AS-C3	AS-C4
	Plain Tube (mm)	Male Thread	Tube conn. Hose ID (mm)	Plain Tube- O-ring Bore (mm)
AS019-1041	4 – 8	M4 - M8	4 – 8	4 – 8
AS032-1041	4 – 16	M4 – M16	4 – 16	4 – 16
AS038-1041	4 – 16	M4 – M16	4 – 16	4 – 16
AS050-1041	4 – 16	M4 – M16	4 – 16	4 – 16
AS064-1041	4 – 16	M4 – M16	4 – 16	4 – 16
AS076-1041	4 – 16	M4 – M16	4 – 16	4 – 16
AS083-1041	4 – 16	M4 – M16	4 – 16	4 – 16
AS102-1041	4 – 16	M4 – M16	4 – 16	4 – 16
AS143-1041	4 – 16	M4 – M16	4 – 16	4 – 16
Note:	AS-C2 can also be equipped with: 1/8 NPT, 1/8 BSP, 1/4 NPT or 1/4 BSP			
	Seal can also be equipped with any Flexible hose connection like: AS-C5-1, AS-C5-2			
	Want/Need another connector type? Please contact AST at info@advancedsealingtechnology.nl			

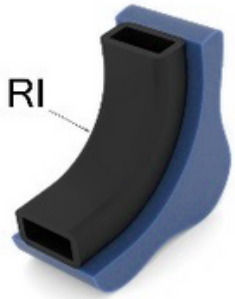
1050 RECTANGULAR PROFILE





Profile Ref.	Profile Dimensions		Groove Dimensions		
	WxH	E max.	W1 +0.2 / -0.0	H1	H2
	mm	mm	mm	mm	mm
AS019-1050	19.00 x 8.00	6.00	20.00	8.50	14.00
AS028-1050	28.50 x 14.25	9.00	29.50	15.00	23.25
AS038-1050	38.00 x 19.00	12.50	39.00	20.00	31.50
AS057-1050	57.00 x 28.50	18.00	58.00	29.50	46.50
AS078-1050	78.00 x 38.00	24.00	79.00	39.00	62.00
AS095-1050	95.00 x 47.50	30.00	96.00	48.50	77.50
AS114-1050	114.00 x 57.00	35.00	115.00	58.00	92.00
AS133-1050	133.00 x 66.50	40.00	134.00	67.50	106.50



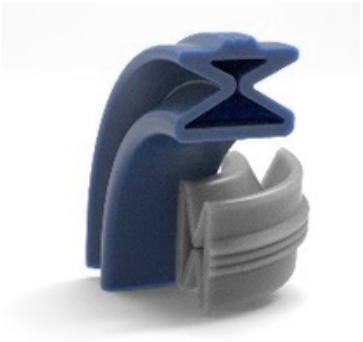


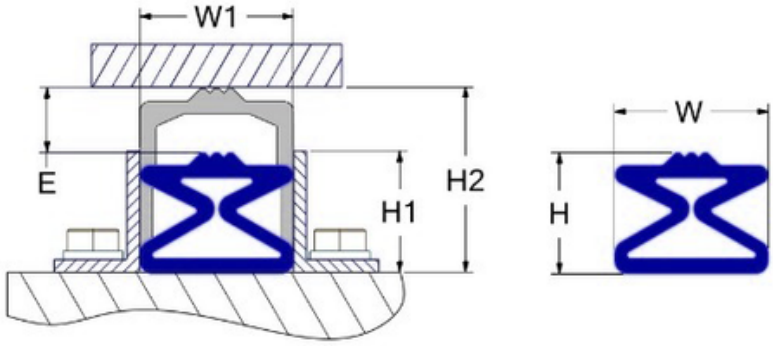
Profile Ref.	Raddi		
	R Axial (fig.1)	RO (fig. 2)	RI (fig. 3)
	mm	mm	mm
AS019-1050	50.00	38.00	150.00
AS028-1050	74.00	50.00	203.00
AS038-1050	98.00	102.00	300.00
AS057-1050	134.00	203.00	457.00
AS078-1050	160.00	225.00	478.00
AS095-1050	252.00	254.00	518.00
AS114-1050	350.00	350.00	620.00
AS133-1050	420.00	420.00	750.00

Pressure Data	
Min. Internal pressure	Max. Internal pressure
Mpa	Mpa
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3
0.2	0.3

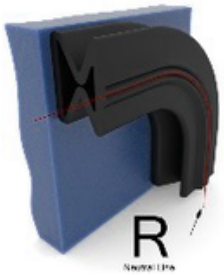
Profile Ref.	AIR Connectors			
	AS-C1	AS-C2	AS-C3	AS-C4
	Plain Tube (mm)	Male Thread	Tube conn. Hose ID (mm)	Plain Tube- O-ring Bore (mm)
AS019-1050	4 – 8	M4 – M8	4 – 8	4 – 8
AS028-1050	4 – 10	M4 – M10	4 – 10	4 – 10
AS038-1050	4 – 16	M4 – M16	4 – 16	4 – 16
AS057-1050	4 – 16	M4 – M16	4 – 16	4 – 16
AS078-1050	4 – 16	M4 – M16	4 – 16	4 – 16
AS095-1050	4 – 16	M4 – M16	4 – 16	4 – 16
AS114-1050	4 – 16	M4 – M16	4 – 16	4 – 16
AS133-1050	4 – 16	M4 – M16	4 – 16	4 – 16
Note:	AS-C2 can also be equipped with: 1/8 NPT, 1/8 BSP, 1/4 NPT or 1/4 BSP			
	Seal can also be equipped with any Flexible hose connection like: AS-C5-1, AS-C5-2			
	Want/Need another connector type? Please contact AST at info@advancedsealingtechnology.nl			

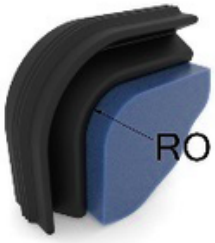
1060 SCISSOR STANDARD PROFILE

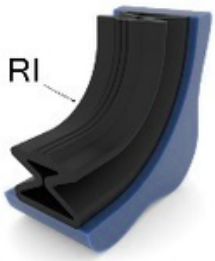




Profile Ref.	Profile Dimensions		Groove Dimensions		
	WxH	*E max.*	*W1 +0.2 / -0.0*	*H1*	*H2*
	mm	mm	mm	mm	mm
AS024-1060	24.00 x 19.00	10.00	25.00	20.00	29.00
AS036-1060	36.00 x 28.50	15.00	37.00	29.50	43.50
AS048-1060	48.00 x 38.00	20.00	49.00	39.00	58.00
AS060-1060	60.00 x 47.50	25.00	61.00	48.50	72.50
AS072-1060	72.00 x 57.00	30.00	73.00	58.00	87.00
AS084-1060	84.00 x 66.50	35.00	85.00	67.50	101.50
AS096-1060	96.00 x 76.00	40.00	97.00	77.00	116.00



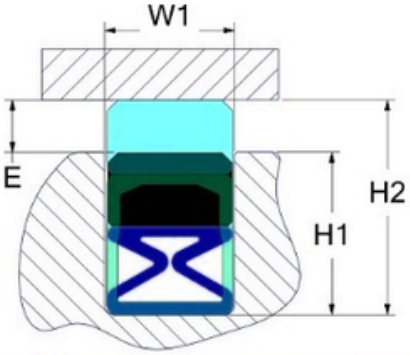


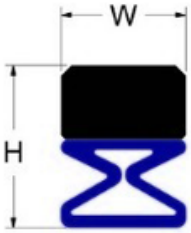


Profile Ref.	Raddi			Pressure Data	
	R Axial (fig.1)	*RO (fig. 2)*	*RI (fig. 3)*	*Min. Internal pressure*	*Max. Internal pressure*
	mm	mm	mm	Mpa	Mpa
AS024-1060	85.00	64.00	256.00	0.2	0.3
AS036-1060	142.00	102.00	412.00	0.2	0.3
AS048-1060	172.00	146.00	505.00	0.2	0.3
AS060-1060	228.00	200.00	800.00	0.2	0.3
AS072-1060	296.00	269.00	1050.00	0.2	0.3
AS084-1060	304.00	280.00	1120.00	0.2	0.3
AS096-1060	380.00	360.00	1440.00	0.2	0.3

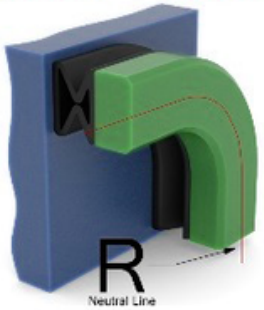
Profile Ref.	AIR Connectors			
	AS-C1	*AS-C2*	*AS-C3*	*AS-C4*
	Plain Tube (mm)	Male Thread	Tube conn. Hose ID (mm)	Plain Tube- O-ring Bore (mm)
AS024-1060	4 – 8	M4 – M8	4 – 8	4 – 8
AS036-1060	4 – 10	M4 – M10	4 – 10	4 – 10
AS048-1060	4 – 16	M4 – M16	4 – 16	4 – 16
AS060-1060	4 – 16	M4 – M16	4 – 16	4 – 16
AS072-1060	4 – 16	M4 – M16	4 – 16	4 – 16
AS084-1060	4 – 16	M4 – M16	4 – 16	4 – 16
AS096-1060	4 – 16	M4 – M16	4 – 16	4 – 16
Note:	AS-C2 can also be equipped with: 1/8 NPT, 1/8 BSP, 1/4 NPT or 1/4 BSP			
	Seal can also be equipped with any Flexible hose connection like: AS-C5-1, AS-C5-2			
	Want/Need another connector type? Please contact AST at info@advancedsealingtechnology.nl			

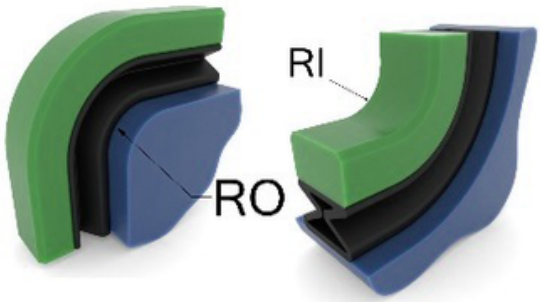
1061 SCISSOR STANDARD PROFILE WITH PAD





Profile Ref.	Profile Dimensions		Groove Dimensions		
	WxH	E max.	W1 +0.2 / -0.0	H1 varies with pressure and application	H2
	mm	mm	mm		mm
AS024-1061	24.00 x 29.00	8.00	25.00	Please use the External pressure table for the max. Gap combined with external pressure. Always **Contact Advanced Sealing Technology** before determining your Groove height.	37.00
AS036-1061	36.00 x 48.50	12.00	37.00		60.50
AS048-1061	48.00 x 58.00	16.00	49.00		74.00
AS060-1061	60.00 x 82.50	20.00	61.00		102.50
AS072-1061	72.00 x 92.00	24.00	73.00		116.00
AS084-1061	84.00 x 106.50	28.00	85.00		134.50
AS096-1061	96.00 x 116.00	32.00	97.00		148.00

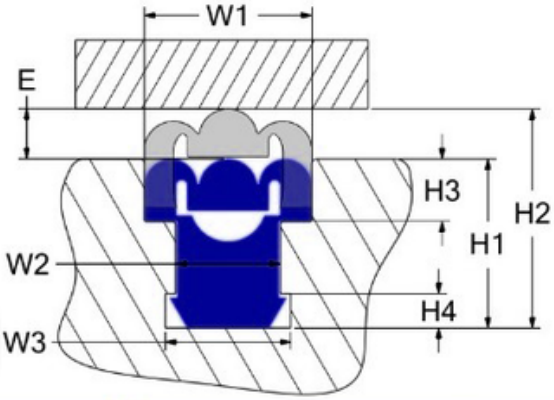


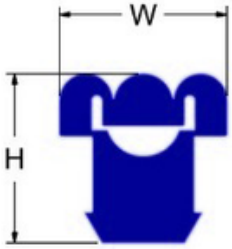


Profile Ref.	Raddi			Pressure Data			
	R Axial (fig.1)	RO (fig. 2)	RI (fig. 3)	Min. Internal press.	Max. Internal press.	Max. External pressure VS Gap (H2-H1)	
	mm	mm	mm	Mpa	Mpa	Max. Gap / Pressure	Max. Gap / Pressure
AS024-1061	170.00	96.00	512.00	0.6	Depends on External Pressure. Please **contact Advanced Sealing Technology**	5.50mm / 0.5 Mpa	1.00mm / 2.5 Mpa
AS036-1061	284.00	153.00	824.00	0.6		7.00mm / 0.5 Mpa	1.00mm / 3.0 Mpa
AS048-1061	244.00	219.00	1010.00	0.6		11.00mm / 0.5 Mpa	1.00mm / 3.0 Mpa
AS060-1061	456.00	300.00	1600.00	0.85		10.00mm / 0.75 Mpa	1.00mm / 5.0 Mpa
AS072-1061	592.00	403.50	2010.00	0.85		14.00mm / 0.75 Mpa	1.00mm / 5.0 Mpa
AS084-1061	608.00	420.00	2240.00	1.1		8.00mm / 1.0 Mpa	1.00mm / 7.5 Mpa
AS096-1061	760.00	540.00	2880.00	1.1		12.00mm / 1.0 Mpa	1.00mm / 7.5 Mpa

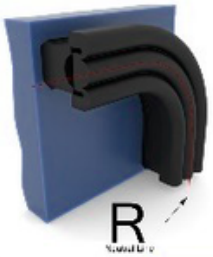
Profile Ref.	AIR Connectors			
	AS-C1	AS-C2	AS-C3	AS-C4
	Plain Tube (mm)	Male Thread	Tube conn. Hose ID (mm)	Plain Tube- O-ring Bore (mm)
AS024-1061	4 – 8	M4 – M8	4 – 8	4 – 8
AS036-1061	4 – 10	M4 – M10	4 – 10	4 – 10
AS048-1061	4 – 16	M4 – M16	4 – 16	4 – 16
AS060-1061	4 – 16	M4 – M16	4 – 16	4 – 16
AS072-1061	4 – 16	M4 – M16	4 – 16	4 – 16
AS084-1061	4 – 16	M4 – M16	4 – 16	4 – 16
AS096-1061	4 – 16	M4 – M16	4 – 16	4 – 16
Note:	AS-C2 can also be equipped with: 1/8 NPT, 1/8 BSP, 1/4 NPT or 1/4 BSP			
	Seal can also be equipped with any Flexible hose connection like: AS-C5-1, AS-C5-2			
	Want/Need another connector type? Please contact AST at info@advancedsealingtechnology.nl			

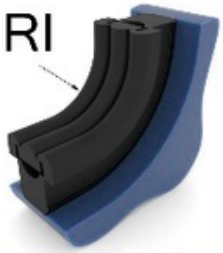
1080 BREAD PROFILE





Profile Ref.	Profile Dimensions		Groove Dimensions		
	WxH	E max.	W1 +0.2 / -0.0	H1 +0.2 / -0.0	H2
	mm	mm	mm	mm	mm
AS016-1080	16.00 x 16.20	4.50	16.50	16.50	20.70
AS020-1080	20.00 x 20.00	6.00	20.50	20.30	26.00
AS030-1080	30.00 x 30.00	8.00	30.50	30.50	38.00
AS040-1080	40.00 x 40.00	11.00	40.50	40.50	51.00
AS050-1080	50.00 x 50.00	14.00	50.50	50.50	64.00
AS060-1080	60.00 x 60.00	17.00	60.50	60.60	77.00
AS070-1080	70.00 x 70.00	20.00	71.00	70.70	90.00
AS080-1080	80.00 x 80.00	23.00	81.00	80.70	103.00
			Please contact AST for additional Groove dimensions and Tolerances		



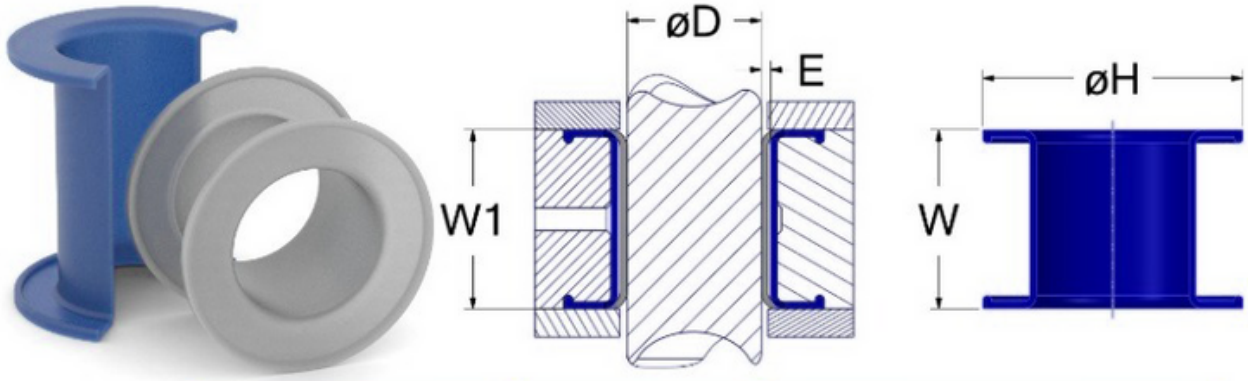


Profile Ref.	Raddi		
	R Axial (fig.1)	RO (fig. 2)	RI (fig. 3)
	mm	mm	mm
AS016-1080	45.00	50.00	75.00
AS020-1080	60.00	65.00	85.00
AS030-1080	87.00	87.50	125.00
AS040-1080	114.00	120.00	165.00
AS050-1080	141.00	150.00	112.50
AS060-1080	168.00	180.00	250.00
AS070-1080	195.00	210.00	290.00
AS080-1080	220.00	240.00	330.00

Pressure Data	
Min. Internal pressure	Max. Internal pressure
Mpa	Mpa
0.1	0.17
0.1	0.17
0.1	0.17
0.1	0.17
0.1	0.17
0.1	0.17
0.1	0.17
0.1	0.17

Profile Ref.	AIR Connectors		
	AS-C5-1	AS-C6-1	AS-C6-2
	Vulc. Flex hose 3x6mm	Crimped hose 5x9.5mm	Crimped hose 6x12mm
AS016-1080	x	-	-
AS020-1080	x	-	-
AS030-1080	x	x	-
AS040-1080	x	x	x
AS050-1080	x	x	x
AS060-1080	x	x	x
AS070-1080	x	x	x
AS080-1080	x	x	x
Note:	Want/Need another connector type? Please contact AST at info@advancedsealingtechnology.nl		

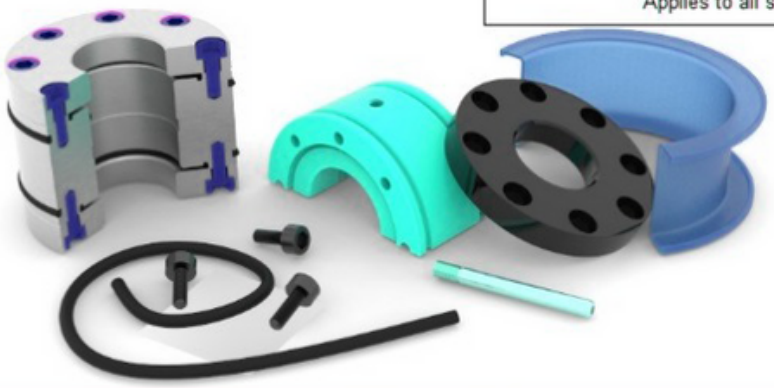
2070 SMALL ID INFLATABLE CASSETTE SEAL



Profile Ref.	Profile Dimensions		Groove Dimensions	Sealing Range	
	WxH	E max.	W1 -0.1 / -0.2	oD min.	oD max.
	mm	mm	mm	mm	mm
AS012-1070	30.00 x 35.00	1.50	30.00	11.75	12.25
AS016-1070	30.00 x 39.00	1.50	30.00	15.75	16.25
AS020-1070	35.00 x 50.00	2.00	35.00	19.50	20.50
AS025-1070	35.00 x 55.00	2.50	35.00	24.25	25.75
AS030-1070	40.00 x 60.00	3.00	40.00	29.00	31.00
AS040-1070	40.00 x 70.00	3.00	40.00	38.00	41.00
AS050-1070	45.00 x 80.00	3.00	45.00	48.00	51.00
AS060-1070	50.00 x 90.00	4.00	50.00	58.00	62.00
AS070-1070	50.00 x 100.00	4.00	50.00	68.00	72.00
AS080-1070	60.00 x 110.00	4.00	60.00	78.00	82.00
AS090-1070	65.00 x 120.00	5.00	65.00	87.00	92.00
AS100-1070	75.00 x 140.00	6.00	75.00	97.00	102.00
AS110-1070	85.00 x 150.00	7.00	85.00	107.00	112.00
AS120-1070	90.00 x 160.00	8.00	90.00	116.00	122.00

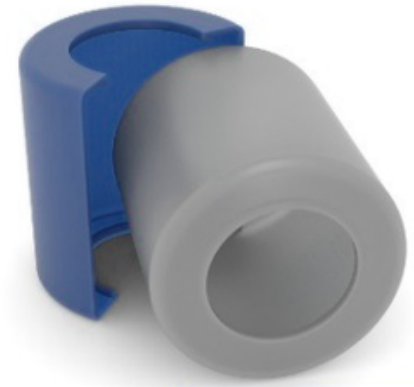
Profile Ref.	AIR Connectors (Installed onto Hardware)
Apply to all	Any connector can be used and installed onto the hardware depending your design and wishes, please contact AST for more Details

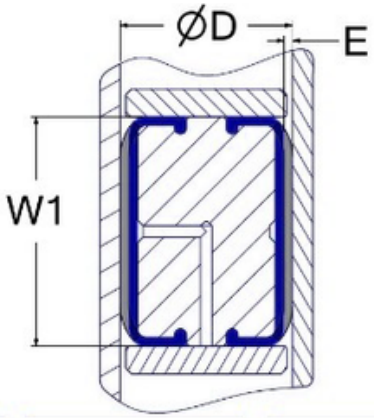
Pressure Data	
Min. Internal pressure	Max. Internal pressure
Mpa	Mpa
0.15	0.2
Applies to all seals	

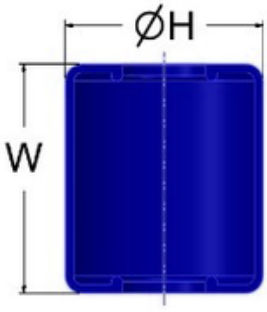


Hardware and Necessaties		
1070 is supplied as a plug-play set, this means Advanced Sealing Technologies B.V. Will supply all hardware which is needed to make the installation and transition as easy as possible such as:		
* Plastic and/or metal hardware parts	* Air-hose	* Fasteners
* Needed Air-connections / Fittings	* 1070 Small ID Sealing Seal	* On-site installation

2071 SMALL OD INFLATABLE CASSETTE SEAL



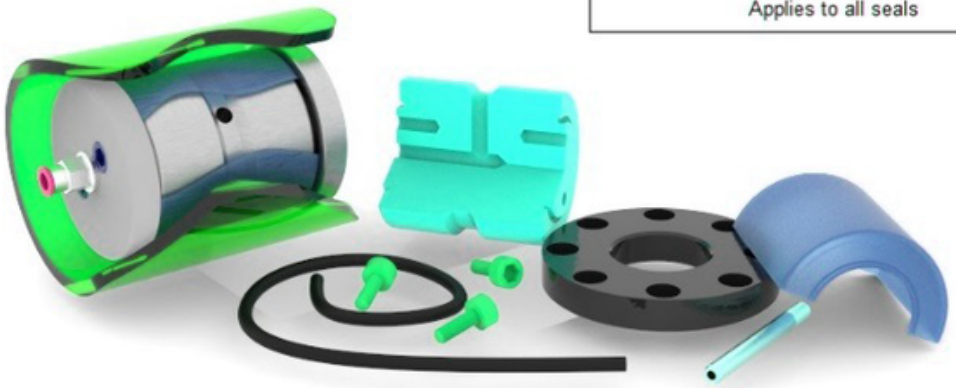




Profile Ref.	Profile Dimensions		Groove Dimensions	Sealing Range	
	WxoH	E max.	W1 -0.1 / -0.2	oD min.	oD max.
	mm	mm	mm	mm	mm
AS020-1071	30.00 x 17.50	2.50	30.00	17.70	20.00
AS025-1071	35.00 x 22.50	2.50	35.00	22.70	25.00
AS030-1071	40.00 x 27.00	3.00	40.00	27.20	30.00
AS035-1071	40.00 x 32.00	3.00	40.00	32.20	35.00
AS040-1071	40.00 x 37.00	3.00	40.00	37.20	40.00
AS045-1071	50.00 x 42.00	3.00	50.00	42.20	45.00
AS050-1071	50.00 x 46.00	4.00	50.00	46.20	50.00
AS060-1071	50.00 x 56.00	4.00	50.00	56.20	60.00
AS070-1071	50.00 x 66.00	4.00	50.00	66.20	70.00
AS080-1071	60.00 x 75.00	5.00	60.00	75.50	80.00
AS090-1071	70.00 x 84.00	6.00	70.00	84.50	90.00
AS100-1071	80.00 x 94.00	6.00	80.00	94.50	100.00
AS110-1071	90.00 x 103.00	7.00	90.00	103.50	110.00
AS120-1071	100.00 x 113.00	7.00	100.00	113.50	120.00

Profile Ref.	AIR Connectors (Installed onto Hardware)
Apply to all	Any connector can be used and installed onto the hardware depending your design and wishes, please contact AST for more Details

Pressure Data	
Min. Internal pressure	Max. Internal pressure
Mpa	Mpa
0.15	0.2
Applies to all seals	

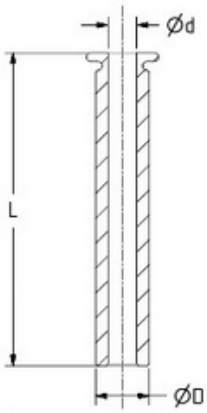


Hardware and Necessaties

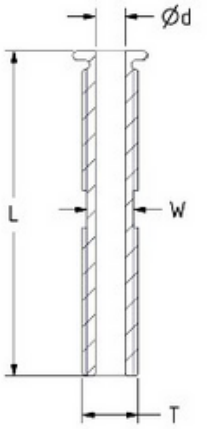
071 is supplied as a plug-play set, this means Advanced Sealing Technologies B.V. Will supply all hardware which is needed to make th
nstallation and transition as easy as possible such as:

Plastic and/or metal hardware parts	* Air-hose	* Fasteners
Needed Air-connections / Fittings	* 1070 Small ID Sealing Seal	* On-site installation

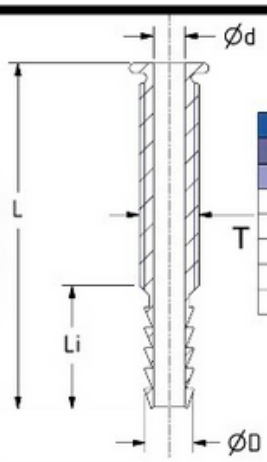
AIR CONNECTOR TYPES



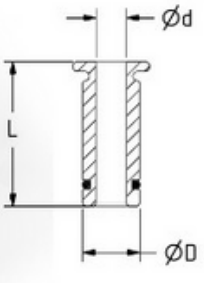
AS-C1, Plain Tube		
øD	ød	L
mm	mm	mm
4	1.5	50
6	3	50
8	4	60
10	6	70
12	8	70
14	8	80
16	10	80

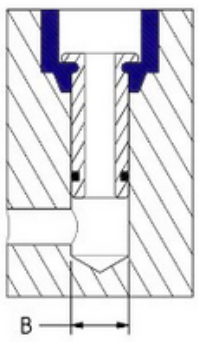


AS-C2, Male Thread			
øT	ød	L	W
mm	mm	mm	mm
M4	1.5	50	3
M6	3	50	5
M8	4	60	6
M10	6	70	8
M12	8	70	10
M14	8	80	11
M16	10	80	13



AS-C3, Male Thread - Tube Connector				
øD	øT	ød	L	Li
mm	mm	mm	mm	mm
4	M6	1.5	50	12
6	M8	3	50	20
8	M10	4	60	20
10	M14	6	70	25
12	M16	8	70	25

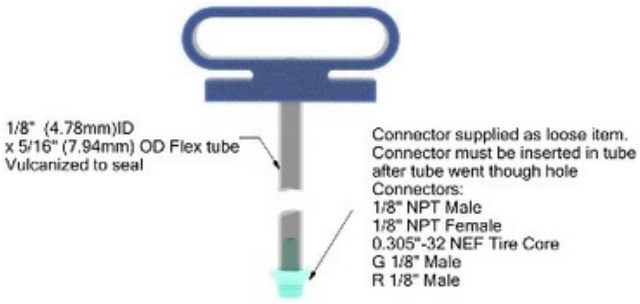




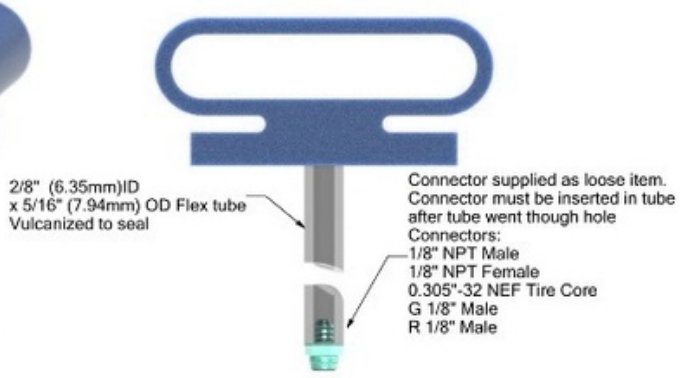
AS-C4, Plain Tube - O-ring			
øD	ød	L	B (h8)
mm	mm	mm	mm
4	1.2	20	4
6	2	25	6
8	3	30	8
10	4	30	10
12	5	30	12

AIR CONNECTOR TYPES

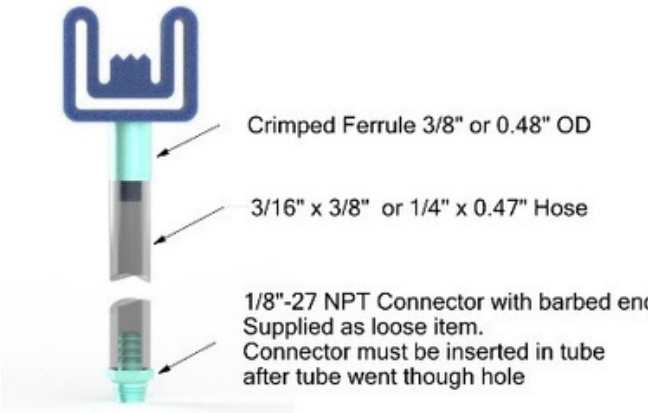
AS-C5-1



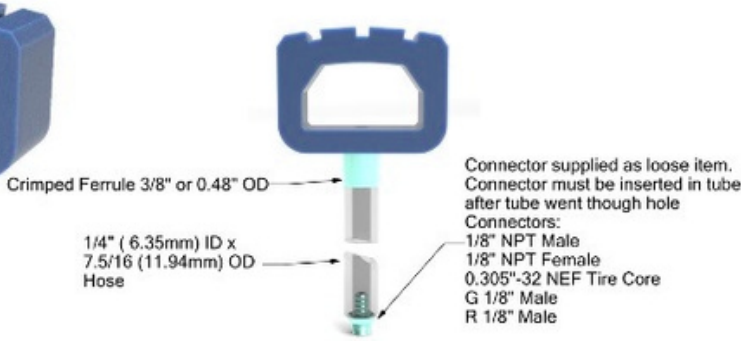
AS-C5-2



AS-C6-1

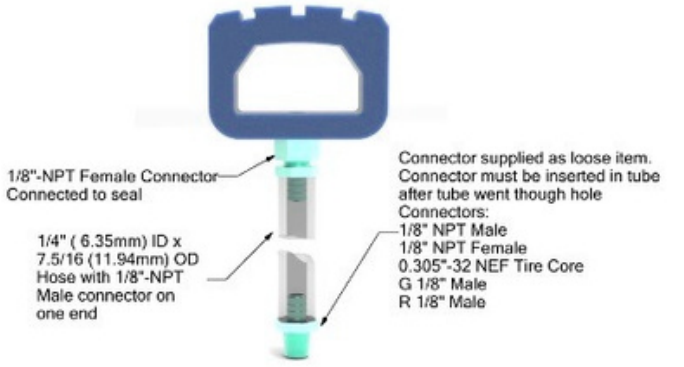


AS-C6-2

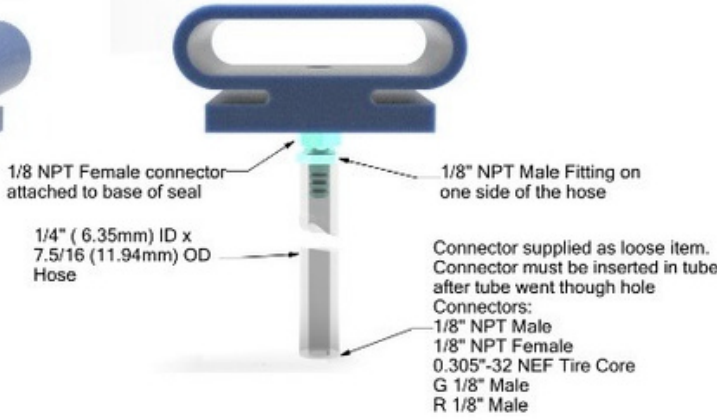


AIR CONNECTOR TYPES

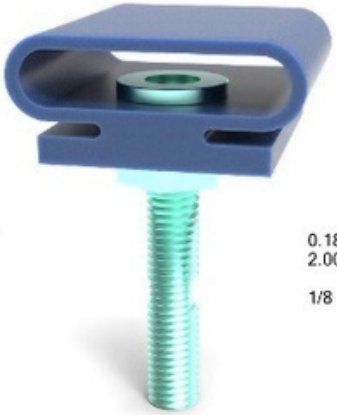
AS-C7-1

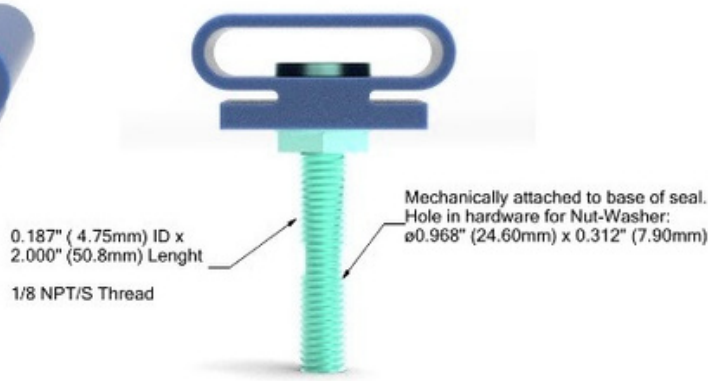


AS-C7-2

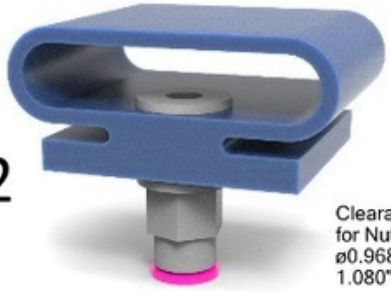


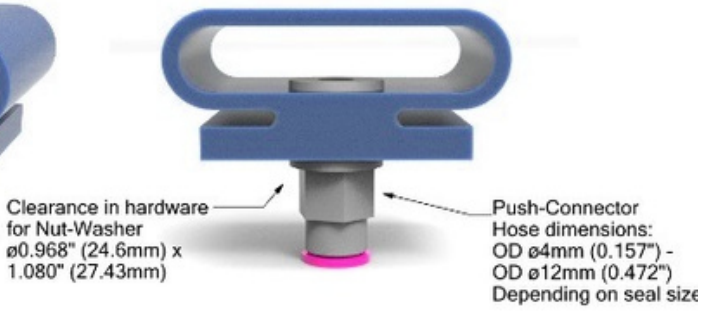
AS-C8-1





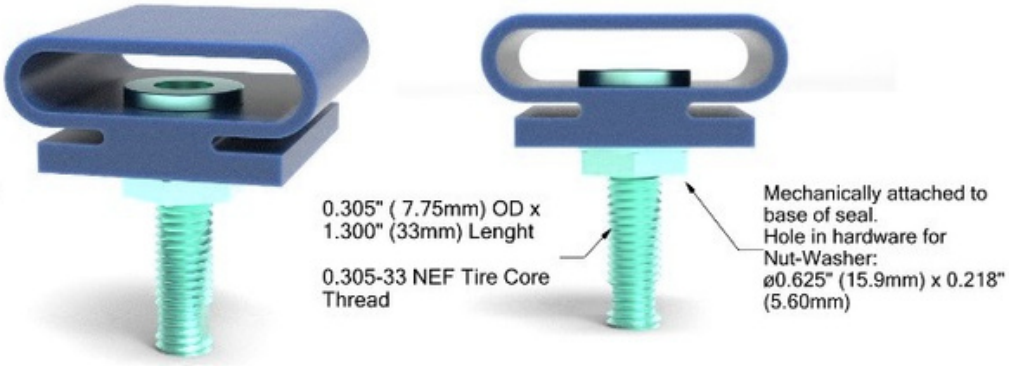
AS-C8-2



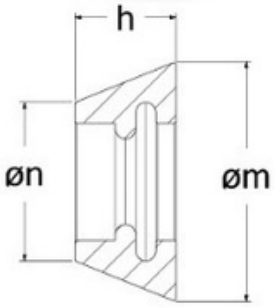


AIR CONNECTOR TYPES

AS-C8-3



Rubber Cones on Connector Types; AS-C1 to AS-C4

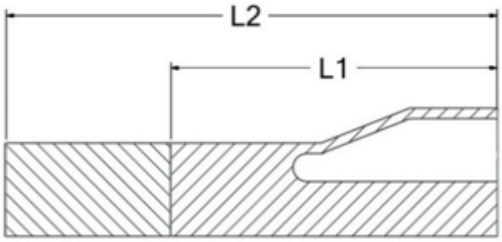


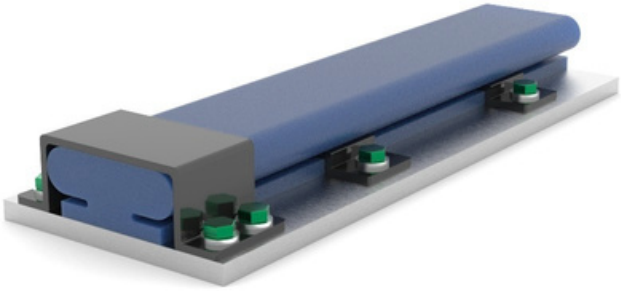
Rubber Cones				
m x n x h	AS-C1	AS-C2	AS-C3	AS-C4
mm	øD (mm)	øM (mm)	ØD-øT (mm)	ØD (mm)
8 x 6 x 4	4	M4	-	4
12 x 10 x 6	6	M6	4 – M6	6
14 x 12 x 6	8	M8	6 – M8	8
21 x 14 x 10	10	M10	8 -M10	10
24 x 16 x 10	12	M12	10 – M12	12
26 x 18 x 12	14	M14	12 - M14	-
28 x 20 x 12	16	M16	-	-

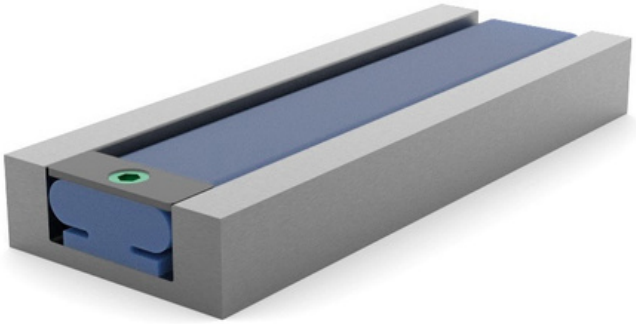
Special Air Connectors

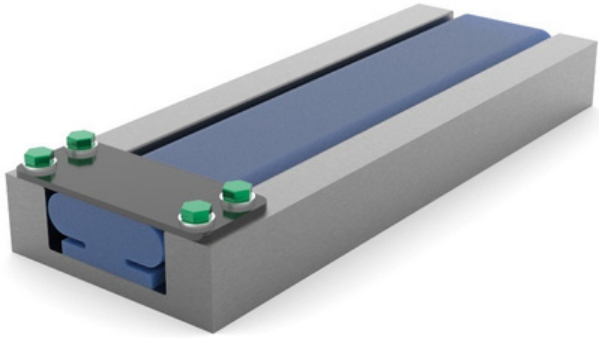
Coudn't find the airconnector you had in mind?
Please contact the AST-Team regarding your airconnector
info@advancedsealingtechnology.nl - Tel. 0031 164 743 113

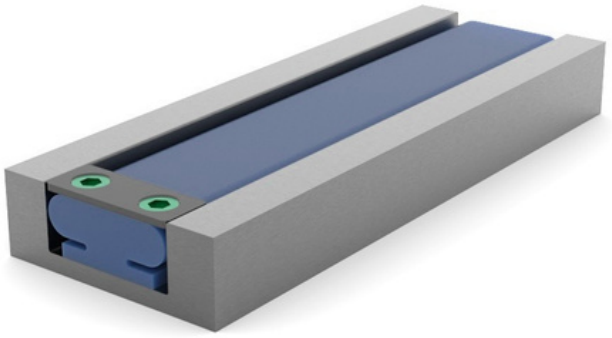
ENDPLUGS AND CLAMPING



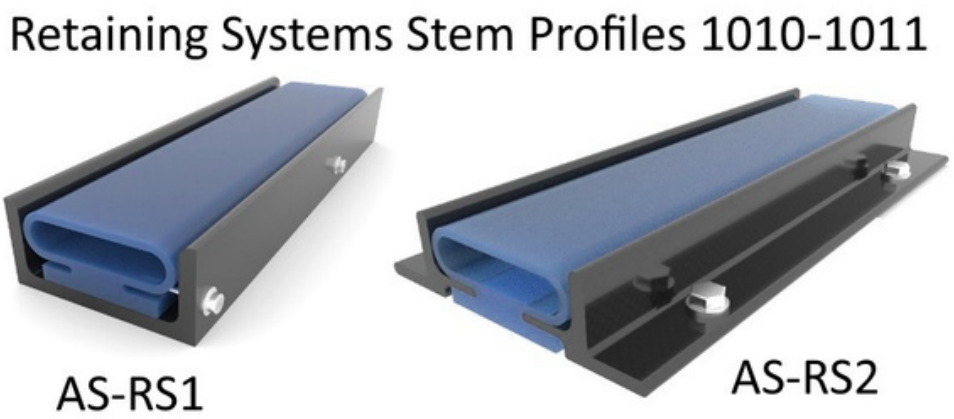


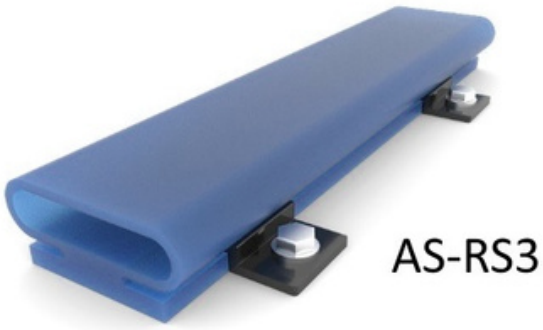






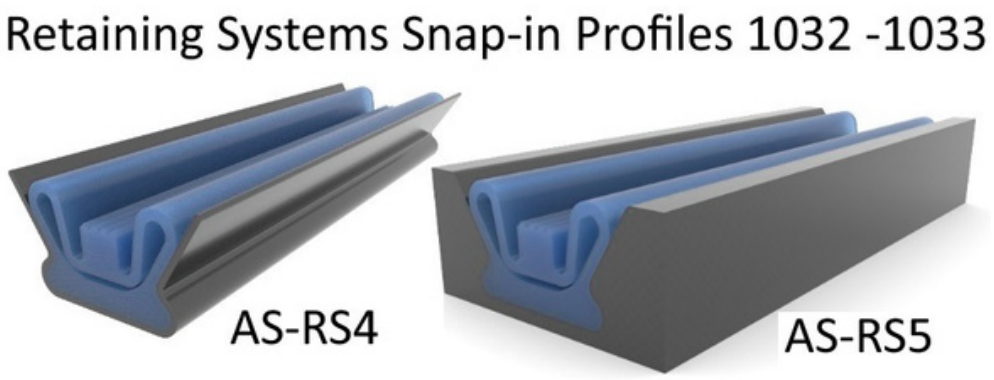
RETAINER

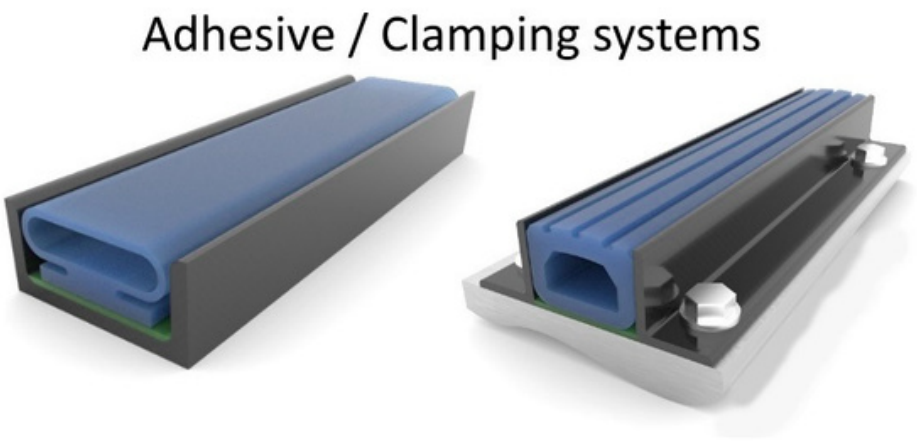




Retainer profiles are available in different materials and can be chosen per application. For example, Aluminium, Stainless steels, plastics and rubbers. Not all dimensions and retainer shapes are available from stock. Adhesives and special double sided tapes are available from stock. Please ask your AST contact for advice or availability.

RETAINER





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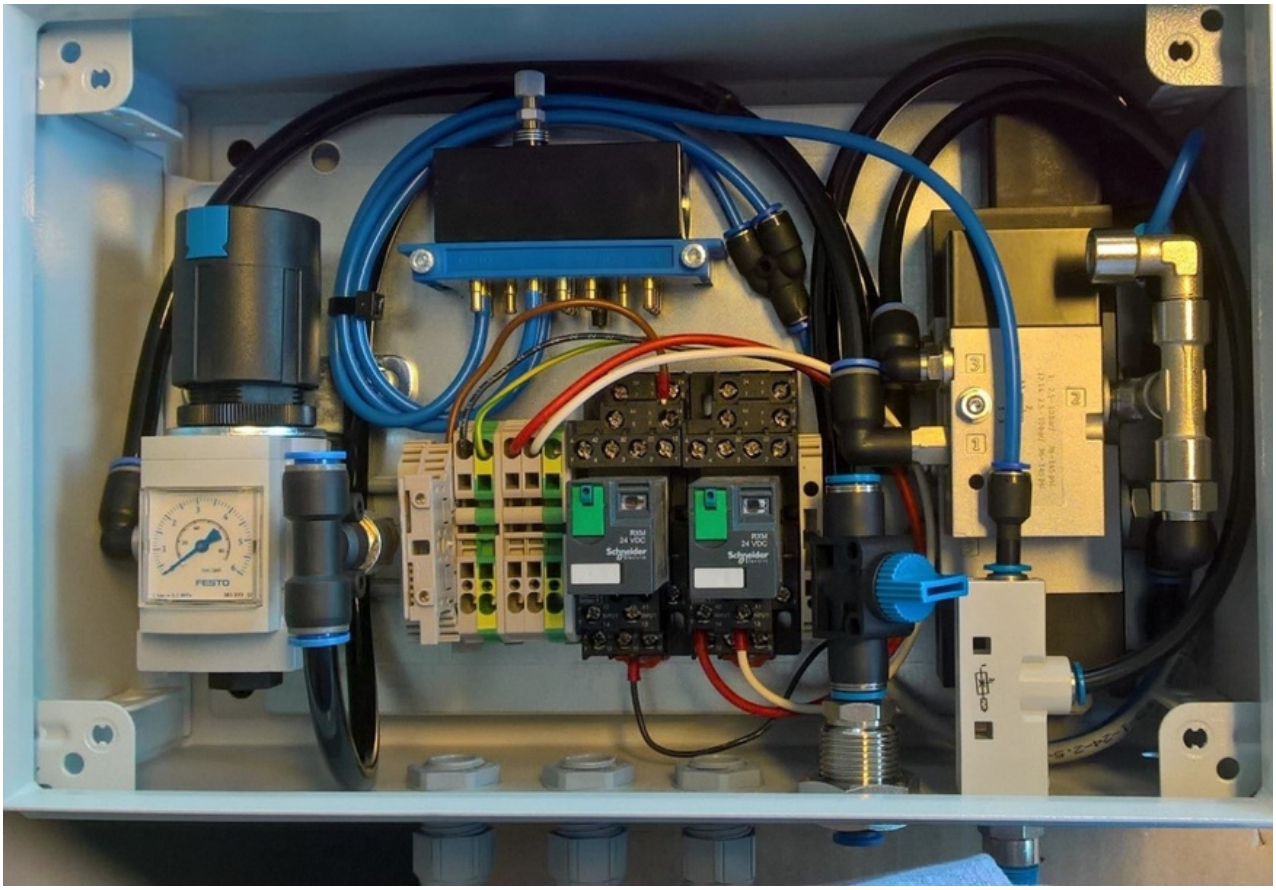
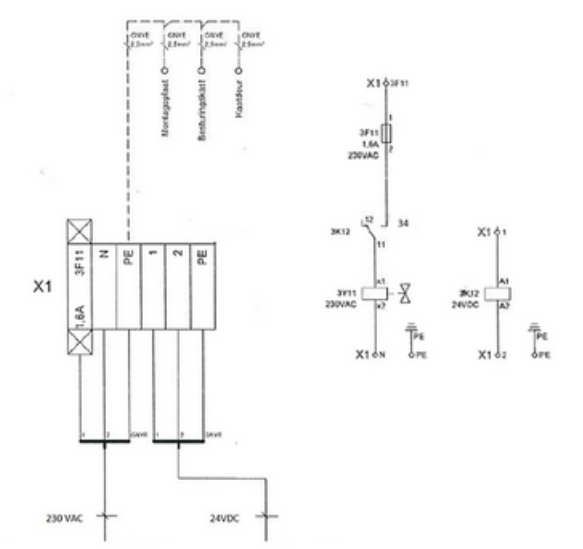
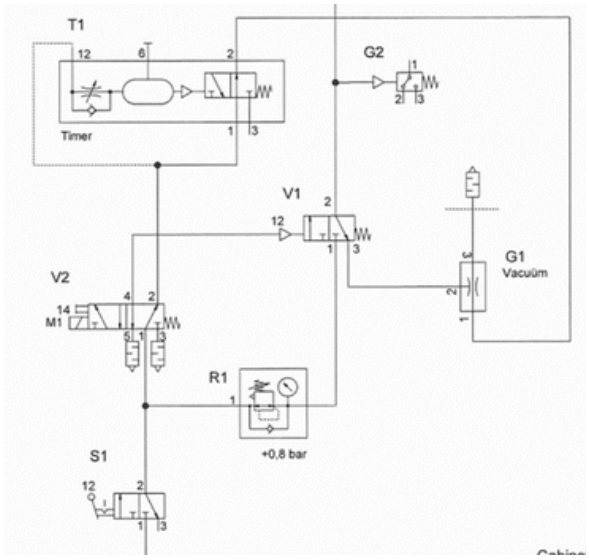
PNEUMATIC CONTROL BOX

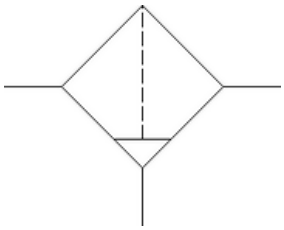
We build and supply your pneumatic system when required. We only use high quality valves and connectors of Festo brand. Please ask for information when applicable.



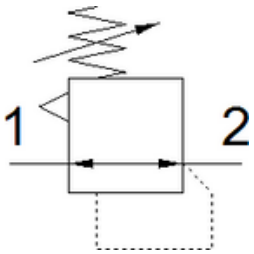




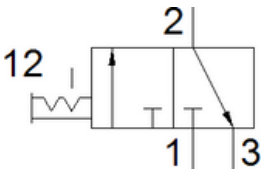
PNEUMATIC SYSTEM FOR INFLATABLE SEALING



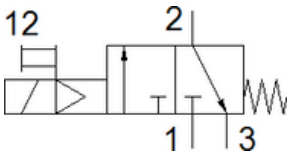
filter MS 6-LF-1/2-ERM 529615



Precision pressure valve MS6-LRP-1/2-D5-AD1 538028



manual activation valve MS6-EM1-1/2-S 541268



PNEUMATIC SYSTEM FOR INFLATABLE SEALING

Also available for food applications.

Illustration	Art. No.	Product name	Art. ID
	526081	Connector set	MS6-AGC
	532799	Connector piece	MS6-MV
	529615	filter	MS6-LF-1/2-ERM
	526073	Mounting part	MS6-WPM-D
	538028	Precision pressure valve	MS6-LRP-1/2-D5-AD1
	542602	Electrical activation valve	MS6-EE-1/2-10V24-S
	541268	Manual activation valve	MS6-EM1-1/2-S

AIR COMPRESSOR

Type 1

230V compressor, Silent HQ

Description: Super silent compressor, oil free, two cylinders, 53 dB, 1400 rpm, max. pressure 7 bar and a 3 liters tank.

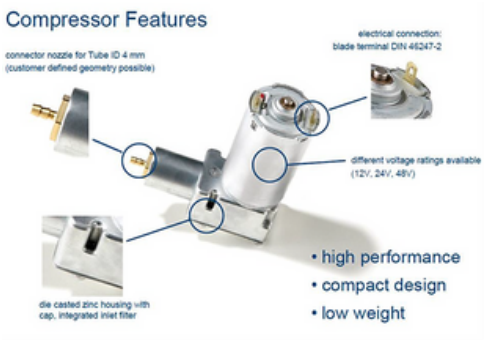
Size 260 x 350 x 400 mm

Type 2

Low noise 12 V compressor

Description: Oil free, 75 dB, 34 l/min, 3400 rpm, max. pressure 8 bar and a 0,5 liter tank.

Size 230 x 250 x230 mm



Type 3

12 / 24 / 48 V Low noise compressor

Description: Oil free, 69 dB, max. pressure 6 bar and weight 560 g.

Size 108 x 100 x 43 mm

HIGH PURITY AND FOOD APPROVED INFLATABLE SEALS

High purity and food approved seals

For some specific types of application seals may need special treatment and/or certification. We have special series of seals, clamps and actuators that are made, treated and packed conform demands for high purity applications. These seals combines the use of advanced materials with a superior seal design to create a seal that functions well under conditions where purity, cleanliness and reliability are required. The features includes the following:

Improved sealing surface

After a long period of testing, we concluded that flat sealing surfaces are a better seal for these applications. Clamping shows to be better while the flat surfaces are better avoiding any dirt or dust.

White or transparent food compliant, high performance materials

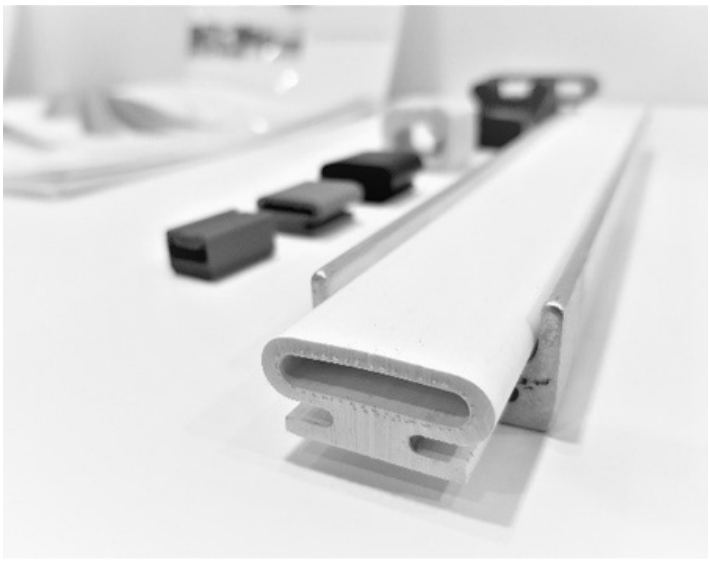
We have developed a high quality material that complies with the regulations FDA 21 CFR/177.2000, EC 2023/2006, EC 1935/2004 and EU 10/2011. This material is able to withstand many inflation cycles. It is mechanical comparable with other inflatable sealing materials but it adds the white or transparent, compliance with regulations that are so important within cleanroom and pharmaceutical applications.

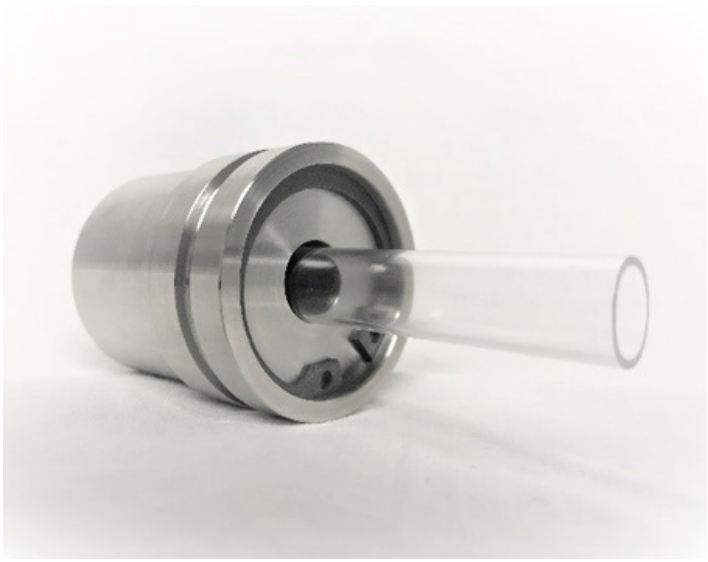
Low outgassing

The material has shown an improvement in outgassing that is approx. 9 times less than comparable industrial materials. Use of this material will degrease the change of contamination controlled environments with harmful chemical molecules.

Easier to clean

When cleaning procedures are required, these profiles are easier to clean due to its smooth sealing surfaces.

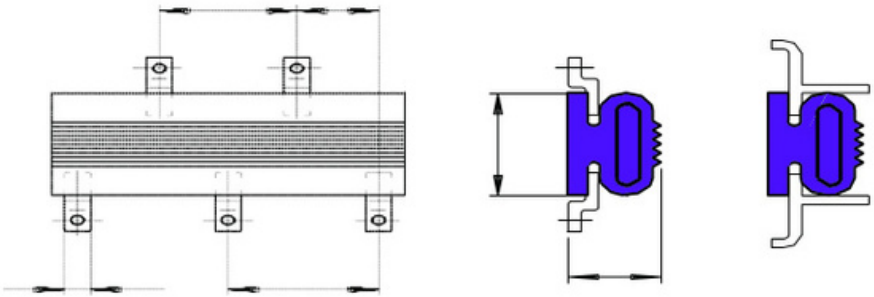




INSTALLATION RECOMMENDATIONS

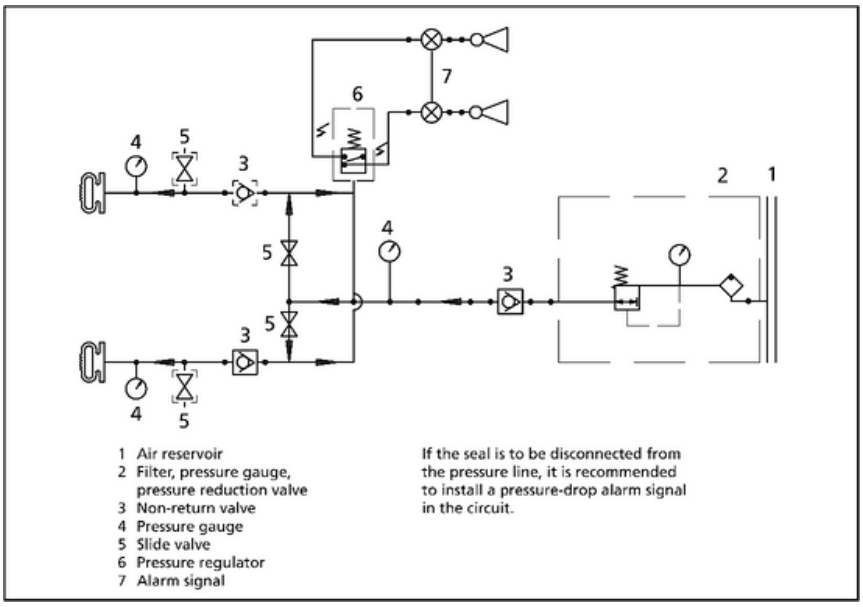
Mounting of an inflatable seal

Seals can be installed in a groove without additional installation elements. These seals are bonded to the groove bottom. The seal flank has to remain free for movement. We recommend to use our special 2 component glue or our special developed 2 sided tapes, available in different width. Seals can also be installed and secured mechanically with different clamping elements. The figure below shows an example of a simple method of installation. This can only be done with low pressure seals.



Seal installation

In order to guarantee the function of the inflatable seal, the sealing surface and the groove must be cleaned before installation of the seal. If the seal is to be bonded, the groove must be degreased. Sharp tooling must be avoided. The inflatable seal must be deflated before you start the installation.



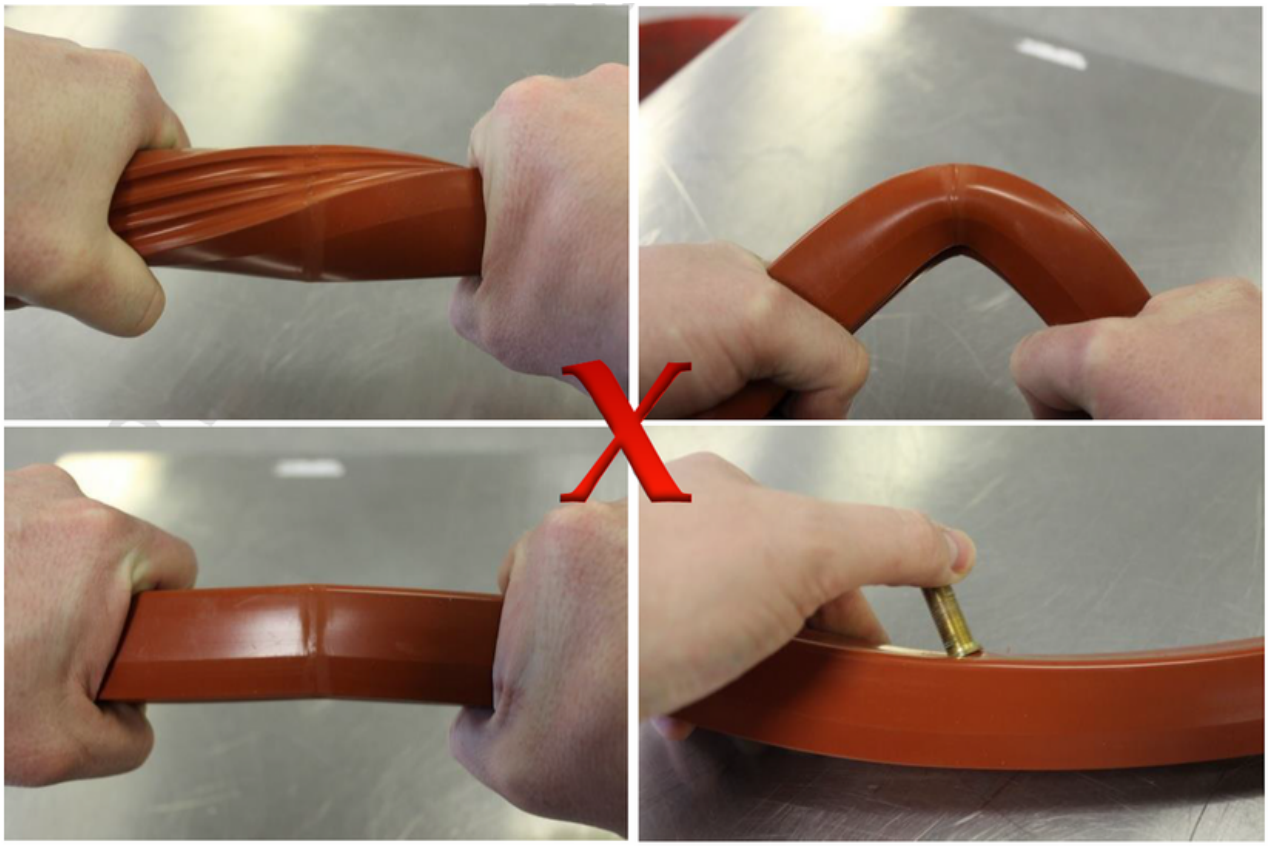
HANDLING INSTRUCTIONS

Inspection

The seal can be visually inspected for damage, dimensionally checked and inflation tested (supported). However, please avoid the following:

- Twisting
- Stretching
- Bending of the profile at the vulcanisation joint(s) or valve areas
- Un-supported inflation

We strongly advise that the bulleted points mentioned above are not attempted as either of them could result in premature failure of the seal also later when the seal is installed at its place.



GENERAL QUALITY CRITERIA, HANDLING AND STORAGE GUIDELINES

Quality

The cost effective use of seals is highly influenced by the quality criteria applied in production.

Seals from Advanced Sealing Technology are continuously monitored according to strict quality standards from material acquisition to delivery.

Certification of our production in accordance with international standards ISO 9001/2015 meets the specific requirements for quality control and management of design, purchasing, production and marketing.

Our quality policy is consistently controlled by strict procedures and guidelines which are implemented within all strategic areas of the company.

All testingof materials and products is performed in accordance with accepted test standards and specifications, e.g. random sampletesting in accordance with DIN ISO 2859, part 1.

Inspection specifications correspond to standards applicable to individual product groups (e.g. for O-Rings: ISO 3601).Our sealing materials are produced free of chloric-fluorinated hydrocarbons and carcinogenic elements.

Compliance with standard quality criteria outlinedin this catalogue. Customer specific requirements are indicated by a different symbol in this position.Customer that require special quality criteriashould contact their local Advanced Sealing Technology sales officefor assistance. We have experience in meeting all Customer quality requirements.

Storage and shelf life

Seals and bearings are often storedas spare parts for prolonged periods.Most rubbers change in physical properties during storage and ultimately become unusable due to excessive hardening, softening, cracking,crazing or other surface degradation. These changesmay be the result of particular factors or combination of factors, such as the action of deformation, oxygen, ozone, light,heat, humidity or oils and solvents. With a few simple precautions, the shelf life of these products can be considerably longer. Fundamental instructions on storage, cleaning and maintenance of elastomeric seal elements are described in international standards, such as: DIN 7716 / BS 3F68:1977, ISO2230 or DIN9088.

The standards give several recommendations for the storage and the shelf life of elastomers, depending on the material classes.

The following recommendations are based on the several standards and are intendedto provide the most suitable conditions for storage of rubbers. They should be observed to maintainthe optimum physicaland chemical values of the parts:

Heat

The storage temperature should preferable be between +5 °C and +25 °C. Direct contactwith sources of heat such as boilers, radiators and direct sunlightshould be avoided.

If articles are taken from low temperature storage, care should be takento avoid distorting them during handling at that temperature as they may have stiffened. In this case the temperature of the articles should be raisedto approximately +20 °C before they are put into service.

Humidity

The relative humidityin the store room should be below 70 %. Very moist or very dry conditions should be avoided. Condensation shouldnot occur.

Light

Elastomeric seals shouldbe protected from light sources, in particular directsunlight or strongartificial light with an ultraviolet (UV) content. The individual storage bags offer the best protection as long as they are UV resistant. It is advisable to cover any windows of storage rooms with a red or orange coating or screen.

Radiation

Precaution should be taken to protect stored articles from all sources of ionizing radiation likely to cause damage to stored articles.

Oxygen and ozone

Where possible, elastomeric materials should be protected from circulating air by wrapping, storage in air-tight containers or by other suitable means.

As ozone is particular deleterious to some elastomeric seals, storage rooms should not contain any equipment that is capable of generating ozone, such as mercury vapor lamps, high voltage electrical equipment, electric motors or other equipment which may give rise to electric sparks or silent electrical discharges. Combustion gases and organic vapor should be excluded from storage rooms as they may give rise to ozone via photochemical processes.

Deformation

Elastomeric materials should, wherever possible, be stored in a relaxed condition free from tension, Compression or other deformation. Where articles are packed in a strain-free condition they should be stored in their original packaging.

Contact with liquid and semi-solid materials

Elastomeric seals should not be allowed to come into contact with solvents, oils, greases or any other semi-solid materials at any time during storage, unless so packed by the manufacturer.

Contact with metal and non-metals

Direct contact with certain metals, e.g. manganese, iron and particularly copper and its alloys, e.g. brass and compounds of these materials are known to have deleterious effects on some rubbers. Elastomeric seals should not be stored in contact with such metals.

Because of possible transfer of plasticisers or other ingredients, rubbers must not be stored in contact with PVC. Different rubbers should preferably be separated from each other.

Cleaning

Where necessary, cleaning should be carried out with the aid of soap and water or methylated spirits. Water should not, however, be permitted to come into contact with fabric reinforced components, bonded seals (because of corrosion) or polyurethane rubbers. Disinfectants or other organic solvents as well as sharp-edged objects must not be used. The articles should be dried at room temperature and not placed near a source of heat. Clean room packing is available. Please contact Advanced Sealing Technology for further details.

Shelf life and shelf life control

The useful life of elastomeric seals will depend to a large extend on the type of rubber. When stored under the recommended conditions (above sections) the below given shelf life of several materials should be considered.

NBR, HNBR, CR	**6 years**
EPDM	**8 years**
FKM, VMQ, FVMQ	**10 years**

Elastomeric seals should be inspected after the given period. After this giving an extension period is possible.

Rubber details and components less than 1.5 mm thick are liable to be more seriously affected by oxidation degradation even when stored in satisfactory conditions as recommended. Therefore they may be inspected and tested more frequently than it is mentioned above.

Rubber details / seals in assembled components

It is recommended that the units should be exercised at least every six months and that the maximum period a rubber detail be allowed to remain assembled within a stored unit, without inspection, be a total of the initial period stated above and the extension period. Naturally this will depend on the design of the unit concerned.

INFLATABLE SEAL TEST REPORT

Every seal is being tested and is supplied with a test report.

Date of Test

Revision Number

Document Number

Identification Number

Seal Reference

Customer

Test Pressure

Pressure maintained for

Pressure Drop Test

Recommended Inflation Pressure

Maximum Inflation Pressure

Roll over bar test

Bend test

Valve orientation

Valve dimensions

Raw material batch number

Assembly Batch Reference

Please do not bend or stretch the seals to check connections. Too much stretching or bending can lead to excessive elongation and tearing. The inflator captioned above has been tested in accordance with the data published herein. However, this seal cannot be guaranteed for its intended use, Advanced Sealing Technology takes no responsibility for failure as a result of misuse.

ENGINEERING ACTION REQUEST (EAR) FOR INFLATABLE SEAL

AST Project No	

Please send back to:	
Name	
Email	
Phone no	

We use your details to work out the Optimum sealing recommendation Your data will be confidential.

Company

Name

Street / PO Box

Post Code/City

Country

Contact

Name

Department

Title

Phone no.

Email

Date, Signature

Profile no

Material

Medium to Seal

Approval Required

Differential pressure environment / medium

Operating temperature

Max Min Duration

Valve Adapter (Selection see catalogue)

Material

Medium to Seal

Approval Required

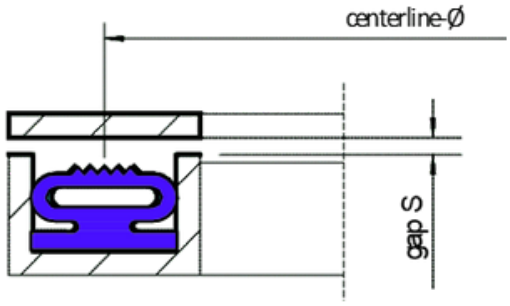
Application

Inflatable seal will be used for sealing

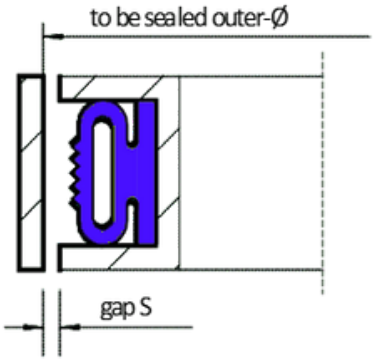
Blending / Lifting of devices

AST Project No	Our recommendation is based on your technical input. Missing details can lead to different sealing solution. When hesitate please contact us.

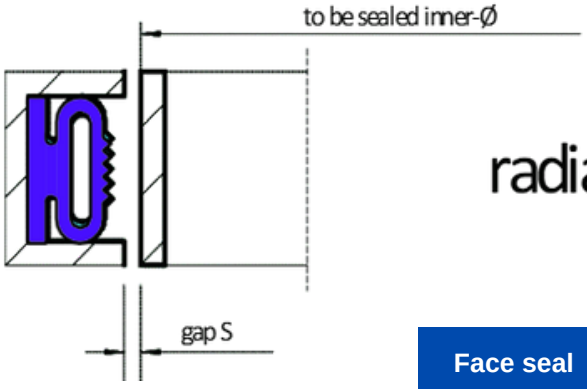
ENGINEERING ACTION REQUEST (EAR) FOR INFLATABLE SEAL



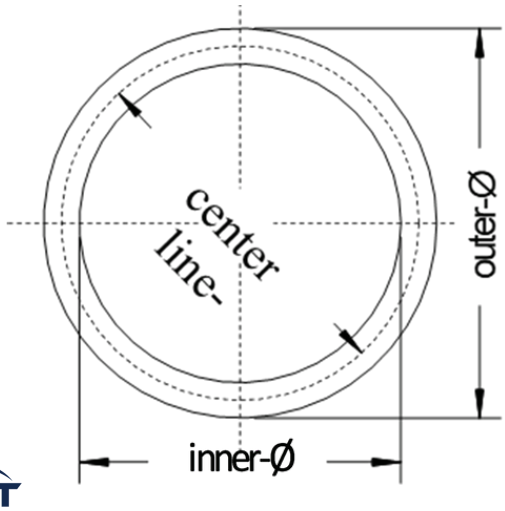
axial



radial outside



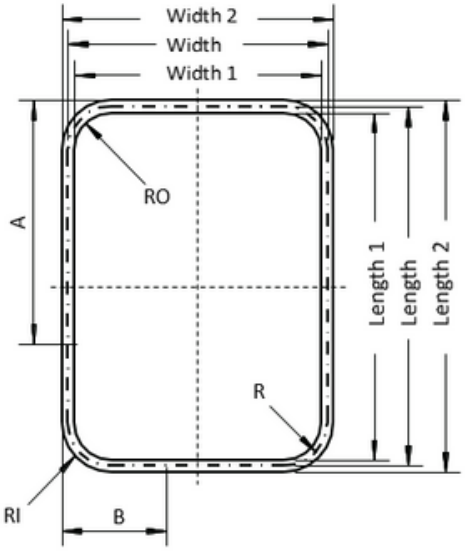
radial inside



Face seal	
Center line Ø	
Inflate out	
Outer Ø to be sealed	
Inflate in	
Inner Ø to be sealed	
Gap S	

ENGINEERING ACTION REQUEST (EAR) FOR INFLATABLE SEAL

Type quadratic or rectangular, e.g. door seal



Width (Face Seal)

Width (Inflate in)

Width 2 (Inflate out)

Length (Face Seal)

Length 1 (Inflate in)

Length 2 (Inflate out)

R (centerlin Ø)

RI (Inflate in)

RO (Inflate out)

A

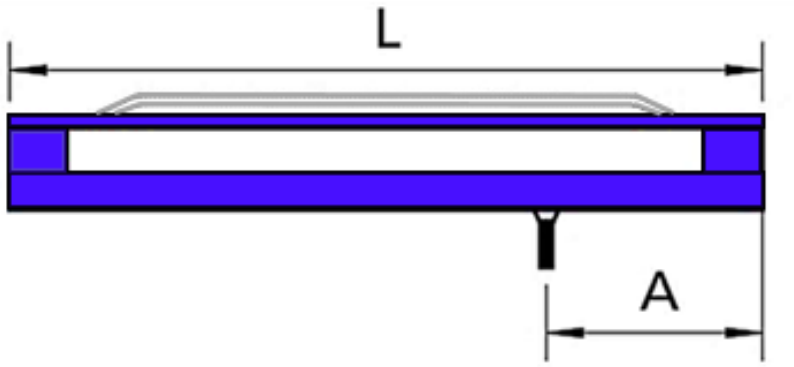
B

Gap S

Dimension A & B refer to the position of the valve seat. All dimensions refer to the devices, which are to be sealed. Radius R / RI / RO have to be in accordance with our remarks about minimum radius (see catalog), rectangular types without radius could be possible after consultation with Advanced sealing Technology.

SKETCH / DESCRIPTION OF THE APPLICATION

ENGINEERING ACTION REQUEST (EAR) FOR INFLATABLE SEAL



End plug relieved

L	
A	
Dimension A defines the position of the (air) connector.	
Seal Relieved	
For more remarks see catalog.	

SKETCH / DESCRIPTION OF THE APPLICATION

NOTES

The information in this brochure is intended to be for general reference purposes only and is not intended to be a specific recommendation for any individual application. The application limits for pressure, temperature, speed and media given are maximum values determined in laboratory conditions. In application, due to the interaction of operating parameters, maximum values may not be achieved. It is vital therefore, that customers satisfy themselves as to be suitable of product and material for each of their individual applications. Any reliance on information is therefore at the user´s own risk. In no event will Advanced Sealing Technology be liable for any loss, damage, claim or expense directly or indirectly arising or resulting from the use of any information provided in this brochure. While every effort is made to ensure the accuracy of information contained herewith, Advanced Sealing Technology cannot warrant the accuracy or completeness of information.

To obtain the best recommendation for a specific application, please contact Advanced Sealing Technology.

This edition supersedes all previous brochures.

THE BEST SEALING
SYSTEM IS DETERMINED
BY ITS FUNCTIONALITY

ADVANCED SEALING TECHNOLOGY

CUSTOMIZED SEALING SOLUTIONS

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