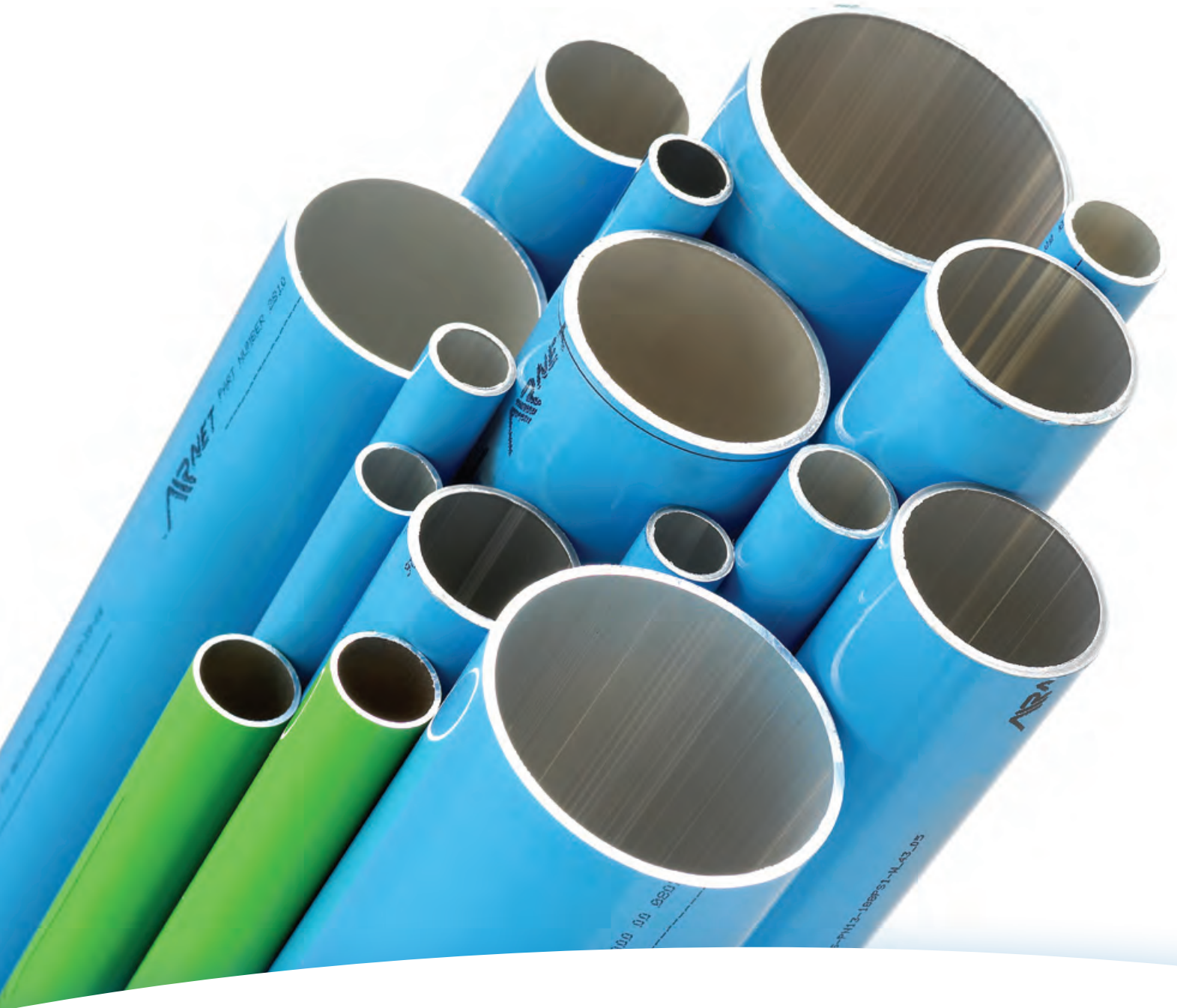


AIRNET



Catalog





www.airnet-system.com

fast / easy / reliable

TABLE OF CONTENTS

General Information	1-2
Piping	3
• Pipe	3
Fittings	4-10
• Union Connection	4
• Elbow	4
• Tee	5
• Valves	6
• Quick Drop	7
• End Cap	7
• Threaded Connector (NPT)	8
• Union Adaptor	8
• Wall Mounted Manifold	9
• Flanges	9
• Spare Parts	10
Accessories	11-14
• NPT Accessories	11
• Flexible Hoses	12
• Protection Strap Against Whiplash	12
• Pressure Gauge	12
• Safety Couplers	13
• Filter-Regulator-Lubricator	14
Installation Material	15-22
• Clips, Brackets and Supports	15
• Other Hanging Solutions	16-17
• Gripple	18-22
Tools	23
• Toolbox	23
• Additional Tools	23
Installation Guide	24-42
• A Properly Designed AIRnet System	24
• Pre-Installation	25-26
• Before Installation	27
• Designing Your System	28-30
• Assembly Guide	31-37
• Operating Conditions & Safety Instructions	38-39
• Install Do's And Don'ts	40-41
• AIRnet Product Services	42

GENERAL INFORMATION

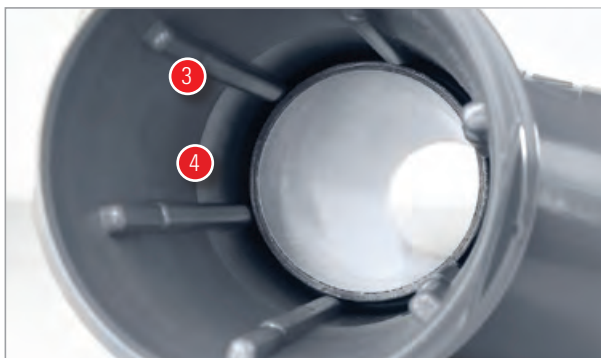
COMPLIANCY	EN 13480 / Directive 97/23/EC and ASME B31.1 Complies with Common Pressure related approvals PED – CE – ASME – TUV
	20 - 25 - 40 - 50 - 63 - 80 - 100 mm
	3/4" - 1" - 1½" - 2" - 2½" - 3" - 4"
PERFORMANCE CRITERIA	<ul style="list-style-type: none"> Compatible with compressed air, Nitrogen Operating temperature limits: -4°F (-20°C) / +158°F (+70°C) Operating Pressure: 20-80mm 0-188 psi, 100mm 0-232 psi Lowest pressure dewpoint possible: -94°F (-70°C) The effect of compressor oils (mineral oil / PAO based / Ester based oils) AIRnet pipes are resistant to UV radiation AIRnet fittings are resistant to indirect UV radiation Corrosion-free* Leak-resistant Compatible with Oil Free and Oil Injected Compressors Vacuum level: 20-80mm 0.13 bar (1.88psi) absolute pressure <p>*When installed in environments free of corrosive vapors or mist.</p> <div> <div> <p>Polymer Fittings (20-50 mm)</p>  <p>AIRNET</p> <ul style="list-style-type: none"> Material PA6 with 15% fiberglass injection. Grip Ring: Stainless Steel Seal: Rubber NBR 70SH Embossed *Part Number *Nominal Diameter *Manufacture Date </div> <div> <p>Aluminum Fittings (63-80 mm)</p>  <p>AIRNET</p> <ul style="list-style-type: none"> Aluminum alloy EN-AB46100 Grip Ring: Stainless Steel Seal: Rubber NBR 70SH Embossed *Part Number *Nominal Diameter *Manufacture Date </div> <div> <p>Steel-Aluminum Fittings (100 mm)</p>  <p>AIRNET</p> <ul style="list-style-type: none"> Material Clamp: Sheet Metal Steel S355MC, acc EN10149-2 Fitting: Cast Aluminum AISi9Mg Grip Ring: Stainless Steel AISI 304 Seal: Rubber NBR 70SH Embossed *Part Number *Nominal Diameter *Manufacture Date </div> <div> <p>Pipes</p>  <p>AIRNET</p> <ul style="list-style-type: none"> Extruded Aluminum UNS alloy A96063 T5 Maximum design pressure indication Printed *Part Number *Nominal Diameter *Manufacture Date </div> </div>
TESTING	<p>Testing for pipes and fittings in accordance to the highest industry standards.</p> <ul style="list-style-type: none"> One hour high pressure resistance test Burst pressure test Leakage test based on vibration cycle at different frequencies Leakage test based on pressure pulsation test

GENERAL INFORMATION

AIRnet fitting design



- 1 STRONG INTERNAL GRIP DESIGN**
New design increasing grip, strength and safety (with stainless steel clinch ring)
- 2 DISTINCTIVE NUT DESIGN**
Notches enable you to tightly secure the AIRnet spanner, without damaging the nut itself
- 3 EXCLUSIVE BODY DESIGN**
Inner body design and large diameter minimizes the flow resistance and pressure drop
- 4 PRECISE INLET GUIDE**
For easier pipe insertion and perfect alignment
- 5 PARTS IDENTIFICATION**
Part number and diameter are embossed for easy identification of parts



AIRnet 10 Year Warranty

The high quality design and performance of the AIRnet product range is complemented by a 10 year warranty on pipes and fittings.

Warranty Coverage Terms

- Use only genuine parts.
- Perform installation according to our instructions and guidelines.
- Never use the components below or in excess of its limit ratings.
- Protect your installation against shocks, excessive vibrations, and corrosive environments.
- Damaged parts and/or site conditions must be submitted for inspection, prior to the settlement of any claim.
- 10 year warranty is limited to replacement of pipe or fitting upon inspection and approval of authorized AIRnet personnel.
- Claims must be submitted to the authorized dealer where originally purchased.



PIPING

> Aluminum pipe for air (6 m / 20 ft)

2810 ☐☐00 ☐☐



PART NUMBER	OUTSIDE Ø (mm / inch)	INSIDE Ø (mm / inch)	LENGTH (m / ft)	WEIGHT (kg / lbs)	LOT SIZE
2810 1000 00	20 / ¾"	17.4 / 0.69"	6 / 20	1.2 / 2.6	01
2810 2000 00	25 / 1"	22.2 / 0.87"	6 / 20	1.9 / 4.2	01
2810 4000 00	40 / 1½"	36.4 / 1.43"	6 / 20	3.5 / 7.7	01
2810 5000 00	50 / 2"	46.0 / 1.81"	6 / 20	4.6 / 10.1	01
2810 6000 00	63 / 2½"	59.0 / 2.32"	6 / 20	6.2 / 13.7	01
2810 7000 00	80 / 3"	76.0 / 2.99"	6 / 20	9.5 / 20.9	01
2810 8800 00	100/4"	97 / 3.88"	5.7 / 19	14 / 30	01

> Aluminum pipe for nitrogen (6 m / 20 ft)

2810 ☐☐61 ☐☐

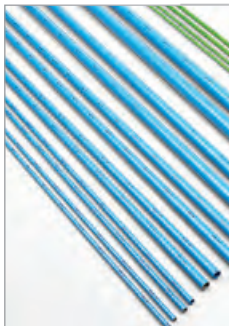


PART NUMBER	OUTSIDE Ø (mm / inch)	INSIDE Ø (mm / inch)	LENGTH (m / ft)	WEIGHT (kg / lbs)	LOT SIZE
2810 1061 05	20 / ¾"	17.4 / 0.69"	6 / 20	1.2 / 2.6	05
2810 2061 05	25 / 1"	22.2 / 0.87"	6 / 20	1.9 / 4.2	05

In most industrial standards, networks for inert gases, such as nitrogen, can be identified by their green color.

> Aluminum pipe for air (3 m / 10 ft)

2810 ☐☐63 ☐☐

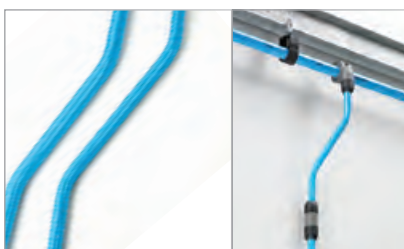


PART NUMBER	OUTSIDE Ø (mm / inch)	INSIDE Ø (mm / inch)	LENGTH (m / ft)	WEIGHT (kg / lbs)	LOT SIZE
2810 1063 10	20 / ¾"	17.4 / 0.69"	3 / 10	0.6 / 1.3	10
2810 2063 10	25 / 1"	22.2 / 0.87"	3 / 10	0.9 / 2.0	10
2810 4063 05	40 / 1½"	36.4 / 1.43"	3 / 10	1.7 / 3.7	05
2810 5063 05	50 / 2"	46.0 / 1.81"	3 / 10	2.3 / 5.1	05
2810 6063 04	63 / 2½"	59.0 / 2.32"	3 / 10	3.1 / 6.8	04
2810 7063 04	80 / 3"	76.0 / 2.99"	3 / 10	4.7 / 10.4	04

Non-stocked item. Contact local administrator for lead time.

> S-bend

2810 ☐☐01 ☐☐



PART NUMBER	DROP LEG Ø (mm / inch)	LENGTH (cm / inch)	LOT SIZE
2810 1001 05	20 / ¾"	50 / 19.7"	05

PART NUMBER	DROP LEG Ø (mm / inch)	LENGTH (cm / inch)	LOT SIZE
2810 2001 05	25 / 1"	50 / 19.7"	05

The S-bend is a 19.7" (50 cm) long, rigid, pre-curved section of aluminum pipe, often used to offset drop legs closer to the mounting surface.

UNION CONNECTION

> Equal Union

2810 □□ 02 □□

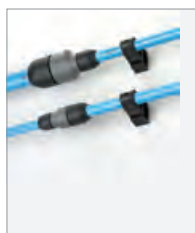


PART NUMBER	Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
		L	W	H	
2810 1002 00	20 / ¾"	102 / 4"	36 / 1.4"	36 / 1.4"	01
2810 2002 00	25 / 1"	125 / 4.9"	45 / 1.8"	45 / 1.8"	01
2810 4002 00	40 / 1½"	199 / 7.8"	72 / 2.8"	72 / 2.8"	01
2810 5002 00	50 / 2"	227 / 8.9"	89 / 3.5"	89 / 3.5"	01
2810 6002 00	63 / 2½"	186 / 7.3"	89 / 3.5"	92 / 3.6"	01
2810 7002 00	80 / 3"	233 / 9.2"	113 / 4.4"	116 / 4.6"	01
2810 8002 00	100/4"	137/ 5.48"	180/ 7.2"	138/ 5.52"	01



> Reducing Union

2810 □□ 21 □□



PART NUMBER	Ø (mm / inch)	REDUCED Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
			L	W	H	
2810 2121 00	25 / 1"	20 / ¾"	115 / 4.5"	45 / 1.8"	45 / 1.8"	01
2810 4221 00	40 / 1½"	25 / 1"	165 / 6.5"	72 / 2.8"	72 / 2.8"	01
2810 5421 00	50 / 2"	40 / 1½"	215 / 8.5"	89 / 3.5"	89 / 3.5"	01
2810 6521 00	63/ 2 1/2"	50/ 2"	209/ 8.36"	89/ 3.56"	89/ 3.56"	01
2810 7621 00	80/ 3"	63/ 2 1/2"	229/ 9.16"	113/ 4.52"	113/ 4.52"	01
2810 8721 00*	100/4"	80/3"	304/ 12.16"	100/ 4"	100/ 4"	

*Always add 1 equal union 2810 8002 00 for each 100/ 4" reducing union

ELBOW

> 90° Elbow

2810 □□ 03 □□



PART NUMBER	Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
		L	W	H	
2810 1003 00	20 / ¾"	82 / 3.2"	82 / 3.2"	36 / 1.4"	01
2810 2003 00	25 / 1"	100 / 3.9"	100 / 3.9"	45 / 1.8"	01
2810 4003 00	40 / 1½"	160 / 6.3"	160 / 6.3"	72 / 2.8"	01
2810 5003 00	50 / 2"	188 / 7.4"	188 / 7.4"	89 / 3.5"	01
2810 6003 00	63 / 2½"	168 / 6.6"	96 / 3.8"	168 / 6.6"	01
2810 7003 00	80 / 3"	213.5 / 8.4"	113 / 4.4"	213.5 / 8.4"	01
2810 8003 00*	100/4"	252/10"	100/ 4"	252/ 10"	01

*Always add 2 equal unions 2810 8002 00 for each 100/ 4" elbow



> 45° Elbow

2810 □□ 04 □□



PART NUMBER	Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
		L	W	H	
2810 1004 00	20 / ¾"	106 / 4.2"	67 / 2.6"	36 / 1.4"	01
2810 2004 00	25 / 1"	128 / 5.0"	83 / 3.3"	45 / 1.8"	01
2810 4004 00	40 / 1½"	205 / 8.1"	65 / 2.6"	72 / 2.8"	01
2810 5004 00	50 / 2"	238 / 9.4"	154 / 6.1"	89 / 3.5"	01

FITTINGS

TEE

> Equal Tee

2810 ☐ ☐ 05 ☐ ☐



PART NUMBER	Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
		L	W	H	
2810 1005 00	20 / ¾"	127 / 5"	82 / 3.2"	36 / 1.4"	01
2810 2005 00	25 / 1"	155 / 6.1"	100 / 3.9"	45 / 1.8"	01
2810 4005 00	40 / 1½"	249 / 9.8"	160 / 6.3"	72 / 2.8"	01
2810 5005 00	50 / 2"	286 / 11.3"	188 / 7.4"	89 / 3.5"	01
2810 6005 00	63 / 2½"	247 / 9.7"	138 / 5.4"	92 / 3.6"	01
2810 7005 00	80 / 3"	314 / 12.4"	213.5 / 8.4"	113 / 4.4"	01
2810 8005 00**	100/4"	304/ 12.2"	100/ 4"	202/ 8"	01

** Always add 3 equal unions 2810 8002 00 for each 100mm / 4" equal tee

> Reducing tee

2810 ☐ ☐ 07 ☐ ☐



PART NUMBER	Ø (mm / inch)	REDUCED Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
			L	W	H	
2810 2107 00	25 / 1"	20 / ¾"	155 / 6.1"	96 / 3.8"	45 / 1.8"	01
2810 4207 00	40 / 1½"	25 / 1"	249 / 9.8"	144 / 5.7"	72 / 2.8"	01
2810 5407 00	50 / 2"	40 / 1½"	286 / 11.3"	179 / 7"	89 / 3.5"	01
2810 6507 00	63/2 1/2"	50/2"	251/10"	89/ 3.56"	193/ 7.72"	01
2810 7607 00	80/3"	63/ 2 1/2"	233/ 9.32"	113/ 4.52"	204/ 8.16"	01
2810 8707 00***	100/4"	80/3"	304/ 12.16"	100/ 4"	227/ 9"	01
2810 8607 00***	100/4"	63/ 2 1/2"	304/ 12.16"	100/ 4"	227/ 9"	01
2810 8507 00***	100/4"	50/ 2"	304/ 12.16"	100/ 4"	227/ 9"	01

*** Always add 2 equal unions 2810 8002 00 for each 100mm / 4" reducing tee

> Threaded Tee / Reducing Tee (NPT thread)

2810 ☐ ☐ 09 ☐ ☐



PART NUMBER	Ø (mm / inch)	REDUCED THREAD OUTLET Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
			L	W	H	
2810 1009 00	20 / ¾"	12.5 / ½"	127 / 5"	85 / 3.3"	85 / 3.3"	01
2810 2009 00	25 / 1"	12.5 / ½"	155 / 6.1"	96.9 / 3.8"	97 / 3.8"	01
2810 5209 00	50/2"	25/1"	301/12"	89/3.5"	150/6"	01
2810 6509 00	63 / 2½"	50 / 2"	247 / 9.7"	116 / 4.6"	92 / 3.6"	01
2810 7609 00	80 / 3"	63 / 2½"	314 / 12.4"	153.5 / 6.0"	113 / 4.4"	01
2810 7709 00	80 / 3"	80 / 3"	314 / 12.4"	139.5 / 5.5"	113 / 4.4"	01
2810 8209 00***	100/4"	25/1"	304/ 12.1"	100/4"	150/6"	01

*** Always add 2 equal unions 2810 8002 00 for each 100mm / 4" reducing tee

A threaded reducing tee has many useful applications. Typically used to add a pressure gauge or incorporating a shop hose to connect equipment.

VALVES

> Standard ball valve



Use a threaded connector to connect standard ball valves to AIRnet piping (see page 8 for part numbers)

PART NUMBER	DIMENSION	LOT SIZE
1310 0723 63	1/2" Male x 1/2" Female	01
1310 0722 82	1/2" Female x 1/2" Female	01
1310 0728 84	3/4" Male x 3/4" Female	01
1310 0722 83	3/4" Female x 3/4" Female	01
1310 0722 84	1" Female x 1" Female	01
1310 0723 78`	1 1/4" Female x 1 1/4" Female	01
1310 0722 86	1 1/2" Female x 1 1/2" Female	01
1310 0722 87	2" Female x 2" Female	01
1310 0722 88	2 1/2" Female x 2 1/2" Female	01
1310 0722 89	3" Female x 3" Female	01

> Valve

2810 □□ 51 □□



PART NUMBER	Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
		L	W	H	
2810 1051 00	20 / ¾"	140 / 5.5"	70 / 2.8"	100 / 4.0"	01
2810 2351 00	25 / 1"	165 / 6.5"	75 / 3.0"	100 / 4.0"	01
2810 4051 00	40 / 1½"	260 / 10.2"	105 / 4.1"	140 / 5.5"	01
2810 5051 00	50 / 2"	285 / 11.2"	125 / 5.0"	150 / 5.9"	01
2810 6051 00	63 / 2½"	220 / 8.7"	185 / 7.3"	310 / 12.2"	01
2810 7051 00	80 / 3"	265 / 10.4"	200 / 7.9"	330 / 13.0"	01
1606 4561 04 *	100/4"	52/2.1"	380/15.2"	365/14.6"	01

* 100mm / 4" butterfly valve requires flange(s) 2810 8254 00 and long bolts 2810 0254 08

> Threaded valve (NPT thread)

2810 □□ 53 □□



PART NUMBER	Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
		L	W	H	
2810 1153 00	20 / ¾"	120 / 4.7"	70 / 2.8"	100 / 3.9"	01
2810 2353 00	25 / 1"	127 / 5.0"	75 / 3.0"	100 / 3.9"	01
2810 4453 00	40 / 1½"	200 / 7.9"	105 / 4.1"	140 / 5.5"	01
2810 5553 00	50 / 2"	209 / 8.2"	125 / 4.9"	150 / 5.9"	01
2810 6653 00	63 / 2½"	170 / 7.0"	185 / 7.3"	310 / 12.2"	01
2810 7753 00	80 / 3"	200 / 8.2"	200 / 8.2"	330 / 13.0"	01

Ball valves are commonly used to isolate sections of the airnet. This provides the flexibility to shutdown one section for maintenance while still providing air to the rest of the system.

FITTINGS

QUICK DROP

> Quick drop

2810 ☐ ☐ 10 ☐ ☐



PART NUMBER	DROP LEG Ø (mm / inch)	MAIN Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
			L	W	H	
2810 2110 00	20 / ¾"	25 / 1"	106 / 4.2"	59 / 2.3"	52 / 2"	01
2810 4110 00	20 / ¾"	40 / 1½"	125 / 4.9"	70 / 2.8"	52 / 2"	01
2810 5110 00	20 / ¾"	50 / 2"	150 / 5.9"	111 / 4.4"	63 / 2.5"	01
2810 6110 00	20 / ¾"	63 / 2½"	148 / 5.8"	110 / 4.3"	62 / 2.5"	01
2810 7110 00	20 / ¾"	80 / 3"	214 / 8.4"	165 / 6.5"	63 / 2.5"	01
2810 4210 00	25 / 1"	40 / 1½"	125 / 4.9"	70 / 2.8"	52 / 2"	01
2810 5210 00	25 / 1"	50 / 2"	150 / 5.9"	111 / 4.4"	63 / 2.5"	01
2810 6210 00	25 / 1"	63 / 2½"	148 / 5.8"	110 / 4.3"	62 / 2.5"	01
2810 7210 00	25 / 1"	80 / 3"	214 / 8.4"	165 / 6.5"	63 / 2.5"	01

> Threaded quick drop (NPT thread)

2810 ☐ ☐ 12 ☐ ☐



PART NUMBER	DROP LEG THREAD OUTLET Ø (NPT)	MAIN Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
			L	W	H	
2810 2012 00	½"	25 / 1"	90 / 3.5"	69 / 2.7"	52 / 2"	01
2810 4012 00	½"	40 / 1½"	102 / 4"	94 / 3.7"	52 / 2"	01
2810 5012 00	½"	50 / 2"	127 / 5"	111 / 4.4"	62 / 2.4"	01
2810 6012 00	½"	63 / 2½"	128 / 5.0"	110 / 4.3"	62 / 2.4"	01
2810 7012 00	½"	80 / 3"	195 / 7.7"	165 / 6.5"	63 / 2.5"	01
2810 4112 00	¾"	40 / 1½"	102 / 4"	94 / 3.7"	52 / 2"	01
2810 5112 00	¾"	50 / 2"	127 / 5"	111 / 4.4"	62 / 2.4"	01
2810 6112 00	¾"	63 / 2½"	128 / 5.0"	110 / 4.3"	62 / 2.4"	01
2810 7112 00	¾"	80 / 3"	195 / 7.7"	165 / 6.5"	63 / 2.5"	01

END CAP

> End cap

2810 ☐ ☐ 06 ☐ ☐



PART NUMBER	Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
		L	W	H	
2810 1006 00	20 / ¾"	59 / 2.3"	36 / 1.4"	36 / 1.4"	01
2810 2006 00	25 / 1"	72 / 2.8"	45 / 1.8"	45 / 1.8"	01
2810 4006 00	40 / 1½"	109 / 4.3"	72 / 2.8"	72 / 2.8"	01
2810 5006 00	50 / 2"	129 / 5.1"	89 / 3.5"	89 / 3.5"	01
2810 6006 00	63 / 2½"	149 / 5.9"	92 / 3.6"	92 / 3.6"	01
2810 7006 00	80 / 3"	155 / 6.1"	113 / 4.4"	113 / 4.4"	01
2810 9806 00*	100 / 4"	269 / 10.76"	150 / 10"	150 / 10"	01

* Always add 1 equal union 2810 8002 00 for each end cap.

PIPING

FITTINGS

ACCESSORIES

INSTALLATION
MATERIAL

TOOLS

INSTALLATION
GUIDE

THREADED CONNECTORS

> Polymer male (NPT thread)

2810 ☐ ☐ 16 ☐ ☐



PART NUMBER	AIRnet Ø (mm / inch)	MALE OUTLET Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
			L	W	H	
2810 1016 00	20 / ¾"	12.5 / ½"	69 / 2.7"	36 / 1.4"	36 / 1.4"	01
2810 1116 00	20 / ¾"	20 / ¾"	71 / 2.8"	36 / 1.4"	36 / 1.4"	01
2810 5516 00	50 / 2"	50 / 2"	144 / 5.7"	89 / 3.5"	89 / 3.5"	01

> Aluminum female (NPT thread)

2810 ☐ ☐ 20 ☐ ☐



PART NUMBER	AIRnet Ø (mm / inch)	FEMALE OUTLET Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
			L	W	H	
2810 1120 00	20 / ¾"	20 / ¾"	71 / 2.8"	36 / 1.4"	36 / 1.4"	01
2810 2220 00	25 / 1"	25 / 1"	85 / 3.3"	45 / 1.8"	45 / 1.8"	01
2810 4420 00	40 / 1½"	40 / 1½"	124 / 4.9"	72 / 2.8"	72 / 2.8"	01
2810 5520 00	50 / 2"	50 / 2"	144 / 5.7"	89 / 3.5"	89 / 3.5"	01
2810 6620 00	63 / 2½"	63 / 2½"	122 / 4.8"	95 / 3.7"	95 / 3.7"	01

> Aluminum male (NPT thread)

2810 ☐ ☐ 18 ☐ ☐



PART NUMBER	AIRnet Ø (mm / inch)	MALE OUTLET Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
			L	W	H	
2810 1018 00	20 / ¾"	12.5 / ½"	69 / 2.7"	36 / 1.4"	36 / 1.4"	01
2810 1118 00	20 / ¾"	20 / ¾"	71 / 2.8"	36 / 1.4"	36 / 1.4"	01
2810 2118 00	25 / 1"	20 / ¾"	82 / 3.2"	45 / 1.8"	45 / 1.8"	01
2810 2218 00	25 / 1"	25 / 1"	85 / 3.3"	45 / 1.8"	45 / 1.8"	01
2810 4318 00	40 / 1½"	32 / 1¼"	124 / 4.9"	72 / 2.8"	72 / 2.8"	01
2810 4418 00	40 / 1½"	40 / 1½"	124 / 4.9"	72 / 2.8"	72 / 2.8"	01
2810 5418 00	50 / 2"	40 / 1½"	140 / 5.5"	89 / 3.5"	89 / 3.5"	01
2810 5518 00	50 / 2"	50 / 2"	144 / 5.7"	89 / 3.5"	89 / 3.5"	01
2810 6518 00	63 / 2½"	50 / 2"	137 / 5.4"	92 / 3.6"	92 / 3.6"	01
2810 6618 00	63 / 2½"	63 / 2½"	141 / 5.6"	92 / 3.6"	92 / 3.6"	01
2810 7618 00	80 / 3"	63 / 2½"	148 / 5.8"	113 / 4.4"	113 / 4.4"	01
2810 7718 00	80 / 3"	80 / 3"	151 / 5.9"	113 / 4.4"	113 / 4.4"	01

UNION ADAPTOR

> Adaptor (NPT thread)

2810 ☐ ☐ 14 ☐ ☐



PART NUMBER	AIRnet Ø (mm / inch)	FEMALE OUTLET Ø (mm / inch)	DIMENSIONS (mm / inch)			LOT SIZE
			L	W	H	
2810 2214 00	25 / 1"	25 / 1"	106 / 4.2"	45 / 1.8"	45 / 1.8"	01
2810 4414 00	40 / 1½"	40 / 1½"	163 / 6.4"	72 / 2.8"	72 / 2.8"	01
2810 5514 00	50 / 2"	50 / 2"	188 / 7.4"	89 / 3.5"	89 / 3.5"	01
2810 6614 00	63 / 2½"	63 / 2½"	199 / 7.8"	110 / 4.3"	110 / 4.3"	01
2810 7714 00	80 / 3"	80 / 3"	251 / 9.9"	130 / 5.1"	130 / 5.1"	01

Union adaptors are used to quickly change out equipment, such as filter without dismantling the assembly.

FITTINGS

WALL MOUNTED MANIFOLD

> Wall mounted manifold (NPT thread)

2810 □□ 24 □□



PART NUMBER	AIRnet Ø (mm / inch)	FEMALE OUTLET Ø (NPT)	DIMENSIONS (mm / inch)			LOT SIZE
			L	W	H	
2810 1024 00	20 / ¾"	½"	100 / 3.9"	68 / 2.7"	110 / 4.3"	01
2810 2024 00	25 / 1"	½"	100 / 3.9"	68 / 2.7"	114 / 4.5"	01

In order to ensure proper assembly and disassembly from 1/2" NPT ports, use Loctite 577 thread sealant.

> Threaded wall mounted manifold (NPT thread)

2810 □□ 26 □□



PART NUMBER	AIRnet Ø (NPT)	FEMALE OUTLET Ø (NPT)	DIMENSIONS (mm / inch)			LOT SIZE
			L	W	H	
2810 0026 00	½"	½"	100 / 3.9"	68 / 2.7"	111 / 4.4"	01
2810 1026 00	¾"	½"	100 / 3.9"	68 / 2.7"	115 / 4.5"	01

FLANGE

> Flange



PART NUMBER	SIZE	Ø (mm)	H (mm)	LOT SIZE
2810 6054 00	2 ½" / 63mm Dual	185	95	01
2810 0054 07	2 ½" / 63mm ANSI	177.8	47	01
2810 7054 00	3" / 80mm Dual	200	120	01
2810 0054 08	3" / 80mm ANSI	190.5	59	01
2810 8254 00	4" / 100 ANSI	240 / 9.6"	131 / 5.24"	01

> Flange Accessories

PART NUMBER	SIZE	DESCRIPTION	Ø (mm)	H (mm)	LOT SIZE
0650 0100 16	2 ½" / 63mm	Flat Gasket	-	-	01
0650 1001 27	3" / 80mm	Flat Gasket	-	-	01
0650 0100 06	4" / 100mm	Flat Gasket	-	-	01
2810 8064 00	4" / 100mm	Flange Support	-	-	01
2810 0254 08	4" / 100mm	Imperial bolts and nuts for flange. Bolts are proper length to be used with butterfly valve.	-	-	08

SPARE PARTS

> Inner Parts

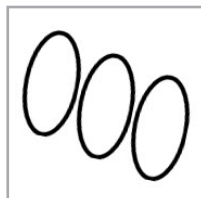
2810 □□ 60 □□



PART NUMBER	Ø (mm / inch)	LOT SIZE
2810 1060 00	20 / ¾"	05
2810 2060 00	25 / 1"	05
2810 4060 00	40 / 1½"	05
2810 5060 00	50 / 2"	05
2810 6060 00	63 / 2½"	05
2810 7060 00	80 / 3"	05

> Replacement O-ring

2810 □□ 65 □□ / 2810 □□ 66 □□



PART NUMBER	Ø (mm / inch)	LOT SIZE
2810 1065 00	20 / ¾"	10
2810 2065 00	25 / 1"	10
2810 4065 00	40 / 1½"	10
2810 5065 00	50 / 2"	10
2810 6065 00	63 / 2½"	10
2810 7065 00	80 / 3"	10
2810 1066 00	Quick drop 20 / ¾"	10
2810 2066 00	Quick drop 25 / 1"	10
2810 8065 05	seal 100/4"	05

> Replacement nuts and bolts

PART NUMBER	DESCRIPTION	LOT SIZE
2810 0166 10	100mm Bolt Set	10
2810 8060 10	20 Lock Pins and 10 Bolts (Used on 100mm Equal Sockets)	10

ACCESSORIES

NPT ACCESSORIES

The AirNet product range is complemented by a full range of high quality accessories for your compressed air installation.

> Spiral Hose

1310 □□□□ □□



PART NUMBER	DESCRIPTION	WORKING PRESSURE	CONNECTION SIZE	HOSE ID	HOSE OD	WORKING LENGTH
1310 0722 90	Spiral Hose	140	3/8"	21/64"	1/2"	12 ft
1310 0722 92	Spiral Hose	140	3/8"	21/64"	1/2"	20 ft

Burst pressure is 420.

> Shop Hose

1310 □□□□ □□



PART NUMBER	DESCRIPTION	WORKING PRESSURE	CONNECTION SIZE	HOSE ID	HOSE OD	WORKING LENGTH
1310 0722 96	Non Conductive	300	3/8"	3/8"	?	25 ft
1310 0722 97	Non Conductive	300	3/8"	3/8"	?	50 ft

> Reducing Bushing

1310 □□□□ □□



PART NUMBER	MALE NPT	FEMALE NPT
1312 1003 25	1/2"	1/4"
1312 1003 26	1/2"	3/8"
1312 1003 35	3/4"	1/2"
1312 1003 28	1"	3/4"
1310 0724 03	1-1/2"	1"
1310 2011 69	2"	1-1/2"
1310 2563 25	2-1/2"	2"
1310 2565 14	3"	2"
1310 2506 82	3"	2-1/2"

> Hose Reels

1310 □□□□ □□



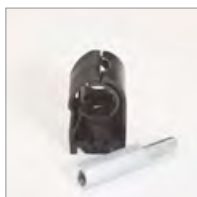
PART NUMBER	DESCRIPTION	SIZE (ID)	HOSE LENGTH	TYPE	LOT SIZE
1310 0722 93	300 PSI Heavy Duty	1/4"	50 ft	Open Reel	01
1310 0722 94	300 PSI Heavy Duty	3/8"	50 ft	Open Reel	01
1310 0722 95	300 PSI Heavy Duty	3/8"	30 ft	Open Reel	01
1310 0723 73	300 PSI Heavy Duty	1/4"	50 ft	Enclosed Reel	01
1310 0723 74	300 PSI Heavy Duty	3/8"	50 ft	Enclosed Reel	01

Spring driven features:

- Auto rewind easily wraps, stores and protects hose
- Heavy guage 1/4" steel base and support post
- Factory-matched cartridge-style spring motor
- Brass NPT swivel inlet machined from solid
- 1" solid steel axle with 1" lubricated precision bearings
- Guide arm adjusts to wall, floor and overhead positions
- Multi-position lock ratchet secures hose at desired length
- Non-corrosive stainless steel spring, pawl, and zinc plated ratchet
- Compact space saving design
- Swivel seals: Nitrile

> Pipe Clip Adaptor

1310 ☐☐☐☐☐☐



PART NUMBER	DESCRIPTION
1310 0722 76	Pipe clip to threaded rod (M8 x 3/8")

FLEXIBLE HOSES

> AIRnet hose NPT

2810 ☐☐☐ 57 ☐☐



PART NUMBER	LENGTH (ft)	Ø (inch)	CONNECTION TYPE	LOT SIZE
1312 1009 50	2.5'	3/4"	straight	01
1312 1009 51	4.9'	3/4"	straight	01
1312 1009 52	2.5'	1"	straight	01
1312 1009 53	4.9'	1"	straight	01
1312 1009 54	4.9'	1 1/2"	straight	01
1312 1009 55	4.9'	2"	straight	01

PROTECTION STRAP AGAINST WHIPLASH

2810 ☐☐☐ 55 ☐☐

The strap prevents the flexible hose from lashing should it become disconnected.

Conforms to ISO 4414 safety standards.

PART NUMBER	TYPE	LOT SIZE
2810 0055 00	For Ø12.5-32 mm (½"-1¼") hoses	01
2810 0055 01	For Ø40-80 mm (1½"-3") hoses	01

PRESSURE GAUGE

Use a threaded quick drop to install pressure gauges at any point in your network.

> Pressure gauge



PART NUMBER	MALE INLET Ø (NPT)	LOT SIZE
1503 2729 01*	¼"	01

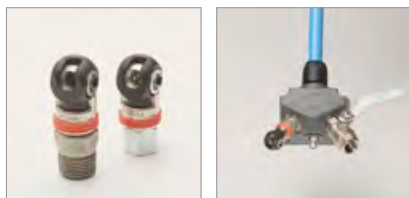
* Use a bushing 1312 1003 25 to connect from a Ø12.5 mm (½") threaded quick drop outlet.

ACCESSORIES

SAFETY COUPLERS

> 1/4" Body Style

1310 1009 □□



Pressure

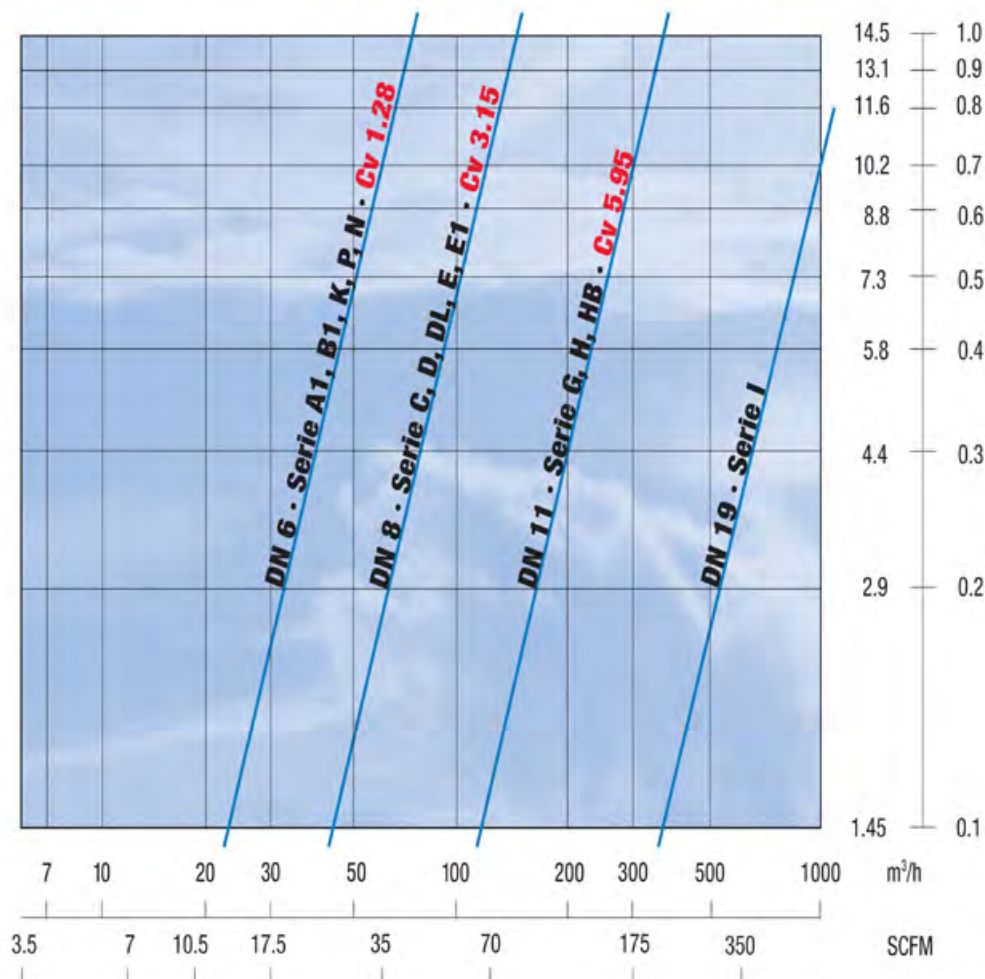
- Operating pressure up to 360 psi
- Connection and disconnection up to 200 psi
- Suitable for technical vacuums up to approx. 3 inHg

Temperature

- Standard model from -4° to +212°F.

PART NUMBER	DESCRIPTION	THREAD SIZE	PROFILE
1312 1009 41	Quick Coupler	1/4" FNPT	ARO
1312 1009 42	Quick Coupler	1/2" MNPT	ARO
1312 1009 46	Quick Coupler	1/4" FNPT	Industrial
1312 1009 47	Quick Coupler	1/2" MNPT	Industrial
1312 1009 43	Plug	1/4" MNPT	ARO
1312 1009 44	Plug	1/4" FNPT	ARO
1312 1009 48	Plug	1/4" MNPT	Industrial
1312 1009 49	Plug	1/4" FNPT	Industrial

SC Performance Graph for Air



Flow rate at 68°F (20°C), operating pressure 87 psi (6 bar)

PIPING

FITTINGS

ACCESSORIES

INSTALLATION
MATERIAL

TOOLS

INSTALLATION
GUIDE

INSTALLATION MATERIAL

CLIPS, BRACKETS AND SUPPORT

> Profile channel arms



PART NUMBER	DESCRIPTION	DIMENSIONS (mm / inch)			LOT SIZE
		L	W	H	
2810 0030 00	Profile channel (2 m / 6.6 ft)	2000 / 78.7"	30 / 1.2"	27 / 1.1"	05
2810 0031 00	Profile wall bracket	50 / 2.0"	76 / 3.0"	114 / 4.5"	05
2810 0032 00	Cantilever arm	300 / 11.8"	—	27 / 1.1"	05
2810 0132 00		500 / 19.7"	—	27 / 1.1"	01
2810 0033 00	T-bolt	30 / 1.2"	—	—	10
2810 0133 00		40 / 1.6"	—	—	10
2810 0233 00		60 / 2.4"	—	—	10
2810 0333 00		80 / 3.1"	—	—	10
2810 0034 00	Protection cap	—	30 / 1.2"	18.5 / 0.7"	10

Please respect the maximum weight allowed for a specific arm length.
 Profile channel can be cut to length and attached to wall using profile wall bracket.
 Protection caps sold separately.

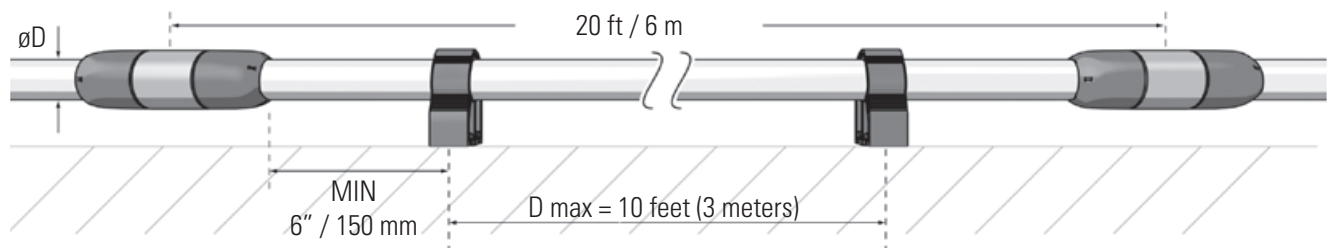
> Pipe clip



2810 □□ 22 □□

PART NUMBER	Ø (mm / inch)	C	DIMENSIONS (mm / inch)			LOT SIZE
			L	W	H	
2810 1122 00	20 / ¾"	M8	56 / 2.2"	30 / 1.2"	31 / 1.2"	20
2810 2122 00	25 / 1"	M8	60 / 2.4"	30 / 1.2"	38 / 1.5"	20
2810 4022 00	40 / 1½"	M8	101 / 4"	40 / 1.6"	60 / 2.4"	20
2810 5022 00	50 / 2"	M8	108 / 4.3"	40 / 1.6"	75 / 2.8"	20
2810 6022 00	63 / 2½"	M8	118 / 4.6"	40 / 1.6"	94 / 3.7"	20
2810 7122 00	80 / 3"	M8	162 / 6.4"	50 / 2"	118 / 4.6"	20

A minimum of two pipe clips are required to secure a 20 ft/6 m pipe length.



INSTALLATION MATERIAL

> Clip spacer

2810 ☐ ☐ 27 ☐ ☐



PART NUMBER	Ø (mm / inch)	LOT SIZE
2810 0027 00	20 / ¾"	10
	25 / 1"	
2810 0127 00	40 / 1½"	10
	50 / 2"	
	63 / 2½"	
2810 0227 00	80 / 3"	10
2810 0327 00	100 / 4"	10

The clip spacer compensates for the height difference which is created when connecting pipes of a different diameter allowing perfect alignment.

OTHER HANGING SOLUTIONS

> Hanging to a beam I or H profile



PART NUMBER	DESCRIPTION	DIMENSIONS (mm / inch)			LOT SIZE
		L	W	H (beam thickness)	
2810 0035 00	Push-in beam clamp (1)	36 / 1.42"	18 / 0.71"	2 - 3 / 0.08" - 0.12"	10
2810 0135 00		36 / 1.42"	18 / 0.71"	3 - 8 / 0.12" - 0.31"	10
2810 0235 00		36 / 1.42"	18 / 0.71"	8 - 14 / 0.31" - 0.55"	10
2810 0335 00	Screw beam clamp (2)	36 / 1.42"	18 / 0.71"	14 - 20 / 0.55" - 0.79"	10
2810 0036 00		36 / 1.42"	18 / 0.71"	18 / 0.71"	10
2810 0038 00	Hang clamp (3)	64 / 2.52"	19 / 0.75"	1 - 4 / 0.04" - 0.16"	10
2810 0138 00		64 / 2.52"	19 / 0.75"	4 - 7 / 0.16" - 0.28"	10

> Other hanging solutions



PART NUMBER	DESCRIPTION	DIMENSIONS (mm / inch)			LOT SIZE
		L	W	H	
2810 0037 00	U-bolt beam clamp (1)	70 / 2.8"	43 / 1.7"	—	10
2810 0039 00	Roof clamp (2)	25 / 1"	—	—	10
2810 0050 00	Canalis hanger (3)	200 / 7.9"	59 / 2.3"	30 / 1.2"	05

INSTALLATION MATERIAL

> Gripple products



(1)



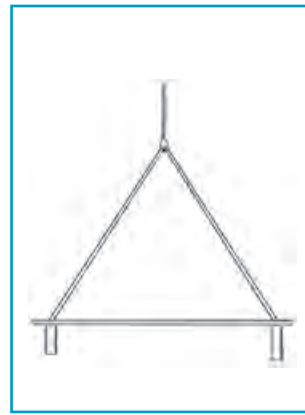
(2)



(3)



(4)



(5)



(6)

TYPE	PART NUMBER	DIMENSIONS	WORKING LOAD	LOT SIZE
(1) Loop Hangers	2810 0238 05	5 ft	No. 2 Working Load Limit	5
	2810 0238 10			10
	2810 0338 05	15 ft	0 - 100 lbs Loop	5
	2810 0338 10			10
(2) 1/4" Stud Hangers	2810 0438 05	5 ft	No. 2 Working Load Limit	5
	2810 0438 10			10
	2810 0538 05	15 ft	22-100 lbs 1/4" Stud	5
	2810 0538 10			10
(3) 90 Degree Eyelet Hangers	2810 0638 05	5 ft	No. 2 Working Load Limit	5
	2810 0638 10			10
	2810 0738 05	15 ft	22-100 lbs 90 Degree Eyelet	5
	2810 0738 10			10
(4) Single Barrel Hangers	2810 1038 05	5 ft	No. 2 Working Load Limit	5
	2810 1038 10			10
	2810 1138 05	15 ft	22-100 lbs Single Barrel	5
	2810 1138 10			10
(5) No. 2 Y-Fit Pipe Hanger	2810 0838 05	5 ft	No. 2 Y-Fit Pipe Hanger Working Load Limit	5
	2810 0828 10			10
	2810 0938 05	15 ft	0-200 lbs Barrel Fixing	5
	2810 0938 10			10
Tool (6)	2810 0149 00	N/A	A purpose made tool for cutting wire rope	1

INSTALLATION MATERIAL



The Grippler hanger range is a safe, efficient and fast alternative to hanging brackets. It is perfectly designed to suspend AIRnet piping and is compatible with the complete line of AIRnet pipes, regardless of diameter, length of pipe or suspension distance

required. The Grippler range can be suspended from beams and purlins, trusses, concrete, metal and wooden structures and can be easily configured to suspend multiple lines from one fastener.

> Loop hanger (Ideal use - hanging from beams)



Applications

The loop end fixing is an ideal method for choking around:

- Bar joists
- Purlins
- Beams
- Roof trusses
- Unistrut channel
- Other accessible building features

Product Features

- Quick and safe choke knot installation
- No need for nuts, bolts, beam clamps, purlin clips or other accessories
- Up to 6 times faster installation compared with threaded rod, strap or chain

Loop End Fixing Size

SIZE	WEIGHT RANGE
No. 2	Holds up to 100 lbs.

- 5:1 safety factor.
- Available in lengths of 5ft or 15ft as standard.

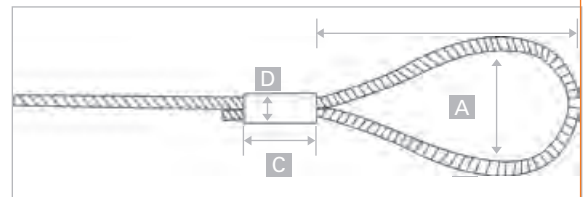
Kit Contents:

- 5' or 15' hangers
- Grippler
- Grippler key

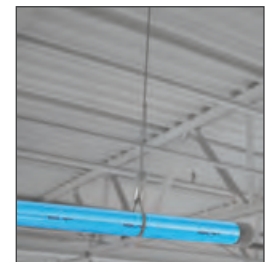
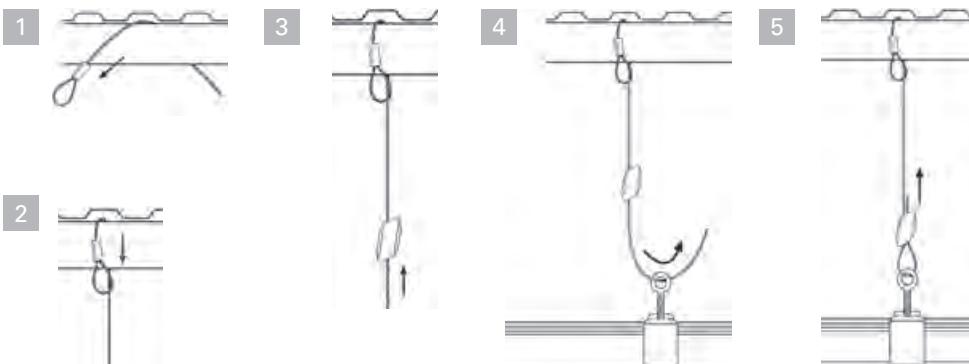


Loop Specifications

SIZE	A (Nominal) inches	B (Nominal) inches	C inches	D inches
No. 2	1 3/16"	2 3/8"	1/2"	5/16"



How to Use



AIRnet piping installed with Grippler hanger.

INSTALLATION MATERIAL

> Stud hanger (Ideal use - hanging from concrete/metal decking)



Applications

The stud end fixing provides a quick method for installing services into:

- Concrete structures
- Metal decking structures
- Metal brackets using nuts
- Clamps and clevis hangers with 1/4" female threads

Product Features

- Quick installation into concrete using drop-in anchors or nuts
- Drop-in anchors or nuts supplied free as part of the kit

Stud End Fixing Size

SIZE	Weight range	Thread
No. 2	22-100 lbs	1/4"

- The above size has a 5:1 safety factor.
- Available in lengths of 5ft or 15ft as standard.

Kit Contents:

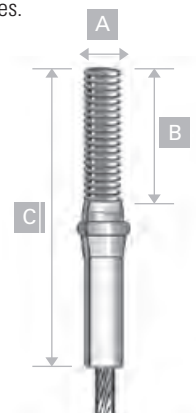
- 5' or 15' hangers
- Gripper
- Gripper key
- Expansion nut



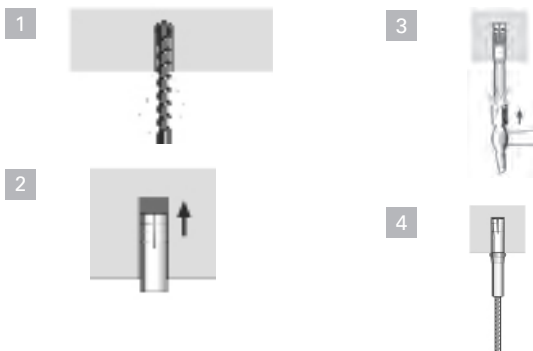
Stud Specifications

SIZE	A inches	B inches	C inches
No. 2	1/4"	3/4"	2"

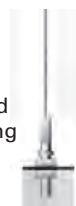
All standard Gripper studs are manufactured from mild steel which is zinc coated for maximum anti-corrosion properties.



How to Use



All stud products can be attached to the suspended service by using either nuts or inserting into a female thread on the service.



INSTALLATION MATERIAL

> 90° Eyelet hanger (Designed to be used with powder actuated devices)



Applications

Designed for fixing into concrete, steel and wood:

- Suitable for suspending all types of services
- 9/32" hole allows any suitable 1/4" fastener or anchor to be used in concrete

Product Features

- Versatile - can be attached to concrete using a variety of 1/4" anchors or fasteners
- Designed for shot firing into concrete, steel and wood using gas and powder actuated tools
- Quick and safe saving time on installation

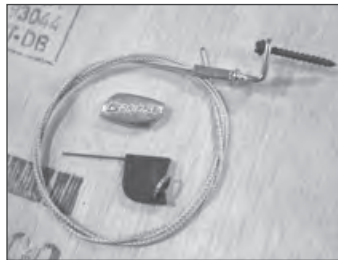
90° Eyelet Fixing Size

SIZE	WEIGHT RANGE
No. 2	22-100 lbs.

- The above size has a 5:1 safety factor.
- Available in lengths of 5ft or 15ft as standard.

Kit Contents:

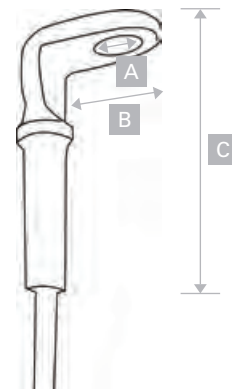
- 5' or 15' hangers
- Gripper
- Gripper key
- Screw



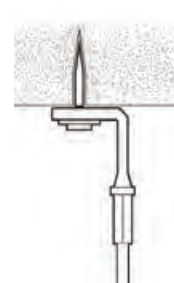
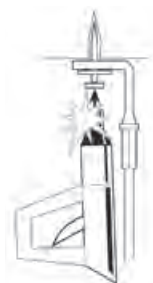
90° Eyelet Specification

SIZE	A inches	B inches	C inches
No. 2	9/32"	7/8"	1 1/2"

The 90° Gripper eyelet end fixing is made from zinc plated steel.



How to Use



INSTALLATION MATERIAL

PIPING

FITTINGS

ACCESSORIES

INSTALLATION MATERIAL

TOOLS

INSTALLATION GUIDE

> Barrel hanger (Ideal to use in conjunction with AIRnet pipe clips)



Applications

Designed to work with a 1/4" male thread, this 1/4" female threaded barrel unit is suitable for:

- 1/4" bolts or screws

Product Features

- Aesthetic finish provides a clean look
- Quick installation
- Screw onto 1/4" T-bar twist clip or 1/4" bolt
- Cable is an integral part of barrel fixing with an end stop

Barrel End Fixing Size

SIZE	WEIGHT RANGE
No. 2	22-100 lbs.

- The above size has a 3:1 safety factor.
- Available in lengths of 5ft or 15ft as standard.

Kit Contents:

- 5' or 15' hangers
- Gripper
- Gripper key
- Barrel end fixing
- Screw

Does Not Include:

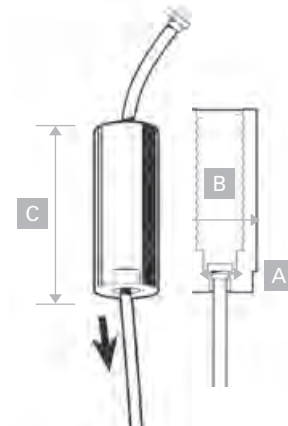
- Tools
- AIRnet pipe clip



Barrel Specification

SIZE	A inches	B inches	C inches
No. 2	1/4"	1/2"	1 3/16"

The Gripper barrel end fixing is made from zinc plated steel.

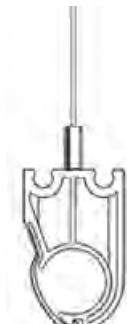


How to Use

1



2



For use with AIRnet pipe clips.



AIRnet piping installed with Gripper barrel fixing.

INSTALLATION MATERIAL

> Y-Fit pipe hanger (Ideal use - hanging multiple pipes)



Applications

Y-fit pipe hanger provides a quick and easy way to suspend pipework or conduit without the need for traditional supports and bearers:

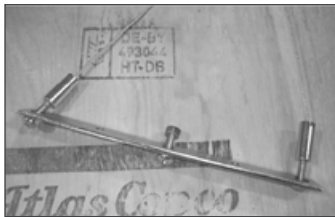
- Supplied as a complete kit which consists of a barrel Y-Fit hanger with metal support plate.
- Designed to support two pipes/conduit 3/8" - 2 1/2"
- Y-Fit accessory suitable for long drops with standard Grippler hanger kits.

Product Features

- Quick attachment of pipe/conduit brackets to barrel fixing
- 50% less drilling with one single anchoring point
- Replaces conventional supports which require cutting and preparation on-site
- Ready to use kit
- Two legs provide support improving the center of gravity

Y-Fit Pipe Hanger Fixing Size

- Available in lengths of 5ft or 15ft as standard.
- Leg lengths 8"

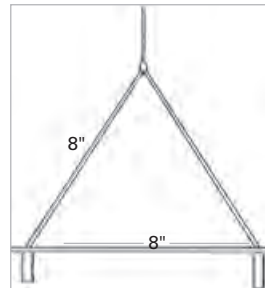


Kit Contents:

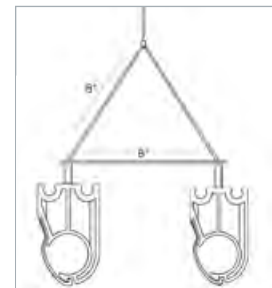
- 5' or 15' hangers
- Grippler
- Grippler key
- Barrel fixing (x2)
- Y Bar
- Nut & bolt

Y-Fit Pipe Hanger Specification

Y-Fit bar can hold up to 5 pipe clips.



Y-Fit Pipe Hanger



Y-Fit Pipe Hanger with 2 Airnet pipe lips.

How to Use



Shown with a third Airnet pipe clip, nut & bolt. To install, insert bolt through pipe clip and Y Bar. Secure with nut.

TOOLS

TOOLBOX

Order your complete ToolBOX to assemble Ø20 - 50 mm ($\frac{3}{4}$ " - 2") pipes and quick drops. Tools may be purchased separately.

> ToolBOX

2810 0345 00



PART NUMBER	ITEM	DESCRIPTION
2810 2128 00	AIRnet spanner	Ø20-25 mm ($\frac{3}{4}$ " - 1")
2810 4028 00	AIRnet spanner	Ø40 mm (1½")
2810 5028 00	AIRnet spanner	Ø50 mm (2")
2810 0049 00	L key	Quick drop assembly
2810 0029 00	AIRnet pipe marker	For all diameters
2810 0040 00	Aluminum pipe cutter	The pipe cutter for large diameters (2810 0140 00) is supplied individually
2810 0141 00	Aluminum pipe deburrer	Only heavy duty model to cover all diameters up to Ø50 mm (2")
2810 0042 00	Hole deburrer	
2810 0043 00	Hole saw	Ø19 mm ($\frac{3}{4}$ ") Used for Ø25 mm (1") quick drops
2810 0143 00	Hole saw	Ø12.5 mm ($\frac{1}{2}$ ") Used for Ø20 mm ($\frac{3}{4}$ ") quick drops
2810 0044 00	Drill bit holder	—
2810 0340 00	Spare Cutter Blade	for pipe cutter
2810 0148 00	Slide Fluid	water base lubricator

> Additional Tools

PART NUMBER	ITEM	DESCRIPTION
2810 6028 00	AIRnet Spanner	63mm (2½")
2810 7028 00	AIRnet Spanner	80mm (3")
2810 8028 00	Belt Spanner	40-80mm (1½" - 3")
2810 0440 00	Cutter Blade	100mm Spare Cutter
2810 0641 00	Aluminum Pipe Deburrer	100mm Deburrer
2810 0441 00	Aluminum Pipe Deburrer	100mm Deburrer Drill
0462 1011 05	Torque Wrench Head	100mm Eq Union use
0462 7094 21	Torque Wrench	100mm Eq Union use

> Toolset

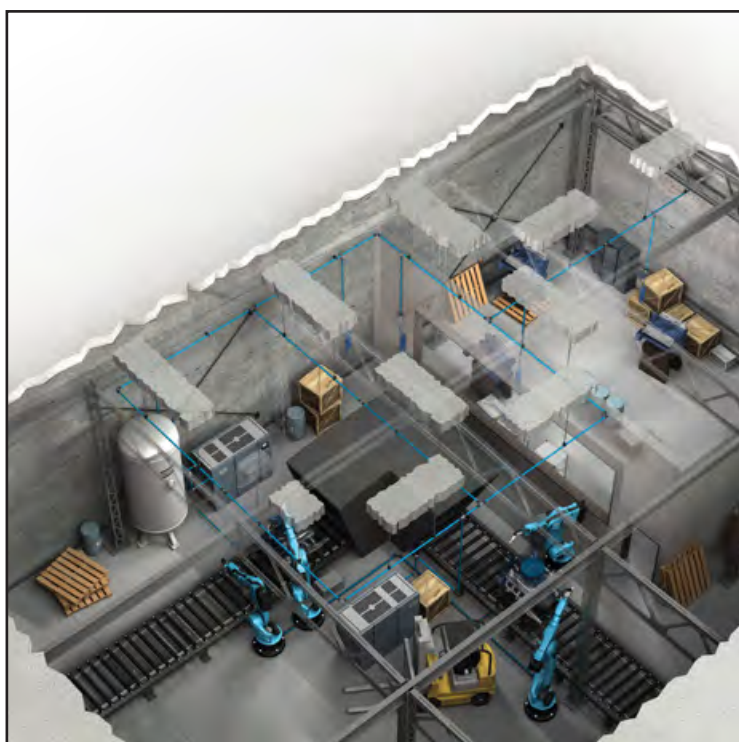
To assemble 100 mm (4") pipes.



PART NUMBER	ITEM	DESCRIPTION
2810 0129 00	AIRnet Pipe Marker	100mm (4")
2810 0044 00	Pipe Cutter	Only for diameter larger than 100mm (4") must verify this statement
0462 1011 05	Torque Wrench	100mm (4")
0462 7094 21	Torque Wrench with head	100mm (4")
2810 0641 00	Hole Deburrer (pen)	100mm (4")
2810 0441 00	Pipe Deburrer	100mm (4") Electric Drill required

A PROPERLY DESIGNED AIRNET SYSTEM

- Guarantees the required pressure at the point of use with minimal pressure drop.
- Allows air flow from generation to point of use with maximum efficiency.
- Maintains contaminant free, high quality air to the downstream equipment and points of use over the lifetime of the system.
- Performs the installation with minimum downtime. The system can be pressurized immediately after assembly.
- Anticipates future requirements, and provides the necessary flexibility for future evolution.
- Reduces downtime, with the proper placement of valves that allows for isolation of areas for maintenance.
- Have questions? Contact us at www.airnet.supportusa@atlascopco.com.



INSTALLATION GUIDE

PRE-INSTALLATION

What is the point of highest pressure drop?

The point of the highest **pressure drop** is typically the furthest point of use in the system. It takes into account all the **pressure drops** along the path from the point of generation to the point of use.

A high **pressure drop** requires a higher loading pressure on the compressor compensating for the losses along the network.

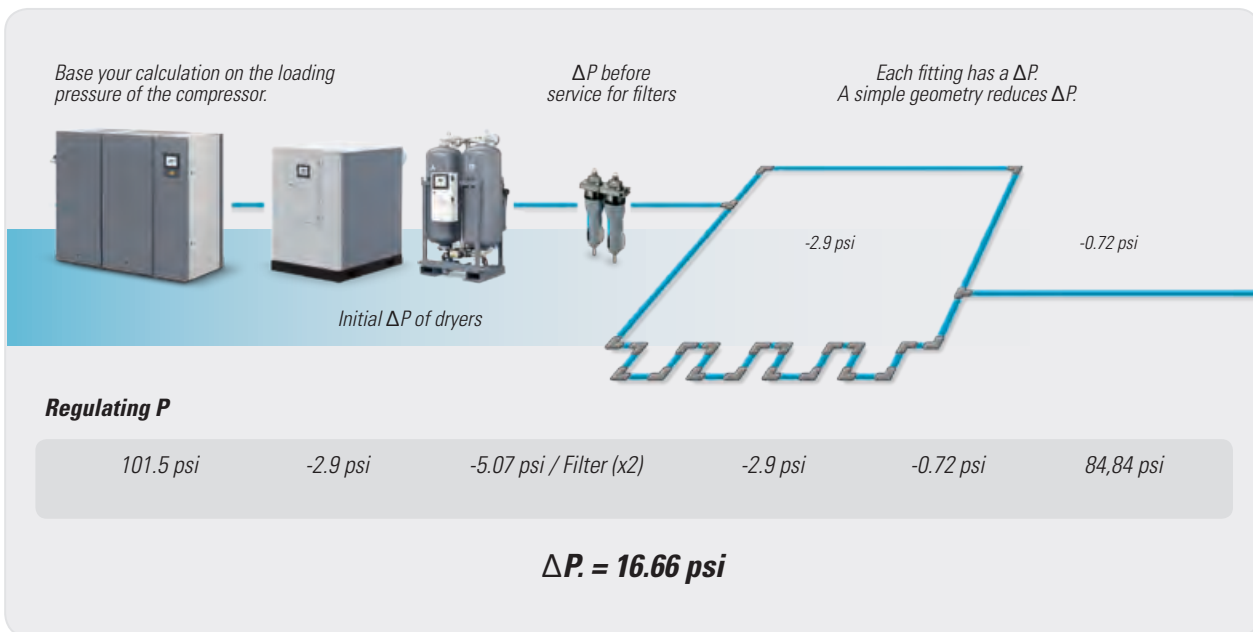
A 2 psi increase in operating pressure results in a 1% increase in energy consumption. **Pressure drops** drastically increase the electric bill.

The pressure drop is influenced by various factors which can be classified from highest to lowest impact.

- The pipes' inner diameter:
Increasing the pipes' inner diameter reduces the **pressure drop** but increases the initial investment.
- Free air delivery:
The air demand of all downstream equipment connected to the network.
- The friction factor:
Related to the pipe's material. AIRnet pipe has a very low friction factor due to its smooth surface as opposed to galvanized pipes.
- The length of the network:
The longer the network, the higher the **pressure drop**.
- The design:
It is recommended to build a ring in order to reduce your **pressure drop**.
- Working pressure:
When the working pressure is lower, the **pressure drop** increases.

A properly designed system takes all these factors into account. By sizing the pipe properly, using AIRnet pipe with its low friction factor, minimizing the length of pipe used, and designing a system that takes advantage of a ring design, you will be able to minimize the **pressure drop** throughout the network. This will allow you to set a narrow pressure band on your compressor, maximizing the efficiency of the system and greatly saving on energy consumption and cost.

To evaluate the pressure drop in a typical installation



Design your network so that the loading pressure at the compressor (101.5 - in the example above) is as close to the actual pressure needed at the point of use. Anticipate future needs that will result in a higher pressure drop (a pressure > 84.84 psi - in the example above).



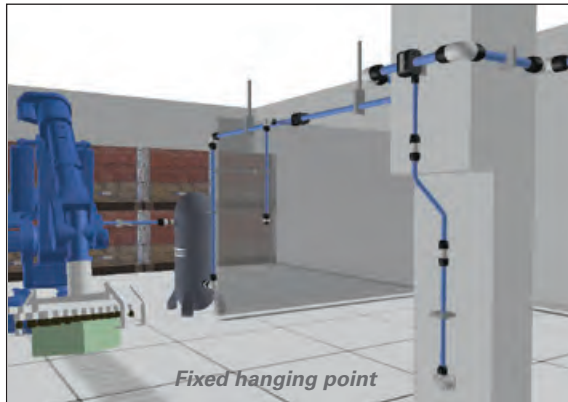
The above data is used for example purposes only.

An improperly designed network will have a high pressure drop and require you to increase the loading pressure. The higher the loading pressure the higher the energy bills. A more efficient alternative may be to use a larger size pipe, minimizing the pressure drop, when designing your system.

INSTALLATION GUIDE

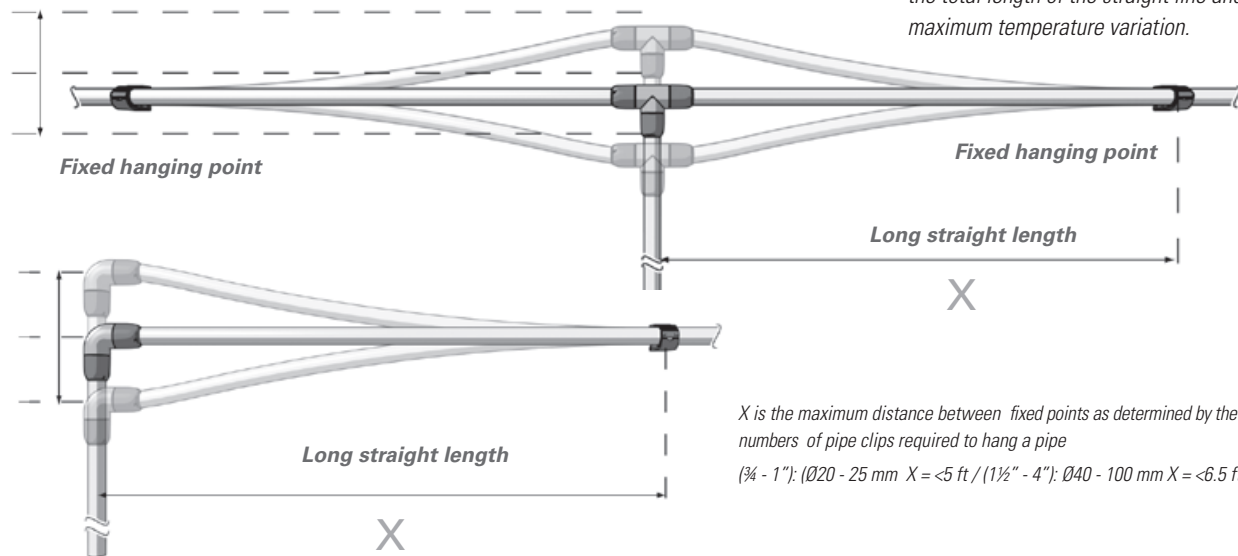
BEFORE INSTALLATION

Evaluate network requirements



- Determine if any major obstacles exist that may require a hose in order to limit the pressure drop in a complex ainet geometry.
- Standardize quick drops lengths and design when possible
- Valves should be used to isolate network sections.
- Long straight lines may require expansion loops in order to absorb the dilatation.

Long straight pipes can expand or contract due to temperature variations. To compensate for this effect, expansion loops are required. The number of expansion loops depends on the total length of the straight line and the maximum temperature variation.



Provided that the hanging point matches the maximum X distance, the below table clarifies the maximum possible straight distance vs. the temperature variation. When the length of the straight line exceeds the maximum, expansion loops are required to compensate for the variation in length.

ΔT (T MAX - T MIN)	$\frac{3}{4}$ " / $\varnothing 20$ mm	1" / $\varnothing 25$ mm	$1\frac{1}{2}$ " / $\varnothing 40$ mm	2" / $\varnothing 50$ mm	$2\frac{1}{2}$ " / $\varnothing 63$ mm	3" / $\varnothing 80$ mm	4" / $\varnothing 100$ mm
9°F / 5°C	692 ft / 211 m	551 ft / 168 m	614 ft / 187 m	492 ft / 150 m	390 ft / 119 m	308 ft / 94 m	247 ft / 75 m
18°F / 10°C	522 ft / 159 m	417 ft / 127 m	463 ft / 141 m	371 ft / 113 m	295 ft / 90 m	233 ft / 71 m	186 ft / 57 m
36°F / 20°C	351 ft / 107 m	279 ft / 85 m	312 ft / 95 m	249 ft / 76 m	197 ft / 60 m	154 ft / 47 m	123 ft / 38 m
54°F / 30°C	262 ft / 80 m	210 ft / 64 m	233 ft / 71 m	187 ft / 57 m	148 ft / 45 m	118 ft / 36 m	94 ft / 29 m
72°F / 40°C	210 ft / 64 m	171 ft / 52 m	187 ft / 57 m	148 ft / 45 m	118 ft / 36 m	95 ft / 29 m	76 ft / 23 m

PIPING

FITTINGS

ACCESSORIES

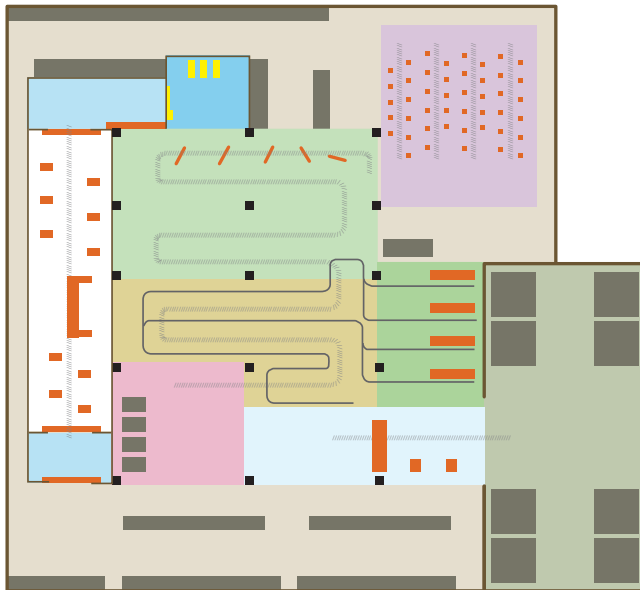
INSTALLATION
MATERIAL

TOOLS

INSTALLATION
GUIDE

DESIGNING YOUR SYSTEM

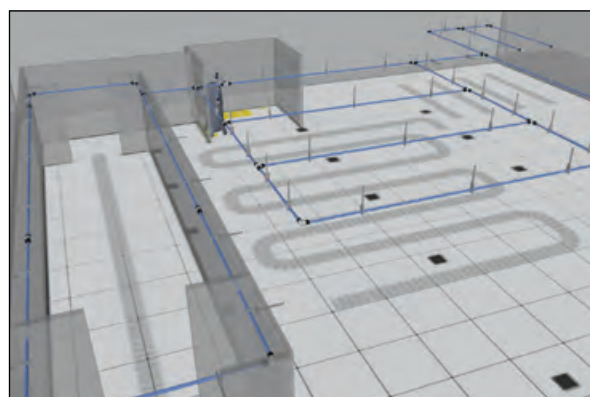
Using a drawing of the plant, identify the major air demand locations.



- Parts Storage
- LCD Panel Manufacturing
- Compressor Room
- Clean Room Air Lock
- Frame Assembly
- Quality Control Area
- Final Assembly
- Plastic Injection Moulding
- Shipping
- Packaging
- Clean Room

- Machinery
- Compressed Air equipment
- Storage Bay

Identify the major air demand locations, including the location of the compressor. Evaluate the consumption level of these locations to make a distinction between high volume consumers (requiring a distribution line) and low volume, point of use consumers (requiring a quick drop).



Create a network skeleton

- Main Ring
- Distribution Line
- Cross Ring Lines
- Drop Legs

INSTALLATION GUIDE

Validate the hanging solution for your network layout

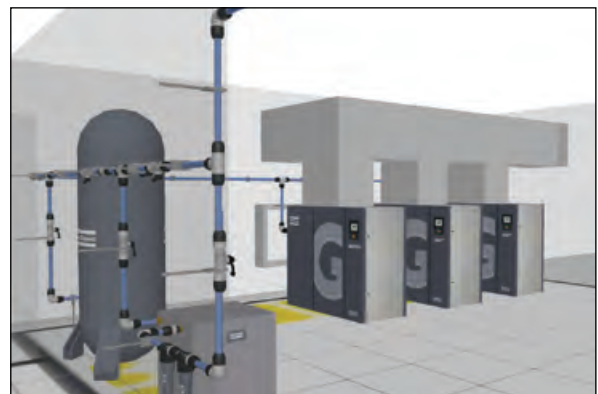
Make sure that the construction of your plant allows you to install the network layout you create. Keep in mind that the selected hanging solution should be safe, and should require the least possible installation time. We offer multiple hanging systems to fit any plant construction.



Connection of manufacturing processes

Inventory the numbers of threaded inlets and outlets in your compressor room to define the threaded unions' requirements.

What type of connection will you use to connect your system to the various points of use? Can these be standardized to wall mounted manifolds?



PIPING

FITTINGS

ACCESSORIES

INSTALLATION
MATERIAL

TOOLS

INSTALLATION
GUIDE

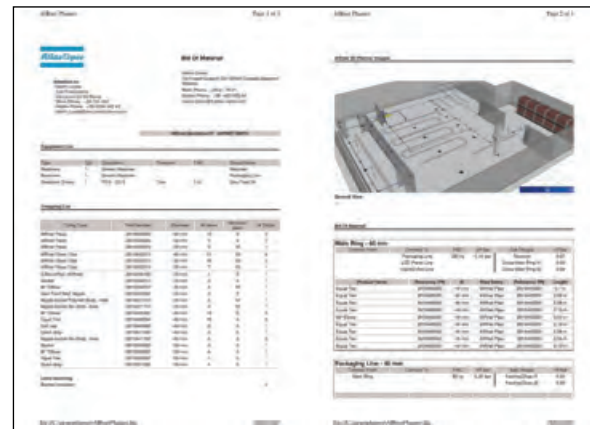
Finalize the bill of material

Tick off the below checklist to make sure nothing is forgotten:

Do you have all necessary equipment for a smooth and successful installation?

- AIRnet pipes
- AIRnet fittings
- Pipe clips
- S-bend to reduce the distance between the pipe and the wall
- Accessories, like hoses and valves
- Threaded connections to connect from and to the manufacturing process
- Bushing - reducing hardware
- Hanging brackets
- Assembly tools
- Lifting equipment
- Additional quick drops to keep on hand stock for possible future extensions

Have you calculated the required assembly and hanging time?

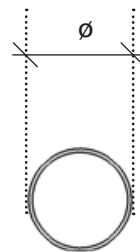
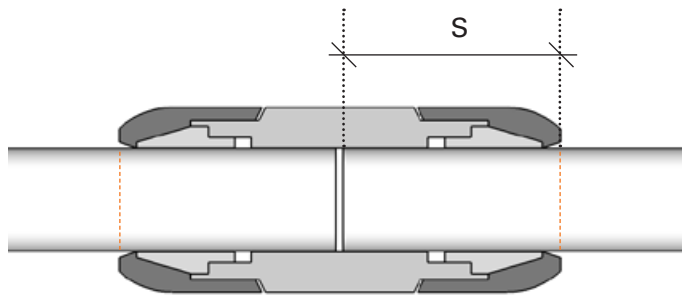


The standard length of an AIRnet pipe is 20 ft or 6 m. As some pipes need to be cut, the required number of pipes does not equal the total length of the network divided by 20 (when calculated in feet) or 6 (when calculated in meters).

INSTALLATION GUIDE

ASSEMBLY GUIDE

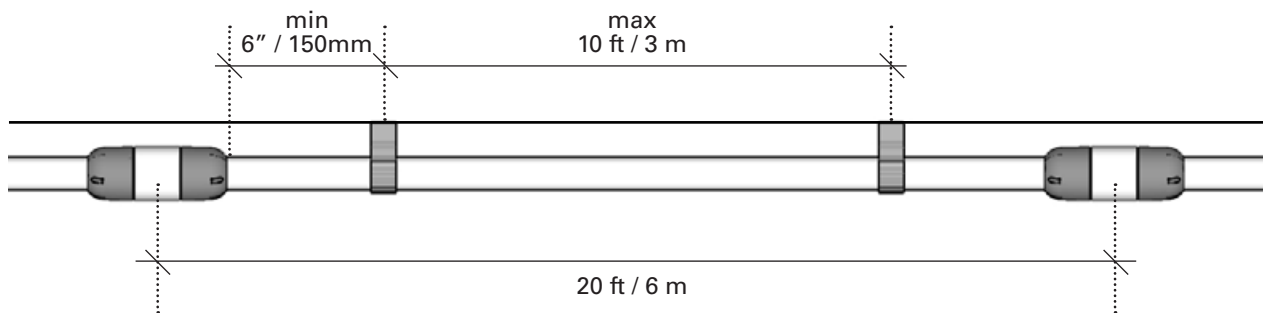
Diameters 3/4" - 3" / 20-80mm



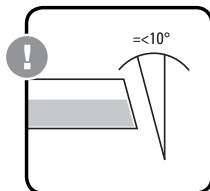
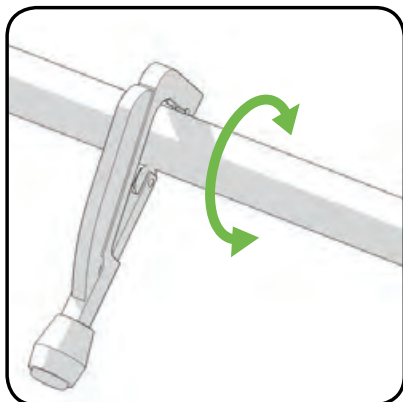
Ø	S
3/4" / 20mm	2" / 49mm
1" / 25mm	2 1/2" / 62mm
1 1/2" / 40mm	3 7/8" / 98mm
2 / 50mm	4 3/8" / 112mm
2 1/2" / 63mm	3 1/2" / 90mm
3" / 80mm	4 1/2" / 115mm



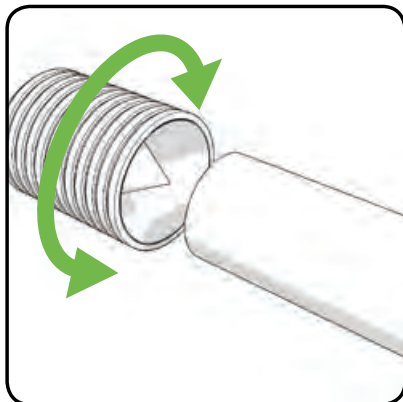
Ø	# clips per tube
3/4" / 20mm	2 x 2810 1022 00
1" / 25mm	2 x 2810 2022 00
1 1/2" / 40mm	2 x 2810 4022 00
2 / 50mm	2 x 2810 5022 00
2 1/2" / 63mm	2 x 2810 6022 00
3" / 80mm	2 x 2810 7022 00



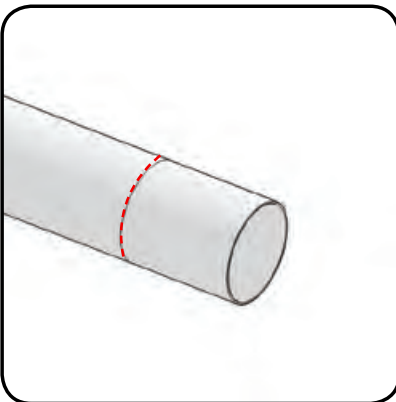
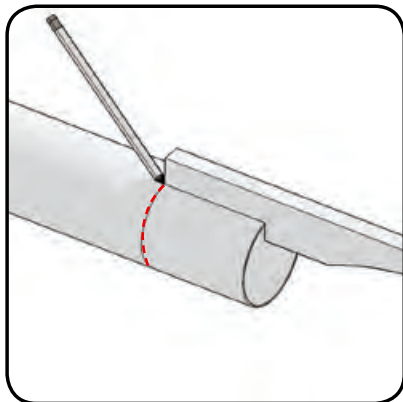
Diameters 3/4" - 3" / 20-80mm



Cut pipe to proper length.



Chamfer and deburr pipe.

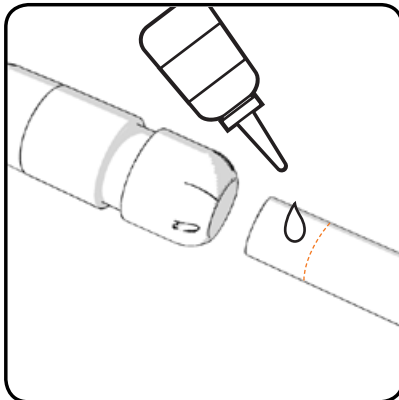


Ø 20-50 mm	2810 0141 00
Ø 63 mm	2810 0241 00
Ø 80 mm	2810 0341 00

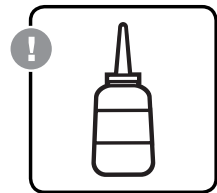
*** Very Important ***
Mark fitting insertion depth.

INSTALLATION GUIDE

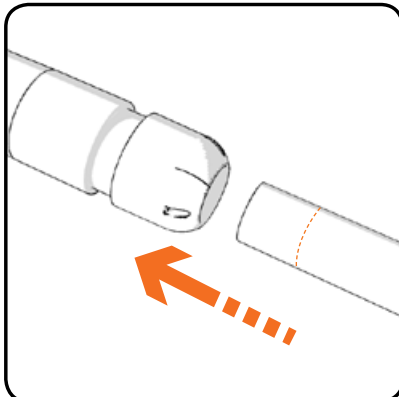
Diameters 3/4" - 3" / 20-80mm



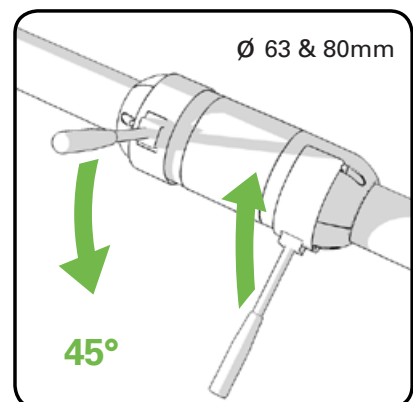
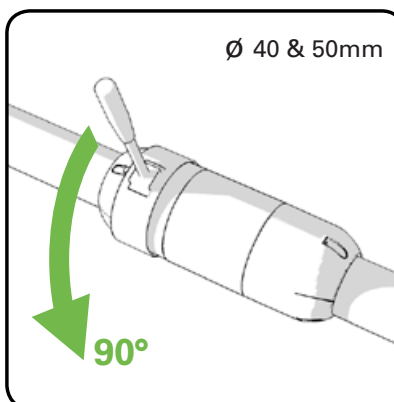
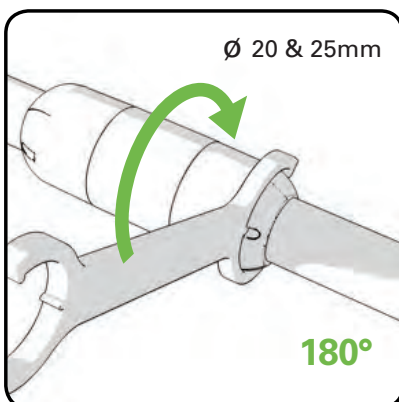
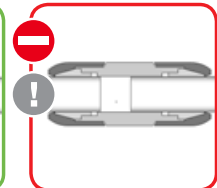
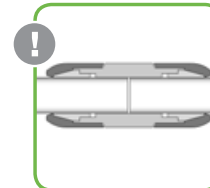
Use silicone free lubricant for easy insertion for size >1".



2810 0148 00



Insert pipe to previously marked depth.



Hand tight then use spanner wrench as indicated.

PIPING

FITTINGS

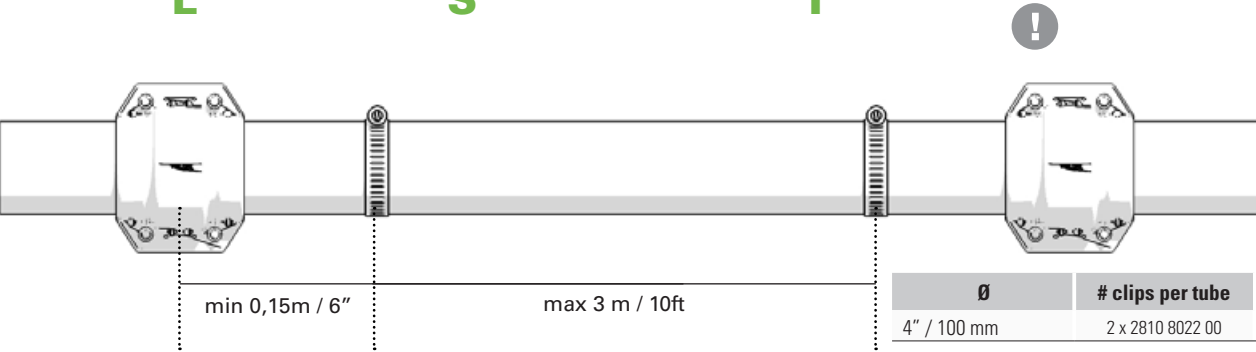
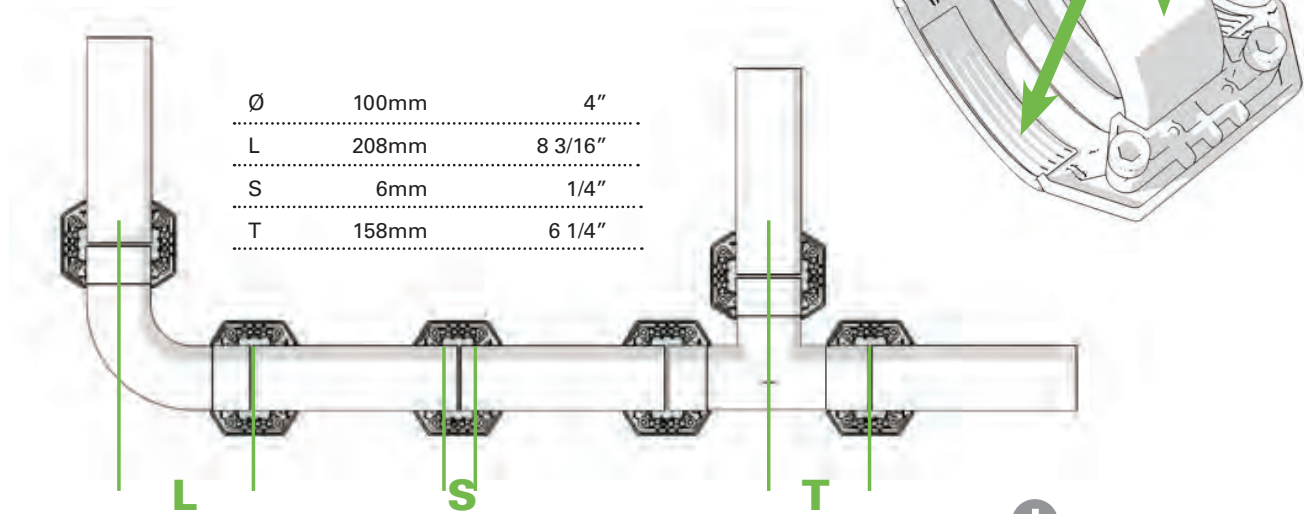
ACCESSORIES

INSTALLATION
MATERIAL

TOOLS

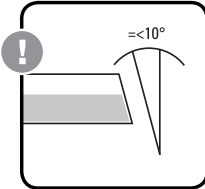
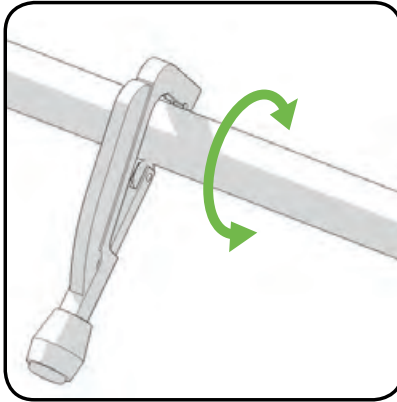
INSTALLATION
GUIDE

Diameter 4" / 100mm

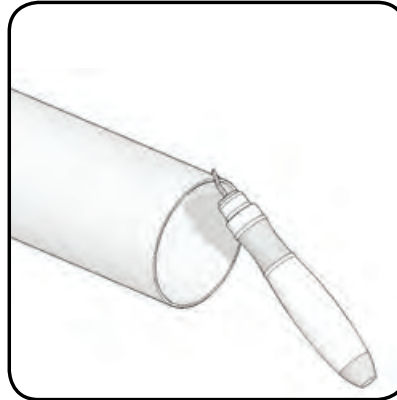
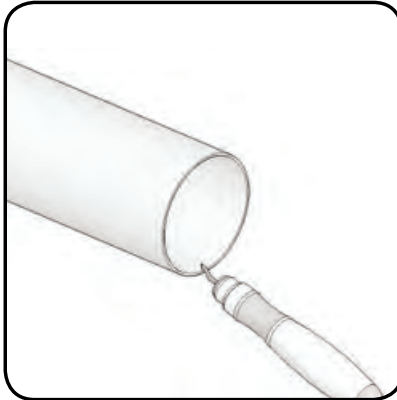


INSTALLATION GUIDE

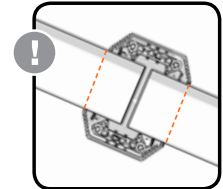
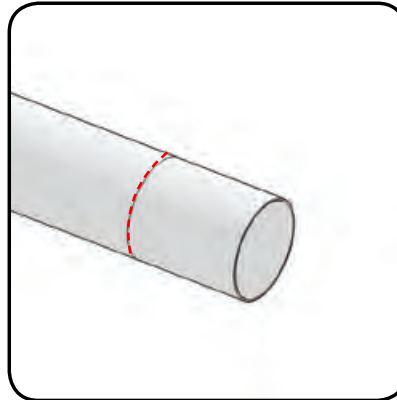
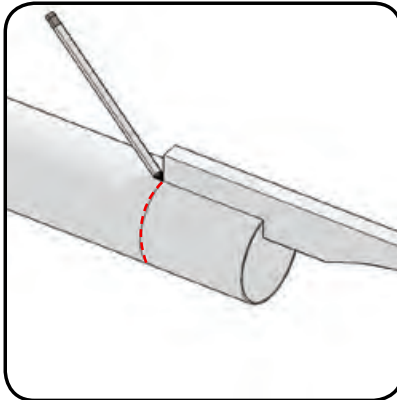
Diameter 4" / 100mm



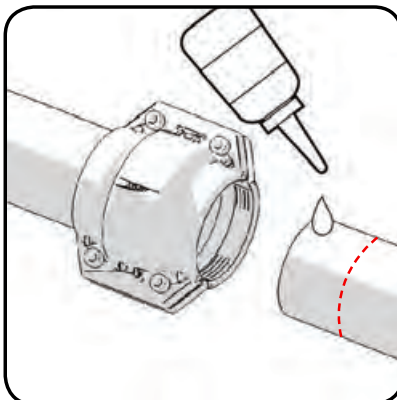
Cut pipe to proper length.



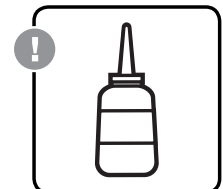
Chamfer and deburr pipe.



*** Very Important ***
Mark fitting insertion depth.



Use silicone free lubricant
for easy insertion.



2810 0148 00

PIPING

FITTINGS

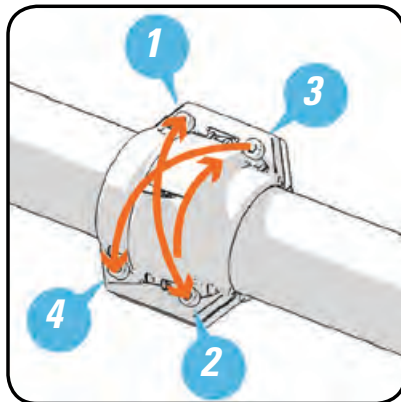
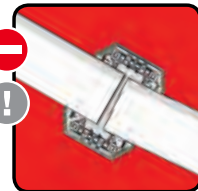
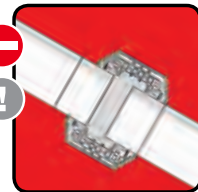
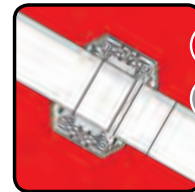
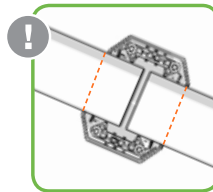
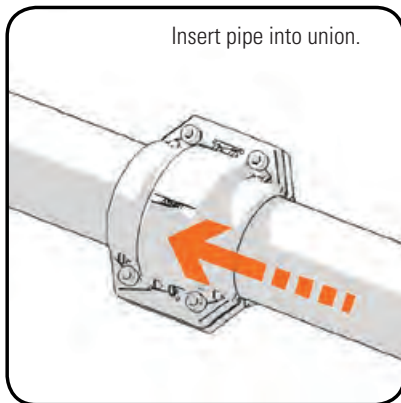
ACCESSORIES

INSTALLATION
MATERIAL

TOOLS

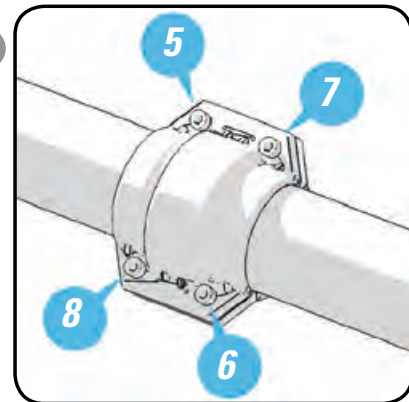
INSTALLATION
GUIDE

Diameter 4" / 100mm



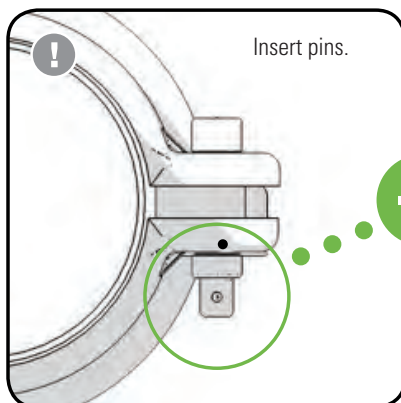
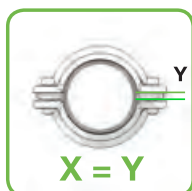
STEP 1

0-3.7 lbs/ft
0-5 Nm



STEP 2

29.5 lbs/ft
40Nm



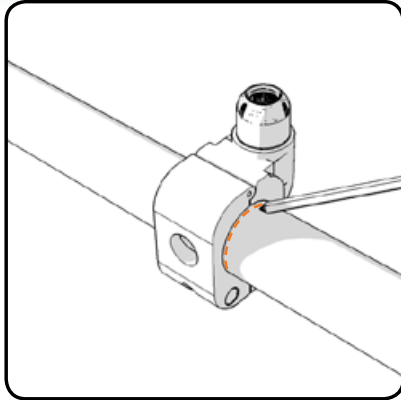
*** Very Important ***

Torque bolts to specified torque settings, making sure to complete in 2 steps.

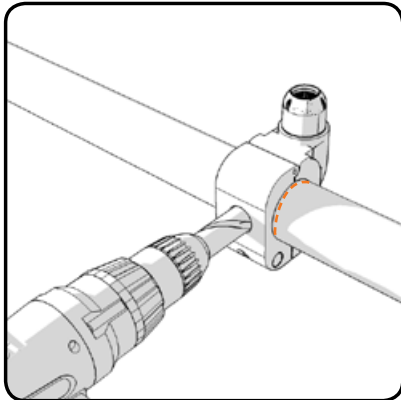
INSTALLATION GUIDE

Quick Drop Assembly

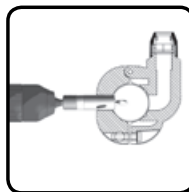
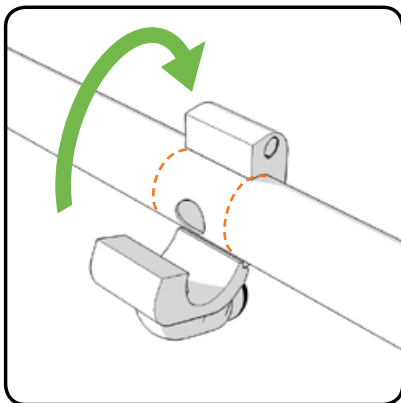
Diameters 3/4" - 3" / 20 - 80mm



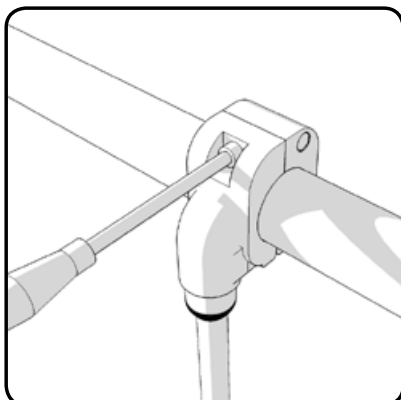
Mark pipe (in the position it will be used in) using the alignment guides molded into the side of the quick drop. Then turn fitting 180 degrees.



Use the quick drop as a drilling guide. Deburr hole and remove metal shavings.



Turn quick drop 180 degrees. Using the marks in step 1 to align quick drop.



Tighten quick drop with L key.



PIPING

FITTINGS

ACCESSORIES

INSTALLATION
MATERIAL

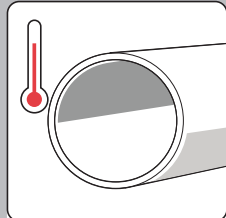
TOOLS

INSTALLATION
GUIDE

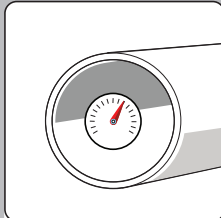
OPERATING CONDITIONS & SAFETY INSTRUCTIONS

- AIRnet has been designed to convey compressed air.
- The installer must employ safe working practices and observe all related local work safety requirements and regulations.
- Installation, operation, maintenance and repair work must be performed by authorized, trained, specialized personnel.
- Before any installation, maintenance, repair work, adjustment or any other non-routine checks, relieve the system of pressure and effectively isolate the system from all sources of pressure.
- Never use the components below or in excess of its limit ratings.
- AIRnet pipes and fittings are not recommended for embedded or buried installations.
- Do not use the AIRnet system as support for electrical equipment or earth conductor.
- Use the correct tools.
- Use only genuine parts.
- Never weld pipes.
- The AIRnet pipes offer excellent resistance to UV radiation.
- AIRnet piping must be appropriately protected against violent impacts.
- Any plugs or caps must be removed before installing the pipes.
- Never use solvents or chemicals which can damage the materials.
- Check the surface of the AIRnet pipe (no deep scratches, abrasions, dents, ...) before installing.
- Never connect AIRnet pipes directly to a source of excessive vibrations, use hoses instead.
- The installer must ensure that all local codes and regulations are followed for the installation of compressed air systems.
- At initial start up, apply a test pressure of 30 psi to the system to identify leakage or imperfect joints. After performing the inspection, increase the pressure gradually and constantly (max. 15 psi every 30 seconds).

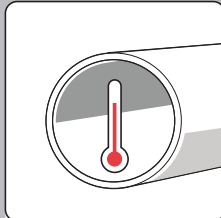
INSTALLATION GUIDE



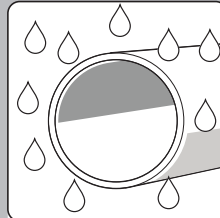
-4°F ↔ +122°F
-20°C ↔ +50°C



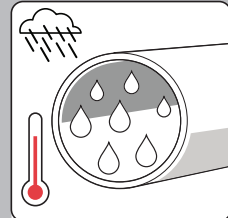
60psi ↔ 188 psi
4 bar ↔ 13 bar



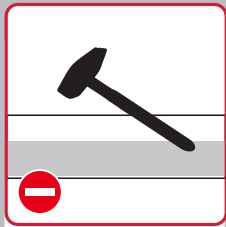
-4°F ↔ +158°F
-20°C ↔ +70°C



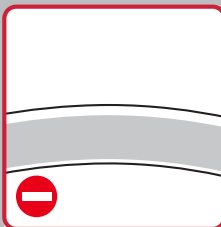
Rh 100%



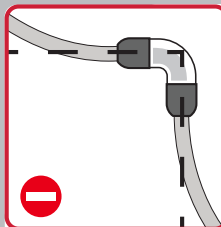
-94°F
-70°C



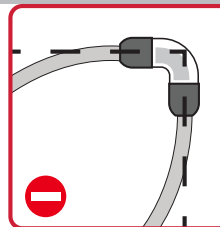
DO NOT STRIKE



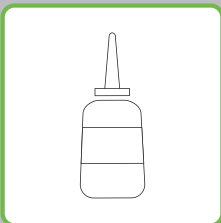
DO NOT BEND



RESPECT GEOMETRY OF FITTINGS



COMPATIBLE WITH
LUBRICANTS



REUSEABLE

PIPING

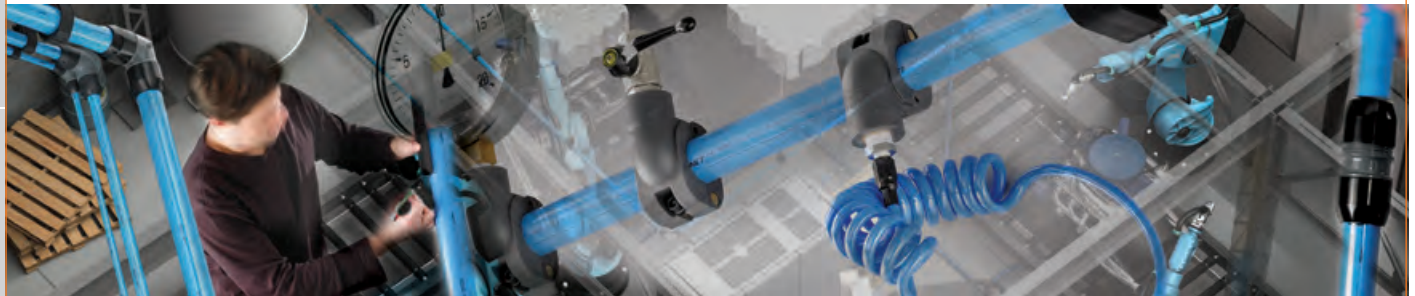
FITTINGS

ACCESSORIES

INSTALLATION
MATERIAL

TOOLS

INSTALLATION
GUIDE



AIRnet PIPE SYSTEMS INSTALL DO'S AND DON'TS

By referring to the following short list of **DO's** and **DON'Ts**, your AIRnet installation will go smoothly. Have fun and enjoy installing the best, safest, and most efficient piping system available.

DO cut the pipe using a tubing cutter. **DON'T** use a hacksaw or cut saw.

DO chamfer pipe ends ensuring a nice smooth edge is achieved.

DO ensure the pipe is inserted fully into the body of the fitting. Use an AIRNET pipe marker to ensure a perfect fit. Use a non-silicone based lubricant to facilitate assembly.

DO use a minimum of 2 pipe hangers for every 20-foot length of pipe.

DO deburr all drilled holes to ensure the O-ring is not damaged when attaching AIRnet quick drops.

DO use a torque wrench when installing 4" (100mm) pipe.

DON'T overtighten standard market pipe hangers. AIRnet pipes should be able to slide.

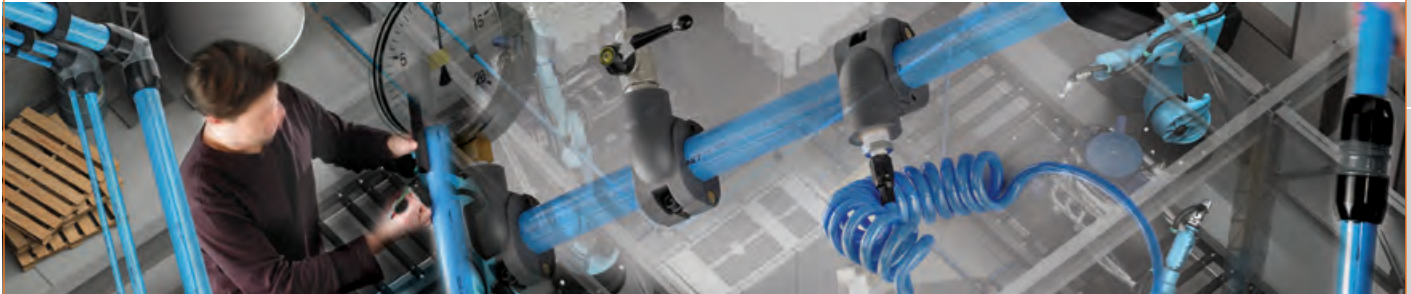
DON'T assemble fittings by sliding them piece by piece onto the pipe. Loosen the nut just enough to insert the pipe with all parts as a single unit.

DON'T drag the pipe along the ground, deform, or scratch its ends.

DON'T use a wrench with metal jaws on AIRnet fittings. **DO** use the AIRnet wrench to tighten fittings. Hand tight plus 1/2 turn is all that is necessary.



INSTALLATION GUIDE



AIRnet PIPE SYSTEMS

STARTING YOUR AIRnet SYSTEM

Read this before pressurizing the AIRnet system. AIRnet installation can be pressurized immediately once the installation is completed following these directions.

- Once the system is installed, check for any anomalies and any signs of impacts, deep dents, or abrasion. Make sure all fittings have been properly fitted to the pipes observing the depth mark - should be flush to the nut or no longer visible - made with the pipe marker, and then correctly tightened.
- Immediately replace any defective or uneven sections of the installation.
- Check all clamp and wall mounted bracket anchoring points.
- Pressurize the air network in steps.
- Before reaching the required test pressure, test for leaks and/or faulty connections first by gradually raising the pressure to 30 psi.
- Once all checks and adjustments have been made, maintain the pressure at 30 psi and check again for other points of improvement.
- Continue pressurizing, raising the pressure gradually and continuously (15 psi at a time) repeating the system check and making adjustments every step of the way until the working pressure has been reached.
- When the gauge registers the test pressure, maintain it for at least 10 minutes (slight dips are tolerated) checking again for possible improvements.
- After the first 48 to 96 hours, check all seals and make sure nuts have not become loose making any necessary corrections.



PIPING

FITTINGS

ACCESSORIES

INSTALLATION
MATERIAL

TOOLS

INSTALLATION
GUIDE

AIRNET PRODUCT SERVICES

WE OFFER ASSISTANCE WITH ALL YOUR AIRNET NEEDS

Design

- AIRnet system quotation
- Technical assistance
- Pipe sizing
- Pressure drop calculations
- Layout of system - from compressor to point of use

Installation

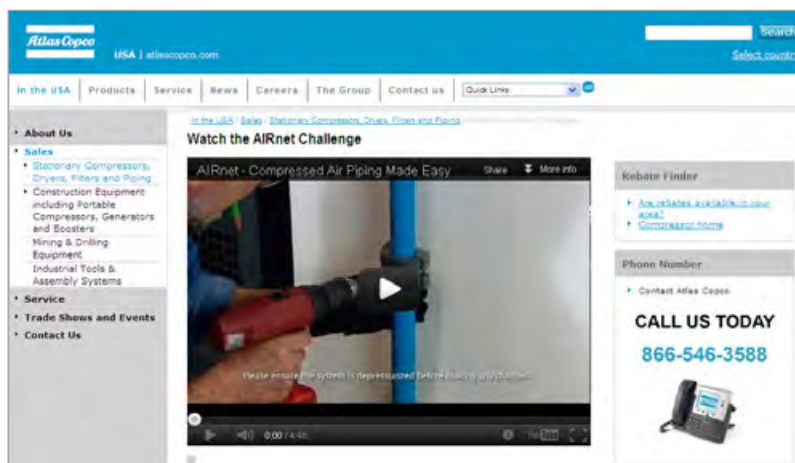
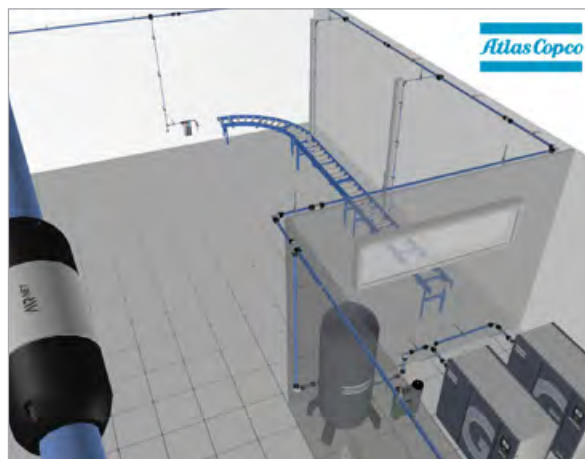
- Guidance on proper AIRnet assembly techniques
- AIRnet assembly literature
- AIRnet assembly videos

Contact Information

- Email: airnet.supportusa@us.atlascopco.com

Website

- www.atlascopco.us/airnetchallengeusa



NOTES

A series of horizontal dotted lines for taking notes.

fast

Thanks to a smart design and low weight materials, AIRnet can be installed in 30% of the time compared to conventional systems.

easy

AIRnet pipes and fittings are assembled in just a few steps by a single installer, without the need for heavy machinery.

reliable

The durable, corrosion-free AIRnet pipes and fittings come with a 10-year warranty. Low friction and seamless connections minimize pressure drop.



97/23/EC
ASME B31.1
EN755
Qualicoat
Test in accordance with EN 10204
TUV Certification DR97/23/EG art. 3.3

Local Representative