





We provide superior performing compressed air & gas systems with engineered longevity to reduce operating costs and improve productivity.



## **ENGINEERED FOR SUPERIOR PERFORMANCE**

Compressed Air & Gas Systems

# Catalogue





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superior available - Advancing the compressed air & gas piping industry.

AIRpipe maintains a >300,000 sq ft campus for manufacturing, R&D, and logistics. We are committed to being your total system solutions provider.





## **Competitive Advantage**



# Superior Reliability & Longevity

- Highly-durable materials resistant to corrosion, vibration, thermal variation, and outdoor weather conditions.
- Metal clamshell connectors for all diameters are stronger and more durable versus polymer fittings.
- Unique grab ring design (20-50mm) and lugged ring (63-200mm) allows for zero risk of disconnection.
- Patented active concentric seals provide leak-free performance, even in high vibration applications. Seal lifespan is double that of industry competitors.

### **Energy & Cost Savings**

- The smooth interior design and highflow connectors ensures a constant supply of clean air at a reduced pressure drop, resulting in significant energy savings.
- Guaranteed leak-free performance and superior longevity versus traditional pipe systems.

# Quick & Easy Modular Installation

- Complete range of pipe, fittings and accessories works easily for new projects renovations & extensions.
- Requires no special tooling, welding, gluing, brazing, soldering, or thread cutting
- Reusable, lightweight, and modular design allows for easy modifications.
- Quick drops can be added at any time to create new points of use.

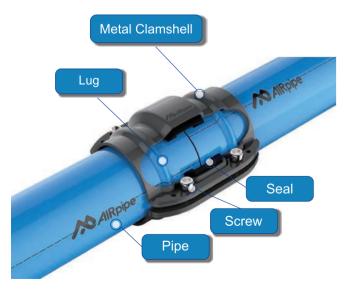
## **Connection Technology**

AlRpipe innovative modular technology enables rapid and easy assembly via quick connection of fittings to the aluminum pipe. This technology takes into account the specific requirement of each diameter to provide the user with a secure connection.



## Grab Ring Clamping Style Connection DN20 - DN50mm

- Metal clamshell union connector, quick install & reassembly.
- Grab ring with surface contact, no shrinking on inner diameter.
- Surface contact, active conentric sealing, leak free
- Superior reliability & longevity.



## Lugged Ring Clamping Style Connection DN63 - DN200mm

- Metal clamsheel union connector, quick install & reassembly.
- · Convex ring, no shrinking on inner diameter.
- Surface contact, active conentric sealing, leak free
- Superior reliability & longevity.

## **Technical Specifications**

#### Suitable fluids

- Compressed air (dry, wet, lubricated)
- Vacuum
- Inert gases (including Argon, Helium, Nitrogen, CO2 mixes)

#### Max. Working pressure

Max. working pressure: 232 psi.
 \*(Max. working pressure for DN200 is 188 psi.)

#### Vacuum

 Vacuum: 3.8 inches of mercury (absolute pressure)

#### Resistance to

- Corrosio
- Aggressive environments
- Mechanical shocks
- Thermal variations
- Ultraviolet (U.V.)Compressor oil carry over (mineral/synthetic)

#### Recyclability

• 100% recyclable.

Flow					Length					
N m3/h	50M	100M	150M	300M	500M	750M	1000M	1300M	1600M	2000M
10	20	20	20	20	20	20	20	25	25	25
30	20	20	20	25	25	25	25	25	25	40
50	20	25	25	25	25	25	40	40	40	40
70	25	25	25	25	40	40	40	40	40	40
100	25	25	25	40	40	40	40	40	40	50
150	25	40	40	40	40	40	40	50	50	50
250	40	40	40	40	50	50	50	50	50	50
350	40	40	40	50	50	50	63	63	63	63
500	40	40	50	50	63	63	63	63	63	63
750	40	50	50	50	63	63	63	80	80	80
1000	50	50	63	63	63	80	80	100	100	100
1250	50	50	63	63	63	100	100	100	100	100
1500	50	63	63	80	80	100	100	100	100	100
1750	63	63	80	80	80	100	100	100	100	150
2000	63	80	80	80	100	100	100	100	150	150
2500	63	80	80	80	100	100	100	150	150	150
3000	80	80	80	100	100	150	150	150	150	150
3500	80	80	100	100	150	150	150	150	150	150
4000	80	100	100	100	150	150	150	150	150	150
4500	80	100	100	150	150	150	150	150	150	150
5000	80	100	100	150	150	150	150	150	150	150
5500	100	100	100	150	150	150	150	150	150	150
6000	100	100	150	150	150	150	150	150	150	150
6500	150	150	150	150	150	150	150	150	150	200
7200	150	150	150	150	150	150	150	200	200	200
8000	200	200	200	200	200	200	200	200	200	200
8500	200	200	200	200	200	200	200	200	200	200
10000	200	200	200	200	200	200	200	200	200	200
12000	200	200	200	200	200	200	200	200	200	200

• Closed loop system at 116 psi with 5% allowable pressure drop.

#### Example

- Main system length (ring main): 500m
- Required flow rate: 312 SCFM
- Working pressure: 116 psi

Result: The most suitable AIRpipe diamter is: Dn50mm





## **Warranty and Certifiations**





#### 10 Year Limited Warranty:

- AIRpipe USA warranties its products to be free of defects in material and workmanship for a period of ten years from the date of product purchase. No other warranties, express or implied are made by AIRpipe USA. This limitation explicitly excludes any implied warranty of merchantability or fitness for a particular purpose. The sole remedy for breach of this warranty of material and workmanship or for negligence in manufacture or design is limited to replacement or repair, at the sole digression of AIRpipe USA. In no event shall AIRpipe USA, it's parent, and sister companies be liable for indirect, special, incidental or consequential damages of any kind. No allowance will be made for repairs made by the purchaser.
- AIRpipe USA warranties its products to be free of defects in material and workmanship for a period of ten years from the date of product purchase. No other warranties, express or implied are made by AIRpipe USA. This limitation explicitly excludes any implied warranty of merchantability or fitness for a particular purpose. The sole remedy for breach of this warranty of material and workmanship or for negligence in manufacture or design is limited to replacement or repair, at the sole digression of AIRpipe USA. In no event shall AIRpipe USA, it's parent, and sister companies be liable for indirect, special, incidental or consequential damages of any kind. No allowance will be made for repairs made by the purchaser.

#### **Engineering standards:**

- ASME B31.1 & B31.3
- UL94HB
- UL94V-2
- TUV
- CE & EN
- PED 2014/68/EU
- TS
- ASTM B241, EN755-8, GB/T4437.1-2000, JIS H4080

#### **Certifications and Compliances:**

- ISO 9001 version 2000
- ISO 14001 version 2004
- ISO 8573-1 version 2010
- ASME, UL, TUV, CRN, CE, EN and TS















# CONTENT

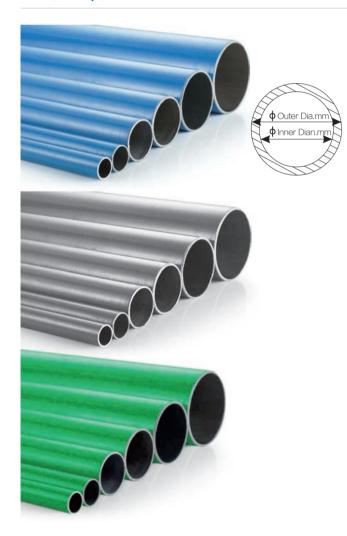
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# Rigid Aluminum Pipe

- Clean air certified (ISO 8573-1)
- Optimum flow performance
- Lightweight
- High quality powder coated exterior
- Extruded marine grade aluminum
- Suitable for Compressed air, oil-free or lubricated, vacuum, and inert gases (Nitrogen, Argon, Helium)

- Max.working pressure: 232 psi
   Max.working pressure for DN 200 is 188 psi
- Vacuum: 3.8 inches of mercury (absolute pressure)
- Working temperature: -4 up to +176

#### Blue / Grey / Green



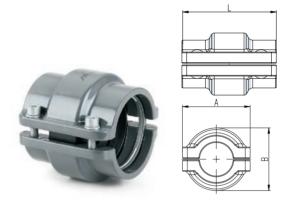
AIRpipe	Nominal Diameter	OD( mm)	ID(mm)	L(M)
1000	20	20.1	17.5	5.8
2000	25	25.1	22.5	5.8
4000	40	40.1	36.5	5.8
5000	50	50.1	45.7	5.8
6000	63	67.6	63	5.8
7000	80	84.8	80.0	5.8
8000	100	101.8	96.8	5.8
9000	150	153	147.5	5.8
A000	200	205	197.8	5.8
1062	20	20.1	17.5	5.8
2062	25	25.1	22.5	5.8
4062	40	40.1	36.5	5.8
5062	50	50.1	45.7	5.8
6062	63	67.6	63	5.8
7062	80	84.8	80.0	5.8
8062	100	101.8	96.8	5.8
9062	150	153	147.5	5.8
A062	200	205	197.8	5.8
1061	20	20.1	17.5	5.8
2061	25	25.1	22.5	5.8
4061	40	40.1	36.5	5.8
5061	50	50.1	45.7	5.8
6061	63	67.6	63	5.8
7061	80	84.8	80.0	5.8
8061	100	101.8	96.8	5.8
9061	150	153	147.5	5.8
A061	200	205	197.8	5.8

## Connectors

- Quick connection
- Superior reliability & longevity
- Designed for extreme environments

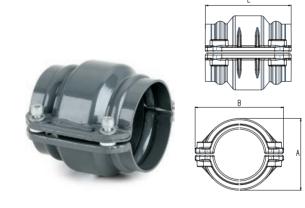
- Modular and reusable
- 100% recyclable and non-flammable materials (UL94-HB Standard)

### Pipe to Pipe Connector



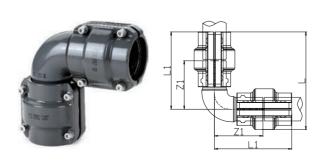
AIRpipe	Nominal Diameter	L	А	В
1002	20	59	36	41
2002	25	59	42	44
4002	40	78	69	60
5002	50	79	80	74

## Pipe to Pipe Connector



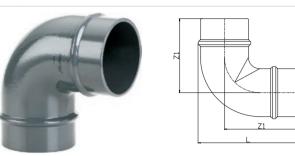
AIRpipe	Nominal Diameter	L	А	В
6002	63	114	98	121
7002	80	114	115	137
8002	100	146	128	157
9002	150	146	188	224
A002	200	135	240	265

### Equal 90° Elbow



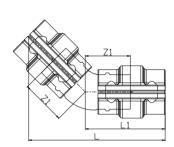
AIRpipe	Nominal Diameter	L1	L	Z1
1003	20	80	100	61
2003	25	83	105	67
4003	40	109	139	91
5003	50	115	152	101

## Equal 90° Elbow



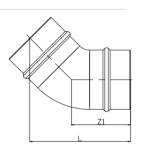
Equal 45° Elbow





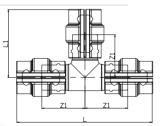
Equal 45° Elbow





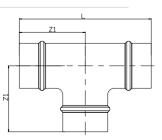
## **Equal Tee**





**Equal Tee** 





AIRpipe	Nominal Diameter	L	Z1
6003	63	143	105
7003	80	156	110
8003	100	194	140
9003	150	265	185
A003	200	315	207.5

<sup>\*</sup>Supplied with (2) union connectors.

AIRpipe	Nominal Diameter	L	L1	Z1
1004	20	118	70	39
2004	25	119	71	40
4004	40	159	92	52
5004	50	162	95	54

AIRpipe	Nominal Diameter	L	<b>Z</b> 1
6004	63	144	84
7004	80	145	85
8004	100	179	105
9004	150	215	126
A004	200	231	135

<sup>\*</sup>Supplied with (2) union connectors.

AIRpipe	Nominal Diameter	L	L1	Z1
1005	20	160	80	49
2005	25	166	83	52
4005	40	218	109	69
5005	50	230	115	74

AIRpipe	Nominal Diameter	L	Z1
6005	63	200	100
7005	80	220	110
8005	100	262	131
9005	150	332	170
A005	200	375	187.5

<sup>\*</sup>Supplied with (3) union connectors.

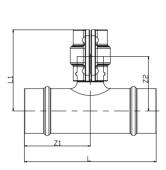
### Reducing Tee



AIRpipe	Nominal Diameter	L	Z1	Z2	L1
2107	25x20	160	50	51	80
4207	40x25	200	61	60	90
5207	50x25	220	70	71	101
5407	50x40	220	70	74	114

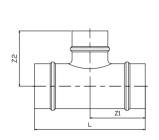
## Reducing Tee





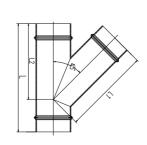
## Reducing Tee





## Equal Lateral Tee





AIRpipe	Nominal Diameter	L	Z1	L1	Z2
6407	63x40	200	100	122	83
6507	63x50	200	100	123	83
7407	80x40	190	100	132	92
7507	80x50	200	106	133	92
8507	100x50	226	118	141	100

<sup>\*</sup>Supplied with (2) union connectors.

AIRpipe	Nominal Diameter	L	Z1	Z2
7607	80x63	210	105	105
8607	100x63	236	118	118
8707	100x80	246	123	121
9607	150x63	242	121	150
9707	150x80	226	131	147
9807	150x100	272	136	162
A607	200x63	240	120	170
A707	200x80	256	128	171
A807	200x100	276	138	182
A907	200x150	344	172	182

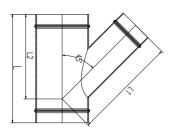
<sup>\*</sup>Supplied with (2) union connectors.

AIRpipe	Nominal Diameter	L	L1	L2
6009	63	238	184	163
7009	80	262	211	184
8009	100	305	246	213
9009	150	385	340	280
A009	200	459	400	347

<sup>\*</sup>Supplied with (3) union connectors.

## Lateral Reducing Tee



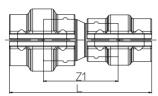


AIRpipe	Nominal Diameter	L	L1	L2
8712	100x80	282	226	202
9712	150x80	292	276	235
9812	150x100	312	300	244
A812	200x100	320	339	275
A912	200x150	394	377	312

<sup>\*</sup>Supplied with (3) union connectors.

## Reducing Pipe to Pipe Connector

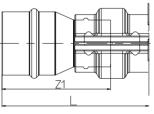




AIRpipe	Nominal Diameter	L	Z1
2121	25x20	130	67
4221	40x25	156	84
5221	50x25	160	86
5421	50x40	172	91

### Reducing Pipe to Pipe Connector



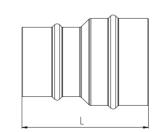


AIRpipe	Nominal Diameter	L	<b>Z</b> 1
6421	63x40	156	116
6521	63x50	157	117
7521	80x50	158	117

<sup>\*</sup>Supplied with a union connector.

## Reducing Pipe to Pipe Connector

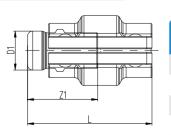




AIRpipe	Nominal Diameter	L
7621	80x63	126
8621	100x63	152
8721	100x80	141
9721	150x80	155
9821	150x100	172
A921	200x150	170

End Cap \*Supplied with (2) union connectors.

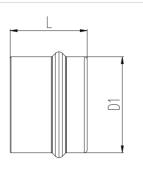




AIRpipe	Nominal Diameter	L	D1	Z1
1006	20	70	22	40
2006	25	70	27	40
4006	40	90	42	49
5006	50	91	52	50

## **End Cap**





AIRpipe	Nominal Diameter	L	D1
6006	63	54	68
7006	80	55	85.4
8006	100	70	101.8
9006	150	70	153
A006	200	70	205

<sup>\*</sup>Supplied with a union connector.

#### Male Threaded Elbow



AIRpipe	DN	L	L1	L2	NPT	Z1
1015	20	95	79	49	1/2"	49
1115	20	95	79	49	3/4"	49
2015	25	102	82	52	1/2"	52
2215	25	102	82	52	1"	52
4415	40	141	109	69	1-1/2"	69
5515	50	151	114	74	2"	74

<sup>\*</sup>Note: Suitable for connecting to air compressors, dryers, and filters.

#### Female Threaded Elbow

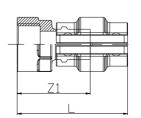


AIRpipe	DN	L	L1	L2	NPT	Z1
1013	20	95	79	49	1/2"	49
1113	20	95	79	49	3/4"	49
2013	25	102	82	52	1/2"	52
2213	25	102	82	52	1"	52
4413	40	141	109	69	1-1/2"	69
5513	50	151	114	74	2"	74

<sup>\*</sup>Note: Suitable for connecting to air compressors, dryers, and filters.

#### **Female Threaded Adapter**





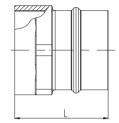
AIRpipe	Nominal Diameter	L	NPT	Z1
1019	20	88	1/2"	57
1119	20	88	3/4"	58
2019	25	90	1/2"	59
2219	25	90	1"	60
4419	40	119	1-1/2"	78
5519	50	120	2"	79



Z1 L2 L3 Drill

### Female Threaded Adapter



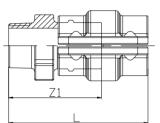


AIRpipe	Nominal Diameter	L	NPT
6619	63	93	2-1/2"
7719	80	100	3"

<sup>\*</sup>Supplied with a union connector.

### Male Threaded Adapter

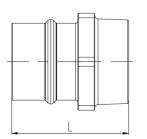




AIRpipe	Nominal Diameter	L	Z1	NPT
1017	20	90	59	1/2"
1117	20	91	60	3/4"
2017	25	92	60	1/2"
2117	25	93	60	3/4"
2217	25	93	62	1"
4217	40	119	78	1"
4317	40	122	81	1-1/4"
4417	40	122	81	1-1/2"
4517	40	122	81	2"
5417	50	122	81	1-1/2"
5517	50	126	85	2"

#### Male Threaded Adapter





AIRpipe	Nominal Diameter	L	NPT
6517	63	98	2"
6617	63	103	2-1/2"
7617	80	107	2-1/2"
7717	80	110	3"

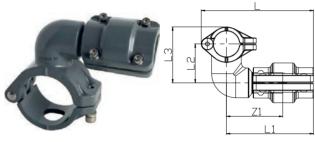
<sup>\*</sup>Supplied with a union connector.

# **Quick Drop Connectors**

- All-aluminum body
- Alignment stub design for quick installation

- Optimum flow
- Captivated seal

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		Diamoto						
	2110	25x20	110	85	55	38	55	16
	2210	25x25	110	85	55	38	55	16
	4110	40x20	125	91	61	45	70	22
-	4210	40x25	125	91	61	45	70	22
	5110	50x20	129	89	59	54	84	25
	5210	50x25	129	89	59	54	84	25
	6110	63x20	152	89	59	71	112	25
	6210	63x25	152	89	59	71	112	25
	7110	80x20	158	89	59	77	127	25
	7210	80x25	158	89	59	77	127	25
	8110	100x20	154	83	53	97	154	25
1	8210	100x25	154	83	53	97	154	25
1.1	9110	150x20	202	82	52	123	204	25
	9210	150x25	202	82	53	123	204	25
	A210	200x25	256	84	55	149	267	25

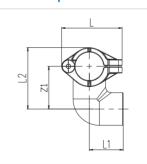
### Straight Quick Drop



AIRpipe	Nominal Diameter	L	L1	L2	Z1	Drill
8410	100x40	204	134	162	104	38
9410	150x40	267	180	215	150	51
9510	150x50	255	181	215	151	51
A410	200x50	329	206	269	176	51
A510	200x50	330	207	269	177	51

#### Female Threaded Quick Drop

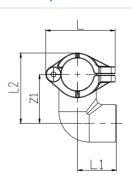




AIRpipe	DN x NPT	L	L1	Z1	L2	Drill
2011	25x½"	54	30	38	55	16
4011	40x½"	72	42	45	70	22
4111	40x³/4"	72	42	45	70	22
5011	50x½"	83	46	54	84	25
5111	50x <sup>3</sup> / <sub>4</sub> "	83	47	54	84	25

#### Female Threaded Quick Drop



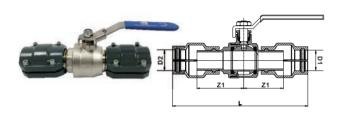


AIRpipe	DNxNPT	L	L1	Z1	L2	Drill
6011	63x½"	126	65	75	112	16
6111	63x³¼"	126	78	75	112	22
7011	80x½"	138	65	80	127	22
7111	80x¾"	138	78	80	127	25
8011	100x½"	170	54	95	150	25
9011	150x½"	219	55	120	201	25

## Wall Brackets & Valved Connectors

- Quick connection
- Available for BSP/NPT thread, flange and plug-in connection type
- · High-flow design ensure optimal performance
- Nickel-plated brass

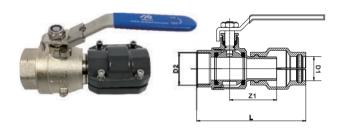
#### **Quick Connect Valve**



AIRpipe(NPT)	D1	D2	L	Z1
1052	20	20	165	52
2052	25	25	169	55
4052	40	40	232	76
5052	50	50	242	80

\* Material of Valve Body: Brass. \* Locking Handle.

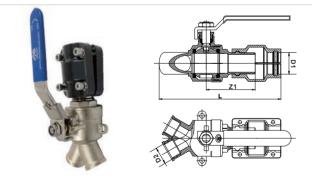
### One-port Female Wall Bracket



AIRpipe(NPT)	D1	D2		Z1
1252	20	□½"	118	52
2252	25	1"	115	55
2452	25	□½"	215	76
4452	40	1-1/2"	154	80
5552	50	2"	165	76

- \* Material of Valve Body : Brass \* Includes Mounting Plate and Hardware. \* Locking Handle

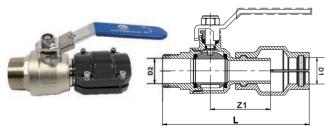
#### Two-port Female Wall Bracket



<b>A/Rpipe</b> (NPT)	D1	D2	L	Z1
1152	20	□¹⁄2"	133	52
2152	25	<b>□</b> ½"	144	55

- \* Material of Valve Body : Brass \* Includes Mounting Plate and Hardware. \* Locking Handle

#### Male Threaded Quick Connect Valve



<b>AIRpipe</b> (NPT)	D1	D2	L	Z1
1352	20	3/4"	116	52
2352	25	1"	122	55
4352	40	1-1/2"	163	76
5352	50	2"	177	80

\* Material of Valve Body : Brass \* Locking Handle

## Angled Two-port Female Wall Bracket



#### One & Two Port Angled Wall Brackets



#### Threaded Ball Valve



#### **Butterfly Valve Pre-Assembled**



<b>AIRpipe</b> (NPT)	D1	Connector
1552	20	75° Two port, 1/2"
2552	25	75° Two port, 1/2"

- \* Material of Valve Body : Brass \* Includes Mounting Plate and Hardware. Locking Handle

AIRpipe (NPT)	D1	Connector
1123	20	45° One port 1/2"
2123	25	45° One port 1/2"
1023	20	45° Two ports½"
2023	25	45° Two ports 1/2"

- \* Material of Body : Aluminium \* Incoudes a 1/4" venting valve

AIRpipe(NPT)	D1	D2	L	Thread
0073	1/2"	1/2"	53	Female
0173	3/4"	3/4"	58	Female
1073	1/2"	1/2"	60	Male
1173	3/4"	3/4"	65	Male
0273	1/2"	1/2"	53	Male* Female
1273	3/4"	3/4"	59	Male* Female
2073	1"	1"	70	Female
4073	1-1/2"	1-1/2"	90	Female
5073	2"	2"	103	Female

- \* Material of Valve Body : Brass
- \* Locking Handle

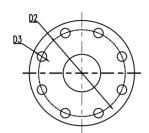
AIRpipe (NPT)	Nominal Diameter		Material of valve
6051	63	188	Cast Iron
7051	80	210	Cast Iron
8051	100	236	Cast Iron
9051	150	256	Cast Iron
A051	200	278	Cast Iron
6151	63	188	Stainless Steel
7151	80	210	Stainless Steel
8151	100	236	Stainless Steel
9151	150	256	Stainless Steel
A151	200	278	Stainless Steel

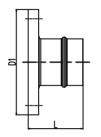


# Flange Connectors

### **ANSI Aluminum Flange**





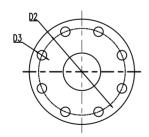


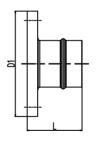
AIRpipe	Nominal Diameter	Flange size	Bolt size		D1	D2	D3
6170	63	65	M16	85	180	139.7	18
7170	80	80	M16	82	190	152.4	18
8170	100	100	M16	92	230	190.5	18
9170	150	150	M20	100	280	241.3	22
A170	200	200	M20	109	345	298.5	22

<sup>\*</sup>Includes bolts and gasket.

## ANSI Aluminum Reducing Flange







AIRpipe	Nominal Diameter	Flange size	Bolt size	L	D1	D2	D3
7671	63	80	M16	85	190	152.4	18
8671	63	100	M16	87	230	190.5	18
6771	80	63	M16	87	180	139.7	18
8771	80	100	M16	84	230	190.5	18
0771	80	125	M16	84	255	215.9	22
7871	100	80	M16	92	190	152.4	18
0871	100	125	M16	92	255	215.9	22
9871	100	150	M16	92	280	241.3	18
0971	150	125	M20	100	255	215.9	22

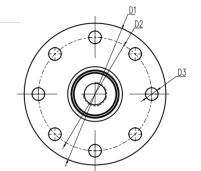
<sup>\*</sup>Includes bolts and gasket.

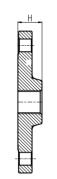
## ANSI Female Threaded Flange





\*Includes 1 gasket and 4 bolts(7cm) for DN25/DN40/DN50/Dn63 \*Includes 1 gasket and 8 bolts(7cm) for DN80/DN100/DN150





AIRpipe	Nominal Diameter	Female thread	Bolt size	D1	D2	D3	Н
2270	25	1"	M14	110	79.4	14	16
4470	40	1-1/2"	M14	125	98.4	18	21
5570	50	2"	M16	150	120.7	18	24
6270		1"					
	63	·	M16	180	139.7	18	27
6470	63	1-1/2"	M16	180	139.7	18	27
6570	63	2"	M16	180	139.7	18	27
7270	80	1"	M16	190	152.4	18	29
7470	80	1-1/2"	M16	190	152.4	18	29
7570	80	2"	M16	190	152.4	18	29
7670	80	2-1/2"	M16	190	152.4	18	29
8470	100	1-1/2"	M16	230	190.5	18	32
8570	100	2"	M16	230	190.5	18	32
8670	100	2-1/2"	M16	230	190.5	18	32
9470	150	1-1/2"	M20	280	241.3	22	38
9570	150	2"	M20	280	241.3	22	38
9670	150	2-1/2"	M20	280	241.3	22	38
9770	150	3"	M20	280	241.3	22	38

<sup>\*</sup> Above flange material: stainless steel.

AIRpipe	Nominal Diameter	Female thread	Bolt size	D1	D2	D3	Н
2279	25	1"	M14	110	79.4	14	16
4479	40	1-1/2"	M14	125	98.4	18	21
5579	50	2"	M16	150	120.7	18	24
6279	63	1"	M16	180	139.7	18	27
6479	63	1-1/2"	M16	180	139.7	18	27
6579	63	2"	M16	180	139.7	18	27
7279	80	1"	M16	190	152.4	18	29
7479	80	1-1/2"	M16	190	152.4	18	29
7579	80	2"	M16	190	152.4	18	29
7679	80	2-1/2"	M16	190	152.4	18	29
8479	100	1-1/2"	M16	230	190.5	18	32
8579	100	2"	M16	230	190.5	18	32
9279	150	2-1/2"	M16	230	190.5	18	32
9479	150	1-1/2"	M20	280	241.3	22	38
9579	150	2"	M20	280	241.3	22	38
9679	150	2-1/2"	M20	280	241.3	22	38
9779	150	3"	M20	280	241.3	22	38
	2279 4479 5579 6279 6479 6579 7279 7479 7579 7679 8479 8579 9279 9479 9579	AIRPIPE         Diameter           2279         25           4479         40           5579         50           6279         63           6479         63           6579         63           7279         80           7479         80           7579         80           7679         80           8479         100           8579         100           9279         150           9479         150           9679         150	Alrente         Diameter         thread           2279         25         1"           4479         40         1-½"           5579         50         2"           6279         63         1"           6479         63         1-½"           6579         63         2"           7279         80         1"           7479         80         2"           7579         80         2"           7679         80         2-½"           8479         100         1-½"           8579         100         2"           9279         150         2-½"           9479         150         1-½"           9579         150         2"           9679         150         2-½"	Alrente         Diameter         thread         size           2279         25         1"         M14           4479         40         1-½"         M14           5579         50         2"         M16           6279         63         1"         M16           6479         63         1-½"         M16           6579         63         2"         M16           7279         80         1"         M16           7479         80         2"         M16           7579         80         2"         M16           7679         80         2-½"         M16           8479         100         1-½"         M16           8579         100         2"         M16           9279         150         2-½"         M16           9479         150         1-½"         M20           9579         150         2"         M20           9679         150         2-½"         M20	Alrente         Diameter         thread         size         D1           2279         25         1"         M14         110           4479         40         1-½"         M14         125           5579         50         2"         M16         150           6279         63         1"         M16         180           6479         63         1-½"         M16         180           6579         63         2"         M16         180           7279         80         1"         M16         190           7479         80         1-½"         M16         190           7579         80         2"         M16         190           7679         80         2-½"         M16         190           8479         100         1-½"         M16         230           8579         100         2"         M16         230           9479         150         2-½"         M20         280           9579         150         2-½"         M20         280           9679         150         2-½"         M20         280	AIRPIPE         Diameter         thread         size         D1         D2           2279         25         1"         M14         110         79.4           4479         40         1-½"         M14         125         98.4           5579         50         2"         M16         150         120.7           6279         63         1"         M16         180         139.7           6479         63         2"         M16         180         139.7           6579         63         2"         M16         180         139.7           7279         80         1"         M16         190         152.4           7479         80         2"         M16         190         152.4           7579         80         2"         M16         190         152.4           7679         80         2-½"         M16         190         152.4           8479         100         1-½"         M16         230         190.5           8579         100         2"         M16         230         190.5           9279         150         2-½"         M16         230         19	Alrentation         Diameter         thread         size         D1         D2         D3           2279         25         1"         M14         110         79.4         14           4479         40         1-½"         M14         125         98.4         18           5579         50         2"         M16         150         120.7         18           6279         63         1"         M16         180         139.7         18           6479         63         1-½"         M16         180         139.7         18           6579         63         2"         M16         180         139.7         18           7279         80         1"         M16         190         152.4         18           7479         80         1-½"         M16         190         152.4         18           7579         80         2"         M16         190         152.4         18           7679         80         2-½"         M16         190         152.4         18           8479         100         1-½"         M16         230         190.5         18           8579

<sup>\*</sup> Above flange material: Carbon steel.



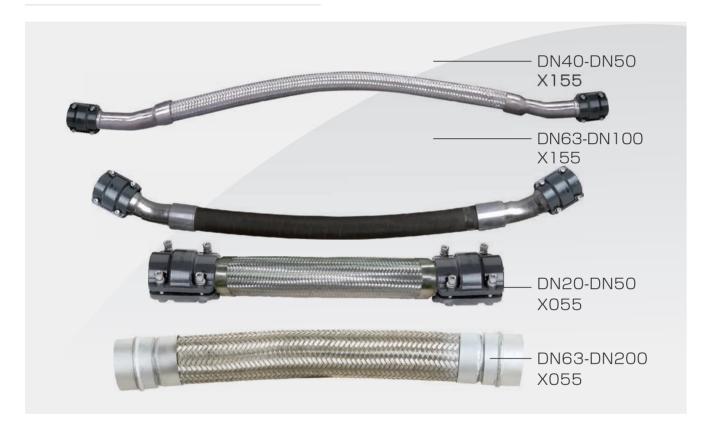


## Flexible Hose

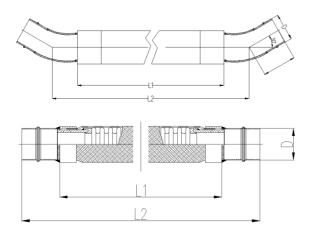
- Suitable for Compressor & equipment outlets to absorb vibration
- Bypass obstacles

- Allows for expansion and contraction of loops
- Resistant to mineral and synthetic lubricated oils.

#### Flexible Hoses



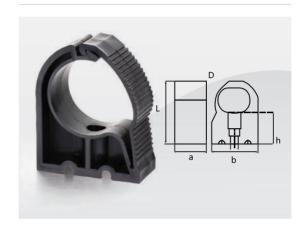
AIRpipe	Nominal Diameter	D	L1	L2	Remark
4155	40	40.1	39.37	47.24	SS304 material, 30°
5155	50	50.1	43.31	53.15	33304 Material, 30
6155	63	67.6	47.24	53.15	
7155	80	84.8	66.93	72.83	Rubber material, 30°
8155	100	101.8	66.93	74.80	
1055	20	20.1	19.69	22.44	
2055	25	25.1	19.69	22.44	
4055	40	40.1	19.69	23.62	
5055	50	50.1	19.69	23.62	SS304 material,
6055	63	67.6	19.69	25.59	Straight connection
7055	80	84.8	19.69	25.59	
8055	100	101.8	19.69	25.98	
9055	150	153	35.43	41.89	
A055	200	205	55.12	61.18	



## Fixtures & Accessories

- Suitable for various pipe systems
- Used for a variety of installation methods, eg: wall, beam, roof, channel, rod, cable, etc, vertically or horizontally
- Non-flammable
- Designed to work best with AIRpipe system

### Fixture Clip



AIRpipe	D		L	H	а	b
1022	20	3/8"	56	30	30	31
2022	25	3/8"	60	27.5	30	38
4022	40	3/8"	101	50	40	60
5022	50	3/8"	108	45	40	75
6022	67	3/8"	118	38.5	40	94
7022	84	3/8"	172	71	50	119
8022	100	3/8"	209	83	60	162

<sup>\* 3/8&</sup>quot;-16 threaded rod port.

### **Clip Spacer**





AIRpipe	Compatible sizes	а	b
0027	20~25	30	49
0127	40~63	30	94

\*Spacer clip 0027 is used to create a level plane for 3/4"or 1" diameters transitioning to 1 1/2", 2", or 2 1/2".

\*Spacer clip 0127 is used to create a level plane for 1 1/2", 2", or 2 1/2" diameters transitioning to 3" or 4".

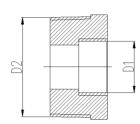
## Fixture Clip (Steel)



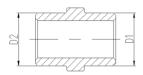
AIRpipe	D
4122	40
5122	50
6122	67
7122	84
8122	100
9122	150
A122	200

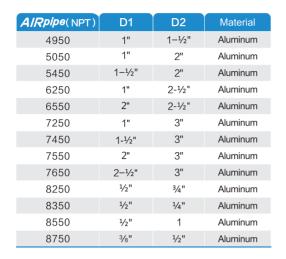
## **Threaded Adapter**







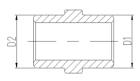




AIRpipe(NPT)	D1	D2	Material
8150	1"	3/4"	Aluminum
8450	1/2"	1/4"	Aluminum
8650	3/4"	1/2"	Aluminum

### Threaded Adapter





AIRpipe(NPT)	D1	D2	Material
0031	1/2"	1/2"	Aluminum
1131	3/4"	3/4"	Aluminum
2231	1"	1"	Aluminum
4431	1-1/2"	1-1/2"	Aluminum
5531	2"	2"	Aluminum

Note: Used for the connection between two Filters.

#### Manifolds





<b>AIRpipe</b> (NPT)	D	Connection Port
0183	Male ½"	One-port manifold
0283	Male ½"	Two-port manifold
0383	Male ½"	Three-port manifold
0783	Male ½"	Four-port manifold

<sup>\*</sup> Inlets and outlets are ½"

#### Water Drain Valve



AIRpipe	Inlet size
0973	½" Female thread

\*One 1/2" ball valve is needed.

#### **Electronic Drain Valve**



AIRpipe	Inlet size
0873	1/2"

\*One 1/2" ball valve is needed.

## Display Kit



AIRpipe	Н	L	I
0146	200	270	190
0246	200	600	400

<sup>\*</sup> Couplers are sold separately.

## Tools

## Tool Bag



\*Contains all tooling for DN20-50, along with hex and hole saw bits for all diameters and quick drop fittings

\*For DN80 and DN100 pipe installation, 0140 and 0844 are

\*For DN150 and DN200 pipe installation, 0344 and 0844 are needed.

AIRpipe	Component Name
0141	20 mm to 50 mm (¾" to 2") Pipe Deburrer
0042	20 mm to 200 mm (3/4" to 8") Hole Deburrer
0643	Drill Arbor & Pilot Bits for 38 and 51 mm Hole Saw Bits
0543	51 mm Hole Saw Bit
0443	38 mm Hole Saw Bit
0343	25 mm Hole Saw Bit
0243	Drill Arbor & Pilot Bit for 16, 22, and 25 mm Hole Saw Bits.
0843	22 mm Hole Saw Bit
0743	16 mm Hole Saw Bit
0040	20 mm to 63 mm (¾" to 2 ½") Pipe Cutter
PM	Permanent Marker
0044	Pipe Insertion Depth Gauge
4 mm	4 mm Hex Bit (2" in length) for Drill
5 mm	5 mm Hex Bit (2" in length) for Drill
6 mm	6 mm Hex Bit (2" in length) for Drill
8 mm	8 mm Hex Bit (2" in length) for Drill
0046	Tool Bag

### **Hole Deburrer**



AIRpipe	L	Applicable diamete
0042	160	DN20-DN200

### **Drill Arbor & Pilot Bit**



4 (Dulus			
AIRpipe	L	Applicable Drill	Applicable diameter
0243	110	16-25	DN25~DN100
0643	110	38-51	DN150~DN200

## Hole Saw Bit



AIRpipe	L	D	Applicable diameter
0743	50	16	DN25
0843	50	22	DN40
0343	50	25	DN50~DN200
0443	50	38	DN100
0543	50	51	DN150~DN200

### **Electric Pipe Cutter**



AIRpipe	Applicable diameter
0344	DN63~DN200

## **Aluminum Pipe Cutter**



AIRpipe	L	Н	Applicable diameter	
0040	220	40	DN20-DN63	
0140	240	40	DN40-DN100	

## Aluminum pipe deburrer



AIRpipe	L	Н	Applicable diameter	
0141	90	70	DN20-DN5	

## Portable Lugging Machine



AIRpipe	Applicable diameter	Remark		
0844	DN63~DN200	Contains every jaw set		



## Installing AIRpipe

#### General

#### General

- Prior to the installation of a AIRpipe compressed air distribution system, the installer should ensure that the installation area complies with any regulations applicable to areas exposed to explosive hazards (in particular the effect of static electricity in a silo area). AIRpipe should be installed downstream of the compressed air receiver, or after the dryer. Flexible AIRpipe hose can be installed at the start of the system in order to eliminate any sources of vibration and to facilitate maintenance operations. When maintaining or modifying a AIRpipe system, the relevant section should be vented prior to the commencement of any work. Installers should use only AIRpipe components and accessories, in particular AIRpipe pipe clips and fixture clamps. The technical properties of the AIRpipe components, as described in the AIRpipe catalog, must be respected.
- AlRpipe aluminum pipe is supplied ready for use. No particular preparation (cutting, deburring, chamfering, etc.) is required.
- Thanks to the rigidity of AIRpipe aluminum pipe, temperature-related expansion / contraction is reduced to a minimum. The AIRpipe system retains its straightness, and hence its performance, over time (reduction of pressure drop caused by surface friction)
- AlRpipe aluminum pipe is calibrated and fits perfectly with all AlRpipe components.

#### **Component assembly**

• AlRpipe components are provided with assembly instructions for their correct use - simply follow the methods and recommendations stated in this document.

#### Expansion / contraction

• Expansion and contraction of the system should be calculated prior to installation. The system designer and installer should calculate the elongation or retraction of each AlRpipe line according to the recommendations in this installation guide.

#### Situations to avoid

- AlRpipe pipe should be protected from mechanical impact, particularly if exposed to collision with fork-lift trucks or when sited
  in an environment with moving overhead loads. Similarly, rotation of the pipe and pipe supports should be avoided. AlRpipe pipe
  must not be welded. Flexible AlRpipe hoses should be used in accordance with the recommendations of the installation
  quidelines.
- installation within a solid mass (concrete, foam, etc.)
- the hanging of any external equipment to AIRpipe pipe
- the use of AIRpipe for grounding, or as a support for electrical equipment
- exposure to chemicals that are incompatible with AIRpipe components (please contact us for further details)

#### Best practices to maintain an optimized AIRpipe System

- Design, installation, and maintenance should be performed in accordance with reasonable engineering knowledge and practice with involving pi ping systems
- Maintain high-quality air levels within your system.
- To avoid pressure drops within your system, minimize pipe diameter reductions
- Properly size your system to allow for optimal flow and efficiency.

#### Measuring Pipe Insertion Depth

 When installing pipe diameters ¾" to 2", use the insertion depth gauge (part number 0044) to place an insertion depth mark on the pipe.



### **Drilling indicator**

• An identifying layline is imprinted on each length of pipe that may be used as an alignment guide when installing quick drop connections.

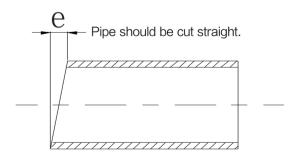


### **Cutting the pipe**

 Rotate the corresponding pipe cutter around the pipe while gently tightening the wheel.



Use part number 0040 for pipe diameters  $\frac{3}{4}$ " to 2  $\frac{1}{2}$ ". Use part number 0140 for pipe diameters 1  $\frac{1}{2}$ " to 4".



Nominal Diameter	Cutting slope of pipe end allowable deviation (e)
20~80	1.0
100~150	1.4
200	2.0



# **Superior Reliability!**

## Quick and Easy Installation

#### Sizing Chart for Quick Drops

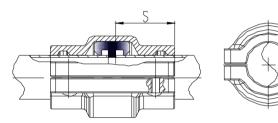
Pilot Bit	Hole Saw	DN(MM)	Quick Drops (PN)					
0243	0743	Ф16	2110	2210	2011			
0243	0843	Ф22	4110	4210	4011	4111		
	0343	Ф25	5110	5210	6110	6210	7110	7210
0243			8110	8210	9110	9210	A210	
0243			5011	5111	6011	6111	7011	7111
			8011	9011				
0643	0443	Ф38	8410					
0643	0543	Ф51	9410	9510	A410	A510		







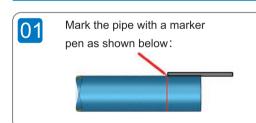
#### Insertion Depth S For DN20~DN50 Connector



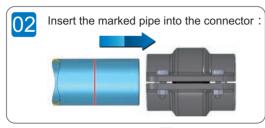
DN	Insertion depth S (IN)
20	1.14"
25	1.14"
40	1.53"
50	1.53"

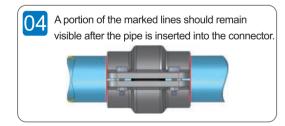
• "S" denotes the insertion depth of the pipe into the connector.

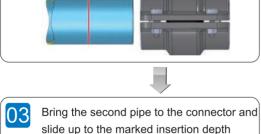
#### Installation Guide for DN20~DN50

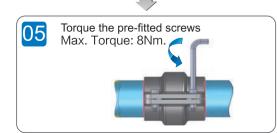


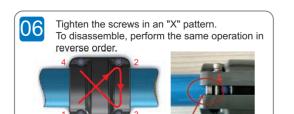






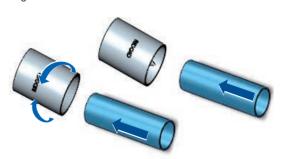






#### **Deburr & Chamfer The Outer and Inner Edges Before Installation**

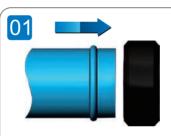
 Use 0141 for DN20-DN50 to chamfer the outer edges and also deburr the inner end.



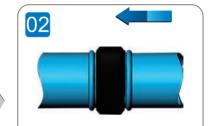
• Use a file for DN63-DN200 to chamfer the outer edges; make use of a deburring tool to debur the inside of the pipe end.



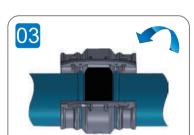
#### Installation Guide for DN63~DN200



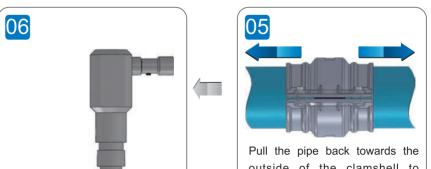
Slide the seal over the edge of the pipe so that it sits flush with the lugged edge.

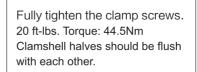


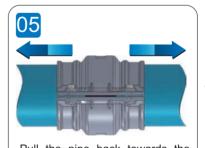
Insert the second pipe into the seal until the seal and the lugged edge are flush.



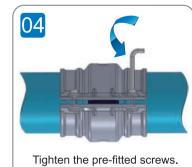
Position the clamp over the seal.

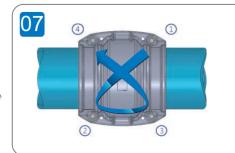






outside of the clamshell to complete alignment.





For effective assembly, tighten the screws in an "X" pattern. To disassemble, perform the same operation in reverse order.

### Hand-held hydraulic lugging machine operation requirements



Manually open the jaws of the clamp and insert the aluminum pipe into the clamp as far as possible.

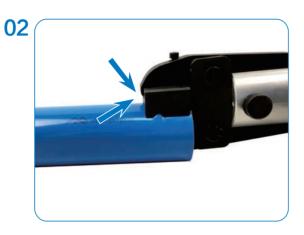


Re-open the two jaws to remove the pipe and rotate the pipe slightly. Put the jaw side to the mark position.

# Hand-held hydraulic lugging machine operation requirements

AIRPIPE	DN63	DN80	DN100	DN150	DN200
Min. number of lugs	5	6	6	9	12

Note: Do not overlap the lugs!

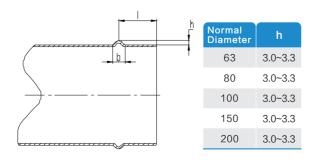


Release the jaws. Press the trigger and crimp the pipe until a "snap" sound is heard.

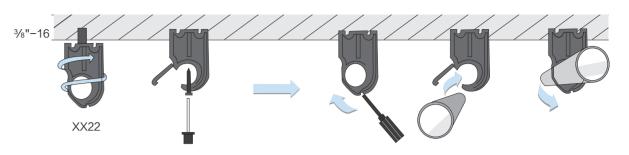


Renew the operation until the required minimum number of lugs for each diameter is finished.

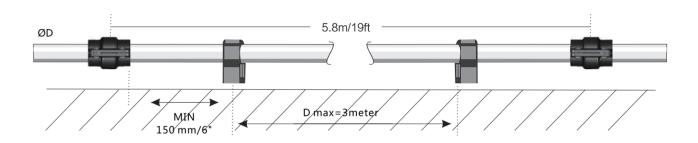
### Lugs size for DN63~DN200



#### Pipe Clip



AIRpipe's pipe clips are designed for versatility. They can be secured via all-thread rod through the clips internal 3/8" 16 nut, or mounted directly with wall anchors.



The bolt size 3/8"-16 is suitable for all fixing clips.

This clip allows expansion and contraction of the pipe to occur freely. The fixing clip should be fixed at the min distance of 6 inch (150mm) from the connector in order to allow for the expansion and contraction effect.

### Spacers for pipe clips



Spacer clip 0027 is used to create a level plane for 3/4 " or 1" diameters transitioning to 1 1/2", 2", or 2 1/2". Spacer clip 0127 is used to create a level plane for 1 1/2", 2", or 2 1/2" diameters transitioning to 3" or 4".



## Installing Quick Drop Connectors

01



• Mark the pipe where the hole for the quick drop connector will be installed.



• Identify the drill arbor & hole saw bit required by locating the quick drop part number on the sizing chart. Note: the quick drop part number is located on the connector.

05



• Apply steady pressure until the hole saw bit has completely entered the 06



• Remove debris and deburr cut edges.

03



• With the proper drill arbor & hole saw bit part numbers identified, thread the hole saw bit onto the drill arbor to create a single drill bit.



• Hold the drill perpendicular to the pipe with the drill bit in the center of the mark placed on the pipe.

07



• The quick drop connector easily aligns into the drilled hole.



Tighten the bolt to complete assembly

#### Compensating for the effect of expansion and contraction due to temperature variations

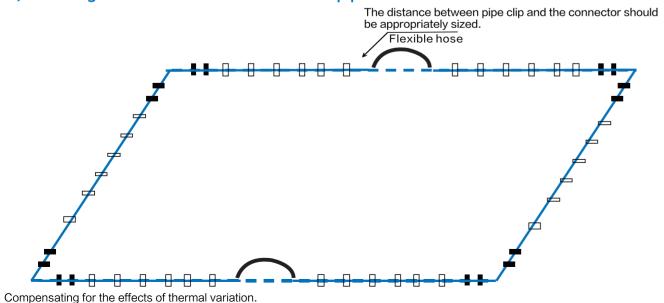
Consequences of not properly accounting for thermal variations:

- $\square$  Leakage and system deformation, that in extreme situations, could result in a connection separation.
- □ Pipe system movement could create an obstruction.
- Quick drop connections could become compromised.
- 1. In order to compensate for the effects of expansion and contraction due to temperature variations, system lengths should be appropriately evalulated and expansion joints installed where needed.
  - a. Anytime there is a change in temperature between areas.
  - b. If there is a temperature differential of 30° F or more possible in the system.
- c. For significant lengths of piping.
- 2. Recommended locations of flexible hoses or expansion loops include but are not limited to.
  - a. The discharge of the compressor.
  - b. The middle of of a long run of pipe.
  - c. Corners of a piping network.
  - d. In a multiple pipeline loop at the beginning of a parallel line internal to the pipeline loop.
- 3. Best practices include but are not limited to:
  - a. All aluminum piping to be installed in strict accordance with AIRpipe installation instructions and specifications.
  - b. Allowing the corners to expand and contract by placing pipe clips an appropriate distance from each corner. Avoid placing a pipe clip directly in the corner.
  - c. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls.
  - d. Install piping adjacent to equipment and machines to allow service and maintenance.
  - e. Install air and drain piping with 1 percent slope download in direction of flow.
  - f. Install nipples, flanges, unions, transition and special fittings, and valves with pressure ratings same as or higher than system pressure rating, unless otherwise indicated.
  - g. Install branch connections to compressed-air mains from top of main. Provide drain leg and drain trap at end of each main and branch and at low points.
  - h. Install piping to permit valve servicing.
  - i. Install piping free of sags and bends.
  - j. Install unions, adjacent to each valve and at final connection to each piece of equipment and machine.
  - k. Install sleeves and escutcheons for piping penetrations of walls, ceilings, and floors as necessary.
  - I. The fixing clips shall allow axial movement of the pipe to compensate for system expansion and contraction.
  - m .Horizontal and vertical AIRpipe piping shall be supported by AIRpipe pipe clips.
    - Hanger rods to be solid with only enough thread for the connection ends.

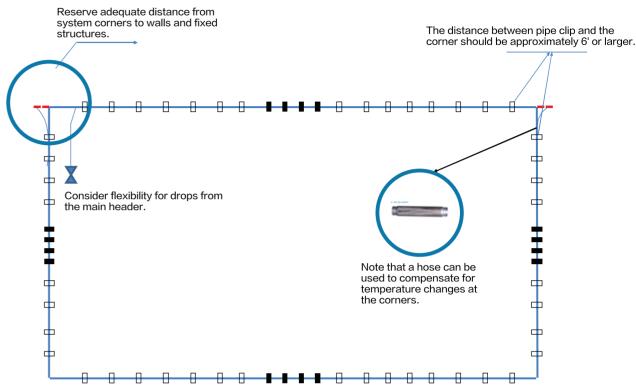
Hangers to be spaced at intervals as described herein, as required to avoid sag, prevent vibration, and allow accurate leveling or grading.

#### 1. Single loop system

### A) Installing flexible hose in the middle of a pipe run.



#### B) Installing flexible hose at the corner of a long pipe run



Compensating for the effects of expansion or contraction.

#### 2) Multiloop pipeline

