

Rexflex

FLEXIBLE PIPING SYSTEMS FOR INERT GASES

• EASILY CUSTOMIZED • USER FRIENDLY • ECONOMICAL •



SYSTEM PLANNING GUIDE

PRODUCT RATINGS

Pipe - ASTM 1282 - MAWP 200 psi @ 73°F, 160 psi @ 140°F

Fittings - MAWP 200 psi

Suitable for Inert Gases, Compressed Air, and Non-Potable Water Only

Verify pipe diameter will meet flow (scfh) requirements.

Check local building codes before purchase.

SYSTEM LAYOUT

Before installing Rexflex piping, create a plan for the piping system. Identify where the inert gas distribution manifold will be located.

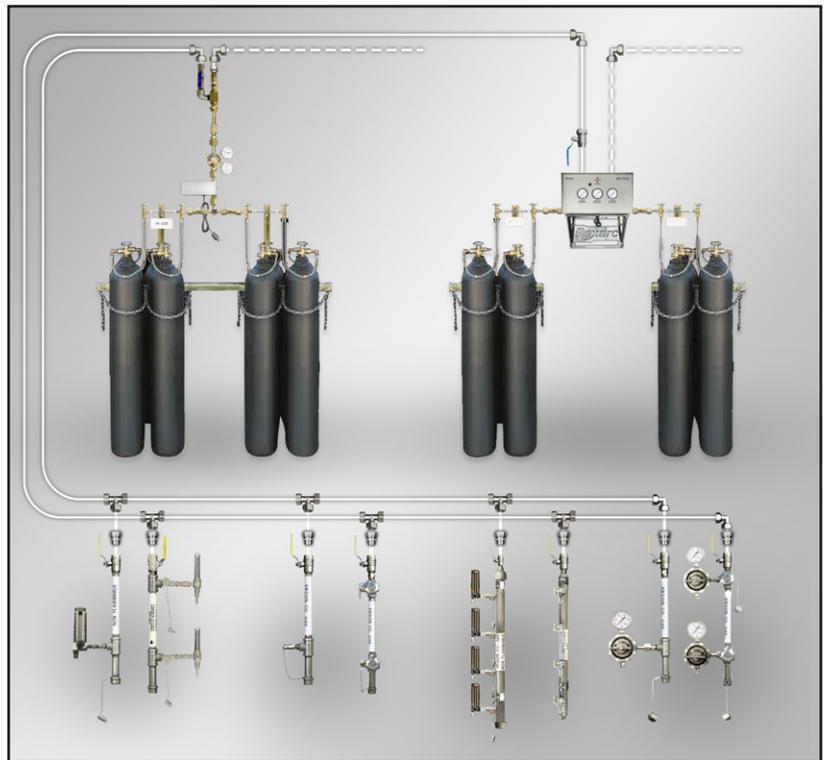
Measure lineal feet up, around, through and down to each point of use.

Note on the plan where elbows, tees, and outlets will be.

Remember to Measure for Pressure Relief/Vent Piping.

BENDING Rexflex PIPE

Rexflex piping can be bent and will hold its shape. Caution should be applied to not cause the pipe to kink. Using the Rexflex pipe bender enables sweeping radius to be created without kinking. For sharp corners, use Rexflex LBOW's.



Rexflex PIPE INSTALLATION

Use Rexflex pipe clips for mounting to enable pipe expansion and contraction with temperature changes. 5' Spacing between clips for 3/4" and 1" Rexflex pipe. Use #8 size anchor suitable for mounting surface. Label Vent and Gas Piping according to Local Code.



Bury pipe and fittings as needed in soil or under concrete. Complete pressure testing and wrap all underground fittings BEFORE covering.

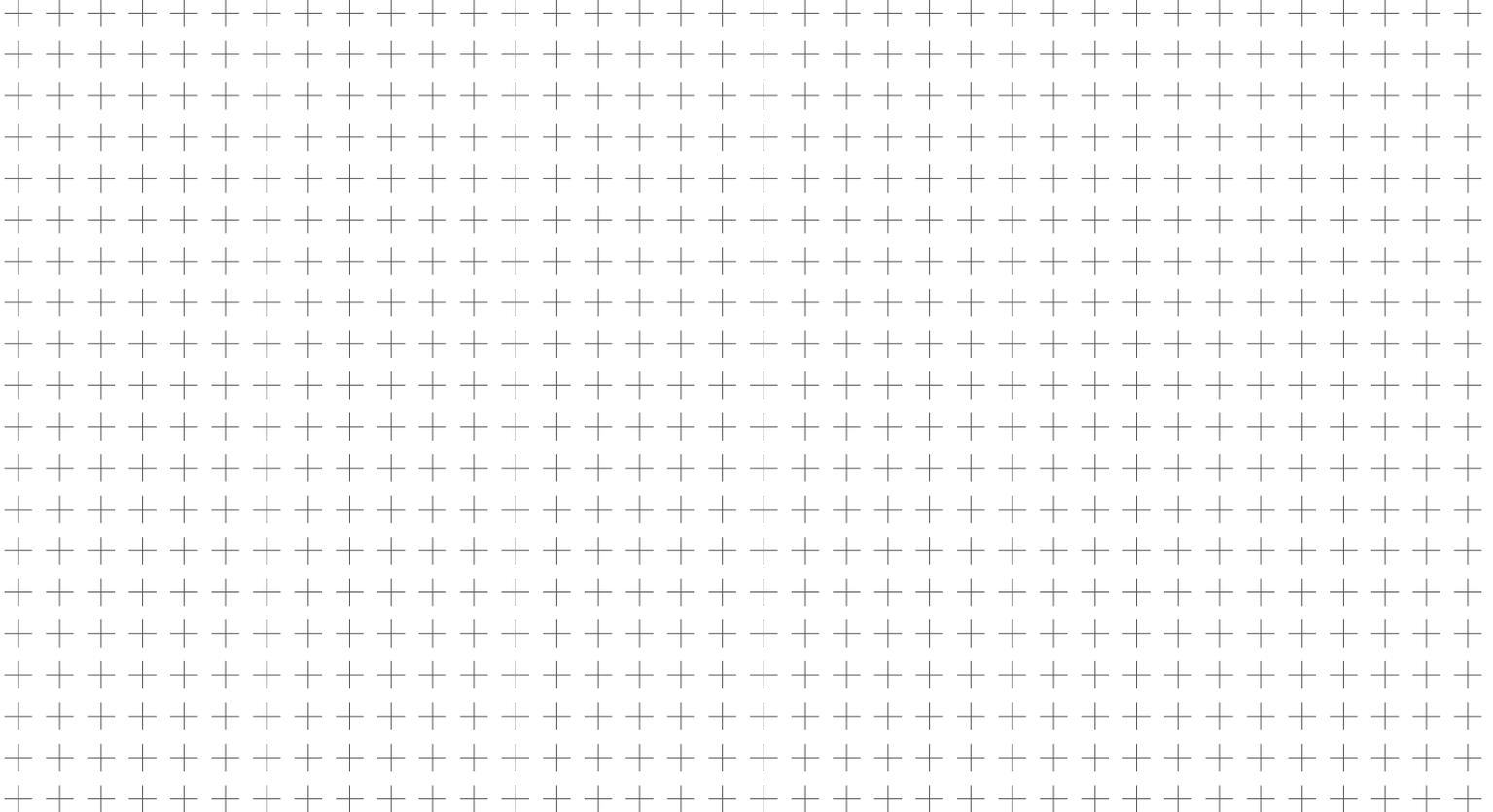
Rexflex THREADED FITTINGS

To prevent thread gauling - Apply two (2) wraps of pipe tape and then a small amount of pipe sealant.



SYSTEM LAYOUT PLAN

Sketch Piping System Layout and Plan Here



	Pipe Diameter (Circle One)	Lineal Ft.	# Drop Lines \times Length Each Drop Line = Total Drop Line Length
Manifold Relief Valve Line	3/4"		
Inert Manifold to Main	3/4" 1"		
Run 1	3/4" 1"		
Run 2	3/4" 1"		
Run 3	3/4" 1"		
Run 4	3/4" 1"		
Run 5	3/4" 1"		
Total Lineal Ft	3/4"		
Total Lineal Ft	1"		

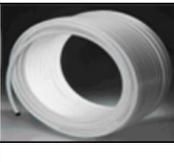
For assistance sizing your piping, scan this QR Code to go to Rexarc's Pipe Diameter Calculator and filling in the needed information. Keep in mind that a larger pipe diameter will provide a buffer for peaks in flow. Should the calculator return a size recommendation of 1/2", using 3/4" Rexflex Piping will be an excellent solution.

SCAN QR CODE



PIPE DIAMETER
CALCULATOR

Rexflex PIPE
M.A.W.P.: 200 psi @ 73°F / 160 psi @ 140°F
Materials: PE x AL x PE, Glued, ASTM 1282

	Rexflex PIPE			Rexflex PIPE MOUNTING CLIPS	
	Part Number	Details		Part Number	Details
	RFP-PE-AL-INRT-0.75-50	50' Roll, 3/4" Diameter		RFF-CLIP-0.75	Clip, 3/4"
	RFP-PE-AL-INRT-1.0-100	100' Roll, 1" Diameter		RFF-CLIP-1.0	Clip, 1"
Use in piping system as main and branch supply lines.			#8 wall attaching hardware not provided by Rexarc. Purchased separately according to type of surface(s) of attachment.		

Rexflex Pipe Fittings and Valves - ALL Rexflex
M.A.W.P.: 200 psi
Material: 57 Brass Nickel Plated

	COUPLING			TEE	
	Part Number	Details		Part Number	Details
	RFF-COUP-1.0Px1.0P	1" Both		RFF-TEE-1.0x1.0x1.0	1" ALL
	RFF-COUP-0.75Px0.75P	3/4" Both		RFF-TEE-1.0x0.75x1.0	1"x3/4"x1"
Use in piping system to extend or splice inert gas lines.			Use in piping system for branch and drop lines to station outlets.		
	ELBOW			SHUT-OFF VALVE	
	Part Number	Details		Part Number	Details
	RFF-LBOW-1.0x1.0	1" Both		RFF-VALV-1.0Px1.0P	1" Both
	RFF-LBOW-0.75x0.75	3/4" Both		RFF-VALV-0.75Px0.75P	3/4" Both
Use in piping system to create clean 90 degree turns.			Use to shut-off main supply line from gas source and to isolate other branch lines throughout the system.		

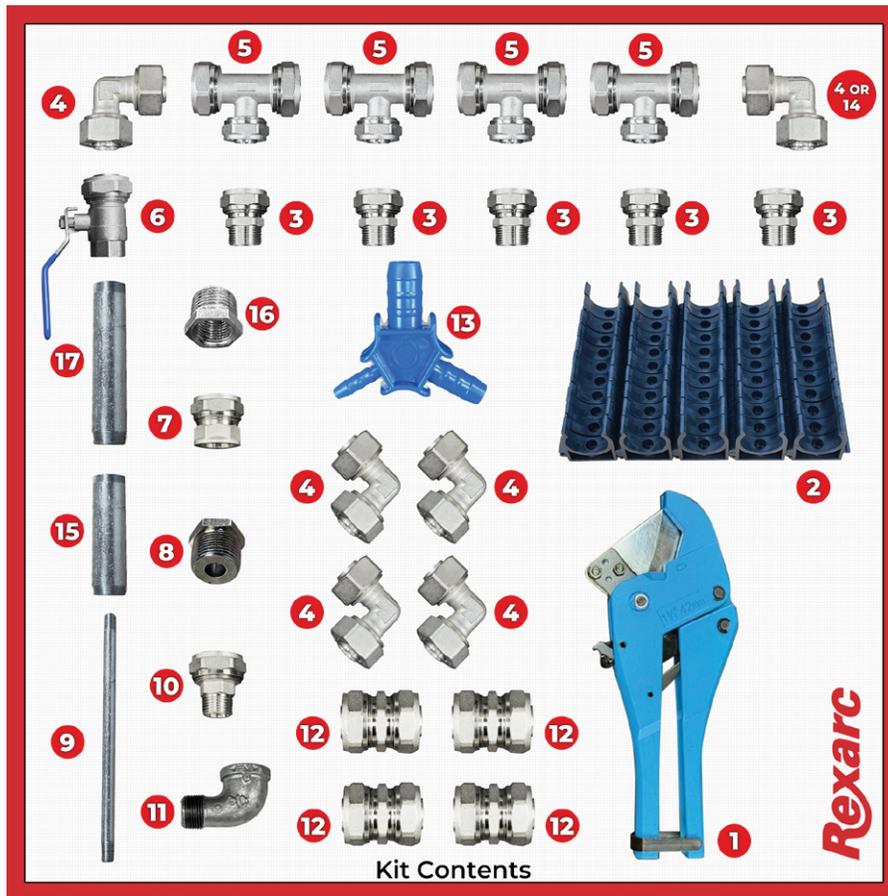
Rexflex Pipe Fittings and Valves - NPT - Rexflex
M.A.W.P.: 200 psi
Material: 57 Brass Nickel Plated

	STRAIGHT: Rexflex - MALE NPT			COUPLING: Rexflex - FEMALE NPT	
	Part Number	Details		Part Number	Details
	RFF-MSTR-0.75x0.5NM	1/2" (M) NPT, 3/4" Rexflex		RFF-COUP-0.75Fx0.75P	3/4" (F) NPT, 3/4 Rexflex
	RFF-MSTR-0.75x0.75NM	3/4" (M) NPT, 3/4" Rexflex			
Use in piping system to convert Rexflex pipe to NPT at station outlets.			Use with Rexarc changeover control boxes to convert vent outlet from NPT to Rexflex piping.		
	SHUT-OFF VALVE - Rexflex - FEMALE NPT			ELBOW- Rexflex - MALE NPT	
	Part Number	Details		Part Number	Details
	RFF-VALV-0.75Px0.75NF	3/4" Rexflex, 3/4" NPT(F)		RFF-LBOW-0.75-MP	3/4" Rexflex x 3/4" NPT(M)
	RFF-VALV-1.0Px0.75NF	1" Rexflex, 3/4" NPT(F)		RFF-LBOW-0.75x1.0-MP	1" Rexflex x 3/4" NPT(M)
Use in piping system to convert Rexflex pipe to NPT for gas shut-off at equipment connections.			Use in piping system to convert NPT to Rexflex piping.		

Installation Tools for Rexflex Pipe and Fittings

	Rexflex Pipe Cutter				Rexflex Pipe Straightener		
	Size(s)	Part Number	Details		Size(s)	Part Number	Details
	3/4"	RFT-CUTTER	Hand Ratchet Style Rexflex Pipe Cutter		3/4"	RFT-PIPESTRAIGHTENER	Suction Mount Pipe Streghtener
	1"				1"		
Use to cut Rexflex pipe to custom lengths.			Required for proper Rexflex pipe to fitting installation.				
	Rexflex Pipe Bender				Rexflex Pipe Reamer		
	Size(s)	Part Number	Details		Size(s)	Part Number	Details
	3/4"	RFT-BENDER	Hand Ratchet Style Rexflex Pipe Bender		3/4"	RFT-REAMER	Handheld Rexflex Pipe Reamer
	1"				1"		
Use to create radius bends in place of using an elbow fitting.							

Rexarc
Control Box
Gas and Vent
Outlet
Connections



Rexarc
Manual Manifolds
Gas and Vent Outlet

Rexflex Piping System Installation Kit System Line Size: 3/4" (all) Part Number: RFK-5 OUTLET-0.75			
ITEM	PURPOSE	PART NO.	QTY
1	Rexflex Pipe Cutter	RFT-CUTTER	1
2	Rexflex Pipe Clips	RFF-CLIP-0.75	50
3	Station Outlet Converter - Rexflex to NPT	RFF-MSTR-0.75x0.75NM	5
4	90° Elbow (Corners)	RFF-LBOW-0.75x0.75	6
5	Tee (Drop Line)	RFF-TEE-0.75x0.75x0.75	4
6	Main Gas Supply Shut-Off Valve	RFF-VALV-0.75Px0.75NF	1
7	Control Box Pressure Relief Valve Outlet Coupling	RFF-MSTR-0.75Px0.75P	1
8	Control Box Pressure Relief Valve Outlet Bushing	1-34-0002-06-02	1
9	Control Box Pressure Relief Valve Outlet Nipple	1-34-0049-02-64	1
10	Manual Manifold Pressure Relief Valve Outlet Coupling	RFF-COUP-0.75Fx0.75P	1
11	Manual Manifold Gas Outlet Elbow	1-34-0038-06	1
12	Pipe Extension/Splice Coupling	RFF-COUP-0.75Px0.75P	4
13	Pipe Reamer	RFT-REAMER	1
14	Not Applicable to 3/4" Kit - Included as ITEM 4		
15	Control Box Gas Outlet Nipple	1-34-0049-04-16	1
16	Control Box Gas Outlet Bushing	1-34-0006-06-04	1
17	Manual Manifold Gas Outlet Nipple	1-34-0049-06-32	1

Rexflex Piping System Installation Kit System Line Size: 1" Main, 3/4" Branch/Drop Part Number: RFK-5 OUTLET-1			
ITEM	PURPOSE	PART NO.	QTY
1	Rexflex Pipe Cutter	RFT-CUTTER	1
2	Rexflex Pipe Clips	RFF-CLIP-1.0	50
3	Station Outlet Converter - Rexflex to NPT	RFF-MSTR-0.75x0.75NM	5
4	90° Elbow (Corners)	RFF-LBOW-1.0x1.0	5
5	Reducing Tee (Drop Line)	RFF-TEE-1.0x0.75x1.0	4
6	Main Gas Supply Shut-Off Valve	RFF-VALV-1.0Px0.75NF	1
7	Control Box Pressure Relief Valve Outlet Coupling	RFF-MSTR-0.75Px0.75P	1
8	Control Box Pressure Relief Valve Outlet Bushing	1-34-0002-06-02	1
9	Control Box Pressure Relief Valve Outlet Nipple	1-34-0049-02-64	1
10	Manual Manifold Pressure Relief Valve Outlet Coupling	RFF-COUP-0.75Fx0.75P	1
11	Manual Manifold Gas Outlet Elbow	1-34-0038-06	1
12	Pipe Extension/Splice Coupling	RFF-COUP-1.0Px1.0P	4
13	Pipe Reamer	RFT-REAMER	1
14	Reducing Elbow (Drop Line)	RFF-LBOW-1.0x0.75	1
15	Control Box Gas Outlet Nipple	1-34-0049-04-16	1
16	Control Box Gas Outlet Bushing	1-34-0006-06-04	1
17	Manual Manifold Gas Outlet Nipple	1-34-0049-06-32	1

Labels - For 3/4" and 1" Rexflex Pipe - NFPA Compliant

Description	Part No.	Color Code	Legend	Description	Part No.	Color Code	Legend
Argon	1-03-0107	White	Black	Carbon Dioxide	1-03-0108	White	Black
Argon-CO2	1-03-0238	White	Black	Compressed Air	1-03-0105	White	Black
				Nitrogen	1-03-0106	White	Black

FITTING INSTALLATION GUIDE - 3/4" and 1"



CUT Rexflex pipe squarely with Pipe Cutter.



SHAPE the inside of Rexflex pipe. Use reaming tool to prepare pipe for fitting installation by fully inserting correct size and rotating a minimum of **3 FULL TURNS.**

For 3/4" pipe, use Peg #25
For 1" pipe, use Peg #32
Soapy water helps with this step.



MATE Rexflex pipe and fitting shoulder. Soapy Water helps with this step.



TIGHTEN Rexflex fitting nut to hand tight. Mark fitting and nut.



SEAL Rexflex fitting and pipe. Use wrench to tighten minimum of 3/4 turn, or until tight.

Installation Recommendations

Read all instructions and watch all videos related to Rexflex piping, fittings, and tools before starting. Apply care throughout installation of the piping system. The system will be carrying inert gases up to 200 psi.

Reminders about Product Design and Use

Maximum pressure of Rexflex pipe is 200 psi at 73°F and 160 psi at 140°F.
Maximum pressure of Rexflex fittings are 200 psi.
Rexflex pipe and fittings are not designed for use in corrosive environments.
Don't use any glue with Rexflex piping or fittings.
Rexflex pipe is not designed to take violent impacts.
If Rexflex pipe is mounted in direct sunlight, paint the pipe to prevent UV exposure.

Warnings

VERIFY that all fittings are tightened before the system is pressurized for the first time.
SLOWLY pressurize piping system to 50 psi after initial installation and use soapy water on each fitting to test for leaks. Then increase pressure to working pressure, MAX 200 psi.
Check local building codes before installation.
Rexflex piping systems must have a safety relief valve at the inert gas source to prevent over pressurization. (Relief valve is provided with all Rexarc manifold systems.)
Pressurize system slowly.
Turn off main gas supply when not in use.
Keep untrained personnel and children away from system.



Frequently Asked Questions

How do I adapt to Rexflex piping from black pipe or copper?

Rexflex piping can be adapted to black pipe or copper systems. Through one or multiple fittings, adapt the existing pipe to 3/4" or 1" NPT (M or F). From there, use the appropriate Rexflex adapter fitting to convert from NPT to Rexflex piping.

A local hardware store will have a variety of pipe thread fittings to help you adapt to any existing threaded system.

How do I know which size to use?

Choosing the correct diameter of pipe is based on how much flow rate will need to travel through the pipe. Flow rate is SCFH (standard cubic feet per hour).

The longer the distance the piping runs, the larger diameter of pipe you need. Keep the diameter of the main line of pipe the same. As a standard, Rexflex piping can be reduced to 3/4" for the drop leg portions, regardless of location in the system.

Should I do a pressure test?

Yes, prior to fully starting the system, a pressure test must be conducted to verify there are no leaks. To do this, visually verify all fittings have been tightened. Then increase the system pressure to 50 PSI on the delivery regulator of the inert gas manifold. Perform a leak test by using soapy water on each fitting and pipe connection. Upon verification that the system is not leaking, increase to working pressure, up to Maximum 200 PSI, and repeat leak test procedure.

Are Rexflex piping systems sunlight and UV resistant?

Like any plastic product exposed to direct sunlight, it's best to cover or paint the tubing to extend its working life. Failure to do so will likely result in the product not achieving full service life.

What is the expected service life of Rexflex piping?

With proper use, Rexflex piping can serve up to 50-years.

Are your products OSHA Approved?

This is one of those somewhat tricky questions. OSHA does not approve any products for safety but does rely on the manufacturer for recommendations. Since Rexflex piping is manufactured specifically for inert gases and it has been verified to the specifications listed, it is allowed.

OSHA has issued guidelines that PVC plastic pipe cannot be used for inert gas piping.

What materials are Rexflex fittings:

Rexflex fittings are nickel plated brass.

What is the warranty?

Rexflex piping and fittings come with a one year warranty from the date of shipment.

What is the max pressure rating for Rexflex piping?

200 psi at 73°F and 160 psi at 140°F

What is the temperature range of your products?

-40°F to 140°F

What is the bend radius of the Rexflex piping?

3/4": 6-8" Radius

1": 10-12" Radius

Can Rexflex pipe or fittings be buried in concrete or underground?

Rexflex piping and fittings are suitable for burying in soil or concrete. Using conduit covering is not required for Rexflex piping. If buried, wrap fittings with appropriate tape and 'sleeving up' through concrete is recommended.

Can the products be painted?

Yes, Rexflex pipe and fittings can be painted.

If I run out of fittings, where can I buy more?

Rexflex pipe and fittings do not interchange with common parts at a local store as they are specific to our systems. To order additional Rexflex pipe or fittings, just give us a call.

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VISIT OUR WEBSITE

Rexflex

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