

fh **FLEX-HOSE** CO. INC.



A World of Difference...™

IN CRITICAL PIPING CONNECTIONS



LISTED
Tri-Flex Loop®
for compressed
and combustible
gases
33NB



CSA standard B51 certified.
Inspected and tested by the
Technical Standards and
Safety Authority of Canada.



APPROVED

For Fire Protection Systems

NSF/ANSI 61,
California low lead law
and NSF/ANSI 372
third party listed
by IAPMO R&T



www.flexhose.com • 1-877-tri-flex

A World of Difference...

IN CRITICAL PIPING CONNECTIONS SINCE 1968



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ASME Section IX

Flex-Hose Co., Inc.

Traditions Will Never Mean Limits.

We understand that no customer's requirements are exactly the same. That our audience is targeted to engineers/designers and construction contractors whose responsibilities are to oversee costs and quality in the physical realm of installation of piping systems to existing and newly constructed buildings.

That's why Flex-Hose Co. pays so much attention to the details of your experience. Our employees will greet you in such a way that says we truly care and appreciate the opportunity to meet your performance expectation. Flex-Hose Co. personnel have the technical training and ability to provide solutions to the most demanding application. Our support also extends through specific job analysis services which recommends placement of product location in a piping system, perfectly integrating them into the overall theme of your project, saving you both time and money. This is the result of staying true to what is essentially right.

Anything Worth Doing is Worth Doing Right.

It's not very hard to understand that people are influenced by innovation, long-term reliability, ease of installation, and extreme cost savings. It's a no-brainer. This essence is built into the very fabric of our business and products since 1968.

Flex-Hose sets the standards for innovation and engineering brilliance with the Tri-Flex Loop®, quite literally the envy of the industry. Our renowned products are backed by the best warranties in the business that other manufacturers find easier to talk about than to duplicate.

Flex-Hose UL listed and labeled products are tested, listed, labeled and regularly inspected by Underwriters Laboratories to ensure they meet or exceed industry performance standards. Our products have also been inspected and tested by the Technical Standards & Safety Authority of Canada, and hold a CSA Standard B51 Certificate to meet the high quality standards of the Canadian market.

So enjoy years of service with our flexible piping connections. Flex-Hose Co. products give you that choice. Don't compromise.

Phil Argersinger, President/Owner



Pumpsaver®

Form Follows Function.

Many believe that all braided pump connectors are the same, until you go to pick up the Pumpsaver®. The Pumpsaver is manufactured with closed pitch hose making it an extraordinarily flexible connection. That construction saves valuable time on equipment installation, making it easy when it comes to equipment alignment.

Safety and performance has always been the heart of our product's design. That is why Pumpsaver's unique manufacturing process creates a smooth transition at the first convolution to the flange vs. the industry norm – a raw, jagged sharp edge.

PUMPSAVERS design and manufacturing utilizes state-of-the-art welding technology. Flex-Hose Co. has welders certified to ASME Section IX. Quality and safety is our passion at Flex-Hose Co. That is why we 100% pressure test every Pumpsaver connector to assure trouble-free installation and years of quality service and back our product with the industry's only 3 year product replacement warranty.

Standard Sizes ½" to 24" I.D.

Other sizes and custom styles available.
Please consult factory.



Large Inventory for Immediate Shipment!

Flex-Hose Co.'s PUMPSAVER® connectors are metal flexible connectors available in stainless steel or bronze. They are used to prevent damage to pumps caused by piping stress. PUMPSAVER connectors also absorb vibration and noise found in pump installations. PUMPSAVER connectors are easily installed and reduce the possibility of pump failure.

They are designed to be pressure tested 1.5 times their maximum rated working pressure and manufactured with a 4:1 safety factor. Their compact design saves valuable space.

Working pressure of standard hose and braid up to 1325PSI or full vacuum and operating temperatures of -400°F to +1500°F.

PUMPSAVERS are manufactured with 321 stainless steel or bronze annular corrugated close pitch metal flexible hose. Other stainless steel and corrosion-resistant alloys are available.

PUMPSAVERS are available with flanged ends, steel male NPT ends, grooved ends, weld ends, or copper tube female sweat ends and may include multiple braids for higher working pressures.



CSA standard B51 certified. Inspected and tested by the Technical Standards and Safety Authority of Canada.



NSF/ANSI 61, California low lead law and NSF/ANSI 372 third party listed by IAPMO R&T

ASME Section IX



INDUSTRIAL Metal Hose

Why Metal Hose?

Flex Hose Co. industrial metal hoses can be supplied up to 24" in diameter. Major applications include absorbing vibration, compensating for misalignment, and accommodating offset motion.

Our metal Hose assemblies are widely used in mechanical and process piping systems for conveying high pressure and/or high temperature media as well as corrosive and non-corrosive media including gas.

If it can be welded...

...we can build it, attach it or incorporate it into your industrial metal hose assembly. So don't limit our ability to meet your requirements by what you see or don't see in our published catalog.

Flex-Hose Co. personnel have the technical training and ability to provide solutions to the most demanding applications. Our support also extends through specific job analysis which recommends product placement within a piping system, perfectly integrating them into the overall theme of your project – saving you both time and money!

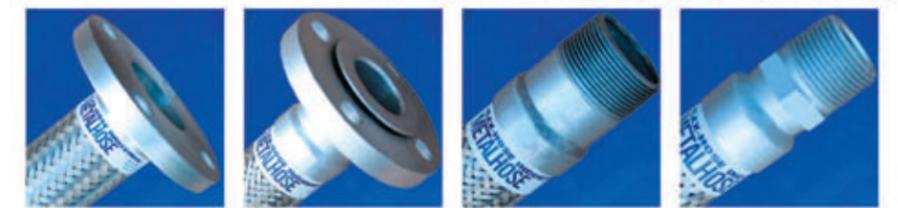


CSA standard B51 certified. Inspected and tested by the Technical Standards and Safety Authority of Canada.

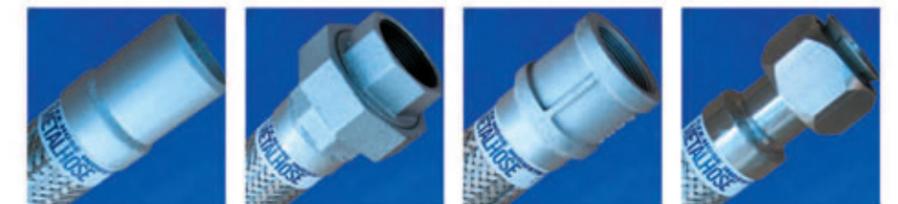
ASME Section IX

Industrial Metal Hose Selection Guide

STAINLESS STEEL HOSE AND BRAID



- | | | | |
|--|---|---|--|
| FIXED FLANGE | FLOATING FLANGE | MALE PIPE NIPPLE | HEX MALE PIPE NIPPLE |
| <ul style="list-style-type: none"> • 150/300/600 ANSI • Raised Face/Flat Face • Forged/Plate (Type C) • Carbon Steel/Stainless Steel | <ul style="list-style-type: none"> • 150/300/600 ANSI • Forged/Plate (Type C) • Carbon Steel/Stainless Steel | <ul style="list-style-type: none"> • Sch 40/80 • Carbon Steel/Stainless Steel • MONEL® | <ul style="list-style-type: none"> • Carbon Steel/Stainless Steel |
| HOSE DIAMETER ½"-24" | HOSE DIAMETER ½"-24" | HOSE DIAMETER ½"-6" | HOSE DIAMETER ½"-4" |



- | | | | |
|--|---|---|---|
| WELD END | FEMALE UNION | FEMALE COUPLING | FEMALE JIC SWIVEL |
| <ul style="list-style-type: none"> • Square Cut/Bevel Cut • Sch 10/40/80 • Carbon Steel/Stainless Steel | <ul style="list-style-type: none"> • 150/300/3000# • Carbon Steel/Stainless Steel | <ul style="list-style-type: none"> • 150/300/3000# • Carbon Steel/Stainless Steel | <ul style="list-style-type: none"> • Stainless Steel |
| HOSE DIAMETER ½"-24" | HOSE DIAMETER ½"-4" | HOSE DIAMETER ½"-4" | HOSE DIAMETER ½"-2" |

BRONZE HOSE AND BRAID



- | | | | | |
|---------------------|-----------------------------|---------------------|---------------------|---------------------|
| FEMALE SWEAT | HEX MALE PIPE NIPPLE | FEMALE UNION | MALE UNION | PRESS FIT |
| HOSE DIAMETER ½"-3" | HOSE DIAMETER ½"-3" | HOSE DIAMETER ½"-3" | HOSE DIAMETER ½"-3" | HOSE DIAMETER ½"-2" |

Available Alloys:

- 316 Stainless Steel
- 321 Stainless Steel
- Bronze
- Hastelloy®
- Inconel®
- Monel®

©Hastelloy is a registered trademark of Haynes International. ©Inconel and Monel are registered trademarks of Inco Alloys/Special Metals.



FLEX-HOSE CO., INC.
FULTRAfuelflex™



CYCLE TESTED FOR
20,000 cycles

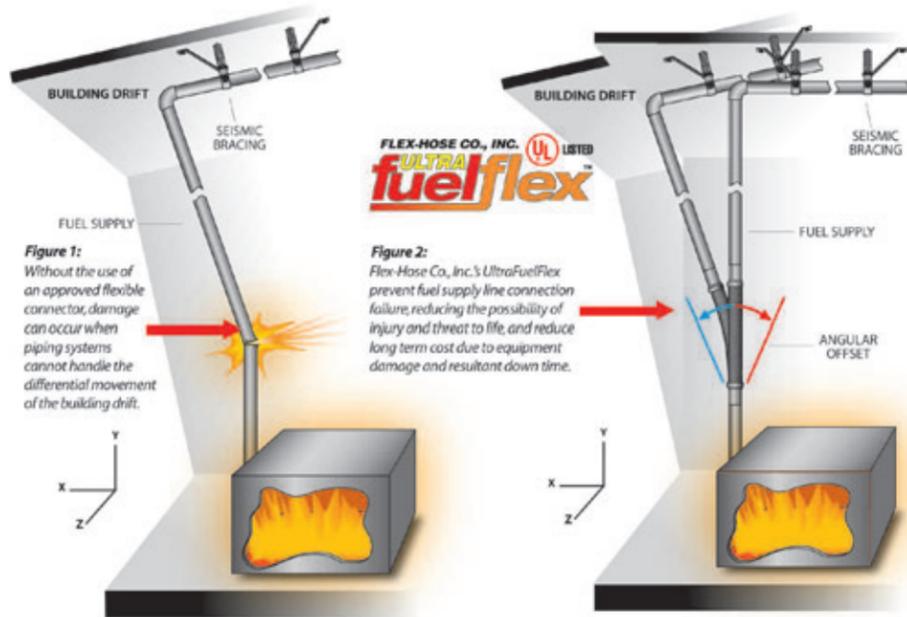
Protecting Your Fuel-Fired Equipment



UltraFuel Flex meets the requirements of the 2019 International Building Code (IBC) Chapter 16 - Structural Design, and is designed to meet the force and displacement requirements for boilers and pressure vessels as specified by The American Society of Civil Engineers (ASCE 7-16) Chapter 13.6.9, 13.6.13

Standard Sizes
 1" to 4" I.D.

Male NPT, flanged & weld ends available.
 Please consult factory.



Quality Assurance

Safety and performance has always been the heart and soul of the UltraFuel Flex product's design. They have been tested, listed, labeled, and regularly inspected by Underwriters Laboratory to ensure they meet or exceed industry performance standards.

UltraFuel Flex is manufactured with 321(ASTM A240) grade stainless steel closed pitch metal flexible hose, making it an extraordinarily flexible connection. One of the rigorous testing requirements of UL536 testing is flexure cycle testing. UltraFuel Flex was flexure tested for 20,000 cycles while maintaining a working pressure of 175 psig. Upon successful completion of 20,000 cycles, UltraFuel Flex was pressurized to 875 psig (5:1 safety factor) and maintained pressure integrity... **Passing the test!**

Applications

Flex-Hose Co. UltraFuel Flex UL536 Listed connectors are approved for compressed and combustible gases. They are used to prevent damage to critical gas/fuel fired equipment caused by piping stress where rigidly supported pipes connect to equipment. UltraFuel Flex are easily installed and reduce the possibility of equipment connection failure. Common applications include gas connections on boilers, water heaters, and unit heaters and fuel connections on emergency generators and gas turbine engine installations.

Pressures

UltraFuel Flex are designed for a maximum working pressure of 175 psi at 70°F and are capable of system test to 262 psig. Manufactured with 5:1 safety factor.

All UltraFuel Flex are 100% hydrostatic tested at the factory to 262 psig to insure trouble free installation and years of quality service.

UL536 Requirements

UltraFuel Flex connectors have a UL536 listing having a nominal inside diameter from 1 to 4 inches intended for use if piping systems carrying flammable, compressed and combustible gases, at pressures not exceeding 175 psi at ambient temperature.

Note: The terms compressed and combustible gases, as used herein, mean gases such as liquefied petroleum gases and manufactured and natural fuel gases.



PurgAir™

Large Inventory for Immediate Shipment!

The PurgAir Advantage – An Air Free System.

PURGAIR inline air separator saves valuable space and the internal diverter design is a cost-effective means for separation of air in a hydronic system. The Purgair are fitted with air vent tapping and drain connection tapping. Purgair's rugged construction makes it suitable for pipe line mounting. Standard pressure ratings of 150 psi. Available with 150 lb. plate steel flanges, butt weld ends and groove ends. We 100% pressure test every PurgAir to assure trouble-free installation and years of quality service.

Standard Sizes 3" to 24" I.D.

Benefits

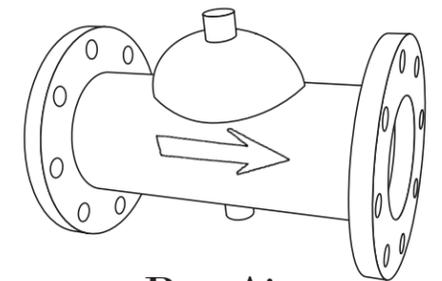
- Air-free water flow means enhanced systems operations and reduced costs
- Internal diverter effectively separates air from heating and cooling systems. The result: better performance and lower operating costs
- Permits quick venting of air at start-up
- Reduces service costs due to air-bound piping
- Extends the life of your system by reducing corrosion & erosion
- Improves heat transfer efficiency in boilers, fan coils, chillers, etc.
- Reduces the overall energy costs of your system
- Optimizes pump performance

Applications

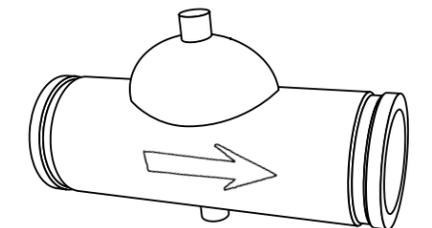
PurgAir Separators should be installed at the highest temperature and the lowest pressure points in the system.

When this is not possible, the best location is at the point of highest temperature. Ideally, a separator should be located on the outlet side of the boiler, and the suction side of the pump.

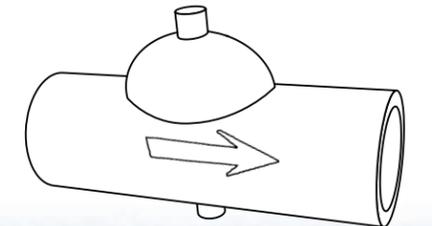
PurgAir Flanged Ends



PurgAir Grooved Ends



PurgAir Weld Ends





Flexzorber®

Large Inventory for Immediate Shipment!

Simply Like No Other.

There is an epic story to be told. Steel, rubber... bring them together to form the simple curves of the Flexzorber, simply like no other.

So don't be fooled by others who may try to justify premium prices with fancy specs. That's why mere words should never suffice. We put the industry's first and only 2 year full replacement warranty and proudly mark each one with the Flexzorber brand signifying durability and reliability.

So unleash your profits and insist on Flexzorber style rubber connectors and expansions joints, the cost-effective solution to reducing thermal pipe growth and stress.

Flexzorber expansion joints are precision molded under high pressure to ensure product integrity. Flexzorber's spherical arch design is ideal for solving motion problems in a piping system because the forces to deflect or move the joint are inherently low since the shape allows pressure to be exerted uniformly in all directions.

The ease of movement exhibited by Flexzorber joints provides an excellent choice for use with plastic piping systems. The molded spherical flowing arch is referred to as self-cleaning and is thus suited for slurries or applications with potential sediment build up or turbulence. The cord reinforcement is bonded within the elastomer to avoid exposure to atmosphere or media. The elastomeric cover provides excellent resistance to oils, sunlight, ozone, and heat aging. Flexzorber spherical connectors are manufactured with a neoprene or EPDM which provides resistance to a wide variety of media including glycol applications.

Flexzorber spherical expansion joints have ANSI class 150 lb. steel floating flanges or female unions that are zinc-coated for corrosion protection and also allows simple installation. The Flexzorber flange face eliminates the need for a gasket.

Other styles, sizes and elastomers available. Please consult factory.



CSA standard B51 certified. Inspected and tested by the Technical Standards and Safety Authority of Canada.



Flexzorber Double Sphere Union

Standard Sizes
3/4" to 2" I.D.



Flexzorber Single Sphere Flanged

Standard Sizes
1 1/2" to 20" I.D.



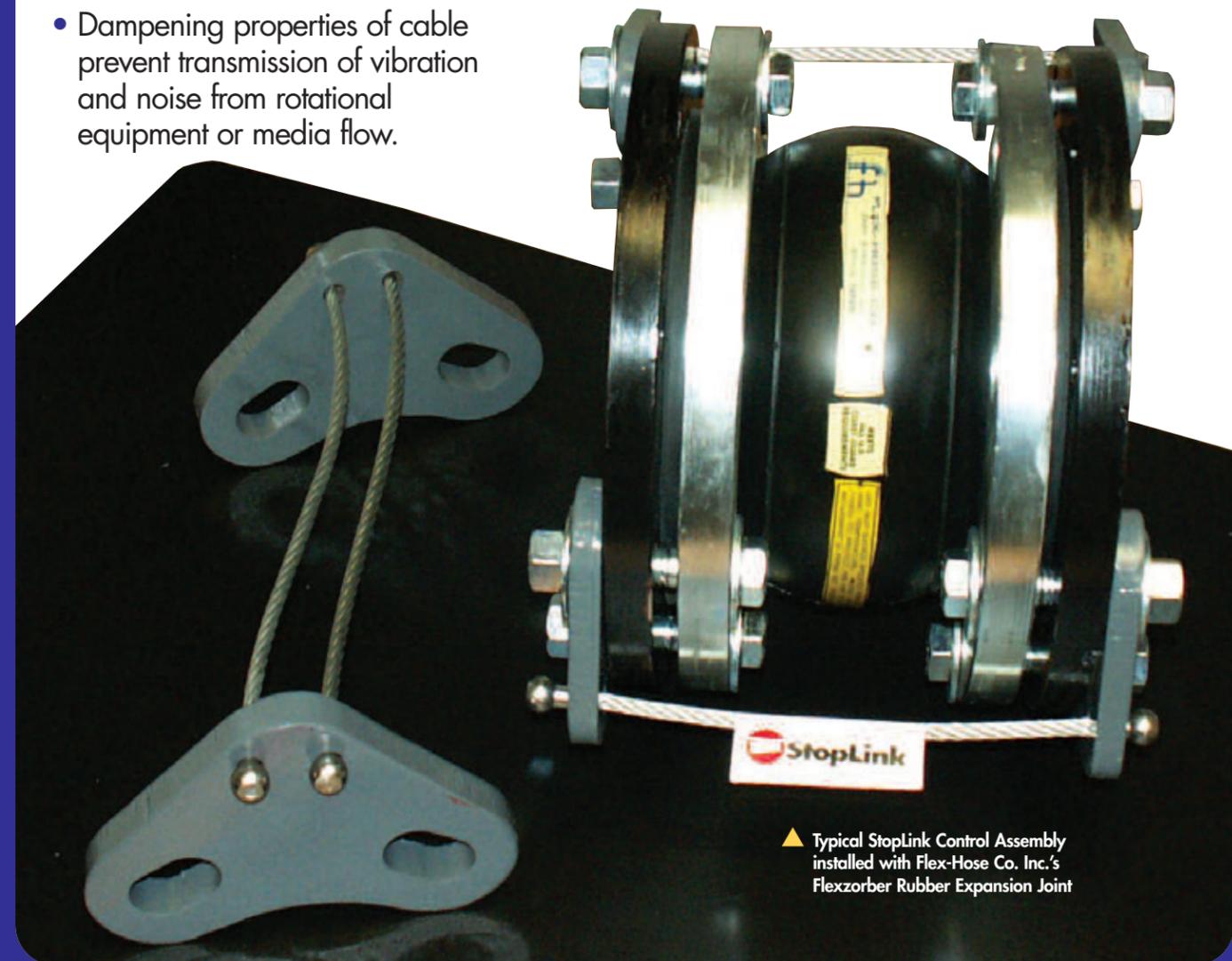
Flexzorber Double Sphere Flanged

Standard Sizes
2" to 12" I.D.

StopLink™

Simplifies any Rubber Connector or Expansion Joint Installation!

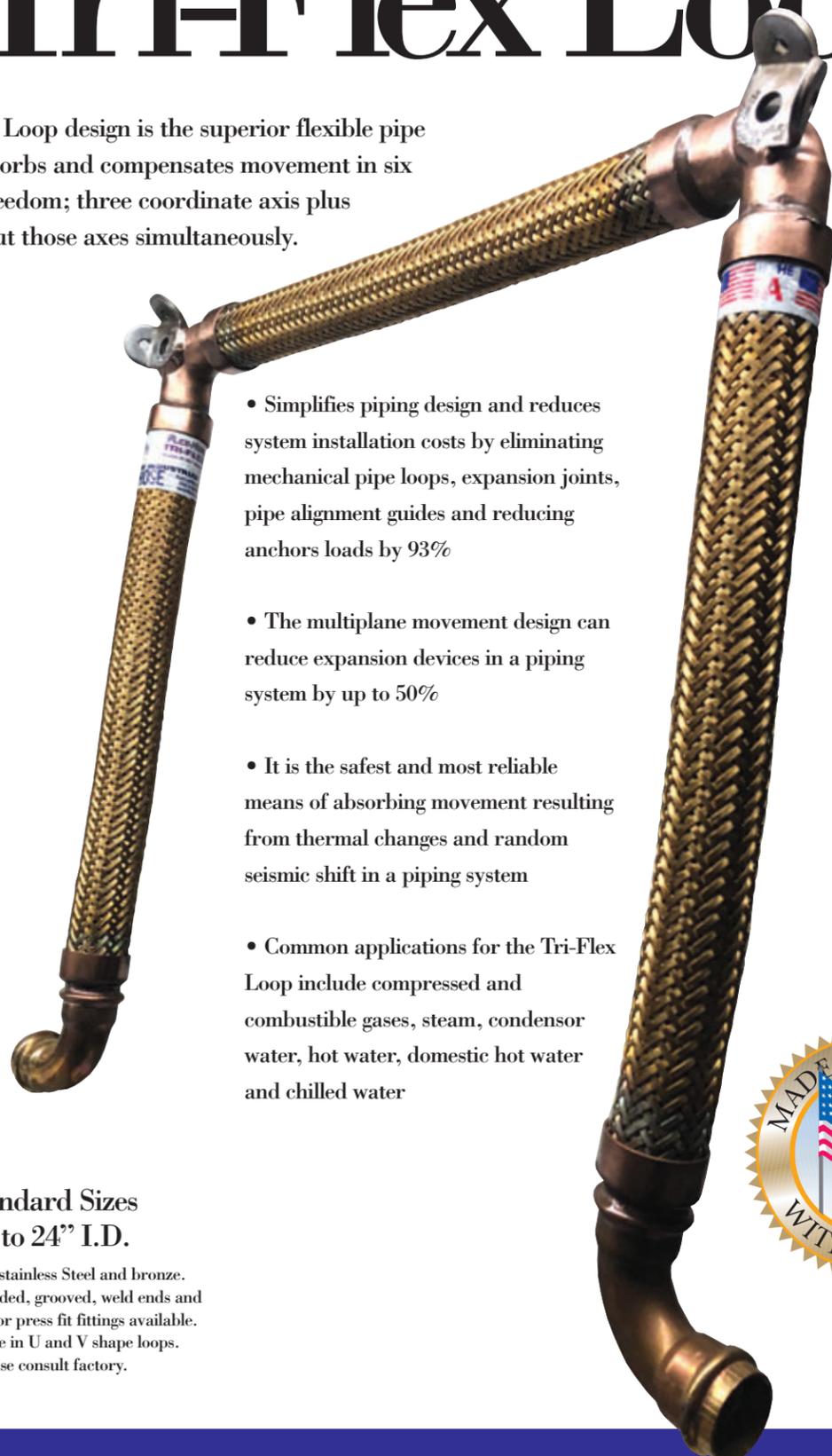
- Easy to install - factory designed and assembled with no loose parts or field adjustments. Simply bolt to mating flanges.
- Fraction of the weight of conventional control rod assemblies reducing shipping costs.
- Dampening properties of cable prevent transmission of vibration and noise from rotational equipment or media flow.
- Reduce travel of rubber connector protecting from over axial extension without restricting design movements.
- No future maintenance required.



▲ Typical StopLink Control Assembly installed with Flex-Hose Co. Inc.'s Flexzorber Rubber Expansion Joint

Tri-Flex Loop[®]

The Tri-Flex Loop design is the superior flexible pipe loop that absorbs and compensates movement in six degrees of freedom; three coordinate axis plus rotation about those axes simultaneously.



- Simplifies piping design and reduces system installation costs by eliminating mechanical pipe loops, expansion joints, pipe alignment guides and reducing anchors loads by 93%
- The multiplane movement design can reduce expansion devices in a piping system by up to 50%
- It is the safest and most reliable means of absorbing movement resulting from thermal changes and random seismic shift in a piping system
- Common applications for the Tri-Flex Loop include compressed and combustible gases, steam, condensor water, hot water, domestic hot water and chilled water



Standard Sizes
1/2" to 24" I.D.

Available in stainless Steel and bronze.
Flanged, threaded, grooved, weld ends and copper sweat or press fit fittings available.
Also available in U and V shape loops.
Please consult factory.

Tri-Flex Loop: The complete expansion loop system solution.

Expansion Loop Sizing Program

It's FREE

PROGRAM FEATURES

- Calculates pipe thermal expansion; various alloys for chilled water, condenser water, hot water, domestic hot water, saturated steam
- Calculates nesting of expansion seismic loops
- Building seismic joints
- Calculates spring rates of expansion seismic loops
- Automatically selects UL[®] Listed hanger assemblies
- Creates detailed schedule or submittals
- Allows saving of projects, opening new projects, and editing of projects
- Industry terminology
- Application examples
- Specifications



Auto CAD Compatible



AND BEST OF ALL IT SAVES DESIGN TIME!
Compatible with all Auto CAD programs allowing input directly into your piping drawings!

Save Labor Costs with these Tri-Flex Loop Accessories!

Tri-Flex Loop[®] Hanger Assembly Kit and Accessories

The UL Listed Seismic Wire Rope/Cable[™] used in our hanger assemblies conform to the requirements of the ASCE (American Society of Civil Engineers) guidelines for structural applications of wire rope, in that the cable is pre-stretched and the permanent end fittings maintain the breakstrength of the cable with a safety factor of two.

Tri-Flex Loop[®] Factory Cable Anchor Kit

The Tri-Flex Loop Factory Cable Anchor Kit saves valuable time on Tri-Flex Loop installation, making it easy to anchor the piping system when using the revolutionary Tri-Flex Loop.

The UL Listed Seismic Wire Rope/Cable[™] used in our hanger assemblies conform to the requirements of the ASCE (American Society of Civil Engineers) guidelines for structural applications of wire rope, in that the cable is pre-stretched and the permanent end fittings maintain the breakstrength of the cable with a safety factor of two.

See individual product bulletins for full details.

CYCLE TESTED FOR 20,000 cycles



LISTED
Tri-Flex Loop[®] for compressed and combustible gases
33NB

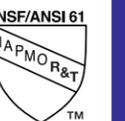


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For Fire Protection Systems

NSF/ANSI 61, California low lead law and NSF/ANSI 372 third party listed by IAPMO R&T



A WORLD OF DIFFERENCE IN CRITICAL PIPING CONNECTIONS™

A WORLD OF DIFFERENCE IN CRITICAL PIPING CONNECTIONS™



Large Inventory for Immediate Shipment!

Flexcomp™ Expansion Compensators

FLEXCOMP expansion compensator's compact design saves valuable space. It is a perfect way to absorb up to 2" of axial movement resulting from thermal growth in a domestic hot water, heating hot water, and chilled water piping system. Flexcomp's externally pressurized, rugged construction fully encases the stainless steel bellows with an external cover, assuring safety and reliability. Standard pressure ratings up to 200 psi. Flexcomps are available standard with female copper tube ends and steel male NPT ends.

Standard Sizes
3/4" to 4" I.D.

2 Year Product Replacement
Warranty Exceeds Industry Standards



Large Inventory for Immediate Shipment!

Flexpress™ Externally Pressurized Guided Expansion Joints

FLEXPRESS externally pressurized guided expansion joint provides a reliable means of absorbing high axial motions up to 16". Flexpress offers a totally enclosed, externally pressurized stainless steel bellows that is protected from external damage by an external cover. The rugged construction of the external cover is also designed for the working pressure. The Flexpress carbon steel pipe integral liner is designed to prevent bellows impingement or fatigue due to flow induced vibration. Standard pressure ratings up to 300 PSI are available with flanged ends or beveled weld ends.

Standard Sizes
2" to 24" I.D.

5 Year Product Replacement
Warranty Exceeds Industry Standards



Large Inventory for Immediate Shipment!

Bellowsflex™ Metal Bellows Expansion Joints

BELLOWSFLEX metal bellows type expansion joints are designed for a wide range of service conditions. The standard bellows element is manufactured with 321 stainless steel. Other stainless steel or heat and corrosion resistant alloys are available. Standard pressure ratings up to 300 PSI. Available with flanged or beveled weld end fittings. Bellowsflex can also be supplied with accessories such as tie rods, flow liners, and protective external covers/shrouds.

Sizes
2" to 60" I.D.



Large Inventory for Immediate Shipment!

Pumpflex™ Bellows Pump Connectors/Expansion Joints

PUMPFLEX bellows pump connector features a 304 series stainless steel bellows construction. Pumpflex has a short face-to-face dimension for compact installations. It is ideal in applications for vibration control and noise reduction as well as strain relief, misalignment, and less than .5" movement of thermal growth. Pumpflex features tie rod restraints to prevent elongation, and compression sleeves to prevent over compression. Standard pressure ratings of 225 PSI. Available with 150 lb. flat face flanges. Additional alloys and styles available. Please consult factory.

Standard Sizes
2" to 24" I.D.

2 Year Product Replacement
Warranty Exceeds Industry Standards



High Performance Expansion Joints with Corrosion Resistant Coating

HIGH PERFORMANCE Expansion Joints with corrosion resistant, thick film, protective coatings and safety metal bellows are made with ETFE - Ethylene Tetrafluoroethylene* and are the answer to high temperature corrosive attack. They are FDA conforming and suitable for food contact applications. Their relative chemical inertness make them ideal for applications where maintaining product purity is critical. They are available in a wide variety of ranges - abrasion resistance or mild chemical services (3-10 mils) to (20-30 mils) thick for ultimate chemical resistance. Continuous operating temperatures of 150°C (300°F). Other corrosion resistant coatings also available.

Standard Sizes
2" to 48" I.D.



Large Inventory for Immediate Shipment!

BellowsXhaust™ Exhaust Type Expansion Joints

BELLOWSXHAUST expansion joints are designed to absorb pipe expansion, reduce noise, and dampen vibration. They are ideal for low pressure (50 psi) and high temperature (1200°F) applications. The assembly weights have been reduced to permit use in thin wall flue duct systems. Most common applications are exhaust connections on diesel, gasoline or gas turbine engine installations, and ducting conveying corrosive gases. To simplify selection, standard designs have been developed with a 321 stainless steel bellows element. BellowsXhaust are available with flanged ends, weld ends and optional vanstone flanges with axial travel up to 3.5 inches.

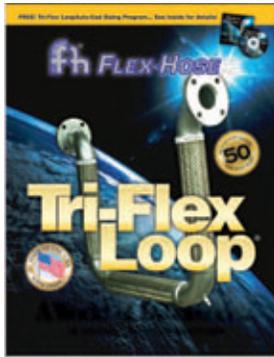
Standard Sizes
4" to 48" I.D.



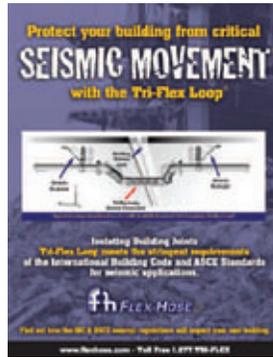
Visit our website for more information on our broad range of products.



Product Overview



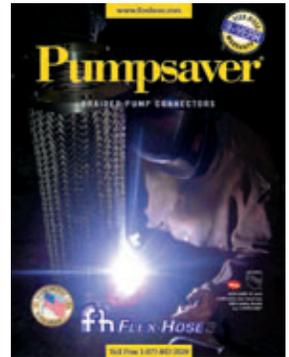
Flexible Pipe Loop



IBC Compliant
Seismic Connections



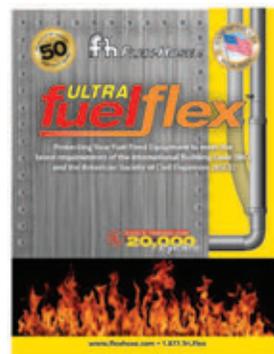
Flexible Pipe Loop
Hanger Kit & Accessories



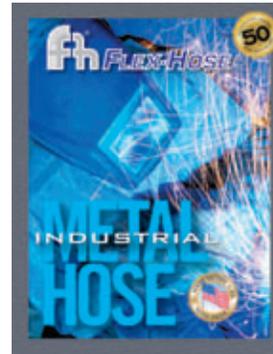
Braided Metal
Pump Connectors



Expansion Joint
Application Guide



Flexible Gas
Connection



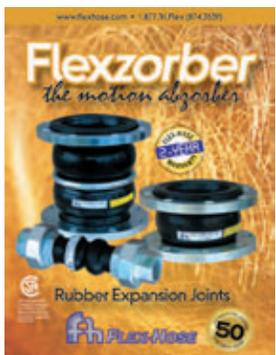
Industrial
Metal Hose



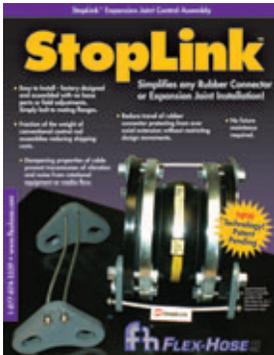
Metal Bellows
Expansion Joints



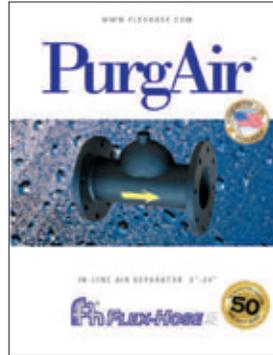
Enclosed Metal Bellows
Expansion Joints



Rubber
Expansion Joints



Expansion Joint
Control Assemblies



Air Separators



Expansion
Compensators



Externally Pressurized
Expansion Joints

A World of Difference in Critical Piping Connections since 1968.



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Expanded Design and Manufacturing Operation
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