

Industrial

Fabricated Hose Guide



Providing **Solutions** for your
Toughest Industrial Applications

phoenixpumps.com
602.232.1952

Updated 2025 Edition

Composite Hose Assemblies

HEAVY DUTY

HEAVY DUTY FLUOROPOLYMER CHEMICAL HOSE

4121SGF

4124SSF

Application: This type is designed for hazardous chemicals where a PTFE chemical resistant liner is required for tank truck, railcar, and in plant transfers suitable for use with a wide variety of chemicals

Color/Cover: 4121SGF Light Blue/PVC coated Nylon, Abrasion, Ozone resistant
4124SSF Light Blue yellow stripe/ PVC coated Nylon, Abrasion, Ozone resistant

Inner Wire: T316 Stainless Steel Wire

Inner lining: PFA, FEP, ETFE

Carcass: Polypropylene fabrics, films and seamless tubes

Outer Wire: 4121SGF Galvanized Steel
4124SSF T316 Stainless Steel

Temp. Range: -22°F to +212°F (-30°C to +100°C)

Maximum elongation: ≤10% on test pressure

Vacuum range: 26 in Hg (660 mm Hg), 0.9 bar

Electrical properties: Electrically Conductive ≤2.5 ohm/m for sizes less than 2" ≤1.0 ohm/m for size 2" and above

EN13765: 2010, IMO, IBC, BS5842, NAHAD-600:2005

Specially designed end fittings (see below) have been developed for use with Willcox Composite hoses that have a unique leak-proof sealing face and specially machined helical spiral shank which engages into the corresponding internal helix wire when secured into the hose by either crimping or swaging the external ferrules.

Twice the Life!

Half the Weight

Tighter Bend Radius

TECHNICAL DATA: TYPE 4124SSF									
Inside Diameter		Working Pressure		Min. Bend Radius		Approx Weight		Maximum Length	
Inches	mm	PSI	Bar	Inches	mm	lb/ft	kg/m	Feet	Meters
1	25	250	17.5	5.0	125	0.9	1.3	100	30
1 1/2	40	250	17.5	6.0	150	1.1	1.6	100	30
2	50	250	17.5	6.0	150	1.4	2.1	100	30
3	80	250	17.5	9.0	225	2.1	3.1	100	30
4	100	250	17.5	11.0	275	2.5	3.7	100	30

GENERAL PURPOSE

Uni-FLON™ SPECIAL CHEMICAL SERVICE HOSE



Description: Built to meet the demands of today's highly aggressive media. Superior chemical resistance is achieved with a PTFE, inner liner, reinforced with multiple plies of polyester and polypropylene films. Rated for full vacuum.

Maximum length: 100ft (10"= 80 ft.)
Operating Temperature: -40°F to +225°F / -40°C to +106°C

Uni-FLON™ SG
Uni-FLON™ SS
Uni-FLON™ PS is available on request

SPECIFICATION CHART								
ID x OD	1" x 2"	1.5" x 2"	2" x 2.5"	3" x 3.5"	4" x 4.5"	6" x 7"	8" x 9.4"	10" x 11.5"
Max WP PSI	250	250	250	250	250	250	250	200
Burst Pres PSI	1000	1000	1000	1000	1000	1000	1000	1000
Bend Rad. Inches	4.0	5.0	6.0	7.9	11.9	22.0	30.0	40.0
Weight LB/FT	0.60	0.80	1.60	2.40	3.20	7.20	11.0	14.50

FLEXKOMPO PTFE Composite Hose with No Inner Wire



No Inner Wire

Great for Bleach & Bromine!

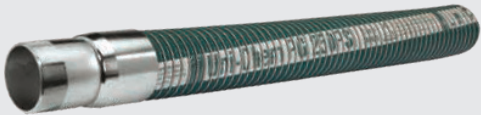
Description: This type is designed for hazardous chemicals where a PTFE chemical resistant liner is required for tank truck, railcar, and in plant transfers suitable for use with a wide variety of chemicals.

Applications: Chemical transfer, paint, food & beverage, loading cells, railcar and tractor trailer uploading
Temperature Range: 40°F to + 212°F (-40°C to +100°C) Continuous
Tube: FDA compliant Khemgard® PTFE
Reinforcement: Polyester film and polyester fabrics reinforced with a double helix. The first wire is embedded in the carcass and the second wire is on the outer cover.
Available upon request: Private branding and optional cover colors.

SPECIFICATION CHART								
ID x OD	1" x 2"	1.5" x 2"	2" x 2.5"	3" x 3.5"	4" x 4.5"	6" x 7"	8" x 9.4"	10" x 11.5"
Max WP PSI	250	250	250	250	250	250	250	200
Burst Pres PSI	1000	1000	1000	1000	1000	1000	1000	1000
Bend Rad. Inches	4.0	5.0	6.0	7.9	11.9	22.0	30.0	40.0
Weight LB/FT	0.60	0.80	1.60	2.40	3.20	7.20	11.0	14.50

ECONOMY

Uni-CHEM™ STANDARD CHEMICAL SERVICE HOSE



Description: Specifically designed for in-plant liquid transfer operations as well as tank truck delivery and rail car loading. Constructed with multiple plies of polypropylene films and polyester vapor barrier. Rated for full vacuum.

Maximum length: 100 ft (10"= 80ft.)
Operating Temperature: -40°F to +212°F / -40°C to +100°C

Uni-CHEM™ PG, PS
Uni-CHEM™ SG, SS

SPECIFICATION CHART								
ID x OD	1" x 1.5"	1.5" x 1.9"	2" x 2.4"	3" x 3.5"	4" x 4.4"	6" x 7"	8" x 9.4"	10" x 11.5"
Max WP PSI	250	250	250	250	250	250	250	250
Burst Pres PSI	1000	1000	1000	1000	1000	1000	1000	1000
Bend Rad. Inches	4.0	5.0	6.0	7.9	11.9	22.0	30.0	40.0
Weight LB/FT	0.60	0.80	1.60	2.40	3.20	7.20	11.0	14.50



If you have any questions contact your hose specialist at
602.232.1952

Composite Hose Anatomy

Innovated Composite Hose Anatomy

Internal Helical Wire:

- Polypropylene Coated Steel
- Galvanized Steel
- Stainless Steel

External Helical Wire:

- Galvanized Steel
- Stainless Steel

Abrasion and Ozone Resistant Outer Cover

- Multiple Polypropylene Layers
- Seamless Tubes
- Multiple Polypropylene Layers
- Polypropylene or Fluoropolymer Inner Layers

Ferrule:

- Coated Steel
- Stainless Steel

Tailpiece:

- Carbon Steel
- T316 Stainless Steel
- PTFE coated

Flanged Ends:

- Carbon Steel
- Stainless Steel

Compared to rubber hose and metal hose

Willcox composite hoses are light weight and flexible for user friendly handling. Their multi-layer construction prevents catastrophic failures. Flexibility is retained at low and even cryogenic temperatures. Hoses are protected from corrosion and attack by other liquids, UV and ozone by their tough, PVC nylon impregnated outer covers.

Engineered and Manufactured to High Standards

Willcox composite hoses comply with various US and international standards including U.S.C.G, BS5842, EN13765: 2010, EN13766:2010, Heavy duty hoses for ocean going vessels can be approved to IMO Codes, BCH and IBC requirements.

Extremely Wide Chemical Compatibility

From acetaldehyde to zinc halides and thousands of chemicals, liquids and compounds in between, Willcox composite hoses are specifically designed to meet your most challenging transfer applications.

Fittings for Composite Hose

Hose Couplings, Adapters and Accessories



Fitting Styles: Victaulic grooved tailpiece (12), Threaded tailpiece (13,16,10,3,4,6), Polypropylene ANSI drilled flanged tailpiece with steel backing ring (14,8), Aluminum female coupler tailpiece (15), Floating or swivel ANSI flange on a stub end tailpiece (11), Metallic ANSI RF fixed flange tailpiece (9), Self locking arm female coupler tailpiece (1,2), Quick disconnect male adapter tailpiece (5), Sanitary tailpiece (7)

- Fittings:** All fittings are designed assure 100% performance by each hose. Attachment methods are specifically developed for a perfect union and ensure performance up to rated burst pressure.
- Double start threads, scrolls or serrations:** Double start threads, scrolls or serrations engage the inner wire and ensure positive location of the outer wire after swagging. Precise machining assures maintenance of hose film pack and wire integrity.
- Raised sealing face:** Raised sealing face is vital to a leak-proof connection. Our external swage or crimp processes assures that the hose is permanently engaged and sealed to the fitting.
- Comprehensive range of fittings available:** Threaded or flanged stock connections, designed to current US and international standards. Fixed (weld-neck or slip on) and swivel flanges to ANSI Class 150, 300 or DIN PN 10/16 or JIS 10K flanges are available. Proprietary quick release female couplers with self locking arms are available with male cam adapters. Sanitary fittings in both T316 Stainless Steel or polypropylene are available. With the ability to offer custom fittings designed for particular applications and compatibility requirements.
- Materials:** Carbon steel, Stainless Steel (T316 and T304), Brass, Aluminum, Hastelloy C-276, polypropylene and kynar are available.
- Slings:** Recommended for support in heavy dock and barge service. Full range of slings are warehoused and readily available.
- Scuff guard:** To protect hose from excessive abrasion in dockside and terminal operations. Available in 60-ft (18 meter) coils and can be cut, banded and clamped to hose.

Not Sure How to Specify Your Hose?

Simply provide us with the following information

GOLDEN RULES for Industrial Hose and Fittings		
S	ize	I.D., O.D. and length
T	emperature	of the material conveyed and the surrounding environment
A	pplication	conditions of use
M	edia	being conveyed, type and concentration
P	ressure	to which the assembly will be exposed
E	nds	style, type, orientation, attachment methods, etc.
D	elivery	testing, quality, packaging and delivery requirements

The **STAMPED** approach to specifying a hose is a well-accepted methodology from NAHAD (National Association for Hose and Accessories Distribution). Using the STAMPED method will ensure that the right hose is selected for safety, efficiency, and longevity in your industrial applications.

Additional Considerations for
Industrial Hoses





- There can be a few additional things to keep in mind when specifying your industrial hose that may not be obvious in the STAMPED method. Then can include:
- **Bend Radius** – always follow manufacturer guidelines for minimum bend radius to ensure your hose will not kink or restrict flow. Large diameter hoses often are not overly flexible!
 - **Weight** – Large diameter hoses, especially longer length hoses, can be very heavy. Make sure your employees use proper care in moving these around to avoid possible injury.
 - **Abrasion Resistance** – Exposure to friction (dragging along the ground) can necessitate the use of hose supports or other reinforcement to keep the outer shell of the hose safe from erosion and possible leaking.
 - **Hose Life Expectancy** – Be sure to understand the service life of the hose you order and how usage and environment may shorten it. A regular hose testing program will protect against unexpected failures before the hose’s expected EOL.
 - **Hose Certification & Compliance** – Hoses that comply with industry standards (NAHAD, SAE, FDE, ISO, etc) can provide added security and the knowledge that an unexpected failure will be less likely, keeping your workers safe and healthy.

Features That Set Us Apart...
Know Your Components...

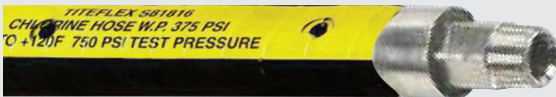




Industrial Hose Assemblies

HEAVY DUTY					
Construction	Cover	Reinforcement	Temperature Range	Safety Factor	Packaging
<div><div>▶</div><div>CONTINENTAL UHMWPE CHEMICAL HOSE<ul style="list-style-type: none">Made in Canada (3/4" Spiral Yellow Transfer Tape)</div></div> <div></div>					
Application: Versatile chemical hose that handles majority of common industrial chemicals in pressure, gravity flow & suction service					
<ul style="list-style-type: none">Ultra-high molecular weight polyethylene (UHMWPE)	<ul style="list-style-type: none">Green EPDM with wrapped impression orBlue EPDM with wrapped impression. *Blue EPDM available by special order.	<ul style="list-style-type: none">Spiral-Plied Synthetic Fabric with Double Wire Helix	<ul style="list-style-type: none">-40°F to 212°F (-40°C to 100°C)	<ul style="list-style-type: none">4:1	<ul style="list-style-type: none">Coiled & Poly-Wrapped
<div><div>▶</div><div>EXTREMEFLEX™ BROWN</div></div> <div></div>					
Application: A high-tech, flexible and versatile chemical hose capable of handling a wide variety of acids, alcohols, salt solutions and petroleum-based products.					
<ul style="list-style-type: none">CPE (Chlorinated Polyethylene)	<ul style="list-style-type: none">EPDM (Corrugated)	<ul style="list-style-type: none">Spiral-Plied Synthetic Fabric	<ul style="list-style-type: none">-30°F to 275°F (-34°C to 135°C)	<ul style="list-style-type: none">4:1	<ul style="list-style-type: none">Coiled & Poly-Wrapped
<div><div>▶</div><div>CONTI® CHEM SUPERIOR FEP</div></div> <div></div>					
Application: Universal hose with seamless transparent FEP lining of Teflon resistant to all commonly used chemicals. Suitable for both suction and delivery. Meets EN 12115:2011. Conti® Chem Superior FEP is manufactured to European standards.					
<ul style="list-style-type: none">FEP, Transparent, Smooth BoreElectrically non-conductiveUSP Class VI compliant	<ul style="list-style-type: none">EPDM Rubber, BlackAbrasion and Flame resistant	<ul style="list-style-type: none">Braided Synthetic Fibers	<ul style="list-style-type: none">-22°F to 212°F (-30°C to 100°C)	<ul style="list-style-type: none">4:1	<ul style="list-style-type: none">Coiled & Poly-Wrapped
<div><div>▶</div><div>CHEM ONE®<ul style="list-style-type: none">Chemical transfer hoseAlphasyn® Tube 200 PSI WP</div></div> <div></div>					
Application: Continental Chem One® is for the transfer of a variety of current industrial chemicals used today. For use in pressure, gravity flow and/or suction service.					
<ul style="list-style-type: none">Modified Cross-linked Polyethylene (XLPE)	<ul style="list-style-type: none">Omegasyn™ EPDM (Black)All other color options have are EPDM546-590 Abrasion Resistant Cover (ARC)	<ul style="list-style-type: none">Spiral-Plied Synthetic Fabric	<ul style="list-style-type: none">-40°F to 250°F (-40°C to 121°C)	<ul style="list-style-type: none">4:1	<ul style="list-style-type: none">Coiled & Poly-Wrapped

FLEXIBLE PTFE HOSE



Chlorine Institute
Approval
Pamphlet 6
Appendix A

Chlorine transfer is recognized as one of the most challenging and potentially hazardous hose applications. Aware of the clear need for safety, reliability and performance, Titeflex has engineered a unique product to meet the demands of this critical application. Titeflex S818XX chlorine hoses are internationally accepted and recognized for providing many years of unparalleled safety and performance.

Application: Size 1" chlorine hose for rail car loading and unloading.
Titeflex 1/2" chlorine hose for replacing copper whips at chlorine repackaging plants filling 1 ton containers and 100/150 lb. cylinders.

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S818XX PTFE Chlorine/Bromine Hose

ALTERNATE END FITTING STYLE		
Assembly Part Number	Hose Size, In.	End Fitting
111451-L	1	Male NPT & Flange*
111437-L	1	Flange X Flange

* Flange retainer is Monel Schedule 80, MSS type A above piece construction with no welds. Flange is 300 lb. ASME forged steel.




Industrial Hose Assemblies (cont'd)

GENERAL PURPOSE Versilon™ Chlorine / Bleach Hose

Construction	Cover	Reinforcement	Temperature Range	Maximum Length	Quality Control & Testing
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➤ **PVDF BRAIDED HELICALLY CONVOLUTED FLUOROPOLYMER HOSE**

Rugged PTFE / PVDF / Monel Construction

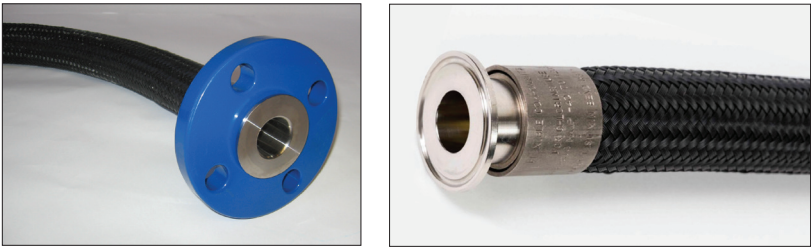


Chlorine Institute Approval

Pamphlet 6 Appendix A

Versilon™ Chlorine Transfer Hose from Saint-Gobain is constructed with a PTFE convoluted inner tube and reinforced with PVDF braid. The convoluted inner tube is low profile and helically formed to increase flexibility and promote self drainage. The PVDF braid resists abrasion better than stainless steel reinforcements and reduces burn potential from accidental contact. Versilon™ Chlorine Transfer Hose has excellent chemical resistance for longer service life and is not subject to stress corrosion, pin-holing or flex cracking.

One piece extruded PTFE fluoropolymer	Thick strand chafe resistant PVDF	Two high tensile strength PVDF braids for high pressure rating	40°F to +122°F	1/2"	25'	Each hose is material lot traceable
No seams or voids	Protects against abrasion		40°C to +50°C	1"	25'	Each hose is subject to stringent QC procedures throughout the manufacturing process
				1-1/2"	25'	Each hose is permanently identified in accordance with Chlorine Institute specifications
						Each hose is thoroughly cleaned before assembly; no oils, solvents or other contaminants are used in the assembly process
						Each hose is pressure tested with nitrogen gas at twice the rated operating pressure while fully submerged under water
						Each hose is dried and capped for shipment
						A unique serial number is applied to each end of the hose for further traceability; permanent log of all hose assemblies maintained at factory



CHLORINE TRANSFER HOSE SPECIFICATIONS											
Part Number	Inside Diameter		Outside Diameter		Maximum Working Pressure		Minimum Burst Pressure		Minimum Bend Radius		Weight
	(in)	(mm)	(in)	(mm)	(psi)	(MPa)	(psi)	(MPa)	(in)	(mm)	
8CLXXXXMKY	1/2	12.7	1	25.4	500	3.45	2,500	17.24	2.00	50.8	0.16
16CLXXXXMKY	1	25.4	1-5/8	41.3	375	2.59	1,875	12.93	4.00	101.6	0.41

NOTE: Weights and outside diameter dimensions are nominal. Data given is for hose only. End fitting vs. hose pressure limitations must be considered and the lower of the two ratings must be used on assemblies.

Features and Benefits

- Excellent chemical resistance for longer service life
- Not subject to stress corrosion, pin-holing or flex cracking
- Convoluted inner tube is low profile and formed to promote self-drainage
- Moisture resistant inner tube
- Does not need to be cleaned and capped after every use
- Minimum pressure drop for faster loading and unloading
- Lightweight and ultra flexible for ease of handling
- Low force to bend
- Less costly than Monel® (metal) hose
- Wide hex flats for easy wrenching

Typical Applications

- Tank car loading/unloading
- Pulp and paper bleaching
- Chemical transfer

Fitting Options

Versilon Crimp Style Fittings

- Standard: Schedule 80 Monel® stub end 300# epoxy coated carbon steel lap-joint flange
- Schedule 80 Monel® hex male NPT (1" wide wrenching flats)
- - Schedule 80 Monel® R405 male NPT or Schedule 80 stub end available
- Internal Monel® crimp ferrule locks fitting to inner tube and two reinforcement braids
- Special Hastelloy® fittings for wet chlorine applications and other aggressive applications

Regulatory Compliance

- Manufactured in accordance with Chlorine Institute Pamphlet 6 piping specifications


Common Media

- Chlorine
- Bromine
- Sodium hydroxide
- Sulfuric and hydrochloric acids
- Other corrosive materials

ECONOMY WST™ Series PVC Hose

General Applications	Construction	Service Temperature Range	Features & Advantages
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➤ **HEAVY DUTY PVC FABRIC REINFORCED SUCTION & DISCHARGE HOSE**



– Fish suction

– Irrigation lines

– Pumps, rental and construction dewatering

– Pumps, trash

– Suction and discharge

– Water suction - heavy duty

Double-ply PVC tube, polyester fabric reinforcement and rigid PVC helix.

-4°F (-20°C) to +150°F (+65°C)*

– **Fabric Reinforcement** - Designed with high tensile strength polyester yarn jacket to handle both suction and higher pressure discharge applications.

– **Transparent Construction** - “See-the-flow.” Allows for visual confirmation of material flow.

– **Easy Slide Helix** - Rigid helix design protects hose tube from cover wear, and allows hose to slide easily over rough surfaces. Easy-to-handle.


Nominal Specifications											
Series Number	I.D.		O.D.		Working Pressure (PSI)		Vacuum Rating Hg (in)		Min. Bending Radius at 68°F	Standard Length (ft)	Weight (lbs/ft)
	(in)	(mm)	(in)	(mm)	68°F	104°F	68°F	104°F			
WST150	1-1/2	38.1	1.95	49.5	110	70	Full	28	2.5	100	0.42
WST200	2	50.8	2.60	66.0	100	65	Full	28	4	100	0.74
WST300	3	76.2	3.62	92.0	100	50	Full	28	6	100/20	1.13
WST400	4	101.6	4.76	121.0	75	37	Full	28	8	100/20	1.74
WST500	5	127.0	5.98	151.9	70	35	28	25	11	100/20	2.95
WST600	6	152.4	7.17	182.1	70	35	28	25	13	100/20	3.88
WST800	8	203.5	9.21	234.0	60	30	26	20	18	25/20	5.57

NOTE: Service life may vary depending on operating conditions and type of material being conveyed. *Actual service temperature range is application dependent.

ECONOMY W™ Series PVC Hose

General Applications	Construction	Service Temperature Range	Features & Advantages	Convoluted Outer Cover
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➤ **HEAVY DUTY PVC LIQUID SUCTION HOSE**



– Extreme cold conditions (Sizes 4" -16")

– Fish suction

– Gold dredging

– Pumps, rental and construction dewatering

– Pumps, trash

– Slurry handling

– Water suction - heavy duty

PVC tube with rigid PVC helix.

Sizes 1" - 3": -4°F (-20°C) to +150°F (+65°C)*;
Sizes 4" -16": -40°F (-40°C) to +150°F (+65°C)*

– **“Cold-Flex” Materials (Sizes 4" - 16")** - Hose remains flexible in sub-zero temperatures.

– **Transparent Construction** - “See-the-flow.” Allows for visual confirmation of material flow.

– Provides increased hose flexibility.

Nominal Specifications											
Series Number	I.D.		O.D.		Working Pressure (PSI)		Vacuum Rating Hg (in)		Min. Bending Radius at 68°F	Standard Length (ft)	Weight (lbs/ft)
	(in)	(mm)	(in)	(mm)	68°F	104°F	68°F	104°F			
W100	1	25.4	1.30	33.0	55	35	Full	28	1	100	0.21
W125	1-1/4	31.7	1.60	40.6	50	30	Full	28	2	100	0.28
W150	1-1/2	38.1	1.85	47.0	50	30	Full	28	2	100	0.34
W200	2	50.8	2.40	61.0	50	30	Full	28	3	100	0.52
W250	2-1/2	63.5	2.99	75.9	45	25	Full	28	4	100	0.77
W300	3	76.2	3.64	92.5	45	25	Full	28	6	100	1.18
W400	4	101.6	4.76	121.0	35	18	Full	28	8	100	1.92
W500	5	127.0	5.75	146.0	35	18	28	25	12	100/20	2.95
W600	6	152.4	7.00	177.8	30	15	28	25	14	100/20	3.76
W800	8	203.2	9.18	233.2	30	15	28	25	24	40/20	5.99
W1000	10	254.0	11.56	293.5	25	12	28	25	39	40/20	9.74
W1200	12	304.8	13.64	346.5	20	10	28	25	59	40/20	12.77
W1400†	14	357.6	15.59	396.0	18	8	26	23	80	20	13.50
W1600†	16	408.4	17.72	450.0	12	5	24	20	95	20	16.00

NOTE: Service life may vary depending on operating conditions and type of material being conveyed. *Actual service temperature range is application dependent.

†Non-stock item, minimum order required.

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Industrial Hose Assemblies (cont’d)

ECONOMY Clearbraid® K3130 Series BF			
General Applications	Construction	Service Temperature Range	Features & Advantages
➤ HEAVY WALL PVC FOOD & BEVERAGE HOSE			
A heavier walled crystal clear Phthalate Free yarn reinforced hose suitable for a wide variety of food and beverage applications.			

<ul style="list-style-type: none">Food & beverage dispensing.Deionized water.Liquid food products.Air and water lines.Powdered food products.Potable water transfer.Air breathing lines.Pneumatic lines.Packaging machines.	Crystal clear Phthalate Free PVC compound, formulated with ingredients in compliance with applicable FDA(03) requirements, meets USDA(18), 3A(01), NSF(13), UL(17), RoHS(16) and USP(19) Class VI criteria. Reinforced with spiraled polyester yarn and longitudinal blue tracer yarns for identification.	+25°F (-4°C) to +150°F (+65°C)	 CERTIFIED UNDER STANDARD 51	<ul style="list-style-type: none">Constructed with Phthalate Free compounds.NSF-51 certified material.Crystal clear — allows visual confirmation of product flow.Longitudinally-reinforced to reduce elongation under pressure.Light weight.Self-extinguishing.Non-marking.Silicone-free.Non-conductive.One-piece lengths.Resistant to chemicals (see chemical-resistance chart).Compound hardness 73 ±3 Shore “A”.Phthalate Free!
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Nominal Specifications									
Series No.	Size Code	Nominal I.D.		Nominal O.D.		Max. Working Pressure† (PSI)		Standard Lengths	Approx. Wt. per Pkg.
		(in)	(mm)	(in)	(mm)	@ 70°F (20°C)	@ 122°F (50°C)	Full Coil	Full Coil
K3130	02	1/8	3.2	.328	8.3	350	200	300 ft.	12 lbs.
K3130	03	3/16	4.8	.406	10.3	350	200	300 ft.	27 lbs.
K3130	04	1/4	6.5	.500	12.7	350	200	300 ft.	24 lbs.
K3130	05	5/16	7.9	.563	14.3	275	160	300 ft.	28 lbs.
K3130	06	3/8	9.5	.625	15.9	275	145	300 ft.	32 lbs.
K3130	08	1/2	12.7	.813	20.7	250	130	300 ft.	52 lbs.
K3130	10	5/8	15.9	1.000	25.4	225	125	200 ft.	52 lbs.
K3130	12	3/4	19.1	1.125	28.6	200	120	200 ft.	60 lbs.
K3130	16	1	25.4	1.375	34.9	150	85	200 ft.	76 lbs.
K3130	20	1-1/4	31.8	1.750	44.5	125	75	100 ft.	64 lbs.
K3130	24	1-1/2	38.1	2.000	50.8	100	65	100 ft.	75 lbs.
K3130	32	2	50.8	2.500	63.5	75	55	100 ft.	96 lbs.

† **Note:** Working Pressure decreases as temperature increases. Pressure ratings can only be obtained with proper coupling procedures. Use of compression fittings with Kuri Tec® yarn-reinforced hose is not recommended. Hose claims involving use of these fittings will be disallowed.

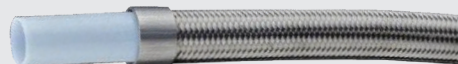
CLEARBRAID® is a registered trademark of Accuflex Industrial Hose, Ltd. and is used under license by Kuriyama of America, Inc.



If you have any questions contact your hose specialist at
602.232.1952


High Pressure Hose & Application
Specific Teflon Hoses
also Available!

Teflon Hose Assemblies

Smooth Bore		
General Applications	Construction	Service Temperature Range
➤ SAE 100 R14A NON CONDUCTIVE Smooth Bore Nominal ID		
300 Series Stainless Steel wire braid reinforced non conductive nominal ID PTFE hose		

<ul style="list-style-type: none">AutomotiveHydraulicsPaints	<ul style="list-style-type: none">SolventsMarineFood & Beverage	Tube: FDA Compliant Khemgard® PTFE for increased flexibility Reinforcement: 300 Series stainless steel braid Available upon request: Special covers such as silicone and PU.	-100°F to + 450°F (-73°C to 232°C) Continuous
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Nominal Specifications							
Code	I.D. (in)	O.D. (in)	Working Pressure (PSI)	Burst Pressure (PSI)	Vacuum (Hg)	Bend Radius (in)	Weight (lbs/ft)
SB-03	0.13	0.23	3000	12000	28.9	0.98	0.04
SB-04	0.19	0.30	3000	12000	28.9	1.38	0.05
SB-05	0.25	0.35	3000	12000	28.9	1.77	0.06
SB-06	0.31	0.43	2500	10000	28.9	1.97	0.09
SB-06T	0.37	0.49	2250	9000	28.9	2.17	0.1
SB-08	0.41	0.52	2000	8000	28.9	2.56	0.11
SB-10	0.50	0.62	1750	7000	28.9	2.76	0.14
SB-12	0.63	0.75	1500	6000	15	5.12	0.17
SB-12T	0.75	0.87	1100	4400	15	7.48	0.22
SB-16	0.87	1.01	1000	4000	13	9.84	0.24
SB-16T	1.00	1.15	900	3600	13	10.63	0.3
SB-0Z	1.13	1.28	1000	4000	11	11.81	0.35

Convuluted		
General Applications	Construction	Service Temperature Range
<div>➤ CONFLEX - NON CONDUCTIVE Convuluted PTFE</div>		<div></div>
<p>SS304 stainless steel wire reinforced open pitch convuluted Khemgard® PTFE hose. Khemgard®, a specially formulated PTFE, offers greater hose flexibility, reducing kinking and allowing the hose to self drain more easily. The low coefficient of friction of the Khemgard® coupled with a innovative convolution design allows for increased flow rates through the hose.</p>		

Sanitary & FDA Approved Connections

<ul style="list-style-type: none">CosmeticsFood & BeveragePulp & PaperChemical Transfer	Tube: FDA Compliant Khemgard® PTFE. Meet USP Class IV. Reinforcement: SS304 Series stainless steel braid Available upon request: SS316 braid, Silicone and PU covers	-100°F to + 450°F (-73°C to 232°C) Continuous
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Nominal Specifications							
Code	I.D. (in)	O.D. (in)	Working Pressure (PSI)	Burst Pressure (PSI)	Vacuum (Hg)	Bend Radius (in)	Weight (lbs/ft)
WC-040P	1/4	0.41	1740	6960	29.9	0.71	0.08
WC-060P	3/8	0.56	1850	7400	28	2	0.23
WC-080P	1/2	0.75	1500	6000	28	3	0.27
WC-100P	5/8	0.89	1160	4640	29.9	1.97	0.23
WC-120P	3/4	1.01	1300	5200	28	3.5	0.43
WC-160P	1	1.3	1000	4000	28	4	0.63
WC-200P	1-1/4	1.57	900	3600	28	4.5	0.75
WC-240P	1-1/2	1.89	700	2800	28	4.5	0.88
WC-320P	2	2.38	500	2000	28	5	1.11

- Conductive and Non-Conductive Options are available
 - Hoses available for Liquid and Gas Applications
 - Pressure available up to 6000 psi
 - Temperature Ratings up to 500 Degree F; Special Covers available upon request
- End Configurations – MNPT, Female NPT, (FJIC Straights, 90 degree), Tri-Clamp, Cam Lock, etc.
 - Materials Available – Carbon Steel, Stainless Steel, Brass, PFA Lined, etc.



FDA/3A Hose Assemblies

Rubber Hoses			
General Applications	Construction	Service Temperature Range	Features & Advantages
<div><div></div><div>EASYFLEX - 3A WHITE NBR FOOD Rubber Hoses</div></div>		<div></div>	
Easyflex is a light weight flexible gray rubber hose with an FDA and 3A compliant white nitrile tube. Helix wire construction allows for full vacuum service			

<div><div></div><div><ul style="list-style-type: none">Food ProcessingWine TransferBreweriesJuice Dairy</div></div>	<div><div>Tube: Ultra smooth FDA and 3A compliant white Phthalate free NBR</div><div>Reinforcement: Synthetic plies with an embedded helix wire</div><div>Cover: Gray ozone and weather resistant non-marking compound</div><div>Available upon request: Private branding and optional cover colors</div></div>	<div><div>-4°F to +200°F (-20°C to +93°C) Continuous</div></div>	<div><div><ul style="list-style-type: none">MTO Easy Flex HoseTube – Smooth Bore; FDA, 3A compliantWire Helix; Multiple End ConfigurationsUltra Flexible Version AvailableCorrugated Hose Available</div></div>
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Nominal Specifications							
Code	I.D. (in)	O.D. (in)	Working Pressure (PSI)	Burst Pressure (PSI)	Vacuum (Hg)	Bend Radius (in)	Weight (lbs/ft)
NFH-100	1	1.42	250	750	27	5.91	0.53
NFH-150	1.1/2	2.05	250	750	27	9.06	0.87
NFH-200	2	2.56	250	750	27	11.81	1.24
NFH-250	2.1/2	3.11	250	750	27	14.96	1.75
NFH-300	3	3.62	250	750	24	17.72	2.08
NFH-400	4	4.8	250	750	21	23.62	3.22

Rubber Hoses			
General Applications	Construction	Service Temperature Range	Features & Advantages
<div><div></div><div>FLEXIFOOD - WHITE CHLOROBUTYL Rubber Hoses</div></div>		<div></div>	
The Flexifood comes with a white FDA compliant Butyl tube. The hose is ideally suited for the transfer of fatty liquids and alcohol with an alcoholic content of up to 92%			

<div><div></div><div><ul style="list-style-type: none">DairyAlcohol (max 92%)Food Processing</div></div>	<div><div>Tube: FDA compliant white Chlorobutyl with an ultra smooth tube</div><div>Reinforcement: Synthetic plies with an embedded helix wire</div><div>Cover: Gray ozone and weather resistant non marking compound with excellent resistance to vegetable and animal fats</div><div>Available upon request: Private branding and optional cover colors</div></div>	<div><div>-4°F to +200°F (-20°C to +93°C) Continuous</div></div>	<div><div><ul style="list-style-type: none">MTO Flexifood – White ChlorobutylFDA Compliant Butyl Smooth Bore TubeMultiple End Configurations Available</div></div>
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Nominal Specifications							
Code	I.D. (in)	O.D. (in)	Working Pressure (PSI)	Burst Pressure (PSI)	Vacuum (Hg)	Bend Radius (in)	Weight (lbs/ft)
BFH-100	1	1.42	250	750	27	5.91	0.53
BFH-150	1.1/2	2.05	250	750	27	9.06	0.87
BFH-200	2	2.56	250	750	27	11.81	1.24
BFH-250	2.1/2	3.11	250	750	27	14.96	1.73
BFH-300	3	3.62	250	750	24	17.72	2.08
BFH-400	4	4.8	250	750	21	23.62	3.19

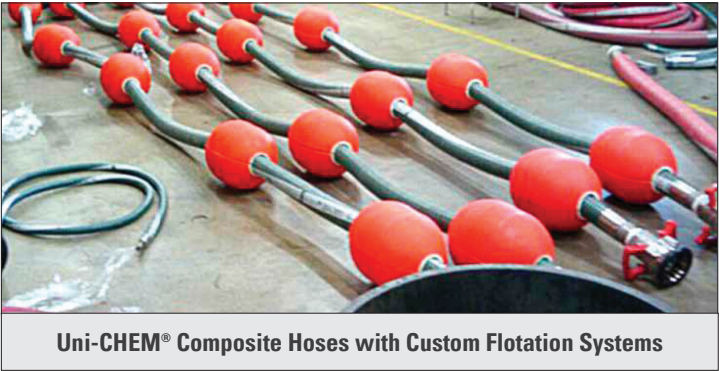
Note: Hoses and Options are available upon request.

Coast Guard
Approved

Marine / Dredging Hose

Corrugated Dock Hose		
Construction	Service Temperature Range	Features & Advantages
<div><div></div><div>NOVAFLEX 3265 Corrugated Dock Hose</div></div>		<div></div>
Specially designed for barge unloading where flexibility and ease of handling are required. Special tire cord reinforcement with dual wire helix and corrugated cover enhances the characteristics. Tube resistant to 55% aromatic fuels. Meets USCG requirements.		

<div><div>Tube: NBR</div><div>Reinforcement: Polyester tire cord, dual wire helix</div><div>Cover: Black NBR/PVC corrugated</div><div>Ends: Straight. Length 100 ft (max)</div></div>	<div><div>-30°F (-35°C) to +200°F (+93°C)</div></div>	<div><div><ul style="list-style-type: none">Engineered for multiple applications; US Coast Guard and SAE approvalsSizes range from ¼” thru 24”Continental, Novaflex, etc</div></div>
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Specifications Chart							
Part No.	I.D.	O.D.	Piles	MBR (in)	VAC (Hg)	WP (psi)	Weight (lbs/ft)
3265BT-06000-00	6	7.38	4	30	30”	225	8.85
3265BT-08000-00	8	9.44	6	42	30”	225	13.00
3265BT-10000-00	10	11.80	6	60	30”	225	19.50
3265BT-12000-00	12	13.97	8	72	30”	225	25.70

Safety, Reliability, Longevity.
What you want from your Industrial Hose

Loading Arm / Rail Car Products



▶ Loading Arms

Features

- Three arm swivel options: o-ring, v-ring, or split flange
- Two base swivel options: v-ring or split flange
- Fast delivery for many sizes and styles
- Engineered with easy service in mind
- D-handle/ball handle is used to guide the API load coupler onto the adapter on the tank truck
- Long radius elbow improves the flow into the API load coupler and provides space between the load arm and the tank truck, allowing for clearance
- Torsion spring counterbalance:
 - Ball screw adjustment mechanism for easy and safe adjustment
 - Multiple spring rates available for different load requirements
 - Multiple grease ports for ease of service
- Many different end connections offered as well as accessories; contact Dixon® for more information

Applications

- Used in the transfer of liquids and dry bulk in refineries, chemical plants, rail terminals, truck terminals, tote and drum filling, and the food industry

Sizes

- Customizable, available 2", 3", 4" configurations

Materials

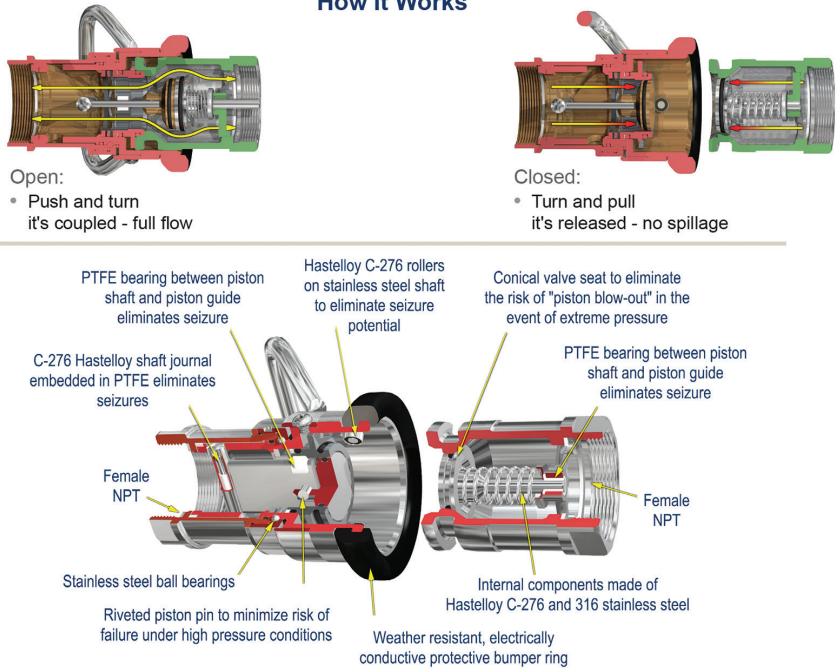
- **Arm:** carbon steel, aluminum, 316 stainless steel
- **Counterbalance/base swivel:** 316 stainless steel, carbon steel
- **Seals:** Buna-N, FKM-A, NPRN, PTFE, and more upon request
- **Hose:** 321/316/304 stainless steel or composite

Available Options

- All styles: a-frame, scissor, horizontal, pantograph, supported/unsupported boom, etc.



How It Works



Hose Testing Services



▶ Your Safety and Compliance is Our Top Priority

Phoenix Pumps, Inc. is pleased to offer on-site testing of your industrial hoses. Our teams will meet or exceed your requirements and provide you with a comprehensive report detailing each hose, what was done, and its current condition with a recommendation for action on that assembly. The process is simple.

- Step1:** Contact your local Phoenix Pumps, Inc. Service Center to discuss your needs and timing. We'll work with you to meet your needs and timing.
- Step 2:** Forward your SOP or other requirements for testing to ensure compliance with your requirements.
- Step 3:** Decontaminate and gather the hose assemblies into one area.

When our team arrives on-site at your facility, you can expect the following:

- We will walk your facility to conduct a site review with our Hose Product Manager prior to testing so that we fully understand your needs.
- We will provide all testing rigs and equipment along with the manpower needed.
- We will follow all rules and procedures of your facility to ensure safety and compliance.
- All hoses will be visually inspected for damage, including but not limited to:
 - Kinking
 - Wear marks on hose cover
 - Crush damage
 - Inferior cam-lock seals
 - Cam-lock deformities
 - Bad crimping or clamping
- All hoses will be pressure tested with both air and water at an agreed upon setting that complies with your facility's SOPs
- We will provide comprehensive documentation documenting the following:
 - All hoses tested
 - All specifications and processes followed during testing
 - Condition of each hose after testing
 - Recommendation for each hose after testing
- Post-testing documentation will include a listing of hoses scheduled to be rotated out of service and retired.
- All hoses that pass testing will be tagged with a stainless-steel hose tag showing serial number, date, and location
- All hoses that fail testing will be reviewed with facility personnel about why we failed the hose
- We will coordinate with your facility on the replacement of failed hose assemblies and hoses scheduled to be rotated out of service.



For more information on Hose Testing services or to schedule testing, contact your local Phoenix Pumps, Inc. Service Center at 704.844.1100.

You'll be in good hands knowing that the **Hose Professionals** at **Phoenix Pumps, Inc.** will handle the rest.

Expansion Joints



PROCO EXPANSION JOINT SYSTEMS

Expansion joints are critical for absorbing pipe motion and other stresses inherent in piping systems, along with helping to reduce system noise, reduce vibration, protect against start-up and surge forces, and compensate for alignment of offset issues in the system.

Expansion joints are available in rubber and PTFE, along with Stainless Steel Flex Connectors, Check Valves, Pipe Penetration Seals, and PTFE Gaskets.

CERTIFICATIONS

- NSF-61
- NSF-372
- FDA Accepted
- ASTM F 1123-87
- ABS
- CRN

Series 231ET PTFE Lined



FEATURES

- High pressure PTFE lined expansion joint
- Resists chemical attack at elevated temperatures

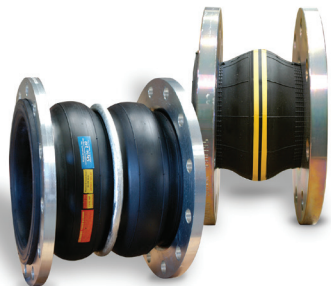
Series RC/RE Concentric/Eccentric Reducer



FEATURES

- Reducing concentric and eccentric
- Eliminates need for reducers in piping system
- Eccentric always on suction side, concentric on discharge

Series 240/242 Molded Spherical



FEATURES

- Molded design for higher pressure rating
- Rotating flanges for easy installation
- Self cleaning arch

Series 230 Spool-Type Wide Arch



FEATURES

- Heavy duty hand-built design
- Wider arch for more movement
- Filled arch option for solids/slurry applications

Series 6201 Flexible Metal Pump Connectors



FEATURES

- Assists with lateral offset in piping system
- Good for steam and condensate applications

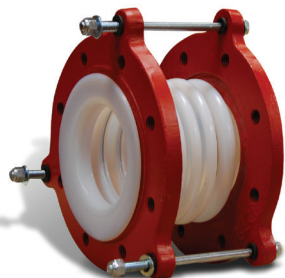
Series 500 Ducting Joints



FEATURES

- Found on air handling units
- Low pressure high temperature design

Series 440 Molded PTFE



FEATURES

- Low spring rate molded PTFE
- Built in control rods
- Good option for tanks handling chemicals
- Good option for thermoplastic piping

Series 260R Wide Arch Low Spring Rate



FEATURES

- Low spring rate rubber expansion joint
- Can be used in PVC, CPVC, FRP, HDPE piping
- Absorbs expansion/contraction of tanks
- Good option for thermoplastic piping

Pipe Penetration Seals



FEATURES

- A great substitute instead of caulking
- Found where pipes pass through walls, ceilings, floors, etc
- Prevents backflow of media up to 20 PSI

Series 700 Duckbill Check Valve



FEATURES

- Prevents backflow in a piping system
- Longer life than a CS or SS swing or gate check valve

Quick-Disconnect Fittings

Fittings are available in a wide variety of materials, including Stainless Steel, Aluminum and Polypro. **Contact us for more information.**

Vent-Lock® Safety Cam & Groove Couplings

Hose Couplings, Adapters and Accessories

New
Product
Alert!


Application: Transfer of fluids and solids, with a safer disconnection

- Features:**
- Safety release cam & groove couplings permit the release of static pressure when disconnecting hose assemblies
 - Venting system protects operator from being sprayed with hazardous or non- hazardous fluids or solids
 - Does not interchange with standard cam & groove products; use only with Dixon L-style fittings
 - Safety orange cam arms
 - Consult Dixon for availability of other materials


Specifications:
Rated to 250 PSI; recommendation based on the use of mating Dixon® L-style fittings at ambient temperature 70°F (21°C) with standard nitrile rubber seal installed.
For use at elevated temperatures or other unusual operating conditions, consult Dixon


- 1", 1-1/2" and 2" sizes have a maximum working pressure of 250 PSI
- 3" maximum working pressure 150 PSI with King Crimp® ferrules, crimp sleeves, and bands at 125 PSI
- 4" maximum working pressure 150 PSI with King Crimp ferrules, crimp sleeves, and bands at 100 PSI

Attachment Options: Ferrules, sleeves, bands, and other reliable options


Adapter x Female NPT		Size No.	316 Stainless Steel Part #
Type A		1"	L100-A-SS
		1-1/2"	L150-A-SS
		2"	L200-A-SS
		3"	L300-A-SS


4" available in Aluminum


Coupler x Hose Shank		Size No.	316 Stainless Steel Part #
Type C		1"	L100-C-SS
		1-1/2"	L150-C-SS
		2"	L200-C-SS


Coupler x Hose Shank		Size No.	316 Stainless Steel Part #
EZ Boss-Lock Type C		1"	RLC100EZ
		1-1/2"	RLC150EZ
		2"	RLC200EZ1
		3"	RLC300EZ1


4" available in Aluminum

Coupler x Female NPT		Size No.	316 Stainless Steel Part #
Type D		1"	RLD100EZ
		1-1/2"	RLD150EZ
		2"	RLD200EZ
		3"	RLD300EZ


Adapter x Hose Shank		Size No.	316 Stainless Steel Part #
Type E		1"	L100-E-SS
		1-1/2"	L150-E-SS
		2"	L200-E-SS
		3"	L300-E-SS


Dust Caps		Size No.	316 Stainless Steel Part #
Type DC		1"	L100-DC-SS
		1-1/2"	L150-DC-SS
		2"	L200-DC-SS

Dust Plugs		Size No.	316 Stainless Steel Part #
Type DP		1"	L100-DP-SS
		1-1/2"	L150-DP-SS
		2"	L200-DP-SS
		3"	L300-DP-SS

EZ Boss-Lock Dust Caps		Size No.	316 Stainless Steel Part #
Type H		1"	RLH100EZ
		1-1/2"	RLH150EZ
		2"	RLH200EZ
		3"	RLH300EZ

3" available in Aluminum

Dixon® Handle Assembly		Size No.	316 Stainless Steel Part #
		1"	L100-HSCR-P-SI
		1-1/2" - 2"	L200-HSCR-P-SI
		FEATURES	
		<ul style="list-style-type: none">- Use only with Dixon Vent-Lock couplers- Includes handle, ring, and pin	

EZ Boss-Lock Handle Assembly		Size No.	316 Stainless Steel Part #
		1"	LRHEZ175
		1-1/2" - 2"	LRHEZ152
		3"	LRHEZ34
		FEATURES <ul style="list-style-type: none">- Use only with EZ Boss-Lock Vent-Lock couplers- Includes handle, ring, and pin	

Kem Key Safety Products

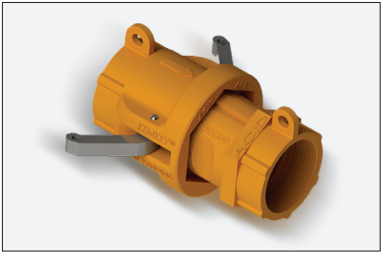
Unique Fittings to **Prevent Accidental Connections** and **Cross Contamination**

Orange Hexagon for Acids

Orange Hexagon with at least one aligning guide or key: All materials considered acids or acidic such as sulfuric acid, hydrochloric acid, nitric acid, phosphoric acid, acidic acid, hydrofluoric acid, etc. plus any specialized blended product that has a very low pH and is considered acidic.

- Materials** | 30% fiberglass filled polypropylene, or PVDF (Kynar)
- Sizes** | One-inch pipe thread (polypropylene only), two-inch pipe thread

Specialized products within this category | Sulfuric Acid, Hydrochloric Acid

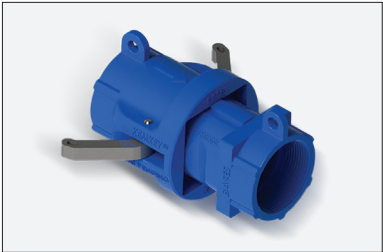


Blue Square for Bases

Blue Square with at least one aligning guide or key: All materials considered bases (high pH) such as caustic (sodium hydroxide), amines, potassium hydroxide, etc. plus any specialized blended product that is has a pH over 9.

- Materials** | 30% fiberglass filled polypropylene
- Sizes** | One-inch pipe thread, two-inch pipe thread

Specialized products within this category | Caustic Solutions, Amine Mixtures

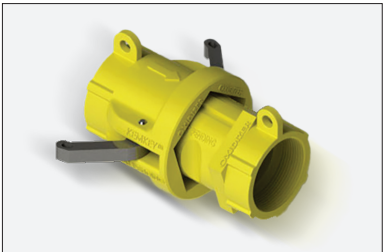


Yellow Pentagon for Oxidizers

Orange Hexagon with at least one aligning guide or key: All materials considered acids or acidic such as sulfuric acid, hydrochloric acid, nitric acid, phosphoric acid, acidic acid, hydrofluoric acid, etc. plus any specialized blended product that has a very low pH and is considered acidic.

- Materials** | 30% fiberglass filled polypropylene, or PVDF (Kynar)
- Sizes** | One-inch pipe thread (polypropylene only), two-inch pipe thread


Specialized products within this category | Bleach, sodium hypochlorite




Standard Quick-Disconnect Fittings

Phoenix Pumps, Inc. inventories a wide range of quick-disconnect cam style couplers in fluoropolymer and alloy materials to match your needs. We also can provide the right gasket materials to ensure leak-free operation. We have alternatives that are Made in the USA for unmatched quality or lower cost, imported fittings.


1316PTC(Size No.) 316 Stainless Steel
1323PTC(Size No.) Aluminum
1302PTC(Size No.) Black Polypropylene

Adapter X Female NPT Thread		Size No.	Size
Type A		010	1"
		012	1-1/4"
		015	1-1/2"
		020	2"
		030	3"
		040	4"


1320PTC5(Size No.) 316 Stainless Steel
13271PTC0(Size No.) Aluminum
1306PTC0(Size No.) Black Polypropylene

Coupler X Hose Shank		Size No.	Size
Type C		10	1"
		12	1-1/4"
		15	1-1/2"
		20	2"
		30	3"
		40	4"


1319PTC5(Size No.) 316 Stainless Steel
1302PTC4(Size No.) Aluminum
1305PTC0(Size No.) Black Polypropylene

Coupler X Female NPT Thread		Size No.	Size
Type D		10	1"
		12	1-1/4"
		15	1-1/2"
		20	2"
		30	3"
		40	4"


1317PTC0(Size No.) 316SS
1303PTC4(Size No.) Aluminum
1303PTC0(Size No.) Black Polypropylene

Adapter X Hose Shank		Size No.	Size
Type E		10	1"
		12	1-1/4"
		15	1-1/2"
		20	2"
		30	3"
		40	4"


1315PTC(Size No.) 316 Stainless Steel
1332PTC(Size No.) Aluminum
1301PTC(Size No.) Black Polypropylene

Adapter X Male NPT Thread		Size No.	Size
Type F		010	1"
		012	1-1/4"
		015	1-1/2"
		020	2"
		030	3"
		040	4"

1349PTC(Size No.) 316 Stainless Steel
1330PTC(Size No.) Aluminum
1313PTC(Size No.) Black Polypropylene

Adapter Dust Plug		Size No.	Size
Type DP		010	1"
		012	1-1/4"
		015	1-1/2"
		020	2"
		030	3"
		040	4"

1329PTC(Size No.) 316 Stainless Steel
1331PTC(Size No.) Aluminum
1314PTC(Size No.) Black Polypropylene

Coupler Dust Cap		Size No.	Size
Type DC		010	1"
		012	1-1/4"
		015	1-1/2"
		020	2"
		030	3"
		040	4"

Contact Us for
PRICING!



Safety Accessories

Safety Strap

- High Strength Hook and Loop Strap
- Excellent UV and weather resistance



Hose Support

- Safety yellow for high visibility
- Easy installation – new two piece design
- Supports and elevates hose and sanitary stainless steel piping systems
- Eliminates hose abrasion
- **Protects hose fittings from damage**



Safety Lock™

- Eliminate Spills. Visually Confirm Ear Locking
- Safety Lock is an alternative product to the Hook & Loop
- Fastener Straps with an easy- to-install and easy-to-remove, heavy duty “clip” that clicks into place over the ears.



Teflon® Encapsulated Gasket

- Teflon Enveloped **Neoprene**
- Teflon Encapsulated **Silicone**
- Teflon Encapsulated **Viton®**



Safety Bump SBF®

- An alternative choice to the traditional cam and groove caps and plugs, providing a comfortable handle for the driver's hand
- “**Bump**” extends beyond the hose fittings and ears, protecting them from damage.



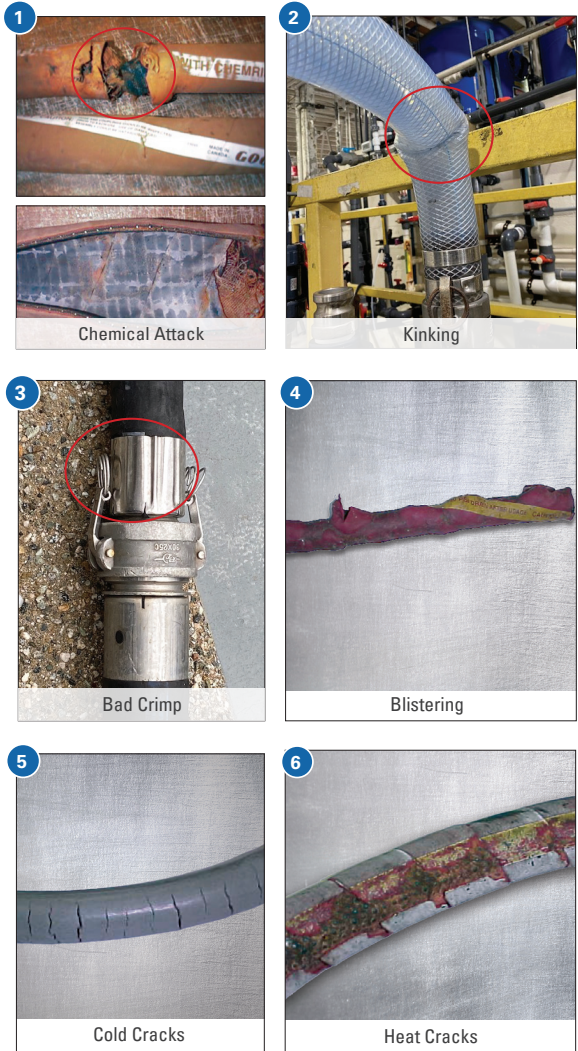
Male Safety Bump is available.
Safety Bump is not rated for Pressure.

Safety Features



1. Crimp Sleeve
2. Safety Bump
3. Safety Strap
4. Safety Lock
5. Cotter Pin Lock

Safety Matters! / Potential Hazards to Watch For...



1. Chemical hose failures typically occur from the in side-out. We have a wide variety of hose material choices to match your chemistry and tough applications.
2. Correct routing of your hose can prevent kinking. Work with the Hose Experts at Phoenix Pumps, Inc. to select the correct lengths and fittings for your application.
3. Over crimping damages hoses and can create leak paths that lead to inner & outer tube failure.
4. Choosing the correct hose materials will eliminate attack on the inner tube that can lead to blistering and hose failure.
- 5 & 6. Both Internal and External temperatures must be accounted for when selecting a hose. An incorrect selection can lead to unseen internal cracking or visible external cracks.

Phoenix Pumps, Inc. On-Site Consulting & Advisory Services

Phoenix Pumps, Inc. can provide **Technical Support to Optimize and Troubleshoot Areas** in your **Facility's Chemical Process**

Hose Safety Site Survey

- Identify potential safety risks & recommend solutions.
- Discuss details involving Phoenix Pumps, Inc. Hydrostatic Hose Testing Services, Features and benefits.

Railcar & Tanker Truck Loading Site Survey

- Review current practices & provide suggestions for process improvement, enhanced safety, measurement, alarms, communication and general components needed for retrofit, upgrade, expansion or new build.

Corrosive Environment & Process Site Survey

- Identify problem areas of the facility and or processes where chemical attack is problematic, causing down time and frequent repairs; propose solutions.

Plant Process Efficiency / Productivity Site Survey

- Review performance & Issues in critical process areas to identify areas for improvement and cost reductions: Flow Rates, Liquid Levels, Filtration Efficiency, Pump Performance (flow rates & efficiency)

Chemical / Water Treatment / Neutralization Site Survey

- Review current practices and identify options for process improvement and cost reductions, including turnkey treatment systems as needed.

Employee Training, Continuing Education & Best Practices Support!

- Monthly or quarterly technical training sessions to assist with customer associate training and development in the areas of Hoses, Valves, Automation, Actuation, Filtration, Pumping Systems, Various brands, products, technologies and solutions for every chemical application.





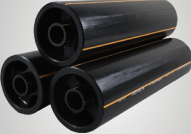

Industrial Repair Site Survey

- Identify repair opportunities for a wide range of components in use in the facility with the intent of saving money through refurbishing to like new status for a fraction of the price of buying new.
- Instant evaluations via our 75 Engineers standing by, accessibly through our App and providing answers in 15 minutes.

Contact Phoenix Pumps, Inc. for a **Free Facility Evaluation!**

Also Available from Phoenix Pumps, Inc....

Your facility takes more than a robust hose program to remain operating at its peak efficiency. **Phoenix Pumps, Inc. has a complete suite of safe and reliable products** from the world class manufacturers you've come to depend on.

<p>Mag Drive Pumps</p>  <ul style="list-style-type: none">- Run dry capable- Magnetic drive or direct-drive- Available in a variety of materials and alloys to match your chemistry- Fractional motors up to 25+ horsepower	<p>AODD Pumps</p>  <ul style="list-style-type: none">- Available in Polypro, PDVF and a variety of alloys- Rubber and fluoropolymer diaphragms- 1/4" piping connections up to 3" available- Containment Duty pumps in 1" to 3"	<p>Tanks</p>  <ul style="list-style-type: none">- Horizontal or vertical storage tanks- Single wall or double-contained- Materials: HDLPE, XLPE, PVDF & FRP- Specific Gravities up to 1.9
<p>Radar Level Control</p>  <ul style="list-style-type: none">- 80 GHz continuous measurement- Range up to 394' for liquids and 197' for solids- Variety of communications protocols with local or remote indication	<p>Chemical Resistant Piping</p>  <ul style="list-style-type: none">- Piping systems in PVC, CPVC, PE, Polypro & PVDF- Single wall or double-containment- Full array of channel, clamps and hanger	<p>Bag & Cartridge Filters</p>  <ul style="list-style-type: none">- Filter bags or cartridges in a wide variety of materials to match your chemistries- Single, double, or multiple cartridge/bag housings in fluoropolymer or alloy construction

A Company of Companies

Choose



The Expert Fit

SUNSOURCE

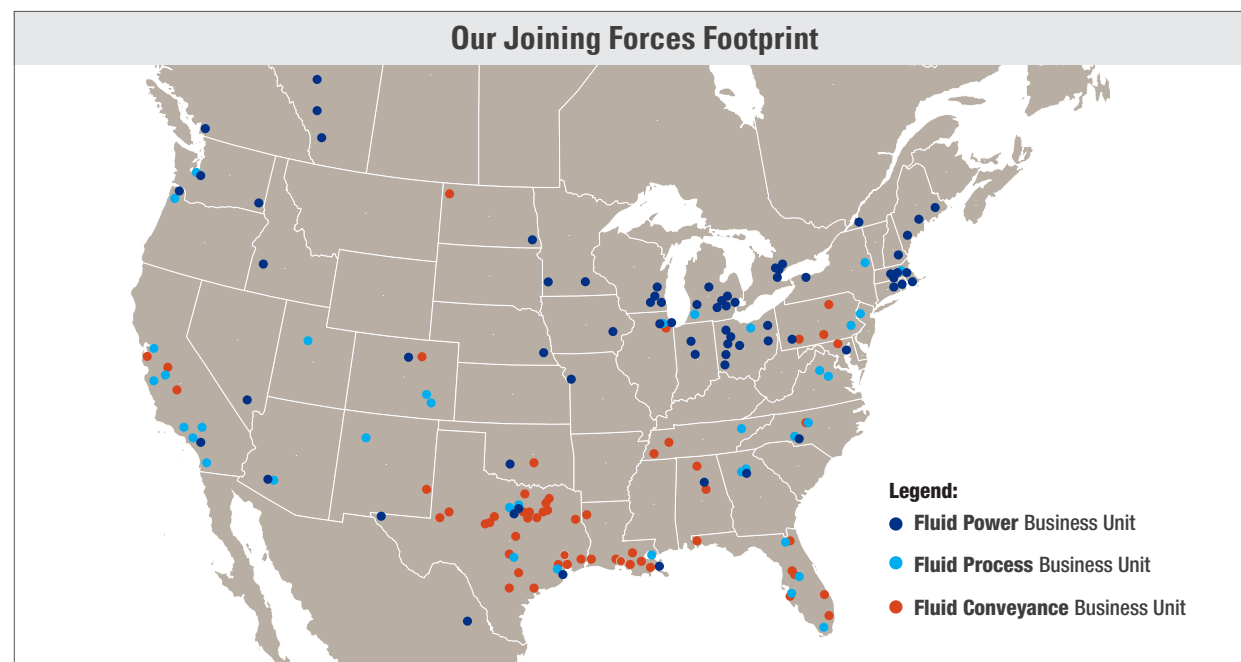
The foundation for SunSource's impressive reputation has been built by 'joining forces' with a select group of leading industrial distribution companies with complementary products, services and a solution-based approach. Our strategically architected platform is built to deliver deep application and industry expertise across the critical product categories that you rely on most to keep your business running.

It's our rich history and **decades of experience** that separate SunSource from a traditional parts-in-a-box distributor. Our companies share access to technical experts, talented support teams, life cycle services, and an extensive product variety and inventory available across the organization. We're stronger together; enabling SunSource to deliver unmatched technical capabilities and solutions that you can rely on.

SunSource - People, Products, and Solutions. When Expertise Counts.

Fluid Power	
Fluid Process	
Fluid Conveyance	

Our Joining Forces Footprint



Legend:
● Fluid Power Business Unit
● Fluid Process Business Unit
● Fluid Conveyance Business Unit

"Reliability You Can Trust by **Phoenix Pumps, Inc.**"

Phoenix Pumps, Inc. now has access to products and services through GHX Industrial. GHX is a highly recognized value-added distributor and fabricator of industrial gaskets and hoses, with fabricating warehouses throughout the United States. We inventory a wide range of gasket materials, hoses, fittings, textiles, and expansion joints. We are able to cover a broad spectrum of applications for the industries we serve.

For All the RIGHT REASONS

- Localized Manufacturing and Service with fabrication centers throughout the United States
- Engineering & Technical Support
- ISO 9001:2008 Certified and Compliant
- E-commerce & EDI Capabilities
- Adherence to NAHAD Hose Safety Institute Specification & Assembly Guidelines
- Lean Distribution and Manufacturing
- Recognized as a Continental ContiTech STAR Distributor
- Consistency in Product, Price, and Packaging
- Site Product and Application Surveys
- Prompt After Hours Emergency Response

MAJOR Manufacturing Partners



HOSE Products

Industrial Hose

- Steam Hose
- Air & Water Hose
- Marine Hose
- Dock Hose
- Chemical Hose
- Petroleum Transfer Hose
- Water-blast
- Oilfield Hose Products
- Rotary & Vibrator Hose
- Certified BOP Assemblies
- Material Handling Hose
- Expansion Joints
- Composite Hose
- Full Line of Industrial Couplings
- Hose Reels
- Clamps, Quick Couplings
- Strainers, Dry Disconnects
- Foot Valves

Metal Hose

- Braided – Interlocked
- All Grades of Stainless Steel
- Steam Jacketed
- Steam Traced
- Full Line of End Connections
- Pipe Fabrication
- PTFE Lined Pipe Fabrication

Teflon Hose

- Corrugated and Smooth
- Bore Braided
- Teflon
- Custom Jacketing
- Full Line of Fittings

One **Call**
Gets it **ALL!**



phoenixpumps.com

602.232.1952



Ask us what you need for your system.

We have trained salespeople and our
Tech Support Team is available to assist
with application support and product selection.

