Industrial Hose & Couplings HYGIENIC HOSE & COUPLINGS

PRODUCT INDEX

The range of flexible hygienic hoses is well proven in all kinds of hygienic fluid applications, offering ease of handling, durability and CIP suitability.

Premium food and brewer hose assemblies and silicone hose assemblies offer exceptionally high standards of operational cleanliness, coupled with excellent flexibility and ease of handling. Custom made hose assemblies can be manufactured for bulk food delivery through to pharmaceutical and biomedical applications.

We also offers a wide range of hygienic end fittings. These fittings are manufactured in 316 stainless steel (with 304 stainless steel nuts) in the following configurations:-

RJT- manufactured to BS 1864. Used for ease of dismantling for washing and sterilising.

DIN 11851 - manufacturing to European standards with round slotted nuts.

SMS - The Swedish standard has a slotted round nut.

IDF - International Dairy Federation standard (also known as International Sanitary

Tri-Clamp - Manufactured to the Tri-Clover and American 3A standards. The selfaligning union has a smooth crevice free bore.

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SMS Unions

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Pirtek Light-Weight Series Premium Brewers Suction and Delivery Hose



Thanks to its new Light-Weight hose construction, which offers a 50% weight saving, along with its 316 S/S Hygienic end fittings, this new generation of Brewers Suction & Delivery hose is now far CLEANER and SAFER than the old thick walled hoses of the past.

Light-Weight Premium Brewers Suction and Delivery Hose

- Over 50% lighter than conventional thick walled Brewers hose
- Meets with all F.D.A. and B.G.A. requirements
- High working temperatures / pressures and highly flexible
- · Approved by all the leading U.K. Brewers
- · All Hygienic Swaged Assemblies are Fully Tested and Certified
- Permanent "Deep Engraved" ferrule Serial Numbering Available
- Available in sealed bags for clean Storage / Transportation
- Ex-Stock Deliveries on loose lengths and Full Hygienic Assemblies

Pirtek Light-Weight Series Premium Food & Dairy Suction and Delivery Hose



Because of its new Light-Weight hose construction, which offers a 50% weight saving, along with its 316 S/S Hygienic end fittings, this new generation of Food / Dairy Suction & Delivery hose is now far CLEANER and SAFER than the old thick walled hoses of the past.

Light-Weight Premium Food / Dairy Suction and Delivery Hose

- Over 50% lighter than conventional thick walled Food & Dairy hose
- · Meets with all F.D.A. and European requirements
- High cleaning and working temperatures / pressures and highly flexible
- Approved by all the leading Dairies and Food Manufacturing Plants
- · All Hygienic Swaged Assemblies are Fully Tested and Certified
- Permanent "Deep Engraved" Serial Numbering Available
- Available in sealed bags for clean Storage / Transportation
- Ex-Stock Deliveries on loose lengths and Full Hygienic Assemblies

Pirtek Non-Crush Premium Food & Dairy Suction and Delivery Hose



With its specially designed Nylon Helix which allows the hose to retain its original shape, even when 'Driven Over' by large road Tankers, this new Non-Crush hose has become a dominant leader within the Dairy Industry's Milk Reception areas, and Tanker loading and off loading points at Breweries and Food Plants.

Non-Crush Premium Food / Dairy Suction and Delivery Hose

- Non Crush Construction
- Ideal for Milk Reception and Other Foodstuff Tanker Loading areas
- Meets with all F.D.A and European requirements
- High cleaning and working temperatures/pressures and highly flexible
- · Approved by all the leading Dairies and Food Manufacturing Plants
- All Hygienic Swaged Assemblies are fully tested and certified
- Permanent 'Deep Engraved' Serial Numbering Available
- Available in sealed bags for clean Storage / Transportation
- Ex-Stock Deliveries on loose lengths and Full Hygienic Assemblies

Deep Engraving Ferrules & Tags



Due to our new radial machining technique, we can now deep engrave all our hygienic hose assemblies with clear, permanent and individual hose reference

Now anything from bin stock numbers, area location numbers as well as individual product lines can be added to all our hygienic hose assemblies.

Deep Engraved Swaged Ferrule and Standard Hose Tags

- · Permanent and easy to read
- · Allows each hose to be individually identified
- · Allows positive proof of last clean or product use
- Can make each hose specific to each use i.e. C.I.P. Only or Yeast Only etc.
- · Allows full traceability and formation of an On-site Hose Register

Standard Hose Tags

We can also "Deep Engrave" Standard hose tags, which can be strapped to a hose assembly as opposed to swaged as above, which again offers the facility of hose identification.

Pirtek vulcanised Smooth Inner Bore Fitting Systems



Pirtek silicone hoses can be assembled in numerous sizes with stateof-the-art sanitary connections. Sanitary vulcanised ends allow for the fabrication of hose assemblies with a smooth, virtually crevice-free interior surface that extends over the sealing face. This entire assembly has one internal diameter (I.D.) which eliminates bacteria traps and assures maximum flow rates and minimal pressure drop per given size. These non-metallic, platinum cured sanitary ends provide built-in male sanitary gasket, eliminating the need for an independent gasket, which is often difficult to align or gets dropped during installation. The sanitary ends create a face-to-face total live length allowing greater flexibility in the length of assemblies. vulcanised ends are also available in same sizes with gasket groove design female. This design is useful when coupling multiple units together. Our (vulcanised) silicone fittings are supported with either a Stainless Steel or Polysulfone 'cup'. This allows for mechanical support at the fitting and protects the moulded silicone end from damage. These fittings are made within standard sanitary clamp designs.

Vulcanised SIB may be sanitised or sterilised by autoclaving, SIP, CIP or Radiation methods.

Vulcanised SIB sanitary ends can be fabricated at the factory. In this

case the vulcanised fitting equipment allows the end fitting to be molecularly bonded to the tubing.

The vulcanising system includes cutting tool, support mandrels, static mixing gun. SIB technology meets or exceeds the requirements of: Pharmacopoeia XXIII Class VI, 21 CFR 177.2600 and 3A.

Pirtek Sani-Lock is a completely reusable assembly

that allows you to make your own hose assemblies

on site, on demand. It is autoclavable and can be disassembled and cleaned with ease. Sani-Lock comes

Teflon®- coated to promote non-galling.

HYGIENIC HOSE & COUPLINGS

complete with a platinum-cured silicone or Kynar® collet and is

available in 316L stainless steel. The Acme female threading is

Pirtek Sani-Lock Sanitary Reusable

System

Pirtek Crimp Fitting System

Pirtek offers a full line of stainless steel fittings including custom fabrication. Also available are DIN, IDF and any other international standard fittings. All modified fittings are promptly fabricated in our fully equipped fabrication facilities.

No Entrapment

A smooth transition between hose tube fitting is created via state-of-the-art fitting and 360° degree crimping technology. Hoses can be sanitised with short term CIP/SIP cycles thus eliminating time-consuming tear-down-and-clean procedures.

Full Locking Design

A 3-way locking system grabs hose interior and exterior while interfacing at hose end preventing fitting blow-off at elevated temperature and pressure. This feature seals the hose end preventing ingress of fluids or cleaning media that swell and deteriorate hose reinforcements.

User Friendly

Smooth exterior surface.

Quality Fitting Materials

Type 316L stainless steel, standard.

No Internal Rough Edges, Drag Marks or Crimp Ridges Standard 15Ra surface finish.





Assembling Pirtek Sani-Lock Sanitary Reusable Fittings

Step 1

Place the Sani-Lock nut and sleeve over the STHT-R tubing outer diameter as shown. Then put the barbed end of the Sani-Lock into the STHT-R inner diameter.



Step 2

After the barbed end of the Sani-Lock has been positioned all the way into the STHT-R, pull the sleeve up against the Sani-Lock so it is touching the exposed bulkhead.



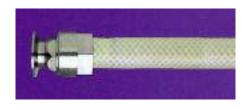
Step 3

Now pull the nut all the way up to the threaded end and tighten the nut by hand until approximately three threads remain exposed.



Step 4

Finally, take two wrenches and tighten the nut all the way up to the Sani-Lock.



Flexible Components TLCTCO Smooth I.D. Chemfluor® FEP Fluoropolymer Lined EPDM Rubber Hose Externally "Convoluted Outer" Cover



Ideal for Process Applications

With increased flexibility, easily identified by a reduced force-to-bend and small minimum bend radius, TLCTCO will quickly demonstrate reasons to include this new hose construction in your demanding process applications.

Flexibility

While achieving flexibility in hose assemblies is always a goal in hose design considerations, pressure limitations, long-term service life, hose durability and ease of handling must also be considered. TLCTCO meets these objectives and is ideally suited for many critical process applications in the chemical, pharmaceutical and industrial marketplace.

Purity

High purity, ultra smooth Chemfluor® FEP fluoropolymer liners used in the manufacture of TLCTCO series hose have been leading the process industry for many years. The TLCTCO hose series is an improvement in flexibility of a proven, reliable industry leading product line that we are sure will add increased productivity, ease of handling, better value and increased service.

A CRITICAL PROCESS MARKET PRODUCT

Smooth Chemfluor® FEP fluoropolymer lined EPDM rubber covered hose externally "convoluted outer" cover

Features/Benefits

- Reduced force-to-bend
- · Improved bend radius
- Ultra-flexibility
- Easy to handle
- · Smooth ID when bent
- High pressure rating
- Kink resistant
- Sterilizable
- Autoclavable
- · Imparts no taste or odour
- · Non-aging liner
- All purpose
- Ozone & abrasion resistant cover
- Supplied lengths to 30 metres

Typical Applications

- · Load cells
- Skid transfer
- Pumping stations/portable pumps
- · Vessel or tank transfer
- · Rail car loading/unloading
- Transfer lines
- · Chemical process lines

Available End Connections PermaSeal®, "Crimp Style" fittings

- Over 40 fitting styles available in a wide range of materials
- 316L stainless steel standard material of construction for wetted surfaces

"Flare-Thru" fittings

 Available in lap joint 150# flanged and female cam-lock, locking and non-locking swivel styles

HYGIENIC HOSE & COUPLINGS

Hose Specifications/Performance Chart TLCTCO - "Convoluted Outer" Smooth ID Chemfluor® FEP Fluoropolymer Lined Transfer Hose

Part Number	Hose Size I.D. (in.)	Size Nominal 0.D. (in.)	Recommended Working Pressure (P.S.I.)	Vacuum Rating @ 70°F (In.)	Minimum Burst Pressure (P.S.I)	Minimum Recommended Bend Radius (in.)	Approx. Weight Per Ft. (Lbs.)
TLCTCO-12	3/4	1.25	400	29.9	1600	2 1/2	0.62
TLCTCO-16	1	1.50	350	29.9	1400	3 3/4	0.75
TLCTCO-24	1 1/2	2.05	300	29.9	1200	7	1.20
TLCTCO-32	2	2.65	250	29.9	1000	8 3/4	1.50

Weights & outside diameter dimensions are nominal.

Data given is for TLCTCO hose only. End fitting vs. hose pressure limitations must be considered and the lower of the two ratings must be used on assemblies.

Working pressure is given @70°F; decrease working pressure 1% for every 2°F above 212°F. Vacuum rating is given @70°F; decrease vacuum rating 1% for every 2°F above 212°F. For 1 ½" and larger sizes, vacuum rating decreases when installed less than 2x minimum bend radius.

Flare-Thru fittings are pressure rated only! Not rated for vacuum service.

Extended Service Life Tip:

Pirtek advises using full length "anti-kink" armour casing or at least 16" to 24" long "anti-kink" cuffs at each fitting end to help reduce the strain on the crimp collar and fittings in high load installations. Prolonged service at elevated temperatures will reduce total service life.

Construction:

- Bonded smooth I.D. Chemfluor® FEP fluoropolymer liner
- Multiple EPDM rubber internal layers
- Double plycord pressure reinforcement
- Double helix, high tensile strength carbon steel wire support for flexibility and vacuum resistance
- Externally convoluted EPDM outer cover
- Available with green cover/yellow stripe, standard Temperature Rating:
- -40°F to +350°F Approvals:
- USP Class VI
- FDA/USDA Food Contact Title 21CFR 177.1550

Typical Physical Properties Chemfluor® Liner

Property	ASTM Method	Value or Rating	
Durometer Hardness	D2240	55D	
Shore A, 15Sec			
Tensile Strength	D412	2600 (17-9)	
psi (MPa)			
Ultimate Elongation,%	D412	275	
Tear Resistance	D624	N/A	
lb-f/inch (kN/m)			
Specific Gravity	D792	2.17	
Colour	white		

RJT Unions Hexagon Nuts



Part Number	Coupling Size	
RJN-16	1	
RJN-24	11/2	
RJN-32	2	
RJN-40	21/2	
RJN-48	3	
RJN-64	4	

RJT Unions Nitrile Gaskets



Part Number	Coupling Size	
RJG-16	1	
RJG-24	11/2	
RJG-32	2	
RJG-40	21/2	
RJG-48	3	
RJG-64	4	

RJT Unions Weld Liners



Part Number	Coupling Size	
RJL-16	1	
RJL-24	11/2	
RJL-32	2	
RJL-40	21/2	
RJL-48	3	
RJL-64	4	

RJT Unions Hose Tail



Part Number	Coupling Size	Hose Tail	
RJHT-16	1	1	
RJHT-24	11/2	11/2	
RJHT-32	2	2	
RJHT-40	21/2	21/2	
RJHT-48	3	3	
RJHT-64	4	4	

RJT Unions Plain Blank



Part Number	Coupling Size	
RJB-16	1	
RJB-24	11/2	
RJB-32	2	
RJB-40	21/2	
RJB-48	3	
RJB-64	4	

DIN Unions Round Nuts



Part Number	Coupling Size	
DIRN-16	1	
DIRN-24	11/2	
DIRN-32	2	
DIRN-40	21/2	
DIRN-48	3	
DIRN-64	4	

RJT Unions Blank Nut & Chain



Part Number	Coupling Size	
RJBC-16	1	
RJBC-24	11/2	
RJBC-32	2	
RJBC-40	21/2	
RJBC-48	3	
RJBC-64	4	

DIN Unions Weld Liners



Part Number	Coupling Size	
DIWL-16	1	
DIWL-24	11/2	
DIWL-32	2	
DIWL-40	21/2	
DIWL-48	3	
DIWI -64	4	

RJT Unions Weld Males



Part Number	Coupling Size	
RJM-16	1	
RJM-24	11/2	
RJM-32	2	
RJM-40	21/2	
RJM-48	3	
RJM-64	4	

DIN Unions Plain Blank



Coupling	
3126	
1	
11/2	
2	
21/2	
3	
4	
	Size 1 11/2 2 21/2

HYGIENIC HOSE & COUPLINGS

DIN Unions Hose Tail

Part Number	Coupling Size	Hose Tail	
DIHT-16	1	1	
DIHT-24	11/2	11/2	
DIHT-32	2	2	
DIHT-40	21/2	21/2	
DIHT-48	3	3	
DIHT-64	4	4	



SMS Unions Plain Blank

Part Number	Coupling Size	
SMB-16	1	
SMB-24	11/2	
SMB-32	2	
SMB-40	21/2	
SMB-48	3	
SMB-64	4	



DIN Unions Weld Males

Part Number	Coupling Size	
DIWM-16	1	
DIWM-24	1½	
DIWM-32	2	
DIWM-40	21/2	
DIWM-48	3	
DIWM-64	4	



SMS Unions Hose Tail

Part Number	Coupling Size	Hose Tail	
SMHT-16	1		
SMHT-24	1½		
SMHT-32	2		
SMHT-40	21/2		
SMHT-48	3		
SMHT-64	4		

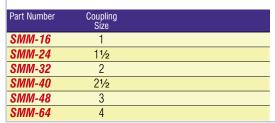


DIN Unions Gasket

Part Number	Coupling Size	
DIG-16	1	
DIG-24	11/2	
DIG-32	2	
DIG-40	21/2	
DIG-48	3	
DIG-64	4	



SMS Unions Weld Males





SMS Unions Round Nuts

Part Number	Coupling Size	
SMN-16	1	
SMN-24	11/2	
SMN-32	2	
SMN-40	21/2	
SMN-48	3	
SMN-64	4	



SMS Unions Gasket

Part Number	Coupling Size	
SMG-16	1	
SMG-24	11/2	
SMG-32	2	
SMG-40	21/2	
SMG-48	3	
SMG-64	4	



SMS Unions Weld Liners

Coupling Size	
1	
11/2	
2	
21/2	
3	
4	
	Size 1 11/2 2 21/2



IDF Unions Hexagon Nuts

Part Number	Coupling Size	
IDN-16	1	
IDN-24	11/2	
IDN-32	2	
IDN-40	21/2	
IDN-48	3	
IDN-64	4	



IDF Unions Weld Liners



Part Number	Coupling Size	
IDL-16	1	
IDL-24	1½	
IDL-32	2	
IDL-40	21/2	
IDL-48	3	
IDL-64	4	

IDF Unions Plain Blank



Part Number	Coupling Size	
IDB-16	1	
IDB-24	1½	
IDB-32	2	
IDB-40	21/2	
IDB-48	3	
IDB-64	4	

IDF Unions Blank Nut and Chain



Part Number	Coupling Size	
IDBC-16	1	
IDBC-24	11/2	
IDBC-32	2	
IDBC-40	21/2	
IDBC-48	3	
IDBC-64	4	

IDF Unions Weld Males



Part Number	Coupling Size	
<i>IDM-16</i>	1	
IDM-24	11/2	
IDM-32	2	
IDM-40	21/2	
IDM-48	3	
IDM-64	4	

IDF Unions Nitrile Gasket



Coupling Size	
1	
11/2	
2	
21/2	
3	
4	
	Size 1 1½ 2 2½

IDF Unions Hose Tail



	1	
IDHT-16 1 1		
IDHT-24 1½ 1½	11/2	
IDHT-32 2 2	2	
IDHT-40 2½ 2½	21/2	
IDHT-48 3 3	3	
IDHT-64 4 4	4	

Clamp Unions Single Hinge



Part Number	Coupling Size	
CLC-08	1/2	
CLC-12	3/4	
CLC-16	1	
CLC-24	1½	
CLC-32	2	
CLC-40	21/2	
CLC-48	3	
CLC-64	4	
CLC-80	5	
CLC-96	6	

Clamp Unions High Pressure



Coupling Size	
1/2	
3/4	
1	
1½	
2	
21/2	
3	
4	
5	
6	
	Size 1/2 3/4 1 11/2 2 21/2 3 4 5

Clamp Unions Ferrules



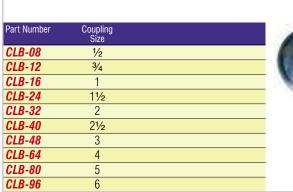
Part Number	Coupling Size	
CLF-08	1/2	
CLF-12	3/4	
CLF-16	1	
CLF-24	11/2	
CLF-32	2	
CLF-40	21/2	
CLF-48	3	
CLF-64	4	
CLF-80	5	
CLF-96	6	

Clamp Unions Hose Tail



Coupling Size	Hose Tail	
1/2	1/2	
3/4	3/4	
1	1	
1½	11/2	
2	2	
21/2	21/2	
3	3	
4	4	
5	5	
6	6	
	Size 1/2 3/4 1 11/2 2 21/2 3 4 5	Size 1/2 1/2 3/4 3/4 1 1 11/2 11/2 2 2 21/2 21/2 3 3 4 4 5 5

Clamp Unions Blank





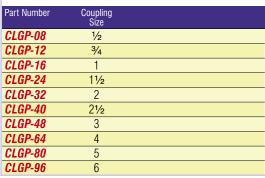
		Clamp Unions Gasket- EPDM
Part Number	Coupling Size	
CLGE-08	1/2	((()
CLGE-12	3/4	
CLGE-16	1	
CLGE-24	11/2	
CLGE-32	2	
CLGE-40	21/2	
CLGE-48	3	
CLGE-64	4	
CLGE-80	5	
CLGE-96	6	

Clamp Unions Gasket- Silicone

Part Number	Coupling Size	
CLGS-08	1/2	
CLGS-12	3/4	
CLGS-16	1	
CLGS-24	11/2	
CLGS-32	2	
CLGS-40	21/2	
CLGS-48	3	
CLGS-64	4	
CLGS-80	5	
CLGS-96	6	



Clamp Unions Gasket- PTFE





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