

PVDF & FEP

Specifications

Temperature Range
-40°F to +180°F

Vacuum Rating
To 28" Hg

Diameter Tolerance
±.005"

Hardness
65 Shore D

Tube Markings
None

Working Pressure
4:1 Safety Factor

Resin Compliance
See Material
Compliance Notice on
page 2

Suggested Fittings
Push-In, Compression

Polyvinylidene Fluoride – PVDF

Polyvinylidene Fluoride (PVDF) compound is an economical alternative to Teflon® (PTFE, PFA, and FEP) tubing for applications not requiring heat resistance. PVDF possesses excellent resistance to a wide range of chemicals. The high purity material is the ideal tubing for a variety of applications requiring an odorless and tasteless tube.

There are multiple grades of resins available. Some of these are used in rigid pipe applications. Freelin-Wade uses a flexible grade.

Features

Resists:

- Acids
 - Aromatics
 - Halogen
 - Radiation
 - Alcohol
 - Mild Bases
 - Fungus
 - UV Light
 - Aliphatics
 - Chloride
 - Out-gassing
- Sterilizable by Gamma Radiation or Ozone.
 - Resists fungal growth per MS 810B, Method 508 testing.

PVDF



Specifications

Temperature Range
-100°F to +400°F
-73°C to 204°C

Vacuum Rating
To 28" Hg

Diameter Tolerance
±.005"

Hardness
57 Shore D

Tube Markings
None

Working Pressure
5:1 Safety Factor

Resin Compliance
See Material
Compliance Notice on
page 2

Suggested Fittings
Flare, Compression,
Push-In

Fluorinated Ethylene Propylene – FEP

Freelin-Wade's FEP tubing (compare to DuPont's® Teflon®) is one of the most durable and versatile flexible plastic tubes that you can buy. FEP, or fluorinated ethylene propylene, is an economical choice for applications requiring chemical resistance or exposure to a wide range of temperatures. Freelin-Wade's FEP is extremely flexible, making it an ideal choice for self-retracting coils. FEP is also available in a variety of packaged lengths.

Applications include chemical processing, laboratory applications, medical devices, water purification, food processing and automotive paint spraying.

Features

- 100% virgin grade high performance resin designed to resist stress cracking
- Low permeability
- High thermal stability and UV resistant
- Non-flammable/Self-extinguishing
- Superior electrical insulation properties
- Chemically inert to most industrial chemicals and solvents
- Available in colors



FEP
Coiling:
available
as a variation

Polyvinylidene Fluoride - PVDF

Part Number & Color Code	Packaging Unit Size	OD	ID	Wall	Standard Colors	Working Pressure		lb/100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1J-681- ____	100' Bag	1/8"	1/16"	.030"		300 PSI	125 PSI	0.71	3/16"	PI, C
1C-681- ____	500' Reel									
1B-681- ____	1000' Reel									
1A-681- ____	2500' Reel									
1J-682- ____	100' Bag	1/4"	.170"	.040"	 	165 PSI	70 PSI	2.03	3/4"	PI, C
1B-682- ____	500' Reel									
1A-682- ____	1000' Reel									
1J-683- ____	100' Bag	3/8"	1/4"	.062"	 	165 PSI	70 PSI	4.72	1-1/4"	PI, C
1A-683- ____	500' Reel									
1J-684- ____	100' Bag	1/2"	3/8"	.062"	 	130 PSI	55 PSI	6.61	2-1/8"	PI, C
1A-684- ____	250' Reel									
1AA-684- ____	500' Reel									

Metric Sizes

Part Number & Color Code	Packaging Unit Size	OD	ID	Wall	Standard Colors	Working Pressure		lb/100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1J-692- ____	100' Bag	6 mm	4 mm	1 mm		195 PSI	115 PSI	1.88	15.9 mm	PI, C
1B-692- ____	500' Reel									
1A-692- ____	1000' Reel									
1A-695- ____	250' Reel	12 mm	10 mm	1 mm		150 PSI	60 PSI	4.2	80 mm	PI, C
1AA-695- ____	500' Reel									

Variations Available:

Coiling • Colors • Cutting • Printing • Packaging • Sizes

Fluorinated Ethylene Propylene - FEP

Part Number & Color Code	Packaging Unit Size	OD	ID	Wall	Standard Colors	Working Pressure		lb/100'	Bend Radius	Fitting
						75°F/25°C				
1J-900- ____	100' Bag	1/8"	1/16"	.030"		420 PSI		0.9	1/2"	PI, C
1C-900- ____	500' Reel									
1B-900- ____	1000' Reel									
1A-900- ____	2500' Reel									
1J-901- ____	100' Bag	1/4"	3/16"	.030"		210 PSI		2.0	1.75"	PI, C
1B-901- ____	500' Reel									
1A-901- ____	3000' Reel									
1J-902- ____	100' Bag	1/4"	1/8"	.062"		455 PSI		3.4	1/2"	PI, C
1B-902- ____	500' Reel									
1A-902- ____	1000' Reel									
1J-903- ____	100' Bag	3/8"	1/4"	.062"		300 PSI		5.7	1"	PI, C
1A-903- ____	1000' Reel									
1J-904- ____	100' Bag	1/2"	3/8"	.062"		218 PSI		8.0	2"	PI, C
1A-904- ____	500' Reel									

Metric Sizes

Part Number & Color Code	Packaging Unit Size	OD	ID	Wall	Standard Colors	Working Pressure		lb/100'	Bend Radius	Fitting
						75°F/25°C				
1J-941- ____	100' Bag	4 mm	2 mm	1 mm		450 PSI		1.4	38.1 mm	PI, C
1C-941- ____	500' Reel									
1B-941- ____	1000' Reel									
1A-941- ____	2500' Reel									
1J-942- ____	100' Bag	6 mm	4 mm	1 mm		301 PSI		2.3	25.4 mm	PI, C
1B-942- ____	500' Reel									
1A-942- ____	2500' Reel									
1J-943- ____	100' Bag	8 mm	6 mm	1 mm		225 PSI		3.2	81.3 mm	PI, C
1A-943- ____	1500' Reel									
1J-944- ____	100' Bag	10 mm	8 mm	1 mm		125 PSI		4.1	70 mm	PI, C
1A-944- ____	1500' Reel									

Variations Available:

Coiling • Colors • Cutting • Packaging • Jacketing

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EVA Lined Beverage Tubing

Specifications

Temperature Range
-40°F to +150°F

Diameter Tolerances
±.005"

Tube Markings
FW Markings

Working Pressure
3:1 Safety Factor

Base Resin Compliance
NSF/FDA compliant for beverage lines. Certain restrictions may apply.

Suggested Fittings
Push to Connect

Soda, beer, juice and liquor tubing requires the best of two worlds: 1) a line flexible enough to make long runs and complicated installs seamless and easy; and 2) a line that provides a strong vapor barrier that may be easily washed down to transition between flavors or beverages.

Introducing Freelin-Wade's EVA Lined LLDPE Beverage Tubing. A thin inner layer of EVA gives an unsurpassed vapor barrier that can be rinsed to transition to a new beverage or flavor with no residual flavor left behind, while the outer layer of LLDPE makes working with standard fittings and in tight spaces a breeze.

EVA Lined LLDPE tubing is used by commercial and retail venue beverage OEMs, installation companies, breweries, and home brewers and as a replacement tubing for many food and beverage systems.

Applications

- Soda Dispensing and Syrup Transfer Lines
- Liquor Transfer
- Food Processing
- Beer Tap Lines and Insulated Bundles
- Juice Transfer Lines
- Food Grade Oil Lines
- Cocktail Mixing Units
- Coolants
- Detergents



- **Superior Environmental Stress Crack Resistance (ESCR):** Exceptionally durable vs. standard polyethylene tubing.
- **Enhanced Performance:** This tubing is designed to perform in demanding beverage systems.
- **Non-Toxic and Odorless**
- **Compatibility:** Freelin-Wade's EVA Lined Tubing can be effortlessly connected with easy push-to-connect fittings.
- **Jacketed Bundles:** Great for multiple, uniquely identifiable lines in a jacketed bundle for large installations made easy.

EVA Lined Tubing

Part Number & Color Code	Packaging Unit Size	OD	ID	Wall	Standard Colors	Working Pressure 72°F/22°C	Bend Radius
1J-852-10- 1A-852-10-	100' Bag 500' Reel	5/16"	.227"	.043"	10	140 PSI	2"
1J-854-10- 1A-854-10-	1000' Bag 2500' Reel	3/8"	.27"	.053"	10	135 PSI	2"
1J-856-10- 1A-856-10-	100' Bag 250' Reel	1/2"	.375"	.063"	10	120 PSI	2-1/2"
Variations Available:						Packaging • Sizes	

Weld-Spatter Resistant Tubing

Weld-Spatter Resistant Tubing is made by taking blue Fre-Thane® 95A durometer polyurethane and jacketing it with a specially formulated weld-spatter resistant cover. The result is a jacketed tube that resists incidental weld-spatter contact. The outer cover base resin meets UL94V0 requirements and offers strong insulating properties. It also resists oils, greases, acids, bases, aqueous solutions, ozone, heat-aging and ultraviolet light. The cover is approximately .030" thick and does not adhere to the inner tube, allowing the jacket to be easily skived back for fitting connection with conventional compression or push-in fittings.



Weld-Spatter Resistant

Features

- Protects tube from incidental weld-spatter contact.
- Flexible with an excellent bend radius.
- Resistant to kink damage.
- Broad range of chemical resistance.
- Can be formed into retractable coils.

Specifications

Temperature Range
-40°F to +165°F

Vacuum Rating
To 28" Hg

Diameter Tolerances
±.005"

Tube Markings
FW Specs

Working Pressure
3:1 Safety Factor

Resin Compliance
Outer Jacket: UL94V0

Suggested Fittings
Push-In, Compression, Barb

Weld-Spatter Resistant

Part Number & Color Code	Packaging Unit Size	OD	ID	Standard Colors	Working Pressure		lb/100'	Bend Radius	Fitting
					75°F/25°C	150°F/65°C			
1J-356-07 _	100' Bag	5/32"	.093"	05 07	210 PSI	85 PSI	1.58	3/8"	Pl, C B
1B-356-07 _	500' Reel								
1A-356-07 _	1000' Reel								
1J-351-07 _	100' Bag	1/4"	.160"	01 05 06 07 08 11	175 PSI	70 PSI	2.89	1/2"	Pl, C B
1B-351-07 _	250' Reel								
1A-351-07 _	1000' Reel								
1J-352-07 _	100' Bag	3/8"	.245"	01 07	170 PSI	70 PSI	5.25	7/8"	Pl, C B
1A-352-07 _	500' Reel								
1J-366-07 _	50' Bag	1/2"	.320"	01	175 PSI	70 PSI	8.52	1-1/8"	Pl, C B
1A-366-07 _	200' Reel								

Metric Sizes

Part Number & Color Code	Packaging Unit Size	OD mm	ID mm	Standard Colors	Working Pressure		lb/100'	Bend Radius	Fitting
					75°F/25°C	150°F/65°C			
1J-358-07 _	100' Bag	6	4	07	160 PSI	65 PSI	2.59	12.7 mm	Pl, C B
1B-358-07 _	250' Reel								
1A-358-07 _	1000' Reel								
1J-359-07 _	100' Bag	8	5	01 07 11	190 PSI	75 PSI	4.15	19 mm	Pl, C B
1A-359-07 _	500' Reel								
1J-360-07 _	100' Bag	10	6.5	01 07	170 PSI	70 PSI	5.71	22.2 mm	Pl, C B
1A-360-07 _	500' Reel								
1J-361-07 _	50' Bag	12	8	01	155 PSI	60 PSI	7.43	28.6 mm	Pl, C B
1A-361-07 _	250' Reel								

Variations Available:

Coiling • Colors • Cutting • Bonding • Printing • Packaging • Sizes

Also known as Spark-Lin®

US Toll Free: 888-373-9233

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Static Dissipative Polyurethane

Specifications

Temperature Range
-40°F to +165°F

Vacuum Rating
To 28" Hg

Diameter Tolerances
±.005"

Tube Markings
None

Dissipative Values:
per EIA Std 541

Volume Resistivity:
 5×10^8 ohms-cm

Surface Resistivity:
 5×10^8 ohms/sq

Working Pressure
3:1 Safety Factor

UV Stabilized
Yes

Suggested Fittings
Barb

Static electricity is a stationary charge of electricity resting on an object's surface. With plastic tubing, the charge is usually generated by friction on the exterior or interior of the tubing. The charge is typically localized. This means that a charge may exist on one part of the tube but not the entire tube. The spotty nature of the charge makes it much harder to detect. Furthermore, humans can only sense electrostatic discharge (ESD) greater than 3,500 electrostatic volts. A charge as low as 100 volts of ESD can damage certain circuits meaning that electronics can be destroyed by ESD without the person even knowing it. For more information about ESD, please contact Freelin-Wade.

Freelin-Wade's Static Dissipative Polyurethane tubing is made from an Ether-based polyurethane that is specially formulated to help control ESD. It should always be used in low humidity environments or when tubing will be near circuit boards.

Features

- Dissipates electrostatic charges with no chemical additives.
- Contains no conductive fillers and no particle emission.
- Dissipative values are permanent and cannot be washed away.
- Non-contaminating and non-outgassing.
- Ideal for low humidity environments.
- Non-corrosive to electronic leads and components.





90A Static Dissipative Polyurethane

Part Number & Color Code	Packaging Unit Size	OD	ID	Wall	Standard Colors	Working Pressure		lb/100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1J-413-90 ____ 100' Bag	100' Bag	1/8"	1/16"	.031"	01 81	145 PSI	55 PSI	.48	3/16"	B
1C-413-90 ____ 500' Reel	500' Reel									
1B-413-90 ____ 1000' Reel	1000' Reel									
1A-413-90 ____ 2500' Reel	2500' Reel									
1J-486-90 ____ 100' Bag	100' Bag	5/32"	3/32"	.031"	01 02 05 07 09	125 PSI	50 PSI	.61	3/8"	B
1C-486-90 ____ 500' Reel	500' Reel									
1B-486-90 ____ 1000' Reel	1000' Reel									
1A-486-90 ____ 2500' Reel	2500' Reel									
1J-430-90 ____ 100' Bag	100' Bag	5/32"	5/64"	.039"	01 04 07 81	145 PSI	60 PSI	.74	3/8"	B
1C-430-90 ____ 500' Reel	500' Reel									
1B-430-90 ____ 1000' Reel	1000' Reel									
1A-430-90 ____ 2500' Reel	2500' Reel									
1J-425-90 ____ 100' Bag	100' Bag	1/4"	1/8"	.062"	01 81	145 PSI	60 PSI	1.91	1/2"	B
1B-425-90 ____ 500' Reel	500' Reel									
1A-425-90 ____ 1000' Reel	1000' Reel									
1J-451-90 ____ 100' Bag	100' Bag	1/4"	.160"	.045"	07	115 PSI	60 PSI	1.46	3/4"	B
1B-451-90 ____ 500' Reel	500' Reel									
1A-451-90 ____ 1000' Reel	1000' Reel									
1J-452-90 ____ 100' Bag	100' Bag	3/8"	.245"	.065"	01 05	100 PSI	50 PSI	3.18	1"	B
1A-452-90 ____ 500' Reel	500' Reel									

Metric Sizes

Part Number & Color Code	Packaging Unit Size	OD mm	ID mm	Wall mm	Standard Colors	Working Pressure		lb/100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1J-486-90 ____ 100' Bag	100' Bag	4	2.4	.8	01 02 05 07 09	105 PSI	50 PSI	.80	9.5 mm	B
1C-486-90 ____ 500' Reel	500' Reel									
1B-486-90 ____ 1000' Reel	1000' Reel									
1A-486-90 ____ 2500' Reel	2500' Reel									
1J-488-90 ____ 100' Bag	100' Bag	6	4	1	01 07 09 81	90 PSI	45 PSI	1.3	12.7 mm	B
1B-488-90 ____ 500' Reel	500' Reel									
1A-488-90 ____ 1000' Reel	1000' Reel									
1J-489-90 ____ 100' Bag	100' Bag	8	5	1.5	01	100 PSI	50 PSI	2.6	19 mm	B
1A-489-90 ____ 500' Reel	500' Reel									
1J-472-90 ____ 100' Bag	100' Bag	9	6	1.5	81	100 PSI	50 PSI	3.3	24 mm	B
1A-472-90 ____ 500' Reel	500' Reel									
1J-490-90 ____ 50' Bag	50' Bag	10	6.5	1.75	05 07	100 PSI	50 PSI	3.9	22.3 mm	B
1A-490-90 ____ 500' Reel	500' Reel									
1J-491-90 ____ 50' Bag	50' Bag	12	8	2	01	90 PSI	45 PSI	5.3	28.6 mm	B
1A-491-90 ____ 250' Reel	250' Reel									

Variations Available:

Coiling • Colors • Cutting • Bonding • Printing • Packaging • Sizes

US Toll Free: 888-373-9233

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Reinforced PUR, Flexi-Corr™ & Asepsi-Flex®

Specifications

Temperature Range Reinforced PUR

-40°F to +165°F

Flexi-Corr

-20°F to +160°F

Asepsi-Flex

-30°F to +150°F

Vacuum Rating

To 28" Hg

Working Pressure

Reinforced PUR

4:1 Safety Factor

UV Stabilized

Reinforced PUR

Yes

Resin Compliance

See Material
Compliance Notice on
page 2

Reinforced PUR is a clear, heavy-wall, 85A durometer polyurethane hose reinforced with a tough nylon innerbraid. The reinforcement provides a greater working pressure while maintaining flexibility and kink resistance. The Ether-based compound is ideal for transferring abrasive materials or media that would be damaging to PVC and other hoses.

Features

- Resistant to abrasion, oils, and fungus.
- Tough; withstands constant flexing.
- Lightweight.
- Very flexible in subzero temperatures.
- Bondable into multi-ribbon hoses.
- Retains original values; does not harden or crack with age.



Flexi-Corr™

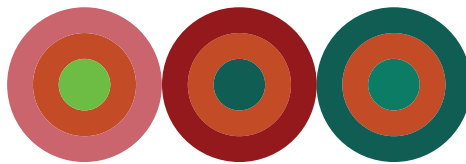
Flexi-Corr is a lightweight corrugated tubing that is highly flexible. Even at low temperatures, it will bend without kinking. Manufactured from durable Ethyl Vinyl Acetate (EVA), it contains no plasticizers and is resistant to corrosion, aging, ozone and ultraviolet light. The smooth inner-bore makes for a quiet flow. An excellent vacuum and low pressure blower tubing, it's also commonly used as a conduit for bundling assortments of tubing and wiring.

Asepsi-Flex®

Asepsi-Flex is made from PVC and is smooth inside and out. The unique design resists kinking and is crush-resistant while remaining highly flexible for a variety of vacuum, umbilical, and conduit applications. Available in four colors.

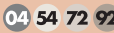
Reinforced PUR Hose

Part Number & Color Code	Packaging Unit Size	OD	ID	Wall	Available Only in Clear	Working Pressure		lb/100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1A-800-10	100' Reel	.470"	1/4"	.110"		230 PSI	150 PSI	6.0	3/4"	B
1E-800-10	Cut Length									
1A-801-10	100' Reel	.630"	3/8"	.127"		155 PSI	100 PSI	9.9	1-1/2"	B
1E-801-10	Cut Length									
1A-802-10	100' Reel	.750"	1/2"	.125"		125 PSI	80 PSI	12.0	2"	B
1E-802-10	Cut Length									
1A-803-10	100' Reel	.905"	5/8"	.140"		105 PSI	70 PSI	16.4	2-3/4"	B
1E-803-10	Cut Length									
1A-804-10	100' Reel	1.025"	3/4"	.137"		90 PSI	60 PSI	18.6	3"	B
1E-804-10	Cut Length									
1A-805-10	100' Reel	1.300"	1"	.150"		75 PSI	50 PSI	26.2	5"	B
1E-805-10	Cut Length									
Coiling • Cutting • Bonding • Printing • Packaging • Sizes										



Flexi-Corr Cuff

Flexi-Corr™ Corrugated Hose

Part Number & Color Code	Packaging Unit Size	ID	Standard Colors	Working Pressure 75°F/25°C	lb/100'	Max Vacuum	Part Number for Cuffs
1E-047- ____	25' Length	1/2"		15 PSI	6.8	29 Hg	OC-012
1F-047- ____	50' Length						
1E-053- ____	25' Length	5/8"		15 PSI	8.7	29 Hg	OC-058
1F-053- ____	50' Length						
1E-054- ____	25' Length	3/4"		15 PSI	10.0	29 Hg	OC-034
1F-054- ____	50' Length						
1E-055- ____	25' Length	1"		15 PSI	14.0	29 Hg	OC-100
1F-055- ____	50' Length						
1E-056- ____	25' Length	1-1/4"		13 PSI	20.0	29 Hg	OC-114
1F-056- ____	50' Length						
1E-057- ____	25' Length	1-1/2"		9 PSI	26.0	29 Hg	OCH-112
1F-057- ____	50' Length						
1E-058- ____	25' Length	1-3/4"		7 PSI	34.0	28 Hg	N/A
1F-058- ____	50' Length						
1E-093- ____	25' Length	2"		5 PSI	52.0	20 Hg	OC-200
1F-093- ____	50' Length						
Variations Available:						Cutting • Packaging	

Asepsi-Flex® PVC Vacuum Hose

Part Number & Color Code	Packaging Unit Size	ID	Standard Colors	Maximum Vacuum
1E-501- ____	25' Length	1/2"		29 Hg
1F-501- ____	100' Length			
1E-625- ____	25' Length	5/8"		29 Hg
1F-625- ____	100' Length			
Variations Available:				Cutting • Packaging

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