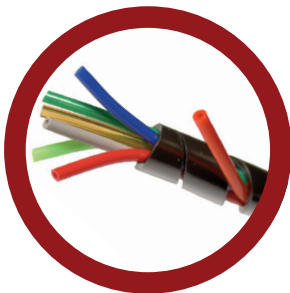


Jacketing & Accessories



Jacketing your tubing lines is an attractive and easy way to organize your tubing. It saves time over tie wrapping and creates a more user friendly assembly.



PVC Jacketed Bundles

Freelin-Wade's PVC Jacketed Bundles are an excellent way to color code a pneumatic system in a neat flexible package. Ten colors of Fre-Thane® 85A Polyurethane tubing, jacketed with a clear flexible PVC. Variations include bundling wire, different tube sizes, materials, colors and coiling.

Hose Cutter Part Number	Packaging Unit Size	OD	ID	Bundled Colors	lbs./100'	Fitting
10A-025-00	100' Bag	1/4"	1/8"	01 04 05 06 07 08 09 10 11 12	21.0	B
10E-025-00	Cut Length					

Variations Available: Bundle your own choice of tubing and wire.

Expandable Webbing

Expandable Webbing can expand up to three times its size. The webbing is a polyester sleeve that allows heat and humidity to escape. Expandable Webbing is flexible and easy to install. Available only in black.

Part Number	Packaging Unit Size	Minimum Size	lbs./100'
1J-126-01	25' Bag	1/4"	.2
1D-126-01	100' Box		
1B-126-01	500' Reel		
1J-127-01	25' Bag	1/2"	.8
1D-127-01	100' Box		
1B-127-01	500' Reel		
1J-128-01	25' Bag	3/4"	1.2
1D-128-01	100' Box		
1B-128-01	500' Reel		

Spiral Wrap

Spiral Wrap is made from a spiral cut of linear low density polyethylene (LLDPE) material. It easily wraps around tubing and allows for easy branching of contents.

Part Number	Packaging Unit Size	OD	ID	Standard Colors	lbs./100'
1J-078-___	25' Bag	1/2"	3/8"	01 10	3.4
1D-078-___	100' Box				
1A-078-___	250' Reel				

Tubing Cutters & Replacement Blades

Suitable for 1/8" - 3/4" O.D. tubing. Keep one everywhere that you have tubing.

Tubing Cutter Part Number	Description
PXC058	Black Tubing Cutter
PXC058B	Blue Tubing Cutter
PXC058-L	Black Tubing Cutter w/Red Leash

Replacement Blades Part Number	Description
PXC059	Single Blade
PXC059-P5	5-Pack
PXC059-P10	10-Pack



Jacketing & Accessories

Hose Cutter

Our heavy duty Hose Cutter will cut plastic tubing or hose up to 1" O.D. Reinforced hose can be cut perfectly with ease.

Hose Cutter Part Number	Description
PXC098R	Red Hose Cutter
PXC099M	Single Replacement Blade



Tubing Marker Clips

These easy-snap clips will not damage tubing. The kit consists of 50 each numerals 0 through 9 and 50 each of 14 different letters: A, B, C, D, E, F, G, H, J, P, R, X, Y, Z. Comes in a convenient plastic storage case.

Marker Clip Part Number	Fits Tubing Size
TMC-02	1/8"
TMC-04	1/4"

Marker Clip Part Number	Fits Tubing Size
TMC-05	5/32"
TMC-06	3/8"



Tubing H Clips

Our "H" Clips are an easy and inexpensive way to route dual tubing or hose runs. Conveniently attached via the countersunk center screw hole (3/16"). Tubing "H" Clips neatly and safely secure tubing for a clean professional look. Manufactured from black Polyacetal plastic with a useful temperature range of -40° to + 212°F.

"H" Clip Part Number	Fits Tubing Size
HTC-156-200	.156" - .200"
HTC-201-325	.201" - .325"
HTC-326-400	.326" - .400"
HTC-401-485	.401" - .485"

"H" Clip Part Number	Fits Tubing Size
HTC-486-575	.486" - .575"
HTC-576-675	.576" - .675"
HTC-676-825	.676" - .825"
HTC-826-1000	.826" - 1.00"



Tube Channels

Our tube channel mounts are perfect for securing multiple tubing lines. The small 10-tube channel can be mounted with its pressure sensitive adhesive backing or with a #4 screw. Available in three sizes to fit 5/32", 3/16" and 1/4" tubing. The large style channel holds 3/8" and 1/2" tubing and mounts with two screws.

Large Channel Part Number	Tubing Size OD	Number of Channels
PTC6-7	3/8	7
PTC6-10	3/8	10
PTC8-6	1/2	6

Small Channel Part Number	Tubing Size OD	Number of Channels
TC5-10	5/32	10
TC3-10	3/16	10
TC4-10	1/4	10



Kynar® 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
FDA, USPVI
UL 94 V0, NSF-51

Suggested Fittings
Push-In, Compression

Kynar® Polyvinylidene Fluoride – PVDF

Kynar® PVDF compound is an economical alternative to Teflon® (PTFE, PFA, and FEP) tubing for applications not requiring heat resistance. Kynar 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 Kynar resins available. Some of these are used in rigid pipe applications. Freelin-Wade uses a flexible grade.

For more information about Kynar, refer to the Kynar Website: www.kynar.com
You can also refer to our Chemical Resistance Chart on page 38.

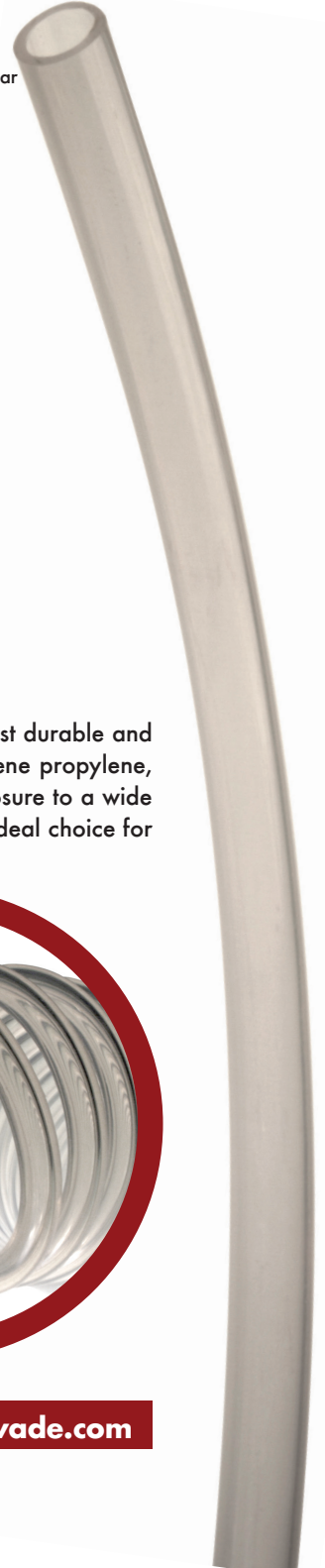
Features

Resists:

- Acids
- Alcohols
- Aliphatics
- Aromatics
- Mild Bases
- Chloride
- Halogen
- Fungus
- Out-gassing
- Radiation
- UV Light

- Sterilizable by Gamma Radiation or Ozone.
- Resists fungal growth per MS 810B, Method 508 testing.

Kynar



Specifications

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

Vacuum Rating
To 28" Hg

Diameter Tolerance
±.005"

Hardness
57 Shore D

Tube Markings
None

Working Pressure
4:1 Safety Factor

Resin Compliance
FDA Food Contact
UL 94 V0, USP VI
ASTM D 3296-03

Suggested Fittings
Flare, Compression,
Push-In

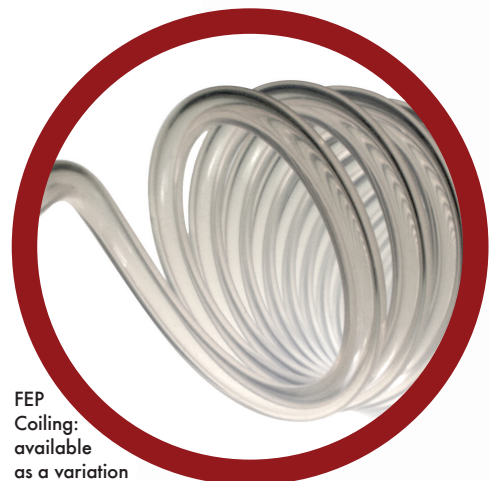
Fluorinated Ethylene Propylene – FEP

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 spray.

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



FEP
Coiling:
available
as a variation

Part Number & Color Code	Packaging Unit Size	OD	ID	Wall	Standard Colors	Working Pressure		lbs./100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1J-681- ___ 100' Bag	1C-681- ___ 500' Reel	1/8"	1/16"	.030"	10	300 PSI	125 PSI	0.71	3/16"	PI, C
1B-681- ___ 1000' Reel	1A-681- ___ 2500' Reel									
1J-682- ___ 100' Bag	1B-682- ___ 500' Reel									
1A-682- ___ 1000' Reel	1J-683- ___ 100' Bag	3/8"	1/4"	.062"	10 10	165 PSI	70 PSI	4.72	1-1/4"	PI, C
1A-683- ___ 500' Reel	1J-684- ___ 100' Bag									
1A-684- ___ 250' Reel	1AA-684- ___ 500' Reel									

Metric Sizes

Part Number & Color Code	Packaging Unit Size	OD mm	ID mm	Wall mm	Standard Colors	Working Pressure		lbs./100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1J-692- ___ 100' Bag	1B-692- ___ 500' Reel	6	4	1	10	195 PSI	115 PSI	1.88	15.9 mm	PI, C
1A-692- ___ 1000' 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		lbs./100'	Bend Radius	Fitting									
						75°F/25°C													
1J-900- ___ 100' Bag	1C-900- ___ 500' Reel	1/8"	1/16"	.030"	10	300 PSI		0.9	1/2"	PI, C									
1B-900- ___ 1000' Reel	1A-900- ___ 2500' Reel																		
1J-901- ___ 100' Bag	1B-901- ___ 500' Reel										1/4"	3/16"	.030"	10	150 PSI		2.0	1.75"	PI, C
1A-901- ___ 3000' Reel	1J-902- ___ 100' Bag	1/4"	1/8"	.062"	10	300 PSI		3.4	1/2"	PI, C									
1A-902- ___ 1000' Reel	1J-903- ___ 100' Bag										3/8"	1/4"	.062"	10	207 PSI		5.7	1"	PI, C
1A-903- ___ 1000' Reel	1J-904- ___ 100' Bag	1/2"	3/8"	.062"	10	155 PSI		8.0	2"	PI, C									
1A-904- ___ 1000' Reel																			

Metric Sizes

Part Number & Color Code	Packaging Unit Size	OD mm	ID mm	Wall mm	Standard Colors	Working Pressure		lbs./100'	Bend Radius	Fitting
						75°F/25°C				
1J-941- ___ 100' Bag	1C-941- ___ 500' Reel	4	2	1	10	450 PSI		1.4	1.5"	PI, C
1B-941- ___ 1000' Reel	1A-941- ___ 2500' Reel									
1J-942- ___ 100' Bag	1B-942- ___ 500' Reel									
1A-942- ___ 2500' Reel	1J-943- ___ 100' Bag	8	6	1	10	250 PSI		3.2	2.5"	PI, C
1A-943- ___ 1500' Reel	1J-944- ___ 100' Bag									
1A-944- ___ 1500' Reel										

Variations Available:

Coiling • Cutting • Packaging • Jacketing

Multi-Bore Polyurethane

Specifications

Temperature Range
-40°F to +125°F

Vacuum Rating
To 28" Hg.

Diameter Tolerances
±.005"

Tube Markings
None

Working Pressure
3:1 Safety Factor

UV Stabilized
85A

Resin Compliance
See Fre-Thane®
compliances on page 8

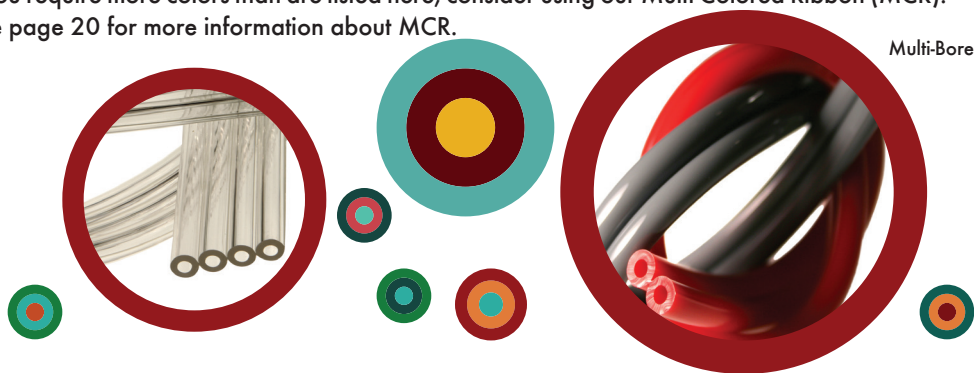
Suggested Fittings
Barb

Standard Tail Lengths
8" and 16"

Multi-Bore Polyurethane

Multi-Bore tubing is produced using our Fre-Thane® polyurethane in a single extrusion. Unlike MCR, it is made in one extrusion, which means the tube can only be made in a single color. Unlike MCR, Multi-Bore can't be separated cleanly and should not be used with push-in fittings.

If you require more colors than are listed here, consider using our Multi-Colored Ribbon (MCR). See page 20 for more information about MCR.



85A Multi-Bore Polyurethane

Part Number & Color Code	Packaging Unit Size	OD	ID	Configuration	Standard Colors	Working Pressure		lbs./100'	Fitting
						75°F/25°C	150°F/65°C		
3J-028- ___	100' Bag	1/8"	.066"	Triple Tube	10 14	125 PSI	50 PSI	1.7	B
3A-028- ___	1000' Reel								
4J-026- ___	100' Bag	1/8"	.066"	Quad Tube	10	125 PSI	50 PSI	2.2	B
4A-026- ___	500' Reel								
2J-016- ___	100' Bag	1/4"	1/8"	Twin Tube	01 05 10 27	150 PSI	60 PSI	4.1	B
2A-016- ___	500' Reel								
4J-023- ___	50' Bag	1/4"	1/8"	Quad Tube	10	150 PSI	60 PSI	8.4	B
4A-023- ___	250' Reel								

90A Multi-Bore Polyurethane

Part Number & Color Code	Packaging Unit Size	OD	ID	Configuration	Standard Colors	Working Pressure		lbs./100'	Fitting
						75°F/25°C	150°F/65°C		
2J-006- ___	100' Bag	1/8"	1/16"	Twin Tube	01 10 14	190 PSI	75 PSI	1.1	B
2B-006- ___	1000' Reel								
2A-006- ___	2000' Reel								
2J-013- ___	100' Bag	1/4"	.159"	Twin Tube	14	130 PSI	50 PSI	2.9	B
2A-013- ___	500' Reel								

Variations Available:

Coiling • Cutting • Bonding • Printing • Packaging • Sizes

Fre-Thane® Multi-Bore Polyurethane Coils

Part Number & Color Code	OD	ID	Bore/DUR	Standard Colors	Working Pressure		Material Length	Working Length	Retracted Length	Coil ID
					75°F/25°C	150°F/65°C				
2V-006- ___	1/8"	1/16"	Twin 90A	01 10 14	160 PSI	65 PSI	7'	5'	6"	3/4"
2W-016- ___	1/4"	1/8"	Twin 85A	01 05 10 27	130 PSI	50 PSI	10'	8'	12.5"	1"
4W-023- ___	1/4"	1/8"	Quad 85A	10	130 PSI	50 PSI	10'	7'	21"	1-1/4"

Variations Available:

Cutting • Printing • Packaging

Multi-Colored Ribbon (MCR)

Specifications

Temperature Range
-40°F to +165°F

Vacuum Rating
85A-95A: To 28" Hg.

Diameter Tolerances
1/8" - 9/16": ±.005"
3/4": ±.007"
Metric: ±.127mm

Tube Markings
None

Working Pressure
3:1 Safety Factor

UV Stabilized
95A & 85A

Resin Compliance
95A: NSF61
Meets UL94HB
85A: NSF61
Meets UL94HB
USPVI

Suggested Fittings
95A: Barb, Push-In, FX
85A: Barb

Multi-Colored Ribbon tubing (MCR) is a bonded ribbon of multi-colored Fre-Thane® Polyurethane tubing. Any time that you are routing two or more lines, MCR is the way to go. It offers faster installation times and eliminates the need for spiral wrap or jacketing.

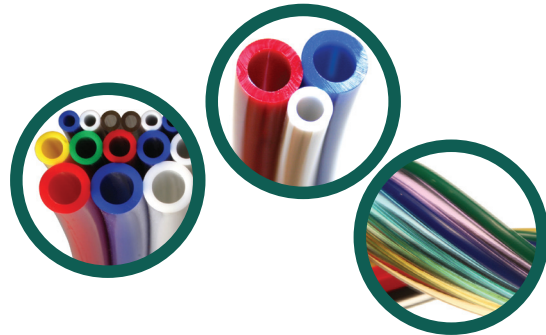
Freelin-Wade's proprietary bonding process allows the tubing to be separated without leaving any residue. This ensures a tight, leak free seal with push-in style fittings. MCR is a durable, cost-effective way to color code your tubing lines for identification, tracing or troubleshooting. Additionally, MCR will withstand the rigors of flexing and stretching, just like the rest of our polyurethane tubing.

MCR is available in a wide range of stock configurations which are listed below and to the right. In addition, variations are easy. Freelin-Wade will make MCR to suit your needs. Our unique manufacturing process enables us to bond up to 20 tubes, mixing and matching colors, sizes and configurations.

Common MCR Variations

Features

- Bond 2 to 20 tubes, up to 3.5" wide
- Use multiple colors in any combination.
- Mix or match tube sizes.
- Tubes can be stacked into many configurations.
- Color code your lines making routing and line identification easy.



85A Standard Multi-Colored Ribbon (MCR)

Part Number & Color Code	Packaging Unit Size	OD	ID	Color Arrangement	Working Pressure 75°F/25°C	lbs./100'	Bend Radius	Fitting
2M-013-01-10 2ME-013-01-10	100' Bag Cut Length	1/8"	.066"	01 10	135 PSI	.86	3/16"	B
4M-013-26-28-29-25 4ME-013-26-28-29-25	100' Bag Cut Length	1/8"	.066"	26 28 29 25	135 PSI	1.72	3/16"	B
6M-013-06-07-05-08-09-12 6ME-013-06-07-05-08-09-12	100' Bag Cut Length	1/8"	.066"	06 07 05 08 09 12	135 PSI	2.58	3/16"	B
8M-013-11-04-32-27-26-28-29-25 8ME-013-11-04-32-27-26-28-29-25	100' Bag Cut Length	1/8"	.066"	11 04 32 27 26 28 29 25	135 PSI	3.44	3/16"	B
8M-013-10-10-10-10-10-10-10-10 8ME-013-10-10-10-10-10-10-10-10	100' Bag Cut Length			10 10 10 10 10 10 10 10				
2M-025-01-10 2ME-025-01-10	100' Bag Cut Length	1/4"	1/8"	01 10	145 PSI	3.60	1/2"	B
4M-025-26-28-29-25 4ME-025-26-28-29-25	100' Bag Cut Length			26 28 29 25				
4M-025-01-01-01-01 4ME-025-01-01-01-01	100' Bag Cut Length	1/4"	1/8"	01 01 01 01	145 PSI	7.20	1/2"	B
4M-025-10-10-10-10 4ME-025-10-10-10-10	100' Bag Cut Length			10 10 10 10				
6M-025-06-07-05-08-09-12 6ME-025-06-07-05-08-09-12	100' Bag Cut Length	1/4"	1/8"	06 07 05 08 09 12	145 PSI	10.80	1/2"	B
6M-025-10-10-10-10-10-10 6ME-025-10-10-10-10-10-10	100' Bag Cut Length			10 10 10 10 10 10				
8M-025-11-04-32-27-26-28-29-25 8ME-025-11-04-32-27-26-28-29-25	100' Bag Cut Length	1/4"	1/8"	11 04 32 27 26 28 29 25	145 PSI	14.40	1/2"	B

Variations Available:

Coiling • Colors • Cutting • Packaging • Sizes

95A Standard Multi-Colored Ribbon (MCR)

Part Number & Color Code	Packaging Unit Size	OD	ID	Color Arrangement	Working Pressure 75°F/25°C	lbs./ 100'	Bend Radius	Fitting
2M-157-05-07 2ME-157-05-07	100' Bag Cut Length	1/8"	.066"	05 07	255 PSI	.88	1/4"	B, PI
4M-157-05-07-11-10 4ME-157-05-07-11-10	100' Bag Cut Length	1/8"	.066"	05 07 11 10	255 PSI	1.72	1/4"	B, PI
6M-157-08-06-05-07-11-10 6ME-157-08-06-05-07-11-10	100' Bag Cut Length	1/8"	.066"	08 06 05 07 11 10	255 PSI	2.60	1/4"	B, PI
8M-157-25-27-08-06-05-07-11-10 8ME-157-25-27-08-06-05-07-11-10	100' Bag Cut Length	1/8"	.066"	25 27 08 06 05 07 11 10	255 PSI	3.52	1/4"	B, PI
2M-156-05-07 2ME-156-05-07	100' Bag Cut Length	5/32"	3/32"	05 07	210 PSI	1.24	3/8"	B, PI
4M-156-05-07-11-10 4ME-156-05-07-11-10	100' Bag Cut Length	5/32"	3/32"	05 07 11 10	210 PSI	2.48	3/8"	B, PI
6M-156-08-06-05-07-11-10 6ME-156-08-06-05-07-11-10	100' Bag Cut Length	5/32"	3/32"	08 06 05 07 11 10	210 PSI	3.72	3/8"	B, PI
2M-151-05-07 2ME-151-05-07	100' Bag Cut Length	1/4"	.160"	05 07	175 PSI	2.88	1/2"	B, PI, FX
4M-151-05-07-11-10 4ME-151-05-07-11-10	100' Bag Cut Length	1/4"	.160"	05 07 11 10	175 PSI	5.76	1/2"	B, PI, FX
6M-151-08-06-05-07-11-10 6ME-151-08-06-05-07-11-10	100' Bag Cut Length	1/4"	.160"	08 06 05 07 11 10	175 PSI	8.64	1/2"	B, PI, FX
8M-151-25-27-08-06-05-07-11-10 8ME-151-25-27-08-06-05-07-11-10	100' Bag Cut Length	1/4"	.160"	25 27 08 06 05 07 11 10	175 PSI	11.52	1/2"	B, PI, FX
2M-152-05-07 2ME-152-05-07	100' Bag Cut Length	3/8"	.245"	05 07	170 PSI	6.30	7/8"	B, PI, FX
4M-152-05-07-11-10 4ME-152-05-07-11-10	100' Bag Cut Length	3/8"	.245"	05 07 11 10	170 PSI	12.60	7/8"	B, PI, FX

Metric Sizes

Part Number & Color Code	Packaging Unit Size	OD	ID	Color Arrangement	Working Pressure 75°F/25°C	lbs./ 100'	Bend Radius	Fitting
2M-156-05-07 2ME-156-05-07	100' Bag Cut Length	4mm	2.4mm	05 07	210 PSI	1.24	9.5mm	B, PI
4M-156-05-07-11-10 4ME-156-05-07-11-10	100' Bag Cut Length	4mm	2.4mm	05 07 11 10	210 PSI	2.48	9.5mm	B, PI
6M-156-08-06-05-07-11-10 6ME-156-08-06-05-07-11-10	100' Bag Cut Length	4mm	2.4mm	08 06 05 07 11 10	210 PSI	3.72	9.5mm	B, PI
2M-158-09-01 2ME-158-09-01	100' Bag Cut Length	6mm	4mm	09 01	160 PSI	2.42	12.7mm	B, PI
4M-158-09-01-11-10 4ME-158-09-01-11-10	100' Bag Cut Length	6mm	4mm	09 01 11 10	160 PSI	4.84	12.7mm	B, PI
2M-159-06-08 2ME-159-06-08	100' Bag Cut Length	8mm	5mm	06 08	190 PSI	4.72	19mm	B, PI
4M-159-06-08-11-10 4ME-159-06-08-11-10	100' Bag Cut Length	8mm	5mm	06 08 11 10	190 PSI	9.44	19mm	B, PI

Variations Available:

Coiling • Colors • Cutting • Packaging • Sizes

95A Multi-Colored Ribbon (MCR) Coils

Part Number & Color Code	OD	ID	Tail Length	Color Arrangement	Working Pressure		Material Length	Working Length	Retracted Length	Coil ID
					75°F/25°C	150°F/65°C				
2MC-156-5 2MC-156-10	5/32"	3/32"	8"	05 07	190 PSI	75 PSI	5'	3.75'	3.75"	1"
10'							7.5'	9"	1"	
2MC-151-5 2MC-151-10	1/4"	.160"	8"	05 07	155 PSI	60 PSI	5'	3.75'	5.6"	1"
10'							7.5'	13.25"	1"	
2MC-152-5 2MC-152-10	3/8"	.245"	8"	05 07	150 PSI	60 PSI	5'	3.75'	5"	1.75"
10'							7.5'	11.5"	1.75"	

Variations Available:

Colors • Cutting • Packaging • Sizes

USA & International: 503-434-5561

US Toll Free: 888-373-9233

21

Spatter Guard SRT

Specifications

Temperature Range
-40°F to +165°F

Vacuum Rating
To 28" Hg.

Diameter Tolerances
±.005"

Hardness:
58D

Tube Markings
FW Specifications

Working Pressure
3:1 Safety Factor

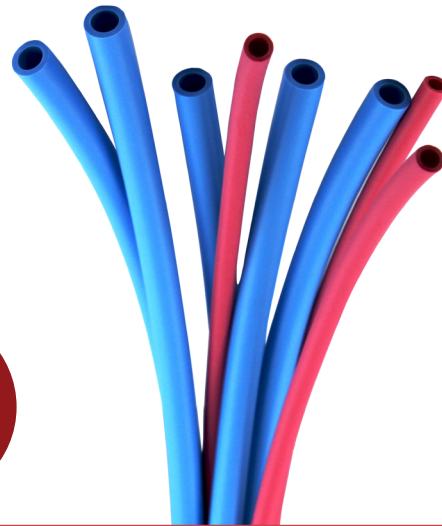
Resin Compliance
Meets UL94V0

Suggested Fittings
Push-In & Compression

Spatter Guard SRT is made from a 94V0 polyurethane resin that has been specifically formulated to resist against weld spatter without the need of an outer jacket. While this new tubing can be used in any application where you are currently using the jacketed version, it has a higher working pressure making it even better suited for industrial applications. This resin resists oils, greases, heat-aging, ultra-violet light, and is silicone and halogen free. And because it is polyurethane, it is kink resistant, abrasion resistant, and it can also be bonded and formed into retractable coils. Spatter Guard SRT works with push to connect and compression fittings without the need for boots or skiving saving you time and money.

Features

- Protects tube from incidental weld spatter contact.
- No skiving necessary
- Resistant to kink damage.
- Broad range of chemical resistance.
- Can be formed into retractable coils.



Spatter Guard SRT

Part Number & Color Code	Packaging Unit Size	OD	ID	Standard Colors	Working Pressure		lbs./100'	Bend Radius	Fitting
					75°F/25°C	150°F/65°C			
1J-376-___	100' Bag	5/32"	.093"	01 05 06 07 11	215 PSI	105 PSI	0.68	9/16"	PI,C
1C-376-___	500' Reel								
1B-376-___	1000' Reel								
1A-376-___	2500' Reel								
1J-371-___	100' Bag	1/4"	.160"	01 05 06 11	180 PSI	90 PSI	1.59	1"	PI,C
1B-371-___	250' Reel								
1A-371-___	1000' Reel								
1J-372-___	100' Bag	3/8"	.245"	01 05 06 07 11	170 PSI	85 PSI	3.48	1"	PI,C
1A-372-___	500' Reel								
1J-386-___	50' Bag	1/2"	.320"	01 05 06 07 11	170 PSI	80 PSI	6.37	1-1/8"	PI,C
1A-386-___	200' Reel								

Part Number & Color Code	Packaging Unit Size	OD	ID	Standard Colors	Working Pressure		lbs./100'	Bend Radius	Fitting
					75°F/25°C	150°F/65°C			
1J-376-___	100' Bag	4	2.4	01 05 06 07 11	215 PSI	105 PSI	0.68	.562mm	PI,C
1C-376-___	500' Reel								
1B-376-___	1000' Reel								
1A-376-___	2500' Reel								
1J-398-___	100' Bag	6	4	01 05 06 07 11	160 PSI	80 PSI	1.34	25.4mm	PI,C
1B-398-___	250' Reel								
1A-398-___	1000' Reel								
1J-399-___	100' Bag	8	5	01 05 06 07 11	190 PSI	85 PSI	2.61	23.8mm	PI,C
1A-399-___	500' Reel								
1J-390-___	50' Bag	10	6.5	01 05 06 07 11	170 PSI	85 PSI	3.86	25.4mm	PI,C
1A-390-___	500' Reel								
1J-391-___	50' Bag	12	8	01 05 06 07 11	150 PSI	70 PSI	5.34	28.6mm	PI,C
1A-391-___	250' Reel								

Variations Available:

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

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:
85A: 4×10^{10} ohms-cm
90A: 9.9×10^9 ohms-cm

Surface Resistivity:
85A: 1×10^{11} ohms/sq
90A: 9.9×10^9 ohms/sq

Working Pressure
3:1 Safety Factor

UV Stabilized
90A & 85A

Resin Compliance
85A: FDA

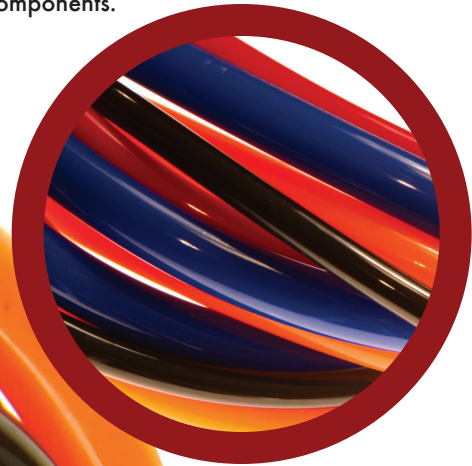
Suggested Fittings
Barb

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 ESD volts 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 available in both a 90A durometer and an 85A durometer tube. It's 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 is going to 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.



85A Static Dissipative Polyurethane

Part Number & Color Code	Packaging Unit Size	OD	ID	Wall	Standard Colors	Working Pressure		lbs./100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1J-413- ___ 100' Bag 1C-413- ___ 500' Reel 1B-413- ___ 1000' Reel 1A-413 ___ 2500' Reel		1/8"	1/16"	.031"	01 81	115 PSI	55 PSI	.48	3/16"	B
1J-430- ___ 100' Bag 1C-430- ___ 500' Reel 1B-430- ___ 1000' Reel 1A-430- ___ 2500' Reel		5/32"	5/64"	.039"	01 04 07 09 25 27 28 45 46 81	125 PSI	60 PSI	.74	3/8"	B
1J-425- ___ 100' Bag 1B-425- ___ 500' Reel 1A-425- ___ 1000' Reel		1/4"	1/8"	.062"	01 81	120 PSI	60 PSI	1.91	1/2"	B
1J-405- ___ 100' Bag 1A-405- ___ 500' Reel		3/8"	.245"	.065"	01 81	90 PSI	45 PSI	3.29	3/4"	B

Metric Sizes

Part Number & Color Code	Packaging Unit Size	OD mm	ID mm	Wall mm	Standard Colors	Working Pressure		lbs./100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1J-458- ___ 100' Bag 1B-458- ___ 500' Reel 1A-458- ___ 1000' Reel		6	4	1	81	70 PSI	35 PSI	1.27	9.5 mm	B
1J-472- ___ 100' Bag 1A-472- ___ 500' Reel		9	6	1.5	01 81	80 PSI	40 PSI	2.84	19 mm	B

Variations Available:

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

90A Static Dissipative Polyurethane

Part Number & Color Code	Packaging Unit Size	OD	ID	Wall	Standard Colors	Working Pressure		lbs./100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1J-486-90 _ 100' Bag 1C-486-90 _ 500' Reel 1B-486-90 _ 1000' Reel 1A-486-90 _ 2500' Reel		5/32"	3/32"	.031"	01 02 05 07 09	105 PSI	50 PSI	.61	3/8"	B
1J-451-90 _ 100' Bag 1B-451-90 _ 500' Reel 1A-451-90 _ 1000' Reel		1/4"	.160"	.045"	07	115 PSI	60 PSI	1.46	3/4"	B
1J-452-90 _ 100' Bag 1A-452-90 _ 500' Reel		3/8"	.245"	.065"	05	100 PSI	50 PSI	3.18	1"	B

Metric Sizes

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

Variations Available:

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