

Flexelene™ TUBING

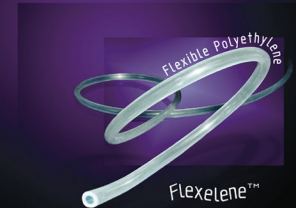


Advanced Tubing Technology

From

Eldon James

Flexelene™ TUBING



Advanced Tubing Technology

From

Eldon James

The Flexelene™ Advantage

Eldon James Flexelene™ tubing combines the excellent inert qualities of polyethylene with the flexibility found in 78A durometer PVC tubing. Flexelene™ is manufactured without the use of plasticizers, and has been designed for use with Eldon James "single barb" fittings to offer an outstanding economical alternative to rigid polyethylene tubing systems. Common applications for Flexelene™ include: pure water transfer, water conditioning, drinking water and bottling lines, brewery lines, wine transfer, beverage transfer and handling of de-ionized water.

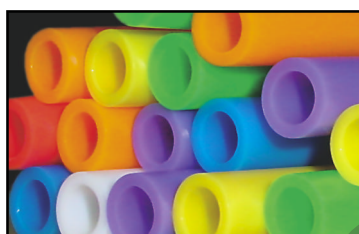
Flexelene™ tubing is certified to **NSF Standards 51& 61** for contact with food, and use in beverage and water applications.

Flexelene™

- Polyethylene based polymer – a standard class of material used in the water industry
- Pressure ratings similar to, or higher than, those of comparable polyurethane and PVC tubing
- Far exceeds the pressure capabilities of silicone
- Significantly more flexible than standard polyethylene tubing
- Typical working temperature range – 40°F to + 170°F (– 40°C to 76°C)
- Impact resistant at low temperatures • Maintains flexibility to – 40°F
- UV stable with excellent ozone resistance • Suitable for use with de-ionized water
- Contains no toxic plasticizers and is silicone free
- Abrasion and chemical resistant
- Available in clear or a variety of colors
- Economical



Certified to
NSF/ANSI 61
NSF/ANSI 51



- * The N suffix in the Flexelene™ part number denotes Natural/Clear tubing
- * To order colored tubing, replace the N with the appropriate color suffix from the chart below

Ordering Tubing

*All Flexelene™ colors are UV stabilized

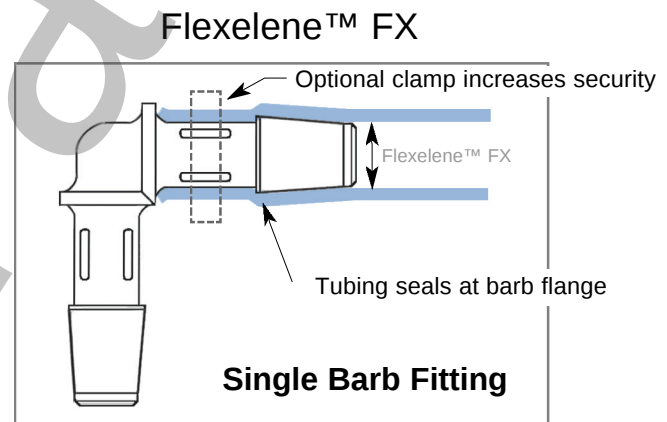
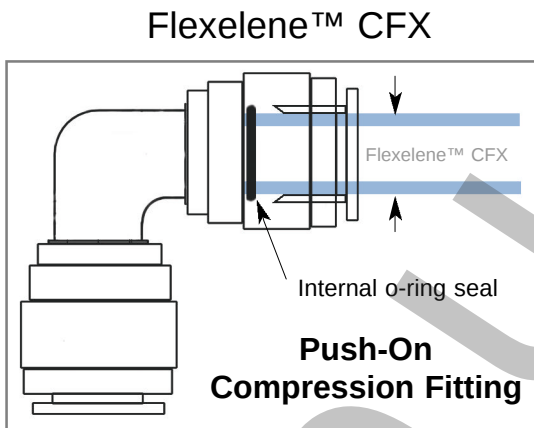
Color Suffix	Tubing Color	FX Tubing ID	CFX Tubing OD	+ Denotes standard colors 0 Denotes colors available based on a quantity order								
		1/16"	3/32"	1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"
N	Natural/Clear	+	+	+	+	+	+	+	+	+	+	+
W	White	0	0	+	0	+	0	0	0	0	0	0
B	Blue	0	0	+	+	+	0	+	0	0	0	0
X	Black	0	0	+	+	+	0	+	0	0	0	0
R	Red	0	0	+	+	+	0	+	0	0	0	0
O	Orange	0	0	+	0	+	0	0	0	0	0	0
V	Violet	0	0	+	0	+	0	0	0	0	0	0
G	Green	0	0	+	0	+	0	0	0	0	0	0
Y	Yellow	0	0	+	0	+	0	0	0	0	0	0

Flexelene™ FX and CFX Tubing

Fitting Compatibility

Flexelene™ FX tubing is designed for use with barbed fittings and is compatible with most standard barb sizes. The inside diameter of the tubing is sized so that Eldon James fittings fit easily into the tubing. FX tubing and FXAG (anti-microbially protected) tubing are recommended for use with barbed fittings only.

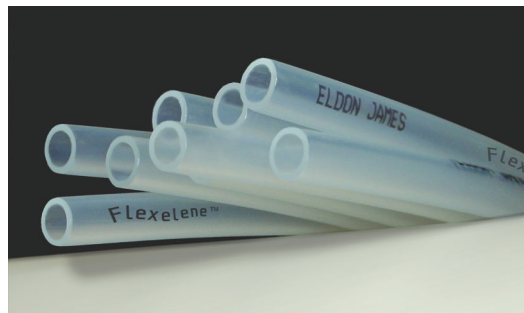
Flexelene™ CFX tubing is designed for use with compression or push-on style fittings. CFX and CFXAG (antimicrobially protected) tubing is sized so that the outside dimension (OD) of the tubing is compatible with push-on fittings. This type of fitting seals with an O-Ring against the tubing's outer wall. Eldon James single barb fittings can be used with Flexelene™ CFX tubing; however, glycerine, water, soap, alcohol or some other type of lubricant may be required to facilitate insertion.

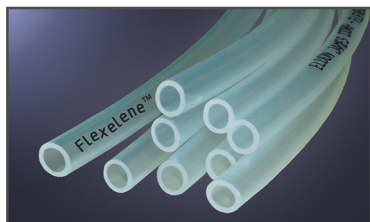


System Design Using Flexelene™ CFX and Push-On Compression Fittings

Flexelene™ flexible CFX & CFXAG tubing offer these advantages over rigid tubing when used with push-on fittings:

1. The tubing's inherent flexibility can alleviate lateral stress, a primary cause of leaks in push-on connections.
2. Flexible tubing dampens vibration and shut-off hammer in a system.
3. Design of a system can incorporate both push-on and barbed fittings when Flexelene™ CFX is used.
4. Because it bends, flexible tubing reduces the number of fittings required for most installations.





Eldon James Corp.

Flexelene™ FX Tubing

Part Number	ID	OD	Working PSI @70°F	Burst PSI @70°F	Wall Thickness	Bend Radius in.
FX1-2N	1/16"	1/8"	110	420	1/32"	5/32"
FX1.5-2.5N	3/32"	5/32"	86	260	1/32"	3/16"
FX2-4N	1/8"	1/4"	150	450	1/16"	1/4"
FX3-5N	3/16"	5/16"	96	320	1/16"	1/2"
FX4-6N	1/4"	3/8"	73	220	1/16"	1"
FX5-7N	5/16"	7/16"	67	200	1/16"	1 1/2"
FX6-8N	3/8"	1/2"	53	160	1/16"	1 3/4"
FX8-10N	1/2"	5/8"	48	145	1/16"	2 1/2"
FX8-12N	1/2"	3/4"	80	240	1/8"	1 1/2"
FX10-12N	5/8"	3/4"	40	120	1/16"	4"
FX12-14N	3/4"	7/8"	30	90	1/16"	8"
FX12-16N	3/4"	1"	33	100	1/16"	TBD
FX16-20N	1"	1 1/4"	45	135	1/8"	8"

Burst pressures are approximately 3 times the maximum working pressure. Higher temperatures will reduce the available working pressure. Results are based on tests at our facility under controlled conditions; therefore, Eldon James Corp. makes no warranty or claim as to the performance of Flexelene™ in a specific application. It is strongly recommended that application-specific testing be done, particularly in situations where pressures approach the listed working PSI.

Flexelene™ FX Natural Quantity Pricing Price Per 100 ft. Roll

Part Number	ID	OD	1-3 Rolls	4-9 Rolls	10-19 Rolls	20-99 Rolls
FX1-2N	1/16"	1/8"	\$22.41	\$20.17	\$19.05	\$17.93
FX1.5-2.5N	3/32"	5/32"	\$23.50	\$21.15	\$19.97	\$18.80
FX2-4N	1/8"	1/4"	\$24.51	\$22.06	\$20.83	\$19.61
FX3-5N	3/16"	5/16"	\$33.62	\$30.26	\$28.58	\$26.90
FX4-6N	1/4"	3/8"	\$41.32	\$37.19	\$35.12	\$33.06
FX5-7N	5/16"	7/16"	\$52.53	\$47.28	\$44.65	\$42.02
FX6-8N	3/8"	1/2"	\$52.53	\$47.28	\$44.65	\$42.02
FX8-10N	1/2"	5/8"	\$96.00	\$86.40	\$81.60	\$76.80
FX8-12N	1/2"	3/4"	\$120.00	\$108.00	\$102.00	\$96.00
FX10-12N	5/8"	3/4"	\$141.00	\$126.90	\$119.85	\$112.80
FX12-14N	3/4"	7/8"	\$141.00	\$126.90	\$119.85	\$112.80
FX12-16N	3/4"	1"	\$143.00	\$128.70	\$121.55	\$114.40
FX16-20N	1"	1 1/4"	\$150.00	\$135.00	\$127.50	\$120.00

Data presented for properties of materials and chemical resistance is for reference only. Customer applications and conditions of use are beyond our control; therefore, it is imperative that customers test Eldon James products in their specific application to determine suitability. All information is provided without implied or expressed warranty or guarantee, and none of the information provided constitutes a recommendation or endorsement of any kind by Eldon James Corporation.



Eldon James Corp.

Flexelene™



Compression Fitting Compatible Tubing

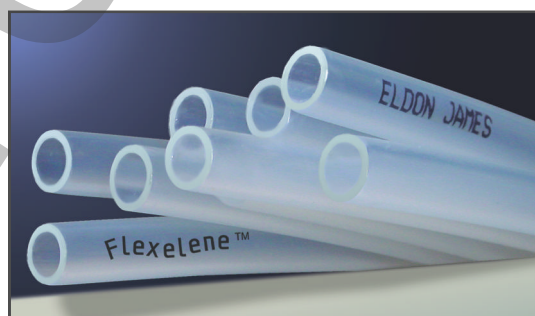
Part Number	OD	ID	Working PSI @70°F	Burst PSI @70°F	Wall Thickness	Bend Radius in.
CFX2-4N	1/4"	.125"	150	450	1/16"	1/4"
CFX170-4N	1/4"	.170"			0.08"	
CFX3-5N	5/16"	.188"	96	320	1/16"	1/2"
CFX4-6N	3/8"	.265"	73	220	1/16"	1"
CFX5-7N	7/16"	.323"	67	200	1/16"	1 1/2"
CFX6-8N	1/2"	.385"	53	160	1/16"	1 3/4"
CFX8-10N	5/8"	.510"	48	145	1/16"	2 1/2"

Burst pressures are approximately 3 times the maximum working pressure. Higher temperatures will reduce the available working pressure. Results are based on tests at our facility under controlled conditions; therefore, Eldon James Corp. makes no warranty or claim as to the performance of Flexelene™ in a specific application. It is strongly recommended that application-specific testing be done, particularly in situations where pressures approach the listed working PSI.

Flexelene™ CFX Natural Quantity Pricing
Price Per 100 ft. Roll

Compression Fitting Compatible Tubing

Part Number	OD	ID	1-3 Rolls	4-9 Rolls	10-19 Rolls	20-99 Rolls
CFX2-4N	1/4"	.125"	\$24.51	\$22.06	\$20.83	\$19.61
CFX170-4N	1/4"	.170"	\$29.06	\$26.16	\$24.70	\$23.25
CFX3-5N	5/16"	.188"	\$33.62	\$30.26	\$28.58	\$26.90
CFX4-6N	3/8"	.265"	\$41.32	\$37.19	\$35.12	\$33.06
CFX5-7N	7/16"	.323"	\$52.53	\$47.28	\$44.65	\$42.02
CFX6-8N	1/2"	.385"	\$52.53	\$47.28	\$44.65	\$42.02
CFX8-10N	5/8"	.510"	\$96.00	\$86.40	\$81.60	\$76.80



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Eldon James Corp.

Flexelene™

colors

Part Number	ID	OD	Working PSI @70°F	Burst PSI @70°F	Wall Thickness	Bend Radius in.
FX1-2 *	1/16"	1/8"	110	420	1/32"	5/32"
FX1.5-2.5 *	3/32"	5/32"	86	260	1/32"	3/16"
FX2-4 *	1/8"	1/4"	150	450	1/16"	1/4"
FX3-5 *	3/16"	5/16"	96	320	1/16"	1/2"
FX4-6 *	1/4"	3/8"	73	220	1/16"	1"
FX5-7 *	5/16"	7/16"	67	200	1/16"	1 1/2"
FX6-8 *	3/8"	1/2"	53	160	1/16"	1 3/4"
FX8-10 *	1/2"	5/8"	48	145	1/16"	2 1/2"
FX8-12 *	1/2"	3/4"	80	240	1/8"	1 1/2"
FX10-12 *	5/8"	3/4"	40	120	1/16"	4"
FX12-14 *	3/4"	7/8"	30	90	1/16"	8"
FX12-16 *	3/4"	1"	33	100	1/16"	TBD
FX16-20 *	1"	1 1/4"	45	135	1/8"	8"

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* ADD COLOR SUFFIX

Flexelene™ FX Color Quantity Pricing

Price Per 100 ft. Roll

Part Number	ID	OD	1-3 Rolls	4-9 Rolls	10-19 Rolls	20-99 Rolls
FX1-2 *	1/16"	1/8"	\$23.84	\$21.46	\$20.27	\$19.07
FX1.5-2.5 *	3/32"	5/32"	\$25.00	\$22.50	\$21.24	\$20.00
FX2-4 *	1/8"	1/4"	\$26.07	\$23.47	\$22.16	\$20.86
FX3-5 *	3/16"	5/16"	\$35.76	\$32.19	\$30.40	\$28.62
FX4-6 *	1/4"	3/8"	\$43.96	\$39.56	\$37.36	\$35.17
FX5-7 *	5/16"	7/16"	\$55.88	\$50.30	\$47.50	\$44.70
FX6-8 *	3/8"	1/2"	\$55.88	\$50.30	\$47.50	\$44.70
FX8-10 *	1/2"	5/8"	\$102.13	\$91.91	\$86.81	\$81.70
FX8-12 *	1/2"	3/4"	\$127.66	\$114.89	\$108.51	\$102.13
FX10-12 *	5/8"	3/4"	\$150.00	\$135.00	\$127.50	\$120.00
FX12-14 *	3/4"	7/8"	\$150.00	\$135.00	\$127.50	\$120.00
FX12-16 *	3/4"	1"	\$152.13	\$136.91	\$129.31	\$121.70
FX16-20 *	1"	1 1/4"	\$159.75	\$143.62	\$135.63	\$127.66

* **ADD COLOR SUFFIX** to colored Flexelene™ part numbers:

☐ **N** Clear
 ☐ **W** White
 ☐ **B** Blue
 ☐ **X** Black
 ☐ **R** Red
 ☐ **O** Orange
 ☐ **V** violet
 ☐ **G** Green
 ☐ **Y** Yellow

Please refer to availability options on page 2 and add color suffix to indicate the color of tubing you would like to order.



Eldon James Corp.

Flexelene™

Colors



⑥

Flexelene™ CFX-Color Tubing

Compression Fitting Compatible Tubing

Part Number	OD	ID	Working PSI @70°F	Burst PSI @70°F	Wall Thickness	Bend Radius in.
CFX2-4 *	1/4"	.125"	150	450	1/16"	1/4"
CFX170-4 *	1/4"	.170"			0.08"	
CFX3-5 *	5/16"	.188"	96	320	1/16"	1/2"
CFX4-6 *	3/8"	.265"	73	220	1/16"	1"
CFX5-7 *	7/16"	.323"	67	200	1/16"	1 1/2"
CFX6-8 *	1/2"	.385"	53	160	1/16"	1 3/4"
CFX8-10 *	5/8"	.510"	48	145	1/16"	2 1/2"

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* ADD COLOR SUFFIX

Flexelene™ CFX Color Quantity Pricing
Price Per 100 ft. Roll

Compression Fitting Compatible Tubing

Part Number	OD	ID	1-3 Rolls	4-9 Rolls	10-19 Rolls	20-99 Rolls
CFX2-4*	1/4"	.125"	\$26.07	\$23.47	\$21.24	\$20.86
CFX170-4*	1/4"	.170"	\$30.92	\$27.83	\$25.82	\$24.74
CFX3-5*	5/16"	.188"	\$35.76	\$32.19	\$30.40	\$28.62
CFX4-6*	3/8"	.265"	\$43.96	\$39.56	\$37.36	\$35.17
CFX5-7*	7/16"	.323"	\$55.88	\$50.30	\$47.50	\$44.70
CFX6-8*	1/2"	.385"	\$55.88	\$50.30	\$47.50	\$44.70
CFX8-10*	5/8"	.510"	\$102.13	\$91.91	\$86.81	\$81.70

* **ADD COLOR SUFFIX** to colored Flexelene™ part numbers:

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 ☐ **W** White
 ☐ **B** Blue
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 ☐ **Y** Yellow

Please refer to availability options on page 2 and add color suffix to indicate the color of tubing you would like to order.

Flexelene™ – Material Properties

Hardness Shore A	Tensile Yield (MPa)	Ultimate Tensile Strength(MPa)	Minimum Operating Temp °F	Maximum Operating Temp °F	Flexural Modulus (MPa)	Vicat Softening Point
92	5.9	24.5	-40°	+170°	59.2	168°F