

# Ozone Compatible Tubing Chart

INNER DIMENSION (inch)	OUTER DIMENSION (INCH)	WALL (inch)	PVDF with EVA LINING	FEP	FLEXELENE	PTFE
1/16	1/8	1/32	N/A	FEP-062 x 125	FX-016 x 125	PTFE-062 x 125
3/32	5/32	1/32	N/A	N/A	FX-094 x 156	N/A
1/8	3/16	1/32	N/A	FEP-125 x 188	N/A	PTFE-125 x 188
1/8	1/4	1/16	N/A	FEP-125 x 250	FX-125 x 250	PTFE-125 x 250
5/32	1/4	3/64	N/A	FEP-156 x 250	N/A	PTFE-156 x 250
3/16	1/4	1/32	EVA-188 x 250	FEP-188 x 250	NA	PTFE-188 x 250
3/16	5/16	1/16	N/A	FEP-188 x 313	FX-188 x 313	PTFE-188 x 313
1/4	5/16	1/32	N/A	FEP-250 x 313	N/A	PTFE-250 x 313
1/4	3/8	1/16	N/A	FEP-250 x 375	FX-250 x 375	PTFE-250 x 375
5/16	3/8	1/32	N/A	FEP-313 x 375	N/A	PTFE-313 x 375
5/16	7/16	1/16	N/A	N/A	FX-313 x 478	N/A

INNER DIMENSION (inch)	OUTER DIMENSION (INCH)	WALL (inch)	PVDF with EVA LINING	FEP	FLEXELENE	PTFE
3/8	7/16	1/32	N/A	FEP-375 x 438	N/A	PTFE-375 x 438
3/8	1/2	1/16	EVA-375 x 500	FEP-375 x 500	FX-375 x 500	PTFE-375 x 500
7/16	1/2	1/32	N/A	FEP-438 x 500	N/A	N/A
1/2	5/8	1/16	N/A	FEP-500 x 625	FX-500 x 625	PTFE-500 x 625
9/16	5/8	1/32	N/A	FEP-563 x 625	N/A	PTFE-563 x 625
9/16	11/16	1/16	N/A	N/A	N/A	PTFE-563 x 688
5/8	3/4	1/16	N/A	FEP-625 x 750	N/A	PTFE-625 x 750
11/16	3/4	1/32	N/A	FEP-688 x 750	N/A	PTFE-688 x 750
3/4	1	1/8	N/A	N/A	FX-750 x 1000	N/A
1	1-1/4	1/8	N/A	N/A	FX-1000 x 1250	N/A

## Picking the Right Tubing

### Factors affecting tubing selection:

S (size)	The Inside Diameter (ID) and also the wall thickness if specified.	What continuous length is desired?  Is the flexibility of the tubing a concern?
T (temperature)	The temperature of the substance passing through the tubing as well as the temperature of the environment.	Will the tubing be placed indoors, outdoors or buried?
A (application)	How is it being used?	Is the flexibility of the tubing a concern?  How soon do you need the tubing?
M (media)	What is the chemical and concentration of the material passing through the tubing?	If the media will be ozone gas, what is the percentage by net weight of the ozone?
P (pressure)	To what pressure / vacuum will the tubing be subjected?	

FACTOR	PVDF with EVA OUTER JACKET	FEP	FLEXELENE	PTFE
<b>Material Name</b>	Polyvinylidene Fluoride with Ethylene-Vinyl Acetate	Flourinated Ethylene-Propylene	Polyethylene Based Polymer	Polytetrafluoro-Ethylene
<b>Processed</b>	Melt Extrusion for Both Materials	Melt by Injection Molding		Paste Extrusion
<b>Ozone Amount of Rating</b>	N/A	Excellent	Up to 1.5% (32 g/m3)	Excellent

<b>Available Footages</b>	100 feet continuous length, also available in 1 foot increments / Longer continuous lengths available by special order, please call for pricing and availability	100 feet continuous length, also available in 1 foot increments / Longer continuous lengths available by special order, please call for pricing and availability	100 feet continuous length, also available in 1 foot increments / Longer continuous lengths available by special order, please call for pricing and availability	100 feet continuous length, also available in 1 foot increments / Longer continuous lengths available by special order, please call for pricing and availability
<b>Fittings to Use</b>	Barbed Only	Barbed or Compression	Barbed Only	Barbed or Compression
<b>Tensile of Burst PSI</b>	N/A	3000	1/2" x 5/8" = 145	2500 - 4000
<b>Flexibility 0-4 (most)</b>	3	2	4	1
<b>Rigidity</b>	Easily Flattened	Can be Stepped on without Collapsing	Easily Flattened, but will Bounce Back	Can be Stepped on without Collapsing
<b>Hardness (D2240)</b>	N/A	57 Shore D	92 Shore A	60 Shore D
<b>Coefficient of Friction or Lubricity (D1894) 0-4 (best)</b>	2	(0.27 - 0.67) 3	1	(0.08) 4
<b>UV (outdoor) Exposure</b>	Excellent	Excellent	Good	Excellent
<b>Specific Gravity gm/cu.cm (resin weight)</b>	N/A	2.15		2.17

<b>Chemical Resistance Rating (best) A-D</b>	Poor with Strong Acids, Otherwise B	A (all common solvents, acids and bases)		A (all common solvents, acids and bases)
<b>Working Temperature</b>	110° F / 43° C	-418° - 403° F / -250° C - 206° C	-40° - 170° F / -40 - 76° C	-454° - 500° F / -270° - 260° C
<b>Continuous Service Temperature</b>	155° F / 68° C	400° F / 204° C	170° F / 76° C	500° F / 260° C
<b>Melting Point</b>	176° F / 80° C	518° F / 270° C (D2236)	168° F (Vicat softening point)	621° F / 327° C (D2236)
<b>Dielectric Constant (D150-81)</b>	N/A	2.1		2.1
<b>Weathering 0-4 (best)</b>	Yellows in Sun	4		3.5
<b>Natural Color</b>	Clear Inside with White Outer Jacket	Clear	Clear	White or Translucent
<b>Colors Available (not kept in stock)</b>	Outer Jacket Color	White, Blue, Black, Red, Orange, Green	White, Blue, Black, Red, Orange, Purple, Green, Yellow, Brown, Pink	White, Blue, Black, Red, Orange, Green
<b>Certifications</b>	N/A	FDA Raw Material Approved	USP Class VI NSF 51 Certified Raw Materials, RoHS Compliant	USP Class VI Approved