

Versilon™ C-210-A

Oil, Fuel and Grease Resistant Tubing

Exceptional Properties

Our rigidly controlled manufacturing process makes Versilon C-210-A tubing the flexible polyurethane tubing that has consistent tight tolerances from lot to lot. Made of tough ester-based polyurethane, Versilon C-210-A tubing's clarity, high tear strength and excellent abrasion resistance make it ideal for many applications, including fuel and lubricant lines, pneumatic lines, abrasive product transfer and cable jacketing. It also offers exceptional resistance to oils, greases, fuels and many other chemicals.

Versilon C-210-A tubing is able to withstand rugged daily use; it resists weathering and can be safely used in temperatures ranging from -100°F (-73°C) to 175°F (79°C).

Excellent Stability Even When Exposed to Oils, Greases and Fuels

While many rubber and plastic materials exhibit resistance to certain solvents, oils and chemicals, Versilon tubing will resist a much wider range of substances.

Plasticizer extraction leading to embrittlement is one of the most frequent causes of failure when flexible tubing is exposed to harsh chemicals. Versilon C-210-A tubing is plasticizer-free and remains flexible even when cycled through temperature extremes.

Easy and Secure Attachment to Fittings

Versilon C-210-A tubing's precision tolerances and high elasticity provide the user with an easy, worry-free attachment to fittings.

Features and Benefits

- Consistently tight dimensional tolerances
- Excellent abrasion and tear resistance
- Excellent resistance to oils, greases and fuels
- Retains flexibility in sub-zero environments
- High tear resistance

Typical Applications

- Abrasive and viscous slurry transfer
- Lubrication and degreaser dispensing
- Pellet and powder transfer
- Pneumatic sensory devices
- Instrumentation control lines
- Coolant recovery systems

Versilon C-210-A

Part Number	ID	OD	Wall Thickness	Min. Bend Radius	Max. Working Pressure		Vacuum Rating	
	(in)	(in)	(in)	(in)	73°F (psi)*	175°F (psi)*	73°F (inHg)	175°F (inHg)
AEM02002	1/16	1/8	1/32	3/16	70	40	29.9	29.9
AEM02006	1/8	3/16	1/32	1/2	45	25	29.9	29.9
AEM02007	1/8	1/4	1/16	5/16	74	45	29.9	29.9
AEM02011	3/16	1/4	1/32	1	34	19	29.9	29.9
AEM02012	3/16	5/16	1/16	5/8	56	33	29.9	29.9
AEM02013	3/16	3/8	3/32	7/16	70	44	29.9	29.9
AEM02016	1/4	5/16	1/32	1-9/16	28	12	20.0	5.0
AEM02017	1/4	3/8	1/16	15/16	42	25	29.9	29.9
AEM02018	1/4	7/16	3/32	11/16	58	28	29.9	29.9
AEM02019	1/4	1/2	1/8	9/16	70	45	29.9	29.9
AEM02022	5/16	7/16	1/16	1-15/16	36	22	29.9	29.9
AEM02027	3/8	1/2	1/16	1-3/4	34	19	29.9	25.0
AEM02028	3/8	9/16	3/32	1-5/16	45	27	29.9	29.9
AEM02029	3/8	5/8	1/8	1-1/16	54	33	29.9	29.9
AEM02033	7/16	5/8	3/32	1-11/16	40	21	29.9	29.9
AEM02034	7/16	11/16	1/8	1-3/8	49	29	29.9	29.9
AEM02036	1/2	5/8	1/16	2-7/8	26	14	20.0	5.0
AEM02037	1/2	11/16	3/32	2-1/8	36	18	29.9	29.9
AEM02038	1/2	3/4	1/8	1-3/4	46	27	29.9	29.9
AEM02044	5/8	3/4	1/16	4-1/8	24	11	10.0	5.0
AEM02045	5/8	13/16	3/32	3	32	16	29.9	15.0
AEM02046	5/8	7/8	1/8	2-3/8	38	21	29.9	29.9
AEM02052	3/4	15/16	3/32	4	26	13	15.0	5.0
AEM02053	3/4	1	1/8	3-1/4	33	20	29.9	25.0
AEM02059**	7/8	1-1/8	1/8	4-1/8	30	18	29.9	20.0
AEM02062	1	1-1/4	1/8	5-1/8	28	14	15.0	10.0

* Working pressures are calculated at a 1:5 ratio relative to burst pressure using ASTM D1599.
 ** Made to order, minimums will apply.

Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness (Shore A), 15 sec	D2240	82
Color	—	Clear
Opacity	—	Transparent
Tensile Strength, psi (MPa)	D412	6050 (41.7)
Ultimate Elongation, %	D412	500
Tear Resistance, lb-f/in. (kN/m)	D1004	475 (83.1)
	D624	400 (70.0)
	Die C	
Specific Gravity	D792	1.20
Water Absorption, % 24 hrs @ 23°C	D570	1.12
Compression Set Constant Deflection, % @ 158°F (70°C) for 22 hrs	D395 Method B	68
Brittleness Temp., °F (°C)	D746	-100 (-73)
Maximum Recommended Operating Temp., °F (°C)	—	175 (79)
Tensile Stress, psi (MPa)	D412	@ 100% Elongation
		800 (5.5)
		@ 300% Elongation
1500 (10.4)		
Tensile Set, %	D412	98
Dielectric Strength, v/mil (kV/mm)	D149	330 (12.9)

Unless otherwise noted, all tests were conducted at room temperature (73°F). Values shown were determined on 0.075" thick extruded strip or 0.075" thick molded ASTM plaques or molded ASTM durometer buttons.

The values listed for working and burst pressures are derived from tests conducted under controlled laboratory conditions. Many factors will reduce the tubing's ability to withstand pressure, including temperature, chemical attack, stress, pulsation and the attachment to fittings. It is imperative that the user conduct tests simulating the conditions of the application prior to specifying the tubing for use.



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NOTE: The data and details given in this document are correct and up to date. This document is intended to provide information about the product and possible applications. This document is not the product specification and does not provide specific features, nor does it guarantee product performance in specific applications. Saint-Gobain cannot anticipate or control the conditions of the field and for this reason strongly recommends that practical tests are conducted to ensure that the product meets the requirements of a specific application.

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