

AEROSPACE MATERIAL SPECIFICATION



AMS-T-81914/3

Issued

JUN 1999

Tubing, Plastic, Flexible, Convoluted, Fluorinated
Ethylene Propylene, Standard Convolution

FSC 9330

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The complete requirements for procuring the tubing described herein shall consist of this document and the issue in effect of MIL-T-81914(AS).

REQUIREMENTS:

Convolution type: Helical (see 3.3)

Construction details: Construction details, including available sizes, dimensions and tolerances, are located in Table I. Lengths shall be as specified by the procuring activity.

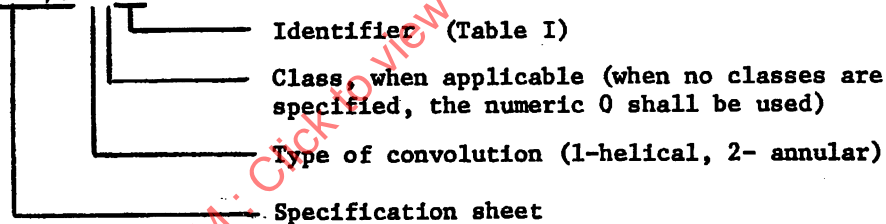
Continuous operating temperature: -67°C (-88°F) to +200°C (392°F).

Color: Unless otherwise specified, the supplied color shall be clear, natural.

Physical properties: General physical requirement values along with associated test conditions are located in Table II.

Part number: Consists of the basic number of this specification sheet and a dash number as shown below:

M81914/3-0000



Standard convolution, Fluorinated Ethylene Propylene, standard wall 0.500 inch is identified as M81914/3-1006.

TABLE I
CONSTRUCTION DETAILS

Ident- ifier	Max. Inside Dia.	Min. Inside Dia.	Max. Outer Dia.	Wall Thickness Max.	Convolutions Per Inch $\pm 1/2$	Weight (Lbs) Per 100 feet Max.	Min. Bend Radius
**01	.187	.181	.320	.018	8	1.5	.500
**02	.281	.273	.414	.018	8	1.7	.750
**03	.312	.306	.450	.018	8	1.9	.750
**04	.375	.364	.510	.018	8	2.2	.875
**05	.437	.427	.571	.018	8	3.1	.875
**06	.500	.485	.650	.023	7	4.0	1.250
**07	.625	.608	.770	.023	7	4.8	1.500
**08	.750	.730	.930	.023	6	6.1	1.750
**09	.875	.860	1.073	.023	5	7.0	2.00
**10	1.000	.975	1.226	.023	5	8.5	2.37
**11	1.125	1.105	1.390	.023	5	9.3	2.37
**12	1.250	1.210	1.539	.023	4	10.9	2.75
**13	1.500	1.437	1.832	.023	4	12.6	3.38
**14	1.750	1.688	2.082	.023	4	14.8	3.88
**15	2.000	1.937	2.332	.023	4	16.8	4.25
**16	2.250	2.188	2.582	.023	4	17.6	5.38
**17	2.500	2.437	2.832	.023	4	20.0	6.00
**18	3.000	2.937	3.332	.023	4	25.1	7.00
**19	4.000	3.937	4.332	.023	4	38.1	9.50
**20	5.000	4.870	5.375	.023	4	43.7	11.0

** - The asterisks shall be replaced with convolution type and class designation.

Note: Unless otherwise specified all dimensions are in inches.

TABLE II
PHYSICAL PROPERTIES

PROPERTY	REQUIREMENT	TEST METHOD
Construction details	In accordance with Table I	4.6.1
Stress in psi @ 10% strain	225 to 700	4.6.2
Specific gravity, max.	2.18	4.6.3