SAE The Engineering Society For Advancing Mobility Land Sea Air and Space®
INTERNATIONAL
400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE MATERIAL SPECIFICATION

SAE AMS-T-81914/5

Issued JUL 1998

Submitted for recognition as an American National Standard

Tubing, Plastic, Extra Flexible, Convoluted, Ethylene-Tetrafluoroethylene, Close Convolution

NOTICE

This document has been taken directly from U.S. Military Specification MIL-T-81914/5(AS) and contains only minor editorial and format changes required to bring it into conformance with the publishing requirements of SAE technical standards. The initial release of this document is intended to replace MIL-T-81914/5(AS). Any part numbers established by the original specification remain unchanged.

The original Military Specification was adopted as an SAE standard under the provisions of the SAE Technical Standards Board (TSB) Rules and Regulations (TSB 001) pertaining to accelerated adoption of government specifications and standards. TSB rules provide for (a) the publication of portions of unrevised government specifications and standards without consensus voting at the SAE Committee level, and (b) the use of the existing government specification or standard format.

Under Department of Defense policies and procedures, any qualifications requirements and associated qualified products lists are mandatory to DOD contracts. Any requirement relating to qualified products lists (QPL's) has not been adopted by SAE and is not part of this technical report.

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)

Class:

Class 1 - Standard wall thickness
Class 2 - Thin wall thickness

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

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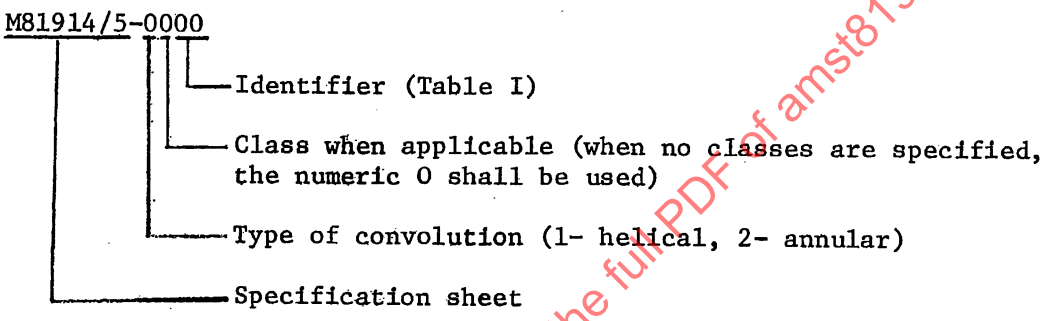
Continuous operating temperature: -67°C (-88°F) to 150°C (302°F)

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.

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



Close convolution, Ethylene-Tetrafluoroethylene, thin wall, 0.500 inch is identified as M81914/5-1206.

TABLE I
CONSTRUCTION DETAILS

IDENT-IFIER	MAXIMUM INSIDE DIAMETER	MINIMUM INSIDE DIAMETER	MINIMUM OUTER DIAMETER	WALL THICKNESS MAXIMUM		CONVOLUTIONS PER INCH ±1		WEIGHT PER 100 FT. MAX.		MINIMUM BEND RADIUS
				CLASS 1	CLASS 2	CLASS 1	CLASS 2	CLASS 1	CLASS 2	
**01	.188	. 181	.320	.018	.012	10	11	1.4	1.2	0.31
**02	.281	.273	.414	.018	012	10	11	1.6	1.3	0.41
**03	.312	.306	.450	.018	012	10	11	1.7	1.5	0.41
**04	.375	.359	.510	.018	012	10	11	2.0	1.6	0.50
**05	.437	.427	.571	.018	012	10	11	3.1	1.90	0.50
**06	.500	.480	.650	.023	012	9	10	3.7	2.20	0.75
**07	.625	.603	.770	.023	012	9	10	4.4	2.75	0.75
**08	.750	.725	.930	.023	012	8	9	5.6	3.30	0.93
**09	.875	.860	1.073	.023	012	7	8	7.1	3.85	1.25
**10	1.000	.970	1.226	.023	012	7	8	7.6	4.40	1.25
**11	1.125	1.105	1.390	.023	012	7	8	8.4	4.95	1.43
**12	1.250	1.205	1.539	.023	012	6	7	9.0	5.50	1.43
**13	1.500	1.437	1.832	.023	012	5	6	9.6	6.60	1.75
**14	1.750	1.688	2.082	.023	012	5	6	10.7	7.70	2.00
**15	2.000	1.937	2.332	.023	012	5	6	12.4	8.85	2.25
**16	6.000	5.870	6.120	.028		4		28.5		11.0

** The asterisks shall be replaced by convolution type and class designation

NOTE: Unless otherwise specified, all dimensions are in inches.