

SAE Aerospace An SAE International Group	AEROSPACE MATERIAL SPECIFICATION	SAE AMS-T-81914/4	REV. A
		Issued Cancelled 1998-07 2011-03	
		Superseded by AS81914/4	
Tubing, Plastic, Extra Flexible, Convoluted, Fluorinated Ethylene Propylene, Close Convolution			

RATIONALE

This specification has been transferred from the SAE AMS Committee "P" to the SAE AE8-C1 Committee. This document was intended as a parts specification but was under the jurisdiction of a materials committee. Considering this is a parts specification this revision cancels the AMS-T-81914/4 material standard and supersedes with AS81914/4 parts standard. All part numbers will remain M81914/4 in accordance with SAE guidelines.

CANCELLATION NOTICE

This specification has been declared "CANCELLED" by the Aerospace Materials Division, SAE, as of March 2011 and has been superseded by AS81914/4. The requirements of the latest issue of AS81914/4 shall be fulfilled whenever reference is made to the cancelled AMS-T-81914/4. By this action, this document will remain listed in the Numerical Section of the Index of Aerospace Material Specifications, noting that it has been superseded by AS81914/4.

Cancelled specifications are available from SAE.

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SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

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NOTICE

This document has been taken directly from U.S. Military Specification MIL-T-81914/4(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-81914/4(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.

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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)

Class:

Class 1 - Standard wall thickness

Class 2 - Thin wall thickness

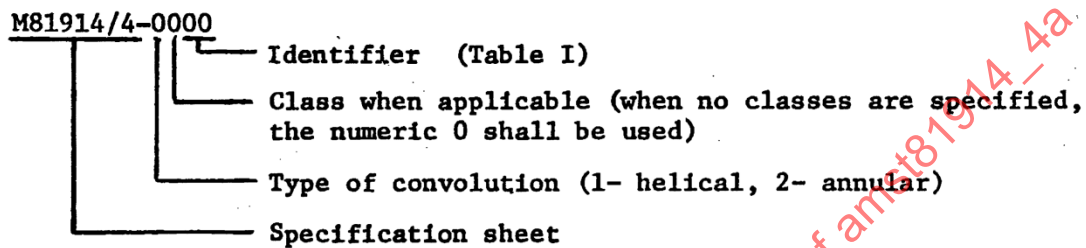
Construction details: Construction details, including available sizes, dimensions and tolerances, are located in Table I. Lengths shall be as specified by the procuring activity.

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.

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



Close convolution, Fluorinated ethylene propylene, thin wall, 0.500 inch is identified as M81914/4-1206.

TABLE I
CONSTRUCTION DETAILS

Ident- ifier	Maximum Inside Dia.	Minimum Inside Dia.	Maximum Outer Dia.	Wall Thickness Max.		Convolutions per inch; ± 1		Weight per 100 ft., Max		Min. Bend Radius
				Class 1	Class 2	Class 1	Class 2	Class 1	Class 2	
**01	.188	.181	.320	.018	.013	10	11	1.7	1.4	0.31
**02	.281	.273	.414	.018	.013	10	11	2.0	1.6	0.41
**03	.312	.306	.450	.018	.013	10	11	2.1	1.9	0.41
**04	.375	.359	.510	.018	.013	10	11	2.5	2.0	0.50
**05	.437	.427	.571	.018	.013	10	11	3.9	2.9	0.50
**06	.500	.480	.650	.023	.018	9	10	4.6	3.4	0.75
**07	.625	.603	.770	.023	.018	9	10	5.5	4.4	0.75
**08	.750	.725	.930	.023	.018	8	9	6.9	5.4	0.93
**09	.875	.860	1.073	.023	.018	7	8	8.9	6.9	1.25
**10	1.000	.970	1.226	.023	.018	7	8	9.5	7.5	1.25
**11	1.125	1.105	1.390	.023	.018	7	8	10.5	8.5	1.43
**12	1.250	1.205	1.539	.023	.018	6.5	7	11.2	9.7	1.43
**13	1.500	1.437	1.832	.023	.018	5.5	6	12.0	11.3	1.75
**14	1.750	1.688	2.082	.023	.018	5.5	6	13.5	12.3	2.00
**15	2.000	1.937	2.332	.023	.018	5.5	6	15.5	13.3	2.25
**16	6.000	5.870	6.120	-	.018	-	6	-	32.1	11.0

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

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