



AEROSPACE MATERIAL SPECIFICATION

AMS-DTL-23053™/12

REV. B

Issued 1999-07
Revised 2012-09
Cancelled 2018-12

Superseded by AS23053/12

Insulation Sleeving, Electrical, Heat Shrinkable,
Polytetrafluoroethylene

FSC 5970

RATIONALE

Requirements of AMS-DTL-23053/12 have been replaced in entirety by AS23053/12.

CANCELLATION NOTICE

This Technical Report has been declared "CANCELLED" as of December 2018 and has been superseded by AS23053/12. By this action, this document will remain listed in the respective index, if applicable. Cancelled Technical Reports are available from SAE.

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The requirements for acquiring the sleeving described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-DTL-23053.

REQUIREMENTS

Polymer type: The base polymer used in formulating this sleeving shall be polytetrafluoroethylene.

Continuous operating temperature range: -88 °F (-67 °C) to +482 °F (+250 °C).

Class: The sleeving shall be furnished in the following classes, as specified (See 6.4a and 6.8):

Class 1 - Thick wall sleeving

Class 2 - Standard wall sleeving

Class 3 - Thin wall sleeving

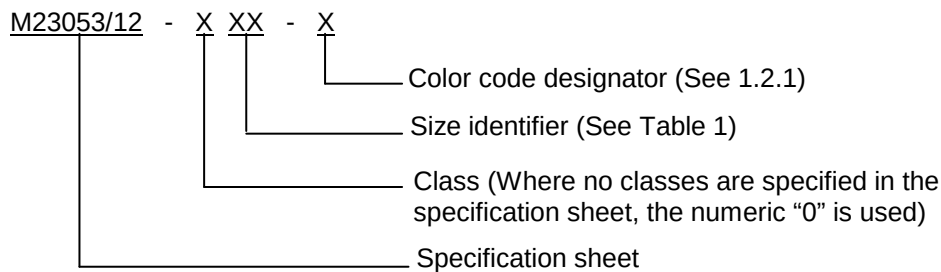
Class 4 - Very thin wall sleeving

Class 5 - High shrink, thin wall

Color: The sleeving shall be furnished in clear (transparent milk white to light tan) or in the color specified by the acquiring activity. Colors shall conform to the requirements of Class I of MIL-STD-104. (See 1.2.1 and 3.4.2.1)

Longitudinal change: ±20 percent

Military part number: The Military part number shall consist of the basic number of this specification sheet and dash numbers as follows:



Example: Thin walled (Class 3), 0.430 inch (10.9 mm) as supplied ID, clear sleeving shall be identified as M23053/12-327-C.

TABLE 1 - CONSTRUCTION DETAILS, INCHES (MM) 1/

Military part number <u>1/</u>	As supplied ID minimum	After unrestricted shrinkage	
		ID maximum	Wall Thickness <u>2/</u>
<u>Class 1</u>			
M23053/12-101-*	0.166 (4.22)	0.130 (3.30)	0.030 ± 0.005 (0.762 ± 0.127)
M23053/12-102-*	0.250 (6.35)	0.193 (4.90)	0.030 ± 0.005 (0.762 ± 0.127)
M23053/12-103-*	0.333 (8.46)	0.257 (6.53)	0.030 ± 0.005 (0.762 ± 0.127)
M23053/12-104-*	0.415 (10.54)	0.320 (8.13)	0.030 ± 0.005 (0.762 ± 0.127)
M23053/12-105-*	0.498 (12.65)	0.383 (9.73)	0.030 ± 0.005 (0.762 ± 0.127)
M23053/12-106-*	0.580 (14.73)	0.448 (11.38)	0.030 ± 0.006 (0.762 ± 0.152)
M23053/12-107-*	0.666 (16.92)	0.510 (12.95)	0.030 ± 0.006 (0.762 ± 0.152)
M23053/12-108-*	0.748 (19.00)	0.572 (14.53)	0.030 ± 0.006 (0.762 ± 0.152)
M23053/12-109-*	0.830 (21.08)	0.637 (16.18)	0.030 ± 0.006 (0.762 ± 0.152)
M23053/12-110-*	0.915 (23.24)	0.700 (17.78)	0.032 ± 0.006 (0.813 ± 0.152)
M23053/12-111-*	1.000 (25.40)	0.764 (19.41)	0.040 ± 0.007 (1.016 ± 0.178)
M23053/12-112-*	1.170 (29.72)	0.891 (22.63)	0.045 ± 0.007 (1.143 ± 0.178)
MS3053/12-113-*	1.330 (33.78)	1.020 (25.91)	0.050 ± 0.008 (1.270 ± 0.203)
<u>Class 2</u>			
M23053/12-201-*	0.050 (1.27)	0.027 (0.69)	0.012 ± 0.002 (0.305 ± 0.051)
M23053/12-202-*	0.055 (1.40)	0.032 (0.81)	0.012 ± 0.002 (0.305 ± 0.051)
M23053/12-203-*	0.060 (1.52)	0.039 (0.99)	0.016 ± 0.003 (0.406 ± 0.076)
M23053/12-204-*	0.065 (1.65)	0.043 (1.09)	0.016 ± 0.003 (0.406 ± 0.076)
M23053/12-205-*	0.076 (1.93)	0.049 (1.24)	0.016 ± 0.003 (0.406 ± 0.076)
M23053/12-206-*	0.085 (2.16)	0.054 (1.37)	0.016 ± 0.003 (0.406 ± 0.076)
M23053/12-207-*	0.110 (2.79)	0.067 (1.70)	0.016 ± 0.003 (0.406 ± 0.076)
M23053/12-208-*	0.120 (3.05)	0.072 (1.83)	0.016 ± 0.003 (0.406 ± 0.076)
M23053/12-209-*	0.130 (3.30)	0.080 (2.03)	0.016 ± 0.003 (0.406 ± 0.076)
M23053/12-210-*	0.140 (3.56)	0.080 (2.03)	0.016 ± 0.003 (0.406 ± 0.076)
M23053/12-211-*	0.150 (3.81)	0.089 (2.26)	0.016 ± 0.003 (0.406 ± 0.076)
M23053/12-212-*	0.170 (4.32)	0.101 (2.57)	0.016 ± 0.003 (0.406 ± 0.076)
M23053/12-213-*	0.191 (4.85)	0.112 (2.84)	0.016 ± 0.003 (0.406 ± 0.076)
M23053/12-214-*	0.205 (5.21)	0.124 (3.15)	0.020 ± 0.004 (0.508 ± 0.102)
M23053/12-215-*	0.215 (5.46)	0.130 (3.30)	0.020 ± 0.004 (0.508 ± 0.102)
M23053/12-216-*	0.240 (6.10)	0.141 (3.58)	0.020 ± 0.004 (0.508 ± 0.102)
M23053/12-217-*	0.270 (6.86)	0.158 (4.01)	0.020 ± 0.004 (0.508 ± 0.102)
M23053/12-218-*	0.302 (7.67)	0.178 (4.52)	0.020 ± 0.004 (0.508 ± 0.102)
M23053/12-219-*	0.320 (8.13)	0.198 (5.03)	0.020 ± 0.004 (0.508 ± 0.102)
M23053/12-220-*	0.370 (9.40)	0.224 (5.69)	0.020 ± 0.004 (0.508 ± 0.102)