

REV.
A

AS23053™/2

FEDERAL SUPPLY CLASS
5970

RATIONALE

CORRECTION TO MILITARY PART NUMBER IN TABLE 1 IS REQUIRED.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS23053.

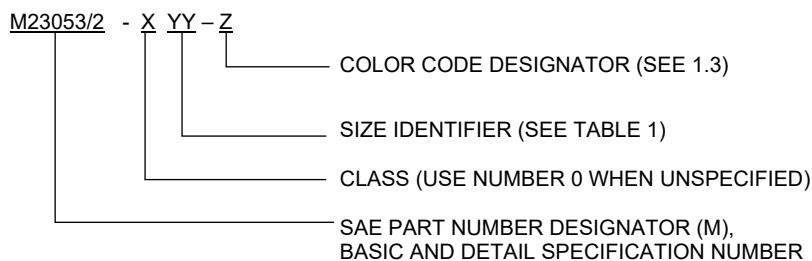
PARAGRAPH NUMBERS REFERENCED HEREIN WITHOUT A SPECIFICATION NUMBER ARE OF AS23053.

REQUIREMENTS:

1. QUALIFICATION: NO QUALIFIED PARTS LIST (QPL) SHALL BE ISSUED FOR SLEEVINGS IN THIS SPECIFICATION.
2. EXCLUSION FOR USE: THESE SLEEVINGS SHALL BE EXCLUDED FROM USE IN ALL SPACE VEHICLES, ALL AIRCRAFT, AND IN ENCLOSURES WHICH ARE SEALED OR PRIMARILY DEPENDENT ON RECIRCULATED ATMOSPHERE FOR COOLING (SEE INTENDED USE).
3. CONTINUOUS OPERATING TEMPERATURE RANGE: -20 °C (-4 °F) TO 105 °C (221 °F).
4. CLASSIFICATION: THE HEAT SHRINKABLE SLEEVING SHALL BE FURNISHED IN THE FOLLOWING CLASSES, AS SPECIFIED:
CLASS 1 - CROSSLINKED
CLASS 2 - NON-CROSSLINKED
5. COLOR: CLASS 1 SHALL BE FURNISHED IN THE COLORS CONFORMING TO CLASS II OF MIL-STD-104. CLASS 2 SHALL BE FURNISHED IN COLORS CONFORMING TO CLASS II OF MIL-STD-104.
6. LONGITUDINAL CHANGE: CLASS 1: -10, +1%; CLASS 2, -25%.
7. DIMENSIONAL LIFE: THE DIMENSIONAL LIFE OF A PRODUCT APPLIES TO THE EXPANDED ID, RECOVERED ID AND WALL THICKNESS DIMENSIONS OF THE PRODUCT AS SOLD BY THE MANUFACTURER, DISTRIBUTORS AND RE-BRANDERS. AS23053/2 PRODUCTS CAN BE EXPECTED TO HAVE A MINIMUM DIMENSIONAL LIFE AS LISTED BELOW. A PRODUCT MAY BE USED BY THE FINAL PURCHASER BEYOND THE EXPECTED MINIMUM DIMENSIONAL LIFE, AS LONG AS THE EXPANDED ID, RECOVERED ID AND WALL THICKNESS OF THE PRODUCT MEET THE REQUIREMENTS OF THIS SPECIFICATION AT THE TIME OF USE.

CLASS OF SLEEVING	STORAGE TEMPERATURE	MINIMUM DIMENSIONAL LIFE (MONTHS)
1	35 °C (95 °F)	12
2	21 °C (70 °F)	10
2	27 °C (80 °F)	6
2	32 °C (90 °F)	3
2	35 °C (95 °F)	1

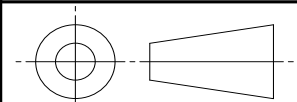
8. MILITARY PART NUMBER: THE MILITARY PART NUMBER SHALL CONSIST OF THE BASIC NUMBER OF THIS SPECIFICATION SHEET AND DASH NUMBERS AS SHOWN BELOW:



EXAMPLE: CLASS 2, STANDARD WALL, CLEAR, .750 INCH AS SUPPLIED ID SLEEVING SHALL BE IDENTIFIED AS M23053/2-209-C.

SAE values your input. To provide feedback on this Technical Report, please visit
<http://standards.sae.org/AS23053/2A>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8D

PROCUREMENT SPECIFICATION: AS23053



AEROSPACE STANDARD

INSULATION SLEEVING, ELECTRICAL, HEAT SHRINKABLE, POLYVINYL CHLORIDE, SEMI RIGID, CROSSLINKED AND NON-CROSSLINKED

AS23053™/2
SHEET 1 OF 4

REV.
A

Documents

9. UNRESTRICTED SHRINKAGE: TEST METHOD 5.5;
 CLASS 1, 200 °C ± 2 °C (392 °F ± 4 °F) FOR 5 MINUTES;
 CLASS 2, 150 °C ± 2 °C (302 °F ± 4 °F) FOR 5 MINUTES.

TABLE 1 - CONSTRUCTION DETAILS (INCHES) ^{1/}

PART NUMBER	AS SUPPLIED ID MINIMUM	AFTER UNRESTRICTED SHRINKAGE	
		ID MAXIMUM	WALL THICKNESS 2/
CLASS 1			
M23053/2-101-*	.046 (1.2)	.023 (0.6)	.020 ± .003 (0.5 ± 0.1)
M23053/2-102-*	.063 (1.6)	.031 (0.8)	.020 ± .003 (0.5 ± 0.1)
M23053/2-103-*	.093 (2.4)	.046 (1.2)	.020 ± .003 (0.5 ± 0.1)
M23053/2-104-*	.125 (3.2)	.062 (1.6)	.025 ± .003 (0.6 ± 0.1)
M23053/2-105-*	.187 (4.7)	.093 (2.4)	.025 ± .003 (0.6 ± 0.1)
M23053/2-106-*	.250 (6.4)	.125 (3.2)	.025 ± .003 (0.6 ± 0.1)
M23053/2-107-*	.375 (9.5)	.187 (4.7)	.030 ± .005 (0.8 ± 0.1)
M23053/2-108-*	.500 (12.7)	.250 (6.4)	.030 ± .005 (0.8 ± 0.1)
M23053/2-109-*	.750 (19.1)	.375 (9.5)	.035 ± .005 (0.9 ± 0.1)
M23053/2-110-*	1.000 (25.4)	.500 (12.7)	.040 ± .005 (1.0 ± 0.1)
M23053/2-111-*	1.500 (38.1)	.750 (19.1)	.045 ± .006 (1.1 ± 0.2)
M23053/2-112-*	2.000 (50.8)	1.000 (25.4)	.050 ± .007 (1.3 ± 0.2)
CLASS 2 - STANDARD WALL			
M23053/2-201-*	.046 (1.2)	.023 (0.6)	.020 ± .003 (0.5 ± 0.1)
M23053/2-202-*	.063 (1.6)	.031 (0.8)	.020 ± .003 (0.5 ± 0.1)
M23053/2-203-*	.093 (2.4)	.046 (1.2)	.020 ± .003 (0.5 ± 0.1)
M23053/2-204-*	.125 (3.2)	.062 (1.6)	.025 ± .003 (0.6 ± 0.1)
M23053/2-205-*	.187 (4.7)	.093 (2.4)	.025 ± .003 (0.6 ± 0.1)
M23053/2-206-*	.250 (6.4)	.126 (3.2)	.025 ± .003 (0.6 ± 0.1)
M23053/2-207-*	.375 (9.5)	.187 (4.7)	.030 ± .005 (0.8 ± 0.1)
M23053/2-208-*	.500 (12.7)	.250 (6.4)	.030 ± .005 (0.8 ± 0.1)
M23053/2-209-*	.750 (19.1)	.750 (19.1)	.035 ± .005 (0.9 ± 0.1)
M23053/2-210-*	1.000 (25.4)	.500 (12.7)	.040 ± .005 (1.0 ± 0.1)
M23053/2-211-*	1.500 (38.1)	.750 (19.1)	.045 ± .006 (1.1 ± 0.2)
M23053/2-212-*	2.000 (50.8)	1.000 (25.4)	.050 ± .007 (1.3 ± 0.2)
CLASS 2 - THIN WALL			
M23053/2-213-*	.063 (1.6)	.037 (0.9)	.014 ± .003 (0.4 ± 0.1)
M23053/2-214-*	.093 (2.4)	.055 (1.4)	.014 ± .003 (0.4 ± 0.1)
M23053/2-215-*	.125 (3.2)	.075 (1.9)	.014 ± .003 (0.4 ± 0.1)
M23053/2-216-*	.187 (4.7)	.110 (2.8)	.018 ± .003 (0.5 ± 0.1)
M23053/2-217-*	.250 (6.4)	.150 (3.8)	.022 ± .004 (0.6 ± 0.1)
M23053/2-218-*	.375 (9.5)	.225 (5.7)	.022 ± .004 (0.6 ± 0.1)
M23053/2-219-*	.500 (12.7)	.300 (7.6)	.022 ± .004 (0.6 ± 0.1)
M23053/2-220-*	.750 (19.1)	.450 (11.4)	.022 ± .004 (0.6 ± 0.1)
M23053/2-221-*	1.000 (25.4)	.600 (15.2)	.022 ± .004 (0.6 ± 0.1)
M23053/2-222-*	1.500 (38.1)	.900 (22.9)	.034 ± .005 (0.9 ± 0.1)
M23053/2-223-*	2.000 (50.8)	1.200 (30.5)	.034 ± .005 (0.9 ± 0.1)
M23053/2-224-*	3.000 (76.2)	1.800 (45.7)	.034 ± .005 (0.9 ± 0.1)
M23053/2-225-*	4.000 (101.6)	2.400 (61.0)	.034 ± .005 (0.9 ± 0.1)
M23053/2-226-*	5.000 (127.0)	3.000 (76.2)	.034 ± .005 (0.9 ± 0.1)
M23053/2-227-*	6.000 (152.4)	3.600 (91.4)	.034 ± .005 (0.9 ± 0.1)

^{1/} DIAMETER LIMITS FOR OBJECT TO BE ENCLOSED SHALL BE AS RECOMMENDED IN TECHNICAL DATA.

^{2/} WALL THICKNESS DIMENSIONS ARE LESS WHEN SHRINKAGE IS RESTRICTED.

* - THE ASTERISK IN THE PART NUMBER SHALL BE REPLACED BY COLOR CODE DESIGNATIONS.

	AEROSPACE STANDARD	AS23053™/2 SHEET 2 OF 4	REV. A
	INSULATION SLEEVING, ELECTRICAL, HEAT SHRINKABLE, POLYVINYL CHLORIDE, SEMI RIGID, CROSSLINKED AND NON-CROSSLINKED		



Documents

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