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400 COMMONWEALTH DRIVE, WARRENDALE, PA 15096

AEROSPACE  
MATERIAL  
SPECIFICATION

AMS 3799/3

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Revised

WEBBING, TUBULAR, LOW MODULUS ARAMID  
1(25) Wide, 4000 (17,800 N) Breaking Strength

1. SCOPE:

- 1.1 Form: This specification covers one width and one strength of low modulus aramid tubular webbing.
- 1.2 Application: Primarily for use in construction of parachutes.
- 1.3 Classification: 1 in. (25 mm) wide low modulus aramid tubular webbing having 4000 lb (17,800 N) breaking strength.

2. APPLICABLE DOCUMENTS: Shall be as shown in AMS 3799.

3. TECHNICAL REQUIREMENTS:

- 3.1 Basic Specification: The complete requirements for procuring the tubular webbing described herein shall consist of this document and the latest issue of the basic specification, AMS 3799.
- 3.2 Construction and Properties:
- 3.2.1 Yarn: Yarn used in weaving the webbing shall be low modulus aramid with a carbonization (char) temperature not lower than 355°C (680°F).
- 3.2.1.1 Denier and Filament Count: The yarn shall be 200 denier  $\pm$  15 and shall consist of 100 filaments  $\pm$  10.
- 3.2.1.2 Ply: The yarn shall be 8 ply.
- 3.2.1.3 Twist: The final ply of yarn shall be twisted 2.5 to 2.8 turns per in. (25 mm).
- 3.2.2 Webbing:
- 3.2.2.1 Weave: Shall be tubular, plain, one up and one down.

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- 3.2.2.2 Color: Shall be FED-STD-595 Sage Green 1565, unless otherwise specified. The color shall be obtained by use of melt spun solution dyed yarn.
- 3.2.2.3 Width: Shall be 1.00 in.  $\pm$  0.06 (25.0 mm  $\pm$  1.5).
- 3.2.2.4 Thickness: Shall not exceed 0.120 in. (3.0 mm).
- 3.2.2.5 Weight: Shall not exceed 1.75 oz per linear yd (54 g/m).
- 3.2.2.6 Breaking Strength: Shall be not less than 4000 lb (17,800 N) unaged and not less than 85% of the unaged strength after aging.
- 3.2.2.7 Ultimate Elongation: Shall be not less than 12.0%.
- 3.2.2.8 Thread Count: Warp ends shall be not less than 251. Filling picks shall be not less than 24 per in. (25 mm).
- 3.3 Length of Put-up: Unless otherwise specified, webbing shall be furnished in rolls containing 160 yd  $\pm$  10 (145 m  $\pm$  10). Not more than 2 pieces shall be contained in any one roll.
4. QUALITY ASSURANCE PROVISIONS: Shall be as in AMS 3799 and the following:
- 4.1 Except for breaking strength, the physical and chemical values specified apply to the average of the determinations made on a sample unit for test purposes as specified in the applicable test method. For breaking strength, the lot shall be rejected if any individual determination breaks at a load lower than the required minimum. The sample unit for testing shall be 8 linear yd (7.5 linear m). The lot shall be unacceptable if one or more samples fail to meet any requirement specified. The sample size shall be as specified in the basic specification.
5. PREPARATION FOR DELIVERY: See AMS 3799.
6. ACKNOWLEDGMENT: See AMS 3799.
7. REJECTIONS: See AMS 3799.
8. NOTES: See AMS 3799.