

# AEROSPACE MATERIAL SPECIFICATION

Submitted for recognition as an American National Standard



AMS 3798/7B

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Superseding AMS 3798/7A

Webbing, Low Modulus Aramid  
1-23/32 (44) Wide, 8700 (38,700) Breaking Strength  
Double Plain Weave with Binder

## 1. SCOPE:

### 1.1 Form:

This specification covers one width and one breaking strength of low-modulus aramid webbing.

### 1.2 Application:

See AMS 3798.

### 1.3 Classification:

1-23/32 inches (44 mm) wide low-modulus aramid webbing having 8700 pounds force (38,700 N) breaking strength.

## 2. APPLICABLE DOCUMENTS:

The following publications form a part of this specification to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order.

### 2.1 SAE Publications:

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

See AMS 3798.

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### 3. TECHNICAL REQUIREMENTS:

#### 3.1 Basic Specification:

The complete requirements for procuring the webbing described herein shall consist of this document and the latest issue of the basic specification, AMS 3798.

#### 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 (671 °F).

3.2.1.1 Denier and Filament Count: The yarn shall be 1200 denier  $\pm$  15 and shall consist of 600 filaments  $\pm$  15.

3.2.1.2 Ply: Final warp yarn shall be not less than three ply; binder yarn shall be singles. Filling yarn shall be not less than two ply.

3.2.1.3 Twist: The final ply of yarn shall have not less than 2.5 turns per inch (25.4 mm) twist. The required denier and number of single yarns shall be twisted together (plied) in one operation.

3.2.2 Webbing: Shall conform to the following requirements:

3.2.2.1 Weave: Shall be a double plain weave with a single filling. Separate binder warp ends shall weave two-up and two-down, one end as one. All other warp yarns shall weave two ends as one, except that the edge warp yarns shall weave one end as one, not exceeding eight ends on one selvage and nine on the other selvage.

3.2.2.2 Color: Shall be FED-STD-595, Olive Green 106 solution dyed.

3.2.2.3 Width: Shall be 1.72 inches  $\pm$  0.06 (43.7 mm  $\pm$  1.5), determined in accordance with ASTM D 3774.

3.2.2.4 Thickness: Shall be 0.145 to 0.175 inch (3.68 to 4.44 mm), determined in accordance with ASTM D 1777.

3.2.2.5 Weight: Shall not exceed 4.35 ounces/yard (134.9 g/m), determined in accordance with ASTM D 3776.

3.2.2.6 Breaking Strength: Shall be not less than 8700 pounds force (38,700 N) unaged and not less than 85% of the unaged strength after aging, determined in accordance with FED-STD-191, Method 4108.

3.2.2.7 Thread Count: There shall be not less than 241 warp ends in the face and back, and not less than 29 binder ends, for a total of not less than 270 ends. There shall be not less than 18 filling picks per inch (25.4 mm).