

WEBBING, NYLON/POLYESTER, AIRCRAFT ARRESTING  
Center Pick  
130,000 lb (578 kN)

1. SCOPE:

- 1.1 Form: This specification covers one type of nylon/polyester in the form of webbing.
- 1.2 Application: Primarily for use in land-based aircraft arresting systems.
- 1.3 Classification: Nylon/polyester webbing containing a center pick and having an average breaking strength of 130,000 lb (578 kN).

2. APPLICABLE DOCUMENTS: See AMS 3796.

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 3796.

3.2 Construction and Properties:

- 3.2.1 Yarn: Shall be as specified in Table I and the following:

- 3.2.1.1 Fiber Identification: Ground, binder, and stuffer shall be nylon, prepared from hexamethylene diamine and adipic acid, or its derivatives. Filling shall be polyester, identified as polyethylene glycol terephthalate.

- 3.2.1.2 Melting Point: Shall be not lower than 245°C (475°F).

- 3.2.1.3 Denier: Shall be 1260 except that of filling fibers shall be 1000 or 1100 as specified in Table I.

- 3.2.2 Webbing: Shall be as specified in Table II and as follows:

- 3.2.2.1 Weave: Shall be as shown in Fig. 1.

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3.2.2.2 Edge Wear Markers: There shall be two yellow marker ends in the center of each selvage stuffer as shown in Fig. 1. The marker shall be an 840 denier 5-ply yarn.

3.2.2.3 Length: Shall be as specified by purchaser.

4. QUALITY ASSURANCE PROVISIONS: See AMS 3796.

5. PREPARATION FOR DELIVERY: See AMS 3796.

6. ACKNOWLEDGMENT: See AMS 3796.

7. REJECTIONS: See AMS 3796.

8. NOTES: See AMS 3796.

TABLE I

Characteristics of Yarn

Requirements

Twist, turns per in. (25.4 mm)	
Ground	2.0 to 3.0
Binder	2.0 to 3.0
Stuffer	1.0 to 2.0
Filling	1.0 to 2.0

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TABLE II

## Properties of Webbing

Requirements	
Width <u>1/</u> <u>2/</u> <u>3/</u>	7.937 in. +0.125, -0.062 (201.6 mm +3.0, -1.5)
Thickness	0.345 in. + 0.010 (8.76 mm + 0.25)
Weight, max	50 oz per linear yd (1,550 g/m)
Breaking Strength, min	
Average	130,000 lb (578 kN)
Single Determination	125,000 lb (556 kN)
Breaking Strength, Sewed Loops	<u>4/</u>
Ends in Warp, min	
Ground	574
Binder	136
Yellow Marker	4
Filling Yarns per in. (25.4 mm), min	19.5
Extractable Matter	3.1 to 8.5% by wt.
Stiffness (angle subtended), max	35 deg
Color (after resin treatment)	Black

1/ Nonconformance shall be based on a length greater than 12 in. (305 mm).

2/ Single determination.

3/ A maximum of two single determinations per roll may deviate not more than -1/8 in. (-3 mm).

4/ Three of five specimens shall have a breaking strength not lower than 110,000 lb (489 kN) each; the other two shall have a breaking strength not lower than 100,000 lb (444.8 kN). The width of the sewed loop shall be not more than 8.125 in. (206.5 mm) at any point along the entire length of the loop. Any roll not meeting this requirement shall be unacceptable.