

FED. SUPPLY CLASS

5315

1. SCOPE

1.1 This specification covers headless grooved pins having longitudinal grooves (see 6.1).

1.2 Classification.

1.2.1 Types and grades. Headless grooved pins covered by this specification shall be of the following types and grades (see Figure 1):

- Type A – Taper groove, full length
- Type B – Taper groove, half length
- Type C – Straight groove, full length
- Type D – Taper groove, reverse taper
- Type E – Taper, half length, center groove
- Type F – Straight groove (hopper feeding)

- Grade A – Carbon steel
- Grade B – CRES
- Grade C – Brass

2. APPLICABLE DOCUMENTS

2.1 The following documents of the issue in effect on date of invitation for bids or request for proposal form a part of the specification to the extent specified herein.

SPECIFICATIONS

Federal

~~QQ-B-626 ————— Brass, Leaded and Non-Leaded; Rod, Shapes, Forgings and Flat Products with Finished Edges (Bar, Flat, Wire and Strip)~~
~~QQ-W-321 ————— Wire, Brass~~

Copies can be obtained from the Department of Defense Single Stock Point (DODSSP). <http://dodssp.daps.dla.mil>

Military

MIL-F-495 Finish, Chemical, Black, for Copper Alloys
MIL-STD-2073/1 Standard Practice for Military Packaging

Copies can be obtained from the Department of Defense Single Stock Point (DODSSP). <http://dodssp.daps.dla.mil>

STANDARDS

Federal

~~FED. STD. NO. 66 ————— Steel, Chemical Composition and Hardenability~~

Copies can be obtained from the Department of Defense Single Stock Point (DODSSP). <http://dodssp.daps.dla.mil>

① COMPLETELY REVISED

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MIL-P-20700, REVISION A.

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 1
PROCUREMENT SPECIFICATION NONE	TITLE PIN, GROOVED, HEADLESS, LONGITUDINAL GROOVE	CLASSIFICATION SPECIFICATION NASM20700 SHEET 1 OF 5

- 2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply.

American Society for Quality

ANSI/ASQ Z1.4 Sampling Procedures and Tables For Inspection By Attributes

Copies can be obtained from the American Society for Quality, 600 North Plankinton Ave., Milwaukee, WI 53203.
www.asq.org

ASTM International

ASTM B16/B16M	Free-Cutting Brass Rod, Bar and Shapes for Use in ScrewMachines
ASTM B36/B36M	Brass Plate, Sheet, Strip, And Rolled Bar
ASTM B121/B121M	Leaded Brass Plate, Sheet, Strip, and Rolled Bar
ASTM B124/B124M	Copper and Copper Alloy Forging Rod, Bar, and Shapes
ASTM B134/B134M	Brass Wire
ASTM B159/B159M	Phosphor Bronze Wire
ASTM B206/B206M	Copper-Nickel-Zinc (Nickel Silver) Wire and Copper-Nickel Alloy Wire
ASTM A342/A342M	Indicator, Permeability: Low-Mu (Go-No Go)
ASTM B633	Zinc Coating, Electrodeposited, Requirements for
ASTM D3951	Standard Practice for Commercial Packaging

Copies can be obtained from ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. www.astm.org

SAE International

AMS2700	Passivation Treatments for Austenitic, Ferritic and Martensitic CRES (Fastening Devices)
AMS-QQ-P-416	Plating, Cadmium (Electrodeposited)
AIR4127	Steel, Chemical Composition and Hardenability

Copies can be obtained from SAE International, 400 Commonwealth Dr., Warrendale, PA 15096-0001. www.sae.org

ASME

ASME B18.8.2 Taper Pins, Dowel Pins, Straight Pins, Grooved Pins, and Spring Pins

Copies can be obtained from ASME, Three Park Ave., New York, NY 10016-5990. www.asme.org

3. REQUIREMENTS

3.1 Materials

3.1.1 Grade A. Material for Grade A grooved pins shall be cold drawn carbon steel wire or cold finished bar. The steel shall conform to one of the B1100 or C1200 series of ~~FED. STD. NO. 66~~ AIR4127 and have a minimum shear strength of 64 kilopounds per square inch (KSI).

3.1.2 Grade B. Material for Grade B grooved pins shall be cold drawn CRES wire or cold finished bar. The steel shall conform to one of the 300 series of ~~FED. STD. NO. 66~~ AIR4127 and have a minimum shear strength of 90 KSI. When specified (see 6.2), pins shall have a magnetic permeability of not more than 2.0 (Air = 1.0) at a field strength of H = 200 oersteds when tested in accordance with 4.4.3.

3.1.3 Grade C. Material for Grade C grooved pins shall be cold drawn half-hard brass wire conforming to the requirements of ~~QQ-W-321~~ ASTM B134/B134M, ASTM B159/B159M or ASTM B206/B206M or half-hard brass bar conforming to the requirements of ~~QQ-B-626~~ ASTM B121/B121M, ASTM B124/B124M, ASTM B16/B16M or ASTM B36/B36M. Brass shall have a minimum shear strength of 40 KSI.

3.2 Dimensions and tolerances. Dimensions and tolerances for all types of pins shall conform to ASME B18.8.2 and shall apply after protective finishes (see 6.3).

REVISION
1
NASM20700
SHEET 2

