

INCH-POUND

MS33651C  
 14 August 2014  
 SUPERSEDING  
 MS33651B  
 3 May 1985

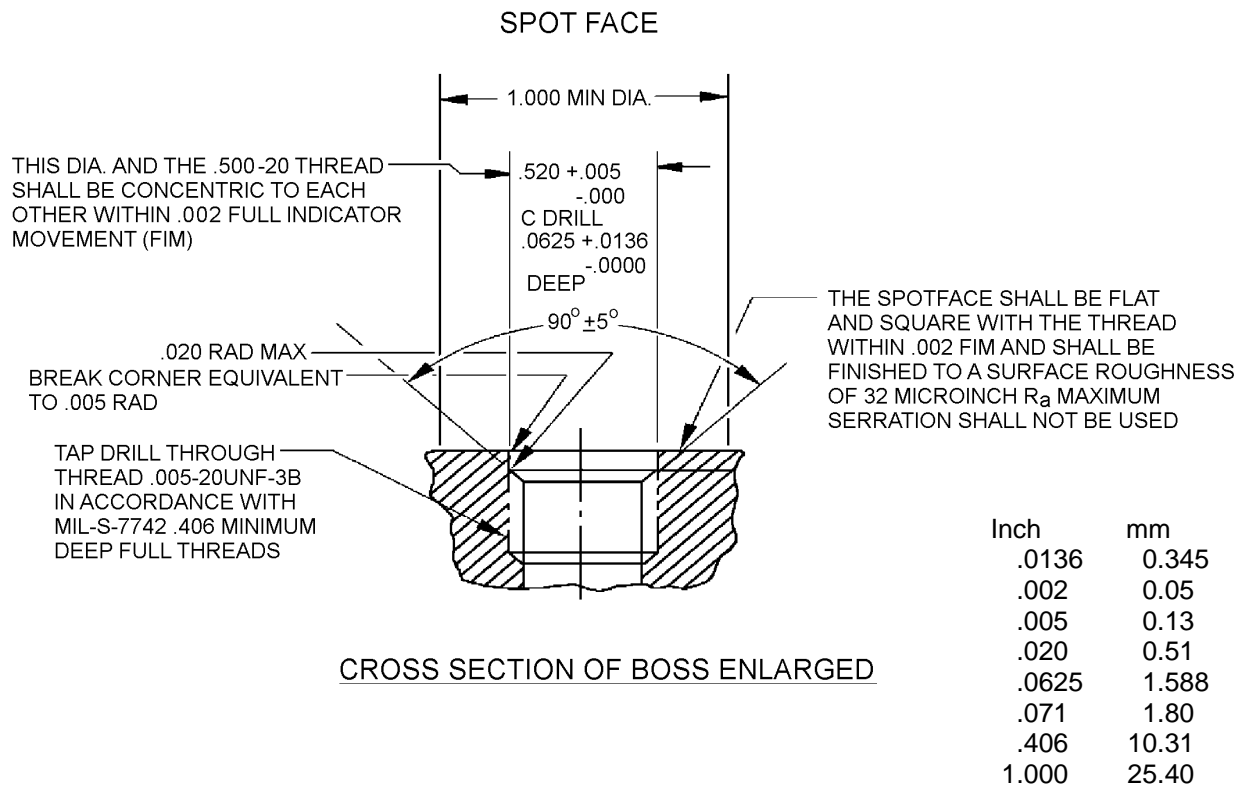
## DETAIL SPECIFICATION SHEET

## BOSS AND INSTALLATIONS - AIR CONNECTION

Inactive for new design after 20 September 2000.

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet.



## NOTES:

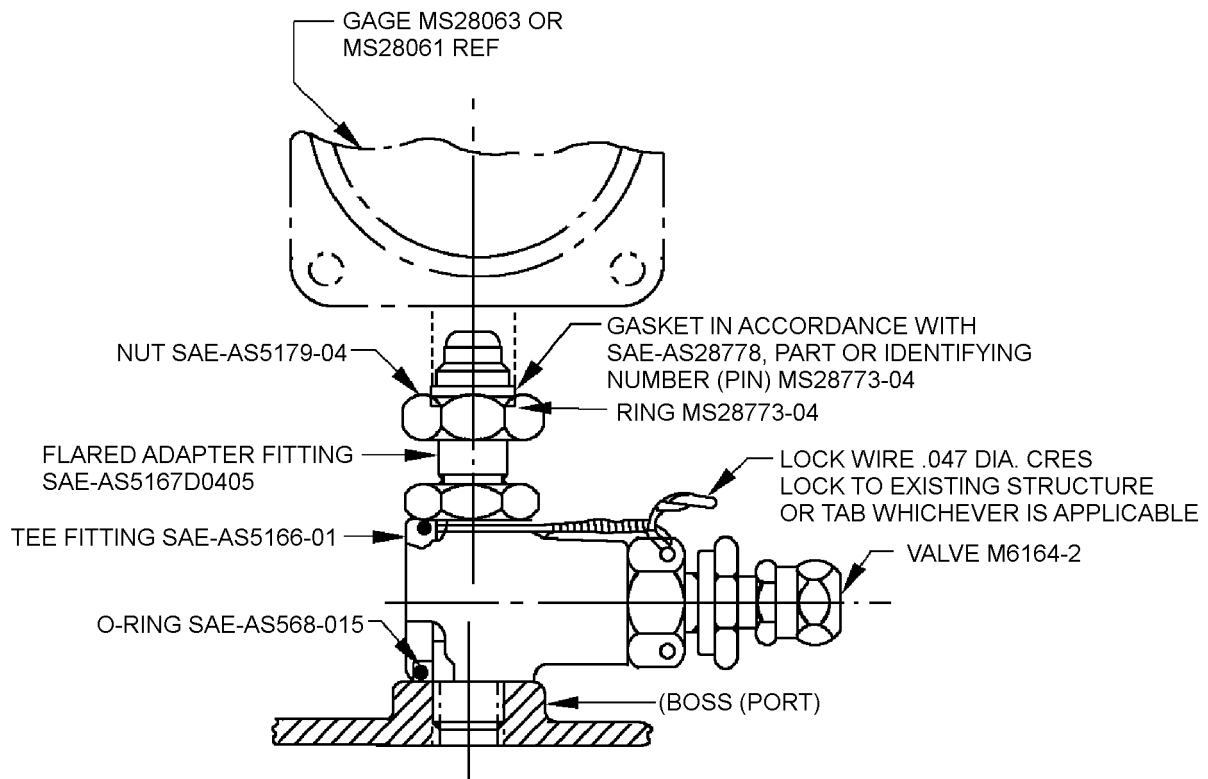
1. Dimensions are in inches.
2. Metric equivalents are given for information only.

FIGURE 1. Cross section of boss enlarged.

AMSC N/A

FSC 4730

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TYPICAL DIRECT GAGE CONNECTION

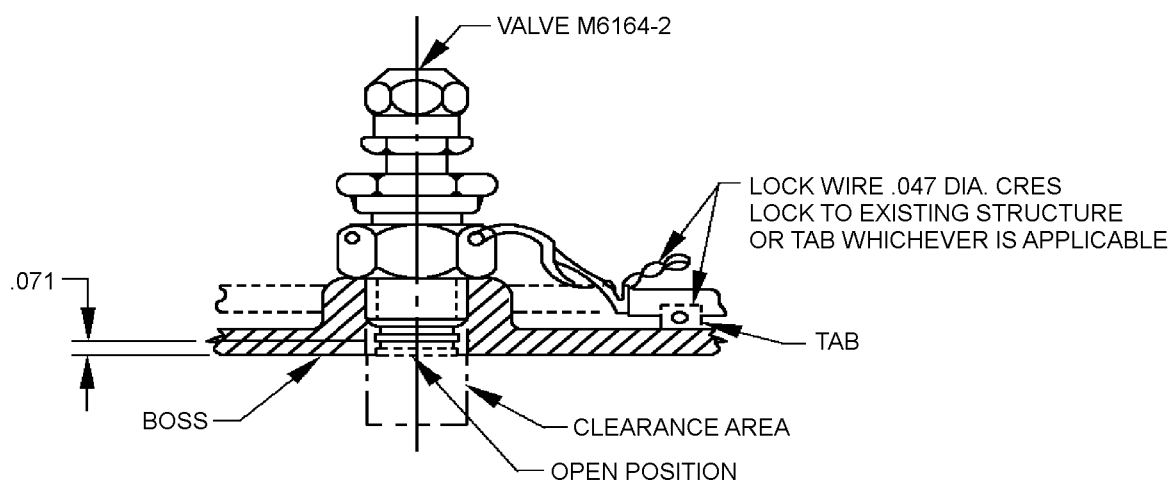
Inch	mm
.047	1.19

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. CRES (Corrosion resistant steel).

FIGURE 2. Valve M6164-2 installation in boss (typical direct gage connection).

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### DIRECT AIR BODY CONNECTION

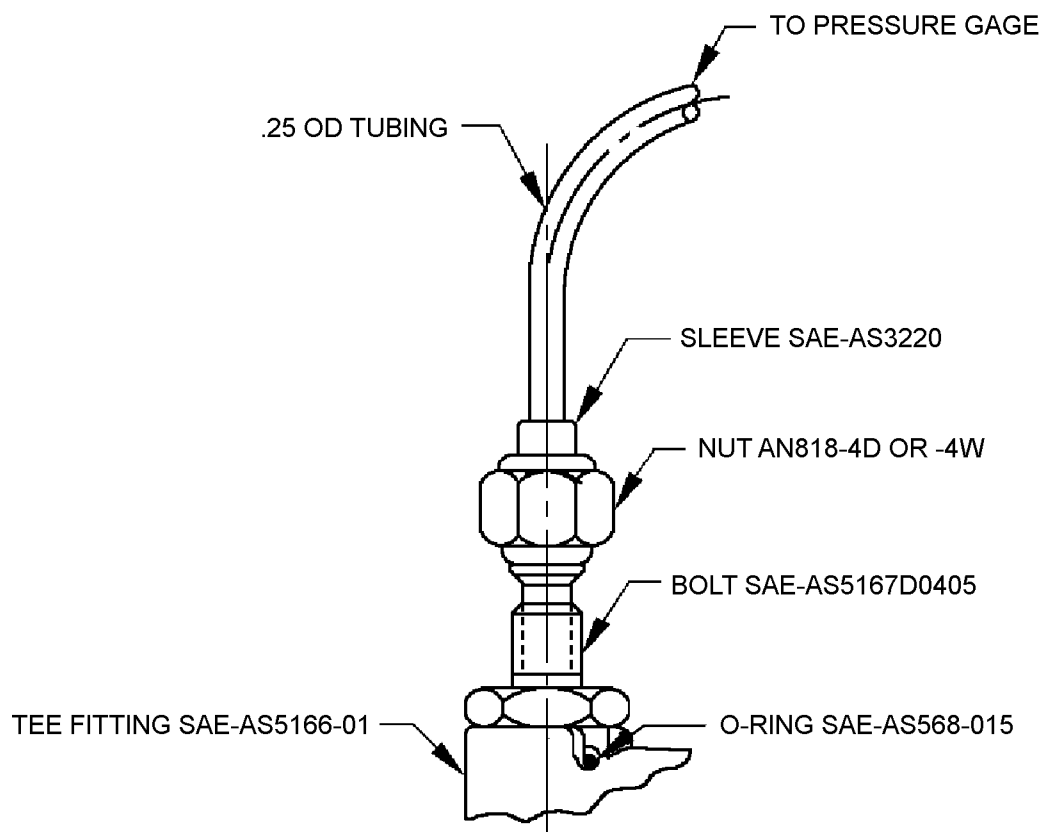
Inch	mm
.071	1.80

#### NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.

FIGURE 3. Valve installation in boss (direct air body connection).

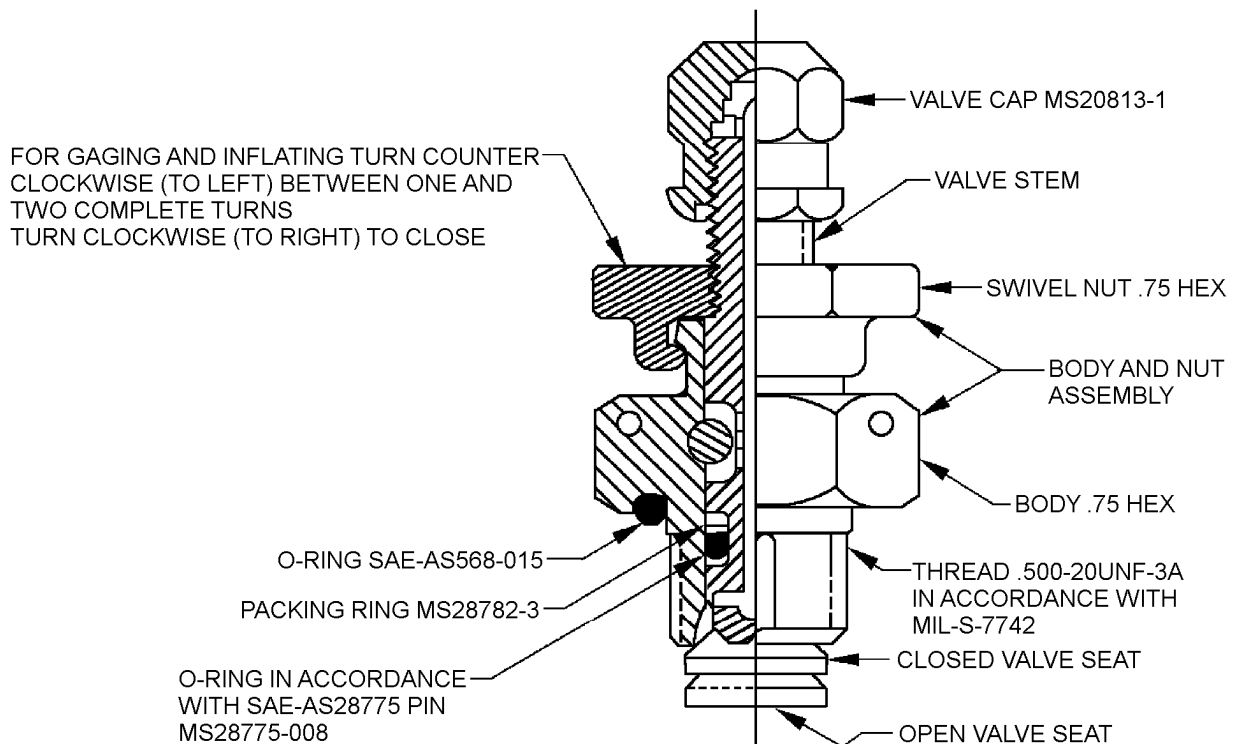
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TYPICAL REMOTE GAGE CONNECTION

FIGURE 4. Valve M6164-2 installation in boss (typical remote gage connection).

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## SECTION A - A

Supersession data: This air valve replaces AN6287-1 on shock struts, air bottles and accumulators and is suitable for all operating pressures up to 5000 psi (17 MPa).

FIGURE 5. M6164-2 high pressure air valve assembly.

## REQUIREMENTS

This is a design standard and not to be used as a PIN.

Use O-ring SAE-AS568-015 to seal valve at the boss, using holes provided in 3/4 hex of body. Use valve as a complete assembly. Do not interchange parts.

The valve assembly shall not contact any internal parts of the unit in which it is used. An additional area of .078 inch (1.98 mm) minimum clearance shall be provided for opening valve.

Steel boot shall be used with steel bolt and aluminum alloy body shall be used with aluminum alloy bolt.

Provide space around valve M6164-2 to permit use of open end wrench on the hexes and to protect connection of MIL-DTL-8348 gage assemblies.

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Lubricate O-ring SAE-AS568-015 with grease in accordance with SAE-AMS-G-4343 prior to installation in boss. This air valve should not be used in any boss having a diameter of less than .813 inch (20.65 mm). Boss must be clean and smooth.

CAUTION: Clean top surface of boss and insure that it is free from nicks and scratches before installing air valve. With O-ring in place, tighten 3/4 hex against top surface of boss to 100 - 110 inch-pound (11.3 - 12.4 Nm) of torque. Never loosen body assembly to discharge air.

## OPERATING INSTRUCTIONS

Using gage assembly MIL-DTL-8348.

- a. To charge with or discharge air.
  1. Remove dust cap MS20813-1.
  2. Attach air filling chuck to valve by means of gage assembly.
  3. Loosen 3/4 hex swivel nut to between one and two turns. Turn clockwise to tighten.
  4. Charge or discharge to proper air pressure.
  5. Tighten 3/4 hex swivel nut to 50 - 70 inch-pounds (5.6 - 7.9 Nm) torque. Turn counterclockwise to loosen.
  6. Remove gage assembly from valve and replace and tighten dust cap (MS20813-1) to extreme finger tightness.

Without using gage assembly.

- a. To charge unit with air.
  1. Remove dust cap MS20813-1.
  2. Attach air filling chuck from booster pump, air bottle, etc., to valve stem threads.
  3. Loosen 3/4 hex swivel nut to between one and two turns. Turn counterclockwise to loosen.
  4. Charge to proper air pressure.
  5. Tighten 3/4 hex swivel nut to 50 - 70 inch-pound (5.6 - 7.9 Nm) torque. Turn clockwise to tighten.
  6. Remove air filling chuck from valve and replace and tighten dust cap (MS20813-1) to extreme finger tightness.
- b. To discharge air from unit.
  1. Remove dust cap MS20813-1.
  2. Loosen 3/4 hex swivel nut to suite required discharge. Turn counterclockwise to loosen. If only a small amount of air is to be discharged, loosen 3/4 hex nut slightly.
  3. Tighten 3/4 hex swivel nut to 50 - 70 inch-pound (5.6 - 7.9 Nm) torque. Turn clockwise to tighten.
  4. Remove air filling chuck from valve and replace and tighten dust cap (MS20813-1) to extreme finger tightness.

Changes from previous issues. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

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Referenced documents. This document references the following:

MIL-DTL-8348	SAE-AMS-G-4343
MIL-S-7742	SAE-AS3220
MS28061	SAE-AS28775
MS28063	SAE-AS28778
MS28782	

#### CONCLUDING MATERIAL

Custodians:

Navy - AS  
Air Force - 99  
DLA - CC

Preparing activity:  
DLA - CC

(Project 4730-2014-039)

Review activities:

Navy - SA  
Air Force - 71

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.