

INCH-POUND

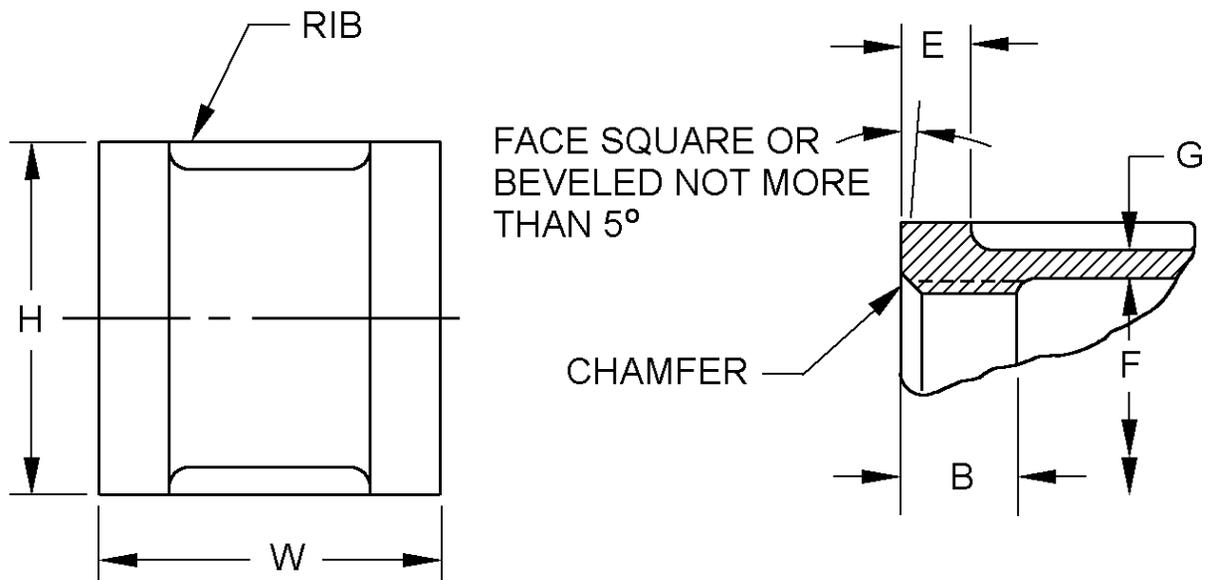
MS39233D  
24 July 2015  
SUPERSEDING  
MS39233C  
11 July 1986

DETAIL SPECIFICATION SHEET

COUPLING, PIPE STRAIGHT (150 & 300 POUNDS)

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 and  
ASME B16.3.



- |                                |                                  |
|--------------------------------|----------------------------------|
| B - Length of Thread Min       | G - Metal Thickness              |
| E - Width of Band Min          | H - Outside Diameter of Band Min |
| F - Inside Diameter of Fitting | W - Length of Coupling           |

FIGURE 1. Class 150 and 300 coupling dimensions.



MS39233D

TABLE I. Dimensions of Couplings – Class 150

Dash No.	Nominal Pipe Size	B	E	F		G	H	W	
				Min	Max			Value	Tol. ±
1	1/8	.25 (6.4)	.20 (5.1)	.41 (10.4)	.44 (11.2)	.09 (2.3)	.69 (17.5)	.96 (24.4)	.06 (1.5)
2	1/4	.32 (8.1)	.22 (5.6)	.54 (13.7)	.58 (14.7)	.10 (2.5)	.84 (21.3)	1.06 (26.9)	.08 (2.0)
3	3/8	.36 (9.1)	.23 (5.8)	.68 (17.3)	.72 (18.3)	.10 (2.5)	1.02 (25.9)	1.16 (29.5)	.10 (2.5)
4	1/2	.43 (10.9)	.25 (6.4)	.84 (21.3)	.90 (22.9)	.11 (2.8)	1.20 (30.5)	1.34 (34.0)	.12 (3.0)
5	3/4	.50 (12.7)	.27 (6.9)	1.05 (26.7)	1.11 (28.2)	.12 (3.0)	1.46 (37.1)	1.52 (38.6)	.12 (3.0)
6	1	.58 (14.7)	.30 (7.6)	1.32 (33.5)	1.39 (35.3)	.13 (3.3)	1.77 (45.0)	1.67 (42.4)	.14 (3.6)
7	1-1/4	.67 (17.0)	.34 (8.6)	1.66 (42.2)	1.73 (43.9)	.15 (3.8)	2.15 (54.6)	1.93 (49.0)	.14 (3.6)
8	1-1/2	.70 (17.8)	.37 (9.4)	1.90 (48.3)	1.97 (50.0)	.16 (4.1)	2.43 (61.7)	2.15 (54.6)	.16 (4.1)
9	2	.75 (19.1)	.42 (10.7)	2.38 (60.5)	2.45 (62.2)	.17 (4.3)	2.96 (75.2)	2.53 (64.3)	.16 (4.1)
10	2-1/2	.92 (23.4)	.48 (12.2)	2.88 (73.2)	2.98 (75.7)	.21 (5.3)	3.59 (91.2)	2.88 (73.2)	.20 (5.1)
11	3	.98 (24.9)	.55 (14.0)	3.50 (88.9)	3.60 (91.4)	.23 (5.8)	4.29 (109.0)	3.18 (80.8)	.20 (5.1)
12	4	1.08 (27.4)	.66 (16.8)	4.50 (114.3)	4.60 (116.8)	.27 (6.9)	5.40 (137.2)	3.69 (93.7)	.24 (6.1)

Notes:

Dimensions are given in inches. Metric equivalents are given in parentheses and are for information only.  
 For dimension G, metal thickness at no point shall be less than 90 percent of the thickness given in the table.

MS39233D

TABLE II. Dimensions of Couplings – Class 300

Dash No.	Nominal Pipe Size	B	E	F		G	H	W
				Min	Max			
13	1/4	.43 (10.9)	.38 (9.7)	.54 (13.7)	.58 (14.7)	.14 (3.6)	.93 (23.6)	1.37 (34.8)
14	3/8	.47 (11.9)	.44 (11.2)	.67 (17.0)	.72 (18.3)	.15 (3.8)	1.12 (28.4)	1.62 (41.1)
15	1/2	.57 (14.5)	.50 (12.7)	.84 (21.3)	.90 (22.9)	.16 (4.1)	1.34 (34.0)	1.87 (47.5)
16	3/4	.64 (16.3)	.56 (14.2)	1.05 (26.7)	1.11 (28.2)	.18 (4.6)	1.63 (41.4)	2.12 (53.8)
17	1	.75 (19.1)	.62 (15.7)	1.31 (33.3)	1.38 (35.1)	.20 (5.1)	1.95 (49.5)	2.37 (60.2)
18	1-1/4	.84 (21.3)	.69 (17.5)	1.66 (42.2)	1.73 (43.9)	.22 (5.6)	2.39 (60.7)	2.87 (72.9)
19	1-1/2	.87 (22.1)	.75 (19.1)	1.90 (48.3)	1.97 (50.0)	.24 (6.1)	2.68 (68.1)	2.87 (72.9)
20	2	1.00 (25.4)	.84 (21.3)	2.37 (60.2)	2.44 (62.0)	.26 (6.6)	3.28 (83.3)	3.62 (91.9)
21	2-1/2	1.17 (29.7)	.94 (23.9)	2.87 (72.9)	2.97 (75.4)	.31 (7.9)	3.86 (98.0)	4.12 (104.6)
22	3	1.23 (31.2)	1.00 (25.4)	3.50 (88.9)	3.60 (91.4)	.35 (8.9)	4.62 (117.3)	4.12 (104.6)

Notes:

Dimensions are given in inches. Metric equivalents are given in parentheses and are for information only.

For dimension G, metal thickness at no point shall be less than 90 percent of the thickness given in the table.

REQUIREMENTS:

Material: Material shall be in accordance with ASME B16.3.

Protective Coating: Fittings may be black finish or zinc coated in accordance with ASME B16.3 and identified by the letter given in table III.

TABLE III. Protective coating identification letter.

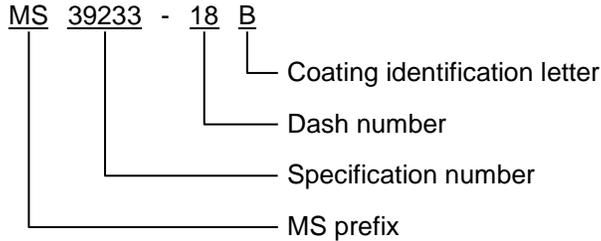
Coating	Coating Identification Letter
Zinc	(none)
Black	B

Dimensions: Dimension shall be as given on figure 1 and in tables I and table II.

MS39233D

Threads: Street elbows shall be threaded with American Standard Taper Pipe Threads (NPT) in accordance with FED-STD-H28.

Part or Identifying Number (PIN): The PIN consists of the MS prefix, specification number, the dash number, and the coating identification letter.



Examples of a PIN:

MS39233-1 represents a class 150, 1/8 inch coupling with a zinc coating.

MS39233-16B represents a class 300, 3/4 inch coupling with a black coating.

Referenced documents shall be of the issue in effect on date of invitation for bid.

Order of precedence. Unless otherwise noted herein or in the contract, in the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

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

Reference documents. In addition to ASME B16.3 this document references the following:

FED-STD-H28

CONCLUDING MATERIAL

Custodians:

Army - AR

Navy - MC

Air Force - 99

Preparing activity:

DLA - CC

(Project 4730-2015-050)

Review activities:

Army – AT, AV

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>.