

FIGURE 1

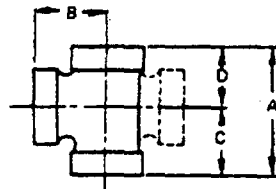
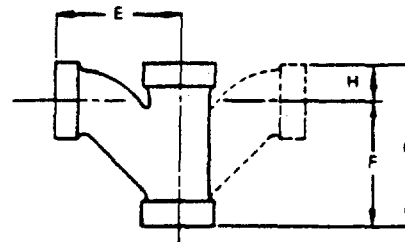
90° Y-BRANCH REDUCING  
90° DOUBLE Y-BRANCH REDUCING90° LONG Y-BRANCH REDUCING  
90° LONG DOUBLE Y-BRANCH REDUCING

TABLE I. Dimensions.

Nominal Pipe Size	X = 90 Deg. Short Y-Branch Y = 90 Deg. Short Double Y-Branch				Z = 90 Deg. Long Y-Branch W = 90 Deg. Long Double Y-Branch			
	End to End A	Center to End B	Center to End C	Center to End D	End to End G	Center to End E	Center to End F	Center to End H
1-1/2 x 1-1/4	3-7/8	2-1/2	2-3/8	1-1/2	5-1/8	3-7/8	3-15/16	1-3/16
2 x 1-1/2	4-5/8	2-15/16	2-11/16	1-15/16	5-3/4	4-3/8	4-7/16	1-5/16
2-1/2 x 1-1/2	4-7/8	3-1/16	2-13/16	2-1/16	5-3/4	4-9/16	4-7/16	1-5/16
2-1/2 x 2	5-1/2	3-5/16	3-1/4	2-1/4	7-3/8	5-3/4	5-3/4	1-5/8
3 x 1-1/2	5-1/16	3-5/16	2-15/16	2-1/8	5-15/16	5	4-5/8	1-5/16
3 x 2	6-11/16	3-5/8	3-5/16	2-3/8	7-9/16	6-1/16	5-15/16	1-5/8
4 x 1-1/2	5-1/4	3-13/16	3	2-1/4	6-1/16	5-7/16	4-3/4	1-5/16
4 x 2	5-13/16	4-1/16	3-3/8	2-7/16	7-11/16	6-5/8	6-1/16	1-5/8
4 x 2-1/2	6-5/8	4-7/16	3-13/16	2-13/16	8-5/8	7-1/16	6-5/8	2
4 x 3	7-3/8	4-3/4	4-5/16	3-1/16	10	8-1/16	7-5/8	2-3/8
5 x 1-1/2	5-9/16	4-3/8	3-3/16	2-3/8	6-5/16	6	4-15/16	1-3/8
5 x 2	6-1/8	4-5/8	3-9/16	2-9/16	7-3/4	7-1/8	6-1/8	1-5/8
5 x 3	7-3/4	5-1/4	4-1/2	3-1/4	10-1/4	8-5/8	7-7/8	2-3/8
5 x 4	9-1/8	5-11/16	5-3/8	3-3/4	13	10-7/16	10-1/8	2-7/8
6 x 2	6-1/4	5-1/8	3-5/8	2-5/8	7-15/16	7-3/4	6-5/16	1-5/8
6 x 3	7-7/8	5-3/4	4-9/16	3-5/16	10-3/8	9-1/8	8-1/16	2-5/16
6 x 4	9-1/4	6-3/16	5-7/16	3-13/16	13-1/16	11	10-3/16	2-7/8
6 x 5	10-9/16	6-5/8	6-1/4	4-5/16	16-1/16	12-13/16	12-9/16	3-1/2

## (A) NOTES:

- MATERIAL:** Material shall be in accordance with ANSI B16.12.
- COATING:** Coatings shall be in accordance with ANSI B16.12 and shall be uncoated, coated with a bituminous composition or zinc coated as specified by the MS part number.
- DIMENSIONS:** All dimensions are in inches and shall be in accordance with ANSI B16.12. Double Y-branches have the same dimensions as single Y-branches.
- THREADED ENDS:** The threaded ends shall be in accordance with ANSI B16.12. All drainage fittings having openings at 90 degree nominal angle shall be tapped with a pitch of 1/4 inch in one foot with the pitch in the direction shown in ANSI B16.12.
- GENERAL:**
  - Referenced documents shall be of the issue in effect on date of invitation for bid or requests for proposal.
  - For design feature purposes, this standard takes precedence over procurement documents referenced herein.
  - The U.S. Government has a Federal Supply Cataloging system which establishes approved item names to catalog and standardize items used within the government. The Federal Supply Cataloging System's approved item name may not be the same that is used in commercial or industrial organizations. Therefore, the government name and equivalent commercial names are listed here for fittings on this MS.

(A) DENOTES CHANGES

P A NAVY-YD Other Cust ARMY-ME (A)	International Interest	TITLE (A) Y-BRANCHES, 90° REDUCING, CAST-IRON THREADED DRAINAGE	MILITARY STANDARD MS90524
Procurement Specification ANSI B16.12 (A)	SUPERSEDES:		PAGE 1 OF 2

Fed. Gov. Nomenclature	Commercial Nomenclature
Tee-Y, drainage pipe (short turn double style)	90 degree short double Y-branch (reducing)
Tee-Y, drainage pipe (long turn double style)	90 degree long double Y-branch (reducing)
Tee-Y, drainage pipe (short turn style)	90 degree short Y-branch (reducing)
Tee-Y, drainage pipe (long turn style)	90 degree long Y-branch (reducing)

6. **PART NUMBER:** The MS part number is formed by combining the MS number with a dash after it, the size code number, the Y-branch style letter, and the coating identification number.

MS 90524-~~XX~~X X

Size code number (see note 7) \_\_\_\_\_

Fitting style letter (see note 8) \_\_\_\_\_

Coating identification number (see note 9) \_\_\_\_\_

7. **SIZE:** The nominal pipe size is designated by two digits (see table 11). The first size given is for the run ends and the other size is for the reduced branch end(s).

TABLE II. Code Number to Size.

Code Number	Nominal Pipe Size	Code Number	Nominal Pipe Size
01	1 1/2 x 1 1/4	10	4 x 3
02	2 x 1 1/2	11	5 x 1 1/2
03	2 1/2 x 1 1/2	12	5 x 2
04	2 1/2 x 2	13	5 x 3
05	3 x 1 1/2	14	5 x 4
06	3 x 2	15	6 x 2
07	4 x 1 1/2	16	6 x 3
08	4 x 2	17	6 x 4
09	4 x 2 1/2	18	6 x 5

8. **Y-BRANCH STYLE:** The style of Y-branch is designated by a single letter (see table 111).

TABLE III. Code Letter to Y-Branch Style.

Code Letter	Y-Branch style 1/
V	90 degree short double Y-branch
W	90 degree long double Y-branch
X	90 degree short Y-branch
Z	90 degree long Y-branch

1/ See note 5c for approved Federal Cataloging system item name.

9. **COATING:** The type of coating is designated by a digit (see table IV).

TABLE IV. Code Number to Coating.

Code Number	Coating
1	Uncoated
2	Bituminous composition
3	Zinc coated

P.A. NAVY-YD Other Cust ARMY-ME (A)	International Interest	TITLE (A) Y-BRANCHES, 90° REDUCING, CAST-IRON THREADED DRAINAGE	MILITARY STANDARD
			MS90524
Procurement Specification ANSI B16.12 (A)	SUPERSIDES.		PAGE 2 OF 2