
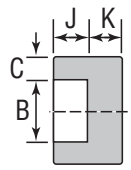


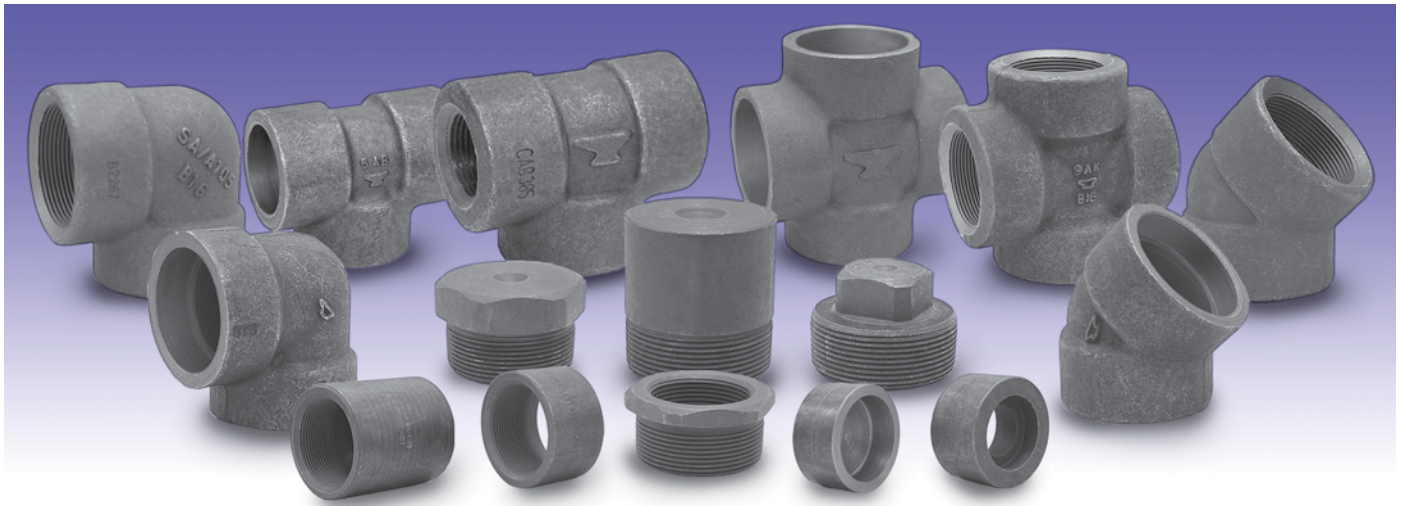
## Class 3000 Socket Weld

|  | Size  |     | B<br>Socket Dia. |                | C<br>Minimum |      | J<br>Socket Depth<br>Minimum |      | K    |      | Unit Weight |      |
|---|---|-----|------------------|----------------|--------------|------|------------------------------|------|------|------|-------------|------|
|   | NPS   | DN  | in               | mm             | in           | mm   | in                           | mm   | in   | mm   | lbs         | kg   |
|   |  |     |                  |                |              |      |                              |      |      |      |             |      |
|   | 1/8   | 6   | .440<br>.420     | 11.2<br>10.8   | 0.125        | 3.18 | 0.38                         | 9.5  | 0.19 | 4.8  | 0.07        | 0.03 |
|   | 1/4   | 8   | .575<br>.555     | 14.6<br>14.2   | 0.130        | 3.30 | 0.38                         | 9.5  | 0.19 | 4.8  | 0.09        | 0.04 |
|   | 3/8   | 10  | .710<br>.690     | 18.0<br>17.6   | 0.138        | 3.50 | 0.38                         | 9.5  | 0.19 | 4.8  | 0.17        | 0.08 |
|   | 1/2   | 15  | .875<br>.855     | 22.2<br>21.8   | 0.161        | 4.09 | 0.38                         | 9.5  | 0.25 | 6.4  | 0.30        | 0.14 |
|   | 3/4   | 20  | 1.085<br>1.065   | 27.6<br>27.2   | 0.168        | 4.27 | 0.50                         | 12.5 | 0.25 | 6.4  | 0.37        | 0.17 |
|   | 1   | 25  | 1.350<br>1.330   | 34.3<br>33.9   | 0.196        | 4.98 | 0.50                         | 12.5 | 0.38 | 9.6  | 0.60        | 0.27 |
|   | 1 1/4   | 32  | 1.695<br>1.675   | 43.1<br>42.7   | 0.208        | 5.28 | 0.50                         | 12.5 | 0.38 | 9.6  | 0.96        | 0.44 |
|   | 1 1/2   | 40  | 1.935<br>1.915   | 49.2<br>48.8   | 0.218        | 5.54 | 0.50                         | 12.5 | 0.44 | 11.2 | 1.20        | 0.54 |
|   | 2   | 50  | 2.426<br>2.406   | 61.7<br>61.2   | 0.238        | 6.04 | 0.62                         | 16.0 | 0.50 | 12.7 | 2.00        | 0.91 |
|   | 2 1/2   | 65  | 2.931<br>2.906   | 74.4<br>73.9   | 0.302        | 7.67 | 0.62                         | 16.0 | 0.62 | 15.7 | 2.75        | 1.25 |
|   | 3   | 80  | 3.560<br>3.535   | 90.3<br>89.8   | 0.327        | 8.30 | 0.62                         | 16.0 | 0.75 | 19.0 | 5.00        | 2.27 |
|   | 4   | 100 | 4.570<br>4.545   | 115.7<br>115.2 | 0.368        | 9.35 | 0.75                         | 19.0 | 0.88 | 22.4 | 8.25        | 3.74 |

**Note:** When the pipe is seated against the bottom of the socket prior to welding, to prevent possible cracking of the fillet welds, it is recommended that the pipe be withdrawn approximately 1/16 in (1.6mm) away from contact with the bottom of the socket before starting the weld.

Average of socket wall thickness around periphery shall be no less than listed values. The minimum values are permitted in localized areas.

| PROJECT INFORMATION |  | APPROVAL STAMP                             |  |
|---------------------|--|--|--|
| Project:            |  | <input type="checkbox"/> Approved          |  |
| Address:            |  | <input type="checkbox"/> Approved as noted |  |
| Contractor:         |  | <input type="checkbox"/> Not approved      |  |
| Engineer:           |  | Remarks:                                   |  |
| Submittal Date:     |  |  |  |
| Notes 1:            |  |  |  |
| Notes 2:            |  |  |  |



## Materials

The steel for Anvil Forged Carbon Steel Fittings consists of forging, bars, seamless pipe or tubes which conform to the requirements for melting process, chemical composition and mechanical properties of ASTM A105.

## Design Basis

ASME B16.11 - Forged fittings, socket-weld and threaded

## Dimensions

ASME B16.11, unless otherwise noted

## Threads

ASME B1.20.1 NPT Threads

## Forged Steel Fittings

In accordance with ASME standard B16.11 - "Forged Fittings, Socket-Welding and Threaded" this table shows the schedule of pipe corresponding to each class of fitting for rating purposes.

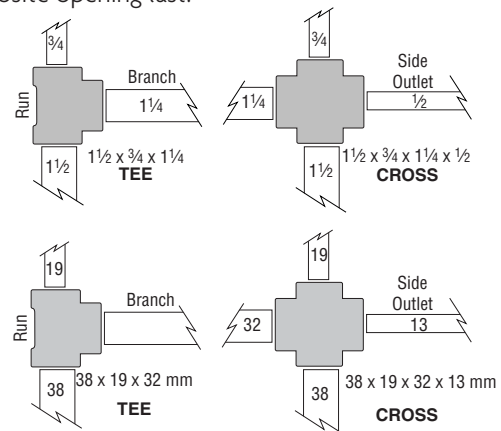
| PRESSURE RATINGS |          |      |
|------------------|----------|------|
| Class            | Schedule |      |
|                  | N.P.T.   | S.W. |
| 2000             | 80       | -    |
| 3000             | 160      | 80   |
| 6000             | XXS/XXH  | 160  |

ASME B16.11 provides that the maximum allowable pressure of a fitting be computed in accordance with the applicable piping code or regulation for straight seamless pipe or for material of equivalent composition and mechanical properties to the fitting. Any corrosion or mechanical allowances and any reduction in allowable stress due to temperature or other service conditions must be applied to the pipe and fitting alike.

## Reducing Fittings

Reducing elbows, tees and crosses are available in both threaded and socket-welding.

On reducing tees and crosses give the size of the largest run opening; then give the opposite opening. On a tee give the branch size last. On a cross give the largest side outlet third and the opposite opening last.



## Standards and Specifications

|                                       | Dimensions  | Material                        | Thread       | Pressure Rating |
|---------------------------------------|-------------|---------------------------------|--------------|-----------------|
| <b>FORGED STEEL THREADED FITTINGS</b> |             |                                 |              |                 |
| Class 2000, 3000, 6000                | ASME B16.11 | ASTM A105, ASTM A182, ASTM A350 | ASME B1.20.1 | ASME B16.11     |