# RISING FERROMATE PRIVATE LIMITED

AN ISO 9001:2015 CERTIFIED CO.

Manufacturer of

CS, AS, MS, SS & Nickel Alloys But Weld & Socket Weld, Pipe Fittings and Flanges

# WELCOME TO

## OUR FACTORY





FACTORY

COMPANY PROFILE

Rising Ferromate Private Limited is an ISO 9001-2015 certified company

We are a manufacturer of Pipe- Fittings and Flanges. Our manufacturing units are located in the industrial area of Taloja MIDC Navi Mumbai, Maharashtra and having plant of 15000 Sq Ft with Modern Equipments And Technology

## Our Range Of Products Are As Follows

1.PIPE - FITTINGS –Size 15 NB TO 500 NB - BW Fittings, SW Fittings , Threaded Fittings , Forged Fittings

2.FORGED FLANGES – Size 15 NB TO 600 NB Flanges Slip on flange, Blind flange, Lap Joint flange , Weld neck Flanges, Socket Weld flanges , Spectacles flanges , SOFF , BLFF Ring Joint

MATERIAL CONSTRUCTION :
CARBON STEEL A105 , ASTM A36, ASTM 516 Gr.60/70
STAINLESS STEEL : A182 F 304,304L, 310, 316 , 316L 317 , 317L,321, 310,S32205 (DUPLEX), S322507(SUPER DUPLEX)

ALLOY STEEL : A182 F1,F5,F9,F11,F12,LF2.....

We are committed to serve our customer's sourcing needs of the above products with our Quality products as well as our service. Our clients are our most valuable assets and for that we use our skilled team and modern technology and equipment to fulfill their needs.

We learned our experience working with our reputed clients of industries like Chemical and Pharma, Food Processing, Oil & Gas, Petrochemicals, Heavy Engineering, Waste Water management, Hydraulics, Heavy Fabrication Etc.

As we are very much interested to do business with you on long term basis, we request you to please enlist our name in your approved vendor list and send us your valuable requirements and give a opportunity to submit our competitive rates and delivery terms

# OUR CUSTOMERS

## Chemical & Pharma Industries



## Oil & Gas, Petro Chemical & Sugar Industries


## Power & Heavy Industries



OUR CUSTOMERS

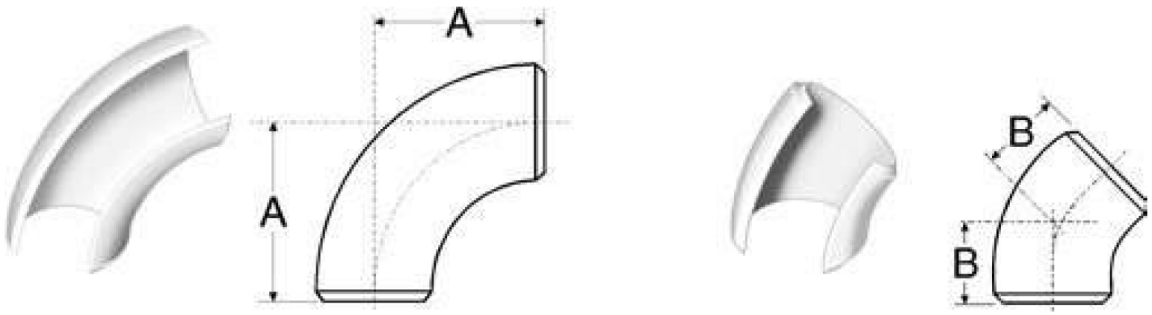
QUALITY CONTROL

Our Associate NABL Approved
Lab Material Inspection Laboratory Siwree Mumbai
Earth Metallurgical Serviced Pvt. Ltd Taloja

1. BRINELL HARDNESS TEST
2. SPECTROMETER (P.M.I TEST)
3. IMPACT TEST
4. SHORE IMPACT TEST
5. UNIVERSAL TEST
6. SURFACE ROUGHNESS TEST
7. METAL LAB. (P.M.I TEST)
8. UT TRASONIC TEST

# Butt Weld Fittings

## Range/Sizes - 90° and 45° Long Radius Elbows - ANSI B16.9




### Dimensions (based on ASME/ANSI B16.9) and example weights for long radius elbows

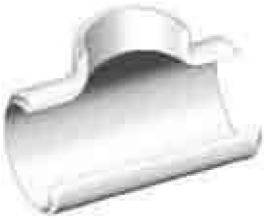
| Common | | | 90° Elbow | | | 45° Elbow | | |
|---|---|---|---|---|---|---|---|---|
| Nominal Pipe Size | OD at Bevel | | A | | 40S/STD[1] | B | | 40S/STD[1] |
| | in | mm | in | mm | kg/piece | in | mm | kg/piece |
| 1/2 | 0.84 | 21 | 1.50 | 38 | 0.08 | 0.62 | 16 | 0.04 |
| 3/4 | 1.05 | 27 | 1.50 | 38 | 0.10 | 0.75 | 19 | 0.05 |
| 1 | 1.32 | 33 | 1.50 | 38 | 0.15 | 0.88 | 22 | 0.07 |
| 1 1/4 | 1.66 | 42 | 1.88 | 48 | 0.25 | 1.00 | 25 | 0.12 |
| 1 1/2 | 1.90 | 48 | 2.25 | 57 | 0.36 | 1.12 | 29 | 0.18 |
| 2 | 2.38 | 60 | 3.00 | 76 | 0.65 | 1.38 | 35 | 0.32 |
| 2 1/2 | 2.88 | 73 | 3.75 | 95 | 1.29 | 1.75 | 44 | 0.64 |
| 3 | 3.50 | 89 | 4.50 | 114 | 2.02 | 2.00 | 51 | 1.01 |
| 3 1/2 | 4.00 | 102 | 5.25 | 133 | 2.83 | 2.25 | 57 | 1.41 |
| 4 | 4.50 | 114 | 6.00 | 152 | 3.84 | 2.50 | 64 | 1.92 |
| 5 | 5.56 | 141 | 7.50 | 190 | 6.51 | 3.12 | 79 | 3.25 |
| 6 | 6.62 | 168 | 9.00 | 229 | 10.1 | 3.75 | 95 | 5.05 |
| 8 | 8.62 | 219 | 12.00 | 305 | 20.3 | 5.00 | 127 | 10.15 |
| 10 | 10.75 | 273 | 15.00 | 381 | 36.0 | 6.25 | 159 | 18.0 |
| 12 | 12.75 | 324 | 18.00 | 457 | 53.0 | 7.50 | 190 | 26.5 |
| 14 | 14.00 | 356 | 21.00 | 533 | 68.0 | 8.75 | 222 | 34.0 |
| 16 | 16.00 | 406 | 24.00 | 610 | 89.2 | 10.00 | 254 | 44.6 |
| 18 | 18.00 | 457 | 27.00 | 686 | 113.0 | 11.25 | 286 | 56.5 |
| 20 | 20.00 | 508 | 30.00 | 762 | 140.0 | 12.50 | 318 | 70.0 |
| 22 | 22.00 | 559 | 33.00 | 838 | 170.0 | 13.50 | 343 | 85.0 |
| 24 | 24.00 | 610 | 36.00 | 914 | 202.0 | 15.00 | 381 | 101.0 |
| 26 | 26.00 | 660 | 39.00 | 991 | 241.4 | 16.00 | 406 | 120.5 |
| 28 | 28.00 | 711 | 42.00 | 1067 | 279.9 | 17.25 | 438 | 140.0 |
| 30 | 30.00 | 762 | 45.00 | 1143 | 321.3 | 18.50 | 470 | 160.5 |
| 32 | 32.00 | 813 | 48.00 | 1219 | 365.6 | 19.75 | 502 | 183.0 |
| 34 | 34.00 | 864 | 51.00 | 1295 | - | 21.00 | 533 | - |
| 36 | 36.00 | 914 | 54.00 | 1372 | 462.7 | 22.25 | 565 | 231.0 |
| 38 | 38.00 | 965 | 57.00 | 1448 | - | 23.62 | 600 | - |
| 40 | 40.00 | 1016 | 60.00 | 1524 | 571.3 | 24.88 | 632 | 285.5 |
| 42 | 42.00 | 1067 | 63.00 | 1600 | 629.8 | 26.00 | 660 | 315.0 |
| 44 | 44.00 | 1118 | 66.00 | 1676 | - | 27.38 | 695 | - |
| 46 | 46.00 | 1168 | 69.00 | 1753 | - | 28.62 | 727 | - |
| 48 | 48.00 | 1219 | 72.00 | 1829 | - | 29.88 | 759 | - |

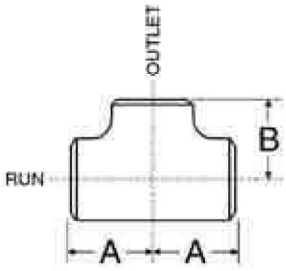
Notes
- Dimensions quoted in mm are 'Nominal' values from B16.9 (i.e. rounded equivalents of the inch dimensions). Refer to ASME/ANSI B16.9 for additional 'Max' and 'Min' metric dimensions.
- For tolerances see page 3-14.

1 Weights are approximate and based on manufacturers' data (where available) for Schedule 40S/Standard fittings. See page 3-15 for further information.

# Butt Weld Fittings

## Range/Sizes - Equal Tees - ANSI B16.9






### Dimensions (based on ASME/ANSI B16.9) and example weights for equal tees

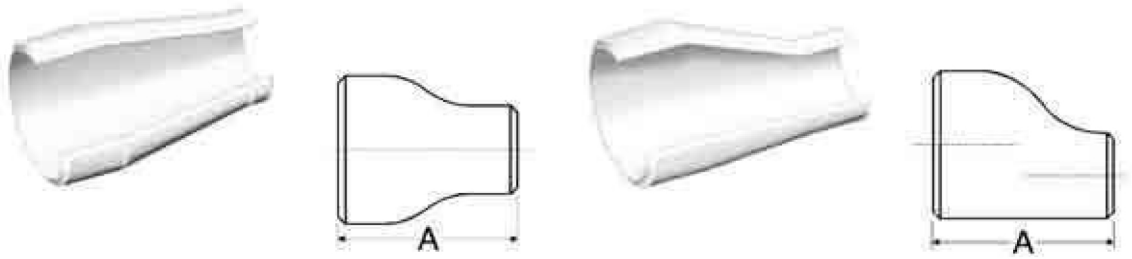
| Nominal Pipe Size | OD at Bevelled OD | | Run A | | Outlet B | | Weight (Tees only) 40S/STD[1] |
|---|---|---|---|---|---|---|---|
| | in | mm | in | mm | in | mm | kg/piece |
| 1/2 | 0.84 | 21 | 1.00 | 25 | 1.00 | 25 | 0.08 |
| 3/4 | 1.05 | 27 | 1.12 | 29 | 1.12 | 29 | 0.11 |
| 1 | 1.32 | 33 | 1.50 | 38 | 1.50 | 38 | 0.24 |
| 1 1/4 | 1.66 | 42 | 1.88 | 48 | 1.88 | 48 | 0.41 |
| 1 1/2 | 1.90 | 48 | 2.25 | 57 | 2.25 | 57 | 0.60 |
| 2 | 2.38 | 60 | 2.50 | 64 | 2.50 | 64 | 0.87 |
| 2 1/2 | 2.88 | 73 | 3.00 | 76 | 3.00 | 76 | 1.66 |
| 3 | 3.50 | 89 | 3.38 | 86 | 3.38 | 86 | 1.90 |
| 3 1/2 | 4.00 | 102 | 3.75 | 95 | 3.75 | 95 | - |
| 4 | 4.50 | 114 | 4.12 | 105 | 4.12 | 105 | 4.13 |
| 5 | 5.56 | 141 | 4.88 | 124 | 4.88 | 124 | 6.55 |
| 6 | 6.62 | 168 | 5.62 | 143 | 5.62 | 143 | 9.73 |
| 8 | 8.62 | 219 | 7.00 | 178 | 7.00 | 178 | 18.0 |
| 10 | 10.75 | 273 | 8.50 | 216 | 8.50 | 216 | 30.8 |
| 12 | 12.75 | 324 | 10.00 | 254 | 10.00 | 254 | 44.3 |
| 14 | 14.00 | 356 | 11.00 | 279 | 11.00 | 279 | 53.7 |
| 16 | 16.00 | 406 | 12.00 | 305 | 12.00 | 305 | 66.3 |
| 18 | 18.00 | 457 | 13.50 | 343 | 13.50 | 343 | 84.1 |
| 20 | 20.00 | 508 | 15.00 | 381 | 15.00 | 381 | 104 |
| 22 | 22.00 | 559 | 16.50 | 419 | 16.50 | 419 | 126 |
| 24 | 24.00 | 610 | 17.00 | 432 | 17.00 | 432 | 140 |
| 26 | 26.00 | 660 | 19.50 | 495 | 19.50 | 495 | 158 |
| 28 | 28.00 | 711 | 20.50 | 521 | 20.50 | 521 | 176 |
| 30 | 30.00 | 762 | 22.00 | 559 | 22.00 | 559 | 203 |
| 32 | 32.00 | 813 | 23.50 | 597 | 23.50 | 597 | 231 |
| 34 | 34.00 | 864 | 25.00 | 635 | 25.00 | 635 | - |
| 36 | 36.00 | 914 | 26.50 | 673 | 26.50 | 673 | 294 |
| 38 | 38.00 | 965 | 28.00 | 711 | 28.00 | 711 | - |
| 40 | 40.00 | 1016 | 29.50 | 749 | 29.50 | 749 | 363 |
| 42 | 42.00 | 1067 | 30.00 | 762 | 28.00 | 711 | 382 |
| 44 | 44.00 | 1118 | 32.00 | 813 | 30.00 | 762 | - |
| 46 | 46.00 | 1168 | 33.50 | 851 | 31.50 | 800 | - |
| 48 | 48.00 | 1219 | 35.00 | 889 | 33.00 | 838 | - |

Notes
- For NPS 26 and larger: Dimensions are not applicable to crosses. Also, dimension B is recommended but not required.
- Dimensions quoted in mm are 'Nominal' values from B16.9 (i.e. rounded equivalents of the inch dimensions). Refer to B16.9 for additional 'Max' and 'Min' metric dimensions.
- For tolerances see page 3-14.

1 Weights are approximate and based on manufacturers' data (where available) for Schedule 40S/Standard fittings. See page 3-15 for further information.

# Butt Weld Fittings

## Range/Sizes - Concentric and Eccentric Reducers - ANSI B16.9




### Dimensions (based on ASME/ANSI B16.9) and example weights for reducers

| Nominal Pipe Size | Large End OD at Bevel | | Small End OD at Bevel | | End to End A | | Weight 40S/STD[1] |
|---|---|---|---|---|---|---|---|
| | in | mm | in | mm | in | mm | kg/piece |
| 3/4⇨1/2 | 1.05 | 27 | 0.84 | 21 | 1.50 | 38 | 0.06 |
| 3/4⇨3/8 | 1.05 | 27 | 0.68 | 17 | 1.50 | 38 | - |
| 1⇨3/4 | 1.32 | 33 | 1.05 | 27 | 2.00 | 51 | 0.12 |
| 1⇨1/2 | 1.32 | 33 | 0.84 | 21 | 2.00 | 51 | 0.11 |
| 1 1/4⇨1 | 1.66 | 42 | 1.32 | 33 | 2.00 | 51 | 0.16 |
| 1 1/4⇨3/4 | 1.66 | 42 | 1.05 | 27 | 2.00 | 51 | 0.14 |
| 1 1/4⇨1/2 | 1.66 | 42 | 0.84 | 21 | 2.00 | 51 | 0.13 |
| 1 1/2⇨1 1/4 | 1.90 | 48 | 1.66 | 42 | 2.50 | 64 | 0.24 |
| 1 1/2⇨1 | 1.90 | 48 | 1.32 | 33 | 2.50 | 64 | 0.22 |
| 1 1/2⇨3/4 | 1.90 | 48 | 1.05 | 27 | 2.50 | 64 | 0.20 |
| 1 1/2⇨1/2 | 1.90 | 48 | 0.84 | 21 | 2.50 | 64 | 0.18 |
| 2⇨1 1/2 | 2.38 | 60 | 1.90 | 48 | 3.00 | 76 | 0.37 |
| 2⇨1 1/4 | 2.38 | 60 | 1.66 | 42 | 3.00 | 76 | 0.35 |
| 2⇨1 | 2.38 | 60 | 1.32 | 33 | 3.00 | 76 | 0.32 |
| 2⇨3/4 | 2.38 | 60 | 1.05 | 27 | 3.00 | 76 | 0.30 |
| 2 1/2⇨2 | 2.88 | 73 | 2.38 | 60 | 3.50 | 89 | 0.72 |
| 2 1/2⇨1 1/2 | 2.88 | 73 | 1.90 | 48 | 3.50 | 89 | 0.66 |
| 2 1/2⇨1 1/4 | 2.88 | 73 | 1.66 | 42 | 3.50 | 89 | 0.63 |
| 2 1/2⇨1 | 2.88 | 73 | 1.32 | 33 | 3.50 | 89 | - |
| 3⇨2 1/2 | 3.50 | 89 | 2.88 | 73 | 3.50 | 89 | 0.93 |
| 3⇨2 | 3.50 | 89 | 2.38 | 60 | 3.50 | 89 | 0.85 |
| 3⇨1 1/2 | 3.50 | 89 | 1.90 | 48 | 3.50 | 89 | 0.78 |
| 3⇨1 1/4 | 3.50 | 89 | 1.66 | 42 | 3.50 | 89 | 0.75 |
| 3 1/2⇨3 | 4.00 | 102 | 3.50 | 89 | 4.00 | 102 | - |
| 3 1/2⇨2 1/2 | 4.00 | 102 | 2.88 | 73 | 4.00 | 102 | - |
| 3 1/2⇨2 | 4.00 | 102 | 2.38 | 60 | 4.00 | 102 | - |
| 3 1/2⇨1 1/2 | 4.00 | 102 | 1.90 | 48 | 4.00 | 102 | - |
| Reducers 3 1/2⇨1 1/4, and 4, 5, 6, & 8⇨3 1/2 are also available | | | | | | | |
| 4⇨3 1/2 | 4.50 | 114 | 4.00 | 102 | 4.00 | 102 | - |
| 4⇨3 | 4.50 | 114 | 3.50 | 89 | 4.00 | 102 | 1.45 |
| 4⇨2 1/2 | 4.50 | 114 | 2.88 | 73 | 4.00 | 102 | 1.37 |
| 4⇨2 | 4.50 | 114 | 2.38 | 60 | 4.00 | 102 | 1.27 |
| 4⇨1 1/2 | 4.50 | 114 | 1.90 | 48 | 4.00 | 102 | 1.18 |
| 5⇨4 | 5.56 | 141 | 4.50 | 114 | 5.00 | 127 | 2.50 |
| 5⇨3 | 5.56 | 141 | 3.50 | 89 | 5.00 | 127 | 2.27 |
| 5⇨2 1/2 | 5.56 | 141 | 2.88 | 73 | 5.00 | 127 | 2.16 |
| 6⇨5 | 6.62 | 168 | 5.56 | 141 | 5.50 | 140 | 3.57 |
| 6⇨4 | 6.62 | 168 | 4.50 | 114 | 5.50 | 140 | 3.30 |
| 6⇨3 | 6.62 | 168 | 3.50 | 89 | 5.50 | 140 | 3.04 |
| 8⇨6 | 8.62 | 219 | 6.62 | 168 | 6.00 | 152 | 5.71 |
| 8⇨5 | 8.62 | 219 | 5.56 | 141 | 6.00 | 152 | 5.40 |
| 8⇨4 | 8.62 | 219 | 4.50 | 114 | 6.00 | 152 | 5.10 |
| 10⇨8 | 10.75 | 273 | 8.62 | 219 | 7.00 | 178 | 9.58 |
| 10⇨6 | 10.75 | 273 | 6.62 | 168 | 7.00 | 178 | 8.78 |
| 10⇨5 | 10.75 | 273 | 5.56 | 141 | 7.00 | 178 | 8.42 |

# Butt Weld Fittings

## Range/Sizes - Concentric and Eccentric Reducers - ANSI B16.9

| Nominal Pipe Size | Large End | | Small End | | End to End | | Weight |
|---|---|---|---|---|---|---|---|
| | OD at Bevel | | OD at Bevel | | A | | 40S/STD[1] |
| | in | mm | in | mm | in | mm | kg/piece |
| 12⇨10 | 12.75 | 324 | 10.75 | 273 | 8.00 | 203 | 13.6 |
| 12⇨8 | 12.75 | 324 | 8.62 | 219 | 8.00 | 203 | 12.7 |
| 12⇨6 | 12.75 | 324 | 6.62 | 168 | 8.00 | 203 | 11.8 |
| 14⇨12 | 14.00 | 356 | 12.75 | 324 | 13.00 | 330 | 25.4 |
| 14⇨10 | 14.00 | 356 | 10.75 | 273 | 13.00 | 330 | 23.6 |
| 14⇨8 | 14.00 | 356 | 8.62 | 219 | 13.00 | 330 | 21.8 |
| 16⇨14 | 16.00 | 406 | 14.00 | 356 | 14.00 | 356 | 31.0 |
| 16⇨12 | 16.00 | 406 | 12.75 | 324 | 14.00 | 356 | 29.6 |
| 16⇨10 | 16.00 | 406 | 10.75 | 273 | 14.00 | 356 | 27.8 |
| 18⇨16 | 18.00 | 457 | 16.00 | 406 | 15.00 | 381 | 37.8 |
| 18⇨14 | 18.00 | 457 | 14.00 | 356 | 15.00 | 381 | 35.7 |
| 18⇨12 | 18.00 | 457 | 12.75 | 324 | 15.00 | 381 | 34.3 |
| 20⇨18 | 20.00 | 508 | 18.00 | 457 | 20.00 | 508 | 56.4 |
| 20⇨16 | 20.00 | 508 | 16.00 | 406 | 20.00 | 508 | 53.5 |
| 20⇨14 | 20.00 | 508 | 14.00 | 356 | 20.00 | 508 | 50.8 |
| 22⇨20 | 22.00 | 559 | 20.00 | 508 | 20.00 | 508 | 62.6 |
| 22⇨18 | 22.00 | 559 | 18.00 | 457 | 20.00 | 508 | 59.7 |
| 22⇨16 | 22.00 | 559 | 16.00 | 406 | 20.00 | 508 | 57.1 |
| 24⇨22 | 24.00 | 610 | 22.00 | 559 | 20.00 | 508 | 68.6 |
| 24⇨20 | 24.00 | 610 | 20.00 | 508 | 20.00 | 508 | 65.7 |
| 24⇨18 | 24.00 | 610 | 18.00 | 457 | 20.00 | 508 | 63.0 |
| 26⇨24 | 26.00 | 660 | 24.00 | 610 | 24.00 | 610 | - |
| 26⇨22 | 26.00 | 660 | 22.00 | 559 | 24.00 | 610 | - |
| 26⇨20 | 26.00 | 660 | 20.00 | 508 | 24.00 | 610 | - |
| 26⇨18 | 26.00 | 660 | 18.00 | 457 | 24.00 | 610 | - |
| 28⇨26 | 28.00 | 711 | 26.00 | 660 | 24.00 | 610 | - |
| 28⇨24 | 28.00 | 711 | 24.00 | 610 | 24.00 | 610 | - |
| 28⇨20 | 28.00 | 711 | 20.00 | 508 | 24.00 | 610 | - |
| 28⇨18 | 28.00 | 711 | 18.00 | 457 | 24.00 | 610 | - |
| 30⇨28 | 30.00 | 762 | 28.00 | 711 | 24.00 | 610 | - |
| 30⇨26 | 30.00 | 762 | 26.00 | 660 | 24.00 | 610 | - |
| 30⇨24 | 30.00 | 762 | 24.00 | 610 | 24.00 | 610 | - |
| 30⇨20 | 30.00 | 762 | 20.00 | 508 | 24.00 | 610 | - |
| 32⇨30 | 32.00 | 813 | 30.00 | 762 | 24.00 | 610 | - |
| 32⇨28 | 32.00 | 813 | 28.00 | 711 | 24.00 | 610 | - |
| 32⇨26 | 32.00 | 813 | 26.00 | 660 | 24.00 | 610 | - |
| 32⇨24 | 32.00 | 813 | 24.00 | 610 | 24.00 | 610 | - |
| 34⇨32 | 34.00 | 864 | 32.00 | 813 | 24.00 | 610 | - |
| 34⇨30 | 34.00 | 864 | 30.00 | 762 | 24.00 | 610 | - |
| 34⇨26 | 34.00 | 864 | 26.00 | 660 | 24.00 | 610 | - |
| 34⇨24 | 34.00 | 864 | 24.00 | 610 | 24.00 | 610 | - |
| 36⇨34 | 36.00 | 914 | 34.00 | 864 | 24.00 | 610 | - |
| 36⇨32 | 36.00 | 914 | 32.00 | 813 | 24.00 | 610 | - |
| 36⇨30 | 36.00 | 914 | 30.00 | 762 | 24.00 | 610 | - |
| 36⇨26 | 36.00 | 914 | 26.00 | 660 | 24.00 | 610 | - |
| 36⇨24 | 36.00 | 914 | 24.00 | 610 | 24.00 | 610 | - |
| Reducers 38⇨36/34/32/30/28/26, 40⇨38/36/34/32/30, 42⇨40/38/36/34/32/30, 44⇨42/40/38/36, 46⇨44/42/40 and 48⇨46/44/42/40 are also available | | | | | | | |

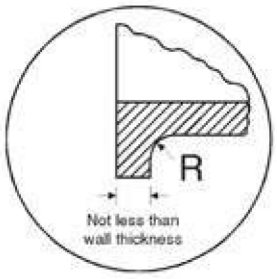
Notes

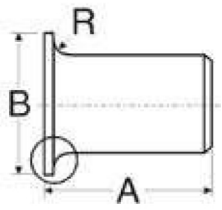
- Dimensions quoted in mm are 'Nominal' values from B16.9 (i.e. rounded equivalents of the inch dimensions). Refer to B16.9 for additional 'Max' and 'Min' metric dimensions.
- For tolerances see page 3-14.
- Other sizes listed in B16.9 are 5⇨2, 6⇨2½, 10⇨4, 12⇨5, 14⇨6, 16⇨8, 18⇨10, 20⇨12, 22⇨14 and 24⇨16.

1 Weights are approximate and based on manufacturers' data (where available) for Schedule 40S/Standard fittings. See page 3-15 for further information.

# Butt Weld Fittings

## Range/Sizes - Lap Joint Stub Ends - ANSI B16.9




### Dimensions (based on ASME/ANSI B16.9) and example weights

| Common | | | Long Pattern | | Short Pattern | | Diameter of Lap | | Radius of Fillet | | OD of Barrel | | | | Weight |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal Pipe Size | OD at Bevel | | A | | A | | B | | R | | OD max | | OD min | | 40S/STD[1] |
| | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | kg/piece |
| 1/2 | 0.84 | 21 | 3.00 | 76 | 2.00 | 51 | 1.38 | 35 | 0.12 | 3 | 0.90 | 23 | 0.81 | 21 | 0.14 |
| 3/4 | 1.05 | 27 | 3.00 | 76 | 2.00 | 51 | 1.69 | 43 | 0.12 | 3 | 1.11 | 28 | 1.02 | 26 | 0.18 |
| 1 | 1.32 | 33 | 4.00 | 102 | 2.00 | 51 | 2.00 | 51 | 0.12 | 3 | 1.38 | 35 | 1.28 | 33 | 0.30 |
| 1 1/4 | 1.66 | 42 | 4.00 | 102 | 2.00 | 51 | 2.50 | 64 | 0.19 | 5 | 1.72 | 44 | 1.63 | 41 | 0.41 |
| 1 1/2 | 1.90 | 48 | 4.00 | 102 | 2.00 | 51 | 2.88 | 73 | 0.25 | 6 | 1.97 | 50 | 1.87 | 47 | 0.55 |
| 2 | 2.38 | 60 | 6.00 | 152 | 2.50 | 64 | 3.62 | 92 | 0.31 | 8 | 2.46 | 62 | 2.34 | 60 | 1.00 |
| 2 1/2 | 2.88 | 73 | 6.00 | 152 | 2.50 | 64 | 4.12 | 105 | 0.31 | 8 | 2.97 | 75 | 2.84 | 72 | 1.56 |
| 3 | 3.50 | 89 | 6.00 | 152 | 2.50 | 64 | 5.00 | 127 | 0.38 | 10 | 3.60 | 91 | 3.47 | 88 | 2.15 |
| 3 1/2 | 4.00 | 102 | 6.00 | 152 | 3.00 | 76 | 5.50 | 140 | 0.38 | 10 | 4.10 | 104 | 3.97 | 101 | - |
| 4 | 4.50 | 114 | 6.00 | 152 | 3.00 | 76 | 6.19 | 157 | 0.44 | 11 | 4.59 | 117 | 4.47 | 114 | 3.05 |
| 5 | 5.56 | 141 | 8.00 | 203 | 3.00 | 76 | 7.31 | 186 | 0.44 | 11 | 5.68 | 144 | 5.53 | 141 | 5.30 |
| 6 | 6.62 | 168 | 8.00 | 203 | 3.50 | 89 | 8.50 | 216 | 0.50 | 13 | 6.74 | 171 | 6.59 | 168 | 6.90 |
| 8 | 8.62 | 219 | 8.00 | 203 | 4.00 | 102 | 10.62 | 270 | 0.50 | 13 | 8.74 | 222 | 8.59 | 218 | 10.45 |
| 10 | 10.75 | 273 | 10.00 | 254 | 5.00 | 127 | 12.75 | 324 | 0.50 | 13 | 10.91 | 277 | 10.72 | 272 | 18.15 |
| 12 | 12.75 | 324 | 10.00 | 254 | 6.00 | 152 | 15.00 | 381 | 0.50 | 13 | 12.91 | 328 | 12.72 | 323 | 22.25 |
| 14 | 14.00 | 356 | 12.00 | 305 | 6.00 | 152 | 16.25 | 413 | 0.50 | 13 | 14.17 | 360 | 13.97 | 355 | 29.05 |
| 16 | 16.00 | 406 | 12.00 | 305 | 6.00 | 152 | 18.50 | 470 | 0.50 | 13 | 16.18 | 411 | 15.97 | 406 | 32.69 |
| 18 | 18.00 | 457 | 12.00 | 305 | 6.00 | 152 | 21.00 | 533 | 0.50 | 13 | 18.19 | 462 | 17.97 | 456 | 38.60 |
| 20 | 20.00 | 508 | 12.00 | 305 | 6.00 | 152 | 23.00 | 584 | 0.50 | 13 | 20.24 | 514 | 19.97 | 507 | 42.68 |
| 22 | 22.00 | 559 | 12.00 | 305 | 6.00 | 152 | 25.25 | 641 | 0.50 | 13 | 22.24 | 565 | 21.97 | 558 | - |
| 24 | 24.00 | 610 | 12.00 | 305 | 6.00 | 152 | 27.25 | 692 | 0.50 | 13 | 24.24 | 616 | 23.97 | 609 | 51.30 |

Notes
- Dimensions quoted in mm are 'Nominal' values from B16.9 (rounded equivalents of the inch dimensions). Refer to B16.9 for additional 'Max' and 'Min' metric dimensions.
- OD of barrel max and min dimensions (in and mm) are rounded. Refer to B16.9 for the exact values.
- Long pattern stub ends are standard. Purchaser should specify if short pattern is required. Long pattern stub ends are also known as ASA Stub Ends. Short pattern stub ends are used with larger flanges in Classes 300 and 600, and with most sizes in Class 900 and higher. When long pattern stub ends are used with flanges in Classes 1500 and 2500, it may be necessary to increase the length A.
- Additional lap thickness must be provided for special facings (e.g. tongue and groove); this is within length A.
- Dimension B conforms to ASME/ANSI B16.5, Pipe Flanges and Forged Fittings.
- Gasket face finish shall be accordance with ASME/ANSI B16.5 for raised face flanges.
- For tolerances see page 3-14.

1 Long pattern weights are listed (short pattern weights are similar to MSS SP-43 lap joint stub ends, page 3-11). Weights are approximate and based on manufacturers' data (where available) for Schedule 40S/Standard fittings. See page 3-15 for further information.

# Butt Weld Fittings

## Specifications - General

### Applicable specifications

Specifications applicable to buttwelding fittings are as follows:

- **ASME/ANSI B16.9-2007** - Factory-made wrought steel buttwelding fittings.
- **ASME/ANSI B16.28-1997** - Wrought steel buttwelding short radius elbows and returns.
- **MSS SP-43 1991**, Reaffirmed 1996 - Wrought stainless steel buttwelding fittings. This applies to 5S, 10S, and 40S wall thicknesses only.
- **ASME/ANSI B16.25-1997** - Buttwelding ends. This defines various weld bevel designs and dimensions, beyond the scope of this manual.
- **Wall Thicknesses**. Fittings are manufactured to match the wall thicknesses of pipe.
- **Weights** quoted in the fitting tables are based on manufacturers' data and are approximate. Actual weights may vary from those quoted depending on the type of construction. For austenitic and duplex stainless steel, multiply the quoted weight by 1.014. For ferritic and martensitic stainless steel, multiply the quoted weight by 0.985.

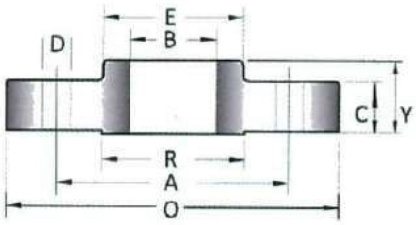
### Manufacture and test

- Materials and Manufacture. ASME/ANSI and MSS stainless steel buttwelding fittings are most commonly manufactured to ASTM A403.
- Production Testing. Test requirements are defined in ASTM A430.
- **ASME/ANSI Test Requirements**. B16.9 and B16.28 do not require production testing of fittings although they must be capable of withstanding the rated pressure:
  **Pressure Ratings**. The rated pressure is as for straight seamless pipe of equivalent NPS, wall thickness and material.
  **Proof testing** to qualify the fitting design comprises a bursting strength test. The fitting is required to withstand, without rupture, 105% of the pressure P given by: P = (2St) / D
  where
  S= Actual ultimate tensile strength of a specimen from a representative fitting.
  t = Nominal wall thickness
  D = Outside diameter
- **MSS SP-43 Test Requirements**. SP-43 does not require hydrostatic testing of fittings although they must be capable of withstanding 1.5 times the pressure ratings at 100 °F:
  **Pressure Ratings**. Fittings produced to MSS SP-43 have the pressure ratings shown in this table.

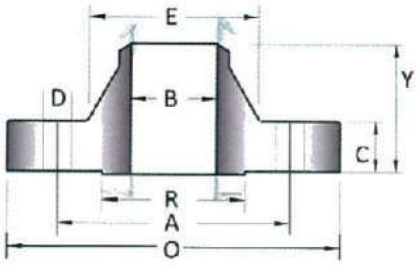
| Temperature | Schedule 5S | Schedule 10S |
|---|---|---|
| °F | Pressure, psi | |
| 100 | 225 | 275 |
| 150 | 215 | 255 |
| 200 | 200 | 240 |
| 250 | 190 | 225 |
| 300 | 175 | 210 |
| 350 | 165 | 195 |
| 400 | 150 | 180 |
| 450 | Not recommended for use at these temperatures | 165 |
| 500 | | 150 |
| 600 | | 130 |
| 700 | | 110 |
| 750 | | 100 |

# Flanges

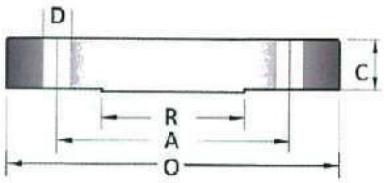





SLIP ON WELDING




WELDING NECK




BLIND

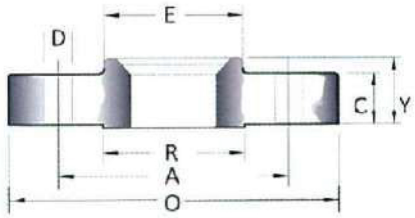
## DIMENSIONS FLANGES OF CLASS 150 (ASME B 16.5)

| Nominal Pipe Size | | Flange Dia | Dia of Bolt Circle | Dia of Bolt Holes | No of Holes | Thk of Flange | Dia of Hub | Length through Hub | | | Dia of Bore | | Dia of R/F | Depth of Socket |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (Inch) | (mm) | O | A | D | | C | E | S/o. & S/w. Y | W/N Y | L/J Y | S/o. & S/w. B | L/J B | R | F |
| 1/2 | 15 | 90 | 60.3 | 15.9 | 4 | 9.6 | 30 | 14 | 46 | 16 | 22.2 | 22.9 | 34.9 | 10 |
| 3/4 | 20 | 100 | 69.9 | 15.9 | 4 | 11.2 | 38 | 14 | 51 | 16 | 27.7 | 28.2 | 42.9 | 11 |
| 1 | 25 | 110 | 79.4 | 15.9 | 4 | 12.7 | 49 | 16 | 54 | 17 | 34.5 | 34.9 | 50.8 | 13 |
| 1.1/4 | 32 | 115 | 88.9 | 15.9 | 4 | 14.3 | 59 | 19 | 56 | 21 | 43.2 | 43.7 | 63.5 | 14 |
| 1.1/2 | 40 | 125 | 98.4 | 15.9 | 4 | 15.9 | 65 | 21 | 60 | 22 | 49.5 | 50.0 | 73.0 | 16 |
| 2 | 50 | 150 | 120.7 | 19.0 | 4 | 17.5 | 78 | 24 | 62 | 25 | 61.9 | 62.5 | 92.1 | 17 |
| 2.1/2 | 65 | 180 | 139.7 | 19.0 | 4 | 20.7 | 90 | 27 | 68 | 29 | 74.6 | 75.4 | 104.8 | 19 |
| 3 | 80 | 190 | 152.4 | 19.0 | 4 | 22.3 | 108 | 29 | 68 | 30 | 90.7 | 91.4 | 127.0 | 21 |
| 4 | 100 | 230 | 190.5 | 19.0 | 8 | 22.3 | 135 | 32 | 75 | 33 | 116.1 | 116.8 | 157.2 | - |
| 5 | 125 | 255 | 215.9 | 22.2 | 8 | 22.3 | 164 | 35 | 87 | 36 | 143.8 | 114.4 | 185.7 | - |
| 6 | 150 | 280 | 241.3 | 22.2 | 8 | 23.9 | 192 | 38 | 87 | 40 | 170.7 | 171.4 | 215.9 | - |
| 8 | 200 | 345 | 298.5 | 22.2 | 8 | 27.0 | 246 | 43 | 100 | 44 | 221.5 | 222.2 | 269.9 | - |
| 10 | 250 | 405 | 362.0 | 25.4 | 12 | 28.6 | 305 | 48 | 100 | 49 | 276.2 | 277.4 | 323.8 | - |
| 12 | 300 | 485 | 431.8 | 25.4 | 12 | 30.2 | 365 | 54 | 113 | 56 | 327.0 | 328.2 | 381.0 | - |
| 14 | 350 | 535 | 476.3 | 28.6 | 12 | 33.4 | 400 | 56 | 125 | 79 | 359.2 | 360.2 | 412.8 | - |
| 16 | 400 | 595 | 539.8 | 28.6 | 16 | 35.0 | 457 | 62 | 125 | 87 | 410.5 | 411.2 | 469.9 | - |
| 18 | 450 | 635 | 577.9 | 31.7 | 16 | 38.1 | 505 | 67 | 138 | 97 | 461.8 | 462.3 | 533.4 | - |
| 20 | 500 | 700 | 635.0 | 31.7 | 20 | 41.3 | 559 | 71 | 143 | 103 | 513.1 | 514.3 | 584.2 | - |
| 24 | 600 | 815 | 749.3 | 34.9 | 20 | 46.1 | 663 | 81 | 151 | 111 | 616.0 | 616.0 | 692.2 | - |

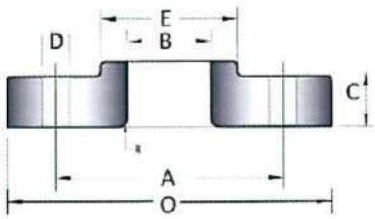
## DIMENSIONS OF CLASS 300 FLANGES (ASME B 16.5)

| Nominal Pipe Size | | Flange Dia | Dia of Bolt Circle | Dia of Bolt Holes | No of Holes | Thk of Flange | Dia of Hub | Length through Hub | | | Dia of Bore | | Dia of R/F | Depth of Socket |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (Inch) | (mm) | O | A | D | | C | E | S/o. & S/w. Y | W/N Y | L/J Y | S/o. & S/w. B | L/J B | R | F |
| 1/2 | 15 | 95 | 66.7 | 15.9 | 4 | 12.7 | 38 | 21 | 51 | 22 | 22.2 | 22.9 | 34.9 | 10 |
| 3/4 | 20 | 115 | 82.6 | 19.0 | 4 | 14.3 | 48 | 24 | 56 | 25 | 27.7 | 28.2 | 42.9 | 11 |
| 1 | 25 | 125 | 88.9 | 19.0 | 4 | 15.9 | 54 | 25 | 60 | 27 | 34.5 | 34.9 | 50.8 | 13 |
| 1.1/4 | 32 | 135 | 98.4 | 19.0 | 4 | 17.5 | 64 | 25 | 64 | 27 | 43.2 | 43.7 | 63.5 | 14 |
| 1.1/2 | 40 | 155 | 114.3 | 22.2 | 4 | 19.1 | 70 | 29 | 67 | 30 | 49.5 | 50.0 | 73.0 | 16 |
| 2 | 50 | 165 | 127.0 | 19.0 | 8 | 20.7 | 84 | 32 | 68 | 33 | 61.9 | 62.5 | 92.1 | 17 |
| 2.1/2 | 65 | 190 | 149.2 | 22.2 | 8 | 23.9 | 100 | 37 | 75 | 38 | 74.6 | 75.4 | 104.8 | 19 |
| 3 | 80 | 210 | 168.3 | 22.2 | 8 | 27.0 | 117 | 41 | 78 | 43 | 90.7 | 91.4 | 127.0 | 21 |
| 4 | 100 | 255 | 220.0 | 22.2 | 8 | 30.2 | 146 | 46 | 84 | 48 | 116.1 | 116.8 | 157.2 | - |
| 5 | 125 | 280 | 235.0 | 22.2 | 8 | 33.4 | 178 | 49 | 97 | 51 | 143.8 | 114.4 | 185.7 | - |
| 6 | 150 | 320 | 269.9 | 22.2 | 12 | 35.0 | 206 | 51 | 97 | 52 | 170.7 | 171.4 | 215.9 | - |
| 8 | 200 | 380 | 330.2 | 25.4 | 12 | 39.7 | 260 | 60 | 110 | 62 | 221.5 | 222.2 | 269.9 | - |
| 10 | 250 | 445 | 387.4 | 28.6 | 16 | 46.1 | 321 | 65 | 116 | 95 | 276.2 | 277.4 | 323.8 | - |
| 12 | 300 | 520 | 450.8 | 31.7 | 16 | 49.3 | 375 | 71 | 129 | 102 | 327.0 | 328.2 | 381.0 | - |
| 14 | 350 | 585 | 514.4 | 31.7 | 20 | 52.4 | 425 | 75 | 141 | 111 | 359.2 | 360.2 | 412.8 | - |
| 16 | 400 | 650 | 571.5 | 34.9 | 20 | 55.6 | 483 | 81 | 144 | 121 | 410.5 | 411.2 | 469.9 | - |
| 18 | 450 | 710 | 628.6 | 34.9 | 24 | 58.8 | 533 | 87 | 157 | 130 | 461.8 | 462.3 | 533.4 | - |
| 20 | 500 | 775 | 685.8 | 34.9 | 24 | 62.0 | 587 | 94 | 160 | 410 | 513.1 | 514.3 | 584.2 | - |
| 24 | 600 | 915 | 812.8 | 41.3 | 24 | 68.3 | 702 | 105 | 167 | 152 | 616.0 | 616.0 | 692.2 | - |

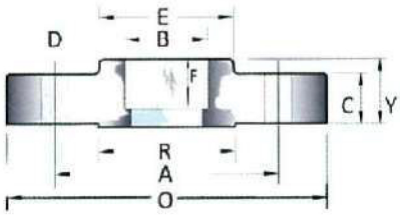
# Flanges




THREADED




LAPPED




SOCKET WELDING
(1/2 to 3 only)

## DIMENSIONS OF CLASS 600 FLANGES (ASME B 16.5)

| Nominal Pipe Size | | Flange Dia | Dia of Bolt Circle | Dia of Bolt Holes | No of Holes | Thk of Flange | Dia of Hub | Length through Hub | | | Dia of Bore | | Dia of R/F | Depth of Socket |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (Inch) | (mm) | O | A | D | | C | E | S/o. & S/w. Y | W/N Y | L/J Y | S/o. & S/w. B | L/J B | R | F |
| 1/2 | 15 | 95 | 66.7 | 15.9 | 4 | 14.3 | 38 | 22 | 52 | 22 | 22.2 | 22.9 | 34.9 | 10 |
| 3/4 | 20 | 115 | 82.6 | 19.0 | 4 | 15.9 | 48 | 25 | 57 | 25 | 27.7 | 28.2 | 42.9 | 11 |
| 1 | 25 | 125 | 88.9 | 19.0 | 4 | 17.5 | 54 | 27 | 62 | 27 | 34.5 | 34.9 | 50.8 | 13 |
| 1.1/4 | 32 | 135 | 98.4 | 19.0 | 4 | 20.7 | 64 | 29 | 67 | 29 | 43.2 | 43.7 | 63.5 | 14 |
| 1.1/2 | 40 | 155 | 114.3 | 22.2 | 4 | 22.3 | 70 | 32 | 70 | 32 | 49.5 | 50.0 | 73.0 | 16 |
| 2 | 50 | 165 | 127.0 | 19.0 | 8 | 25.4 | 84 | 37 | 73 | 37 | 61.9 | 62.5 | 92.1 | 17 |
| 2.1/2 | 65 | 190 | 149.2 | 22.2 | 8 | 28.6 | 100 | 41 | 79 | 41 | 74.6 | 75.4 | 104.8 | 19 |
| 3 | 80 | 210 | 168.3 | 22.2 | 8 | 31.8 | 117 | 46 | 83 | 46 | 90.7 | 91.4 | 127.0 | - |
| 4 | 100 | 275 | 215.9 | 25.4 | 8 | 38.1 | 152 | 54 | 102 | 54 | 116.1 | 116.8 | 157.2 | - |
| 5 | 125 | 330 | 266.7 | 28.6 | 8 | 44.5 | 189 | 60 | 114 | 60 | 143.8 | 144.4 | 185.7 | - |
| 6 | 150 | 355 | 292.1 | 28.6 | 12 | 47.7 | 222 | 67 | 117 | 67 | 170.7 | 171.4 | 215.9 | - |
| 8 | 200 | 420 | 349.2 | 31.7 | 12 | 55.6 | 273 | 76 | 133 | 76 | 221.5 | 222.2 | 269.9 | - |
| 10 | 250 | 510 | 431.8 | 34.9 | 16 | 63.5 | 343 | 86 | 152 | 111 | 276.2 | 277.4 | 323.8 | - |
| 12 | 300 | 560 | 489.0 | 34.9 | 20 | 66.7 | 400 | 92 | 156 | 117 | 327.0 | 328.2 | 381.0 | - |
| 14 | 350 | 605 | 527.0 | 38.1 | 20 | 69.9 | 432 | 94 | 165 | 127 | 359.2 | 360.2 | 412.8 | - |
| 16 | 400 | 685 | 603.2 | 41.3 | 20 | 76.2 | 495 | 106 | 178 | 140 | 410.5 | 411.2 | 469.9 | - |
| 18 | 450 | 74 | 645.0 | 44.4 | 20 | 82.6 | 546 | 117 | 184 | 152 | 461.8 | 462.2 | 533.4 | - |
| 20 | 500 | 815 | 723.9 | 44.4 | 24 | 88.9 | 610 | 127 | 190 | 165 | 513.1 | 514.4 | 584.2 | - |
| 24 | 600 | 940 | 838.2 | 50.8 | 24 | 101.6 | 718 | 140 | 203 | 184 | 616.0 | 616.0 | 692.2 | - |

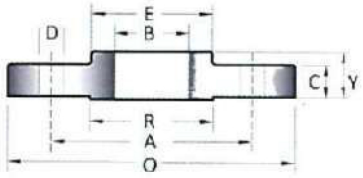
## DIMENSIONS OF CLASS 900 FLANGES (ASME B 16.5)

| Nominal Pipe Size | | Flange Dia | Dia of Bolt Circle | Dia of Bolt Holes | No of Holes | Thk of Flange | Dia of Hub | Length through Hub | | | Dia of Bore | | Dia of R/F | Depth of Socket |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (Inch) | (mm) | O | A | D | | C | E | S/o. & S/w. Y | W/N Y | L/J Y | S/o. & S/w. B | L/J B | R | F |
| 1/2 | 15 | 120 | 82.6 | 22.2 | 4 | 22.3 | 38 | 32 | 60 | 32 | 22.2 | 22.9 | 34.9 | 10 |
| 3/4 | 20 | 130 | 88.9 | 22.2 | 4 | 25.4 | 44 | 35 | 70 | 35 | 27.7 | 28.2 | 42.9 | 11 |
| 1 | 25 | 150 | 101.6 | 25.4 | 4 | 28.6 | 52 | 41 | 73 | 41 | 34.5 | 34.9 | 50.8 | 13 |
| 1.1/4 | 32 | 160 | 111.1 | 25.4 | 4 | 28.6 | 64 | 41 | 73 | 41 | 43.2 | 43.7 | 63.5 | 14 |
| 1.1/2 | 40 | 180 | 123.8 | 28.6 | 4 | 31.8 | 70 | 44 | 83 | 44 | 49.5 | 50.0 | 73.0 | 16 |
| 2 | 50 | 215 | 165.1 | 25.4 | 8 | 38.1 | 105 | 57 | 102 | 57 | 61.9 | 62.5 | 92.1 | 17 |
| 2.1/2 | 65 | 245 | 190.5 | 28.6 | 8 | 41.3 | 124 | 64 | 105 | 64 | 74.6 | 75.4 | 104.8 | 19 |
| 3 | 80 | 240 | 190.5 | 25.4 | 8 | 38.1 | 127 | 54 | 102 | 54 | 90.7 | 91.4 | 127.0 | - |
| 4 | 100 | 290 | 235.0 | 31.7 | 8 | 44.5 | 159 | 70 | 114 | 70 | 116.1 | 116.8 | 157.2 | - |
| 5 | 125 | 350 | 279.4 | 35.0 | 8 | 50.8 | 190 | 79 | 127 | 79 | 143.8 | 114.4 | 185.7 | - |
| 6 | 150 | 380 | 317.5 | 31.7 | 12 | 55.6 | 235 | 86 | 140 | 86 | 170.7 | 171.4 | 215.9 | - |
| 8 | 200 | 470 | 393.7 | 38.1 | 12 | 63.5 | 298 | 102 | 162 | 114 | 221.5 | 222.2 | 269.9 | - |
| 10 | 250 | 545 | 469.9 | 38.1 | 16 | 69.5 | 368 | 108 | 184 | 127 | 276.2 | 277.4 | 323.8 | - |
| 12 | 300 | 610 | 533.4 | 38.1 | 20 | 79.4 | 419 | 117 | 200 | 143 | 327.0 | 328.2 | 381.0 | - |

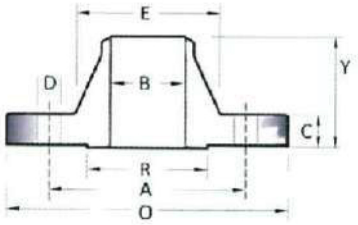
-
-
-
-
-

# Flanges

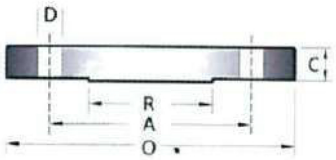





SLIP ON WELDING




WELDING NECK




BLIND

## DIMENSIONS OF CLASS 1500 FLANGES (ASME B 16.5)

| Nominal Pipe Size | | Flange Dia | Dia of Bolt Circle | Dia of Bolt Holes | No of Holes | Thk of Flange | Dia of Hub | Length through Hub | | | Dia of Bore | | Dia of R/F | Depth of Socket |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (Inch) | (mm) | O | A | D | | C | E | S/o. & S/w. Y | W/N Y | L/J Y | S/o. & S/w. B | L/J B | R | F |
| 1/2 | 15 | 120 | 82.6 | 22.2 | 4 | 22.3 | 38 | 32 | 60 | 32 | 22.2 | 22.9 | 34.9 | 10 |
| 3/4 | 20 | 130 | 88.9 | 22.2 | 4 | 25.4 | 44 | 35 | 70 | 35 | 27.2 | 28.2 | 42.9 | 11 |
| 1 | 25 | 150 | 101.6 | 25.4 | 4 | 28.6 | 52 | 41 | 73 | 41 | 34.5 | 34.9 | 50.8 | 13 |
| 1.1/4 | 32 | 160 | 111.1 | 25.4 | 4 | 28.6 | 64 | 41 | 73 | 41 | 43.2 | 43.7 | 63.5 | 14 |
| 1.1/2 | 40 | 180 | 123.8 | 28.6 | 4 | 31.8 | 70 | 44 | 83 | 44 | 49.5 | 50.0 | 73.0 | 16 |
| 2 | 50 | 215 | 165.1 | 25.4 | 8 | 38.1 | 105 | 57 | 102 | 57 | 61.9 | 62.5 | 92.1 | 17 |
| 2.1/2 | 65 | 245 | 190.5 | 28.6 | 8 | 44.3 | 124 | 64 | 105 | 64 | 74.6 | 75.4 | 104.8 | 19 |
| 3 | 80 | 265 | 203.2 | 31.7 | 8 | 47.7 | 133 | 73 | 117 | 73 | 90.7 | 91.4 | 127.0 | - |
| 4 | 100 | 310 | 241.3 | 34.9 | 8 | 54.0 | 162 | 91 | 124 | 90 | 116.1 | 116.8 | 157.2 | - |
| 5 | 125 | 375 | 292.1 | 41.3 | 8 | 73.1 | 197 | 105 | 156 | 105 | 143.8 | 114.4 | 185.7 | - |
| 6 | 150 | 395 | 317.5 | 38.1 | 12 | 82.6 | 229 | 119 | 171 | 119 | 170.7 | 171.4 | 215.9 | - |
| 8 | 200 | 485 | 393.7 | 44.4 | 12 | 92.1 | 292 | 143 | 213 | 143 | 221.5 | 222.2 | 269.9 | - |
| 10 | 250 | 585 | 482.6 | 50.8 | 12 | 105.0 | 368 | 159 | 254 | 179 | 276.3 | 277.4 | 323.8 | - |
| 12 | 300 | 675 | 571.5 | 54.0 | 16 | 123.9 | 451 | 181 | 283 | 219 | 327.1 | 328.2 | 381.0 | - |

## DIMENSIONS OF CLASS 2500 FLANGES (ASME B 16.5)

| Nominal Pipe Size | | Flange Dia | Dia of Bolt Circle | Dia of Bolt Holes | No of Holes | Thk of Flange | Dia of Hub | Length through Hub | | | Dia of Bore | | Dia of R/F | Depth of Socket |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (Inch) | (mm) | O | A | D | | C | E | S/o. & S/w. Y | W/N Y | L/J Y | S/o. & S/w. B | L/J B | R | F |
| 1/2 | 15 | 135 | 88.9 | 22.2 | 4 | 30.2 | 43 | 40 | 73 | 40 | 22.3 | 22.9 | 34.9 | 10 |
| 3/4 | 20 | 140 | 95.2 | 22.2 | 4 | 31.8 | 51 | 43 | 79 | 43 | 28.2 | 28.2 | 42.9 | 11 |
| 1 | 25 | 160 | 108.0 | 25.4 | 4 | 35.0 | 57 | 48 | 89 | 48 | 34.9 | 34.9 | 50.8 | 13 |
| 1.1/4 | 32 | 185 | 130.2 | 28.6 | 4 | 38.1 | 73 | 52 | 95 | 52 | 43.7 | 43.7 | 63.5 | 14 |
| 1.1/2 | 40 | 205 | 146.0 | 31.7 | 4 | 44.5 | 79 | 60 | 111 | 60 | 50.0 | 50.0 | 73.0 | 16 |
| 2 | 50 | 235 | 171.4 | 28.6 | 8 | 50.9 | 95 | 70 | 127 | 70 | 62.5 | 62.5 | 92.1 | 17 |
| 2.1/2 | 65 | 265 | 196.8 | 31.7 | 8 | 57.2 | 114 | 79 | 143 | 79 | 75.4 | 75.4 | 104.8 | 19 |
| 3 | 80 | 305 | 228.6 | 34.9 | 8 | 66.7 | 133 | 92 | 168 | 92 | 91.4 | 91.4 | 127.0 | - |
| 4 | 100 | 355 | 273.0 | 41.3 | 8 | 76.2 | 165 | 108 | 190 | 108 | 116.8 | 116.8 | 157.2 | - |
| 5 | 125 | 420 | 323.8 | 47.6 | 8 | 92.1 | 203 | 130 | 229 | 130 | 144.4 | 144.4 | 185.7 | - |
| 6 | 150 | 485 | 368.3 | 54.0 | 8 | 108.0 | 235 | 152 | 273 | 152 | 171.4 | 171.4 | 215.9 | - |
| 8 | 200 | 550 | 438.2 | 54.0 | 12 | 127.0 | 305 | 178 | 318 | 178 | 222.2 | 222.2 | 269.9 | - |
| 10 | 250 | 675 | 539.8 | 66.7 | 12 | 165.1 | 375 | 229 | 419 | 229 | 277.4 | 277.4 | 323.8 | - |
| 12 | 300 | 760 | 619.1 | 73.0 | 12 | 184.2 | 441 | 254 | 464 | 254 | 328.2 | 328.2 | 381.0 | - |

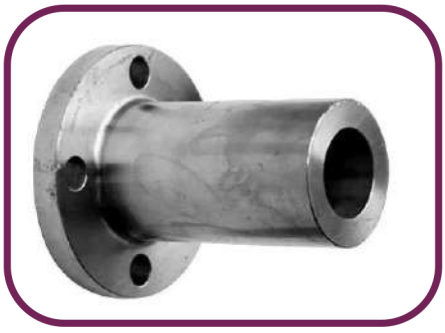
1) Thickness 'C' is Exclusive of Raised Face Thickness of 7mm. for Class 1500 & 2500.
2) For weld neck Bore Dia to be specified by purchaser or neck thickness to be specified by purchaser.

## Butt Weld Pipe Fittings






## Flanges


## Pipes, Sheets & Round Bar



# RISING FERROMATE PRIVATE LIMITED

AN ISO 9001:2015 CERTIFIED CO.

Manufacturer of

CS, AS, MS, SS & Nickel Alloys But Weld & Socket Weld, Pipe Fittings and Flanges


LALIT GANDHI MOB. 87793 02636 / 88286 50787

KISHOR KEER MOB. 81046 49655 / 91674 80896

Email : sales78rfpl@gmail.com / sales@rfpl.net.in

OFFICE ADDRESS:
OFFICE NO.1, CRESENT MENSION,
GROUND FLOOR, NEAR MOSQUE,
1ST KUMBHARWADA LANE,
NEAR GOL DEOL TEMPLE, GRAND ROAD,
MUMBAI - 400004. INDIA
PHONE NO. 022 6743 8382

FACTORY ADDRESS:
PLOT NO.78/2, WAVANJE VILLAGE,
BEHIND KINGFISHER FACTORY,
TALOJA MIDC, TALOJA
RAIGARH - 410205 INDIA.