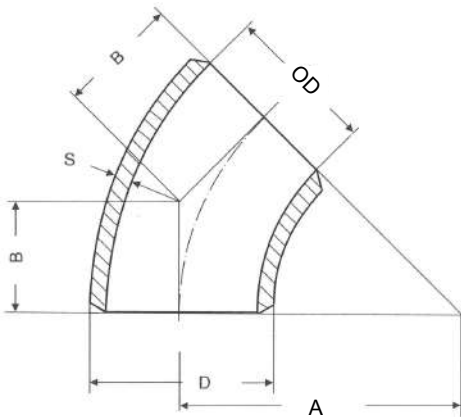


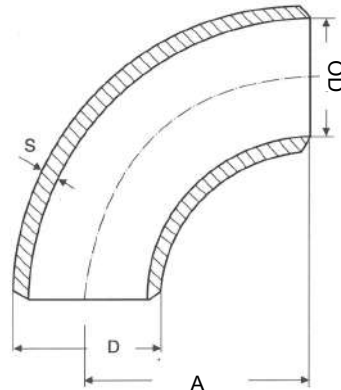
BS EN 10253-2 (BS 1965)

Butt Weld Fittings
Seamless P235GH Carbon Steel

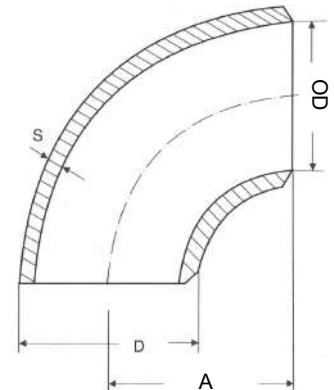
Long & Short Radius Elbows



Long Radius 45° Elbow



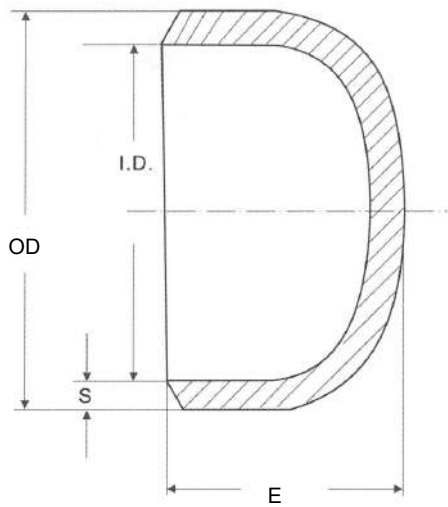
Long Radius 90° Elbow



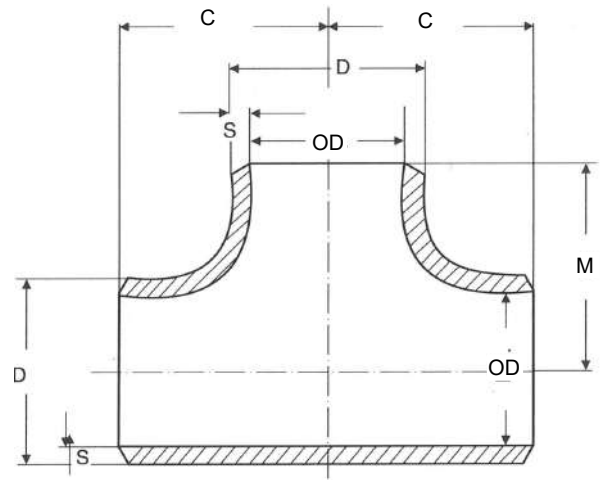
Short Radius 90° Elbow

| Nominal Pipe Size | Outside Diameter (OD) | Wall Thickness (MM) | | 45 Deg Elbows - Long Radius | Approx Weight | 90 Deg Elbows - Long Radius | Approx Weight | 90 Deg Elbows - Short Radius | Approx Weight |
|-------------------|-----------------------|---------------------|-----|-----------------------------|---------------|-----------------------------|---------------|------------------------------|---------------|
| | | MED | HVY | | | | | | |
| IN | MM | | | Centre to Face B | KG | Centre to Face A | KG | Centre to Face A | KG |
| 1/2 | 21.3 | 2.6 | 3.2 | 11.1 | 0.05 | 38.0 | 0.09 | - | - |
| 3/4 | 26.9 | 2.6 | 3.2 | 11.1 | 0.05 | 38.0 | 0.09 | - | - |
| 1 | 33.7 | 3.2 | 4.0 | 22.2 | 0.05 | 38.0 | 0.09 | 25.4 | 0.12 |
| 1 1/4 | 42.4 | 3.2 | 4.0 | 25.4 | 0.14 | 47.5 | 0.27 | 31.8 | 0.23 |
| 1 1/2 | 48.3 | 3.2 | 4.0 | 28.5 | 0.18 | 57.0 | 0.36 | 38.1 | 0.30 |
| 2 | 60.3 | 3.6 | 4.5 | 34.9 | 0.32 | 76.0 | 0.64 | 50.8 | 0.50 |
| 2 1/2 | 76.1 | 3.6 | 4.5 | 44.4 | 0.50 | 95.0 | 1.00 | 63.5 | 0.77 |
| 3 | 88.9 | 4.0 | 4.9 | 50.8 | 0.77 | 114.3 | 1.50 | 76.2 | 1.20 |
| 3 1/2 | 101.6 | 4.0 | 4.9 | 57.2 | 1.10 | 142.5 | 2.00 | 95.0 | 2.30 |
| 4 | 114.3 | 4.5 | 5.4 | 63.5 | 1.50 | 152.4 | 2.90 | 101.6 | 3.50 |
| 5 | 139.7 | 4.9 | 5.4 | 79.3 | 2.40 | 190.5 | 4.90 | 127.0 | 5.10 |
| 6 | 165.1 | 4.9 | 5.4 | 95.2 | 3.90 | 228.6 | 6.90 | 152.4 | 13.20 |
| 8 | 219.1 | 6.3 | 8.0 | 127.0 | 6.80 | 305.0 | 13.60 | 203.2 | 24.70 |
| 10 | 273.0 | 8.0 | 9.5 | 159.0 | 12.70 | 381.0 | 24.90 | 254.0 | 35.40 |
| 12 | 323.9 | 8.0 | 9.5 | 190.5 | 20.40 | 457.0 | 40.80 | 304.8 | 47.60 |

Caps & Tees



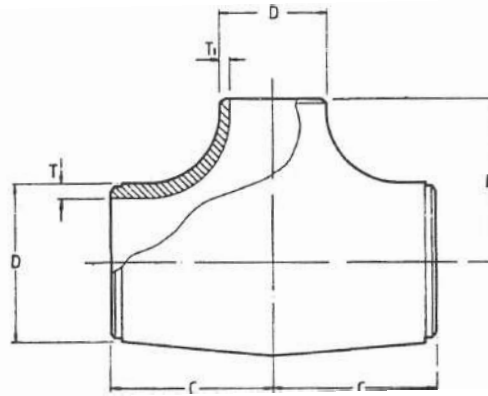
Cap



Equal Tee

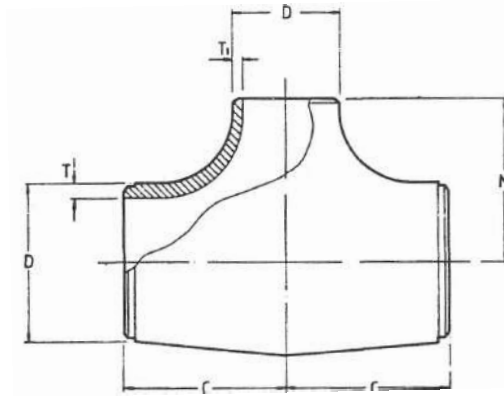
| Nominal Pipe Size | Outside Diameter (OD) | Wall Thickness (MM) | | Cap Length E | Approx Weight | Tee Length C & M | Approx Weight |
|-------------------|-----------------------|---------------------|-----|------------------|---------------|------------------|---------------|
| | | MED | HVY | Centre to Face B | | Centre to Face A | |
| 1 | 33.7 | 3.2 | 4.0 | 38.0 | 0.14 | 38.0 | 0.45 |
| 1 1/4 | 42.4 | 3.2 | 4.0 | 38.0 | 0.18 | 47.5 | 0.73 |
| 1 1/2 | 48.3 | 3.2 | 4.0 | 38.0 | 0.23 | 57.0 | 1.10 |
| 2 | 60.3 | 3.6 | 4.5 | 38.0 | 0.32 | 63.5 | 1.40 |
| 2 1/2 | 76.1 | 3.6 | 4.5 | 38.0 | 0.45 | 76.0 | 2.40 |
| 3 | 88.9 | 4.0 | 4.9 | 51.0 | 0.64 | 85.5 | 3.40 |
| 3 1/2 | 101.6 | 4.0 | 4.9 | 59.0 | 0.89 | 90.0 | 4.20 |
| 4 | 114.3 | 4.5 | 5.4 | 63.0 | 1.10 | 105.0 | 5.70 |
| 5 | 139.7 | 4.9 | 5.4 | 76.0 | 1.90 | 124.0 | 9.10 |
| 6 | 165.1 | 4.9 | 5.4 | 90.0 | 2.80 | 142.5 | 13.20 |
| 8 | 219.1 | 6.3 | 8.0 | 101.5 | 5.00 | 178.0 | 24.90 |
| 10 | 273.0 | 8.0 | 9.5 | 127.0 | 9.10 | 216.0 | 41.30 |
| 12 | 323.9 | 8.0 | 9.5 | 152.5 | 13.60 | 254.0 | 59.90 |

Reducing Tees



| NOMINAL PIPE SIZE | OUTSIDE DIAMETER (D) | HEAVY MM / KG | | CENTRE TO END RUN (C) | CENTRE TO END BRANCH (M) |
|----------------------|----------------------------|------------------|--------|--------------------------------|-----------------------------------|
| | | WT (T x T1) | WEIGHT | MM | MM |
| 3/4 x 1/2 | 27 x 21 | 3.2 x 3.2 | 0.22 | 29.0 | 29.0 |
| 1 x 3/4 | 33 x 27 | 4.0 x 3.2 | 0.35 | 38.0 | 29.0 |
| 1 x 1/2 | 33 x 21 | 4.0 x 3.2 | 0.35 | 38.0 | 38.0 |
| 1 1/4 x 1 | 43 x 33 | 4.0 x 4.0 | 0.70 | 48.0 | 48.0 |
| 1 1/4 x 3/4 | 43 x 27 | 4.0 x 3.2 | 0.70 | 48.0 | 48.0 |
| 1 1/4 x 1/2 | 43 x 21 | 4.0 x 3.2 | 0.70 | 48.0 | 48.0 |
| 1 1/2 x 1 1/4 | 48 x 43 | 4.0 x 4.0 | 1.04 | 57.0 | 57.0 |
| 1 1/2 x 1 | 48 x 33 | 4.0 x 4.0 | 1.04 | 57.0 | 57.0 |
| 1 1/2 x 3/4 | 48 x 27 | 4.0 x 3.2 | 1.04 | 57.0 | 57.0 |
| 1 1/2 x 1/2 | 48 x 21 | 4.0 x 3.2 | 1.04 | 57.0 | 57.0 |
| 2 x 1 1/2 | 60 x 48 | 4.5 x 4.0 | 1.67 | 64.0 | 60.0 |
| 2 x 1 1/4 | 60 x 43 | 4.5 x 4.0 | 1.67 | 64.0 | 57.0 |
| 2 x 1 | 60 x 33 | 4.5 x 4.0 | 1.67 | 64.0 | 51.0 |
| 2 x 3/4 | 60 x 27 | 4.5 x 3.2 | 1.67 | 64.0 | 44.0 |
| 2 1/2 x 2 | 76 x 60 | 4.5 x 4.5 | 2.35 | 76.0 | 70.0 |
| 2 1/2 x 1 1/2 | 76 x 48 | 4.5 x 4.0 | 2.35 | 76.0 | 67.0 |
| 2 1/2 x 1 1/4 | 76 x 43 | 4.5 x 4.0 | 2.35 | 76.0 | 64.0 |
| 2 1/2 x 1 | 76 x 33 | 4.5 x 4.0 | 2.35 | 76.0 | 57.0 |
| 3 x 2 1/2 | 89 x 76 | 5.0 x 4.5 | 3.43 | 86.0 | 83.0 |
| 3 x 2 | 89 x 60 | 5.0 x 4.5 | 3.43 | 86.0 | 76.0 |
| 3 x 1 1/2 | 89 x 48 | 5.0 x 4.0 | 3.43 | 86.0 | 73.0 |
| 3 x 1 1/4 | 89 x 43 | 5.0 x 4.0 | 3.43 | 86.0 | 70.0 |
| 3 x 1 | 89 x 33 | 5.0 x 4.0 | 3.63 | 86.0 | 67.0 |
| 4 x 3 | 114 x 89 | 5.4 x 5.0 | 6.10 | 105.0 | 98.0 |
| 4 x 2 1/2 | 114 x 76 | 5.4 x 4.5 | 6.10 | 105.0 | 95.0 |
| 4 x 2 1/2 | 114 x 60 | 5.4 x 4.5 | 6.10 | 105.0 | 89.0 |
| 4 x 1 1/2 | 114 x 48 | 5.4 x 4.0 | 6.10 | 105.0 | 86.0 |
| 4 x 1 1/4 | 114 x 43 | 5.4 x 4.0 | 6.10 | 105.0 | 80.0 |
| 5 x 4 | 140 x 114 | 5.4 x 5.4 | 9.52 | 124.0 | 117.0 |
| 5 x 3 | 140 x 89 | 5.4 x 5.0 | 9.52 | 129.0 | 111.0 |
| 5 x 2 1/2 | 140 x 76 | 5.4 x 4.5 | 9.52 | 124.0 | 108.0 |

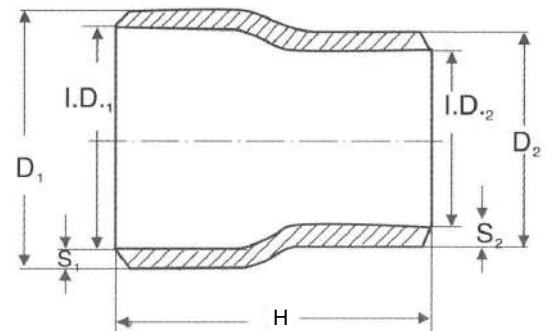
Reducing Tees



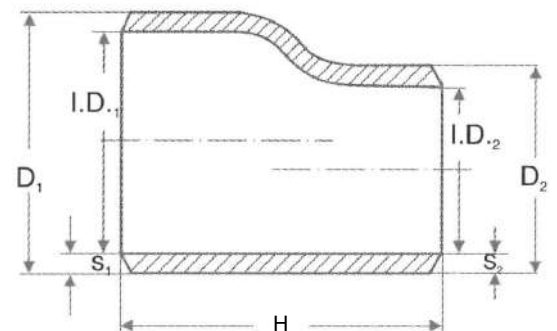
| NOMINAL PIPE SIZE | OUTSIDE DIAMETER (D) | HEAVY MM / KG | | CENTRE TO END RUN (C) | CENTRE TO END BRANCH (M) |
|----------------------|-------------------------|------------------|--------|-----------------------------|-----------------------------------|
| | | WT (T x T1) | WEIGHT | | |
| 6 x 5 | 165 x 140 | 7.1 x 5.4 | 12.30 | 143.0 | 137.0 |
| 6 x 4 | 165 x 114 | 7.1 x 5.4 | 12.30 | 143.0 | 130.0 |
| 6 x 3 | 165 x 89 | 7.1 x 5.0 | 12.30 | 143.0 | 127.0 |
| 6 x 2 1/2 | 165 x 76 | 7.1 x 4.5 | 12.30 | 143.0 | 129.0 |
| 8 x 6 | 219 x 168 | 8.0 x 7.1 | 21.30 | 178.0 | 168.0 |
| 8 x 5 | 219 x 140 | 8.0 x 5.4 | 21.30 | 178.0 | 162.0 |
| 8 x 4 | 219 x 114 | 8.0 x 5.4 | 21.30 | 178.0 | 156.0 |
| 10 x 8 | 273 x 219 | 9.5 x 7.1 | 33.30 | 216.0 | 203.0 |
| 10 x 6 | 273 x 168 | 9.5 x 7.1 | 33.30 | 216.0 | 194.0 |
| 10 x 5 | 273 x 140 | 9.5 x 5.4 | 33.30 | 216.0 | 191.0 |
| 12 x 10 | 324 x 273 | 9.5 x 7.1 | 52.90 | 254.0 | 241.0 |
| 12 x 8 | 324 x 219 | 9.5 x 7.1 | 52.90 | 254.0 | 229.0 |
| 12 x 6 | 324 x 168 | 9.5 x 7.1 | 52.90 | 254.0 | 219.0 |

Concentric & Eccentric Reducers

| Nominal Pipe Size | Wall Thickness (MM) | | Approx Height | Approx Weight |
|-------------------|---------------------|-----------|---------------|---------------|
| | Large End | Small End | Branch H | KG |
| 1 1/2 x 1/2 | 4.0 | 3.2 | 63.5 | 0.27 |
| 1 1/2 x 3/4 | 4.0 | 3.2 | 63.5 | 0.27 |
| 1 1/2 x 1 | 4.0 | 4.0 | 63.5 | 0.32 |
| 2 x 1 | 4.5 | 4.0 | 76.0 | 0.45 |
| 2 x 1 1/4 | 4.5 | 4.0 | 76.0 | 0.50 |
| 2 x 1 1/2 | 4.5 | 4.0 | 76.0 | 0.55 |
| 2 1/2 x 1 | 4.5 | 4.0 | 90.0 | 0.59 |
| 2 1/2 x 1 1/4 | 4.5 | 4.0 | 90.0 | 0.64 |
| 2 1/2 x 1 1/2 | 4.5 | 4.0 | 90.0 | 0.68 |
| 2 1/2 x 2 | 4.5 | 4.0 | 90.0 | 0.73 |
| 3 x 1 1/4 | 4.9 | 4.0 | 90.0 | 0.82 |
| 3 x 1 1/2 | 4.9 | 4.0 | 90.0 | 0.91 |
| 3 x 2 | 4.9 | 4.5 | 90.0 | 0.95 |
| 3 x 2 1/2 | 4.9 | 4.5 | 90.0 | 1.00 |
| 4 x 1 1/2 | 5.4 | 4.0 | 102.0 | 1.20 |
| 4 x 2 | 5.4 | 4.5 | 102.0 | 1.45 |
| 4 x 2 1/2 | 5.4 | 4.5 | 102.0 | 1.50 |
| 4 x 3 | 5.4 | 4.9 | 102.0 | 1.59 |
| 5 x 2 1/2 | 5.4 | 4.5 | 127.0 | 2.44 |
| 5 x 3 | 5.4 | 4.9 | 127.0 | 2.54 |
| 5 x 4 | 5.4 | 5.4 | 127.0 | 2.58 |
| 6 x 2 1/2 | 5.4 | 4.5 | 139.5 | 3.26 |
| 6 x 3 | 5.4 | 4.9 | 139.5 | 3.44 |
| 6 x 4 | 5.4 | 5.4 | 139.5 | 3.49 |
| 6 x 5 | 5.4 | 5.4 | 139.5 | 3.67 |
| 8 x 4 | 8.0 | 5.4 | 152.5 | 4.98 |
| 8 x 5 | 8.0 | 5.4 | 152.5 | 5.44 |
| 8 x 6 | 8.0 | 5.4 | 152.5 | 5.89 |
| 10 x 4 | 9.5 | 5.4 | 178.0 | 9.50 |
| 10 x 5 | 9.5 | 5.4 | 178.0 | 10.00 |
| 10 x 6 | 9.5 | 5.4 | 178.0 | 10.00 |
| 10 x 8 | 9.5 | 8.0 | 178.0 | 10.40 |
| 12 x 6 | 9.5 | 5.4 | 203.0 | 10.00 |
| 12 x 8 | 9.5 | 8.0 | 203.0 | 13.60 |
| 12 x 10 | 9.5 | 9.5 | 203.0 | 15.00 |

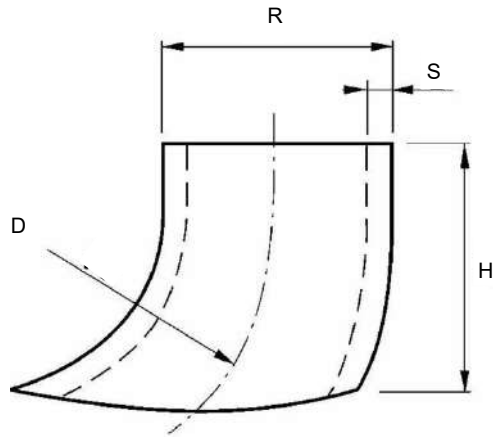


Concentric Reducer



Eccentric Reducer

Branch Bends



| Nominal Pipe Size | Outside Diameter (OD) | Wall Thickness (MM) | | Radius R | Approx Height Branch H | Approx Weight |
|-------------------|-----------------------|---------------------|-----|----------|------------------------|---------------|
| | | MED | HVY | | | |
| IN | MM | | | MM | MM | KG |
| 1/2 | 21.3 | 2.6 | 3.2 | 38.0 | 25.0 | 0.05 |
| 3/4 | 36.9 | 2.6 | 3.2 | 38.0 | 25.0 | 0.00 |
| 1 | 33.7 | 3.2 | 4.0 | 38.0 | 25.0 | 0.05 |
| 1 1/4 | 42.4 | 3.2 | 4.0 | 47.5 | 32.0 | 0.14 |
| 1 1/2 | 48.3 | 3.2 | 4.0 | 57.0 | 35.0 | 0.18 |
| 2 | 60.3 | 3.6 | 4.5 | 76.0 | 45.0 | 0.36 |
| 2 1/2 | 76.1 | 3.6 | 4.5 | 82.5 | 57.0 | 0.59 |
| 3 | 88.9 | 4.0 | 4.9 | 114.5 | 70.0 | 0.75 |
| 3 1/2 | 101.6 | 4.0 | 4.9 | 139.7 | 80.0 | 1.00 |
| 4 | 114.3 | 4.5 | 5.4 | 152.5 | 90.0 | 1.50 |
| 5 | 139.7 | 4.9 | 5.4 | 190.5 | 114.0 | 2.40 |
| 6 | 165.1 | 4.9 | 5.4 | 228.5 | 133.2 | 3.80 |
| 8 | 219.1 | 6.3 | 8.0 | 305.0 | 178.0 | 4.20 |
| 10 | 273.0 | 8.0 | 9.5 | 381.0 | 228 | 7.30 |
| 12 | 323.9 | 8.0 | 9.5 | 457.0 | 266.5 | 12.70 |