

WROUGHT STEEL BUTT-WELDING FITTING

- 90° Elbow(Long, Short)

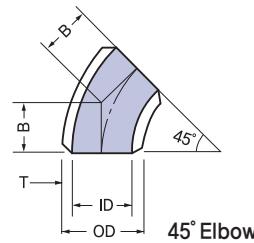
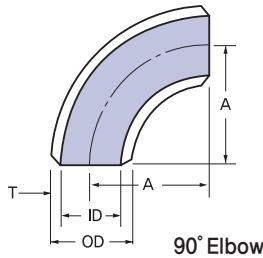
- 45° Elbow(Long)

STD, Sch40, X-S, Sch80, Sch160, XX-S

ASME B16.9, ASME B16.28

Unit : mm

| Nominal Pipe Size | Outside Diameter O.D | Center-to-End | | | STD | | Sch 40 | |
|-------------------|----------------------|---------------|-------|-------|-------|--------|--------|--------|
| | | Long | | Short | T | I.D | T | I.D |
| | | A | B | A | | | | |
| 1/2 | 0.840 | 1.50 | 0.62 | - | 0.109 | 0.622 | 0.109 | 0.622 |
| 3/4 | 1.050 | 1.50 | 0.75 | - | 0.113 | 0.824 | 0.113 | 0.824 |
| 1 | 1.315 | 1.50 | 0.88 | 1.00 | 0.133 | 1.049 | 0.133 | 1.049 |
| 1 1/4 | 1.660 | 1.88 | 1.00 | 1.25 | 0.140 | 1.380 | 0.140 | 1.380 |
| 1 1/2 | 1.900 | 2.25 | 1.12 | 1.50 | 0.145 | 1.610 | 0.145 | 1.610 |
| 2 | 2.375 | 3.00 | 1.38 | 2.00 | 0.154 | 2.067 | 0.154 | 2.067 |
| 2 1/2 | 2.875 | 3.75 | 1.75 | 2.50 | 0.203 | 2.469 | 0.203 | 2.469 |
| 3 | 3.500 | 4.50 | 2.00 | 3.00 | 0.216 | 3.068 | 0.216 | 3.068 |
| 3 1/2 | 4.000 | 5.25 | 2.25 | 3.50 | 0.226 | 3.548 | 0.226 | 3.548 |
| 4 | 4.500 | 6.00 | 2.50 | 4.00 | 0.237 | 4.026 | 0.237 | 4.026 |
| 5 | 5.563 | 7.50 | 3.12 | 5.00 | 0.258 | 5.047 | 0.258 | 5.047 |
| 6 | 6.625 | 9.00 | 3.75 | 6.00 | 0.280 | 6.065 | 0.280 | 6.065 |
| 8 | 8.625 | 12.00 | 5.00 | 8.00 | 0.322 | 7.981 | 0.322 | 7.981 |
| 10 | 10.750 | 15.00 | 6.25 | 10.00 | 0.365 | 10.020 | 0.365 | 10.020 |
| 12 | 12.750 | 18.00 | 7.50 | 12.00 | 0.375 | 12.000 | 0.406 | 11.938 |
| 14 | 14.000 | 21.00 | 8.75 | 14.00 | 0.375 | 13.250 | 0.438 | 13.124 |
| 16 | 16.000 | 24.00 | 10.00 | 16.00 | 0.375 | 15.250 | 0.500 | 15.000 |
| 18 | 18.000 | 27.00 | 11.25 | 18.00 | 0.375 | 17.250 | 0.562 | 16.876 |
| 20 | 20.000 | 30.00 | 12.50 | 20.00 | 0.375 | 19.250 | 0.594 | 18.812 |
| 22 | 22.000 | 33.00 | 13.50 | 22.00 | 0.375 | 21.250 | 0.594 | 20.812 |
| 24 | 24.000 | 36.00 | 15.00 | 24.00 | 0.375 | 23.250 | 0.688 | 22.624 |
| 26 | 26.000 | 39.00 | 16.00 | 26.00 | 0.375 | 25.250 | 0.688 | 24.624 |
| 28 | 28.000 | 42.00 | 17.25 | 28.00 | 0.375 | 27.250 | 0.688 | 26.624 |
| 30 | 30.000 | 45.00 | 18.50 | 30.00 | 0.375 | 29.250 | 0.688 | 28.624 |
| 32 | 32.000 | 48.00 | 19.75 | 32.00 | 0.375 | 31.250 | 0.688 | 30.624 |
| 34 | 34.000 | 51.00 | 21.00 | 34.00 | 0.375 | 33.250 | 0.688 | 32.624 |
| 36 | 36.000 | 54.00 | 22.25 | 36.00 | 0.375 | 35.250 | 0.688 | 34.500 |
| 38 | 38.000 | 57.00 | 23.62 | 38.00 | 0.375 | 37.250 | - | - |
| 40 | 40.000 | 60.00 | 24.88 | 40.00 | 0.375 | 39.250 | - | - |
| 42 | 42.000 | 63.00 | 26.00 | 42.00 | 0.375 | 41.250 | - | - |
| 44 | 44.000 | 66.00 | 27.38 | 44.00 | 0.375 | 43.250 | - | - |
| 46 | 46.000 | 69.00 | 28.62 | 46.00 | 0.375 | 45.250 | - | - |
| 48 | 48.000 | 72.00 | 29.88 | 48.00 | 0.375 | 47.250 | | |
| 50 | 50.000 | 75.00 | 31.06 | 50.00 | 0.375 | 49.250 | | |
| 52 | 52.000 | 78.00 | 32.30 | 52.00 | 0.375 | 51.250 | | |
| 54 | 54.000 | 81.00 | 33.55 | 54.00 | 0.375 | 53.250 | | |
| 56 | 56.000 | 84.00 | 34.79 | 56.00 | 0.375 | 55.250 | | |
| 58 | 58.000 | 87.00 | 36.04 | 58.00 | 0.375 | 57.250 | | |
| 60 | 60.000 | 90.00 | 37.28 | 60.00 | 0.375 | 59.250 | | |



Unit : inch

| X-S | | Sch80 | | Sch160 | | XX-S | | Nominal Pipe Size |
|-------|--------|-------|--------|--------|--------|-------|--------|-------------------|
| T | I.D | T | I.D | T | I.D | T | I.D | |
| 0.147 | 0.546 | 0.147 | 0.546 | 0.188 | 0.464 | 0.294 | 0.252 | 1/2 |
| 0.154 | 0.742 | 0.154 | 0.742 | 0.218 | 0.612 | 0.308 | 0.434 | 3/4 |
| 0.179 | 0.957 | 0.179 | 0.957 | 0.250 | 0.815 | 0.358 | 0.599 | 1 |
| 0.191 | 1.278 | 0.191 | 1.278 | 0.250 | 1.160 | 0.382 | 0.896 | 1 1/4 |
| 0.200 | 1.500 | 0.200 | 1.500 | 0.281 | 1.338 | 0.400 | 1.100 | 1 1/2 |
| 0.218 | 1.939 | 0.218 | 1.939 | 0.344 | 1.687 | 0.436 | 1.503 | 2 |
| 0.276 | 2.323 | 0.276 | 2.323 | 0.375 | 2.125 | 0.552 | 1.771 | 2 1/2 |
| 0.300 | 2.900 | 0.300 | 2.900 | 0.438 | 2.624 | 0.600 | 2.300 | 3 |
| 0.318 | 3.364 | 0.318 | 3.364 | - | - | - | - | 3 1/2 |
| 0.337 | 3.826 | 0.337 | 3.826 | 0.531 | 3.348 | 0.674 | 3.152 | 4 |
| 0.375 | 4.813 | 0.375 | 4.813 | 0.625 | 4.313 | 0.750 | 4.063 | 5 |
| 0.432 | 5.761 | 0.432 | 5.761 | 0.719 | 5.187 | 0.864 | 4.897 | 6 |
| 0.500 | 7.625 | 0.500 | 7.625 | 0.906 | 6.813 | 0.875 | 6.875 | 8 |
| 0.500 | 9.750 | 0.594 | 9.562 | 1.125 | 8.500 | 1.000 | 8.750 | 10 |
| 0.500 | 11.750 | 0.688 | 11.374 | 1.312 | 10.126 | 1.000 | 10.750 | 12 |
| 0.500 | 13.000 | 0.750 | 12.500 | 1.406 | 11.188 | - | - | 14 |
| 0.500 | 15.000 | 0.844 | 14.312 | 1.594 | 12.812 | - | - | 16 |
| 0.500 | 17.000 | 0.938 | 16.124 | 1.781 | 14.438 | - | - | 18 |
| 0.500 | 19.000 | 1.031 | 17.938 | 1.968 | 16.062 | - | - | 20 |
| 0.500 | 21.000 | 1.125 | 19.750 | 2.125 | 17.750 | - | - | 22 |
| 0.500 | 23.000 | 1.219 | 21.562 | 2.344 | 19.312 | - | - | 24 |
| 0.500 | 25.000 | - | - | - | - | - | - | 26 |
| 0.500 | 27.000 | - | - | - | - | - | - | 28 |
| 0.500 | 29.000 | - | - | - | - | - | - | 30 |
| 0.500 | 31.000 | - | - | - | - | - | - | 32 |
| 0.500 | 33.000 | - | - | - | - | - | - | 34 |
| 0.500 | 35.000 | - | - | - | - | - | - | 36 |
| 0.500 | 37.000 | - | - | - | - | - | - | 38 |
| 0.500 | 39.000 | - | - | - | - | - | - | 40 |
| 0.500 | 41.000 | - | - | - | - | - | - | 42 |
| 0.500 | 43.000 | - | - | - | - | - | - | 44 |
| 0.500 | 45.000 | - | - | - | - | - | - | 46 |
| 0.500 | 47.000 | - | - | - | - | - | - | 48 |
| 0.500 | 49.000 | - | - | - | - | - | - | 50 |
| 0.500 | 51.000 | - | - | - | - | - | - | 52 |
| 0.500 | 53.000 | - | - | - | - | - | - | 54 |
| 0.500 | 55.000 | - | - | - | - | - | - | 56 |
| 0.500 | 57.000 | - | - | - | - | - | - | 58 |
| 0.500 | 59.000 | - | - | - | - | - | - | 60 |