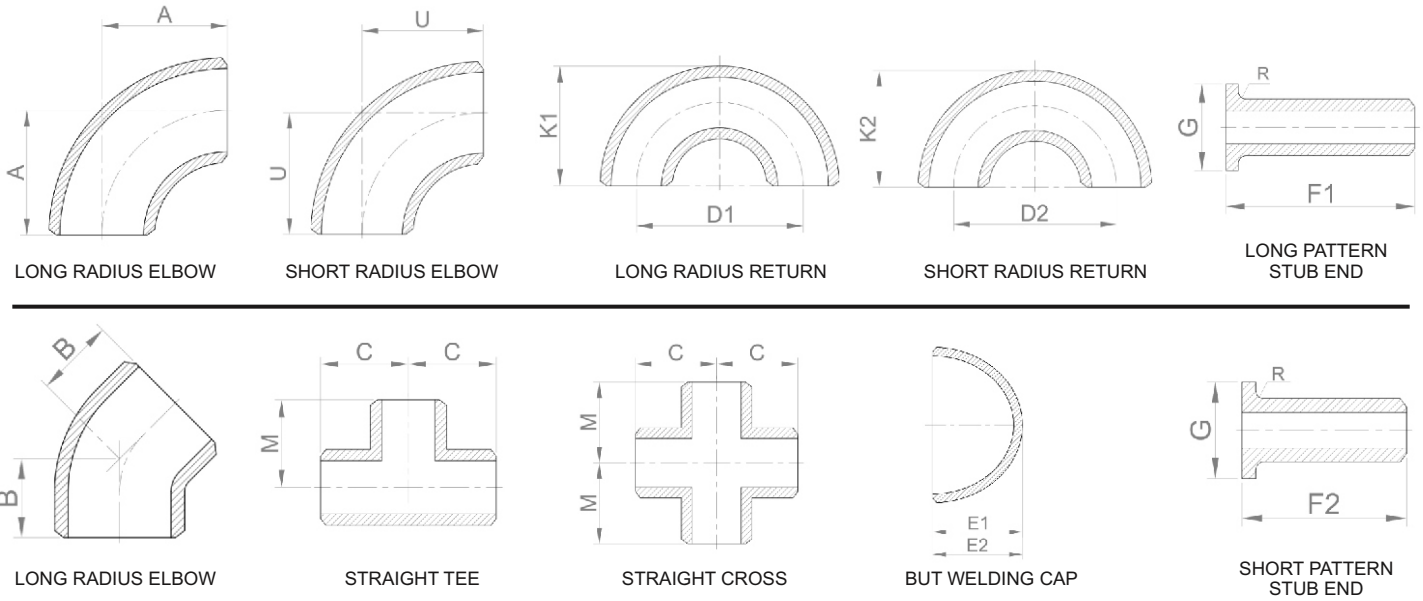


Butt Weld Fittings



| | |
|-------------------------------|---|
| <p>Types</p> | <p>Equal tee / Reducing Tee / 90° Elbow / 45° Elbow / 90° Long Radius Elbow / 45° Long Radius / Elbow / 90° Short Radius Elbow / 45° Short Radius Elbow / 1d Elbow / 1.5d Elbow / 3d Elbow / 5d Elbow / Equal Cross / Reducing cross / Concentric Reducer / Eccentric Reducer / Stub End / Lap Joint Stub End / Pipe Cap / Swage Nipple / Lateral / 45° Lateral Tee</p> |
| <p>Standards</p> | <ul style="list-style-type: none"> • ASME B16.9 • ASME B16.28 • ASME B16.25 • MSS SP-75 • DIN2605 • JISB2311 • JISB2312 • JISB2313 • DIN 2605 • BS 1965 • MSS SP-95 |
| <p>Size</p> | <p>Size: Butt weld : ½" - 24"</p> |
| <p>Pressure Rating</p> | <ul style="list-style-type: none"> • Butt weld : SCH 5S, SCH 10, SCH 10S, SCH 20, SCH 40, SCH 40S, SCH 80, SCH 80S, SCH 120, SCH 160, SCH XX, SCH XS. |
| <p>Features</p> | <p>Heat code Traceability / 100% Material annealed & Passivated / Wrench flat body allowing standard hex wrench assembly / great pressure sustaining capacity than traditional pipe class rating / High quality surface CNC machined finish / Three chambers cleaning system (Surface Preparation, Ultrasonic degreasing, Hot Dry Air)</p> |



DIMENSION OF BUTT WELD FITTINGS

| Nominal Pipe Size (NPS) | DN | Out Side Diameter at Bevel | Center to End | | 180 Long Radius | | 180 Short Radius | | Short Radius Elbow U | Tees & Crosses Center to End | | Lap Joint Stub Ends | | | | Caps | |
|----------------------------|-----|----------------------------|-------------------|-------------------|-----------------|----------------|------------------|----------------|-------------------------|---------------------------------|-----|---------------------|---------------------|-----------------------|------------------|------------------------|-----|
| | | | 90 deg Elbow A | 45 deg Elbow B | D ₁ | K ₁ | D ₂ | K ₂ | | C | M | Long Pattern F1 | Short Pattern F2 | Radius of Fillet R | Dia. of Lap G | Length of Cap E1 E2 | |
| | | | | | | | | | | | | | | | | | |
| 1/2 | 15 | 21.3 | 38 | 16 | 76 | 48 | - | - | - | 25 | 25 | 76 | 51 | 3 | 35 | 25 | 25 |
| 3/4 | 20 | 26.7 | 38 | 19 | 76 | 51 | - | - | - | 29 | 29 | 76 | 51 | 3 | 43 | 25 | 25 |
| 1 | 25 | 33.4 | 38 | 22 | 76 | 56 | 51 | 41 | 25 | 38 | 38 | 102 | 51 | 3 | 51 | 38 | 38 |
| 1 1/4 | 32 | 42.2 | 48 | 25 | 95 | 70 | 64 | 52 | 32 | 48 | 48 | 102 | 51 | 5 | 64 | 38 | 38 |
| 1 1/2 | 40 | 48.3 | 57 | 29 | 144 | 83 | 76 | 62 | 38 | 57 | 57 | 102 | 51 | 6 | 73 | 38 | 38 |
| 2 | 50 | 60.3 | 76 | 35 | 152 | 106 | 102 | 81 | 51 | 64 | 64 | 152 | 64 | 8 | 92 | 38 | 44 |
| 2 1/2 | 65 | 73.0 | 95 | 44 | 190 | 132 | 127 | 100 | 64 | 76 | 76 | 152 | 64 | 8 | 106 | 38 | 51 |
| 3 | 80 | 88.9 | 114 | 51 | 229 | 159 | 152 | 121 | 76 | 86 | 86 | 152 | 64 | 10 | 127 | 51 | 64 |
| 3 1/2 | 90 | 101.6 | 133 | 57 | 267 | 184 | 178 | 140 | 89 | 95 | 95 | 152 | 76 | 10 | 140 | 64 | 76 |
| 4 | 100 | 114.3 | 152 | 64 | 305 | 210 | 203 | 159 | 102 | 105 | 105 | 152 | 76 | 11 | 157 | 64 | 76 |
| 5 | 125 | 141.3 | 190 | 79 | 381 | 262 | 254 | 197 | 127 | 124 | 124 | 203 | 76 | 11 | 185 | 76 | 89 |
| 6 | 150 | 168.3 | 229 | 95 | 457 | 313 | 305 | 237 | 152 | 143 | 143 | 203 | 89 | 13 | 218 | 89 | 102 |
| 8 | 200 | 219.1 | 305 | 127 | 610 | 414 | 406 | 313 | 203 | 178 | 178 | 203 | 102 | 13 | 270 | 102 | 127 |
| 10 | 250 | 273.0 | 381 | 159 | 762 | 518 | 508 | 391 | 254 | 216 | 216 | 254 | 127 | 13 | 324 | 127 | 152 |
| 12 | 300 | 323.8 | 457 | 190 | 914 | 619 | 610 | 467 | 305 | 254 | 254 | 254 | 152 | 13 | 381 | 152 | 178 |
| 14 | 350 | 355.6 | 533 | 222 | 1067 | 711 | 711 | 533 | 356 | 279 | 279 | 305 | 152 | 13 | 413 | 165 | 191 |
| 16 | 400 | 406.4 | 610 | 254 | 1219 | 813 | 813 | 610 | 406 | 305 | 305 | 305 | 152 | 13 | 470 | 178 | 203 |
| 18 | 450 | 457 | 686 | 286 | 1372 | 914 | 914 | 686 | 457 | 343 | 343 | 305 | 152 | 13 | 533 | 203 | 229 |
| 20 | 500 | 508 | 762 | 318 | 1524 | 1016 | 1016 | 762 | 508 | 381 | 381 | 305 | 152 | 13 | 584 | 229 | 254 |
| 22 | 550 | 559 | 838 | 343 | 1676 | 1118 | 1118 | 838 | 559 | 419 | 419 | 305 | 152 | 13 | 641 | 254 | 254 |
| 24 | 600 | 610 | 914 | 381 | 1829 | 1219 | 1219 | 914 | 610 | 432 | 432 | 305 | 152 | 13 | 692 | 267 | 305 |

Ordering Information

As Per Our Design

| 1) Materials | |
|----------------------------------|----------|
| Type Of Materials | Nomen. |
| S S310 | S1 |
| SS316 | S6 |
| SS316L | S6L |
| SS317 | S7 |
| SS321 | S21 |
| Monal 400 | M4 |
| Incoloy 625 | I6 |
| Incoloy 825 | I8 |
| Carbon Steel | CS |
| ASTM A105 | A1 |
| Alloy 20 | A20 |
| ASTM A182 F53 (Super Duplex F53) | F53 |
| ASTM A182 F51 (F51) | F51 |
| ASTM A182 F60 (F60) | F60 |
| ASTM A234 Gr. WPB | WPB |
| Mild Steel | MS |
| Nickel alloy | NA |
| Galvanized | GLV |
| ASTM A403 Gr.. WPXXX | WP6, WP4 |

| 2) Sizes | |
|----------|--------|
| Size | Nomen. |
| 1/8" | 6 |
| 1/4" | 8 |
| 3/8" | 10 |
| 1/2" | 15 |
| 3/4" | 20 |
| 1" | 25 |
| 1 1/4" | 32 |
| 1 1/2" | 40 |
| 2" | 50 |
| 2 1/2" | 65 |
| 3" | 80 |
| 4" | 100 |
| 5" | 125 |
| 6" | 150 |
| 8" | 200 |
| 10" | 250 |
| 12" | 300 |
| 14" | 350 |
| 16" | 400 |
| 18" | 450 |

| 3) Type of Fittings | |
|---------------------|--------|
| Type | Nomen. |
| 45 Degree Elbow | 4EL |
| 90 Degree Elbow | EL |
| Long Nipple | L-NI |
| Long Swage Nipple | LS-NI |
| Nipple | NI |
| Barrel Nipple | BN |
| Tee | T |
| Unequal Tee | UT |
| Cross | CR |
| Socket | SK |
| Half Coupling | HC |
| Full Coupling | FC |
| Connector | CN |
| Eccentric Reducer | ER |
| Reducer | R |
| Swage Nipple | SN |
| Union | UN |
| Cap | CA |
| Coupling | CU |
| Elbolet | EL |
| Long Radius | LR |
| Short Radius | SR |
| Weldolet | WL |

| 4) End Connection | |
|---------------------|--------|
| Type | Nomen. |
| Butt Weld | BW |
| Socket Weld | SW |
| NPT Thread (Male) | NM |
| BSP Thread (Male) | BM |
| NPT Thread (Female) | NF |
| BSP Thread (female) | BF |
| Plain End | PL |
| Bevel End | BE |

| 5) Type Of Class | |
|------------------|--------|
| Types | Nomen. |
| Class 2000 | #2000 |
| Class 3000 | #3000 |
| Class 6000 | #6000 |
| Class 9000 | #9000 |
| Class C | CL 'C' |
| Class A | CL 'A' |
| Sch 10 | S10 |
| Sch 20 | S20 |
| Sch 40 | S40 |
| Sch 80 | S80 |
| Sch 160 | S160 |
| Sch XXS | SXXS |
| Sch 120 | S120 |
| Sch 10S | S10S |
| Sch 40S | S40S |

Ex. LONG RADIUS ELBOW 90° = __-15-EL-LR-BW-SCH__