

FITTINGS

NPS ½ through 60

- Schedule Standard (STD)
- Schedule **Extra-Strong (XS)**
- Schedule 40
- Schedule 80
- Schedule 160
- Schedule Double Extra-Strong (XXS)

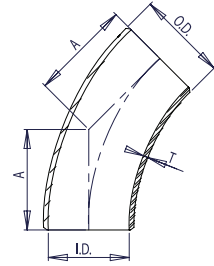


FITTINGS

All Products Backed by the Hisea Marine Warranty

| Pipe Size | Outside Diameter | Inside Diameter | Wall Thickness | Center to End | Pipe Schedule Number | Approx. Weight in Kilograms |
|-----------|------------------|-----------------|----------------|---------------|----------------------|-----------------------------|
| NPS | O.D. | I.D. | T | A | | |
| ¾ | 26.7 | 20.96 | 2.87 | 24 | 40 | 0.23 |
| 1 | 33.4 | 26.64 | 3.38 | 31 | 40 | 0.32 |
| 1 ¼ | 42.2 | 35.08 | 3.56 | 39 | 40 | 0.45 |
| 1 ½ | 48.3 | 40.94 | 3.68 | 47 | 40 | 0.59 |
| 2 | 60.3 | 52.48 | 3.91 | 63 | 40 | 0.68 |
| 2 ½ | 73.0 | 62.68 | 5.16 | 79 | 40 | 0.79 |
| 3 | 88.9 | 77.92 | 5.49 | 95 | 40 | 1.36 |
| 3 ½ | 101.6 | 90.12 | 5.74 | 111 | 40 | 2.27 |
| 4 | 114.3 | 102.26 | 6.02 | 127 | 40 | 4.08 |
| 5 | 141.3 | 128.20 | 6.55 | 157 | 40 | 7.26 |
| 6 | 168.3 | 154.08 | 7.11 | 189 | 40 | 10.21 |
| 8 | 219.1 | 202.74 | 8.18 | 252 | 40 | 20.41 |
| 10 | 273.0 | 254.46 | 9.27 | 316 | 40 | 36.29 |
| 12 | 323.8 | 304.74 | 9.53 | 378 | * | 54.43 |
| 14 | 355.6 | 336.54 | 9.53 | 441 | 30 | 68.04 |
| 16 | 406.4 | 387.34 | 9.53 | 505 | 30 | 87.54 |
| 18 | 457.0 | 437.94 | 9.53 | 568 | * | 112.49 |
| 20 | 508.0 | 488.94 | 9.53 | 632 | 20 | 139.71 |
| 24 | 610.0 | 590.94 | 9.53 | 757 | 20 | 199.58 |

3R SCHEDULE STD

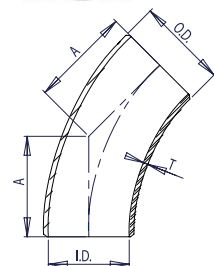


NOTES

1. Conforms to ASME B16.9 & ASTM A234 WPB.
 2. All dimensions are in millimeters.
 3. For sizes larger than NPS 24 please call.
 4. All weights are in kilograms and approximated or estimated.
- * This size and thickness does not correspond to any pipe schedule number.

| Pipe Size | Outside Diameter | Inside Diameter | Wall Thickness | Center to End | Pipe Schedule Number | Approx. Weight in Kilograms |
|-----------|------------------|-----------------|----------------|---------------|----------------------|-----------------------------|
| NPS | O.D. | I.D. | T | A | | |
| ¾ | 26.7 | 18.88 | 3.91 | 24 | 80 | 0.07 |
| 1 | 33.4 | 24.30 | 4.55 | 31 | 80 | 0.13 |
| 1 ¼ | 42.2 | 32.50 | 4.85 | 39 | 80 | 0.20 |
| 1 ½ | 48.3 | 38.14 | 5.08 | 47 | 80 | 0.28 |
| 2 | 60.3 | 49.22 | 5.54 | 63 | 80 | 0.54 |
| 2 ½ | 73.0 | 58.98 | 7.01 | 79 | 80 | 0.91 |
| 3 | 88.9 | 73.66 | 7.62 | 95 | 80 | 1.50 |
| 3 ½ | 101.6 | 85.44 | 8.08 | 111 | 80 | 2.04 |
| 4 | 114.3 | 97.18 | 8.56 | 127 | 80 | 2.81 |
| 5 | 141.3 | 122.24 | 9.53 | 157 | 80 | 4.76 |
| 6 | 168.3 | 146.36 | 10.97 | 189 | 80 | 7.71 |
| 8 | 219.1 | 193.70 | 12.70 | 252 | 80 | 15.56 |
| 10 | 273.0 | 247.60 | 12.70 | 316 | 60 | 24.27 |
| 12 | 323.8 | 298.40 | 12.70 | 378 | * | 35.20 |
| 14 | 355.6 | 330.20 | 12.70 | 441 | * | 45.36 |
| 16 | 406.4 | 381.00 | 12.70 | 505 | 40 | 60.78 |
| 18 | 457.0 | 431.60 | 12.70 | 568 | * | 77.11 |
| 20 | 508.0 | 482.60 | 12.70 | 632 | 30 | 94.80 |
| 24 | 610.0 | 584.60 | 12.70 | 757 | * | 136.98 |

3R SCHEDULE XS



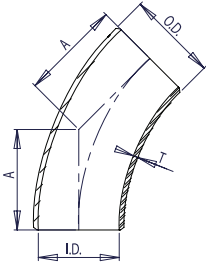
NOTES

1. Conforms to ASME B16.9 & ASTM A234 WPB.
 2. All dimensions are in millimeters.
 3. For sizes larger than NPS 24 please call.
 4. All weights are in kilograms and approximated or estimated.
- * This size and thickness does not correspond to any pipe schedule number.

FITTINGS

45° ELBOWS

3R SCHEDULE 40

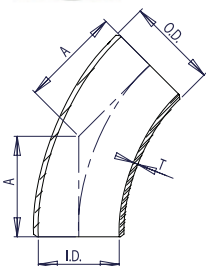

NOTES

1. Conforms to ASME B16.9 & ASTM A234 WPB.
2. All dimensions are in millimeters.
3. For sizes larger than NPS 24 please call.
4. All weights are in kilograms and approximated or estimated.

| Pipe Size | Outside Diameter | Inside Diameter | Wall Thickness | Center to End | Pipe Schedule Number | Approx. Weight in Kilograms |
|-----------|------------------|-----------------|----------------|---------------|----------------------|-----------------------------|
| NPS | O.D. | I.D. | T | A | | |
| 3/4 | 26.7 | 20.96 | 2.87 | 24 | 40 | 0.23 |
| 1 | 33.4 | 26.64 | 3.38 | 31 | 40 | 0.32 |
| 1 1/4 | 42.2 | 35.08 | 3.56 | 39 | 40 | 0.45 |
| 1 1/2 | 48.3 | 40.94 | 3.68 | 47 | 40 | 0.59 |
| 2 | 60.3 | 52.48 | 3.91 | 63 | 40 | 0.68 |
| 2 1/2 | 73.0 | 62.68 | 5.16 | 79 | 40 | 0.79 |
| 3 | 88.9 | 77.92 | 5.49 | 95 | 40 | 1.36 |
| 3 1/2 | 101.6 | 90.12 | 5.74 | 111 | 40 | 2.27 |
| 4 | 114.3 | 102.26 | 6.02 | 127 | 40 | 4.08 |
| 5 | 141.3 | 128.20 | 6.55 | 157 | 40 | 7.26 |
| 6 | 168.3 | 154.08 | 7.11 | 189 | 40 | 10.21 |
| 8 | 219.1 | 202.74 | 8.18 | 252 | 40 | 20.41 |
| 10 | 273.0 | 254.46 | 9.27 | 316 | 40 | 36.29 |
| 12 | 323.8 | 303.18 | 10.31 | 378 | 40 | 72.57 |
| 14 | 355.6 | 333.34 | 11.13 | 441 | 40 | 122.47 |
| 16 | 406.4 | 381.00 | 12.70 | 505 | 40 | 163.29 |
| 18 | 457.0 | 428.46 | 14.27 | 568 | 40 | 222.26 |
| 20 | 508.0 | 477.82 | 15.09 | 632 | 40 | 278.96 |
| 24 | 610.0 | 575.04 | 17.48 | 757 | 40 | 351.53 |

FITTINGS

3R SCHEDULE 80


NOTES

1. Conforms to ASME B16.9 & ASTM A234 WPB.
2. All dimensions are in millimeters.
3. All weights are in kilograms and approximated or estimated.

| Pipe Size | Outside Diameter | Inside Diameter | Wall Thickness | Center to End | Pipe Schedule Number | Approx. Weight in Kilograms |
|-----------|------------------|-----------------|----------------|---------------|----------------------|-----------------------------|
| NPS | O.D. | I.D. | T | A | | |
| 3/4 | 26.7 | 18.88 | 3.91 | 24 | 80 | 0.07 |
| 1 | 33.4 | 24.30 | 4.55 | 31 | 80 | 0.13 |
| 1 1/4 | 42.2 | 32.50 | 4.85 | 39 | 80 | 0.20 |
| 1 1/2 | 48.3 | 38.14 | 5.08 | 47 | 80 | 0.28 |
| 2 | 60.3 | 49.22 | 5.54 | 63 | 80 | 0.54 |
| 2 1/2 | 73.0 | 58.98 | 7.01 | 79 | 80 | 0.91 |
| 3 | 88.9 | 73.66 | 7.62 | 95 | 80 | 1.50 |
| 3 1/2 | 101.6 | 85.44 | 8.08 | 111 | 80 | 2.04 |
| 4 | 114.3 | 97.18 | 8.56 | 127 | 80 | 2.81 |
| 5 | 141.3 | 122.24 | 9.53 | 157 | 80 | 4.76 |
| 6 | 168.3 | 146.36 | 10.97 | 189 | 80 | 7.71 |
| 8 | 219.1 | 193.70 | 12.70 | 252 | 80 | 15.56 |
| 10 | 273.0 | 242.82 | 15.09 | 316 | 80 | 68.04 |
| 12 | 323.8 | 288.84 | 17.48 | 378 | 80 | 90.72 |
| 14 | 355.6 | 317.50 | 19.05 | 441 | 80 | 153.09 |
| 16 | 406.4 | 363.52 | 21.44 | 505 | 80 | 204.12 |
| 18 | 457.0 | 409.34 | 23.83 | 568 | 80 | 277.82 |
| 20 | 508.0 | 455.62 | 26.19 | 632 | 80 | 348.70 |
| 24 | 610.0 | 548.08 | 30.96 | 757 | 80 | 439.42 |