

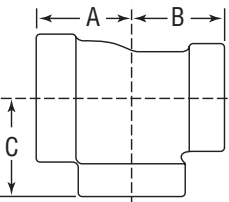


MALLEABLE IRON FITTINGS



Class 300 (XS/XH)

|  | Size | | | | | | Center to End | | | | | | Unit Weight | | | | | |
|--|-------|-------|-------|-------|-------|---------|---------------|---------|---------|--------|---------|-------|-------------|------|-------|------|---|---|
| | | | | | | | A | | B | | C | | Black | | Galv. | | | |
| | NPS | DN | NPS | DN | NPS | DN | in | mm | in | mm | in | mm | lbs | kg | lbs | kg | | |
|   | 3/8 | 10 | 3/8 | 10 | 1/4 | 8 | 1 | 25 | 1 | 25 | 1 | 25 | 0.37 | 0.17 | – | – | | |
| | 1/2 | 15 | 1/2 | 15 | 1/4 | 8 | 1 1/16 | 27 | 1 1/16 | 27 | 1 1/8 | 29 | 0.48 | 0.22 | – | – | | |
| | | | | | 3/8 | 10 | 1 3/16 | 30 | 1 3/16 | 30 | 1 3/16 | 30 | 0.61 | 0.28 | – | – | | |
| | 3/4 | 20 | 1/2 | 15 | 3/4 | 20 | 1 3/8 | 35 | 1 3/8 | 35 | 1 5/16 | 33 | 0.80 | 0.36 | – | – | | |
| | | | | | 1/2 | 15 | 1 5/16 | 33 | 1 1/4 | 32 | 1 3/8 | 35 | 0.78 | 0.35 | – | – | | |
| | | | 3/4 | 20 | 3/4 | 20 | 1 7/16 | 37 | 1 3/8 | 35 | 1 7/16 | 37 | 0.93 | 0.42 | – | – | | |
| | | | | | 1/4 | 8 | 1 3/16 | 30 | 1 3/16 | 30 | 1 1/4 | 32 | 0.76 | 0.34 | – | – | | |
| | 1 | 25 | 3/4 | 20 | 3/8 | 10 | 1 1/4 | 32 | 1 1/4 | 32 | 1 5/16 | 33 | 0.80 | 0.36 | – | – | | |
| | | | | | 1/2 | 15 | 1 5/16 | 33 | 1 5/16 | 33 | 1 3/8 | 35 | 0.90 | 0.41 | 0.9 | 0.41 | | |
| | | | 1 | 25 | 1/2 | 15 | 1 | 25 | 1 5/8 | 41 | 1 1/2 | 38 | 1 5/8 | 41 | 1.36 | 0.62 | – | – |
| | | | | | 3/4 | 20 | 3/4 | 20 | 1 1/2 | 38 | 1 7/16 | 37 | 1 9/16 | 40 | 1.27 | 0.58 | – | – |
| | | | 1 | 25 | 1 | 25 | 1 | 25 | 1 5/8 | 41 | 1 9/16 | 40 | 1 5/8 | 41 | 1.38 | 0.63 | – | – |
| | | | | | 1/4 | 8 | 1 1/4 | 32 | 1 1/4 | 32 | 1 3/8 | 35 | 1.09 | 0.49 | – | – | | |
| | 1 1/4 | 32 | 1 1/4 | 32 | 1/2 | 15 | 1 7/16 | 37 | 1 7/16 | 37 | 1 1/2 | 38 | 1.26 | 0.57 | 1.26 | 0.57 | | |
| | | | | | 3/4 | 20 | 1 1/2 | 38 | 1 1/2 | 38 | 1 9/16 | 40 | 1.33 | 0.60 | 1.33 | 0.60 | | |
| | | | | | 1 | 25 | 1 1/2 | 38 | 1 1/2 | 38 | 1 9/16 | 40 | 1.33 | 0.60 | 1.33 | 0.60 | | |
| | 1 1/2 | 40 | 1 1/2 | 40 | 1 | 25 | 1 3/4 | 44 | 1 5/8 | 41 | 1 13/16 | 47 | 1.92 | 0.87 | – | – | | |
| | | | | | 1/2 | 15 | 1 1/2 | 38 | 1 1/2 | 38 | 1 11/16 | 43 | 1.70 | 0.77 | 1.70 | 0.77 | | |
| | | | | | 3/4 | 20 | 1 5/8 | 41 | 1 5/8 | 41 | 1 3/4 | 44 | 1.90 | 0.86 | 1.90 | 0.86 | | |
| | 1 1/2 | 40 | 1 1/2 | 40 | 1 | 25 | 1 3/4 | 44 | 1 3/4 | 44 | 1 13/16 | 47 | 2.10 | 0.95 | 2.10 | 0.95 | | |
| | | | | | 1/2 | 15 | 1 5/8 | 41 | 1 5/8 | 41 | 1 13/16 | 47 | 2.27 | 1.03 | 2.27 | 1.03 | | |
| | | | | | 3/4 | 20 | 1 11/16 | 43 | 1 11/16 | 43 | 1 7/8 | 48 | 2.46 | 1.12 | 2.46 | 1.12 | | |
| | | | | | 1 | 25 | 1 13/16 | 47 | 1 13/16 | 47 | 2 | 51 | 2.60 | 1.18 | 2.60 | 1.18 | | |
| | 2 | 50 | 2 | 50 | 1 1/4 | 32 | 2 | 51 | 2 | 51 | 2 1/16 | 52 | 3.05 | 1.38 | 3.05 | 1.38 | | |
| 1 1/2 | | | | | 40 | 2 | 50 | 2 1/2 | 64 | 2 3/8 | 60 | 2 1/2 | 64 | 4.50 | 2.04 | – | – | |
| 1/2 | | | | | 15 | 1 3/4 | 44 | 1 3/4 | 44 | 2 1/16 | 52 | 3.35 | 1.52 | 3.35 | 1.52 | | | |
| 3/4 | | | | | 20 | 1 13/16 | 47 | 1 13/16 | 47 | 2 1/8 | 54 | 3.56 | 1.61 | 3.56 | 1.61 | | | |
| 1 | | | | | 25 | 2 | 51 | 2 | 51 | 2 1/4 | 57 | 3.70 | 1.68 | 3.70 | 1.68 | | | |
| 2 1/2 | 65 | 2 1/2 | 65 | 1 1/4 | 32 | 2 1/8 | 54 | 2 1/8 | 54 | 2 5/16 | 59 | 4.22 | 1.91 | 4.22 | 1.91 | | | |
| | | | | 1 1/2 | 40 | 2 1/4 | 57 | 2 1/4 | 57 | 2 3/8 | 60 | 4.60 | 2.09 | 4.60 | 2.09 | | | |
| | | | | 1 1/2 | 40 | 2 7/16 | 62 | 2 7/16 | 62 | 2 5/8 | 67 | 6.35 | 2.88 | – | – | | | |
| 3 | 80 | 3 | 80 | 2 | 50 | 2 11/16 | 68 | 2 11/16 | 68 | 2 3/4 | 70 | 7.60 | 3.45 | – | – | | | |
| | | | | 2 | 50 | 2 13/16 | 73 | 2 13/16 | 73 | 3 1/8 | 79 | 9.60 | 4.35 | 9.60 | 4.36 | | | |

Note: See following page for pressure-temperature ratings. Galvanized weights may vary. Please contact your Anvil Representative if you need verification.
 All Elbows & Tees 3/8" (10 DN) and Larger are 100% Gas Tested at a Minimum of 100 PSI. (6.9 bar)

| PROJECT INFORMATION | | APPROVAL STAMP | |
|---------------------|--|--|--|
| Project: | | <input type="checkbox"/> Approved | |
| Address: | | <input type="checkbox"/> Approved as noted | |
| Contractor: | | <input type="checkbox"/> Not approved | |
| Engineer: | | Remarks: | |
| Submittal Date: | | | |
| Notes 1: | | | |
| Notes 2: | | | |

MALLEABLE IRON FITTINGS



Malleable Iron Threaded Pipe Unions Pressure - Temperature Ratings

| Temperature | | Pressure | | | | | |
|--------------------|-----------------------|-----------|------|-----------|------|-----------|------|
| | | Class 150 | | Class 250 | | Class 300 | |
| (°F) | (°C) | psi | bar | psi | bar | psi | bar |
| -20° to 150° | -28.9° to 65.6° | 300 | 20.7 | 500 | 34.5 | 600 | 41.4 |
| 200° | 93.3° | 265 | 18.3 | 455 | 31.4 | 550 | 37.9 |
| 250° | 121.1° | 225 | 15.5 | 405 | 27.9 | 505 | 34.8 |
| 300° | 148.9° | 185 | 12.8 | 360 | 24.8 | 460 | 31.7 |
| 350° | 176.7° | 150 | 10.3 | 315 | 21.7 | 415 | 28.6 |
| 400° | 204.4° | 110 | 7.6 | 270 | 18.6 | 370 | 25.5 |
| 450° | 232.2° | 75 | 5.2 | 225 | 15.5 | 325 | 22.4 |
| 500° | 260.0° | - | - | 180 | 12.4 | 280 | 19.3 |
| 550° | 287.8° | - | - | 130 | 9.0 | 230 | 15.9 |

Note: Unions with Copper or Copper Alloy seats are not intended for use where temperature exceeds 450°F



For Listings/Approval Details and Limitations, visit our website at www.anvilintl.com or contact an Anvil Sales Representative.

Malleable Iron Threaded Fittings Pressure - Temperature Ratings

| Temperature | | Pressure | | | | | | | |
|--------------------|-----------------------|-----------|------|--------------------------|-------|----------------------------|-------|----------------------------|------|
| | | Class 150 | | Class 300 | | | | | |
| | | | | Sizes ¼"-1" (6-25 mm) | | Sizes 1¼"-2" (32-51 mm) | | Sizes 2½"-3" (64-76 mm) | |
| (°F) | (°C) | psi | bar | psi | bar | psi | bar | psi | bar |
| -20° to 150° | -28.9° to 65.6° | 300 | 20.7 | 2,000 | 137.9 | 1,500 | 103.4 | 1,000 | 68.9 |
| 200° | 93.3 | 265 | 18.3 | 1,785 | 123.1 | 1,350 | 93.1 | 910 | 62.7 |
| 250° | 121.1 | 225 | 15.5 | 1,575 | 108.6 | 1,200 | 82.7 | 825 | 56.9 |
| 300° | 148.9 | 185 | 12.8 | 1,360 | 93.8 | 1,050 | 72.4 | 735 | 50.7 |
| 350° | 176.7 | 150 | 10.3 | 1,150 | 79.3 | 900 | 62.1 | 650 | 44.8 |
| 400° | 204.4 | - | - | 935 | 64.5 | 750 | 51.7 | 560 | 38.6 |
| 450° | 232.2 | - | - | 725 | 50.0 | 600 | 41.4 | 475 | 32.8 |
| 500° | 260.0 | - | - | 510 | 35.2 | 450 | 31.0 | 385 | 26.5 |
| 550° | 287.8 | - | - | 300 | 20.7 | 300 | 20.7 | 300 | 20.7 |

Anvil Class 150/300 Malleable Iron Fittings conform to ASME B16.3 and Unions conform to ASME B16.39.

ALL ELBOWS & TEES ¾" (10 DN) and LARGER ARE 100% GAS TESTED AT A MINIMUM OF 100 PSI. (6.9 bar)

Standards and Specifications

| | Dimensions | Material | Galvanizing* | Thread | Pressure Rating |
|--------------------------------|-------------|------------|--------------|--------------|-----------------|
| MALLEABLE IRON FITTINGS | | | | | |
| Class 150/PN 20 | ASME B16.3 | ASTM A-197 | ASTM A-153 | ASME B1 20.1 | ASME B16.3 |
| Class 300/PN 50 | ASME B16.3 | ASTM A-197 | ASTM A-153 | ASME B1 20.1 | ASME B16.3 |
| MALLEABLE IRON UNIONS | | | | | |
| Class 150/PN 20 | ASME B16.39 | ASTM A-197 | ASTM A-153 | ASME B1 20.1 | ASME B16.39 |
| Class 250 | ASME B16.39 | ASTM A-197 | ASTM A-153 | ASME B1 20.1 | ASME B16.39 |
| Class 300/PN 50 | ASME B16.39 | ASTM A-197 | ASTM A-153 | ASME B1 20.1 | ASME B16.39 |

* ASTM B 633, Type I, SC 4, may be supplied as alternate zinc coating per applicable ASME B16 product standard.

General Assembly of Threaded Fittings

- 1) Inspect both male and female components prior to assembly.
 - Threads should be free from mechanical damage, dirt, chips and excess cutting oil.
 - Clean or replace components as necessary.
- 2) Application of thread sealant
 - Use a thread sealant that is fast drying, sets-up to a semi hard condition and is vibration resistant. Alternately, an anaerobic sealant may be utilized.
 - Thoroughly mix the thread sealant prior to application.
 - Apply a thick even coat to the male threads only. Best application is achieved with a brush stiff enough to force sealant down to the root of the threads.
- 3) Joint Makeup
 - For sizes up to and including 2" pipe, wrench tight makeup is considered three full turns past handtight. Handtight engagement for 1/2" through 2" thread varies from 4 1/2 turns to 5 turns.
 - For 2 1/2" through 4" sizes, wrench tight makeup is considered two full turns past handtight. Handtight engagement for 2 1/2" through 4" thread varies from 5 1/2 turns to 6 3/4 turns.