

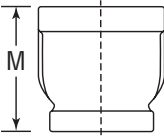



## Class 150 (Standard)

	Size				M		Unit Weight			
	NPS	DN	NPS	DN	in	mm	Black		Galv.	
							lbs	kg	lbs	kg
   <small>* Sizes 1/2 x 1/4, 3/4 x 1/2 and 1 x 3/4 do not have bands at the reducing end.</small>	1/4	8	1/8	6	1	25	0.07	0.03	0.07	0.03
	3/8	10	1/8	6	1 1/8	29	0.11	0.05	0.11	0.05
			1/4	8			0.11	0.05	0.11	0.05
	1/2	15	1/8	6	1 1/4	32	0.14	0.06	0.14	0.06
			1/4*	8			0.15	0.07	0.15	0.07
			3/8	10			0.17	0.08	0.17	0.08
	3/4	20	1/8	6	1 7/16	37	0.24	0.11	0.24	0.11
			1/4	8			0.22	0.10	0.22	0.10
			3/8	10			0.25	0.11	0.25	0.11
	1	25	1/2*	15	1 11/16	43	0.27	0.12	0.27	0.12
			1/4	8			0.35	0.16	0.35	0.16
			3/8	10			0.35	0.16	0.35	0.16
	1 1/4	32	1/2	15	2 1/16	52	0.39	0.18	0.39	0.18
			3/4*	20			0.43	0.20	0.43	0.20
			1	25			0.61	0.28	0.61	0.28
	1 1/2	40	1/2	15	2 5/16	59	0.64	0.29	0.64	0.29
			3/4	20			0.68	0.31	0.68	0.31
			1	25			0.78	0.35	0.78	0.35
			1 1/4	32			0.88	0.40	0.88	0.40
	2	50	1	25	2 13/16	73	0.88	0.40	0.88	0.40
			1 1/4	32			0.90	0.41	0.90	0.41
			1 1/2	40			1.30	0.59	1.30	0.59
			2	50			1.34	0.61	1.34	0.61
	2 1/2	65	1	25	3 1/4	83	1.40	0.63	1.40	0.63
			1 1/4	32			1.53	0.69	1.53	0.69
			1 1/2	40			1.55	0.70	1.55	0.70
			2	50			2.12	0.96	2.12	0.96
	3	80	2 1/2	65	3 11/16	94	2.09	0.95	2.09	0.95
			3	80			2.09	0.95	2.09	0.95
			2	50			2.51	1.14	2.51	1.14
2 1/2			65	3.16			1.43	3.16	1.43	
3 1/2	90	1	25	4	102	2.99	1.36	2.99	1.36	
		1 1/4	32			3.30	1.50	3.30	1.50	
		1 1/2	40			3.25	1.47	3.25	1.47	
4	100	2	50	4 3/8	111	3.31	1.50	3.31	1.50	
		2 1/2	65			4.32	1.96	4.32	1.96	
		3	80			4.72	2.14	4.72	2.14	
		3 1/2	90			4.99	2.26	4.99	2.26	
		4	100			4.90	2.22	4.90	2.22	
5	125	4	100	4 9/16	116	5.10	2.31	5.10	2.31	
6	150	4	100	4 13/16	124	5.93	2.69	5.93	2.69	
						6.55	2.97	6.55	2.97	
						6.30	2.86	6.30	2.86	
						9.57	4.34	9.57	4.34	
						10.30	4.67	10.30	4.67	

**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	
<b>Project:</b>		<input type="checkbox"/> Approved	
<b>Address:</b>		<input type="checkbox"/> Approved as noted	
<b>Contractor:</b>		<input type="checkbox"/> Not approved	
<b>Engineer:</b>		<b>Remarks:</b>	
<b>Submittal Date:</b>			
<b>Notes 1:</b>			
<b>Notes 2:</b>			



**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](http://www.anvilintl.com) or contact an Anvil Sales Representative.

**Malleable Iron Threaded Fittings  
Pressure - Temperature Ratings**

Temperature		Pressure							
		Class 150		Class 300					
(°F)	(°C)	psi	bar	Sizes 1/4"-1" (6-25 mm)		Sizes 1 1/4"-2" (32-51 mm)		Sizes 2 1/2"-3" (64-76 mm)	
				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 3/8" (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	Federal/Other
<b>MALLEABLE IRON FITTINGS</b>						
Class 150/PN 20	ASME B16.3•	ASTM A-197	ASTM A-153	ASME B1 20.1+	ASME B16.3•	ASME B16.3**
Class 300/PN 50	ASME B16.3•	ASTM A-197	ASTM A-153	ASME B1 20.1+	ASME B16.3•	
<b>MALLEABLE IRON UNIONS</b>						
Class 150/PN 20	ASME B16.39•	ASTM A-197	ASTM A-153	ASME B1 20.1+	ASME B16.39•	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•	

• an American National standard (ANSI), + ASME B1.20.1 was ANSI B2.1, \*\* Formerly WW-P-521, \*\*\* Formerly WW-U-531

\*\*\*\* 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.