## **MALLEABLE IRON FITTINGS**



## Class 150 (Standard)

FIGURE 1101	Size		Α		Unit Weight			
90° Elbow					Black		Galv.	
	NPS	DN	in	mm	lbs	kg	lbs	kg
	1/8	6	<sup>11</sup> / <sub>16</sub>	17	0.06	0.03	0.06	0.03
	1/4	8	<sup>13</sup> / <sub>16</sub>	22	0.11	0.05	0.11	0.05
	3/8	10	<sup>15</sup> / <sub>16</sub>	24	0.17	0.08	0.17	0.08
\$	1/2	15	1 <sup>1</sup> /8	29	0.30	0.14	0.30	0.14
	3/4	20	<b>1</b> <sup>5</sup> / <sub>16</sub>	33	0.45	0.20	0.45	0.20
	1	25	1 <sup>1</sup> / <sub>2</sub>	38	0.73	0.33	0.73	0.33
USA	1 <sup>1</sup> / <sub>4</sub>	32	1 <sup>3</sup> / <sub>4</sub>	44	0.97	0.44	0.97	0.44
	1 <sup>1</sup> / <sub>2</sub>	40	<b>1</b> <sup>15</sup> / <sub>16</sub>	49	1.30	0.59	1.30	0.59
<b>←</b> A →	2	50	21/4	57	2.06	0.93	2.06	0.93
<u> </u>	21/2	65	211/16	68	3.55	1.61	3.55	1.61
	3	80	31/16	78	5.46	2.48	5.46	2.48
	31/2	90	3 <sup>7</sup> / <sub>16</sub>	87	7.10	3.22	7.10	3.22
L- i A	4	100	3 <sup>13</sup> / <sub>16</sub>	98	8.95	4.06	8.95	4.06
<u> </u>	5	125	41/2	114	13.90	6.30	13.90	6.30
	6	150	5 <sup>1</sup> / <sub>8</sub>	130	23.00	10.43	23.00	10.43

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/s" (10 DN) and Larger are 100% Gas Tested at a Minimum of 100 PSI. (6.9 bar)

PROJECT INFORMATION	APPROVAL STAMP
Project:	☐ Approved
Address:	Approved as noted
Contractor:	☐ Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

### MALLEABLE IRON FITTINGS





### **Malleable Iron Threaded Pipe Unions Pressure - Temperature Ratings** Pressure **Temperature Class 150 Class 250 Class 300** (°C) (°F) psi bar bar -20° -28.9° to to 300 20.7 500 34.5 600 41.4 150° 65.6° 200° 93.3° 265 18.3 455 31.4 550 37.9 250° 121.1° 225 15.5 405 27.9 505 34.8 148.9° 31.7 300° 185 12.8 360 24.8 460 350° 176.7° 10.3 28.6 150 315 21.7 415 400° 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° 19.3 180 12.4 280 550° 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.

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	Pressure - Temperature Ratings											
			Pressure									
	Tempe	rature					Class	300				
	10111		Class	s 150	Sizes		Sizes 1		Sizes 2			
					(6-25	ī mm)	(32–5	1 mm)	(64–70	6 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		
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Malleable Iron Threaded Fittings

mm) bar 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 56.9 148.9 12.8 300° 185 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 %" (10 DN) and LARGER ARE 100% GAS TESTED AT A MINIMUM OF 100 PSI. (6.9 bar)

Standards and Specifications										
	Dimensions	Material	Galvanizing****	Thread	<b>Pressure Rating</b>	Federal/Other				
MALLEABLE IRON FITTINGS										
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●					
MALLEABLE IRON UNIONS										
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●					

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

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

### MALLEABLE IRON FITTINGS



# **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 41/2 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.