MALLEABLE IRON FITTINGS



Class 150 (Standard)

FIGURE 1101	Size		A		Unit Weight			
90° Elbow					Black		Galv.	
	NPS	DN	in	mm	Ibs	kg	lbs	kg
	1/8	6	¹¹ / ₁₆	17	0.06	0.03	0.06	0.03
	1/4	8	¹³ / ₁₆	22	0.11	0.05	0.11	0.05
	3/8	10	¹⁵ / ₁₆	24	0.17	0.08	0.17	0.08
\$	1/2	15	1 ¹ /8	29	0.30	0.14	0.30	0.14
	3/4	20	1 ⁵ / ₁₆	33	0.45	0.20	0.45	0.20
	1	25	1 ¹ / ₂	38	0.73	0.33	0.73	0.33
USA	1 ¹ / ₄	32	1 ³ / ₄	44	0.97	0.44	0.97	0.44
	1 ¹ / ₂	40	1 ¹⁵ / ₁₆	49	1.30	0.59	1.30	0.59
← A →	2	50	21/4	<i>57</i>	2.06	0.93	2.06	0.93
	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 ⁷ / ₁₆	87	7.10	3.22	7.10	3.22
i A	4	100	3 ¹³ / ₁₆	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 ¹ /8	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 (°F) (°C) psi bar psi bar -20° -28.9° 300 20.7 500 34.5 600 41.4 to to 150° 65.6° 200° 93.3° 18.3 550 37.9 265 455 31.4 250° 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 28.6 415 400° 204.4° 110 7.6 270 18.6 370 25.5 232.2° 450° 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 $450\,^{\circ}\text{F}$





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

maneable from threaded Fittings										
Pressure - Temperature Ratings										
				Pressure						
Temperature		Class 150		Class 300						
				Sizes ½"-1" (6-25 mm)		Sizes 1½"–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	

Malleable Iron Threaded Fittings

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

20.7

300

20.7

300

20.7

300

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	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				

550°

287.8

^{*} 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.