

MALLEABLE IRON FITTINGS



Class 150 (Standard)

FIGURE 1134 Hex Locknut	Size		Minimum Dimensions								Unit Weight			
			A		B		C		D		Black		Galv.	
	NPS	DN	in	mm	in	mm	in	mm	in	mm	lbs	kg	lbs	kg
 A (min.) Across Flats Six Sides D (min) B dia. (min) C (min) NPSL Thread For additional sizes larger than 2" (50 DN) see Cast Iron page 52. Not to be used for pressure service.	• 1/4	8	.840	21	.660	17	.250	6	.060	2	0.02	0.01	0.02	0.01
	• 3/8	10	1.000	25	.770	20	.280	7	.060	2	0.04	0.02	0.04	0.02
	• 1/2	15	1.180	30	.970	25	.310	8	.060	2	0.06	0.03	0.06	0.03
	3/4	20	1.430	36	1.230	31	.340	9	.060	2	0.08	0.04	0.08	0.04
	1	25	1.750	44	1.500	38	.380	10	.060	2	0.14	0.06	0.14	0.06
	1 1/4	32	2.100	53	1.860	47	.420	11	.060	2	0.21	0.10	0.21	0.10
	1 1/2	40	2.350	60	2.120	54	.470	12	.060	2	0.24	0.11	0.24	0.11
	2	50	2.880	73	2.630	67	.530	13	.090	2	0.40	0.18	0.40	0.18

• Supplied in steel only.

FIGURE 1190 Floor Flange (Ductile Iron)	Size		Dia. of Flange		Diameter of Bolt Circle		No. of Holes	Dia. of Holes		Unit Weight			
			in	mm	in	mm		in	mm	Black		Galv.	
	NPS	DN	in	mm	in	mm		in	mm	lbs	kg	lbs	kg
 Structural use only.	1/4	8	2 3/16	56	1 7/8	48	4	1/4	6	0.39	0.18	0.39	0.18
	3/8	10	3	76	2	51	4	1/4	6	0.43	0.20	0.43	0.20
	1/2	15	3 1/2	89	2 1/2	64	4	1/4	6	0.56	0.25	0.56	0.25
	3/4	20	3 1/2	89	2 1/2	64	4	1/4	6	0.60	0.27	0.60	0.27
	1	25	4	102	3	76	4	1/4	6	0.84	0.38	0.84	0.38
	1 1/4	32	4	102	3	76	4	1/4	6	0.90	0.41	0.90	0.41
	1 1/2	40	4 1/2	114	3 1/2	89	4	5/16	8	1.20	0.54	1.20	0.54
	2	50	5 1/2	140	4 1/4	108	4	5/16	8	2.03	0.92	2.03	0.92

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 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					
(°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
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•	

• 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.