

MALLEABLE IRON FITTINGS



Class 300 (XS/XH)

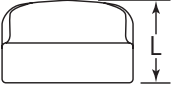
 FIGURE 1163 Cap	Size		Height L		Unit Weight			
					Black		Galv.	
	NPS	DN	in	mm	lbs	kg	lbs	kg
 	1/4	8	25/32	20	0.10	0.05	0.10	0.05
	3/8	10	13/16	22	0.15	0.07	0.15	0.07
	1/2	15	1	25	0.23	0.10	0.23	0.10
	3/4	20	1 1/16	27	0.35	0.16	0.35	0.16
	1	25	1 1/4	32	0.58	0.26	0.58	0.26
	1 1/4	32	1 3/8	35	1.00	0.45	1.00	0.45
	1 1/2	40	1 7/16	37	1.18	0.54	1.18	0.54
	2	50	1 11/16	43	1.94	0.88	1.94	0.88
	2 1/2	65	2 1/16	52	3.32	1.51	3.32	1.51
	3	80	2 3/16	56	4.71	2.14	4.71	2.14

 FIGURE 390 Square Countersunk Plugs	Size		Unit Weight			
			Black		Galv.	
	NPS	DN	lbs	kg	lbs	kg
 See Cast Iron section for other available sizes.	1/2	15	0.05	0.02	0.05	0.02
	3/4	20	0.11	0.05	0.11	0.05

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:		☐ 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**

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 1/4"–1" (6–25 mm)		Sizes 1 1/4"–2" (32–51 mm)		Sizes 2 1/2"–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 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
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.