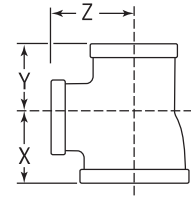


MALLEABLE IRON FITTINGS



Class 150 (Standard)

FIGURE 1105R
Reducing Tee



Size						X		Y		Z		Unit Weight			
												Black		Galv.	
NPS	DN	NPS	DN	NPS	DN	in	mm	in	mm	in	mm	lbs	kg	lbs	kg
1/8	6	1/8	6	1/4	8	3/4	19	3/4	19	3/4	19	0.12	0.05	0.12	0.05
1/4	8	1/4	8	1/8	6	3/4	19	3/4	19	3/4	19	0.13	0.06	0.13	0.06
				3/8	10	15/16	24	15/16	24	7/8	22	0.19	0.09	0.19	0.09
3/8	10	1/4	8	1/4	8	7/8	22	13/16	22	15/16	24	0.19	0.09	0.19	0.09
				3/8	10	15/16	24	15/16	24	15/16	24	0.21	0.10	0.21	0.10
		3/8	10	1/2	15	1 1/16	27	1 1/16	27	1 1/16	27	0.21	0.10	0.21	0.10
				1/2	15	1 1/8	29	1 1/8	29	1 1/8	29	0.27	0.12	0.27	0.12
1/2	15	1/4	8	1/2	15	1 1/8	29	1 5/16	24	1 1/8	29	0.29	0.13	0.29	0.13
				3/8	10	1 1/16	27	1	25	1 1/16	27	0.28	0.13	0.28	0.13
		3/8	10	1/2	15	1 1/8	29	1 1/16	27	1 1/8	29	0.33	0.15	0.33	0.15
				1/4	8	1	25	1	25	1	25	0.27	0.12	0.27	0.12
		1/2	15	3/8	10	1 1/16	27	1 1/16	27	1 1/16	27	0.30	0.14	0.30	0.14
				3/4	20	1 1/4	32	1 1/4	32	1 3/16	30	0.45	0.20	0.45	0.20
		1	25	1	25	1 3/8	35	1 3/8	35	1 1/4	32	0.55	0.25	0.55	0.25
				1 1/4	32	1 5/8	41	1 5/8	41	1 7/16	37	0.90	0.41	0.90	0.41
3/4	20	1/4	8	3/4	20	1 5/16	33	1 1/8	29	1 5/16	33	0.45	0.20	0.45	0.20
				3/8	10	1 1/8	29	1 5/16	24	1 1/8	29	0.36	0.16	-	-
		3/8	10	3/4	20	1 5/16	33	1 1/8	29	1 5/16	33	0.46	0.21	0.46	0.21
				1/2	15	1 3/16	30	1 1/8	29	1 1/4	32	0.43	0.20	0.43	0.20
		1/2	15	3/4	20	1 5/16	33	1 1/4	32	1 5/16	33	0.51	0.23	0.51	0.23
				1/4	8	1 1/16	27	1 1/16	27	1 1/8	29	0.38	0.17	0.38	0.17
		3/4	20	3/8	10	1 1/8	29	1 1/8	29	1 1/8	29	0.42	0.19	0.42	0.19
				1/2	15	1 3/16	22	1 3/16	30	1 1/4	32	0.47	0.21	0.47	0.21
		1	25	1	25	1 7/16	37	1 7/16	37	1 3/8	35	0.62	0.28	0.62	0.28
				1 1/4	32	1 5/8	41	1 5/8	41	1 7/16	37	0.90	0.41	0.90	0.41
1	25	1/4	8	1	25	1 1/2	38	1 5/16	33	1 1/2	38	0.69	0.31	0.69	0.31
				1/2	15	1 1/4	32	1 1/8	29	1 3/8	35	0.70	0.32	0.70	0.32
		1/2	15	3/4	20	1 3/8	35	1 1/4	32	1 7/16	37	0.56	0.25	0.56	0.25
				1	25	1 1/2	38	1 3/8	35	1 1/2	38	0.76	0.34	0.76	0.34
		3/4	20	1/2	15	1 1/4	32	1 3/16	30	1 3/8	35	0.59	0.27	0.59	0.27
				3/4	20	1 3/8	35	1 5/16	33	1 7/16	37	0.74	0.34	0.74	0.34
		1	25	1	25	1 1/2	38	1 7/16	37	1 1/2	38	0.78	0.35	0.78	0.35
				1/4	8	1 1/8	29	1 1/8	29	1 1/4	32	0.53	0.24	0.53	0.24
		3/8	10	1/2	15	1 1/4	32	1 3/16	30	1 1/4	32	0.60	0.27	0.60	0.27
				1/2	15	1 1/4	32	1 1/4	32	1 3/8	35	0.70	0.32	0.70	0.32
		3/4	20	1/2	15	1 1/4	32	1 3/8	35	1 7/16	37	0.82	0.37	0.82	0.37
				1 1/4	32	1 1 1/16	43	1 1 1/16	43	1 9/16	40	0.92	0.42	0.92	0.42
		1 1/2	40	1 1/2	40	1 13/16	47	1 13/16	46	1 5/8	41	1.19	0.54	1.19	0.54
				2	50	2	51	2	51	1 3/4	44	1.63	0.74	1.63	0.74

See additional sizes on following page.

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 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					
(°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
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.