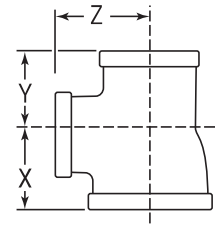


Class 150 (Standard)

FIGURE 1105R
Reducing Tee (Cont'd.)



Size					X		Y		Z		Unit Weight						
											Black		Galv.				
NPS	DN	NPS	DN	NPS	DN	in	mm	in	mm	in	mm	lbs	kg	lbs	kg		
2	50	1/2	15	2	50	2 1/4	57	1 7/8	48	2 1/4	57	2.15	0.98	2.15	0.98		
		3/4	20	2	50	2 1/4	57	1 15/16	49	2 1/4	57	2.00	0.91	2.00	0.91		
		1	25	2	50	2 1/4	57	2	51	2 1/4	57	2.14	0.97	2.14	0.97		
		1 1/4	32	1 1/4	32	1 1/4	32	1 7/8	48	1 3/4	44	2 1/8	54	1.72	0.78	1.72	0.78
				1 1/2	40	1 1/2	40	2	51	1 7/8	48	2 3/16	56	1.85	0.84	1.85	0.84
				2	50	2	50	2 1/4	57	2 1/8	54	2 1/4	57	2.20	1.00	2.20	1.00
		1 1/2	40	1	25	1 3/4	44	1 5/8	41	2	51	1 7/8	48	1.57	0.71	1.57	0.71
				1 1/4	32	1 1/4	32	1 7/8	48	1 13/16	47	2 1/8	54	1.76	0.80	1.76	0.80
				1 1/2	40	1 1/2	40	2	51	1 15/16	49	2 3/16	56	1.95	0.88	1.95	0.88
				2	50	2	50	2 1/4	57	2 3/16	56	2 1/4	57	2.24	1.02	2.24	1.02
		2	50	1/2	15	1 1/2	38	1 1/2	38	1 1/2	38	1 7/8	48	1.65	0.75	1.65	0.75
				3/4	20	1 5/8	41	1 5/8	41	2	51	2 1/8	54	1.87	0.85	1.87	0.85
				1	25	1 3/4	44	1 3/4	44	2	51	2 1/8	54	1.76	0.80	1.76	0.80
				1 1/4	32	1 7/8	48	1 7/8	48	2 1/8	54	2 3/16	56	2.35	1.07	2.35	1.07
				1 1/2	40	2	51	2	51	2 3/16	56	2 1/4	57	2.55	1.16	2.55	1.16
				2 1/2	65	2 5/8	67	2 5/8	67	2 3/8	60	2 3/8	60	3.50	1.59	3.50	1.59
2 1/2	65	1 1/2	40	2	50	2 3/8	60	2 3/16	56	2 5/8	67	3.43	1.56	3.43	1.56		
		2	50	2 1/2	65	2 11/16	68	2 1/2	64	2 11/16	68	3.80	1.72	3.80	1.72		
		2 1/2	65	3/4	20	1 3/4	44	1 3/4	44	2 5/16	59	2 5/8	67	3.28	1.49	3.28	1.49
				1	25	1 7/8	48	1 7/8	48	2 3/8	60	2 11/16	68	4.10	1.86	4.10	1.86
				1 1/4	32	2 1/16	52	2 1/16	52	2 1/16	62	2 1/2	64	2.72	1.23	2.72	1.23
				1 1/2	40	2 3/16	56	2 3/16	56	2 1/2	64	2 5/8	67	2.85	1.29	2.85	1.29
				2	50	2 3/8	60	2 3/8	60	2 5/8	67	2 1/2	64	3.36	1.52	3.36	1.52
		3	80	3	76	3	76	2 13/16	73	2 1/2	64	3.46	1.57	3.46	1.57		
		2	50	2 3/8	60	2 3/8	60	2 5/8	67	2 1/2	64	3.65	1.66	3.65	1.66		
		3	80	3	76	3	76	2 13/16	73	2 1/2	64	5.82	2.64	5.82	2.64		
3	80	2	50	2 1/2	64	2 1/4	57	2 7/8	73	2 7/8	73	4.50	2.04	4.50	2.04		
		3	80	3 1/8	79	2 7/8	73	3 1/8	79	2 7/8	73	5.80	2.63	5.80	2.63		
		2 1/2	65	2	50	2 1/2	64	2 3/8	60	2 7/8	73	4.80	2.18	4.80	2.18		
				2 1/2	65	2 13/16	73	2 11/16	68	3	76	2 7/8	73	5.80	2.63	5.80	2.63
		3	80	3/4	20	1 7/8	48	1 7/8	48	2 5/8	67	2 7/8	73	4.03	1.83	4.03	1.83
				1	25	2	51	2	51	2 5/8	67	2 7/8	73	4.13	1.87	4.13	1.87
				1 1/4	32	2 3/16	56	2 3/16	56	2 3/4	70	2 7/8	73	4.50	2.04	4.50	2.04
				1 1/2	40	2 5/16	59	2 5/16	59	2 13/16	73	2 7/8	73	5.18	2.35	5.18	2.35
				2	50	2 1/2	64	2 1/2	64	2 7/8	73	2 7/8	73	5.70	2.59	5.70	2.59
				2 1/2	65	2 13/16	73	2 13/16	73	3	76	2 7/8	73	6.09	2.76	6.09	2.76
4	100	3	80	4	100	3 13/16	98	3 5/8	92	3 13/16	98	10.40	4.72	10.40	4.72		
		4	100	1 1/2	40	2 1/2	65	2 1/2	65	3 3/8	86	3 1/2	89	7.47	3.39	7.47	3.39
				2	50	2 3/4	70	2 3/4	70	3 1/16	87	3 1/2	89	8.39	3.80	8.39	3.80
				2 1/2	65	3 1/16	78	3 1/16	78	3 1/2	89	3 1/2	89	9.60	4.35	9.60	4.35
				3	80	3 5/16	84	3 5/16	84	3 5/8	92	3 5/8	92	11.02	5.00	11.02	5.00
				3	80	3 5/16	84	3 5/16	84	3 5/8	92	3 5/8	92	11.02	5.00	11.02	5.00

See additional sizes on previous page.

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)

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.