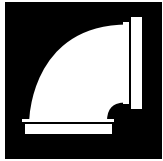


Threaded Fittings



Tyco Fire Products --- www.tyco-grooved.com
 451 North Cannon Avenue, Lansdale, Pennsylvania 19446 --- USA
 Customer Service/Sales: Tel: (215) 362-0700 / Fax: (215) 362-5385
 Technical Services: Tel: (800) 381-9312 / Fax: (800) 791-5500



General Description



See Fire Protection Submittal Sheet for pressure rating and Listing and Approval information

Ductile Iron threaded fittings (with the exception of California Tees and Street Elbows) conform to ANSI B16.3. They are higher in strength and more corrosion resistant than cast iron fittings. The additional strength is provided by the ductile properties making up the fitting. This is accomplished by adding magnesium while the iron is being poured into its final cast shape. This provides an advantage as the fittings are not as susceptible to leaks or cracking and they are also lighter than standard cast iron.

Caution: *Installers who have not used ductile iron threaded fittings before should be instructed that the fittings are stronger than the pipe and over-tightening the fitting can create leaks and cause damage to pipe threads. In general, there is about one-half turn difference between cast iron and ductile iron fittings. Apply Teflon tape or high quality pipe joint compound on the male pipe threads and tighten two to three turns beyond hand tight. If you are using an automatic make-on machine, please exercise caution in setting your machine to the proper parameters prior to tightening fittings onto the male pipe threads.*



Technical Data

Figures: 811, 812, 813, 814, 815, 816, 817, 818, 820, 825, 827, 830, 719, California Tees, and Street Elbows

Sizes: 1/2" - 2 1/2"

Maximum Working Pressure:

800 Series, California Tees, and Street Elbows: 300 psi
 Figure 719: 250 psi

Approvals: UL, and FM

Note: See Fire Protection Submittal Sheet for exact Listing/Approval information.

Manufacture Source:

Imported

Material:

Ductile Iron, conforming to ANSI B16.3 (Note: Figure 719 Plugs are constructed of Cast Iron)

Thread: N.P.T.



Installation

Apply Teflon Tape or high quality pipe joint compound on the male pipe threads and tighten two to three turns beyond hand tight. (See caution in first column)



Ordering Procedure

Ordering information: When placing an order, indicate the full product name. Please specify the quantity, figure number and size.

Availability and Service: Grooved Piping Products, valves, accessories and other products are available throughout the U.S., Canada, and internationally, though a network of distribution centers. You may write directly or call 215-362-0700 for the distributor nearest you.

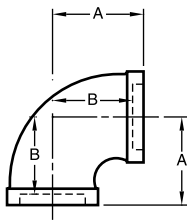


Care and Maintenance

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in accordance with the applicable standards of the National Fire Protection Association (e.g., NFPA 25), in addition to the standards of any authority having jurisdiction. The installing contractor or product manufacturer should be contacted relative to any questions. Any impairment must be immediately corrected.

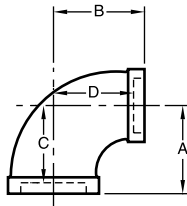
It is recommended that automatic sprinkler systems be inspected, tested, and maintained by a qualified Inspection Service.

Figure 811
90° Elbow



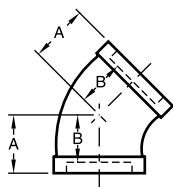
Size Inches	A Inches	B Inches	Part Number	Weight Lbs.	Box Qty.
1/2	1 1/8	9/16	86206	0.24	240
3/4	1 5/16	3/4	86205	0.40	120
1	1 1/2	13/16	86200	0.64	70
1 1/4	1 3/4	1 1/16	86201	0.95	40
1 1/2	1 15/16	1 3/16	86202	1.24	30
2	2 1/4	1 1/2	86203	1.74	20
2 1/2	2 11/16	1 9/16	86204	3.28	10

Figure 812
90° Reducing Elbow



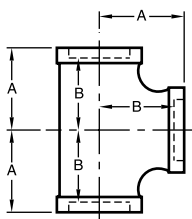
Size Inches	A Inches	B Inches	C Inches	D Inches	Part Number	Weight Lbs.	Box Qty.
3/4 x 1/2	1 3/16	1 3/16	5/8	5/8	86342	0.33	160
1 x 1/2	1 1/4	1 3/8	9/16	13/16	86210	0.44	110
1 x 3/4	1 3/8	1 7/16	1 1/16	7/8	86211	0.53	90
1 1/4 x 1/2	1 5/16	1 1/2	5/8	1 5/16	86212	0.64	75
1 1/4 x 3/4	1 7/16	1 5/8	3/4	1 1/16	86213	0.75	60
1 1/4 x 1	1 9/16	1 11/16	7/8	1	86214	0.77	55
1 1/2 x 3/4	1 1/2	1 3/4	3/4	1 3/16	86221	0.95	45
1 1/2 x 1	1 5/8	1 13/16	7/8	1 1/8	86215	0.99	40
1 1/2 x 1 1/4	1 13/16	1 7/8	1 1/8	1 3/16	86216	1.14	35
2 x 3/4	1 5/8	1 15/16	7/8	1 3/8	86217	1.39	30
2 x 1	1 3/4	2 1/16	2	1 5/16	86218	1.58	25
2 x 1 1/2	2	2 3/16	1 1/4	1 7/16	86220	1.67	20
2 1/2 x 2	2 3/8	2 5/8	1 1/4	1 7/8	86262	3.01	15

Figure 813
45° Elbow



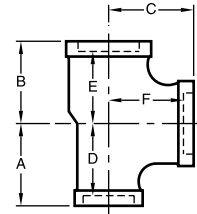
Size Inches	A Inches	B Inches	Part Number	Weight Lbs.	Box Qty.
1/2	7/8	3/8	86780	0.22	250
3/4	1	7/16	86781	0.33	150
1	1 1/8	13/16	86280	0.48	90
1 1/4	1 5/16	5/8	86281	0.73	50
1 1/2	1 7/16	1 1/16	86282	0.93	35
2	1 11/16	1 5/16	86283	1.55	18
2 1/2	1 15/16	1	86782	2.70	12

Figure 814
Tee



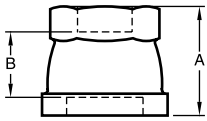
Size Inches	A Inches	B Inches	Part Number	Weight Lbs.	Box Qty.
1/2	1 1/8	9/16	86340	0.33	150
3/4	1 5/16	3/4	86341	0.50	90
1	1 1/2	13/16	86230	0.85	60
1 1/4	1 3/4	1 1/16	86231	1.30	35
1 1/2	1 15/16	1 3/16	86232	1.63	24
2	2 1/4	1 1/2	86233	2.63	12
2 1/2	2 11/16	1 9/16	86234	4.55	8

Figure 815
Reducing Tee



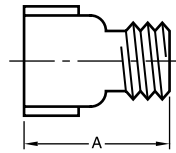
Size Inches	A Inches	B Inches	C Inches	D Inches	E Inches	F Inches	Part Number	Wt. Lbs.	Box Qty.
3/4 x 3/4 x 1/2	1 3/16	1 3/16	1 1/4	5/8	5/8	1 1/16	86235	0.46	95
3/4 x 3/4 x 1	1 7/16	1 7/16	1 3/8	7/8	7/8	1 1/16	86755	0.68	65
1 x 1/2 x 1	1 1/2	1 3/8	1 1/2	13/16	13/16	13/16	86236	0.70	55
1 x 3/4 x 1/2	1 1/4	1 3/16	1 3/8	9/16	5/8	13/16	86756	0.63	80
1 x 3/4 x 3/4	1 3/8	1 5/16	1 7/16	1 1/16	3/4	7/8	86757	0.68	65
1 x 3/4 x 1	1 1/2	1 7/16	1 1/2	13/16	7/8	13/16	86237	0.77	55
1 x 1 x 1/2	1 1/4	1 1/4	1 3/8	9/16	9/16	13/16	86238	0.66	65
1 x 1 x 3/4	1 3/8	1 3/8	1 7/16	1 1/16	1 1/16	7/8	86239	0.73	60
1 x 1 x 1 1/4	1 11/16	1 11/16	1 9/16	1	1	7/8	86240	0.97	45
1 x 1 x 1 1/2	1 13/16	1 13/16	1 5/8	1 1/8	1 1/8	7/8	86241	1.14	35
1 1/4 x 1 x 1/2	1 15/16	1 1/4	1 9/16	5/8	9/16	1	86242	0.81	50
1 1/4 x 1 x 3/4	1 7/16	1 3/8	1 5/8	3/4	1 1/16	1 1/16	86243	0.90	50
1 1/4 x 1 x 1	1 9/16	1 1/2	1 11/16	7/8	13/16	1	86244	1.03	45
1 1/4 x 1 x 1 1/4	1 3/4	1 11/16	1 3/4	1 1/16	1	1 1/16	86245	1.10	40
1 1/4 x 1 x 1 1/2	1 7/8	1 13/16	1 13/16	1 3/16	1 1/8	1 1/16	86246	1.43	30
1 1/4 x 1 1/4 x 1/2	1 3/8	1 3/8	1 9/16	1 1/16	1 1/16	1	86247	0.87	45
1 1/4 x 1 1/4 x 3/4	1 7/16	1 7/16	1 5/8	3/4	3/4	1 1/16	86248	0.96	45
1 1/4 x 1 1/4 x 1	1 9/16	1 9/16	1 11/16	7/8	7/8	1	86249	1.10	40
1 1/4 x 1 1/4 x 1 1/2	1 7/8	1 7/8	1 13/16	1 13/16	1 13/16	1 1/16	86250	1.50	30
1 1/4 x 1 1/4 x 2	2 1/8	2 1/8	2	1 7/16	1 7/16	1 1/8	86251	2.00	24
1 1/2 x 1 x 1/2	1 7/16	1 5/16	1 11/16	1 1/16	5/8	1 1/8	86252	0.97	40
1 1/2 x 1 x 3/4	1 1/2	1 3/8	1 3/4	3/4	1 1/16	1 3/16	86253	1.14	40
1 1/2 x 1 x 1	1 5/8	1 1/2	1 13/16	7/8	13/16	1 1/8	86254	1.14	30
1 1/2 x 1 x 1 1/2	1 15/16	1 13/16	1 15/16	1 3/16	1 1/8	1 3/16	86255	1.52	30
1 1/2 x 1 1/4 x 1/2	1 7/16	1 5/16	1 11/16	1 1/16	5/8	1 1/8	86257	1.03	40
1 1/2 x 1 1/4 x 3/4	1 1/2	1 7/16	1 3/4	3/4	3/4	1 3/16	86258	1.10	40
1 1/2 x 1 1/4 x 1	1 5/8	1 9/16	1 13/16	7/8	7/8	1 1/8	86259	1.31	30
1 1/2 x 1 1/4 x 2	2 3/16	2 1/8	2	1 7/16	1 7/16	1 1/4	86260	1.94	20
1 1/2 x 1 1/2 x 1/2	1 7/16	1 7/16	1 11/16	1 1/16	1 1/16	1 1/8	86261	1.14	35
1 1/2 x 1 1/2 x 3/4	1 1/2	1 1/2	1 3/4	3/4	3/4	1 3/16	86262	1.23	35
1 1/2 x 1 1/2 x 1	1 5/8	1 5/8	1 13/16	7/8	7/8	1 1/8	86263	1.38	30
1 1/2 x 1 1/2 x 1 1/4	1 13/16	1 13/16	1 7/8	1 1/16	1 1/16	1 3/16	86264	1.50	30
1 1/2 x 1 1/2 x 2	2 3/16	2 3/16	2	1 7/16	1 7/16	1 1/4	86265	2.00	20
2 x 1 x 2	2 1/4	2	2 1/4	1 1/2	1 5/16	1 1/2	86266	2.18	15
2 x 1 1/4 x 2	2 1/4	2 1/8	2 1/4	1 1/2	1 7/16	1 1/2	86267	2.31	15
2 x 1 1/2 x 1/2	1 1/2	1 7/16	1 7/8	3/4	1 1/16	1 5/16	86268	1.50	30
2 x 1 1/2 x 3/4	1 5/8	1 1/2	1 15/16	7/8	3/4	1 3/8	86269	1.61	25
2 x 1 1/2 x 1	1 3/4	1 5/8	2	1	7/8	1 5/16	86270	1.65	20
2 x 1 1/2 x 1 1/2	2 1/16	1 15/16	2 3/16	1 5/16	1 3/16	1 7/16	86272	2.03	20
2 x 1 1/2 x 2	2 1/4	2 3/16	2 1/4	1 1/2	1 7/16	1 1/2	86273	2.37	15
2 x 2 x 1/2	1 1/2	1 1/2	1 7/8	3/4	3/4	1 5/16	86222	1.50	30
2 x 2 x 3/4	1 5/8	1 5/8	1 15/16	7/8	7/8	1 3/8	86223	1.67	20
2 x 2 x 1	1 3/4	1 3/4	2	1	1	1 5/16	86224	1.91	20
2 x 2 x 1 1/4	1 7/8	1 7/8	2 1/8	1 1/8	1 1/8	1 7/16	86225	2.05	20
2 x 2 x 1 1/2	2	2	2 3/16	1 1/4	1 1/4	1 1/2	86226	2.11	15
2 x 2 x 2 1/2	2 5/8	2 5/8	2 3/8	1 3/4	1 7/8	1 7/16	86227	3.67	10
2 1/2 x 2 x 3/4	1 3/4	1 5/8	2 9/16	5/8	7/8	1 3/4	86274	2.22	15

Figure 816
Reducing Coupling



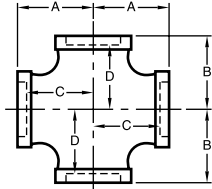
Size Inches	A Inches	B Inches	Part Number	Weight Lbs.	Box Qty.
3/4 x 1/2	1 3/4	1 1/16	86772	0.38	240
1 x 1/2	1 11/16	1/2	86228	0.38	200
1 x 3/4	1 3/4	1/2	86229	0.53	110

Figure 825
Extension Piece



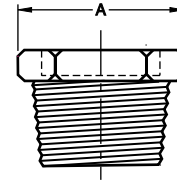
Size Inches	A Inches	Part Number	Weight Lbs.	Box Qty.
1/2 x 1 1/2	1 1/2	72751	0.20	300
1/2 x 2	2	72980	0.27	250
3/4 x 1 1/2	1 1/2	72981	0.22	250
3/4 x 2	2	72982	0.31	200

Figure 817
Cross



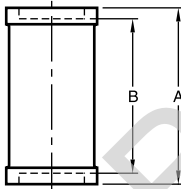
Size Inches	A Inches	B Inches	C Inches	D Inches	Part Number	Weight Lbs.	Box Qty.
1	1 1/2	1 1/2	13/16	13/16	86284	0.97	45
1 1/4	1 3/4	1 3/4	1 1/16	1 1/16	86285	1.59	25
1 1/2	1 15/16	1 15/16	1 3/16	1 3/16	86286	1.89	20
2	2 1/4	2 1/4	1 1/2	1 1/2	86287	2.93	10
1 1/4 x 1 1/4 x 1 x 1	1 11/16	1 9/16	1	7/8	86289	1.25	30
1 1/2 x 1 1/2 x 1 x 1	1 13/16	1 5/8	1 1/16	1 15/16	86322	1.48	24
2 x 2 x 1 x 1	2	1 3/4	1 1/4	1 1/16	86291	2.64	10

Figure 827
Hex Bushing



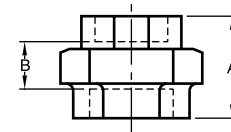
Size Inches	A Inches	Part Number	Weight Lbs.	Box Qty.
1 x 1/2	1 1/16	72726	0.22	280
1 x 3/4	1 1/16	72762	0.18	280
1 1/4 x 1	1 3/16	72763	0.31	150
1 1/2 x 1	1 1/4	72757	0.53	100
1 1/2 x 1 1/4	1 1/4	72764	0.35	100
2 x 1	1 3/8	72759	0.75	80
2 x 1 1/4	1 3/8	72761	0.69	80
2 x 1 1/2	1 3/8	72775	0.62	80

Figure 818
Straight Coupling



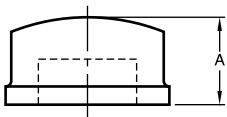
Size Inches	A Inches	B Inches	Part Number	Wrench	Weight Lbs.	Box Qty.
1/2	1 3/8	5/16	72779	1 1/8	0.18	360
3/4	1 5/8	9/16	72778	1 3/8	0.26	200
1	1 3/4	3/8	72755	1 11/16	0.44	110
1 1/4	2	9/16	72754	2	0.54	75
1 1/2	2 3/16	3/4	72753	2 1/4	0.71	60
2	2 5/8	1 1/8	72752	2 3/4	1.15	30
2 1/2	3	3/4	72758	3 3/8	2.29	18

Figure 830
Brass Seat Union



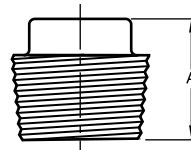
Size Inches	A Inches	B Inches	Part Number	Weight Lbs.	Box Qty.
1/2	1 7/8	13/16	86207	0.47	110
3/4	2	15/16	86275	0.66	80
1	2 3/16	13/16	86276	1.08	50
1 1/4	2 1/2	1 1/16	86277	1.54	35
1 1/2	2 5/8	1 3/16	86278	2.03	25
2	3 1/8	1 5/8	86279	3.15	18

Figure 820
Cap



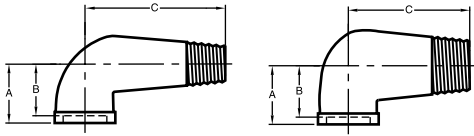
Size Inches	A Inches	Part Number	Weight Lbs.	Box Qty.
1/2	7/8	72776	0.15	500
3/4	1	72777	0.22	300
1	1 3/16	72824	0.33	180
1 1/4	1 5/16	72756	0.54	110
1 1/2	1 3/8	72822	0.68	80
2	1 1/2	72823	0.96	45
2 1/2	1 3/4	72825	1.80	25

Figure 719
Cast Iron Plug



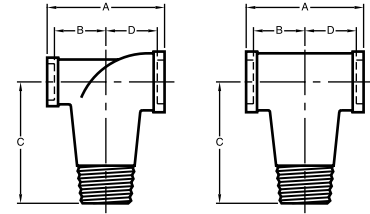
Size Inches	A Inches	Part Number	Weight Lbs.	Box Qty.
1/2	15/16	86292	0.10	500
3/4	1 1/8	86293	0.18	300
1	1 1/4	86294	0.28	200
1 1/4	1 3/8	86295	0.50	110
1 1/2	1 7/16	86296	0.70	80
2	1 1/2	86297	0.90	45

Street Elbows

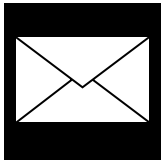


Size Inches	A Inches	B Inches	C Inches	Part Number	Weight lbs.	Box Qty.
1 x 1/2	1 1/2	3/4	3	42003	0.70	80
1 x 1	1 1/2	3/4	3	42002	0.90	60

California Tees



Size Inches	A Inches	B Inches	C Inches	D Inches	Part Number	Weight lbs.	Box Qty.
1 x 1/2 x 1	1 1/2	7/8	3	3/4	42000	0.95	50
1 x 1 x 1	1 1/2	3/4	3	3/4	42001	0.95	45



Limited Warranty

Products manufactured by Tyco Fire Products are warranted solely to the original Buyer for ten (10) years against defects in material and workmanship when paid for and properly installed and maintained under normal use and service. This warranty will expire ten (10) years from date of shipment by Tyco Fire Products. No warranty is given for products or components manufactured by companies not affiliated by ownership with Tyco Fire Products or for products and components which have been subject to misuse, improper installation, corrosion, or

which have not been installed, maintained, modified or repaired in accordance with applicable Standards of the National Fire Protection Association (NFPA), and/or the standards of any other Authorities Having Jurisdiction. Materials found by Tyco Fire Products to be defective shall be either repaired or replaced, at Tyco Fire Products' sole option. Tyco Fire Products neither assumes, nor authorizes any person to assume for it, any other obligation in connection with the sale of products or parts of products. Tyco Fire Products shall not be responsible for sprinkler system design errors or inaccurate or incomplete information supplied by Buyer or Buyer's representatives.

IN NO EVENT SHALL TYCO FIRE PRODUCTS BE LIABLE, IN CONTRACT, TORT, STRICT LIABILITY OR UNDER ANY OTHER LEGAL THEORY, FOR INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LABOR CHARGES, REGARDLESS OF WHETHER TYCO FIRE PRODUCTS WAS INFORMED ABOUT THE POSSIBILITY OF SUCH DAMAGES, AND IN NO EVENT SHALL TYCO FIRE PRODUCTS' LIABILITY EXCEED AN AMOUNT EQUAL TO THE SALES PRICE.

THE FOREGOING WARRANTY IS MADE IN LIEU OF ANY AND ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

General Notes: It is the Designer's responsibility to select products suitable for the intended service and to ensure that pressure ratings and performance data is not exceeded. Never remove any piping component nor correct or modify any piping deficiencies without first depressurizing and draining the system. Material and gasket selection should be verified to be compatible for the specific application.

