

## Pipe Fittings

These fittings are suitable for interconnecting piping, valves and other components in both wet and dry automatic sprinkler systems. Installation should be according to applicable sprinkler system fabrication rules. These rules limit the minimum size of sprinkler piping to 1 in., nominal. FM Approved pipe fittings of smaller sizes are intended for use as valve trim, gauge connections, and for other peripheral service. The water flow path of the sprinkler system cannot be designed using smaller sizes than 1 in., nominal. Unless otherwise noted in the listing, these fittings have 175 psi (1205 kPa) rated working pressure.

Threaded connections on fittings can be made to FM Approved threadable thinwall pipe or to Schedule 40 pipe. Refer to the "Steel Pipe" listings for a summary of the various types of FM Approved steel pipe suitable for threading or grooving."

The fittings manufacturer's installation instructions must be observed in all cases. When connections are made to FM Approved pipe, the pipe manufacturer's installation instructions must also be followed.

Unless otherwise stated below, the maximum ambient temperature to which these fittings should be subjected is 225°F (107°C).

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<b>Product Designation</b>	<b>Fitting Description</b>	<b>Nominal Pipe Size, in.</b>	<b>Max Working Pressure, psi (kPa)</b>	<b>Remarks</b>
C10	90° Elbow Grooved	2, 2-1/2, 3, 4, 6	200 (1380)	a, b, c
C11	45° Elbow Grooved	2, 2-1/2, 3, 4, 6	200 (1380)	a, b, c
C20	Tee Grooved	2, 2-1/2, 3, 4, 6	200 (1380)	a, b, c
C60	Cap Grooved	2, 2-1/2, 3, 4, 6	200 (1380)	a, b, c

#### Remarks:

- Provides a rigid transition between flanged components and a grooved system.
- ASTM B584 C90500 Copper Material.
- Manufactured out of ASTM B584 C89836 as an alternate material

<b>Product Designation</b>	<b>Fitting Description</b>	<b>Nominal Pipe Size, in.</b>	<b>Max Working Pressure, psi (kPa)</b>	<b>Remarks</b>
899	End-All Fitting	1-1/4 × 1/2, 3/4, 1 1-1/2 × 1/2, 3/4, 1 2 × 1/2, 3/4, 1 2-1/2 × 1/2, 3/4, 1	300 (2070)	-
901	Short Radius 90° Elbow Grooved	2, 2-1/2, 3, 4, 5, 6, 8 76.1, 139.7, 165.1 mm	300 (2070)	-
903	Short Radius Tee Grooved	2, 2-1/2, 3, 4, 5, 6, 8 76.1, 139.7, 165.1 mm	300 (2070)	-
7110	90° Elbow Grooved	1, 1-1/4, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8 76.1, 139.7, 165.1 mm	500 (3447)	-
7110	90° Elbow Grooved	10, 12	300 (2070)	-

7110	90° Elbow Grooved	14, 16, 18, 24	175 (1205)	-
7110	90° Elbow Grooved	20	250 (1725)	-
7110LR	1.5D 90° Elbows	2, 2-1/2, 3, 4, 5, 6, 8	300 (2070)	-
7110DR	Drain Elbows	2, 2-1/2, 3, 4, 5, 6	300 (2070)	-
7111	45° Elbow Grooved	1, 1-1/4, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8 76.1, 139.7, 165.1 mm	500 (3447)	-
7111	45° Elbow Grooved	10, 12	300 (2070)	-
7111	45° Elbow Grooved	14, 16, 18, 24	175 (1205)	-
7111	45° Elbow Grooved	20	250 (1725)	-
7112	22-1/2° Elbow Grooved	1-1/4, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8 139.7, 165.1 mm	300 (2070)	-
7113	11-1/4° Elbow Grooved	1-1/4, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8 139.7, 165.1 mm	300 (2070)	-
7120	Tee Grooved	1-1/4, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8 76.1, 139.7, 165.1 mm	500 (3447)	-
7120	Tee Grooved	10, 12, 14	300 (2070)	-
7120	Tee Grooved	16	175 (1205)	-
7121	Reducing Tee Grooved	2 x 1-1/2 2-1/2 x 2 3 x 1-1/2, 2, 2-1/2 4 x 2, 2-1/2, 3 5 x 2, 3, 4 6 x 2, 2-1/2, 3, 4, 5 8 x 2, 3, 4, 6	300 (2070)	-
7130	45° Laterals Grooved	2, 2-1/2, 3, 4, 5, 6, 8 139.7, 165.1 mm	300 (2070)	-
7135	Cross Grooved	2, 2-1/2, 3, 4, 5, 6	300 (2070)	-
7150	Concentric Reducer Grooved	2 x 1-1/4 2 x 1-1/2 2-1/2 x 1-1/4 2-1/2 x 1-1/2 2-1/2 x 2 3 x 1-1/2, 2, 2-1/2 4 x 2, 2-1/2, 3 5 x 2, 3, 4 6 x 2, 2-1/2, 3, 4, 5 8 x 3, 4, 6 10 x 4, 6, 8	300 (2070)	-

		12 × 8, 10 14 × 6, 8, 10, 12		
7151	Eccentric Reducer Grooved	2 × 1-1/2 2-1/2 × 2 3 × 2, 2-1/2 4 × 2, 2-1/2, 3 5 × 2, 3, 4 6 × 2, 2-1/2, 3, 4, 5 8 × 3, 4, 6 10 × 4, 6, 8 12 × 8, 10 14 × 6, 8, 10, 12	300 (2070)	-
7160	Cap Grooved	1-1/4, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8, 10, 12 76.1, 139.7, 165.1 mm	300 (2070)	-
7160H	Cap Grooved	10, 12	300 (2070)	-
7160H	Cap Grooved	14, 16, 18, 24	175 (1205)	-
7170	Adaptor	2-1/2, 3, 4, 5, 6	175 (1205)	-
7181	Universal Reducing Flange	3 × 2 4 × 3 6 × 4	300 (2070)	-
Model 811	90° Elbow Screwed Fittings	1/2, 3/4, 1, 1-1/4, 1-1/2, 2, 2-1/2	300 (2070)	k
Model 813	45° Elbow Screwed Fittings	1/2, 3/4, 1, 1-1/4, 1-1/2, 2, 2-1/2	300 (2070)	k
Model 812	Reducing Elbow Screwed Fittings	3/4 × 1/2 1 × 1/2, 3/4 1-1/4 × 1/2, 3/4, 1 1-1/2 × 1/2, 3/4, 1, 1-1/4 2 × 3/4, 1, 1-1/2 2-1/2 × 2	300 (2070)	k
Model 814	Tee Screwed Fittings	1/2, 3/4, 1, 1-1/4, 1-1/2, 2, 2-1/2	300 (2070)	k
Model 815	Reducing Tee Screwed Fittings	3/4 × 3/4 × 1/2 1 × 1 × 1/2, 3/4 1 × 3/4 × 1/2, 3/4, 1 1 × 1/2 × 1 1-1/4 × 1-1/4 × 1/2, 3/4, 1 1-1/4 × 1 × 1/2, 3/4, 1, 1-1/4 1 × 1 × 1-1/4 1-1/2 × 1-1/2 × 1/2, 3/4, 1, 1-1/4 1-1/2 × 1-1/4 × 1/2, 3/4, 1, 1-1/4, 1-1/2 1-1/2 × 1 × 1/2, 3/4, 1, 1-1/2 1 × 1 × 1-1/2 1-1/4 × 1-1/4 × 1-1/2, 2 1-1/4 × 1 × 1-1/2 2 × 2 × 1/2, 3/4, 1, 1-1/4, 1-1/2 2 × 1-1/2 × 1/2, 3/4, 1, 1-1/2, 2 2 × 1-1/4 × 2 2 × 1 × 2 1-1/2 × 1-1/2 × 2 1-1/2 × 1-1/4 × 2 2-1/2 × 2 × 3/4 2 × 2 × 2-1/2	300 (2070)	k

Model 816	Reducing Coupling Screwed Fittings	3/4 × 1/2 1 × 1/2, 3/4 1-1/4 × 3/4, 1 1-1/2 × 1, 1-1/4 2 × 1, 1-1/4, 1-1/2	300 (2070)	k
Model 825	Extension Piece Screwed Fittings	1/2 × 1-1/2 L, 2 L 3/4 × 1-1/2 L, 2 L	300 (2070)	k
Model 817	Cross Screwed Fittings	1, 1-1/4, 1-1/2, 2	300 (2070)	k
Model 817	Cross Screwed Fittings	1-1/4 × 1 1-1/2 × 1 2 × 1	300 (2070)	k
Model 818	Straight Coupling Screwed Fittings	1/2, 3/4, 1, 1-1/4, 1-1/2, 2, 2-1/2	300 (2070)	k
Model 819	Plug Screwed Fittings	1/2, 3/4, 1, 1-1/4, 1-1/2, 2	300 (2070)	k
Model 820	Cap Screwed Fittings	1/2, 3/4, 1, 1-1/4, 1-1/2, 2, 2-1/2	300 (2070)	k
Model 827	Hex. Bushing Screwed Fittings	1 × 1/2, 3/4 1-1/4 × 1/2, 3/4, 1 1-1/2 × 1/2, 3/4, 1, 1-1/4 2 × 1/2, 3/4, 1, 1-1/4, 1-1/2	300 (2070)	k
Model 827	Face Bushing Screwed Fittings	1-1/4 × 1 1-1/2 × 1, 1-1/4 2 × 1-1/4, 1-1/2	300 (2070)	k
Model 830	Brass Seat Union Screwed Fittings	1/2, 3/4, 1, 1-1/4, 1-1/2, 2, 2-1/2	300 (2070)	k
Model 831	Long Street Elbow Screwed Fittings	1 × 1/2 M, 1 M	300 (2070)	k
Model 832	Long Street Tee Screwed Fittings	1 × 1/2 × 1 M 1 × 1 × 1 M	300 (2070)	k

**Remarks:**

k. Standard threaded pipe fittings conforming to ASTM A-536 (Grade 65-45-12) ductile iron, ANSI B2.1 taper threads according to NPT. Unless otherwise noted in the listing, these fittings are ductile iron.

Product Designation	Fitting Description	Nominal Pipe Size, in. Grooved	Nominal Outlet Pipe Size, in. NPT or BSP	Max Working Pressure, psi (kPa)	Remarks
Model 850	Sprinkler Hub	2, 2-1/2	1	300 (2070)	k, l, m
Model 850	Sprinkler Hub	76.1	1	300 (2070)	l, m
Model 851	Reducing Sprinkler Hub	2 × 1-1/2, 2-1/2 × 1-1/2, 2-1/2 × 2	1	300 (2070)	k, l, m
Model 851	Reducing Sprinkler Hub	76.1 × 2	1	300 (2070)	l, m

Model 853	Sprinkler End Hub	1-1/2, 2, 2-1/2	1	300 (2070)	k, l, n
Model 853	Sprinkler End Hub	76.1	1	300 (2070)	l, n

**Remarks:**

k. ANSI B2.1 taper threads according to NPT. Unless otherwise noted in the listing, these fittings are ductile iron.

l. BSP threaded pipe fittings. Unless otherwise noted in the listing, these fittings are ductile iron.

m. Three outlets

n. Four outlets

Product Designation	Fitting Description	Nominal Pipe Size, in.	Max Working Pressure, psi (kPa)	
C10	90° Elbow Grooved	2, 2-1/2, 3, 4, 6	200 (1380)	
C11	45° Elbow Grooved	2, 2-1/2, 3, 4, 6	200 (1380)	
C20	Tee Grooved	2, 2-1/2, 3, 4, 6	200 (1380)	
C60	Cap Grooved	2, 2-1/2, 3, 4, 6	200 (1380)	
55	Nipple Adaptor Grooved x Threaded	1-1/2 × 1-1/2 2 × 2	300 (2070)	
7125	Bullhead Tee Grooved	2 × 2 × 2-1/2 2-1/2 × 2-1/2 × 3, 4 3 × 3 × 4 4 × 4 × 6	300 (2070)	
7127	Standpipe Tee Grooved	4 × 4 × 2-1/2	300 (2070)	
7150F	Reducing Socket Adaptor Grooved x Threaded	1-1/2 × 1 2 × 1-1/4, 1-1/2 2-1/2 × 1-1/4, 1-1/2, 2 3 × 1-1/4, 1-1/2, 2 4 × 1-1/2, 2, 2-1/2	300 (2070)	
7150M	Reducing Nipple Grooved x Threaded	1-1/2 × 1 2 × 1-1/4, 1-1/2 2-1/2 × 1-1/4, 1-1/2, 2 3 × 1-1/4, 1-1/2, 2 4 × 1-1/2, 2, 2-1/2 5 × 1-1/2 6 × 1-1/2, 2, 2-1/2, 4	300 (2070)	
7160T	Transition Fitting Grooved	2 × 1, 1-1/4 2-1/2 × 1, 1-1/4, 1-1/2 3 × 1, 1-1/4, 1-1/2, 2 4 × 1, 1-1/4, 1-1/2, 2 6 × 1, 1-1/4, 1-1/2, 2	300 (2070)	
7180	Adaptor Grooved x Flanged	2, 2-1/2, 3, 4, 5, 6, 8	300 (2070)	
SS-80	Adaptor Grooved x Flanged	2, 2-1/2, 3, 4, 5, 6, 8	300 (2070)	

SS-10	90° Elbow Grooved	1, 1-1/4, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8, 10, 12, 76.1, 139.7, 165.1, 216.3, 267.4, 318.5 mm	300 (2070)	
SS-11	45° Elbow Grooved	1, 1-1/4, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8, 10, 12, 76.1, 139.7, 165.1, 216.3, 267.4, 318.5 mm	300 (2070)	
SS-20	Tee Grooved	1, 1-1/4, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8, 10, 12, 76.1, 139.7, 165.1, 216.3, 267.4, 318.5 mm	300 (2070)	
SS-60	Cap Grooved	1, 1-1/4, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8, 76.1, 139.7, 165.1, 216.3, 267.4, 318.5 mm	300 (2070)	
SS-21	Reducing Tee Grooved	2 x 1-1/2 2-1/2 x 2 3 x 2, 2-1/2, 76.1 mm 4 x 2, 2-1/2, 3, 76.1 mm 6 x 3, 4 76.1 mm x 2 139.7 mm x 3, 4 165.1 mm x 3, 4, 139.7 mm 216.3 mm x 4, 139.7, 165.1 mm 267.4 x 165.1, 216.3	300 (2070)	
SS-21F	Reducing Tee Grooved x Threaded (Thread Branch End)	3 x 2 4 x 2	300 (2070)	
SS-50	Concentric Reducer Grooved	2-1/2 x 2 3 x 2, 2-1/2, 76.1 mm 4 x 2, 2-1/2, 3, 76.1 mm 6 x 3, 4 76.1 mm x 2 139.7 mm x 3, 4 165.1 mm x 3, 4, 139.7 mm 216.3 mm x 4, 139.7, 165.1 mm 267.4 x 165.1, 216.3 318.5 x 216.3, 267.4 mm	300 (2070)	
SS-50F	Concentric Reducer Grooved x Threaded (with threaded end)	2-1/2 x 2 3x2 4x2	300 (2070)	

**Remarks:**

- Provides a rigid transition between flanged components and a grooved system.
- Min schedule cut groove pipe to be joined: 8 inches or smaller – Schedule 40.
- Min schedule rolled groove pipe to be joined: 8 inches or smaller – Schedule 10.
- EPDM gasket.
- Stainless steel material.
- Copper Material.

Product Designation	Fitting Description	Nominal Pipe Size mm, NPS	Rated Working Pressure, psi (kPa)	Remarks
WS-21	Segmentally Welded Grooved Reducing Tee	267.4 x 114.3, 139.7 318.5 x 114.3, 139.7, 165.1	300 (2070)	a, b

**Remarks:**

a. Manufactured from Grade 304 Schedule 20S ASTM A312 Stainless Steel Aboveground Sprinkler Pipe and available with rolled grooves

b. Manufactured from Grade 316 Schedule 20S ASTM A312 Stainless Steel Aboveground Sprinkler Pipe and available with rolled grooves

<b>Company Name:</b>	Aalberts integrated piping systems APAC Inc.
<b>Company Address:</b>	No. 295, Sec. 3 Wantan Road, Wantan Pingtung, Taiwan (R.O. C) 913
<b>Company Website:</b>	<a href="http://shurjoint.com">http://shurjoint.com</a>
<b>New/Updated Product Listing:</b>	No
<b>Listing Country:</b>	Taiwan
<b>Certification Type:</b>	FM Approved
<b>Class of Work:</b>	1920-Coupling & Fitting, All Type