

**FlameGuard™**  
CPVC FIRE SPRINKLER  
PIPING PRODUCTS



**TECHNICAL INFORMATION  
WEIGHTS & DIMENSIONS**

*January 1, 2007*  
SUPERSEDES ALL PREVIOUS EDITIONS



Quality Systems Certificate No. 293  
Corporate Facilities, Sylmar, CA  
Assessed to ISO 9001: 2000

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FG-4-0107



# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS

The information contained in this publication is based on current information and Product design at the time of publication and is subject to change without notification. Our ongoing commitment to product improvement may result in some variation. No representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or results to be obtained therefrom. For verification of technical data or additional information not contained herein, please contact Spears® Technical Services Department [West Coast: (818) 364-1611—East Coast: (717) 938-9006].

## General Information

### RECOMMENDATIONS FOR INSTALLERS AND USERS:

Plastic piping systems should be **ENGINEERED, INSTALLED** and **OPERATED** in accordance with **ESTABLISHED DESIGN AND ENGINEERING STANDARDS AND PROCEDURES** for plastic piping systems. Suitability for the intended service application should be determined by the installer and/or user prior to installation of a plastic piping system. All Installation and maintenance personnel should be trained in the proper handling and installation requirements and precautions of plastic piping systems. **PRIOR TO ASSEMBLY, all piping system components should be inspected for damage or irregularities. Mating components should be checked to assure that tolerances and engagements are compatible. Do not use any components that appear irregular or do not fit properly. Contact the appropriate manufacturer of the component product in question to determine usability. Consult all applicable codes and regulations for compliance prior to installation.**

**Installation must be made in accordance with  
SPEARS® MANUFACTURING COMPANY  
FIRE SPRINKLER PIPING PRODUCTS  
Installation Instructions - FG-3**

**NOTE** — Individual or group instruction in correct solvent welding procedures is available by contacting your local distributor or your servicing Spears® Regional Distribution Center.

**SOLVENT CEMENT CONNECTIONS** — Spears® Manufacturing Company recommends the use of Spears® Two Step FS-1 primer with FS-3 solvent cement OR Spears® FS-5 One Step solvent cement for joining Spears® products. Use of solvent cementing products not approved for CPVC fire sprinkler systems, or failure to follow installation instructions will automatically void the warranty.

**THREADED CONNECTION** — Spears® Manufacturing Company recommends the use of Spears® BLUE 75™ Thread Sealant. This product has been tested by Spears® and the sealant manufacturer for compatibility with the Spears® CPVC fire sprinkler products. Consult the sprinkler head manufacturer before using this product. **WARNING: OTHER PIPE JOINT COMPOUNDS OR PASTES MAY CONTAIN SUBSTANCES THAT COULD CAUSE STRESS CRACKING IN THE CPVC OR OTHER FITTING COMPONENTS.** Care must be taken to avoid overtorquing - generally 1 to 2 turns beyond finger tight is all that is required to make up a threaded connection. Factory testing has indicated 10-25 ft. lbs. of torque is adequate to obtain a leak free seal.

### NOT FOR USE WITH COMPRESSED AIR OR GASES

**WARNING: DO NOT USE COMPRESSED AIR OR GAS TO TEST ANY PVC OR CPVC THERMOPLASTIC PIPING PRODUCT OR SYSTEM, AND DO NOT USE DEVICES PROPELLED BY COMPRESSED AIR OR GAS TO CLEAR SYSTEMS. THESE PRACTICES MAY RESULT IN EXPLOSIVE FRAGMENTATION OF SYSTEM PIPING AND COMPONENTS CAUSING SERIOUS OR FATAL BODILY INJURY.**

#### Dimension Reference

- G = (LAYING LENGTH) Intersection of center lines to bottom of socket/thread; 90° elbows, tees, crosses; ± 1/32 inch.
- H = Intersection of center lines to face of fitting; 90° elbows tees, crosses; ± 1/32 inch.
- J = Intersection of center lines to bottom of socket/thread; 45° elbows; ± 1/32 inch
- L = Overall length of fittings; ± 1/16 inch.
- M = Outside diameter of socket/thread hub; ± 1/16 inch.
- N = Socket bottom to socket bottom; couplings; ± 1/16 inch.
- Q = Width of flats; ± 1/16 inch.
- W = Height of cap; ± 1/16 inch.

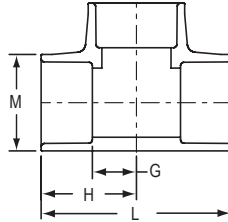
<b>CPVC FIRE SPRINKLER PIPE SDR 13.5 (ASTM F 442)</b>							
Part Number	Nominal Size		Average O.D.		Average I.D.		Approx. Weight Lbs./Ft.
	Inches	(mm)	Inches	(mm)	Inches	(mm)	
CP-007	3/4	(19.1)	1.050	(26.7)	.874	(22.5)	.181
CP-010	1	(25.4)	1.315	(33.4)	1.101	(28.2)	.280
CP-012	1-1/4	(31.8)	1.660	(42.2)	1.394	(35.6)	.418
CP-015	1-1/2	(38.1)	1.900	(48.3)	1.598	(40.7)	.550
CP-020	2	(50.8)	2.375	(60.3)	2.003	(50.9)	.872
CP-025	2-1/2	(63.5)	2.875	(73.0)	2.423	(61.5)	1.260
CP-030	3	(76.2)	3.500	(88.9)	2.950	(75.0)	1.900

# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS



## TEE

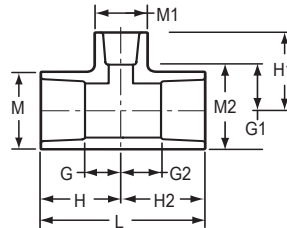
Socket x Socket x Socket



Part Number	Size	G	H	L	M	Approx. Wt. (Lbs.)
4201-007	3/4	17/32	1-9/16	3-1/8	1-5/16	.11
4201-010	1	25/32	1-13/16	3-5/8	1-5/8	.19
4201-012	1-1/4	7/8	2-1/8	4-1/4	1-31/32	.28
4201-015	1-1/2	1-5/32	2-9/16	5-3/32	2-11/32	.54
4201-020	2	1-13/32	2-15/16	5-7/8	2-7/8	1.00
4201-025	2-1/2	1-19/32	3-11/32	6-11/16	3-17/32	1.81
4201-030	3	2-1/16	3-15/16	7-7/8	4-3/16	3.02

## REDUCING TEE

Socket x Socket x Socket



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
4201-102	3/4x3/4x1	27/32	11/16	27/32	1-27/32	1-27/32	1-27/32	3-11/16	1-13/32	1-23/32	1-13/32	.21
4201-125	1x3/4x3/4	21/32	13/16	5/8	1-25/32	1-13/16	1-5/8	3-7/16	1-17/32	1-5/16	1-5/16	.16
4201-126	1x3/4x1	3/4	1-7/8	1-3/32	1-27/32	2-31/32	1-31/32	3-13/16	1-23/32	1-23/32	1-13/32	.26
4201-131	1x1x3/4	21/32	13/16	21/32	1-25/32	1-13/16	1-25/32	3-9/16	1-5/8	1-5/16	1-5/8	.16
4201-157	1-1/4x1x3/4	11/16	1-1/32	11/16	1-15/16	2-1/32	1-13/16	3-25/32	2-3/32	1-13/32	1-23/32	.32
4201-158	1-1/4x1x1	3/4	1	7/8	2	2-1/16	2	4	2	1-11/16	1-5/8	.26
4201-159	1-1/4x1x1-1/4	15/16	31/32	1	2-3/16	2-7/32	2-3/32	4-9/32	2-3/32	2-3/32	1-23/32	.42
4201-167	1-1/4x1-1/4x3/4	21/32	1	21/32	1-29/32	2	1-29/32	3-13/16	2	1-5/16	2	.22
4201-168	1-1/4x1-1/4x1	13/16	1	13/16	2-1/16	2-1/8	2-1/16	4-1/8	1-31/32	1-5/8	1-31/32	.24
4201-169	1-1/4x1-1/4x1-1/2	1-1/8	15/16	1-1/8	2-3/8	2-11/32	2-3/8	4-3/4	2-3/32	2-11/32	2-3/32	.51
4201-201	1-1/2x1-1/4x3/4	11/16	1	1/4	2-1/16	2	1-15/16	4	2-5/16	1-3/8	2-1/16	.41
4201-202	1-1/2x1-1/4x1	27/32	1-1/32	1	2-7/32	2-5/32	2-1/4	4-15/32	2-5/16	1-11/16	2-1/16	.42
4201-210	1-1/2x1-1/2x3/4	23/32	1-1/16	23/32	2-3/32	2-1/32	2-3/32	4-3/16	2-5/16	1-3/8	2-5/16	.38
4201-211	1-1/2x1-1/2x1	13/16	1-3/16	13/16	2-3/16	2-1/4	2-3/16	4-3/8	2-11/32	1-23/32	2-11/32	.41
4201-212	1-1/2x1-1/2x1-1/4	1	1-1/8	1	2-3/8	2-11/32	2-3/8	4-13/16	2-11/32	2-3/32	2-11/32	.48
4201-213	1-1/2x1-1/2x2	1-5/16	1-1/8	1-5/16	2-11/16	2-21/32	2-11/16	5-3/8	2-11/32	2-27/32	2-11/32	.72

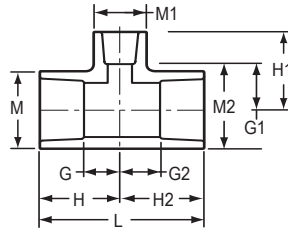


# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS

## REDUCING TEE

(continued)

Socket x Socket x Socket



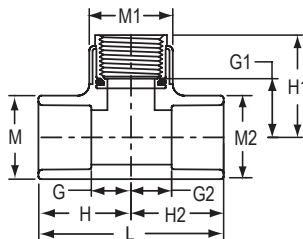
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
4201-248	2x2x3/4	11/16	1-13/32	11/16	2-7/32	2-7/16	2-7/32	4-7/16	2-27/32	1-3/8	2-27/32	.52
4201-249	2x2x1	7/8	1-7/16	7/8	2-3/8	2-9/16	2-3/8	4-3/4	2-27/32	1-23/32	2-27/32	.61
4201-250	2x2x1-1/4	1	1-11/32	1	2-17/32	2-19/32	2-17/32	5-3/32	2-27/32	2-3/32	2-27/32	.63
4201-251	2x2x1-1/2	1-7/32	1-13/32	1-7/32	2-11/16	2-25/32	2-11/16	5-3/8	2-27/32	2-11/32	2-27/32	.85
4201-289	2-1/2x2-1/2x1	29/32	25/32	29/32	2-21/32	1-29/32	2-21/32	5-5/16	3-1/2	1-23/32	3-1/2	1.03
4201-290	2-1/2x2-1/2x1-1/4	1-3/32	1-23/32	1-3/32	2-27/32	1-27/32	2-27/32	5-11/16	3-1/2	2-3/32	3-1/2	1.19
4201-291	2-1/2x2-1/2x1-1/2	1-3/16	1/2	1-3/16	2-15/16	1-7/8	2-15/16	5-7/8	3-15/32	2-11/32	3-15/32	1.26
4201-292*	2-1/2x2-1/2x2	1-19/32	2-1/8	1-19/32	3-11/32	3-5/8	3-11/32	6-11/16	3-17/32	3-17/32	3-17/32	2.46
4201-335*	3x3x1	1-7/16	2-7/16	1-7/16	3-5/16	3-23/32	3-5/16	6-5/8	4-5/32	2-7/8	4-5/32	2.00
4201-336*	3x3x1-1/4	1-3/8	1-3/4	1-3/8	3-5/16	3-1/2	3-5/16	6-5/8	4-1/8	2-7/8	4-1/8	1.94
4201-337*	3x3x1-1/2	1-3/8	2	1-3/8	3-5/16	3-5/8	3-5/16	6-5/8	4-1/8	2	4-1/8	1.85
4201-338	3x3x2	1-7/16	1-13/16	1-7/16	3-5/16	3-5/16	3-5/16	6-5/8	4-5/32	2-7/8	4-5/32	1.73
4201-339	3x3x2-1/2	1-3/4	1-31/32	1-3/4	3-5/8	3-23/32	3-5/8	7-1/4	4-5/32	3-7/16	4-5/32	2.14

\* Branch Outlet Sized with Bushing

## SPRINKLER HEAD TEE

Metal Thread Insert Style

Socket x Socket x Fipt



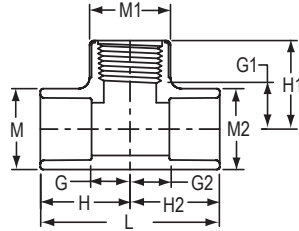
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
4202-101	3/4x3/4x1/2	7/16	15/16	7/16	1-7/16	11-17/32	1-7/16	2-29/32	1-3/8	1-3/16	1-3/8	.18
4202-124	1x3/4x1/2	15/32	1-1/32	15/32	1-9/16	1-11/16	1-9/16	3-1/4	1-11/16	1-3/16	1-3/8	.23
4202-130	1x1x1/2	7/16	1-5/32	7/16	1-9/16	1-11/16	1-9/16	3-5/32	1-23/32	1-7/32	1-23/32	.32
4202-010	1x1x1	11/16	1-7/32	11/16	1-13/16	1-15/16	1-13/16	3-19/32	1-11/16	1-11/16	1-23/32	.39
4202-156	1-1/4x1x1/2	15/32	1-9/32	15/32	1-23/32	1-29/32	1-23/32	3-3/8	2-1/16	1-7/32	1-11/16	.36
4202-166	1-1/4x1-1/4x1/2	7/16	1-11/32	7/16	1-11/16	1-15/16	1-11/16	3-3/8	2-1/16	1-7/32	2-1/16	.31
4202-199	1-1/2x1-1/4x1/2	7/16	1-17/32	7/16	1-13/16	2-3/32	1-13/16	3-11/16	2-5/16	1-7/32	2-1/16	.45
4202-209	1-1/2x1-1/2x1/2	1/2	1-15/32	1/2	1-7/8	2-3/32	1-7/8	3-3/4	2-5/16	1-7/32	2-5/16	.52
4202-237	2x1-1/2x1/2	17/32	1-23/32	17/32	2-1/32	2-11/32	2-1/32	3-15/16	2-27/32	1-7/32	2-11/32	.57
4202-247	2x2x1/2	1/2	1-25/32	1/2	2	2-11/32	2	4-1/32	2-27/32	1-7/32	2-27/32	.51



## SPRINKLER HEAD TEE

### Special Reinforced Plastic Thread Style

Socket x Socket x SR Fipt

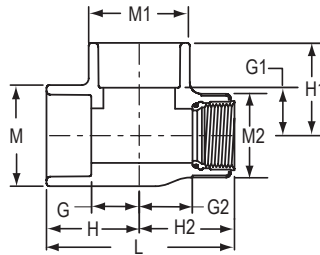


Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
4202-101SR	3/4x3/4x1/2	5/8	25/32	5/8	1-5/8	1-7/16	1-5/8	3-1/4	1-3/8	1-3/16	1-3/8	.15
4202-124SR	1x3/4x1/2	7/16	29/32	9/16	1-19/32	1-5/8	1-9/16	3-5/32	1-23/32	1-3/16	1-17/32	.19
4202-130SR	1x1x1/2	7/16	7/8	7/16	1-9/16	1-5/8	1-9/16	3-1/8	1-23/32	1-7/16	1-23/32	.25
4202-010SR	1x1x1	21/32	3/4	21/32	1-25/32	1-21/32	1-25/32	3-19/32	1-23/32	1-7/8	1-23/32	.35
4202-156SR	1-1/4x1x1/2	15/32	1-5/32	19/32	1-23/32	1-7/8	1-23/32	3-13/32	2-3/32	1-3/16	1-23/32	.26
4202-166SR	1-1/4x1-1/4x1/2	15/32	3/4	15/32	1-23/32	1-15/32	19/32	3-7/16	2-3/32	1-3/16	2-3/32	.28
4202-168SR	1-1/4x1-1/4x1	13/16	2-3/8	13/16	2-1/16	3-1/4	2-1/16	4-1/8	1-31/32	2	1-31/32	.37
4202-199SR	1-1/2x1-1/4x1/2	9/16	1-9/32	17/32	1-15/16	2	1-25/32	3-23/32	2-11/32	1-3/16	2-3/32	.33
4202-209SR	1-1/2x1-1/2x1/2	1/2	1-1/4	1/2	1-7/8	1-31/32	1-7/8	3-3/4	2-11/32	1-3/16	2-11/32	.35
4202-211SR	1-1/2x1-1/2x1	7/8	1-3/16	7/8	2-1/4	2-3/32	2-3/32	4-1/2	2-11/32	1-23/32	2-1/4	.45
4202-237SR	2x1-1/2x1/2	23/32	1-9/16	3/8	2-7/32	2-9/32	1-3/4	3-31/32	2-7/8	1-3/16	2-11/32	.45
4202-247SR	2x2x1/2	1/2	31/32	1/2	2	1-11/16	19/32	4	2-7/8	1-3/16	2-7/8	48

## SPRINKLER HEAD TEE

### Metal Thread Insert Style

Socket x Fipt x Socket



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
4203-122	1x1/2x1	11/16	11/16	1-3/16	1-19/32	1-19/32	1-25/32	3-13/32	1-11/16	1-11/16	1-7/32	.24

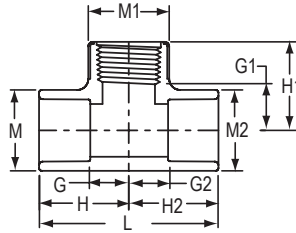


# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS

## SPRINKLER HEAD TEE

### Special Reinforced Plastic Thread Style

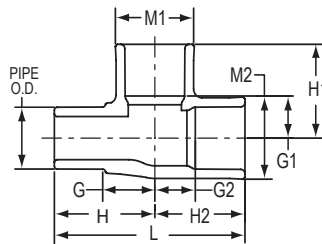
Socket x Socket x SR Fipt



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
4203-122SR	1x1/2x1	27/32	3/4	1-3/32	1-23/32	1-5/8	1-13/16	3-7/16	1-23/32	1-23/32	1-7/32	.21

## STREET TEE

Spigot x Socket x Socket



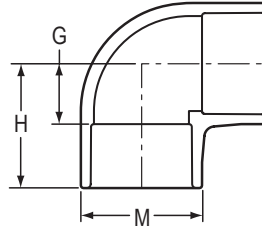
Part Number	Size	G	G1	G2	H	H1	H2	L	M1	M2	Approx. Wt. (Lbs.)
4244-007	3/4	13/16	27/32	27/32	1-13/16	1-7/8	1-7/8	3-5/8	1-13/32	1-13/32	.16
4244-010	1	1-5/32	1-1/32	1-1/32	2-1/8	1-29/32	1-29/32	4-3/16	1-3/4	1-3/4	.27
4244-012	1-1/4	1-1/4	1	1	2-7/16	2-9/32	2-9/32	4-27/32	2-3/32	2-3/32	.42
4244-015	1-1/2	1-13/16	1-1/8	1-1/8	2-7/8	2-9/16	2-9/16	5-11/32	2-11/32	2-11/32	.56
4244-020	2	1-11/16	1-7/16	1-7/16	3-1/4	2-29/32	2-29/32	6-1/8	2-27/32	2-27/32	.84

# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS



## 90° ELL

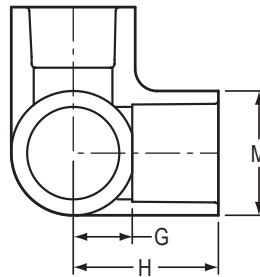
Socket x Socket



Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
4206-007	3/4	9/16	1-1/2	1-5/16	.07
4206-010	1	3/4	1-5/8	1-5/8	.11
4206-012	1-1/4	7/8	2-1/8	2	.18
4206-015	1-1/2	1-5/32	2-17/32	2-11/32	.25
4206-020	2	1-13/32	2-29/32	2-7/8	.63
4206-025	2-1/2	1-5/8	3-7/16	3-7/16	1.17
4206-030	3	1-29/32	3-23/32	4-3/16	1.80

## SIDE OUTLET ELL

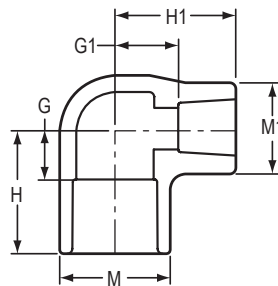
Socket x Socket x Socket



Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
4213-007	3/4	27/32	1-19/32	1-5/16	.09
4213-010	1	3/4	1-7/8	1-5/8	.17

## REDUCING 90° ELL

Socket x Socket



Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
4206-131	1x3/4	21/32	13/16	1-3/4	1-25/32	1-19/32	1-9/32	.11

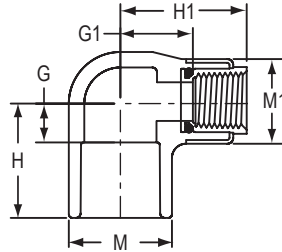


# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS

## SPRINKLER HEAD 90° ELL

### Metal Thread Insert Style

Socket x Fipt

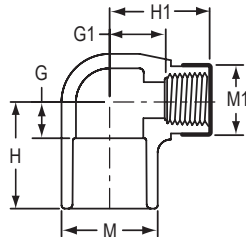


Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
4207-101	3/4x1/2	15/32	29/32	1-15/32	1-1/2	1-3/8	1-7/32	.29
4207-130	1x1/2	15/32	1-3/32	1-21/32	1-11/16	1-23/32	1-7/32	.19
4207-131	1x3/4	1/2	1-3/16	1-5/8	1-27/32	1-23/32	1-13/32	.35
4207-166	1-1/4x1/2	7/16	1-5/16	1-21/32	1-29/32	2-1/16	1-7/32	.35

## SPRINKLER HEAD 90° ELL

### Special Reinforced Plastic Thread Style

Socket x SR Fipt



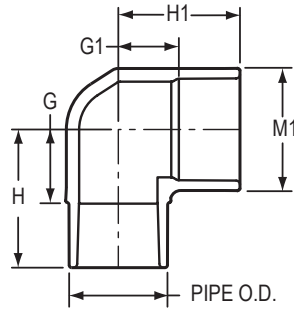
Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
4207-101SR	3/4x1/2	11/32	13/16	1-15/32	1-1/2	1-13/32	1-3/16	.14
4207-130SR	1x1/2	7/16	7/8	1-9/16	1-5/8	1-23/32	1-3/8	.20
4207-131SR	1x3/4	1/2	7/8	1-5/8	1-9/16	1-23/32	1-3/8	.16
4207-166SR	1-1/4x1/2	13/32	1-1/32	1-21/32	1-23/32	2-3/32	1-7/32	.19





## 90° STREET ELL

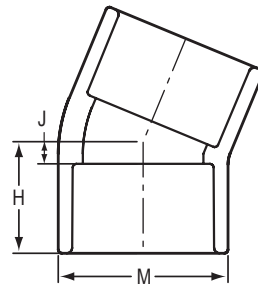
Spigot x Socket



Part Number	Size	G	G1	H	H1	M1	Approx. Wt. (Lbs.)
4209-007	3/4	15/16	17/32	1-15/16	1-17/32	1-3/8	.12
4209-010	1	1-9/32	23/32	2-13/32	1-27/32	1-3/4	.21
4209-012	1-1/4	1-9/16	27/32	2-13/16	2-3/32	2-3/32	.32
4209-015	1-1/2	1-15/32	1-3/16	2-27/32	2-9/16	2-11/32	.42
4209-020	2	1-23/32	1-3/8	3-7/32	2-15/16	2-27/32	.65

## 22-1/2° ELL

Socket x Socket



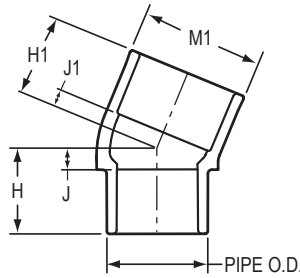
Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
4216-007	3/4	1-3/16	7/32	1-13/32	.09
4216-010	1	1-3/8	9/32	1-25/32	.14
4216-012	1-1/4	1-1/2	5/16	2-3/32	.20
4216-015	1-1/2	1-7/16	13/32	1-3/8	.19
4216-020	2	1-7/8	3/8	2-27/32	.43



# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS

## 22-1/2° STREET ELL

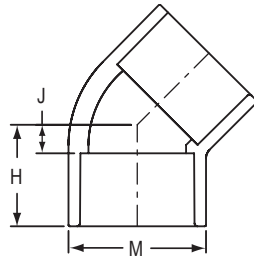
Spigot x Socket



Part Number	Size	H	H1	J	J1	M1	Approx. Wt. (Lbs.)
4242-007	3/4	1-1/4	1-1/2	1/4	1/2	1-3/8	.08
4242-010	1	1-3/8	1-3/8	9/32	9/32	1-23/32	.14
4242-012	1-1/4	1-9/16	1-25/32	17/32	11/16	2-1/16	.21
4242-015	1-1/2	1-13/32	1-23/32	1/2	11/32	2-11/32	.28
4242-020	2	1-29/32	2-1/8	7/32	5/8	2-7/8	.42

## 45° ELL

Socket x Socket

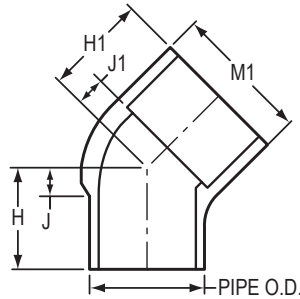


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
4217-007	3/4	1-5/16	5/16	1-5/16	.10
4217-010	1	1-15/32	11/32	1-5/8	.11
4217-012	1-1/4	1-5/8	3/8	2-3/32	.23
4217-015	1-1/2	1-27/32	15/32	2-11/32	.32
4217-020	2	2-1/8	21/32	2-7/8	.48
4217-025	2-1/2	2-1/2	3/4	3-1/2	.96
4217-030	3	2-3/4	7/8	4-5/32	1.22



## 45° STREET ELL

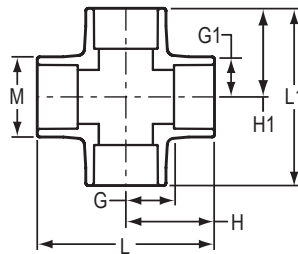
Spigot x Socket



Part Number	Size	H	H1	J	J1	M1	Approx. Wt. (Lbs.)
4227-010	1	1-1/2	1-5/16	1/2	1/4	1-5/8	.10
4227-012	1-1/4	1-25/32	1-9/16	9/16	11/32	1-31/32	.15
4227-015	1-1/2	2-1/32	2-1/8	19/32	25/32	2-11/32	.29
4227-020	2	2-5/16	1-15/16	25/32	13/32	2-7/8	.44

## CROSS

Socket x Socket x Socket x Socket



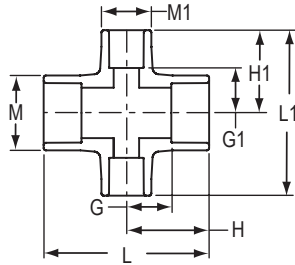
Part Number	Size	G	G1	H	H1	L	L1	M	Approx. Wt. (Lbs.)
4220-007	3/4	5/8	5/8	1-21/32	1-21/32	3-5/16	3-5/16	1-13/32	.22
4220-010	1	1-11/16	1-11/16	1-5/8	1-5/8	3-1/4	3-1/4	1-5/8	.23
4220-012	1-1/4	1-1/8	1-1/8	2-3/8	2-3/8	4-3/4	4-3/4	2-3/32	.65
4220-015	1-1/2	1-7/32	1-7/32	2-5/8	2-5/8	5-1/4	5-1/4	2-11/32	.87
4220-020	2	1-1/2	1-1/2	3	3	6	6	3	1.43
4220-025	2-1/2	1-23/32	1-23/32	3-13/32	3-13/32	6-13/16	6-13/16	3-1/2	2.17
4220-030	3	2-1/16	2-1/16	3-15/16	3-15/16	7-7/8	7-7/8	4-1/8	3.12



# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS

## REDUCING CROSS

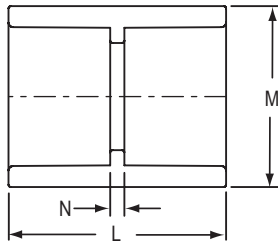
Socket x Socket x Socket x Socket



Part Number	Size	G	G1	H	H1	L	L1	M	M1	Approx. Wt. (Lbs.)
4220-131	1x3/4	7/8	5/8	2	1-5/8	4	3-1/4	1-27/32	1-1/2	.35
4220-167	1-1/4x3/4	1-1/16	23/32	2-1/16	1-31/32	4-3/32	3-31/32	2-1/16	1-13/32	.35

## COUPLING

Socket x Socket

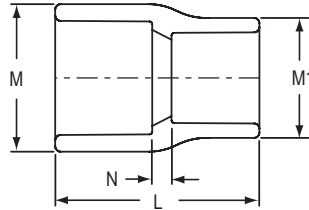


Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
4229-007	3/4	2-1/8	1-5/16	3/16	.05
4229-010	1	2-3/16	1-5/8	3/32	.08
4229-012	1-1/4	2-19/32	2	3/32	.13
4229-015	1-1/2	2-31/32	2-1/2	11/32	.32
4229-020	2	3-1/8	2-7/8	1/8	.46
4229-025	2-1/2	3-13/16	3-9/16	7/16	.70
4229-030	3	4	4-3/16	1/4	.89



## REDUCER COUPLING

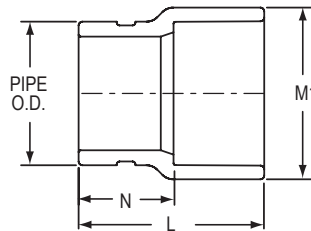
Socket x Socket



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
4229-131	1x3/4	2-3/8	1-23/32	1-13/32	7/32	.10
4229-167	1-1/4x3/4	2-19/32	2-3/32	1-5/8	11/32	.17
4229-168	1-1/4x1	2-11/16	2-3/32	1-23/32	5/16	.18
4229-210	1-1/2x3/4	2-13/16	2-11/32	1-13/32	15/32	.19
4229-211	1-1/2x1	2-7/8	2-11/32	1-15/16	3/8	.24
4229-212	1-1/2x1-1/4	2-25/32	2-3/8	2-3/32	5/32	.22
4229-248	2x3/4	3-3/16	2-7/8	1-7/16	23/32	.32
4229-249	2x1	3-1/8	2-7/8	1-23/32	1/2	.31
4229-250	2x1-1/4	3-3/16	2-7/8	2-1/8	17/32	.33
4229-251	2x1-1/2	3-3/16	2-27/32	2-11/32	9/32	.31
4229-291	2-1/2x1-1/2	3-23/32	3-15/32	2-11/32	21/32	.51
4229-292	2-1/2x2	3-21/32	3-1/2	2-7/8	13/32	.52

## GROOVED COUPLING ADAPTER

Groove x Socket



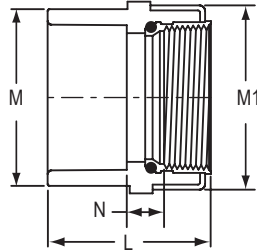
Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
4233-012	1-1/4	3-5/8	2-3/32	2-11/32	.72
4233-015	1-1/2	3-3/4	2-11/32	2-11/32	.83
4233-020	2	3-7/8	2-27/32	2-11/32	1.29
4233-025	2-1/2	3-3/8	3-1/2	1-21/32	.52
4233-030	3	3-9/16	4-5/32	1-23/32	.72



# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS

## FEMALE ADAPTER Metal Thread Insert Style

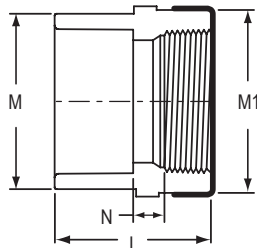
Socket x Fipt



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
4235-007	3/4	2	1-13/32	1-3/8	5/16	.23
4235-010	1	2-9/32	1-3/4	1-29/32	13/32	.38
4235-012	1-1/4	2-3/8	2-3/32	2-1/16	13/32	.35
4235-015	1-1/2	2-9/16	2-3/8	2-7/16	7/16	.23
4235-020	2	2-11/16	2-7/8	3-1/32	15/32	.31

## FEMALE ADAPTER Special Reinforced Plastic Thread Style

Socket x SR Fipt

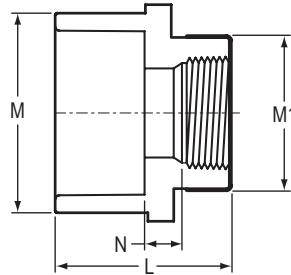


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
4235-007SR	3/4	1-7/8	1-13/32	1-3/8	1/8	.09
4235-010SR	1	1-23/32	1-23/32	1-15/16	3/32	.21
4235-012SR	1-1/4	2-5/16	2-1/8	2-1/16	3/16	.20



## FEMALE SPRINKLER HEAD ADAPTER Special Reinforced Plastic Thread Style

Socket x SR Fipt

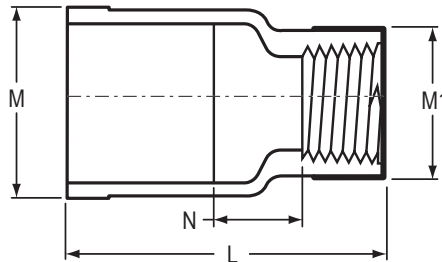


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
4235-101SR	3/4x1/2	1-29/32	1-13/32	1-3/16	7/32	.07
4235-130SR	1x1/2	2-7/32	1-23/32	1-3/16	13/32	.10
4235-131SR	1x3/4	2-3/32	1-3/4	1-3/8	1/4	.13

## FEMALE SPRINKLER HEAD ADAPTER Special Reinforced Plastic Thread Style with Socket Wrench Flats

Socket x SR Fipt

M = Flat-to-Flat Dimension



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
W4235-101SR	3/4x1/2	2-9/32	1-13/32	1-3/16	17/32	.09
W4235-130SR	1x1/2	2-9/32	1-3/4	1-3/16	13/32	.12

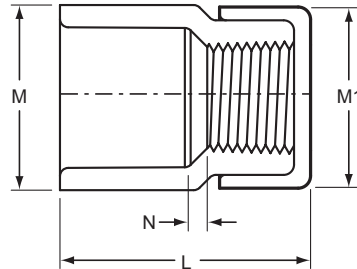


# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS

## FEMALE SPRINKLER HEAD ADAPTER

### Special Reinforced Plastic Thread w/Metal Thread Start

Socket x SR Fipt

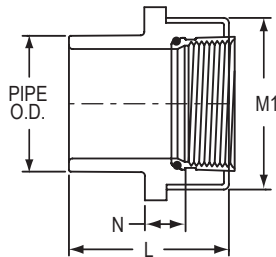


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
Z4235-101SR	3/4x1/2	1-7/8	1-3/8	1-7/16	3/16	.08
Z4235-130SR	1x1/2	2-1/32	1-23/32	1-7/16	5/32	.17

## SPIGOT FEMALE ADAPTER

### Metal Thread Insert Style

Spigot x Fipt

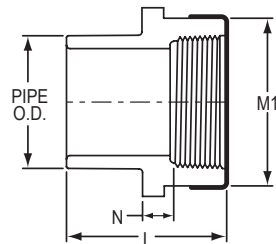


Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
4278-007	3/4	2-1/32	1-3/8	15/32	.14
4278-010	1	2-13/32	1-23/32	19/32	.23

## SPIGOT FEMALE ADAPTER

### Special Reinforced Plastic Thread Style

Spigot x SR Fipt



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
4278-007SR	3/4	1-15/16	1-3/8	11/32	.08
4278-010SR	1	2-1/4	1-23/32	13/32	.13

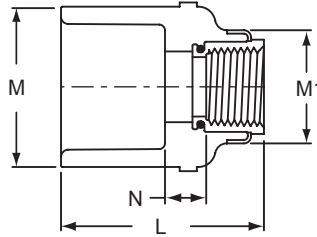




## FEMALE SPRINKLER HEAD ADAPTER

### Metal Thread Insert Style

Socket x Fipt

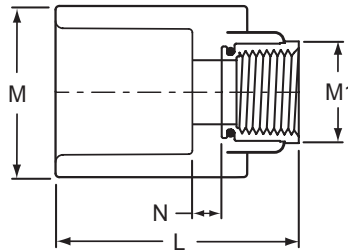


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
4235-101	3/4x1/2	2-1/32	1-13/32	1-7/32	7/16	.13
4235-130	1x1/2	2-7/32	1-11/16	1-3/16	17/32	.15
4235-131	1x3/4	2-9/32	1-23/32	1-3/8	9/16	.19

## FEMALE SPRINKLER HEAD ADAPTER

### Metal Thread Insert Style with Long Body

Socket x Fipt

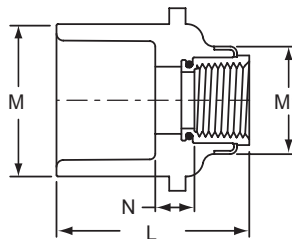


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
L4235-130	1x1/2	2-3/32	1-23/32	1-7/32	5/16	.18

## FEMALE SPRINKLER HEAD ADAPTER

### Metal Thread Insert Style with Positioning Ring

Socket x Fipt



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
R4235-101	3/4x1/2	1-15/16	1-7/16	1-7/32	9/32	.14

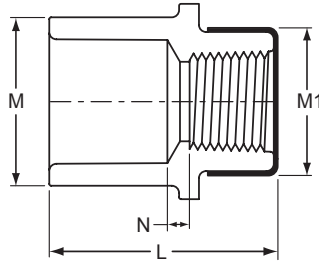


# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS

## FEMALE SPRINKLER HEAD ADAPTER

### Special Reinforced Plastic Thread Style with Positioning Ring

Socket x SR Fipt

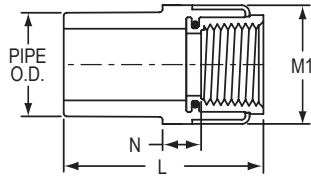


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
R4235-101SR	3/4x1/2	1-15/16	1-7/16	1-7/32	7/32	.09

## SPIGOT FEMALE SPRINKLER HEAD ADAPTER

### Metal Thread Insert Style

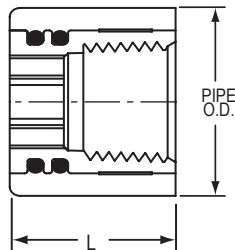
Spigot x Fipt



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
4238-101	3/4x1/2	2-1/32	1-7/32	1/2	.16
4238-130	1x1/2	2-1/32	1-7/32	7/16	.17

## BUSHING with METAL THREAD INSERT

Spigot x Fipt



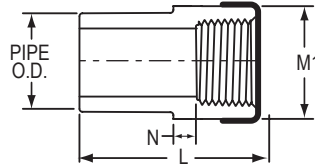
Part Number	Size	L	Approx. Wt. (Lbs.)
4238-130BR	1x1/2	1	.13



## SPIGOT FEMALE SPRINKLER HEAD ADAPTER

### Special Reinforced Plastic Thread Style

Spigot x SR Fipt

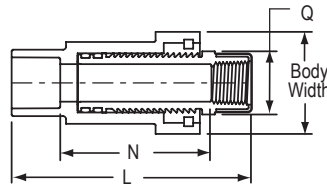


Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
4238-101SR	3/4x1/2	1-29/32	1-7/32	1/8	.07
4238-130SR	1x1/2	2-1/32	1-7/32	7/32	.09

## ADJUSTABLE SPRINKLER HEAD ADAPTER

### Special Reinforced Plastic Thread Style

Socket x SR Fipt

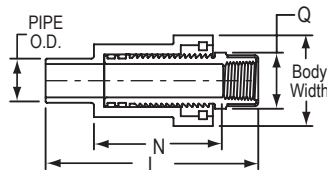


Part Number	Size	L		N		Q	Body Width	Approx. Wt. (Lbs.)
		Min	Max	Min	Max			
42001SR	3/4x1/2	5-1/32	6-5/16	3-11/32	4-5/8	1-5/16	2-1/8	.37
42011SR	1x1/2	6-13/32	8	4-1/2	6-1/8	1-7/16	2-1/8	.68

## ADJUSTABLE SPRINKLER HEAD ADAPTER

### Special Reinforced Plastic Thread Style

Spigot x SR Fipt



Part Number	Size	L		N		Q	Body Width	Approx. Wt. (Lbs.)
		Min	Max	Min	Max			
42004SR	3/4x1/2	5-1/32	6-5/16	3-3/16	4-15/32	1-5/16	2-1/8	.36
42014SR	1x1/2	5	6-1/4	3-5/32	4-13/32	1-5/16	2-1/8	.37

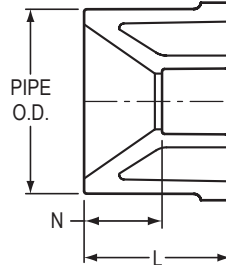


# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS

## REDUCER BUSHING

### Flush Style

Spigot x Socket

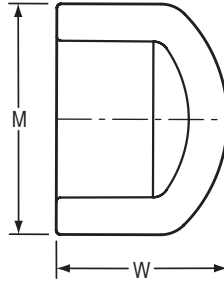


Part Number	Size	L	N	Approx. Wt. (Lbs.)
4237-131	1x3/4	1-13/32	13/32	.05
4237-167	1-1/4x3/4	1-19/32	17/32	.12
4237-168	1-1/4x1	1-23/32	1/2	.09
4237-210	1-1/2x3/4	1-11/16	11/16	.19
4237-211	1-1/2x1	1-17/32	13/32	.15
4237-212	1-1/2x1-1/4	1-9/16	5/16	.07
4237-248	2x3/4	1-29/32	29/32	.22
4237-249	2x1	1-29/32	3/4	.26
4237-250	2x1-1/4	1-11/16	7/16	.21
4237-251	2x1-1/2	1-11/16	5/16	.15
4237-290	2-1/2x1-1/4	2-13/32	1-5/32	.45
4237-291	2-1/2x1-1/2	2-13/32	1-1/32	.44
4237-292	2-1/2x2	2-9/32	13/16	.26
4237-338	3x2	2-1/4	3/4	.63
4237-339	3x2-1/2	2-5/16	1/4	.40

# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS



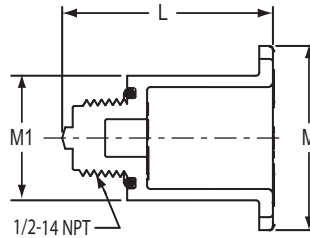
## CAP Socket



Part Number	Size	M	W	Approx. Wt. (Lbs.)
4247-007	3/4	1-3/8	1-13/32	.05
4247-010	1	1-19/32	1-9/16	.06
4247-012	1-1/4	2-3/32	1-27/32	.13
4247-015	1-1/2	2-11/32	2	.17
4247-020	2	2-27/32	2-9/32	.39
4247-025	2-1/2	3-17/32	2-11/16	.52
4247-030	3	4-3/8	3	.92

## TEST PLUG - O-ring Sealed

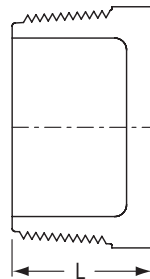
Mipt - For Pressure Testing Only,  
Not For use with Z4235 Series Adapters



Part Number	Size	L	M	M1	Approx. Wt. (Lbs.)
FTP-005	1/2	2	1-7/8	1-1/4	.04

## TEST PLUG

(PVC White) Not UL Listed; For Pressure Testing Only,  
Mipt



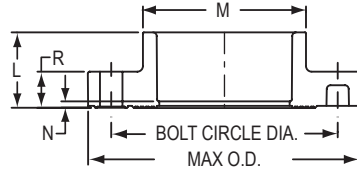
Part Number	Size	L	Approx. Wt. (Lbs.)
4250-005	1/2	27/32	.02



# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS

## FLANGE - ONE PIECE

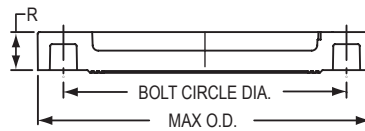
4 Bolt Holes, 150 psi  
Socket



Part Number	Size	L	M	N	R	No. of Bolt Holes	Bolt Circle Dia.	Bolt Size	Min. Bolt Length	Max. O.D.	Approx. Wt. (Lbs.)
4251-007	3/4	1-5/32	1-1/2	1/8	17/32	4	2-3/4	1/2	2	3-29/32	.31
4251-010	1	1-5/16	1-13/16	1/8	11/16	4	3-1/8	1/2	2-1/4	4-9/32	.35
4251-012	1-1/4	1-13/32	2-7/32	5/32	11/16	4	3-1/2	1/2	2-1/4	4-5/8	.44
4251-015	1-1/2	1-9/16	2-1/2	3/16	23/32	4	3-7/8	1/2	2-1/2	5	.52
4251-020	2	1-27/32	3	11/32	7/8	4	4-3/4	5/8	3	5-31/32	.91
4251-025	2-1/2	2-1/4	3-1/2	1/2	1-1/32	4	5-1/2	5/8	3-1/4	6-15/16	1.32

## BLIND FLANGE

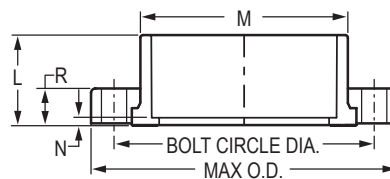
4 Bolt Holes, 150 psi



Part Number	Size	R	Bolt Circle Dia.	No. of Bolt Holes	Bolt Size	Min. Bolt Length	Max. O.D.	Approx. Wt. (Lbs.)
4253-007	3/4	17/32	2-3/4	4	1/2	2	3-27/32	.30
4253-010	1	23/32	3-1/8	4	1/2	2-1/4	4-1/4	.35
4253-012	1-1/4	21/32	3-1/2	4	1/2	2-1/4	4-5/8	.40
4253-015	1-1/2	3/4	3-7/8	4	1/2	2-1/2	5-1/32	.74
4253-020	2	25/32	4-3/4	4	5/8	3	5-15/16	.89
4253-025	2-1/2	1-1/32	5-1/2	4	5/8	3-1/4	6-15/16	1.70
4253-030	3	1-5/16	6	4	5/8	3-1/4	7-5/8	1.72

## FLANGE - TWO PIECE

Van Stone Style, 4 Bolt Holes, 150 psi  
Socket



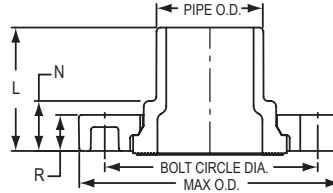
Part Number	Size	L	M	N	R	Bolt Circle Dia.	No. of Bolt Holes	Bolt Size	Min. Bolt Length	Max. O.D.	Approx. Wt. (Lbs.)
4254-030	3	2-1/8	4-1/4	9/32	1-1/32	6	4	5/8	3-1/4	7-15/32	1.75

# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS



## FLANGE - TWO PIECE

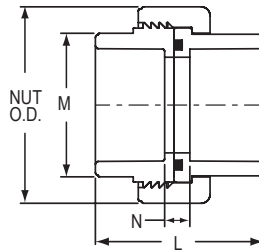
Van Stone Style, 4 Bolt Holes, 150 psi  
Spigot



Part Number	Size	L	N	R	Bolt Circle Dia.	No. of Bolt Holes	Bolt Size	Min. Bolt Length	Max. O.D.	Approx. Wt. (Lbs.)
4256-007	3/4	1-15/16	13/16	17/32	2-3/4	4	1/2	2	3-27/32	.30
4256-010	1	2-7/32	1-1/32	11/16	3-1/8	4	1/2	2-1/4	4-1/4	.41
4256-012	1-1/4	2-3/8	1	11/16	3-1/2	4	1/2	2-1/4	4-5/8	.50
4256-015	1-1/2	2-7/16	1-3/32	23/32	3-7/8	4	1/2	2-1/2	4-31/32	.65
4256-020	2	2-3/4	1-5/32	25/32	4-3/4	4	5/8	3	5-15/16	1.00
4256-025	2-1/2	3-1/16	1-9/32	1-1/32	5-1/2	4	5/8	3-1/4	6-15/16	1.62
4256-030	3	3-3/8	1-13/32	1-1/32	6	4	5/8	3-1/4	7-9/16	1.76

## UNION

Socket x Socket



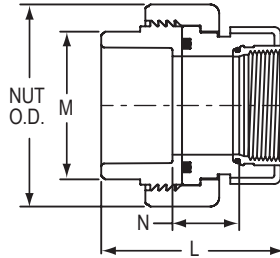
Part Number	Size	L	M	N	Nut O.D.	Approx. Wt. (Lbs.)
4257-007	3/4	2-3/8	1-17/32	3/8	2-1/2	.38
4257-010	1	2-9/16	1-27/32	3/8	2-7/8	.41
4257-012	1-1/4	2-27/32	2-7/32	11/32	3-5/16	.52
4257-015	1-1/2	3-1/8	2-1/2	3/8	3-17/32	.63
4257-020	2	3-5/8	3-1/32	9/16	4-3/16	1.09



# FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS

## TRANSITION UNION Metal Thread Insert Style

Socket x Fipt

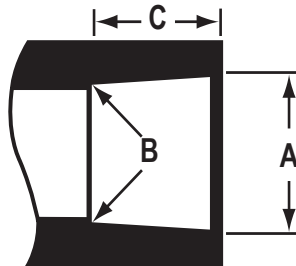


Part Number	Size	L	M	N	Nut O.D.	Approx. Wt. (Lbs.)
4259-010BR	1	2-7/8	1-27/32	1	2-7/8	.56
4259-012BR	1-1/4	3	2-3/16	1-1/8	3-9/32	.98
4259-015BR	1-1/2	3-3/4	2-1/2	1-9/16	3-17/32	.93
4259-020BR	2	4-3/16	3-1/32	1-27/32	4-3/16	1.57

## SOCKET DIMENSIONS

SCH 40 - ASTM F438

SCH 80 - ASTM F439



Size	Socket Entrance A	Socket Bottom B	Tolerance	SCH 40 Minimum Socket Length C	SCH 80 Minimum Socket Length C
3/4	1.058	1.046	± 0.004	0.719	1.000
1	1.325	1.130	± 0.005	0.875	1.125
1-1/4	1.670	1.655	± 0.005	0.938	1.250
1-1/2	1.912	1.894	± 0.006	1.094	1.375
2	2.387	2.369	± 0.005	1.156	1.500
2-1/2	2.889	2.868	± 0.007	1.750	1.750
3	3.516	3.492	± 0.008	1.875	1.875







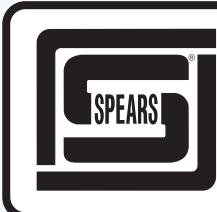












**SPEARS® MANUFACTURING COMPANY**

Corporate Office  
15853 Olden Street • Sylmar, CA 91342  
PO Box 9203 • Sylmar, CA 91392  
(818) 364-1611 • <http://www.spearsmfg.com>

