

CPVC BlazeMaster® Fire Protection Fittings



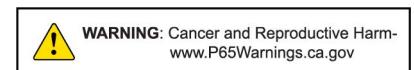
Viking Plastics LLC.

5150 Beltway Drive SE
Caledonia, Michigan 49316

Visit our website for the most current information.

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Key to Viking Figure Numbers

TYPE OF MATERIAL

V50 = CPVC Fire Protection

TYPE OF FITTING & DESCRIPTION

01 = Coupling
 03 = Female Adapter
 04 = Male Adapter
 06 = 45° Elbow
 07 = 90° Elbow
 11 = Tee
 12 = Sprinkler Tee (Thread on Outlet)
 14 = Sprinkler Tee (Thread on Run)
 17 = Cap
 18 = Bushing
 19 = Blind Flange
 33 = Unions
 35 = Cross
 51 = Solid Flange

TYPE OF CONNECTIONS

2 = Fitting Connection Spigot
 3 = Female Thread Connection
 4 = Male Thread Connection
 S = Sprinkler Adapter
 BI = Brass Insert
 R = Reducing

FITTING TERMS AND ABBREVIATIONS

FNPT = Female NPT Thread
 MNPT = Male NPT Thread
 S or SLIP = Female Socket
 SPG = Male End (Spigot)
 G = Grooved
 L = Large
 S = Small
 H = Heavy
 IPS = Iron Pipe Size
 CTS = Copper Tube Size
 Q = Quart
 P = Pint



Specifications and Engineering Data

Introduction

Viking BlazeMaster® CPVC fire sprinkler products are manufactured from high quality, post-chlorinated polyvinyl chloride (CPVC), a specialty thermoplastic material tested and listed by certifying agencies for use in CPVC fire sprinkler systems. Viking CPVC fire sprinkler products provide unique advantages over traditional metal fire sprinkler systems through superior hydraulics, ease of installation, handling, and quicker assembly using readily available and less expensive tools. These products are also based on technology with a continuous and proven service history of more than forty (40) years.

Pressure Rating

Viking BlazeMaster® fittings of nominal sizes 3/4" – 3" (20 – 80 mm) are rated for continuous service of 175 psi (1270 kPa) at 150°F (65°C).

Approvals

Viking BlazeMaster® fittings for fire sprinkler systems

- » Listed by Underwriters Laboratories (UL) for the United States and Canada under Chlorinated Polyvinyl Chloride Sprinkler Pipe and Fittings - VIWT and VIWT7.EX15419
- » FM Global approved for FM Global Group insured properties - Class 1635-Plastic Pipe & Ftngs AS Sys
- » Meets approval and listing requirements of NFPA 13, 13D, and 13R
- » Red Book listed by the Loss Prevention Safety Board (LPCB) under automatic sprinkler, water spray and deluge systems - Certificate 1558a to LPS 1260-2.2
- » CPVC fittings and sprinkler adapters are NSF International listed to NSF/ANSI-61 (health effects) and NSF/ANSI-372 (Lead Free*) for use in potable water applications

Nibco **BlazeMaster®** fittings for fire sprinkler systems

- » Listed by Underwriters Laboratories (UL) for the United States and Canada under Chlorinated Polyvinyl Chloride Sprinkler Pipe and Fittings - VIWT and VIWT7.EX6309
- » Red Book listed by the Loss Prevention Safety Board (LPCB) under automatic sprinkler, water spray and deluge systems - Certificate 878a to LPS 1260-2.2

Use with other Manufacturers' Pipes, Fittings, & Solvent Cements

Viking BlazeMaster® CPVC fire sprinkler products are listed by UL to standard 1821. They are also approved by FM to standard 1635. These standards require rigorous testing to ensure the products will function as a component of the assembled fire protection system. For fire protection CPVC pipe the current UL standard is 1821 and FM standard 1635. Viking warrants each Viking BlazeMaster® fitting installed in accordance with local code and regulations with UL listed and/or FM approved CPVC pipe and fittings in compliance with the UL & FM standards. A current list of compatible UL and ULC listed CPVC manufacturers are: Viking (pipe), Harvel (pipe), TYCO Fire Products (pipe & fittings), IPEX (pipe & fittings) and Spears (pipe & fittings).

NOTICE: While Viking BlazeMaster® CPVC fire sprinkler products are UL listed for use in combination with other listed manufacturers' products, specific application approvals may not be the same among manufacturers. It is the installer's responsibility to verify suitability of products used in combination according to each manufacturer's installation instructions. Contact Viking if you have questions on any application not addressed in this manual.

Engineering Data – Product Specifications

Viking BlazeMaster® CPVC fire sprinkler products are made for use with listed CPVC fire sprinkler pipe produced in SDR 13.5 dimensions, as specified in ASTM F442.

Viking BlazeMaster® CPVC fire sprinkler fittings are produced in schedule 40 dimensions for sizes 3/4 inch (20 mm) through 1-1/4 inch (32 mm) in accordance with ASTM F438 and schedule 80 dimensions for sizes 1-1/2 inch (40 mm) through 3 inch (80 mm) in accordance with ASTM F439. These products are cULus listed, and FM Approved for a rated working pressure of 175 psi (1200 kPa) at 150°F (65°C) for sprinkler service.

Installation Instructions

CPVC pipe and fittings are for professional use only and are not sold to the general public. For complete installation instructions refer to the Viking "Installation and Design Manual" on

www.vikinggroupinc.com.

*Weighted average lead content <0.25%.



CPVC Standard Fire Protection Fittings

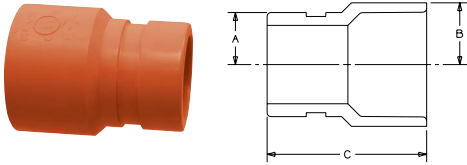
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BlazeMaster® Fire Protection Fittings – STANDARD

ADAPTERS

Grooved Coupling Adapters (G x S)

V5001-G

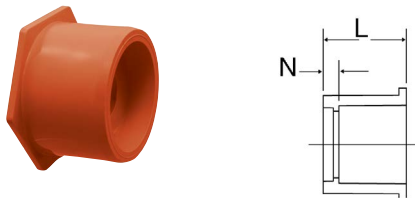


Viking Part Number	Nominal Size		Approx. Wght.		Dimensions						Joint
					A		B		C		
	IN.	mm	lb.	kg	IN.	mm	IN.	mm	IN.	mm	
V5001G-012	1-1/4	33	0.17	0.08	0.83	21	1.04	26	2.98	76	GXS
V5001G-015	1-1/2	40	0.2	0.09	0.95	24	1.17	30	3.15	80	GXS
V5001G-020	2	50	0.3	0.14	1.18	30	1.43	36	3.37	86	GXS
V5001G-025	2-1/2	65	0.52	0.24	1.43	36	1.74	44	3.66	93	GXS
V5001G-030	3	75	0.72	0.33	3.5	89	--	--	--	--	GXS

BUSHINGS

Bushings

V5018

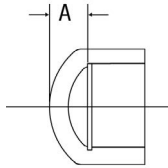


Viking Part Number	Nominal Size		Approx. Wght.		Dimensions				Joint
					L		N		
	IN.	mm	lb.	kg	IN.	mm	IN.	mm	
V5018-131	1x3/4	25x19	0.04	0.02	1.28	33	0.29	7	SPGXS
V5018-168	1-1/4x1	31x25	0.08	0.04	1.41	36	0.29	7	SPGXS
V5018-167	1-1/4x3/4	31x19	0.10	0.05	1.41	36	0.41	10	SPGXS
V5018-212	1-1/2x1-1/4	40x31	0.07	0.03	1.54	39	0.27	7	SPGXS
V5018-211	1-1/2x1	40x25	0.12	0.05	1.54	39	0.39	10	SPGXS
V5018-210	1-1/2x3/4	40x19	0.16	0.07	1.54	39	0.53	13	SPGXS
V5018-251	2x1-1/2	50x40	0.16	0.07	1.66	42	0.27	7	SPGXS
V5018-250	2x1-1/4	50x31	0.20	0.09	1.66	42	0.4	10	SPGXS
V5018-249	2x1	50x25	0.22	0.10	1.66	42	0.52	13	SPGXS
V5018-248	2x3/4	50x19	0.22	0.10	1.66	42	0.64	16	SPGXS
V5018-292	2-1/2x2	65x50	0.24	0.11	1.94	49	0.44	11	SPGXS
V5018-291	2-1/2x1-1/2	65x40	0.36	0.16	1.94	49	0.57	14	SPGXS
V5018-290	2-1/2x1-1/4	65x31	0.40	0.18	1.94	49	0.68	17	SPGXS
V5018-289	2-1/2x1	65x25	0.47	0.21	1.94	49	0.81	21	SPGXS
V5018-339	3x2-1/2	75x65	0.47	0.21	2.42	61	0.6	15	SPGXS
V5018-338	3x2	75x50	0.66	0.30	2.42	61	0.93	24	SPGXS
V5018-337	3x1-1/2	75x40	0.73	0.33	2.42	61	1.03	26	SPGXS

BlazeMaster® Fire Protection Fittings – STANDARD

CAPS

V5017



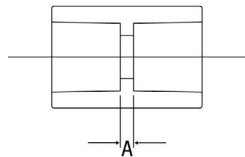
Caps

Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
V5017-007	3/4"	19	0.04	0.02	0.31	8	S
V5017-010	1"	25	0.06	0.03	0.39	10	S
V5017-012	1-1/4"	31	0.22	0.1	0.56	14	S
V5017-015	1-1/2"	40	0.3	0.14	0.68	17	S
V5017-020	2"	50	0.42	0.19	0.68	17	S
V5017-025	2-1/2"	65	0.62	0.28	1.2	30	S
V5017-030	3"	75	0.96	0.44	1.26	32	S

COUPLINGS

V5001

V5001-R



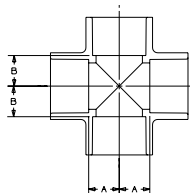
Couplings

Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
V5001-007	3/4	19	0.06	0.03	0.12	3	SXS
V5001-010	1	25	0.08	0.04	0.09	2	SXS
V5001-012	1-1/4	31	0.12	0.05	0.08	2	SXS
V5001-015	1-1/2	40	0.23	0.1	0.27	7	SXS
V5001-020	2	50	0.44	0.2	0.28	7	SXS
V5001-025	2-1/2	65	0.72	0.33	0.2	5	SXS
V5001-030	3	75	1.1	0.5	0.22	6	SXS
V5001R-131	1x3/4	25x19	0.08	0.04	0.29	7	SXS
V5001R-168	1-1/4x1	31x25	0.12	0.05	0.35	9	SXS
V5001R-212	1-1/2x1-1/4	40x31	0.38	0.17	0.51	13	SXS
V5001R-211	1-1/2x1	40x25	0.36	0.16	0.67	17	SXS
V5001R-210	1-1/2x3/4	40x19	0.34	0.15	0.8	20	SXS
V5001R-251	2x1-1/2	50x40	0.49	0.22	0.51	13	SXS
V5001R-249	2x1	50x25	0.48	0.22	0.75	19	SXS

CROSSES

V5035

V5035-R



Crosses

Viking Part Number	Nominal Size		Approx. Wght.		Dimensions				Joint
					A		B		
	IN.	mm	lb.	kg	IN.	mm	IN.	mm	
V5035-007	3/4	19	0.12	0.05	0.61	15	0.61	15	SXSXSXS
V5035-010	1	25	0.24	0.11	0.75	19	0.75	19	SXSXSXS
V5035-012	1-1/4	31	0.34	0.15	0.9	23	0.9	23	SXSXSXS
V5035-015	1-1/2	40	0.87	0.39	1.23	31	1.23	31	SXSXSXS
V5035-020	2	50	1.43	0.65	1.53	39	1.53	39	SXSXSXS
V5035-025	2-1/2	65	2.17	0.98	1.75	44	1.75	44	SXSXSXS
V5035-030	3	75	3.12	1.42	1.89	48	1.89	48	SXSXSXS
V5035R-131	1x1x3/4x3/4	25x25x19x19	0.18	0.08	0.61	15	0.73	19	SXSXSXS

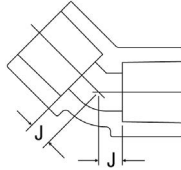


WARNING: Cancer and Reproductive Harm.
www.P65Warnings.ca.gov

BlazeMaster® Fire Protection Fittings – STANDARD

ELBOWS

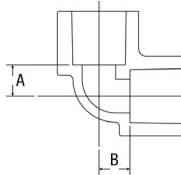
V5006



45° Elbows

Viking Part Number	Nominal Size		Approx. Wght.		Dimension J		Joint
	IN.	mm	lb.	kg	IN.	mm	
V5006-007	3/4	19	0.06	0.03	0.32	8	SXS
V5006-010	1	25	0.12	0.05	0.39	10	SXS
V5006-012	1-1/4	31	0.18	0.08	0.48	12	SXS
V5006-015	1-1/2	40	0.36	0.16	0.47	12	SXS
V5006-020	2	50	0.54	0.24	0.58	15	SXS
V5006-025	2-1/2	65	1	0.45	0.65	17	SXS
V5006-030	3	75	1.28	0.57	0.76	19	SXS

V5007 V5007-R



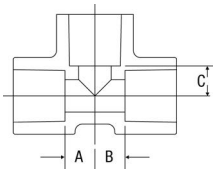
90° Elbows

Viking Part Number	Nominal Size		Approx. Wght.		Dimensions				Joint
					A		B		
	IN.	mm	lb.	kg	IN.	mm	IN.	mm	
V5007-007	3/4	19	0.08	0.04	0.56	14	0.56	14	SXS
V5007-010	1	25	0.14	0.06	0.69	18	0.69	18	SXS
V5007-012	1-1/4	31	0.22	0.10	0.91	23	0.91	23	SXS
V5007-015	1-1/2	40	0.41	0.18	1.06	27	1.06	27	SXS
V5007-020	2	50	0.83	0.37	1.24	31	1.24	31	SXS
V5007-025	2-1/2	65	1.16	0.52	1.5	38	1.5	38	SXS
V5007-030	3	75	1.66	0.74	1.81	46	1.81	46	SXS
V5007R-131	1x3/4	25x19	0.12	0.05	0.61	15	0.75	19	SXS

BlazeMaster® Fire Protection Fittings – STANDARD

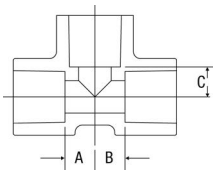
TEES

V5011



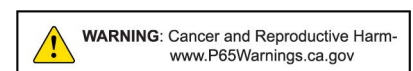
Tees

V5011-R



Viking Part Number	Nominal Size		Approx. Wght.		Dimensions						Joint
					A		B		C		
	IN.	mm	lb.	kg	IN.	mm	IN.	mm	IN.	mm	
V5011-007	3/4	19	0.1	0.04	0.57	14	0.57	14	0.57	14	SXSXS
V5011-010	1	25	0.17	0.08	0.69	18	0.69	18	0.69	18	SXSXS
V5011-012	1-1/4	33	0.28	0.12	0.89	23	0.89	23	0.89	23	SXSXS
V5011-015	1-1/2	40	0.58	0.26	1.05	27	1.05	27	1.05	27	SXSXS
V5011-020	2	50	0.82	0.37	1.25	32	1.25	32	1.25	32	SXSXS
V5011-025	2-1/2	65	1.4	0.62	1.53	39	1.53	39	1.53	39	SXSXS
V5011-030	3	75	2.14	0.96	1.84	47	1.84	47	1.84	47	SXSXS
V5011R-102	3/4x3/4x1	19x19x25	0.14	0.06	0.7	18	0.7	18	0.73	19	SXSXS
V5011R-131	1x1x3/4	25x25x19	0.16	0.07	0.61	15	0.61	15	0.94	24	SXSXS
V5011R-126	1x3/4x1	25x19x25	0.2	0.09	0.76	19	0.99	25	0.78	20	SXSXS
V5011R-125	1x3/4x3/4	25x19x19	0.16	0.07	0.6	15	0.87	22	0.77	20	SXSXS
V5011R-168	1-1/4x1-1/4x1	33x33x25	0.24	0.11	0.73	19	0.73	19	0.89	23	SXSXS
V5011R-167	1-1/4x1-1/4x3/4	33x33x19	0.2	0.09	0.6	15	0.6	15	0.89	23	SXSXS
V5011R-159	1-1/4x1x1-1/4	33x25x33	0.28	0.12	0.88	22	1.03	26	0.87	22	SXSXS
V5011R-158	1-1/4x1x1	33x25x25	0.24	0.11	0.71	18	0.9	23	0.89	23	SXSXS
V5011R-157	1-1/4x1x3/4	33x25x19	0.2	0.09	0.61	15	0.76	19	0.89	23	SXSXS
V5011R-169	1-1/4x1-1/4x1-1/2	33x33x45	0.44	0.2	1.01	26	1.01	26	0.88	22	SXSXS
V5011R-212	1-1/2x1-1/2x1-1/4	45x45x33	0.46	0.21	0.89	23	0.89	23	1.04	26	SXSXS
V5011R-211	1-1/2x1-1/2x1	40x40x25	0.54	0.24	0.77	20	0.77	20	0.96	24	SXSXS
V5011R-210	1-1/2x1-1/2x3/4	40x40x19	0.5	0.22	0.67	17	0.67	17	1.04	26	SXSXS
V5011R-202	1-1/2x1-1/4x1	40x33x25	0.4	0.18	0.72	18	0.91	23	1.01	26	SXSXS
V5011R-201	1-1/2x1-1/4x3/4	40x33x19	0.36	0.16	0.6	15	0.78	20	1.02	26	SXSXS
V5011R-213	1-1/2x1-1/2x2	40x40x50	0.66	0.29	1.3	33	1.3	33	1.14	29	SXSXS
V5011R-251	2x2x1-1/2	50x50x40	0.86	0.38	1.06	27	1.06	27	1.37	35	SXSXS
V5011R-250	2x2x1-1/4	50x50x33	0.67	0.3	1	25	1	25	1.28	33	SXSXS
V5011R-249	2x2x1	50x50x25	0.72	0.32	0.8	20	0.8	20	1.25	32	SXSXS
V5011R-248	2x2x3/4	50x50x19	0.68	0.3	0.7	18	0.7	18	1.25	32	SXSXS
V5011R-292	2-1/2x2-1/2x2	65x65x50	1.32	0.59	1.26	32	1.26	32	1.53	39	SXSXS
V5011R-291	2-1/2x2-1/2x1-1/2	65x65x40	1.21	0.54	1.06	27	1.06	27	1.53	39	SXSXS
V5011R-290	2-1/2x2-1/2x1-1/4	65x65x33	1.12	0.5	0.91	23	0.91	23	1.53	39	SXSXS
V5011R-289	2-1/2x2-1/2x1	65x65x25	1.05	0.47	0.74	19	0.74	19	1.53	39	SXSXS
V5011R-339	3x3x2-1/2	75x75x65	1.71	0.76	1.53	39	1.53	39	1.84	47	SXSXS
V5011R-338	3x3x2	75x75x50	1.91	0.85	1.26	32	1.26	32	1.84	47	SXSXS
V5011-R337	3x3x1-1/2	75x75x40	1.39	0.62	1.06	27	1.06	27	1.82	46	SXSXS

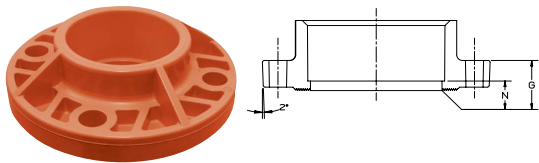
Note: All Viking reducing tees are molded to size, not fabricated.



BlazeMaster® Fire Protection Fittings – STANDARD

FLANGES

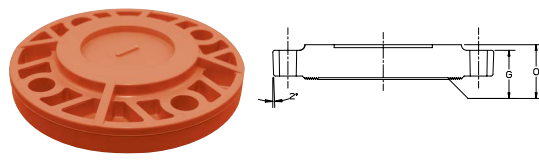
V5051-H



Socket Flanges

Viking Part Number	Nominal Size		Approx. Wght.		Dimensions				Joint
					G		N		
	IN.	mm	lb.	kg	IN.	mm	IN.	mm	
V5051H-030	3	75	1.75	0.78	1.02	26	0.32	8	S

V5019-H

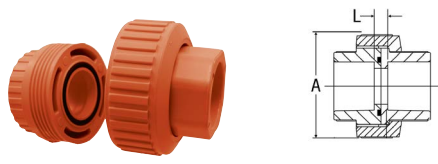


Blind Flanges

Viking Part Number	Nominal Size		Approx. Wght.		Dimensions				Joint
					G		O		
	IN.	mm	lb.	kg	IN.	mm	IN.	mm	
V5019H-030	3	75	2.18	0.97	1.00	25	1.33	34	--

UNIONS

V5033-E



Unions (O-ring Material EPDM)

Viking Part Number	Nominal Size		Approx. Wght.		Dimensions				Joint
					A		L		
	IN.	mm	lb.	kg	IN.	mm	IN.	mm	
V5033E-007	3/4	19	0.27	0.12	2.46	62	0.43	11	SxS
V5033E-010	1	25	0.40	0.18	2.70	69	0.43	11	SxS



WARNING: Cancer and Reproductive Harm-
www.P65Warnings.ca.gov

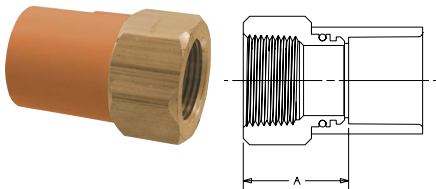
CPVC Threaded Fire Protection Fittings

Adapters.....	14-16
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BlazeMaster® Fire Protection Fittings – THREADED

ADAPTERS

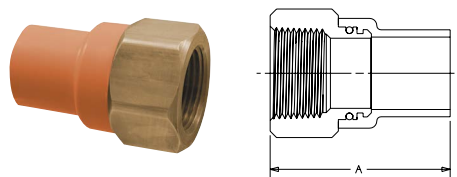
V5003-BI



Female Adapters with Metal Thread Insert

Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
V5003BI-007	3/4	19	0.28	0.12	1.19	30	SXFNPT
V5003BI-010	1	25	0.63	0.28	1.59	40	SXFNPT
V5003BI-012	1-1/4	33	1.02	0.46	1.96	50	SXFNPT
V5003BI-015	1-1/2	40	1.26	0.56	1.98	50	SXFNPT
V5003BI-020	2	50	1.98	0.88	1.99	51	SXFNPT

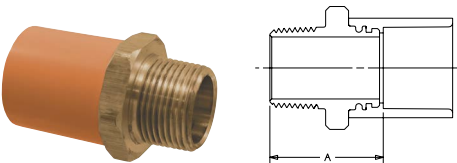
V5003-2-BI



Spigot Female Adapters with Metal Thread Insert

Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
V50032BI-007	3/4	19	0.28	0.12	2	51	SPGXFNPT
V50032BI-010	1	25	0.7	0.31	2.72	69	SPGXFNPT

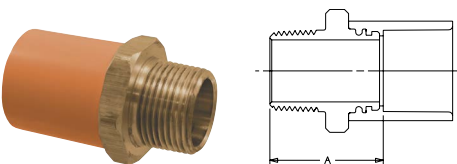
V5004-BI



Male Adapters with Metal Thread Insert

Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
V5004BI-007	3/4	19	0.22	0.1	1.35	34	SxMNPT
V5004BI-010	1	25	0.46	0.21	1.82	46	SxMNPT
V5004BI-012	1-1/4	33	0.74	0.33	2.05	52	SxMNPT
V5004BI-015	1-1/2	40	1.06	0.47	2.14	54	SxMNPT
V5004BI-020	2	50	1.8	0.8	2.31	59	SxMNPT

V5004-BI-BSP



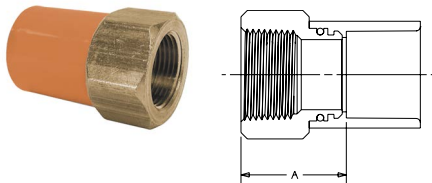
Male Adapters with Metal BSP Thread Insert

Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
V5004BI-BSP-007	3/4	19	0.22	0.1	1.35	34	SxMBSPT
V5004BI-BSP-010	1	25	0.46	0.21	1.82	46	SxMBSPT
V5004BI-BSP-012	1-1/4	33	0.74	0.33	2.05	52	SxMBSPT
V5004BI-BSP-015	1-1/2	40	1.06	0.47	2.14	54	SxMBSPT
V5004BI-BSP-020	2	50	1.8	0.8	2.31	59	SxMBSPT

BlazeMaster® Fire Protection Fittings – THREADED

ADAPTERS

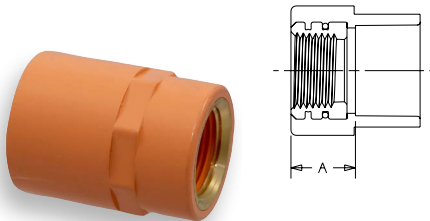
V5003-BI-BSP



Female Adapters with Metal BSP Thread Insert

Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
V5003BIBSP-010	1	25	0.63	0.28	1.59	40	SXBSPT
V5003BIBSP-012	1-1/4	33	1.02	0.46	1.96	50	SXBSPT
V5003BIBSP-015	1-1/2	40	1.26	0.56	1.98	50	SXBSPT
V5003BIBSP-020	2	50	1.98	0.88	1.99	51	SXBSPT

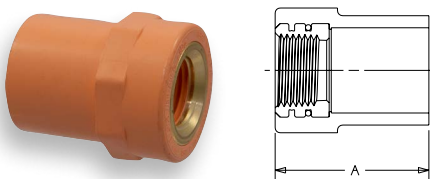
V5003-S-BI



Female Sprinkler Adapters with Metal Thread Insert

Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
V5003SBI-101	3/4x1/2	19x13	0.16	0.07	0.72	18	SXFNPT
V5003SBI-130	1x1/2	25x13	0.18	0.08	0.73	19	SXFNPT
V5003SBI-131	1x3/4	25x19	0.18	0.08	0.93	24	SXFNPT

V5003-2-S-BI



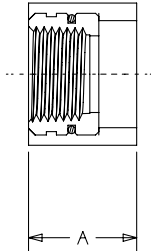
Spigot Female Sprinkler Adapters with Metal Thread Insert

Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
V50032SBI-101	3/4x1/2	19x13	0.15	0.07	1.53	39	SPGXFNPT
V50032SBI-130	1X1/2	25x13	0.16	0.07	1.84	47	SPGXFNPT

BlazeMaster® Fire Protection Fittings – THREADED

ADAPTERS

V5018-S-BI

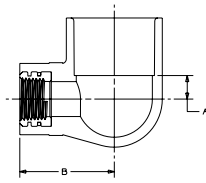


Bushing Sprinkler Adapters with Metal Thread Insert

Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
V5018SBI-130	1 x 1/2	25x13	0.15	0.07	1	25	SPGXFNPT

ELBOWS

V5007-3-S-BI



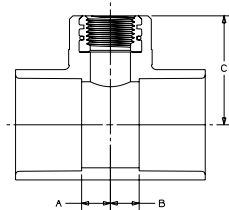
Sprinkler 90 with Metal Thread Insert

Viking Part Number	Nominal Size		Approx. Wght.		Dimensions				Joint
					A		B		
	IN.	mm	lb.	kg	IN.	mm	IN.	mm	
V50073SBI-101	3/4x 1/2	19x13	0.22	0.1	0.56	14	1.62	41	SxFNPT
V50073SBI-130	1x 1/2	25x13	0.27	0.12	0.5	13	1.76	45	SxFNPT
V50073SBI-131	1x 3/4	25x19	0.26	0.12	0.59	15	1.88	48	SxFNPT
V50073SBI-166	1-1/4x 1/2	33x13	0.3	0.13	0.48	12	1.95	50	SxFNPT

BlazeMaster® Fire Protection Fittings – THREADED

TEES

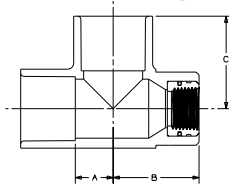
V5012-S-BI
V5012R-S-BI



Sprinkler Tees with Metal Thread Insert

Viking Part Number	Nominal Size		Approx. Wght.		Dimensions						Joint
					A		B		C		
	IN.	mm	lb.	kg	IN.	mm	IN.	mm	IN.	mm	
V5012SBI-101	3/4x3/4x1/2	19x19x13	0.22	0.1	0.42	11	0.42	11	1.6	41	SxSxFNPT
V5012SBI-010	1	25	0.44	0.2	0.8	20	0.8	20	1.48	38	SxSxFNPT
V5012SBI-130	1x1x1/2	25x25x13	0.29	0.13	0.41	10	0.41	10	1.76	45	SxSxFNPT
V5012SBI-166	1-1/4x1-1/4x1/2	33x33x13	0.34	0.15	0.52	13	0.52	13	1.95	50	SxSxFNPT
V5012SBI-209	1-1/2x1-1/2x1/2	40x40x13	0.46	0.21	0.45	11	0.45	11	2.13	54	SxSxFNPT
V5012SBI-247	2x2x1/2	50x50x13	0.58	0.26	0.47	12	0.47	12	1.68	43	SxSxFNPT
V5012RSBI-124	1x3/4x1/2	25x19x13	0.28	0.12	0.46	12	0.83	21	1.69	43	SxSxFNPT
V5012RSBI-156	1-1/4x1x1/2	33x25x13	0.34	0.15	0.51	13	0.63	16	1.94	49	SxSxFNPT
V5012RSBI-199	1-1/2x1-1/4x1/2	40x33x13	0.47	0.21	0.46	12	0.67	17	2.13	54	SxSxFNPT
V5012RSBI-237	2x1-1/2x1/2	50x40x13	0.58	0.26	0.48	12	0.78	20	2.38	60	SxSxFNPT

V5014R-S-BI



Sprinkler Tees with Metal Thread Insert

Viking Part Number	Nominal Size		Approx. Wght.		Dimensions						Joint
					A		B		C		
	IN.	mm	lb.	kg	IN.	mm	IN.	mm	IN.	mm	
V5014RSBI-122	1x1/2x1	25x13x25	0.3	0.13	0.71	18	1.74	44	1.9	48	SxFNPTxS



BlazeMaster® Fire Protection Fittings – THREADED

INSTASEAL ADAPTERS

V5003-S-BG

Sprinkler Adapters with Metal Thread Insert and EPDM Rubber Seat



Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
V5003SBG-101	3/4 X 1/2	19x13	--	--	1.50	38	S x FNPT
V5003SBG-130	1 X 1/2	25x13	--	--	1.88	48	S x FNPT

V5003-2-S-BG

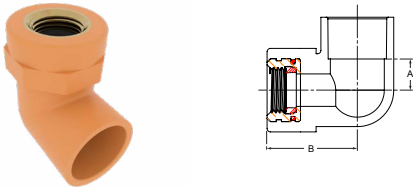
Sprinkler Adapters with Metal Thread Insert and EPDM Rubber Seat



Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
V50032SBG-101	3/4 X 1/2	19x13	--	--	1.50	38	SPG x FNPT
V50032SBG-130	1 X 1/2	25x13	--	--	1.85	47	SPG x FNPT

V5007-S-BG

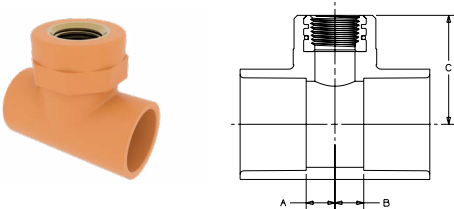
Sprinkler Adapter Elbows with Metal Thread Insert and EPDM Rubber Seat



Viking Part Number	Nominal Size		Approx. Wght.		Dimensions				Joint
					A		B		
	IN.	mm	lb.	kg	IN.	mm	IN.	mm	
V50073SBG-101	3/4 X 1/2	19x13	0.22	0.1	0.56	14	1.62	41	S x FNPT
V50073SBG-130	1 X 1/2	25x13	0.27	0.12	0.50	13	1.75	45	S x FNPT

V5012-S-BG

Sprinkler Adapter Tees with Metal Thread Insert and EPDM Rubber Seat



Viking Part Number	Nominal Size		Approx. Wght.		Dimensions						Joint
					A		B		C		
	IN.	mm	lb.	kg	IN.	mm	IN.	mm	IN.	mm	
V5012SBG-101	3/4 X 3/4 X 1/2	19x19x13	0.22	0.1	0.43	11	0.43	11	1.62	41	S x S x FNPT
V5012SBG-130	1 X 1 X 1/2	25x25x13	0.27	0.12	0.42	11	0.42	11	1.75	45	S x S x FNPT

NOTICE

Do not use PTFE tape or thread sealants on the threads of the InstaSeal fittings.

Tightening torque from touch of sprinkler to seat for proper installation of sprinkler

REFER TO INTALLATION INSTRUCTIONS

½ turn CW	14-19 IN-LBS	Minimum
¾ turn CW	24-30 IN-LBS	Recommended
1¼ turns CW	50-60 IN-LBS	Maximum

NOTE: Torque values are shown as "Inch-pounds" and not "foot-pounds".

INSTASEAL ADAPTER INSTALLATION INSTRUCTIONS

NOTICE

InstaSeal adapters can only be used with sprinklers having a K-factor less than or equal to 5.8 (83.6 metric).

- Follow BlazeMaster one-step solvent cement instructions for socket or spigot fittings. Never complete a solvent cement joint with the sprinkler installed into the InstaSeal fitting per NFPA 13 requirements. DO NOT OVER APPLY CEMENT WHERE IT COULD OVER SPILL TO RUBBER SEAT. Installer must be properly trained and certified for construction and assembly of BlazeMaster® CPVC piping systems.
- IMPORTANT - Seating the Sprinkler:**
After proper cure time of cement, make sure sealing surface of rubber is clean and free of any nicks or scratches on sprinkler seal end surface. Use only the thumb and forefinger (finger strength) to start the sprinkler in the lead thread of the InstaSeal sprinkler adapter continuing until sprinkler contacts rubber seat. The rubber seat should not be compressed during this step. (Note: also include accessories as supplied by sprinkler manufacturer, such as adjustable cups and escutcheons, on to sprinkler prior to installing sprinkler into adapter fitting.)

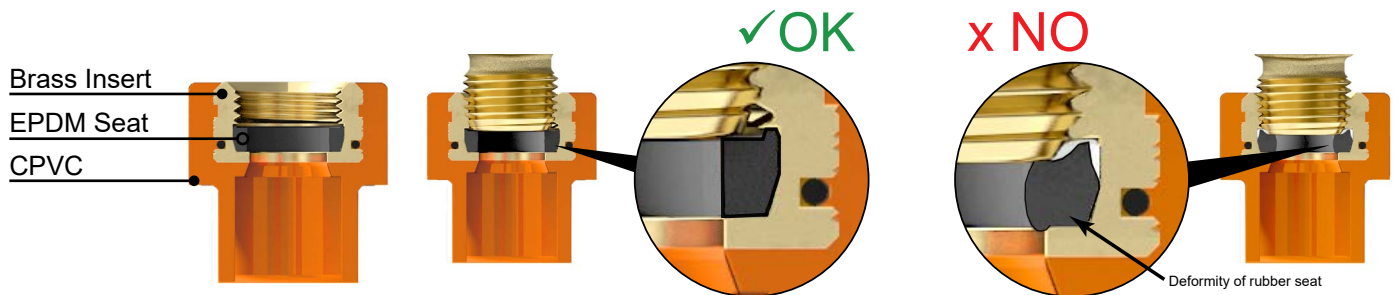


Figure 1: Sprinkler Contact on Rubber Seat

3. A. Pendent and Upright Sprinklers:

After seating the sprinkler, use the sprinkler manufacturer's recommended wrench to turn the sprinkler clockwise (CW) a minimum of one half ($\frac{1}{2}$) turn for seal. If sprinkler frame arms require alignment with pipe, continue to rotate CW to align, up to the maximum of $1\frac{1}{4}$ turns from initial seat to sprinkler contact as stated and as shown in Figure 1.

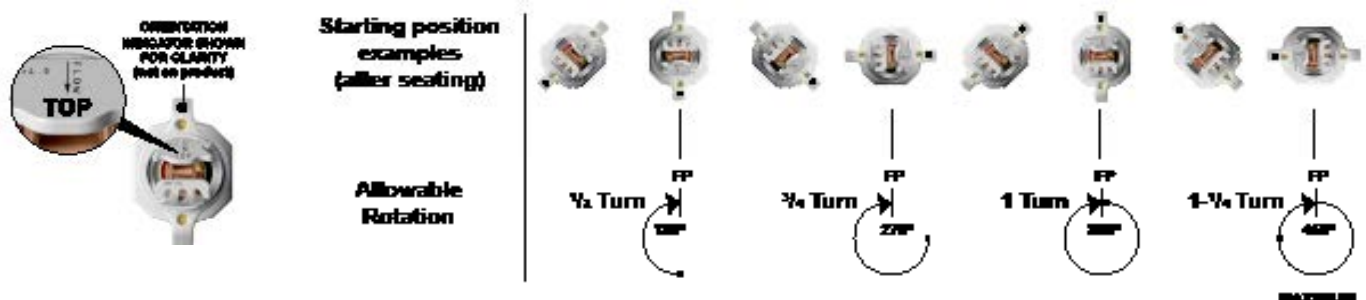
NOTICE

Do not tighten more than $1\frac{1}{4}$ turns from initial sprinkler touch to rubber seat. Over-tightening will cause the rubber seat to protrude into the waterway and reduce the K-factor which impedes flow. Additionally, permanent damage to the rubber seat will occur leading to failure and leakage. Refer to Figure 1.

B. Horizontal Sidewall Sprinklers:

After seating the sprinkler, use the sprinkler manufacturer's recommended wrench to turn the sprinkler clockwise to the required final position as shown below. **Note:** It may be necessary to re-seat the sprinkler to the EPDM seal (back out and restart threads) in a different position in order to achieve the required Final Position.

Required Final Position (FP)
See the manufacturer's installation instructions for proper location and distance from ceiling.





BlazeMaster® Fire Protection Fittings – ACCESSORIES

CEMENT AND ACCESSORIES



Solvent Cement

Viking Part Number	Size	Description	Weight per Case	
			Lbs.	Kg
V5097Q	Quart	One Step Cement	27	12.05
V5097P	Pint	One Step Cement	14	6.25

Brush



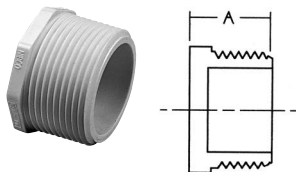
Viking Part Number	Size	Description	Weight per Case	
			Lbs.	Kg
V5096	NA	Brush	11	4.91

Dauber



Viking Part Number	Size	Description	Weight per Case	
			Lbs.	Kg
V5093-S	Small	Duaber (pipe sizes 3/4"-1-1/4")	2	0.89
V5093-L	Large	Duaber (pipe sizes 1-1/4"-3")	2	0.89

Test Plug



Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
05005005	1/2	15	0.03	0.01	1.06	27	MPT

Review – Do's & Don'ts

Do's

- » Installation should be made only by a qualified installer or contractor in accordance with all applicable codes and requirements.
- » Read and follow the installation instructions.
- » Follow recommended safe work practices.
- » Make certain thread sealants, gasket lubricants, and firestop materials are compatible with CPVC.
- » Keep pipe and fittings in original packaging until needed.
- » Cover pipe and fittings with an opaque tarp if stored outdoors.
- » Follow proper handling procedures.
- » Use tools specifically designed for use with plastic pipe and fittings.
- » Use the proper solvent cement and follow application instructions.
- » Use a drop cloth to protect interior finishes.
- » Cut the pipe ends square.
- » Deburr and bevel the pipe end with a chamfering tool.
- » Rotate the pipe 1/4 turn when bottoming pipe in fitting socket.
- » Make certain no solvent cement is on sprinkler and adapter threads.
- » Make certain that solvent cement does not run and plug the sprinkler orifice.
- » Follow the manufacturer's recommended cure times prior to pressure testing.
- » Fill lines slowly and only at a proper pressure.
- » Bleed the air from the system prior to pressure testing.
- » Support sprinkler properly to prevent lift up of the through the ceiling when activated.
- » For threaded rod hangar supports keep within 1/16" near pipe or use surge arrestor.
- » Install Viking BlazeMaster® CPVC fire sprinkler products in wet or dry system applications.
- » Use only insulation and/or glycerin and water solutions for freeze protection.
- » Allow for movement due to expansion and contraction.
- » Ensure installers have been properly trained per the Viking BlazeMaster® CPVC Fire Sprinkler System Installation and Design Manual and renew training every three years at a minimum.

Don'ts

- » Do not use edible oils as a gasket lubricant.
- » Do not use petroleum or solvent-based sealants, lubricants, or fire stop materials.
- » Do not use any glycol-based solutions as anti-freeze.
- » Do not contaminate the CPVC system with cutting oils or compressor oils.
- » Do not mix glycerin and water solutions in contaminated containers.
- » Do not use solvent cement that exceeds its shelf life or has become discolored or jellied.
- » Do not allow solvent cement to plug the sprinkler orifice.
- » Do not connect rigid metal couplers to CPVC grooved adapters.
- » Do not thread or groove CPVC pipe.
- » Do not use solvent cement near sources of heat, open flame, or when smoking.
- » Do not pressure test with air.
- » Do not pressure test until recommended cure times are met.
- » Do not exceed proper pressure for testing.
- » Do not use ratchet cutters below 50°F.
- » Do not use CPVC pipe that has been stored outdoors, unprotected and is faded in color.
- » Do not allow threaded rod to come in contact with the pipe.
- » Do not install Viking BlazeMaster® CPVC fire sprinkler products in cold weather without allowing for expansion.
- » Do not allow puddling of cement in fittings and pipe.
- » Do not use dull or broken cutting tool blades when cutting pipe.

Cat.	Viking Part Number	Size	Nibco Figure No.	Spears Figure no.	Tyco Figure No.	Cat.	Viking Part Number	Size	Nibco Figure No.	Spears Figure no.	Tyco Figure No.
ADAPTERS	V5001G-012	1-1/4"	5001-G	4233-012	80160	ELBOWS	V5006-007	3/4"	5006	4217-007	80050
	V5001G-015	1-1/2"	5001-G	4233-015	80161		V5006-010	1"	5006	4217-010	80051
	V5001G-020	2"	5001-G	4233-020	80162		V5006-012	1-1/4"	5006	4217-012	80052
	V5001G-025	2-1/2"	5001-G	4233-025	80163		V5006-015	1-1/2"	5006	4217-015	80053
	V5001G-065	65 mm	5001-G	--	--		V5006-020	2"	5006	4217-020	80054
	V5001G-030	3"	5001-G	4233-030	80164		V5006-025	2-1/2"	5006	4217-025	90055
BUSHINGS	V5018-131	1"x3/4"	5018	4237-131	80200		V5006-030	3"	5006	4217-030	90056
	V5018-168	1-1/4"x1"	5018	4237-168	80202		V5007-007	3/4"	5007	4206-007	80025
	V5018-167	1-1/4"x3/4"	5018	4237-167	80201		V5007-010	1"	5007	4206-010	80026
	V5018-212	1-1/2"x1-1/4"	5018	4237-212	80205		V5007-012	1-1/4"	5007	4206-012	80027
	V5018-211	1-1/2"x1"	5018	4237-211	80204		V5007-015	1-1/2"	5007	4206-015	80028
	V5018-210	1-1/2"x3/4"	5018	4237-210	80203		V5007-020	2"	5007	4206-020	80029
	V5018-251	2"x1-1/2"	5018	4237-251	80209		V5007-025	2-1/2"	5007	4206-025	80030
	V5018-250	2"x1-1/4"	5018	4237-250	80208		V5007-030	3"	5007	4206-030	80031
	V5018-249	2"x1"	5018	4237-249	80207		V5007R-131	1"x3/4"	5007-R	4206-131	80032
	V5018-248	2"x3/4"	5018	4237-248	80206	FLANGES	V5019H-030	3"	5019-H	4253-030	N/A
	V5018-292	2-1/2"x2"	5018	4237-292	80211		V5051H-030	3"	5051-H	N/A	N/A
	V5018-291	2-1/2"x1-1/2"	5018	4237-291	80213	TEES	V5011-007	3/4"	5011	4201-007	80000
	V5018-290	2-1/2"x1-1/4"	5018	4237-290	80214		V5011-010	1"	5011	4201-010	80001
	V5018-289	2-1/2"x1"	5018	N/A	80215		V5011-012	1-1/4"	5011	4201-012	80002
	V5018-339	3"x2-1/2"	5018	4237-339	80212		V5011-015	1-1/2"	5011	4201-015	80003
	V5018-338	3"x2"	5018	4237-338	80210		V5011-020	2"	5011	4201-020	80004
	V5018-337	3"x1-1/2"	5018	N/A	N/A		V5011-025	2-1/2"	5011	4201-025	80005
CAPS	V5017-007	3/4"	5017	4247-007	80100		V5011-030	3"	5011	4201-030	80006
	V5017-010	1"	5017	4247-010	80101		V5011R-102	3/4"x3/4"x1"	5011-R	4201-102	80132
	V5017-012	1-1/4"	5017	4247-012	80102		V5011R-131	1"x1"x3/4"	5011-R	4201-131	80260
	V5017-015	1-1/2"	5017	4247-015	80103		V5011R-126	1"x3/4"x1"	5011-R	4201-126	80134
	V5017-020	2"	5017	4247-020	80104		V5011R-125	1"x3/4"x3/4"	5011-R	4201-125	80133
	V5017-025	2-1/2"	5017	4247-025	80105		V5011R-168	1-1/4"x1-1/4"x1"	5011-R	4201-168	80262
	V5017-030	3"	5017	4247-030	80106		V5011R-167	1-1/4"x1-1/4"x3/4"	5011-R	4201-167	80261
	V5017-030	3"	5017	4247-030	80106		V5011R-159	1-1/4"x1"x1-1/4"	5011-R	4201-159	80137
COUPLINGS	V5001-007	3/4"	5001	4229-007	80075		V5011R-158	1-1/4"x1"x1"	5011-R	4201-158	80136
	V5001-010	1"	5001	4229-010	80076		V5011R-157	1-1/4"x1"x3/4"	5011-R	4201-157	80135
	V5001-012	1-1/4"	5001	4229-012	80077		V5011R-169	1-1/4"x1-1/4"x1-1/2"	5011-R	4201-169	80138
	V5001-015	1-1/2"	5001	4229-015	80078		V5011R-212	1-1/2"x1-1/2"x1-1/4"	5011-R	4201-212	80275
	V5001-020	2"	5001	4229-020	80079		V5011R-211	1-1/2"x1-1/2"x1"	5011-R	4201-211	80264
	V5001-025	2-1/2"	5001	4229-025	80080		V5011R-210	1-1/2"x1-1/2"x3/4"	5011-R	4201-210	80263
	V5001-030	3"	5001	4229-030	80081		V5011R-202	1-1/2"x1-1/4"x1"	5011-R	4201-202	80141
	V5001R-131	1"x3/4"	5001-R	4229-131	80220		V5011R-201	1-1/2"x1-1/4"x3/4"	5011-R	4201-201	80140
	V5001R-168	1-1/4"x1"	5001-R	4229-168	N/A		V5011R-213	1-1/2"x1-1/2"x2"	5011-R	4201-213	N/A
	V5001R-210	1-1/2"x3/4"	5001-R	4229-210	N/A		V5011R-251	2"x2"x1-1/2"	5011-R	4201-251	80267
	V5001R-211	1-1/2"x1"	5001-R	4229-211	N/A						
	V5001R-212	1-1/2"x1-1/4"	5001-R	4229-212	N/A						
	V5001R-249	2"x1"	5001-R	4229-249	N/A						
	V5001R-251	2"x1-1/2"	5001-R	4229-251	N/A						
CROSSES	V5035-007	3/4"	5035	4220-007	80009						
	V5035-010	1"	5035	4220-010	80010						
	V5035-012	1-1/4"	5035	4220-012	80011						
	V5035-015	1-1/2"	5035	4220-015	80012						
	V5035-020	2"	5035	4220-020	80013						
	V5035-025	2-1/2"	5035	4220-025	80014						
	V5035-030	3"	5035	4220-030	N/A						
	V5035R-131	1"x3/4"x1"x3/4"	5035-R	4220-131	80015						

Cat.	Viking Part Number	Size	Nibco Figure No.	Spears Figure no.	Tyco Figure No.
TEES	V5011R-250	2"x2"x1-1/4"	5011-R	4201-250	80274
	V5011R-249	2"x2"x1"	5011-R	4201-249	80266
	V5011R-248	2"x2"x3/4"	5011-R	4201-248	80265
	V5011R-291	2-1/2"x2-1/2"x2"	5011-R	4201-292	80276
	V5011R-251	2-1/2"x2-1/2"x1-1/2"	5011-R	4201-291	80273
	V5011R-290	2-1/2"x2-1/2"x1-1/4"	5011-R	4201-290	80272
	V5011R-289	2-1/2"x2-1/2"x1"	5011-R	4201-289	80271
	V5011R-339	3"x3"x2-1/2"	5011-R	4201-339	80269
	V5011R-338	3"x3"x2"	5011-R	4201-338	80268
UNIONS	V5033E-007	3/4"	5033-E	4257-007	N/A
	V5033E-010	1"	5033-E	4257-010	N/A

Cat.	Viking Part Number	Size	Nibco Figure No.	Spears Figure no.	Tyco Figure No.
InstaSael	V5003SBG-101	3/4 X 1/2	N/A	4135-101BRG	80175RS
	V5003SBG-130	1 X 1/2	N/A	4135-130BRG	80176RS
	V50032SBG-101	3/4 X 1/2	N/A	N/A	N/A
	V50032SBG-130	1 X 1/2	N/A	N/A	80178RS
	V50073SBG-101	3/4 X 1/2	N/A	N/A	N/A
	V50073SBG-130	1 X 1/2	N/A	N/A	N/A
	V5012SBG-101	3/4"x3/4"x1"	N/A	N/A	N/A
	V5012SBG-130	1"x1"x3/4"e	N/A	N/A	N/A
TEES	V5012SBI-010	1"	5012-S-BI	4202-010	80249
	V5012SBI-101	3/4"x3/4"x1/2"	5012-S-BI	4202-101	80250
	V5012RSBI-124	1"x3/4"x1/2"	5012-R-S-BI	4202-124	N/A
	V5012SBI-130	1"x1"x1/2"	5012-S-BI	4202-130	80251
	V5012RSBI-122	1"x1/2"x1"	5012-R-S-BI	4203-122	N/A
	V5012RSBI-156	1-1/4"x1"x1/2"	5012-R-S-BI	4202-156	80256
	V5012SBI-166	1-1/4"x1-1/4"x1/2"	5012-S-BI	4202-166	80252
	V5012RSBI-199	1-1/2"x1-1/4"x1/2"	5012-R-S-BI	4202-199	80257
	V5012SBI-209	1-1/2"x1-1/2"x1/2"	5012-S-BI	4202-209	80254
	V5012SBI-247	2"x2"x1/2"	5012-S-BI	4202-247	80253
TEST PLUG	V450-005	1/2"	450-005	4250-005	N/A
	V5012RSBI-237	2"x1-1/2"x1/2"	5012-R-S-BI	4202-237	80258

THREADED FITTINGS

Cat.	Viking Part Number	Size	Nibco Figure No.	Spears Figure no.	Tyco Figure No.
ADAPTERS	V5003BI-007	3/4"	5003-BI	4235-007	80142
	V5003BI-010	1"	5003-BI	4235-010	80145
	V5003BI-012	1-1/4"	5003-BI	4235-012	80146
	V5003BI-015	1-1/2"	5003-BI	4235-015	80147
	V5003BI-020	2"	5003-BI	4235-020	80148
	V50032BI-007	3/4"	5003-2-BI	4278-007	N/A
	V50032BI-010	1"	5003-2-BI	4278-010	N/A
	V5003SBI-101	3/4"x1/2"	5003-S-BI or 80175W	4235-101	80175E or V80175W
	V5003SBI-130	1"x1/2"	5003-S-BI or V80176W	4235-130	80176E or V80176W
	V5003SBI-131	1"x3/4"	5003-S-BI	4235-131	80179
	V50032SBI-101	3/4"x1/2"	5003-2-S-BI	4238-101	80177L
	V50032SBI-130	1"x1/2"	5003-2-S-BI	4238-130	80178
	V5003BIBSP-010	1"	5003-BI-BSP	N/A	N/A
	V5003BIBSP-012	1-1/4"	5003-BI-BSP	N/A	N/A
	V5003BIBSP-015	1-1/2"	5003-BI-BSP	N/A	N/A
	V5003BIBSP-020	2"	5003-BI-BSP	N/A	N/A
	V5004BI-007	3/4"	5004-BI	4236-007	80157
	V5004BI-010	1"	5004-BI	4236-010	80158
	V5004BI-012	1-1/4"	5004-BI	4236-012	N/A
	V5004BI-015	1-1/2"	5004-BI	4236-015	N/A
	V5004BI-020	2"	5004-BI	4236-020	N/A
	V5004BI-BSP-007	3/4"	5004-BI-BSP	N/A	N/A
	V5004BI-BSP-010	1"	5004-BI-BSP	N/A	N/A
	V5004BI-BSP-012	1-1/4"	5004-BI-BSP	N/A	N/A
	V5004BI-BSP-015	1-1/2"	5004-BI-BSP	N/A	N/A
	V5004BI-BSP-020	2"	5004-BI-BSP	N/A	N/A
ELBOWS	V5018SBI-130	1"x1/2"	5018-S-BI	4238-130BR	N/A
	V50073SBI-101	3/4"x1/2"	5007-3-S-BI	4207-101	80199
	V50073SBI-130	1"x1/2"	5007-3-S-BI	4207-130	80198
	V50073SBI-131	1"x3/4"	5007-3-S-BI	4207-131	80196
	V50073SBI-166	1-1/4"x1/2"	5007-3-S-BI	4207-166	N/A

