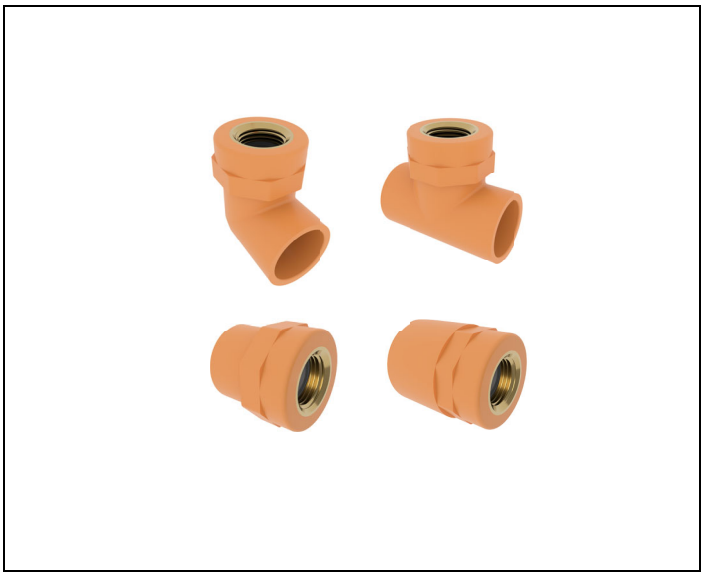
TECHNICAL BULLETIN

INSTASEAL® CPVC SPRINKLER ADAPTERS

1. PRODUCT IDENTIFICATION

The Viking InstaSeal® CPVC sprinkler adapters are fittings designed to streamline the installation process for sprinkler fitters. The gasketed fitting effectively seals the connection upon sprinkler installation, eliminating the need for sealants that are typically used in traditional installation. They are made for use with listed CPVC fire sprinkler pipe produced in SDR 13.5 dimensions, as specified in ASTM F442.



Governmental codes, ordinances, and standards may apply and may differ from one another.

cULus Listed: EX15419

FM Approved: Class 1635

Red Book Listed (LPBC): Certificate 1558a to LPS 1260-2.2

NFS International Listed: NFS/ANSI-62 and NFS/ANSI-372 for use in potable water application.

1.1 Specifications

Item	Value
Pipe	Chlorinated polyvinyl chloride (CVPC)
Seal	EPDM Rubber
Insert	Brass
Pressure rating	175 PSI (12 bar) at 150°F (65°C)

2. ORDERING INFORMATION

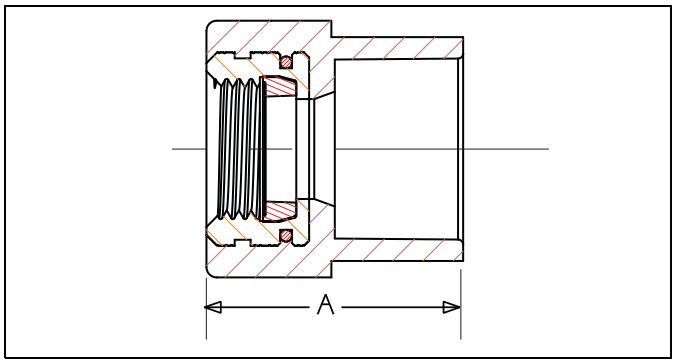


Figure – 1: V5003-S-BG

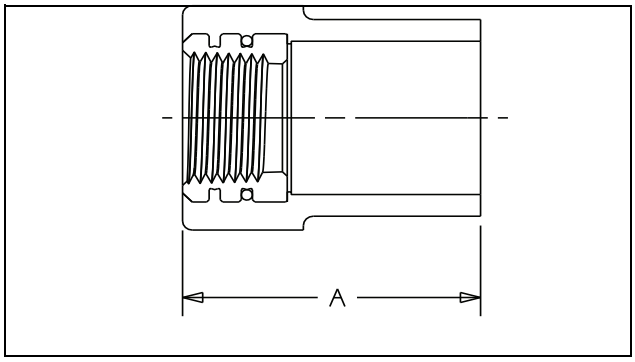


Figure – 2: V5003-2-S-BG

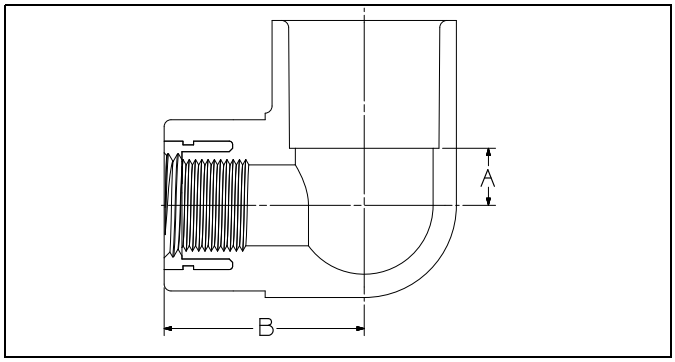


Figure – 3: V5007-S-BG

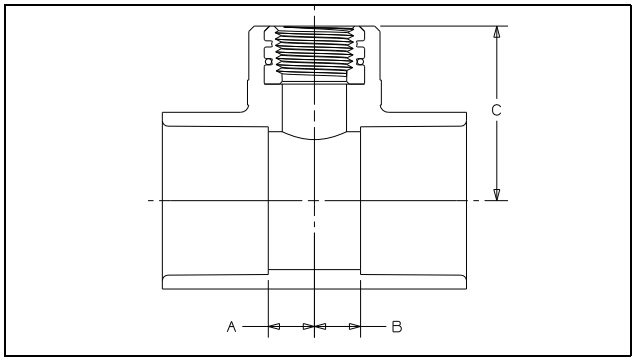


Figure – 4: V5012-S-BG

Model	Part Number	Nominal Size	Dimensions (Inches)			Joint
			A	B	C	
V5003-S-BG	V5003-S-BG-101	3/4 x 1/2	1.50	--	--	S x FNPT
	V5003-S-BG-130	1 x 1/2	1.88	--	--	S x FNPT
V5003-2-S-BG	V5003-2-SBG-101	3/4 x 1/2	1.50	--	--	SPG x FNPT
	V5003-2-SBG-130	1 x 1/2	1.85	--	--	SPG x FNPT
V5007-S-BG	V5007-3-SBG-101	3/4 x 1/2	0.56	1.62	--	S x FNPT
	V5007-3-SBG-130	1 x 1/2	0.50	1.75	--	S x FNPT
V5012-S-BG	V5012-S-BG-101	3/4 x 3/4 x 1/2	0.43	0.43	1.62	S x S x FNPT
	V5012-S-BG-130	1 x 1 x 1/2	0.42	0.42	1.75	S x S x FNPT

3. INSTALLATION

3.1 Installation Standards

Refer to appropriate NFPA, FM Global, and/or any other applicable installation standards. Also refer to the sprinkler's technical data sheet for information regarding installation of the sprinkler.

Installer must be properly trained and certified for BlazeMaster® CPVC piping system(s) construction and assembly.

NOTICE

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

1. Follow BlazeMaster® one-step solvent cement instructions for socket or spigot fittings. **Never complete a solvent cement joint with the sprinkler installed into the InstaSea®l fitting per NFPA 13 requirements. DO NOT OVER APPLY CEMENT WHERE IT COULD SPILL OVER, ONTO THE RUBBER SEAT.**

SEATING THE SPRINKLER:

2. After proper cement cure time, make sure the rubber sealing surface is clean and free of any knicks or scratches on the sprinkler's seal-end surface. Use only the thumb or forefinger (finger strength) to start the sprinkler in the lead thread of the InstaSeal® sprinkler adapter continuing until the sprinkler contacts the rubber seat. The rubber seat must NOT be compressed during this step.

   NOTE: Also include accessories as supplied by sprinkler manufacturer, such as adjustable cups and escutcheons, onto the sprinkler prior to installing sprinkler into adapter fitting.)

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 (1/2) turn for seal. If the sprinkler frame arms require alignment with pipe, continue to rotate CW to align, up to the maximum of 1-1/4 turns from initial seat to sprinkler contact as stated and shown in Figure 5.

   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.

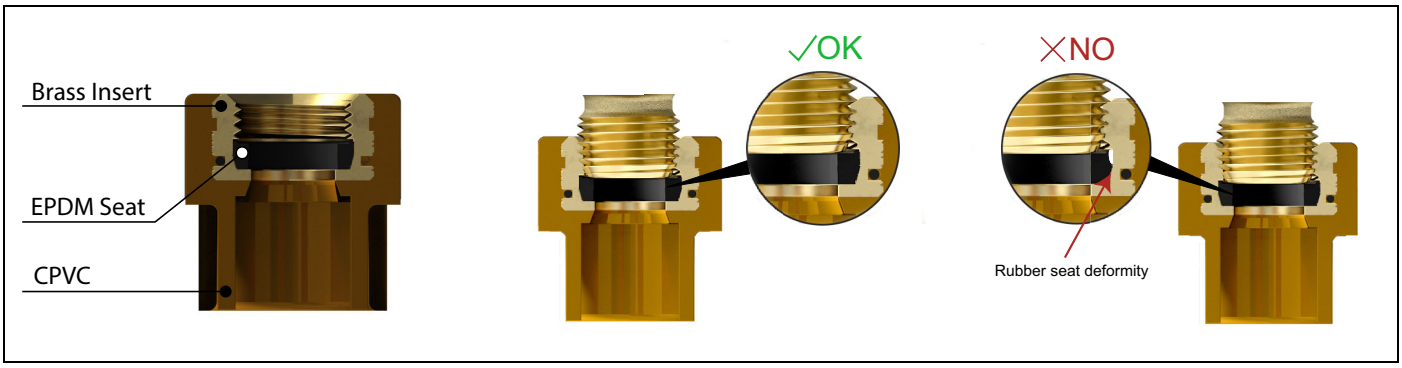


Figure – 5 Sprinkler Contact on Rubber Seat

NOTICE

Do not tighten more than 1-1/4 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, impeding flow. It will also cause permanent damage to the rubber seat, which leads to failure and leakage. Refer to Figure 5.

To tighten the torque from sprinkler touch to rubber seat, refer to the following table and the installation instructions:

Torque Tightening		
Turns	**Inch-Pounds**	**Tightening Recommendation**
1/2 clockwise	14-19	1/2 turns = Minimum
3/4 clockwise	24-30	3/4 = Recommended
1-1/4 clockwise	50-60	1-1/4 = Maximum

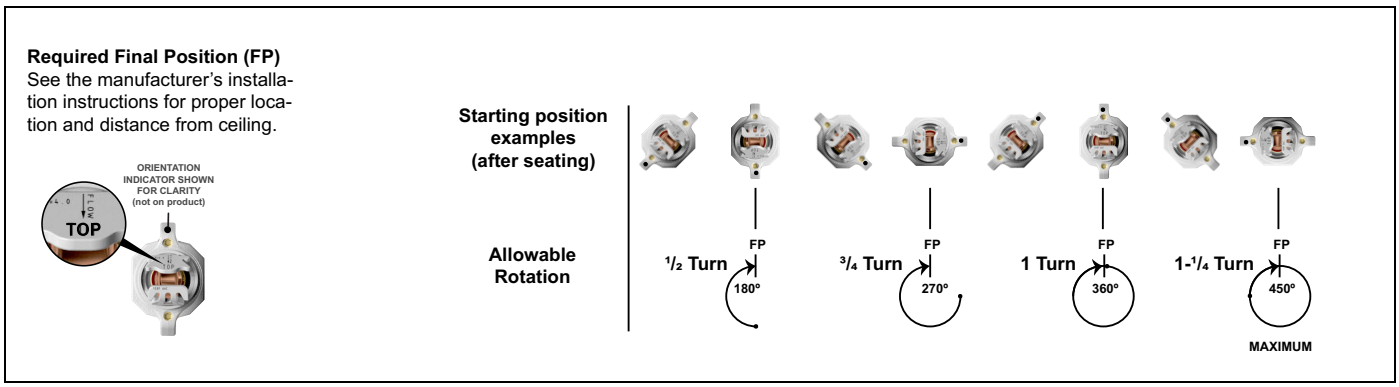


Figure – 6 Torque Tightening Process