## BlazeMaster ${ }^{\text {T }}$ CPVC Pipe

## Technical Features

- Sizes Available (Nominal) : ${ }^{3 / 4} 4^{\prime \prime}$ (DN20) through 3" (DN80) pipe diameters, with a Standard Dimension Ratio (SDR) of 13.5 as specified in ASTM F442.
- Environmental Specifications : Indoor use only.

Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$

- Hazen-Williams C Value : 150
- Pressure Data : Working Pressure : $175 \mathrm{PSI}(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Specifications :
- Meets NFPA 13, 13R and 13D standards for light hazard occupancies. Pipe meets or exceeds ASTM F442.
- Approved for National Sanitation Foundation (NSF) potable water services
- CPVC Pipe from Viking SupplyNet complies to NSF cell class 23547 (demonstrated highest structural properties).
- Meets LPC Sprinkler Rules requirements


| BlazeMaster ${ }^{\circledR}$ CPVC Pipe |  |  |  |  |  |  |  | Physical Data |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Pipe Size |  | Actual Outside Diameter |  | Average I.D. (inch / mm) | Weight per $\mathbf{1 5}^{\prime}$ (4.6m) length (lb/kg) | Length (ft / m) | Approvals | Part Number |
| inch | metric | inch | mm |  |  |  |  |  |
| 3/4" | DN20 | 1.050 | 26,670 | 0.874 / 22,199 | 2.52 / 1,14 | 15 / 4,6 | cULus, FM, LPCB*, WRAS, NSF | 34PIPE |
| 1" | DN25 | 1.315 | 33,401 | 1.101 / 27,965 | 3.93 / 1,78 | 15 / 4,6 |  | 1PIPE |
| $1^{1 / 4 \prime}{ }^{\prime \prime}$ | DN32 | 1.660 | 42,164 | 1.394 / 35,408 | 6.27 / 2,84 | 15 / 4,6 |  | 114PIPE |
| $1^{1 / 2 \prime}{ }^{\prime \prime}$ | DN40 | 1.900 | 48,260 | 1.598 / 40,589 | 8.22 / 3,73 | 15 / 4,6 |  | 112PIPE |
| 2" | DN50 | 2.375 | 60,325 | 2.003 / 50,876 | 12.89 / 5,85 | 15 / 4,6 |  | 2PIPE |
| $2^{1 / 2 \prime}{ }^{\prime \prime}$ | DN65 | 2.875 | 73,000 | 2.423 / 61,500 | 18.86 / 8,55 | 15 / 4,6 |  | 212PIPE |
| 3" | DN80 | 3.500 | 88,900 | 2.950 / 74,900 | 28.01 / 12,71 | 15 / 4,6 |  | 3PIPE |
| Nominal Pipe Size |  | Actual Outside Diameter |  | Average I.D. (inch / mm) | Weight per 10' ( $3,05 \mathrm{~m}$ ) length (lb / kg) | Length (ft / m) | Approvals | Part Number |
| inch | metric | inch | mm |  |  |  |  |  |
| $3 / 4^{\prime \prime}$ | DN20 | 1.050 | 26,670 | 0.874 / 22,199 | 1.68 / 0,76 | 10 / 3,05 | $\begin{gathered} \text { cULus, FM, } \\ \text { LPCB*, WRAS, } \\ \text { NSF } \end{gathered}$ | 34PIPE10 |
| $1^{\prime \prime}$ | DN25 | 1.315 | 33,401 | 1.101 / 27,965 | 2.62 / 1,19 | 10 / 3,05 |  | 1 PIPE10 |
| $1^{1 / 1 / 4}$ | DN32 | 1.660 | 42,164 | 1.394 / 35,408 | 4.18 / 1,90 | 10 / 3,05 |  | 114PIPE10 |
| $1^{1 / 2 \prime}{ }^{\prime \prime}$ | DN40 | 1.900 | 48,260 | 1.598 / 40,589 | 5.48 / 2,49 | 10 / 3,05 |  | 112PIPE10 |
| 2" | DN50 | 2.375 | 60,325 | 2.003 / 50,876 | 8.59 / 3.90 | 10 / 3,05 |  | 2PIPE10 |
| 21/2" | DN65 | 2.875 | 73,000 | 2.423 / 61,500 | 12.57 / 5,70 | 10 / 3,05 |  | 212PIPE10 |
| 3" | DN80 | 3.500 | 88,900 | 2.950 / 74,900 | 18.67 / 8,47 | 10 / 3,05 |  | 3PIPE10 |

Note: CPVC Pipe is produced in SDR 13.5 Dimensions in accordance with ASTM F442. Standard Dimension Ratio is the ratio of the outside pipe diameter to the wall thickness of the pipe

* Approved up to and includng 2"

IMPORTANT: Installers should receive thorough hands-on training in the proper methods of assembly and installation of CPVC products. On-site training is available at no charge from Viking SupplyNet. Participants in the training program will receive a special card acknowledging their attendance. In addition to receiving proper training, installers must always consult the Manufacturer's Design and Installation Guide before any installation project is commenced.

## BlazeMaster ${ }^{\text {® }}$ CPVC Pipe

## BlazeMaster ${ }^{\circledR}$ CPVC Pipe

Corrosion resistance CPVC fire sprinkler pipe, when installed in strict accordance with the manufacturer's design and installation instructions, are UL and C-UL Listed by Underwriters Laboratories for use in the following:

- Light Hazard occupancies as defined in the Standard for Installation of Sprinkler Systems, NFPA 13.
- Residential occupancies up to and including four stories in height as defined by NFPA 13R.
- Residential occupancies as defined in the Standard for Sprinkler Systems in One and Two Family Dwellings, NFPA13D.
- Installation of private fire service mains and their appurtenances, NFPA 24.

CPVC fire sprinkler pipe from Viking SupplyNet shall be employed in wet pipe systems only and are not listed for outdoor use. CPVC pipe must never be used in a system using compressed air or other gases.
CPVC pipe from Viking SupplyNet also carries the following enhanced listings and approvals:

- According to UL Listed (UL 1821)
- Can be flush at return air plenums
- Mechanical cut-in tee $\&$ crosses concealed with Grinnell figure 730 fittings
- Mechanical cut-in tee \& crosses exposed with Grinnell figure 730 fittings
- Exposed system risers NFPA 13D, 13R
- Exposed basement NFPA 13D (solid wood joist)
- Extended coverage (exposed)
- $20^{\prime}$ spacing on pendent in lieu of $15^{\prime}$
- $18^{\prime}$ spacing on sidewall in lieu of $14^{\prime}$
- Use with combustible concealed sprinklers
- Tyco attic sprinkler head (to protect the floor below)
- Tyco attic sprinkler head with wet system piping (feed main and ridge installation)
- Exposed sidewall sprinkler Listing for exposed pipe \& fittings
- $24^{\prime}$ extended coverage sidewall sprinkler, $12^{\prime \prime}$ drop, $155^{\circ} \mathrm{F}$ sprinkler head
- $18^{\prime}$ extended coverage sidewall sprinkler, $12^{\prime \prime}$ drop, $165^{\circ} \mathrm{F}$ sprinkler head
- $16^{\prime}$ extended coverage sidewall sprinkler, $12^{\prime \prime}$ drop, $175^{\circ} \mathrm{F}$ sprinkler head
- $14^{\prime}$ standard coverage sidewall sprinkler, $12^{\prime \prime}$ drop, $200^{\circ} \mathrm{F}$ sprinkler head
- Factory Mutual Approved*
- Factory Mutual Approval exposed
- Factory Mutual Approval above drop-in ceilings
- Factory Mutual Approval exposed w/ Soffi-Steel soffiting covering system
- LPCB Approval
-WRAS Approval
The above data is based on UL and FM reported Listings and Approvals as of $11 / 30 / 05$. New and enhanced listings and approvals are being pursued. Always check with the appropriate Listing and Approval agency for details on current listing parameters.
CPVC pipe also meets all applicable standards for pressure rated application as required in ANSI-NSF Standard 14 and complies with ANSI-NSF Standard 61 for health effects and are marked with the NSF-pw end us marking. Viking Plastics CPVC Pipe is manufactured from WRAS approved Blazemaster ${ }^{\circledR}$ compound
All CPVC fire sprinkler pipe shall be Listed by Underwriters Laboratories for wet pipe systems, and shall carry a rated working pressure of 175 psi @ $150^{\circ} \mathrm{F}\left(12 \mathrm{bar} @ 66^{\circ} \mathrm{C}\right)$. The FM Approval is limited to use in wet pipe fire protection sprinkler systems for light hazard occupancies in both concealed and exposed applications with certain restrictions.
Piping must always be installed in strict accordance to the manufacturer's System Design and Installation Manual, including product storage and handling, joining methods, supporting and bracing, expansion and contraction allowance and testing, etc. National Fire Protection Association (NFPA) Standards 13, 13D, and 13R or LPC Sprinkler Rules Technical Bulletins, must be referenced for design and installation requirements in conjunction with the installation instructions.
All CPVC fire sprinkler pipe from Viking SupplyNet is manufactured in the USA by an ISO 9001 certified manufacturer. All CPVC pipe shall be packaged immediately after its manufacture to prevent damage and shall be stored indoors after production, at the manufacturing site, until shipped from the factory. The pipe shall bear the logo of the listing agencies, and shall carry the National Sanitation Foundation (NSF) seal of approval for potable water applications.
CPVC products are intended for use in areas where the maximum ambient temperature does not exceed $150^{\circ} \mathrm{F}\left(66^{\circ} \mathrm{C}\right)$. If the ambient temperature is expected to exceed this limitation, refer to the manufacturer's System Design and Installation Manual for additional information on methods to reduce the pipe exposure temperatures. CPVC pipe is not intended to be installed in outdoor applications. CPVC pipe is intended to beused in wet pipe systems only and have not been investigated for use in dry pipe systems. Special installation and design criteria relative to pipe hanger spacings, piping and sprinkler restraint, sprinkler temperature rating, piping locations, testing procedures and friction loss characteristics are specified in the manufacturer's installation instructions provided with the pipe. The manufacturer's installation instructions should be reviewed and the Authority Having Jurisdiction consulted before installation.


## Reducing Tee

## Socket x Socket x Socket

## Technical Features

- Sizes Available (Nominal) : See table below.
- Environmental Specifications : Indoor use only. Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$
- Pressure Data : Working Pressure : 175 PSI (12.1 bar) at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Specifications: For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1^{1} / 4^{\prime \prime}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of $175 \mathrm{psi}(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.
* LPCB Approved up to and including 2" ** Approval pending.



## Reducing Tee - Socket x Socket x Socket

| Nominal Pipe Size |  | Dimensions (mm / inch) |  |  | Approx. Weight (lbs. / kgs.) | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | A | B | C |  |  |
| $3 / 4^{\prime \prime} \times 3 / 4^{\prime \prime} \times 1^{\prime \prime}$ | DN20 x DN20 x DN25 | / 0.70 | / 0.70 | / 0.73 | 0.15 / 0.068 | V5011R-102 |
| $1^{\prime \prime} \times 3 / 4^{\prime \prime} \times 3 / 4^{\prime \prime}$ | DN25 x DN20 x DN20 | / 0.74 | / 0.80 | / 0.84 | 0.15 / 0.068 | V5011R-125 |
| $1^{\prime \prime} \times{ }^{\prime \prime} 4^{\prime \prime} \times 1^{\prime \prime}$ | DN25 x DN20 x DN25 | / 0.74 | / 0.91 | / 0.73 | 0.22 / 0.100 | V5011R-126 |
| $1^{\prime \prime} \times 1^{\prime \prime} \times 3 / 4^{\prime \prime}$ | DN25 x DN25 x DN20 | / 0.61 | / 0.61 | / 0.94 | 0.13 / 0.059 | V5011R-131 |
| $1^{1 / 1} 4^{\prime \prime} \times 1^{\prime \prime} \times 3 / 4^{\prime \prime}$ | DN32 x DN25 x DN20 | / 0.74 | / 0.60 | / 0.89 | 0.20 / 0.091 | V5011R-157 |
| $1^{1 / 44^{\prime \prime} \times 1 "} \times 1^{\prime \prime}$ | DN32 x DN25 x DN25 | / 0.90 | / 0.71 | / 0.89 | 0.24 / 0.110 | V5011R-158 |
|  | DN32 x DN25 x DN32 | / 1.00 | / 0.91 | / 0.87 | 0.28 / 0.130 | V5011R-159 |
|  | DN32 x DN32 x DN20 | / 0.60 | / 0.60 | / 0.89 | 0.21 / 0.095 | V5011R-167 |
| $1^{1 / 44^{\prime \prime} \times 1 / 4^{\prime \prime} \times 1^{\prime \prime}}$ | DN32 x DN32 $\times$ DN25 | / 0.72 | / 0.72 | / 0.89 | 0.13 / 0.059 | V5011R-168 |
| $1^{1 / 4^{\prime \prime}} \times 1^{1 / 44^{\prime \prime} \times 11^{1 / 2} 2^{\prime \prime}}$ | DN32 $\times$ DN32 $\times$ DN40 | / 1.00 | / 1.00 | / 0.88 | 0.42 / 0.191 | V5011R-169 |
|  | DN40 x DN32 x DN20 | / 0.76 | / 0.62 | / 1.02 | $0.35 / 0.159$ | V5011R-201 |
| $1^{1} / 2^{\prime \prime} \times 1^{1} / 4^{\prime \prime} \times 1^{\prime \prime}$ | DN40 x DN32 x DN25 | / 0.88 | / 0.74 | / 1.01 | 0.39 / 0.177 | V5011R-202 |
| $1^{1 / 2^{\prime \prime}} \times 1^{1 /} / 2^{\prime \prime} \times{ }^{\prime \prime} / 4^{\prime \prime}$ | DN40 $\times$ DN40 $\times$ DN20 | / 0.76 | / 0.76 | / 1.31 | 0.48 / 0.172 | V5011R-210 |
|  | DN40 x DN40 x DN25 | / 0.77 | / 0.77 | / 1.29 | 0.52 / 0.236 | V5011R-211 |
| $1^{1 / 1} 2^{\prime \prime} \times 1^{1} / 2^{\prime \prime} \times 1^{1 / 1} 4^{\prime \prime}$ | DN40 x DN40 x DN32 | / 0.87 | / 0.87 | / 1.04 | 0.47 / 0.213 | V5011R-212 |
|  | DN40 x DN40 x DN50 | / 1.30 | / 1.29 | / 1.14 | 0.67 / 0.304 | V5011R-213 |
| $2^{\prime \prime} \times 2^{\prime \prime} \times 3 / 4^{\prime \prime}$ | DN50 x DN50 x DN20 | / 0.67 | / 0.67 | / 1.56 | 0.65 / 0.295 | V5011R-248 |
| $2^{\prime \prime} \times 2^{\prime \prime} \times 1^{\prime \prime}$ | DN50 x DN50 x DN25 | / 0.77 | / 0.77 | / 1.55 | 0.69 / 0.313 | V5011R-249 |
| $2^{\prime \prime} \times 2^{\prime \prime} \times 1^{1 / 2^{\prime \prime}}$ | DN50 x DN50 x DN40 | / 1.04 | / 1.04 | / 1.29 | 0.83 / 0.376 | V5011R-251 |
|  | DN65 x DN65 x DN25 | / 1.53 | / 1.53 | / 2.59 | 1.87 / 0.848 | V5011R-289 |
| $2^{1 / 1 / 2^{\prime \prime} \times 21 / 2^{\prime \prime} \times 1^{1 / 1} 4^{\prime \prime}}$ | DN65 x DN65 x DN32 | / 1.53 | / 1.53 | / 2.47 | 1.90 / 0.862 | V5011R-290 |
| $2^{1 / 1 / 2^{\prime \prime} \times 21 / 2^{\prime \prime} \times 1^{1 / 1} 2^{\prime \prime}}$ | DN65 x DN65 x DN40 | / 1.53 | / 1.53 | / 2.08 | 1.86 / 0.844 | V5011R-291 |
| $3^{\prime \prime} \times 3^{\prime \prime} \times 2^{\prime \prime}$ | DN80 x DN80 x DN50 | / 1.34 | / 1.34 | / 1.82 | 1.73 / 0.785 | V5011R-338 |
| $3^{\prime \prime} \times 3^{\prime \prime} \times 2^{1 / 2 \prime}{ }^{\prime \prime}$ | DN80 x DN80 x DN65 | / 1.84 | / 1.84 | / 2.55 | 2.90 / 1.320 | V5011R-339 |

## Equal Tee

## Socket x Socket x Socket

## Technical Features

- Sizes Available (Nominal) : ${ }^{3 / 4} 4^{\prime \prime}$ (DN20) through 3" (DN80) pipe diameters.
- Environmental Specifications : Indoor use only.

Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$

- Pressure Data : Working Pressure : $175 \mathrm{PSI}(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Specifications : For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442. CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1^{1 / 14^{\prime \prime}}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of 175 psi ( 12.1 bar ) at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending.


## Equal Tee - Socket x Socket $\mathbf{x}$ Socket

Physical Data

| Nominal Pipe Size |  | Dimensions (mm / inch) |  |  | Approx. Weight (lbs. / kgs.) | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | A | B | C |  |  |
| $3 / 4{ }^{\prime \prime}$ | DN20 | / 0.56 | / 0.56 | / 0.56 | 0.09 / 0.04 | V5011-007 |
| 1" | DN25 | / 0.69 | / 0.69 | / 0.69 | 0.15 / 0.07 | V5011-010 |
| $1^{1 / 4 \prime}{ }^{\prime \prime}$ | DN32 | / 0.89 | / 0.89 | / 0.89 | 0.30 / 0.14 | V5011-012 |
| 11/2" | DN40 | / 1.06 | / 1.06 | / 1.06 | 0.73 / 0.33 | V5011-015 |
| 2" | DN50 | / 1.27 | / 1.27 | / 1.27 | 1.05 / 0.48 | V5011-020 |
| 21/2" | DN65 | / 1.53 | / 1.53 | / 1.53 | 1.59 / 0.72 | V5011-025 |
| 3" | DN80 | / 1.84 | / 1.84 | / 1.84 | 2.38 / 1.10 | V5011-030 |

CPVC Fittings
Allowances for Friction Loss in Fittings

| Nominal Pipe Size |  | Equivalent Feet / Meters of Pipe |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | Tee Run | Tee Branch | 90 Elbow | $45^{\circ}$ Elbow | Coupling |
| $3 / 4^{\prime \prime}$ | DN20 | $1 / 0.3$ | 3 / 0.9 | 7 / 2.1 | 1 / 0.3 | 1 / 0.3 |
| $1^{\prime \prime}$ | DN25 | $1 / 0.3$ | 5 / 1.5 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{1 / 4} 4^{\prime \prime}$ | DN32 | $1 / 0.3$ | 6/1.8 | 8 / 2.4 | $2 / 0.6$ | $1 / 0.3$ |
| 11/2" | DN40 | $1 / 0.3$ | $8 / 2.4$ | 9 / 2.7 | $2 / 0.6$ | $1 / 0.3$ |
| 2" | DN50 | $1 / 0.3$ | 10 / 3.1 | 11 / 3.4 | $2 / 0.6$ | $1 / 0.3$ |
| 21/2" | DN65 | $2 / 0.6$ | 12 / 3.7 | 12 / 3.7 | $3 / 0.9$ | $2 / 0.6$ |
| 3" | DN80 | $2 / 0.6$ | 15 / 4.6 | 13 / 4.0 | 4 / 1.2 | $2 / 0.6$ |

## Sprinkler Head Tee (Metal Thread Insert) Socket x Socket x NPT Thread

## Technical Features

- Sizes Available (Nominal) : See table below.
- Environmental Specifications : Indoor use only. Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$
- Pressure Data : Working Pressure : $175 \mathrm{PSI}(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Threaded Connections : 1 female threaded NPT outlet.
- Specifications : For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442. CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1^{1} / 4^{\prime \prime}$ (DN32) and in Schedule 80 for sizes $1^{1 / 2 \prime 2}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of $175 \mathrm{psi}(12.5 \mathrm{bar})$ at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending.

Sprinkler Head Tee (Metal Thread Insert) - Socket $\mathbf{x}$ Socket $\mathbf{x}$ NPT Thread $\quad$ Physical Data

| Nominal Pipe Size |  | Dimensions (inch) |  |  | Approx. Weight (lbs. / kgs.) | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | A | B | C |  |  |
| $3 / 4^{\prime \prime} \times 3 / 4^{\prime \prime} \times 1 / 2^{\prime \prime}$ | DN20 x DN20 x DN15 | / 0.42 | / 0.42 | / 1.60 | 0.22 / 0.100 | V5012SBI-101 |
| $1^{\prime \prime} \times 3 / 4^{\prime \prime} \times 1 / 2^{\prime \prime}$ | DN25 x DN20 x DN15 | / 0.43 | / 0.83 | / 1.69 | 0.27 / 0.125 | V5012RSBI-124 |
| $1^{\prime \prime} \times 1^{\prime \prime} \times 1 / 2^{\prime \prime}$ | DN25 x DN25 x DN15 | / 0.42 | / 0.42 | / 1.76 | 0.28 / 0.127 | V5012SBI-130 |
| $1^{\prime \prime} \times 1^{\prime \prime} \times 1^{\prime \prime}$ | DN25 x DN25 x DN25 | / 0.83 | / 0.83 | / 1.48 | 0.43 / 0.195 | V5012SBI-010 |
| $1^{1 / 44^{\prime \prime}} \times 1^{\prime \prime} \times 1 / 2^{\prime \prime}$ | DN32 x DN25 x DN15 | / 0.51 | / 0.63 | / 1.94 | 0.33 / 0.149 | V5012RSBI-156 |
| $1^{1 / 4^{\prime \prime}} \times 1^{1 / 4^{\prime \prime}} \times 1 / 2^{\prime \prime}$ | DN32 $\times$ DN32 $\times$ DN15 | / 0.51 | / 0.51 | / 1.95 | 0.33 / 0.149 | V5012SBI-166 |
| $1^{1 / 2^{\prime \prime}} \times 1^{1 / 4^{\prime \prime}} \times 1 / 2^{\prime \prime}$ | DN40 $\times$ DN32 $\times$ DN15 | / 0.45 | / 0.67 | / 2.13 | 0.47 / 0.213 | V5012RSBI-199 |
| $1^{1 / 2^{\prime \prime}} \times 11^{1 / 2^{\prime \prime}} \times 1 / 2^{\prime \prime}$ | DN40 x DN40 x DN15 | / 0.45 | / 0.45 | / 2.13 | $0.47 / 0.213$ | V5012SBI-209 |
| $2^{\prime \prime} \times 1^{1 / 2} 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | DN50 x DN40 $\times$ DN15 | / 0.62 | / 0.82 | / 2.38 | $0.58 / 0.263$ | V5012RSBI-237 |
| $2^{\prime \prime} \times 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | DN50 x DN50 x DN15 | / 0.50 | / 0.50 | / 1.68 | 0.58 / 0.263 | V5012SBI-247 |

CPVC Fittings
Allowances for Friction Loss in Fittings

| Nominal Pipe Size |  | Equivalent Feet / Meters of Pipe |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | Tee Run | Tee Branch | $90^{\circ}$ Elbow | $45^{\circ}$ Elbow | Coupling |
| $3 / 4{ }^{\prime \prime}$ | DN20 | 1 / 0.3 | 3 / 0.9 | 7 / 2.1 | 1 / 0.3 | 1 / 0.3 |
| $1^{\prime \prime}$ | DN25 | $1 / 0.3$ | $5 / 1.5$ | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{1 / 4} 4^{\prime \prime}$ | DN32 | $1 / 0.3$ | 6 / 1.8 | 8 / 2.4 | $2 / 0.6$ | $1 / 0.3$ |
| $1^{1 / 2} 2^{\prime \prime}$ | DN40 | $1 / 0.3$ | $8 / 2.4$ | 9 / 2.7 | $2 / 0.6$ | $1 / 0.3$ |
| 2" | DN50 | $1 / 0.3$ | 10 / 3.1 | 11 / 3.4 | $2 / 0.6$ | $1 / 0.3$ |
| 21/2" | DN65 | $2 / 0.6$ | 12 / 3.7 | 12 / 3.7 | $3 / 0.9$ | $2 / 0.6$ |
| 3" | DN80 | $2 / 0.6$ | 15 / 4.6 | 13 / 4.0 | 4 / 1.2 | 2 / 0.6 |

## Sprinkler Head Tee (Metal Thread Insert)

## Socket x NPT Thread x Socket

## Technical Features

- Sizes Available (Nominal) : $1^{\prime \prime}(\mathrm{DN} 25) \times 1 / 2^{\prime \prime}(\mathrm{DN} 15) \times 1^{\prime \prime}$ (DN25) - Environmental Specifications : Indoor use only.

Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$

- Pressure Data : Working Pressure : $175 \mathrm{PSI}(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Threaded Connections : 1 female threaded NPT outlet.
- Specifications: For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442. CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1^{1 / 4^{\prime \prime}}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of 175 psi (12.1 bar) at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service. Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending.



## 

 ASTM F442. water use.Sprinkler Head Tee (Metal Thread Insert) - Socket x NPT Thread x Socket $\quad$ Physical Data

| Nominal Pipe Size |  | Dimensions (mm / inch) |  |  | Approx. Weight (lbs. / kgs.) | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | A | B | C |  |  |
| $1^{\prime \prime} \times 1 / 2^{\prime \prime} \times 1^{\prime \prime}$ | DN25 x DN15 x DN25 | / | / | / | 0.25 / 0.113 | V5012RSBI-122 |


| CPVC Fittings |  | Allowances for Friction Loss in Fittings |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Pipe Size |  | Equivalent Feet / Meters of Pipe |  |  |  |  |
| inch | metric | Tee Run | Tee Branch | $90^{\circ}$ Elbow | $45^{\circ}$ Elbow | Coupling |
| 3/44 ${ }^{\prime \prime}$ | DN20 | $1 / 0.3$ | $3 / 0.9$ | 7/2.1 | 1/0.3 | $1 / 0.3$ |
| 1" | DN25 | 1 / 0.3 | 5 / 1.5 | $7 / 2.1$ | $1 / 0.3$ | $1 / 0.3$ |
| $1^{1 / 4^{\prime \prime}}$ | DN32 | 1/0.3 | 6/1.8 | 8/2.4 | 2/0.6 | 1/0.3 |
| $11 / 2^{\prime \prime}$ | DN40 | $1 / 0.3$ | 8/2.4 | $9 / 2.7$ | $2 / 0.6$ | $1 / 0.3$ |
| 2 " | DN50 | $1 / 0.3$ | 10 / 3.1 | 11 / 3.4 | $2 / 0.6$ | 1/0.3 |
| $2^{1 / 2^{\prime \prime}}$ | DN65 | $2 / 0.6$ | 12 / 3.7 | 12 / 3.7 | $3 / 0.9$ | $2 / 0.6$ |
| $3^{\prime \prime}$ | DN80 | $2 / 0.6$ | 15 / 4.6 | 13/4.0 | 4 / 1.2 | $2 / 0.6$ |

## Sprinkler Head Tee - Sidewall (Metal Thread Inserts) NPT Thread x NPT Thread x Socket

## Technical Features

- Sizes Available (Nominal) : ${ }^{1 / 2 "}$ (DN15) pipe run with $1^{\prime \prime}$ (DN25) outlet.
- Environmental Specifications : Indoor use only. Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$
- Pressure Data : Working Pressure : $175 \mathrm{PSI}(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Threaded Connections : 2 female threaded NPT inlets.
- Specifications : For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1^{1} / 4^{\prime \prime}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through $3^{\prime \prime}$ (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of $175 \mathrm{psi}(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service. Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending.

CPVC Fittings

| Nominal Pipe Size |  | Equivalent Feet / Meters of Pipe |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | Tee Run | Tee Branch | $90^{\circ}$ Elbow | $45^{\circ}$ Elbow | Coupling |
| $3 / 4^{\prime \prime}$ | DN20 | $1 / 0.3$ | 3 / 0.9 | 7 / 2.1 | $1 / 0.3$ | 1 / 0.3 |
| 1" | DN25 | $1 / 0.3$ | 5 / 1.5 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{1 / 44^{\prime \prime}}$ | DN32 | $1 / 0.3$ | 6 / 1.8 | $8 / 2.4$ | 2 / 0.6 | $1 / 0.3$ |
| $1^{1 / 2} 2^{\prime \prime}$ | DN40 | $1 / 0.3$ | 8 / 2.4 | 9 / 2.7 | $2 / 0.6$ | 1 / 0.3 |
| 2" | DN50 | $1 / 0.3$ | 10 / 3.1 | 11 / 3.4 | $2 / 0.6$ | $1 / 0.3$ |
| 21/2" | DN65 | $2 / 0.6$ | 12 / 3.7 | 12 / 3.7 | $3 / 0.9$ | 2 / 0.6 |
| 3" | DN80 | $2 / 0.6$ | 15 / 4.6 | 13 / 4.0 | 4 / 1.2 | 2 / 0.6 |

## $90^{\circ}$ Elbow \& Reducing $90^{\circ}$ Elbow

## Socket x Socket

## Technical Features

- Sizes Available (Nominal) : See tables below.
- Environmental Specifications : Indoor use only. Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$
- Pressure Data : Working Pressure : $175 \mathrm{PSI}(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Specifications : For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1^{1} / 4^{\prime \prime}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of 175 psi ( 12.1 bar ) at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.


Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending.
90 Elbow - Socket x Socket

| Nominal Pipe Size |  | Dimensions (mm / inch) |  | Approx. Weight (lbs. / kgs.) | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | A | B |  |  |
| $3 / 4{ }^{\prime \prime}$ | DN20 | / 0.56 | / 0.56 | 0.06 / 0.022 | V5007-007 |
| 1 " | DN25 | / 0.69 | / 0.69 | 0.09 / 0.034 | V5007-010 |
| $1^{1 / 4 \prime}{ }^{\prime \prime}$ | DN32 | / 0.91 | / 0.91 | 0.16 / 0.059 | V5007-012 |
| 11/2" | DN40 | / 1.06 | / 1.06 | 0.50 / 0.187 | V5007-015 |
| 2" | DN50 | / 1.24 | / 1.24 | 0.70 / 0.261 | V5007-020 |
| 21/2" | DN65 | / 1.50 | / 1.50 | 1.16 / 0.433 | V5007-025 |
| 3" | DN80 | / 1.81 | / 1.81 | 1.82 / 0.679 | V5007-030 |


| Reducing $90^{\circ}$ Elbow - Socket x Socket |  |  |  | Approx. Weight (lbs. / kgs.) | Physical Data |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nom | Pipe Size | Dimensions (mm / inch) |  |  | Part Number |
| inch | metric | A | B |  | Part Number |
| $1^{\prime \prime} \mathrm{X}^{3 / 4 \prime}$ | DN25 x DN32 | / 0.61 | / 0.75 | 0.12 / 0.045 | V5007R-131 |

CPVC Fittings

| Nominal Pipe Size |  | Equivalent Feet / Meters of Pipe |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | Tee Run | Tee Branch | $90^{\circ}$ Elbow | $45^{\circ}$ Elbow | Coupling |
| $3 / 4{ }^{\prime \prime}$ | DN20 | $1 / 0.3$ | 3 / 0.9 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{\prime \prime}$ | DN25 | $1 / 0.3$ | 5 / 1.5 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{1 / 4 \prime}{ }^{\prime \prime}$ | DN32 | $1 / 0.3$ | 6 / 1.8 | 8 / 2.4 | $2 / 0.6$ | $1 / 0.3$ |
| 11/2" | DN40 | $1 / 0.3$ | $8 / 2.4$ | 9 / 2.7 | $2 / 0.6$ | $1 / 0.3$ |
| 2" | DN50 | $1 / 0.3$ | 10 / 3.1 | 11 / 3.4 | 2 / 0.6 | $1 / 0.3$ |
| 21/2" | DN65 | $2 / 0.6$ | 12 / 3.7 | 12 / 3.7 | $3 / 0.9$ | $2 / 0.6$ |
| 3" | DN80 | 2 / 0.6 | 15 / 4.6 | 13 / 4.0 | 4 / 1.2 | 2 / 0.6 |

## Sprinkler Head $90^{\circ}$ Elbow (Metal Thread Insert)

## Socket x NPT Thread

## Technical Features

- Sizes Available (Nominal) : $3^{\prime \prime \prime}$ (DN20) through $1^{1} / 4^{\prime \prime}$ (DN32) run, $1 / 2^{\prime \prime}$ (DN15) and ${ }^{3} / 4^{\prime \prime}$ (DN20) outlet.
- Environmental Specifications : Indoor use only. Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$
- Pressure Data : Working Pressure : 175 PSI (12.1 bar) at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Threaded Connections : 1 female threaded NPT outlet.
- Specifications: For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1^{1 / 1 / 4^{\prime \prime}}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through $3^{\prime \prime}$ (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of 175 psi ( 12.1 bar ) at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending.


## Sprinkler Head 90 Elbow (Metal Thread Insert) - Socket x NPT Thread Physical Data

| Nominal Pipe Size |  | Dimensions (mm / inch) |  | Approx. Weight (lbs. / kgs.) | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | A | B |  |  |
| $3^{3 / 4} 4^{\prime \prime} \times 1 / 2^{\prime \prime}$ | DN20 x DN15 | / 0.56 | / 1.62 | 0.22 / 0.099 | V50073SBI-101 |
| $1^{\prime \prime} \times 1 / 2^{\prime \prime}$ | DN25 x DN15 | / 0.50 | / 1.75 | 0.27 / 0.122 | V50073SBI-130 |
| $1^{\prime \prime} \mathrm{x}^{3 / 4} 4^{\prime \prime}$ | DN25 x DN20 | / 0.59 | / 1.88 | 0.27 / 0.122 | V50073SBI-131 |
| $1^{1 / 4} 4^{\prime \prime} \times 1 / 2^{\prime \prime}$ | DN32 x DN15 | / 0.48 | / 1.95 | 1.86 / 0.844 | V50073SBI-166 |

CPVC Fittings
Allowances for Friction Loss in Fittings

| Nominal Pipe Size |  | Equivalent Feet / Meters of Pipe |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | Tee Run | Tee Branch | $90^{\circ}$ Elbow | $45^{\circ}$ Elbow | Coupling |
| $3 / 4^{\prime \prime}$ | DN20 | $1 / 0.3$ | 3 / 0.9 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{\prime \prime}$ | DN25 | $1 / 0.3$ | $5 / 1.5$ | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{1 / 4}{ }^{\prime \prime}$ | DN32 | $1 / 0.3$ | 6 / 1.8 | $8 / 2.4$ | $2 / 0.6$ | $1 / 0.3$ |
| $1^{1 / 2} 2^{\prime \prime}$ | DN40 | $1 / 0.3$ | 8 / 2.4 | 9 / 2.7 | $2 / 0.6$ | $1 / 0.3$ |
| 2" | DN50 | $1 / 0.3$ | 10 / 3.1 | 11 / 3.4 | $2 / 0.6$ | $1 / 0.3$ |
| 21/2" | DN65 | $2 / 0.6$ | 12 / 3.7 | 12 / 3.7 | $3 / 0.9$ | $2 / 0.6$ |
| 3" | DN80 | 2 / 0.6 | 15 / 4.6 | 13 / 4.0 | 4 / 1.2 | $2 / 0.6$ |

## $45^{\circ}$ Elbow

## Socket x Socket

## Technical Features

- Sizes Available (Nominal) : $3^{1 / 4^{\prime \prime}}$ (DN20) through 3" (DN80) pipe diameters.
- Environmental Specifications : Indoor use only. Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$
- Pressure Data : Working Pressure : 175 PSI (12.1 bar) at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Specifications : For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1^{1} / 4^{\prime \prime}$ (DN32) and in Schedule 80 for sizes $1^{1 / 2 \prime \prime}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL
Listed and FM Approved for a rated working pressure of 175 psi (12.1 bar) at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service. Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending.
$45^{\circ}$ Elbow - Socket x Socket
Physical Data

| Nominal Pipe Size |  | Dimensions (mm / inch) | Approx. Weight (lbs. / kgs.) | Part Number |
| :---: | :---: | :---: | :---: | :---: |
| inch | metric | J |  |  |
| 3/4" | DN20 | / 0.32 | 0.06 / 0.027 | V5006-007 |
| $1^{\prime \prime}$ | DN25 | / 0.39 | 0.12 / 0.054 | V5006-010 |
| $1^{1 / 4} 4^{\prime \prime}$ | DN32 | / 0.48 | 0.17 / 0.0794 | V5006-012 |
| $1^{1 / 2} 2^{\prime \prime}$ | DN40 | / 0.47 | 0.41 / 0.190 | V5006-015 |
| 2" | DN50 | / 0.58 | 0.62 / 0.280 | V5006-020 |
| 21/2" | DN65 | / 0.65 | 0.93 / 0.420 | V5006-025 |
| 3" | DN80 | / 0.76 | 1.39 / 0.630 | V5006-030 |

## CPVC Fittings

Allowances for Friction Loss in Fittings

| Nominal Pipe Size |  | Equivalent Feet / Meters of Pipe |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | Tee Run | Tee Branch | $90^{\circ}$ Elbow | $45^{\circ}$ Elbow | Coupling |
| $3 / 4^{\prime \prime}$ | DN20 | $1 / 0.3$ | 3 / 0.9 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{\prime \prime}$ | DN25 | $1 / 0.3$ | 5 / 1.5 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{1 / 4} 4^{\prime \prime}$ | DN32 | $1 / 0.3$ | 6 / 1.8 | 8 / 2.4 | $2 / 0.6$ | $1 / 0.3$ |
| $1^{1 / 2} 2^{\prime \prime}$ | DN40 | $1 / 0.3$ | $8 / 2.4$ | 9 / 2.7 | $2 / 0.6$ | $1 / 0.3$ |
| 2" | DN50 | $1 / 0.3$ | 10 / 3.1 | 11 / 3.4 | $2 / 0.6$ | $1 / 0.3$ |
| 21/2" | DN65 | $2 / 0.6$ | 12 / 3.7 | 12 / 3.7 | $3 / 0.9$ | $2 / 0.6$ |
| 3" | DN80 | 2 / 0.6 | 15 / 4.6 | 13 / 4.0 | 4 / 1.2 | 2 / 0.6 |

## Cross \& Reducing Cross

## Socket x Socket x Socket x Socket

## Technical Features

- Sizes Available (Nominal) : See tables below.
- Environmental Specifications : Indoor use only.

Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$

- Pressure Data : Working Pressure : $175 \mathrm{PSI}(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Specifications : For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1 \frac{1}{1 / 4} 4^{\prime \prime}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of $175 \mathrm{psi}(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending.

Cross - Socket x Socket x Socket x Socket Physical Data

| Nominal Pipe Size |  | Dimensions (mm / inch) |  | Approx. Weight (lbs. / kgs.) | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | A | B |  |  |
| $3 / 4{ }^{\prime \prime}$ | DN20 | / 0.60 | / 0.60 | 0.13 / 0.059 | V5035-007 |
| $1^{\prime \prime}$ | DN25 | / 0.74 | / 0.74 | 0.25 / 0.113 | V5035-010 |
| $1^{1 / 4^{\prime \prime}}$ | DN32 | / 0.90 | / 0.90 | 0.35 / 0.159 | V5035-012 |
| $1^{1 / 2} 2^{\prime \prime}$ | DN40 | / 1.23 | / 1.23 | 0.69 / 0.313 | V5035-015 |
| 2" | DN50 | / 1.53 | / 1.53 | 1.02 / 0.463 | V5035-020 |
| 21/2" | DN65 | / 1.75 | / 1.75 | 1.70 / 0.771 | V5035-025 |

Reducing Cross - Socket x Socket x Socket x Socket
Physical Data

| Nominal Pipe Size |  | Dimensions (mm / inch) |  | Approx. Weight (lbs. / kgs.) | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | A | B |  |  |
| $1^{\prime \prime} \times 1^{\prime \prime} \times 3 / 4^{\prime \prime} \times 3 / 4^{\prime \prime}$ | DN25 x DN25 x DN20 x DN20 | / 0.60 | / 0.72 | 0.18 / 0.082 | V5035-131 |

CPVC Fittings
Allowances for Friction Loss in Fittings

| Nominal Pipe Size |  | Equivalent Feet / Meters of Pipe |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | Tee Run | Tee Branch | $90^{\circ}$ Elbow | $45^{\circ}$ Elbow | Coupling |
| $3 / 4^{\prime \prime}$ | DN20 | 1 / 0.3 | 3 / 0.9 | 7 / 2.1 | $1 / 0.3$ | 1 / 0.3 |
| $1^{\prime \prime}$ | DN25 | $1 / 0.3$ | $5 / 1.5$ | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{1 / 4 \prime}{ }^{\prime \prime}$ | DN32 | $1 / 0.3$ | 6 / 1.8 | $8 / 2.4$ | $2 / 0.6$ | $1 / 0.3$ |
| $1^{1 / 2} 2^{\prime \prime}$ | DN40 | $1 / 0.3$ | $8 / 2.4$ | 9 / 2.7 | $2 / 0.6$ | $1 / 0.3$ |
| 2" | DN50 | $1 / 0.3$ | 10 / 3.1 | 11 / 3.4 | 2 / 0.6 | $1 / 0.3$ |
| 21/2" | DN65 | $2 / 0.6$ | 12 / 3.7 | 12 / 3.7 | $3 / 0.9$ | 2 / 0.6 |
| 3" | DN80 | 2 / 0.6 | 15 / 4.6 | 13 / 4.0 | 4 / 1.2 | 2 / 0.6 |

## Sprinkler Head Cross - Sidewall (Metal Thread Inserts) Socket x Socket x NPT Thread x NPT Thread

## Technical Features

- Sizes Available (Nominal) : See table below
- Environmental Specifications : Indoor use only.

Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$

- Pressure Data : Working Pressure : $175 \mathrm{PSI}(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Threaded Connections : 2 female threaded NPT outlets.
- Specifications : For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1^{1} / 4^{\prime \prime}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of 175 psi $(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending.

Sprinkler Head Cross - Sidewall (Metal Thread Inserts) - Soc x Soc x NPT x NPT Physical Data

| Nominal Pipe Size |  | Dimensions (mm / inch) |  |  |  | Approx. Weight (lbs. / kgs.) | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | A | B | C | D |  |  |
| $1^{\prime \prime} \times 1^{\prime \prime} \times 1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | DN25 x DN25 x DN15 x DN15 | / 1.18 | / 1.18 | / 0.62 | / 0.62 | 0.46 / 0.209 | V50353SBIS-130 |

CPVC Fittings Allowances for Friction Loss in Fittings

| Nominal Pipe Size |  | Equivalent Feet / Meters of Pipe |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | Tee Run | Tee Branch | $90^{\circ}$ Elbow | $45^{\circ}$ Elbow | Coupling |
| $3 / 4$ " | DN20 | 1 / 0.3 | 3 / 0.9 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| 1 " | DN25 | $1 / 0.3$ | 5 / 1.5 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{1 / 4 \prime}{ }^{\prime \prime}$ | DN32 | $1 / 0.3$ | 6 / 1.8 | 8 / 2.4 | $2 / 0.6$ | $1 / 0.3$ |
| 11/2" | DN40 | $1 / 0.3$ | $8 / 2.4$ | 9 / 2.7 | $2 / 0.6$ | $1 / 0.3$ |
| 2" | DN50 | 1 / 0.3 | 10 / 3.1 | 11 / 3.4 | $2 / 0.6$ | $1 / 0.3$ |
| 21/2" | DN65 | $2 / 0.6$ | 12 / 3.7 | 12 / 3.7 | $3 / 0.9$ | $2 / 0.6$ |
| 3" | DN80 | 2 / 0.6 | 15 / 4.6 | 13 / 4.0 | 4 / 1.2 | 2 / 0.6 |

## Coupling <br> Socket x Socket

## Technical Features

- Sizes Available (Nominal) : $3 / 4^{\prime \prime}$ (DN20) through 3" (DN80) pipe diameters.
- Environmental Specifications : Indoor use only. Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$
- Pressure Data : Working Pressure : $175 \mathrm{PSI}(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Specifications : For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes ${ }^{3} / 4^{\prime \prime}$ (DN20) through $1^{1} / 4^{\prime \prime}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through $3^{\prime \prime}$ (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of 175 psi (12.1 bar) at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending

Coupling - Socket x Socket Physical Data

| Nominal Pipe Size |  | Dimensions (mm / inch) | Approx. Weight (lbs. / kgs.) | Part Number |
| :---: | :---: | :---: | :---: | :---: |
| inch | metric | A |  |  |
| $3 / 4{ }^{\prime \prime}$ | DN20 | / 0.10 | 0.05 / 0.023 | V5001-007 |
| $1^{\prime \prime}$ | DN25 | / 0.09 | 0.08 / 0.036 | V5001-010 |
| $1^{1 / 44^{\prime \prime}}$ | DN32 | / 0.10 | 0.13 / 0.059 | V5001-012 |
| 11/2" | DN40 | / 0.24 | 0.37 / 0.168 | V5001-015 |
| 2" | DN50 | / 0.19 | 0.52 / 0.236 | V5001-020 |
| 21/2" | DN65 | / 0.13 | 0.68 / 0.308 | V5001-025 |
| 3" | DN80 | / 0.16 | 1.05 / 0.476 | V5001-030 |

CPVC Fittings
Allowances for Friction Loss in Fittings

| Nominal Pipe Size |  | Equivalent Feet / Meters of Pipe |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | Tee Run | Tee Branch | $90^{\circ}$ Elbow | $45^{\circ}$ Elbow | Coupling |
| $3 / 4^{\prime \prime}$ | DN20 | 1 / 0.3 | $3 / 0.9$ | 7 / 2.1 | 1 / 0.3 | 1 / 0.3 |
| $1^{\prime \prime}$ | DN25 | $1 / 0.3$ | 5 / 1.5 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{1 / 44^{\prime \prime}}$ | DN32 | $1 / 0.3$ | 6 / 1.8 | $8 / 2.4$ | $2 / 0.6$ | $1 / 0.3$ |
| 11/2" | DN40 | $1 / 0.3$ | $8 / 2.4$ | 9 / 2.7 | $2 / 0.6$ | $1 / 0.3$ |
| 2" | DN50 | $1 / 0.3$ | 10 / 3.1 | 11 / 3.4 | $2 / 0.6$ | $1 / 0.3$ |
| 21/2" | DN65 | $2 / 0.6$ | 12 / 3.7 | 12 / 3.7 | $3 / 0.9$ | $2 / 0.6$ |
| 3" | DN80 | $2 / 0.6$ | 15 / 4.6 | 13 / 4.0 | 4 / 1.2 | 2 / 0.6 |

## Reducer Coupling

## Socket x Socket

## Technical Features

- Sizes Available (Nominal) : $1^{\prime \prime}$ (DN25) through $2^{1} / 2^{\prime \prime}$ (DN65) inlet, ${ }^{3} / 4^{\prime \prime}$ (DN20) through 2" outlet.
- Environmental Specifications : Indoor use only.

Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$

- Pressure Data : Working Pressure : 175 PSI (12.1 bar) at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Specifications : For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1^{1} / 4^{\prime \prime}$ (DN32) and in Schedule 80 for sizes $1^{1 / 2 \prime \prime}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of 175 psi $(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.


Reducer Coupling - Socket x Socket
Physical Data

| Nominal Pipe Size |  | Dimensions (mm / inch) | Approx. Weight (lbs. / kgs.) | Part Number |
| :---: | :---: | :---: | :---: | :---: |
| inch | metric | A |  |  |
| $1^{\prime \prime} \mathrm{x}^{3 / 4} 4^{\prime \prime}$ | DN25 x DN20 | / 0.29 | 0.07 / 0.032 | V5001R-131 |
| $1^{1 / 44^{\prime \prime} \times 1^{\prime \prime}}$ | DN32 x DN25 | / 0.35 | 0.12 / 0.054 | V5001R-168 |
| $1^{1 / 2^{\prime \prime}} \mathrm{x}^{3 / 4^{\prime \prime}}$ | DN40 x DN20 | / 1.02 | $0.31 / 0.140$ | V5001R-210 |
| $1^{1 / 1 / 2^{\prime \prime} \times 1^{\prime \prime}}$ | DN40 x DN25 | 10.88 | $0.33 / 0.150$ | V5001R-211 |
| $1^{1 / 2^{\prime \prime}} \times 1^{1 / 4^{\prime \prime}}$ | DN40 x DN32 | / 0.76 | 0.50 / 0.230 | V5001R-212 |
| $2^{\prime \prime} \times 1^{\prime \prime}$ | DN50 x DN25 | / 0.97 | 0.44 / 0.200 | V5001R-249 |
| $2^{\prime \prime} \times 1^{1 / 2 \prime}{ }^{\prime \prime}$ | DN50 x DN40 | / 0.46 | 0.50 / 0.230 | V5001R-251 |

CPVC Fittings

| Nominal Pipe Size |  | Equivalent Feet / Meters of Pipe |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | Tee Run | Tee Branch | $90^{\circ}$ Elbow | $45^{\circ}$ Elbow | Coupling |
| $3 / 4{ }^{\prime \prime}$ | DN20 | $1 / 0.3$ | 3 / 0.9 | 7 / 2.1 | 1 / 0.3 | 1 / 0.3 |
| 1" | DN25 | $1 / 0.3$ | 5 / 1.5 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| 1/1/4" | DN32 | $1 / 0.3$ | 6 / 1.8 | 8 / 2.4 | $2 / 0.6$ | $1 / 0.3$ |
| 11/2" | DN40 | $1 / 0.3$ | $8 / 2.4$ | 9 / 2.7 | $2 / 0.6$ | $1 / 0.3$ |
| 2" | DN50 | $1 / 0.3$ | 10 / 3.1 | 11 / 3.4 | $2 / 0.6$ | $1 / 0.3$ |
| 21/2" | DN65 | $2 / 0.6$ | 12 / 3.7 | 12 / 3.7 | $3 / 0.9$ | $2 / 0.6$ |
| 3" | DN80 | $2 / 0.6$ | 15 / 4.6 | 13 / 4.0 | 4 / 1.2 | $2 / 0.6$ |

## Coupling Adapter

## Socket x Groove

## Technical Features

- Sizes Available (Nominal) : $1^{1} / 4^{\prime \prime}$ (DN32) through $3^{\prime \prime}$ (DN80) pipe diameters.
- Environmental Specifications : Indoor use only.

Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$

- Pressure Data : Working Pressure : 175 PSI (12.1 bar) at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Specifications: For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1^{1} / 4^{\prime \prime}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of $175 \mathrm{psi}(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending.


## Female Adapter (Metal Thread Insert)

## Socket x NPT Thread

## Technical Features

- Sizes Available (Nominal) : $3 / 4^{\prime \prime}$ (DN20) through 2" (DN50) pipe diameters.
- Environmental Specifications : Indoor use only. Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$
- Pressure Data : Working Pressure : 175 PSI (12.1 bar) at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Threaded Connections : 1 female threaded NPT outlet. Note : 4235-012BS \& 4235-015BS female threaded BSP.
- Specifications : For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}\left(\right.$ DN2O) through $1^{1 / 1 / 4^{\prime \prime}}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of 175 psi $(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

Female Adapter (Metal Thread Insert) - Socket x NPT Thread
Physical Data

| Nominal Pipe Size |  | Dimensions (mm / inch) | Approx. Weight (lbs. / kgs.) | Part Number |
| :---: | :---: | :---: | :---: | :---: |
| inch | metric | A |  |  |
| $3 / 4^{\prime \prime}$ | DN20 | / 1.19 | 0.28 / 0.127 | V5003BI-007 |
| $1^{\prime \prime}$ | DN25 | / 1.59 | 0.63 / 0.286 | V5003BIBSP-010 |
| $1^{1 / 4 \prime}{ }^{\prime \prime}$ | DN32 | / 1.97 | 1.07 / 0.485 | V5003BIBSP-012 |
| 11/2" | DN40 | / 1.98 | 1.33 / 0.603 | V5003BIBSP-015 |
| 2" | DN50 | / 1.99 | 2.00 / 0.907 | V5003BIBSP-020 |

CPVC Fittings

| Nominal Pipe Size |  | Equivalent Feet / Meters of Pipe |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | Tee Run | Tee Branch | $90^{\circ}$ Elbow | $45^{\circ}$ Elbow | Coupling |
| $3 / 4{ }^{\prime \prime}$ | DN20 | 1 / 0.3 | 3 / 0.9 | 7 / 2.1 | 1 / 0.3 | $1 / 0.3$ |
| 1 " | DN25 | $1 / 0.3$ | $5 / 1.5$ | 7 / 2.1 | $1 / 0.3$ | 1/0.3 |
| $1^{1 / 4^{\prime \prime}}$ | DN32 | $1 / 0.3$ | 6 / 1.8 | $8 / 2.4$ | $2 / 0.6$ | $1 / 0.3$ |
| $1^{1 / 2} 2^{\prime \prime}$ | DN40 | $1 / 0.3$ | $8 / 2.4$ | 9 / 2.7 | $2 / 0.6$ | $1 / 0.3$ |
| 2" | DN50 | $1 / 0.3$ | 10 / 3.1 | 11 / 3.4 | 2 / 0.6 | $1 / 0.3$ |
| 21/2" | DN65 | 2 / 0.6 | 12 / 3.7 | 12 / 3.7 | 3 / 0.9 | $2 / 0.6$ |
| 3" | DN80 | $2 / 0.6$ | 15/4.6 | 13 / 4.0 | 4/1.2 | 2 / 0.6 |

## Female Adapter - (Metal Thread Insert)

## Spigot x NPT Thread

## Technical Features

- Sizes Available (Nominal) : Female Adapter : $3 / 4^{\prime \prime}$ (DN2O) and 1" (DN25) pipe diameters.
- Environmental Specifications : Indoor use only. Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Pressure Data : Working Pressure : 175 PSI (12.1 bar)
- Threaded Connections : 1 female threaded NPT outlet.
- Specifications : For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1^{1 / 1 / 4^{\prime \prime}}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through $3^{\prime \prime}$ (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439
(Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of 175 psi ( 12.1 bar) at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service. Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending.

Female Adapter - (Metal Thread Insert) - Spigot x NPT Thread
Physical Data

| Nominal Pipe Size |  | Dimensions (mm / inch) | Approx. Weight <br> (lbs. $/ \mathrm{kgs}$. ) | Part Number |
| :---: | :---: | :---: | :---: | :---: |
| inch | metric | A |  | V50032BI-007 |
| $3^{\prime \prime}$ | DN20 | 12.00 | 12.72 | $0.61 / 0.277$ |
| $1^{\prime \prime}$ | DN25 |  | V50032BI-010 |  |


| CPVC Fittings |  | Allowances for Friction Loss in Fittings |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | t Feet / Met |  |  |
| inch | metric | Tee Run | Tee Branch | $90^{\circ}$ Elbow | $45^{\circ}$ Elbow | Coupling |
| $3 / 4{ }^{\prime \prime}$ | DN20 | $1 / 0.3$ | 3 / 0.9 | 7 / 2.1 | 1 / 0.3 | 1 / 0.3 |
| $1^{\prime \prime}$ | DN25 | $1 / 0.3$ | 5/1.5 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{1 / 4 \prime}{ }^{\prime \prime}$ | DN32 | $1 / 0.3$ | 6/1.8 | $8 / 2.4$ | $2 / 0.6$ | $1 / 0.3$ |
| $1^{1 / 2} 2^{\prime \prime}$ | DN40 | $1 / 0.3$ | $8 / 2.4$ | 9 / 2.7 | $2 / 0.6$ | $1 / 0.3$ |
| 2" | DN50 | 1/0.3 | 10 / 3.1 | 11 / 3.4 | $2 / 0.6$ | 1/0.3 |
| 21/2" | DN65 | $2 / 0.6$ | 12 / 3.7 | 12 / 3.7 | $3 / 0.9$ | $2 / 0.6$ |
| 3" | DN80 | $2 / 0.6$ | 15 / 4.6 | 13 / 4.0 | 4 / 1.2 | 2 / 0.6 |

## Sprinkler Head Adapter - Female (Metal Thread Insert)

## Socket x NPT Thread

## Technical Features

- Sizes Available (Nominal) : $3^{3 / 4^{\prime \prime}}$ (DN20) pipe run $x^{1 / 2^{\prime \prime}}$ (DN15) outlet, $1^{\prime \prime}$ (DN25) pipe run $x^{1 / 2 \prime} 2^{\prime \prime}(D N 15)$ outlet and $1^{\prime \prime}$ (DN25) pipe run $x^{3} / 4^{\prime \prime}$ (DN20) outlet.
- Environmental Specifications : Indoor use only. Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$
- Pressure Data : Working Pressure : 175 PSI (12.1 bar) at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Threaded Connections : 1 female threaded NPT outlet.
- Specifications: For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes ${ }^{3} / 4^{\prime \prime}$ (DN20) through $1^{1 / 1 / 4^{\prime \prime}}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of $175 \mathrm{psi}(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.


| Sprinkler Head Adapter - Female (Metal Thread Insert) - Socket x NPT Thread |  |  |  | Physical Data |
| :---: | :---: | :---: | :---: | :---: |
| Nominal Pipe Size |  | Dimensions (mm / inch) | Approx. Weight | Part Number |
| inch | metric | A | (lbs. / kgs.) |  |
| $3 / 4^{\prime \prime} \times 1 / 2^{\prime \prime}$ | DN20 x DN15 | / 0.75 | 0.18 / 0.082 | V5003SBI-101 |
| $1^{\prime \prime} \times 1 / 2^{\prime \prime}$ | DN25 x DN15 | 10.76 | $0.21 / 0.095$ | V5003SBI-130 |
| $1^{\prime \prime} \mathrm{x}^{3 / 4^{\prime \prime}}$ | DN25 x DN20 | / 0.95 | 0.18 / 0.082 | V5003SBI-131 |

CPVC Fittings

| Nominal Pipe Size |  | Equivalent Feet / Meters of Pipe |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | Tee Run | Tee Branch | $90^{\circ}$ Elbow | $45^{\circ}$ Elbow | Coupling |
| $3 / 4{ }^{\prime \prime}$ | DN20 | $1 / 0.3$ | 3 / 0.9 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| 1 " | DN25 | $1 / 0.3$ | 5 / 1.5 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{1 / 44^{\prime \prime}}$ | DN32 | $1 / 0.3$ | 6 / 1.8 | 8 / 2.4 | $2 / 0.6$ | $1 / 0.3$ |
| $1^{1 / 2} 2^{\prime \prime}$ | DN40 | $1 / 0.3$ | $8 / 2.4$ | 9 / 2.7 | $2 / 0.6$ | $1 / 0.3$ |
| 2" | DN50 | $1 / 0.3$ | 10 / 3.1 | 11 / 3.4 | $2 / 0.6$ | $1 / 0.3$ |
| 21/2" | DN65 | $2 / 0.6$ | 12 / 3.7 | 12 / 3.7 | $3 / 0.9$ | $2 / 0.6$ |
| 3" | DN80 | 2 / 0.6 | 15 / 4.6 | 13 / 4.0 | 4 / 1.2 | 2 / 0.6 |

## Sprinkler Head Adapter - (Metal Thread Insert)

## Technical Features

- Sizes Available (Nominal) : $3^{3 / 4}$ (DN20) and $1^{\prime \prime}$ (DN25) pipe run, $1 / 2^{\prime \prime}$ (DN15) outlet.
- Environmental Specifications : Indoor use only. Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$
- Pressure Data : Working Pressure : 175 PSI (12.1 bar) at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Threaded Connections : 1 female threaded NPT outlet.
- Specifications : For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes ${ }^{3} / 4^{\prime \prime}(D N 20)$ through $1^{1} / 4^{\prime \prime}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through $3^{\prime \prime}$ (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of 175 psi (12.1 bar) at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending.

Sprinkler Head Adapter - (Metal Thread Insert) - Spigot x NPT Thread
Physical Data

| Nominal Pipe Size |  | Dimensions (mm / inch) | Approx. Weight (lbs. / kgs.) | Part Number |
| :---: | :---: | :---: | :---: | :---: |
| inch | metric | A |  |  |
| $3 / 4^{\prime \prime} \times 1 / 2^{\prime \prime}$ | DN20 $\times$ DN15 | / 1.50 | 0.19 / 0.086 | V50032SBI-101 |
| $1^{\prime \prime} \times 1 / 2^{\prime \prime}$ | DN25 x DN15 | / 1.85 | 0.18 / 0.082 | V50032SBI-130 |

CPVC Fittings

| Nominal Pipe Size |  | Equivalent Feet / Meters of Pipe |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | metric | Tee Run | Tee Branch | $90^{\circ}$ Elbow | $45^{\circ}$ Elbow | Coupling |
| $3 / 4{ }^{\prime \prime}$ | DN20 | $1 / 0.3$ | 3 / 0.9 | 7 / 2.1 | $1 / 0.3$ | 1 / 0.3 |
| 1" | DN25 | $1 / 0.3$ | 5 / 1.5 | 7 / 2.1 | $1 / 0.3$ | $1 / 0.3$ |
| $1^{1 / 4^{\prime \prime}}$ | DN32 | $1 / 0.3$ | 6 / 1.8 | 8 / 2.4 | $2 / 0.6$ | $1 / 0.3$ |
| $1^{1 / 2} 2^{\prime \prime}$ | DN40 | $1 / 0.3$ | 8 / 2.4 | 9 / 2.7 | $2 / 0.6$ | $1 / 0.3$ |
| 2" | DN50 | $1 / 0.3$ | 10 / 3.1 | 11 / 3.4 | $2 / 0.6$ | $1 / 0.3$ |
| 21/2" | DN65 | $2 / 0.6$ | 12 / 3.7 | 12 / 3.7 | $3 / 0.9$ | $2 / 0.6$ |
| 3" | DN80 | $2 / 0.6$ | 15/4.6 | 13 / 4.0 | 4/1.2 | 2 / 0.6 |

## Reducer Bushing

## Spigot x Socket

## Technical Features

- Sizes Available (Nominal) : 1" (DN25) through 3" (DN80) inlet, ${ }^{3} / 4^{\prime \prime}$ (DN20) through $2^{1} / 2^{\prime \prime}$ (DN65) outlet.
- Environmental Specifications : Indoor use only. Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$
- Pressure Data : Working Pressure : 175 PSI (12.1 bar) at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right.$ )
- Specifications: For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1^{1 / 14^{\prime \prime}}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of 175 psi $(12.1 \mathrm{bar})$ at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending


## Cap

## Socket

## Technical Features

- Sizes Available (Nominal) : $3^{1 / 4}$ (DN20) through 3" (DN80) pipe diameters.
- Environmental Specifications : Indoor use only. Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$
- Pressure Data : Working Pressure : 175 PSI (12.1 bar) at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right)$
- Specifications: For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes ${ }^{3} / 4^{\prime \prime}$ (DN20) through $1^{1 / 14^{\prime \prime}}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of 175 psi ( 12.1 bar ) at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending.

| Cap - Socket |  |  | Approx. Weight (lbs. / kgs.) | Physical Data |
| :---: | :---: | :---: | :---: | :---: |
| Nominal Pipe Size |  | Dimensions (mm / inch) |  | Part Number |
| inch | metric | A |  |  |
| $3 / 4^{\prime \prime}$ | DN20 | / 0.31 | $0.08 / 0.036$ | V5017-007 |
| 1 " | DN25 | / 0.38 | 0.14 / 0.064 | V5017-010 |
| $1^{1 / 4}{ }^{\prime \prime}$ | DN32 | 10.40 | 0.20 / 0.091 | V5017-012 |
| $1^{1 / 2} 2^{\prime \prime}$ | DN40 | / 0.41 | 0.26 / 0.118 | V5017-015 |
| 2" | DN50 | / 0.42 | 0.38 / 0.172 | V5017-020 |
| 21/2" | DN65 | / 0.57 | 0.57 / 0.259 | V5017-025 |
| 3" | DN80 | / 1.26 | 0.87 / 0.395 | V5017-030 |

## Test Plug

## NPT Thread

## Technical Features

- Sizes Available (Nominal) : $1 / 2^{11}$ (DN15) pipe diameter.
- Environmental Specifications : Indoor use only.

Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$

- Pressure Data : For pressure testing only
- Threaded Connections : Threaded NPT
- Specifications: For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes $3 / 4^{\prime \prime}$ (DN20) through $1^{1} / 4^{\prime \prime}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}$ (DN40) through 3" (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. This product is FM Approved for pressure testing only. Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending


## Union

## Socket x Socket

## Technical Features

- Sizes Available (Nominal) : $3^{1 / 4^{\prime \prime}}$ (DN20) through 2" (DN50) pipe diameters.
- Environmental Specifications : Indoor use only. Maximum Ambient Temperature : $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$
- Pressure Data : Working Pressure : 175 PSI (12.1 bar) at $150^{\circ} \mathrm{F}$ $\left(65^{\circ} \mathrm{C}\right.$ )
- Specifications: For use with listed CPVC fire sprinkler pipe produced in Standard Dimension Ratio (SDR) 13.5, as specified in ASTM F442.
CPVC Fire Sprinkler Fittings are produced in Schedule 40 and Schedule 80 dimensions for sizes ${ }^{3} / 4^{\prime \prime}$ (DN20) through $1^{1 / 1 / 4^{\prime \prime}}$ (DN32) and in Schedule 80 for sizes $1^{1} / 2^{\prime \prime}(D N 40)$ through $3^{\prime \prime}$ (DN80), in accordance with ASTM F437 (Schedule 80 Threaded Fittings), ASTM F438 (Socket type Schedule 40) and ASTM F439 (Schedule 80 Fittings), as applicable. These products are UL Listed and FM Approved for a rated working pressure of 175 psi ( 12.1 bar ) at $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ for sprinkler service.
Approved for National Sanitation Foundation (NSF) potable water services and complies with WRAS requirements for cold water use.

* LPCB Approved up to and including 2"
** Approval pending.

