

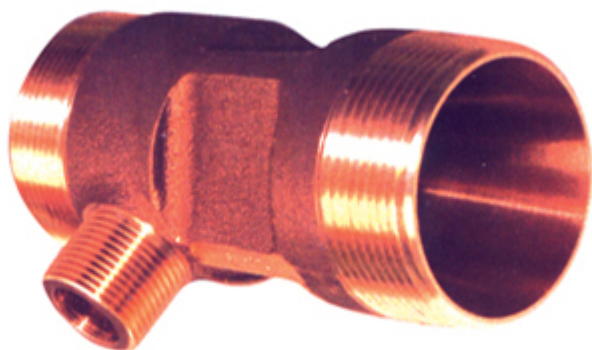


## Ratio Controllers

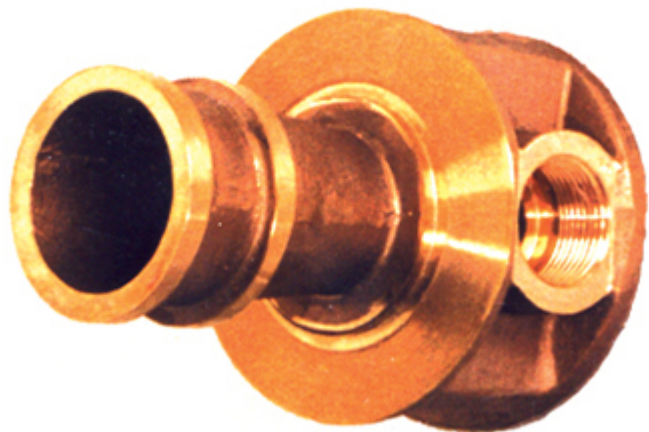
Ratio Controllers are modified venturi foam proportioners that accurately meter pressurized foam concentrate into the firefighting water stream. These foam proportioners are used in conjunction with balanced pressure systems, such as bladder tanks and pumped proportioning skids. In operation, firefighting water flows through the modified venturi, creating an area of lower pressure, which is referred to as the “metering pressure drop”. This metering pressure drop is directly affected by the firefighting water velocity as it flows through the venturi. The (1%, 3% or 6%) concentrate-to-water ratio is maintained over the entire flow range of each size ratio controller. However, each size ratio controller has a minimum flow rate/velocity requirement, and these minimums must be maintained for proper ratio controller operation.

Available in three styles and various sizes, each Ratio Controller consists of the following components: body; metering orifice; inlet nozzle. These components are constructed of ASTM 85-5-5-5 bronze. The inlet nozzle is tapered and machined to a smooth finish to maximize water stream efficiency through the venturi. The foam concentrate metering orifice is sized to the exact type and percentage of foam concentrate to be used. Both the inlet nozzle and metering orifice are secured by a stainless steel retaining ring.

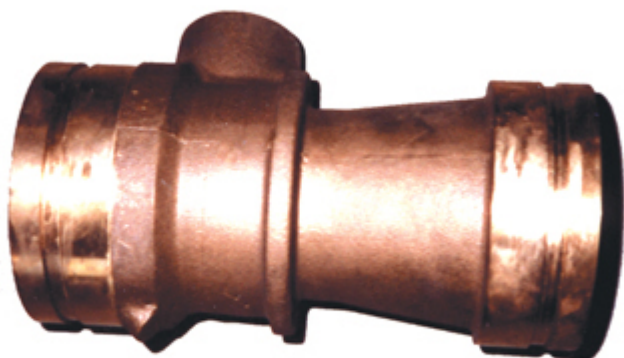
Threaded style – Available sizes 2” and 2.5”



Wafer style – Available sizes 3”, 4”, 6” and 8”



Grooved style – Available size 5”



## Ordering Information

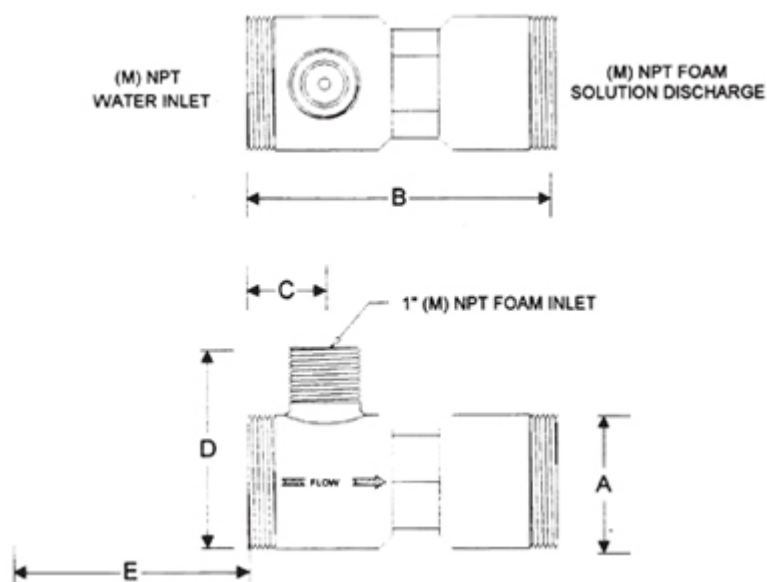
When ordering, please specify foam concentrate type and proportioning rates (1, 3 or 6%).

| Part Number | Description                           | Nominal Flow – AR-AFFF             | Nominal Flow – AFFF              | Concentrate Inlet |
|-------------|---------------------------------------|------------------------------------|----------------------------------|-------------------|
| 10947       | 2” Ratio controller, threaded style   | 80 – 200 gpm<br>(303 – 757 Lpm)    | 40 – 200 gpm<br>(151 – 757 Lpm)  | 1” (M)NPT         |
| 10948       | 2.5” Ratio controller, threaded style | 160 – 500 gpm<br>(606 – 1,893 Lpm) | 80 – 500 gpm<br>(303 -1,893 Lpm) | 1” (M)NPT         |

| Part Number | Description                        | Nominal Flow – AR-AFFF               | Nominal Flow – AFFF                  | Concentrate Inlet |
|-------------|------------------------------------|--------------------------------------|--------------------------------------|-------------------|
| 10949       | 3" Ratio controller, wafer style   | 200 – 700 gpm<br>(757 – 2,650 Lpm)   | 100 – 700 gpm<br>(379 – 2,650 Lpm)   | 1.25" (F)NPT      |
| 10950       | 4" Ratio controller, wafer style   | 300 – 1,250 gpm (1,136 – 4,732 Lpm)  | 175 – 1,250 gpm (662 – 4,732 Lpm)    | 1.5" (F)NPT       |
| 10952       | 6" Ratio controller, wafer style   | 500 – 2,500 gpm (1,893 – 9,464 Lpm)  | 350 – 2,500 gpm (1,325 – 9,464 Lpm)  | 2" (F)NPT         |
| 10954       | 8" Ratio controller, wafer style   | 950 – 4,500 gpm (3,596 – 17,034 Lpm) | 700 – 4,500 gpm (2,650 – 17,034 Lpm) | 2.5" (F)NPT       |
| 10951       | 5" Ratio controller, grooved style | 400 – 1,800 gpm (1,514 – 6,814 Lpm)  | 200 – 1,800 gpm (757 – 6,814 Lpm)    | 2" (F)NPT         |

## Dimensional Information

### Threaded Style

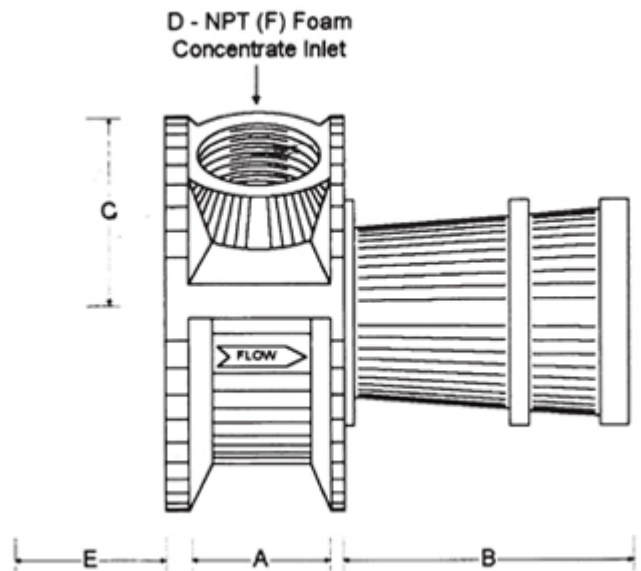


| Dimension | 2" Threaded Style | 2.5" Threaded Style |
|-----------|-------------------|---------------------|
| A         | 2.375" (60.3 mm)  | 2.875" (73.0 mm)    |

| Dimension | 2" Threaded Style | 2.5" Threaded Style |
|-----------|-------------------|---------------------|
| B         | 7" (178 mm)       | 7" (178 mm)         |
| C         | 2.063" (52.4 mm)  | 2.063" (52.4 mm)    |
| D         | 3.75 (95.3 mm)    | 4.125" (104.8 mm)   |
| E*        | 10" (254 mm)      | 13" (330 mm)        |

\*Minimum straight pipe lengths required upstream/downstream of controller.

**Wafer Style**



| Dimension | 3" Wafer Style   | 4" Wafer Style   | 6" Wafer Style    | 8" Wafer Style   |
|-----------|------------------|------------------|-------------------|------------------|
| A         | 2.375" (60.3 mm) | 2.5" (63.5 mm)   | 3.25" (82.6 mm)   | 3.5" (88.9 mm)   |
| B         | 6.063" (154 mm)  | 8" (203 mm)      | 12" (305 mm)      | 12" (305 mm)     |
| C         | 2.625" (66.7 mm) | 3.125" (79.4 mm) | 4.125" (104.8 mm) | 5.25" (133.4 mm) |
| D         | 1.25" (31.8 mm)  | 1.5" (38.1 mm)   | 2" (50.8 mm)      | 2.5" (63.5 mm)   |
| E*        | 15" (381 mm)     | 20" (508 mm)     | 30" (762 mm)      | 40" (1,016 mm)   |

\*Minimum straight pipe lengths required upstream/downstream of controller.

**Grooved Style**

