



## VAF™ FILTRATION SYSTEMS V-250 AUTOMATIC SCREEN FILTERS

### GENERAL INFORMATION

The V-Series™ filter incorporates the latest self-cleaning screen filtration technology available. The complexity and cleaning efficiency of any self-cleaning screen filter is in the mechanical system that drives the cleaning process. The patented+ V-Series filter's bi-directional drive mechanism is the simplest and most efficient design resulting in:

- fewer moving parts (no limit switches or pistons reversing the cleaning mechanism)
- simpler controls
- lowest flush flow
- greater cleaning efficiency
- lower maintenance requirements

The V-Series filter's 12 to 15 second flush cycle is automatically initiated when a pressure differential across the screen increases to 0.5 bar (7 psi). The filter remains on-line and the filtration process is uninterrupted during the brief cleaning process. The flush discharge is among the lowest available resulting in minimal waste.

The V-Series filters are available ASME certified and are manufactured in an ASME certified facility. The filters come in a broad range of materials, pressure and temperature ratings. Evoqua custom manufactures filters and skids to simplify installation and meet specific requirements.

### Specifications

#### Materials

- Filter Body: 3" - 4" inlet/outlet 316L SS \*\*
- Screens: 316L SS sintered \*\*
- Flanges: AWWA Class D \*\*
- Seals: Nitrile, Viton®, silicone \*\*

#### Filtration Range

- 10 to 1500 micron

#### Flow Range

- 7 to 97 m<sup>3</sup>/hr (30 to 426 gpm) per filter \*

#### Maximum Pressure

- 10 bar (150 psi) \*\*

#### Minimum Pressure

- 2 bar (30 psi) \*\*

#### Maximum Temperature

- 80° C (176° F) \*\*

#### Flush Cycle

- 12 to 15 seconds

#### Controller

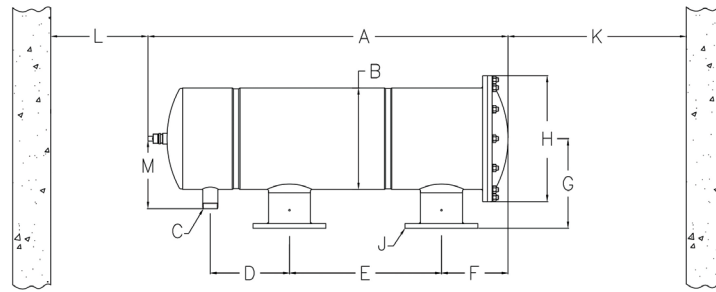
- MicroFlush™ control system - up to four filters \*\*

\* Varies depending on micron level

\*\* Other options available upon request

+Patented in some countries

## V-SERIES™ FILTER DIMENSIONS



| MODEL     | DIMENSIONS (CM) |      |     |      |       |      |      |      | DIMENSIONS (MM) |       |      |      | DIMENSIONS (CM) |     | SCREEN AREA<br>CM <sup>2</sup> | NOMINAL FLOW (M <sup>3</sup> /HR) |     |  | FLUSH FLOW<br>LITERS |
|-----------|-----------------|------|-----|------|-------|------|------|------|-----------------|-------|------|------|-----------------|-----|--------------------------------|-----------------------------------|-----|--|----------------------|
|           | A               | B    | C   | D    | E     | F    | G    | H    | J               | K     | L    | M    | MICRON          |     |                                |                                   |     |  |                      |
|           |                 |      |     |      |       |      |      |      | FLG             |       |      |      |                 |     | 100                            | 200                               | 300 |  |                      |
| V-250-3   | 97.6            | 25.7 | 3.8 | 25.4 | 29.2  | 22.9 | 23.5 | 34.3 | 80              | 88.9  | 30.5 | 18.2 | 1445            | 63  | 84                             | 92                                | 30  |  |                      |
| V-250-4   | 97.6            | 25.7 | 3.8 | 25.4 | 29.2  | 22.9 | 23.5 | 34.3 | 100             | 88.9  | 30.5 | 18.2 | 1445            | 63  | 84                             | 92                                | 30  |  |                      |
| V-500-4   | 123.3           | 25.7 | 3.8 | 25.4 | 54.6  | 22.9 | 23.5 | 34.3 | 100             | 114.3 | 30.5 | 18.2 | 2890            | 125 | 168                            | 184                               | 57  |  |                      |
| V-500-6   | 128.4           | 25.7 | 3.8 | 27.9 | 54.6  | 25.4 | 27.8 | 34.3 | 150             | 114.3 | 30.5 | 18.2 | 2890            | 125 | 168                            | 184                               | 57  |  |                      |
| V-1000-6  | 164.6           | 38.6 | 5.1 | 40.2 | 61.0  | 35.2 | 34.3 | 47.8 | 150             | 152.4 | 30.5 | 26.9 | 5594            | 242 | 325                            | 356                               | 57  |  |                      |
| V-1000-8  | 164.6           | 38.6 | 5.1 | 40.2 | 61.0  | 35.2 | 34.3 | 47.8 | 200             | 152.4 | 30.5 | 26.9 | 5594            | 242 | 325                            | 356                               | 57  |  |                      |
| V-1500-8  | 195.1           | 38.6 | 5.1 | 40.2 | 91.4  | 35.2 | 34.3 | 47.8 | 200             | 178.0 | 30.5 | 26.9 | 8387            | 363 | 487                            | 534                               | 87  |  |                      |
| V-1500-10 | 195.1           | 38.6 | 5.1 | 40.2 | 91.4  | 35.2 | 34.3 | 47.8 | 250             | 178.0 | 30.5 | 26.9 | 8387            | 363 | 487                            | 534                               | 87  |  |                      |
| V-2000H-X | 208.8           | 51.7 | 5.1 | 45.7 | 91.4  | 44.2 | 43.2 | 69.9 | 250 - 300 - 350 | 178.0 | 30.5 | 32.9 | 10942           | 474 | 636                            | 697                               | 87  |  |                      |
| V-3500-X  | 317.5           | 61.0 | 7.6 | 93.3 | 127.0 | 55.3 | 51.1 | 81.3 | 350 - 400 - 500 | 269.3 | 30.5 | 41.7 | 19742           | 855 | 1147                           | 1258                              | 167 |  |                      |

| MODEL     | DIMENSIONS (IN) |      |         |      |      |      |      |      |              |       |      | SCREEN AREA<br>IN <sup>2</sup> | NOMINAL FLOW (GPM) |        |      | FLUSH FLOW<br>GAL |     |     |  |
|-----------|-----------------|------|---------|------|------|------|------|------|--------------|-------|------|--------------------------------|--------------------|--------|------|-------------------|-----|-----|--|
|           | A               | B    | C       | D    | E    | F    | G    | H    | J            | K     | L    |                                | M                  | MICRON |      |                   |     |     |  |
|           |                 |      |         |      |      |      |      |      |              |       |      | FLG                            |                    |        |      | 100               | 200 | 300 |  |
| V-250-3   | 38.4            | 10.1 | 1.5 NPT | 10.0 | 11.5 | 9.0  | 9.2  | 13.5 | 3            | 35.0  | 12.0 | 7.2                            | 224                | 276    | 370  | 405               | 8   |     |  |
| V-250-4   | 38.4            | 10.1 | 1.5 NPT | 10.0 | 11.5 | 9.0  | 9.2  | 13.5 | 4            | 35.0  | 12.0 | 7.2                            | 224                | 276    | 370  | 405               | 8   |     |  |
| V-500-4   | 48.5            | 10.1 | 1.5 NPT | 10.0 | 21.5 | 9.0  | 9.2  | 13.5 | 4            | 45.0  | 12.0 | 7.2                            | 448                | 551    | 739  | 811               | 15  |     |  |
| V-500-6   | 50.5            | 10.1 | 1.5 NPT | 11.0 | 21.5 | 10.0 | 11.0 | 13.5 | 6            | 45.0  | 12.0 | 7.2                            | 448                | 551    | 739  | 811               | 15  |     |  |
| V-1000-6  | 64.8            | 15.2 | 2 NPT   | 15.8 | 24.0 | 13.9 | 13.5 | 18.8 | 6            | 60.0  | 12.0 | 10.6                           | 867                | 1066   | 1431 | 1569              | 15  |     |  |
| V-1000-8  | 64.8            | 15.2 | 2 NPT   | 15.8 | 24.0 | 13.9 | 13.5 | 18.8 | 8            | 60.0  | 12.0 | 10.6                           | 867                | 1066   | 1431 | 1569              | 15  |     |  |
| V-1500-8  | 76.8            | 15.2 | 2 NPT   | 15.8 | 36.0 | 13.9 | 13.5 | 18.8 | 8            | 70.0  | 12.0 | 10.6                           | 1300               | 1599   | 2145 | 2353              | 23  |     |  |
| V-1500-10 | 76.8            | 15.2 | 2 NPT   | 15.8 | 36.0 | 13.9 | 13.5 | 18.8 | 10           | 70.0  | 12.0 | 10.6                           | 1300               | 1599   | 2145 | 2353              | 23  |     |  |
| V-2000H-X | 82.2            | 20.3 | 2 NPT   | 18.0 | 36.0 | 17.4 | 17.0 | 27.5 | 10 - 12 - 14 | 70.0  | 12.0 | 12.9                           | 1696               | 2086   | 2798 | 3070              | 23  |     |  |
| V-3500-X  | 125.0           | 24.0 | 3 FLG   | 36.7 | 50.0 | 21.8 | 20.1 | 32.0 | 14 - 16 - 20 | 106.0 | 12.0 | 16.4                           | 3060               | 3764   | 5049 | 5539              | 44  |     |  |

**NOTES:**

**Nominal flow** rates shown are the maximum flow rate for that model with 100, 200, and 300 micron screens for demonstration purposes only. Larger micron ratings result in higher allowable flow rates. Smaller micron ratings result in lower allowable flow rates.

**Flush flow** volume shown for each model is the volume of water used for that model when the pressure available to the filter is 2.4 bar (35 psi) during a 15 second flush cycle.

