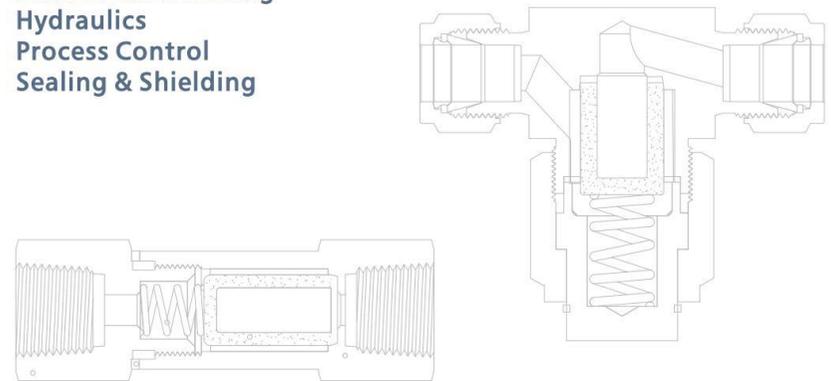




## Filters



Climate Control  
Electromechanical  
Filtration  
Fluid & Gas Handling  
Hydraulics  
Process Control  
Sealing & Shielding



# VFK

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# VFK

Advanced Fluid Control

## Filtration Definitions

- ⦿ Sintered element: metal powder (alloys are available) is pressed in a die at sufficient pressure that the powder particles adhere at their contact points.
- ⦿ Strainer element: the strainer is cup-shaped and includes an inner cup-shaped support structure having staggered perforations extending through the surfaces thereof an outer cup-shaped strainer structure constructed of wire mesh is closely received over the support structure
- ⦿ Element nominal pore size: the element nominal pore size is normally calculated from the pressure required to cause air to bubble from the largest pore in the filter element when submerged in a test liquid.

## Features

### Tee-type Filters

#### 66 Series

- ⦿ Filter element replaceable without removing body from system
- ⦿ Union bonnet design
- ⦿ Nominal pore sizes for sintered element: 0.5, 2, 7, 15, 40, 60 and 80µm
- ⦿ Nominal pore sizes for strainer element: 100, 150, 250 and 450µm
- ⦿ Maximum working pressure: 6000 psig (414 bar)
- ⦿ Working temperature: -20F to 900F (-29C to 482C)
- ⦿ Body materials: 316 SS, 316L SS, 304 SS, 304L SS and Brass
- ⦿ Variety of end connections available

### Bypass Filters

#### 66B Series

- ⦿ Bypass port at filter bottom for the ease of sampling or purging
- ⦿ Union bonnet design
- ⦿ Nominal pore sizes for sintered element: 0.5, 2, 7, 15, 40, 60 and 80µm
- ⦿ Nominal pore sizes for strainer element: 100, 150, 250 and 450µm
- ⦿ Maximum working pressure: 6000 psig (414 bar)
- ⦿ Working temperature: -20F to 900F (-29C to 482C)
- ⦿ Body materials: 316 SS, 316L SS, 304 SS, 304L SS and Brass
- ⦿ Variety of end connections available

### In-line Filters

#### 661 Series

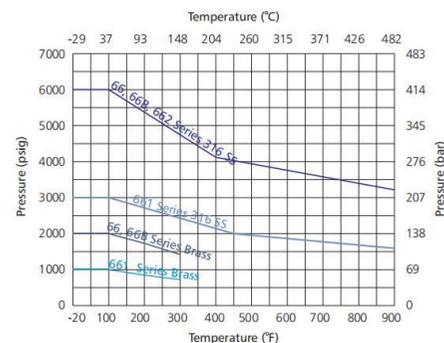
- ⦿ Compact and space-saving design
- ⦿ Nominal pore sizes for sintered element: 0.5, 2, 7, 15, 40, 60 and 80µm
- ⦿ Nominal pore sizes for strainer element: 100, 150, 250 and 450µm
- ⦿ Maximum working pressure: 3000 psig (207 bar)
- ⦿ Working temperature: -20F to 900F (-29C to 482C)
- ⦿ Body materials: 316 SS, 316L SS, 304 SS, 304L SS, 321 SS and Brass
- ⦿ Variety of end connections available

### All-welded In-line Filters

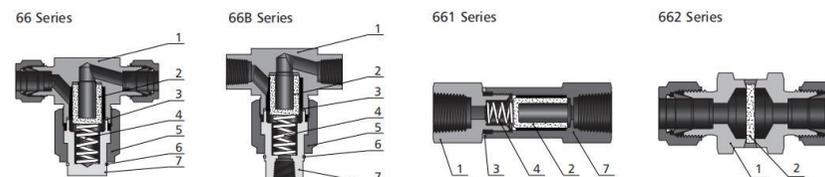
#### 662 Series

- ⦿ Large filtration area and high flow coefficient
- ⦿ All-welded construction for elimination of leakage
- ⦿ Easy cleaning of filters by backflushing
- ⦿ Full-penetration weld between body and element
- ⦿ Nominal pore sizes for sintered element: 0.5, 2, 7, 15, 40, 60 and 80µm
- ⦿ Maximum working pressure: 6000 psig (414 bar)
- ⦿ Working temperature: -20F to 900F (-29C to 482C)
- ⦿ Body materials: 316 SS, 316LSS, 304 SS, 304LSS and Brass
- ⦿ Variety of end connections available

## Pressure vs. Temperature



Contact the authorized representative or VFK for curve graph of other materials



## Standard Materials of Construction

| Component     | Material Grade/ASTM Specification       |                                    |
|---------------|---|------------------------------------|
|               | 316 SS                                  | Brass                              |
| 1 Body        | 316 SS/A479                             | Brass/B16                          |
| 2 Element     | Sintered 316 SS or strainer 316 SS      | Sintered 316 SS or strainer 316 SS |
| 3 Gasket      | PTFE/D1710 or silver-plated 316 SS/A240 | PTFE/D1710 or aluminum/B209        |
| 4 Spring      | 302 SS/A313                             | 302 SS/A313                        |
| 5 Bonnet Nut  | 316 SS/A479                             | Brass/B16                          |
| 6 Backup Ring | 316 SS/A276                             |                                    |
| 7 Bonnet      | 316 SS/A479                             | Brass/B16                          |

- 662 Series filters not available in brass
- Lubricants: molybdenum disulfide-based and silicone-based

## Maximum Differential Pressure of Clean Filter at 70°F (20°C)

| Series       | Maximum Differential Pressure psig (bar) |              |              |              |             |             |             |             |             |             |             |
|--------------|--|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|              | 0.5 micron                               | 2 micron     | 7 micron     | 15 micron    | 40 micron   | 60 micron   | 80 micron   | 100 micron  | 150 micron  | 250 micron  | 450 micron  |
| 66, 66B, 661 | 2250 (155.2)                             | 2250 (155.2) | 1950 (134.5) | 1750 (120.3) | 1150 (79.3) | 1150 (79.3) | 1000 (68.9) | 1000 (68.9) | 1000 (68.9) | 1000 (68.9) | 1000 (68.9) |
| 662          | 600 (41.4)                               | 100 (6.9)    | 100 (6.9)    | 100 (6.9)    | —           | —           | —           | —           | —           | —           | —           |

### Elements

| Nominal Pore Size $\mu\text{m}$ | Pore Size Range $\mu\text{m}$ | Element Type |
|---------------------------------|-------------------------------|--------------|
| 0.5                             | 0.5 to 2                      | Sintered     |
| 2                               | 1 to 4                        |              |
| 7                               | 5 to 10                       |              |
| 15                              | 11 to 25                      |              |
| 40                              | 35 to 53                      |              |
| 60                              | 50 to 75                      |              |
| 80                              | 70 to 95                      |              |
| 100                             | —                             |              |
| 150                             | —                             | Strainer     |
| 250                             | —                             |              |
| 450                             | —                             |              |

### Filtration Area

| Series    | Orifice in. (mm) | Filtration Area in. <sup>2</sup> (mm <sup>2</sup> ) |             |
|-----------|------------------|---|-------------|
|           |                  | Sintered  | Strainer    |
| 266, 266B | 0.094 (2.04)     | 1.30 (830)  | 1.00 (640)  |
| 466, 466B | 0.172 (4.36)     | 1.30 (830)  | 1.00 (640)  |
| 666, 666B | 0.213 (5.41)     | 2.00 (1280)   | 1.70 (1090) |
| 866, 866B | 0.250 (6.35)     | 2.00 (1280)   | 1.70 (1090) |
| 2661      | 0.094 (2.39)     | 0.55 (350)  | —           |
| 4661      | 0.187 (4.75)     | 1.30 (830)  | 1.00 (640)  |
| 6661      | 0.281 (7.14)     | 2.00 (1280)   | 1.70 (1090) |
| 8661      | 0.406 (10.30)    | 2.00 (1280)   | 1.70 (1090) |
| 4FW       | 0.187 (4.75)     | 0.44 (283)  | —           |

661 Series

### Flow Data at 70°F (20°C)

66, 66B Series

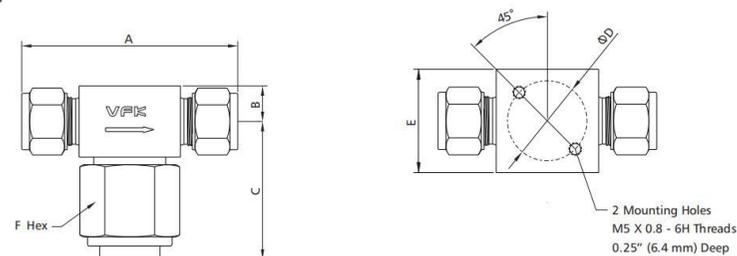
| Pressure Drop to Atmosphere p psig (bar) | 2 Series                       |  | 4 Series                       |  | 6, 8 Series                    |  |
|--|--------------------------------|--|--------------------------------|--|--------------------------------|--|
|  | Water Flow, U.S. gal (L/min)   | Air Flow, std ft <sup>3</sup> /min (std L/min) | Water Flow, U.S. gal (L/min)   | Air Flow, std ft <sup>3</sup> /min (std L/min) | Water Flow, U.S. gal (L/min)   | Air Flow, std ft <sup>3</sup> /min (std L/min) |
|  | 0.5 Micron Cv = 0.035          |  | 0.5 Micron Cv = 0.035          |  | 0.5 Micron Cv = 0.052          |  |
| 5 (0.34)                                 | 0.07 (0.26)                    | 0.40 (11.3)                                    | 0.07 (0.26)                    | 0.40 (11.3)                                    | 0.11 (0.43)                    | 0.47 (13.3)                                    |
| 10 (0.69)                                | 0.11 (0.42)                    | 0.50 (14.2)                                    | 0.11 (0.42)                    | 0.50 (14.2)                                    | 0.16 (0.62)                    | 0.74 (21.0)                                    |
| 50 (3.45)                                | 0.25 (0.95)                    | 1.33 (37.7)                                    | 0.25 (0.95)                    | 1.33 (37.7)                                    | 0.36 (1.38)                    | 1.96 (55.5)                                    |
|  | 2 Micron Cv = 0.068            |  | 2 Micron Cv = 0.072            |  | 2 Micron Cv = 0.096            |  |
| 5 (0.34)                                 | 0.15 (0.56)                    | 0.77 (21.8)                                    | 0.16 (0.60)                    | 0.82 (23.2)                                    | 0.21 (0.81)                    | 1.09 (30.9)                                    |
| 10 (0.69)                                | 0.22 (0.83)                    | 0.97 (27.5)                                    | 0.22 (0.83)                    | 1.02 (28.9)                                    | 0.30 (1.14)                    | 1.37 (38.8)                                    |
| 50 (3.45)                                | 0.48 (1.81)                    | 2.58 (73.1)                                    | 0.51 (1.93)                    | 2.72 (77.0)                                    | 0.67 (2.53)                    | 3.64 (103.1)                                   |
|  | 7 Micron Cv = 0.158            |  | 7 Micron Cv = 0.165            |  | 7 Micron Cv = 0.35             |  |
| 5 (0.34)                                 | 0.35 (1.32)                    | 1.80 (51.0)                                    | 0.37 (1.40)                    | 1.88 (53.2)                                    | 0.78 (2.96)                    | 4.00 (113.3)                                   |
| 10 (0.69)                                | 0.50 (1.89)                    | 2.25 (63.7)                                    | 0.52 (1.96)                    | 2.35 (66.5)                                    | 1.10 (4.18)                    | 5.00 (141.6)                                   |
| 50 (3.45)                                | 1.12 (4.22)                    | 5.98 (169.3)                                   | 1.16 (4.38)                    | 6.25 (177.0)                                   | 2.47 (9.35)                    | 13.30 (376.6)                                  |
|  | 15 Micron Cv = 0.19            |  | 15 Micron Cv = 0.20            |  | 15 Micron Cv = 0.37            |  |
| 5 (0.34)                                 | 0.42 (1.61)                    | 2.16 (61.2)                                    | 0.44 (1.66)                    | 2.28 (64.6)                                    | 0.82 (3.12)                    | 4.20 (118.9)                                   |
| 10 (0.69)                                | 0.60 (2.27)                    | 2.71 (76.7)                                    | 0.63 (2.38)                    | 2.85 (80.7)                                    | 0.82 (3.12)                    | 5.28 (149.5)                                   |
| 50 (3.45)                                | 1.34 (5.06)                    | 7.20 (203.9)                                   | 1.41 (5.33)                    | 7.58 (214.6)                                   | 2.61 (9.88)                    | 14.00 (396.4)                                  |
|  | 40 Micron Cv = 0.23            |  | 40 Micron Cv = 0.24            |  | 40 Micron Cv = 0.42            |  |
| 5 (0.34)                                 | 0.51 (1.94)                    | 2.62 (74.2)                                    | 0.54 (2.04)                    | 2.74 (77.6)                                    | 0.93 (3.54)                    | 4.80 (135.9)                                   |
| 10 (0.69)                                | 0.73 (2.76)                    | 3.28 (96.8)                                    | 0.76 (2.87)                    | 3.42 (96.8)                                    | 1.32 (5.02)                    | 6.00 (169.9)                                   |
| 50 (3.45)                                | 1.63 (6.16)                    | 8.74 (247.5)                                   | 1.70 (6.42)                    | 9.11 (258.0)                                   | 2.96 (11.20)                   | 15.90 (450.2)                                  |
|  | 60 Micron Cv = 0.24            |  | 60 Micron Cv = 0.25            |  | 60 Micron Cv = 0.45            |  |
| 5 (0.34)                                 | 0.54 (2.04)                    | 2.74 (77.6)                                    | 0.56 (2.11)                    | 2.85 (80.7)                                    | 1.00 (3.78)                    | 5.10 (144.4)                                   |
| 10 (0.69)                                | 0.76 (2.87)                    | 3.42 (96.8)                                    | 0.79 (2.98)                    | 3.57 (101.1)                                   | 1.42 (5.37)                    | 6.40 (181.2)                                   |
| 50 (3.45)                                | 1.70 (6.42)                    | 9.11 (258.0)                                   | 1.77 (6.70)                    | 9.49 (268.7)                                   | 3.18 (12.00)                   | 17.00 (481.4)                                  |
|  | 80 Micron Cv = 0.25            |  | 80 Micron Cv = 0.26            |  | 80 Micron Cv = 0.67            |  |
| 5 (0.34)                                 | 0.56 (2.11)                    | 2.85 (80.7)                                    | 0.58 (2.19)                    | 2.96 (83.8)                                    | 1.49 (5.66)                    | 7.64 (216.3)                                   |
| 10 (0.69)                                | 0.79 (2.98)                    | 3.57 (101.1)                                   | 0.82 (3.10)                    | 3.70 (104.8)                                   | 2.11 (5.89)                    | 9.55 (270.4)                                   |
| 50 (3.45)                                | 1.77 (6.70)                    | 9.49 (268.7)                                   | 1.84 (6.95)                    | 9.80 (277.5)                                   | 4.73 (17.90)                   | 25.40 (719.2)                                  |
|  | 100 Micron Cv = 0.27           |  | 100 Micron Cv = 0.28           |  | 100 Micron Cv = 0.72           |  |
| 5 (0.34)                                 | 0.60 (2.27)                    | 3.08 (87.2)                                    | 0.62 (2.34)                    | 3.20 (90.6)                                    | 1.61 (6.08)                    | 8.20 (232.2)                                   |
| 10 (0.69)                                | 0.85 (3.21)                    | 3.85 (109.0)                                   | 0.88 (3.30)                    | 4.00 (113.2)                                   | 2.27 (8.61)                    | 10.20 (288.8)                                  |
| 50 (3.45)                                | 1.91 (7.22)                    | 10.20 (288.8)                                  | 1.98 (7.48)                    | 5.30 (150.1)                                   | 5.09 (19.20)                   | 27.20 (770.2)                                  |
|  | 150, 250, 450 Micron Cv = 0.55 |  | 150, 250, 450 Micron Cv = 0.58 |  | 150, 250, 450 Micron Cv = 0.82 |  |
| 5 (0.34)                                 | 1.23 (4.65)                    | 6.28 (177.8)                                   | 1.30 (4.91)                    | 6.60 (186.9)                                   | 1.83 (6.93)                    | 9.36 (265.0)                                   |
| 10 (0.69)                                | 1.74 (6.58)                    | 7.85 (222.3)                                   | 1.83 (6.91)                    | 8.20 (232.2)                                   | 2.59 (9.80)                    | 11.70 (331.3)                                  |
| 50 (3.45)                                | 3.89 (14.70)                   | 20.80 (589.0)                                  | 4.10 (15.50)                   | 21.90 (620.1)                                  | 5.79 (21.90)                   | 27.20 (770.2)                                  |

| Pressure Drop to Atmosphere p psig (bar) | 2 Series                        |  | 4 Series                        |  | 6, 8 Series                     |  |
|--|---------------------------------|--|---------------------------------|--|---------------------------------|--|
|  | Water Flow, U.S. gal (L/min)    | Air Flow, std ft <sup>3</sup> /min (std L/min) | Water Flow, U.S. gal (L/min)    | Air Flow, std ft <sup>3</sup> /min (std L/min) | Water Flow, U.S. gal (L/min)    | Air Flow, std ft <sup>3</sup> /min (std L/min) |
|  | 0.5 Micron Cv = 0.008           |  | 0.5 Micron Cv = 0.038           |  | 0.5 Micron Cv = 0.187           |  |
| 5 (0.34)                                 | 0.01 (0.03)                     | 0.09 (2.6)                                     | 0.08 (0.30)                     | 0.42 (11.9)                                    | 0.41 (1.54)                     | 2.09 (59.2)                                    |
| 10 (0.69)                                | 0.02 (0.07)                     | 0.11 (3.1)                                     | 0.12 (0.45)                     | 0.52 (14.7)                                    | 0.59 (2.23)                     | 2.56 (72.5)                                    |
| 50 (3.45)                                | 0.05 (0.18)                     | 0.30 (8.5)                                     | 0.26 (0.98)                     | 1.42 (40.2)                                    | 1.32 (4.98)                     | 6.99 (197.9)                                   |
|  | 2 Micron Cv = 0.022             |  | 2 Micron Cv = 0.106             |  | 2 Micron Cv = 0.374             |  |
| 5 (0.34)                                 | 0.04 (0.15)                     | 0.24 (6.8)                                     | 0.23 (0.86)                     | 1.18 (33.4)                                    | 0.83 (3.13)                     | 4.20 (118.9)                                   |
| 10 (0.69)                                | 0.06 (0.22)                     | 0.30 (8.5)                                     | 0.42 (1.58)                     | 1.45 (41.1)                                    | 1.18 (4.46)                     | 5.13 (145.3)                                   |
| 50 (3.45)                                | 0.15 (0.56)                     | 0.82 (23.2)                                    | 0.74 (2.79)                     | 3.96 (112.1)                                   | 2.64 (9.97)                     | 14.00 (396.4)                                  |
|  | 7 Micron Cv = 0.028             |  | 7 Micron Cv = 0.112             |  | 7 Micron Cv = 0.406             |  |
| 5 (0.34)                                 | 0.05 (0.22)                     | 0.31 (8.7)                                     | 0.25 (0.94)                     | 1.26 (35.7)                                    | 0.90 (3.40)                     | 4.56 (129.1)                                   |
| 10 (0.69)                                | 0.08 (0.30)                     | 0.38 (10.8)                                    | 0.35 (1.32)                     | 1.54 (43.6)                                    | 1.28 (4.83)                     | 5.57 (157.7)                                   |
| 50 (3.45)                                | 0.19 (0.71)                     | 1.05 (29.7)                                    | 0.79 (2.98)                     | 4.20 (118.9)                                   | 2.87 (10.80)                    | 15.20 (430.4)                                  |
|  | 15 Micron Cv = 0.096            |  | 15 Micron Cv = 0.183            |  | 15 Micron Cv = 0.515            |  |
| 5 (0.34)                                 | 0.21 (0.79)                     | 1.08 (30.6)                                    | 0.40 (1.51)                     | 2.05 (58.0)                                    | 1.15 (4.37)                     | 5.78 (163.7)                                   |
| 10 (0.69)                                | 0.30 (1.13)                     | 1.32 (37.4)                                    | 0.57 (2.15)                     | 2.50 (70.8)                                    | 1.62 (6.12)                     | 7.07 (200.2)                                   |
| 50 (3.45)                                | 0.67 (2.53)                     | 3.60 (101.9)                                   | 1.29 (4.87)                     | 6.80 (192.6)                                   | 3.64 (13.70)                    | 19.20 (543.7)                                  |
|  | 40 Micron Cv = 0.143            |  | 40 Micron Cv = 0.294            |  | 40 Micron Cv = 0.678            |  |
| 5 (0.34)                                 | 0.32 (1.20)                     | 1.60 (43.7)                                    | 0.65 (2.45)                     | 3.30 (93.4)                                    | 1.51 (5.70)                     | 7.72 (218.6)                                   |
| 10 (0.69)                                | 0.45 (1.70)                     | 1.95 (55.2)                                    | 0.92 (3.47)                     | 4.03 (114.1)                                   | 2.14 (8.08)                     | 9.43 (267.0)                                   |
| 50 (3.45)                                | 1.01 (3.81)                     | 5.34 (151.2)                                   | 2.07 (7.82)                     | 11.00 (311.5)                                  | 4.79 (18.10)                    | 25.70 (727.7)                                  |
|  | 60 Micron Cv = 0.168            |  | 60 Micron Cv = 0.325            |  | 60 Micron Cv = 0.874            |  |
| 5 (0.34)                                 | 0.37 (1.39)                     | 1.89 (53.5)                                    | 0.72 (2.72)                     | 3.57 (101.0)                                   | 1.95 (7.37)                     | 9.81 (277.8)                                   |
| 10 (0.69)                                | 0.53 (2.00)                     | 2.31 (65.4)                                    | 1.02 (3.85)                     | 4.46 (126.3)                                   | 2.76 (10.40)                    | 11.90 (337.0)                                  |
| 50 (3.45)                                | 1.18 (4.46)                     | 6.30 (178.4)                                   | 2.29 (8.86)                     | 12.10 (342.6)                                  | 6.18 (23.30)                    | 32.70 (926.0)                                  |
|  | 80 Micron Cv = 0.198            |  | 80 Micron Cv = 0.473            |  | 80 Micron Cv = 1.106            |  |
| 5 (0.34)                                 | 0.44 (1.66)                     | 2.22 (62.3)                                    | 1.05 (3.96)                     | 5.31 (150.4)                                   | 2.47 (9.33)                     | 12.40 (351.1)                                  |
| 10 (0.69)                                | 0.62 (2.34)                     | 2.71 (76.7)                                    | 1.49 (5.63)                     | 6.49 (183.8)                                   | 3.49 (13.10)                    | 15.10 (427.6)                                  |
| 50 (3.45)                                | 1.40 (5.29)                     | 7.41 (209.8)                                   | 3.34 (12.60)                    | 17.70 (501.2)                                  | 7.82 (29.50)                    | 41.40 (1172.3)                                 |
|  | 100 Micron Cv = 0.220           |  | 100 Micron Cv = 0.565           |  | 100 Micron Cv = 1.218           |  |
| 5 (0.34)                                 | 0.49 (1.85)                     | 2.47 (69.9)                                    | 1.26 (4.76)                     | 6.35 (179.8)                                   | 2.72 (10.20)                    | 13.60 (385.1)                                  |
| 10 (0.69)                                | 0.69 (2.60)                     | 3.02 (85.5)                                    | 1.78 (6.72)                     | 7.76 (219.7)                                   | 3.85 (14.50)                    | 16.70 (472.9)                                  |
| 50 (3.45)                                | 1.55 (5.85)                     | 8.25 (233.6)                                   | 3.99 (15.00)                    | 21.10 (597.5)                                  | 8.61 (32.50)                    | 45.60 (1291.2)                                 |
|  | 150, 250, 450 Micron Cv = 0.264 |  | 150, 250, 450 Micron Cv = 0.780 |  | 150, 250, 450 Micron Cv = 2.413 |  |
| 5 (0.34)                                 | 0.59 (2.23)                     | 2.97 (84.1)                                    | 1.74 (6.57)                     | 8.70 (246.3)                                   | 5.39 (20.30)                    | 27.00 (764.6)                                  |
| 10 (0.69)                                | 0.83 (3.13)                     | 3.63 (102.8)                                   | 2.46 (9.29)                     | 10.70 (303.0)                                  | 7.63 (28.80)                    | 33.10 (937.3)                                  |
| 50 (3.45)                                | 1.86 (7.03)                     | 9.90 (280.3)                                   | 5.51 (20.80)                    | 29.20 (826.9)                                  | 17.00 (64.20)                   | 90.30 (2557.0)                                 |

| Pressure Drop to Atmosphere<br>Δ p psig (bar) | 4 Series                     |  |
|---|------------------------------|--|
|   | Water Flow, U.S. gal (L/min) | Air Flow, std ft <sup>3</sup> /min (std L/min) |
|   | 0.5 Micron Cv = 0.008        |  |
| 5 (0.34)                                      | 0.01 (0.03)                  | 0.09 (2.6)                                     |
| 10 (0.69)                                     | 0.02 (0.07)                  | 0.11 (3.1)                                     |
| 50 (3.45)                                     | 0.05 (0.18)                  | 0.30 (8.5)                                     |
|   | 2 Micron Cv = 0.42           |  |
| 5 (0.34)                                      | 0.93 (3.50)                  | 4.72 (133.7)                                   |
| 10 (0.69)                                     | 1.32 (4.98)                  | 5.77 (163.4)                                   |
| 50 (3.45)                                     | 2.96 (11.10)                 | 15.70 (444.6)                                  |
|   | 5 Micron Cv = 0.45           |  |
| 5 (0.34)                                      | 1.00 (3.78)                  | 5.04 (142.7)                                   |
| 10 (0.69)                                     | 1.42 (5.36)                  | 6.16 (174.4)                                   |
| 50 (3.45)                                     | 3.18 (12.00)                 | 16.80 (475.7)                                  |
|   | 15 Micron Cv = 0.76          |  |
| 5 (0.34)                                      | 1.69 (6.22)                  | 8.55 (242.1)                                   |
| 10 (0.69)                                     | 2.40 (9.07)                  | 10.40 (294.5)                                  |
| 50 (3.45)                                     | 5.37 (20.30)                 | 28.50 (807.0)                                  |

## Dimensions

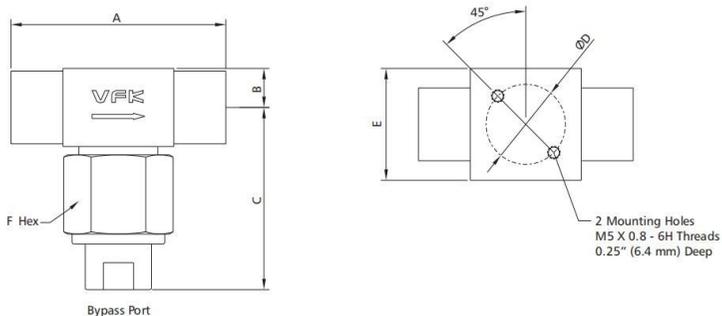
### 66 Series



| Basic Ordering Number | Connection Type and Size |                | Element Series | Dimension, in. (mm) |             |             |             |             |              |
|-----------------------|--------------------------|----------------|----------------|---------------------|-------------|-------------|-------------|-------------|--------------|
|                       | Inlet                    | Outlet         |                | A                   | B           | C           | ΦD          | E           | F            |
| □□66-FX2-             | 1/8" VFK                 | 1/8" VFK       | 4              | 2.27 (57.7)         | 0.38 (9.7)  | 1.49 (37.8) | 1.00 (25.4) | 1.00 (25.4) | 1 (25.4)     |
| □□66-FX4-             | 1/4" VFK                 | 1/4" VFK       | 4              | 2.47 (62.7)         |             |             |             |             |              |
| □□66-FX6-             | 3/8" VFK                 | 3/8" VFK       | 8              | 2.84 (72.1)         | 0.46 (11.7) | 1.74 (44.2) | 1.13 (28.7) | 1.13 (28.7) | 1 1/8 (28.6) |
| □□66-FX8-             | 1/2" VFK                 | 1/2" VFK       | 8              | 3.04 (77.2)         |             |             |             |             |              |
| □□66-MX6-             | 6 mm VFK                 | 6 mm VFK       | 4              | 2.46 (62.5)         | 0.38 (9.7)  | 1.49 (37.8) | 1.00 (25.4) | 1.00 (25.4) | 1 (25.4)     |
| □□66-MX8-             | 8 mm VFK                 | 8 mm VFK       | 8              | 2.84 (72.1)         |             |             |             |             |              |
| □□66-MX10-            | 10 mm VFK                | 10 mm VFK      | 8              | 2.86 (72.6)         | 0.46 (11.7) | 1.74 (44.2) | 1.13 (28.7) | 1.13 (28.7) | 1 1/8 (28.6) |
| □□66-MX12-            | 12 mm VFK                | 12 mm VFK      | 8              | 3.04 (77.2)         |             |             |             |             |              |
| □□66-TS4-             | 1/4" TS                  | 1/4" TS        | 4              | 1.68 (42.7)         | 0.38 (9.7)  | 1.49 (37.8) | 1.00 (25.4) | 1.00 (25.4) | 1 (25.4)     |
| □□66-TS6-             | 3/8" TS                  | 3/8" TS        | 4              |                     |             |             |             |             |              |
| □□66-TB4-             | 1/4" TB                  | 1/4" TB        | 4              |                     |             |             |             |             |              |
| □□66-TB6-             | 3/8" TB                  | 3/8" TB        | 4              |                     |             |             |             |             |              |
| □□66-FN2-             | 1/8 Female NPT           | 1/8 Female NPT | 4              | 2.00 (50.8)         | 0.38 (9.7)  | 1.49 (37.8) | 1.00 (25.4) | 1.00 (25.4) | 1 (25.4)     |
| □□66-FN4-             | 1/4 Female NPT           | 1/4 Female NPT | 4              | 2.13 (54.1)         |             |             |             |             |              |
| □□66-N4-              | 1/4 Male NPT             | 1/4 Male NPT   | 4              | 2.38 (60.5)         | 0.46 (11.7) | 1.74 (44.2) | 1.13 (28.7) | 1.13 (28.7) | 1 1/8 (28.6) |
| □□66-N6-              | 3/8 Male NPT             | 3/8 Male NPT   | 8              |                     |             |             |             |             |              |
| □□66-N8-              | 1/2 Male NPT             | 1/2 Male NPT   | 8              | 2.75 (69.9)         | 0.38 (9.7)  | 1.49 (37.8) | 1.00 (25.4) | 1.00 (25.4) | 1 (25.4)     |
| □□66-R4-              | 1/4 Male FR              | 1/4 Male FR    | 4              | 2.30 (58.4)         |             |             |             |             |              |
| □□66-R8-              | 1/2 Male FR              | 1/2 Male FR    | 8              | 2.55 (64.8)         | 0.46 (11.7) | 1.74 (44.2) | 1.13 (28.7) | 1.13 (28.7) | 1 1/8 (28.6) |

Mounting holes not available with 1/4 female NPT end connections

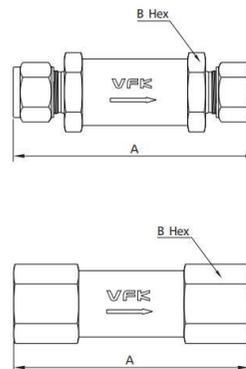
66B Series



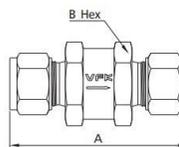
| Basic Ordering Number | Connection Type and Size |                | Element Series | Dimension, in. (mm) |             |             |             |             |              |      | Bypass Port End Connection |
|-----------------------|--------------------------|----------------|----------------|---------------------|-------------|-------------|-------------|-------------|--------------|------|----------------------------|
|                       | Inlet                    | Outlet         |                | A                   | B           | C           | ØD          | E           | F            |      |                            |
| □□66B-FX2-            | 1/8" VFK                 | 1/8" VFK       | 4              | 2.27 (57.7)         | 0.38 (9.7)  | 1.98 (50.2) | 1.00 (25.4) | 1.00 (25.4) | 1 (25.4)     | FL2  |                            |
| □□66B-FX4-            | 1/4" VFK                 | 1/4" VFK       | 4              | 2.47 (62.7)         |             | 2.44 (61.9) |             |             |              |      |                            |
| □□66B-FX6-            | 3/8" VFK                 | 3/8" VFK       | 8              | 2.84 (72.1)         | 0.46 (11.7) | 2.74 (69.1) | 1.13 (28.7) | 1.13 (28.7) | 1 1/8 (28.6) | FL6  |                            |
| □□66B-FX8-            | 1/2" VFK                 | 1/2" VFK       | 8              | 3.04 (77.2)         |             | 2.96 (74.2) |             |             |              |      |                            |
| □□66B-MX6-            | 6 mm VFK                 | 6 mm VFK       | 4              | 2.46 (62.5)         | 0.38 (9.7)  | 2.44 (61.9) | 1.00 (25.4) | 1.00 (25.4) | 1 (25.4)     | FL4  |                            |
| □□66B-MX8-            | 8 mm VFK                 | 8 mm VFK       | 8              | 2.84 (72.1)         |             | 2.74 (69.1) |             |             |              |      |                            |
| □□66B-MX10-           | 10 mm VFK                | 10 mm VFK      | 8              | 2.86 (72.6)         | 0.46 (11.7) | 2.96 (74.2) | 1.13 (28.7) | 1.13 (28.7) | 1 1/8 (28.6) | FL8  |                            |
| □□66B-MX12-           | 12 mm VFK                | 12 mm VFK      | 8              | 3.04 (77.2)         |             | 2.96 (74.2) |             |             |              |      |                            |
| □□66B-TS4-            | 1/4" TS                  | 1/4" TS        | 4              | 1.68 (42.7)         | 0.38 (9.7)  | 1.83 (56.4) | 1.00 (25.4) | 1.00 (25.4) | 1 (25.4)     | TB4  |                            |
| □□66B-TS6-            | 3/8" TS                  | 3/8" TS        | 4              |                     |             |             |             |             |              |      |                            |
| □□66B-TB4-            | 1/4" TB                  | 1/4" TB        | 4              |                     |             |             |             |             |              |      |                            |
| □□66B-TB6-            | 3/8" TB                  | 3/8" TB        | 4              |                     |             |             |             |             |              |      |                            |
| □□66B-FN2-            | 1/8 Female NPT           | 1/8 Female NPT | 4              | 2.13 (54.1)         | 0.38 (9.7)  | 1.71 (43.4) | 1.00 (25.4) | 1.00 (25.4) | 1 1/8 (28.6) | FNS2 |                            |
| □□66B-FN4-            | 1/4 Female NPT           | 1/4 Female NPT | 4              |                     |             |             |             |             |              |      |                            |
| □□66B-N4-             | 1/4 Male NPT             | 1/4 Male NPT   | 4              | 2.38 (60.5)         | 0.46 (11.7) | 2.00 (50.8) | 1.13 (28.7) | 1.13 (28.7) | 1 1/8 (28.6) | FL4  |                            |
| □□66B-N6-             | 3/8 Male NPT             | 3/8 Male NPT   | 8              |                     |             |             |             |             |              |      |                            |
| □□66B-N8-             | 1/2 Male NPT             | 1/2 Male NPT   | 8              | 2.75 (69.9)         | 0.46 (11.7) | 2.96 (74.2) | 1.13 (28.7) | 1.13 (28.7) | 1 1/8 (28.6) | FL8  |                            |
| □□66B-R4-             | 1/4 Male FR              | 1/4 Male FR    | 4              | 2.38 (60.5)         |             |             |             |             |              |      |                            |
| □□66B-R8-             | 1/2 Male FR              | 1/2 Male FR    | 8              | 2.75 (69.9)         | 0.46 (11.7) | 2.96 (74.2) | 1.13 (28.7) | 1.13 (28.7) | 1 1/8 (28.6) | FL8  |                            |

Mounting holes not available with 1/4 female NPT end connections

661 Series



FW Series



| Basic Ordering Number | Connection Type and Size |                 | Element Series | Dimension, in. (mm) |             |
|-----------------------|--------------------------|-----------------|----------------|---------------------|-------------|
|                       | Inlet                    | Outlet          |                | A                   | B           |
| □□661-FX2-            | 1/8" VFK                 | 1/8" VFK        | 2              | 2.35 (59.7)         | 9/16 (14.3) |
| □□661-FX4-            | 1/4" VFK                 | 1/4" VFK        | 4              | 2.95 (74.9)         | 3/4 (19.0)  |
| □□661-FX6-            | 3/8" VFK                 | 3/8" VFK        | 8              | 3.21 (81.5)         | 1 (25.4)    |
| □□661-FX8-            | 1/2" VFK                 | 1/2" VFK        | 8              | 3.49 (88.6)         |             |
| □□661-MX3-            | 3 mm VFK                 | 3 mm VFK        | 2              | 2.38 (60.5)         | 9/16 (14.3) |
| □□661-MX6-            | 6 mm VFK                 | 6 mm VFK        | 4              | 2.96 (75.2)         | 3/4 (19.0)  |
| □□661-FN2-            | 1/8 Female NPT           | 1/8 Female NPT  | 2              | 2.16 (54.9)         | 9/16 (14.3) |
| □□661-FN4-            | 1/4 Female NPT           | 1/4 Female NPT  | 4              | 2.87 (72.9)         | 3/4 (19.0)  |
| □□661-N2-             | 1/8 Male NPT             | 1/8 Male NPT    | 2              | 1.88 (47.7)         | 9/16 (14.3) |
| □□661-N4-             | 1/4 Male NPT             | 1/4 Male NPT    | 4              | 2.69 (68.3)         | 3/4 (19.0)  |
| □□661-R2-             | 1/8 Male FR              | 1/8 Male FR     | 2              | 2.79 (70.8)         |             |
| □□661-R4-             | 1/4 Male FR              | 1/4 Male FR     | 4              |                     |             |
| □□661-FR2-            | 1/8 Female BSPT          | 1/8 Female BSPT | 2              | 2.16 (54.9)         | 9/16 (14.3) |
| □□661-FR4-            | 1/4 Female BSPT          | 1/4 Female BSPT | 4              | 2.87 (72.9)         | 3/4 (19.0)  |
| □□661-R2-             | 1/8 Male BSPT            | 1/8 Male BSPT   | 2              | 1.88 (47.7)         | 9/16 (14.3) |
| □□661-R4-             | 1/4 Male BSPT            | 1/4 Male BSPT   | 4              | 2.69 (68.3)         | 3/4 (19.0)  |

| Basic Ordering Number | Connection Type and Size |                | Orifice in. (mm) | Dimension, in. (mm) |          |
|-----------------------|--------------------------|----------------|------------------|---------------------|----------|
|                       | Inlet                    | Outlet         |                  | A                   | B        |
| □□662-FX4-            | 1/4" VFK                 | 1/4" VFK       | 0.187(4.75)      | 2.15(54.6)          | 1 (25.4) |
| □□662-MX6-            | 6 mm VFK                 | 6 mm VFK       |                  |                     |          |
| □□662-FN4-            | 1/4 Female NPT           | 1/4 Female NPT | 0.453(11.5)      | 1.57(39.9)          |          |
| □□662-N4-             | 1/4 Male NPT             | 1/4 Male NPT   | 0.281(7.14)      | 1.89(48.0)          |          |
| □□662-R4-             | 1/4 Male FR              | 1/4 Male FR    | 0.187(4.75)      | 2.04(51.8)          |          |

- VFK means VFK double ferrule tube fittings, FR means metal gasket seal fittings, TS means fractional tube socket weld, TB means fractional tube butt weld.
- Sizes and types listed are standard. Other sizes and types are available upon request.
- Dimensions are shown with VFK nuts finger-tightened. All dimensions are for reference only and are subject to change. For dimensions not shown above, please contact the authorized representative or VFK

Filters Ordering Information

SS66B — FX8 MX10 — S — P150 — FX4

| A             | B            | C          | D                           | E                        | F  | G            | H                                     | I                         | J                                 |
|---------------|--------------|------------|-----------------------------|--------------------------|--|--------------|---------------------------------------|---------------------------|-----------------------------------|
| Body Material | Valve Series | Inlet Type | Inlet Size                  | Outlet Type              | Outlet Size  | Element Type | Gasket Material                       | Element Nominal Pore Size | Bypass Port (for 66B Series Only) |
| SS            | 66B          | FX         | 8                           | MX                       | 10   | S            | P                                     | S                         | P                                 |
| Body Material | Series       | Inlet Type | Inlet Size                  | Outlet Type              | Outlet Size  | Element Type | Gasket Material                       | Element Nominal Pore Size | Bypass Port (for 66B Series Only) |
| SS            | 316 SS       | FN         | Female NPT                  | 2 1/8 (in.)              | Same as Inlet  | Sintered     | Silver-plated 316 SS for 66, 66B, 661 | 05                        | Female NPT 1/8"                   |
| 6L            | 316L SS      | N          | Male NPT                    | 4 1/4 (in.)              | Specified in the same way as the inlet type and size | S Strainer   | P                                     | 2                         | Fractional Tube Fitting 1/8"      |
| S4            | 304 SS       | FR         | Female BSPT                 | 6 3/8 (in.) or 6 mm      |  |              | P                                     | 7                         | Fractional Tube Fitting 1/4"      |
| 4L            | 304L SS      | R          | Male BSPT                   | 8 1/2 (in.) or 8 mm      |  |              | A                                     | 15                        | 1/4" Tube Socket Weld             |
| S1            | 321 SS       | FM         | Female ISO (for RP)         | 10 mm                    |  |              | A                                     | 40                        | Fractional Tube Fitting 3/8"      |
| B             | Brass        | MS         | Male ISO (for RG)           | 12 3/4 (in.) or 12 mm    |  |              | A                                     | 60                        | Fractional Tube Fitting 1/2"      |
|               |              | FP         | Female BSPP (for RP)        | 14 mm or M14 x 1.5       |  |              |                                       | 80                        | Fractional Tube Fitting 1/2"      |
|               |              | BP         | Male BSPP (for RG)          | 16 1 (in.) or 16 mm      |  |              |                                       | 100                       |                                   |
|               |              | FX         | Fractional Tube Fitting     | 18 18 mm                 |  |              |                                       | 150                       |                                   |
|               |              | MX         | Metric Tube Fitting         | 1 1/4 (in.) or M20 x 1.5 |  |              |                                       | 250                       |                                   |
|               |              | TS         | Fractional Tube Socket Weld | 22 mm or M22 x 1.5       |  |              |                                       | 450                       |                                   |
|               |              | TB         | Fractional Tube Butt Weld   | 25 mm                    |  |              |                                       |                           |                                   |
|               |              | MFR        | Male FR Fitting             |                          |  |              |                                       |                           |                                   |

1. Standard thread pitch for metric threads are as follows:

M10 and below: 1 mm

M12 to M24: 1.5 mm

M27 and above: 2 mm

Standard thread pitch should be ignored in the ordering number, others should be specified.

Elements Ordering Information

| A        | B       | C            | D              | E           |
|----------|---------|--------------|----------------|-------------|
| Material | Element | Element Type | Element Series | Outlet Type |
| SS       | E       | SN           | 8              | 60          |

| A   | Material |
|-----|----------|
| SS: | 316 SS   |
| 6L: | 316L SS  |

| B | Element |
|---|---------|
| E | Element |

| C  | Element Type |
|----|--------------|
| SN | Sintered     |
| ST | Strainer     |

| D                                   | Element Series |
|-------------------------------------|----------------|
| Standard with 2 (only for sintered) |                |
| 4                                   | 4              |
| 8                                   | 8              |

| E   | Element Nominal Pore Size |
|-----|---------------------------|
| 05  | 0.5 µm                    |
| 2   | 2 µm                      |
| 7   | 7 µm                      |
| 15  | 15 µm                     |
| 40  | 40 µm                     |
| 60  | 60 µm                     |
| 80  | 80 µm                     |
| 100 | 100 µm                    |
| 150 | 150 µm                    |
| 250 | 250 µm                    |
| 450 | 450 µm                    |