

Introduction

Parker F Series Inline Filters are designed for protection of instrumentation systems from undesirable materials. Component changes or repair and maintenance can admit dirt, chips, scale, or other contaminants to the small bore tubing.

Features

- ▶ Compact inline design with large filtration area
- ▶ Stainless steel and brass construction
- ▶ Replaceable sintered 316 stainless steel filter element
- ▶ Standard sintered metal micron ratings: 1, 5, 10, 50, and 100
- ▶ Optional 250 and 450 micron wire cloth filter elements
- ▶ Port connections include male and female NPT, CPI™, A-LOK®, UltraSeal, VacuSeal, BSP, SAE, and Seal-Lok®
- ▶ Heat code traceability

Specifications

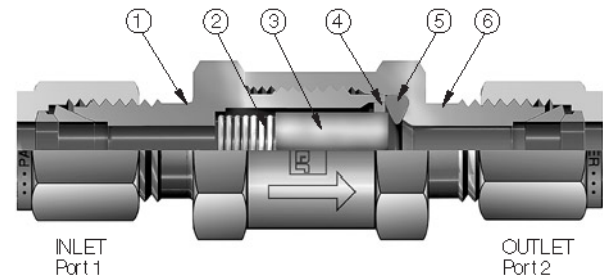
Pressure Rating:

| | |
|---------------------------------|-------------------------|
| 316 SS | |
| 1/8" to 3/4" | 6000 psig (414 bar) CWP |
| 1" | 5000 psig (345 bar) CWP |
| All sizes with PTFE Seals | 4000 psig (276 bar) CWP |
| Brass - 1/8" to 1" | 3000 psig (207 bar) CWP |

Temperature Rating:

| | |
|--|-----------------------------------|
| Fluorocarbon Rubber... | -15°F to +400°F (-26°C to +204°C) |
| Nitrile Rubber | -30°F to +275°F (-34°C to +135°C) |
| Ethylene Propylene Rubber | |
| | -70°F to +275°F (-57°C to +135°C) |
| Neoprene Rubber | -45°F to +250°F (-43°C to +121°C) |
| PTFE | -65°F to +400°F (-54°C to +204°C) |
| Highly Fluorinated Fluorocarbon Rubber | |
| | -15°F to +200°F (-26°C to +93°C) |

Materials of Construction



Model shown: 4A-F4L-50-SS

Note: Flow direction reversed with wire mesh elements.

Materials of Construction

| Item # | Part | Stainless Steel Filter | Brass Filter |
|--------|----------------|------------------------|------------------------|
| 1 | Body | ASTM A276, Type 316 | ASTM B16, Alloy C36000 |
| 2 | Spring | 316 Stainless Steel | |
| 3 | Filter Element | 316 Stainless Steel | |
| 4 | Guide Ring | PTFE | |
| 5 | Seal* | Fluorocarbon Rubber* | |
| 6 | Cap | ASTM A276, Type 316 | ASTM B16, Alloy C36000 |

* Optional seal materials are available. See How to Order section.
Lubrication: Perfluorinated Polyether.

Flow Calculations with 100 psig (7 bar) Inlet Pressure

| Pressure Drop Δ | F2L | | F4L | | F6L | | F8L | | F12L | | F16L | |
|-----------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|
| | Water gpm at 60°F (16°C) | Air SCFM at 60°F (16°C) | Water gpm at 60°F (16°C) | Air SCFM at 60°F (16°C) | Water gpm at 60°F (16°C) | Air SCFM at 60°F (16°C) | Water gpm at 60°F (16°C) | Air SCFM at 60°F (16°C) | Water gpm at 60°F (16°C) | Air SCFM at 60°F (16°C) | Water gpm at 60°F (16°C) | Air SCFM at 60°F (16°C) |
| | 1 Micron | | 1 Micron | | 1 Micron | | 1 Micron | | 1 Micron | | 1 Micron | |
| 5 | 0.04 | 0.38 | 0.13 | 1.34 | 0.13 | 1.38 | 0.56 | 5.91 | 0.66 | 6.90 | 0.91 | 9.52 |
| 10 | 0.05 | 0.52 | 0.18 | 1.86 | 0.19 | 1.93 | 0.80 | 8.24 | 0.93 | 9.61 | 1.28 | 13.27 |
| 50 | 0.11 | 1.03 | 0.40 | 3.67 | 0.42 | 3.80 | 1.78 | 16.21 | 2.08 | 18.92 | 2.87 | 26.12 |
| | 5 Micron | | 5 Micron | | 5 Micron | | 5 Micron | | 5 Micron | | 5 Micron | |
| 5 | 0.06 | 0.61 | 0.26 | 2.74 | 0.31 | 3.26 | 0.92 | 9.69 | 1.81 | 18.96 | 1.88 | 19.75 |
| 10 | 0.08 | 0.85 | 0.37 | 3.82 | 0.44 | 4.54 | 1.31 | 13.50 | 2.56 | 26.41 | 2.66 | 27.52 |
| 50 | 0.18 | 1.67 | 0.83 | 7.53 | 0.98 | 8.94 | 2.92 | 26.57 | 5.71 | 51.99 | 5.95 | 54.18 |
| | 10 Micron | | 10 Micron | | 10 Micron | | 10 Micron | | 10 Micron | | 10 Micron | |
| 5 | 0.25 | 2.63 | 0.38 | 4.01 | 0.45 | 4.74 | 1.68 | 17.67 | 2.33 | 24.45 | 3.04 | 31.88 |
| 10 | 0.35 | 3.66 | 0.54 | 5.59 | 0.64 | 6.60 | 2.38 | 24.61 | 3.30 | 34.06 | 4.30 | 44.42 |
| 50 | 0.79 | 7.21 | 1.21 | 11.00 | 1.43 | 13.00 | 5.32 | 48.45 | 7.37 | 67.05 | 9.61 | 87.44 |
| | 50 Micron | | 50 Micron | | 50 Micron | | 50 Micron | | 50 Micron | | 50 Micron | |
| 5 | 0.37 | 3.92 | 0.76 | 7.95 | 1.80 | 18.89 | 3.67 | 38.52 | 5.23 | 54.87 | 7.64 | 80.16 |
| 10 | 0.53 | 5.46 | 1.07 | 11.08 | 2.55 | 26.31 | 5.19 | 53.67 | 7.40 | 76.46 | 10.81 | 111.70 |
| 50 | 1.18 | 10.75 | 2.40 | 21.81 | 5.69 | 51.80 | 11.61 | 105.65 | 16.54 | 150.50 | 24.16 | 219.86 |
| | 100 Micron | | 100 Micron | | 100 Micron | | 100 Micron | | 100 Micron | | 100 Micron | |
| 5 | 0.51 | 5.37 | 1.33 | 13.94 | 2.74 | 28.72 | 5.13 | 53.77 | 7.95 | 83.42 | 8.38 | 87.88 |
| 10 | 0.72 | 7.49 | 1.88 | 19.42 | 3.87 | 40.01 | 7.25 | 74.92 | 11.25 | 116.24 | 11.85 | 122.45 |
| 50 | 1.62 | 14.73 | 4.20 | 38.22 | 8.65 | 78.76 | 16.21 | 147.48 | 25.14 | 228.81 | 26.49 | 241.03 |
| | 250 Micron | | 250 Micron | | 250 Micron | | 250 Micron | | 250 Micron | | 250 Micron | |
| 5 | 0.58 | 6.03 | 1.77 | 18.46 | 5.41 | 56.57 | 8.95 | 93.50 | 14.28 | 149.18 | 19.14 | 200.01 |
| 10 | 0.82 | 8.37 | 2.50 | 25.62 | 7.66 | 78.51 | 12.65 | 129.75 | 20.19 | 207.02 | 27.07 | 277.56 |
| 50 | 1.82 | 15.85 | 5.59 | 48.53 | 17.12 | 148.74 | 28.29 | 245.81 | 45.14 | 392.21 | 60.52 | 525.83 |
| | 450 Micron | | 450 Micron | | 450 Micron | | 450 Micron | | 450 Micron | | 450 Micron | |
| 5 | 0.78 | 8.08 | 1.82 | 18.92 | 7.02 | 73.18 | 9.05 | 94.28 | 15.36 | 160.03 | 19.81 | 206.39 |
| 10 | 1.10 | 11.18 | 2.57 | 26.17 | 9.93 | 101.23 | 12.80 | 130.43 | 21.72 | 221.38 | 28.01 | 285.51 |
| 50 | 2.45 | 20.54 | 5.74 | 48.07 | 22.21 | 185.94 | 28.62 | 239.57 | 48.57 | 406.62 | 62.64 | 524.43 |

F

Flow / Filter Data

| Filter Series | Effective Filtration Area | | C_V^* | | | | | | |
|---------------|---------------------------|-------|----------------------|----------------------|-----------------------|-----------------------|-------------------------|-------------------------|-------------------------|
| | | | 1 Micron | 5 Micron | 10 Micron | 50 Micron | 100 Micron | 250 Micron | 450 Micron |
| | sq in | sq mm | Micron Range .5 to 3 | Micron Range 5 to 10 | Micron Range 10 to 20 | Micron Range 40 to 50 | Micron Range 100 to 150 | Micron Range 225 to 275 | Micron Range 400 to 500 |
| F2L | 0.39 | 252 | 0.016 | 0.026 | 0.112 | 0.167 | 0.229 | 0.258 | 0.347 |
| F4L | 0.70 | 452 | 0.057 | 0.117 | 0.171 | 0.339 | 0.594 | 0.790 | 0.812 |
| F6L | 1.57 | 1013 | 0.059 | 0.139 | 0.202 | 0.805 | 1.224 | 2.421 | 3.141 |
| F8L | 2.53 | 1632 | 0.252 | 0.413 | 0.753 | 1.642 | 2.292 | 4.001 | 4.047 |
| F12L | 3.77 | 2432 | 0.294 | 0.808 | 1.042 | 2.339 | 3.556 | 6.384 | 6.869 |
| F16L | 4.47 | 2884 | 0.406 | 0.842 | 1.359 | 3.417 | 3.746 | 8.559 | 8.859 |

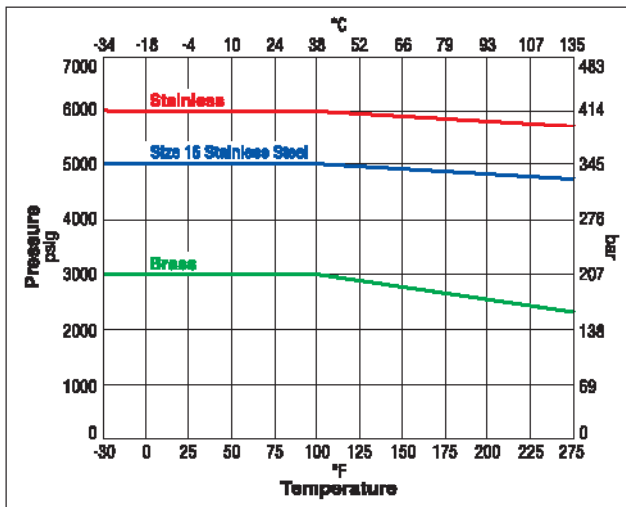
* Tested in accordance with ISA S75.02. Gas flow will be choked when $P_1 - P_2 / P_1 = X_T$. $X_T = 1.0$ for micron sizes 1 through 100; 0.79 for the 250 micron size, and 0.68 for the 450 micron size.

Maximum Pressure Differential Across Clean Filters at 70°F (21°C)

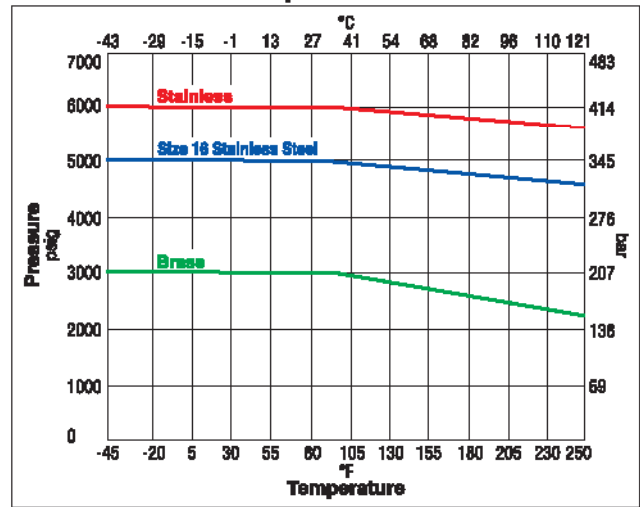
| | 1 micron | 5 micron | 10 micron | 50 micron | 100 micron | 250 micron | 450 micron |
|------|----------|----------|-----------|-----------|------------|------------|------------|
| psig | 2250 | 1950 | 1750 | 1150 | 1000 | 1000 | 1000 |
| bar | 155 | 134 | 120 | 79 | 69 | 69 | 69 |

Pressure vs. Temperature

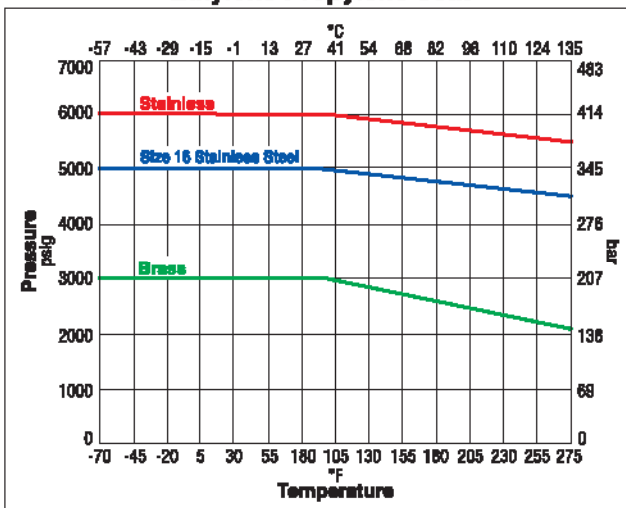
Nitrile Seat



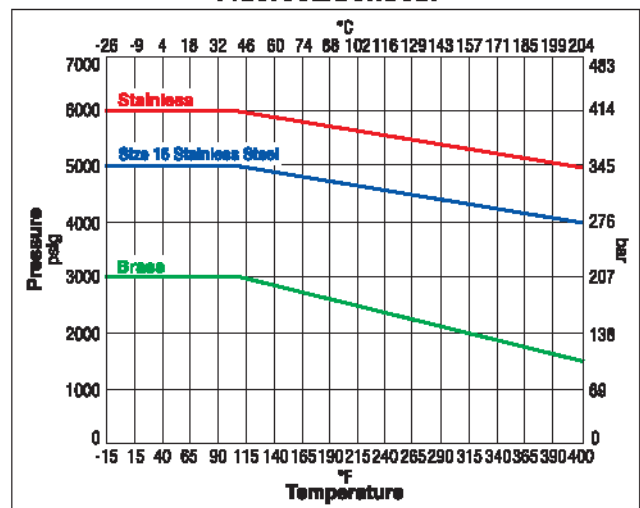
Neoprene Seat



Ethylene Propylene Seat

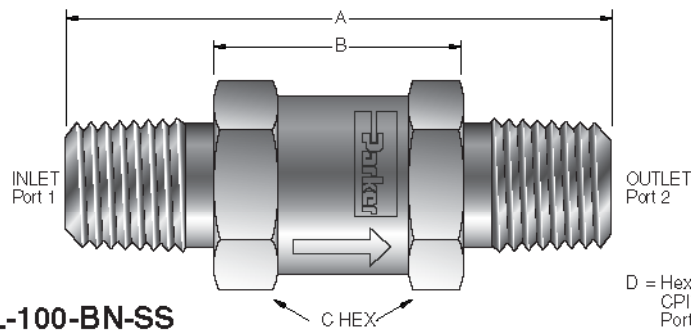


Fluorocarbon Seat



Note: To determine MPa, multiply bar by 0.1

Dimensions



D = Hex Diameter of Nuts on CPI™ and A-LOK® Compression Ported Valves

Model shown: 4M-F4L-100-BN-SS

Dimensions in inches (millimeters) are for reference only, subject to change.

| Basic Part Number | End Connections | | Dimensions | | | | | | | |
|-------------------|-----------------------------|-----------------------------|------------|------|------|------|-------|------|------|------|
| | Inlet Port 1 | Outlet Port 2 | A† | | B | | C | | D | |
| | | | inch | mm | inch | mm | inch | mm | inch | mm |
| 2A-F2L | 1/8" A-LOK® Compression | 1/8" A-LOK® Compression | 2.29 | 58.2 | 1.09 | 27.7 | .625 | 15.9 | .438 | 11.1 |
| 2F-F2L | 1/8" Female NPT | 1/8" Female NPT | 1.86 | 47.2 | — | — | .625 | 15.9 | — | — |
| 2F5-F2L | 1/8" Male SAE | 1/8" Male SAE | 1.69 | 42.9 | 1.09 | 27.7 | .625 | 15.9 | — | — |
| 2G5-F2L | 1/8" Female SAE | 1/8" Female SAE | 1.86 | 47.2 | — | — | .625 | 15.9 | — | — |
| 2KF-F2L | 1/8" Female BSP/ISO Tapered | 1/8" Female BSP/ISO Tapered | 1.86 | 47.2 | — | — | .625 | 15.9 | — | — |
| 2KM-F2L | 1/8" Male BSP/ISO Tapered | 1/8" Male BSP/ISO Tapered | 1.77 | 45.0 | 1.00 | 25.4 | .625 | 15.9 | — | — |
| 2M-F2L | 1/8" Male NPT | 1/8" Male NPT | 1.77 | 45.0 | 1.01 | 25.7 | .625 | 15.9 | — | — |
| 2TA-F2L | 1/8" Tube Adapter | 1/8" Tube Adapter | 1.96 | 49.8 | .88 | 22.4 | .625 | 15.9 | — | — |
| 2Z-F2L | 1/8" CPI™ Compression | 1/8" CPI™ Compression | 2.29 | 58.2 | 1.09 | 27.7 | .625 | 15.9 | .438 | 11.1 |
| M3A-F2L | 3mm A-LOK® Compression | 3mm A-LOK® Compression | 2.30 | 58.4 | 1.05 | 26.7 | .625 | 15.9 | .472 | 12.0 |
| M3Z-F2L | 3mm CPI™ Compression | 3mm CPI™ Compression | 2.30 | 58.4 | 1.05 | 26.7 | .625 | 15.9 | .472 | 12.0 |
| 2M2A-F2L | 1/8" Male NPT | 1/8" A-LOK® Compression | 2.03 | 51.6 | 1.06 | 26.9 | .625 | 15.9 | .438 | 11.1 |
| 2M2F-F2L | 1/8" Male NPT | 1/8" Female NPT | 1.82 | 46.2 | 1.44 | 36.6 | .625 | 15.9 | — | — |
| 2M2Z-F2L | 1/8" Male NPT | 1/8" CPI™ Compression | 2.03 | 51.6 | 1.06 | 26.9 | .625 | 15.7 | .438 | 11.1 |
| 2F-F4L | 1/8" Female NPT | 1/8" Female NPT | 2.01 | 51.1 | — | — | .750 | 19.1 | — | — |
| 2M-F4L | 1/8" Male NPT | 1/8" Male NPT | 1.82 | 46.2 | 1.06 | 26.9 | .750 | 19.1 | — | — |
| 4A-F4L | 1/4" A-LOK® Compression | 1/4" A-LOK® Compression | 2.42 | 61.5 | 1.03 | 26.2 | .750 | 19.1 | .563 | 14.3 |
| 4F-F4L | 1/4" Female NPT | 1/4" Female NPT | 2.40 | 61.0 | — | — | .750 | 19.1 | — | — |
| 4F5-F4L | 1/4" Male SAE | 1/4" Male SAE | 2.02 | 51.3 | 1.15 | 29.2 | .750 | 19.1 | — | — |
| 4G5-F4L | 1/4" Female SAE | 1/4" Female SAE | 2.20 | 55.9 | — | — | .750 | 19.1 | — | — |
| 4KF-F4L | 1/4" Female BSP/ISO Tapered | 1/4" Female BSP/ISO Tapered | 2.40 | 61.0 | — | — | .750 | 19.1 | — | — |
| 4KM-F4L | 1/4" Male BSP/ISO Tapered | 1/4" Male BSP/ISO Tapered | 2.18 | 55.4 | 1.06 | 26.9 | .750 | 19.1 | — | — |
| 4L-F4L | 1/4" Seal-Lok® | 1/4" Seal-Lok® | 1.82 | 46.2 | 1.05 | 26.7 | .750 | 19.1 | — | — |
| 4M-F4L | 1/4" Male NPT | 1/4" Male NPT | 2.18 | 55.4 | 1.04 | 26.4 | .750 | 19.1 | — | — |
| 4Q-F4L | 1/4" UltraSeal | 1/4" UltraSeal | 1.97 | 50.0 | 1.04 | 26.4 | .750 | 19.1 | — | — |
| 4V-F4L | 1/4" VacuSeal | 1/4" VacuSeal | 2.22 | 56.4 | .98 | 24.9 | .750 | 19.1 | — | — |
| 4TA-F4L | 1/4" Tube Adapter | 1/4" Tube Adapter | 2.35 | 59.7 | 1.07 | 27.2 | .750 | 19.1 | — | — |
| 4Z-F4L | 1/4" CPI™ Compression | 1/4" CPI™ Compression | 2.42 | 61.5 | 1.03 | 26.2 | .750 | 19.1 | .563 | 14.3 |
| 6A-F4L | 3/8" A-LOK® Compression | 3/8" A-LOK® Compression | 2.55 | 64.8 | 1.03 | 26.2 | .750 | 19.1 | .688 | 17.5 |
| 6Z-F4L | 3/8" CPI™ Compression | 3/8" CPI™ Compression | 2.55 | 64.8 | 1.03 | 26.2 | .750 | 19.1 | .688 | 17.5 |
| M6A-F4L | 6mm A-LOK® Compression | 6mm A-LOK® Compression | 2.43 | 61.7 | 1.03 | 26.2 | .750 | 19.1 | .551 | 14.0 |
| M6Z-F4L | 6mm CPI™ Compression | 6mm CPI™ Compression | 2.43 | 61.7 | 1.03 | 26.2 | .750 | 19.1 | .551 | 14.0 |
| 4M4A-F4L | 1/4" Male NPT | 1/4" A-LOK® Compression | 2.31 | 58.7 | 1.04 | 26.4 | .750 | 19.1 | .563 | 14.3 |
| 4M4F-F4L | 1/4" Male NPT | 1/4" Female NPT | 2.29 | 58.2 | 1.72 | 43.7 | .750 | 19.1 | — | — |
| 4M4Z-F4L | 1/4" Male NPT | 1/4" CPI™ Compression | 2.32 | 58.9 | 1.05 | 26.7 | .750 | 19.1 | .563 | 14.3 |
| 4M6A-F4L | 1/4" Male NPT | 3/8" A-LOK® Compression | 2.38 | 60.5 | 1.05 | 26.7 | .750 | 19.1 | .688 | 17.5 |
| 4M6Z-F4L | 1/4" Male NPT | 3/8" CPI™ Compression | 2.38 | 60.5 | 1.05 | 26.7 | .750 | 19.1 | .688 | 17.5 |
| 6A-F6L | 3/8" A-LOK® Compression | 3/8" A-LOK® Compression | 3.27 | 83.1 | 1.75 | 44.5 | 1.000 | 25.4 | .688 | 17.5 |
| 6F-F6L | 3/8" Female NPT | 3/8" Female NPT | 3.03 | 77.0 | — | — | 1.000 | 25.4 | — | — |
| 6F5-F6L | 3/8" Male SAE | 3/8" Male SAE | 2.71 | 68.8 | 1.76 | 44.7 | 1.000 | 25.4 | — | — |
| 6G5-F6L | 3/8" Female SAE | 3/8" Female SAE | 2.96 | 75.2 | — | — | 1.000 | 25.4 | — | — |
| 6KF-F6L | 3/8" Female BSP/ISO Tapered | 3/8" Female BSP/ISO Tapered | 3.03 | 77.0 | — | — | 1.000 | 25.4 | — | — |
| 6KM-F6L | 3/8" Male BSP/ISO Tapered | 3/8" Male BSP/ISO Tapered | 2.96 | 75.2 | 1.84 | 46.7 | 1.000 | 25.4 | — | — |
| 6L-F6L | 3/8" Seal-Lok® | 3/8" Seal-Lok® | 2.65 | 67.3 | 1.77 | 45.0 | 1.000 | 25.4 | — | — |
| 6M-F6L | 3/8" Male NPT | 3/8" Male NPT | 2.96 | 75.2 | 1.82 | 46.2 | 1.000 | 25.4 | — | — |
| 6Q-F6L | 3/8" UltraSeal | 3/8" UltraSeal | 2.75 | 69.8 | 1.80 | 45.7 | 1.000 | 25.4 | — | — |
| 6V-F6L | 3/8" VacuSeal | 3/8" VacuSeal | 3.56 | 90.4 | 2.05 | 52.1 | 1.000 | 25.4 | — | — |
| 6TA-F6L | 3/8" Tube Adapter | 3/8" Tube Adapter | 3.24 | 82.3 | 1.80 | 45.7 | 1.000 | 25.4 | — | — |
| 6Z-F6L | 3/8" CPI™ Compression | 3/8" CPI™ Compression | 3.27 | 83.1 | 1.75 | 44.5 | 1.000 | 25.4 | .688 | 17.5 |

Note: Optional wire cloth filter elements may slightly alter dimensions A and B on filters with combination end connections.

†For CPI™ and A-Lok®. Dimensions are measured with nuts in the finger tight position.

Dimensions (Continued)

Dimensions in inches (millimeters) are for reference only, subject to change.

| Basic Part Number | End Connections | | Dimensions | | | | | | | |
|-------------------|-----------------------------|-----------------------------|------------|-------|------|------|-------|------|-------|------|
| | | | A† | | B | | C | | D | |
| | Inlet Port 1 | Outlet Port 2 | inch | mm | inch | mm | inch | mm | inch | mm |
| 8A-F6L | 1/2" A-LOK® Compression | 1/2" A-LOK® Compression | 3.55 | 90.2 | 1.81 | 46.0 | 1.000 | 25.4 | .875 | 22.2 |
| 8Z-F6L | 1/2" CPI™ Compression | 1/2" CPI™ Compression | 3.55 | 90.2 | 1.81 | 46.0 | 1.000 | 25.4 | .875 | 22.2 |
| M8A-F6L | 8mm A-LOK® Compression | 8mm A-LOK® Compression | 3.33 | 84.6 | 1.87 | 47.5 | 1.000 | 25.4 | .630 | 16.0 |
| M8Z-F6L | 8mm CPI™ Compression | 8mm CPI™ Compression | 3.33 | 84.6 | 1.87 | 47.5 | 1.000 | 25.4 | .630 | 16.0 |
| M10A-F6L | 10mm A-LOK® Compression | 10mm A-LOK® Compression | 3.35 | 85.1 | 1.81 | 46.0 | 1.000 | 25.4 | .748 | 19.0 |
| M10Z-F6L | 10mm CPI™ Compression | 10mm CPI™ Compression | 3.35 | 85.1 | 1.81 | 46.0 | 1.000 | 25.4 | .748 | 19.0 |
| 6M6A-F6L | 3/8" Male NPT | 3/8" A-LOK® Compression | 3.14 | 79.8 | 1.81 | 46.0 | 1.000 | 25.4 | .688 | 17.5 |
| 6M6F-F6L | 3/8" Male NPT | 3/8" Female NPT | 3.04 | 77.2 | 2.47 | 62.7 | 1.000 | 25.4 | — | — |
| 6M6Z-F6L | 3/8" Male NPT | 3/8" CPI™ Compression | 3.14 | 79.8 | 1.81 | 46.0 | 1.000 | 25.4 | .688 | 17.5 |
| 6M8A-F6L | 3/8" Male NPT | 1/2" A-LOK® Compression | 3.25 | 82.6 | 1.81 | 46.0 | 1.000 | 25.4 | .875 | 22.2 |
| 6M8Z-F6L | 3/8" Male NPT | 1/2" CPI™ Compression | 3.25 | 82.6 | 1.81 | 46.0 | 1.000 | 25.4 | .875 | 22.2 |
| 8A-F8L | 1/2" A-LOK® Compression | 1/2" A-LOK® Compression | 4.08 | 103.6 | 2.34 | 59.4 | 1.250 | 31.8 | .875 | 22.2 |
| 8F-F8L | 1/2" Female NPT | 1/2" Female NPT | 3.56 | 90.4 | — | — | 1.250 | 31.8 | — | — |
| 8F5-F8L | 1/2" Male SAE | 1/2" Male SAE | 3.45 | 87.6 | 2.34 | 59.4 | 1.250 | 31.8 | — | — |
| 8G5-F8L | 1/2" Female SAE | 1/2" Female SAE | 3.56 | 90.4 | — | — | 1.250 | 31.8 | — | — |
| 8KF-F8L | 1/2" Female BSP/ISO Tapered | 1/2" Female BSP/ISO Tapered | 3.56 | 90.4 | — | — | 1.250 | 31.8 | — | — |
| 8KM-F8L | 1/2" Male BSP/ISO Tapered | 1/2" Male BSP/ISO Tapered | 3.56 | 90.4 | 2.06 | 52.3 | 1.250 | 31.8 | — | — |
| 8L-F8L | 1/2" Seal-Lok® | 1/2" Seal-Lok® | 3.22 | 81.8 | 2.21 | 56.1 | 1.250 | 31.8 | — | — |
| 8M-F8L | 1/2" Male NPT | 1/2" Male NPT | 3.56 | 90.4 | 2.05 | 52.1 | 1.250 | 31.8 | — | — |
| 8Q-F8L | 1/2" UltraSeal | 1/2" UltraSeal | 3.28 | 83.3 | 2.33 | 59.2 | 1.250 | 31.8 | — | — |
| 8TA-F8L | 1/2" Tube Adapter | 1/2" Tube Adapter | 3.75 | 95.3 | 1.78 | 45.2 | 1.250 | 31.8 | — | — |
| 8V-F8L | 1/2" VacuSeal | 1/2" VacuSeal | 3.56 | 90.4 | 2.05 | 52.1 | 1.250 | 31.8 | — | — |
| 8Z-F8L | 1/2" CPI™ Compression | 1/2" CPI™ Compression | 4.08 | 103.6 | 2.34 | 59.4 | 1.250 | 31.8 | .875 | 22.2 |
| M12A-F8L | 12mm A-LOK® Compression | 12mm A-LOK® Compression | 4.06 | 103.1 | 2.34 | 59.4 | 1.250 | 31.8 | .866 | 22.0 |
| M12Z-F8L | 12mm CPI™ Compression | 12mm CPI™ Compression | 4.06 | 103.1 | 2.34 | 59.4 | 1.250 | 31.8 | .866 | 22.0 |
| 8M8A-F8L | 1/2" Male NPT | 1/2" A-LOK® Compression | 3.82 | 97.0 | 2.19 | 55.7 | 1.250 | 31.8 | .875 | 22.2 |
| 8M8F-F8L | 1/2" Male NPT | 1/2" Female NPT | 3.56 | 90.4 | 2.80 | 71.1 | 1.250 | 31.8 | — | — |
| 8M8Z-F8L | 1/2" Male NPT | 1/2" CPI™ Compression | 3.82 | 97.0 | 2.19 | 55.7 | 1.250 | 31.8 | .875 | 22.2 |
| 12A-F12L | 3/4" A-LOK® Compression | 3/4" A-LOK® Compression | 4.34 | 110.2 | 2.60 | 66.0 | 1.375 | 34.9 | 1.125 | 28.6 |
| 12F-F12L | 3/4" Female NPT | 3/4" Female NPT | 4.09 | 103.9 | — | — | 1.375 | 34.9 | — | — |
| 12F5-F12L | 3/4" Male SAE | 3/4" Male SAE | 4.05 | 102.9 | 2.59 | 65.8 | 1.375 | 34.9 | — | — |
| 12G5-F12L | 3/4" Female SAE | 3/4" Female SAE | 4.13 | 104.9 | — | — | 1.375 | 34.9 | — | — |
| 12KF-F12L | 3/4" Female BSP/ISO Tapered | 3/4" Female BSP/ISO Tapered | 4.09 | 103.9 | — | — | 1.375 | 34.9 | — | — |
| 12KM-F12L | 3/4" Male BSP/ISO Tapered | 3/4" Male BSP/ISO Tapered | 4.09 | 103.9 | 2.59 | 65.8 | 1.375 | 34.9 | — | — |
| 12L-F12L | 3/4" Seal-Lok® | 3/4" Seal-Lok® | 3.78 | 96.0 | 2.44 | 62.0 | 1.375 | 34.9 | — | — |
| 12M-F12L | 3/4" Male NPT | 3/4" Male NPT | 4.09 | 103.9 | 2.58 | 65.5 | 1.375 | 34.9 | — | — |
| 12Q-F12L | 3/4" UltraSeal | 3/4" UltraSeal | 3.78 | 96.0 | 2.64 | 67.1 | 1.375 | 34.9 | — | — |
| 12TA-F12L | 3/4" Tube Adapter | 3/4" Tube Adapter | 4.24 | 107.7 | 2.18 | 55.4 | 1.375 | 34.9 | — | — |
| 12V-F12L | 3/4" VacuSeal | 3/4" VacuSeal | 4.64 | 117.9 | 2.64 | 67.1 | 1.375 | 34.9 | — | — |
| 12Z-F12L | 3/4" CPI™ Compression | 3/4" CPI™ Compression | 4.34 | 110.2 | 2.60 | 66.0 | 1.375 | 34.9 | 1.125 | 28.6 |
| M20A-F12L | 20mm A-LOK® Compression | 20mm A-LOK® Compression | 4.32 | 109.7 | 2.56 | 65.0 | 1.375 | 34.9 | 1.260 | 32.0 |
| M20Z-F12L | 20mm CPI™ Compression | 20mm CPI™ Compression | 4.32 | 109.7 | 2.56 | 65.0 | 1.375 | 34.9 | 1.260 | 32.0 |
| M22A-F12L | 22mm A-LOK® Compression | 22mm A-LOK® Compression | 4.30 | 109.2 | 2.56 | 65.0 | 1.375 | 34.9 | 1.260 | 32.0 |
| M22Z-F12L | 22mm CPI™ Compression | 22mm CPI™ Compression | 4.30 | 109.2 | 2.56 | 65.0 | 1.375 | 34.9 | 1.260 | 32.0 |
| 12M12A-F12L | 3/4" Male NPT | 3/4" A-LOK® Compression | 4.22 | 107.2 | 2.59 | 65.8 | 1.375 | 34.9 | 1.125 | 28.6 |
| 12M12F-F12L | 3/4" Male NPT | 3/4" Female NPT | 4.09 | 103.9 | 3.34 | 84.8 | 1.375 | 34.9 | — | — |
| 12M12Z-F12L | 3/4" Male NPT | 3/4" CPI™ Compression | 4.22 | 107.2 | 2.59 | 65.8 | 1.375 | 34.9 | 1.125 | 28.6 |
| 16A-F16L | 1" A-LOK® Compression | 1" A-LOK® Compression | 4.63 | 117.6 | 2.53 | 64.3 | 1.625 | 41.3 | 1.500 | 38.1 |
| 16F-F16L | 1" Female NPT | 1" Female NPT | 4.84 | 122.9 | — | — | 1.625 | 41.3 | — | — |
| 16F5-F16L | 1" Male SAE | 1" Male SAE | 4.10 | 104.1 | 2.64 | 67.1 | 1.625 | 41.3 | — | — |
| 16G5-F16L | 1" Female SAE | 1" Female SAE | 4.84 | 122.9 | — | — | 1.625 | 41.3 | — | — |
| 16KF-F16L | 1" Female BSP/ISO Tapered | 1" Female BSP/ISO Tapered | 4.84 | 122.9 | — | — | 1.625 | 41.3 | — | — |
| 16KM-F16L | 1" Male BSP/ISO Tapered | 1" Male BSP/ISO Tapered | 4.52 | 114.8 | 2.64 | 67.1 | 1.625 | 41.3 | — | — |
| 16M-F16L | 1" Male NPT | 1" Male NPT | 4.52 | 114.8 | 2.63 | 66.8 | 1.625 | 41.3 | — | — |
| 16L-F16L | 1" Seal-Lok® | 1" Seal-Lok® | 3.83 | 97.3 | 2.45 | 62.2 | 1.625 | 41.3 | — | — |
| 16TA-F16L | 1" Tube Adapter | 1" Tube Adapter | 5.11 | 129.8 | 2.52 | 64.0 | 1.625 | 41.3 | — | — |
| 16Z-F16L | 1" CPI™ Compression | 1" CPI™ Compression | 4.63 | 117.6 | 2.53 | 64.3 | 1.625 | 41.3 | 1.500 | 38.1 |
| M25A-F16L | 25mm A-LOK® Compression | 25mm A-LOK® Compression | 4.74 | 120.4 | 2.64 | 67.1 | 1.625 | 41.3 | 1.496 | 38.0 |
| M25Z-F16L | 25mm CPI™ Compression | 25mm CPI™ Compression | 4.74 | 120.4 | 2.64 | 67.1 | 1.625 | 41.3 | 1.496 | 38.0 |
| 16M16A-F16L | 1" Male NPT | 1" A-LOK® Compression | 4.57 | 116.1 | 2.58 | 65.5 | 1.625 | 41.3 | 1.500 | 38.1 |
| 16M16F-F16L | 1" Male NPT | 1" Female NPT | 4.69 | 119.1 | 3.74 | 95.0 | 1.625 | 41.3 | — | — |
| 16M16Z-F16L | 1" Male NPT | 1" CPI™ Compression | 4.57 | 116.1 | 2.58 | 65.5 | 1.625 | 41.3 | 1.500 | 38.1 |

Note: Optional wire cloth filter elements may slightly alter dimensions A and B on filters with combination end connections.

†For CPI™ and A-LOK®. Dimensions are measured with nuts in the finger tight position.

How to Order

Dimensions in inches (millimeters) are for reference only, subject to change.

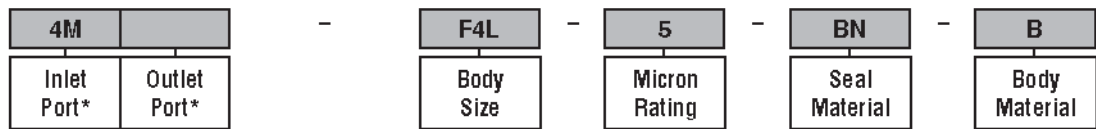
The correct part number is easily derived from the following example and ordering chart. The six product characteristics required are coded as shown in the chart.

Example 1 below describes an F Series Inline Filter with 1/4" male NPT inlet and outlet ports, a 5 micron element, Nitrile seal and brass body construction.

Example 2 below describes an F Series Inline Filter with a 1" male NPT inlet port and a 1" A-LOK® outlet port, a 10 micron element, neoprene seal and stainless steel body construction.

Example 1: 4M-F4L-5-BN-B (shown in the part number blocks below)

Example 2: 16M16A-F16L-10-NE-SS



| Inlet Port* | | | | Outlet Port* | | | | Body Size | Micron Rating | Seal Material | | Body Material | |
|-------------|------|------|------|--------------|------|------|------|-----------|---------------|---------------|--|---------------|-----------------|
| 2A | 2G5 | 2M | M3A | 2A | 2G5 | 2M | M3A | F2L | 1 micron | Blank | Fluorocarbon | B | Brass |
| 2F | 2KF | 2TA | M3Z | 2F | 2KF | 2TA | M3Z | | 5 micron | | Rubber | SS | 316 |
| 2F5 | 2KM | 2Z | | 2F5 | 2KM | 2Z | | | 10 micron | BN | Nitrile Rubber | | Stainless Steel |
| 4A | 4KF | 4Q | M6A | 4A | 4KF | 4Q | M6A | F4L | 50 micron | EPR | Ethylene Rubber | | |
| 4F | 4KM | 4TA | M6Z | 4F | 4KM | 4TA | M6Z | | 100 micron | | Propylene Rubber | | |
| 4F5 | 4L | 4V | | 4F5 | 4L | 4V | | | 250 micron | | Rubber | | |
| 4G5 | 4M | 4Z | | 4G5 | 4M | 4Z | | | 450 micron | NE | Neoprene Rubber | | |
| 6A | 6KF | 6Q | M8Z | 6A | 6KF | 6Q | M8Z | F6L | | T** | PTFE | | |
| 6F | 6KM | 6TA | M10A | 6F | 6KM | 6TA | M10A | | | KZ | Highly Fluorinated Fluorocarbon Rubber | | |
| 6F5 | 6L | 6Z | M10Z | 6F5 | 6L | 6Z | M10Z | | | | | | |
| 6G5 | 6M | M8A | | 6G5 | 6M | M8A | | | | | | | |
| 8A | 8KF | 8Q | M12A | 8A | 8KF | 8Q | M12A | F8L | | | | | |
| 8F | 8KM | 8TA | M12Z | 8F | 8KM | 8TA | M12Z | | | | | | |
| 8F5 | 8L | 8V | | 8F5 | 8L | 8V | | | | | | | |
| 8G5 | 8M | 8Z | | 8G5 | 8M | 8Z | | | | | | | |
| 12A | 12KF | 12Q | M20A | 12A | 12KF | 12Q | M20A | F12L | | | | | |
| 12F | 12KM | 12TA | M20Z | 12F | 12KM | 12TA | M20Z | | | | | | |
| 12F5 | 12L | 12V | M22A | 12F5 | 12L | 12V | M22A | | | | | | |
| 12G5 | 12M | 12Z | M22Z | 12G5 | 12M | 12Z | M22Z | | | | | | |
| 16A | 16G5 | 16L | 16Z | 16A | 16G5 | 16L | 16Z | F16L | | | | | |
| 16F | 16KF | 16M | M25A | 16F | 16KF | 16M | M25A | | | | | | |
| 16F5 | 16KM | 16TA | M25Z | 16F5 | 16KM | 16TA | M25Z | | | | | | |

** Only available with stainless steel filters.

*If the inlet and outlet ports are the same, eliminate the outlet port designator.

Options

Oxygen Cleaning – Add the suffix -C3 to the end of the part number to receive filters cleaned and assembled for oxygen service in accordance with Parker specification ES8003. **Example:** 4A-F4L-10-V-SS-C3

Laser Weld – Add the suffix -LW to the end of the part number to receive tamper-resistant stainless steel filters. **Example:** 2M-F2L-5-SS-LW

Kit Information

To order repair kits for the F Series Inline Filters simply fill in the designators from the chart below.

| Size | Micron Rating | Seat Material | |
|------|---------------|---------------|---------------------------------|
| F2 | 1 micron | V | Fluorocarbon Rubber |
| F4 | 5 micron | BN | Nitrile Rubber |
| F6 | 10 micron | EPR | Ethylene Propylene Rubber |
| F8 | 50 micron | NE | Neoprene Rubber |
| F12 | 100 micron | T | P TFE |
| F16 | 250 micron | KZ | Highly Fluorinated Fluorocarbon |
| | 450 micron | | |

Examples: KIT-F8-10-V, KIT-F16-100-BN



Filter Kits Contain: Molded Seal, Filter Element, Guide Ring, Spring and Maintenance Instructions

F

Caution: When interchanging sintered metal elements with wire cloth filter elements, the flow direction is reversed.