



# F200 Series

## Compressed Air and Gas Filters

### FEATURES

Heavy duty cast aluminum housings

Maximum working pressure 250 PSIG

Nine filtration grades

Push on filter elements



### BENEFITS OF THE F200 SERIES

Rugged construction // Low maintenance // Easy to service

[vanairsystems.com](http://vanairsystems.com)

# The F200 Series from Van Air Systems

Compressed air is a vital utility in many industries. Yet contamination plagues many air systems. Compressor lubricants and oil aerosols. Dust. Dirt. Scale. These damaging contaminants lead to lost productivity and increased down time. It doesn't have to be this way. Turn to F200 Series filters. The toughest most reliable industrial filters for compressed air and other gases.

## Simple is better.

Each F200 filter includes a rugged cast aluminum housing and a filter element constructed with stainless steel support cores and high performance filter media. A filter element comes pre-installed in every housing. Van Air Systems' filter elements are easy to install. Simply push the element into place for a snug fit. Unlike competitive filters, F200 filters use no awkward tie rods or fasteners.

## How it works.

Simple operation is key. Compressed air or gas enters the inlet side of the head and passes through the single filter element. In oil removal applications, air or gas flows from the inside to the outside of the element. In particulate removal applications the flow pattern is from the outside of the element to the inside. Clean air or gas exits the opposite side of the head.

## Approved for Natural Gas.

F200 filters are approved for sweet natural gas service. Use F200 filters to protect instruments, valves, burners, and heaters at the wellhead, metering station, compressor station, and gas plant.



## F200 Series accessories



Manual Drain



Wall Mounting Kit



PD-5 Differential Pressure Indicator



PD-6 Pop-up Differential Pressure Indicator

# Rugged design, durable construction

Strength and durability matter. That's why every F200 filter is designed and constructed for the industrial user.





# F200 Series filter selection

**F200 – 100 -1 – B – MD – PD6**

## FLOW & IN/OUT CONN

| SCFM @<br>100 PSIG | NPT    |
|--------------------|--------|
| 15                 | 1/4"   |
| 25                 | 1/2"   |
| 25                 | 3/8"   |
| 55                 | 1/2"   |
| 85                 | 3/4"   |
| 100                | 1"     |
| 150                | 1"     |
| 265                | 1 1/4" |
| 350                | 1 1/2" |
| 400                | 2"     |
| 500                | 2"     |
| 600                | 3"     |
| 800                | 3"     |
| 1000               | 3"     |
| 1250               | 3"     |

## FILTER ELEMENT

| Element<br>Grade | Description                             |
|------------------|---|
| AA               | 25 Micron, Extra Coarse                 |
| A                | 5 Micron, Coarse Coalescing             |
| B                | 1 Micron, General Purpose Coalescing    |
| C                | .01 Micron, High Efficiency Coalescing  |
| RAA              | 25 Micron, Extra Coarse Particulate     |
| RA               | 5 Micron, Coarse Particulate            |
| RB               | 1 Micron, General Purpose Particulate   |
| RC               | .01 Micron, High Efficiency Particulate |
| RD               | .01 Micron, Vapor Adsorbing             |

## DIFFERENTIAL PRESSURE INDICATOR

| Indicator | Description  |
|-----------|--|
| PD-6A-C   | Pop-up Indicator for F200-15 & 25 (coalescing)       |
| PD-6A-P   | Pop-up indicator for F200-15 & 25 (particulate)      |
| PD-5      | Differential Pressure Indicator for F200-55 & larger |
| PD-6      | Pop-up Indicator for F200-55 & larger                |

## DRAIN

| Drain Type | Description                                       |
|------------|---|
| MD         | Manual Drain                                      |
| AD         | Internal Auto Drain (not for natural gas service) |
| DA         | Drain Adapter (1/4" mNPT x 1/2" fNPT)             |

## How to select a filter

1. Determine the flow rate and pressure at the point in the air or gas system where the filter is to be installed.
2. Select the filter model with a flow rating equal to or exceeding the operating requirement. For filter flow ratings at pressures other than 100 PSIG, consult the table on the next page or contact Van Air Systems.
3. Choose the filter element letter grade that meets the purity level required by the application.
4. Select a drain type.
5. Select a differential pressure indicator.



## Clean, trouble-free compressed air and gas

Rugged housings and long-lasting elements give you the best value for your money. They'll provide dependable filtration to reduce your downtime, maintenance and operating costs.

Van Air F200 series filters are currently providing these benefits in a wide range of applications:

- Instrument air & gas
- Pre-filter and after-filter for deliquescent & regenerative dryers and refrigerated dryers
- Pneumatic hand tools
- Abrasive blasting
- Dust collectors
- Air cylinders
- Air Motors
- Fuel gas

# Filter application guide & suggested installation

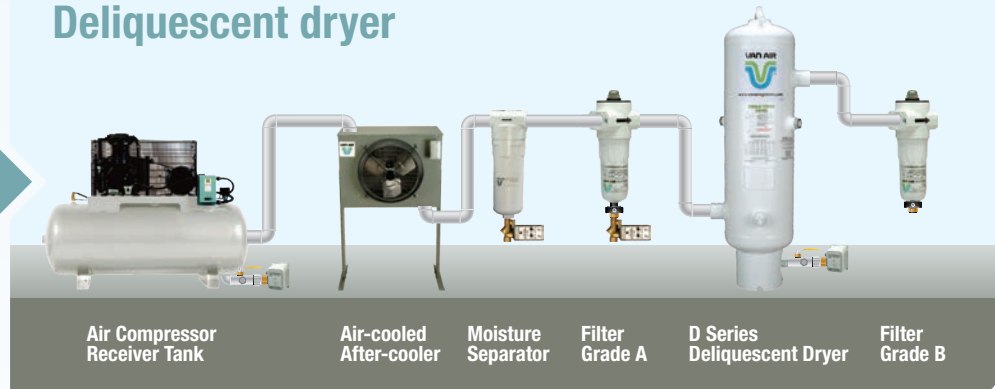
## Typical uses

- Plant air
- Shot / sand blast
- Point of use

## Dryer dew point

20°F - 55°F supression

## Deliquescent dryer



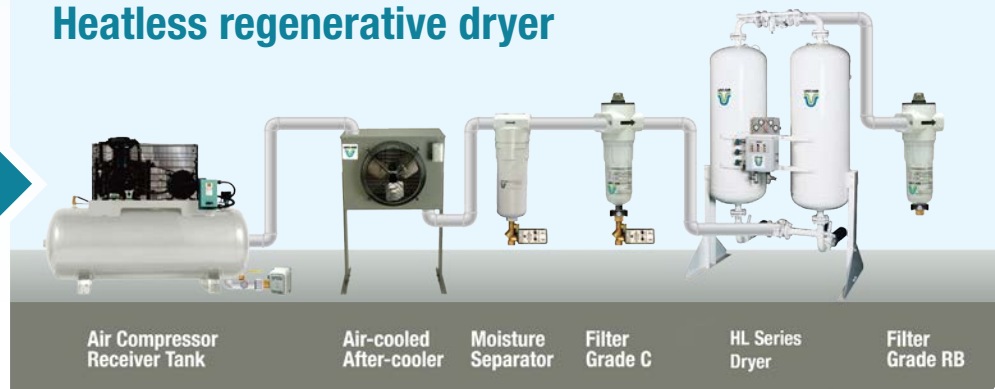
## Typical uses

- Instrument air
- Plant air
- Process air
- Blanketing / padding
- Nitrogen generation
- Pipeline purging

## Dryer dew point

-40°F -100°F

## Heatless regenerative dryer



## Point of use

- Bulk containment removal



Filter Grade  
RA or RAA

## Point of use

- Instrumentation
- Air cylinders, air motors
- Pneumatic conveyors



Filter Grade RB      Filter Grade RC

## Point of use

- Oil vapor adsorption
- Food and beverage applications
- Odor removal



Filter Grade RB      Filter Grade RC      Filter Grade RD

## FILTRATION GRADES

| Element Grade | Purpose                     | Particle Removal Down To | Efficiency  | Max Oil Carryover PPM w/w | Max Inlet Temp °F | Clean Dry Pressure Drop PSI | End Cap Color | Flow Direction |
|---------------|-----------------------------|--------------------------|-------------|---------------------------|-------------------|-----------------------------|---------------|----------------|
| AA            | Extra coarse coalescing     | 25µ                      | 100@25µ     | 7.8                       | 225               | 0.40                        | White         | In/Out         |
| A             | Coarse coalescing           | 5µ                       | 100@5µ      | 3.9                       | 225               | 0.50                        | Green         | In/Out         |
| B             | General purpose coalescing  | 1µ                       | 99.99@.6µ   | 0.78                      | 175               | 0.75                        | Red           | In/Out         |
| C             | High efficiency coalescing  | .01µ                     | 99.9999@.6µ | 0.008                     | 125               | 1.50                        | Blue          | In/Out         |
| RAA           | Extra coarse particulate    | 25µ                      | 100@25µ     | NA                        | 225               | 0.40                        | Black         | Out/In         |
| RA            | Coarse particulate          | 5µ                       | 100@5µ      | NA                        | 225               | 0.50                        | Green         | Out/In         |
| RB            | General purpose particulate | 1µ                       | 99.99@.6µ   | NA                        | 225               | 0.75                        | Red           | Out/In         |
| RC            | High efficiency particulate | .01µ                     | 99.9999@.6µ | NA                        | 225               | 1.50                        | Blue          | Out/In         |
| RD            | Vapor absorbing             | .01µ                     | 99.9999@.6µ | 0.004                     | 80                | 1.50                        | White†        | Out/In         |

† RD elements have no outer drainage layer. The perforated stainless steel outer core is visible.

## STANDARD EQUIPMENT

- Cast aluminum housing
- Maximum working pressure: 250 PSIG (17.2 BARG)
- Interior epoxy coating
- Exterior epoxy coating and epoxy powder coat finish
- Manual ball valve
- Pop-up differential pressure indicator
- O-ring seals
- Inlet/outlet – NPT
- Push on element
- Initial element included

## OPTIONAL EQUIPMENT

- Internal “AD” float drain (not for natural gas service)
- PD-5 dial type pressure differential indicator
- Wall mounting bracket
- EDV Series electronic drain (supplied loose)
- Drain adapter

## DIMENSIONS & SPECIFICATIONS

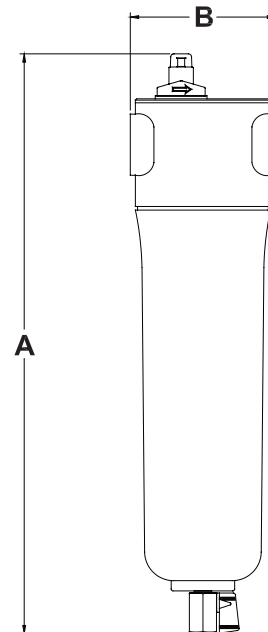
| Model No.          | A        |    | B       |    | In/Out Conn. | Weight |      | Drain Connection | Replacement Element | # of Elements |
|--------------------|----------|----|---------|----|--------------|--------|------|------------------|---------------------|---------------|
|                    | in       | cm | in      | cm |              | lbs    | kg   |                  |                     |               |
| F200-15-1/4-(*)    | 9 1/4    | 24 | 2 13/16 | 8  | 1/4" NPT     | 1.4    | 0.5  | 1/4" NPS         | E200-15/25-(*)      | 1             |
| F200-25-3/8-(*)    | 9 1/4    | 24 | 2 13/16 | 8  | 3/8" NPT     | 1.4    | 0.5  | 1/4" NPS         | E200-15/25-(*)      | 1             |
| F200-25-1/2-(*)    | 9 1/4    | 24 | 2 13/16 | 8  | 1/2" NPT     | 1.4    | 0.5  | 1/4" NPS         | E200-15/25-(*)      | 1             |
| F200-55-1/2-(*)    | 11 3/4   | 30 | 3 7/16  | 9  | 1/2" NPT     | 3.5    | 1.5  | 1/4" NPS         | E200-55-(*)         | 1             |
| F200-85-3/4-(*)    | 14- 9/16 | 37 | 4 15/16 | 13 | 3/4" NPT     | 6.2    | 2.7  | 1/4" NPS         | E200-85-(*)         | 1             |
| F200-100-1-(*)     | 14-9/16  | 37 | 4 15/16 | 13 | 1" NPT       | 6.3    | 2.8  | 1/4" NPS         | E200-100-(*)        | 1             |
| F200-150-1-(*)     | 20-7/16  | 52 | 4 15/16 | 13 | 1" NPT       | 7.6    | 3.4  | 1/4" NPS         | E200-150-(*)        | 1             |
| F200-265-1 1/4-(*) | 20-7/16  | 52 | 4 15/16 | 13 | 1 1/4" NPT   | 7.7    | 3.4  | 1/4" NPS         | E200-265-(*)        | 1             |
| F200-350-1 1/2-(*) | 21-3/8   | 55 | 5 5/16  | 14 | 1 1/2" NPT   | 9.8    | 4.4  | 1/4" NPS         | E200-350/400-(*)    | 1             |
| F200-400-2-(*)     | 21-3/8   | 55 | 5 5/16  | 14 | 2" NPT       | 9.8    | 4.4  | 1/4" NPS         | E200-350/400-(*)    | 1             |
| F200-500-2-(*)     | 29-3/8   | 75 | 5 5/16  | 14 | 2" NPT       | 12.2   | 5.4  | 1/4" NPS         | E200-500-(*)        | 1             |
| F200-600-3-(*)     | 25-3/8   | 64 | 7 7/8   | 20 | 3" NPT       | 22.5   | 10.1 | 1/4" NPS         | E200-600-(*)        | 1             |
| F200-800-3-(*)     | 30-7/8   | 78 | 7 7/8   | 20 | 3" NPT       | 25.5   | 11.5 | 1/4" NPS         | E200-800-(*)        | 1             |
| F200-1000-3-(*)    | 35-3/4   | 91 | 7 7/8   | 20 | 3" NPT       | 32.4   | 14.6 | 1/4" NPS         | E200-1000-(*)       | 1             |
| F200-1250-3-(*)    | 35-3/4   | 91 | 7 7/8   | 20 | 3" NPT       | 32.4   | 14.6 | 1/4" NPS         | E200-1250-(*)       | 1             |

Notes: Due to our policy of continuous improvement, dimensions and specifications may change without notice. Before pre-piping, request a certified drawing.

## FLOW CAPACITIES AT VARIOUS PRESSURES PSIG (BARG)

| Model No.          | 50<br>SCFM | (3.4)<br>NM3/HR | 100<br>SCFM | (6.9)<br>NM3/HR | 150<br>SCFM | (10.3)<br>NM3/HR | 200<br>SCFM | (13.8)<br>NM3/HR | 250<br>SCFM | (17.2)<br>NM3/HR |
|--------------------|------------|-----------------|-------------|-----------------|-------------|------------------|-------------|------------------|-------------|------------------|
| F200-15-1/4-(*)    | 8          | 13              | 15          | 24              | 22          | 35               | 28          | 45               | 35          | 56               |
| F200-25-3/8-(*)    | 14         | 23              | 25          | 40              | 36          | 58               | 47          | 76               | 58          | 93               |
| F200-25-1/2-(*)    | 14         | 23              | 25          | 40              | 36          | 58               | 47          | 76               | 58          | 93               |
| F200-55-1/2-(*)    | 31         | 50              | 55          | 88              | 79          | 127              | 103         | 166              | 127         | 204              |
| F200-85-3/4-(*)    | 48         | 77              | 85          | 137             | 122         | 196              | 159         | 256              | 196         | 315              |
| F200-100-1-(*)     | 56         | 90              | 100         | 161             | 144         | 232              | 187         | 301              | 231         | 371              |
| F200-150-1-(*)     | 85         | 137             | 150         | 241             | 215         | 346              | 281         | 452              | 346         | 556              |
| F200-265-1 1/4-(*) | 149        | 240             | 265         | 426             | 381         | 613              | 496         | 798              | 612         | 984              |
| F200-350-1 1/2-(*) | 197        | 317             | 350         | 563             | 503         | 809              | 655         | 1053             | 808         | 1299             |
| F200-400-2-(*)     | 226        | 363             | 400         | 643             | 574         | 923              | 749         | 1204             | 923         | 1484             |
| F200-500-2-(*)     | 282        | 453             | 500         | 804             | 718         | 1155             | 936         | 1505             | 1154        | 1856             |
| F200-600-3-(*)     | 338        | 544             | 600         | 965             | 862         | 1386             | 1123        | 1806             | 1385        | 2227             |
| F200-800-3-(*)     | 451        | 725             | 800         | 1286            | 1149        | 1848             | 1497        | 2407             | 1846        | 2968             |
| F200-1000-3-(*)    | 564        | 907             | 1000        | 1608            | 1436        | 2309             | 1872        | 3010             | 2308        | 3711             |
| F200-1250-3-(*)    | 700        | 1134            | 1250        | 2010            | 1795        | 2886             | 2340        | 3763             | 2885        | 4639             |

(\*) Filter Element Grade



2950 Mechanic Street, Lake City, PA 16423, USA | Toll Free Phone 800-840-9906 | Corporate Fax 814-774-0778 | Order Entry Fax 814-774-3482

Distributed By:

**VAN AIR SYSTEMS**  
  
[vanairsystems.com](http://vanairsystems.com)

## F200 Series - PDF Downloads

### Installation, Operation and Maintenance Manuals

F200



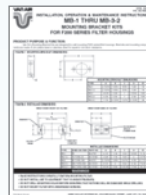
Auto Drain Kit



Connector Kit



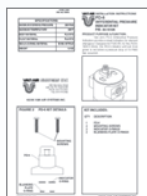
Mounting Bracket Kit



PD-5



PD-6

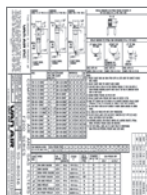


PD-6a



### Drawings

F200



### Instructional Video

F200 Series

