# Filter Solutions

Pneumatech offers you a comprehensive line-up of innovative filter solutions to meet your specific needs. Our filtration solutions are engineered cost-effectively to provide the best air quality and meet today's increasing quality demands.

For general applications we provide oil coalescing, particulate and oil vapor filters in a wide range of flows and pressures. Pneumatech is also your partner for breathing air, silicone-free, sterile & process filtration.

# Ultimate water separators

## Features & Benefits

- Energy saving
  - Reducing both energy consumption and operating costs
- Flexible Installation
  - Modular design and accessible fixings enable simple close coupling assembly
- Cost effective
  - No replacement components required
- Product safety in mind
  - Guaranteed safe housing closure with rotational safety stop
- Corrosion protection
  - Internal and external electrophoretic painting followed by a tough polyester powder coating

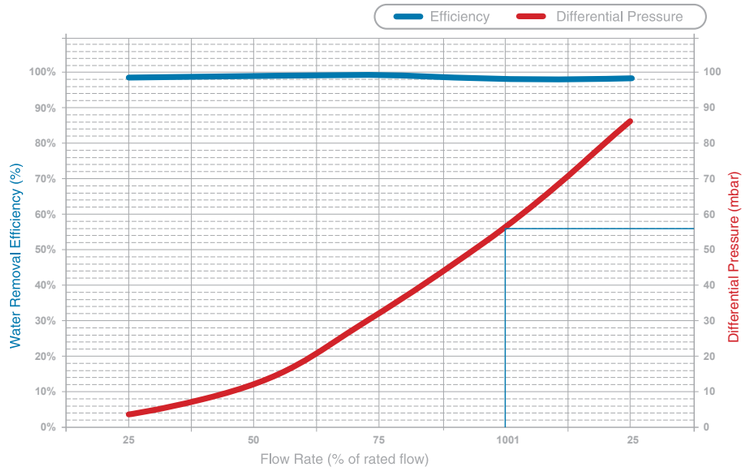
## General Specifications

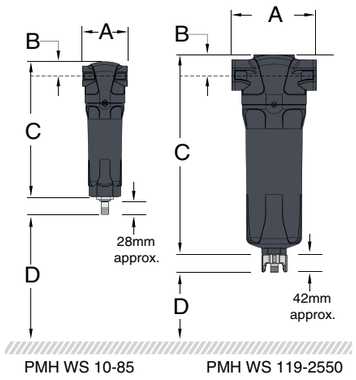
- 13 sizes from 10-2550 m³/h
- Proven centrifugal technology
- Unique module with unique vanes to eliminate points of low efficiency
- Eliminates 99% bulk water, even at low velocities
- Minimal operating pressure loss (50-60 mbar)
- No replacement components necessary
- External accessible drain valve
- Same installation accessories as the filter series
- Electronic drain available as an option

Integrating into Pneumatech's compressed air filtration range, the new Ultimate Water Separator combines proven centrifugal technology with a new forward thinking housing design to deliver market leading water removal efficiencies – eliminating 99% bulk water with continuously low differential pressure.

The custom engineered centrifugal module features unique vanes to eliminate points of low efficiency, and a vortex arrestor to stop re-entrainment – ensuring minimal operating pressure loss and maintaining excellent liquid removal, even at low velocity. Remove 99% of bulk water when tested in accordance with ISO 12500-4

## Tested performance




With exceptional performance at any flow rate, the new Ultimate water separator is perfect for use with variable speed compressors.

| Filter Model | Pipe Size | Flow Rate | | Dimension (mm) | | | | Weight (kg) Approx. | Element Model |
|---|---|---|---|---|---|---|---|---|---|
| | G/NPT | m³/h | CFM | A | B | C | D | | |
| PMH WS 10 | 1/8" | 10 | 6 | 50 | 17 | 157 | 60 | 0.25 | - |
| PMH WS 25 | 1/4" | 25 | 15 | 50 | 17 | 157 | 60 | 0.25 | - |
| PMH WS 42 | 1/4" | 42 | 25 | 70 | 24 | 231 | 70 | 0.6 | - |
| PMH WS 59 | 3/8" | 59 | 35 | 70 | 24 | 231 | 70 | 0.6 | - |
| PMH WS 85 | 1/2" | 85 | 50 | 70 | 24 | 231 | 70 | 0.6 | - |
| PMH WS 119 | 1/2" | 119 | 70 | 127 | 32 | 285 | 80 | 1.7 | - |
| PMH WS 212 | 3/4" | 212 | 125 | 127 | 32 | 285 | 80 | 1.7 | - |
| PMH WS 297 | 1" | 297 | 175 | 127 | 32 | 285 | 80 | 1.7 | - |
| PMH WS 476 | 1 1/4" | 476 | 280 | 140 | 40 | 475 | 80 | 3 | - |
| PMH WS 545 | 1 1/2" | 545 | 321 | 140 | 40 | 475 | 80 | 3 | - |
| PMH WS 1189 | 2" | 1189 | 700 | 170 | 53 | 508 | 100 | 4.9 | - |
| PMH WS 1444 | 2 1/2" | 1444 | 850 | 220 | 70 | 413 | 100 | 8 | - |
| PMH WS 2550 | 3" | 2550 | 1500 | 220 | 70 | 413 | 100 | 8 | - |

## Options

**Electronic drain**

**Wall brackets**

# Ultimate filters - Threaded filters

## Features & Benefits

- Flow-optimised design
- Improved air flow characteristics
- Reduced energy consumption
- Reduced costs of owner ship
- 6 filtration grades
- Increased performance
  - Significantly reduced differential pressure <125 mbar
  - Exceptional oil aerosol and particulate removal
- New filtration technology
  - NEW deep pleated media
  - NEW housing design for flexible installation and simplified serviceability
  - NEW externally accessible drain
- Tested and validated in accordance with ISO 12500-1 & ISO 8573-1:2010
- Dead stop head to bowl connection with lock indication for safety closure
- Corrosion protected housings: internal and external electrophoretic paint finish followed by a tough polyester powder coating
- Unique, specially designed adapter for removal of the automatic and manual drains from the bowl without a need to open the filter (for sizes 119-2550 m³/h)
- Multiple options
  - Differential pressure gauge with/without potential free contact
  - Manual drain
  - Automatic drain
  - Electronic drain
  - Wall brackets
  - Connection kits
- Two ranges available:
  - HE version with differential pressure gaudge
  - S version without differential pressure gaudge

## General Specifications

- Significantly reduced differential pressure <125 mbar
- Maximum working pressure: 16 bar(g)/232 psi(g)
- With manual drain: up to 20.7 bar(g)/300 psi(g)
- Available from 1/8“ to 3“
- Flow rates from 10-2550 m³/h (6-1500 cfm)


**HE filter**


**S filter**

## Options

**Connection kits**

**Automatic drain**

**Wall brackets**

**Manual drain with adapter**

**Electronic drain**

**Differential pressure gaudge including potential free contact**

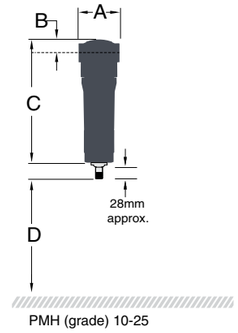


With energy efficiency and low total cost of ownership the Pneumatech Ultimate Filter surpasses conventional filters in the market place, providing to be the most advanced filter yet.

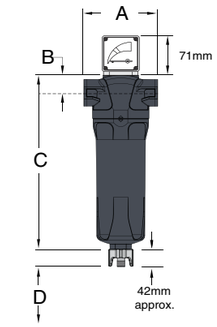
The expertly engineered Ultimate Series not only achieves the highest air purity standards in line with ISO 8573-1:2010, it also incorporates the latest in filtration technology. The new filter housing reduces differential pressure loss which, when combined with the new element design, significantly improves air flow and performance, making the Ultimate filter one of the most energy efficient filter housings available.

With a range that incorporates coalescence filters, dust filters, activated carbon filters and water separators, available in a wide range of port sizes suitable for installation worldwide.

| Filter Model | Pipe Size | Flow Rate | | Dimension (mm) | | | | Weight (kg) Approx. | Element Model |
|---|---|---|---|---|---|---|---|---|---|
| | G/ NPT | m³/h | CFM | A | B | C | D | | |
| PMH (grade) 10 | 1/8" | 10 | 6 | 50 | 17 | 157 | 60 | 0.25 | F(grade)-1 |
| PMH (grade) 25 | 1/4" | 25 | 15 | 50 | 17 | 157 | 60 | 0.25 | F(grade)-2 |
| PMH (grade) 42 | 1/4" | 42 | 25 | 70 | 24 | 231 | 70 | 0.6 | F(grade)-3 |
| PMH (grade) 54 | 3/8" | 54 | 32 | 70 | 24 | 231 | 70 | 0.6 | F(grade)-4 |
| PMH (grade) 85 | 1/2" | 85 | 50 | 70 | 24 | 231 | 70 | 0.6 | F(grade)-5 |
| PMH (grade) 119 | 1/2" | 119 | 70 | 127 | 32 | 285 | 80 | 1.7 | F(grade)-6 |
| PMH (grade) 144 | 3/4" | 144 | 85 | 127 | 32 | 285 | 80 | 1.7 | F(grade)-7 |
| PMH (grade) 178 | 1" | 178 | 105 | 127 | 32 | 285 | 80 | 1.7 | F(grade)-8 |
| PMH (grade) 212 | 3/4" | 212 | 125 | 127 | 32 | 371 | 80 | 2 | F(grade)-9 |
| PMH (grade) 297 | 1" | 297 | 175 | 127 | 32 | 371 | 80 | 2 | F(grade)-10 |
| PMH (grade) 476 | 1 1/4" | 476 | 280 | 140 | 40 | 475 | 80 | 3 | F(grade)-11 |
| PMH (grade) 545 | 11/2" | 545 | 321 | 140 | 40 | 475 | 80 | 3 | F(grade)-12 |
| PMH (grade) 765 | 2" | 765 | 450 | 170 | 53 | 508 | 100 | 4.9 | F(grade)-13 |
| PMH (grade) 1189 | 2" | 1189 | 700 | 170 | 53 | 708 | 100 | 5.5 | F(grade)-14 |
| PMH (grade) 1444 | 2 1/2" | 1444 | 850 | 220 | 70 | 736 | 100 | 10.5 | F(grade)-15 |
| PMH (grade) 1529 | 3" | 1529 | 900 | 220 | 70 | 736 | 100 | 10.5 | F(grade)-16 |
| PMH (grade) 2125 | 3" | 2125 | 1250 | 220 | 70 | 857 | 100 | 11.5 | F(grade)-17 |
| PMH (grade) 2550 | 3" | 2550 | 1500 | 220 | 70 | 1005 | 100 | 12.5 | F(grade)-18 |




PMH (grade) 10-25




PMH (grade) 42-2550

| Grade | P | G | S | C | D | V |
|---|---|---|---|---|---|---|
| Particle removal (micron) ■ | 5 | - | 1 | - | 0.01 | - |
| Outlet oil aerosol concentration (mg/m³) ■ | 1 | 0.3 | - | 0.01 | - | 0.003 |
| Total mass efficiency (%) | >90 | >99.25 | - | >99.9 | - | - |
| Quality class of air at outlet (particles / oil) ▲ | 4 / 3 | - / 3 | 3 / - | - / 2 | 1 / - | - / 1 |
| Initial pressure drop over filter in dry applications (bar) | 0.05 | 0.055 | 0.055 | 0.085 | 0.085 | 0.115 |
| Initial pressure drop over filter in wet applications (bar) ★ | 0.08 | 0.125 | - | 0.125 | - | - |

**Pressure correction factors**

For maximum flow rate, multiply model flow rate by the correction factor corresponding to the minimum operating pressure

| Operating pressure barg (psig) | 4 (58) | 5 (72) | 6 (87) | 7 (100) | 8 (115) | 10 (145) | 12 (174) | 14 (203) | 16 (232) | 20 (290) |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 barg – correction factor | 0.76 | 0.84 | 0.92 | 1.00 | 1.07 | 1.19 | 1.31 | 1.41 | 1.51 | 1.6 |

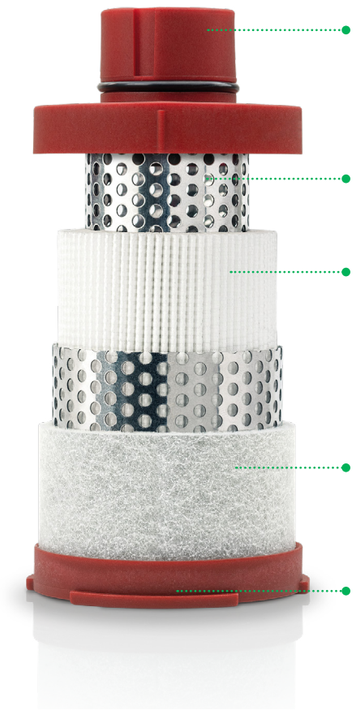
# Ultimate filters - Elements

## Features & Benefits

- Push fit Pneumatech filtration
- High quality stainless steel cylinders
- Custom engineered
- Custom outer drainage layer
- Unique element end cap
- Piracy protection (from size 3)
- Color coding system for optimum identification

## General Specifications

- 6 filtration grades: coalescence, dust & oil vapor filtration



**Push Fit Pneumatech Filtration**
Elements ensure perfect sealing within the filter housing and assist with easy removal

**High quality stainless steel cylinders** provide corrosion resistance and deliver strength and stability to the element

**Custom engineered**
hydrophobic & oleophobic borosilicate media specifically developed to deliver consistently low pressure drop, combined with pleated element construction for high dirt holding capacity and an increased filtration surface area

**Custom outer drainage layer**
prevents oil carryover and improves coalescence performance

**Unique element end cap**
colour coding system for quick and simple grade identification

## Market-leading filtration performance

To ensure optimal performance and low cost, filter elements should be replaced with original parts every 12 months/8000 hours (whichever comes first). Activated carbon filter elements should be replaced every 6 months/1000 hours (whichever comes first).

Pneumatech utilizes deep pleated media to deliver market leading filtration performance. The new forward thinking design delivers exceptional results in both oil aerosol removal and particulate retention; significantly reducing differential pressure and energy consumption for low operational lifetime costs. Engineered to deliver a step change in performance, the new ultimate element optimizes filtration efficiencies and produces compressed air in line with the highest standards of air purity, meeting the quality classes specified in ISO 8573-1: 2010.

## Performance assured

### Filter housing design

The ISO 8573 group of international standards is used for the classification of compressed air

- 1000 hour neutral salt spray test for corrosion to ISO 9227:2006
- Burst pressure tested in excess of 100 barg for a 5:1 safety factor
- Housings are pressure decay tested before despatch. Fine filters are 100% aerosol integrity tested

### Element technology

The new series is available in a complete range of contamination removal grades designed to meet the compressed air purity requirements throughout industry

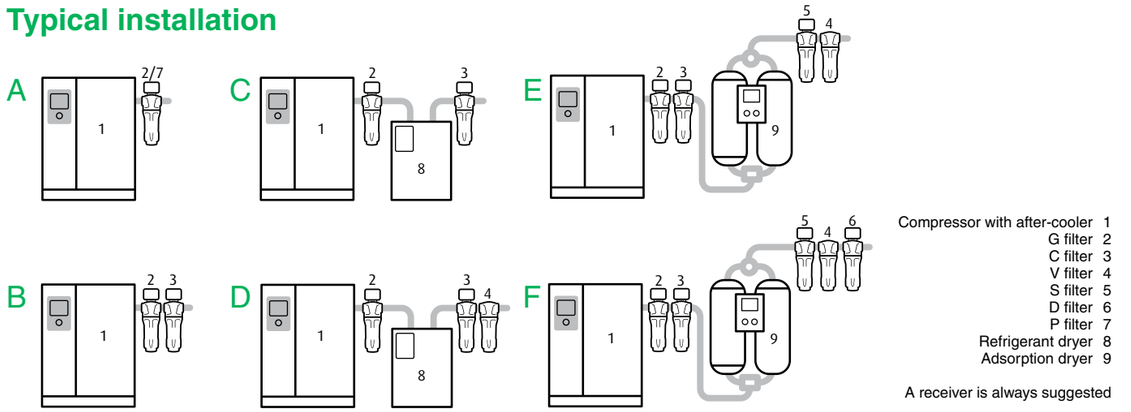
- ISO 8573-1:2010 compressed air purity standard
- ISO 12500 series international standard for compressed air filter testing

### Independent validation

Housing are approved to international standards including:

- Pressure equipment directive 2014/68/EU - Lloyd's register EMEA - notified body no. 0038
- ISO 9001 quality systems - LRQ0930553 - Lloyd's register EMEA - notified body no. 0038
- CRN approved - CRNOE19418 - for use within Canada

## Typical installation




Compressor with after-cooler 1
G filter 2
C filter 3
V filter 4
S filter 5
D filter 6
P filter 7
Refrigerant dryer 8
Adsorption dryer 9

A receiver is always suggested

**A.** General purpose protection
air purity to ISO 8573-1:2010
G filter [ 3 : - : 3 ]
P filter [ 4 : - : 3 ]

**B.** General purpose protection and reduced oil concentration
air purity to ISO 8573-1:2010
[ 1 : - : 2 ]

**C.** High quality air with reduced dew point
air purity to ISO 8573-1:2010
[ 1 : 4 : 2 ]

**D.** High quality air with reduced dew point and oil concentration
air purity to ISO 8573-1:2010
[ 1 : 4 : 1 ]

**E.** High quality air with extremely low dew point
air purity to ISO 8573-1:2010
[ 2 : 2 : 1 ]

**F.** High quality air with extremely low dew point
air purity to ISO 8573-1:2010
[ 1 : 2 : 1 ]

# FF 1 - 12 - Flanged filters

## Features & Benefits

- Guaranteed air purity
  - High-efficient glass fiber and foam media
- No risks of:
  - Cracked filter media
  - Cylinder implosion
  - Top cap leakages
  - Oil re-entrainment
- Significant energy savings
  - Optimal filter media selection allows low pressure losses
  - Zero-loss electronic drain included as standard
- Highest quality standards
  - In-house research, development & production
  - Each filter subjected to rigorous quality control
  - Fully tested and qualified according to ISO standards
- Robust design
  - Stainless steel cores guarantee ultimate strength
  - Protection paper to avoid damaging of glass fiber media
  - Special coating ensures high corrosion protection, and therefore a housing lifetime of at least 20 years
- Easy service and installation
  - Bottom cover with special rotating system
  - Different grade, different colour
  - Differential pressure gauge, with voltage free contact

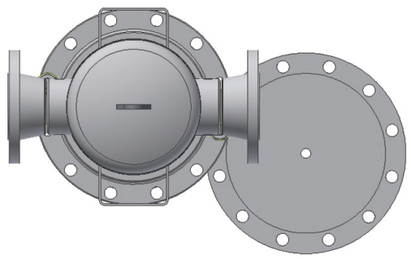
## General Specifications

- Compressed air inlet pressure: 1-16 barg/15-232 psig
- Max. ambient air temperature: 66°C/151 °F (35°C/95 °F for V grade)
- Available grades:
  - P: pre-filter
  - G: fine filter
  - C: super fine filter
  - V: activated carbon filter for oil vapor
  - S: dust filter
  - D: dust filter- high efficient




**Zooming in**

**Special rotating system of bottom cover**



Pneumatech's flanged filter range contains the same type of robust, high-efficient filter cartridges as the threaded range. The cartridges are contained in a welded steel housing which is pressure-rated up to 16 barg / 232 psig and provided with flanged connections at the compressed air inlet and outlet. The filter housings are completely cleaned, zinc phosphate and KTL coated at the inside and outside and externally painted afterwards. This guarantees a housing lifetime of at least 20 years.

All flanged filters are standard equipped with a zero-loss electronic drain and differential pressure gauge with voltage-free contact connections. The special rotating system of the bottom cover makes filter cartridge replacement very straightforward.

**Technical specifications for flanged filters FF 1-12**

| Pneumatech Variant → Specifications ↓ | Units | FF 1 | FF 2 | FF 3 | FF 4 | FF 5 | FF 6 | FF 7 | FF 8 | FF 9 | FF 10 | FF 11 | FF12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal (max.) Flow Rate [1] | l/s | "550 (630)" | "850 (970)" | 1100 (1260) | 1400 (1600) | 1800 (2200) | 2200 (2400) | 3000 (3600) | 4000 | 5000 | 6000 | 7000 | 8000 |
| | $m^3$/hr | 1980 (2268) | 3060 (3492) | 3960 (4536) | 5040 (5760) | 6480 (7920) | 7920 (8640) | 10800 (12960) | 14400 | 18000 | 21600 | 25200 | 28800 |
| | cfm | 1165 (1335) | 1801 (2055) | 2331 (2670) | 2966 (3390) | 3814 (4662) | 4662 (5085) | 6357 (7628) | 8476 | 10594 | 12713 | 14832 | 16951 |
| Max Pressure | barg | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| | psig | 232 | 232 | 232 | 232 | 232 | 232 | 232 | 232 | 232 | 232 | 232 | 232 |
| Connection | DN | DN80 | DN100 | DN100 | DN150 | DN150 | DN150 | DN200 | DN200 | DN250 | DN250 | DN300 | DN300 |
| Dimensions (A) | mm | 370 | 510 | 510 | 620 | 640 | 640 | 820 | 820 | 820 | 920 | 920 | 1040 |
| | inch | 14.6 | 20.1 | 20.1 | 24.4 | 25.2 | 25.2 | 32.3 | 32.3 | 32.3 | 36.2 | 36.2 | 40.9 |
| Dimensions (B) | mm | 190 | 230 | 230 | 290 | 285 | 285 | 400 | 400 | 400 | 550 | 550 | 525 |
| | inch | 7.5 | 9.1 | 9.1 | 11.4 | 11.2 | 11.2 | 15.7 | 15.7 | 15.7 | 21.7 | 21.7 | 20.7 |
| Dimensions (C) | mm | 1295 | 1360 | 1360 | 1480 | 1555 | 1555 | 1745 | 1745 | 1745 | 2085 | 2085 | 2070 |
| | inch | 51.0 | 53.5 | 53.5 | 58.3 | 61.2 | 61.2 | 68.7 | 68.7 | 68.7 | 82.1 | 82.1 | 81.5 |
| Weight | kg | 76 | 141 | 143 | 210 | 176 | 178 | 420 | 428 | 432 | 594 | 597 | 1140 |
| | lbs | 167.6 | 310.9 | 415.3 | 463 | 388 | 392.4 | 925.9 | 943.6 | 952.4 | 1034 | 1479.3 | 1984.2 |
| Number of filter elements | | 1 | 3 | 4 | 5 | 6 | 7 | 10 | 14 | 16 | 20 | 24 | 28 |
| Filter element size | | 1F (grade) | 2F (grade) | 2F (grade) | 2F (grade) | 2F (grade) | 2F (grade) | 2F (grade) | 2F (grade) | 2F (grade) | 2F (grade) | 2F (grade) | 2F (grade) |
| Order example: | | FF 1 C HE (superfine filter with differential pressure gauge) | | | | | | | | | | | |

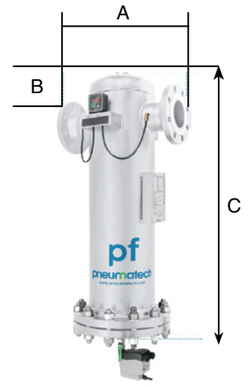
1. Flow is measured at reference conditions: 1 bara and 20°C at operating pressure of 7 barg, inlet temperature 10°C & std PDP of 3°C at the inlet.

**Filter elements performance**

| Grades → Performance ↓ | P | G | C | V | S | D |
|---|---|---|---|---|---|---|
| | Pre-filter | Fine filter - Oil aerosols/ solid particles | Super fine filter - Oil aerosols/ solid particles | Activated Carbon - Oil vapor | Dust filter | High efficiency dust filter |
| Particle removal efficiency at nominal flow (% at MPPS) | 92.03% | 99.92% | 99.98% | n/a | 99.92% | 99.98% |
| Oil carry-over at nominal flow (mg/$m^3$) | <1* | <0,07* | <0,008* | <0,003 | n/a | n/a |

* Oil aerosol content

| Correction factors | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inlet pressure (barg) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 | 14 | 16 |
| Inlet pressure (psig) | 15 | 29 | 44 | 58 | 72.5 | 87 | 102 | 116 | 145 | 174 | 203 | 232 |
| Correction factor | 0.38 | 0.53 | 0.65 | 0.75 | 0.83 | 0.92 | 1 | 1.06 | 1.2 | 1.31 | 1.41 | 1.5 |



# VT - Activated carbon towers + vessels

## Features & Benefits

- Guaranteed air purity with residual oil content below 0,003 mg/m³
  - Superb 2-layer activated carbon material
  - Designed with sufficient safety margin
  - Performance certified by external body
- Significant energy savings & limited system operating costs
  - Optimal internal flow path
  - Average pressure drop of 125 mbar only
- Certified class 1 performance, according to ISO 8573-1:2010
  - If combined with Pneumatech oil coalescing filters (G & C)
- Compact and reliable product design
  - Wall-mounting kit, optional for VT1 - 7
  - Easy to lift, install and service
- The VT is capable of removing hydrocarbons, odors and oil vapors from compressed air

## General Specifications

- Compressed air inlet pressure:
  - VT 1-9: 1-16 barg/15-232 psig (extruded Versions)
  - VT with optional oil indicator: 1-8,8 barg/ 15-127 psig
  - VT 11-15: 1-14,5 barg/15-210 psig (Welded Versions)
  - VT11-15: life time 12000 hours
- Ambient air temperature: (Extruded Versions)
  - -10 - 50°C/14 - 122°F
- Ambient air temperature: (Welded Versions)
  - -10 - 80°C/14 - 176°F
- Compressed air inlet temperature:
  - 1 - 66°C/34 - 151°F

VT 1-9


VT 11-15

## Options

Wall mounting kit

Oil indicator

Oil indicator welded version

Dust filter

Industrie Service
Energie und Umwelt

TÜVRheinland®
Precisely Right.

PNEUMATECH International Compressor Distribution n.v.
P.O. Box 106
Boomsesteenweg 957
2610 Wilrijk
Belgium

Validation Certificate
Evaluation of the air purity class for total oil after an
PNEUMATECH G.C VT filter train
Test report no.: 931 / 21229599/01

The PNEUMATECH G C VT filter train meets the requirements of air purity class 1 for total oil, according to ISO 8573-1:2010, in a typical compressed air installation.

Details can be found in the full test report no.: 931/21229599/01

i.V. i.A.

Dr. Walter Dormagen Dr. Norbert Horlemann

ISO 8573-1:2010 Class 1 validation certificate

Pneumatech's VT activated carbon towers and vessels are high-efficiency filtration products designed to meet the most demanding industry applications. Examples are pharmaceutical, medical, food & beverage, electronics and chemical industries.

The VT is capable of removing hydrocarbons, odors and oil vapors from compressed air. The activated carbon layers will, by the use Activated carbon vessels for higher flows available on request. Please consult Pneumatech for further support.

1. Flow is measured at reference conditions: 1 bara and 20°C at operating pressure of 7 barg, inlet temperature 20°C & inlet PDP of 3°C at the outlet. of adsorption, reduce the residual oil content to less than 0,003 mg/m3. In combination with Pneumatech G and C filters, the VT meets the requirements of air purity class 1 for total oil, according to ISO 8573-1:2010 in a typical compressed air installation, as was certified by an external body.

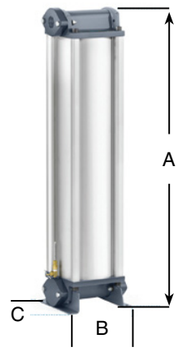
**Technical specifications for VT 1-9**

| Pneumatech Variant→ Specifications ↓ | Units | VT 1 | VT 2 | VT 3 | VT 4 | VT 5 | VT 6 | VT 7 | VT 8 | VT 9 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (1) | l/s | 20 | 45 | 60 | 95 | 125 | 150 | 185 | 245 | 310 |
| | m³/hr | 72 | 162 | 216 | 342 | 450 | 540 | 666 | 882 | 1116 |
| | cfm | 42 | 95 | 127 | 201 | 265 | 318 | 392 | 519 | 657 |
| Initial pressure drop over filter when dry | barg | 0,015 | 0,065 | 0,11 | 0,085 | 0,135 | 0,1 | 0,145 | 0,185 | 0,27 |
| Connection | G/NPT | 1/2" | 1" | 1" | 1" | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" |
| Dimensions (A) | mm | 490 | 715 | 840 | 715 | 840 | 715 | 840 | 840 | 840 |
| | inch | 19.29 | 28.15 | 33.07 | 28.15 | 33.07 | 28.15 | 33.07 | 33.07 | 33.07 |
| Dimensions (B) | mm | 223 | 223 | 223 | 387 | 387 | 551 | 551 | 715 | 879 |
| | inch | 8.78 | 8.78 | 8.78 | 15.24 | 15.24 | 21.69 | 21.69 | 28.15 | 34.61 |
| Dimensions (C) | mm | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 |
| | inch | 7.48 | 7.48 | 7.48 | 7.48 | 7.48 | 7.48 | 7.48 | 7.48 | 7.48 |
| Weight | kg | 10 | 15 | 18 | 29 | 34 | 42 | 50 | 67 | 84 |
| | lbs | 22.0 | 33.1 | 39.7 | 63.9 | 75.0 | 92.6 | 110.2 | 147.7 | 185.2 |

1. Flow is measured at reference conditions: 1 bara and 20°C at operating pressure of 7 barg, inlet temperature 20°C & inlet PDP of 3°C at the outlet.

**Technical specifications vessel version VT 11-15**

| Pneumatech Variant→ Specifications ↓ | Units | VT 11 | VT 12 | VT 13 | VT 14 | VT 15 |
|---|---|---|---|---|---|---|
| Capacity | l/s | 425 | 550 | 850 | 1100 | 1800 |
| | m³/hr | 1530 | 1980 | 3060 | 3960 | 6480 |
| | cfm | 901 | 1165 | 1801 | 2331 | 3814 |
| Initial pressure drop over filter when dry | bar | 0.070 | 0.080 | 0.095 | 0.095 | 0,120 |
| Connection | DIN | 80 | 80 | 100 | 100 | 150 |
| Dimensions (A) | mm | 2435 | 2435 | 2449 | 2449 | 2535 |
| | inch | 95.9 | 95.9 | 96.4 | 96.4 | 99.8 |
| Dimensions (B) | mm | 1048 | 1048 | 1175 | 1175 | 1810 |
| | inch | 41.3 | 41.3 | 46.3 | 46.3 | 71.3 |
| Dimensions (C) | mm | 1125 | 1125 | 1118 | 1118 | 1213 |
| | inch | 44.3 | 44.3 | 44.0 | 44.0 | 47.8 |
| Weight | kg | 264 | 302 | 391 | 602 | 882 |
| | lbs | 582 | 666 | 862 | 1327 | 1944 |




## Correction factors

| For other compressed air inlet temperatures, please multiply the filter capacity by the following correction factor (Kt): | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Inlet temperature | °C | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| | °F | 68 | 77 | 86 | 95 | 104 | 113 | 122 | 131 | 140 |
| Correction factor | Kt | 1.67 | 1.43 | 1.25 | 1 | 0.71 | 0.56 | 0.37 | 0.25 | 0.19 |

| For other compressed air inlet pressures, please multiply the filter capacity by the following correction factor (Kp): | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inlet pressure | barg | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| | psig | 44 | 58 | 73 | 87 | 102 | 116 | 131 | 145 | 160 | 174 | 189 |
| Correction factor | Kp | 0.57 | 0.77 | 0.83 | 1 | 1 | 1 | 1 | 1.05 | 1.05 | 1.11 | 1.18 |

| Correction factors for VT 11-15 (for other compressed air inlet temperatures) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Inlet pressure | °C | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 |
| Correction factor | Kt | 1 | 1 | 1 | 1 | 0,83 | 0,67 | 0,59 | 0,48 | 0,42 | 0,33 |

* for oil free compressors correction factor is always 1

# **HP -** High Pressure Filters

## Features & Benefits

- High reliability
  - High-performance aluminum or stainless steel housings to withstand ultimately high operational pressures
  - Double O-rings, epoxy sealed caps and anti-corrosive coated filter housing
- Maximum contaminant removal
  - Removal of dry and wet dust, particulates, oil aerosol and water droplets
  - High-efficiency glass fiber and fleece media
- Significant energy savings & limited system operating costs
  - Optimal design and filter media allow for low pressure drops
- Easy to service
  - Cartridge color based on type of filtration grade, makes it easy to service

## General Specifications

- Operating pressures: 50-100-350 barg / 725-1450-5075 psig
- Operating temperature range:
  - 0-120°C/32-248°F (for grades S, D, G & C)
  - 0-35°C/32-95°F (for grade V)
- Available grades:
  - G: general oil coalescing filtration (max oil carry-over: 0,08 mg/m³)
  - C: fine oil coalescing filtration (max oil carry-over: 0,007 mg/m³)
  - S: general dust filtration (99,92% at MPPS)
  - D: fine dust filtration (99,98% at MPPS)
  - V: oil vapor filtration (max oil carry-over: 0,003 mg/m³)
- Inlet and outlet connections: threaded
- Housing material: Aluminum (50 barg/725 psig only) or stainless steel (complete range)
- Timer drain and manual drain for 50 bar filters available as an option

## Applications

**Laser cutting**

**PET bottling**

**Pressure testing of components**

**High-pressure die casting**

**Autoclave**

Pneumatech's high pressure filters are engineered to cost effectively provide the best air purity and meet today's increasing quality demands up to working pressures of 350 barg/5075 psig. All high pressure filter housings are hydraulically tested to ensure safe and reliable operation at all times. The hydrostatic test certificate is supplied with every filter.

The high pressure filters are available in 3 pressure ranges. The 50 barg (725 psig) range is available in both aluminum and stainless steel housings. As the performance of both filters is the same, the choice between the 2 can be made based on the customer's preference. The 100 barg (1450 psig) and 350 barg (5075 psig) filters are available in stainless steel housings.

**Technical specifications for HP 1-9 50 barg Aluminium Filters**

| Pneumatech Variant→ Specifications ↓ | Units | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity | l/s | 44 | 69 | 125 | 153 | 232 | 347 | 479 | 535 | 889 |
| | m³/hr | 160 | 250 | 450 | 550 | 835 | 1250 | 1725 | 1925 | 3200 |
| | cfm | 94 | 147 | 265 | 324 | 492 | 736 | 1015 | 1132 | 1882 |
| Connection | BSP | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/2" | 1 1/2" | 2" | 2" |
| Dimensions (A) | mm | 63 | 63 | 110 | 110 | 110 | 146 | 146 | 146 | 146 |
| | inch | 2,48 | 2,48 | 4,33 | 4,33 | 4,33 | 5,75 | 5,75 | 5,75 | 5,75 |
| Dimensions (B) | mm | 150 | 190 | 280 | 280 | 365 | 498 | 498 | 498 | 700 |
| | inch | 5,91 | 7,48 | 11,02 | 11,02 | 14,37 | 19,61 | 19,61 | 19,61 | 27,56 |
| Weight | kg | 0,3 | 0,3 | 2,2 | 2,2 | 2,9 | 6,4 | 6,6 | 6,5 | 9,2 |
| | lbs | 0,7 | 0,7 | 4,9 | 4,9 | 6,4 | 14,1 | 14,6 | 14,3 | 20,3 |

**Technical specifications for HP 1-8 50 barg Stainless Steel**

| Pneumatech Variant→ Specifications ↓ | Units | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity [1] | l/s | 28 | 56 | 94 | 139 | 278 | 472 | 567 | 944 |
| | m³/hr | 100 | 200 | 340 | 500 | 1000 | 1700 | 2040 | 3400 |
| | cfm | 59 | 118 | 200 | 294 | 589 | 1001 | 1201 | 2001 |
| Connection | BSP | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/2" | 2" | 2" |
| Dimensions (A) | mm | 85 | 85 | 85 | 110 | 110 | 150 | 150 | 150 |
| | inch | 3.35 | 3.35 | 3.35 | 4.33 | 4.33 | 5.91 | 5.91 | 5.91 |
| Dimensions (B) | mm | 202 | 227 | 257 | 270 | 422 | 517 | 517 | 817 |
| | inch | 7.95 | 8.94 | 10.12 | 10.63 | 16.61 | 20.35 | 20.35 | 32.17 |
| Weight | kg | 1.7 | 2 | 2.2 | 4 | 5 | 15 | 15 | 21 |
| | lbs | 3.7 | 4.4 | 4.9 | 8.8 | 11.0 | 33.1 | 33.1 | 46.3 |

**Correction factors: 50 barg Aluminum & Stainless Steel**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Operating pressure | barg | 4 | 6 | 8 | 10 | 15 | 20 | 30 | 40 | 50 |
| | psig | 58 | 87 | 116 | 145 | 218 | 290 | 435 | 581 | 726 |
| Correction factor | Kp | 0.14 | 0.22 | 0.28 | 0.34 | 0.47 | 0.56 | 0.7 | 0.85 | 1 |

**Correction factors: 100 barg Stainless Steel**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Operating pressure | barg | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| | psig | 290 | 435 | 581 | 726 | 871 | 1016 | 1161 | 1306 | 1451 |
| Correction factor | Kp | 0.45 | 0.57 | 0.68 | 0.8 | 0.84 | 0.88 | 0.92 | 0.96 | 1 |

**Correction factors: 350 barg Stainless Steel**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Operating pressure | barg | - | - | 50 | 100 | 150 | 200 | 250 | 300 | 350 |
| | psig | - | - | 726 | 1451 | 2177 | 2903 | 3628 | 4354 | 5080 |
| Correction factor | Kp | - | - | 0.73 | 0.78 | 0.82 | 0.87 | 0.91 | 0.96 | 1 |

1. Flow is referred to an absolute pressure of 1 barg and temperature of 20°C

**Technical specifications for HP 1-7 100 barg Stainless Steel**

| Pneumatech Variant→ Specifications ↓ | Units | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|---|
| Capacity [1] | l/s | 28 | 88 | 128 | 189 | 333 | 472 | 944 |
| | m³/hr | 100 | 315 | 460 | 680 | 1200 | 1700 | 3400 |
| | cfm | 59 | 185 | 271 | 400 | 706 | 1001 | 2001 |
| Connection | BSP | 1/4" | 1/2" | 3/4" | 1" | 1" | 1 1/2" | 2" |
| Dimensions (A) | mm | 65 | 65 | 88 | 135 | 135 | 150 | 150 |
| | inch | 2.56 | 2.56 | 3.46 | 5.31 | 5.31 | 5.91 | 5.91 |
| Dimensions (B) | mm | 135 | 250 | 275 | 265 | 480 | 525 | 815 |
| | inch | 5.31 | 9.84 | 10.83 | 10.43 | 18.90 | 20.67 | 32.09 |
| Weight | kg | 3.2 | 5.6 | 6.1 | 10.5 | 14.7 | 22 | 28 |
| | lbs | 7.1 | 12.3 | 13.4 | 23.1 | 32.4 | 48.5 | 61.7 |

**Technical specifications for HP 1-6 350 barg Stainless Steel**

| Pneumatech Variant→ Specifications ↓ | Units | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|
| Capacity [1] | l/s | 13 | 31 | 71 | 142 | 208 | 369 |
| | m³/hr | 48 | 111 | 255 | 510 | 750 | 1330 |
| | cfm | 28 | 65 | 150 | 300 | 441 | 783 |
| Connection | BSP | 1/4" | 1/4" | 1/2" | 3/4" | 1" | 1" |
| Dimensions (A) | mm | 41 | 65 | 88.5 | 885.5 | 150 | 150 |
| | inch | 1.61 | 2.56 | 3.48 | 34.86 | 5.91 | 5.91 |
| Dimensions (B) | mm | 103 | 135 | 210 | 280 | 330 | 480 |
| | inch | 4.06 | 5.31 | 8.27 | 11.02 | 12.99 | 18.90 |
| Weight | kg | 1.6 | 3.2 | 5.6 | 6.1 | 14.5 | 17.4 |
| | lbs | 3.5 | 7.1 | 12.3 | 13.4 | 32.0 | 38.4 |

# FP & FP HP - Process filters (incl. high pressure)

## Features & Benefits

- Enhanced stainless steel (1,4401) filter housing
  - Designed for applications with high risk of corrosion
  - High hygiene standards
- Advanced filter cartridge design
  - High filtration efficiency
  - Guaranteed performance over the entire lifetime
  - Low pressure drop
- Ultimate strength
- 100% integrity tested (DOP test)
- All components meet the FDA requirements for contact with food in accordance with the Code of Federal Regulations (CFR), title 21.
- Wide range of cartridges to suit application needs

## General Specifications: FP 1-18

- Stainless steel process filters
  - Maximum working pressure:
  - 14 barg/203 psig up to PF12
  - 10 barg /145 psig from PF13
- Operating temperature range[1]: 0-150°C / 41-302°F
- Body connections: DIN 11851 (Milk pipe connections)
- Surface finish: Ra 1.6, electro-polished externally
- Inlet and outlet connections: Threaded up to PF12, flanged from PF13

[1]Operating temperature range can vary as per the filter element used.

In process industries where the risk of corrosion of the compressed air system components is high, Pneumatech's FP 1-18 process filter range provides the right solution. The filter housing is made out of stainless steel grade 1,4401. The surface has been smoothened with advanced mechanical and electro-polishing techniques to a level of Ra 1,6. To avoid micro-organism contamination between the filter head and bowl, these are connected by a milk pipe connection as per DIN 11851.

The filter cartridges are available in 4 different filtration grades for a wide variety of applications. All cartridges have been extensively tested to guarantee the best filtration efficiency over the entire cartridge lifetime.

**Technical Specifications FP 1-18**

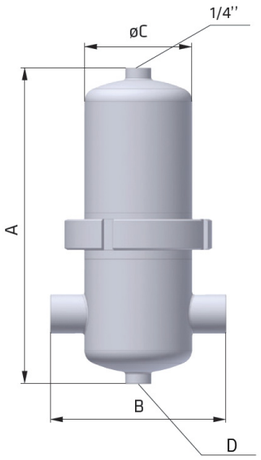
| Pneumatech Variant→ Specifications ↓ | Units | FP 1 | FP 2 | FP 3 | FP 4 | FP 5 | FP 6 | FP 7 | FP 8 | FP 9 | FP 10 | FP 11 | FP 12 | FP 13 | FP 14 | FP 15 | FP 16 | FP 17 | FP 18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow (1) | $m^3$/hr | 75 | 105 | 150 | 225 | 315 | 420 | 600 | 900 | 1260 | 1680 | 2400 | 3600 | 5040 | 6720 | 9600 | 13440 | 17280 | 21120 |
| | cfm | 44 | 62 | 88 | 132 | 185 | 247 | 353 | 530 | 742 | 989 | 1413 | 2119 | 2966 | 3955 | 5650 | 7910 | 10171 | 12431 |
| Operating Pressure | barg/psig | 16/232 | 16/232 | 16/232 | 16/232 | 16/232 | 16/232 | 16/232 | 16/232 | 16/232 | 16/232 | 12/174 | 12/174 | 10/145 | 10/145 | 10/145 | 10/145 | 10/145 | 10/145 |
| Connections | inch | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2" | 2 1/2" | 3" | 3" | DN100 | DN100 | DN150 | DN150 | DN200 | DN200 |
| Dimensions | A (mm) | 202 | 232 | 230 | 254 | 275 | 337 | 386 | 457 | 583 | 740 | 1004 | 1029 | 986 | 1240 | 1311 | 1351 | 1496 | 1496 |
| | A (inch) | 8.0 | 9.1 | 9.1 | 10.0 | 10.8 | 13.3 | 15.2 | 18.0 | 23.0 | 29.1 | 39.5 | 40.5 | 38.8 | 48.8 | 51.6 | 53.2 | 58.9 | 58.9 |
| | B (mm) | 116 | 120 | 125 | 125 | 136 | 155 | 180 | 180 | 180 | 224 | 224 | 252 | 410 | 410 | 480 | 540 | 660 | 660 |
| | B (inch) | 4.6 | 4.7 | 4.9 | 4.9 | 5.4 | 6.1 | 7.1 | 7.1 | 7.1 | 8.8 | 8.8 | 9.9 | 16.1 | 16.1 | 18.9 | 21.3 | 26.0 | 26.0 |
| | C (mm) | 76.1 | 76.1 | 76.1 | 76.1 | 88.9 | 88.9 | 114.3 | 114.3 | 114.3 | 139.7 | 139.7 | 168.3 | 219.1 | 219.1 | 273 | 323.9 | 406.4 | 406.4 |
| | C (inch) | 3.0 | 3.0 | 3.0 | 3.0 | 3.5 | 3.5 | 4.5 | 4.5 | 4.5 | 5.5 | 5.5 | 6.6 | 8.6 | 8.6 | 10.7 | 12.8 | 16.0 | 16.0 |
| | D | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1" | 1" | 1" | 1" | 1" | 1" |
| Mass | kg | 1.7 | 1.9 | 1.9 | 2 | 2.6 | 3 | 4.3 | 4.8 | 5.3 | 9 | 10.8 | 16.2 | 45 | 46 | 70 | 80 | 135 | 135 |
| | lbs | 3.7 | 4.2 | 4.2 | 4.4 | 5.7 | 6.6 | 9.5 | 10.6 | 11.7 | 19.8 | 23.8 | 35.7 | 99.2 | 101.4 | 154.3 | 176.4 | 297.6 | 297.6 |

1. Flow is measured at Reference Conditions: 1 bara and 20°C

**Technical specifications for FP HP 1-8**

| Pneumatech Variant→ Specifications ↓ | Units | FP HP 1 | FP HP 2 | FP HP 3 | FP HP 4 | FP HP 5 | FP HP 6 | FP HP 7 | FP HP 8 |
|---|---|---|---|---|---|---|---|---|---|
| Flow (1) | $m^3$/hr | 150 | 225 | 315 | 420 | 600 | 900 | 1260 | 2400 |
| | cfm | 88 | 132 | 185 | 247 | 353 | 530 | 742 | 1413 |
| Operating Pressure | barg/psig | 50/725 | 50/725 | 50/725 | 50/725 | 50/725 | 50/725 | 50/725 | 50/725 |
| Connections | Inch | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2" | 3" |
| Dimensions | A (mm) | 231 | 253 | 274 | 336 | 387 | 453 | 580 | 1005 |
| | A (inch) | 9.1 | 10.0 | 10.8 | 13.2 | 15.2 | 17.8 | 22.8 | 39.6 |
| | B (mm) | 125 | 125 | 136 | 155 | 180 | 180 | 180 | 224 |
| | B (inch) | 4.9 | 4.9 | 5.4 | 6.1 | 7.1 | 7.1 | 7.1 | 8.8 |
| | C (mm) | 76.1 | 76.1 | 88.9 | 88.9 | 114.3 | 114.3 | 114.3 | 139.7 |
| | C (inch) | 3.0 | 3.0 | 3.5 | 3.5 | 4.5 | 4.5 | 4.5 | 5.5 |
| | D | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" |
| Mass | kg | 2.5 | 2.6 | 3.4 | 3.9 | 5.6 | 6.2 | 6.9 | 14.1 |
| | lbs | 5.5 | 5.7 | 7.5 | 8.6 | 12.3 | 13.7 | 15.2 | 31.1 |

1. Flow is measured at Reference Conditions: 1 bara and 20°C




**Correction factors**

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Operating pressure | barg | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 20 | 30 | 40 | 50 |
| | psig | 29 | 44 | 58 | 72 | 87 | 100 | 115 | 130 | 145 | 160 | 174 | 189 | 203 | 218 | 232 | 100 | 290 | 435 | 725 |
| Correction factor | Kp | 0,38 | 0,5 | 0,63 | 0,75 | 0,88 | 1 | 1,13 | 1,25 | 1,38 | 1,50 | 1,63 | 1,75 | 1,88 | 2,00 | 2,13 | 2,63 | 3,88 | 5,13 | 6,38 |

# FS - Sterile filters

## Features & Benefits

- Enhanced high-grade stainless steel filter housing suitable for sterilization.
  - Designed for applications with high risk of corrosion
  - High hygiene standards thanks to sanitary couplings
- Advanced filter cartridge design
  - High microbiological filtration efficiency
  - Designed to withstand a large number of sterilization cycles thanks to silicon bonded joint and additional NOMEX layer
- Stainless steel cylinders and end-caps
- Low pressure drop
- 100% integrity tested (DOP test)
- All components meet the FDA requirements for contact with food in accordance with the Code of Federal Regulations (CFR), title 21.

## General Specifications

- Maximum working pressure: 14 barg/203 psig
- Operating temperature range[1]: -20°C to 150°C/-4°F to 302°F
- Body connections: DIN 11851 (Milk pipe connections)
- Surface finish: Ra 0.8, electro-polished externally
- Inlet and outlet connections: threaded

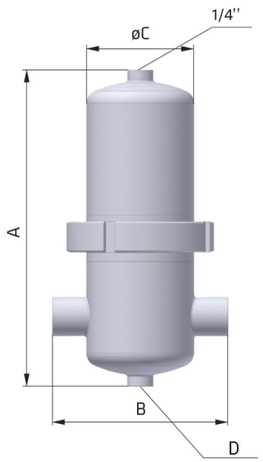
Pneumatech's FSI filters are designed for compressed air and gas applications that need to be free from microbiological contamination, and can thus be sterilized regularly.

Pneumatech's FSI filter housings are made out of stainless steel grade 1.4404, with a surface that has been smoothened to a level of Ra 0,8. There is no void inside the entire filter housing; and thus no risk of micro-organism contamination.

The filter elements are manufactured with silicon as bonded joint to ensure robustness at high operating and sterilization temperatures. For the same reason, an additional NOMEX layer is used at the inside and outside of the filter element. The filter cylinders and end-caps are made out of stainless steel. This all results in a highly efficient and exceptionally strong filter, which keeps its performance after a large number of sterilization cycles, with cycle temperatures up to 200°C (392°F). The filtration grade is Super Fine coalescent filter.

| Filter Model | Pipe Size | Flow Rate | | Dimension (mm) | | | | Weight (kg) Approx. | Element Model |
|---|---|---|---|---|---|---|---|---|---|
| | G/NPT | Nm³/h | SCFM | A | B | C | D | | |
| FSI 1 | 1/4" | 75 | 44 | 225 | 116 | 76.1 | 1/8 | 1.7 | - |
| FSI 2 | 3/8" | 105 | 62 | 251 | 120 | 76.1 | 1/8 | 1.9 | - |
| FSI 3 | 1/2" | 150 | 88 | 253 | 125 | 76.1 | 1/8 | 1.9 | - |
| FSI 4 | 3/4" | 225 | 132 | 281 | 125 | 76.1 | 1/8 | 2.0 | - |
| FSI 5 | 1" | 315 | 185 | 290 | 136 | 88.9 | 1/8 | 2.6 | - |
| FSI 6 | 1 1/4" | 420 | 247 | 357 | 155 | 88.9 | 1/8 | 3.0 | - |
| FSI 7 | 1 1/2" | 600 | 353 | 408 | 179 | 114.3 | 1/4 | 4.3 | - |
| FSI 8 | 2" | 900 | 530 | 476 | 179 | 114.3 | 1/4 | 4.8 | - |
| FSI 9 | 2" | 1260 | 742 | 602 | 180 | 114.3 | 1/4 | 5.3 | - |
| FSI 10 | 2 1/2" | 1680 | 989 | 762 | 224 | 139.7 | 1/4 | 9.0 | - |
| FSI 11 | 3" | 2400 | 1413 | 1030 | 224 | 139.7 | 1/4 | 10.8 | - |
| FSI 12 | 3" | 3600 | 2119 | 1035 | 238 | 154 | 1/4 | 16.2 | - |

| Correction factors | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Operating pressure | barg | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | psig | 29 | 44 | 58 | 72 | 87 | 100 | 115 | 130 | 145 | 160 | 174 | 189 | 203 | 218 | 232 |
| Correction factor | Kp | 0,38 | 0,50 | 0,63 | 0,75 | 0,88 | 1 | 1,13 | 1,25 | 1,38 | 1,50 | 1,63 | 1,75 | 1,88 | 2,00 | 2,13 |



# Condensate Management

Pneumatech's condensate management portfolio includes solutions for separating, draining, detecting and treating oily condensate.

Water separators can be used downstream of the compressor instead of - or together with - the air receiver. We offer three types of condensate drains depending on your needs: a timer drain, a mechanical zero loss float drain and an electronic zero loss drain. Also for condensate treatment we give you the choice, i.e. between the cost-competitive ECOBOX solution and our premium, patented OWS technology.