



International H-Series ***Compressed Air & Gas Filters***

- Coalescing, Particulate & Hydrocarbon Adsorption
- Flows from 10 to 1600 SCFM (17 to 2822 m³/hr)
- 1/4" to 3" NPT, BSPF & BSPT Ports

Bulletin 1300 - 993C/USA



Finite[®]

Do you have... product rejects? Increased maintenance expense?

Contaminants from your compressor going into point of use applications?

Why filter compressed air and gas?

Submicronic contaminants in compressed air systems plug orifices of sensitive pneumatic instrumentation, wear out seals, erode system components, reduce the absorptive capacity of desiccant air/gas dehydrators, foul heat transfer surfaces, reduce air tool efficiency, and damage finished

products. The results include product rejects, lost production time and increased maintenance expense.

For example, trace amounts of submicronic oil can cause serious fish eye blemishing in automotive finishing operations. Water left in air lines can freeze during exposure to cold temperatures, blocking flow

or rupturing pipes. Compressor lubricant not captured in a coalescing filter will eventually collect in pneumatic components, causing premature component repair or replacement. Environmental concerns will be raised if oily, compressed air is continually discharged into the atmosphere

Why use Finite Filters?

SAVE TIME AND MONEY

Finite Filter's International H-Series is the right solution for most compressed air/gas applications. Our filter elements are formed with our special UNI-CAST glass microfibers to enhance the depth-loading characteristics of each element's fiber matrix. This design provides lower pressure drops and less frequent change outs, saving you time and money.

WE MEET YOUR NEEDS

With our wide variety of media, you can find a product to meet your specific requirements. This will avoid over-specifying filtration efficiency.

IMPROVE OPERATION LIFE

We make liberal use of a special prefilter, prolonging operation life on some coalescers from 4 to 6 times.

CONFIDENCE IN PERFORMANCE

Our filter housings have been specifically designed for coalescing filtration. Generous exit ports promote lower pressure drops and large remote sump areas prevent fluid re-entrainment. With Finite's H-Series product line, you can have confidence in performance.



Finite's H-Series Offers...

- Coalescing, particulate and adsorption filter elements
- Optional indicators, gauges and drains
- Temperatures to 450° F (232° C)
- Pressures to 500 PSIG (34 bar)
- Connection sizes from 1/4" to 3" NPT, BSPF & BSPT
- Flows from 10 to 1600 SCFM (17-2822 m³/hr)

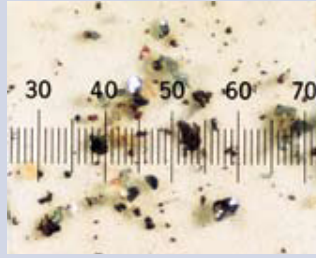
oil



water



solids



Actual pictomicrograph of particulate contaminants (Magnified 100x Scale: 1 division = 20 microns (µm))

The contaminants of greatest concern in precision compressed air systems are water, oil and solids. Water vapor is present in all compressed air; it becomes greatly concentrated by the compression process. While air dryer systems can be used effectively to remove water from compressed air, they will not remove the second major liquid contaminant – oil. Most oil comes from compressor lubrication carry-over, but even

the air produced by oil-free compressors has hydrocarbon contamination brought into the system through the intake.

The third contaminant found in compressed air is solid matter including dirt, rust and scale. Solid particulates, combined with aerosols of water and oil, can clog and shorten the life of air system components and can foul processes.



Typical Applications

(See Pages 5-6 for application and air cleanliness schematics)

Coalescing (Oil Removal)

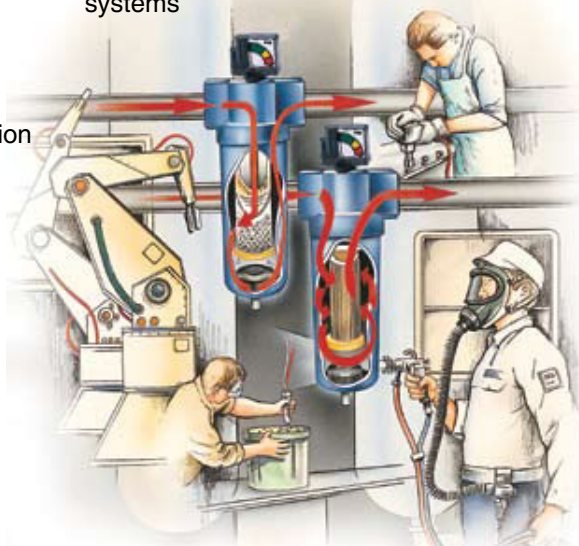
- Air dryer prefilter
- Paint spray booths
- Breathing air
- Tool protection
- Air valve protection
- Air cylinder protection
- Compressed air system protection

Adsorber (Vapor Removal)

- Odor removal
- Breathing air
- Food packaging equipment
- High purity laboratory gases
- Hydrocarbon vapor removal

Interceptor (Particulate Removal)

- Desiccant dryer afterfilter
- Prefilter for coalescer
- Systems with high concentrations of solid contaminant
- Particulate protection for non-lubricated systems



4 Steps to clean, dry compressed air!

Step 1

Determine your application, media grade, media type and end seals. Pages 4-7

Step 2

Choose your housing and replacement elements. Pages 8-9

Step 3

Choose your accessories. Find out what's standard or choose what's best for your application. Page 9

Step 4

How to Order. Build your own part number here! Page 10

Does one of these

applications

describe your system?

From aeration in pharmaceutical and chemical processes to pneumatic power systems, the possibilities for applications are endless. Finite has some suggested air cleanliness standards that may fit your needs. Let one of Finite's application engineers find a system that is right for you.

quality

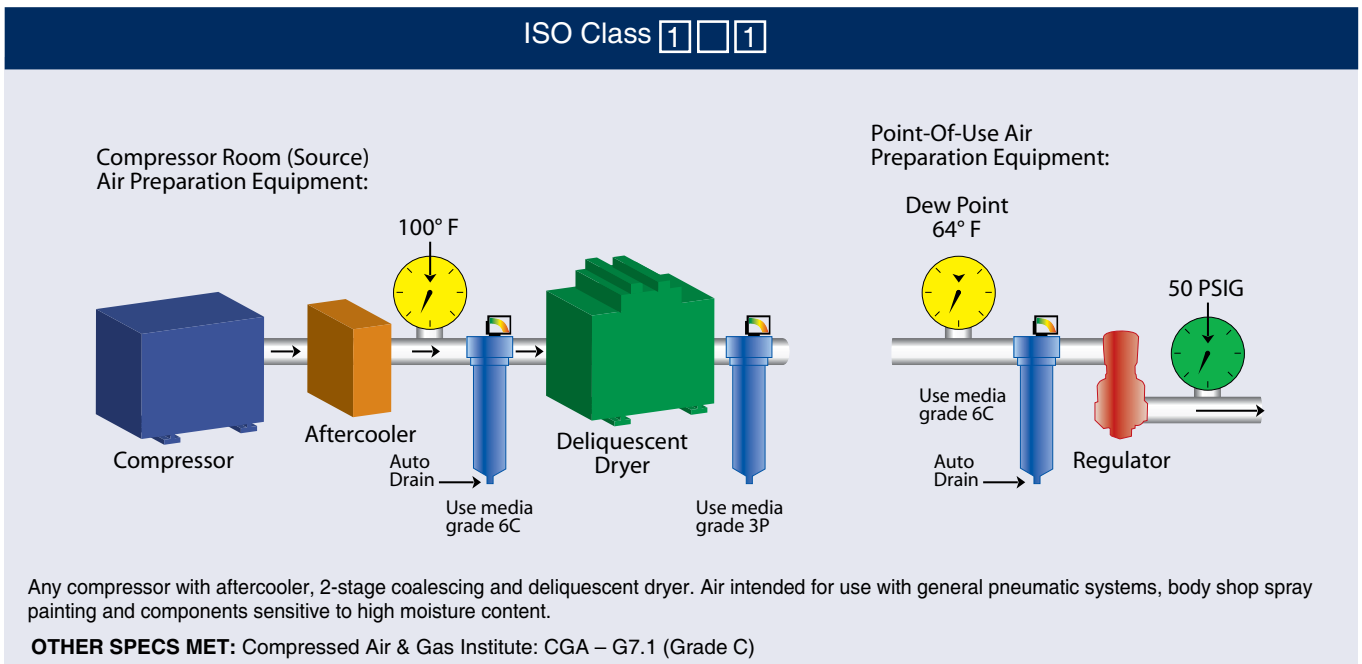
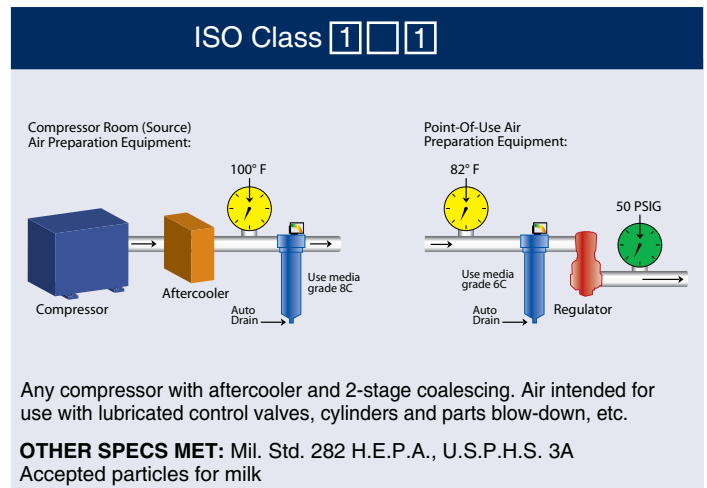
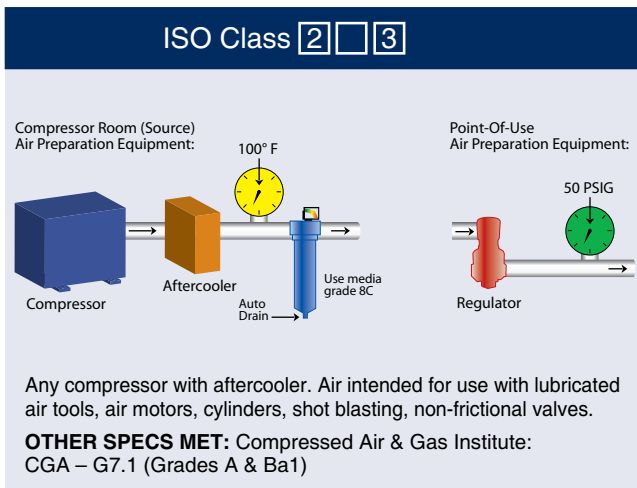
International Standard ISO8573-1 is fast becoming the industry standard method for specifying compressed air cleanliness. The following diagrams describe various systems in terms of their corresponding ISO classification.

| International ISO Standards Notification as specified in ISO8573 - 1 | | | | |
|---|-----------------------|--|-----------------------------------|---|
| Class | Solid | | Water | Oil |
| | Maximum particle size | Maximum Concentration* ppm(mg/m ³) | Maximum Pressure Dewpoint °F (°C) | Maximum Concentration** ppm(mg/m ³) |
| 1 | 0.1 | 0.08 (0.1) | -94 (-70) | 0.008 (0.01) |
| 2 | 1 | 0.8 (1) | -40 (-40) | 0.08 (0.1) |
| 3 | 5 | 4.2 (5) | -4 (-20) | 0.83 (1) |
| 4 | 15 | 6.7 (8) | 37 (+3) | 4.2 (5) |
| 5 | 40 | 8.3 (10) | 45 (+7) | 21 (25) |
| 6 | - | - | 50 (+10) | - |

* At 14.7 psi (1 bar) absolute pressure, +70°F (+20°C) and a relative humidity of 60%. It should be noted that at pressures above atmospheric, the contaminant concentration is higher.

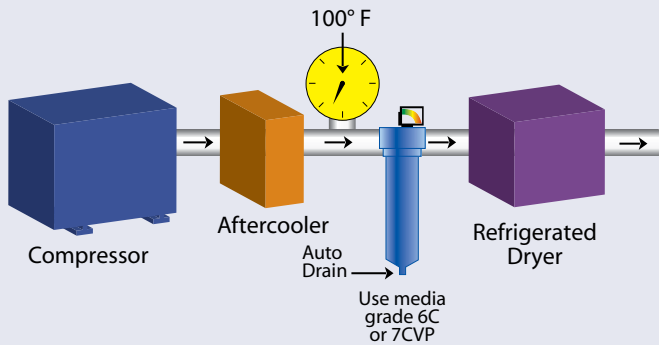
Notes:

1. The quality of the air delivered by non-lubricated compressors is influenced by the quality of the intake air and the compressor design.

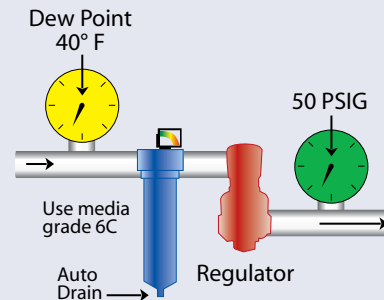


ISO Class 1 4 1

Compressor Room (Source)
Air Preparation Equipment:



Point-Of-Use
Air Preparation Equipment:

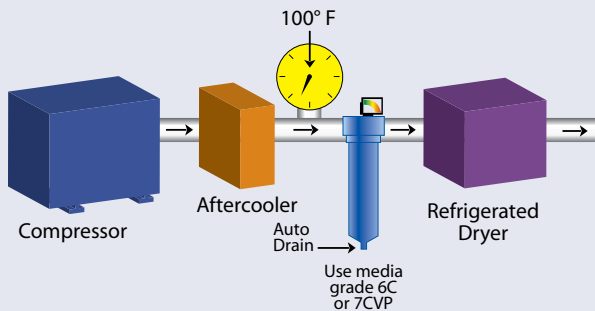


Any compressor with aftercooler, 2-stage coalescing and refrigerated dryer. Air intended for use with air-gauging, air conveyors, spray-painting, food processing, instrumentation, blow molding, cosmetics, film processing, bottling, pharmaceuticals, dairy, breweries, medical, robotics and close tolerance valves.

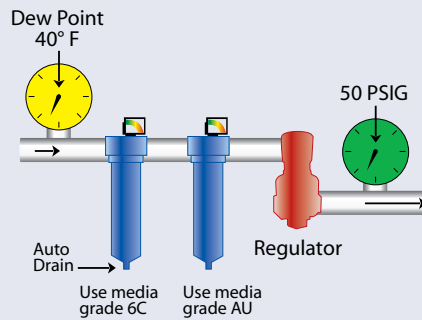
SPECS MET: CGA – G7.1 (Grades D & E), ISAS7.3 Fed. Std. 209 (Class 100)

ISO Class 1 4 1

Compressor Room (Source)
Air Preparation Equipment:



Point-Of-Use
Air Preparation Equipment:

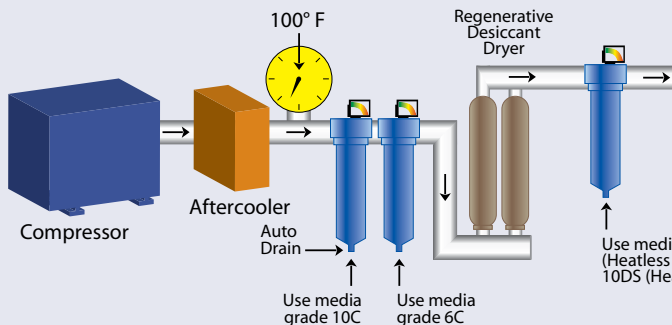


Any compressor with aftercooler, 2-stage coalescing, refrigerated dryer and carbon absorber. Air intended for use as industrial breathing air and decompression chambers. CAUTION: Always use high temperature synthetic lubricants and monitor (alarm for carbon monoxide concentrations exceeding 20ppm). This system will not eliminate toxic gases!

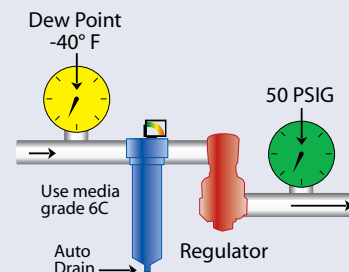
OTHER SPECS MET: O.S.H.A. 29CFR 1910.134

ISO Class 1 2 1

Compressor Room (Source)
Air Preparation Equipment:



Point-Of-Use
Air Preparation Equipment:



Any compressor with aftercooler, two-stage and double coalescing and a regenerative-type desiccant dryer. Air intended for use in applications involving rapid expansion of compressed air, critical instrumentation, high purity gases, computer chip drying, etc. CAUTION: This air is too dry for respiratory use.

SPECS MET: CGA – G7.1 (Grade F)

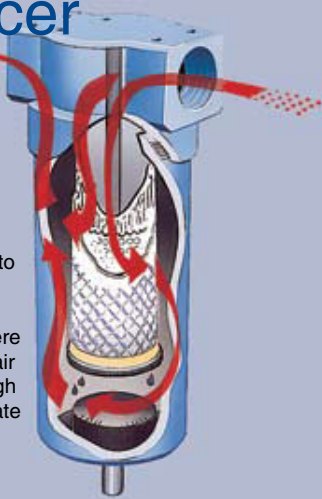
Step 1

Determine your application, media grade, media type and end seals.

Find your (or similar) application in the descriptions below, from the basic application circuits on the previous page, or consult a **Finite**® application engineer. Determine media grade, media type and end seal required. If your application requires a coalescing element, use the information listed below. For other media types, please see the following page.

Coalescing (Liquid and Particulate Removal) Filter Media

How does a coalescer work?



This filter housing cutaway depicts the coalescing process. Air enters the housing and flows through the filter media passing from the inside element surface to the outside. Coalesced liquid (water and oil) collects in the bowl where it is drained and clean air exits the housing through the outlet port. Particulate contaminants are captured and held in the media.

Media Grade
Media Type
End Seal

4

Coalescing elements are wrapped in color netting corresponding to media grades below, or will have the media grade printed on the element.

APPLICATIONS: Very high-efficiency coalescer; for elevated pressures up to **500 PSIG** (34 bar) or when removing aerosols from lighter weight gases. Protection of pneumatic systems and critical modulating systems such as flow and temperature controllers.

STANDARD

6

APPLICATIONS: General air coalescing applications when total removal of liquid aerosols and suspended fines is required in all pressure ranges. Protection of air dryers, air gauging, air logic, modulating systems, critical air conveying, most breathing air systems, etc.

7CVP

APPLICATIONS: High efficiency and very low pressure drop, even when wetted by oil and water, makes this pleated coalescing media an excellent choice for medium efficiency applications. Large surface area means long life and a high tolerance for heavy liquid aerosol contamination. Prefilter for refrigerated air dryer.

8

APPLICATIONS: Good air coalescing efficiency in combination with high flow rate and long element life. Protection of noncritical circuit components such as valves, cylinders, etc. Prefilter for refrigerated air dryer.

10

APPLICATIONS: Precoalescer or prefilter for Grade 6 to remove gross amounts of water and oil, or tenacious aerosols which are difficult to remove. Upgrading existing particulate equipment to coalescing without increase in pressure drop.

Choose your media type

All of the elements below flow in to out.



C: Micro-glass coalescer
Max. temp. 175°F.



Q: Micro-glass coalescer with built-in pleated prefilter
Max. temp. 175°F.



7CVP: Micro-glass pleated coalescer
Max. temp. 175°F.



D: High temperature micro-glass coalescer
Max. temp. 450° F

Media Specifications

| Grade Designation | Coalescing Efficiency .3 to .6 Micron Particles | Maximum Oil Carryover ¹ PPM w/w | Micron Rating | Pressure Drop (PSID) @ Rated Flow ² | |
|-------------------|--|---|---------------|--|------------------------------|
| | | | | Media Dry | Media Wet With 10-20 wt. oil |
| 4 | 99.995% | 0.003 | 0.01 | 1.25 | 3-4 |
| 6 | 99.97% | 0.008 | 0.01 | 1.0 | 2-3 |
| 7 | 99.5% | 0.09 | 0.5 | 0.25 | 0.5 - 0.7 |
| 8 | 98.5% | 0.2 | 0.5 | 0.5 | 1-1.5 |
| 10 | 95% | 0.85 | 1.0 | 0.5 | 0.5 |

¹Tested per ADF-400 at 40 ppm inlet.

²Add dry + wet for total pressure drop.

Coalescer End Seals:

Blank: No end seals - Elements are self-sealing.

Standard on filters with 1/4" to 1" connection sizes.

U: Molded urethane, Standard on all filters with 1 1/4" to 3" connection sizes.

S: Molded silicone rubber end seals used for high-temperature elements up to **450°F** (232°C).

V: Fluorocarbon gasket bonded to metal end cap. Optional seal used for high temperature **450°F** (232°C) elements. Available on 1 1/4" NPT and larger. Standard on all 7CVP media.

Water Separator Filter Media

| Grade Designation | Filter Efficiency Rating | Pressure Drop (PSID) @ Rated Flow Media Dry |
|-------------------|--------------------------|---|
| 100WS | 100µm | <0.25 |

Water Separator End Seals:

Blank: Fluorocarbon gasket bonded to metal end cap. Standard on filters with 1 1/4" to 3" connection sizes.

U: Molded urethane. Standard on all filters with 1/4" to 1" connection sizes.

100WS

APPLICATIONS: Reduction and elimination of excess liquids in gas streams. Excellent prefiltration for coalescing grades 6 and 10 when extreme quantities of liquid contaminants are present.

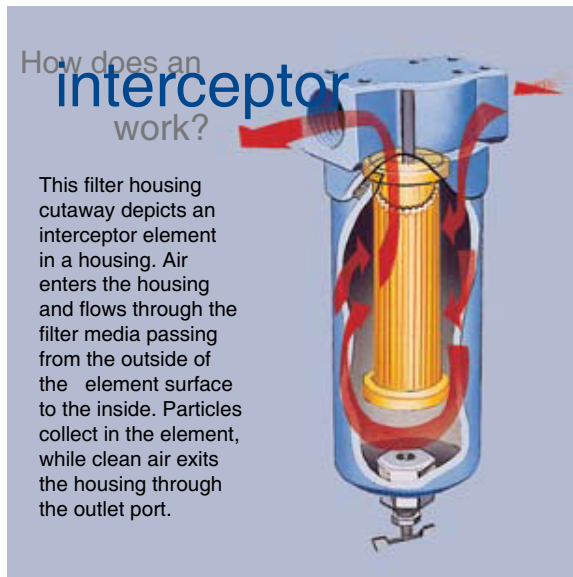
media type



100WS: Rolled Stainless Steel Mesh (304 SS)

Element flows in to out.
Max. temp. 175°F.

Interceptor (Particulate Removal) Filter Media



3P U

APPLICATIONS: Particulate removal where very high dirt-holding capacity is required. Safety afterfilter for desiccant dryer, pore matched prefilter for coalescer or as general use for final instrument air protection.

Media Specifications

| Grade Designation | Filter Efficiency Rating | Pressure Drop (PSID) @ Rated Flow Media Dry |
|-------------------|--------------------------|---|
| 3P | 3µm | 0.25 |

media type



3P: Pleated Cellulose

Element flows out to in.
Max. temp. 175°F.

Standard Interceptor End Seals: U = Molded urethane. Molded silicone rubber (S) and fluorocarbon (V) available - see How to Order on page 10.

Adsorption (Vapor Removal) Filter Media



A U

APPLICATIONS: Polishing gas stream of final trace amounts of hydrocarbon contaminants, usually 0.5 to 2 ppm inlet concentrations. Preparation for breathing air; hydrocarbon vapor removal.

Media Specifications

| Grade Designation | Oil Vapor Removal Efficiency | Pressure Drop (PSID) @ Rated Flow Media Dry |
|-------------------|------------------------------|---|
| A | 99%+ | 1 |

media type



A: Activated Carbon

Element flows out to in.
Max. temp. 175°F.

Standard Adsorber End Seals: U = Molded urethane. Molded silicone rubber (S) available - see How to Order on page 10.

Step 2

Determine your Housing.

Find your desired flow rate under the appropriate media grade column. For pressures other than 100 PSIG or temperatures other than 70°F, please see Alternate Housing Selection Chart, Step 2a, on following page.

Insert Port Type. See page 10 for options. For example: Insert "N" for an NPT Port.

Housing Selection Chart

Rated Flows: SCFM @ 100 PSIG (m³/hr @ 7 bar)
For other pressures, please see Step 2a on following page.

| Housing Assembly | Port Size | Grade 4 Coalescer | Grade 6 Coalescer (Standard) | Grade 7CVP Coalescer | Grade 8 Coalescer | Grade 10 Coalescer | Grade 3PU Interceptor | Grade 100WS Water Separator | Grade A Adsorber |
|------------------|-----------|-------------------|------------------------------|----------------------|-------------------|--------------------|-----------------------|-----------------------------|------------------|
| H_1S | 1/4" | 11 (19) | 15 (26) | N/A | 20 (34) | 25 (43) | 25 (43) | 50 (85) | 15 (26) |
| H_15S | 3/8" | 15 (26) | 20 (34) | N/A | 27 (46) | 33 (56) | 33 (56) | 66 (112) | 20 (34) |
| H_2S | 1/2" | 19 (32) | 25 (43) | N/A | 34 (58) | 42 (71) | 42 (71) | 83 (141) | 25 (43) |
| H_1L | 1/4" | 23 (39) | 30 (51) | N/A | 41 (68) | 50 (85) | 50 (85) | 50 (85) | 30 (51) |
| H_15L | 3/8" | 30 (51) | 40 (68) | N/A | 55 (94) | 66 (112) | 66 (112) | 66 (112) | 40 (68) |
| H_2L | 1/2" | 38 (65) | 50 (85) | N/A | 68 (116) | 83 (141) | 83 (141) | 83 (141) | 50 (85) |
| H_3S | 3/4" | 61 (104) | 80 (136) | N/A | 109 (185) | 133 (226) | 133 (226) | 133 (226) | 80 (136) |
| H_4S | 1" | 76 (129) | 100 (170) | N/A | 136 (231) | 166 (282) | 166 (282) | 232 (394) | 100 (170) |
| H_4L | 1" | 106 (180) | 140 (238) | N/A | 191 (325) | 232 (394) | 232 (394) | 232 (394) | 140 (238) |
| H_5S | 1 1/4" | 190 (323) | 250 (425) | 415 (706) | 330 (461) | 415 (706) | 415 (706) | 415 (706) | 250 (425) |
| H_6S | 1 1/2" | 260 (442) | 350 (595) | 600 (1020) | 465 (791) | 600 (1020) | 600 (1020) | 600 (1020) | 350 (595) |
| H_8E | 2" | 260 (442) | 350 (595) | 600 (1020) | 465 (791) | 600 (1020) | 600 (1020) | 600 (1020) | 350 (595) |
| H_8S | 2" | 340 (578) | 450 (765) | 750 (1275) | 600 (1020) | 750 (1275) | 750 (1275) | 750 (1275) | 450 (765) |
| H_8L | 2" | 470 (799) | 625 (1063) | 1035 (1760) | 830 (1411) | 1035 (1760) | 1035 (1760) | 1035 (1760) | 625 (1063) |
| H_0L | 2 1/2" | 600 (1020) | 800 (1360) | 1330 (2261) | 1060 (1802) | 1330 (2261) | 1330 (2261) | 1330 (2261) | 800 (1360) |
| H_12L | 3" | 750 (1275) | 1000 (1700) | 1660 (2822) | 1330 (2261) | 1660 (2822) | 1660 (2822) | 1660 (2822) | 1000 (1700) |

Replacement Element Part Numbers

Insert Port Type. Port type does not affect element selection.

*Insert selected media grade 4, 6, 8, 10.

| Housing Assembly | Coalescer | Coalescer w/inner retainer | High Temperature | Coalescer w/ built-in prefilter | 7CVP Pleated Coalescer | 3PU Interceptor | 100WS Water Separator | AU Adsorber |
|------------------|-----------|----------------------------|------------------|---------------------------------|------------------------|-----------------|-----------------------|-------------|
| H_1S | *C10-025 | *IU10-025 | *DS10-025 | *QU10-025 | N/A | 3PU10-025 | 100WSU10-025 | AU10-025 |
| H_15S | *C10-025 | *IU10-025 | *DS10-025 | *QU10-025 | N/A | 3PU10-025 | 100WSU10-025 | AU10-025 |
| H_2S | *C10-025 | *IU10-025 | *DS10-025 | *QU10-025 | N/A | 3PU10-025 | 100WSU10-025 | AU10-025 |
| H_1L | *C10-050 | *IU10-050 | *DS10-050 | *QU10-050 | N/A | 3PU10-050 | 100WSU10-025 | AU10-050 |
| H_15L | *C10-050 | *IU10-050 | *DS10-050 | *QU10-050 | N/A | 3PU10-050 | 100WSU10-025 | AU10-050 |
| H_2L | *C10-050 | *IU10-050 | *DS10-050 | *QU10-050 | N/A | 3PU10-050 | 100WSU10-025 | AU10-050 |
| H_3S | *C15-060 | *IU15-060 | *DS15-060 | *QU15-060 | N/A | 3PU15-060 | 100WSU15-060 | AU15-060 |
| H_4S | *C15-060 | *IU15-060 | *DS15-060 | *QU15-060 | N/A | 3PU15-060 | 100WSU15-060 | AU15-060 |
| H_4L | *C15-095 | *IU15-095 | *DS15-095 | *QU15-095 | N/A | 3PU15-095 | 100WSU15-060 | AU15-095 |
| H_5S | *CU25-130 | *CU25-130 | *DS25-130 | *QU25-130 | 7CVP25-130 | 3PU25-130 | 100WS25-130 | AU25-130 |
| H_6S | *CU25-130 | *CU25-130 | *DS25-130 | *QU25-130 | 7CVP25-130 | 3PU25-130 | 100WS25-130 | AU25-130 |
| H_8E | *CU25-130 | *CU25-130 | *DS25-130 | *QU25-130 | 7CVP25-130 | 3PU25-130 | 100WS25-130 | AU25-130 |
| H_8S | *CU25-187 | *CU25-187 | *DS25-187 | *QU25-187 | 7CVP25-187 | 3PU25-187 | 100WS25-187 | AU25-187 |
| H_8L | *CU25-235 | *CU25-235 | *DS25-235 | *QU25-235 | 7CVP25-235 | 3PU25-235 | 100WS25-235 | AU25-235 |
| H_0L | *CU35-280 | *CU35-280 | *DS35-280 | *QU35-280 | 7CVP35-280 | 3PU35-280 | 100WS35-280 | AU35-280 |
| H_12L | *CU35-280 | *CU35-280 | *DS35-280 | *QU35-280 | 7CVP35-280 | 3PU35-280 | 100WS35-280 | AU35-280 |

Step 2a

Alternate Housing Selection Chart

for applications with pressures other than 100 PSIG and 70°F (standard conditions)

Converting Actual Application Conditions to Standardized Conditions

Because the required size of a filter is affected not only by flow, but also by operating pressure and operating temperature, it is necessary to convert those actual conditions to standardized conditions (100 PSIG and 70°F). The calculated adjusted flow rate can then be used to choose the appropriate filter in the chart on page 8. When using the chart, choose the closest flow rate from the appropriate media grade column.

Equation:

| Flow | Pressure | Temperature | Specific Gravity | Adjusted Flow Rate |
|--------------------------------|--|---|----------------------------------|---|
| Actual System Flow Rate (SCFM) | $\frac{(100 \text{ PSIG} + 14.7 \text{ PSIG})}{(\text{System Pressure (PSIG)} + 14.7 \text{ PSIG})}$ | $\frac{(\text{System Temp } ^\circ\text{F} + 460^\circ\text{F})}{(70^\circ\text{F} + 460^\circ\text{F})}$ | $\sqrt{\text{specific gravity}}$ | Adjusted Flow Rate (At 100 PSIG and 70°F) |
| X | X | X | X | = |

Example: For grade 6C filter, with an actual flow rate of 60 SCFM, an actual pressure of 50 PSIG and an actual temperature of 175°F, the equation would go as follows:

| | |
|--|---|
| system pressure = 50 | system temperature = 175 |
| $\frac{(100\text{PSIG} + 14.7 \text{ PSIG})}{(50 \text{ PSIG} + 14.7 \text{ PSIG})}$ | $\frac{(175 ^\circ\text{F} + 460^\circ\text{F})}{(70^\circ\text{F} + 460^\circ\text{F})}$ |
| $\frac{(114.7)}{(64.7)} = 1.77$ | $\frac{(635)}{(530)} = 1.19$ |

Note: Take the square root of your specific gravity. If this is for a compressed air application, skip this step because the specific gravity of air equals one. Please consult **Finite**® if you do not know your specific gravity.

Now go to the chart on page 8, look down the media grade 6 column for a flow of 126.4 SCFM, you will see the correct housing is the HN4L.

60 SCFM X 1.77 X 1.19 X 1 = 126.4 SCFM

Pre-Installed Accessory Options

Step 3








Choose your accessories.

Consult **Finite**® when choosing pre-installed accessories for special gases.

| Accessory Designator | Auto Drain | DPI Indicator | DPG Gauge | High Temp | DP Ports | Fluorocarbon O-rings | No Accessories | Pressure/Temp | | Pressure/Temp | |
|----------------------|------------|---------------|-----------|-----------|----------|----------------------|----------------|---------------|-----------|---------------|-----------|
| | | | | | | | | PSIG | Degrees°F | bar | Degrees°C |
| A | | | | | | | | 250 | 175° | 17 | 79° |
| D | | | | | | | | 250 | 175° | 17 | 79° |
| G | | | | | | | | 500 | 175° | 34 | 79° |
| J | | | | | | | | 250 | 450° | 17 | 232° |
| N | | | | | | | | 500 | 175° | 34 | 79° |
| P | | | | | | | | 250 | 175° | 17 | 79° |
| V | | | | | | | | 500 | 175° | 34 | 79° |
| W | | | | | | | | 250 | 175° | 17 | 79° |
| X | | | | | | | | 250 | 175° | 17 | 79° |
| Y | | | | | | | | 250 | 175° | 17 | 79° |

Pre-installed Accessories

Other Compatible Accessories

| |  |  |  |  |  |  |  |
|------------|---|---|---|---|---|---|---|
| | DPI Indicator | AD-12' Automatic Drain Valve (Internal) | DPG-15 Differential Pressure Gauge | TV-50² Timed Drain Valve | ZLD-10 Zero Loss Drain | VS-50 Visual Sump Drain (not shown: standard bowl guard) | MS-50 Metal Sump Drain (External) |
| Designator | D, W | A, W, X, Y | G, Y | | | | |
| Temp. | 175° F (79° C) | 175° F (79° C) | 175° F (79° C) | 210° F (99° C) | 140° F (60° C) | 125° F (52° C) | 175° F (79° C) |
| Pressure | 250 PSIG (17 Bar) | 250 PSIG (17 Bar) | 500 PSIG (34 Bar) | 300 PSIG (20 Bar) | 250 PSIG (17 Bar) | 150 PSIG (10 Bar) | 250 PSIG (17 Bar) |
| Port Size | N/A | N/A | N/A | 1/2" NPT | 1/2" NPT | 1/2" NPT | 1/2" NPT |

¹Note: AD-12 requires 10 PSIG to seal. ²Note: Other timed drain valves can in Bulletin 1300-150/USA.

Mounting brackets available: BK-M (1/4" - 1/2" connections); BK-3 (3/4" - 1" connections).



Step 4

How to Order

Use the steps below to build your own part number.

For any permutation not mentioned below, please consult factory at 1-800-521-4357.

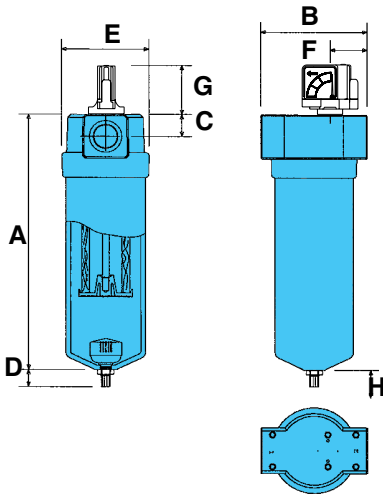
| Step 2 or 2a | | | | Step 1 | | | Step 3 |
|---|--|---|-------------------|--|--|--|--|
| H | N | 1 2 | L - | 6 | C | U | G |
| Series Name | Port Type | Port (Connection) Size | Bowl | Element Grade | Element Type | End Seal | Accessory Designator for preinstalled accessories |
| N - NPT F - BSPF S - SAE* T - BSPT *SAE-32 2" connection only | 1 - 1/4" 15 - 3/8" 2 - 1/2" 3 - 3/4" 4 - 1" 5 - 1 1/4" 6 - 1 1/2" 8 - 2" 0 - 2 1/2" 12 - 3" | S - Standard L - Long E - Economy (short bowl)* *Short bowl is only available on 2" connection size Note: Bowl length is determined by the flow rate required. See page 8, Housing Selection Chart, for flow rates. | 4 6 8 10 | C Q D 7CVP I 3P 100WS A | Blank = No end seal, Standard on 1/4" to 1" connection sizes U = Urethane, Standard on 1 1/4" to 3" connection sizes S = Molded Silicone Rubber V = Fluorocarbon, Available 1 1/4" to 3" connections only U = Urethane, Standard all connection sizes S = Molded Silicone Rubber V = Fluorocarbon, Available 1 1/4" to 3" connections only S = Molded Silicone Rubber, Standard on all conn. sizes V = Fluorocarbon, Available 1 1/4" to 3" conn. sizes only Blank = Fluorocarbon, Standard on all 7CVP elements; elements available 1 1/4" to 3" connections only U = Urethane, Standard on 1/4" to 1" connection sizes U = Urethane, Standard on all connection sizes S = Molded Silicone Rubber V = Fluorocarbon, Available 1 1/4" to 3" connections only U = Urethane, Standard on 1/4" to 1" connection sizes Blank = Fluorocarbon, Standard on 100WS elements 1 1/4" to 3" connections only U = Urethane, Standard on all connection sizes S = Molded Silicone Rubber | A - Auto Drain D - DPI Indicator G - DPG Gauge (Standard on 3/4" & up) J - High Temperature (450°F) N - No Accessories P - 1/8" Differential (3/4" & up) Sensing Ports V - Fluorocarbon O-rings W - A + D X - A + P Y - A + G Note: For max. pressures and temperatures related to Accessories, please see chart on previous page. | |

Examples on How to Order

| | | | | |
|---|---|--|---|--|
| <p>Example 1: HN12L-6CUY</p> <p>What am I ordering? An H-Series, with a 3" NPT connection, long bowl, standard grade 6 coalescing element with urethane end seals, an auto drain and a standard DPG gauge.</p> | <p>Example 2: HN15L-8CA</p> <p>What am I ordering? An H-Series, with a 3/8" NPT connection, long bowl, grade 8 coalescing element without end seals and an auto drain.</p> | <p>Example 3: HN8S-7CVPG</p> <p>What am I ordering? An H-Series, with a 2" NPT connection, standard bowl, a 7CVP coalescing element, with the standard fluorocarbon end seals and standard DPG gauge.</p> | <p>Example 4: HN8E-10DVJ</p> <p>What am I ordering? An H-Series, with a 2" NPT connection, economy short bowl, grade 10 high-temp coalescing element, with the standard fluorocarbon end seals and "J" as an accessory. This high temperature option converts all materials to be capable of handling temperatures of 450°F.</p> | <p>Example 5: HN2S-AUN</p> <p>What am I ordering? An H-Series, with a 1/2" NPT connection, short bowl, adsorber element, with the standard urethane end seals and no accessories.</p> |
|---|---|--|---|--|

Drawings, Dimensions & Specifications

1/4" to 1" Housings



Specifications

Max. Pressure: **500 PSIG** (34 bar)
 Safety Factor: Max. operating to burst 4:1
 Max. Temp.: **175°F** (79°C) with option to **450°F** (232°C)
 Seals: Nitrile Std./Fluorocarbon optional
 Materials: Aluminum - 380 Die cast heads;
 6061 Drawn bowls
 Coatings: Chromated heads and bowls;
 Powder painted exterior
 Design: In-line threaded bowl to head

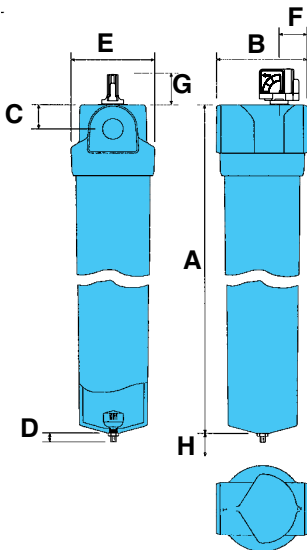
Note: Manual Drain Port is 1/8" FNPT when tee valve is removed from drain bushing.

| Model | A | B | C | D | E | F | G | H* | Sump (ml) | Weight |
|-------|-------------|------------|----------|----------|-------------|-------------|----------|-------------|-----------|-------------|
| H_1S | 6.80 (172) | 3.12 (79) | .63 (16) | .79 (20) | 2.98 (76) | 1.56 (39.5) | 2.6 (66) | 2.99 (76) | 150 | 1.49 (.68) |
| H_15S | 6.80 (172) | 3.12 (79) | .63 (16) | .79 (20) | 2.98 (76) | 1.56 (39.5) | 2.6 (66) | 2.99 (76) | 150 | 1.47 (.66) |
| H_2S | 6.80 (172) | 3.12 (79) | .63 (16) | .79 (20) | 2.98 (76) | 1.56 (39.5) | 2.6 (66) | 2.99 (76) | 150 | 1.44 (.65) |
| H_1L | 9.19 (233) | 3.12 (79) | .63 (16) | .79 (20) | 2.98 (76) | 1.56 (39.5) | 2.6 (66) | 5.51 (140) | 140 | 1.89 (.86) |
| H_15L | 9.19 (233) | 3.12 (79) | .63 (16) | .79 (20) | 2.98 (76) | 1.56 (39.5) | 2.6 (66) | 5.51 (140) | 140 | 1.87 (.85) |
| H_2L | 9.19 (233) | 3.12 (79) | .63 (16) | .79 (20) | 2.98 (76) | 1.56 (39.5) | 2.6 (66) | 5.51 (140) | 140 | 1.85 (.84) |
| H_3S | 10.86 (276) | 4.65 (118) | .96 (24) | .79 (20) | 3.68 (93.5) | 1.73 (44) | 2.6 (66) | 6.5 (165) | 270 | 3.56 (1.61) |
| H_4S | 10.86 (276) | 4.65 (118) | .96 (24) | .79 (20) | 3.68 (93.5) | 1.73 (44) | 2.6 (66) | 6.5 (165) | 270 | 3.29 (1.49) |
| H_4L | 14.36 (365) | 4.65 (118) | .96 (24) | .79 (20) | 3.68 (93.5) | 1.73 (44) | 2.6 (66) | 10.00 (254) | 270 | 4.11 (1.86) |

Special Note: Dimensions are in **inches** (millimeters); weight is in **pounds** (kilograms).

* Clearance required to remove bowl.

1 1/4" to 3" Housings



Specifications

Max. Pressure: **500 PSIG** (34 bar)
 Safety Factor: Max. operating to burst 4:1
 Max. Temp.: **175°F** (79°C) with option to **450°F** (232°C)
 Seals: Nitrile Std./Fluorocarbon optional
 Materials: Aluminum - 356 Sand cast heads;
 6061 Drawn bowls
 Coatings: Chromated heads and bowls;
 Powder painted exterior
 Design: In-line threaded bowl to head

Note: Manual Drain Port is 1/8" FNPT when tee valve is removed from drain bushing.

| Model | A | B | C | D | E | F | G | H* | Sump (ml) | Weight |
|-------|-------------|-----------|-----------|----------|------------|-----------|----------|-------------|-----------|---------------|
| H_5S | 18.23 (463) | 6.0 (152) | 1.65 (42) | .83 (21) | 5.67 (144) | 1.85 (47) | 2.6 (66) | 13.50 (343) | 440 | 12.11 (5.49) |
| H_6S | 18.23 (463) | 6.0 (152) | 1.65 (42) | .83 (21) | 5.67 (144) | 1.85 (47) | 2.6 (66) | 13.50 (343) | 440 | 11.97 (5.43) |
| H_8E | 18.23 (463) | 6.0 (152) | 1.65 (42) | .83 (21) | 5.67 (144) | 1.85 (47) | 2.6 (66) | 13.50 (343) | 440 | 11.97 (5.43) |
| H_8S | 24.23 (617) | 6.0 (152) | 1.65 (42) | .83 (21) | 5.67 (144) | 1.85 (47) | 2.6 (66) | 19.25 (489) | 530 | 14.00 (6.35) |
| H_8L | 29.23 (742) | 6.0 (152) | 1.65 (42) | .83 (21) | 5.67 (144) | 1.85 (47) | 2.6 (66) | 24.02 (610) | 620 | 15.99 (7.25) |
| H_0L | 35.70 (907) | 8.0 (203) | 2.4 (61) | .83 (21) | 7.24 (184) | 2.36 (60) | 2.6 (66) | 28.50 (724) | 880 | 35.00 (15.87) |
| H_12L | 35.70 (907) | 8.0 (203) | 2.4 (61) | .83 (21) | 7.24 (184) | 2.36 (60) | 2.6 (66) | 28.50 (724) | 880 | 34.14 (15.48) |

Special Note: Dimensions are in **inches** (millimeters); weight is in **pounds** (kilograms).

* Clearance required to remove bowl.