

HX Series High Efficiency Compressed Air Filters



Why Filter Compressed Air?

Product rejects and increased maintenance expenses may result from poor air quality.

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. This could result in 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 failure, requiring repair or replacement. Environmental concerns will be raised if oily, compressed air is continuously discharged into the atmosphere through a pneumatic muffler.

HX-Series by the numbers

- 18 filter housing sizes
- 90 filter element types and sizes
- 10 connection sizes
- 9 filtration media choices: From bulk water separators to 99.995% efficient coalescers
- 2 unique nanofiber coalescing media technologies available, our time-tested UNI-CAST formulation as well as a deep bed pleated nanofiber choice
- Millions of borosilicate glass nanofibers utilized in each coalescing element

Finite's HX-Series

- Coalescing, bulk liquid removal, particulate and adsorption filter elements
- Optional differential pressure gauge, an autodrain, or manual drain
- Temperature to 212°F
- Pressures to 290 PSIG

Connection sizes from 1/4" to 3" NPT

Why Use Finite Filters?

Numerous Element Types

Our special UNI-CAST formed elements and our deep bed pleated elements provide lower pressure drop and less frequent changeouts, saving you time and money.

HX Meets Your Needs

The HX-Series offers 630 different filter/element variations to meet your application requirement

OEM Capabilities

When you need a special filter for a unique application, Finite filter experts are ready to work with you. We can tailor a configuration to meet your special need from the wide variety of filter media available. With LEAN manufacturing we can produce custom solutions that will enhance the performance of your product.



Clean, Energy Efficient Compressed Air is the Goal

The key is finding the optimum balance of compressed air quality required, and minimizing the cost and energy needed to achieve that quality.

ISO 8573-1:2010 is now the industry standard for specifying compressed air cleanliness. In this standard, three very common contaminants are focused on, and the various classes describe how clean and dry the compressed air must be in order to achieve that classification. Solid particle content by size range, water content by pressure dewpoint, and oil (including oil vapor) content in mg/m³ is described for each of the classes from Class 0, 1, 2, 3, ..., 9, and X. Class 0 is described as being as specified by the equipment user and is more stringent than Class 1. Even Class 1, because of its -94 F (-70 C) pressure dewpoint, is rarely required in general industrial settings. Most critical compressed air applications will probably fall into Class 2 described in the table below. ISO 12500 establishes a uniform test procedure to be used by all filter companies in the compressed air industry. Using this test, air filters can be tested to equate their performance to ISO 8573-1:2010. This procedure specifies exactly how the filters should be tested at either of two inlet challenge levels: 10 mg/m³ or 40 mg/m³. Since high-efficiency filters are often plumbed in series or staged filtration, the prefilters or precoalescers are often rated at the 40 mg/ m3 level, and final or polishing coalescing filters

are most often rated at the 10 mg/m³ level, since they are typically the beneficiary of prefiltration.

Particulate contamination in a compressed air system can be drawn into the compressor through its intake, or be generated through the compression process or by other system components themselves. Water enters the system through the compressor's intake as humidity in the air. Once compressed the air is saturated meaning that depending on the environment of the system, the water is present either in liquid or vapor state. Oil and hydrocarbon vapors can be drawn into the compressor intake as well, but the largest contributor is carryover of compressor lubricant. See the chart below for typical carryover levels by compressor type.

Using a high performance filter to measure oil aerosol removal, these effects can be observed:

Customary remaining oil content of compressors

| 30 ppm | Piston and mobile screw compressors | |
|--------|-------------------------------------|--------------|
| 12 ppm | Stationary screw compressors | |
| <6 | Rotary vane compressors | \bigotimes |

Reference conditions 14.5 psi (a) (1 bar (a)), $68^{\circ}F$ ($20^{\circ}C$), 0% relative humidity.

ISO Standardization

International Standard ISO8573-1 has become the industry standard method for specifying compressed air cleanliness.

| ISO8573- | Solid Particulate | | | Water | | Oil | |
|----------|---------------------|---------------------|-------------------|--------------------------|-----------------|---------|------------------------------|
| 1:2010 | Maximum number | of particles per i | n³ | Mass Concentration | Vapor Pressure | Liquid | Total Oil (aerosol liquid |
| CLASS | 0.1 - 0.5 micron | 0.5 - 1 micron | 1 - 5 micron | mg/m³ | Dewpoint | g/m³ | and vapor) mg/m ³ |
| 0 | As specified by the | equipment user or s | supplier and more | e stringent than Class 1 | | | |
| 1 | ≤ 20,000 | ≤ 400 | ≤ 10 | - | < -94°F (-70°C) | - | 0.01 |
| 2 | ≤ 400,000 | ≤ 6,000 | ≤ 100 | - | < -40°F (-40°C) | - | 0.1 |
| 3 | - | ≤ 90,000 | ≤ 1,000 | - | < -4°F (-20°C) | - | 1 |
| 4 | - | - | ≤ 10,000 | - | ≤ 37.4°F (3°C) | - | 5 |
| 5 | - | - | ≤ 100,000 | - | ≤ 44.6°F (7°C) | - | - |
| 6 | - | - | - | ≤ 5 | ≤ 50°F (10°C) | - | - |
| 7 | - | - | - | 5 - 10 | - | ≤ 0.5 | - |
| 8 | - | - | - | - | - | 0.5 - 5 | - |
| 9 | - | - | - | - | - | 5 - 10 | - |



New Finite HX-Series Filtration Technology

The HX-Series product line possesses many important design and construction features that combine to provide leading compressed air filtration performance. Improved flow characteristics result in lower pressure differential, which is related to the ongoing operating cost of employing high-efficiency nanofiber coalescing filters. They can be used in applications ranging from general shop air to those more critical applications, such as instrument air, breathing air, food and beverage, or automotive assembly plant paint systems.

Inlet/Outlet Design

Each HX-Series assembly has an inlet and outlet design which provides a full-flow stream of air into and out of the housing. Connection sizes and flow rates correlate to capacities and connection sizes of various compressor types and sizes, reducing the need for bushings and adaptors.

Improved Flow Path

Patented aerospace inspired vanes in the neck of the replaceable filter element ensure unrestricted, turbulent-free laminar flow into the element's core with minimal pressure drop. This design provides no sharp edges or 90 degree elbow turns like traditional coalescing filters.

Flow Distribution

Flow through the core of the element is optimized by use of several features. A patented flow distributor, shown above left ensures that the flow entering the element's core is spread evenly about the inside of the element. At the element's base, a cone-shaped disperser prevents turbulence in the lower region (wet zone) of the element and redirects the air toward the filter media's surface.

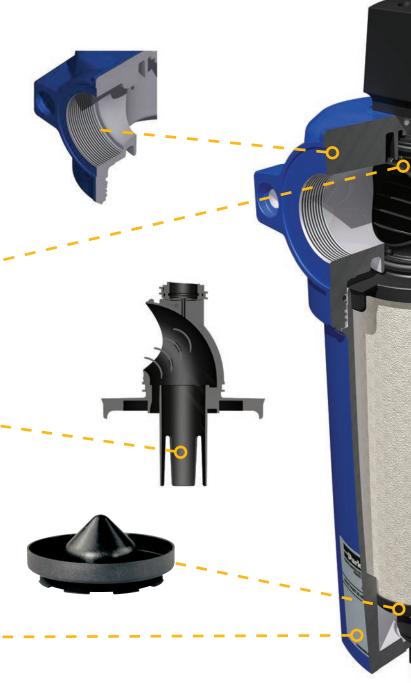
Conical Air Disperser

Air flow dispersion at the base of the element helps eliminate turbulence. See photo at left.

Corrosion Protection

All HX-Series filter assemblies are constructed of cast aluminum. Each filter head and bowl is treated with an alocrome process that inhibits corrosion. They are also painted with an epoxy based powder paint which provides an extremely durable finish.

The materials used in each filter assembly were chosen not only for compatibility with compressed air system environments, but also to provide a robust and trouble-free system component that can be relied on without worry. Additionally, these filters offer the optional accessory of modular connectors up through the one-inch connection size, enhancing their appeal for OEM usage.



Inlet Port Indicators and Differential Sensing Port Plugs

Vertical hash marks are utilized on the top and bottom of the inlet connection port. This feature eliminates any confusion as to which port is the inlet. Although a differential pressure gauge is standard on all larger HX-Series housings, they are also available with threaded and plugged differential sensing ports which can be utilized to connect to remote or standardized monitoring equipment at your facility, or on your mobile device.



Patented Locating Tabs and External Flow Stabilizers

Each element possesses two locating tabs of differing size. This allows only one positive fit postion into the filter bowl during maintenance, ensuring proper installation and eliminating any chance of mistake. Two external flow stabilizers also located on the element's top end cap are featured to provide an even flow of compressed air exhausting from the element into the housing's exit port.



Surge Shield

A shield is designed into the element on the exterior surface of the element, directly below from the outlet port. This shield is a safety barrier that eliminates any possibility of carryover during system upsets, when slugs of water might otherwise challenge the draining capability of coarser grade filter elements, especially water separators.



Deep Bed Pleated Nanofiber Filter Media

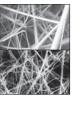
Finite's premium performance 7CP and XF media choices provide excellent filtration efficiency with industry leading low pressure differentials. Lower pressure drop equates to significant energy savings over time and the pleated element's larger surface area (up to 4.5 times) increases element life, providing even greater savings. 7CP (99.5%) is an excellent precoalescer choice while XF provides 99.95% efficiency for final-stage coalescing applications.



UNI-CAST Nanofiber Filter Media

Finite's unique UNI-CAST manufacturing process continues to provide time-tested and proven performance as only the industry's original cast media manufacturer can do. Seamless cast construction, with 95% void volumes and its graduated pore structure is available in four distinct grades with efficiencies ranging from 95% to 99.995% and micron ratings from 0.01 to 1.0 micron. This range enables them to be used in nearly any application as precoalescers, as well as final, or polishing coalescers.









Applications

High efficiency compressed air filters like Finite's HX-Series give the user a large array of filtration possibilities so that the user can pick the most effective for their particular applications. The list of applications below is not intended as a comprehensive listing, but gives an overview of the many types of uses there are for the HX-Series product line.

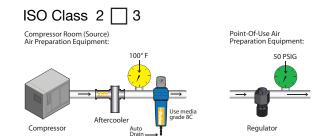
aeration
air agitators
air bearings
air dryer pre-filters
air gauging
air hoists
air motors
air sparging
atomizing air
bag cleaning
bottle filling
breathing air

cooling
dairy air
dental hand pieces
dental suction
desiccant dryer after-filter
dry bulk solid conveying
dust collection
fermentation
filling / capping beverages
injection molding
instrument air
liquid padding

nitrogen separation
odor removal
oil vapor adsorption
packaging
parts blow-offs
PET bottle blowing
plasma welding / cutting
pneumatic automation
pneumatic conveying
pneumatic instruments
pneumatic tools
powder fluidizing

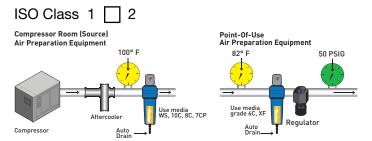
positioning / locating
pressure testing
process air
robotics
sandblasting
snowmaking
soot blowing
spray painting
sprinkler system charging
tablet coating
tire filling
vacuum cups / grasps

The five schematics shown below show the major compressed air system components, where filters can be positioned, and the corresponding compressed air quality specifications.



Any compressor with aftercooler. Air intended for use with lubricated air tools, air motors, cylinders, shot blasting, non-frictional valves.

OTHER SPECS MET: CGA - G7.1 (Grades A & Ba1)



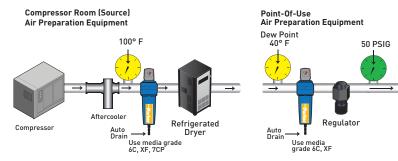
Any compressor with aftercooler and 2-stage coalescing. Air intended for use with lubricated control valves, cylinders, parts blow-down, etc.

OTHER SPECS MET: Mil. Std. 282 H.E.P.A., U.S.P.H.S. 3A Accepted particles for milk

ISO Class 1 4 2

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)

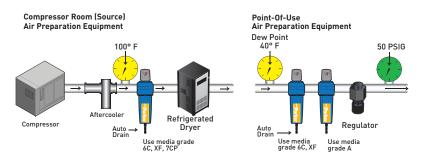


ISO Class 1 4 1

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). This system will not eliminate toxic gases.

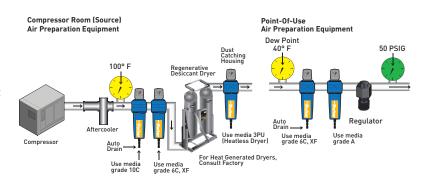
OTHER SPECS MET: O.S.H.A. 29CFR 1910.134



ISO Class 1 2 1

Any compressor with aftercooler, two-stage and double coalescing regenerative-type desiccant dryer and a carbon adsorber. Air intended for use in applications involving rapid expansion of compressed air, critical instrumentation, high purity gases, automotive paint systems, etc.

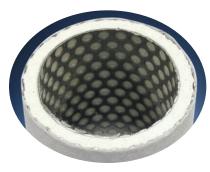
CAUTION: This air is too dry for respiratory use.



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

Find your (or similar) application from 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 Elements (removal of liquids and particulate)



Media type C Available in grades 4, 6, 8, or 10 Air Flow: Inside to Outside

This coalescing element is made with our special UNI-CAST construction. Composed of an epoxy saturated, borosilicate glass micro/nano fiber media, this media is used in applications requiring the removal of liquid and particulate contamination. The outer synthetic fabric layer allows swift removal of coalesced liquids.

Media type C - Choose your grade

Grade 4

Finite's media grade 4 is typically chosen when an extremely high coalescing efficiency is required. Its 99.995% rating is the best available and is ideal for use as a final filter in applications with elevated operating pressures (up to 500 PSIG), or when removing liquid contaminants from gases lighter than compressed air.

Grade 6 (Standard)

Grade 6 filters are used when "total removal of liquid aerosols and suspended fines" is required. Because of its overall performance characteristics, this grade is most often recommended in a variety of industrial applications. Grade 6 is an excellent choice as a prefilter for regenerative desiccant air dryers, as it prevents oil or varnish from coating the desiccant.

Grade 8

Grade 8 filters combine high efficiency (98.5%) with high flow rate and long element life. A separate prefilter is not required for "normal to light" particulate loading. A grade 8 element is often chosen as protection for refrigerated air dryers. This element allows the dryer to maintain efficiency by preventing the coating of copper coils with the build-up of oil or varnish.

Grade 10

Grade 10 filters are used as prefilters for grades 6 or 8 to remove gross amounts of liquid aerosols or tenacious aerosols. Grade 10 is often referred to as a coarse coalescer, or precoalescer. A grade 10 in a media type D filter element is recommended as an afterfilter for heat regenerated desiccant type air dryers as its one micron rating is ideal for collecting air dryer desiccant fines before they pass downstream.



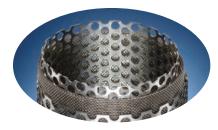
Media type 7CP or XF

Available in grades 4, 6, 8, or 10 Air Flow: Inside to Outside

Finite's 7CP media type consists of two filter layers between metal retainers. The outer layer removes aerosols while the inner layer traps solid particles, protecting and extending the life of the outer layer. 7CP elements are used in bulk liquid coalescing applications or when relatively high efficiency and low pressure drop are required.

Finite's XF media type are constructed similarly to the 7CP, but offer even higher filtration efficiency for more critical compressed air quality demands.

Water Separator Element (removal of bulk liquids)



Media type 100WS

Air Flow: Inside to Outside

This rolled stainless steel mesh element has ID and OD metal retainers with rolled stainless steel mesh in between. It is an extremely robust design. With a nominal rating of 100 micron, this media is used for the reduction and elimination of excess liquids in gas streams. It also would be a good choice as a prefilter for coalescing grades 6 and 10 when extreme volumes of liquid contaminants are present.

Adsorption Element (removal of odor)



Media type 3P

Air Flow: Outside to Inside

Finite's 3P pleated cellulose element removes solid contaminants, with a 3 micron absolute rating. Because this element is designed to flow from its outside to the inside, it has a strong inner retainer that gives this element added strength. 3P particulate "Interceptor" elements are used where very high dirt loading is expected but a relatively fine pore structure is required. It is also used as a prefilter to a coalescing filter in systems where a lot of solid contamination exists.

Interceptor Element (removal of solids)



Media type A

Air Flow: Outside to Inside

This hydrocarbon vapor removal element consists of an ultra-fine grained, highly concentrated, activated carbon sheet media. Because these elements are designed to flow from the outside to their inside, they have a strong inner retainer giving this element added strength. This media type is used to remove hydrocarbon vapor and is often used to remove the smell or taste of compressor lube oil from breathing air.

Finite Media Specifications

| Grade | Coalescing Efficiency | Maximum Oil | Misses Balles | Pressure Drop (PSID) @ Rated Flow ² | | | |
|-------------|-----------------------------|--------------------------------|---------------|--|------------------------------|--|--|
| Designation | 0.3 to 0.6 Micron Particles | Carryover ¹ PPM w/w | Micron Rating | 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 | | |
| ME | 99.95% | 0.02 | 0.3 | .5 | 1.0 | | |
| 7 | 99.5% | 0.09 | 0.5 | .25 | 0.5-0.7 | | |
| 8 | 98.5% | 0.2 | 0.5 | .5 | 1-1.5 | | |
| 10 | 95% | 0.85 | 1.0 | .5 | 0.5 | | |
| 100WS | 99+%³ | N/A | 100 | < 0.25 | <0.25 | | |
| 3P | N/A | N/A | 3.0 | 0.25 | N/A | | |
| Α | 99+%4 | N/A | 3.0 | 1.0 | N/A | | |

Notes:

- 1. Tested per ISO 12500-1 at 40 ppm inlet.
- 2. Add dry + wet columns for total pressure drop.
- 3. Bulk liquid removal efficiency.
- 4. Oil vapor removal efficiency is given for A media.

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, below.

Housing Selection Chart Rated Flows: SCFM @ 100 PSIG; These

HXN6E-

HXN8E-

HXN8F-

HXN8G-

HXN10H-

HXN12H-

HXN12J-

Rated Flows (SCFM) at 100 PSIG Operating Pressure, 70°F Operating Temperature flow rates can be exceeded by 10% and will still meet filtration efficiencies. Final Stage Coalescers Water Sep. **Particulate Pre-Coalescers Vapors** House Media Conn 4C 6C XF 7CP 8C 10C WS **3P** Α **Assembly** Grade (see next page) (NPT) HXN1A-1/4" HXN15B-3/8" HXN2B-1/2" HXN2BH-1/2" HXN3BH-3/4" HXN3C-3/4" HXN4C-1" 1" HXN4Dz-HXN5D-1 1/4' HXN6D-1 1/2" HXN5E-1 1/4"

Step 2a. Alternate Housing Selection Chart

1 1/2"

2"

2"

2"

2 1/2"

3"



Use this step for applications with technical gases or for applications that do not have standard conditions (100 PSIG and 70°F).

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 the previous page. When using the chart, choose the closest flow rate from the appropriate media grade column.

NOTE: HX-Series is designed for use with compressed air and inert gases such as nitrogen. It cannot be used with flammable or poisonous gases.

| Flow Rate | | Pressure | | Temperature | | Specific Gravity (See chart above) | | Adjusted Flow Rate |
|---|---|---|---|---|--|------------------------------------|-----|--------------------------|
| Actual System Flow Rate (SCFM) | X | (100 PSIG + 14.7 PSIG) (System Pressure (PSIG) +14.7 PSIG) | X | (System Temp. °F + 460°F) 70°F + 460°F | | | = | SCFM @ 100 PSIG, 70°F |
| Information Given: Flow Rate = 136 SCFM Pressure = 150 PSIG Actual Temperature = | | 136 SCFM X | | IG + 14.7 PSIG) X (100°F + 46 | | - x √1 = | 100 |) SCFM |

Accessories

Consult Parker when choosing pre-installed accessories for gases other than air.

Pre-installed Accessories

| Accessory Designator | Installed Accessory | Maximum Pressure | Maximum Temperature | Standard / Optional |
|----------------------|----------------------------|---------------------|------------------------|--------------------------------------|
| N | Manual Drain | 290 psi g | 212°F | Optional on all model sizes |
| A | Auto Drain | 250 psi g | 175°F | Standard on all model sizes |
| G | DP Gauge & Manual Drain | 230 psi g | 175°F | Optional on models HXN15B - HXN4C |
| Υ | Auto Drain & DP Gauge | 230 psi g | 175°F | Standard on models HXN4D - HXN12J |



DPG Gauge





Note: Auto drains require a minimum operating pressure of 10 PSIG to seal.

Other Compatible Accessories

| TV-50 Timed Drain Valve | ZLD-013 Zero Loss Drain | VS-50 Visual Sump Drain (not shown: standard bowl guard) | MS-50 Metal Sump Drain (External) | | | | | | |
|----------------------------|-------------------------------|--|--|--|--|--|--|--|--|
| 210° F (99° C) | 140° F (60° C) | 125° F (52° C) | 175° F (79° C) | | | | | | |
| 300 PSIG (20 Bar) | 232 PSIG (16 Bar) | 150 PSIG (10 Bar) | 250 PSIG (17 Bar) | | | | | | |
| 1/2" NPT | | | | | | | | | |



| P/N | Туре | Fits Filter Size: | Description |
|--------|--------------|-------------------|---|
| 2205HX | Manual Drain | HXN1A - HXN12J | 1/2" NPT |
| 2206HX | Auto Drain | HXN1A - HXN12J | Includes 5/16" tube union |
| 2198HX | DP Gauge | HXN15B - HXN12J | Mounts on ports on head; bilateral display |









The accessories above are compatible with this product line. Consult factory for other accessory options and availability.

How to Order

HX Series Filter Assemblies

| Series | Thread | Conn. | Bowl Size | |
|--------|--------|-------------|-----------|--|
| HX | N | 3 | C | |
| | | 1 = 1/4" | А | |
| | | 15 = 3/8" | В | |
| | | 2 = 1/2" | B, BH | |
| | N NDT | 3 = 3/4" | вн, с | |
| HV | | 4 = 1" | C, D | |
| НХ | N-NPT | 5 = 1-1/4" | D, E | |
| | | 6 = 1-1/2" | D, E | |
| | | 8 = 2" | E, F, G | |
| | | 10 = 2-1/2" | Н | |
| | | 12 = 3" | H, J | |

Examples: HXN1A-6CN, HXN2BH-WSA, HXN12J-XFY, HXN8G-6CG

| Element Type | Accessories |
|--------------|--|
| 6 C | Y |
| 4C | N = No Accessories, Manual Drain (optional on all model sizes) |
| 6C 8C | A = Auto Drain (standard on all model sizes) |
| 10C 7CP | G = Diff. Pressure Gauge (gauge not available on model HXN1A) and manual drain |
| XF | |
| 3P | Y = Auto Drain and Diff. Pressure Gauge (standard on models HXN4D - HXN12J) |
| А | (Standard on models market - mani23) |

Note: G and Y options not available on HXN1A versions

HX Series Replacement Elements

The kit includes the replacement element with o-rings, the head-to-bowl o-ring, and lube.

| Element Type | Series | Bowl Size | Kit |
|--------------|--------|-----------|---------|
| 6 C | HX | C | K |
| 4C | | Α | |
| 6C | | В | |
| 8C | | ВН | |
| 10C | | С | |
| 7CP | НХ | D | K = Kit |
| XF | | E | |
| | | F | |
| WS | | G | |
| 3P | | Н | |
| А | | J | |

Examples of How to Order

Example 1: HXN1A-6CN

What am I ordering?
An HX-Series with a 1/4" NPT connection, A-size bowl, a standard grade 6 coalescing element with no accessories, manual drain only

Example 3: HXN12J-XFY

What am I ordering?
An HX-Series with a 3" NPT connection with a J-size bowl, an XF coalescing element with a Y accessory option which includes an auto drain and differential pressure gauge.

Example 2: 6CHXAK

What am I ordering?

An HX-Series replacement element kit, a grade 6 coalescing element, for an A-size bowl. This kit includes the replacement element with o-ring, head-to-bowl o-ring, and lube.

Example 4: XFHXJK

What am I ordering?
An HX-Series replacement element kit, with an XF coalescing element for a J-size bowl. The kit includes the replacement element with o-rings, the head-to-bowl o-ring, and lube.

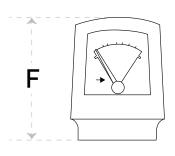
Replacement Element Part Numbers

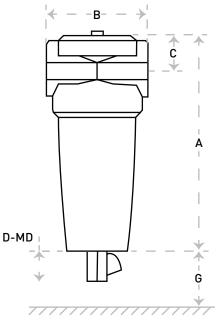
| House Assembly | Connection (NPT) | 4C | 6C | XF | 7CP | 8C | 10C | WS | 3P | A |
|-------------------|------------------|---------|---------|---------|----------|---------|----------|---------|---------|--------|
| HXN1A- | 1/4" | 4CHXAK | 6CHXAK | XFHXAK | 7CPHXAK | 8CHXAK | 10CHXAK | WSHXAK | 3PHXAK | AHXAK |
| HXN15B- | 3/8" | 4CHXBK | 6CHXBK | XFHXBK | 7СРНХВК | 8CHXBK | 10CHXBK | WSHXBK | 3РНХВК | AHXBK |
| HXN2B- | 1/2" | | | | | | | | | |
| HXN2BH- | 1/2" | 4CHXBHK | 6CHXBHK | XFHXBHK | 7СРНХВНК | 8СНХВНК | 10CHXBHK | WSHXBHK | 3РНХВНК | AHXBHK |
| HXN3BH- | 3/4" | | | | | | | | | |
| HXN3C- | 3/4" | 4CHXCK | 6CHXCK | XFHXCK | 7CPHXCK | 8CHXCK | 10CHXCK | WSHXCK | 3РНХСК | AHXCK |
| HXN4C- | 1" | | | | | | | | | |
| HXN4Dz- | 1" | | | | | | | | | |
| HXN5D- | 1 1/4" | 4CHXDK | 6CHXDK | XFHXDK | 7CPHXDK | 8CHXDK | 10CHXDK | WSHXDK | 3PHXDK | AHXDK |
| HXN6D- | 1 1/2" | | | | | | | | | |
| HXN5E- | 1 1/4" | | | | | | | | | |
| HXN6E- | 1 1/2" | 4CHXEK | 6CHXEK | XFHXEK | 7CPHXEK | 8CHXEK | 10CHXEK | WSHXEK | 3PHXEK | AHXEK |
| HXN8E- | 2" | | | | | | | | | |
| HXN8F- | 2" | 4CHXFK | 6CHXFK | XFHXFK | 7CPHXFK | 8CHXFK | 10CHXFK | WSHXFK | 3PHXFK | AHXFK |
| HXN8G- | 2" | 4CHXGK | 6CHXGK | XFHXGK | 7CPHXGK | 8CHXGK | 10CHXGK | WSHXGK | 3PHXGK | AHXGK |
| HXN10H- | 2 1/2" | 4CHXHK | 6CHXHK | XFHXHK | 7СРНХНК | 8CHXHK | 10CHXHK | WSHXHK | 3РНХНК | AHXHK |
| HXN12H- | 3" | | | | | | | | | |
| HXN12J- | 3" | 4CHXJK | 6CHXJK | XFHXJK | 7CPHXJK | 8CHXJK | 10CHXJK | WSHXJK | 3РНХЈК | AHXJK |

Drawings, Dimensions & Specifications

Weights and Dimensions

| House Assembly | A (in.) | B (in.) | C (in.) | D-MD (in.) | D-AD (in.) | E (in.) | F (in.) | G (in.) | Sump (oz.) | Weight (lbs.) |
|-------------------|------------|------------|------------|---------------|---------------|------------|------------|------------|---------------|---------------|
| HXN1A- | 7.0 | 2.6 | 0.9 | 1.6 | 2.4 | 2.6 | N/A | 1.2 | 2.7 | 1.4 |
| HXN15B- | 9.4 | 3.5 | 1.5 | 1.6 | 2.4 | 3.4 | | 1.9 | 7.4 | 3.1 |
| HXN2B- | 9.4 | 3.5 | 1.5 | 1.6 | 2.4 | 3.4 | | 1.9 | 7.4 | 3.1 |
| HXN2BH- | 9.4 | 3.5 | 1.5 | 1.6 | 2.4 | 3.4 | | 1.9 | 4.4 | 3.1 |
| HXN3BH- | 9.4 | 3.5 | 1.5 | 1.6 | 2.4 | 3.4 | | 1.9 | 4.4 | 3.1 |
| HXN3C- | 10.9 | 5.1 | 1.8 | 1.6 | 2.3 | 4.6 | | 2.6 | 5.6 | 6.3 |
| HXN4C- | 10.9 | 5.1 | 1.8 | 1.6 | 2.3 | 4.6 | | 2.6 | 5.6 | 6.3 |
| HXN4Dz- | 14.5 | 5.1 | 1.8 | 1.6 | 2.3 | 4.6 | | 2.6 | 7.4 | 7.2 |
| HXN5D- | 14.5 | 5.1 | 1.8 | 1.6 | 2.3 | 4.6 | | 2.6 | 7.4 | 7.2 |
| HXN6D- | 14.5 | 5.1 | 1.8 | 1.6 | 2.3 | 4.6 | 2.7 | 2.6 | 7.4 | 7.2 |
| HXN5E- | 17.3 | 6.5 | 2.2 | 1.6 | 2.4 | 6.2 | | 3.9 | 12.8 | 9.5 |
| HXN6E- | 17.3 | 6.5 | 2.2 | 1.6 | 2.4 | 6.2 | | 3.9 | 12.8 | 9.5 |
| HXN8E- | 17.3 | 6.5 | 2.2 | 1.6 | 2.4 | 6.2 | | 3.9 | 12.8 | 9.5 |
| HXN8F- | 20.9 | 6.5 | 2.2 | 1.6 | 2.4 | 6.2 | | 3.9 | 12.3 | 15.9 |
| HXN8G- | 27.7 | 6.5 | 2.2 | 1.6 | 2.4 | 6.2 | | 3.9 | 11.1 | 19.9 |
| HXN10H- | 25.7 | 7.6 | 2.8 | 1.7 | 2.4 | 7.2 | | 4.7 | 22.0 | 26.9 |
| HXN12H- | 25.7 | 7.6 | 2.8 | 1.7 | 2.4 | 7.2 | | 4.7 | 22.0 | 26.9 |
| HXN12J- | 33.2 | 7.6 | 2.8 | 1.7 | 2.4 | 7.2 | | 4.7 | 22.0 | 31.0 |



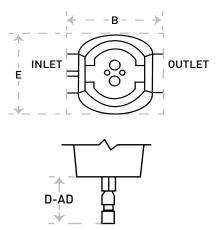


Additional Accessories Available

Specifications

(Pressure/Temp vary by accessory. See Step 3.)

| Maximum Pressure | 230 psig - 290 psig |
|---------------------|--------------------------------------|
| Safety Factor | Burst to max. operating pressure 4:1 |
| Maximum Temperature | 212°F |
| Seals | Element: Nitrile |
| | Head to bowl: Nitrile |
| Materials | Head: Aluminum |
| | Bowl: Aluminum |
| Coatings | Alocromed heads and bowls |
| | Dry powder epoxy paint |

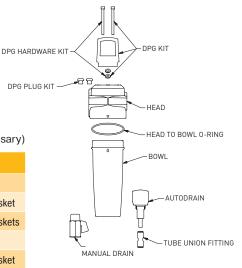


Aftermarket Accessories and Spare Parts

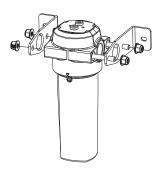
Modular Connectors and Mounting Bracket Kits

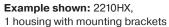
(includes mounting brackets, threaded rods, hex flange locknuts, and gaskets if necessary)

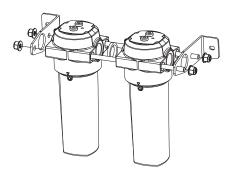
| P/N | Filter Size | Includes |
|--------|------------------------------|---|
| 2207HX | HXN1A - 1 Housing | 2 brackets, 2 threaded rods, 4 flanged lock nuts |
| 2208HX | HXN1A - 2 Housings | 2 brackets, 2 threaded rods, 4 flanged lock nuts, 1 gasket |
| 2209HX | HXN1A - 3 Housings | 2 brackets, 2 threaded rods, 4 flanged lock nuts, 2 gaskets |
| 2210HX | HXN15B - HXN3BH - 1 Housing | 2 brackets, 2 threaded rods, 4 flanged lock nuts |
| 2211HX | HXN15B - HXN3BH - 2 Housings | 2 brackets, 2 threaded rods, 4 flanged lock nuts, 1 gasket |
| 2212HX | HXN15B - HXN3BH - 3 Housings | 2 brackets, 2 threaded rods, 4 flanged lock nuts, 2 gaskets |
| 2213HX | HXN3C -HXN6D - 1 Housing | 2 brackets, 2 threaded rods, 4 flanged lock nuts |
| 2214HX | HXN3C -HXN6D - 2 Housings | 2 brackets, 2 threaded rods, 4 flanged lock nuts, 1 gasket |
| 2215HX | HXN3C -HXN6D - 3 Housings | 2 brackets, 2 threaded rods, 4 flanged lock nuts, 2 gaskets |



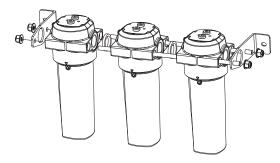
HX-SERIES EXPLODED HOUSING VIEW







Example shown: 2211HX, 2 housings with modular connector and mounting brackets



Example shown: 2212HX, 3 housings with modular connector and mounting brackets

Seal Kits

(includes o-ring and lube)

| P/N | Includes |
|--------|--|
| 2200HX | Head-to-bowl o-ring kit for model HXN1A |
| 2201HX | Head-to-bowl o-ring kit for models HXN15B - HXN3BH |
| 2202HX | Head-to-bowl o-ring kit for models HXN3C - HXN6D |
| 2203HX | Head-to-bowl o-ring kit for models HXN5E - HXN8G |
| 2204HX | Head-to-bowl o-ring kit for models HXN10H - HXN12J |

Other Spare Parts

| P/N | Includes |
|--------|--|
| 2199HX | DP Hardware Kit (includes 2 gaskets and 2 screws only) |
| 2220HX | DP Plug Kit (includes 2 DP plugs, 2 gaskets) |

Superior Design and Construction

Our UNI-CAST nanofiber filters, formed with a unique vacuum process, combine surface (edge) filtration with enhanced depth filtration. UNI-CASTpore construction traps larger poreclogging particles on the surface while allowing access to the element's internal fiber matrix for coalescing and submicronic particulate removal. The result is lower pressure drop and less frequent change-outs saving you time and money. Our deep bed pleated nanofiber filters offer even lower pressure drop performance coupled with excellent capture efficiencies.

Comprehensive Application Coverage

Keep equipment running smoothly and efficiently by minimizing the risk of down time. With 630 configurations, Finite filters are suitable across multiple applications.

Outstanding Technical Assistance

We are committed to providing unmatched technical support to all our customers. Our degreed application engineers provide immediate response to technical questions and requests for specifications and quotes whenever possible. If they are busy serving other customers when you call, they make every effort to return your call within the hour.

Consistent Performance

Superior, consistent performance is as vital to your operation as it is to ours. Certified to ISO 9001:2008 and ISO 14001:2004 Environmental Management Standard, our quality management systems provide products that meet your filtration requirements and exceed your performance expectations. Combined with our superior filter design, Finite filters produce lower differential pressures and higher dirt-holding capacity. Offered in a variety of efficiencies, the media you select will fit your filtration needs.

More than 75% of our standard items are made to order and ready for shipment within three days of order confirmation.



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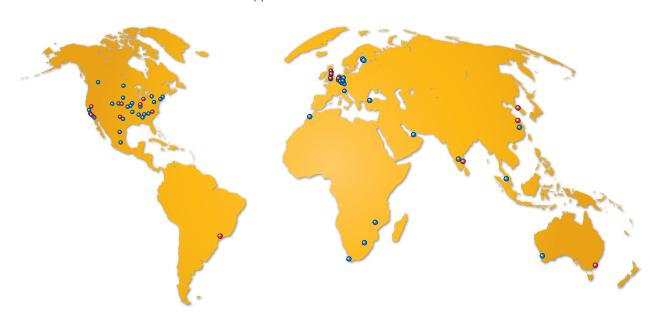
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