

CATALOG *air prep*

Delta 901 Series
Premium Filters
C.R.N. Registered



NUMATICS®

www.numatics.com

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The Delta 901 Series Premium Filters are a product of Numatics, Inc., a leading manufacturer of pneumatic products and motion control products. Our broad spectrum of standard, custom developed products and application components, have made a significant impact on pneumatic innovation as well as pneumatic and motion control technology. Our company has an extensive history of generating innovative concepts and technological breakthroughs. Many of today's standard features in pneumatic technology were industry firsts from Numatics. We continue our innovative approach to product development by developing electric motion control solutions and enhancing our embedded Fieldbus and I/O products to continually meet and solve our customer's application requirements.



Today Numatics is proud to be a part of the Industrial Automation Division of Emerson Electric Co.

Emerson (NYSE: EMR) is a global company that brings together technology and engineering to provide innovative solutions for customers in a wide range of industrial, commercial, and consumer markets.

Numatics along with the vast resources of the Emerson organization will assure that our proud history of innovation and service will continue to meet the needs of our global customers.

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Delta Series Premium Filters

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Features and Benefits



The Numatics Delta Series™ offers premium filtration for applications which require high flows. The standard aluminum end caps on every element, premium manual drain, seals made of Fluorocarbon (FKM), and available 3 micron internal pleated prefilter sets the Delta Series™ apart from our competition.

Delta Series™ filters are ideal for use in many applications including industrial, process, medical, and are perfectly suited for compressor applications.

General Purpose Filtration

- Civil engineering
- Rock quarrying
- Shotblasting
- Prefiltration for oil removal on dryers
- Industrial

Oil-free Compressed Air Application

- Spray painting
- Air conveying
- Air motors
- Process control
- Blowmoldings
- Pre-filter for vacuum pumps

Critical Applications

- Breathing air
- Process air
- Food industry
- Breweries
- Hospital service
- Dryer
- Medical applications
- Film processing

C.R.N Registered

C.R.N. # 0H12256.5C

1/4" to 2" Inclusive Only

2-1/2" & 3" Registration Pending - Consult factory for availability

The Numatics Delta Series™ coalescing filters use a borosilicate glass fiber to remove contaminant from air lines. Air flows from the inside to the outside of the element through a converging/diverging pore structure, trapping contaminant particles in the media (not just on the surface) and forcing liquids to form into larger drops and drain to the bottom of the bowl. Numatics filters are used to remove hydrocarbon, oil, liquid water, rust, and more. The coalescing filters are made up of eight main features:

1. Inner core

Prevents element from collapsing in backflow conditions

2. Optional internal pleated prefilter

3.0 micron media protects the fine borosilicate fibers from large particles, extending the life of the coalescing media

3. Inner media wrap

Allows crossflow of gas, which initiates the coalescing process

4. Media

Three coalescing media choices for best performance. Proprietary glass fiber blend combines low differential pressures and high efficiencies with maximum holding capacity (3 micron particulate and adsorbing grade also available)

5. Outer media wrap

Allows crossflow of gas and improves performance

6. Metal retainers

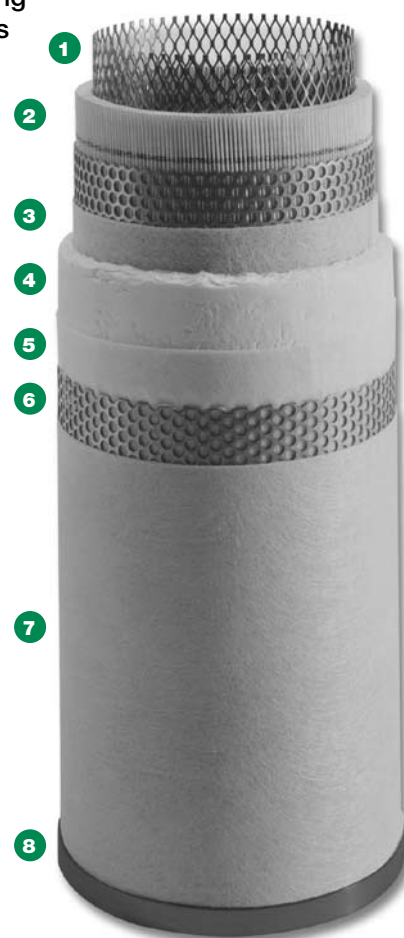
Supports the media both inside and outside during pressure spikes or high differential pressures

7. Drain layer

Large pore fibers allow the large coalesced liquids to drain to the bottom of the bowl

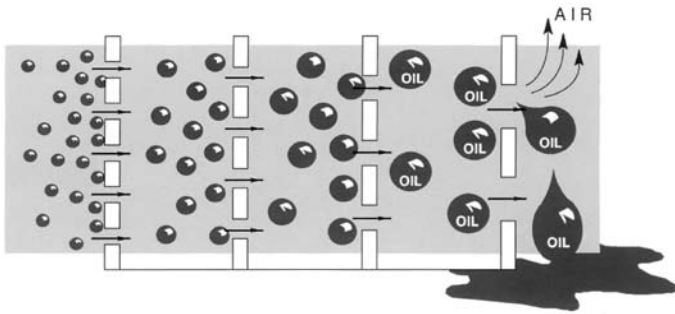
8. End caps

Aluminum end caps provide sturdiness and durability. All elements are clearly engraved with its model number.





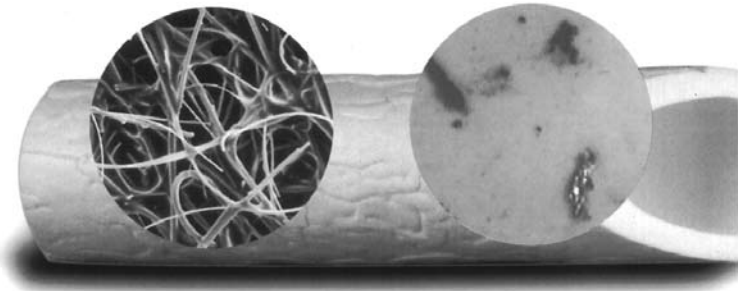
The science of coalescing filtration



Air flows from the inside to the outside of the element through progressively larger openings in the media. As contamination moves through the element, solid particles are trapped and liquids are formed into large droplets. As the air exits the element, surface tension holds the liquids and allows them to drain to the bottom.

The Numatics 0.01 micron borosilicate glass fiber element, when magnified 228x (left), shows deep, tortuous paths and large air pockets which provide high performance contaminate removal and longer life.

Contamination removal from a typical compressed air line with 0.01 micron Numatics media is shown magnified 40x (right). The contamination contains hydrocarbon (black), oil (opaque drops), and metal fragments (shiny spots).

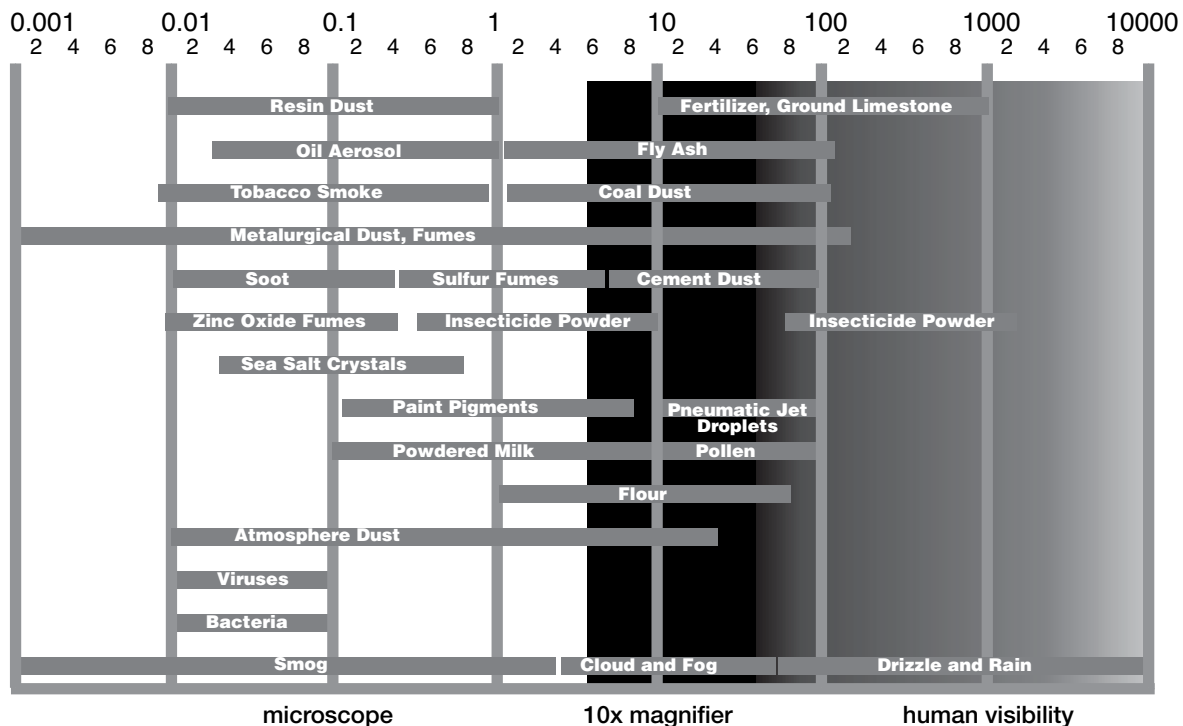


Scanning electron micrograph (at 228x)

Dirty filter magnification (at 40x)

With Numatics® elements like the one on the left installed in your system, the contamination on the right won't get to where it can cause damage. Your system lasts longer and costs less.

What you get is not always what you see



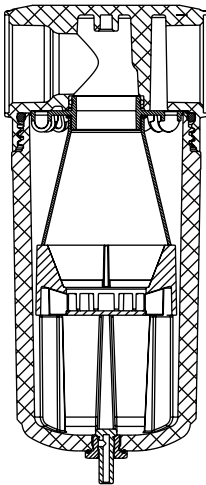


Delta Series Premium Filters

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F901X-12 pictured



Water Separator F901X Series

C.R.N. Rated to 200 PSI at 180°F (1/4 to 2" Inclusive)

Application:

The water separator is an ideal solution where water contamination is present. Water can damage pneumatic components, degrade your final product, and cause valves and cylinders to stick.

The F901X series utilizes an internal spinner to remove large quantities of contamination by centrifugal action. Water, debris, and rust are spun outward to the inside diameter of the bowl. Gravity then sends the contaminant to the bottom of the bowl for discharge.

Recommended Uses:

- Bulk liquid and solid contamination removal
- Downstream from compressor/aftercoolers
- Protection for coalescing elements from large liquid loading
- Refrigerated compressed air dryers

Materials of Construction:

Head 1/4 - 3: A380.0 Cast Aluminum – Anodized

Bowl 1/4 - 3: A380.0 Cast Aluminum – Anodized

Internal Separator Components: A380.0 Cast Aluminum – Anodized

Seals: Fluorocarbon (FKM)

Standard Manual Drain: Brass

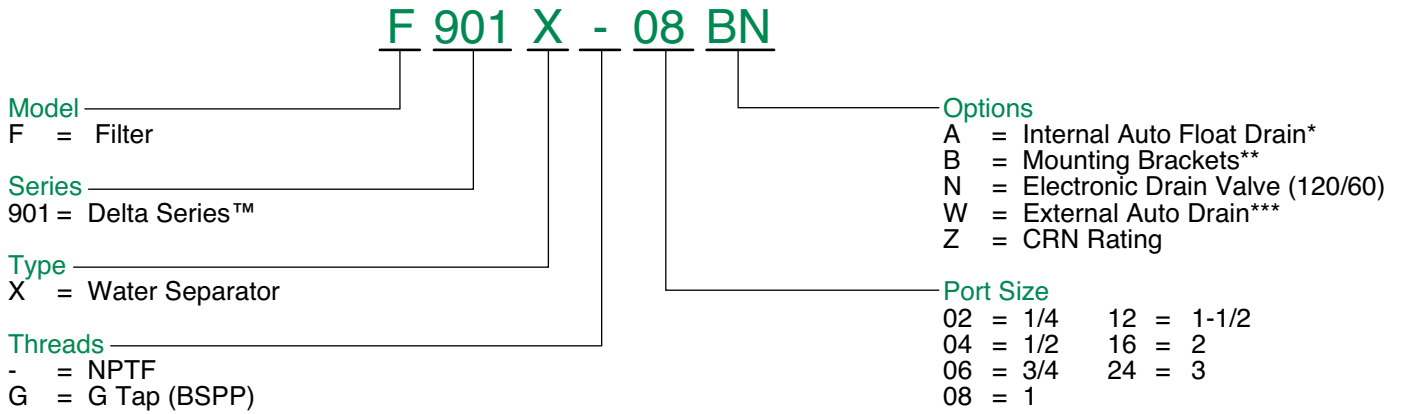
Flow Ratings:

MODEL NUMBER	SIZE	SCFM Based on 100 PSI (7 bar) inlet	m ³ / h	Δ P
F901X-02	1/4	30	51	0.75 PSID
F901X-04	1/2	90	153	0.75 PSID
F901X-06	3/4	165	280	0.75 PSID
F901X-08	1	215	365	0.75 PSID
F901X-12	1-1/2	353	600	0.75 PSID
F901X-16	2	706	1200	0.75 PSID
F901X-24	3	1294	2200	0.75 PSID

Note: Maximum water removal efficiency occurs at stated flows



How to Order - Water Separators



- * Applies to 1/4" to 2" Models Only
- ** Applies to 1/4" to 1-1/2" Models Only
- *** Applies to 2" and 3" Models Only
For Option Combination "W" + "Z" - 2" Port Size Only
Consult Factory - CRN Registration Approval Pending

Pressure and Temperature Specifications - Water Separators

SEPARATOR OPTION TYPE - X	NONE	A FLOAT DRAIN	N ELECT. DRAIN	W EXT. DRAIN	Z CRN
PORT SIZE	ALL	1/4 to 2	1/4 to 3	2, 3	1/4 to 2
MAX. PRESSURE PSI (Bar)	250 (17)	250 (17)	250 (17)	230 (16)	200 (14)
MAX TEMPERATURE °F (°C)	200 (95)	150 (66)	130 (55)	120 (50)	180 (82)

Note: Option combinations default to lower pressure and temperature rating.

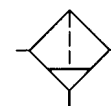


Delta Series Premium Filters

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ISO CLASS 3

F901G – 3.0 Micron Particulate Grade Filter
C.R.N. Rated to 200 PSI at 180°F (1/4 to 2" Inclusive)



ANSI SYMBOL



F901G-08 pictured

Application:

The particulate filter is designed for heavy dirt loading. Large particles such as rust, desiccant dust, and debris will rob the life of your pneumatic components. Contaminant is generated from desiccant type air dryers, older carbon steel pipes, and from the intake of a compressor.

The F901G series features a pleated design - folds of cellulose composite media which provide a large amount of surface area and extend the life of the element. When air flows - from the outside of the element to the inside - the particles are trapped in the space between the filter bowl and the element.

Recommended Uses:

- Solid bulk contamination removal
- Afterfilter to a desiccant dryer
- Protection for coalescers in heavy aerosol applications
- 3 micron particle removal in 'dry' systems

Specifications: { Per ISO 12500 at 33.2 ppm Inlet (40 mg/m³) }

- Solid Particle Efficiency: 97.5%
- Maximum Solid Particle Size: 3 µm
- Maximum Solid Concentration: 1.0 mg/m³ / (0.8375 ppm)
- Flow Path: Outside To Inside Of Element

Materials of Construction:

Filter Particulate:

Head 1/4 - 3: A380.0 Cast Aluminum
 Bowl 1/4 - 1: A380.0 Cast Aluminum
 Bowl 1-1/4 - 3: A356.0-T6 Cast Aluminum
 Seals: Fluorocarbon (FKM)
 Standard Manual Drain: Brass

Particulate Element:

End Caps: 6061-T6511 Anodized Aluminum
 Element: Phenolic Cellulose Pleat
 End Cap Bonding Material: Epoxy Resin
 Support Cores: Galvanized Carbon Steel

Note: Heads and Bowls – Anodized

Flow Ratings:

MODEL NUMBER	SIZE	SCFM Based on 100 PSI (7 bar) inlet	m ³ / h	Δ P
F901G-02	1/4	52	88	1.5 PSID
F901G-03	3/8	67	114	1.5 PSID
F901G-04	1/2	86	146	1.5 PSID
F901G-06	3/4	190	323	1.5 PSID
F901G-08	1	305	518	1.5 PSID
F901G-10	1-1/4	495	841	1.5 PSID
F901G-12	1-1/2	606	1030	1.5 PSID
F901G-16	2	1155	1962	1.5 PSID
F901G-20	2-1/2	1485	2523	1.5 PSID
F901G-24	3	1856	3153	1.5 PSID

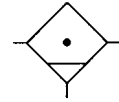
Note: Maximum efficiency occurs at stated flows



F901H-08 pictured

ISO CLASS 3 4

F901H – 1.0 Micron Coarse Grade Coalescer
C.R.N. Rated to 200 PSI at 180°F (1/4 to 2" Inclusive)



ANSI SYMBOL

Application:

The coarse coalescing filter is utilized when low pressure drop or crude separation is required. The coarse filter element is preferred in low pressure and vacuum application so that the efficiency of the compressor or pump is not sacrificed. Also, the coalescing element will take out crude amounts of large liquid oil and water particles, specifically downstream of a compressor to protect a dryer. The F901H features a unique vacuum-formed process. It utilizes micro-glass fibers in raw form to create a seamless, depth-loading media. Combined with a rigid fiber-binding epoxy, the filter element has great strength, high efficiency, and superior life due to polyester drain layer.

Recommended Uses:

- Mainline plant filtration
- Prefilter to refrigerated air dryer
- 1 micron particle removal in 'dry' systems
- Heavy oil concentration removal

Specifications: { Per ISO 12500 at 33.2 ppm Inlet (40 mg/m³) }

- Coalescing Efficiency = 95.0%
- Maximum Solid Particle Size: 1.0 μm
- Maximum Solid Concentration: 2.8 mg/m³ / (2.3 ppm)
- Maximum Oil Concentration: 2.0 mg/m³ / (1.66 ppm)
- Flow Path: Inside to Outside Of Element

Materials of Construction:

Filter Coalescing:

Head 1/4 - 3: A380.0 Cast Aluminum
 Bowl 1/4 - 1: A380.0 Cast Aluminum
 Bowl 1-1/4 - 3: A356.0-T6 Cast Aluminum
 Seals: Fluorocarbon (FKM)
 Standard Manual Drain: Brass

Coalescing Element:

End Caps: 6061-T6511 Anodized Aluminum
 Element: Borosilcate Glass Fibers
 End Cap Bonding Material: Epoxy Resin
 Support Cores: Galvanized Carbon Steel
 Drain Layer: Polyester

Note: Heads and Bowls – Anodized

Flow Ratings:

MODEL NUMBER	SIZE	SCFM Based on 100 PSI (7 bar) inlet	m ³ / h	Δ P
F901H-02	1/4	49	83	1.5 PSID
F901H-03	3/8	59	100	1.5 PSID
F901H-04	1/2	75	127	1.5 PSID
F901H-06	3/4	160	272	1.5 PSID
F901H-08	1	256	435	1.5 PSID
F901H-10	1-1/4	480	816	1.5 PSID
F901H-12	1-1/2	576	979	1.5 PSID
F901H-16	2	1120	1903	1.5 PSID
F901H-20	2-1/2	1440	2447	1.5 PSID
F901H-24	3	1800	3058	1.5 PSID

Note: Maximum efficiency occurs at stated flows



Delta Series Premium Filters

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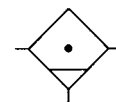


F901D-08 pictured

ISO CLASS 1 1

F901D – 0.01 Micron Fine Grade Coalescer

C.R.N. Rated to 200 PSI at 180°F (1/4 to 2" Inclusive)



ANSI SYMBOL

Application:

The fine coalescing filter is utilized when clean air is required and longer component life is desired. It is recommended in most point-of-use applications for industrial use. Also, the fine coalescer removes small particles of oil, water, and rust that can create problems in painting and coating processes. The F901D features a unique vacuum-formed process. It utilizes micro-glass fibers in raw form to create a seamless, depth-loading media. Combined with a rigid fiber-binding epoxy, the filter element has great strength, high efficiency, and superior life due to polyester drain layer.

Recommended Uses:

- Paint spraying
- Pneumatic tools and instrumentation
- Robotics
- 0.01 micron particle removal in 'dry' systems
- Low oil concentration removal

Specifications: { Per ISO 12500 at 33.2 ppm Inlet (40 mg/m³) }

- Coalescing Efficiency = 99.975%
- Maximum Solid Particle Size: 0.01 µm
- Maximum Solid Concentration: 0.1 mg/m³ / (0.08 ppm)
- Maximum Oil Concentration: 0.01mg/m³ / (0.008 ppm)
- Flow Path: Inside to Outside Of Element

Materials of Construction:

Filter Coalescing:

Head 1/4 - 3: A380.0 Cast Aluminum
 Bowl 1/4 - 1: A380.0 Cast Aluminum
 Bowl 1-1/4 - 3: A356.0-T6 Cast Aluminum
 Seals: Fluorocarbon (FKM)
 Standard Manual Drain: Brass

Coalescing Element:

End Caps: 6061-T6511 Anodized Aluminum
 Element: Borosilicate Glass Fibers
 End Cap Bonding Material: Epoxy Resin
 Support Cores: Galvanized Carbon Steel
 Drain Layer: Polyester

Note: Heads and Bowls – Anodized

Flow Ratings:

MODEL NUMBER	SIZE	SCFM Based on 100 PSI (7 bar) inlet	m ³ / h	Δ P
F901D-02	1/4	31	53	1.5 PSID
F901D-03	3/8	45	76	1.5 PSID
F901D-04	1/2	51	87	1.5 PSID
F901D-06	3/4	100	170	1.5 PSID
F901D-08	1	130	221	1.5 PSID
F901D-10	1-1/4	253	430	1.5 PSID
F901D-12	1-1/2	309	525	1.5 PSID
F901D-16	2	635	1079	1.5 PSID
F901D-20	2-1/2	828	1407	1.5 PSID
F901D-24	3	947	1609	1.5 PSID

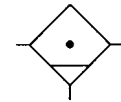
Note: Maximum efficiency occurs at stated flows



F901E-08 pictured

ISO CLASS 1 1

F901E – 0.01 Micron Ultra Fine Grade Coalescer
C.R.N. Rated to 200 PSI at 180°F (1/4 to 2" Inclusive)



ANSI SYMBOL

Application:

The ultra fine coalescing filter is ideal where critically clean air is needed and pressure drop is not a concern. It is a polishing filter to clean up any remains of particles or oil that are left over from the compressor room filtration. It is mainly a point-of-use filter that is targeted specifically for critical processes. It is also used to protect and extend the life of membrane filters. The F901E features a unique vacuum-formed process. It utilizes micro-glass fibers in raw form to create a seamless, depth-loading media. Combined with a rigid fiber-binding epoxy, the filter element has great strength, high efficiency, and superior life due to polyester drain layer.

Recommended Uses:

- Blow molding plastics
- Semiconductor packaging
- Critical instrumentation
- 0.01 micron particle removal in 'dry' systems
- Low oil concentration removal

Specifications: { Per ISO 12500 at 33.2 ppm Inlet (40 mg/m³) }

- Coalescing Efficiency = 99.99%
- Maximum Solid Particle Size: 0.01 µm
- Maximum Solid Concentration: 0.008 mg/m³ / (0.006 ppm)
- Maximum Oil Concentration: 0.004 mg/m³ / (0.003 ppm)
- Flow Path: Inside to Outside Of Element

Materials of Construction:

Filter Coalescing:

Head 1/4 - 3: A380.0 Cast Aluminum
Bowl 1/4 - 1: A380.0 Cast Aluminum
Bowl 1-1/4 - 3: A356.0-T6 Cast Aluminum
Seals: Fluorocarbon (FKM)
Standard Manual Drain: Brass

Coalescing Element:

End Caps: 6061-T6511 Anodized Aluminum
Element: Borosilcate Glass Fibers
End Cap Bonding Material: Epoxy Resin
Support Cores: Galvanized Carbon Steel
Drain Layer: Polyester

Note: Heads and Bowls – Anodized

Flow Ratings:

MODEL NUMBER	SIZE	SCFM Based on 100 PSI (7 bar) inlet	m ³ / h	Δ P
F901E-02	1/4	23	39	1.5 PSID
F901E-03	3/8	28	48	1.5 PSID
F901E-04	1/2	35	59	1.5 PSID
F901E-06	3/4	70	119	1.5 PSID
F901E-08	1	110	187	1.5 PSID
F901E-10	1-1/4	180	306	1.5 PSID
F901E-12	1-1/2	216	367	1.5 PSID
F901E-16	2	420	714	1.5 PSID
F901E-20	2-1/2	540	917	1.5 PSID
F901E-24	3	675	1147	1.5 PSID

Note: Maximum efficiency occurs at stated flows



Delta Series Premium Filters

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F901F-08 pictured

ISO CLASS 4 4

F901F – Vapor Adsorbing Grade Filter

C.R.N. Rated to 200 PSI at 180°F (1/4 to 2" Inclusive)

Application:

The adsorbing filter removes oil and larger hydrocarbon vapor from the compressed air stream. Since it only removes vapor, a coalescing element, specifically the F901D, should be used immediately upstream of the adsorbing filter. Since optimum adsorption occurs at lower temperatures, it is recommended to apply the filter as close to the point-of-use as possible. The F901F features fine activated charcoal impregnated on polyester. The activated carbon particles have a high affinity to vapor and are extremely efficient due to the tremendous amount of surface area present. The adsorbing element and the coalescing element should be changed every 3 to 6 months depending on the application.

Recommended Uses:

- Breathing air applications
- Food and drug industries having direct product contact with exhaust air
- Odor-free air applications
- Heavier hydrocarbon vapor removal

Specifications:

- Efficiency: 90.0% at Maximum Flow
- Maximum Oil Vapor Concentration: 0.003 ppm based on 0.015 ppm Inlet
- Coalescing Prefilter Recommended
- Flow Path: Outside to Inside Of Element

Materials of Construction:

Filter Adsorbing:

Head 1/4 - 3: A380.0 Cast Aluminum
 Bowl 1/4 - 1: A380.0 Cast Aluminum
 Bowl 1-1/4 - 3: A356.0-T6 Cast Aluminum
 Seals: Fluorocarbon (FKM)
 Standard Manual Drain: Brass

Adsorbing Element:

End Caps: 6061-T6511 Anodized Aluminum
 Element: Activated Carbon
 End Cap Bonding Material: Epoxy Resin
 Support Cores: Galvanized Carbon Steel
 Outer Drain Layer: Polyester

Note: Heads and Bowls – Anodized

Flow Ratings:

MODEL NUMBER	SIZE	SCFM Based on 100 PSI (7 bar) inlet	m ³ / h	Δ P
F901F-02	1/4	29	49	1.5 PSID
F901F-03	3/8	63	107	1.5 PSID
F901F-04	1/2	79	134	1.5 PSID
F901F-06	3/4	120	204	1.5 PSID
F901F-08	1	182	309	1.5 PSID
F901F-10	1-1/4	300	510	1.5 PSID
F901F-12	1-1/2	360	612	1.5 PSID
F901F-16	2	700	1189	1.5 PSID
F901F-20	2-1/2	900	1529	1.5 PSID
F901F-24	3	1125	1911	1.5 PSID

Note: Maximum efficiency occurs at stated flows



How to Order - Filters: Particulate, Coalescing, Adsorbing

F 901 G - 04 AG

Model

F = Filter

Series

901 = Delta Series™

Element

G = 3.0 Micron Particulate Filter
 H = 1.0 Micron Coarse Coalescer
 D = 0.01 Micron Fine Coalescer
 E = 0.01 Micron Ultra Fine Coalescer
 F = Adsorbing Grade Element*****

Threads

- = NPTF
 G = G Tap (BSPP)

Options

A = Internal Auto Float Drain *
 B = Mounting Brackets**
 D = Internal Pleated Prefilter***
 G = Differential Pressure Gauge
 N = Electronic Drain Valve (120/60)
 W = External Auto Drain****
 Z = CRN Rating

Port Size

02 = 1/4	10 = 1-1/4
03 = 3/8	12 = 1-1/2
04 = 1/2	16 = 2
06 = 3/4	20 = 2-1/2
08 = 1	24 = 3

* Applies to 1/4" to 2" Models Only
 ** Applies to 1/4" to 1-1/2" Models Only
 *** Applies to Elements H, D and E Only

**** Applies to 2", 2-1/2" and 3" Models Only
 For Option Combination "W" + "Z" - 2" Port Size Only
 Consult Factory - CRN Registration Approval Pending
 ***** Element Type F Use Only Options B and/or Z Only

Optional Internal Pleated Prefilter (See Option D How to Order)

Numatics Delta Series™ filters are premium quality filters which include an optional 3.0 micron, internal pleated prefilter. This prefilter provides protection for the fine borosilicate fibers by removing over 97.5% of 3.0 micron and larger particles, extending the life of the filter element.

Pressure and Temperature Specifications – Particulate and Coalescing Grades

FILTER OPTION ELEMENTS - G,H,D,E	NONE	A FLOAT DRAIN	G DELTA P GAUGE	N ELECT. DRAIN	W EXT. DRAIN	Z CRN
PORT SIZE	ALL	1/4 to 2	1/4 to 3	1/4 to 3	2, 2-1/2, 3	1/4 to 2
MAX. PRESSURE PSI (Bar)	250 (17)	250 (17)	250 (17)	250 (17)	230 (16)	200 (14)
MAX TEMPERATURE °F (°C)	200 (95)	150 (66)	175 (80)	130 (55)	120 (50)	180 (82)

Note: Option combinations default to lower pressure and temperature rating.

Pressure and Temperature Specifications – Adsorbing Grade

FILTER OPTION - ADSORBING ELEMENT GRADE - F	NONE	Z CRN
PORT SIZE	ALL	1/4 to 2
MAX. PRESSURE PSI (Bar)	250 (17)	200 (14)
MAX TEMPERATURE °F (°C)	200 (95)	180 (82)

Note: Option combinations default to lower pressure and temperature rating.

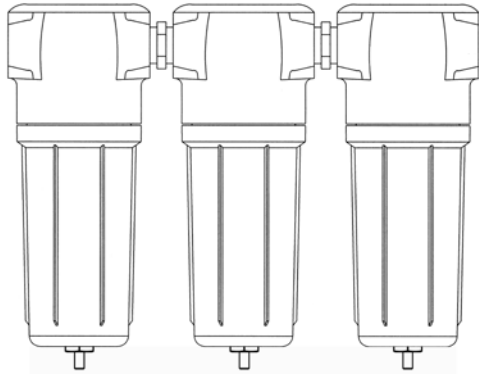


Delta Series Premium Filters

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Recommended Filter Combinations - Industry Applications

Flow rates for filter combinations



ISO 8573 - The Compressed Air Quality Standard

CLASS	Maximum particle size (µm)	Solid		Water		Oil	
		Maximum Concentration**		Maximum Pressure Dewpoint °F (°C)	Maximum Concentration**		
		ppm	(mg/m ³)		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	0.01
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)	-	-

* Particle size is based on a filtration ratio 20. The minimum accuracy of the measuring method used is 20% of the limiting value of the class.

** 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.

APPLICATIONS	RECOMMENDED FILTER ELEMENT COMBINATIONS	SIZE				
		1/4	3/8	1/2	3/4	1
Based on 100 PSI (7 bar) inlet - Δ P 1.5 PSID						
Between aftercooler and dryer	X → H	32 (54)	N/A	65 (108)	132 (220)	196 (327)
Blow molding	G → D → F	20 (33)	32 (54)	38 (64)	71 (119)	100 (167)
Breathing air	G → D → F	" "	" "	" "	" "	" "
Compressed air measuring instruments	G → D	27 (44)	37 (62)	44 (73)	88 (148)	120 (200)
Compressed air motors	G → D	" "	" "	" "	" "	" "
Electronic	G → H → E	19 (32)	24 (39)	30 (50)	61 (101)	96 (160)
Film laboratories	G → D → F	20 (33)	32 (54)	38 (64)	71 (119)	100 (167)
Food packaging	G → D → F	" "	" "	" "	" "	" "
Hospital services	G → D → F	" "	" "	" "	" "	" "
Paint spraying systems	G → D	27 (44)	37 (62)	44 (73)	88 (148)	120 (200)
Paint spraying systems (critical)	G → D → F	20 (33)	32 (54)	38 (64)	71 (119)	100 (167)
Pharmaceutical industry	G → D → F	" "	" "	" "	" "	" "
Pneumatic control systems	G → D	27 (44)	37 (62)	44 (73)	88 (148)	120 (200)
Pneumatic conveying systems	G → D	" "	" "	" "	" "	" "
Pneumatic tools	G → D	" "	" "	" "	" "	" "
Precision analyzers	G → H → F	22 (38)	36 (60)	46 (77)	86 (143)	133 (223)
Process air	H → D → F	19 (32)	31 (52)	37 (62)	69 (116)	98 (163)
Surface treatment	G → H → D	23 (39)	32 (53)	38 (63)	77 (129)	108 (181)

APPLICATIONS	RECOMMENDED FILTER ELEMENT COMBINATIONS	SIZE				
		1 1/4	1-1/2	2	3	
Based on 100 PSI (7 bar) inlet - Δ P 1.5 PSID						
Between aftercooler and dryer	X → H	N/A	377 (630)	745 (1244)	N/A	1283 (2142)
Blow molding	G → D → F	180 (301)	219 (365)	436 (727)	564 (941)	675 (1126)
Breathing air	G → D → F	" "	" "	" "	" "	" "
Compressed air measuring instruments	G → D	225 (376)	275 (459)	556 (929)	723 (1207)	844 (1408)
Compressed air motors	G → D	" "	" "	" "	" "	" "
Electronic	G → H → E	160 (266)	192 (320)	372 (621)	479 (799)	598 (999)
Film laboratories	G → D → F	180 (301)	219 (365)	436 (727)	564 (941)	675 (1126)
Food packaging	G → D → F	" "	" "	" "	" "	" "
Hospital services	G → D → F	" "	" "	" "	" "	" "
Paint spraying systems	G → D	225 (376)	275 (459)	556 (929)	723 (1207)	844 (1408)
Paint spraying systems (critical)	G → D → F	180 (301)	219 (365)	436 (727)	564 (941)	675 (1126)
Pharmaceutical industry	G → D → F	" "	" "	" "	" "	" "
Pneumatic control systems	G → D	225 (376)	275 (459)	556 (929)	723 (1207)	844 (1408)
Pneumatic conveying systems	G → D	" "	" "	" "	" "	" "
Pneumatic tools	G → D	" "	" "	" "	" "	" "
Precision analyzers	G → H → F	226 (378)	273 (455)	528 (881)	679 (1133)	848 (1416)
Process air	H → D → F	179 (299)	217 (362)	434 (724)	561 (937)	672 (1122)
Surface treatment	G → H → D	204 (340)	248 (415)	498 (832)	646 (1079)	764 (1275)

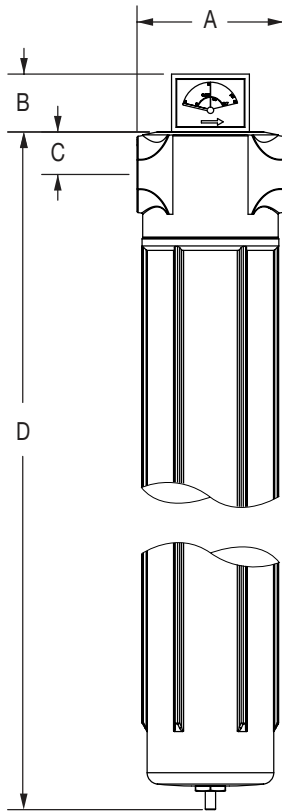
Filter element grades

X = water separator
G = 3.0 micron particulate filter
H = 1.0 micron coarse coalescer

D = 0.01 micron fine coalescer
E = 0.01 micron ultra fine coalescer
F = adsorbing grade filter

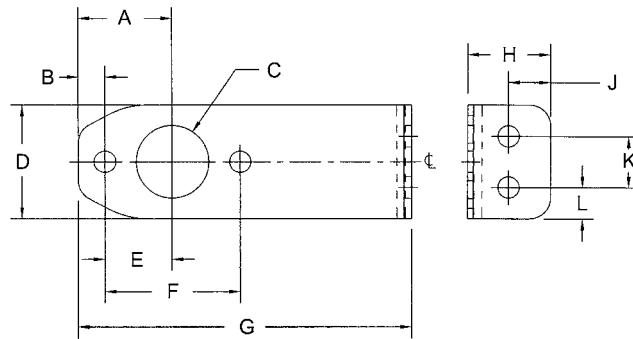


Separator and Filter Dimensions - Std Manual Drain / Mounting Bracket Dimensions



Mounting Bracket Kit

(Includes 2 brackets and required screws)



MODEL	A	B	C	D	E	F	G	H	J	K	L
BRK9001 (1/4-1/2 Models)	1.13 (29)	.32 (8)	Ø.88 (Ø22)	1.38 (35)	.82 (21)	1.63 (41)	4.0 (102)	1.0 (25)	.5 (13)	.62 (16)	.38 (10)
BRK9002 (3/4-1 1/2 Models)	1.5 (38)	.27 (7)	Ø1.94 (Ø42)	2.5 (64)	1.24 (31)	2.47 (63)	5.0 (127)	1.0 (25)	.4 (10)	1.5 (38)	.5 (13)

Separator Dimensions – inches (millimeters)

MODEL	PORT SIZE	WEIGHT lbs (kg)	A	B	C	D	E
F901X-02	1/4	2.9 (1.32)	3.7 (95)	N/A	0.79 (20)	9.4 (238)	1.5 (38)
F901X-04	1/2	2.9 (1.32)	3.7 (95)	N/A	0.79 (20)	9.4 (238)	1.5 (38)
F901X-06	3/4	5.4 (2.45)	4.6 (116)	N/A	1.32 (34)	10.8 (274)	1.5 (38)
F901X-08	1	5.4 (2.45)	4.6 (116)	N/A	1.32 (34)	10.8 (274)	1.5 (38)
F901X-12	1-1/2	5.4 (2.45)	4.6 (116)	N/A	1.32 (34)	10.8 (274)	1.5 (38)
F901X-16	2	12.05 (5.47)	6.3 (160)	N/A	1.70 (43)	13.0 (332)	2.0 (51)
F901X-24	3	36.0 (16.36)	11.0 (280)	N/A	2.9 (73)	17.3 (440)	2.0 (56)

*Notes:

"D" dimension includes manual drain.

The "E" dimension refers to the amount of space needed below the bottom of the bowl in order to remove the bowl.

Filter Dimensions – inches (millimeters)

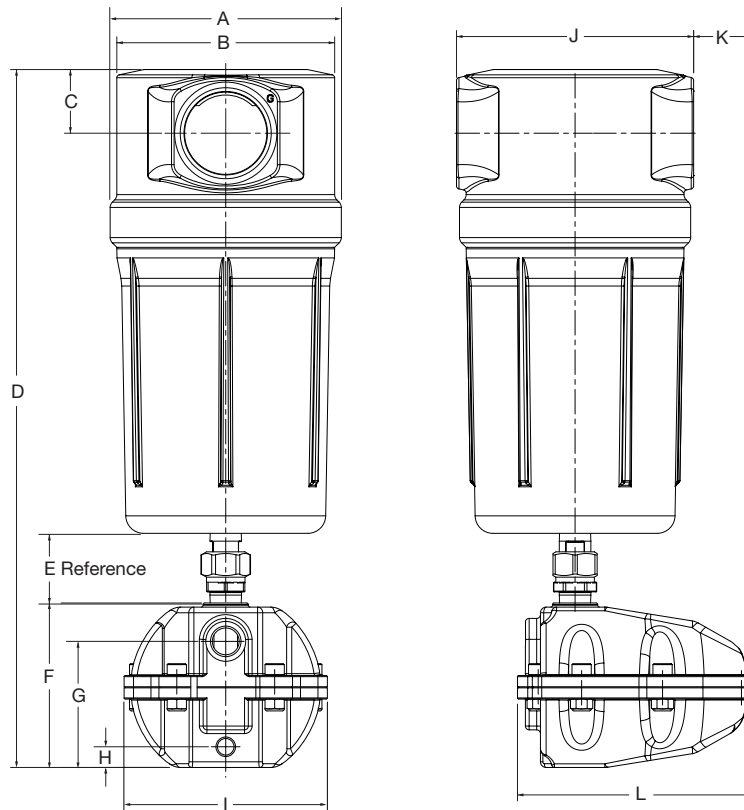
MODEL	PORT SIZE	WEIGHT lbs (kg)	A	B	C	D	E
F901*-02	1/4	2.95 (1.34)	3.7 (95)	1.8 (46)	0.79 (20)	9.38 (238)	1.8 (46)
F901*-03	3/8	2.95 (1.34)	3.7 (95)	1.8 (46)	0.79 (20)	9.38 (238)	1.8 (46)
F901*-04	1/2	2.95 (1.34)	3.7 (95)	1.8 (46)	0.79 (20)	9.38 (238)	1.8 (46)
F901*-06	3/4	7.10 (3.22)	4.6 (116)	1.8 (46)	1.32 (34)	14.69 (373)	1.8 (46)
F901*-08	1	7.10 (3.22)	4.6 (116)	1.8 (46)	1.32 (34)	14.69 (373)	1.8 (46)
F901*-10	1-1/4	9.25 (4.20)	4.6 (116)	1.8 (46)	1.32 (34)	21.07 (535)	1.8 (46)
F901*-12	1-1/2	9.25 (4.20)	4.6 (116)	1.8 (46)	1.32 (34)	21.07 (535)	1.8 (46)
F901*-16	2	22.7 (10.30)	6.3 (160)	1.8 (46)	1.69 (43)	26.80 (681)	1.8 (46)
F901*-20	2-1/2	55.0 (25.0)	11.0 (280)	1.8 (46)	2.9 (73)	30.0 (762)	2.2 (56)
F901*-24	3	55.0 (25.0)	11.0 (280)	1.8 (46)	2.9 (73)	30.0 (762)	2.2 (56)



Delta Series Premium Filters

NUMATICS®

Separator and Filter Dimensions - Option "W" Included



Separator Dimensions – inches (millimeters)

MODEL	PORT SIZE	WEIGHT lbs (kg)	A	B	C	D	E	F	G	H	I	J	K	L
F901X-16	2	16.05* (7.3)	6.14 (156)	5.79 (147)	1.69 (43)	18.54 (471)	1.85 (47)	4.37 (111)	3.35 (85)	0.55 (14)	5.39 (137)	6.30 (160)	1.61 (41)	6.30 (160)
F901X-24	3	40.0* (18.2)	9.05 (230)	8.46 (215)	2.87 (73)	22.8 (579)	1.85 (47)	4.37 (111)	3.35 (85)	0.55 (14)	5.39 (137)	11.02 (280)	-0.75 (-19)	6.30 (160)

* Weight includes W option drain and bushing.

Filter Dimensions – inches (millimeters)

MODEL	PORT SIZE	WEIGHT lbs (kg)	A	B	C	D	E	F	G	H	I	J	K	L
F901*-16	2	26.7* (12.14)	6.14 (156)	5.79 (147)	1.69 (43)	26.06 (662)	1.85 (47)	4.37 (111)	3.35 (85)	0.55 (14)	5.39 (137)	6.30 (160)	1.61 (41)	6.30 (160)
F901*-20	2-1/2	59.0* (26.82)	9.05 (230)	8.46 (215)	2.87 (73)	35.53 (905)	1.85 (47)	4.37 (111)	3.35 (85)	0.55 (14)	5.39 (137)	11.02 (280)	-0.75 (-19)	6.30 (160)
F901*-24	3	59.0* (26.82)	9.05 (230)	8.46 (215)	2.87 (73)	35.53 (905)	1.85 (47)	4.37 (111)	3.35 (85)	0.55 (14)	5.39 (137)	11.02 (280)	-0.75 (-19)	6.30 (160)

* Weight includes W option drain and bushing.



Replacement Elements - 901 Series

Replacement Elements Kit

INCLUDES FILTER ELEMENT AND SEAL

KIT # DESCRIPTION

1/4, 3/8, & 1/2 UNITS

EKF9004G-B	901 Series, 3.0 micron micron particulate
EKF9004H-B	901 Series, 1.0 micron coarse coalescing
EKF9004HD-B	901 Series, 1.0 micron coarse coalescing w/ pleated prefilter
EKF9004D-B	901 Series, 0.01 micron fine coalescing
EKF9004DD-B	901 Series, 0.01 micron fine coalescing w/ pleated prefilter
EKF9004E-B	901 Series, 0.01 micron ultra fine coalescing
EKF9004ED-B	901 Series, 0.01 micron ultra fine coalescing w/ pleated prefilter
EKF9004F-B	901 Series, adsorbing

Element Only - Weight 0.35 lbs (.16 kg) for all sizes

3/4 & 1 UNITS

EKF9008G-B	901 Series, 3.0 micron micron particulate
EKF9008H-B	901 Series, 1.0 micron coarse coalescing
EKF9008HD-B	901 Series, 1.0 micron coarse coalescing w/ pleated prefilter
EKF9008D-B	901 Series, 0.01 micron fine coalescing
EKF9008DD-B	901 Series, 0.01 micron fine coalescing w/ pleated prefilter
EKF9008E-B	901 Series, 0.01 micron ultra fine coalescing
EKF9008ED-B	901 Series, 0.01 micron ultra fine coalescing w/ pleated prefilter
EKF9008F-B	901 Series, adsorbing

Element Only - Weight 1.0 lbs (.45 kg) for all sizes

1 1/4 & 1 1/2 UNITS

EKF9012G-B	901 Series, 3.0 micron particulate
EKF9012H-B	901 Series, 1.0 micron coarse coalescing
EKF9012HD-B	901 Series, 1.0 micron coarse coalescing w/ pleated prefilter
EKF9012D-B	901 Series, 0.01 micron fine coalescing
EKF9012DD-B	901 Series, 0.01 micron fine coalescing w/ pleated prefilter
EKF9012E-B	901 Series, 0.01 micron ultra fine coalescing
EKF9012ED-B	901 Series, 0.01 micron ultra fine coalescing w/ pleated prefilter
EKF9012F-B	901 Series, adsorbing

Element Only - Weight 1.85 lbs (.84 kg) for all sizes

2 UNITS

EKF9016G-B	901 Series, 3.0 micron micron particulate
EKF9016H-B	901 Series, 1.0 micron coarse coalescing
EKF9016HD-B	901 Series, 1.0 micron coarse coalescing w/ pleated prefilter
EKF9016D-B	901 Series, 0.01 micron fine coalescing
EKF9016DD-B	901 Series, 0.01 micron fine coalescing w/ pleated prefilter
EKF9016E-B	901 Series, 0.01 micron ultra fine coalescing
EKF9016ED-B	901 Series, 0.01 micron ultra fine coalescing w/ pleated prefilter
EKF9016F-B	901 Series, adsorbing

Element Only - Weight 3.6 lbs (1.64 kg) for all sizes

2 1/2 & 3 UNITS

EKF9024G-B	901 Series, 3.0 micron micron particulate
EKF9024H-B	901 Series, 1.0 micron coarse coalescing
EKF9024HD-B	901 Series, 1.0 micron coarse coalescing w/ pleated prefilter
EKF9024D-B	901 Series, 0.01 micron fine coalescing
EKF9024DD-B	901 Series, 0.01 micron fine coalescing w/ pleated prefilter
EKF9024E-B	901 Series, 0.01 micron ultra fine coalescing
EKF9024ED-B	901 Series, 0.01 micron ultra fine coalescing w/ pleated prefilter
EKF9024F-B	901 Series, adsorbing

Element Only - Weight 6.35 lbs (2.88 kg) for all sizes

Bowl Replacement

INCLUDES BOWL ONLY

BOWL # DESCRIPTION

BKF9001-B	for 1/4, 3/8, & 1/2 units
BKF9002-B	for 3/4 & 1 units
BKF9004-B	for 1-1/4 & 1-1/2 units
BKF9005-B	for 2 unit
BKF9006-B	for 2-1/2 & 3 units

Separator Bowl

INCLUDES BOWL ONLY

BOWL # DESCRIPTION

BKF9001-B	for 1/4 & 1/2 units
BKF9004S-B	for 3/4, 1, 1-1/2
BKF9005S-B	for 2 units
BKF9006S-B	for 3 units

Filter & Separator Head Replacement Seals

INCLUDES O-RING ONLY

FPHS9001-04	for 1/4, 3/8, & 1/2 units
FPHS9001-12	for 3/4, 1, 1-1/4, & 1-1/2 units
FPHS9001-16	for 2 units
FPHS9001-20	for 2-1/2 & 3 units

Note:

Replacement Elements

900 Delta Series (Previous Generation)

To order a replacement element for the original 900 Series filters choose the port size and element type from the listing on this page and remove the B suffix.

Ex: Replacement for a 1" 0.3 Micron Fine D Grade Coalescer without Internal Pleated Prefilter

901 Series EKF9008D-B becomes EKF9008D for 900 Series

Universal Replacement Elements

Fits 900 Delta Series (Previous Generation) and 901 Series To order a universal replacement element designed to fit either housing, both 900 and 901 Series in the same port size.

Choose the port size and element type from the listing on this page and change the suffix to A.

Ex: Replacement for a 2" 0.1 Micron Fine H Grade Coalescer with Internal Pleated Prefilter

901 Series EKF9016HD-B becomes EKF9016HD-A for both 900 and 901 Series



Options - Replacement Kits

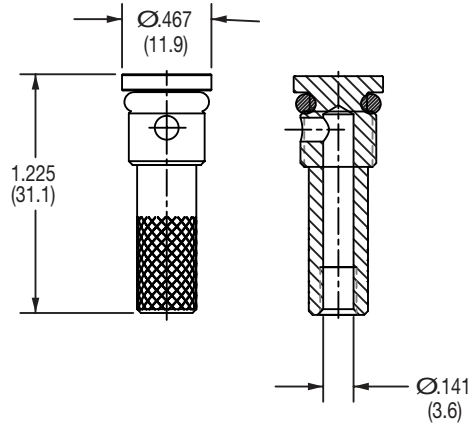
Internal Auto Float Drain - Option "A"
(for port sizes 1/4" through 2" inclusive only)

Model AKF60 (Includes float drain only)



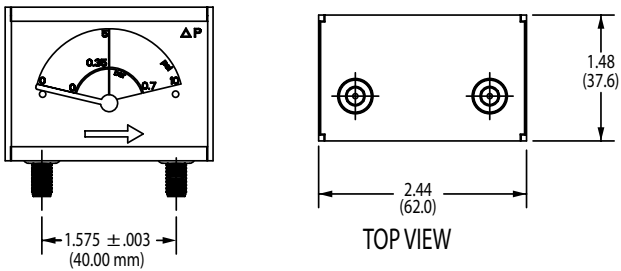
Standard Manual Drain
(for port sizes 1/4" through 3")

Model FP0050



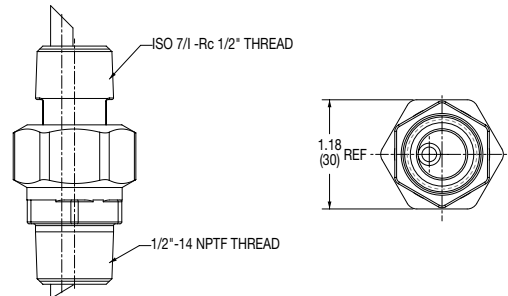
Differential Pressure Gauge - Option "G"
(for port sizes 1/4" through 3")

Model PDI92 (Includes mounting screws and O-rings)



External Auto Drain - Option "W" Adapter
(for port sizes 2" through 3" inclusive only)

Model AKF92AD (Includes adapter only)



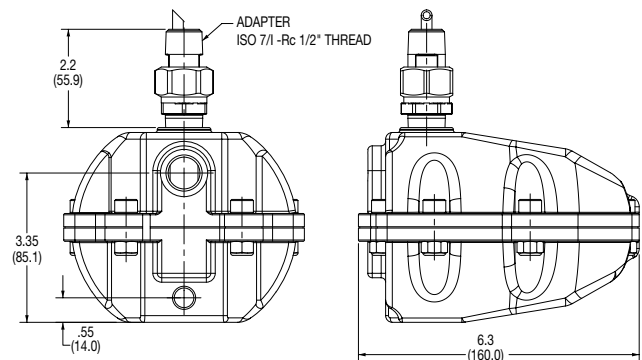
External Auto Drain - Option "W" -
(for port sizes 2" through 3" inclusive only)

Model AKF92 (Includes external drain and adapter)



External Auto Drain - Option "W" - Dimensions
(for port sizes 2" through 3" inclusive only)

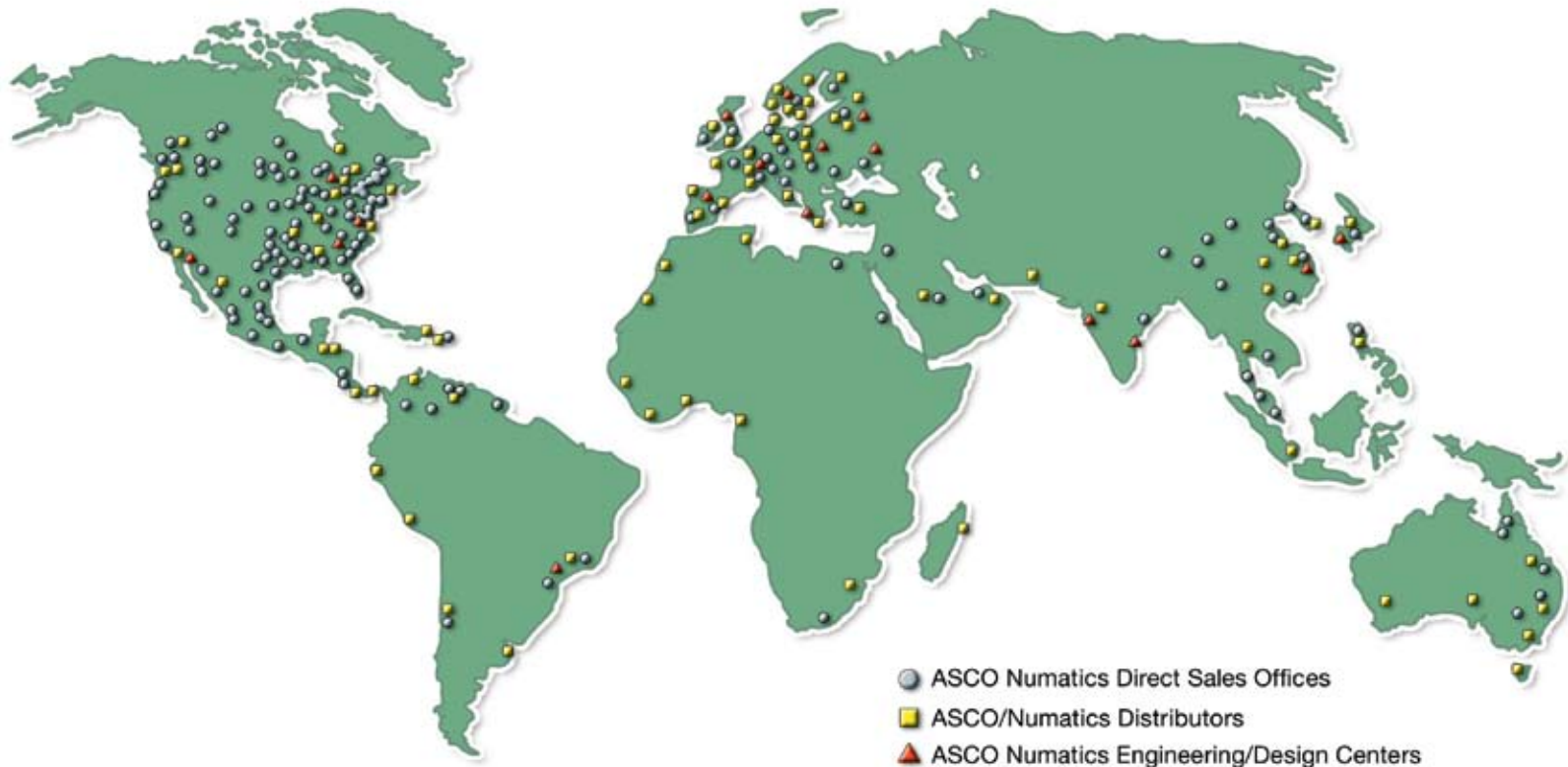
Weight - 4.0 lbs / 1.82 kg Including Adapter





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