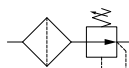




# Precision Pneumatic - BFR Series Combination Filter and Regulators

**BFR-3233****BFR-3431**

Mounting bracket not included.



Air Filter / Regulator

NITRA® BFR Series Precision combination filter and regulators are designed for use in systems that require clean, accurate instrument air. They are constructed of durable materials ideal for industrial environments.

## Features

- Diecast aluminum alloy, irridite and baked epoxy finish body
- Nitrile elastomer and nylon fabric diaphragm
- Nitrile elastomer valve seat
- Additional build materials include: brass, zinc plated steel and acetal
- Mounting on pipe, bracket or through body direct
- 40 micron polyethylene filter (5 micron optional)
- 1/4" and 1/2" NPT ports
- (2) 1/4" NPT gauge ports
- Manual drain
- Made in the USA

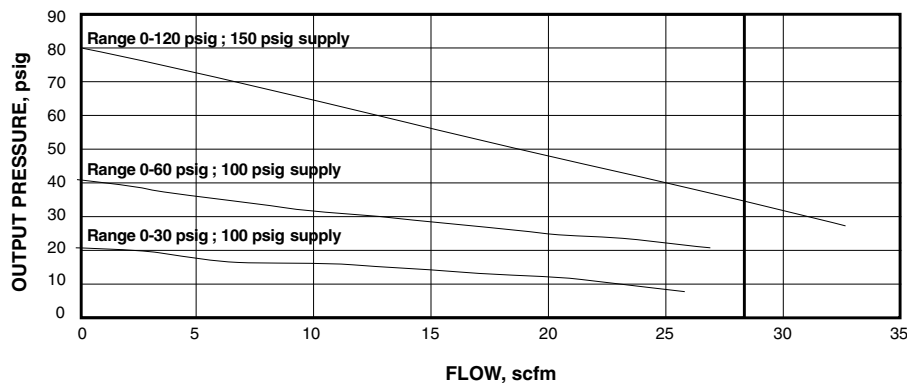


See [www.AutomationDirect.com](http://www.AutomationDirect.com) for a wide variety of fitting options

Precision Pneumatic BFR Series Filter / Regulators											
Part No.	Price	Weight (lbs)	Port Size (FNPT)	Fluid	Temperature	Operating Pressure	Maximum Supply Pressure	Exhaust Capacity	Sensitivity	Air Consumption	Effect of Supply Pressure Variation
<a href="#"><u>BFR-3231</u></a>	\$61.00	0.4	1/4"	Air & Inert gases	0~160°F (-18~71°C)	0-30psi (0-0.21 MPa) (0-2 bar)	250psi (1.72 MPa) (17bar)	0.1 scfm (2.83 NI/min) with downstream pressure 5 psig (0.3 bar) above set point	1" of water	Less than 5 scfh (2.5 NI/min)	Less than 0.25 psig (0.017 bar) for 25 psig (1.7 bar) change
<a href="#"><u>BFR-3232</u></a>	\$61.00	0.4	1/4"			0-60psi (0-0.41 MPa) (0-4 bar)					
<a href="#"><u>BFR-3233</u></a>	\$61.00	0.4	1/4"			0-120psi (0-0.83 MPa) (0-8 bar)					
<a href="#"><u>BFR-3431</u></a>	\$125.00	0.4	1/2"			0-30psi (0-0.21 MPa) (0-2 bar)					Less than 0.5 psig (0.035 bar) for 25 psig (1.7 bar) change
<a href="#"><u>BFR-3432</u></a>	\$125.00	0.4	1/2"			0-60psi (0-0.41 MPa) (0-4 bar)					
<a href="#"><u>BFR-3433</u></a>	\$125.00	0.4	1/2"			0-120psi (0-0.83 MPa) (0-8 bar)					

## Performance Chart

BFR 1/4" NPT

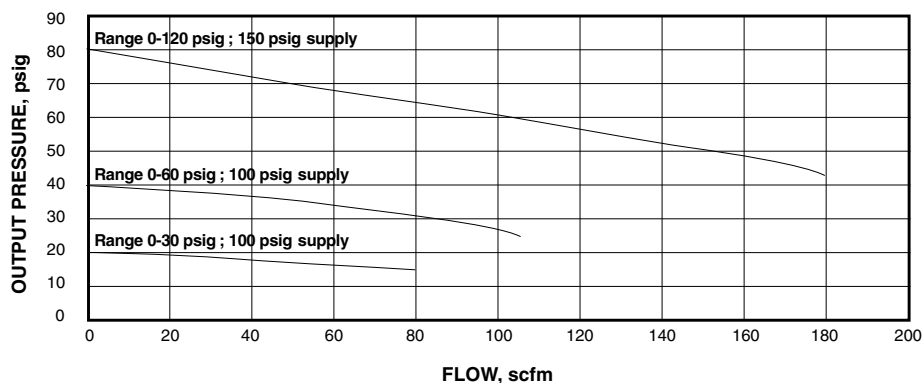




# Precision Pneumatic - BFR Series Combination Filter and Regulators

## Performance Chart

**BFR 1/2" NPT**



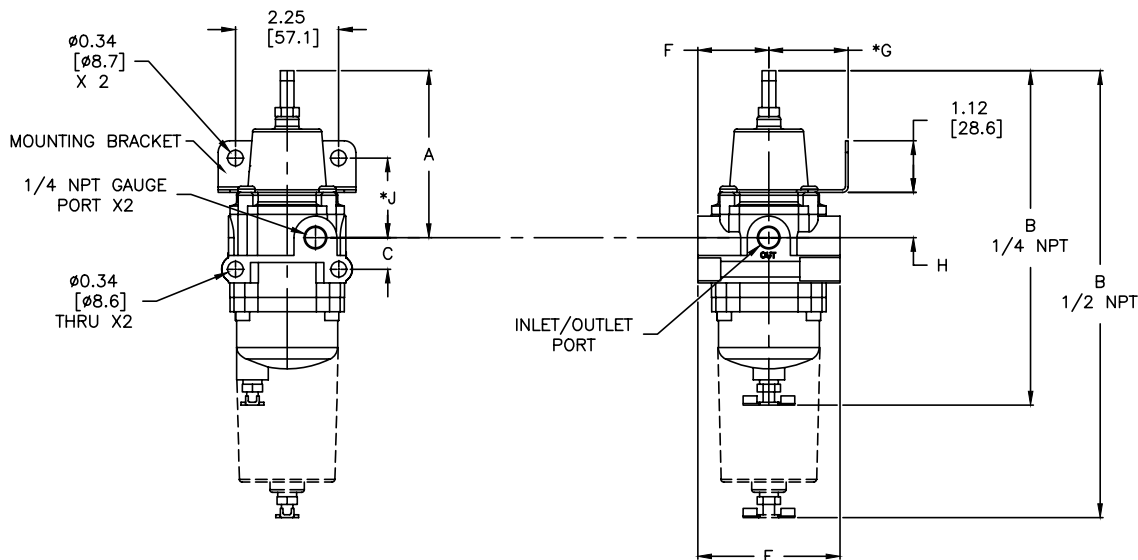
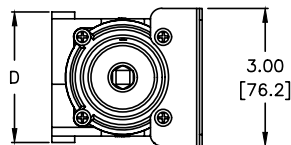
## Dimensions

Inches [mm]

**BFR-X**

PART NUMBER	A	B	C	D	E	F	G	H	J	I/O PORT	PSI RANGE
BFR-3231	3.64	7.29	0.69	2.84	3.10	1.55	1.73	.98	1.73	1/4	0-30
BFR-3232	[92.4]	[185.2]	[17.5]	[72.2]	[78.7]	[39.4]	[43.9]	[25.0]	[44.1]		0-60
BFR-3233											0-120
BFR-3431	3.72	9.78	.70	2.87	3.00	1.5	1.73	1.15	1.90	1/2	0-30
BFR-3432	[94.6]	[248.4]	[17.8]	[73.0]	[76.2]	[38.0]	[44.1]	[29.2]	[48.3]		0-60
BFR-3433											0-120

\*MOUNTING BRACKET  
INSTALLATION OPTIONAL



See our Web site [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete Engineering drawings.



# Precision Pneumatic - BFR Series Combination Filter and Regulators

**BFE-43****BBKT-3**

Pneumatic BFR Series Accessories				
<i>Part No.</i>	<i>Price</i>	<i>Description</i>	<i>Material</i>	<i>Weight (lbs)</i>
<b><u>BFE-31</u></b>	\$14.00	NITRA particulate filter element, replacement, 5 micron, polyethylene. For use with BFR-32 series filter regulators.	Polyethylene (PE)	0.1
<b><u>BFE-33</u></b>	\$14.00	NITRA particulate filter element, replacement, 40 micron, polyethylene. For use with BFR-32 series filter regulators.	Polyethylene (PE)	0.1
<b><u>BFE-41</u></b>	\$14.00	NITRA particulate filter element, replacement, 5 micron, polyethylene. For use with BFR-34 series filter regulators.	Polyethylene (PE)	0.1
<b><u>BFE-43</u></b>	\$14.00	NITRA particulate filter element, replacement, 40 micron, polyethylene. For use with BFR-34 series filter regulators.	Polyethylene (PE)	0.1
<b><u>BBKT-3</u></b>	\$8.75	NITRA mounting bracket. For use with BFR-3 and BR-3 series air prep components.	Plated Steel	0.1



# Pneumatic Air Preparation Accessories



**Part No. [ADB-21](#)**



**Part No. [AB-4T](#)**



**Part No. [AB-4L](#)**



**Part No. [AB-4U](#)**

Pneumatic Air Preparation Accessories			
Part No.	Price	Description	Weight (lbs)
<a href="#">ADB-21</a>	\$18.00	NITRA pneumatic distribution block, 1/8in female NPT inlet(s), (3) 1/8in female NPT outlet(s). For use with Ax-21 series air prep components.	0.1
<a href="#">ADB-22</a>	\$18.00	NITRA pneumatic distribution block, 1/4in female NPT inlet(s), (3) 1/4in female NPT outlet(s). For use with Ax-22 series air prep components.	0.1
<a href="#">ADB-32</a>	\$25.50	NITRA pneumatic distribution block, 1/4in female NPT inlet(s), (3) 1/4in female NPT outlet(s). For use with Ax-32 series air prep components.	0.2
<a href="#">ADB-33</a>	\$25.50	NITRA pneumatic distribution block, 3/8in female NPT inlet(s), (3) 3/8in female NPT outlet(s). For use with Ax-33 series air prep components.	0.2
<a href="#">ADB-44</a>	\$27.00	NITRA pneumatic distribution block, 1/2in female NPT inlet(s), (3) 1/2in female NPT outlet(s). For use with Ax-44 series air prep components.	0.4
<a href="#">AB-2T</a>	\$16.50	NITRA modular T-bracket, for use with Ax-2 series air prep components.	0.2
<a href="#">AB-2L</a>	\$16.50	NITRA modular L-bracket, for use with Ax-2 series air prep components.	0.2
<a href="#">AB-2U</a>	\$16.50	NITRA modular U-bracket, for use with Ax-2 series air prep components.	0.1
<a href="#">AB-3T</a>	\$18.00	NITRA modular T-bracket, for use with Ax-3 series air prep components.	0.3
<a href="#">AB-3L</a>	\$18.00	NITRA modular L-bracket, for use with Ax-3 series air prep components.	0.3
<a href="#">AB-3U</a>	\$18.00	NITRA modular U-bracket, for use with Ax-3 series air prep components.	0.2
<a href="#">AB-4T</a>	\$22.00	NITRA modular T-bracket, for use with Ax-4 series air prep components.	0.5
<a href="#">AB-4L</a>	\$22.00	NITRA modular L-bracket, for use with Ax-4 series air prep components.	0.5
<a href="#">AB-4U</a>	\$22.00	NITRA modular U-bracket, for use with Ax-4 series air prep components.	0.4
<a href="#">AB-6T</a>	\$32.00	NITRA modular T-bracket, for use with Ax-6 series air prep components.	1.3
<a href="#">AB-6L</a>	\$30.00	NITRA modular L-bracket, for use with Ax-6 series air prep components.	1.2
<a href="#">AB-6U</a>	\$28.50	NITRA modular U-bracket, for use with Ax-6 series air prep components.	0.8



# Pneumatic Air Preparation Accessories



**Part No. [AFE2-43](#)**



**Part No. [AFE2-41](#)**



**Part No. [AFE-24](#)**



**Part No. [AFE-35](#)**

Pneumatic Air Preparation Accessories			
Part No.	Price	Description	Weight (lbs)
<b>NITRA Gen 2 Particulate Filters</b>			
<a href="#">AFE2-23</a>	\$1.50	NITRA particulate filter element, replacement, 40 micron particles, high-density polyethylene (HDPE). For use with AF-2 series filters or AFR-2 series filter regulators.	0.01
<a href="#">AFE2-33</a>	\$3.00	NITRA particulate filter element, replacement, 40 micron particles, high-density polyethylene (HDPE). For use with AF-3 series filters or AFR-3 series filter regulators.	0.01
<a href="#">AFE2-43</a>	\$4.25	NITRA particulate filter element, replacement, 40 micron particles, high-density polyethylene (HDPE). For use with AF-4 series filters or AFR-4 series filter regulators.	0.01
<a href="#">AFE2-63</a>	\$11.00	NITRA particulate filter element, replacement, 40 micron particles, high-density polyethylene (HDPE). For use with AF-6 series filters or AFR-6 series filter regulators.	0.04
<a href="#">AFE2-21</a>	\$1.50	NITRA particulate filter element, replacement, 5 micron particles, high-density polyethylene (HDPE). For use with AF-2 series filters or AFR-2 series filter regulators.	0.01
<a href="#">AFE2-31</a>	\$3.00	NITRA particulate filter element, replacement, 5 micron particles, high-density polyethylene (HDPE). For use with AF-3 series filters or AFR-3 series filter regulators.	0.01
<a href="#">AFE2-41</a>	\$4.25	NITRA particulate filter element, replacement, 5 micron particles, high-density polyethylene (HDPE). For use with AF-4 series filters or AFR-4 series filter regulators.	0.01
<a href="#">AFE2-61</a>	\$11.00	NITRA particulate filter element, replacement, 5 micron particles, high-density polyethylene (HDPE). For use with AF-6 series filters or AFR-6 series filter regulators.	0.04
<b>NITRA Coalescing Filters</b>			
<a href="#">AFE-24</a>	\$20.50	NITRA coalescing oil removal filter element, replacement, 0.3 micron particles, borosilicate glass microfiber. For use with AC-2 series coalescing filters.	0.05
<a href="#">AFE-34</a>	\$25.50	NITRA coalescing oil removal filter element, replacement, 0.3 micron particles, borosilicate glass microfiber. For use with AC-3 series coalescing filters.	0.05
<a href="#">AFE-44</a>	\$40.50	NITRA coalescing oil removal filter element, replacement, 0.3 micron particles, borosilicate glass microfiber. For use with AC-4 series coalescing filters.	0.1
<a href="#">AFE-25</a>	\$20.50	NITRA coalescing oil removal filter element, replacement, 0.01 micron particles, borosilicate glass microfiber. For use with AC-2 series coalescing filters.	0.04
<a href="#">AFE-35</a>	\$25.50	NITRA coalescing oil removal filter element, replacement, 0.01 micron particles, borosilicate glass microfiber. For use with AC-3 series coalescing filters.	0.05
<a href="#">AFE-45</a>	\$40.50	NITRA coalescing oil removal filter element, replacement, 0.01 micron particles, borosilicate glass microfiber. For use with AC-4 series coalescing filters.	0.1



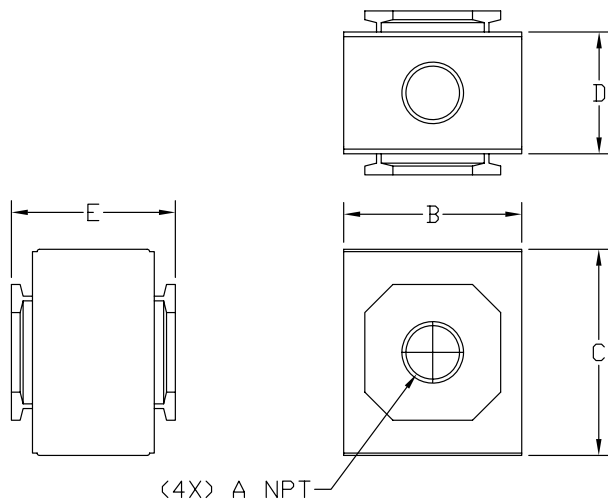
# Pneumatic Air Preparation Accessories

## Dimensions

mm [inches]

### ADB-x

PART NO.	A NPT	DIM B	DIM C	DIM D	DIM E
ADB-21	1/8	30.0 [1.18]	36.0 [1.42]	19.5 [0.77]	28.5 [1.12]
ADB-22	1/4	30.0 [1.18]	36.0 [1.42]	19.5 [0.77]	28.5 [1.12]
ADB-32	1/4	38.0 [1.50]	44.0 [1.73]	26.0 [1.02]	35.0 [1.38]
ADB-33	3/8	38.0 [1.50]	44.0 [1.73]	26.0 [1.02]	35.0 [1.38]
ADB-44	1/2	52.0 [2.05]	52.0 [2.05]	30.0 [1.18]	42.0 [1.65]



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# Pneumatic Air Preparation Accessories

## Dimensions

mm [inches]

### AB-xT

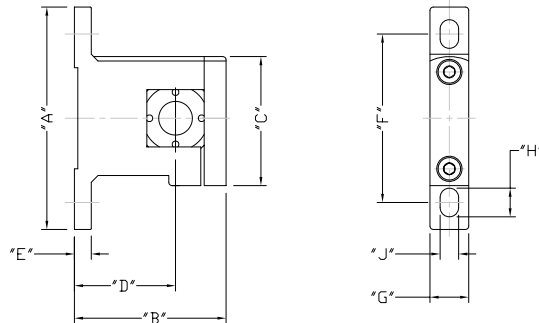


TABLE 1									
PART NUMBER	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"	DIM "F"	DIM "G"	DIM "H"	DIM "J"
AB-2T	66.0 [2.60]	45.0 [1.77]	38.3 [1.51]	30.0 [1.18]	5.0 [0.20]	50.0 [1.97]	11.5 [0.45]	8.5 [0.33]	5.5 [0.22]
AB-3T	88.0 [3.46]	60.5 [2.38]	49.3 [1.94]	41.5 [1.63]	7.0 [0.28]	70.0 [2.76]	12.5 [0.49]	9.0 [0.35]	6.5 [0.26]
AB-4T	104.0 [4.09]	76.0 [2.99]	58.5 [2.30]	50.0 [1.97]	7.0 [0.28]	80.0 [3.15]	15.5 [0.61]	12.0 [0.47]	8.6 [0.34]
AB-6T	128.0 [5.04]	104.0 [4.09]	79.5 [3.13]	70.0 [2.76]	10.0 [0.39]	100.0 [3.94]	19.5 [0.77]	16.0 [0.63]	11.0 [0.43]

### AB-xL

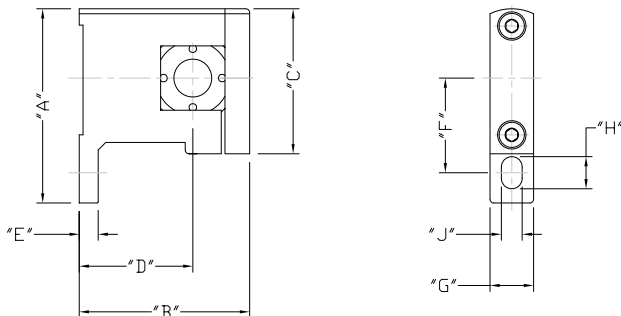


TABLE 1									
PART NUMBER	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"	DIM "F"	DIM "G"	DIM "H"	DIM "J"
AB-2L	51.3 [2.02]	45.0 [1.77]	38.3 [1.51]	30.0 [1.18]	5.0 [0.20]	25.0 [0.98]	11.5 [0.45]	8.5 [0.33]	5.5 [0.22]
AB-3L	68.6 [2.70]	60.5 [2.38]	49.3 [1.94]	41.5 [1.63]	7.0 [0.28]	35.0 [1.38]	12.5 [0.49]	9.0 [0.35]	6.5 [0.26]
AB-4L	79.5 [3.13]	76.0 [2.99]	58.5 [2.30]	50.0 [1.97]	7.0 [0.28]	40.0 [1.57]	15.5 [0.61]	12.0 [0.47]	8.6 [0.34]
AB-6L	103.5 [4.07]	104.0 [4.09]	79.5 [3.13]	70.0 [2.76]	10.0 [0.39]	50.0 [1.97]	19.5 [0.77]	16.0 [0.63]	11.0 [0.43]

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# Pneumatic Air Preparation Accessories

## Dimensions

mm [inches]

**AB-xU**

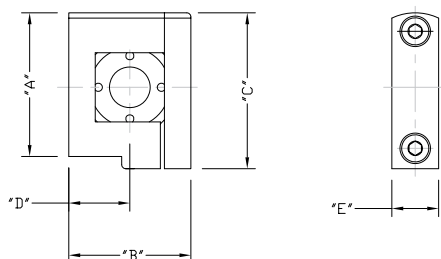


TABLE 1

PART NUMBER	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"
AB-2U	35.5 [1.39]	30.0 [1.18]	38.3 [1.51]	15.0 [0.59]	11.5 [0.45]
AB-3U	43.8 [1.72]	38.0 [1.50]	49.3 [1.94]	19.5 [0.75]	12.5 [0.49]
AB-4U	52.5 [2.07]	52.0 [2.05]	58.5 [2.30]	26.0 [1.02]	15.5 [0.61]
AB-6U	76.5 [3.01]	68.0 [2.68]	79.5 [3.13]	34.0 [1.34]	19.5 [0.77]

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