

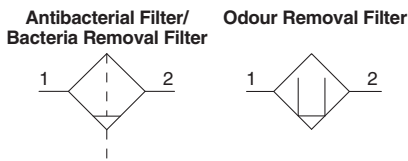
Antibacterial Filter

Odour Removal Filter

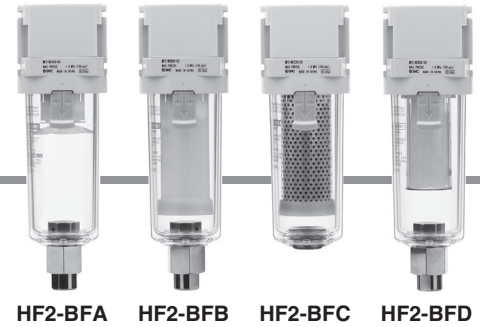
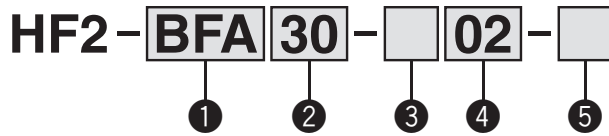
Bacteria Removal Filter

HF2-BF□30 to 40

Symbol



How to Order



		Symbol	Description	②		
				Body size		
				30	40	
①	Filter type	Antibacterial filter	BFA	Nominal filtration rating: 5 μm (Antibacterial activation value of 4 or above)	●	●
			BFB	Nominal filtration rating: 0.1 μm (Antibacterial activation value of 4 or above)	●	●
		Odour removal filter	BFC	Odour removal filter	●	●
		Bacteria removal filter	BFD	Nominal filtration rating: 0.01 μm (Bacteria capture performance LRV ≥ 9)	●	●
+						
③	Pipe thread type*1	—	Rc	●	●	
		N	NPT	●	●	
		F	G	●	●	
+						
④	Port size	02	1/4	●	●	
		03	3/8	●	●	
		04	1/2	—	●	
+						
⑤	Semi-standard	Flow direction	—	Flow direction: Left to right	●	●
			R	Flow direction: Right to left	●	●

*1 The drain ports are Rc1/8 (③ thread type: Rc thread), NPT1/8 female thread (③ thread type: N), and G1/8 female thread (③ thread type: G).
 * Pressure and temperature are represented in the following units. Pressure: MPa (psi), Temperature: °C (°F)



Antibacterial Filter HF2-BFA Series

Standard Specifications

Model	HF2-BFA30	HF2-BFA40
Port size	1/4, 3/8	1/4, 3/8, 1/2
Fluid	Compressed air, Nitrogen, Carbon dioxide (Gas)	
Ambient and fluid temperatures	-5 to 60 °C (23 to 140°F) No freezing	
Proof pressure	1.5 MPa (225 psi)	
Max. operating pressure*1	1.0 MPa (150 psi)	
Rated flow*2	400 l/min (ANR)	800 l/min (ANR)
Nominal filtration rating*3	5 μm (90 % filtered particle size)	
Antibacterial performance (Antibacterial activation value)*4	4 or higher	
Materials of parts in contact with fluid	Metal parts	Aluminium alloy, Brass (Electroless nickel plating)
	Bowl	Nylon (US FDA / Japan Food Sanitation Act compliant materials)
	Rubber parts	Fluororubber (US FDA compliant material)
	Lubricant	NSF-H1 grade
Bowl guard	Nylon (Antibacterial specification)	
Weight	0.27 kg	0.45 kg

*1 For Nitrogen and Carbon dioxide (Gas): 0.99 MPa (145 psi)

*2 This value is achieved when the inlet pressure is 0.7 MPa and when combined with a bacteria removal filter (HF2-BFD30/40).

*3 Based on SMC's measurement conditions

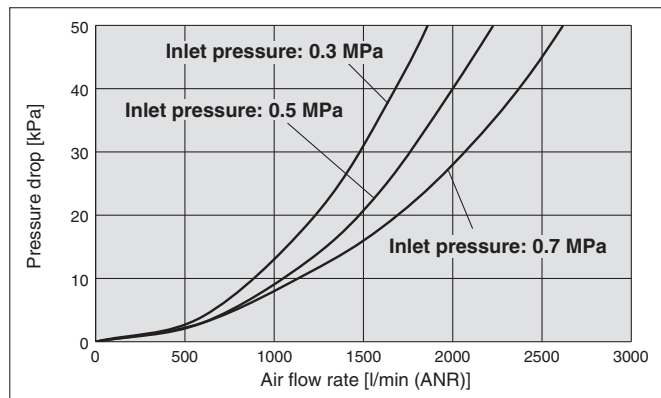
*4 This data is achieved from the evaluation of the filter media (fiber) in accordance with JIS L 1902.

* Refer to the chemical data on page 20 for chemical resistance of the bowl.

Flow Rate Characteristics

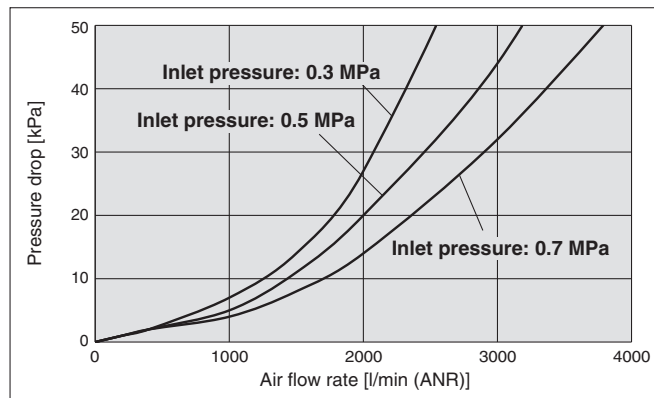
HF2-BFA30

Rc3/8



HF2-BFA40

Rc1/2



HF2-BF □

HF2-BAC

Accessories

Specific Product Precautions

HF2-BF 30 to 40



Antibacterial Filter HF2-BFB Series

Standard Specifications

Model		HF2-BFB30	HF2-BFB40
Port size		1/4, 3/8	1/4, 3/8, 1/2
Fluid		Compressed air, Nitrogen, Carbon dioxide (Gas)	
Ambient and fluid temperatures		-5 to 60 °C (23 to 140°F) No freezing	
Proof pressure		1.5 MPa (225 psi)	
Max. operating pressure*1		1.0 MPa (150 psi)	
Rated flow*2		400 l/min (ANR)	800 l/min (ANR)
Nominal filtration rating*3		0.1 μm (99 % filtered particle size)	
Antibacterial performance (Antibacterial activation value)*4		4 or higher	
Materials of parts in contact with fluid	Metal parts	Aluminium alloy, Brass (Electroless nickel plating)	
	Bowl	Nylon (US FDA / Japan Food Sanitation Act compliant materials)	
	Rubber parts	Fluororubber (US FDA compliant material)	
	Lubricant	NSF-H1 grade	
Bowl guard		Nylon (Antibacterial specification)	
Weight		0.27 kg	0.46 kg

*1 For Nitrogen and Carbon dioxide (Gas): 0.99 MPa (145 psi)

*2 This value is achieved when the inlet pressure is 0.7 MPa and when combined with a bacteria removal filter (HF2-BFD30/40).

*3 Based on SMC's measurement conditions

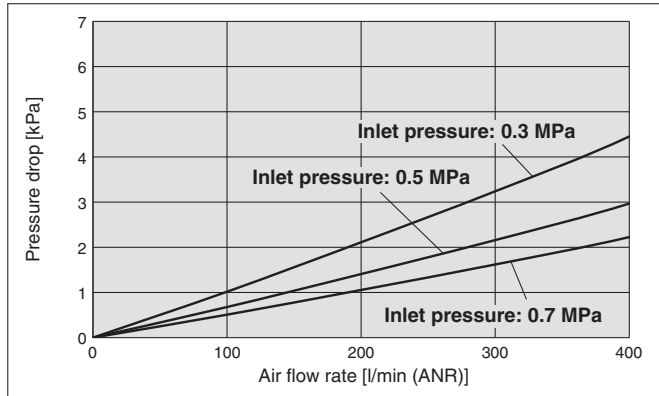
*4 This data is achieved from the evaluation of the filter media (fiber) in accordance with JIS L 1902.

* Refer to the chemical data on page 20 for chemical resistance of the bowl.

Flow Rate Characteristics

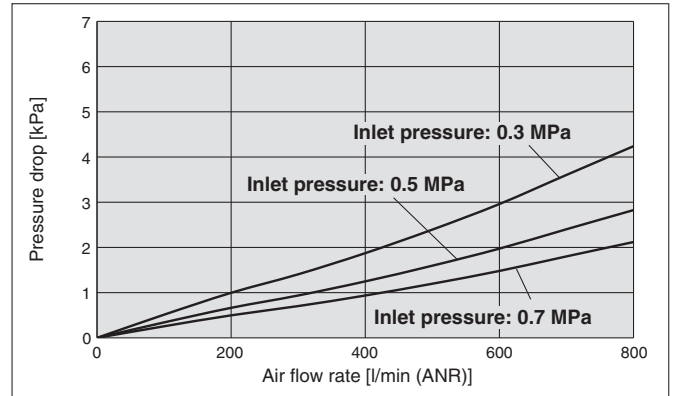
HF2-BFB30

Rc3/8



HF2-BFB40

Rc1/2





Odour Removal Filter HF2-BFC Series

Standard Specifications

Model		HF2-BFC30	HF2-BFC40
Port size		1/4, 3/8	1/4, 3/8, 1/2
Fluid		Compressed air, Nitrogen, Carbon dioxide (Gas)	
Ambient and fluid temperatures		-5 to 60 °C (23 to 140°F) No freezing	
Proof pressure		1.5 MPa (225 psi)	
Max. operating pressure*1		1.0 MPa (150 psi)	
Rated flow*2		400 l/min (ANR)	800 l/min (ANR)
Deodourization performance (Oil concentration on the outlet side)		0.003 mg/m ³ or less	
Materials of parts in contact with fluid	Metal parts	Aluminium alloy, Brass (Electroless nickel plating), Stainless steel	
	Bowl	Nylon (US FDA / Japan Food Sanitation Act compliant materials)	
	Rubber parts	Fluororubber (US FDA compliant material)	
	Lubricant	NSF-H1 grade	
Bowl guard		Nylon (Antibacterial specification)	
Weight		0.20 kg	0.41 kg

*1 For Nitrogen and Carbon dioxide (Gas): 0.99 MPa (145 psi)

*2 This value is achieved when the inlet pressure is 0.7 MPa and when combined with an antibacterial filter (HF2-BFB30/40) or bacteria removal filter (BFD30/40).

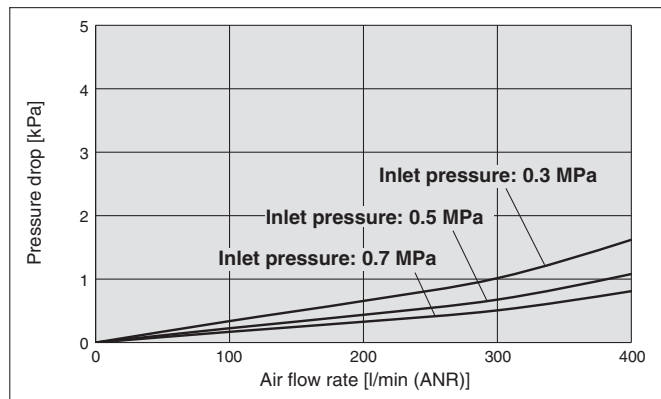
*3 Based on SMC's measurement conditions

* Refer to the chemical data on page 20 for chemical resistance of the bowl.

Flow Rate Characteristics

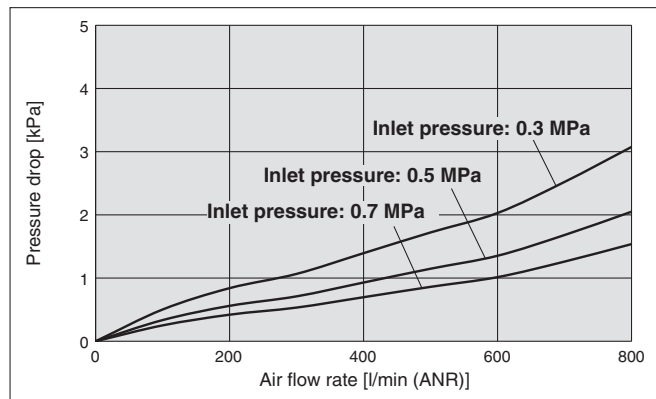
HF2-BFC30

Rc3/8



HF2-BFC40

Rc1/2



HF2-BF □

HF2-BAC

Accessories

Specific Product Precautions

HF2-BF 30 to 40



Bacteria Removal Filter HF2-BFD Series

Standard Specifications

Model		HF2-BFD30	HF2-BFD40
Port size		1/4, 3/8	1/4, 3/8, 1/2
Fluid		Compressed air, Nitrogen, Carbon dioxide (Gas)	
Ambient and fluid temperatures		5 to 45 °C (41 to 113°F)	
Proof pressure		1.5 MPa (225 psi)	
Max. operating pressure*1		1.0 MPa (150 psi)	
Rated flow*2		400 l/min (ANR)	800 l/min (ANR)
Nominal filtration rating*3		0.01 μm (99.99 % filtered particle size)	
Bacteria removal performance (Bacteria capture performance)		LRV ≥ 9*4	
Materials of parts in contact with fluid	Metal parts	Aluminium alloy, Brass (Electroless nickel plating)	
	Bowl	Nylon (US FDA / Japan Food Sanitation Act compliant materials)	
	Rubber parts	Fluororubber (US FDA compliant material)	
	Lubricant	NSF-H1 grade	
Bowl guard		Nylon (Antibacterial specification)	
Weight		0.28 kg	0.46 kg

*1 For Nitrogen and Carbon dioxide (Gas): 0.99 MPa (145 psi)

*2 This value is achieved when the inlet pressure is 0.7 MPa.

*3 Based on SMC's measurement conditions

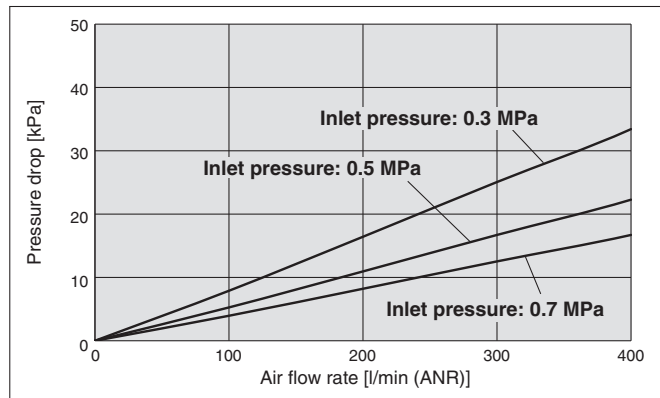
*4 This data is achieved from the evaluation of the filter media in accordance with JIS K 3835.

* Refer to the chemical data on page 20 for chemical resistance of the bowl.

Flow Rate Characteristics

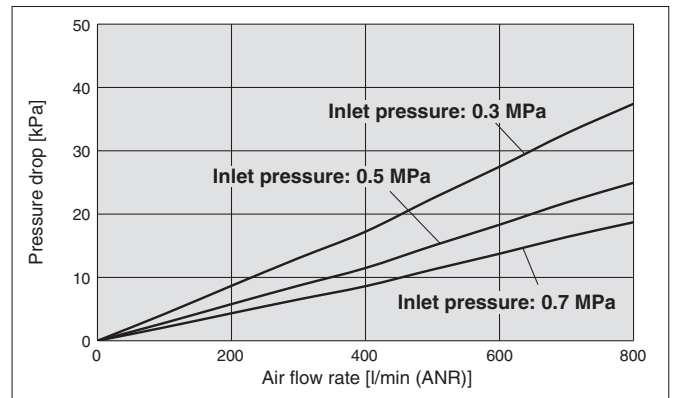
HF2-BFD30

Rc3/8



HF2-BFD40

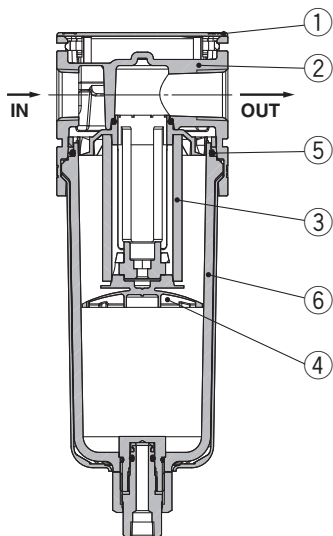
Rc1/2



HF2-BF□30 to 40

Construction

HF2-BFA30 to 40



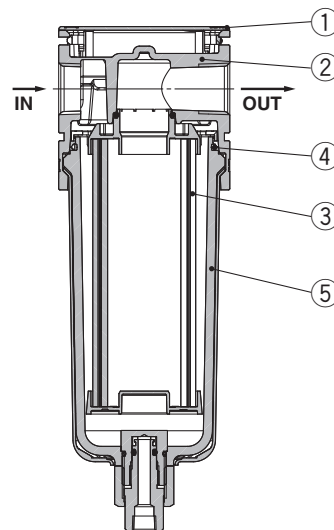
Component Parts

No.	Description	Material
1	Body cover	Resin (Antibacterial specification)
2	Body	Aluminium die-cast (Antibacterial coating)
4	Baffle	Resin (US FDA / Japan Food Sanitation Act compliant materials)
5	Bowl seal	Fluororubber (US FDA compliant material)
6	Bowl assembly	Resin (US FDA / Japan Food Sanitation Act compliant materials) Resin (Antibacterial specification)

Replacement Parts

No.	Description	Part no.	
		30	40
3	Filter element	BFA30P-060S	BFA40P-060S

HF2-BFB30 to 40



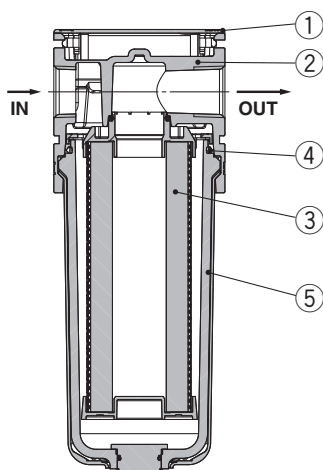
Component Parts

No.	Description	Material
1	Body cover	Resin (Antibacterial specification)
2	Body	Aluminium die-cast (Antibacterial coating)
4	Bowl seal	Fluororubber (US FDA compliant material)
5	Bowl assembly	Resin (US FDA / Japan Food Sanitation Act compliant materials) Resin (Antibacterial specification)

Replacement Parts

No.	Description	Part no.	
		30	40
3	Filter element	BFB-EL30	BFB-EL40

HF2-BFC30 to 40



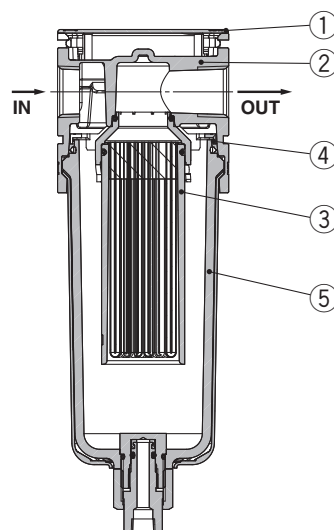
Component Parts

No.	Description	Material
1	Body cover	Resin (Antibacterial specification)
2	Body	Aluminium die-cast (Antibacterial coating)
4	Bowl seal	Fluororubber (US FDA compliant material)
5	Bowl assembly	Resin (US FDA / Japan Food Sanitation Act compliant materials) Resin (Antibacterial specification)

Replacement Parts

No.	Description	Part no.	
		30	40
3	Filter element	BFC-EL30	BFC-EL40

HF2-BFD30 to 40



Component Parts

No.	Description	Material
1	Body cover	Resin (Antibacterial specification)
2	Body	Aluminium die-cast (Antibacterial coating)
4	Bowl seal	Fluororubber (US FDA compliant material)
5	Bowl assembly	Resin (US FDA / Japan Food Sanitation Act compliant materials) Resin (Antibacterial specification)

Replacement Parts

No.	Description	Part no.	
		30	40
3	Filter element	BFD-EL30	BFD-EL40

HF2-BF□

HF2-BAC

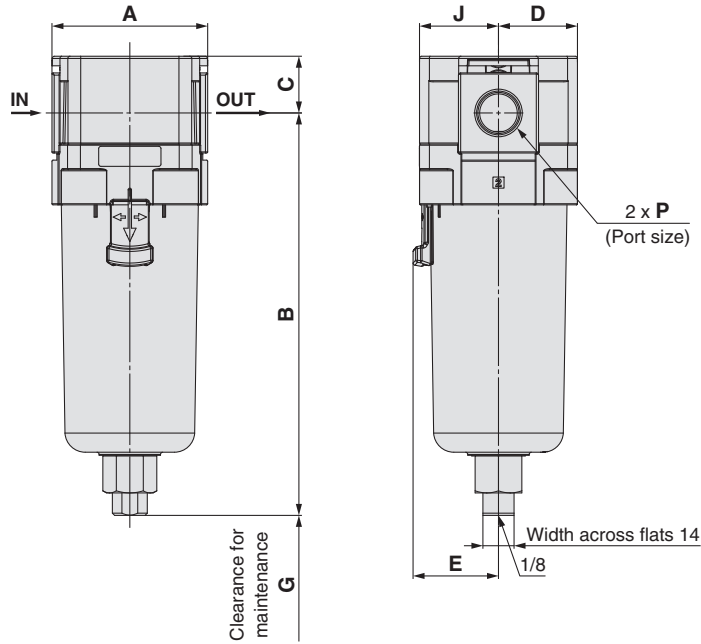
Accessories

Specific Product Precautions

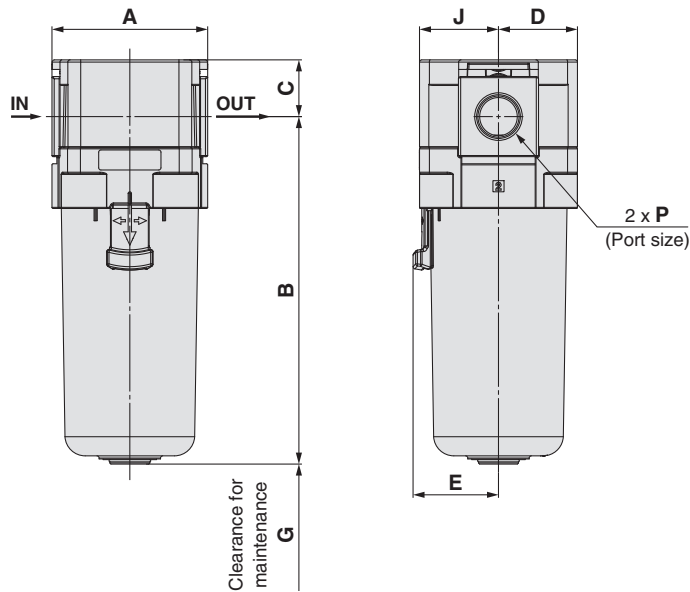
HF2-BF□30 to 40

Dimensions

HF2-BFA30/40, HF2-BFB30/40, HF2-BFD30/40



HF2-BFC30/40



Model	P	A	B	C	D	E	G	J
HF2-BFA30	1/4, 3/8	53	151.1	21.5	26.5	30	35	26.5
HF2-BFB30	1/4, 3/8	53	151.1	21.5	26.5	30	35	26.5
HF2-BFC30	1/4, 3/8	53	126.4	21.5	26.5	30	35	26.5
HF2-BFD30	1/4, 3/8	53	151.1	21.5	26.5	30	35	26.5
HF2-BFA40	1/4, 3/8, 1/2	70	180.9	25.5	35.5	38.4	40	35.5
HF2-BFB40	1/4, 3/8, 1/2	70	180.9	25.5	35.5	38.4	40	35.5
HF2-BFC40	1/4, 3/8, 1/2	70	156.2	25.5	35.5	38.4	40	35.5
HF2-BFD40	1/4, 3/8, 1/2	70	180.9	25.5	35.5	38.4	40	35.5