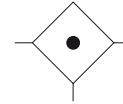


Mini Coalescing and Adsorber Filters - P31

Symbol



- Integral 1/4" ports (NPT, BSPP & BSPT)
- Removes liquid aerosols and sub micron particles
- Oil free air for critical applications, such as air gauging, pneumatic instrumentation and control
- Differential Pressure Indicator (DPI) standard on Coalescing Filters
- Positive bayonet latch to ensure correct and safe fitting
- Adsorbing activated carbon element removes oil vapors and most hydrocarbons

Note: To optimize the life of coalescing element, it is advisable to install a P31F pre-filter with a 5 micron element upstream of the coalescing filter.

To optimize the life of an Adsorber it is advisable to install a P31 Coalescing Filter upstream of the Adsorber. Adsorber element should be replaced approximately every 1000 hours of service.

Options:

P31FB		9	2	D	G	M	N	
Basic series		Thread type		Port size		Mounting		
Global modular mini coalescing filter P31FB		BSPP 1	BSPT 2	1/4" 2	B Pulse drain		N No bracket	
		NPT 9	Element		M Manual drain		Bowl type	
		0.01µ Element C		G Poly bowl with bowl guard		M Metal bowl without sight gauge		
		0.01µ Element with DPI D						
		1µ Element 9						
		1µ Element with DPI Q						
		Adsorber A						

Bold items are most common.

Port size	Description	Flow [†] dm ³ /s (scfm)	Max. bar (psig)	Height mm (inches)	Width mm (inches)	Depth mm (inches)	Part number [†]
1/4"	Poly bowl - 0.01 micron - manual drain	3.6 (7.5)	10 (150)	136.9 (5.39)	40 (1.58)	40 (1.58)	P31FB92DGMN
1/4"	Poly bowl - 0.01 micron - pulse drain	3.6 (7.5)	10 (150)	131.7 (5.19)	40 (1.58)	40 (1.58)	P31FB92DGBN
1/4"	Metal bowl - 0.01 micron - manual drain	3.6 (7.5)	10 (150)	136.9 (5.39)	40 (1.58)	40 (1.58)	P31FB92DMMN
1/4"	Metal bowl - 0.01 micron - pulse drain	3.6 (7.5)	10 (150)	131.7 (5.19)	40 (1.58)	40 (1.58)	P31FB92DMBN

[†] Standard part numbers shown in bold. For other models refer to Options chart above.

[‡] Flow with 6.3 bar (91.3 psig) inlet pressure and 0.2 (3 psig) pressure drop.

Specifications

Flow capacity		
1.0 micron coalescing		5.5 dm ³ /s (12 scfm)
0.01 micron coalescing		3.6 dm ³ /s (7.5 scfm)
Activated carbon adsorber		6 dm ³ /s (12.7 scfm)
Operating temperature	Plastic bowl	-10°C to 52°C (14°F to 125°F)
	Metal bowl	-10°C to 65.5°C (14°F to 150°F)
Max. supply pressure	Plastic bowl	10 bar (150 psig)
	Metal bowl	10 bar (150 psig) [§]
Standard filtration		1.0 and 0.01 micron
Adsorber	Max. oil carryover (ppm w/w)	0.003 @ 21°C (70°F)
Useful retention [†]		12 cm ³ (0.4 US oz.)
Port size	BSPP / BSPT / NPT	1/4
Weight		0.11 kg (0.24 lbs)

Inlet pressure 6.3 bar (91.3 psig), Pressure drop 0.2 bar (3 psig), Saturated Element.

[†] Useful retention refers to volume below the quiet zone baffle.

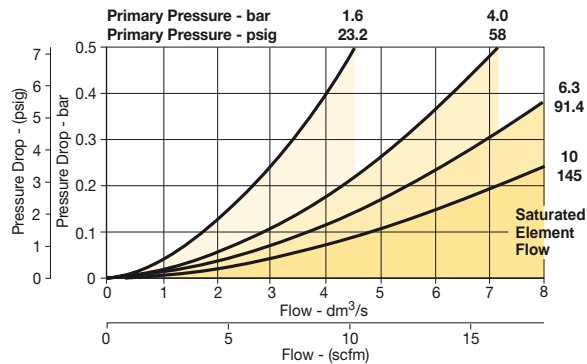
[§] Without pressure indicator (DPI) – max. pressure for metal bowl version is 17 bar (250 psig).

Material Specifications

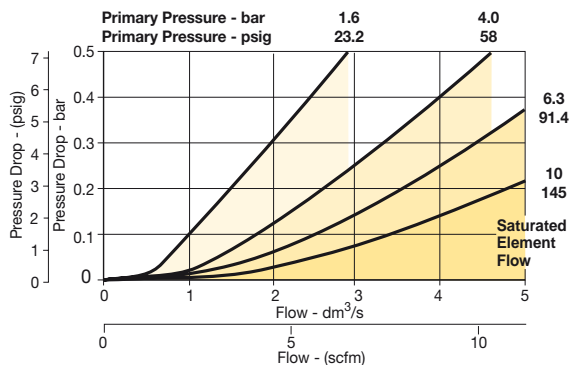
Body	Aluminum	
Body cap	ABS	
Bowl	Plastic bowl	Polycarbonate
	Metal bowl	Aluminum
Filter element	1.0 and .01 micron	Borosilicate cloth
Adsorber	Activated carbon	
Seals	Nitrile	

Flow Charts

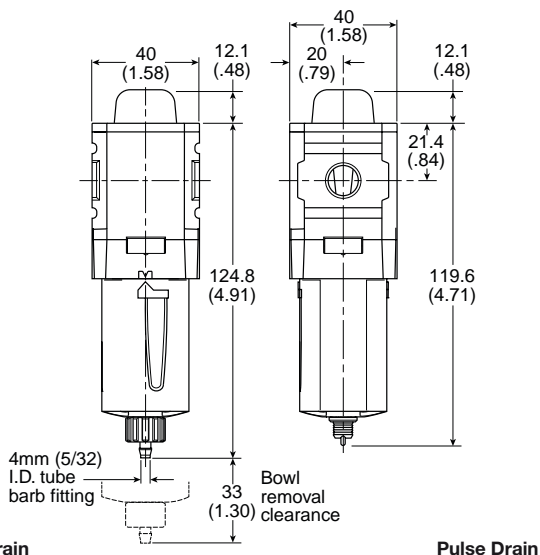
P31 - 1.0 micron flow



P31 - 0.01 micron flow



Dimensions mm (inches)



Repair and Service Kits

Plastic bowl / Bowl guard manual drain	P31KB00BGM
Metal bowl / w/o sight gauge manual drain	P31KB00BMM
Plastic bowl / Bowl guard pulse drain	P31KB00BGB
Metal bowl / w/o sight gauge pulse drain	P31KB00BMB
1µ coalescing filter element	P31KA00ES9
0.01µ coalescing filter element	P31KA00ESC
Activated carbon adsorber filter element	P31KA00ESA
C-bracket (fits to body)	P31KA00MW
T-bracket with body connector	P31KA00MT
Body connector	P31KA00CB
Differential pressure indicator (replacement)	P31KB00RQ