

Mini Coalescing and Adsorber Filters P31



- Integral 1/4 ports (BSPP & NPT)
- Removes liquid aerosols and sub micron particles
- Oil free air for critical applications, such as air gauging, pneumatic instrumentation and control
- Positive bayonet latch to ensure correct & safe fitting
- Adsorbing activated carbon element removes oil vapours and most hydrocarbons

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

Options:

P 3 1	F A						N
Thread type		Port size		Bowl type		Mounting	
BSPP	1	1/4	2	Poly bowl with bowl guard	G	No bracket	N
NPT	9			Metal bowl without sight glass	M		
Element				Drain type			
0.01µ Element		C		Pulse drain		B	
1µ Element		9		Manual drain		M	
Adsorber		A					

Port size	Description	Order Code	Flow dm ³ /s (scfm) *	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/4"	Poly bowl - 0.01 micron - Manual drain	P31FA12CGMN	2 (4.2)	10 (150)	116.3 (4.58)	40 (1.58)	42.7 (1.68)
1/4"	Poly bowl - 0.01 micron - Pulse drain	P31FA12CGBN	2 (4.2)	10 (150)	116.3 (4.58)	40 (1.58)	42.7 (1.68)
1/4"	Metal bowl - 0.01 micron - Manual drain	P31FA12CMMN	2 (4.2)	17 (250)	116.3 (4.58)	40 (1.58)	42.7 (1.68)
1/4"	Metal bowl - 0.01 micron - Pulse drain	P31FA12CMBN	2 (4.2)	17 (250)	116.3 (4.58)	40 (1.58)	42.7 (1.68)
1/4"	Poly bowl - Adsorber	P31FA12AGMN	6 (13)	10 (150)	116.3 (4.58)	40 (1.58)	42.7 (1.68)
1/4"	Metal bowl - Adsorber	P31FA12AMMN	6 (13)	17 (250)	116.3 (4.58)	40 (1.58)	42.7 (1.68)

* flow with 6.3 bar (91.3 psig) inlet pressure and 0.2 bar (3 psig) pressure drop.

Specifications

Flow Capacity		dm ³ /s SCFM
1.0 Micron Coalescing	Energy Efficient Flow*	3.8 (8)
	Maximum Flow**	6 (13)
0.01 Micron Coalescing	Energy Efficient Flow*	2 (4.2)
	Maximum Flow**	3.8 (8)
Activated Carbon Adsorber	Rated Flow*	6 (13)
Operating Temperature	Plastic Bowl	-10°C (14°F) to 52°C (125°F)
	Metal Bowl	-10°C (14°F) to 65.5°C (150°F)
Max Supply Pressure	Plastic Bowl	10 bar (150 psi)
	Metal Bowl	17 bar (250 psi)
Standard Filtration**		1.0 and 0.01 Micron ppm wt
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 / NPT	1/4
Weight		0.11 kg (0.24 lbs)

* Inlet pressure 6.3 bar (90 psi), Pressure drop 0.2 bar (3 psig), Saturated Element.

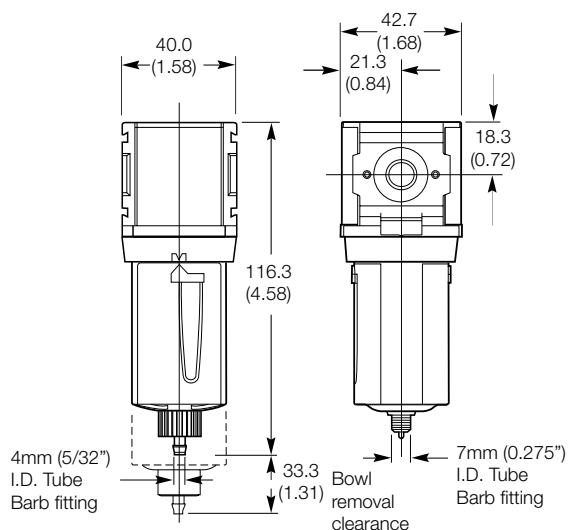
** Inlet pressure 6.3 bar (90 psi), Pressure drop 0.4 bar (6 psig), Saturated Element.

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

Materials of Construction

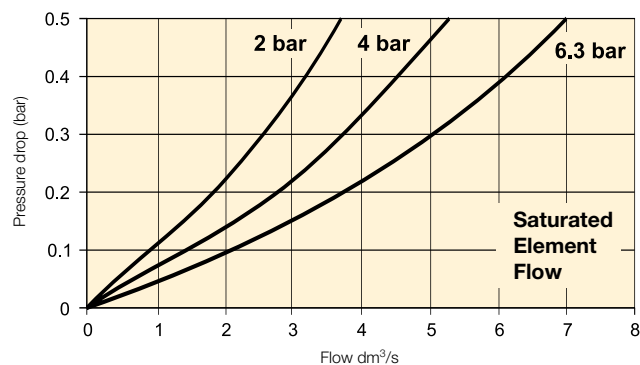
Body	Aluminium	
Body Cap	ABS	
Bowl	Plastic Bowl	Polycarbonate
	Metal Bowl	Aluminium
Filter Element	1.0 and .01 Micron	Borosilicate Cloth
Adsorber	Activated Carbon	
Seals	Nitrile	

Dimensions

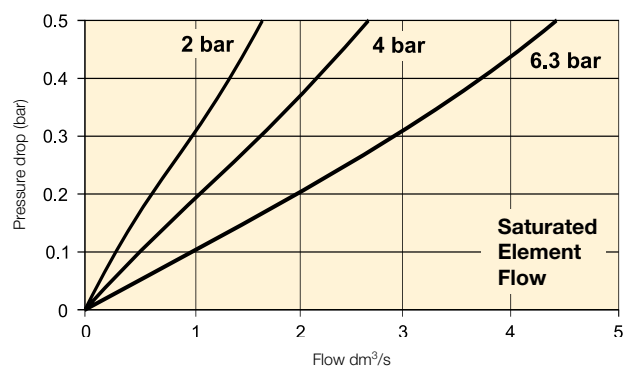


Flow Charts

P31 - 1.0 micron flow



P31 - 0.01 micron flow



Repair and Service Kits

Plastic bowl / Bowl guard manual drain	P31KA00BGM
Metal bowl / w/o sight gauge manual drain	P31KA00BMM
Plastic bowl / Bowl guard pulse drain	P31KA00BGB
Metal bowl / w/o sight gauge pulse drain	P31KA00BMB
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