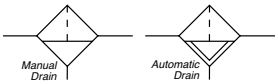
PF504 Particulate Filters – Miniature

- Stainless steel construction handles most corrosive environments
- Fluorocarbon seals standard
- Meets NACE specifications MR-01-75/ISO 15156
- 1/8" female threaded drain
- 1/4" port (NPT, BSPP)



Port Size	Description	Part Number
1/4"	Twist Drain, NPT	**PF504-02DHSS**
1/4"	Auto Pulse Drain, NPT	**PF504-02DHRSS**

Operating information

Operating pressure:	
Twist drain	0 to 300 psig (0 to 20.7 bar)
Auto pulse drain	10 to 175 psig (0 to 12 bar)
Operating temperature:	
Twist drain	0°F to 180°F (-18°C to 82°C)
Auto pulse drain	32°F to 150°F (0°C to 66°C)
Flow capacity†:	23 scfm (10.9 dm^3/s, ANR)
Bowl capacity:	1.0 oz.
Filter rating:	20 micron
Sump capacity:	0.4 oz.
Weight:	0.6 lb (0.27 kg)

Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (0°C)

† scfm = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

Ordering Information:

PF504 – 02 D H ☐ SS

Port Type	
NPT	–
BSPP	G

Port Size	
1/4 inch	02

Bowl Type	
Metal Bowl without Sight Gauge	D

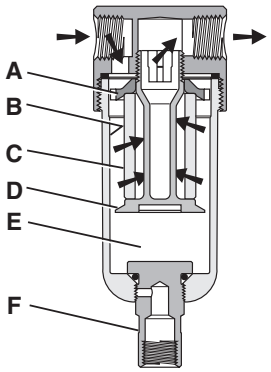
Element	
H	20 micron
G	5 micron

Option	
Blank	Manual Twist Drain
R	Auto Pulse Drain

Material	
SS	Stainless Steel

☐ Most popular.

Operation

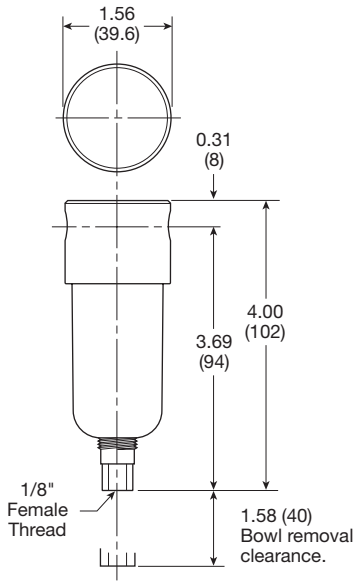


First Stage Filtration:

Air enters at inlet port and flows through deflector plate **(A)** which causes a swirling action. Liquids and coarse particles are forced to the bowl interior wall **(B)** by the centrifugal action of the swirling air. They are then carried down the bowl wall by the force of gravity. The baffle **(D)** separates the lower portion of the bowl into a "quiet zone" **(E)** where the removed liquid and particles collect, unaffected by the swirling air, and are therefore not reentrained into the flowing air.

Second Stage Filtration:

After liquids and large particles are removed in the first stages of filtration, the air flows through element **(C)** where smaller particles are filtered out. The filtered air then passes downstream. Collected liquids and particles in the "quiet zone" **(E)** should be drained before their level reaches a height where they would be reentrained in the flowing air. This can be accomplished by unscrewing the drain valve **(F)** slightly until the liquid begins to drain.



Inches (mm)

Material Specifications

Body	316 stainless steel
Bowls	316 stainless steel
Deflector	Acetal
Drain	316 stainless steel
Element holder	Acetal
Filter element	Polyethylene
Seals	Fluorocarbon

Repair and Service Kits

Auto pulse drain	**RK504SY-SS**
Manual twist drain (small, old)	**SA600Y7-1SS**
Manual twist drain (large, new)	**SAP05481**
5 micron element	**EK504VY**
20 micron element	**EK504Y**
Pipe nipple, 1/4" 316 stainless steel	**1/4 FF-SS**

Flow Charts

PF504 1/4" Filter