### RELIABILITY BY DESIGN



Improve Plant
Production
and Minimize
Maintenance
Costs for
Sensitive
Air and Gas
Handling
Systems.

# Introducing the GP line of gas filters from R.P. Adams.

No matter what the industry, contamination of gas streams such as compressed air and natural gas can dramatically increase maintenance costs and product rejects - and even shut your process or plant down.

That's why leading companies all over the world rely on R.P. Adams gas filters to prevent clogging and friction wear caused by slime, pipe scale and rust, as well as airborne particles including dirt, oils, carbon and moisture.

And with the introduction of high-performance GP Filters, you simply can't find more effective or reliable filtration to protect sensitive process equipment such as control valves and pneumatic tools. Just what you'd expect from the pioneer of advanced filtration technology.

#### BENEFITS AT A GLANCE

- Two-step separation process.
- Nominal five micron filtration.
- Rugged design and construction provides long-term reliability.
- Inline connections, easy to install.
- Durable permanent element withstands repeated cleanings to extend tube life.
- Withstands operating temperatures up to 650°F and pressures to 500 PSIG.
- Designed for, and can be certified to, ASME Code, Section VIII, Division 1.

#### FILTER FEATURES

## Two-Step Separation Guarantees Maximum Filtration

Gas is directed in a tangential flow around the element and against the inside wall, providing centrifugal separation of larger particles and droplets. Contaminants are captured in patented vertical slots located on the filter's side walls. A gas flow interrupter at the bottom of the unit improves draining efficiency and reduces condensate pick-up from liquid collected before the drain. The gas is then diffused through the Poro-Stone tube to achieve maximum filtration.

#### **Rugged Construction**

The Poro-Stone element and corrosion-resistant cast ductile iron filter body on sizes 1/2" to 3" withstand temperatures up to 650 F. For sizes 4" and larger, a combination of fabricated carbon steel and cast iron is furnished. Units also are available in stainless steel construction.

#### **Meeting Industry Standards**

GP filters are designed for, and can be certified to meet the requirements of Section VIII, Division 1, of the ASME code.

#### **Design Pressures to 500 PSIG**

GP Filters are capable of handling pressures up to 500 PSIG. Standard units with design pressures of 150 PSIG and 300 PSIG are available from stock.

#### Inline Process Connections Easy Installation

Inlet and outlet connections are in line with process piping to simplify installation.



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#### APPLICATIONS

#### Protects Sensitive Instrumentation and Pneumatic Equipment

Prevents clogging and friction wear caused by dirt, pipe scale and entrained water or oil. Filters can be used at the point of use, or in the main process stream.

#### **Demister**

When near fog conditions are a problem, two GP filters in series can provide superior demisting and filtration.

#### Flame Arrester

The GP filter can serve as an excellent flame arrester to protect expensive process equipment.

## ELEMENT FEATURES

#### **Five Micron Filtration**

The Poro-Stone element is capable of nominal five micron filtration, making it suitable for the removal of cellular structures such as bacteria and slime.

#### **Durable Tube Construction**

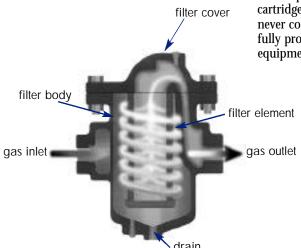
Filter element is an aluminum oxide with silica bond inert ceramic structure which provides superior durability to handle the toughest applications. There are no moving parts. The Poro-Stone tube is directly attached to the filter cover which makes it easy to remove and replace the element.

#### Cleanable Filter Element

The Poro-Stone element can be cleaned and reused for years of effective filtration.

#### **Guaranteed Protection**

Unlike paper or polyester cloth cartridges, the Poro-Stone element will never collapse, even when plugged, to fully protect your process and processing equipment.



## GP Filters for Gas Service Capacity in SCFM based on operating pressure noted below

Size	Model	50 PSIG	100 PSIG	150 PSIG	250 PSIG	300 PSIG
1/2″	GP-22	30	40	50	65	70
3/4"	GP-31	95	130	155	195	215
1″	GP-47	125	165	195	250	275
1 1/2″	GP-99	235	310	375	475	515
2"	GP-132	335	450	540	685	745
3″	GP-283	705	935	1,120	1,425	1,550
4"	GP-508	835	1,115	1,335	1,695	1,850
6"	GP-1527	3,145	4,185	5,015	6,360	6,935