

Cartridge Filters Nowata PGR Series

Gas Coalescing Filter Element

1. Introduction

The PGR gas coalescing filter cartridge is a compressed air coalescer and particulate removal filter. It will remove oil and water aerosols as well as up to 0.3 micron of fine particulates from a gas stream.

Although the PGR cartridge will remove particulate, it is recommended that a particle filter be installed upstream of the coalescing filter. This will significantly extend the life and improve the removal efficiency of the PGR cartridge.

Flow is from the inside to the outside of the cartridge. Particulates are removed on the inside of the filter by normal filtration mechanisms. Oil aerosols pass through the filter media where their reduced velocities allow them to form larger droplets, which coalesce and drain to the bottom of the filter cartridge housing. The housing should have an extended sump area for the collection of coalesced liquids.

Features

- Coalescing removal of oil aerosols protects valuable downstream equipment and preserves process purity
- Removes particulates up to 0.3 micron
- Double open end configuration with Buna or Viton flat gaskets
- Filter media is pleated micro fiberglass layers
- 304 Stainless Steel shell, core and end caps assure long life. High quality stainless steel components give longer service life without harmful corrosion
- Maximum recommended operating temperature 300 °F



2. Applications for the PGR Series Cartridges

Use the PGR filter at the final liquid removal stage in fuel and instrument gas/air applications. It also can be used as a pre-filter for compressed air and gas dryers or a final filter for air operated instruments, paint spray equipment and other pneumatic devices requiring oil and particulate free compressed gas or air.

Note: The filter must be installed in the housing in a reverse flow position. This procedure reverses the gas flow direction in the filter housing.

3. Cartridge Specifications

Recommended change-out differential pressure: 12 - 14 psid

Recommended initial differential pressure: <2.0 psid

Configuration: Double open end with flat gaskets

Maximum operating temperature: 300 °F

Micron rating: 0.3 μ

Product Name	Description	Cartridge Length (inches)	Recommended Flow SCFM of Air (at 100 psig)
1PGR	Reverse Flow, BUNA End Gasket	10 inches	60
1PGR-V	Reverse Flow, VITON End Gasket	10 inches	60
2PGR	Reverse Flow, BUNA End Gasket	20 inches	120
3PGR	Reverse Flow, BUNA End Gasket	30 inches	180

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