

Finite High Pressure Coalescers Clean Natural Gas Required to Operate Field Instrumentation

Market Application Publication



Background

In natural gas processing plants, compressor stations, gathering stations, refineries, and other gas applications, compressed natural gas is a readily available source of fuel to operate various types of instrumentation. If not protected with a filter, instrumentation could become fouled with contaminants and will eventually fail to operate properly. This leads to costly repairs and downtime. A small investment in a high efficiency filter/coalescer is good insurance to protect instrumentation. Filters can be used to protect a large assortment of instruments such as valve actuators, positioners, level controllers, regulators, and others.



Contact Information

Parker Hannifin Corporation
**Industrial Gas Filtration
and Generation Division**
4087 Walden Avenue
Lancaster, NY 14086
parker.com/igfg

phone 716 686 6400
800 343 4048

Benefits

- Design pressure of 500-3600 psi allows housing to be used in a wide range of pressure applications.
- Finite .3 micron rated filters provide excellent protection to remove solids and or liquids.
- Can be installed with either piping or tubing without the need of a separate bracket
- Depending upon media grade and operating pressure, flow rates can range up to 473 scfm
- Ease of service

Features

- High pressure housing
- High efficiency filter elements
- Light weight
- High flow rates

Application

In a dehydration/compressor station plant, a Finite FFC-112 is used to protect a differential pressure transmitter on the plant inlet gas filter/separator. When filters become clogged with contaminate, the differential increases across the filters. When a predetermined differential pressure is reached, the transmitter sends an alarm to a remote location indicating that the filters need to be changed. A crew is then dispatched to change the filters. If the filters are not changed in time, they could collapse. Protecting the transmitter assures trouble free operation.

In a remote field gas gathering transmission line, natural gas is used to operate various instruments. If not protected, the instruments will fail to operate properly. A Finite FFC-112 is used to protect various instruments including valve actuators, dryers and solenoid valves.

Safety is a high priority in all natural gas process plants. Prior to entry, most companies require all people to go through some level of safety training. This includes company employees, contractors, vendors, and visitors. One subject typically covered is the various types of sirens that could be heard inside a plant. Different sounds are used for specific emergencies. Some examples are for fire, toxic gas releases, evacuation and all clear signals. Some sirens are operated by compressed air. To assure the siren operates properly at all times, a Finite FFC-112 is used to protect the siren from solids and liquids.



Product Specifications

Pressure	3600 psi, 4:1 burst strength
Temperature	225°F
Connection Sizes	1/4" NPT or 9/16" SAE
Drain	SAE 6 (consult factory for drain valve)
Weight	1.5 lbs. (0.68 kg)
Dimensions	4.75" L x 2.25" W (12cm x 5.7cm)
Elements	Finite Grade 6 (0.3 micron) or Finite Grade 10 (0.7 micron)
Materials of Construction	
Head	Anodized Aluminum
Bowl	Anodized Aluminum
Seals	Buna-N