



## Clean Dry • Fuels • Oils • Gasses with High Performance *Aquacon*® Filter Cartridges

### FEATURING

- Free and emulsified water to less than 5 ppm
- 1/2 micrometer particulate removal
- Provides protection against “slugs” of water
- Pressure increase signals cartridge change
- Use with existing filter housings

### DESCRIPTION

The VF-31E is a versatile filter housing designed for use with several different high performance *Aquacon* filter cartridges. Cartridges are offered for the optimum filtration of aviation fuel (see caution on reverse side), gasoline, diesel fuel, oils, compressed air, and other gasses. Refer to the Cartridge Selection Table on the reverse side of this sheet for details.

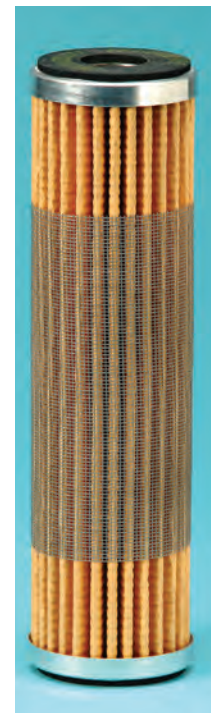
*Aquacon* filters eliminate water contamination problems by removing water from fuels, oils, and gasses. Filtered water is chemically locked into the cartridge’s inner super-absorbent media.

As a cartridge reaches its water holding limit, the media expands very rapidly and restricts the flow of unfiltered material. This causes an increase in the differential pressure which signals the operator to replace the cartridge. When filtering fuels or compressed air, a saturated *Aquacon* cartridge will completely block the flow until it is replaced.

*Aquacon* Cartridges are also excellent dirt filters. Silt, rust, and other particulates are removed by the cartridge’s outer filter media. One-half, five, and 25 micron rated cartridges are available for use with fuels and oils. The ACA-210 cartridge, for use with compressed air and other gasses, has a 1 micron rating.



VF-31E  
Filter Housing



AC-21005  
Filter Cartridge



ACA-210  
Filter Cartridge

### APPLICATIONS

- |           |             |
|-----------|-------------|
| Fuels:    | Oils:       |
| Kerosene  | Insulating  |
| Diesel    | Hydraulic   |
| Biodiesel | Lubricating |
| Gasoline  |             |

Compressed Air and Other Gasses

## FILTER CARTRIDGE SELECTION TABLE

Product being filtered	Application	Cartridge P/N	Data Sheet	Type	Micron	Flow Rate (GPM)
Jet Fuel & Avgas <sup>(1)</sup>	Dirt & Free water	ACO-21001L	1681	<b>Aquacon</b> <sup>®</sup> (Absorbent)	0.5	1-15
Motor Gasoline		AC-21005	1582		5	
Gasohol	Dirt	FOG-21005	N/A	Paper filter	5	1-15
Diesel/ Biodiesel <sup>(1)</sup>	Dirt & Free water	AD-21025	1655	<b>Aquacon</b> <sup>®</sup> (Absorbent)	25	1-15
Oils		AC-21005	1582		5	
		AD-21025	1655		25	
Air/Gas		ACA-210	1689		1	100 SCFM @ 100 psig
	Dirt	FOS-210PLP5	N/A	Synthetic Filter	0.5	

(1) For Aviation and Diesel Fuel Systems, if system pressure can exceed 25 psi, **always** install pressure gauge or other means of determining differential pressure.

(2) See Data Sheet #1709 for absorbent cartridge (AC, AD) flow rates.

## SPECIFICATIONS

### Filter Housing VF-31E

- Recommended maximum flow rate: see table below
- Maximum operating pressure: 150 psi
- Material: cast aluminum head, carbon steel bowl with epoxy painted interior and exterior
- Inlet/Outlet Connection: 1" NPT
- Inlet/Outlet face-to-face: 4"
- Mounting holes in head: four 1/4-20 NC
- Seal: Buna-N gasket
- Height: 13.50" without Petcock, 14.50" with Petcock
- Weight: 3 lbs., 15 oz.
- Shipping Weight: 4 lbs., 15 oz.
- Hardware included: 1 ea. Buna-N Lid Gasket, Mounting Brackets, 1 ea. Plug (for fuel and oil applications), and 1 ea. 1/8" Petcock Drain (for air, gas and aviation fuel applications).

## RECOMMENDED SPARES

- 1 ea. Model G-0995 Buna-N Lid Gasket
- 4 ea. filter cartridges (Specify from table.)

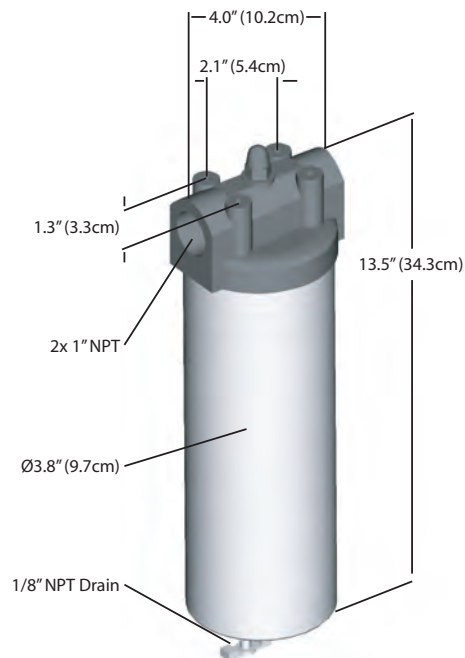
## CAUTION

Do not use **Aquacon**<sup>®</sup> absorbent cartridges (AC, ACO or AD Series) with pre-mixed jet fuel containing anti-icing additives, or with gasoline/alcohol blends.


## ORDERING INFORMATION

### • Model VF-31E Filter Housing

- Supplied without cartridge
- Supplied with 1 ea. Model G-0995 Buna-N Lid Gasket, Mounting Brackets, 1 ea. Plug, and 1 ea. 1/8" Drain Petcock



Dimensions are for estimating purposes only.



Velcon products are sold and serviced by a world-wide representative network. To order, contact Headquarters or your **LOCAL REPRESENTATIVE**:

**COMPANY HEADQUARTERS:**  
 Velcon Filters, LLC  
 1210 Garden of the Gods Road  
 Colorado Springs, CO 80907-3410  
 Phone: 1.800.531.0180 / 1.719.531.5855  
 Fax: 719.531.5690  
 e-mail: vfsales@velcon.com  
 www.velcon.com

**MANUFACTURING PLANTS LOCATED AT:**  
 Colorado Springs, Colorado  
 Sylacauga, Alabama  
 Henryetta, Oklahoma

**OFFICES AND AFFILIATES IN:**  
 Canada, Germany, Singapore, & Spain



**Liquid Filtration  
 and Separation  
 Specialists**