

# Small Filter Housings

VF-61, VF-61E, VF-62

Clean Dry Fuels with High Performance

**Aquacon**<sup>®</sup> Filter Cartridges

## FEATURES

- 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

## APPLICATIONS

- Jet Fuel
- Avgas
- Kerosene
- Gasoline

NOTE: For non-EI qualified applications. Housing does not meet EI1596 or EI1581 qualifications.



VF-61  
with Optional  
DP Gauge

VF-61E  
with Band  
Clamp Closure

VF-62  
with Optional  
Hand Knobs

## DESCRIPTION

The VF-61, VF-61E, and VF-62 are versatile filter housings designed for use with several different high performance **Aquacon** filter cartridges, as well as a variety of paper filters and coalescer/separator cartridges.

**Aquacon** cartridges filter out water by chemically locking it into layers of super-absorbent media. Water removal efficiency is not

affected by common surfactants or additives. Water capacity is as much as 1-½ quarts, depending on the flow rate. These cartridges also effectively filter out dirt, rust and other particulates. (See caution)

As a cartridge reaches its water-holding limit, the media expands very rapidly and restricts the flow. For oils and other high viscosity liquids, the pressure drop will

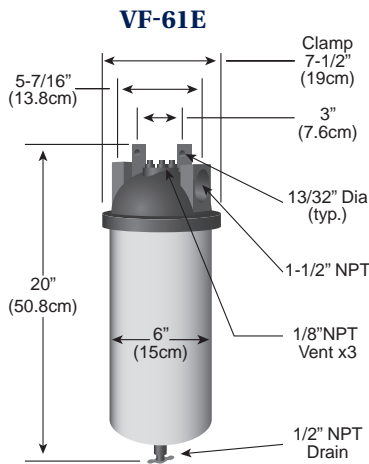
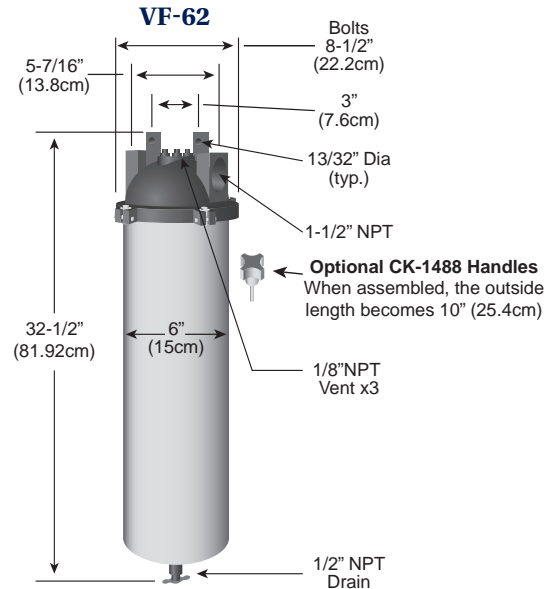
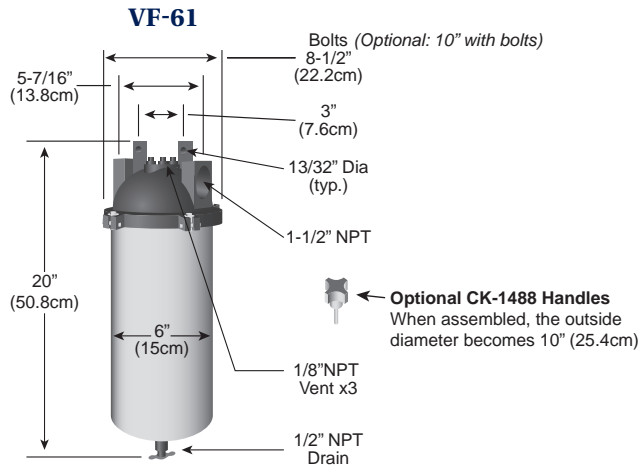
rapidly increase, signaling the need to change cartridges.

The VF-61, with ACO series cartridges installed, has become the standard for low flow rate full flow aviation fuel monitor applications.

Use the VF-61E with band clamp closure for areas with limited space.

## DIMENSIONAL DRAWINGS

Drawings are not to scale. Dimensions are shown for estimating purposes only. Allow 6 inches (15.2 cm) below the vessel to safely remove the vessel to gain access to the cartridge.



VF-61E has a band clamp closure. Use in areas with limited space.

## FILTER CARTRIDGE SELECTION

	Product being filtered	Application	Cartridge P/N	Type	Micron	Flow Rate (GPM)
VF-61, VF-61E	Jet Fuel & Avgas <sup>(1)</sup>	Dirt & Free water	ACO-512P3R	<b>Aquacon</b>	0.3	5-50
			ACO-51201R		0.5	5-50
			OS-51288	Coalescer/ Separator	0.5	Jet: 5-35, Avgas: 5-45
	ALL	Dirt	FO-512PL1/2	Paper Filter	0.5	Fuels: 5-50
FO-512PL05			5			
FO-512PL25			25			
VF-62	Jet Fuel & Avgas <sup>(1)</sup>	Dirt & Free water	ACO-52401R	<b>Aquacon</b>	0.5	10-100
			FO-524PL1/2		Paper Filter	0.5
	FO-524PL05	5				
	FO-524PL25	25				

(1) Always install a differential pressure gauge or other means of determining differential pressure. Please consult installation instructions and operating procedures that accompany products for more detailed information.

## OVER PRESSURE PROTECTION

When exposed to a high concentration of water, the differential pressure across an absorbent cartridge (AC, ACO, AD, or ASL Series cartridges) will immediately increase. Pressure bypasses or other means to limit the inlet pressure to 75 psi (5 bar) should be installed to prevent cartridge from collapsing.

## CAUTION

To protect the fuel system, including the filter housing & other components, be sure to install pressure relief valve(s).

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

### RECOMMENDED SPARES:

- 1 each G-0986 Buna-N O-Ring
- If Viton O-Rings are desired, 2 each G-0986A
- 6 each Cartridges

### ORDERING INFORMATION

- Specify Model VF-61, VF-61E, or VF-62 Filter Housing
- Unit is supplied with G-0986 Buna-N O-Ring and 1/8" valve and 1/2" drain plug installed. 1/2" petcock drain valve is shipped loose.
- Cartridges are not supplied and must be ordered separately.
- Viton O-Rings (P/N G-0986A) are available but must be ordered separately. They are recommended for gasoline and solvent applications. Caution

### OPTIONS

- Part Number 554Y020 is a Carbon Steel 1/2" NPT Ball Valve, with Mounting Nipple
- Part Number CK-1488 quick release hand bolts (set of 4) to replace closure bolts for VF-61 and VF-62 only.
- Part Number 10678 Differential Pressure Gauge Assembly

### SPECIFICATION

#### Housings

- Max. Pressure: 150 psi
- Connection: 1/2" NPT
- Seal: Buna-N O-Ring (P/N G-0986)
- 1/8" brass petcock vent valve and 1/2" drain valve
- Material:
  - VF-61, VF-62: Die cast

aluminum head and closure clamp assembly; carbon steel shell with TGIC-Polyester coated exterior and interior.

- VF-61E: Die cast aluminum head; stainless steel band clamp; carbon steel shell with TGIC-Polyester coated exterior and interior.
- Weight:
  - VF-61: 10 lbs., Shipping Weight: 12lbs.
  - VF-61E: 8 lbs., Shipping Weight: 10 lbs.
  - VF-62: 16 lbs., Shipping Weight: 18 lbs.

#### Cartridges

- Max. Operating Temp.: 250°F (121.1°C)
- Collapse Strength: 75 psi (5 bar)
- pH Range: 5 - 9
- Nom. Filtration Efficiency: 98%

### OPTIONAL DIFFERENTIAL PRESSURE GAUGE ASSEMBLY PART NUMBER 10678 FOR USE WITH VF-61, VF-61E, VF-62

#### DESCRIPTION

This unit measures pressure difference between two points. The gauge allows for a simple reading on an easy-to-read scale. A red/green dial with a breakpoint located at 15 psid alerts the user of the condition of the process.

This kit consists of the following components:

- Differential Pressure Gauge: aluminum body, 1/8" NPT bottom, 1" molded lens & 0-20 psid scale
- Compression Fittings: 4 straight, 2 90° elbow
- 1/4 O.D. Copper Tubing

#### OPERATION

When the needle is in the green zone of the gauge during normal flow, the differential pressure is less than 15 psid across the installed element, and the element does not need to be changed out.

When the needle is in the red zone, the differential pressure is more than 15 psid and the element should be changed out. It has reached its recommended maximum pressure differential.



#### CAUTION:

Do not mount the P/N 10678 differential pressure gauge assembly any closer than 2" from a steel bracket or pipe. The gauge has a magnetic piston, and mounting too close to steel may affect the accuracy.