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

Clean Dry Fuels and Oils with High Performance **Aquacon®** 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



#### **Contact Information:**

Parker Hannifin Corporation **Hydraulic & Fuel Filtration Division** 1210 Garden of the Gods Road Colorado Springs, CO 80907

phone 719 531 5855 fax 719 531 5690 vfsales@parker.com

www.velcon.com

## **Applications**

#### Fuels

- Jet Fuel
- Avgas
- Motor Gasoline
- Diesel fuel
- Biodiesel Fuel

#### Oils

- Insulating Oil
- Hydraulic Oil
- Lubricating Oil
- Selected Solvents





## Description

The VF-61, 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. Refer to the cartridge selection table on page 4.

**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 1-1/2 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.

#### **Specification**

#### Filter Housing VF-61, VF-61E, VF-62:

- Max. Pressure: 150 psi
- Connection: 11/2" 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



#### 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.

# Recommended Spares:

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

#### 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.

## 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 (as shown on page 2) VF-61 and VF-62 only.
- Part Number 10678 Differential Pressure Gauge Assembly (See Form #1959)

- 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.

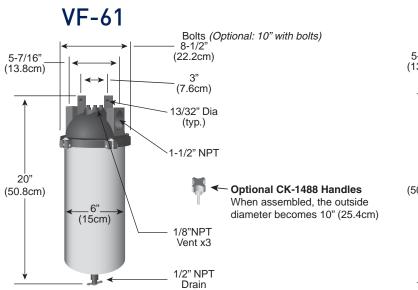
#### Cartridges

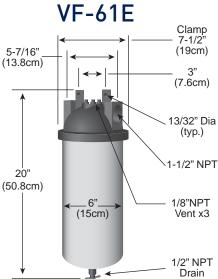
- Max. Operating Temp.: 200°F
- Collapse Strength: 75 psi (5 bar)
- pH Range: 5 9
- Nom. Filtration Efficiency: 98%

#### **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.





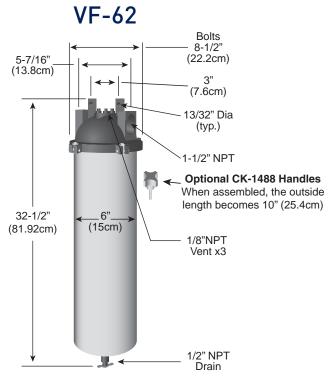
VF-61E has a band clamp closure. Use in areas with limited space.

#### Optional Differential Pressure Gauge



Color Indicates Pressure Drop

Green: Clean 0 - 15 psi Red: Change 16 - 25 psi



VF-62 has a longer body for areas and applications that require higher flow rate.



ENGINEERING YOUR SUCCESS.

The cartinge Selection Table							
Housing P/N	Product being filtered	Application	Cartridge P/N	Data Sheet	Туре	Micron	Flow Rate (GPM)
VF-61, VF-61E	Jet Fuel &	Dirt & Free water	ACO-512P3P	1681	Aquacon®	0.3	5-50
			ACO-51201P		(Absorbent)	0.5	5-50
	Avgas <sup>(1)</sup>		OS-51288	1858	Coalescer/ Separator	0.5	Jet: 5-35 Avgas: 5-45
	Mo-gas		AC-51205	1582	<b>Aquacon</b> ® (Absorbent)	5	5-50
			AD-51225	1655		25	15-50
	Diesel <sup>(1)</sup>		OS-51286	2118	Coalescer/ Separator	5	5-18
	Biodiesel		AD-51225	1655	<b>Aquacon</b> ® (Absorbent)	25	15-50
	Oile		AC-51205	1582	<b>Aquacon</b> ® (Absorbent)	5	Varies with oil
	Oils		AD-51225	1655		25	viscosity <sup>(2)</sup>
	Solvents		ASL-51201	1692		1	5-50
	ALL	Dirt	FO-512PL1/2	1549	Paper Filter	0.5	Fuels: 5-50 Oils: Varies with oil viscosity <sup>(3)</sup>
			FO-512PL05 FO-512PL25			5	
						25	
			FOS-512PL25	1734	Synthetic Filter	tic Filter 25	
VF-62	Jet Fuel & Avgas <sup>(1)</sup>	Dirt & Free water	ACO-52401P	1681	<b>Aquacon</b> ® (Absorbent)	0.5	10-100
	Motor Gasoline		AC-52405	1582		5	10-100
	Diesel <sup>(1)</sup>		AD-52425	1655		25	30-100
	Biodiesel		AD-52425	1055		25	30-100
	Oils		AC-52405	1582		5	Varies with viscosity
	015		AD-52425	1655		25	See Form #VEL1709
	Solvents		ASL-52401	1692		1	10-100
	ALL	Dirt	FO-524PL1/2	1549	Paper Filter	0.5	2-100
			FO-524PL05			5	
			FO-524PL25			25	

#### Filter Cartridge Selection Table

(1) For aviation and diesel fuel applications, always install a differential pressure gauge or other means of determining differential pressure.
(2) See Data Sheet #VEL1709 for absorbent cartridge (AC, AD) flow rates.

(3) See Data Sheet #VEL1532 for paper filter (FO) flow rates, see Data Sheet #1747 for synthetic filter (FOS) flow rates.

Please consult installation instructions and operating procedures that accompany products for more detailed information.

© 2016 Parker Hannifin Corporation. Product names are trademarks or registered trademarks of their respective companies.



Parker Hannifin Corporation **Hydraulic & Fuel Filtration Division** 1210 Garden of the Gods Road Colorado Springs, CO 80907 USA tel +1 719 531 5855 www.velcon.com VEL2105R3 0916