

# Small Filter Housings

VF-609

Clean Dry Fuels with High Performance

**Aquacon**® Filter Cartridges for Helicopter Refueling and Dispensing Pumps

## FEATURES

- Positive Water Removal – Aquacon cartridges remove free and emulsified water from fuels
- Positive Water Holding – filtered water is chemically locked in and can't be squeezed out
- Pressure Increase signals cartridge change
- Effective Dirt Removal – 98% + efficiency for 1/2, 5, or 25 micrometer particles

## APPLICATIONS

- Jet Fuel
- Avgas



The VF-609 uses high performance **Aquacon** filter cartridges. Model above is shown without optional gauge.

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

## DESCRIPTION

The VF-609 is a versatile filter housing with bolted cover, designed for use with several different high performance **Aquacon** filter cartridges. Refer to the cartridge selection table on the reverse side.

**Aquacon** cartridges filter out water by chemically locking it into layers of super-absorbent media. Water removal efficiency is not affected by surfactants or additives, and once captured, the water cannot be squeezed out. Water capacity is as much as 1½ quarts, depending on the flow rate. These cartridges also effectively filter out

dirt, rust and other particulates.

As a cartridge reaches its water-holding limit, the media expands very rapidly and restricts the flow. For fuels, the flow will completely stop, giving positive shut-off and guaranteeing water will not get downstream. For oils and other high viscosity liquids, the pressure drop will rapidly increase, signaling the need to change cartridges.

## OVER PRESSURE PROTECTION

When exposed to a high concentration of water, the differential pressure across an **Aquacon** cartridge will

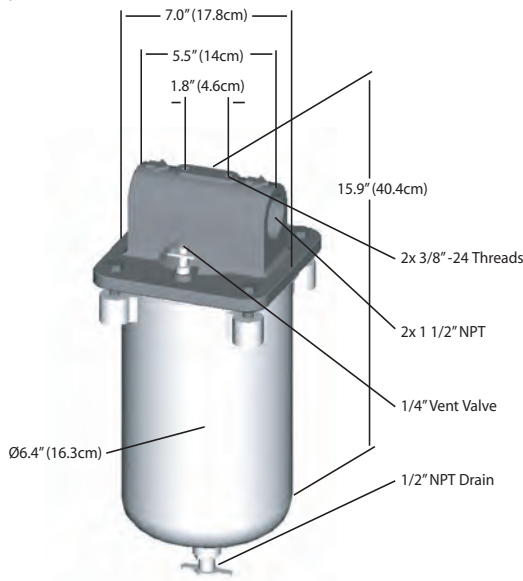
immediately increase. Pressure bypasses or other means to limit the inlet pressure to 75 psi (5 bar) should be installed to prevent the cartridge from collapsing.

## CAUTION

To protect the fuel system, including the VF-609 and other components, be sure to install pressure relief valve(s).

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

**DIMENSION:**



Dimensions are shown for estimating purposes only.

**SPECIFICATION:**

**Housing**

- Max. Operating Pressure: 150 psi
- Cast aluminum head; carbon steel shell with TGIC-polyester coated exterior and interior; four bolt head
- Inlet/Outlet Connections: 1 1/2" NPT
- Closure Seal: Buna-N O-Ring – P/N G-0565
- Weight: 8 lbs.
- Shipping Weight: 10 lbs
- 1/4" brass petcock vent valve and 1/2" drain valve
- Bolted cover

**ORDERING INFORMATION**

- VF-609 unit is supplied with G-0565 Buna-N O-Ring and 1/4" vent valve and 1/2" drain valve.
- Cartridges are not supplied and must be ordered separately.
- Viton O-Rings (P/N G-0565A) are recommended for gasoline and solvent applications.
- Optional Differential Pressure Gauge Assembly is P/N 07-224.
- Optional mounting block for gauge, PN 07-224AMB.
- Optional Drain Valve Part Number 554Y020 is a Carbon Steel 1/2" NPT Ball Valve, with Mounting nipple.

**RECOMMENDED SPARES:**

- 1 each G-0565 Buna-N O-Ring (or 2 each G-0565A Viton O-Rings)
- 6 each cartridges

**Cartridges**

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

**OPTIONAL PRESSURE GAUGE**



The VF-609 gauge is an easy to install optional accessory.

Color	Indicates	Pressure Drop
Green	Clean	0 - 15 psi
Yellow	Change	16 - 25 psi
Red	Dirty	26+ psi

**FILTER CARTRIDGE SELECTION**

Product being filtered	Application	Cartridge P/N	Data Sheet	Type	Micron (µm)	Flow Rate (GPM)
Jet Fuel & Avgas <sup>(1)</sup>	Dirt & Free water	ACO-609P3R	1681	Aquacon®	0.3	15-36
		ACO-60901R			0.5	
		ACO-60905R			5	
		OS-60988	1858	Coalescer/ Separator	0.5	Jet: 5-35 Avgas: 5-45

(1) Always install a differential pressure gauge or other means of determining differential pressure.