



ELIMINATE THE NEED FOR OTHER WATER DEFENSE DEVICES AND RECEIVE MAXIMUM WATER REMOVAL, SOLIDS HOLDING CAPACITY AND SHUTDOWN PROTECTION TO ASSURE CLEAN, DRY FUEL DELIVERY

The **Facet** 21 and 22 Series Fuel-Gard monitors, installed with one Fuel-Gard monitor cartridge, will continually check the entire flow of fuel, not just mere samples, for water or solids contamination. By performing three jobs, this small, compact monitor assures clean, dry fuel. It absorbs free and emulsified

water, removes ultra-fine solids even when surfactants and fuel additives are present, and shuts down the system flow when hit with a localized slug of water. The monitor is designed for 150 psi (1034 kPa) maximum working pressure on jet fuel for 21 Series up to 36 gpm (136 lpm), and 22 Series up to 48 gpm (182 lpm). It is designed to flow from the outside to inside of the cartridge.

Both the interior and exterior surfaces of the carbon steel body are epoxy coated to protect against corrosion. The easy to use stainless steel v-band closure securely holds the die cast aluminum head and Buna-N o-ring seal to the body. This sturdy, single cartridge housing is easy to maintain and requires only 2" (51 mm) base clearance for cartridge changeout.

STANDARD HOUSING DESIGN

- Body: Carbon steel
- Design pressure: 150 psi (1034 kPa)
- Interior and exterior: Epoxy coated
- Head: Die cast aluminum
- Closure: Stainless steel v-band
- Closure seal: Buna-N o-ring—other materials available on request
- Vent and drain connections with brass petcocks provided
- Inlet and outlet connections: 1½" NPT
- One Fuel-Gard monitor cartridge installed

OPTION

- Pressure gauge kit

HOUSING DATA

MODEL NUMBER ⁽¹⁾	MAXIMUM WORKING PRESSURE		REQUIRED CARTRIDGE		NOMINAL LENGTH		SHIPPING WEIGHT		OUTSIDE DIAMETER	
	psi	kPa	qty.	model	in.	mm	lbs.	kgs.	in.	mm
21 SERIES										
VFG-21-609	150	1034	1	FG-O-609	16	406	13	5.9	6½	165
22 SERIES										
VFG-22-612	150	1034	1	FG-O-612	20	508	17	7.5	6½	165

All dimensions, lengths and weights are approximate.

⁽¹⁾ Model number includes housing and required cartridge installed.



The **Facet** Fuel-Gard monitor cartridges meet the latest edition of the Institute of Petroleum (I.P.) Specifications and Qualification Procedures—Aviation Fuel Filter Monitors With Absorbent Type Elements.

The cartridge is made up of layered and pleated, multi-media sections with inner support shells and an outer wrap. A special water absorbent media retains water and the pleats expand. As the maximum water-holding

capacity is reached, a reduction in flow occurs, indicating the cartridge should be changed. Maximum recommended operating temperature is 160°F (71°C) at a maximum differential pressure of 180 psi (1241 kPa).

STANDARD DESIGN FEATURES

- Tested and qualified to meet latest edition of the I.P. Specifications and Qualification Procedures—Aviation Fuel Filter Monitors With Absorbent Type Elements
- Multi-layered media for increased solids holding, water removal and shutdown protection
- Less than 0.3 mg/liter of solids in effluent
- Less than 1 ppm of water in effluent
- Maximum differential pressure: 180 psi (1241 kPa)
- Flow direction: Outside to in
- Not adversely affected by exposure to temperatures varying from -65°F to 160°F (-54°C to 71°C)
- Works in the presence of surfactants and fuel additives

MATERIALS

- Carbon steel structural components
- Heavy duty metal center tube and outer shell for extra structural strength
- All metal components coated to protect against corrosion
- Standard gaskets are Buna-N—other materials available on request

DATA

MODEL NUMBER	OUTSIDE DIAMETER		NOMINAL LENGTH		SHIPPING WEIGHT	
	in.	mm	in.	mm	lbs.	kgs.
21 SERIES						
FG-O-609	6	152	9	230	4	1.8
22 SERIES						
FG-O-612	6	152	12	300	6	2.7

FLOW RATES

MODEL NUMBER	JET FUEL				AV-GAS			
	INITIAL ΔP		FLOW		INITIAL ΔP		FLOW	
	psi	kPa	gpm	lpm	psi	kPa	gpm	lpm
21 SERIES								
FG-O-609	3.5	24.1	36	136	2.5	17.2	36	136
22 SERIES								
FG-O-612	5.5	37.9	48	182	3.5	24.1	60	227

