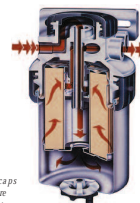




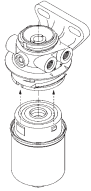
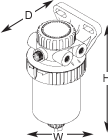
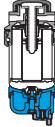
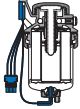
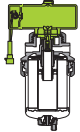
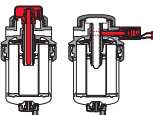
Specified by leading OEMs.

FUELMANAGER

Diesel Fuel Filters/ Water Separators



From the engineered plastic or aluminum mounting head to the rugged composite caps and rings, the Fuel Manager's materials are engineered to stand up in extreme operating environments. The quick-change retaining ring allows tool-free element replacement. This scientifically advanced filter media catches particles as small as two microns as well as removing water. The unique dry-change element eliminates spills during replacement.

Standard Specifications					
Requirement/ Feature		FM 1 Series	FM 10 Series	FM 100 Series	FM 1000 Series
					
Typical Application		Any diesel engine, and diesel powered vehicle or equipment			
Typical Engine Size (HP)		10-75 HP (7.5 - 56 kW)	10-200 HP (7.5 -149 kW)	50-350 HP (37-261 kW)	200- 600 HP (149-447 kW)
Max Fuel Flow (inc. return flow)		Up to 25 US gals/hr. (95 liters/hr)	50 US gals/hr/80 US (190 liters/hr)(300 liters/hr)	180 US gals/hr (680 liters/hr)	
Engine Mounted		OK	OK	OK	OK
Chassis Mounted		OK	OK	OK	OK
Operating Temperature			-40°F to +250°F (-40°C to +121 °C)		
Suction/ Vacuum		OK	OK	OK	OK
Typical Pressure Drop (across clean filter)			0.8 psi (5kPa) at 45 US gals/hr (170 liters/hr)		
Maximum Operating Pressure (w/out See-through Water Bowl)		Up to 20 psi (138 kPa)	Up to 30 psi (200 kPa)	Up to 60 psi (413 kPa)	Up to 100psi (688 kPa)
Particulate Filter			Efficiency up to 99% @ 2 microns (TRI 3353)		
Water Separation		All CLARCOR filters use specially treated hydrophobic media to remove water. Up to 98% efficiency.			
Air Removal		Several options to automatically bleed air back to fuel tank.			
Pre-filter Media Micron Rating			Choice of 150, 30, or 10-microns		
Final Filter Media Micron Rating			Choice of 5 or 2-microns		
Mounting Header		Molded engineered plastic		Cast aluminum	
"Key Track" System		Standard on all FM1, FM10, FM100 & FM1000 Series Ensures only correct service element can be installed on header			
Fuel Line Connection Options		Molded plastic hose barb	Molded plastic hose barb or latch bead	Optional screw-in threads, OR metal hose barb/latch bead/ "quick connectors" Contact CLARCOR EMS for details	
Overall Installation Dimensions		Width = 92mm Depth = 94mm Height = 134mm (smallest) 193mm (largest)	Width = 95mm Depth = 101 mm Height = 150mm (smallest) 230mm (largest)	Width = 101 mm Depth = 105mm Height = 162mm (smallest) 243mm (largest)	Width = 187mm Depth = 155mm Height = 224mm(smallest) 326mm (largest)
Optional Modules					
See-through Water Collection Bowl		Re-usable See-through Bowl for FM1, FM10 & FM100 Enables easy visual check of water to be drained. Adds 70ml extra water storage capacity			Larger See-Through Bowl for FM1000 Enables easy visual check of water to be drained. Adds 350ml extra water storage capacity
Electronic Water-in-Fuel Sensor		Not Available	Available for FM10, FM100 & FM1000 Series. Choice of 12 volts or 24 volts. Choice of electronic signal type. • "Active", completely self-contained kit including warning light indicating need to drain water. Can either be OEM installed or retrofitted. Choice of electrical connectors available. • Alternative "passive" version where electronic signal is controlled by engine or vehicle ECU to provide warning. Choice of electrical connectors available.		
Hand Priming Pump		Not Available	Available for FM10, FM100 & FM1000 Series Enables easy purging of air when initial priming or at time of filter element change.		
Electric Transfer/Lift Pump		Not Available	Not Available	12 volts, 4 Amps. Max flow up to 80 US gals/hr (303 liters/hr) Note: Must be configured to ensure fuel is filtered before pump to protect from debris. Uses special filter elements.	Not Available
Electric Fuel Heater Choice of "Top Load" or "Side Load"		Not Available	Not available	Choice of 12 or 24 volts 100 or 150 watts Built-in thermostatic switch	12 volts 200 or 300 watts Built-in thermostatic switch