



Fuel

Fleetschool Fact Sheet



Sea Pro[®] 7 Series FH234 with Marine Safety Features

It's not just fine filtration needed for fuel system protection. Fleetguard's Sea Pro[®] filters come standard with 7 micron absolute elements. They also offer superior water separation.

Water in fuel is especially dangerous and can be life threatening in marine applications. If it shows up during maneuvering and/or when a vessel is negotiating dangerous waters, the result can be engine loss of power, or stall and failure to re-start.

Other damage can be ongoing if water is not stripped from the fuel and regularly drained off. It only takes 5mls, or a teaspoon of water to each litre of diesel fuel, for the lubricity feature of the fuel to be lowered sufficiently to cause premature fuel system wear, such as increased pump and injector damage, corrosion as well as tips blown off injectors.

Sea Pro[®] with polymer StrataPore[™] media outperforms other cellulose paper type fuel/water separators maintaining 95%+ water separation over the entire service life of the EleMax[™] element. Some cellulose paper elements begin to fall away in this area very soon after start up.

Accurate fuel level, indicating remaining life left in the element can easily be seen through the cover. This is achieved with a unique vapour vent valve located in every element. Any water captured can be easily seen through the bottom bowl for drain off.

In emergency situations where engine shut down due to a clogged filter is not advisable, Duplex and Triplex units come with throw over valves which are available for engine running filter changes.

Sea Pro[®] meets the challenges of...

- Fuel water contamination
- Corrosion (salt water)
- Safety – fire
- Continuous operation
- High fuel flow rate requirements
- Accessibility for maintenance
- Emergency ability to switch from one filter to another without stopping engine

Housings Available

Housing Part Number	Description	Fuel Flow (gph) [*]	Filter Type	Micron Rating ^{**}	Filter Part Number	WIF	Fuel In & Fuel Out	Fuel In & Fuel Out Port Size	Fuel In & Fuel Out Port Size ^{***} (metric)
Sea Pro 7 (Dual & Triple - No shutoff valve - Duplex & Triplex - Includes shutoff valve)									
FH23419	Single w/ Drain	200	Cartridge	7	FS19763	No	Left or Right	3/4" NPT	M26 x 1.5
FH23422	Single w/ Drain, WIF	200	Cartridge	7	FS19763	Yes	Left or Right	3/4" NPT	M26 x 1.5
FH23420	Dual w/ Drain	400	Cartridge	7	FS19763	No	Tee	1" NPT	M33 x 1.5
FH23425	Duplex w/ Drain, 4-Way Valve	400	Cartridge	7	FS19763	No	4-Way Valve	1" NPT	M33 x 1.5
FH23421	Triple w/ Drain	600	Cartridge	7	FS19763	No	Tee	1" NPT	M33 x 1.5
FH23426	Triplex w/ Drain, 4-Way Valve	600	Cartridge	7	FS19763	No	4-Way Valve	1" NPT	M33 x 1.5

^{*} 200 gph (757 lph), 400 gph (1515 lph), 600 gph (2272 lph)
^{**} Other filter options at different micron ratings are available. Specifications subject to change without notice.
^{***} Metric connections require metric adapter fittings. For M26 x 1.5 fittings, use part no. 3954136 S (which includes an outlet M26 x 1.5 outlet fitting, M26 x 1.5 inlet fitting with check valve body, check valve ball, check valve retainer, and check valve spring) and install to inlet and outlet ports of housing. For M33 x 1.5 fittings, use part no. 3954138 S (which contains two M33 x 1.5 fittings) and install to inlet and outlet ports of assembly.



- Fishing boats
- Work boats
- Recreation craft
- Drilling platforms
- Power Gen. and engine powered auxiliary equipment
- UL, Lloyds and USCG Approved

Sea Pro[®] takes to the water with *Seeing is Believing[®]*



Duplex Units



Triplex Units



Sea Pro[®] 7

- Extends the fuel filter life up to three times more than a standard filter
- EleMax[™] element
- Anodized finish
- Clear bottom bowl
- Available with optional WIF and 4-way valve
- *Seeing is Believing[®]* allows you to see when NOT to change a filter



Easiest to Maintain

- Patented *Seeing is Believing[®]* technology – see when NOT to change the filter
- Five minute filter change
- NO MESS filter change
- Remote mount allows easy access and easy filter change
- Water-In-Fuel (WIF) sensor available

Highest Performing

- Best fuel water separation available
- Featuring proprietary StrataPore[™] media
- Maintains its fuel water separation efficiency over time
- High capacity and longer life
- Meets OEM efficiency requirements
- Sturdy, UL approved, quick-acting drain for removing water and other contaminants
- Maximum strength and durability

Most Versatile

- Can be applied across multiple engine applications
- Configurations available for flow rates up to 600 gph (2272 lph)
- Back-up emergency provision: The Sea Pro[®] 7 also accepts standard spin-on filters in an emergency
- Reduces inventory and complexity

Suggested Markets

- Marine
- High corrosion areas



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Air

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Water Separator
 The water separator is a critical component of the fuel system. It is designed to remove water from the fuel before it reaches the engine. This helps to prevent water-related problems such as fuel system corrosion and engine damage.

Water Separator & Filter
 The water separator and filter are designed to work together to remove water and contaminants from the fuel. The water separator is located upstream of the filter to catch any water that may be present in the fuel.

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Coolant

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A Premium Engine Coolant that works with case, protecting your Enterprise, Engine & Environment

PGPLUS
 PGPLUS is a premium engine coolant that works with case, protecting your Enterprise, Engine & Environment. It is designed to provide long-term protection for the engine and environment.

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Hydraulic

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Beta Ratio - Comparing Hydraulic Filter Element Performance

The following table lists some selected beta ratios and their corresponding capture efficiencies.

Filter Beta	Capture Efficiency
2	99%
3	99.7%
5	99.8%
10	99.9%
20	99.95%
100	99.99%

Exhaust

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Stop Noise in its Tracks

Exhaust noise is a major concern for fleet operators. It can be reduced by using reactive absorptive mufflers. These mufflers are designed to absorb sound waves and reduce noise levels.

Reactive Absorptive Mufflers by Fleetguard

Reactive absorptive mufflers are designed to absorb sound waves and reduce noise levels. They are made of reactive materials that absorb sound energy.

TEST YOUR KNOWLEDGE

- Configurations of Sea Pro® are available up to how many gallons per hour of fuel flow:**
 A 200 gph B 400 gph C 600 gph
- How little water in each litre of diesel does it take to breakdown the lubricity of the fuel to cause premature fuel system damage:**
 A A teaspoon full B A tablespoon full
 C An eggcup full
- Which Sea Pro's come with a valve or valves to allow running engine filter changes:**
 A Dual and Triple B Duplex and Triplex
 C Sea Pro® Sea Doggy D None of the above
- Where is the vapour vent valve located:**
 A In the body of the housing assembly
 B In the inlet port of the housing
 C Next to the drain valve
 D In the filter element

1. C
2. A
3. B
4. D

ANSWERS

These and other Fleetschool Fact Sheets can be found on the Fleetguard Website at:

www.fleetguard.com/fleet/en/product_literature/en_lit_asia.jsp#fleetschool

Asia Pacific

Australia
 31 Garden Street
 Kilsyth Victoria 3137 Australia
 Tel. 1 800 032 037
 Tel. 61 3 9721 9100
 Fax. 1 800 032 036
 Fax. 61 3 9721 9147
fleetassist.australia@cummins.com

New Zealand
 Tel. 0800 448 363
 Fax. 0800 448 367
fleetassist.australia@cummins.com

China
 No. 9 Building, 353 RiYing North Rd
 Waigaoqiao Free Trade Zone
 Pudong, Shanghai 200131 China
 Tel. 86 21 50463918
 Fax: 86 21 50463928
fleetassist.china@cummins.com

Japan
 PO Box 536, Ark Mori Building
 22nd Floor
 12-32 Akasaka 1-Chome
 Minato-Ku, Tokyo, 107-6022 Japan
 Tel. 81 3 3505 1851
 Fax. 81 3 3505 0990
fleetassist.japan@cummins.com

Korea
 1293-2, (4-NA-203)
 Jeongwang-Dong
 Siheung-City, Gyunggi-Do
 Korea 429-450
 Tel. 82 31 432 0616-9
 Fax. 82 31 432 9478
fleetmaster.korea@cummins.com

Singapore
 8 Tanjong Penjuru
 Jurong Industrial Estate
 Singapore 609019
 Tel. 65 6266 3833
 Fax. 65 6265 6909
fleetassist.singapore@cummins.com

India
 Fleetguard Filters Pvt. Ltd.
 Kirloskar House 100
 Anand Park, Aundh
 Pune - 411 007 India
 Tel. 91 20 2588 3903~0537
 Fax. 91 20 2588 7428
marketing@fleetguard-filtrum.com

Cummins Exhaust India Ltd
 Plot No. 1, Silver Industrial Estate
 Village Bhimpore
 Dist. Daman (Union Territory)
 Pin 396 210 India
 Tel. 91 260 257384
 Fax. 91 260 257238

