# **FBO Series**

Long Life High Performance Diesel Filtration Elements

The Engine & Mobile Filtration Division EMEA (EMFE) have developed a new Aquabloc<sup>™</sup> 3D coalesceing filtration media representing a technological step forward in diesel fuel filtration and water separation. The new elements enables operators to meet the challenges of dealing with increasingly sophisticated fuel, and an ever-more demanding commercial environment. The new FBO elements offer up to 50% longer service life and considerably improved water separation in fuels which contain biodiesels. New deaeration features allow the elements to work in suction applications more effectively and efficiently.

### What is Aquabloc<sup>™</sup>3D?

Aquabloc<sup>™</sup>3D uses three distinct media stages. Stage 1 actively removes impurities, Stage 2 will coalesce or grow large water droplets from emulsified water in the fuel, before a final barrier stage prevents re-entrainment of the water. Aquabloc<sup>™</sup> 3D is Parker's newest coalescer media, designed as an upgrade which should be offered in preference to Parker's existing coalescers for the FBO Series. The new grade of media enables a coalescer element to be used in poor quality fuels, where only an absorber had previously been applied.



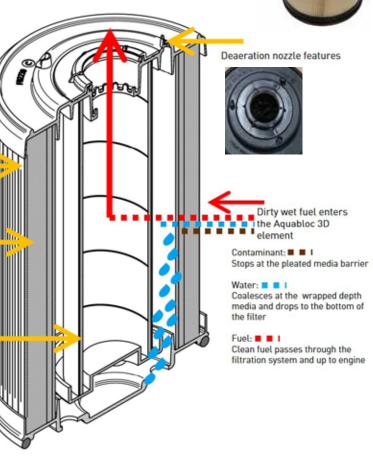
**Fuel** 

#### How does it work?

Stage 1: The fuel encounters a high capacity synthetic pleated particle filtration media. This unique pleated design maximizes the surface area, ensuring consistent flow, and delivering exceptional particle retention efficiency. As the fuel passes through the pleat pack, larger unwanted particles are removed.

Stage 2: Fuel passes through multiple wrapped layers of treated depth coalescing media. Here, the partially-filtered fuel interacts with the multi-density coalescer, effectively growing water droplets of >200 micron from emulsified droplets of <5 microns. These large droplets then fall to a collection bowl separating the majority of the emulsified water from the fuel.

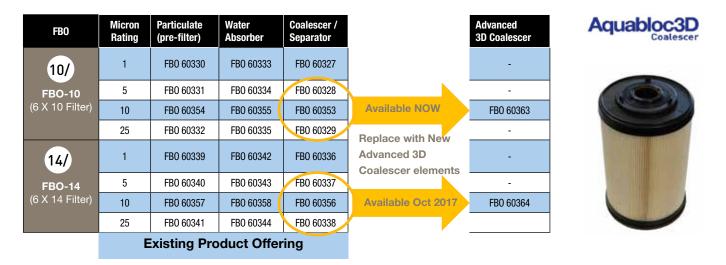
Stage 3: Finally, before the fuel leaves the filter, there is a central hydrophobic woven mesh cartridge which prevents any of the now large droplets from exiting the filter and entering into the fuel system.



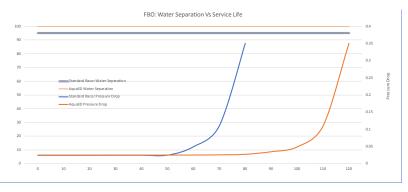


## Part numbering and specification:

The table below shows all the FBO replacement elements including the Advanced 3D Coalescer options available to you. Parker would suggest replacing 5, 10 and 25 micron coalescers with the new Aquabloc<sup>TM</sup> 3D element.



The graph below shows that the new Aquabloc<sup>™</sup>3D media used in the FBO elements has improved water separation and also increased dirt holding capacity which extends the service life of the filter.



## **Product Benefits**

- Innovative three stage filtration technology for outstanding fuel purity
- Unique pleated media design ensures effective filtration with maximum flow
- New deareation features allowing greatly improved usability in suction applications
- Innovative design and proven performance, delivering reduced downtime and maintenance, lower total cost and longer working life
- Direct upgrade alternatives available for many existing installations- just upgrade performance at service

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