## **2" Monitor Element**

# For removing Water and Solids from Aviation Fuels according to El 1583 6<sup>th</sup> Edition.

Qualified and witnessed acc. to the EI 1583 (Specifications and Qualification Procedures for Aviation Fuel Filter Monitors with Absorbend Type Elements).

Filter monitor vessels are fitted with monitor elements and used on aircraft refuelling vehicles, hydrant dispensers and other mobile fuelling equipment.

This element is not suitable for using with Aviation fuels containing anti-icing additives (FSII) and therefore it should not be applied!

- completely new development
- improved salt water resistance
- nearly no media migration
- lower initial differential pressure
- improved conductivity, thereby significant reduction in the risk of electrostatic charging
- interchangeable with all approved filter monitor elements on the market
- useable in all approved filter monitor vessels

#### **Technical Details**

		1			
Nominal filter efficiency:	acc. to EI 1583, 6th ed.	Sealing material:	NBR (Buna-N <sup>©</sup> )		
Change-out dp:	1.7 bar / 25 psi <sup>1,2</sup>	Minimum collapse strenght:	12 bar / 175 psi		
Maximum service time:	12 Months <sup>3</sup>	Maximum storage time:	24 Months <sup>3,4</sup>		
Operating temperature:	-30°C bis +80°C	Outside diameter:	50 mm (2")		
Flow direction:	Out to In	Inner tube:	electroconductiv plastic⁵		
Endcaps:	electrically conductiv, glass fibre reinforced plastic (polyamid)				
Labeling:	Date of manufacturing, ID-Number etc on the endcap (acc. to EI 1583)				

<sup>1</sup> 1.5 bar / 22 psi according to JIG Issue 11/JIG 1

<sup>2</sup> 1.0 bar / 15 psi according to ATA 103

<sup>3</sup> Manufacturer recommendation

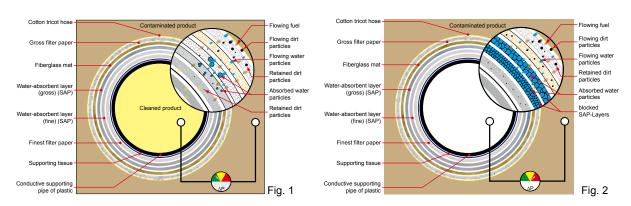
<sup>4</sup> Original packaging, 20°C and max. 50% humidity after date of shipment out of FAUDI Aviation stock

<sup>5</sup> POM (polymethylen)

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## 2" Monitorelement

#### Function



The fuel through the Monitor Element flows from outside to inside and passes different filter media (*Fig.1*). The first filter layer as well as the following glass fiber layer collect the bigger solid particles. The following SAP layer (**S**uper**A**bsorbent **P**olymer) is absorbing the bigger water particles that the fuel contains. The next SAP layer is absorbing the smaller water particles, which haven't been collected in the SAP layer before. A final filtration of the smallest solid particles will be performed with the last filter layer. The differential pressure of the Monitor Element is increasing with rising contamination of all layers with water and dirt. If the SAP layers have reached the max. water holding capacity, the Monitor Element will block and fuel won't flow anymore (*Fig.2*). The Element has to be exchanged.

### Sample of Marking

Article code: M.2-770/6 Model El 1583, 6 <sup>th</sup> edition Nominal length in mm									
	Flow Rate		Length (nominal)		Interchangeable with				
Туре	GPM	l/min	mm	inch	Velcon	Facet			
M.2-134/6	5	20	127	5	CDF-205P	FG-210-6			
M.2-261/6	10	39	254	10	CDF-210P	FG-210-6			
M.2-387/6	15	58	381	15	CDF-215P	FG-215-6			
M.2-515/6	20	77	508	20	CDF-220P	FG-220-6			
M.2-642/6	25	96	635	25	CDF-225P	FG-225-6			
M.2-770/6	30	115	762	30	CDF-230P	FG-230-6			

### Please note!

The flow capacity may drop significantly when the monitor elements are contaminated with water and/ or particles. A constant monitoring of the differential pressure is mandatory! If a visual inspection is not possible, we recommend the use of electronic differential pressure measuring devices in connection of an electronic flow meter whose readings from a monitoring and logging unit, eg DPGUARD<sup>®</sup>, is evaluated and stops the refueling operation in case of any failure.

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