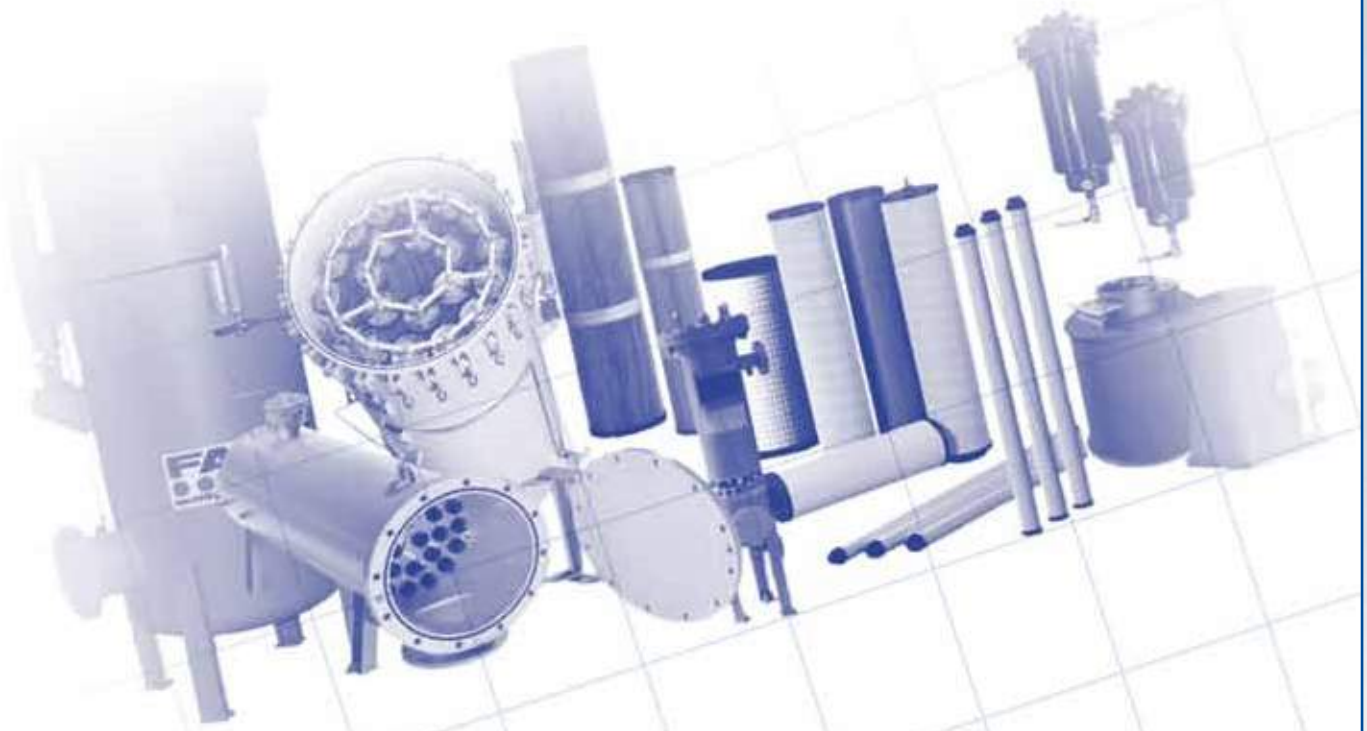


FAUDI aviation
quality guarantees safety

FILTERS, VESSELS AND ACCESORIES

Friol, S.L. • Avda. Profesor López Piñero, 8-11ª • 46013 Valencia, Spain • Tel. +34 963 69 35 55 • Fax +34 963 69 33 73 • E-mail: friol@friolsl.com • www.friolsl.com

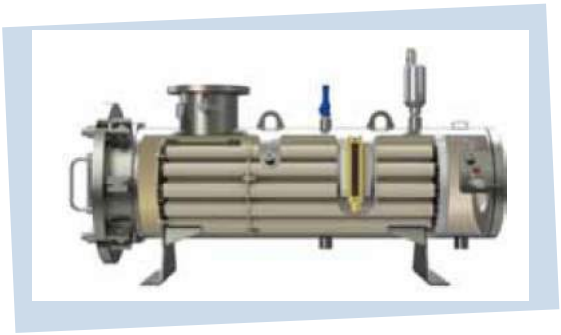
FILTER MONITOR / FFM SERIES

APPLICATIONS

FAUDI Aviation Filter Monitors are simple compact units which can easily be installed and serviced. They are developed in particular for mobile fuelling installation and can be delivered in two versions. Type FFM without and type FFMI with interlock system.

The FAUDI Aviation interlock system is an additional safety device designed to prevent closure of the cover should the full amount of monitor elements not be fitted.

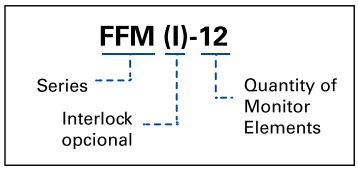
The interlock prevents unfiltered fuel being delivered if an element is missing.



TECHNICAL DETAILS

- For mobile and/or stationary applications.
- AccordingtoEI15836aEdition.
- Suitable for JET A 1, etc.
- Vessel material acc to costumer request (carbon steel, stainless steel or aluminum).
- Maximal flow rate up to 4,600l/min (higher flow rates on request).
- Max 15 ppm free water in outlet stream.
- Max 0,26 mg/l (average) particles in outlet stream.
- Outer diameter of monitor elements: 2 inch.
- Nominal micron rating of monitor elements: 1um.

SAMPLE IDENTIFICATION



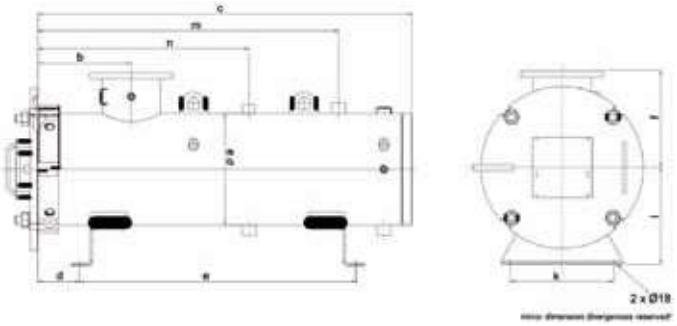
Type	Monitor Element		Element Length		Max. Flow Rate		Volum	Weigth* FFM	Weigth* FFMI
	Model	Qty.	mm	Inch	l/min	USGPM	≈ l	≈ Kg	≈ Kg
FFM- 3	M.2-770/6	3	770	30	345	91	≈ 22	≈ 50	n.a
FFM- 5	M.2-770/6	5	770	30	575	151	≈ 22	≈ 50	n.a
FFM- 10	M.2-770/6	10	770	30	1.150	303	≈ 60	≈ 105	n.a
FFM- 12	M.2-770/6	12	770	30	1.380	364	≈ 60	≈ 120	n.a
FFM(I)- 20	M.2-770/6	20	770	30	2.300	607	≈ 85	≈ 138	≈ 145
FFM(I)- 30	M.2-770/6	30	770	30	3.450	911	≈ 135	≈ 190	≈ 200
FFM(I)- 36	M.2-770/6	36	770	30	4.140	1.093	≈ 170	≈ 235	≈ 248
FFM(I)- 40	M.2-770/6	40	770	30	4.600	1.215	≈ 210	≈ 270	≈ 285

** Design in carbon or stainless steel*

STANDAR DESIGN

- Material in carbon or stainless steel.
- Cover installation with hinge (left) and swing volts.
- AD-2000 module H.
- Design pressure: 16 bar
- Connections for:
  - Automatic air eliminator
  - Differential pressure measuring device
  - Pressure relief valve
  - Sample probe connections on outlet and inlet.

Dimensions in mm for carbon steel vessel standard



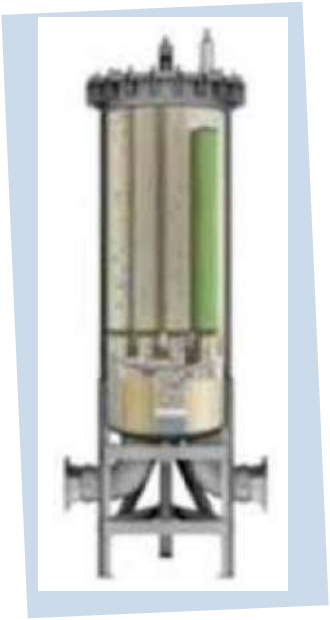
			Dimensiones in mm											
	In-/Outlet				FFM	FFM(I)						FFM	FFM(I)	
Type	DIN	ANSI	Ø a	b	c	c	d	e	f	k	l	m	m	n
FFM-3	DN 50	2"	168	200	1.050	n.a.	290	606	170	150	170	830	n.a.	520
FFM-5	DN 50	2"	168	200	1.050	n.a.	290	606	170	150	170	830	n.a.	520
FFM-10	DN 100	4"	273	250	1.100	n.a.	100	820	250	250	250	870	n.a.	560
FFM-12	DN 100	4"	273	250	1.100	n.a.	100	820	250	250	250	870	n.a.	560
FFM(1)-20	DN 150	6"	324	270	1.085	1.100	120	800	280	300	280	870	890	610
FFM(1)-30	DN 150	6"	406	270	1.100	1.125	120	800	320	350	350	870	890	610
FFM(1)-36	DN 150	6"	457	270	1.100	1.135	120	800	340	450	400	870	890	610
FFM(1)-40	DN 150	6"	508	270	1.120	1.145	120	800	370	450	400	880	890	610

FILTER WATER SEPARATOR / FW10-V SERIES

APPLICATIONS

For stationary installations at refineries, fuel storages, marine depots, as well as tank farms, according to EI 1581 5th Edition, Category C, Type S.

Faudi a VIATION Filter Water Separator Vessels are designed and built in accordance with the strict engineering guidelines and pressure vessel regulation of AD-2000. The design according to other pressure vessel regulations like ASME code with or without u-stamp, BS, GOST-R, etc... is possible on costumer request.



TECNICAL DETAILS

- For stationary applications.
- Suitable for Jet A1,JET A, other fluids on request.
- Vessel material acc. to costumer request (carbon steel, stainless steel or aluminum).
- Maximal flow rates up to 8.550 l/m.
- Max. 15 ppm free water in the outlet stream.
- Max. 0,26 mg/l (average) particles in the outlet stream.

SAMPLE IDENTIFICATION

FW10-V-5/1093

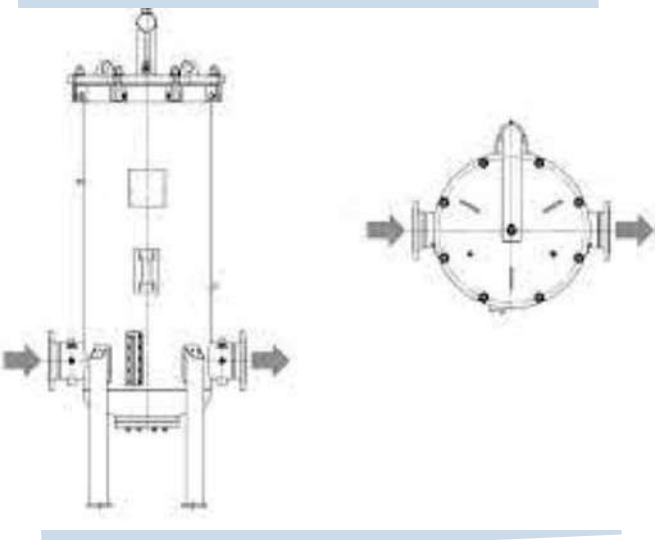
- Serie
- Vertical Orientation
- Quantity of coalescer elements
- Length of coalescer elements in mm

	Separator Element		Max.Flow Rate	
Type	Model	Anz.	l/min	USGPM
W10-V- 3/ 559	60.677-565	1	640	169
FW10-V- 3/ 727	60.677-727	1	840	222
FW10-V- 3/ 842	60.677-727	1	960	254
FW10-V- 3/ 727	60.677-727	2	1.400	370
FW10-V- 3/ 842	60.677-727	2	1.680	444
FW10-V- 3/ 727	60.677-727	3	2.500	660
FW10-V- 3/ 965	60.677-727	3	3.000	792
FW10-V- 3/ 1093	60.677-1093	3	4.000	1.057

	Separator Element		Max.Flow Rate	
Type	Model	Anz.	l/min	USGPM
W10-V- 12/ 965	60.677-900	5	4.335	1.145
FW10-V- 9/ 1422	60.677-1093	3	4.500	1.189
FW10-V- 12/ 1093	60.677-900	5	5.500	1.453
FW10-V- 12/ 1422	60.677-1188	5	6.500	1.717
FW10-V- 12/ 1422	60.677-1188	6	7.100	1.876
FW10-V- 14/ 1422	60.677-1188	6	8.150	2.153
FW10-V- 15/ 1422	60.677-1188	6	8.750	2.312
FW10-V- 16/ 1422	60.677-1188	6	9.500	2.510

STANDARD DESIGN

- Material in carbon steel
- Cover installation with cover lifting device and swing bolts
- AD-2000 module H
- Design Pressure: 16 bar
- Water lever indicator (model Z-3.5)
- Connections for:
  - Automatic air eliminator
  - Differential pressure measuring device (4- point)
  - Pressure relief valve
  - Sample probe connections on outlet and inlet.



MULTI PURPOSE FILTER MPF Series

DESCRIPTION

Cascadable Multi-Purpose-Filter-Housing to use with a coalescer, separator, microfilter or filter monitor element. Realising a filter water separator for small flow rates with two MPF. One fitted with a coalescer element, the second with a separator elements. With three MPF it is possible to realize a filter water separator with a prefilter or with a downstream filter monitor. There are three different housing heights available to meet different flow rate requirements. For increasing the maximal flow rate over all the MPFs could be use in parallel condition. The connecting to the pipe system is possible by flanged connections or by optional available hose clamps. The MPF series offers various possibilities to create an economic filtration unit in lower flow rate ranges.

APPLICATIONS

- Filtration of diesel on low flow rates.
- Refuelling of small ships and barks.
- Filtration of heating oil.

FUELS

- Diesel.
- Heating oil.

TECHINCAL DETAILS

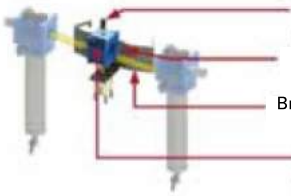
- Design temperature; -10ºC a +50ºC.
- Connections: R1 ½" or flanged.
- Design pressure: 6,0 bar.
- Max. differential pressure: 1,5 bar.

FLOW RATES

Vessel Type	Element Lenght (Inch)	Flow Rate	Element Typ											
			Coalescer Element*			Micro Filter Element						Absortion Element		
			Nominal Micron Rating in um											
			1	5	25	5	10	15	20	25	40	1	5	25
MPF-210	10	l/min	19	15	12	39	39	39	40	40	40	39	39	39
		usgpm	5.0	3.9	3.1	10.3	10.3	10.3	10.6	10.6	10.6	10.3	10.3	10.3
MPF-215	15	l/min	29	24	19	58	60	60	63	63	63	58	58	58
		usgpm	7.6	6.3	5.0	15.3	15.9	15.9	16.6	16.6	16.6	15.3	15.3	15.3
MPF-230	30	l/min	60	50	40	115	120	120	130	130	130	115	115	115
		usgpm	15.8	13.2	10.5	30.4	31.7	31.7	34.4	34.4	34.4	30.4	30.4	30.4

* – *Only in combination with a separator element with identical length!*
– *These flow rates are based on fuels with minimum interfacial tension of ≤ 36 mN/m and maximale water content of 0.1 Vol. % in the inlet.*
– *Maximale 50 ppm free water outlet.*

AVAILABLE RATES

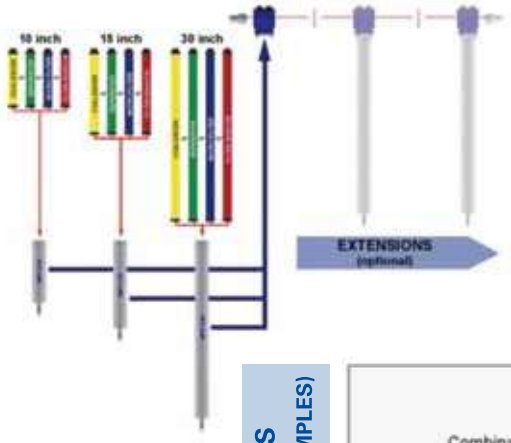


Air Vent
3 010 777
O-Ring NBR
8 869 216
Bracket for drum
3 010 736
Adaptor
3 010 733

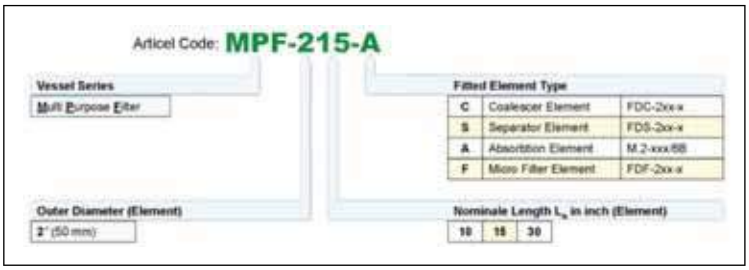
Y-Adaptor
(for parallel combination)
3 011 504

Reducing
(R 1 172" to G 1/2")
3 010 778

COMBINATIONS OF ELEMENTS



SAMPLE OF MARKING



COMBINATIONS OF HOUSINGS (SAMPLES)

Combinations	Coalescer	Separator	Micro Filter	Monitor Filter	Combinations	Micro Filter	Coalescer	Separator
1			1		1 2		1	2
				1				
1 2	1	2			1 2		1	2
			1	2				
1 2 3	2	3	1		1 2 3	1	2	3
	1	2		3				
1 2 3 4	2	3	1	4	1 2 3	1	2	3
	3	4	1 & 2					

2" DIESEL ABSORTION ELEMENT

ON ONE VIEW

Function	Free Water Removal & Particle Filtration from hydrocarbons
Media	Diesel, biodiesel blends.
Norms/Specs.	N.a
Applications	Absorber on fixed fuelling installations
Range of use	Refineries, petrochemical plants, mining and marine.
Micron Ratings	1, 5 & 25 mu
Features & Benefits	• High efficiency absorbtion of free water • Improved diesel engine performance and life time • Reduce fuel contamination problems • Economical period of use. • Easy replaceable with other brands.

TECHNICAL DETAILS

Efficiency	99% (acc.to ISO 19438)
Change-out differential pressure	21 psi (1.5 bar) 75 psi (5.2 bar)
Recommended Storage Time (max.)	12 months[1y2]
Tiempo Recommended service Time (max.)	12 months[1]
Operating Temperature	min. -30°C / máx. 80°C
Flow Direction	Out to in
Outside Diameter	2 inch (152 mm)
Material of inner tube	Conductive Polyamid (reinforced)
Material of seals	NBR (Buna-N®)
Material of end caps	Conductive Polyamid
Labeling of end cap	Type, date of manufacturing & ID-Number

[1] *Manufacturer recommendation*
[2] *Original Packaging, 20°C & max. 50% humidity after date of shipment out of manufacturer's stock*

SAMPLE OF MARKING

ARTICLE CODE **FDA-215-5**

Element Series
FAUDI DIESEL ABSORBER

Outside Diameter
2" (50 mm)

Nominal Length L " in inch
10 - 15 - 30

Nominal Micron Rating in µm
1 - 5 - 25

6" DIESEL ABSORTION ELEMENT

ON ONE VIEW

Function	Free Water Removal & Particle Filtration from hydrocarbons
Media	Diesel, biodiesel blends.
Norms/Specs.	N.a
Applications	Absorber on fixed fuelling installations
Range of use	Refineries, petrochemical plants, mining and marine.
Micron Ratings	5, 10, 15, 20, 25 and 40 mu
Features & Benefits	• High efficiency absorbtion of free water • Improved diesel engine performance and life time • Reduce fuel contamination problems • Economical period of use.

TECHNICAL DETAILS

Efficiency	99% (acc.to ISO 19438)
Change-out differential pressure	21 psi (1.5 bar) 75 psi (5.2 bar)
Recommended Storage Time (max.)	12 months[1y2]
Tiempo Recommended service Time (max.)	12 months[1]
Operating Temperature	min. -30°C / máx. 80°C
Flow Direction	Out to in
Outside Diameter	6 inch (152 mm)
Material of inner tube	Epoxy coated steel
Material of seals	NBR (Buna-N®)
Material of end caps	Epoxy coated steel
Labeling of end cap	Type, date of manufacturing & ID-Number

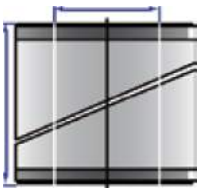
[1] *Manufacturer recommendation*
[2] *Original Packaging, 20°C & max. 50% humidity after date of shipment out of manufacturer's stock*

TORQUES

Junta plana

Tabla Conversión			
ft/lbs	Pulg./lbs	kg/m	Nm
5	62	0.71	7
11	128	1.50	15
16	193	2.25	22
20	240	2.80	27
25	300	3.50	34

SAMPLE OF MARKING



Flat sealed

ARTICLE CODE **FDA-614-5**

Element Series
FAUDI DIESEL ABSORBER

Outside Diameter
6" (152 mm)

Nominal Length " in inch

	inch	*mm*
14	141/2	368
27	273/4	705
33	333/8	848
44	431/4	1,099
56	561/4	1,429

Nominal Imicron rating in µm
5 - 10 - 15 - 20 - 25 - 40

MICRO FILTER / SERIES MF

APPLICATION

FAUDI Aviation Micro Filters are used wherever there is a demand for high quality, economic and reliable filtration. They are designed to continuously remove fine particles such as rust, dirt, sand and pipe scale from Aviation Fuel Systems. These highly efficient Micro Filters are used at refineries, bulk fuel depots, transfer stations and airports predominantly prior to Filter/Water Separators to protect and prolong Coalescer elements life.

Aviation Micro Filters are offering the following advantage:
- Safe operation using tried and tested technique.
- Easy installation and maintenance
- Quick open/closure.
- Alternative degrees of filtration available by changing element type.
- Economic due to increased surface area
- Long life time because high solid holding capacity.

CONSTRUCTION

Standard version
Design Pressure: 10 bar.
Temperature: -10 to +50o C.
Design code: AD 2000 (German Pressure Regulation Rules)
Material of construction: C-Stahl.
Internal coating: a c c . t o MIL-PRF-4556 (latest edition).
Other design pressures as well as other materials like aluminum or stainless steel are available upon request.

ADDITIONAL APPLICATIONS

- Thin mineral oils, jet propulsion fuels, test and super grade petrol, diesel fuel, solvents, fuel oil.
- Natural gas, Refinery gases, Air, Nitrogen.
- Lubricants, Hydraulic fluid and turbine oill.
- Industrial and cooling water.

TECHNICAL DETAILS

- For stationary and mobile applications.
- According to EI 1590 (equipped with 6"-Microfilter Elements).
- For Jet A1, JP 1, JP 4. JP 8, Kerosene and other thin fluids.
- Maximum flow rates up to 40.000 l/min, higher flow rates on request.

Fitted with 4" microfilter elements						
Model Nº	Microfilter element		Flow rates for liquids to 1,5ºC Organized to filter fineness (l/min)			
	Qty.	Ø	0,5 um	1 um	2 um	5 um
MF- 1	1	4"	280	320	360	400
MF- 3	3	4"	840	960	1.80	1.200
MF- 7	7	4"	1.969	2.240	2.520	2.800
MF- 10	10	4"	2.800	3.200	3.600	4.000
MF- 16	16	4"	4.480	5.120	5.760	6.400
MF- 20	20	4"	5.600	6.400	7.200	8.000
MF- 28	28	4"	7.840	8.960	10.080	11.200
MF- 35	35	4"	9.800	11.200	12.600	14.000
MF- 41	41	4"	11.480	13.120	14.760	16.400
MF- 50	50	4"	14.000	16.000	18.000	20.000
MF- 61	61	4"	17.080	19.520	21.960	24.400
MF- 80	80	4"	22.400	25.600	28.800	32.000
MF- 100	100	4"	28.000	32.000	36.000	40.000

Fitted with 4" microfilter elements						
Model Nº	Microfilter element		Flow rates for liquids to 1,5ºC Organized to filter fineness (l/min)			
	Qty.	Ø	0,5 um	1 um	2 um	5 um
MF- 4/1130	4	6"	1.760	2.240	2.720	3.200
MF- 6/1130	6	6"	2.640	3.360	4.080	4.800
MF- 7/1130	7	6"	3.080	3.920	4.760	5.600
MF- 8/1130	8	6"	3.520	4.480	5.440	6.400
MF- 9/1130	9	6"	3.960	5.040	6.120	7.200
MF- 11/1130	11	6"	4.840	6.160	7.480	8.800
MF- 12/1130	12	6"	5.280	6.720	8.160	9.600
MF- 13/1130	13	6"	5.720	7.280	8.840	10.400
MF- 15/1130	15	6"	6.600	8.400	10.200	12.000
MF- 20/1130	20	6"	8.800	11.200	13.600	16.000

VERTICAL FILTER COALESCER VFC-1/254-10 y VFC-1/355-10

DESCRIPTION

Ther FAUDI Aviation VFC-1 (Vertical Filter Coalescer) housings for 10" and 14" combined Coalescer/Separator elements are simple compact units, which can be easily installed and serviced. The VFC-1/254-10 assembly can flow 89 l/min. maximum. The VFC-1/355-10 can flow 136 l/min. maximum. Approved acc. to API/ IP 1581 5th Edition, Category C, type S-LW.

INSTALLATIONS

- Aircraft refuelling vehicles.
- Hydrant dispensers.
- Fixed fuelling installations, tank farms.
- Other mobile fuelling equipment.

APPLICATIONS

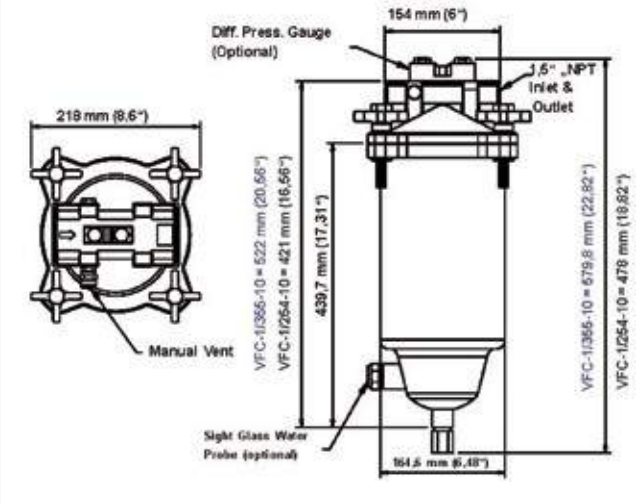
Jet Fuel, AVGAS, Kerosene, Diesel.

OPTIONAL ACCESSORIES

- Water sight glass or electronic Water Probe Delta P Indicator.
- Differential Pressure Gauge.

STANDARD DESIGN FEATURES

- Die-cast Aluminum Head.
- Steel filter bowl housing.
- Powder coated components.
- 10 bar/ +50ºC maximum design pressure.
- 1 ½" NPT Inlet and outlet.
- "Locking Ring Collar" - no clamps.
- Manual Drain valve.
- Manual Vent valve.



ELEMENTS

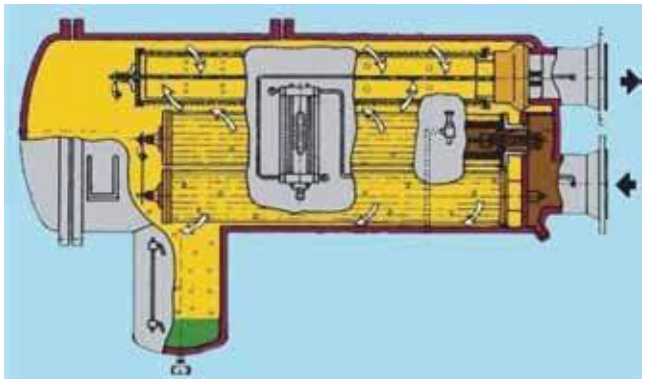
		MAXIMUM FLOW RATES	CHANGEOUT DIFFERENTIAL PRESSURE
VFC-1/254-10	**Micron rating**	**Jet Fuel**	**Delta P**
CS6-254-1	1	89 l/min	1,5 bar
VFC-1/355-10	**Micron rating**	**Jet Fuel**	**Delta P**
CS6-355-1	1	136 l/min	1,5 bar

FW10-H-T Filter/Water Separator-Series

SAMPLE OF MARKING

FW10-H-T-10/1093-16

- *Series*
- *For mobile application*
- *Quantity of coalescer elements*
- *Lenght of coalescer element*
- *Design pressure (bar)*



TECHNICAL DETAILS

- For mobile application.
- According to API/IP 1581 5th Edition, Category C, Type S.
- For Jet A1, JP 1, JP 4. JP 8, kerosene.
- Maximum flow rates up to 7.700 l/min.
- Max. 15 ppm free water in the outlet stream.
- Max. 0,26 mg/l (average) particles in the outlet stream.

FLOW PROCESS DESCRIPTION

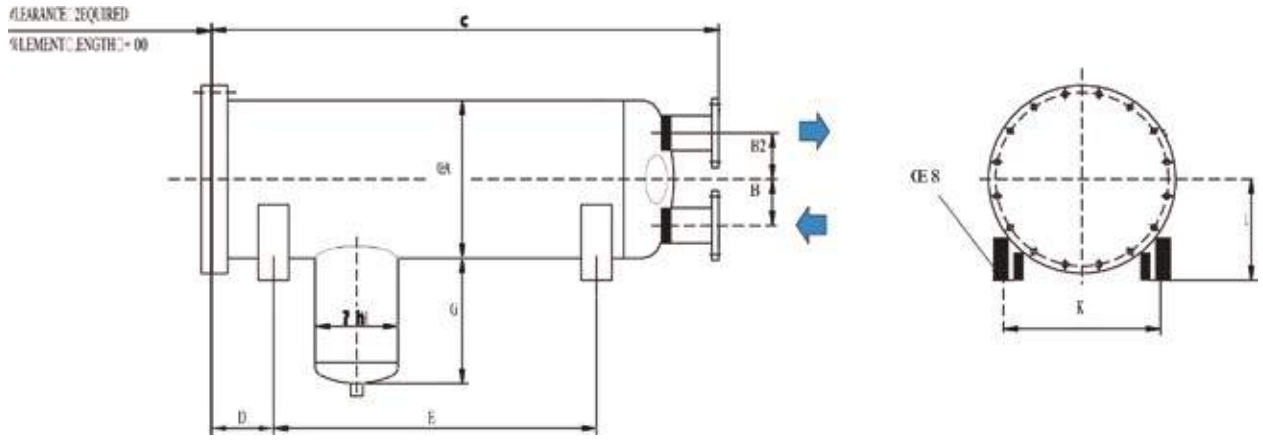
The process of filtration und separation takes place in two element stages. In the first stage, known as the Coalescer stage, during flow through the element from the inside to outside solid particles are retained by the star-shaped folded paper layers. At the same time emulsion separation begins in the pleated paper section. Next the fuel-water mixture flows through the Coalescer part of the element. Due to its hydrophobic and hydrophilic properties very small and fine water droplets coalesce by retardation, acceleration and deflection of the liquid flow to form larger droplets. Afterwards they drop into the water sump because of their higher specific weight.

The second stage Separator elements separates the smallest water droplets which have been swept along in the Filter/Water Separator by velocity. These are retained at the hydrophobic coated surface of the Separator elements and then also collect as a sediment in the water sump.

Model Nº	Separator		Max Flow Rate		Volume	Weigth app.
	Model	Qty.	l/min	USGPM	l	kg
FW10-H-T 2/ 559	60.677- 565	1	430	114	153	238
FW10-H-T 3/ 559	60.677- 565	1	640	169	197	310
FW10-H-T 4/ 559	60.677- 565	2	870	230	261	321
FW10-H-T 4/ 727	60.677- 565	2	1110	293	261	325
FW10-H-T 6/ 559	60.677- 565	2	1300	343	361	373
FW10-H-T 5/ 727	60.677- 565	2	1390	367	323	476
FW10-H-T 6/ 727	60.677- 727	2	1680	444	410	549
FW10-H-T 6/ 842	60.677- 842	2	2010	531	445	561
FW10-H-T 6/ 965	60.677- 965	2	2350	621	483	581
FW10-H-T 6/1093	60.677-1093	2	2760	729	538	601
FW10-H-T 7/1093	60.677- 842	3	3220	851	544	705
FW10-H-T 6/1422	60.677- 965	3	3560	941	572	844
FW10-H-T 7/1422	60.677-1093	3	4150	1096	616	917
FW10-H-T 8/1422	60.677-1188	3	4690	1239	802	982
FW10-H-T 9/1422	60.677-1093	4	5340	1411	905	1150
FW10-H-T10/1422	60.677-1188	4	5940	1569	993	1480
FW10-H-T11/1422	60.677-1093	5	6530	1725	1062	1531
FW10-H-T12/1422	60.677-1188	5	7120	1881	1115	1531

FW10-H-T Filter/Water Separator-Series

DIMENSIONS IN MM



Model Nº	Conexions		Øa	b1	b2	e	d	e	g	Øh	k	l	min ID. vessel
	DIN	ANSI											
FW10-H- 2/ 559	100	4	450	125	125	1010	150	470	350	324	450	275	413
FW10-H-T 3/ 559	100	4	500	125	125	1080	180	480	350	324	500	300	468
FW10-H-T 4/ 559	100	4	550	125	125	1235	200	550	350	324	550	325	530
FW10-H-T 4/ 727	100	4	550	125	125	1235	200	550	350	324	550	325	530
FW10-H-T 6/ 559	100	4	650	150	150	1280	200	560	350	324	650	375	628
FW10-H-T 5/ 727	100	4	600	150	150	1300	200	620	350	324	600	350	578
FW10-H-T 6/ 727	125	5	650	150	150	1440	200	725	350	324	650	375	628
FW10-H-T 6/ 842	125	5	650	150	150	1555	250	790	350	324	650	375	628
FW10-H-T 6/ 965	150	6	650	150	150	1680	250	910	350	324	650	375	628
FW10-H-T 6/1093	150	6	650	150	150	1855	250	1090	350	324	650	375	628
FW10-H-T 7/1093	150	6	700	135	135	1640	250	850	350	324	700	400	662
FW10-H-T 6/1422	200	8	700	180	180	1965	250	1100	350	324	700	400	650
FW10-H-T 7/1422	200	8	700	180	180	1995	250	1170	350	324	700	400	662
FW10-H-T 8/1422	200	8	750	180	180	1980	280	1150	350	406	750	425	718
FW10-H-T 9/1422	200	8	800	180	180	1980	280	1150	350	406	800	450	768
FW10-H-T10/1422	200	8	850	180	180	1980	280	1150	350	406	850	475	818
FW10-H-T11/1422	250	10	900	210	245	1990	280	1150	350	406	900	500	876
FW10-H-T12/1422	250	10	900	210	245	1990	280	1150	350	406	900	500	876
FW10-H-T13/1422	250	10	950	210	245	2000	280	1150	350	406	950	525	910

4" MICRO FILTER ELEMENT

FAUDI Aviation micro filters are used wherever there is a demand for high quality, economical and reliable filtration. They are designed to continuously remove fine particle such as rust, dirt, sand and pipe scale from aviation fuel systems. These highly efficient micro filters are used at refineries, bulk fuel depots, transfer stations and airports predominantly prior to Filter/Water Separators to protect and prolong coalesce element life.

TECHNICAL DETAILS

Change-out differential pressure:	1.5 bar (21 psi)
Collapse Pressure:	3.0 bar (43.5 psi)
Recommended Service Time(max):	24 months[1]
Recommended Storage Time(max):	24 months[1y2]
Operating Temperature:	min. -30°C / máx. 80°C
Flow Direction:	Out to in
Outside Diameter:	100 mm (4")

[1] Manufacturer recommendation
[2] Original packaging 20°C y max. 50% humidity after date of shipment out of stock.

STANDARD DESIGN

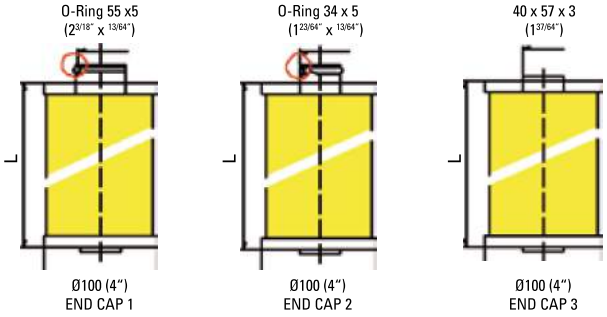
- Inner tube made out of Polyamid/reinforced glass fibre
- Seals in NBR (Buna-N©)
- Ends caps made out of Polyamid/reinforced glass fibre
- Labeling of end caps acc. To EI specification (date manufacturing, ID-Number, etc.)

4" MICRO FILTER ELEMENT

SAMPLE OF MARKING

ARTICLE CODE **2.1-559/B**

- *Nominal micron rating*
- *Endcap design*
- *Nominal Length in mm*
- *Special features*



Nominal m rating	Nominal Length L		Model 1 (en cap)	Model 2 (end cap)	Model 3 (end cap)
	mm	inch			
1	330	13	1.1-330		
1	559	221/32	1.1-559	1.2-559	
1	559	221/32	1.1-559/B	1.2-559/B	
2	559	221/32	2.1-559		2.3-559
5	102	41/64			5.3-102
5	102	41/64			5.3-102/SF
5	235	961/64	5.1-235	5.2-235	
5	235	961/64	5.1-235/SF	5.2-235/S	
5	280	11		5.2-280	5.3-280
5	280	11			5.3-280/S
5	559	221/32	5.1-559	5.2-559	5.3-559
5	559	221/32	5.1-559/B		5.3-559/B
5	559	221/32	5.1-559/S		5.3-559/S
15	102	41/64			15.3-102
15	102	41/64			15.3-102/SF
15	235	961/64	15.1-235		
15	235	961/64	15.1-235/SF		
15	559	221/32	15.1-559		15.3-559
15	559	221/32	15.1-559/SF		
30	559	221/32	30.1-559		30.3-559
40	559	221/32	40.1-559		40.3-559

Special Features	
B	Conditional resistant
S	Silicone treatment
SF	Silicone free
Combinations of above on request	

TORQUES

TORQUES CONVERSION TABLE			
ft-lbs	in-lbs	kg/m	Nm
11	140	1.60	15
25	300	3.50	34

6" EIMF Micro filter (acc. to EI 1590 3ª ed.)

FAUDI Aviation micro filters are used wherever there is a demand for high quality, economical and reliable filtration. There are designed to continuously remove particles, pollutions and contaminations from aviation fuel system. These highly efficient micro filters are used at refineries, bulk fuel depots, transfer stations and airports, mainly up streams of Filter/Water Separators in order to protect and prolong colalescer element life.

APPLICATIONS

- As stand-alone-solution for continuously remove particles from aviation fuels.
- As prefilter in front of a filter water separator to extend the life-time of the coalescer elements.
- At refineries, bulk fuel depots, transfer stations and airports.

TECHNICAL DETAILS

Tested and approved in accordance with the 3th edition EI 1590

Nominal Micron Rating:	1 um
Change-out Differential pressure:	21 psi (100 kPa) (1.5 bar)
Test/Burst Pressure:	75 psi (520 kPa) (5.2 bar)
Recommended service time(max)	24 months[1]
Recommended storage Time: (max.)	24 months[1y2]
Operating Temperature	-30°C a +80°C
Flow Direction:	Out to in
Outside Diameter:	6" (152 mm)

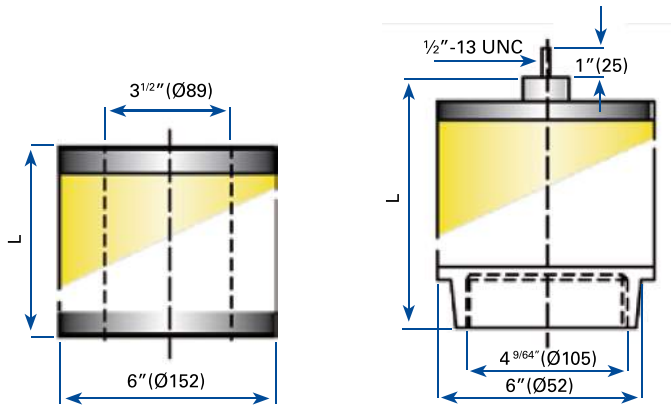
[1] *Manufacture recommendation*
[2] *Original packaging , 20°C and max. 50% humidity after date of shipment out of manufacturer's stock.*

STANDARD DESIGN

- Less than 0.15 mg/l particles greater then the stated micron rating.
- Absorbability up to 350 g/m2 particles (tested with Red Iron Oxide R-9998 up to 1.5 bar).
- Seals in NBR (Buna-N©).
- Interchangeable with other EI approved micro filter elements.
- End caps made out of Polyamid/ reinforced glass fibre, resp. painted steel.
- Labeling of end caps acc. To EI specification (date of manufacturing, ID-Number, etc).

6" EIMF Micro filter (acc. to EI 1590 3ª ed.)

PART NUMBERING



END CAP DESIGN 4 END CAP DESIGN 7

SAMPLE OF MARKING

ARTICLE CODE

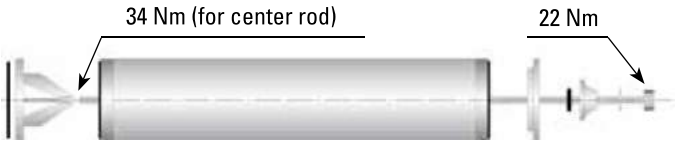
EIMF1.4-1130

- *EI* approved*
- *Micro filter element*
- *Nominal micron rating*
- *End cap design*
- *Overall length in mm inclu.seals*

Nominal Micron Rating	Overall Length L (including seals)		End cap design 4	Máximum flow rate		End cap design 7	Máximum flow	
	Mm	inch		l/min	usgpm		l/min	usgpm
1	285	111/4	EIMF1.4-279	155	41			
1	368	141/2	EIMF1.4-362	205	55	EIMF1.7-362	170	45
1	565	221/4	EIMF1.4-559	323	86	EIMF1.7-559	300	80
1	733	287/8	EIMF1.4-727	424	112	EIMF1.7-727	383	102
1	848	333/8	EIMF1.4-842	493	131			
1	1,117	443/8	EIMF1.4-1130	655	173	EIMF1.7-1130	630	167

TORQUES

END CAP DESIGN 4



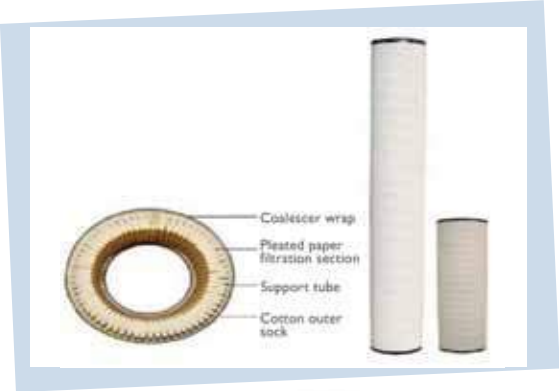
END CAP DESIGN 7

Torques Conversion Table			
ft/lbs	in/lbs	kg/m	Nm
17	200	2.30	22
20	240	2.80	27
25	300	3.50	34

MIL-TYPE COALESCER ELEMENT

For the separation of water and solids from Aviation according to EI 1581 5th edition, category M, type S.

Filter water separators are fitted with coalescer and separator elements and use don aircraft refuelling vehicles, hydrant dispensers and other mobile fuelling equipment. They are also used in other branches of industry such as refineries, petrochemical plants and marine applications where efficiency filtration and separation is required.

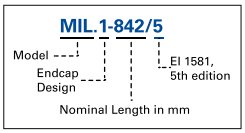


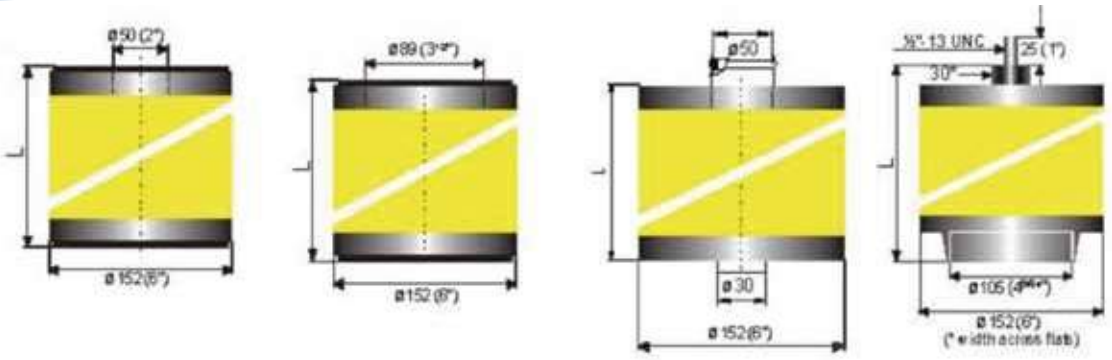
TECHNICAL DETAILS

- Tested and approved to EI 1581 5th edition, cat M, type S.
- Nominal Filtration: 1um.
- Change out Differential Pressure 1.1 bar 815 psi).
- Test/Berst Pressure: 5.2 bar (75 psi)
- Recommended service time (max): 24 months
- Recommended storage time (max): 24 months
- Operating temperature: min -30o C/ max. 80o C.
- Flow Direction: In to Out
- Outside Demeter: 152 mm (6").

STANDARD DESIGN

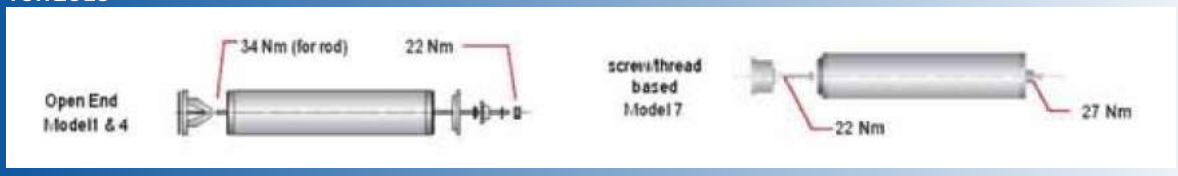
Inner tube in epoxy coated steel. Seals in NBR (Buna-N). End caps made out of Polyamide/reinforced glass fibre. Labeling of end caps acc. To EI specification.





OPEN END						THREAD BASE		
Nominal Length L (including sealing)		Endcap Design				Nominal Length L		Endcap Design
mm	inch	1	3	4	6	mm	inch	7
285	11 ¼			MIL 4-279				
369	14 ½			MIL 4-362	MIL 4-362	351	1413/16	MIL 7-362
473	18 5/8		MIL 3-467					
565	22 ¼		MIL 3-559	MIL 4-559	MIL 4-559	565	22 ¼	MIL 7-559
733	28 7/8			MIL 4-727		705	27 ¾	MIL 7-727
848	33 3/8	MIL 1-842	MIL 3-842	MIL 4-842	MIL 4-842	834	32 7/8	MIL 7-842
971	38 ¼		MIL 3-965	MIL 4-965		965	38	MIL 7-965
1099	43 ¼			MIL 4-1093		1114	43 7/8	MIL 7-1093
1428	56 ¼			MIL 4-1422		1418	56 7/8	MIL 7-1422

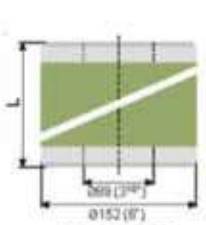
TORQUES

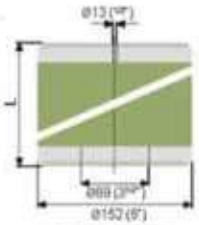


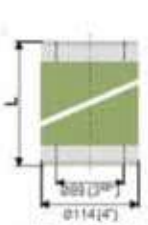
SEPARATOR ELEMENT - TYPE 60...

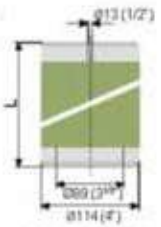
The fuel flows from the coalescer element and enters the separator element from outside to inside. The separator element is manufactured with hydrophobic material and is designed to repel small water droplets yhat may be carried over from the coalesce element. These small water droplets are retained on the separator element surface until they combine with other droplets and become large enough to fall because of the higher density into the water collection sump.

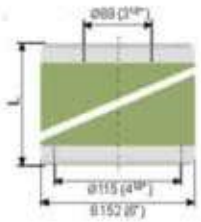
Permanent Reusable	
Effective water barrier	
Tested and approved to spec.	EI 1581, 5th. Edition Category M, Type S
Admissible operating temperature	-30°C +80°C
Flow direction	Out to in
Separator screen	DM= Teflon coated stainless steel mesh DM= for military applications
Labeling of end caps	Acc. to EI specification
Seals	NBR (Buna-N

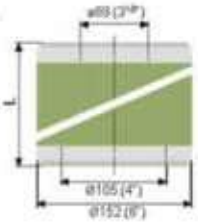

Model 60.644

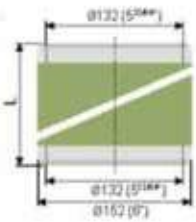

Model 60.6C4

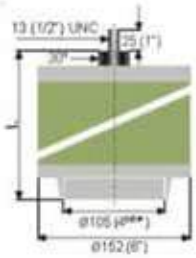

Model 60.444


Model 60.4C4


Model 60.648


Model 60.649


Model 60.655


Model 60.677

Example of marking: **60.644-565/D**

Type
60 for aviation fuel

Diameter
4 outer Ø 4" (100 mm)
6 outer Ø 6" (152 mm)

Endcap top (marked)
3 inner Ø 40,5 mm
4 inner Ø 89 mm
5 inner Ø 132 mm
7 closed with bolt 1/2" UNC
C closed with hole Ø 13 mm

Additions
D teflonized
P synthetic (plastic)

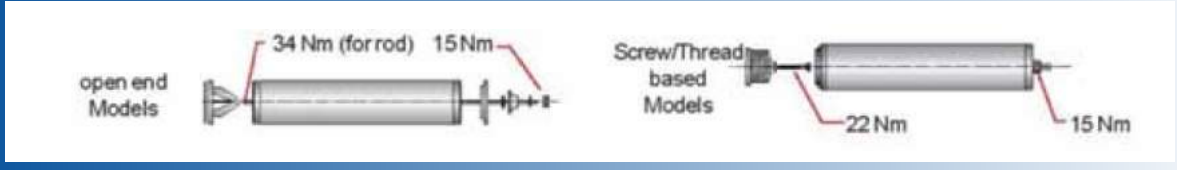
Length L in mm

179	300	430	600	727	842	1012	1204	1422
235	382	526	826	756	900	1093	1226	
279	407	565	700	839	965	1130	1244	

Endcap bottom
3 inner Ø 40,5 mm
4 inner Ø 89 mm
5 inner Ø 132 mm
7 screw/thread
8 inner Ø 115 mm
9 inner Ø 105 mm

Torque Conversion table			
ft/lbs	inch/lbs	kg/m	Nm
11	128	1,50	15
17	200	2,30	22
25	300	3,50	34

TORQUES



2" MONITOR ELEMENT

For removing Water and Solids from Aviation Fuels according to EI 1583 6ª Edition.

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

Filter monitor vessels are fitted with monitor elements and use don aircraft refuelling vehicles, hydrant dispensers and other mobile fuelling equipment).

This element is not suitable for using with monitor elements and sued on aircraft refueling vehicles, hydrant dispensers and otrher mobile fuelling equipment.

FEATURES

- Completely new development.
- Improved salt water resistance.
- Nearly no media migration.
- Lower initial pressure.
- Improved conductivity, thereby significant reduction in the risk of electrostatic charging.
- Interchangeable with all approved filter monitor elements on the market.
- Usable in all approved filter monitor vessels.

TECNICAL DETAILS

Nominal filter efficiency:	Acc. To EI 1583, 6th ed.
Sealing material:	NBR (Buna-N©)
Change-out dp:	1.7 bar / 25 psi[1,2]
Collapse strength:	12 bar / 175 psi
Maximum service time:	12[3] months
Maximum storage time:	24 months[3,4]
Operating temperature:	-30°C bis + 80°C
Outside diameter:	50 mm (2")
Flow direction:	Out to in
Inner tube:	Coated carbon steel
End caps:	Poliamid/ reinforced glass fibre (flat based elements). Exposy coated carbon steel (screw base elements)
Labeling:	Date of manufacturing, ID-Number etc. On the end cap (acc. to EI 1583)

[1] *1.5 bar/22 psi according to JIG Issue 11/JIG 1.*
[2] *1.0 bar/15 psi according to ATA 103.*
[2] *Manufacturer recommendations*
[3] *Original packaging, 20°C & max. 50% humidity after date of shipment out of manufacturer's stock.*

2" MONITOR ELEMENT

FUNCTION

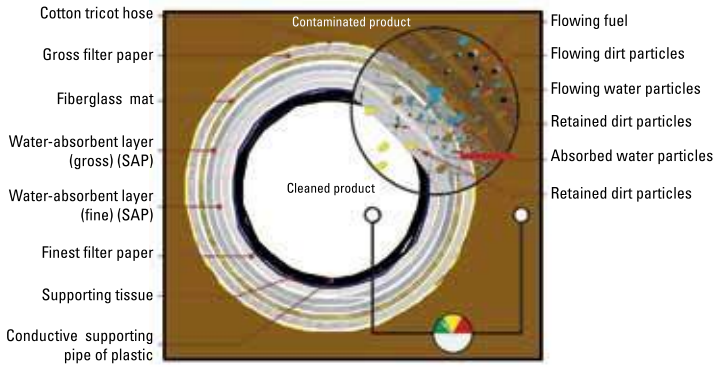


FIG. 1

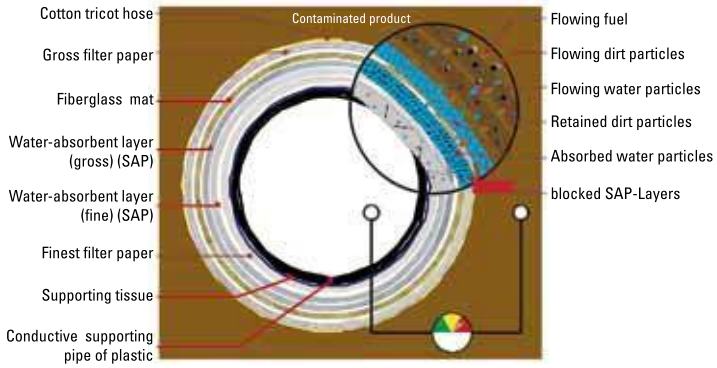


FIG. 2

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 (Super Absorbent Polymer) 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.2-770/6B

Model

Nominal Length in mm

EI 1583 6ª edition

Type	Flow rate		Nominal Length		Interchangeable with:	
	GPM	l/min	mm	inch	Velcon	Facet
M.2-134/6B	5	20	127	5	CDF-205P	FG-210-6
M.2-261/6B	10	39	254	10	CDF-210P	FG-210-6
M.2-387/6B	15	58	381	15	CDF-215P	FG-215-6
M.2-515/6B	20	77	508	20	CDF-220P	FG-220-6
M.2-642/6B	25	96	635	25	CDF-225P	FG-225-6
M.2-770/6B	30	115	762	30	CDF-230P	FG-230-6

PLEASE NOTE!

The flow capacity when the monitor elements are contaminated with wáter and/ or particles. A constant monitoring of the differential pressure is mandatory! I f 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, is evaluated and stops the refueling in case of any failure.

6" MONITOR ELEMENT

For removing Water and Solids from Aviation Fuels according to EI 1583 6th Edition.

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

Filter monitor vessels are fitted with Monitors elements and use don aircraft refuelling vehicles, hydrant dispensers and other mobile fuelling equipment.

This element is not suitable for the use with Aviation fuels containing anticicng (FSII) and therefore it should not be applied!

YOUR BENEFIT

- Completely new development.
- Improved salt water resistance.
- Nearly no media migration.
- Lower initial differential pressure.
- Interchangeable with all approved filter monitor elements on the market.
- Usable in all approved filter monitor vessels.

TECNICAL DETAILS

Nominal filter efficiency:	Acc. To EI 1583, 6th ed.
Sealing material:	NBR (Buna-N©)
Change-out dp:	1.7 bar / 25 psi[1,2]
Collapse strength:	12 bar / 175 psi
Maximum service time:	12[3] months
Maximum storage time:	24 months[3,4]
Operating temperature:	-30°C bis + 80°C
Outside diameter:	152 mm (6")
Flow direction:	Out to in
Inner tube:	Coated carbon steel
End caps:	Poliamyd/reinforced glass fibre (screw base element) Exposy coated carbon steel (flat based element)
Labeling:	Date of manufacturing, ID-Number etc. on the endcap (acc. to EI 1583)

[1] *1.5 bar/22 psi according to JIG Issue 11/JIG 1.*
[2] *1.0 bar/15 psi according to ATA 103.*
[2] *Manufacturer recommendations*
[3] *Original packaging, 20°C & max. 50% humidity after date of shipment out of manufacturer's stock.*

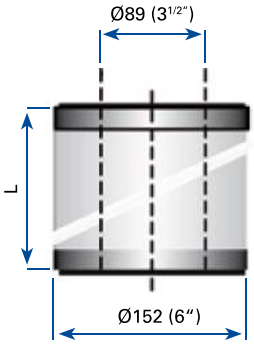
6" MONITOR ELEMENT

SAMPLE OF MARKING

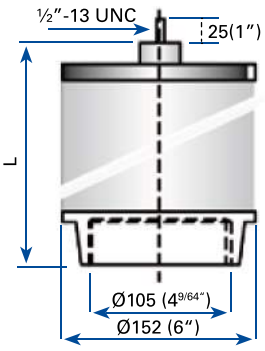
ARTICLE CODE

MO6.4-1093/6B

- *Model Type(Out to in)*
- *Outer diameter*
- *End cap design*
- *Nominal length in mm*
- *EI 1583, 6ª edition*



END CAP 4



END CAP 7

		Nominal Length		Flow rate		Interchangeable with:	
	Model	mm	inch	l/min	USGPM	VELCON	FACET
OPEN END TYPE 4	MO6.4-235/6B	235	9 1/4	128	34	ACO-60901P	FG-O-609
	MO6.4-279/6B	279	11 1/4	160	42	ACO-61101P	FG-O-611
	MO6.4-362/6B	362	14 1/2	212	56	ACO-61401P	FG-O-614
	MO6.4-467/6B	467	18 25/64	295	78	ACO-61801P	FG-O-618
	MO6.4-559/6B	559	22 1/4	365	96	ACO-62201P	FG-O-622
	MO6.4-727/6B	727	28 7/8	464	123	ACO-62901P	FG-O-628
	MO6.4-842/6B	842	33 3/8	557	147	ACO-63301P	FG-O-633
	MO6.4-965/6B	965	38 1/4	650	172	ACO-63801P	FG-O-638
	MO6.4-1093/6B	1,093	43 1/4	756	200	ACO-64401P	FG-O-644

		Nominal Length		Flow rate		Interchangeable with:	
	Model	mm	inch	l/min	USGPM	VELCON	FACET
SCREW BASE TYPE 6	MO6.7-235/6B	235	9 1/4	128	34	ACO-60901PTB	FG-O-609SB
	MO6.7-279/6B	279	11 1/4	160	42	ACO-61101PTB	FG-O-611SB
	MO6.7-362/6B	351	14 13/16	212	56	ACO-61401PTB	FG-O-614SB
	MO6.7-467/6B	467	18 25/64	295	78	ACO-61801PTB	FG-O-618SB
	MO6.7-559/6B	565	22 1/4	365	96	ACO-62201PTB	FG-O-622SB
	MO6.7-727/6B	705	27 3/4	464	123	ACO-62901PTB	FG-O-628SB
	MO6.7-842/6B	834	32 7/8	557	147	ACO-63301PTB	FG-O-633SB
	MO6.7-965/6B	965	38	650	172	ACO-63801PTB	FG-O-638SB
	MO6.7-1093/6B	1,114	43 7/8	756	200	ACO-64401PTB	FG-O-644SB

PLEASE NOTE!

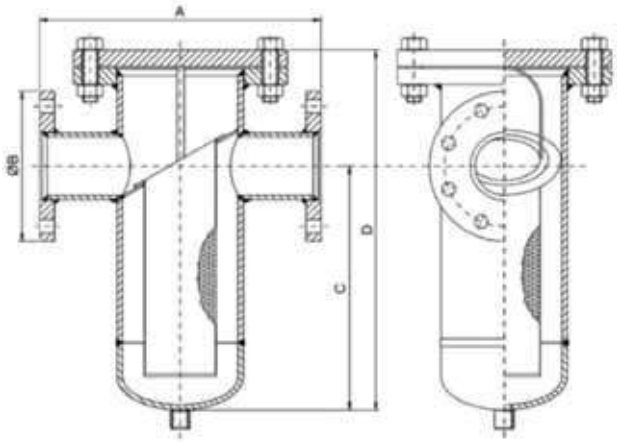
The flow capacity may drop significantly when the monitor elements are contaminated with wáter and/ or particles. A constant monitoring of the differential pressure is mandatory! If a visual inspection is not possible, we recommend the use of electronic differential pressure measuring devices in connection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

FILTERS & ACCESORIES

BASKET FILTER

Basket filter with screw cup or quick opening with flanged ends. Used as pre-filter pump or pre-stage filter systems.

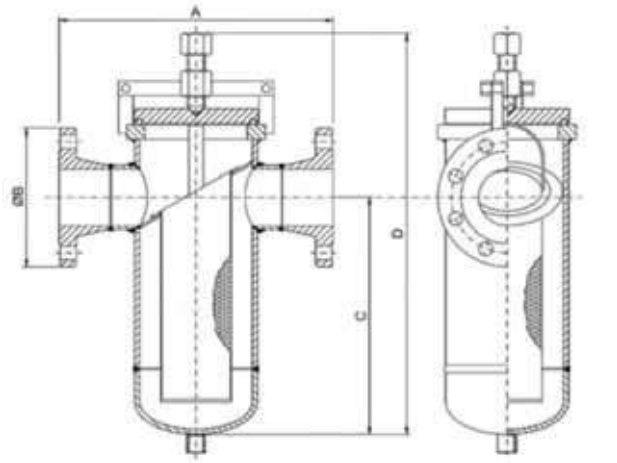
Available in carbon steel or stainless steel with flanges DIN o ASA. Stainless mesh on request.



Basket filter with screwed cover with flanged ends.

Available in carbon or stainless steel with flanges DIN o ASA.
Stainless mesh. On request

DN	A	BDIN	BASA	C	D
50	300	165	152,4	290	380
65	350	185	177,8	320	420
80	375	200	190,5	350	440
100	440	220	228,6	380	520
125	525	250	-	500	650
150	600	285	279,4	610	775
200	800	340	342,9	750	935
250	900	405	406,4	825	1075
300	950	460	482,6	860	1130
350	1050	520	533,4	1090	1370
400	1150	580	596,9	1120	1430
450	1250	615	635	1180	1500



Basket filter with quick opening cup with flanged ends

Available in carbon steel or stainless steel with flanges DIN o ASA.
Stainless mesh. On request.

DN	A	B	C	D
50	300	165	290	460
65	350	185	320	520
80	375	200	350	590
100	440	220	380	660
125	525	250	500	700
150	600	285	610	875
200	800	340	750	1050
250	900	405	825	1200
300	950	460	860	1310
350	1050	520	1090	1550
400	1150	580	1120	1630