





UFI FILTERS
CHOSEN BY THE BEST

# A WINNING COMPANY

### **ENGINEERED FILTRATION SOLUTIONS**

UFI Hydraulic Division is the arm of the UFI Group dedicated to hydraulic filtration, specialized in the design, manufacture and marketing of a comprehensive line of reliable, high efficiency hydraulic filters for mobile and industrial applications.

UFI filters meet the hydraulic system requirements of maximum protection, with high efficiency and constant stability, thanks to high performance materials and micro-fibre filtration media, according to the market and technology demand.

# MOBILE HYDRAULIC APPLICATIONS

The supply of reliable hydraulic power to vehicles serving the arduous requirements of the construction industry safeguards vehicle utilization and productivity levels and avoids the expensive, time-consuming issues associated with un-planned downtime, maintenance and repair. UFI Hydraulic Division has the knowledge and engineering technology to confront and master these issues with a proven range of filtration products for the mobile customer. Many well-known constructionvehicle manufacturers and end users have placed their trust in UFI's ability for many years, both in Original Equipment and in Aftermarket.

### STATIONARY HYDRAULIC APPLICATIONS

UFI Hydraulic Division has earned a solid reputation for quality and cost-efficient products also for CNC machines, presses, windmill applications and industrial hydraulic systems.

High-performance micro-fibre filtration media, with high voids-volume, warrants validated levels of dirt-holding capacity, coherent with the economic extended machine-life service-intervals demanded by the market. There is no evidence that oil can exceed a certain level of cleanliness and therefore Filtration Quality should be as efficient as space, costs and pressure-drop will allow.

### THE HYDRAULIC DIVISION BY NUMBERS



Founded in **1992**, it's now a world leader in hydraulic technology.

1992



7 application sectors:

from heavy duty, industrial and power generation to special applications.



150

3 production plants and over 150 employees in 6 countries worldwide.

6 lines of filter supplied: suction, return, pressure, off-line, trasmissions, air.

6

### HYDRAULIC SECTORS



### **HEAVY DUTY**

Trucks, buses, road building machines etc.



### **AGRICULTURAL**

Tractors, combined harvesters, mixers, sprayers etc.



### **CONSTRUCTION**

Excavators, backhoe loaders, dumpers, telehandlers etc.



### **POWER GENERATION**

Wind turbines, genset, oil & gas etc.



### **MATERIAL HANDLING**

Forklifts, port machining, vertical lifts etc.



### **INDUSTRIAL**

Primary metal, ceramic presses, plastic presses, etc.



### PROTECTIVE EQUIPMENT

Medical and FFP2 masks, media for health protection devices.

# ALTERNATIVE FILTER ELEMENTS



# UFI OE TECHNOLOGY FOR HIGH PRESSURE SPIN-ON ELEMENTS

When the time comes to replace your hydraulic filter elements, don't compromise on quality.

Globalisation and the highly competitive environment we live in creates enormous pressure on manufacturers. The temptation to cut costs and the under estimation of the importance of genuine hydraulic filter elements poses a real risk to manufacturing efficiency and productivity. There will always be an alternative source for the filter element you

There will always be an alternative source for the filter element you bought, however this source doesn't come without risk!

The difference between UFI parts and other "will fit" parts goes well beyond price and becomes a question of quality, confidence and the available level of "fallback" and support provided by a reputable filter manufacturer.

UFI Hydraulic Filter Elements are made from the **highest quality materials**. Others may offer

interchangeable filter elements, but "under the skin" they are not the same -

"It's what you don't see that may cost you dearly!"

UFI possess the necessary **filtration technology** and **background** to manufacture "Alternative" filter elements to meet OE, OES and independent aftermarket requirements. In doing so, these filter-elements are subjected to the same rigorous test regime as proprietary product.

This ensures at the very least a like-for-like performance with the competitive original.

An important detail of paramount importance where OE branding of the alternative element is undertaken.

In many cases, UFI alternative elements even exceed the performance characteristics of the original.

In particular, the FORTIMAX series completes the spin-on families of UFI Hydraulics range, which includes filters and elements for hydraulic systems on suction, return and pressure lines, with filtration from 90 microns up to 5 absolute microns and flow rates up to at 300 l/min. The main feature of spin-on filters is the easy and rapid replacement of the used cartridge and is strategic when the machines involved in the maintenance operate in particularly contaminated contexts and difficult environmental conditions.

UFI alternative filter elements offer **definite and reliable performance**. Thanks to the quality of the media, UFI spin-ons ensure **high efficiency** and **greater storage capacity** than similar products on the market.

Please check our Cross Reference online to find UFIFILTERMAX equivalent part number among more than 4.000 references of OEs, as AGCO, ARGO, ATLAS, BELL, BOBCAT, BOMAG, BOMBARDIER, BOSCH REXROTH, BUSSE & KUNTZE, CARRARO, CASE, CATERPILLAR, CLAAS, CUMMINS, DANA, DEUTZ-FAHR, DOOSAN, EATON, HYUNDAI CONSTRUCTION, JCB, JOHN DEERE, KOMATSU, KUBOTA, LAVERDA, LEKANG, LIEBHERR, LINDE, MANITOU, NEW HOLLAND, TOYOTA, VOLVO, ZF, and of competitors', as BALDWIN, DONALDSON, F.B.O., FAI FILTRI, FILTREC, FLEETGUARD, HIFI, IKRON, MAHLE, SF-FILTER, WIX.



### MAIN-LINE, HIGH EFFICIENCY FILTRATION

### Application:

FORTIMAX high pressure spin on series is ideal for use in **servo-assisted hydrostatic transmissions** where the servo line requires high performance filtration at medium working pressures.

Moreover, it is particularly suitable for cooling circuits, as well as for the traditional filtration of the fluid on the **return line** or on **auxiliary low pressure lines**. Other applications:

- Fluid conditioning systems
- Drainage lines
- Cooling circuits
- Transfer of fuel
- Hydrostatic loading pumps
- Engine oil systems
- Power transmissions

### Closed loop systems

- Agricultural equipment
- Power packs
- Earthmoving equipment
- High pressure pumps
- Mobile equipment (cement trucks, mobile cranes, waste management trucks, tankers, etc.)

### User Benefits:

- Compact design and quality construction
- Easy to handle
- Rapid to replace
- Disposable Canister
- No mess, as oil is contained inside
- Available in different sizes and lengths for longer life
- Perfect Interchangeability with several OE products



# HIGH PRESSURE SPIN-ON ELEMENTS

### **MATERIALS**

Spin-on housing: Steel Bypass valve: Polyammide Seals: NBR Nitrile

(FKM - on request fluoroelastomer)

### **PRESSURE (ISO 10771-1)**

Max working: 3,5 MPa (35 bar) Collapse, differential for the filter element (ISO 2941): 1 MPa (10 bar)

### **BYPASS VALVE**

Setting: 250 kPa (2,5 bar) 350 kPa (3,5 bar)

### **WORKING TEMPERATURE**

From -25° to +110° C

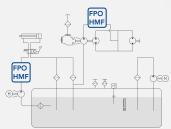
### **COMPATIBILITY (ISO 2943)**

Full with fluids: HH-HL-HM-HR-HV-HTG (according to ISO 6743/4)
For fluids different than the above mentioned, please contact our Customer Service.

# FORTIMAX REPORTIMAN REPORT OF THE PROPERTY O



### **HYDRAULIC DIAGRAM**



Is this datasheet the latest release? Please check on our website.



# FORTIMAX HIGH PRESSURE SPIN-ON ELEMENTS

### **ORDERING AND OPTION CHART**

- D		FUTED ELEMENT FAMILY							
E P	0	FILTER ELEMENT FAMILY						1	
		SIZE	1A	1B	11	12	14	21	22
		SEALS						T	
		N = NBR Nitrile			N	N	N	N	N
		F = FKM Fluoroelastomer	F	F	F	F			
		FILTER MEDIA*							
		CC = impregnated cellulose 10 µm					CC		
		CD = impregnated cellulose 25 µm			CD		CD	CD	
		FA = fibreglass 5 μm(c) β>1.000							FA
		FB = fibreglass 7 $\mu$ m(c) $\beta$ >1.000			FB		FB	FB	FB
		FC = fibreglass 12 $\mu$ m(c) $\beta$ >1.000			FC		FC	FC	FC
		FS = fibreglass 16 $\mu$ m(c) $\beta$ >1.000	FS	FS		FS			
		FD = fibreglass 21 $\mu$ m(c) $\beta$ >1.000			FD	FD	FD	FD	FD
		BYPASS VALVE**							,
		W = without			W	W	W	W	W
		G = 250 kPa (2,5 bar)	G	G		G			
		D = 350 kPa (3,5 bar)			D	D	D	D	D
		CONNECTION DIMENSION**							,
		A = 1"-12 UNF	А	А		А			
		B = 1 3/8"-12 UN			В	В	В	В	
		C = 13/16"-16 UN			С				
		D = 2"-16 UN			D	В			
		COLOUR**			,				
		W = white			W	W	W	W	W
		B = black	В	В	В	В			В

### **MAINTENANCE**

The used filter elements cannot be cleaned and are classified as "Dangerous waste material". They must be disposed according to local laws by authorized Companies.

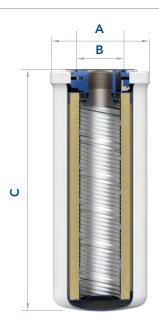
Verify that the Company you choose has the expertise and authorization to dispose this type of waste material.

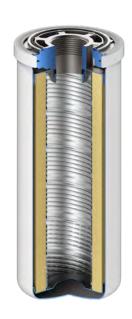
<sup>\*</sup> Other filter media option available on request.

<sup>\*\*</sup> Additional digits for Aftermarket OE execution only



## FILTER ELEMENT DIMENSIONS





### **FILTER HOUSING**

	Α	В	С	KG	Seal	Media	Bypass	Colour	Area (cm²)
EPO1AFFSGAB	94	1"-12 UNF	172	1,0	FKM	Fibreglass 16µm	2,5	black	2.210
EPO1BFFSGAB	94	1"-12 UNF	212	1,1	FKM	Fibreglass 16µm	2,5	black	2.900
EPO11NCD	97	1 3/8"-12 UN 2B	155	0,9	NBR	Impregnated cellulose 25µm	-	white	2.130
EPO11NFB	97	1 3/8"-12 UN 2B	155	0,9	NBR	Fibreglass 7µm	-	white	1.860
EPO11NFC	97	1 3/8"-12 UN 2B	155	0,9	NBR	Fibreglass 10µm	-	white	1.860
EPO11NFD	97	1 3/8"-12 UN 2B	155	0,9	NBR	Fibreglass 21µm	-	white	1.860
EPO11NFDDCW	97	13/16"-16 UN	155	0,9	NBR	Fibreglass 21µm	3,5	white	1.860
EPO11NFDDCB	97	13/16"-16 UN	155	0,9	NBR	Fibreglass 21µm	3,5	black	1.860
EPO11NFDDDW	97	2"-16 UN	155	0,9	NBR	Fibreglass 21µm	3,5	white	1.860
EPO11NFDDBW	97	1"3/8-12 UN	155	0,9	NBR	Fibreglass 21µm	3,5	white	1.860
EPO11FFDDCW	97	13/16"-16 UN-2B	155	0,9	FKM	Fibreglass 21µm	3,5	white	1.860
EPO12NFD	97	1"3/8-12 UNF	180	1,0	NBR	Fibreglass 21µm	-	white	2.360
EPO12NFDDDW	97	2"-16 UN	180	1,0	NBR	Fibreglass 21µm	3,5	white	2.360
EPO12FFSGAB	97	1"-12 UNF	180	1,0	FKM	Fibreglass 16µm	2,5	black	2.360
EPO14NCC	97	1 3/8"-12 UN 2B	240	1,3	NBR	Impregnated cellulose 10µm	-	white	3.810
EPO14NCD	97	1 3/8"-12 UN 2B	240	1,3	NBR	Impregnated cellulose 25µm	-	white	3.810
EPO14NFB	97	1 3/8"-12 UN 2B	240	1,3	NBR	Fibreglass 7µm	-	white	3.320
EPO14NFC	97	1 3/8"-12 UN 2B	240	1,3	NBR	Fibreglass 10µm	-	white	3.320
EPO14NFD	97	1 3/8"-12 UN 2B	240	1,3	NBR	Fibreglass 21µm	-	white	3.320
EPO14NCDDBW	97	1"3/8-12 UNF	240	1,3	NBR	Impregnated cellulose 25µm	3,5	white	3.810
EPO21NCD	121	1 3/4"-12 UN 2B	294	2,3	NBR	Impregnated cellulose 20µm	-	white	6.480
EPO21NFB	121	1 3/4"-12 UN 2B	294	2,3	NBR	Fibreglass 7µm	-	white	5.060
EPO21NFC	121	1 3/4"-12 UN 2B	294	2,3	NBR	Fibreglass 10µm	-	white	5.060
EPO21NFD	121	1 3/4"-12 UN 2B	294	2,3	NBR	Fibreglass 21µm	-	white	5.060
EPO21NFCWBW	121	1"3/8-12 UNF	295	2,3	NBR	Fibreglass 12µm	-	white	5.060
EPO21NFA	121	1 3/4"-12 UN 2B	361	2,7	NBR	Fibreglass 5µm	-	white	5.060
EPO22NFB	121	1 3/4"-12 UN 2B	361	2,7	NBR	Fibreglass 7µm	-	white	6.300
EPO22NFC	121	1 3/4"-12 UN 2B	361	2,7	NBR	Fibreglass 10µm	-	white	6.300
EPO22NFD	121	1 3/4"-12 UN 2B	361	2,7	NBR	Fibreglass 21µm	_	white	6.300





### **DISCLAIMER**

Please note that the information given in this catalogue is based on standard product features and refers to average applications that may not be valid in some specific case.

Due to continuous improvement to our products, their performances, dimensions and weights may change without prior notice.

We do not accept any liability for accuracy on this information.

# UFI HYDRAULIC DIVISION UFI FILTERS HYDRAULICS S.P.A.

Via S. Chierico, 24 - Bolgare (BG) - Italy T +39 0354493831 - F +39 035843743 info.ufihyd@it.ufifilters.com

### Company with quality management system certified by DNV

ISO 9001 - IATF 16949

Company with environmental system certified by DNV ISO 14001

# UFI FILTERS USA INC.

50 W. Big Beaver Road, Suite 440 Troy, MI 48084 - USA T +1 2484207448

### UFI FILTERS DO BRASIL LTDA

Av. Prefeito Luis Latorre, 9450 Galpão 15 – Distrito Industrial Jundiaí – São Paulo Zipcode: 13209-430 - Brazil T +55 11 2923-6554

# UFI FILTERS INDIA PVT LTD.

Plot no .D-222/ 47 ,T.T.C M.I.D.C Shirwane Nerul Navi - Mumbai 400706 - India T +91 2220875755 T +91 8744071920

### UFI FILTERS KOREA LIMITED

42, Hwanggeum 3-ro, Yangchon-eup Gimpo-si, Gyeonggi-do, 10048 - Korea T +82 319861341 F +82 319861349

# SOFIMA INDUSTRIAL FILTER SHANGHAI CO, LTD

Floor 1, building 2, No.128, Yuantong Road, Datuan Town, Pudong new district, Shanghai City, 201314 Shanghai - China T +86 2139792688