

UFI FILTERS HYDRAULIC DIVISION

WELCOME TO TOMORROW



UFI FILTERS
CHOSEN BY THE BEST

www.ufihyd.com

A WINNING GROUP



UFI'S MISSION

UFI Filters' mission is to create innovative and sustainable solutions in filtration and thermal management systems. UFI Filters puts customers first and aims to provide them with exceptional quality products to enhance the efficiency of their applications.

UFI Filters believes in a business ethic of continuous improvement and mutual respect, which begins inside the Company and extends to customers and suppliers with equal importance.

UFI'S VISION

Be the trendsetter in the world of filtration, hydraulic applications included, and thermal management.

UFI'S VALUES

The "Values" of ethical conduct adopted by UFI Group and shared throughout its entire organization are:

INNOVATION

Being one step ahead

PASSION

Being driven by passion and heart

EXCELLENCE

Delivering superior results, so that we are always chosen by the best

INTEGRITY

Operating in adherence to moral and ethical principles

ACCOUNTABILITY

Achieving our goals respecting our values

DIVERSITY

Appreciating and valuing our differences

THE GROUP BY NUMBERS



1971

Founded in 1971, it's now a world leader in filtration technology and thermal management.



206

206 patents at international level.



4.000

18 production plants and over 4,000 employees in 16 countries worldwide.



F1

Present everywhere, from F1 cars to the ExoMars spacecraft.



95%

95% of vehicles manufacturers worldwide choose UFI Filters.



5%

5% of turnover reinvested in R&D.

HYDRAULIC DIVISION



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 construction vehicle 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.

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.

SUCTION FILTERS



OPTIMAL PROTECTION OF YOUR PUMP

Application:

Suction filters are required for general purpose coarse filtration protection of the downstream hydraulic-pump. Fine filtration at this point in the hydraulic circuit is not recommended to avoid pump-cavitation.

User Benefits:

Suction filters represent the "first-line" filtration and are used to:

- avoid the ingress of contamination into the hydraulic circuit
- prolong the lifetime of finer downstream filtration
- reduce the particulate-load on the finer filter, thus extending service-life-intervals, unplanned downtime and maintenance
- avoid damage to the finer downstream filter from coarse particulate, such as rust.

The overall consequence of effective "first-line" suction filtration is a reduction in the Kwh running costs of the hydraulic-pump.

SUCTION FILTERS



CAL

Qmax 100 l/min



ESA-ESB

Qmax 600 l/min



FMA-LFM

Pmax 0,7 Mpa
Qmax 600 l/min



FSC-FSB

Qmax 500 l/min



FSD-MSE

Qmax 700 l/min



FSE-AMF

Qmax 75 l/min



FSG-FAC

Qmax 70 l/min



PRESSURE FILTERS



PRESSURE FILTERS

FPA-MDM

Pmax 11 MPa
Qmax 50 l/min



FPB-MHT

Pmax 42 MPa
Qmax 450 l/min



FPC

Pmax 38,5 MPa
Qmax 120 l/min



FPD-MDF

Pmax 31,5 MPa
Qmax 400 l/min



FPE-AMF-AMD

Pmax 1,2 MPa
Qmax 300 l/min



FPG-MDS

Pmax 5 Mpa
Qmax 400 l/min



MAIN-LINE, HIGH EFFICIENCY FILTRATION

Application:

UFI pressure filters are generally used for the following applications: hydraulic Transmission and power-steering applications, general main-line, open-loop pressure filters for full-flow hydraulic system conditions.

User Benefits:

- main-line, high-efficiency, full-flow fine filtration for the protection of precision valves and fluid-power proportional controls.
- high-performance, high-dirt-holding capacity, micro-fibre filter elements keep the cost of ownership (running-costs) low between planned vehicle service-intervals
- non-welded housing design for extended life and safer operation.

FPH-TLM

Pmax 2 MPa
Qmax 400 l/min



FPL-SPP

Pmax 31,5 MPa
Qmax 400 l/min

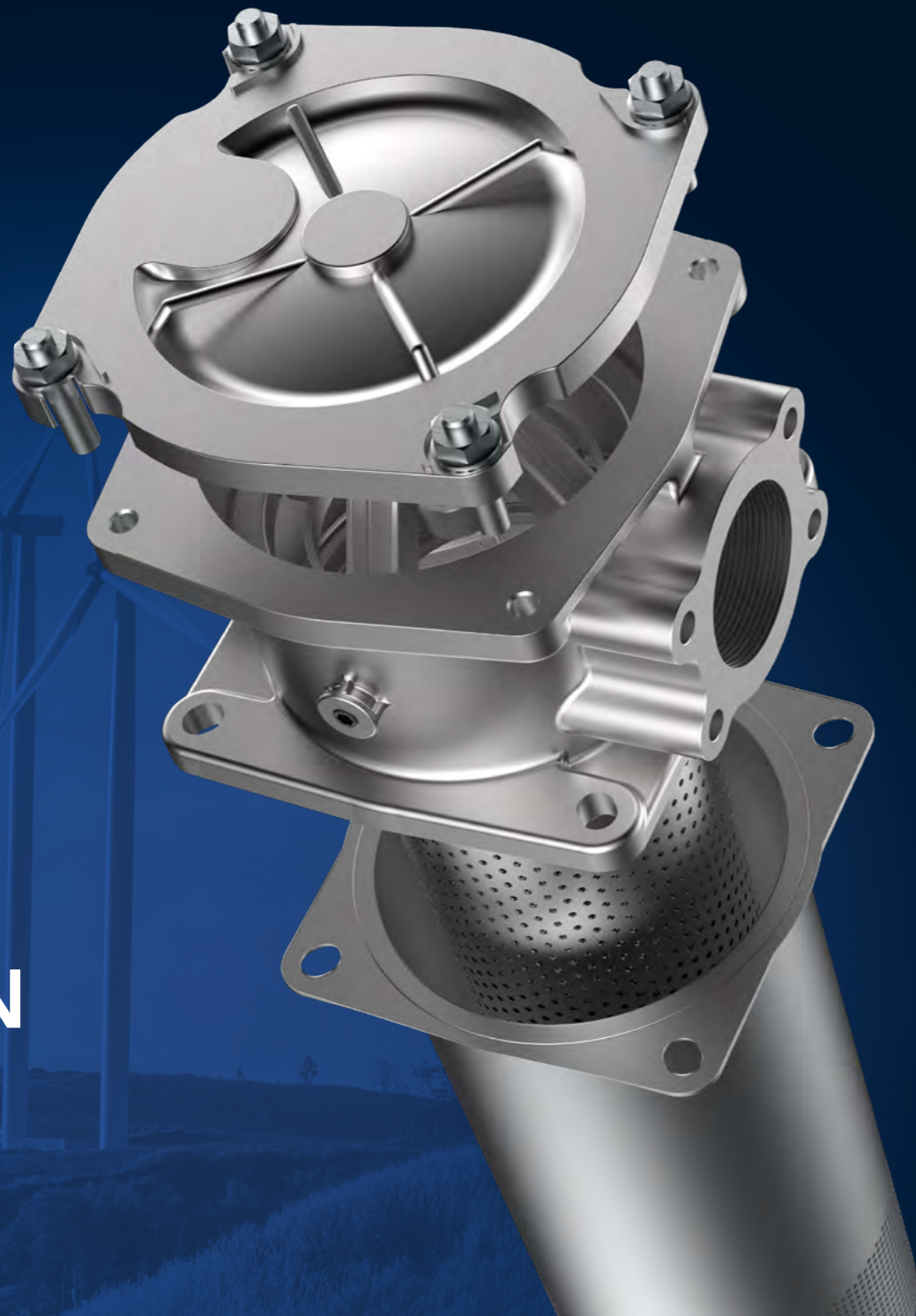


FPM-SPM

Pmax 21 MPa
Qmax 120 l/min



RETURN FILTERS



RETURN FILTERS

FRA-RFM

Qmax 700 l/min



FRB-RFA

Qmax 140 l/min



FRC-MAR

Qmax 200 l/min



FRD-MRH

Qmax 1500 l/min



FRF-RFC

Qmax 2200 l/min



FRG-RSC

Qmax 2400 l/min



FRH

Qmax 200 l/min



RETURN-LINE SAFEGUARDS FLUID CLEANLINESS

Application:

Hydraulic Return-Filters are used on the return-side of the hydraulic-circuit, where the oil re-enters the tank-reservoir.

This type of filter should be sized for the maximum flow of the hydraulic system.

To avoid "foaming" in the reservoir, the return flow-pipe must be located below the liquid level in the tank.

As a general "rule of thumb," the distance between the bottom of the reservoir-tank and the end of the return-pipe should be more than 2 to 3 times larger than the pipe diameter.

User Benefits:

Space-saving "tank-top" mounting avoids excessive piping. Externally-mounted filters, keep contamination outside of the tank-reservoir and are often more accessible for filter element replacement.

Main benefits:

- Light-weight / compact-design. Tank-reservoir filling via the filter top-cap
- helps maintain system cleanliness
- Ease of maintenance and filter element replacement
- Filters available with built-in air breathers
- Integral filter element by-pass valves

OFF-LINE FILTERS



OFF-LINE FILTERS



FOF-ROL

Pmax 1 Mpa
Qmax 1500 l/min



UOW-GTC

Qmax 40 l/min



FLUSHING AND HYDRAULIC-FLUID TRANSFER

Application:

Off-line filters are used to maintain "Roll-Off-Cleanliness" in the hydraulic-circuit at the time a new vehicle leaves the manufacturing assembly-line or a vehicle undergoes repair or re-build. Stationary off-line filters work at system-pressure and can be connected to the hydraulic-circuit of the vehicle in such a way that it becomes the "power-supply." The circuit can be cycled to flush out and remove harmful contamination to pre-condition the oil for longevity and improved service-life. Off-line filters maintain "Roll-Off-Cleanliness." Where the level of cleanliness is insufficient to remove harmful contamination from "Built-in," "Brought-in," "Induced-in" and "Taken-in" sources, the result can be premature vehicle breakdown/failure within the warranty period.

User Benefits:

- "Built-in" – contamination left in the system or in componentry during initial vehicle assembly or vehicle repair/re-build.
- "Brought-in" - components and/or sub-assemblies "brought-in" or manufactured off-line/off-site, may be contaminated and add to the overall levels of contamination on the vehicle during assembly, repair or re-build.
- "Induced-in" - contamination internally "induced" into the system during operation and performance-testing or caused by wear, corrosion, agitation, oxidation or hydraulic-fluid degradation.
- "Taken-in" - Externally introduced contamination that enters a system from the atmosphere via insufficiently sealed orifices, covers or access-points.

HYDRO-DRY



ALTERNATIVE FILTER-ELEMENTS



THE IMPORTANCE OF REMAINING "GENUINE", EVEN WHEN MANUFACTURING ALTERNATIVE FILTER-ELEMENTS

When the time comes to replace your hydraulic filter elements, don't compromise on quality. Don't buy a counterfeit, pirate part!

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 originally bought, however this source doesn't come without risk!

If you have been satisfied with the Genuine filter and its filter element, which could have been specified by your chosen equipment supplier (our OE customer for example) from the outset, why would you want to compromise that satisfaction now, for a part which is actually very reasonably priced, considering the service it performs and the protection it affords?

These "look alike" filter elements represent an unethical and often illegal practice that poses a real danger to your company's operation. The equipment these filters are protecting has cost you a lot of money - much more than you can save by buying pirate elements. Therefore a compromise on the device designed to remove high-maintenance contamination from your essential hydraulic energy source, surely cannot make good business sense.

The difference between Genuine UFI parts and available "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.

Genuine, UFI Hydraulic Filter Elements are made from the highest quality materials.

Literally millions of our Genuine parts have proven themselves over the years in many varied applications.

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!

TRANSMISSION FILTERS



COMBINED RETURN & SUCTION FILTER

Application:

Hydraulic transmissions are usually configured in one of two ways, split or closed-coupled. A split transmission consists of a power unit with hydraulic pump, heat-exchanger, hydraulic filter(s), valves and controls mounted on a tank-reservoir. Split transmissions are typically used in heavy-duty applications. Split transmissions offer a wide range of flexibility in terms of system-configuration for the most efficient use of space and weight distribution. Combined Return & Suction Filters replace the need for suction- or pressure filters for the charge-pump in closed-loop hydrostatic-drive circuits and for return filters in the open-loop hydraulic circuit (Split transmissions).

FTA-FTB-KTS

Pmax 1 Mpa
Qmax 240 l/min



AIR FILTERS



CBA-TM
Qmax 750 l/min



CBB-FA
Qmax 500 l/min



CBC-TSP
Qmax 1800 l/min



CBD-FA
Qmax 1500 l/min



CBE-FA
Qmax 20000 l/min



CBF-FA
Qmax 4000 l/min



CBS-SAB
Qmax 2800 l/min



CSE-SBB
Qmax 2800 l/min



AIR SENTRY



AIR FILTRATION LINE

Air breathers and filters should be fitted to the top of the tank-reservoir to protect against an ingress of contamination from the atmosphere. The most important benefits are the protection from airborne particulate contamination and humidity and the direct-mounting to the tank reservoir, avoiding additional piping the protection ser

ACCESSORIES



CFA-TM



CLA-LS



CLB-LME



FAB



CLOGGING INDICATORS



COMPREHENSIVE CHOICE, HIGH QUALITY STANDARD

Compromising hydraulic-system performance - ignoring the essential change-out requirement of a filter-element, or not fitting an indicator and forgetting the fact that a filter is installed, is a false economy and could cost far more in downtime and expensive hydraulic component repair and/or replacement.

User Benefits:

- Tank breather filters for the filtration of the incoming air to the tanks of hydraulic systems
- Tank filler and breather filter for the filtration of the incoming air to the tanks of hydraulic systems and for filling the oil on the hydraulic tank
- Filler caps for filling oil in the hydraulic tanks
- Visual and electrical level indicators of fluid for hydraulic tank
- Oil bath air filters for prolonged use in particularly dusty environments, to ensure an excellent level of filtering and a long working life. For very dusty environments can be provided with cyclone prefiltering



HEAVY DUTY FILTERS



HEAVY DUTY FILTERS

BLOW BY FILTERS

Crankcase Ventilation



ENGINE-OIL FILTRATION MODULES

with Integrated Cooler



DIESEL FUEL PRE-FILTERS



DIESEL FUEL FILTERS



DIESEL FUEL FILTRATION MODULES



CNG/LPG FILTERS



HEAVY DUTY FILTERS

Heavy vehicle manufacturers must ensure the highest levels of efficiency and safety, particularly for heavy duty vehicles, which travel long distances every day. This is why it is important to be able to rely on top-level suppliers such as UFI Filters, with its complete range. We supply our OE products to manufacturers who represent 48% of the world's production of trucks and industrial vehicles. UFI Filters has marked the history of heavy duty engines oil filtration with the DEFENDER® patent, which uses a media, borrowed from aerospace technologies, composed of synthetic microfibres to guarantee extreme performance, with a service interval of hundreds thousand kilometres. Technological evolution has led to the latest generation of innovative systems for filtration of oil, fuel, air blow-by and CNG/LPG. Since 2010 UFI Filters Group is also supplying OEMs with vacuum brazed heat exchangers in order to fulfill the requirements of cooling/heating in engines, transmissions and hybrid vehicles as well.

OIL FILTERS



THERMAL MANAGEMENT



AIR FILTERS



GLOBAL PRESENCE



- **Headquarter**
- **Hydraulic Production & Sales**
- **Hydraulic Sales**

UFI GROUP

HEADQUARTER

- UFI Filters S.p.A. Nogarole Rocca (IT)

18 PRODUCTION SITES

- UFI Filters S.p.A (Nogarole Rocca, IT)
- Planet Filters S.p.A. (IT)
- Plastic Technologies S.p.A. (IT)
- UFI Filters Czech s.r.o. (CZ)
- Sofima Filters S.A (TN)
- UFI Filters do Brasil LTDA (BR)
- UFI Filters India Pvt. Ltd (Belgaum, IN)
- UFI Filters India Pvt. Ltd (Bawal, IN)

- Sofima Automotive Filter Shanghai Co, Ltd (CN)
- UFI Filters Shanghai Co, Ltd. (CN)
- Sofima Industrial Filter Shanghai Co, Ltd (CN)
- Sofima Automotive Filter Changchun Co, Ltd (CN)
- Sofima Trading Shanghai Co, Ltd (CN)
- UFI Filters Korea Co, Ltd. (KR)
- UFI Filters S.p.A (Marcaria, IT)
- UFI Filters Poland Sp Zoo (PL)
- UFI Filters Chongqing Co, Ltd (CN)
- SOFIMA Filters India Pvt. Ltd (Bahadurgarh, IN)

OPENING SOON

- UFI Filters Mexico (MX)

3 INNOVATION CENTERS

- UFI Innovation Center S.r.l. (IT)
- UFI Innovation Center India Pvt. Ltd (IN)
- UFI Filters Shanghai Co, Ltd (CN)

54 COMMERCIAL OFFICES

HYDRAULIC DIVISION

HEADQUARTER

- UFI Filters S.p.A. Nogarole Rocca (IT)

3 PRODUCTION SITES & SALES

- Planet Filters S.p.A. (IT)
- UFI Filters India (IN)
- Sofima Industrial Filter Shanghai Co, Ltd (CN)

1 INNOVATION CENTER

- UFI Innovation Center S.r.l. (IT)

4 COMMERCIAL OFFICES

- Saarbrucken (DE)
- UFI Filters United States (US)
- UFI Filters do Brasil LTDA (BR)
- UFI Filters Korea Co, Ltd. (KR)



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.

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ISO 9001 - IATF 16949

Company with environmental system certified by DNV
ISO 14001

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