

EVERY  
PRODUCT  
PART NUMBER  
AVAILABLE TO ORDER



aerospace  
climate control  
electromechanical  
**filtration**  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding



# Hydraulic Filter Division Europe - Distribution Overview

Products and Services v2.0



ENGINEERING YOUR SUCCESS.

# Why Parker?

As a leader in the motion and control industry, Parker strives to become a trusted partner to customers.



Our customer relationships are built by listening closely to customers' requirements and delivering time and again:

- Saving time
- Reducing waste
- Improving efficiency
- Expanding output
- Increasing profitability

Parker Filtration's global reputation as a reliable supplier of superior filtration products and services across a variety of industries is the result of a focused and integrated development and manufacturing system coupled with customer service and technical support that, we suggest, is second to none.



## Parker Innovations – Support for Distributors

At Parker we're committed to providing on-going support for distributors.

To keep ahead of ever-changing industry requirements we've developed a range of interactive support tools, specifically developed by Hydraulic Filter Division Europe to provide the information and insight required by our distributors.

**E-Learning** - Parker online knowledge at your fingertips



HFDE's online 'elearning' training modules at [www.parkerhfde.com/elearning](http://www.parkerhfde.com/elearning) is the first place to go for anyone searching for web-based hydraulic filtration training and personal development.

**Hydraulic & Lube Filtration**  
On & Offline Filter Selector



Visit [www.filterselector.com](http://www.filterselector.com) and register today for the HFDE hydraulic and lube filter selector. There is also a downloadable, offline version to install and use when there is no internet connection available.





## Parker Quality & Reliability



Parker's European hydraulic filtration team is guided by its relentless drive to improve products, refine manufacturing processes and deliver quality products on time, every time.

We bring our hydraulic and lube filtration and fluid condition monitoring 'know how' to every application – wherever in the world it may be.

Parker's world-wide distribution network provides the vital link with end users and MRO product requirements, system solutions and after-sales service and technical support.

Industrial and mobile MRO customer applications benefit from:

- Parker product innovations.
- Manufacturing quality and technologies.
- On-time delivery and applied strategic principles of purchasing and production.
- Value added by developing cross-group relationships, ensuring the final solution is always the best fit for the customer.

### Par Fit™ Selector and Tool Kit - On & Offline Tools



Visit [www.parker.com/parfit](http://www.parker.com/parfit) to use the online Par Fit interchange element selector to identify the right Parker element. The offline Par Fit Tool Kit incorporates a version of the element selector, Element Expert - a visual, dimensional element identification tool and the OEM apps tool - linking Par Fit part numbers to OEM part numbers by market and machine type.

### Fluid Condition Monitoring - Apple App



The unique HFDE Condition Manufacturing AppStore app is available to download free onto your iPhone, iPad or iPod Touch and offers two valuable calculation tools to help reduce the risk of equipment downtime. The ISO Generator assesses the ISO cleanliness of a system and the frequency calculator gives a system monitoring frequency.





## Parker Products – On-demand

Hydraulic filtration and condition monitoring equipment and services that support distribution.

Distributor sales counters and Parker Stores provide a perfect sales support environment to promote and sell Parker's hydraulic and lube filtration, fluid power products and fluid condition monitoring solutions.

Equally, MRO business is comprehensively covered by promoting quality Par Fit interchange element options for over 140 competitor manufacturers so there's sure to be a Par Fit element to match a customer enquiry.

Now take a look at just some of the products that are available to order



## Parker innovation in manufacturing

Parker's Hydraulic Filter Division Europe operates across four industry Business Units providing a comprehensive product and service solution to all Parker Distributors via the Parker worldwide sales company network.



### Hydraulic Filtration Products

**Together, we can** provide filtration solutions based on ecological and economical values.

- On-time hydraulic and lube filtration solutions.
- Working with customers to achieve higher standards and improved performance.
- New technologies and innovative products.
- Helping industries reduce environmental impact by more than 50%.



### Heavy Duty Fuel & Lubrication Filtration Solutions

**Together, we can** find powerful filtration solutions that generate effective savings.

- Providing the correct filtration solution for a multitude of fuel, gas, hydraulic oil and lubrication systems.
- Low and medium pressure multi-purpose filters.
- A range of filter elements including environmentally sound choices allowing highly customised solutions.



### Fluid Condition Monitoring Products

**Together, we can** ensure that fluid contamination doesn't affect maintenance programmes.

- Globally proven portable particle analysers.
- On-line particle detectors that provide 24/7 system diagnostics.
- Off-line bottle samplers/analysers.
- Innovative moisture sensors designed to monitor and measure moisture in fluid.



### PAR FIT™ Hydraulic Interchange Elements

**Together, we can** supply our customers with over 50,000 interchange elements.

- Over 140 filter competitors covered.
- World-class global research and development facilities.
- Product design, development and innovation.

# Low Pressure Hydraulic Filters

## TTF Series

Tanktop Mounted Return Line Filters, Max 500 l/min – 10 bar

AN INNOVATIVE GREEN  
FILTER FEATURING  
**LEIF®**



### Product Features

- TTF features pre-filtration by means of a magnet column.
- Patented LEIF® elements safeguard filtration quality.
- Flow from inside to out.
- Maximum pressure 10 bar. Maximum flow 500 l/min.
- Options include a filling port in the filter cover and second return port.

### Technical Specification

#### Product Description:

Tank top mounted, return filter with aluminium head and cover

**Maximum Working Pressure:**  
10 bar

#### Operating Temperature Range:

Seal material Nitrile:

-40°C to +100°C

Seal material Fluoroelastomer:

-20°C to +120°C

#### Seal Material:

Nitrile, fluoroelastomer

#### Bypass Setting:

Opening pressure 1.5 or 2 bar.

Other settings on request

#### Connections:

Threaded BSP ports.

Flanged ports available

#### Filtration Media:\*

10 micron Microglass III & Ecoglass III for LEIF® elements

#### Options:

Diffuser type T (with closed diffuser end cap and with perforated plate area, recommended when oil entry in reservoir is close to the reservoir bottom or to ensure oil entry under the reservoir oil level)

**For more information see the HFDE product catalogue Ref: FDHB500.**

### Ordering Information

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
TTF310QLBP2EG121	90	1.5 bar	G¾	None	937878Q
TTF610QLBP2EG203	170	1.5 bar	G1¼	Diffuser type T	937853Q
TTF810QLBP2EG243	300	1.5 bar	G1½	Diffuser type T	937855Q
TTF1010QLBP2HG24A	500	2.0 bar	G1½	Diffuser type T	937857Q

\*Note: All filter assemblies are supplied with plugged indicator ports. Indicator codes are shown on Page 10. Indicators can be ordered separately from the filter assembly. 10 micron element options have been selected for all filter products in this overview except EPF, DF40 and Eco 130 Series filters.

## BGT Series

Tanktop Mounted Return Line Filters, Max 2400 l/min – 10 bar

AN INNOVATIVE GREEN  
FILTER FEATURING  
**LEIF®**



### Product Features

- BGT features pre-filtration by means of a magnet column.
- Patented LEIF® elements safeguard filtration quality.
- Flow from inside to out.
- Maximum pressure 10 bar. Maximum flow 2400 l/min.
- Filter heads with multiple ports available.

### Technical Specification

#### Product Description:

Tank top mounted, return filter with aluminium head and cover

**Maximum Working Pressure:**  
10 bar

#### Operating Temperature Range:

Seal material Nitrile:

-40°C to +100°C

Seal material Fluoroelastomer:

-20°C to +120°C

#### Seal Material:

Nitrile, fluoroelastomer

#### Bypass Setting:

Opening pressure 1.5 bar.

Other settings on request

#### Connections:

Flanges SAE2", 3". Threaded ports and multiple ports available

#### Filtration Media:\*

10 micron Microglass III and Ecoglass III for LEIF® elements

#### Options:

Diffuser type T (with closed diffuser end cap and with perforated plate area, recommended when oil entry in reservoir is close to the reservoir bottom or to ensure oil entry under the reservoir oil level)

**For more information see the HFDE product catalogue Ref: FDHB500.**

### Ordering Information

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
BGT1210QLBPER323	500	1.5 bar	2"SAE-3000-PSI	Diffuser type T	937859Q
BGT1510QLBPER483	1000	1.5 bar	3"SAE-3000-PSI	Diffuser type T	937862Q
BGT1710QBPER483	2000	1.5 bar	3"SAE-3000-PSI	Diffuser type T	937772Q

\*Note: All filter assemblies are supplied with plugged indicator ports. Indicator codes are shown on Page 10. Indicators can be ordered separately from the filter assembly. 10 micron element options have been selected for all filter products in this overview except EPF, DF40 and Eco 130 Series filters.

## Tanktopper Series I, II & III

Tanktop Mounted Return Line Filters with Integrated Air Breather, Max. 650 l/min - 10 bar

AN INNOVATIVE GREEN  
FILTER FEATURING  
**LEIF®**



### Product Features

- Tanktopper offers a total filtration solution with integrated air breather.
- Patented LEIF® elements safeguard filtration quality.
- Maximum pressure 10 bar. Maximum flow 650 l/min.
- In-to-Out filtration plus gauge and switch options.

### Technical Specification

#### Product Description:

Tank top mounted, return filter with aluminium head and co-polymer cover

**Maximum Working Pressure:**  
10 bar

**Operating Temperature Range:**  
-40°C to +80°C

**Seal Material:**  
Nitrile, fluoroelastomer (on request)

**Bypass Setting:**  
Opening pressure 1.5

#### Connections:

Threaded BSP or SAE ports. Second return port available for Tanktopper II and Tanktopper III

#### Filtration Media:\*

10 micron Microglass III, Ecoglass III for LEIF® element. Air breather 10 micron Abs

#### Magnetic Pack Options:

Optional for Tanktopper I. Standard for Tanktopper II and III

**For more information see the HFDE product catalogue Ref: FDHB500.**

### Ordering Information

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
TPR110QLBP2EG12E	40	1.5 bar	G¾"	Magnets	937902Q
TPR510QLBP2E2G201	120	1.5 bar	2x G1¼"	none	937892Q
TPR710QLBP2E2G241	250	1.5 bar	2x G1½"	none	937894Q

\*Note: All filter assemblies are supplied with plugged indicator ports. Indicator codes are shown on Page 10. Indicators can be ordered separately from the filter assembly. 10 micron element options have been selected for all filter products in this overview except EPF, DF40 and Eco 130 Series filters.

## PT Tank Top Mounted Filter Series

Max. 400 l/min - 10 bar



### Product Features

- Compact tank top mounted return line filter.
- Filter element can be used for direct screw-in mounting with co-polymer reservoirs.
- Flow capability up to 400 l/min at 10 bar working pressure.
- In-to-Out flow avoids re-contamination of the system.
- Parker quality filter element.

### Technical Specification

#### Product Description:

Tanktop mounted, return filter with aluminium head design

**Maximum Working Pressure:**  
10 bar

**Seal Material:**  
Nitrile, fluoroelastomer

**Operating Temperature Range:**  
-20°C to + 100°C

**Bypass Settings:**  
1.7 bar

#### Connections:

PT2: G¾" and G1"  
PT4: G1" or G1¼"

**Filtration Media:\***  
10 micron Microglass III

**Indicator Options:**  
Visual and electrical switch (NO or NC) type

**For more information see the HFDE product catalogue Ref: FDHB500.**

### Ordering Information

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
PT2110QBPGG124	25	1.7	G¾"	Airtight funnel	936752Q
PT2210QBPGG124	50	1.7	G¾"	Airtight funnel	936756Q
PT4110QBPGG164	110	1.7	G1"	Airtight funnel	936744Q
PT4210QBPGG164	175	1.7	G1"	Airtight funnel	936748Q

\*Note: All filter assemblies are supplied with plugged indicator ports. Indicator codes are shown on Page 10. Indicators can be ordered separately from the filter assembly. 10 micron element options have been selected for all filter products in this overview except EPF, DF40 and Eco 130 Series filters.

## Maxiflow + PS Series

Spin-on Filters, Max. 360 l/min - 10 bar



### Product Features

- Maxiflow full flow filters for suction or return applications.
- Maximum pressure 10 bar. Maximum flow 360 l/min.
- Available with a variety of integrated and add-on indicators.
- High quality filter medium.

### Technical Specification

**Product Description:**  
Full flow 'spin-on' filters for suction or return

**Filter Head Material:**  
Preferred Series MXA: Aluminium LM24  
PS Series: Aluminium alloy

**Filter Bowl Material:**  
Preferred Series MXA: Steel  
PS Series: Steel

**Maximum Working Pressure:**  
Preferred Series MXA: 10 bar  
PS Series: 10 bar

**Operating Temperature Range:**  
Preferred Series MXA: -30°C to +90°C  
PS Series: -30°C to +110°C

**Seal Material:**  
Preferred Series MXA: Nitrile  
PS Series: Buna (nitrile)

**Bypass:**  
Preferred Series MXA: Return line 1.05 bar, Suction line 0.17 bar, No bypass option  
PS Series: Return line 1.5 bar, Suction line 0.10 bar, No bypass option

**Filtration Media:\***  
Preferred Series MXA: 10 micron Microglass III media, Cellulose media  
PS Series: 10 micron Microglass III media, Cellulose media

**For more information see p the HFDE product catalogue Ref: FDHB500.**

### Ordering Information

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
MXA8551424	70	1,05 bar	G¾	Dual visual indicator	MXR8550
12PS10BTV1R2B	70	1,5 bar	G¾	Gauge type visual ind	MXR8550
MXA.8511.424	70	1.05 bar	G¾	Dual visual indicator	MX1518410x4
12PS10CTV1R2B	70	1,5 bar	G¾	Gauge type visual ind	MX1518410x4
MXA.8511.223	20 (Suction)	none	G¾	Dual visual indicator	MX1518410x4
12PS10CTV2S4B	20 (Suction)	none	G¾	Gauge type visual ind	MX1518410x4
MXA9511424	180	1,05 bar	G1½	Dual visual indicator	MX1591410x4
22PS10CTV1R2D	180	1,5 bar	G1½	Gauge type visual ind	MX1591410x4
MXA9511223	48 (Suction)	none	G1½	Dual visual indicator	MX1591410x4
22PS10CTV2S4D	48 (Suction)	none	G1½	Gauge type visual ind	MX1591410x4

## ATZ Series

Suction Filters, Max. 300 l/min



### Product Features

- ATZ submersible suction filters located below tank oil level.
- Maximum flow 300 l/min.
- In-to-Out filter stops contaminated oil leaking back into the system.
- Pre-filtration takes place by means of a magnetic column.
- Unique check valve, enabling element change below oil level.

### Technical Specification

**Product Description:**  
Suction line filter mounted horizontally against tank side. Aluminium filter housing

**Operating Pressure:**  
Vacuum

**Operating Temperature Range:**  
Seal material Nitrile: -40°C to +100°C. Seal material Fluoroelastomer: -20°C to +130°C

**Seal Material:**  
Nitrile, fluoroelastomer

**Bypass Valve:**  
Blocked

**Connections:**  
Threads G1½  
Flanges 2½" SAE-300° PSI

**Filtration Media:\***  
10 micron Microglass III  
10µ cellulose and 40µ Stainless Steel

**Element Collapse Rating:**  
10 bar (ISO 2941)

**Pressure Indicator Options:**  
0.15 bar or 0.30 bar (vacuum gauge).  
125-250VAC (electrical vacuum switch)  
12-28Vdc (electrical vacuum switch)

**For more information see the HFDE product catalogue Ref: FDHB500.**

### Ordering Information

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
ATZ110CBPXG241	120	Blocked	G1½	none	937958
ATZ110QBXPXG241	120	Blocked	G1½	none	937964Q
ATZ210CBPXR481	300	Blocked	2 ½" SAE-3000 PSI	none	937959
ATZ210QBXPXR481	300	Blocked	2 ½" SAE-3000 PSI	none	937965Q

\*Note: All filter assemblies are supplied with plugged indicator ports. Indicator codes for the ATZ are shown on Page 10. Indicators can be ordered separately from the filter assembly. 10 micron element options have been selected for all filter products in this overview except EPF, dF40 and Eco 130 Series filters.

# Medium Pressure Hydraulic Filters

## 12CS Series

Coreless Spin-On Filter, Max. 75 l/min - 35 bar



### Product Features

- 12CS features a Parker quality, replaceable coreless 10 micron Ecoglass III element.
- Re-usable bowl design for easy element removal.
- Maximum pressure 35 bar.
- An eco filter solution for hydraulic systems.

### Technical Specification

#### Product Description:

A coreless spin-on medium pressure filter with a die cast aluminium head and steel bowl

**Maximum Working Pressure:**  
35 bar

**Operating Temperature Range:**  
Buna: -40°C to 107°C

#### Filtration Media:\*

10 micron Ecoglass III element in fiberglass and polyester.  
Permanent steel core

#### Element Condition Indicator Options:

For predictive maintenance, 3 types of indicator are available.  
An electrical analogue or switch type indicator or a battery operated visual LED indicator.

**For more information see the HFDE product catalogue Ref: FDHB500.**

### Ordering Information

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
12CS210QEBNKS121	75	3.4 bar	SAE-12	none	940763Q
12CS210QEBNKG121	75	3.4 bar	G3/4	none	940763Q

\*Note: All filter assemblies are supplied with plugged indicator ports. Indicator codes are shown on Page 10. Indicators can be ordered separately from the filter assembly. 10 micron element options have been selected for all filter products in this overview except EPF, dF40 and Eco 130 Series filters.

## 15/40/80CN Series

Medium Pressure Filters, Max. 600 l/min - 70 bar



### Product Features

- CN utilizes a cast aluminium head and bowl.
- Excellent fatigue pressure ratings.
- Maximum pressure 70 bar. Maximum flow 600 l/min.

### Technical Specification

**Maximum Working Pressure:**  
70 bar

Rated fatigue pressure: 56 bar

**Operating Temperature Range:**

Seal material Nitrile:  
-40°C to +100°C.

Seal material Fluoroelastomer:  
-20°C to +120°C.

**Seal Material:**

Nitrile or fluoroelastomer.

**Bypass Valve & Indicator Settings:**

Table following gives bypass valve and corresponding indicator setting.

Bypass	Indicator
1.7 bar	1.2 bar
3.5 bar	2.5 bar

**Connections:**

Several threaded port options available, flange faced ports available on 80CN.

BSPF(G)	15CN: 1", 3/4"	40CN: 1 1/4", 1 1/2"	80CN: 1 1/2", 2"
SAE	15CN: 12, 16		

40CN: 16, 24

80CN: 24, 32

ISO 6149 15CN: M27

(On Request) 40CN: M33

80CN: M42, M48

Metric 3000-M 80CN: 2"

**Filter Housing:**

Head material aluminium.

Bowl material hard anodized aluminium.

**Microglass III (available by request)**

Supported with epoxy coated metal wire mesh, end cap material reinforced composite and metal inner core. Collapse rating 20 bar (ISO 2941).

**Ecoglass III**

Supported with plastic net, end cap material reinforced composite. No metal parts. Collapse rating 10 bar (ISO 2941).

**For more information see the HFDE product catalogue Ref: FDHB500.**

### Ordering Information

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
15CN110QEVPG6164	50	3,5 bar	G1"	none	936700Q
15CN210QEVPG6164	100	3,5 bar	G1"	none	936704Q
40CN110QEVPG6244	180	3,5 bar	G1 1/2"	none	936708Q
40CN210QEVPG6244	280	3,5 bar	G1 1/2"	none	936601Q
80CN210QEVTKG324	370	3,5 bar	G2"	none	936602Q
80CN210QEVPG6324	530	3,5 bar	G2"	none	936718Q



## Eco 130 Series

Medium Pressure Filters, Max. 1400 l/min. 30 bar



### Product Features

- In-line filter as a single filter, a dual unit, a parallel unit or a filter system.
- Single filter flow rate 1000 l/min. max.
- Dual and parallel unit flow rate 1400 l/min. max.

### Technical Specification

#### Maximum Working Pressure:

Single filter: 30 bar  
Dual and parallel units and filter systems: 16 bar

#### Operating Temperature:

-40°C...+100°C with Nitrile seals,  
-20°C...+120°C with Fluoroelastomer seals.

#### Seal Material:

Nitrile or optionally fluoroelastomer

#### Bypass Valve:

Opening pressure 3.5 bar

#### Connections:

Single filter: Flanges SAE 2" 3000-M, SAE 2½" 3000-M or with adaptor threads G1½ or G2.

Dual units: Flanges SAE 3" 3000-M or with adaptor threads G2.

Parallel units and filter systems: DN80/PN16 or DN100/PN16

#### Filtration Materials:

- Glassfibre Microglass III
- Environmentally friendly Ecoglass III. No metal parts.
- Cleanable metal mesh

#### Assembly:

In-line filter as a single filter, a dual unit, a parallel unit or a filter system with L-bore selecting valve assembly (only one side in use). Vertical installation

#### Nominal Flow Rate (30 cSt):

Single filter: 1000 l/min (60 m³/h)  
Dual and parallel units and filter systems: 1400 l/min (84 m³/h)

#### Housing Material:

Aluminium

#### Differential Pressure Indicators:

Visual indicator always included to each column, setting 2.5 bar. Optional electrical or electronic indicators to be mounted on lower indicator port

#### Fluid Compatibility:

Suitable for use with regular hydraulic and lubrication oils.

**For more information see the HFDE product catalogue Ref: FDHB500.**

### Ordering Information

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
130M210QEBM3KR401	700	3,5 bar	SAE 2½"-3000M	Visual indicator 2,5 bar	938723Q
130M220QEBM3KR401	900	3,5 bar	SAE 2½"-3000M	Visual indicator 2,5 bar	938724Q
130M310QEBM3KR401	900	3,5 bar	SAE 2½"-3000M	Visual indicator 2,5 bar	938727Q
130M320QEBM3KR401	1000	3,5 bar	SAE 2½"-3000M	Visual indicator 2,5 bar	938728Q

## DF40

Duplex Filters, Max. 200 l/min. 40 bar



### Product Features

- Fuel filter for diesel engines up to 10 MW.
- Lubrication filter for gearboxes and propulsion systems.
- Medium pressure duplex filter in hydraulic systems.
- In-line return duplex filter in hydraulic systems.

### Technical Specification

#### Maximum Working Pressure:

40 bar

#### Operating Temperature Range:

-20°C...+120°C with Fluoroelastomer seals, -20°C...+160°C with metal mesh elements and Fluoroelastomer seals

#### Seal Material:

Fluoroelastomer

#### Bypass Valve:

Standard without bypass, optional opening pressure 3.5 bar

#### Connections:

Flanges SAE 1½" 3000-M as standard. Optional thread connections G1½ and G1¼ available with flange adapters

#### Duplex Filter:

Change-over valve with open center position. Locking device for both end positions. Element change is possible by opening either the top cover or the bowl in the bottom.

#### Housing Material:

Cast iron (GJS)

Weight: 52 kg

#### Nominal Flow Rate (30 cSt):

200 l/min (12 m³/h)

#### Filter Elements:

- Environmentally friendly Ecoglass III elements, micron ratings(abs): 2 µm, 5 µm, 10 µm and 20 µm. Ecoglass III elements contribute to ISO14001 because they do not include metal parts
- Glassfibre Microglass III elements, micron ratings(abs): 2 µm, 5 µm, 10 µm and 20 µm
- Cleanable metal mesh elements, micron ratings(abs): 35 µm and 60 µm

#### Fluid Compatibility:

Suitable for use with regular hydraulic and lubrication oils & light fuel oils.

**For more information see the HFDE product catalogue Ref: FDHB500.**

### Ordering Information

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
DF40110QEVPKR241	270	3,5 bar	SAE 1½"-3000M	none	939206Q
DF40120QEVPKR241	300	3,5 bar	SAE 1½"-3000M	none	939207Q

\*Note: All filter assemblies are supplied with plugged indicator ports. Indicator codes are shown on Page 10. Indicators can be ordered separately from the filter assembly. 10 micron element options have been selected for all filter products in this overview except EPF, dF40 and Eco 130 Series filters.

## EPF *i*protect® (Ecological Pressure Filter)

High Pressure Filters, Max 700 l/min - 450 bar



### Product Features

- Designed with the *i*protect® patented filtration technology.
- Filter element remains in filter bowl during filter service.
- Reduce waste by typically 50% or more.
- No risk of installation mistakes due to a 'foolproof' design.
- Easy to integrate into hydraulic manifold solutions.

### Technical Specification

**Maximum working pressure:**  
450 bar Filter housing pressure pulse fatigue tested 10<sup>6</sup> pulses 0-450 bar

**Operating temperature range**  
Seal material Nitrile : -40 °C to +100 °C  
Seal material Fluorelastomer: -20 °C to +120 °C

**Seal material**  
Nitrile or Fluorelastomer

**Bypass valve & Indicator settings**

Bypass	Indicator
3.5 bar	2.5 bar
5.0 bar	3.5 bar
7.0 bar	5.0 bar
Blocked	5.0 bar

**Connections**  
Inlet and outlet connections are threaded internally

**Connection style**  
Thread G½ - G1½

**Specification**  
Nominal flows 40 l/min-500 l/min

**Filter housing**  
Head material cast iron (GSI)  
Bowl material steel

**Microglass III**  
Supported with epoxy coated metal wire mesh, end cap material reinforced composite and reusable metal inner core. Collapse pressure 25 bar (ISO 2941)

**Indicator options**  
Indicating differential pressure:  
2.5 +/- 0.3 bar  
3.5 +/- 0.3 bar  
5.0 +/- 0.3 bar

Visual M3  
Electrical T1  
Electronic F1 (PNP)  
Electronic F2 (NPN)  
Atex versions are available on request

**For more information see the HFDE product catalogue Ref: FDHB500.**

### Ordering Information

Part Number	Flow L/Min	Micron Rating	Length	Bypass	Ports	Replacement Elements
EPF1105QIBPMG081	40	5	1	7 bar	G1/2"	944419Q
EPF1100QIBPMG081	40	10	1	7 bar	G1/2"	944420Q
EPF2205QIBPMG121	140	5	2	7 bar	G3/4"	944431Q
EPF2210QIBPMG121	140	10	2	7 bar	G3/4"	944432Q
EPF3205QIBPMG161	250	5	2	7 bar	G1"	944439Q
EPF3210QIBPMG161	250	10	2	7 bar	G1"	944440Q
EPF4205QIBPMG201	450	5	2	7 bar	G1 1/4"	944447Q
EPF4210QIBPMG201	450	10	2	7 bar	G1 1/4"	944448Q
EPF5105QIBPMG241	500	5	1	7 bar	G1 1/2"	944451Q
EPF5110QIBPMG241	500	10	1	7 bar	G1 1/2"	944452Q

## Indicator Series

FMU Δp-Indicators and Pressure Indicators, Max 420 bar



### Product Features

- The FMU range of filter condition indicators, designed for use on a wide range of Parker filters.
- Accurate visual, electronic or electrical filter condition feedback.
- Maximum pressure 420 bar.
- Mobile, industrial and marine applications.

### Technical Specification

**Maximum Working Pressure:**  
420 bar (250 bar for aluminium)

**Maximum Differential Pressure:**  
210 bar

**Working Temperature Range:**  
-20 °C to +85 °C with fluorelastomer seals, -40 °C to +85 °C with nitrile and EPDM seals

**Material of Housing:**  
Brass, aluminium or stainless steel

**Seals:**  
Fluorelastomer, Nitrile or EPDM

**Mounting Torque:**  
max. 75 Nm  
(max. 50 Nm for aluminium indicator body & filter housing)

### Ordering Information

Part Number	Filter Type	Indicator Settings	Ports	Description
FMUG2EBPG02L	TPR, PT	1,2 bar	G1/8	pressure gauge
FMUS2EBMG02L	TPR, PT	1,2 bar	G1/8	pressure switch NO 42Vdc
FMUG1EBPM10L	TTF, BGT	1,2 bar	M10	pressure gauge
FMUS1EBMM10L	TTF, BGT	1,2 bar	M10	pressure switch NO/NC 42Vdc
FMUU2VBMM10L	ATZ	-0,3 bar	M10	vacuum gauge
FMUV2VBMM10L	ATZ	-0,3 bar	M10	vacuum switch NO 42Vdc
FMUM3KVMU14M	CN, DF40	2,5 bar	U14M cavity	visual differential pressure indicator
FMUT1KVMU14M	CN, DF40	2,5 bar	U14M cavity	electrical differential pressure switch
941802	12CS	All	1/8-27NPT	Analogue Electrical Indicator
941814	12CS	All	1/8-27NPT	Reed switch [on-off] Indicator
941945	12CS	All	1/8-27NPT	Visual Red-LED Indicator
FMUM3KVMU12H	130M	2,5 bar	U12H cavity	visual differential pressure indicator
FMUT1KVMU12H	130M	2,5 bar	U12H cavity	electrical differential pressure switch
FMUM3MVS08	EPF	5,0 bar	S08 cavity	visual differential pressure indicator
FMUT1MVS08	EPF	5,0 bar	S08 cavity	electrical diff pressure switch. (NO/NC type switch)

\*Note: All filter assemblies are supplied with plugged indicator ports. Indicator codes are shown on Page 10. Indicators can be ordered separately from the filter assembly. 10 micron element options have been selected for all filter products in this overview except EPF, DF40 and Eco 130 Series filters.

## Guardian

Portable Hydraulic Filtration System, Max. 15 l/min - 3.4 bar



### Product Features

- Guardian is designed to 'clean' new oil and deliver it to a system.
- Carries out a clean-up of existing fluid to its original condition.
- Maximum pressure 3.4 bar. Maximum flow 15 l/min.
- Filters petroleum based oils, water emulsions and diesel fuels.

### Technical Specification

Features	Advantages
Portable and robust design	Guardian is designed to be used anywhere. Take it to the system or transfer new oil from the drum.
Lightweight design	Only 10.6 kg.
Quick disconnect hose connections	Storage is simple. Guardian's compact design means it is easily stowed.
Visual indicator	Operational condition is constantly monitored.
110VAC or 220/240VAC options	Guardian's power flexibility means it can be used anywhere.
A range of clean-up elements	A user can specify the media that will best achieve his clean up/filtering requirements.
Water removal element option	Water removal from the system is an important requirement for fluid efficiency.

Note: 15 l/min / Fluid transfer at a controlled rate

### Ordering Information

Part Number	Motor Option	Element
GT4E110Q1UK	220/240 VAC	G04396Q
GT4E110Q1EUR	220/240 VAC	G04396Q
GT4E210Q1IND	110 VAC	G04396Q

For more information see the HFDE product catalogue Ref: FDHB500.

## 10MFP Series

with 'Moduflow plus' Portable Filtration Trolley



### Product Features

- 10MFP hydraulic trolley is the ideal way to pre-filter and transfer fluids into reservoirs or to clean up a system.
- Maximum flow 38 l/min.
- Par-Gel water removal elements available.
- icountPD particle detector option available.
- MS Moisture Sensor option (IPD integrated).

### Technical Specification

**Product description:**  
Transfers fluid from drums or storage tanks

**Maximum Recommended Fluid Viscosity:**  
10MFP - (108 cSt)  
0.85 specific gravity

**Visual Indicator (outlet filter):**  
Visual differential type 3-band (clean, change, bypass)

**Filter Bypass Valve Settings (Integral to Element):**  
Inlet - 0.2 bar  
Outlet - 2.4 bar

**Flow Rate:**  
38 L/min

**Operating Temperature:**  
-40°C to +66°C

**Electrical Service Required:**  
10MFP - 110/220 volts, 60/50 Hz, single phase, 10/5 amps

**Electrical Motor:**  
10MFP - ¾ hp @ 3450 rpm, O.D.P.  
Thermal overload protection

**Construction:**  
Cart frame - Steel  
Filter head - Aluminum  
Filter bowl - Steel  
Hoses - PVC (Std.)  
EPDM (high temp option)  
Wands - PVC (Std.)  
Steel tube (high temp option)

**Weight:**  
45.4kg

**For more information see the HFDE product catalogue Ref: FDHB500.**

### Ordering Information

Part Number	Motor Option	Element	
		Inlet	Outlet
10MFP140SA10Q1UK	220/240 VAC	940802	937399Q
10MFP140SA10Q1EUR	220/240 VAC	940802	937399Q
10MFP240SA10Q1IND	110VAC	940802	937399Q

For icount PD options, contact Parker.

## Filter Breathers and Environmental Air Filters

### EAB Series Air Filters



#### Product Features

- EAB Series - airflow up to 1500 l/min. Visual gauge option.
- Compact EAB10 airflow upto 1000 l/min, visual gauge option.

#### Technical Specification

##### Construction:

Glass reinforced composite housing with Eco-element.

##### Filter media options:

P020: High quality polyester media.  
2µm (abs)C015: Polyester media with water-resistant layer. 1.5µm (abs)  
Q010: Glass fibre media. 1.0µm (abs).

##### Mounting options:

With 6 screws. Includes machine and plate screws, a strainer and gaskets External threads G¾", G1"Internal thread G¾".

##### Options:

Visuals gauge type vacuum/pressure indicator. Overpressure valve, pressure setting 0.2 bar. EAB10 cannot be specified with an overpressure valve and vacuum/pressure gauge at the same time.

**For more information see the HFDE product catalogue Ref: FDHB500.**

#### Ordering Information

Part Number	Pressure Valve	Micron rating	Connection	Option	Replacement Elements
EAB20P020HC73V2	0,2 bar	2	6 hole fixing 73mm	none	EAC20P020
EAB10P020HC73	none	2	6 hole fixing 73mm	none	EAC10P020
EAB20P020GE16	none	2	G1 external thread	none	EAC20P020
EAB20P020HC73A	none	2	6 hole fixing 73mm	Pressure Gauge	EAC20P020

### Glass-filled Nylon and Metal Breathers



#### Product Features

- IP65 rated, non-corrodible glass-filled nylon range.
- Metal Pressurised and unpressurised range.

#### Technical Specification

##### Construction - IP65 Rated filter breathers

Moulded in non-corrodible glass filled nylon combining strength with a light weight design.

##### Construction - Metal Range

Air breathers and filter breathers designs available in pressurised and unpressurised options.

**For more information see the HFDE product catalogue Ref: FDHB500.**

#### Ordering Information

##### Filter Breathers (Metal)

Part Number	Displacement L/min	Micron rating	Connection	Option	Replacement Cap
AB116310	430	10	n/a	none	CAP.1163.10
SPA.1731.10.5	430	10	G¾	crack pressure 0,35 bar	none
SAB.1562.10	430	10	G¾	n/a	none

##### IP65 Rated Filter Breathers

Part Number	Displacement L/min	Micron rating	Connection	Option	Replacement Elements
AB98212011	0,2 bar	10	single hole	95mm strainer	none
AB98213011	0,35 bar	10	single hole	95mm strainer	none
AB98210011	none	10	single hole	95mm strainer	none
AB98210021	none	10	single hole	telescopic strainer	none
AB98817011	0,7 bar	10	6 hole fixing 73mm	95mm strainer	none
AB98810001	none	10	6 hole fixing 73mm	without strainer	none
AB98810011	none	10	6 hole fixing 73mm	95mm strainer	none

## Fluid Level Measurement

### Fluid Level Temperature Gauges



#### Product Features

- 3 sizes of fluid level/temperature gauge.
- 2 hole mounting.
- 76mm, 127mm and 254mm mounting centres.
- A one-piece design, high-visibility viewing lens for added security.
- Moulded in shatterproof, transparent polyamide.

For more information see the HFDE product catalogue Ref: FDHB500.

#### Ordering Information

Part Number	Description	Centres	Thread
FL69121	level/temp	76mm	M10
FL69123	level/temp	76mm	M12
FL69111	level	76mm	M10
FL69113	level	76mm	M12
FL69221	level/temp	127mm	M10
FL69223	level/temp	127mm	M12
FL69211	level	127mm	M10
FL69213	level	127mm	M12
FL69321	level/temp	254mm	M10
FL69323	level/temp	254mm	M12
FL69311	level	254mm	M10
FL69313	level	254mm	M12

## Suction Elements

### Proven solutions for oil reservoir efficiency



#### Product Features

A range of quality elements for reservoir and system application.

A high quality range of suction elements designed to compliment a reservoir installation including in-tank suction strainers and oil diffusers, metal and polyester in-line filters and drive couplings with nylon sleeve and sintered steel couplings.

- In-tank suction strainers.
- Constricted in stainless steel media with 30% glass-filled nylon head and Zintec centre tube.
- Maximum working temperature 90°C.
- 125 micron filtration media.
- Bypass rating 0.17bar.

For more information see the HFDE product catalogue Ref: FDHB500.

#### Ordering Information

Part Number	Flow Rate L/min	Thread	Bypass
SE75231210	50	1"	n/a
SE75351210	95	1 1/2"	n/a
SE75351310	130	1 1/2"	n/a
SE75361410	180	2"	n/a
SE75481410	500	3"	n/a

## Fluid Particle Detectors

### icount Oil Sampler (IOS)



#### Product Features

- Portable monitoring tool providing fluid qualification to ISO 4406:1999 standards.
- Quick, simple to use monitoring tool for sampling fluids from containers, fuel bunkers and holding tanks.
- Field solution to laboratory methods for the detection of solid contamination and freewater inference.
- On-board 250,000 test memory.
- MS moisture sensor standard.

#### Technical Specification

The IOS quality condition monitor for hydraulic oils and hydrocarbon fuels uses advanced technology to produce extremely repeatable results.

At the heart of the system is a sophisticated laser detector, using a light obscuration flow cell, providing continuous measurement of fluid flow passing through a sample tube.

Measurements are taken every second as standard, although measurement intervals and test period can be defined

#### Ordering Information

Part Number	Fluid Type	Calibration	Included
IOS1220EUR	Mineral	MTD	online connection adaptor
SER.MISC.067	Mineral	MTD	Verification fluid 2 x 500ml

by the user, with results being reported immediately and updated in real time.

Data is displayed on a built-in OLED digital display and can also be stored for subsequent upload via the embedded icount's web page interface connecting through an RJ45 cable.

For pressure systems (more than 2.5 bar) a Pressure Reducing Valve (PRV) is included as standard.



### icountPD - Online Particle Detector



#### Product Features

- Independent monitoring of system contamination trends.
- Warning LED or digital display indicators for Low, Medium and High contamination levels.
- Visual indicators with power and alarm output warnings.
- Continuous performance for prolonged analysis.
- Moisture Sensor RH% intergrated option.
- Full PC/PLC integration technology.

#### Typical Applications

##### Mobile Equipment

Earth Moving Machinery  
Harvesting  
Forestry  
Agriculture

##### Industrial Equipment

Production Plants  
Fluid Transfers  
Pulp & Paper  
Refineries

##### Power Generation

Wind Turbines  
Gearboxes  
Lubrication Systems

##### Maintenance

Test Rigs  
Flushing Stands

##### Fuel Contamination Detection

Fuel Storage Tanks  
Vehicle Fuel Tanks  
Uploading Fuel into an Aircraft

**For more information see the HFDE product catalogue Ref: FDHB500.**



#### Ordering Information

Part Number	Display	Moisture Sensor	Option	Output Option
IPD12322230	Digital	YES	8 pin plug connector	RS232 / 4 - 20mA
ACC6NN018	n/a	n/a	M12 to RS232 adapter	n/a
ACC6NN022	n/a	n/a	M12 to Power cable adapter	n/a
ACC6NN019	n/a	n/a	Flow control	n/a

## Moisture Sensing

### icountMS Range

#### Product Features

- MS moisture sensors provide fast, reliable and accurate inline detection of moisture in fluids.
- MS200 'Programmable' sensor monitoring and reporting relative humidity (RH), moisture content in oils. 420 bar MAOP.
- Temperature Outputs.



Part Number	Fluid Type	Output Options	Thread
MS2202110	Mineral	0-5VDC	G1/4 BSP BONDED SEAL
MS2204110	Mineral	4-20MA	G1/4 BSP BONDED SEAL
ACC6NF000	n/a	n/a	M12 x 8 pin cable

**For more information see the HFDE product catalogue Ref: FDHB500.**



## Fluid Particle Counters

### icountLCM20 Portable Particle Counter



#### Product Features

- icountLCM20 is a proven answer to fluid system contamination monitoring.
- 2-minute test procedure.
- Multi-standard ISO, NAS and AS4059 cleanliness reporting.
- Data entry, data graphing and integral printer.
- 420 bar rated maximum pressure.

#### How does icountLaserCM work?

- The particles are measured by a photo diode that converts light intensity to a voltage output which is recorded against time.
  - As the particle moves across the window the amount of light intensity to a voltage is measured and recorded.
  - This 'voltage' lost relates directly to the area of the particle measured, is changed into a capacitance value.
  - This value is counted and stored in the icountLaserCM computer in one of 6 channels according to particle size.
  - Readouts are displayed on the hand-held LCD in the accepted ISO and NAS standards ready for hard copy printing or RS232 computer download.
  - The on-board computer allows storage of up to 300 test results.
- For more information see the HFDE product catalogue Ref: FDHB500.**

#### Ordering Information

Part Number	Fluid Type	Calibration	Option
LCM202022	Mineral	MTD	n/a
ACC6NE009	n/a	n/a	Power Supply Euro 12 Volts
ACC6NE013	n/a	n/a	Re-chargable Battery Pack
ACC6NE015	n/a	n/a	Printer Paper x 5 rolls

### icountACM20 Aviation Fuel Contamination Monitor



#### Product Features

- icountACM20 monitors aviation fuel contamination to DEFSTAN 91-91 Issue 6 Jet A-1 fuel specification.
- Energy Institute Test Method IP 564.
- 2-minute test procedure.
- On-board, rear-mounted pump enables monitoring possibilities.
- Example: Fuel storage/vehicle tanks & fuel storage drums.

#### Technical Specification

##### Fluid Type

- Hydrocarbon Fuel
- Mineral Oil

##### Calibration

- MTD

#### Applications

The Parker icountACM20 Portable Particle Counter has been developed from existing technology for monitoring contamination in AvTur and other hydrocarbon fuels, in accordance with the Energy Institute (EI) Method IP 564. In addition, the ACM can also be used to monitor various fuels from existing sampling points in locations from refineries, pipelines, distribution terminals, airport fuel supply systems

all the way through to the point of uplift into aircraft.

- Fuel Testing Laboratories - DEFSTAN 91-91 issue 6.
- Bottle Sampling - Energy Institute (EI) - IP 564.
- Replace Clear & Bright and Gravimetric.
- Also for use on petroleum based hydraulic applications (Skydrol compatible available).

**For more information see the HFDE product catalogue Ref: FDHB500.**

#### Ordering Information

Part Number	Supersedes	Description
ACM202024EUR	N/A	icountACM20 with lab kit - EURO (DEFSTAN 9191)
ACC6ND000	B84794	1 Meter process cable
ACC6NE006	B84816	Parsmart downloader software
ACC6NE021	N/A	Euro Offline kit
SER.MISC.067	N/A	Verification fluid 2 x 500ml
ACC6NE015	B84702	Printer reel (x5)
ACC6NE014	P843702	Printer Ribbon (x1)

## Bottle Sampling

### icountBS2



#### Product Features

- Quick sample bottle analysis with variable test time options from 15 seconds and volume capacities from 10ml.
- Repeatable and re-producible result performance to ISO4406:1999 and NAS1638 particle count distributions.
- On-board compressor and 'shop' air capability.
- Environmentally controlled front-loading bottle chamber.
- CE compliant.
- Fluid resistant touch type screen panel.
- On-board thermal printer.
- 500 test memory (fully downloadable).
- MS Moisture sensor standard.



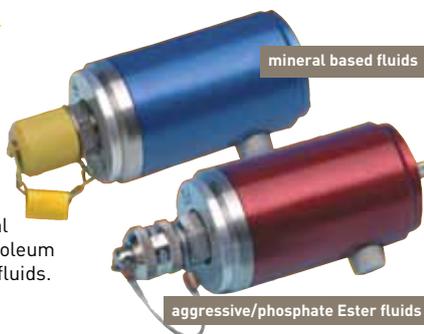
Part Number	Fluid Type	Calibration	Option
IBS3100EUR	Mineral	MTD	MS included
ACC6NW008	n/a	n/a	European power supply
SER.MISC.049	n/a	n/a	Calibration sample bottles x 6 - 250ml
ACC6NE002	n/a	n/a	50 X 250ml bottles (pairs)
ACC6NW005	n/a	n/a	Printer Paper Role

## Single Point Sampler

### SPS - Online Sampling

#### Product Features

- Lightweight, compact and easy to use online sampling unit.
- Connects an icountLCM20 to a single pressure test point in a fluid system.
- Suitable for use with mineral and biodegradable oils, petroleum based and phosphate ester fluids.
- 420 bar (6000 PSI) rated maximum pressure.



Part Number	Fluid Type	Option
SPS2021	Mineral	n/a

For more information see the HFDE product catalogue Ref: FDHB500.

## System 20

### Inline sensors and monitors



#### Product Features

- 2 types of System20 sensor are available. STI=industrial with reverse flow capability. STS=Mobile without reverse flow capability.
- 3 sizes of industrial inline System20 sensor for pressures up to 420 bar. 2 sizes of Mobile System20 sensor.
- Analogue monitor utilizes 3 day-glow gauges with protective cover.
- EM20 electronic monitor with full digital display and 300 test memory.
- For use with all mineral oils, water and oil/water emulsions.

Part Number	Fluid Type	Calibration
STM6211110	Mineral	LPM
STI2144100	Mineral	380 LPM
STI1144100	Mineral	100 LPM
STI0144100	Mineral	25 LPM

For more information see the HFDE product catalogue Ref: FDHB500.

## Oil Checking

### Oilcheck

#### Product Features

- Oilcheck hand-held condition monitor provides a visual comparison between new and used oils.
- Completely portable and battery powered.
- Numerical display shows positive or negative increase in dielectrics.
- Optional protective rubberised sleeve.



Part Number	Fluid Type	Calibration	Option
OLK605	Mineral, Synthetic	Storage capability	Protective boot ACC6NV001

For more information see the HFDE product catalogue Ref: FDHB500.

## Flowmeters (Brass Version)



### Product Features

- Works in any plane.
- Pressure up to 350 bar (5000 psi).
- Flows up to 360 l/min.
- Accuracy  $\pm 5\%$  FSD.
- Repeatability  $\pm 1\%$  FSD.
- Direct reading.
- Relatively insensitive to viscosity changes.
- Oil or water calibrated.
- Optional reed switch upgrade.

### Technical Specification

**Construction:**  
Brass body to BS 2874 CZ114.

**Maximum Working Pressure:**  
Up to 350 bar.

**Minimum Working Pressure:**  
1 bar.

**Temperature Range:**  
Brass  $-20^{\circ}\text{C}$  to  $+90^{\circ}\text{C}$ .

**Calibration:**  
Oil Specific gravity  
0.856 at  $20^{\circ}\text{C}$ .

Water Specific gravity  
1.0 at  $20^{\circ}\text{C}$ .

**Viscosity Range:**  
10 to 200 cSt (oil).

**Accuracy:**  
 $\pm 5\%$  FSD.

**Repeatability:**  
 $\pm 1\%$  FSD.

**Min. Scale Reading:**  
10% FSD.

**Connections:**  
BSP parallel threads.

**Wetted/Non-wetted Parts:**  
Consult Parker for information.

**For more information see the HFDE product catalogue Ref: FDHB500.**

### Ordering Information

Part Number	Fluid Type	Port	Flow Range	Pressure
FM26122212	Oil	1/4 BSP female	0.5 - 4.5 l/min	350 Bar
FM26122312	Oil	1/4" BSP female	1 - 9 l/min	350 Bar
FM26222112	Oil	1/2" BSP female	2 - 20 l/min	350 Bar
FM26222122	Water	1/2" BSP female	2 - 20 l/min	350 Bar
FM26222222	Water	1/2" BSP female	5 - 46 l/min	350 Bar
FM26322112	Oil	3/4" BSP female	5 - 55 l/min	350 Bar
FM26322212	Oil	3/4" BSP female	10 - 110 l/min	350 Bar
FM26322222	Water	3/4" BSP female	10 - 110 l/min	350 Bar

## LoFlow and Easiflow



### Product Features (LoFlow)

- Easy to read, permanent printed scales.
- Large scale definition for precise measurement.
- Negligible pressure drop characteristics.
- 10 bar pressure rating.
- Simple to use.

### Technical Specification (LoFlow)

**Construction:**  
Body - Grillon TR55.  
Back body half - ABS 7020.  
Float - Acetal

**Maximum working temperature:**  $60^{\circ}\text{C}$ .  
**Accuracy:**  $\pm 2\%$  typical.  
**Repeatability:**  $\pm 1\%$ .  
**Connections:**  $1/4"$  and  $3/8"$  tapered threads.

### Ordering Information

Product Number	Media	Flow Range (l/min)	Switch Range (l/min)
LF802412	Water	$3/4$ - $3/4$	0.2 - 2.0
LF802432	Oil	$3/4$ - $3/4$	0.1 - 0.9

### Product Features (Easiflow)

- Oil and water calibrated.
- Works in any plane.
- Pressures up to 10 bar.
- Flows from 1 to 150 l/min.

### Technical Specification (Easiflow)

#### Meters

**Construction:**  
Body - Glass filled nylon  
Viewing glass - Borosilicate glass  
Seal - Nitrile  
**Maximum Working Pressure:** 10 bar.  
**Minimum Working Pressure:** 1 bar.  
**Temperature Range:**  
 $+5^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$  - Oil.  
 $+5^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  - Water.  
**Flow Rate:** 1 to 150 l/min.  
**Viscosity Range:** 10 to 200 centistokes (oil).  
**Connections:** 1" BSP parallel threads.

#### Flowswitch

The Easiflow switch is a flow measuring device incorporating an AC/DC switch  
**General Flowmeter Specification:**  
See material details opposite.  
**Switch Type Specifications:**  
Magnetically operated reed switch.  
**Electrical Details:**  
Voltage range 300Vac/dc  
Maximum current 2.5Amps  
Maximum load 100W resistive  
70W  
**For more information see the HFDE product catalogue Ref: FDHB500.**

### Ordering Information

Product Number	Media	Flow Range (l/min)
EF773111220	Water	2 - 30
EF7731112220	Water	4 - 50
EF7731111120	Oil	2 - 30
EF7731112120	Oil	4 - 50

Product Number	Media	Flow Range (l/min)	Switch Range (l/min)
EF7731110221	Water	1 - 15	5 - 15
EF7731111221	Water	2 - 30	5 - 30
EF7731110121	Oil	1 - 15	5 - 15
EF7731111121	Oil	2 - 30	5 - 30



## Quality interchange elements with a proven record.

The Par Fit range offers end users, maintenance engineers and manufacturers a range of over 50,000 Parker Par Fit quality interchangeable elements using Microglass III and Ecoglass III media. Reduce stockholding, cut costs and ensure reliable and quality filter performance.

### Product Features

- Par Fit elements are manufactured to the same exacting standards as Parker original elements using Microglass III and Ecoglass III media.
- Quality backed by Parker's unrivalled technical resources.
- Reduce stockholding and costs by sourcing all your replacement elements from Parker.
- Interchange elements for Pall, Hydac, Mahle, Internormen, MP Filtri, Donaldson and over 300 more manufacturers.
- Cross reference information available for over 50,000 part numbers.

For more information see the HFDE product catalogue Ref: FDHB500.



Filter Elements Competitor	Filter Element Competitor Part Number	Parker Part Number
Argo	V2.1217-08	<b>PR4467</b>
Argo	V2.1217-03	<b>938194Q</b>
Argo	P2.1217-21	<b>PR4466</b>
Argo	V2.1217-36	<b>PR4468</b>
Argo	V3.0520-08	<b>PR4476</b>
Argo	V3.0607-08	<b>PR4472</b>
Argo	P3.0510-00	<b>PR4469</b>
Argo	P3.0510-02	<b>PR4475</b>
Argo	P2.1217-12	<b>PR4465</b>
Donaldson	P165569	<b>944035Q</b>
Donaldson	P164378	<b>944023Q</b>
Donaldson	P164375	<b>944022Q</b>
Donaldson	P163322	<b>944012Q</b>
Donaldson	P165659	<b>944036Q</b>
Donaldson	P165338	<b>944029Q</b>
Eaton Vickers	V30PV1C10	<b>932624Q</b>
Eaton Vickers	VRF2B2C10	<b>932694Q</b>
Eaton Vickers	V30PV2C10	<b>932630Q</b>
Eaton Vickers	V30PV2H10	<b>932633Q</b>
Eppensteiner	2.0018.H10XL-A00-0-P	<b>939778Q</b>
Eppensteiner	2.0030-G10-A-000-P	<b>939824Q</b>
Eppensteiner	2.0015.H10XL-A00-0-P	<b>939776Q</b>
Eppensteiner	2.0045.H10XL-A00-0-P	<b>939777Q</b>
Eppensteiner	2.0013.H10XL-A00-0-P	<b>939775Q</b>
Hydac	0110D010BN3HC	<b>PR3087Q</b>
Hydac	0165R010BN4HC	<b>938275Q</b>
Hydac	0850R010BN4HC	<b>938295Q</b>
Hydac	0095D010BN4HC	<b>938309Q</b>
Hydac	0850R020BN4HC	<b>938296Q</b>
Hydac	0060D010BN3HC	<b>PR3058Q</b>
Hydac	0240D010BN3HC	<b>PR3145Q</b>

Filter Elements Competitor	Filter Element Competitor Part Number	Parker Part Number
Hydac	0330R010BN4HC	<b>938283Q</b>
Hydac	0110D010BH3HC	<b>PR3095Q</b>
Hydac	0160D010BN3HC	<b>PR3116Q</b>
Hydac	2600R010BN4HC	<b>938312Q</b>
Hydac	0660D010BN3HC	<b>PR3203Q</b>
Hydac	0160R010BN4HC	<b>938271Q</b>
Hydac	0240R010BN4HC	<b>938279Q</b>
Hydac	0165R020BN4HC	<b>938276Q</b>
Hydac	0660R010BN4HC	<b>938291Q</b>
Hydac	0660D020BN3HC	<b>PR3204Q</b>
Hydac	0330R020BN4HC	<b>938284Q</b>
Hydac	0030D010BH3HC	<b>PR3037Q</b>
Hydac	0330D010BN3HC	<b>PR3174Q</b>
Hydac	0110D020BN3HC	<b>PR3088Q</b>
Hydac	0160D020BN3HC	<b>PR3117Q</b>
Hydac	0110R010BN4HC	<b>938267Q</b>
Hydac	0060D010BH3HC	<b>PR3066Q</b>
Hydac	0240D003BH3HC	<b>PR3151Q</b>
Hydac	1300R010BN4HC	<b>938303Q</b>
Hydac	0330D010BH3HC	<b>PR3182Q</b>
Hydac	0060D020BN3HC	<b>PR3059Q</b>
Hydac	0850R005BN4HC	<b>938294Q</b>
Hydac	0030D010BN3HC	<b>PR3033Q</b>
Hydac	0240R010BN3HC	<b>PR3292Q</b>
Hydac	0060D003BH3HC	<b>PR3064Q</b>
Hydac	0060R010BN4HC	<b>938259Q</b>
Hydac	0500R010BN4HC	<b>938287Q</b>
Hydac	0240D020BN3HC	<b>PR3146Q</b>
Hydac	0240D005BN3HC	<b>PR3144Q</b>
Hydac	0140D010BN3HC	<b>937064Q</b>
Hydac	1300R020BN4HC	<b>938304Q</b>

Filter Elements Competitor	Filter Element Competitor Part Number	Parker Part Number
Hydac	0280D005BH3HC	<b>937069Q</b>
Hydac	0240R020BN4HC	<b>938280Q</b>
Hydac	0110R020BN4HC	<b>938268Q</b>
Hydac	0110D003BN3HC	<b>PR3085Q</b>
Hydac	0660D010BH3HC	<b>PR3211Q</b>
Hydac	0060R020BN4HC	<b>938260Q</b>
Hydac	0110D005BN3HC	<b>PR3086Q</b>
Hydac	0060D020BH3HC	<b>PR3067Q</b>
Hydac	0850R003BN4HC	<b>938293Q</b>
Hydac	0060D005BH3HC	<b>PR3065Q</b>
Hydac	0240D003BN3HC	<b>PR3143Q</b>
Hydac	2600R020BN4HC	<b>938313Q</b>
Hydac	0060D005BN3HC	<b>PR3057Q</b>
Hydac	0160D010BH3HC	<b>PR3124Q</b>
Hydac	2600R005BN4HC	<b>938311Q</b>
Hydac	0030R020BN4HC	<b>938256Q</b>
Hydac	0160R010BN3HC	<b>PR3275Q</b>
Hydac	0330D005BH3HC	<b>PR3181Q</b>
Hydac	0660D003BN3HC	<b>PR3201Q</b>
Hydac	1300R003BN4HC	<b>938301Q</b>
Hydac	0240D010BH3HC	<b>PR3153Q</b>
Hydac	0280D010BN3HC	<b>937072Q</b>
Hydac	0030R010BN4HC	<b>938255Q</b>
Hydac	0140D020BN3HC	<b>937066Q</b>
Hydac	0140D010BH3HC	<b>937063Q</b>
Hydac	0950R010BN4HC	<b>938299Q</b>
Hydac	0110D005BH3HC	<b>PR3094Q</b>
Hydac	0330D003BN3HC	<b>PR3172Q</b>
Hydac	0075R010BN4HC	<b>938263Q</b>
Hydac	0030D005BN3HC	<b>PR3032Q</b>
Hydac	0160R020BN4HC	<b>938272Q</b>

Filter Elements Competitor	Filter Element Competitor Part Number	Parker Part Number
Hydac	0030D020BN3HC	<b>PR3034Q</b>
Hydac	0030D005BH3HC	<b>PR3036Q</b>
Hydac	0330D005BN3HC	<b>PR3173Q</b>
Hydac	1300R005BN4HC	<b>938302Q</b>
Hydac	0280D010BH3HC	<b>937071Q</b>
Hydac	0160D005BN3HC	<b>PR3115Q</b>
Hydac	0660R005BN4HC	<b>938290Q</b>
Hydac	0185R010BN4HC	<b>939782Q</b>
Hydac	0095D015MM	<b>939827Q</b>
Internormen	01.E 170.10VG.HR.E.V	<b>938172Q</b>
Internormen	01.E 320.25VG.16.S.V	<b>938169Q</b>
Internormen	01.E 210.25VG.16.S.V	<b>938189Q</b>
Internormen	01.E 360.10VG.HR.E.V	<b>938176Q</b>
Internormen	01.E 210.10VG.16.S.V	<b>938188Q</b>
Internormen	01.E 90.10VG.HR.E.V	<b>938240Q</b>
Internormen	01.NL 63.10VG.30.E.V	<b>938180Q</b>
Internormen	01.NL 63.25VG.30.E.V	<b>938181Q</b>
Internormen	01.E 320.10VG.16.S.V	<b>938168Q</b>
Mahle	Pi23025DNSM-X10	<b>PR4539Q</b>
Mahle	Pi23010RNSM-X10	<b>PR4500Q</b>
Mahle	Pi3130 SMX10	<b>PR2863Q</b>
Mahle	Pi3108 SMX 10	<b>PR2839Q</b>
Mahle	Pi3230 SMXVST10	<b>PR2866Q</b>
Mahle	Pi23040RNSM-X10	<b>PR4510Q</b>
Mahle	Pi4105 SMX25	<b>PR2832Q</b>
Mahle	Pi25100RNSM-X25	<b>PR4519Q</b>
Mahle	Pi3115 SMX10	<b>PR2855Q</b>
Mahle	852 519 Mic 10	<b>937106Q</b>
Mahle	Pi3145 SMX10	<b>PR2871Q</b>
Mahle	Pi3208 SMXVST10	<b>PR2842Q</b>
Mahle	Pi1005Mic25	<b>PR2829Q</b>
Mahle	Pi3105 SMX 10	<b>PR2831Q</b>
Mahle	Pi23010DNSM-X10	<b>PR4531Q</b>
Mahle	Pi23016RNSM-X10	<b>PR4503Q</b>
Mahle	Pi2230SMXVST3	<b>PR2865Q</b>
Mahle	Pi73025DN SMXVST10	<b>PR4537Q</b>
Mahle	Pi3205 SMXVST10	<b>PR2834Q</b>
Mahle	Pi23040DNSM-X10	<b>PR4543Q</b>
Mahle	Pi23100RNSM-X10	<b>PR4518Q</b>
Mahle	Pi4145 SMX25	<b>PR2872Q</b>
Mahle	Pi21040DNSM-X3	<b>PR4542Q</b>
Mahle	Pi23025RNSM-X10	<b>PR4506Q</b>
Mahle	Pi23063RNSM-X10	<b>PR4514Q</b>
Mahle	Pi3111 SMX 10	<b>PR2847Q</b>
Mahle	Pi21025DNSM-X3	<b>PR4538Q</b>
MP Filtri	MF1001A25HV	<b>943710Q</b>
MP Filtri	MF1003A25HV	<b>943718Q</b>
MP Filtri	MF1002A25HV	<b>943714Q</b>
MP Filtri	HP3202A10VN	<b>938359Q</b>
MP Filtri	MF1801A25HV	<b>943722Q</b>
MP Filtri	HP1352A10VN	<b>938347Q</b>
MP Filtri	MF1801A10HV	<b>943721Q</b>

Filter Elements Competitor	Filter Element Competitor Part Number	Parker Part Number
MP Filtri	HP0371A25VN	<b>938324Q</b>
MP Filtri	MF1002A10HV	<b>943713Q</b>
MP Filtri	MR2503A10V	<b>943920Q</b>
MP Filtri	HP3203A10VN	<b>943502Q</b>
MP Filtri	MF7501A10HV	<b>943741Q</b>
MP Filtri	HP1351A25VN	<b>938344Q</b>
MP Filtri	HP0652A10VN	<b>938335Q</b>
MP Filtri	CU630A10V	<b>943819Q</b>
MP Filtri	MF4002A10HV	<b>943733Q</b>
MP Filtri	CU040A25V	<b>943800Q</b>
MP Filtri	CU250A25V	<b>943812Q</b>
MP Filtri	CU100A25V	<b>943804Q</b>
MP Filtri	HP1352A25VN	<b>938348Q</b>
MP Filtri	MF0301A10HV	<b>943705Q</b>
MP Filtri	HP1353A10VN	<b>938351Q</b>
MP Filtri	HP3202A25VN	<b>938360Q</b>
MP Filtri	CU250A10V	<b>943811Q</b>
MP Filtri	HP0371A10VN	<b>938323Q</b>
MP Filtri	HP0372A10VN	<b>938327Q</b>
MP Filtri	MF0301A25HV	<b>943706Q</b>
MP Filtri	HP0651A10VN	<b>938331Q</b>
MP Filtri	HP0653A25VN	<b>938340Q</b>
MP Filtri	HP1351A10VN	<b>938343Q</b>
MP Filtri	MF4002A25HV	<b>943734Q</b>
MP Filtri	CU350A10V	<b>943815Q</b>
MP Filtri	MR2504A25V	<b>943929Q</b>
MP Filtri	HP0651A25VN	<b>938332Q</b>
MP Filtri	MF1802A10HV	<b>943725Q</b>
MP Filtri	MF4003A10HV	<b>943737Q</b>
MP Filtri	HP0651A10VH	<b>943615Q</b>
Pall	HC9800FKN4H	<b>930197Q</b>
Pall	HC6300FKS13H	<b>937123Q</b>
Pall	HC9600FKS13H	<b>926839Q</b>
Pall	HC9600FKT16H	<b>930164Q</b>
Pall	HC9800FKS8H	<b>930193Q</b>
Pall	HC9800FKS4H	<b>930190Q</b>
Pall	HC9600FKT8H	<b>PR3441Q</b>
Pall	HC9600FKN13H	<b>926845Q</b>
Pall	HC9800FKT8H	<b>930194Q</b>
Pall	HC9600FKN8H	<b>926843Q</b>
Pall	HC9600FKS8H	<b>PR3438Q</b>
Pall	HC9800FKT4H	<b>930191Q</b>
Pall	HC9600FKN16H	<b>926890Q</b>
Pall	HC9800FKN8H	<b>930198Q</b>
Pall	HC8300FKS16H	<b>PR3456Q</b>
Pall	HC9020FKN8H	<b>933246Q</b>
Pall	HC9020FKS8H	<b>925600Q</b>
Pall	HC9020FKN4H	<b>933239Q</b>
Pall	HC9600FKS16H	<b>926888Q</b>
Pall	HC9600FKT4H	<b>PR3440Q</b>
Pall	HC9600FKT13H	<b>930162Q</b>
Pall	HC9600FKP16H	<b>926699Q</b>

Filter Elements Competitor	Filter Element Competitor Part Number	Parker Part Number
Pall	HC9600FKS4H	<b>PR3437Q</b>
Pall	HC9600FKN4H	<b>926841Q</b>
Pall	HC9700FKS18H	<b>932679Q</b>
Pall	HC9700FKS9H	<b>932670Q</b>
Pall	HC6200FKS8H	<b>938160Q</b>
Pall	HC9020FKT8H	<b>PR3446Q</b>
Pall	HC9020FKS4H	<b>925580Q</b>
Pall	HC8900FKS13H	<b>933204Q</b>
Pall	HC8300FKS39H	<b>932874Q</b>
Pall	HC9021FKP8H	<b>927723Q</b>
Pall	HC9020FKP8H	<b>925602Q</b>
Pall	HC9601FKT8H	<b>927175Q</b>
Pall	HC9020FKP4H	<b>925582Q</b>
Pall	HC9650FKS13H	<b>937213Q</b>
Pall	HC9601FKP8H	<b>927176Q</b>
Pall	HC9600FKP13H	<b>926698Q</b>
Pall	HC9021FKT4H	<b>928642Q</b>
Pall	HC9600FKP8H	<b>PR3436Q</b>
Pall	HC9600FKP4H	<b>PR3435Q</b>
Pall	HC8300FKT16H	<b>933047Q</b>
Pall	HC9801FKS8H	<b>937223Q</b>
Pall	HC9021FKT8H	<b>928643Q</b>
Pall	HC6300FKS26H	<b>937125Q</b>
Pall	HC9651FKT8H	<b>928150Q</b>
Pall	HC8300FKP39H	<b>932872Q</b>
Pall	HC9021FKP4H	<b>927725Q</b>
Pall	HC8300FKP16H	<b>PR3455Q</b>
Pall	HC9604FKT16H	<b>937206Q</b>
Pall	HC8900FKP13H	<b>933202Q</b>
Pall	HC9800FKP8H	<b>930192Q</b>
Pall	HC9020FKT4H	<b>PR3444Q</b>
Pall	HC8900FKN16H	<b>933211Q</b>
Pall	HC9601FKP4H	<b>927170Q</b>
Pall	HC9801FKS4H	<b>937222Q</b>
Pall	HC9601FKT13H	<b>927181Q</b>
Pall	HC9901FKN26H	<b>939784Q</b>
Pall	HC9601FKP13H	<b>927182Q</b>
Pall	HC9801FKP13H	<b>PR2759Q</b>

## Pressure Transducers

### ASIC 'Performer'



#### Product Features

- A quality range of transducers and transmitters with pressure ratings - 25, 60, 100, 220, 400 and 600 bar.
- One-piece body and diaphragm machining ensures long term stability.
- All Stainless Steel construction.
- 0-5 Volt, 1-6 Volt Transducers.
- 1/4" BSP Thread.
- M12 or MicroDIN plug options.

#### Technical Specification

##### Pressure Ranges:

25, 60, 100, 250, 400, 600 bar.

##### Vibration Resistance:

IEC 600682-6:  
+/- 5mm/10Hz...32Hz  
200m/s<sup>2</sup> / 32Hz...2kHz

##### Installation:

Spanner size 22A/F.  
Max. (recommended)  
tightening torque = 30Nm.  
Weight: 200 - 230g  
Lifespan: 10 million cycles



##### Pressure Tolerance Specifications:

Rating	Maximum Overload Pressure	Maximum Burst Pressure
25	x 2 (50 bar)	x 3 (75 bar)
60	x 2 (120 bar)	x 3 (180 bar)
100	x 2 (200 bar)	x 3 (300 bar)
250	x 2 (500 bar)	x 3 (750 bar)
400	x 2 (800 bar)	x 3 (1200 bar)
600	x 2 (1200 bar)	x 2.5 (1500 bar)

#### Electrical

Supply Voltage	Output
12 - 36Vdc	0 - 5Vdc
12 - 36Vdc	1 - 6Vdc
6 - 36Vdc	4 - 20mA

Transducer current draw = <6mA  
Load impedance (ohm) = >10K  
Output signal noise = 0.1%FS

#### Thread Forms

G $\frac{1}{4}$  (1/4BSP) with ED seal.  
All thread forms and sensor interface are made from 1.4301 stainless steel.  
Non standard threads - contact Parker CMC

For more information see the HFDE product catalogue Ref: FDHB500.

#### Ordering Information

Part Number	Description	Output	Pressure	Thread form	Connector
PTDVB0251B1C1	0 - 5 Vdc 25 bar 1/4 BSP ED seal Micro-DIN	0-5Vdc	025	1/4 BSP	Micro DIN
PTD.VB2501B1C1	0 - 5 Vdc 250 bar 1/4 BSP ED seal micro-DIN	0-5Vdc	250	1/4 BSP	Micro DIN
PTDVB4001B1C1	0 - 5 Vdc 400 bar 1/4 BSP ED seal micro-DIN	0-5Vdc	400	1/4 BSP	Micro DIN
PTDVB4001B1C2	0 - 5 Vdc 400 bar 1/4 BSP ED seal M12	0-5Vdc	400	1/4 BSP	M12

#### Important Information

##### WARNING-USER RESPONSIBILITY

##### FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

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