

# Hydraulic Filters



## Low Pressure Hydraulic Filters

### Tanktopper Series I, II & III

Tanktop mounted return line filters with integrated air breather, max. 650 l/min - 10 bar



#### 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.

# Low Pressure Hydraulic Filters

## TTF Series

Tanktop mounted return line filters, max 500 l/min – 10 bar



### 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



### 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.

# Low & Medium Pressure Hydraulic Filters

## Maxiflow

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 indicators.
- High quality filter medium.

### Technical Specification

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

**Filter Head Material:**  
Series MXA:  
Aluminium

**Filter Bowl Material:**  
MXA: Steel

**Maximum Working Pressure:**  
MXA: 10 bar

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

**Seal Material:**  
Preferred Series MXA: Nitrile

**Bypass:**  
Preferred Series MXA: Return line  
1.75 bar, Suction line 0.2 bar,  
No bypass option

**Filtration Media:\***  
Preferred Series MXA: 10 micron  
Microglass III media, Cellulose media  
**For more information see the HFDE  
product catalogue Ref: FDHB500.**

### Ordering Information

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
MXA1210QBG2G6121	70	1.75 bar	G%	Pressure Gauge	MXR8550
MXA1210CBG2G6121	70	1.75 bar	G%	Pressure Gauge	MX1518410x4
MXA1210CBU4R6121	20 [suction]	0.2 bar	G%	Vacuum Gauge	MX1518410x4
MXA2310CBG2G6201	180	1.75 bar	G1¼	Pressure Gauge	MX1591410x4
MXA2310CBU4R6201	48 [suction]	0.2 bar	G1¼	Vacuum Gauge	MX1591410x4

## GMF iProtect

Medium pressure filters, max. 600 l/min - 70 bar



### Product Features

- More compact solutions are possible.
- Filter element remains in filter bowl during filter service.
- Reduce waste over 50% thanks to re-usable element core.
- No risk of installation mistake due to a 'foolproof' design.
- Easy to intergrate into hydraulic manifold solutions.

### Technical Specification

**Pressure ratings:**  
Maximum allowable  
operating pressure: 70 bar  
Rated fatigue pressure: 56 bar

**Connections:**  
Several threaded port options available,  
flange faced ports available on GMF  
size 4.

**Connection style Model**  
GMF size 2 GMF size 3 GMF size 4  
BSPF(G) 1", 3/4" 11/4", 11/2" 11/2", 2"  
SAE 12, 16 16, 24 24, 32  
Metric 3000-M 2"

**Filter housing:**  
Head material aluminium.  
Bowl material hard anodized  
aluminium.

**Seal material:**  
Nitrile or fluoroelastomer.

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

**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  
6 bar 5 bar

**Filter element:**  
**Degree of filtration:**  
Quantumfiber™ filter media,  
determined by Multipass-test according  
to ISO16889

**iprotect® QI**  
Supported with epoxy coated metal  
wire mesh, end cap material reinforced  
composite. Collapse pressure rated at  
20 bar (ISO 2941)

**Indicator options (all with SAE8 thread):**  
- visual M3. - electrical T1.

- electronic F1(PNP). - electronic  
F2(NPN).

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

### Ordering Information

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
GMF2110QIVPKG164	55	3.5 Bar	G1"	Plugged indicator ports	9388970
GMF2210QIVPKG164	90	3.5 Bar	G1"	Plugged indicator ports	9389010
GMF3110QIVPKG244	120	3.5 Bar	G1 1/2"	Plugged indicator ports	9389050
GMF3210QIVPKG244	230	3.5 Bar	G1 1/2"	Plugged indicator ports	9389090
GMF4110QIVPKG324	350	3.5 Bar	G2"	Plugged indicator ports	9389130
GMF4210QIVPKG324	530	3.5 Bar	G2"	Plugged indicator ports	9389170

# Low & Medium Pressure Hydraulic Filters

## 12CS Series

Coreless spin-on filter, max. 75 l/min - 35 barr



### 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	SAE-12	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.

## 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		938724Q
130M310QEBM3KR401	900	3.5 bar	SAE 2½"-3000M		938727Q
130M320QEBM3KR401	1000	3.5 bar	SAE 2½"-3000M		938728Q

## High Pressure Filters

### EPF iprotect® (Ecological Pressure Filter)

High pressure filters, max 700 l/min - 450 bar



#### Product Features

- Designed with the iprotect® 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  $10^6$  pulses 0-450 bar

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

**Seal material**  
Nitrile of Fluoroelastomer

#### 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 G $\frac{1}{2}$  - G1 $\frac{1}{2}$

**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
EPF1110QIBPMG081	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

## Heavy Duty Filter

### 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 1 $\frac{1}{2}$ " 3000-M as standard. Optional thread connections G1 $\frac{1}{2}$  and G1 $\frac{1}{4}$  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 m<sup>3</sup>/h)

**Filter Elements:**  
• Environmentally friendly Ecoglass III elements, micron ratings(abs): 2  $\mu$ m, 5  $\mu$ m, 10  $\mu$ m and 20  $\mu$ m. Ecoglass III elements contribute to ISO14001 because they do not include metal parts

• Glassfibre Microglass III elements, micron ratings(abs): 2  $\mu$ m, 5  $\mu$ m, 10  $\mu$ m and 20  $\mu$ m  
• Cleanable metal mesh elements, micron ratings(abs): 35  $\mu$ m and 60  $\mu$ m

**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 1 $\frac{1}{2}$ "-3000M	none	939206Q
DF40120QEVPKR241	300	3.5 bar	SAE 1 $\frac{1}{2}$ "-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.

## Indicators

### Indicator Series

FMU  $\Delta p$ -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 fluoroelastomer seals,  
-40 °C to +85 °C with nitrile and EPDM seals

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

**Seals:**  
Fluoroelastomer, 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
FMU2VBMM10L	ATZ	-0.3 bar	M10	vacuum gauge
FMU2VBMM10L	ATZ	-0.3 bar	M10	vacuum switch NO 42Vdc
FMUM3KVMU14M	DF40	2.5 Bar	U14M cavity	Visual differential pressure indicator
FMUT1KVMU14M	DF40	2.5 Bar	U14M cavity	Electrical differential pressure switch
FMUM3KVM508	GMF	5.0 Bar	S08 cavity	Visual differential pressure indicator
FMUT1KVM508	GMF	5.0 Bar	S08 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
FMUM3MVM508	EPF	5.0 bar	S08 cavity	visual differential pressure indicator
FMUT1MVM508	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.

## Portable Filtration

### Guardian

Portable hydraulic filtration system, max. 15 l/min - 3.4 Bar



CE

#### 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.



# Portable Filtration

## 10MFP Series

With 'moduflow plus' portable filtration trolley

## Sentinel™

Portable purification system



CE

### 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

Standard Products Table - icountPD Fitted Options

Part Number	Motor Option	Element	
		Inlet	Outlet
10MFP140SA10Q1UKPD	220/240 VAC	940802	937399Q
10MFP140SA10Q1EURPD	220/240 VAC	940802	937399Q
10MFP240SA10Q1INDPD	110VAC	940802	937399Q

Standard Products Table - Standard Trolley Options

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



CE

### Product Features

- Proven vacuum dehydration technology, ensuring only clean, dry oil re-enters the reservoir.
- On board data display and storage via IQAN MD3 display screen.
- Rapid detection and removal - embedded % RH moisture, and optional solid particle contamination detector.
- Sentinel mode – long life automatic switch on, measurement, operation and shut-off.

### Technical Specification

**Principle of operation**

Vacuum dehydrator. 24 inHg

**Working pressure**  
0–4 bar (0–60 psi)

**Working viscosity**  
1–460 cSt Packed Tower

**Flow range**  
12 l/min 5GPM

**Fluid connection interface inlet & outlet:**  
22L metric

**Fluid working condition**  
+ 70°C at – 0.8bar

**Ambient storage temperature for unit**  
–40°C to +80°C; –40°F to +176°F

**Operating temperature for unit**  
–30°C to +80°C; –22°F to +176°F

**Operating humidity range**  
5%RH to 100%RH

**Fluid operating temperature (Oil)**  
+5°C to +80°C; +41°F to +176°F

**Moisture sensor linear scale within the range**  
5%RH to 100%RH

**Computer compatibility connection**

Unit to be connected to a laptop computer via USB port

**Seals**  
Fluorocarbon

**Vacuum pump type**  
Dry sealed vacuum pump

**Particle filter type**  
5 micron 'iprotect' element

**Heater type**  
6KW low - density heater

**Power requirement** 380–420VAC, 3P, 50Hz

**Noise level at standard operation** 75 dBA

**Certification**  
IP54 rating (unit open)  
CE marked  
EC Declaration of Conformity  
Machinery Directive

**Weight**  
190 kg

**icount Fluid Property Sensor (FPS)**  
Contact Parker

**IQAN MD3 Display Memory size**  
80,000 logs

### Ordering Information

Part Number	Description
945274	Standard unit
Optional accessories	<b>943237</b> – Service Kit (Triceptor element, Coalescer element, Filter element, Vacuum Pump Oil) <b>ACC6JH003</b> - Vacuum Pump Oil (1 LITRE) <b>MS1504</b> - Moisture Sensor

## Offline Filtration

### OCU Oil Conditioning

Bypass and off-line filters



#### Product Features

- Solid Partical Filtration.
- Water Absorption.
- Sludge, Resin, and Oxidation Absorption.
- Removing up to 99% of all Solid Contaminates typically.
- Reducing the Water Concentration to Less than 100 ppm typically.
- Eliminating Resins and Oxidation Products.

#### Technical Specification

##### Product description:

Bypass filter with integrated flow / pressure control valve

Ultra-depth filter media technology for the removal of free water (WR type element) or solid contamination

Off-line filters are available on request (type OC2)

##### Maximum Working Pressure:

245 bar (pressure control valve lowers pressure to lower level, maximum pressure filter housing 12.4 bar)

Bypass valve setting: 4.5 bar

##### Flow Rate:

OCU1 : 1,5 l/min

OCU 2: 2,5 l/min

##### Operating Temperature:

-20 to + 90 degrees Celcius

##### Filter Media:

10 micron synthetic ultra-depth Parker media

WR water removal media (only available for size OCU2)

##### Port Connections:

OCU1: SAE 6 for inlet and outlet

OCU2: SAE 8 for inlet and outlet

#### Ordering Information

Part Number	Flow l/min	Bypass	Ports	Included Options	Micron Rating	Filter Type	Replacement Elements
OC1X10VGLS061	1.5	4.5 bar	SAE 6	Flow/ Pressure control valve	10	Bypass Filter	942652
OC222010VGLS061	2	4.5 bar	SAE 6	Flow/ Pressure control valve	10	Bypass Filter	942656 and 942682 (Water removal)

## Transducers

### ASIC 'Performer'

Pressure transducers



#### 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

12 - 36Vdc

12 - 36Vdc

6 - 36Vdc

##### Output

0 - 5Vdc

1 - 6Vdc

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
PTDV80251B1C1	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



# Reservoir Equipment

## EAB Series Air Filters

Filter breathers and environmental 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

Filter breathers and environmental air filters



### 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 Filler 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

# Reservoir Equipment

## 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 ½"	n/a
SE75351310	130	1 ½"	n/a
SE75361410	180	2"	n/a
SE75481410	500	3"	n/a

# Condition Monitoring

## icount Oil Sampler (IOS)

Fluid particle detectors



### 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.
- Now available with integrated WiFi transmitter for remote operation.

### 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 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 or via wireless.

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



## icountPD - Online Particle Dectector

Fluid particle detectors



### 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	Fluid Type	Calibration	Included
IOS1220EUR	Mineral	MTD	On-line connection adaptor
IOS1221EUR	Mineral	MTD	WiFi and on-line connection adaptor
SER.MISC.067	Mineral	MTD	Verification fluid 2 x 500ml

### 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

## icountMS Range

Moisture sensing

### 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.



### Ordering Information

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.**

# Condition Monitoring

## icountLCM20 Portable Particle Counter

Fluid particle counters



### 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

Fluid particle counters



### 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)

# Condition Monitoring

## icount BS Plus

Bottle sampling



### 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).
- In-built moisture sensor.



### Ordering Information

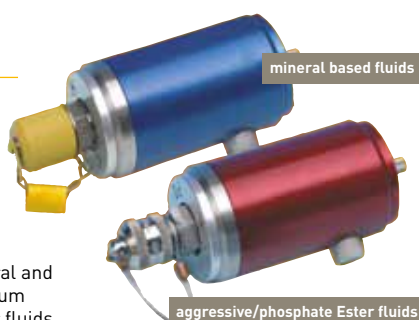
Part Number	Fluid Type	Calibration	Option
IBS3100	Mineral	MTD	MS included
ACC6NW008	n/a	n/a	European power supply
SER.MISC.049	n/a	n/a	Calibration sample bottles x 6 - 250ml
ACC6NE002	n/a	n/a	50 X 250ml bottles (pairs)
ACC6NW005	n/a	n/a	Printer Paper Role

## SPS - Online Sampling

Single point sampler

### 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.



### Ordering Features

Part Number	Fluid Type	Option
SPS2021	Mineral	n/a

## Inline sensors and monitors

System 20



### 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.

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

### Ordering Information

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

## Oilcheck

Oil checking

### 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 dielectric.
- Optional protective rubberised sleeve.

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



### Ordering Features

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



# Condition Monitoring

## Flowmeters (Brass Version)

High pressure



### 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

Low pressure



### 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:**  $\frac{1}{4}"$  and  $\frac{3}{4}"$  tapered threads.

### Ordering Information

Product Number	Media	Flow Range (l/min)	Switch Range (l/min)
LF802412	Water	$\frac{3}{4}$ - $\frac{3}{4}$	0.2 - 2.0
LF802432	Oil	$\frac{3}{4}$ - $\frac{3}{4}$	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.

#### Flows switch

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)
EF7731111220	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



# Condition Monitoring

## ANALEXfdMplus

Ferrous debris monitor



### Product Features

- Lab grade test for ferrous debris wear in the field.
- Provides direct PPM measurement.
- Measures both oils and greases.
- Features adaptors for many bottles / syringes / pots.

### Technical Specification

#### Measurement Range (approx PPM):

50ml Bottle 0 - 2500ppm  
10ml Syringe 0-19000ppm  
5ml Syringe 0-34000ppm  
5ml Tube 0-28000ppm  
4ml Grease Pot 0-8000ppm

Display Resolution: 1 ppm

#### Sample Media:

50ml Sample Bottles, 10ml Syringes, 5ml Syringes & Test Tubes, 4ml Grease Pots

#### Test Time:

← 1 minute to stabilise from power on  
← 15 seconds per sample

#### Power:

110 - 250 VAC autoselected 50/60 Hz

#### Fuse Rating:

2.5 A 250 VAC HRC A/S T ceramic

#### Operating Temp. Range:

15 - 40 °C (60 - 104 °F)

Weight: 4.22 kg

### Ordering Information

Part Number	Product Description
FGK17144PA	ANALEXfdMplus Ferrous Debris Monitor
FGK14946PA	ANALEXfdM sample bottle pack (360)
FGK15005PA	ANALEX 5ml plastic sample pots with lids (3000)
FGK17074PA	fdMplus 5ml test tube no cap (1000)
FGK17075PA	fdMplus 10ml syringe consumables (500)
FGK17076PA	pdMplus 5ml syringe consumables (500)
FGK17725PA	Grease Thief starter pack & calibration standards

## MHC Bearing Checker

Acoustic analysis

### Product Features

- Acoustic emission measurement tool.
- Simple hand-held device to determine bearing condition & inadequate lubrication.
- Easy operation & instant problem detection.



### Technical Specification

#### Display:

LCD, 2 lines by 8 characters

#### Distress® Display:

Numeric or Text ("OK" if <10, "Suspect" if between 10 & 15, "Poor" if >15)

#### Reading in progress:

Flashing LED indicator (in addition to LCD display message)

#### Non-Volatile Memory:

Shows last taken readings when unit is switched on

#### Auto Shut-Off:

Instrument auto switches off 30 seconds after last button press

#### Internal Batteries:

NiMH rechargeable battery via micro USB port - Typically over 1000 measurements between charges

#### Operating Temperature:

0°C to 65°C

#### Overall Dimensions:

98 mm x 62 mm x 34 mm (including magnetic sensing head)

Weight: 225 g

### Ordering Information

Part Number	Product Description
FGH11510PA	MHC Bearing Checker

## Low Range DIGI Water Kit

Water in oil measurement

### Product Features

- Electronic display gives step by step instructions.
- Simple to use key pad.
- Light weight glass reinforced plastic body.
- Latest transducer technology for improved accuracy and ease of cleaning.
- Nonslip twist grips.



### Technical Specification

#### Range:

0.02 - 1%, 100 - 3000ppm, 0 - 10%

Test time: 3 minutes

Battery life: Five years

### Ordering Information

Part Number	Product Description
FGK17032PA	Low Range Digi Water Kit
FGK2101PA	EasySHIP Water in Oil Reagent Pack (50)

# Condition Monitoring

## Heated Viscometer

Viscometer measurement



### Product Features

- Monitoring viscosity gives an early warning for a range of common problems.
- Highly accurate results with three readings available at 40°C, 50°C or 100°C.
- Test an even greater range of oils, by changing the viscosity index or density.
- Estimate the combustion performance (CCAI) of fuel oil.
- Heavy duty, robust equipment - ideal for long term use with rapid results.

### Technical Specification

**Range:**  
Measured viscosity at 40°C and 50°C .  
Calculated at 100°C viscosity

**Display:**  
8 Digit LED

**Power:**  
100 to 240 V AC 50/60 Hz, user selectable

### Ordering Information

Part Number	Product Description
<b>FGK1200PA</b>	Oil Analysis Viscometer [Heated]
<b>ASK11098</b>	Viscometer end cap
<b>ASK11097</b>	Viscometer end plug
<b>BIK10307</b>	Viscometer steel ball [23mm]
<b>BIK10004</b>	Oil Analysis viscometer ball strainer

## DIGI Field Kit

Multiparameter test kit



### Product Features

- Laboratory grade accuracy in a field deployable kit.
- State of the art digital analysis.
- Monitor combustion related debris and oxidation products.
- Easily understandable results.

### Technical Specification

**DIGI Combined Water in Oil/TBN Cell:**  
0.02 - 1%, 200 - 1000ppm, 0 - 10%, 0 - 20%, 0 - 100 TBN

**ECON Insolubles Test:**  
Qualitative

**ECON viscostick:**  
go/no go

**ECON TAN Test:**  
TAN 0 - 6

### Ordering Information

Part Number	Product Description
<b>FGK1108PA</b>	EasySHIP DIGI Field Kit
<b>FGK24743PA</b>	ECON Total Acid Number / TAN Drop Test Pack
<b>FGK2002PA</b>	TBN Reagent pack [50]
<b>FGK2003PA</b>	Electronic Insolubles reagent pack [50]
<b>FGK1006PA</b>	ECON Insoluble Kit

# Par Fit SmaRT1000

PAR♦FIT™  
**SmaRT**1000

**PALL UE 219 & UE 319**  
Replacement Elements

**PALL UE 619**  
Replacement Elements

Pall SRT replacement filter element range

The Par Fit Smart1000 is a new range of replacement elements designed to be 100% interchangeable with the PALL UE219, UE319 and UE619 element series, but with greater affordability, advanced filter technology and availability 'on-demand'.

## Product Features

- Extraction handle - UE219 and UE319. Unique extraction handle, designed clean and simple removal of the element from the filter housing.
- Strengthened extraction ring - UE619. Increased material thickness around the extraction ring and support ribs prevents break-off during removal.
- QuantumFiber media - unique fibre composition that ensures maximum filter efficiency over an extended lifetime.
- Static Control filter media eliminates electro-static charging in hydraulic fluids, without compromising efficiency.



**PALL UE 219 & UE 319**  
Replacement Elements

Unique extraction handle – prevents direct contact with contaminated element



**PALL UE 619**  
Replacement Elements

Extra thick extraction ring and support ribs – prevents break-off during replacement



Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Pall	UE219AP04Z	940400Q
Pall	UE219AN04Z	940401Q
Pall	UE219AS04Z	940402Q
Pall	UE219AT04Z	940403Q
Pall	UE219AP08Z	940404Q
Pall	UE219AN08Z	940405Q
Pall	UE219AS08Z	940406Q
Pall	UE219AT08Z	940407Q
Pall	UE219AP13Z	940408Q
Pall	UE219AN13Z	940409Q
Pall	UE219AS13Z	940410Q
Pall	UE219AT13Z	940411Q
Pall	UE219AP20Z	940412Q
Pall	UE219AN20Z	940413Q

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Pall	UE219AS20Z	940414Q
Pall	UE219AT20Z	940415Q
Pall	UE319AP08Z	940416Q
Pall	UE319AN08Z	940417Q
Pall	UE319AS08Z	940418Q
Pall	UE319AT08Z	940419Q
Pall	UE319AP13Z	940420Q
Pall	UE319AN13Z	940421Q
Pall	UE319AS13Z	940422Q
Pall	UE319AT13Z	940423Q
Pall	UE319AP20Z	940424Q
Pall	UE319AN20Z	940425Q
Pall	UE319AS20Z	940426Q
Pall	UE319AT20Z	940427Q

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Pall	UE319AP40Z	940428Q
Pall	UE319AN40Z	940429Q
Pall	UE319AS40Z	940430Q
Pall	UE319AT40Z	940431Q
Pall	UE619AP20Z	940432Q
Pall	UE619AN20Z	940433Q
Pall	UE619AS20Z	940434Q
Pall	UE619AT20Z	940435Q
Pall	UE619AP40Z	940436Q
Pall	UE619AN40Z	940437Q
Pall	UE619AS40Z	940438Q
Pall	UE619AT40Z	940439Q

# Par Fit

## 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 interchange 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 Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Hydac	0060D010BN3HC	PR3058Q
Hydac	1700R005BN4HC	938306Q
Hydac	0030D020BN3HC	PR3034Q
Hydac	0030D003BH3HC	PR3035Q
Hydac	0030D005BH3HC	PR3036Q
Hydac	0030D010BH3HC	PR3037Q
Hydac	0030D020BH3HC	PR3038Q
Hydac	0030D005BN3HC	PR3032Q
Hydac	0060D005BN3HC	PR3057Q
Hydac	0030D003BN3HC	PR3031Q
Hydac	0060D020BN3HC	PR3059Q
Hydac	0060D003BH3HC	PR3064Q
Hydac	0060D005BH3HC	PR3065Q
Hydac	0060D010BH3HC	PR3066Q
Hydac	0060D020BH3HC	PR3067Q
Hydac	0110D003BN3HC	PR3085Q
Hydac	0110D005BN3HC	PR3086Q
Hydac	0060D003BN3HC	PR3056Q
Hydac	0185R010BN4HC	939782Q
Hydac	1700R010BN4HC	938307Q
Hydac	1700R020BN4HC	938308Q
Hydac	0095D010BN4HC	938309Q
Hydac	2600R003BN4HC	938310Q
Hydac	2600R005BN4HC	938311Q
Hydac	2600R010BN4HC	938312Q
Hydac	0030D010BN3HC	PR3033Q
Hydac	0030 D 025 W	939159Q
Hydac	0110D010BH3HC	PR3095Q
Hydac	0075D020BN4HC	939787Q
Hydac	0800RK010BN4HC	939788Q
Hydac	1300R005BN4HC/B6	939826Q

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Hydac	0095D015MM	939827Q
Hydac	1300R050WHC	939830Q
Hydac	1300R100WHC	939831Q
Hydac	0300RK010BN4HC	939950Q
Hydac	2600R020BN4HC	938313Q
Hydac	0660D005BN3HC	PR3202Q
Hydac	0330D005BN3HC	PR3173Q
Hydac	0330D010BN3HC	PR3174Q
Hydac	0330D020BN3HC	PR3175Q
Hydac	0330D003BH3HC	PR3180Q
Hydac	0330D005BH3HC	PR3181Q
Hydac	0330D010BH3HC	PR3182Q
Hydac	0110D010BN3HC	PR3087Q
Hydac	0660D003BN3HC	PR3201Q
Hydac	0240D010BH3HC	PR3153Q
Hydac	0660D010BN3HC	PR3203Q
Hydac	0660D020BN3HC	PR3204Q
Hydac	0660D003BH3HC	PR3209Q
Hydac	0660D005BH3HC	PR3210Q
Hydac	0660D010BH3HC	PR3211Q
Hydac	0660D020BH3HC	PR3212Q
Hydac	0035D020BN3HC	937058Q
Hydac	0330D020BH3HC	PR3183Q
Hydac	0160D020BH3HC	PR3125Q
Hydac	0110D020BN3HC	PR3088Q
Hydac	0110D020BH3HC	PR3096Q
Hydac	0160D003BN3HC	PR3114Q
Hydac	0160D005BN3HC	PR3115Q
Hydac	0160D010BN3HC	PR3116Q
Hydac	0160D020BN3HC	PR3117Q
Hydac	0160D003BH3HC	PR3122Q

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Hydac	0330D003BN3HC	PR3172Q
Hydac	0160D010BH3HC	PR3124Q
Hydac	0240D020BH3HC	PR3154Q
Hydac	0240D003BN3HC	PR3143Q
Hydac	0240D005BN3HC	PR3144Q
Hydac	0240D010BN3HC	PR3145Q
Hydac	0240D020BN3HC	PR3146Q
Hydac	0240D003BH3HC	PR3151Q
Hydac	0240D005BH3HC	PR3152Q
Hydac	0110D003BH3HC	PR3093Q
Hydac	0160D005BH3HC	PR3123Q
Hydac	0060R010BN4HC	938259Q
Hydac	0500D010BN3HC	937080Q
Hydac	0140D005BH3HC	937061Q
Hydac	0500D020BN3HC	937082Q
Hydac	0030R003BN4HC	938253Q
Hydac	0030R010BN4HC	938255Q
Hydac	0030R020BN4HC	938256Q
Hydac	0110R020BN4HC	938268Q
Hydac	0060R005BN4HC	938258Q
Hydac	0500D003BH3HC	937075Q
Hydac	0060R020BN4HC	938260Q
Hydac	0075R003BN4HC	938261Q
Hydac	0075R010BN4HC	938263Q
Hydac	0075R020BN4HC	938264Q
Hydac	0110R003BN4HC	938265Q
Hydac	0110R005BN4HC	938266Q
Hydac	0110R010BN4HC	938267Q
Hydac	0060R003BN4HC	938257Q
Hydac	0280D003BN3HC	937068Q
Hydac	0140D003BH3HC	937059Q

# Par Fit

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Hydac	0110D005BH3HC	<b>PR3094Q</b>
Hydac	1700R003BN4HC	<b>938305Q</b>
Hydac	0140D005BN3HC	<b>937062Q</b>
Hydac	0140D010BH3HC	<b>937063Q</b>
Hydac	0140D010BN3HC	<b>937064Q</b>
Hydac	0140D020BH3HC	<b>937065Q</b>
Hydac	0500D005BN3HC	<b>937078Q</b>
Hydac	0280D003BH3HC	<b>937067Q</b>
Hydac	0500D003BN3HC	<b>937076Q</b>
Hydac	0280D005BH3HC	<b>937069Q</b>
Hydac	0280D005BN3HC	<b>937070Q</b>
Hydac	0280D010BH3HC	<b>937071Q</b>
Hydac	0280D010BN3HC	<b>937072Q</b>
Hydac	0280D020BH3HC	<b>937073Q</b>
Hydac	0280D020BN3HC	<b>937074Q</b>
Hydac	0500D020BH3HC	<b>937081Q</b>
Hydac	0140D020BN3HC	<b>937066Q</b>
Hydac	0950R003BN4HC	<b>938297Q</b>
Hydac	0500R020BN4HC	<b>938288Q</b>
Hydac	0660R003BN4HC	<b>938289Q</b>
Hydac	0660R005BN4HC	<b>938290Q</b>
Hydac	0660R010BN4HC	<b>938291Q</b>
Hydac	0660R020BN4HC	<b>938292Q</b>
Hydac	0850R003BN4HC	<b>938293Q</b>
Hydac	0850R005BN4HC	<b>938294Q</b>
Hydac	0500R010BN4HC	<b>938287Q</b>
Hydac	0850R020BN4HC	<b>938296Q</b>
Hydac	1300R005BN4HC	<b>938302Q</b>
Hydac	0950R005BN4HC	<b>938298Q</b>
Hydac	0950R010BN4HC	<b>938299Q</b>
Hydac	0950R020BN4HC	<b>938300Q</b>
Hydac Par Fit	1300R003BN4HC	<b>938301Q</b>
Hydac Par Fit	1300R010BN4HC	<b>938303Q</b>
Hydac Par Fit	0500D010BH3HC	<b>937079Q</b>
Hydac Par Fit	1300R020BN4HC	<b>938304Q</b>
Hydac Par Fit	0850R010BN4HC	<b>938295Q</b>
Hydac Par Fit	0160R010BN4HC	<b>938271Q</b>
Hydac Par Fit	0500R005BN4HC	<b>938286Q</b>
Hydac Par Fit	0160R005BN4HC	<b>938270Q</b>
Hydac Par Fit	0160R020BN4HC	<b>938272Q</b>
Hydac Par Fit	0165R003BN4HC	<b>938273Q</b>
Hydac Par Fit	0165R005BN4HC	<b>938274Q</b>
Hydac Par Fit	0165R010BN4HC	<b>938275Q</b>
Hydac Par Fit	0165R020BN4HC	<b>938276Q</b>
Hydac Par Fit	0240R003BN4HC	<b>938277Q</b>
Hydac Par Fit	0500R003BN4HC	<b>938285Q</b>
Hydac Par Fit	0240R010BN4HC	<b>938279Q</b>
Hydac Par Fit	0240R020BN4HC	<b>938280Q</b>
Hydac Par Fit	0330R003BN4HC	<b>938281Q</b>
Hydac Par Fit	0330R005BN4HC	<b>938282Q</b>

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Hydac	0330R010BN4HC	<b>938283Q</b>
Hydac	0330R020BN4HC	<b>938284Q</b>
Hydac	0240R005BN4HC	<b>938278Q</b>
Pall	HC8304FKT16H	<b>937171Q</b>
Pall	HC8304FKS39H	<b>937170Q</b>
Pall	HC8304FKS16H	<b>937169Q</b>
Pall	HC8304FKP39H	<b>937168Q</b>
Pall	HC8304FKP16H	<b>937167Q</b>
Pall	HC8304FKT39H	<b>937172Q</b>
Pall	HC8304FKN16H	<b>937165Q</b>
Pall	HC9601FKS16H	<b>937188Q</b>
Pall	HC8304FKN39H	<b>937166Q</b>
Pall	HC9604FKP8H	<b>937200Q</b>
Pall	HC8900FKN39H	<b>937180Q</b>
Pall	HC9604FKP13H	<b>937197Q</b>
Pall	HC9601FKS13H	<b>937187Q</b>
Pall	HC9601FKS8H	<b>937190Q</b>
Pall	HC8300FWT39H	<b>937163Q</b>
Pall	HC6400FKS16H	<b>935145</b>
Pall	HC8900FKT39H	<b>937183Q</b>
Pall	HC6400FKS26H	<b>935149</b>
Pall	HC9604FKS16H	<b>937202Q</b>
Pall	HC8400FKS16H	<b>933777Q</b>
Pall	HC8314FKS39H	<b>934123Q</b>
Pall	HC8314FKT39H	<b>934124Q</b>
Pall	HC9601FKN8H	<b>934194Q</b>
Pall	HC8314FKS16H	<b>934310Q</b>
Pall	HC8500FKS13H	<b>935177</b>
Pall	HC6400FKS13H	<b>935141</b>
Pall	HC6400FKT8H	<b>937146Q</b>
Pall	HC9800FKS13H	<b>933786Q</b>
Pall	HC8500FKT13H	<b>935178</b>
Pall	HC8200FKT16H	<b>935551Q</b>
Pall	HC6300FKS13H	<b>937123Q</b>
Pall	HC6300FKS26H	<b>937125Q</b>
Pall	HC6300FKS8H	<b>937126Q</b>
Pall	HC6300FKT13H	<b>937127Q</b>
Pall	HC9800FKN13H	<b>933784Q</b>
Pall	HC9020FKT8H	<b>PR3446Q</b>
Pall	HC8700FKS8H	<b>PR4459Q</b>
Pall	HC8300FKN16H	<b>PR2798Q</b>
Pall	HC9600FKP4H	<b>PR3435Q</b>
Pall	HC9600FKP8H	<b>PR3436Q</b>
Pall	HC9600FKS4H	<b>PR3437Q</b>
Pall	HC9600FKS8H	<b>PR3438Q</b>
Pall	HC9600FKT4H	<b>PR3440Q</b>
Pall	HC9801FKP13H	<b>PR2759Q</b>
Pall	HC9020FKT4H	<b>PR3444Q</b>
Pall	HC9100FKT13H	<b>944096Q</b>

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Pall	HC8300FKP16H	<b>PR3455Q</b>
Pall	HC8300FKS16H	<b>PR3456Q</b>
Pall	HC8700FKS4H	<b>PR4455Q</b>
Pall	HC8700FKT4H	<b>PR4456Q</b>
Pall	HC8700FKT8H	<b>PR4460Q</b>
Pall	HC8400FKT16H	<b>933763Q</b>
Pall	HC9600FKP13H	<b>926698Q</b>
Pall	HC9600FKT8H	<b>PR3441Q</b>
Pall	HC9100FKN8H	<b>938163Q</b>
Pall	HC9604FKT8H	<b>937208Q</b>
Pall	HC9650FKN13H	<b>937209Q</b>
Pall	HC9650FKS13H	<b>937213Q</b>
Pall	HC9650FKT13H	<b>937215Q</b>
Pall	HC9801FKS4H	<b>937222Q</b>
Pall	HC9801FKS8H	<b>937223Q</b>
Pall	HC6200FKP8H	<b>938158Q</b>
Pall	HC9801FKT13H	<b>PR2760Q</b>
Pall	HC6200FKT8H	<b>938161Q</b>
Pall	HC9604FKS8H	<b>937204Q</b>
Pall	HC9100FKS8H	<b>938164Q</b>
Pall	HC8904FKT39H	<b>938317Q</b>
Pall	HC8904FKN13H	<b>944067Q</b>
Pall	HC8904FKS26H	<b>944072Q</b>
Pall	HC4704FKP16H	<b>944082Q</b>
Pall	HC4704FKN16H	<b>944083Q</b>
Pall	HC9100FKS13H	<b>944095Q</b>
Pall	HC6200FKS8H	<b>938160Q</b>
Pall	HC9601FKT16H	<b>928142Q</b>
Pall	HC9600FKT13H	<b>930162Q</b>
Pall	HC9601FKP13H	<b>927182Q</b>
Pall	HC8300FKS8H	<b>927661Q</b>
Pall	HC8300FKP8H	<b>927663Q</b>
Pall	HC9021FKS4H	<b>927696Q</b>
Pall	HC9021FKP8H	<b>927723Q</b>
Pall	HC9601FKP8H	<b>927176Q</b>
Pall	HC8300FKN8H	<b>927861Q</b>
Pall	HC9601FKT8H	<b>927175Q</b>
Pall	HC9601FKP16H	<b>928143Q</b>
Pall	HC9651FKT8H	<b>928150Q</b>
Pall	HC9600FKS13H	<b>926839Q</b>
Pall	HC9021FKT4H	<b>928642Q</b>
Pall	HC9700FKS27H	<b>933488Q</b>
Pall	HC8300FKT8H	<b>929099Q</b>
Pall	HC9400FKS13H	<b>929885Q</b>
Pall	HC9021FKP4H	<b>927725Q</b>
Pall	HC9600FKS16H	<b>926888Q</b>
Pall	HC9020FKS4H	<b>925580Q</b>
Pall	HC9020FKP4H	<b>925582Q</b>
Pall	HC9020FKS8H	<b>925600Q</b>
Pall	HC9020FKP8H	<b>925602Q</b>



## Par Fit

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Pall	HC9600FKP16H	<b>9266990</b>
Pall	HC9600FKN4H	<b>9268410</b>
Pall	HC9601FKT13H	<b>9271810</b>
Pall	HC9600FKN13H	<b>9268450</b>
Pall	HC9021FKT8H	<b>9286430</b>
Pall	HC9600FKN16H	<b>9268900</b>
Pall	HC9650FKN8H	<b>9269880</b>
Pall	HC9650FKN16H	<b>9269940</b>
Pall	HC9650FKS16H	<b>9269960</b>
Pall	HC9650FKP16H	<b>9269980</b>
Pall	HC9601FKT4H	<b>9271690</b>
Pall	HC9601FKP4H	<b>9271700</b>
Pall	HC9600FKN8H	<b>9268430</b>
Pall	HC8900FKN26H	<b>9332190</b>
Pall	HC8900FKP13H	<b>9332020</b>
Pall	HC8900FKN13H	<b>9332030</b>
Pall	HC9600FKT16H	<b>9301640</b>
Pall	HC8900FKT13H	<b>9332050</b>
Pall	HC9651FKP8H	<b>9281520</b>
Pall	HC8900FKN16H	<b>9332110</b>
Pall	HC8900FKS8H	<b>9331950</b>
Pall	HC8900FKP26H	<b>9332180</b>
Pall	HC8900FKS13H	<b>9332040</b>
Pall	HC8900FKS26H	<b>9332200</b>
Pall	HC8900FKT26H	<b>9332210</b>
Pall	HC9020FKN4H	<b>9332390</b>
Pall	HC9020FKN8H	<b>9332460</b>
Pall	HC9400FKT13H	<b>9332530</b>
Pall	HC9400FKT39H	<b>9332660</b>
Pall	HC9650FKT8H	<b>9332950</b>
Pall	HC8900FKS16H	<b>9332120</b>
Pall	HC9800FKS8H	<b>9301930</b>
Pall	HC9800FKP4H	<b>9301890</b>
Pall	HC9800FKS4H	<b>9301900</b>
Pall	HC9800FKT4H	<b>9301910</b>
Pall	HC8900FKP16H	<b>9332100</b>
Pall	HC9800FKP8H	<b>9301920</b>
Pall	HC8900FKN8H	<b>9331940</b>
Pall	HC9800FKT8H	<b>9301940</b>
Pall	HC9800FKN4H	<b>9301970</b>
Pall	HC9800FKN8H	<b>9301980</b>
Pall	HC8400FKS39H	<b>9330910</b>
Pall	HC9700FKS9H	<b>9326700</b>
Pall	HC9700FKS18H	<b>9326790</b>
Pall	HC8300FKP39H	<b>9328720</b>
Pall	HC8300FKN39H	<b>9328730</b>
Pall	HC8300FKS39H	<b>9328740</b>
Pall	HC8300FKT39H	<b>9328750</b>
Pall	HC8300FKT16H	<b>9330470</b>
Pall	HC9700FKT9H	<b>9310180</b>

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Internormen	01.NL 63.25VG.30.E.V	<b>9381810</b>
Internormen	01.NL 63.10VG.30.E.V	<b>9381800</b>
Internormen	01.E 360.10VG.HR.E.V	<b>9381760</b>
Internormen	01.E 360.3VG.HR.E.V	<b>9381740</b>
Internormen	01.E 170.25VG.HR.E.V	<b>9381730</b>
Internormen	01.E 170.10VG.HR.E.V	<b>9381720</b>
Internormen	01.E 170.6VG.HR.E.V	<b>9381710</b>
Internormen	01.E 210.25VG.16.S.V	<b>9381890</b>
Internormen	01.E 320.10VG.16.S.V	<b>9381680</b>
Internormen	01.E 320.25VG.16.S.V	<b>9381690</b>
Internormen	01.E 30.25VG.30.E.V	<b>9382450</b>
Internormen	01.E175.3VG.16.S1.V	<b>9400740</b>
Internormen	01.E 900.10VG.30.E.V	<b>9397340</b>
Internormen	01.N 100.80G.16.E.V	<b>9397260</b>
Internormen	01.NL 100.6VG.30.E.V	<b>9397240</b>
Internormen	01.NBF 25-40.3VL.B.P	<b>9382510</b>
Internormen	01.E 210.10VG.16.S.V	<b>9381880</b>
Internormen	01.E 30.10VG.30.E.V	<b>9382440</b>
Internormen	01.E 90.25VG.HR.E.V	<b>9382410</b>
Internormen	01.E 90.10VG.HR.E.V	<b>9382400</b>
Internormen	01.E 90.3VG.HR.E.V	<b>9382380</b>
Internormen	01.E 425.25VG.16.S.V	<b>9381930</b>
Internormen	01.NBF 55-85.3VL.B.P	<b>9382520</b>
Internormen	01.E 170.10VG.30.E.V	<b>9382320</b>
Internormen	01.E 425.6VG.16.S.V	<b>9381910</b>
Internormen	01.E 425.10VG.16.S.V	<b>9381920</b>
Internormen	01.NL 100.10VG.30.E.V	<b>9381840</b>
Internormen	01.E 631.10VG.16.S.V	<b>9382120</b>
Internormen	01.E 631.25VG.16.S.V	<b>9382130</b>
Internormen	01.E 360.10VG.30.E.V	<b>9382200</b>
Internormen	01.E 450.10VG.30.E.V	<b>9382240</b>
Internormen	01.E 450.25VG.30.E.V	<b>9382250</b>
Internormen	01.E 240.10VG.HR.E.V	<b>9382280</b>
MP Filtri	CU250A25VN	<b>9438120</b>
MP Filtri	CU200A25VN	<b>9438080</b>
MP Filtri	CU250A03VN	<b>9438090</b>
MP Filtri	CU250A10VN	<b>9438110</b>
MP Filtri	CU100A25VN	<b>9438040</b>
MP Filtri	CU350A10VN	<b>9438150</b>
MP Filtri	CU350A25VN	<b>9438160</b>
MP Filtri	CU630A10VN	<b>9438190</b>
MP Filtri	CU630A25VN	<b>9438200</b>
MP Filtri	CU730A25VN	<b>9438240</b>
MP Filtri	CU100A10VN	<b>9438030</b>
MP Filtri	CU730A10VN	<b>9438230</b>
MP Filtri	CU040A25VN	<b>9438000</b>
MP Filtri	CU040A10VN	<b>9437990</b>
MP Filtri	CU025A25VN	<b>9437960</b>
MP Filtri	CU025A10VN	<b>9437950</b>
MP Filtri	MF7501M60NV	<b>9437910</b>

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
MP Filtri	MF7501A10HV	<b>9437410</b>
MP Filtri	MF4003A10HV	<b>9437370</b>
MP Filtri	MF4003A03HV	<b>9437350</b>
MP Filtri	MF4002A25HV	<b>9437340</b>
MP Filtri	MF4002A10HV	<b>9437330</b>
MP Filtri	CU850A10VN	<b>9438270</b>
MP Filtri	MF1802A25HV	<b>9437260</b>
MP Filtri	MR2504A10V	<b>9439280</b>
MP Filtri	MF4001A10HV	<b>9437290</b>
MP Filtri	MF4003A25HV	<b>9437380</b>
MP Filtri	MR8504A25V	<b>9439930</b>
MP Filtri	MR8503A25V	<b>9439850</b>
MP Filtri	MR8503A10V	<b>9439840</b>
MP Filtri	MR8502A10V	<b>9439760</b>
MP Filtri	MR8501A25V	<b>9439690</b>
MP Filtri	MR8501A10V	<b>9439680</b>
MP Filtri	MR6304A25V	<b>9439610</b>
MP Filtri	MR6304A10V	<b>9439600</b>
MP Filtri	MR6303A25V	<b>9439530</b>
MP Filtri	MR6303A10V	<b>9439520</b>
MP Filtri	MR6302A25V	<b>9439450</b>
MP Filtri	MR2503A10V	<b>9439200</b>
MP Filtri	MR2504A25V	<b>9439290</b>
MP Filtri	CU850A25VN	<b>9438280</b>
MP Filtri	MR2503A25V	<b>9439210</b>
MP Filtri	MF1802A10HV	<b>9437250</b>
MP Filtri	MR2502A25V	<b>9439130</b>
MP Filtri	MR2502A10V	<b>9439120</b>
MP Filtri	MR2501A10V	<b>9439040</b>
MP Filtri	MR1004A25V	<b>9438970</b>
MP Filtri	MR1004A10V	<b>9438960</b>
MP Filtri	MR1003A25V	<b>9438890</b>
MP Filtri	MR1003A10V	<b>9438880</b>
MP Filtri	MR1002A25V	<b>9438810</b>
MP Filtri	MR1002A10V	<b>9438800</b>
MP Filtri	MR6302A10V	<b>9439440</b>
MP Filtri	HP0653A25VN	<b>9383400</b>
MP Filtri	HP3203A10VN	<b>9435020</b>
MP Filtri	HP3202A25VN	<b>9383600</b>
MP Filtri	HP3202A10VN	<b>9383590</b>
MP Filtri	HP3202A06VN	<b>9383580</b>
MP Filtri	HP3202A03VN	<b>9383570</b>
MP Filtri	HP3201A10VN	<b>9383550</b>
MP Filtri	HP3201A03VN	<b>9383530</b>
MP Filtri	HP1353A10VN	<b>9383510</b>
MP Filtri	HP1352A25VN	<b>9383480</b>
MP Filtri	HP1352A10VN	<b>9383470</b>
MP Filtri	HP1352A03VN	<b>9383450</b>
MP Filtri	HP3203A25VN	<b>9435030</b>
MP Filtri	HP1351A10VN	<b>9383430</b>



## Par Fit

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
MP Filtri	HP0652A10VN	<b>938335Q</b>
MP Filtri	HP0653A10VN	<b>938339Q</b>
MP Filtri	HP0652A25VN	<b>938336Q</b>
MP Filtri	MF1801A25HV	<b>943722Q</b>
MP Filtri	HP0651A25VN	<b>938332Q</b>
MP Filtri	MF7501A25HV	<b>943742Q</b>
MP Filtri	HP0372A25VN	<b>938328Q</b>
MP Filtri	HP0372A10VN	<b>938327Q</b>
MP Filtri	HP0371A25VN	<b>938324Q</b>
MP Filtri	HP0371A10VN	<b>938323Q</b>
MP Filtri	HP0371A06VN	<b>938322Q</b>
MP Filtri	HP0371A03VN	<b>938321Q</b>
MP Filtri	MR1001A25V	<b>938320Q</b>
MP Filtri	HP1351A25VN	<b>938344Q</b>
MP Filtri	MF0301A10HV	<b>943705Q</b>
MP Filtri	HP3204A10VN	<b>943506Q</b>
MP Filtri	MF1003A25HV	<b>943718Q</b>
MP Filtri	MF1003A10HV	<b>943717Q</b>
MP Filtri	MF1002A25HV	<b>943714Q</b>
MP Filtri	MF1002A10HV	<b>943713Q</b>
MP Filtri	MF1001A25HV	<b>943710Q</b>
MP Filtri	MF1001A10HV	<b>943709Q</b>
MP Filtri	HP0651A10VN	<b>938331Q</b>
MP Filtri	MF0301A25HV	<b>943706Q</b>
MP Filtri	HP3204A10VH	<b>943651Q</b>
MP Filtri	HP3203A03VH	<b>943645Q</b>
MP Filtri	HP3202A25VH	<b>943644Q</b>
MP Filtri	HP0653A10VH	<b>943623Q</b>
MP Filtri	HP5002A10VN	<b>943514Q</b>
MP Filtri	HP0651A10VH	<b>943615Q</b>
MP Filtri	MF1801A10HV	<b>943721Q</b>
MP Filtri	HP0652A10VH	<b>943619Q</b>
MP Filtri	HP3202A10VH	<b>943643Q</b>
MP Filtri	HP1351A03VH	<b>943625Q</b>
MP Filtri	HP1351A10VH	<b>943627Q</b>
MP Filtri	HP1352A10VH	<b>943631Q</b>
MP Filtri	HP1353A10VH	<b>943635Q</b>
MP Filtri	HP3202A03VH	<b>943641Q</b>
MP Filtri	HP3202A06VH	<b>943642Q</b>
MP Filtri	HP0651A25VH	<b>943616Q</b>
Argo	V3.0520-08	<b>PR4476</b>
Argo	V3.0510-06	<b>944075Q</b>
Argo	P3.0510-02	<b>PR4475</b>
Argo	V3.0607-08	<b>PR4472</b>
Argo	V3.0607-06	<b>PR4471</b>
Argo	P3.0510-00	<b>PR4469</b>
Argo	V2.1217-36	<b>PR4468</b>
Argo	V2.1217-08	<b>PR4467</b>
Argo	V3.0933-08	<b>944098Q</b>
Argo	V3.0940-06	<b>939789Q</b>

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Argo	V3.0623-06	<b>939764Q</b>
Argo	V2.1260-26	<b>939762Q</b>
Argo	P3.0520-01	<b>939760Q</b>
Argo	V2.1217-03	<b>938194Q</b>
Argo	P2.1217-12	<b>PR4465</b>
Argo	P2.1217-21	<b>PR4466</b>
Mahle	Pi3115 SMX10	<b>PR2855Q</b>
Mahle	Pi3130 SMX10	<b>PR2863Q</b>
Mahle	Pi2130SMX3	<b>PR2862Q</b>
Mahle	Pi1030MIC25	<b>PR2861Q</b>
Mahle	Pi4215 SMXVST25	<b>PR2859Q</b>
Mahle	Pi3215 SMXVST10	<b>PR2858Q</b>
Mahle	Pi4130 SMX25	<b>PR2864Q</b>
Mahle	Pi4115 SMX25	<b>PR2856Q</b>
Mahle	Pi4145 SMX25	<b>PR2872Q</b>
Mahle	Pi1115Mic10	<b>PR2852</b>
Mahle	Pi2215SMXVST3	<b>PR2857Q</b>
Mahle	Pi2230SMXVST3	<b>PR2865Q</b>
Mahle	Pi3230 SMXVST10	<b>PR2866Q</b>
Mahle	Pi4230 SMXVST25	<b>PR2867Q</b>
Mahle	852 126 Mic 10	<b>PR4381Q</b>
Mahle	Pi4211 SMXVST25	<b>PR2851Q</b>
Mahle	Pi2245SMXVST3	<b>PR2873Q</b>
Mahle	Pi3245 SMXVST10	<b>PR2874Q</b>
Mahle	Pi4245 SMXVST25	<b>PR2875Q</b>
Mahle	852 435 SM 10	<b>PR4375Q</b>
Mahle	852 436 SM 25	<b>PR4376Q</b>
Mahle	852 690 Sm 10	<b>937108Q</b>
Mahle	Pi3145 SMX10	<b>PR2871Q</b>
Mahle	Pi3205 SMXVST10	<b>PR2834Q</b>
Mahle	Pi8515DRG100	<b>939845Q</b>
Mahle	Pi3211 SMXVST10	<b>PR2850Q</b>
Mahle	852 127 SMX 10	<b>937100Q</b>
Mahle	852 127 SMX 25	<b>937101Q</b>
Mahle	852 439 Sm 10	<b>937105Q</b>
Mahle	852 519 Mic 10	<b>937106Q</b>
Mahle	852 519 Sm L	<b>937107Q</b>
Mahle	852 760 Sm 10	<b>937109Q</b>
Mahle	Pi1005Mic25	<b>PR2829Q</b>
Mahle	Pi4105 SMX25	<b>PR2832Q</b>
Mahle	Pi4205 SMXVST25	<b>PR2835Q</b>
Mahle	Pi2108SMX3	<b>PR2838Q</b>
Mahle	Pi3108 SMX 10	<b>PR2839Q</b>
Mahle	Pi4108 SMX25	<b>PR2840Q</b>
Mahle	Pi2208SMXVST3	<b>PR2841Q</b>
Mahle	Pi3208 SMXVST10	<b>PR2842Q</b>
Mahle	Pi4208 SMXVST25	<b>PR2843Q</b>
Mahle	Pi3111 SMX 10	<b>PR2847Q</b>
Mahle	Pi4111 SMX25	<b>PR2848Q</b>
Mahle	Pi2211SMXVST3	<b>PR2849Q</b>

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Mahle	Pi3105 SMX 10	<b>PR2831Q</b>
Eppensteiner	2.460-H10XL-C-000-M	<b>939849Q</b>
Eppensteiner	2.0045.H10XL-A00-0-P	<b>939777Q</b>
Eppensteiner	2.460-H10XL-A-000-P	<b>939850Q</b>
Eppensteiner	2.140.H20XL-A00-0-P	<b>937133Q</b>
Eppensteiner	2.0013.H10XL-A00-0-P	<b>939775Q</b>
Eppensteiner	2.0015.H10XL-A00-0-P	<b>939776Q</b>
Donaldson	P163322	<b>944012Q</b>
Donaldson	P164375	<b>944022Q</b>
Donaldson	P164378	<b>944023Q</b>
Donaldson	P165338	<b>944029Q</b>
Donaldson	P176565	<b>944032Q</b>
Donaldson	P176566	<b>944033Q</b>
Donaldson	P165569	<b>944035Q</b>
Donaldson	P165659	<b>944036Q</b>
Donaldson	P176567	<b>944047Q</b>

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