

# Hydraulic Filter Division Europe - Distribution Overview

Products and Services V3.0

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



ENGINEERING YOUR SUCCESS.

# Dedicated service and support for our distribution partners.

Our success is built on doing the right thing for customers. That means providing distributors with world class products, support and opportunities time after time; helping you to meet the needs of end-users, and opening doors to profitable new business.

This brochure introduces you to the package of solutions you can expect from Parker Hydraulic Filter Division Europe (HFDE), including information about our unique technical, training and specification tools, and a comprehensive listing of our recommended distribution focused products all available on-demand from our European Distribution Centre.











# New ideas for growing business together.

We get it; you trust us with your reputation. So when you work with Parker, you can expect a true partnership – with our ideas, resources and expertise dedicated to achieving shared success.







#### Service and support

Our distribution partners enjoy the very best in technical, sales and marketing support, including comprehensive product information, interactive specification tools and innovative training resources. On-line or in-person, we'll make it happen for you.

#### **Product excellence**

Every Parker product is engineered and manufactured to the highest standards. It's a quality commitment that drives efficiency, reliability and profitability gains for you and your customers.

#### **Research and development**

Leadership isn't achieved through standing still. That's why our R&D investment is ongoing, and focussed on delivering continual product improvements, creating new opportunities and new products aimed at strengthening our distribution product portfolio.

#### **Global reach**

With manufacturing across the globe and around the clock, and expertise in every marketplace, we have unrivalled capability to deliver your promises, wherever you operate.





# World class products

Parker HFDE operates across four industry segments; hydraulic filtration, conditioning monitoring, heavy duty fuel and lubrication and Par Fit replacement elements, channelling market expertise and class-leading products to distributors via the Parker worldwide sales company network.



# Hydraulic filtration

- Advanced solutions for a huge variety of mobile and industrial applications
- Designed to maximise system and component lifetime in hydraulic and lubrication systems
- Improving performance, saving operating cost, and reducing environmental impact
- 'Next generation' technology, supporting equipment innovation

## Heavy duty fuel and lubrication filtration

- Filtration on an industrial scale, for gas, fuel, hydraulic oil and lubrication systems
- From offshore and marine to power generation and renewable energy
- Wide range of low and medium pressure multi-purpose filters and customised solutions
- Delivering optimum productivity, control, reliability and safety
- Looking after systems, protecting the customer's investment



#### Fluid condition monitoring products

- Super-sensitive fluid condition monitoring products, for today's sophisticated equipment
- On-line particle detectors for 24/7 system diagnostics
- Off-line bottle samplers and analysers
- Innovative sensors designed to monitor and measure moisture in fluid
- Providing real time data, and optimising system efficiency, safety and operating costs



# Par Fit hydraulic and lubrication interchange elements

- Specification, reliability, availability and price Par Fit meets every requirement
- Over 50,000 interchange filter elements, covering almost every main OE part and recognised manufacturer
- Parker engineered, to the latest ISO standards, for ultimate reliability and customer reassurance
- Available for immediate despatch, when you need it, through the Parker global network



# Moving forward

#### quantµmfiber™ A quantum leap

Featuring a ground breaking fibre composition, Parker Quantumfiber™ sets new standards of media performance for customers across the globe.

## PAR☆FIT<sup>™</sup> SmaRT1000

A range of replacement filter elements, designed to match the Pall SRT replacement elements. Engineered and manufactured by Parker, Par Fit SmaRT1000<sup>™</sup> provides a straight forward swap for the Pall product, but with greater affordability, 'same or better' performance, and 'guaranteed' availability from stock in Europe.









# Empowered by knowledge

We have created a world of on and off-line support services and tools that enable our customers to share our knowledge and expertise. It's an intelligence-driven approach that's designed to foster opportunity and growth.

#### **Product literature**

Our library of product brochures, market/ application brochures, and catalogues is constantly updated, and available printed or available to download. All the information you need is immediately to hand.

#### E-learning

Develop your industry knowledge and learn about our products, technologies, and environmental initiatives, using our bespoke online training platform. Register at www.parkerhfde.com/e-learning.

#### Software, apps and online resources

Practical tools to help with product specification, system operation, and performance evaluation – making life easier, and business more profitable for distributors and end customers alike.

• Par Fit Toolkit

Par Fit Toolkit makes identifying and ordering replacement interchange elements faster and more straightforward. Combining three programs in one, you can search by machine part number, application or visual reference. Available at www.parkerhfde.com/toolkit

• Filter selector

The Parker Filtration Filter Selector enables you to search and select Parker Hydraulic and lubrication filter products on and off-line. Available at www.filterselector.com

• Fluid Condition Monitoring – iOS App Enables you to assess the ISO cleanliness of a system, and calculate system monitoring frequency. Available to download free onto your iOS device from the iOS app store.





# Tanktopper Series I, II & III

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

# www.endering.com

#### **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<sup>®</sup> 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.

# 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
TPR110QLBP2EG12E	40	1.5 bar	G¾	Magnets	937902Q
TPR510QLBP2E2G201	120	1.5 bar	2x G1¼	none	937892Q
TPR710QLBP2E2G241	250	1.5 bar	2x G11⁄2	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.

#### Ordering Information

Part Number	Flow L/Min	Bypass	Ports	orts Included Options	
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.



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# **TTF Series**

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

## **BGT Series**

Tanktop mounted return line filters, max 2400 l/min - 10 bar



#### **Product Features**

- TTF features pre-filtration by means of a magnet column.
- Patented LEIF<sup>®</sup> 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.

Connections:

Options:

Threaded BSP ports.

Filtration Media:\*

for LEIF® elements

the reservoir oil level)

Flanged ports available

10 micron Microglass III & Ecoglass III

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

For more information see the HFDE

product catalogue Ref: FDHB500.

#### **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

#### **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.



#### **Product Features**

- BGT features pre-filtration by means of a magnet column.
- Patented LEIF<sup>®</sup> 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.

## Maxiflow

Spin-on filters, max. 360 I/min - 10 bar

# **GMF** iProtect

Medium pressure filters, max. 600 I/min - 70 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

#### **Ordering Information**

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.

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
MXA1210QBG2GG121	70	1.75 bar	G¾	Pressure Gauge	MXR8550
MXA1210CBG2GG121	70	1.75 bar	G¾	Pressure Gauge	MX1518410x4
MXA1210CBU4RG121	20 (suction)	0.2 bar	G¾	Vacuum Gauge	MX1518410x4
MXA2310CBG2GG201	180	1.75 bar	G1¼	Pressure Gauge	MX1591410x4
MXA2310CBU4RG201	48 (suction)	0.2 bar	G1¼	Vacuum Gauge	MX1591410x4



#### **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.

#### **Ordering Information**

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.

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
GMF2110QIVPKG164	55	3.5 Bar	G1"	Plugged indicator ports	938897Q
GMF2210QIVPKG164	90	3.5 Bar	G1"	Plugged indicator ports	938901Q
GMF3110QIVPKG244	120	3.5 Bar	G1 1/2"	Plugged indicator ports	938905Q
GMF3210QIVPKG244	230	3.5 Bar	G1 1/2"	Plugged indicator ports	938909Q
GMF4110QIVPKG324	350	3.5 Bar	G2"	Plugged indicator ports	938913Q
GMF4210QIVPKG324	530	3.5 Bar	G2"	Plugged indicator ports	938917Q



# **12CS Series**

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

## Eco 130 Series

Medium pressure filters, max. 1400 l/min. 30 bar



#### **Product Features**

- 12CS features a Parker quality, replaceable coreless 10 micron Ecoglass Ill 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

#### **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

**Element Condition Indicator Options:** 

For predictive maintenance, 3 types

An electrical analogue or switch type

For more information see the HFDE

product catalogue Ref: FDHB500.

of indicator are available.

visual LED indicator.

indicator or a battery operated

\*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.



#### **Product Features**

• In-line filter as a single filter, a dual unit, a paralled unit or a filter system.

Assembly:

Vertical installation

Housing Material:

Aluminium

indicator port

Fluid Compatibility:

In-line filter as a single filter, a dual unit, a parallel unit or a

Nominal Flow Rate (30 cSt):

filter system with L-bore selecting

Single filter: 1000 l/min (60 m<sup>3</sup>/h)

Dual and parallel units and filter

Differential Pressure Indicators:

Visual indicator always included

to each column, setting 2.5 bar.

Optional electrical or electronic

Suitable for use with regular

hydraulic and lubrication oils.

For more information see the HFDE

product catalogue Ref: FDHB500.

indicators to be mounted on lower

systems: 1400 l/min (84 m3/h)

valve assembly (only one side in use).

- Single filter flow rate 1000 l/min. max.
- Dual and paralled 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  $2^{1/2}$ " 3000-M or with adaptor threads G11/2 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:

#### · Clearfirm Midler Idls

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

Cleanable metal mesh

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
130M210QEBM3KR401	700	3.5 bar	SAE 21/2"-3000M	Visual	938723Q
130M220QEBM3KR401	900	3.5 bar	SAE 21/2"-3000M	2.5 bar	938724Q
130M310QEBM3KR401	900	3.5 bar	SAE 21/2"-3000M		938727Q
130M320QEBM3KR401	1000	3.5 bar	SAE 21/2"-3000M		938728Q

# EPF iprotect® (Ecological Pressure Filter)

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

# **DF40**

Duplex filters, max. 200 l/min. 40 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.

Specification

Filter housing

Microglass III

Indicator options

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)

Bowl material steel

Nominal flows 40 I/min-500 I/min

Supported with epoxy coated metal

composite and reusable metal inner

Atex versions are available on request

For more information see the HFDE

product catalogue Ref: FDHB500.

Indicating differential pressure:

wire mesh, end cap material reinforced

core. Collapse pressure 25 bar (ISO 2941)

Head material cast iron (GSI)

• 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

Dypuss vu	ve a maica
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<sup>1</sup>/<sub>2</sub> - G1<sup>1</sup>/<sub>2</sub>

#### **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



#### 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  $1\!\!\!\!/ 2^{\prime\prime}$  3000-M as standard. Optional thread connections G1 $\!\!\!/ 2$  and G1 $\!\!\!/ 2$  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)

#### **Ordering Information**

Part Number	Flow L/Min	Bypass	Ports	Included Options	Replacement Elements
DF40110QEVPKR241	270	3.5 bar	SAE 11/2"-3000M	none	939206Q
DF40120QEVPKR241	300	3.5 bar	SAE 11/2"-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.



#### 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 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.

# **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: 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)

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

#### **Ordering Information**

210 bar

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	DF40	2.5 Bar	U14M cavity	Visual differential pressure indicator
FMUT1KVMU14M	DF40	2.5 Bar	U14M cavity	Electrical differential pressure switch
FMUM3KVMS08	GMF	5.0 Bar	S08 cavity	Visual differential pressure indicator
FMUT1KVMS08	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
FMUM3MVMS08	EPF	5.0 bar	S08 cavity	visual differential pressure indicator
FMUT1MVMS08	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 I/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 I/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

# Sentinel<sup>™</sup>

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.

**Electrical Service Required:** 

Thermal overload protection

single phase, 10/5 amps

Electrical Motor:

Construction:

Cart frame – Steel

Filter bowl – Steel

Hoses - PVC (Std.)

Wands - PVC (Std.)

Weight:

45.4kg

Filter head – Aluminum

EPDM (high temp option)

Steel tube (high temp option)

For more information see the HFDE

product catalogue Ref: FDHB500.

10MFP - 110/220 volts, 60/50 Hz,

10MFP – ¾ hp @ 3450 rpm, 0.D.P.

- 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

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		



#### **Product Features**

CE

- 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.

via USB port

Fluorocarbon

Heater type

Certification

dBA

Weight

190 kg

Vacuum pump type

Particle filter type

Dry sealed vacuum pump

5 micron 'iprotect' element

6KW low - density heater

IP54 rating (unit open) CE marked

**Machinery Directive** 

Contact Parker

80.000 loas

EC Declaration of Conformity

icount Fluid Property Sensor (FPS)

IQAN MD3 Display Memory size

Seals

Computer compatibility connection

Unit to be connected to a laptop computer

Power requirement 380-420VAC,3P,50Hz

Noise level at standard operation 75

 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 + 70C 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

5%RH 10 100%RH

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



# **OCU Oil Conditioning**

Bypass and off-line filters

# ASIC 'Performer'

Pressure transducers



#### **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

#### Ordering Information

Flow Rate:
0CU1 : 1,5 l/min
0CU 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

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
0C222010VGLS061	2	4.5 bar	SAE 6	Flow/ Pressure control valve	10	Bypass Filter	942656 and 942682 (Water removal)



#### **Product Features**

- A quality range of transucers and transmitters with pressure ratings 25, 60, 100, 220, 400 and 600 bar.
- One-piece body and diaphragm machining ensures

#### **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

#### 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

#### **Ordering Information**

Part Number	Description	Output	Pressure	Thread form	Connector
PTDVB0251B1C1	0 - 5 Vdc 25 bar ¼ BSP ED seal Micro-DIN	0-5Vdc	025	¼ BSP	Micro DIN
PTD.VB2501B1C1	0 - 5 Vdc 250 bar ¼ BSP ED seal micro-DIN	0-5Vdc	250	¼ BSP	Micro DIN
PTDVB4001B1C1	0 - 5 Vdc 400 bar ¼ BSP ED seal micro-DIN	0-5Vdc	400	¼ BSP	Micro DIN
PTDVB4001B1C2	0 - 5 Vdc 400 bar ¼ BSP ED seal M12	0-5Vdc	400	¼ BSP	M12

- long term stability.
- All Stainless Steel construction.
- 0-5 Volt, 1-6 Volt Transducers.
- 1/4" BSP Thread.

Installation:

Spanner size 22A/F.

Weight: 200 - 230g

**Thread Forms** 

G¼ (¼BSP) with ED seal.

Non standard threads -

contact Parker CMC

All thread forms and sensor interface

are made from 1.4301 stainless steel

For more information see the HFDE

product catalogue Ref: FDHB500.

Max. (recommended)

tightening torque = 30Nm.

Lifespan: 10 million cycles

• M12 or MicroDIN plug options.

# **EAB Series Air Filters**

Filter breathers and environmental air filters

# **Glass-filled Nylon and Metal Breathers**

Filter breathers and environmental air filters



#### **Product Features**

- EAB Series airflow up to 1500 I/min. Visual gauge option.
- Compact EAB10 airflow upto 1000 1/min, visual gauge option.

Options:

same time.

Visuals gauge type vacuum/pressure

specified with an overpressure valve

For more information see the HFDE

product catalogue Ref: FDHB500.

and vacuum/pressure gauge at the

setting 0.2 bar. EAB10 cannot be

indicator. Overpressure valve, pressure

#### **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 G<sup>4/2</sup>, G1"Internal thread G<sup>4/2</sup>.

#### **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



#### **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



# Fluid Level Measurement

Fluid level temperature gauges

# **Suction Elements**

Proven solutions for oil reservoir efficiency



#### **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



#### **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.

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

# icount Oil Sampler (IOS)

Fluid particle dectectors

#### **Product Features**

Fi

- Portable monitoring tool providing fluid gualification 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

#### **Ordering Information**

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

# 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. CE
- Temperature Outputs.



# icountPD - Online Particle Dectector

Fluid particle dectectors



#### 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 Aariculture 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 CE

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

#### **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.





intervals and test period can be defined

by the user, with results being reported

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

included as standard.

bar) a Pressure Reducing Valve (PRV) is

immediately and updated in real time.

Data is displayed on a built-in OLED

# 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.

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

CE

• This value is counted and stored in the icountLaserCM computer

in one of 6 channels according

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.

• Readouts are displayed on the hand-

held LCD in the accepted ISO and NAS

standards ready for hard copy printing

to particle size.

- Calibration MTD
- Hydrocarbon Fuel • Mineral Oil

#### 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.

#### **Ordering Information**

17

- 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.

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)

# icount BS Plus

#### Bottle sampling



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#### **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.

#### **Ordering Information**

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.

# Inline sensors and monitors

#### System 20



#### **Product Features**

CE

- 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 dayglow 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



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

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



ral based flui

aggressive/phosphate Ester fluids

CE

# 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 ±5% FSD.
- Repeatability ±1% FSD.
- Direct reading.

1 bar.

Oil

Water

- Relatively insensitive to viscosity changes.
- Oil or water calibrated.
- Optional reed switch upgrade.

#### **Technical Specification**

Construction: Viscosity Range: Brass body to BS 2874 CZ114. 10 to 200 cSt (oil). Maximum Working Pressure: Accuracy: Up to 350 bar. ±5% FSD. Minimum Working Pressure: Repeatability: ±1% FSD. Temperature Range: Min. Scale Reading: Brass -20°C to +90°C. 10% FSD. Calibration: Connections: Specific gravity BSP parallel threads. 0.856 at 20°C. Wetted/Non-wetted Parts: Specific gravity Consult Parker for information. 1.0 at 20°C. 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.

**Technical Specification (LoFlow)** 

10 bar pressure rating.

• Negligible pressure drop characteristics.

• Simple to use.

Maximum working temperature: 60°C. Accuracy: ±2% typical Repeatability: ±1%. Connections: 1/4" and 3/4" tapered threads.

#### **Ordering Information**

Back body half - ABS 7020.

Construction:

Float - Acetal

Body - Grillon TR55.

Product Number	Media	Flow Range (I/min)	Switch Range (I/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	Flowswitch	
Construction:	The Easiflow switch is	a flow measuring device
Body - Glass filled nylon	incorporating an AC/E	)C switch
Viewing glass - Borosilicate glass	General Flowmeter S	pecification:
Seal - Nitrile	See material details o	opposite.
Maximum Working Pressure: 10 bar.	Switch Type Specifica	tions:
Minimuorking Pressure: 1 bar.	Magnetically operated	l reed switch.
Temperature Range:	Electrical Details:	
+5°C to +80°C - Oil.	Voltage range	300Vac/dc
+5°C to +60°C - Water.	Maximum current	2.5Amps
Flow Rate: 1 to 150 l/min.	Maximum load	100W resistive
Viscosity Range: 10 to 200 centistokes (oil).		70W
Connections: 1" BSP parallel threads.		

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

Product Number	Number Media			Flow Range (I/min)	
EF7731111220		Water	2 - 30		
EF7731112220		Water	4 - 50		
EF7731111120		Oil		2 - 30	
EF7731112120		Oil		4 - 50	
Product Number	Med	lia	Flow Range (	l/min)	Switch Range (I/min)
EF7731110221	Wat	er	1 - 15		5 - 15
EF7731111221	Wat	er	2 - 30		5 - 30
EF7731110121	Oil		1 - 15		5 - 15
EF7731111121	Oil		2 - 30		5 - 30

# 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 Sample Bottles, 10ml Syringes, 5ml

Syringes & Test Tubes, 4ml Grease Pots

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 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) With the form

Weight: 4.22 kg

#### **Ordering Information**

Sample Media:

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  $\leftarrow$ 10, "Suspect" if between 10 & 15, "Poor" if  $\rightarrow$ 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

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



# **Heated Viscometer**

Viscometer measurement

# **DIGI Field Kit**

Multiparameter test kit



#### **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
FGK1200PA	Oil Analysis Viscometer (Heated)
ASK11098	Viscometer end cap
ASK11097	Viscometer end plug
BIK10307	Viscometer steel ball (23mm)
BIK10004	Oil Analysis viscometer ball strainer



#### **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

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

# PAR�FIT<sup>™</sup> SmaRT1000

# 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 hydraulicfluids, without compromising efficiency.

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



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	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



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

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Hydac	0330R010BN4HC	938283Q
Hydac	0330R020BN4HC	938284Q
Hydac	0240R005BN4HC	938278Q
Pall	HC8304FKT16H	937171Q
Pall	HC8304FKS39H	937170Q
Pall	HC8304FKS16H	937169Q
Pall	HC8304FKP39H	937168Q
Pall	HC8304FKP16H	937167Q
Pall	HC8304FKT39H	937172Q
Pall	HC8304FKN16H	937165Q
Pall	HC9601FKS16H	937188Q
Pall	HC8304FKN39H	937166Q
Pall	HC9604FKP8H	937200Q
Pall	HC8900FKN39H	937180Q
Pall	HC9604FKP13H	937197Q
Pall	HC9601FKS13H	937187Q
Pall	HC9601FKS4H	937189Q
Pall	HC9601FKS8H	937190Q
Pall	HC8300FWT39H	937163Q
Pall	HC6400FKS16H	935145
Pall	HC8900FKT39H	937183Q
Pall	HC6400FKS26H	935149
Pall	HC9604FKS16H	937202Q
Pall	HC8400FKS16H	9337770
Pall	HC8314FKS39H	934123Q
Pall	HC8314FKT39H	934124Q
Pall	HC9601FKN8H	934194Q
Pall	HC8314FKS16H	934310Q
Pall	HC8500FKS13H	935177
Pall	HC6400FKS13H	935141
Pall	HC6400FKT8H	937146Q
Pall	HC9800FKS13H	933786Q
Pall	HC8500FKT13H	935178
Pall	HC8200FKT16H	9355510
Pall	HC6300FKS13H	9371230
Pall	HC6300FKS26H	9371250
	HC6300FKS8H	9371260
Pall	HC6300FKT13H	9371280
Pall		9337840
	HC9800FKN13H	PR3446Q
Pall	HC9020FKT8H	PR34460 PR44590
Pall	HC8700FKS8H	
Pall	HC8300FKN16H	PR2798Q
Pall	HC9600FKP4H	PR3435Q
Pall	HC9600FKP8H	PR3436Q
Pall	HC9600FKS4H	PR3437Q
Pall	HC9600FKS8H	PR3438Q
Pall	HC9600FKT4H	PR3440Q
Pall	HC9801FKP13H	PR2759Q
Pall	HC9020FKT4H	PR3444Q
Pall	HC9100FKT13H	944096Q

Filter Element Competitor	Filter Element Competitor Part Number	Parker Part Number
Pall	HC8300FKP16H	PR3455Q
Pall	HC8300FKS16H	PR3456Q
Pall	HC8700FKS4H	PR4455Q
Pall	HC8700FKT4H	PR4456Q
Pall	HC8700FKT8H	PR4460Q
Pall	HC8400FKT16H	9337630
Pall	HC9600FKP13H	926698Q
Pall	HC9600FKT8H	PR3441Q
Pall	HC9100FKN8H	938163Q
Pall	HC9604FKT8H	937208Q
Pall	HC9650FKN13H	937209Q
Pall	HC9650FKS13H	9372130
	HC9650FK513H	
Pall	HC9801FK54H	937215Q 937222Q
Pall		
Pall	HC9801FKS8H	937223Q 938158Q
Pall	HC6200FKP8H	
Pall	HC9801FKT13H	PR2760Q
Pall	HC6200FKT8H	9381610
Pall	HC9604FKS8H	937204Q
Pall	HC9100FKS8H	938164Q
Pall	HC8904FKT39H	938317Q
Pall	HC8904FKN13H	944067Q
Pall	HC8904FKS26H	944072Q
Pall	HC4704FKP16H	944082Q
Pall	HC4704FKN16H	944083Q
Pall	HC9100FKS13H	944095Q
Pall	HC6200FKS8H	938160Q
Pall	HC9601FKT16H	9281420
Pall	HC9600FKT13H	930162Q
Pall	HC9601FKP13H	927182Q
Pall	HC8300FKS8H	927661Q
Pall	HC8300FKP8H	927663Q
Pall	HC9021FKS4H	927696Q
Pall	HC9021FKP8H	927723Q
Pall	HC9601FKP8H	927176Q
Pall	HC8300FKN8H	927861Q
Pall	HC9601FKT8H	927175Q
Pall	HC9601FKP16H	928143Q
Pall	HC9651FKT8H	928150Q
Pall	HC9600FKS13H	926839Q
Pall	HC9021FKT4H	928642Q
Pall	HC9700FKS27H	933488Q
Pall	HC8300FKT8H	929099Q
Pall	HC9400FKS13H	929885Q
Pall	HC9021FKP4H	927725Q
Pall	HC9600FKS16H	926888Q
Pall	HC9020FKS4H	925580Q
Pall	HC9020FKP4H	925582Q
Pall	HC9020FKS8H	925600Q
Pall	HC9020FKP8H	925602Q



Filter Element	Filter Element Competitor	Parker Part
Competitor	Part Number	Number
Pall	HC9600FKP16H	926699Q
Pall	HC9600FKN4H	926841Q
Pall	HC9601FKT13H	927181Q
Pall	HC9600FKN13H	926845Q
Pall	HC9021FKT8H	928643Q
Pall	HC9600FKN16H	926890Q
Pall	HC9650FKN8H	926988Q
Pall	HC9650FKN16H	926994Q
Pall	HC9650FKS16H	926996Q
Pall	HC9650FKP16H	926998Q
Pall	HC9601FKT4H	927169Q
Pall	HC9601FKP4H	927170Q
Pall	HC9600FKN8H	926843Q
Pall	HC8900FKN26H	933219Q
Pall	HC8900FKP13H	933202Q
Pall	HC8900FKN13H	933203Q
Pall	HC9600FKT16H	930164Q
Pall	HC8900FKT13H	933205Q
Pall	HC9651FKP8H	928152Q
Pall	HC8900FKN16H	933211Q
Pall	HC8900FKS8H	933195Q
Pall	HC8900FKP26H	933218Q
Pall	HC8900FKS13H	933204Q
Pall	HC8900FKS26H	933204Q
Pall	HC8900FKT26H	933221Q
Pall	HC9020FKN4H	933239Q
Pall	HC9020FKN8H	933246Q
Pall	HC9400FKT13H	933253Q
		933266Q
Pall	HC9400FKT39H	
Pall	HC9650FKT8H	933295Q 933212Q
Pall	HC8900FKS16H	
Pall	HC9800FKS8H	930193Q
Pall	HC9800FKP4H	930189Q
Pall	HC9800FKS4H	930190Q
Pall	HC9800FKT4H	930191Q
Pall	HC8900FKP16H	933210Q
Pall	HC9800FKP8H	930192Q
Pall	HC8900FKN8H	933194Q
Pall	HC9800FKT8H	930194Q
Pall	HC9800FKN4H	930197Q
Pall	HC9800FKN8H	930198Q
Pall	HC8400FKS39H	933091Q
Pall	HC9700FKS9H	932670Q
Pall	HC9700FKS18H	932679Q
Pall	HC8300FKP39H	932872Q
Pall	HC8300FKN39H	932873Q
Pall	HC8300FKS39H	932874Q
Pall	HC8300FKT39H	932875Q
Pall	HC8300FKT16H	933047Q
Pall	HC9700FKT9H	931018Q

Filter	Filter Element	Parker
Element Competitor	Competitor Part Number	Part Number
Internormen	01.NL 63.25VG.30.E.V	938181Q
Internormen	01.NL 63.10VG.30.E.V	938180Q
Internormen	01.E 360.10VG.HR.E.V	938176Q
Internormen	01.E 360.3VG.HR.E.V	938174Q
Internormen	01.E 170.25VG.HR.E.V	938173Q
Internormen	01.E 170.10VG.HR.E.V	938172Q
Internormen	01.E 170.6VG.HR.E.V	9381710
Internormen	01.E 210.25VG.16.S.V	938189Q
Internormen	01.E 320.10VG.16.S.V	938168Q
Internormen	01.E 320.25VG.16.S.V	938169Q
Internormen	01.E 30.25VG.30.E.V	938245Q
Internormen	01.E175.3VG.16.S1.V	940074Q
Internormen	01.E 900.10VG.30.E.V	939734Q
Internormen	01.E 900.10VG.30.E.V	939726Q
Internormen	01.NL 100.6VG.30.E.V	939724Q
Internormen	01.NBF 25-40.3VL.B.P	939724u 938251Q
		938251u 938188Q
Internormen	01.E 210.10VG.16.S.V 01.E 30.10VG.30.E.V	938188u 938244Q
Internormen		
Internormen	01.E 90.25VG.HR.E.V	938241Q
Internormen	01.E 90.10VG.HR.E.V	938240Q
Internormen	01.E 90.3VG.HR.E.V	9382380
Internormen	01.E 425.25VG.16.S.V	938193Q
Internormen	01.NBF 55-85.3VL.B.P	9382520
Internormen	01.E 170.10VG.30.E.V	9382320
Internormen	01.E.425.6VG.16.S.V	9381910
Internormen	01.E 425.10VG.16.S.V	9381920
Internormen	01.NL 100.10VG.30.E.V	938184Q
Internormen	01.E 631.10VG.16.S.V	938212Q
Internormen	01.E 631.25VG.16.S.V	9382130
Internormen	01.E 360.10VG.30.E.V	938220Q
Internormen	01.E 450.10VG.30.E.V	938224Q
Internormen	01.E 450.25VG.30.E.V	9382250
Internormen	01.E.240.10VG.HR.E.V	938228Q
MP Filtri	CU250A25VN	9438120
MP Filtri	CU200A25VN	943808Q
MP Filtri	CU250A03VN	943809Q
MP Filtri	CU250A10VN	943811Q
MP Filtri	CU100A25VN	943804Q
MP Filtri	CU350A10VN	943815Q
MP Filtri	CU350A25VN	943816Q
MP Filtri	CU630A10VN	943819Q
MP Filtri	CU630A25VN	943820Q
MP Filtri	CU730A25VN	943824Q
MP Filtri	CU100A10VN	943803Q
MP Filtri	CU730A10VN	943823Q
MP Filtri	CU040A25VN	943800Q
MP Filtri	CU040A10VN	943799Q
MP Filtri	CU025A25VN	943796Q
MP Filtri	CU025A10VN	943795Q
MP Filtri	MF7501M60NV	943791Q

Filter	Filter Element	Parker
Element Competitor	Competitor Part Number	Part Number
MP Filtri	ME7501A10HV	943741Q
MP Filtri	MF4003A10HV	943737Q
MP Filtri	MF4003A03HV	943735Q
MP Filtri	MF4002A25HV	9437340
MP Filtri	MF4002A10HV	943733Q
MP Filtri	CU850A10VN	9438270
MP Filtri	MF1802A25HV	943726Q
MP Filtri	MR2504A10V	943928Q
MP Filtri	MF4001A10HV	9437290
MP Filtri	MF4003A25HV	943738Q
MP Filtri	MR8504A25V	943993Q
MP Filtri	MR8503A25V	943985Q
MP Filtri	MR8503A10V	943984Q
MP Filtri	MR8502A10V	943976Q
MP Filtri	MR8501A25V	943969Q
MP Filtri	MR8501A10V	943968Q
MP Filtri	MR6304A25V	943961Q
MP Filtri	MR6304A10V	943960Q
MP Filtri	MR6303A25V	943953Q
MP Filtri	MR6303A10V	943952Q
MP Filtri	MR6302A25V	943945Q
MP Filtri	MR2503A10V	943920Q
MP Filtri	MR2504A25V	943929Q
MP Filtri	CU850A25VN	943828Q
MP Filtri	MR2503A25V	943921Q
MP Filtri	MF1802A10HV	943725Q
MP Filtri	MR2502A25V	943913Q
MP Filtri	MR2502A10V	943912Q
MP Filtri	MR2501A10V	943904Q
MP Filtri	MR1004A25V	943897Q
MP Filtri	MR1004A10V	943896Q
MP Filtri	MR1003A25V	943889Q
MP Filtri	MR1003A10V	943888Q
MP Filtri	MR1002A25V	943881Q
MP Filtri	MR1002A10V	943880Q
MP Filtri	MR6302A10V	943944Q
MP Filtri	HP0653A25VN	938340Q
MP Filtri	HP3203A10VN	943502Q
MP Filtri	HP3202A25VN	938360Q
MP Filtri	HP3202A10VN	938359Q
MP Filtri	HP3202A06VN	938358Q
MP Filtri	HP3202A03VN	938357Q
MP Filtri	HP3201A10VN	938355Q
MP Filtri	HP3201A03VN	938353Q
MP Filtri	HP1353A10VN	938351Q
MP Filtri	HP1352A25VN	938348Q
MP Filtri	HP1352A10VN	938347Q
MP Filtri	HP1352A03VN	938345Q
MP Filtri	HP3203A25VN	943503Q
MP Filtri	HP1351A10VN	938343Q

# Par Fit

Filter	Filter Element	Parker
Element	Competitor	Part
Competitor	Part Number	Number
MP Filtri	HP0652A10VN	938335Q
MP Filtri	HP0653A10VN	938339Q
MP Filtri	HP0652A25VN	938336Q
MP Filtri	MF1801A25HV	943722Q
MP Filtri	HP0651A25VN	938332Q
MP Filtri	MF7501A25HV	943742Q
MP Filtri	HP0372A25VN	938328Q
MP Filtri	HP0372A10VN	938327Q
MP Filtri	HP0371A25VN	938324Q
MP Filtri	HP0371A10VN	938323Q
MP Filtri	HP0371A06VN	938322Q
MP Filtri	HP0371A03VN	938321Q
MP Filtri	MR1001A25V	938320Q
MP Filtri	HP1351A25VN	938344Q
MP Filtri	MF0301A10HV	943705Q
MP Filtri	HP3204A10VN	943506Q
MP Filtri	MF1003A25HV	943718Q
MP Filtri	MF1003A10HV	943717Q
MP Filtri	MF1002A25HV	943714Q
MP Filtri	MF1002A10HV	943713Q
MP Filtri	MF1001A25HV	943710Q
MP Filtri	MF1001A10HV	943709Q
MP Filtri	HP0651A10VN	938331Q
MP Filtri	MF0301A25HV	943706Q
MP Filtri	HP3204A10VH	943651Q
MP Filtri	HP3203A03VH	943645Q
MP Filtri	HP3202A25VH	943644Q
MP Filtri	HP0653A10VH	943623Q
MP Filtri	HP5002A10VN	943514Q
MP Filtri	HP0651A10VH	943615Q
MP Filtri	MF1801A10HV	943721Q
MP Filtri	HP0652A10VH	943619Q
MP Filtri	HP3202A10VH	943643Q
MP Filtri	HP1351A03VH	943625Q
MP Filtri	HP1351A03VH	943627Q
MP Filtri	HP1352A10VH	943631Q
MP Filtri	HP1353A10VH	943635Q
MP Filtri	HP3202A03VH	943641Q
MP Filtri	HP3202A06VH	943642Q
MP Fillri	HP3202A06VH	943616Q
	V3.0520-08	943616U PR4476
-	V3.0510-06	944075Q
Argo	P3.0510-02	9440750 PR4475
Argo		PR4475
Argo	V3.0607-08	PR4472
Argo	V3.0607-06	
Argo	P3.0510-00	PR4469
Argo	V2.1217-36	PR4468
Argo	V2.1217-08	PR4467
Argo	V3.0933-08	944098Q
Argo	V3.0940-06	939789Q

Filter	Filter Element	Parker
Element	Competitor	Part
Competitor	Part Number	Number
Argo	V3.0623-06	939764Q
Argo	V2.1260-26	939762Q
Argo	P3.0520-01	939760Q
Argo	V2.1217-03	938194Q
Argo	P2.1217-12	PR4465
Argo	P2.1217-21	PR4466
Mahle	Pi3115 SMX10	PR2855Q
Mahle	Pi3130 SMX10	PR2863Q
Mahle	Pi2130SMX3	PR2862Q
Mahle	PI1030MIC25	PR2861Q
Mahle	Pi4215 SMXVST25	PR2859Q
Mahle	Pi3215 SMXVST10	PR2858Q
Mahle	Pi4130 SMX25	PR2864Q
Mahle	Pi4115 SMX25	PR2856Q
Mahle	Pi4145 SMX25	PR2872Q
Mahle	Pi1115Mic10	PR2852
Mahle	Pi2215SMXVST3	PR2857Q
Mahle	Pi2230SMXVST3	PR2865Q
Mahle	Pi3230 SMXVST10	PR2866Q
Mahle	Pi4230 SMXVST25	PR2867Q
Mahle	852 126 Mic 10	PR4381Q
Mahle	Pi4211 SMXVST25	PR2851Q
Mahle	Pi2245SMXVST3	PR2873Q
Mahle	Pi3245 SMXVST10	PR2874Q
Mahle	Pi4245 SMXVST25	PR2875Q
Mahle	852 435 SM 10	PR4375Q
Mahle	852 436 SM 25	PR4376Q
Mahle	852 690 Sm 10	937108Q
Mahle	Pi3145 SMX10	PR2871Q
Mahle	Pi3205 SMXVST10	PR2834Q
Mahle	Pi8515DRG100	939845Q
Mahle	Pi3211 SMXVST10	PR2850Q
Mahle	852 127 SMX 10	9371000
Mahle	852 127 SMX 25	9371010
Mahle	852 439 Sm 10	937105Q
Mahle	852 519 Mic 10	9371060
Mahle	852 519 Sm L	937107Q
Mahle	852 760 Sm 10	9371090
Mahle	Pi1005Mic25	PR2829Q
Mahle	Pi4105 SMX25	PR2832Q
Mahle	Pi4205 SMX25	PR2835Q
	Pi2108SMX3	PR2838Q
Mahle Mahle	Pi3108 SMX 10	PR2839Q
		PR2839Q PR2840Q
Mahle	Pi4108 SMX25	
Mahle	Pi2208SMXVST3	PR2841Q
Mahle	Pi3208 SMXVST10	PR2842Q
Mahle	Pi4208 SMXVST25	PR2843Q
Mahle	Pi3111 SMX 10	PR2847Q
Mahle	Pi4111 SMX25	PR2848Q
Mahle	Pi2211SMXVST3	PR2849Q

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



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# Parker Worldwide

#### Europe, Middle East, Africa

**AE – United Arab Emirates,** Dubai Tel: +971 4 8127100 parker.me@parker.com

**AT – Austria,** Wiener Neustadt Tel: +43 (0)2622 23501-0 parker.austria@parker.com

**AT – Eastern Europe,** Wiener Neustadt Tel: +43 (0)2622 23501 900 parker.easteurope@parker.com

**AZ – Azerbaijan,** Baku Tel: +994 50 2233 458 parker.azerbaijan@parker.com

**BE/LU – Belgium,** Nivelles Tel: +32 (0)67 280 900 parker.belgium@parker.com

**BG - Bulgaria,** Sofia Tel: +359 2 980 1344 parker.bulgaria@parker.com

**BY – Belarus,** Minsk Tel: +375 17 209 9399 parker.belarus@parker.com

**CH – Switzerland,** Etoy Tel: +41 (0)21 821 87 00 parker.switzerland@parker.com

**CZ – Czech Republic,** Klecany Tel: +420 284 083 111 parker.czechrepublic@parker.com

**DE – Germany,** Kaarst Tel: +49 (0)2131 4016 0 parker.germany@parker.com

**DK – Denmark,** Ballerup Tel: +45 43 56 04 00 parker.denmark@parker.com

**ES – Spain,** Madrid Tel: +34 902 330 001 parker.spain@parker.com

**FI – Finland,** Vantaa Tel: +358 (0)20 753 2500 parker.finland@parker.com

**FR – France,** Contamine s/Arve Tel: +33 (0)4 50 25 80 25 parker.france@parker.com

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**GR – Greece,** Athens Tel: +30 210 933 6450 parker.greece@parker.com HU – Hungary, Budaörs Tel: +36 23 885 470 parker.hungary@parker.com

**IE – Ireland,** Dublin Tel: +353 (0)1 466 6370 parker.ireland@parker.com

IT – Italy, Corsico (MI) Tel: +39 02 45 19 21 parker.italy@parker.com

**KZ – Kazakhstan,** Almaty Tel: +7 7273 561 000 parker.easteurope@parker.com

NL – The Netherlands, Oldenzaal Tel: +31 (0)541 585 000 parker.nl@parker.com

**NO – Norway,** Asker Tel: +47 66 75 34 00 parker.norway@parker.com

PL – Poland, Warsaw Tel: +48 (0)22 573 24 00 parker.poland@parker.com

**PT – Portugal,** Leca da Palmeira Tel: +351 22 999 7360 parker.portugal@parker.com

**RO – Romania,** Bucharest Tel: +40 21 252 1382 parker.romania@parker.com

**RU – Russia,** Moscow Tel: +7 495 645-2156 parker.russia@parker.com

**SE – Sweden,** Spånga Tel: +46 (0)8 59 79 50 00 parker.sweden@parker.com

**SK – Slovakia,** Banská Bystrica Tel: +421 484 162 252 parker.slovakia@parker.com

SL – Slovenia, Novo Mesto Tel: +386 7 337 6650 parker.slovenia@parker.com

**TR – Turkey,** Istanbul Tel: +90 216 4997081 parker.turkey@parker.com

**UA – Ukraine,** Kiev Tel +380 44 494 2731 parker.ukraine@parker.com

**UK – United Kingdom,** Warwick Tel: +44 (0)1926 317 878 parker.uk@parker.com **ZA – South Africa,** Kempton Park Tel: +27 (0)11 961 0700 parker.southafrica@parker.com

#### North America

**CA – Canada,** Milton, Ontario Tel: +1 905 693 3000

**US – USA,** Cleveland Tel: +1 216 896 3000

#### Asia Pacific

**AU – Australia,** Castle Hill Tel: +61 (0)2-9634 7777

**CN – China,** Shanghai Tel: +86 21 2899 5000

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#### South America

**AR – Argentina,** Buenos Aires Tel: +54 3327 44 4129

**BR – Brazil,** Sao Jose dos Campos Tel: +55 800 727 5374

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