

Guardian®

Portable Filtration Systems

Max 15 l/min - 2 bar



Global Filtration Technology

Portable Filtration Systems

Guardian®

TYPICAL APPLICATIONS

- Injection Moulding M/c s
- Royal Navy Surface Fleet Systems
- Paper Mills
- Steel Mills
- Industrial & Mobile Equipment
- Marine Systems Support

The Parker Filtration Guardian® Portable Filtration Systems.

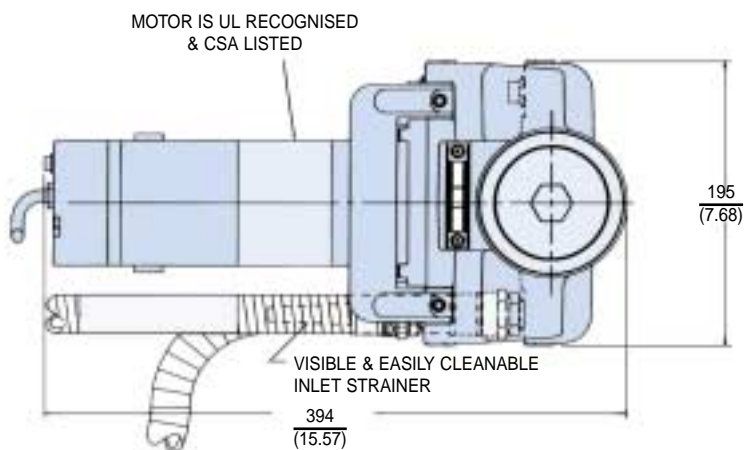
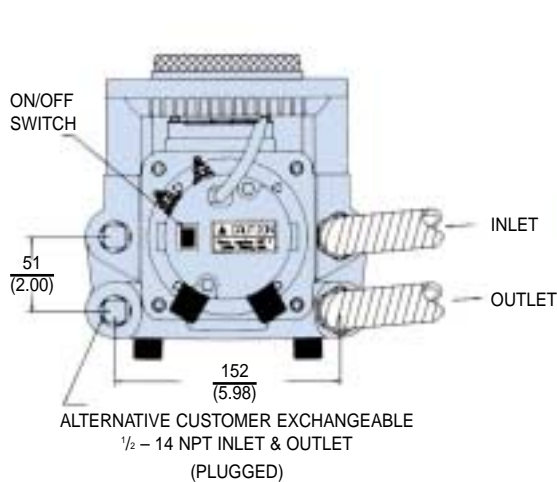
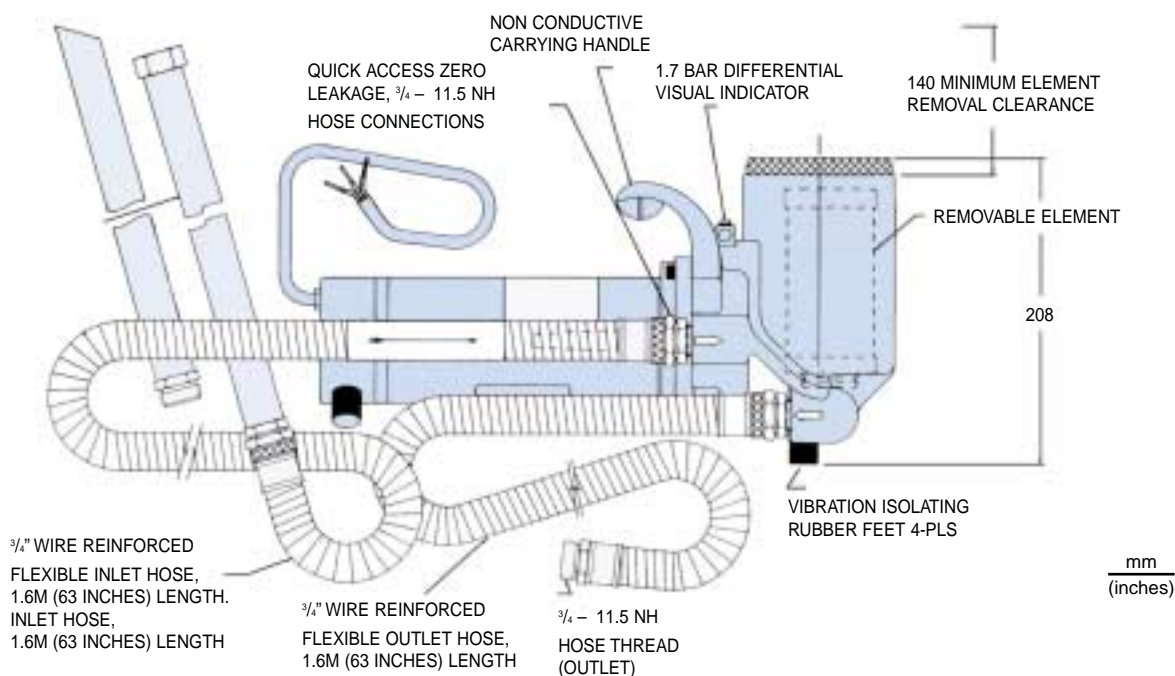
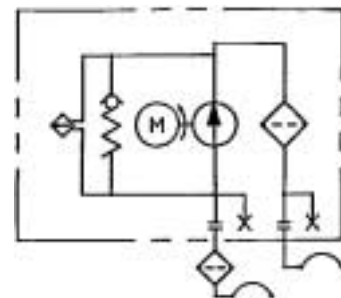
Guardian is a portable filtration system with two main functions: to ensure that new fluid often contaminated during handling, is delivered to the system at a specific cleanliness; and to permit periodic clean up of existing fluid to original condition.



TYPICAL APPLICATIONS



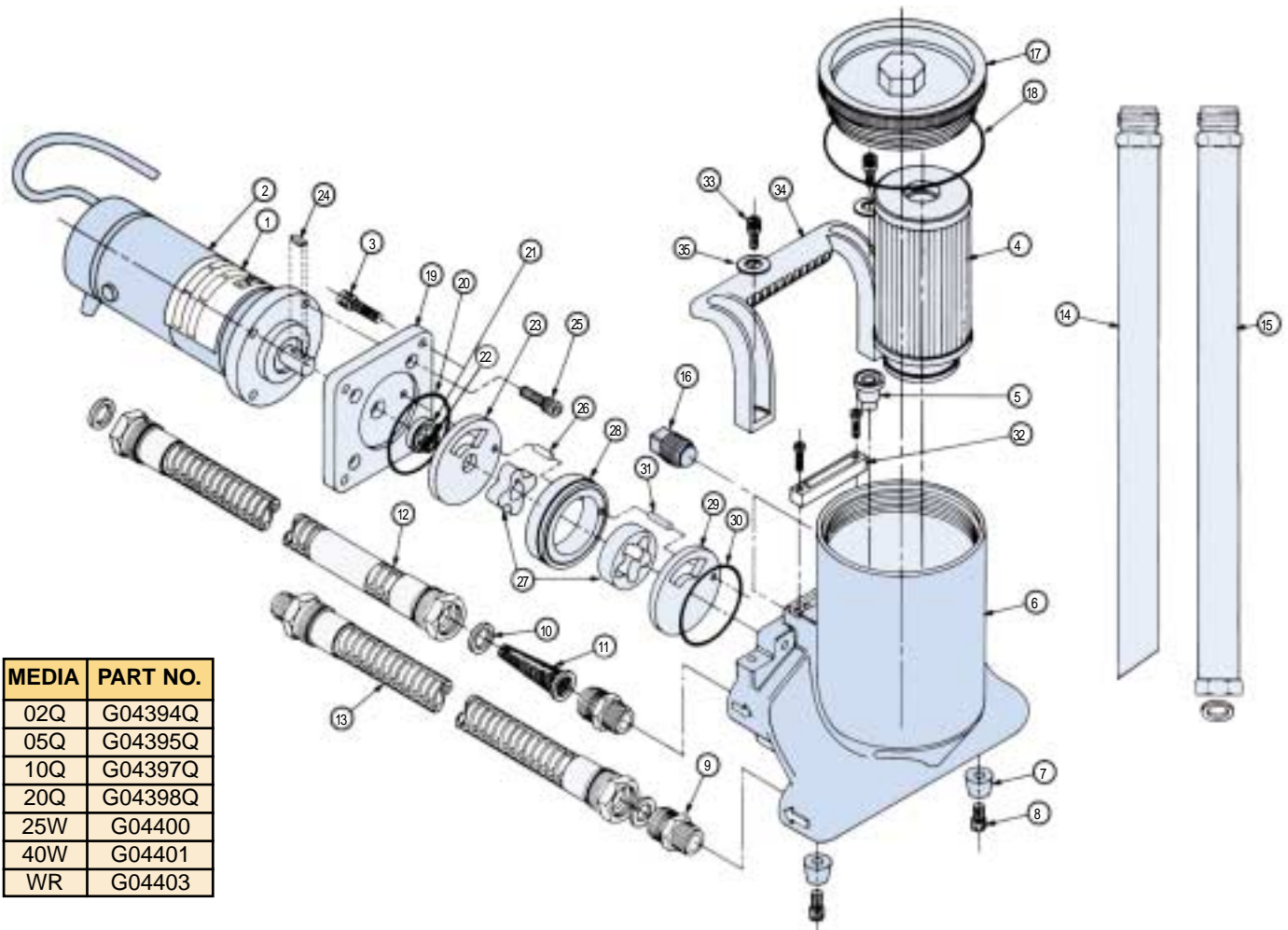
FEATURES AND DIMENSIONS



Portable Filtration Systems

Guardian®

REPLACEMENT PARTS



MEDIA	PART NO.
02Q	G04394Q
05Q	G04395Q
10Q	G04397Q
20Q	G04398Q
25W	G04400
40W	G04401
WR	G04403

PARTS LIST

1 Label.....	932495	23 Shadow Plate	
2a Motor, 220/240VAC.....	933730	24 Woodruff Key	
2b Motor, 110 VAC.....	933729	25 SHCS (4)	
3 SHCS (4).....	01-01-UNC 04x008	26 Roll Pin	
4 Element	See table	27 Gerotor Set	
5 Relief Valve	928981	28 Gerotor Ring	
6 Housing	931838	29 Outlet Plate	
7 Rubber Bumpers (2)	931888	30 Gerotor O-Ring	
8 SHCS (2).....	01-01-UNC 04x004	31 Roll Pin	
9 Brass Fitting (2).....	931928	32 Indicator Kit (includes 2xSHCS).....	S04182
10 Gasket (4).....	931956	Handle Assembly Kit.....	S04183
11 Inlet Screen	931927	33 SHCS (2)	
12 Inlet Hose Assembly.....	931936	34 Handle	
13 Outlet Hose Assembly	931937	35 Washer (2)	
14 Tube Assembly	931965	Quick Disconnect Kit.....	932097
15 Tube Extension Assembly	931966	Wiring Instruction Card.....	932494
16 Brass Pipe Plug	931920	Protective Case.....	601727
17 End Cap		Brush Kit (110 V).....	G34329
18 O-Ring		Brush Kit (220 V).....	G34327
Seal Kit.....	S04180	Brush Kit (24 V DC).....	932761
Pump Unit Assembly Kit.....	S04181	Bowl Extension Kit.....	932081
19 Adaptor Plate		Cover Assembly Kit.....	S04179
20 Housing O-Ring			
21 Polypak Seal			
22 Washer			

Note: SHCS denotes "Socket Head Cap Screw".

PART NUMBER MATRIX

Table 1

F3

Table 2

GT4E

Table 3

1

Table 4

10Q

Table 5

I

Table 6

UK

Table 7

-

Table 1

Seals	
Description	SYMBOL
Fluoroelastomer*	F3

Table 2

Model Number	
Description	SYMBOL
Guardian®	GT4E

Table 3

Motor Options	
Description	CODE
220/240 VAC, 50Hz	1
110 VAC, 50Hz	2

Table 5

Options	
None	1
Quick Disconnect Hose Connections	6

Table 4

Element Media Degree of Filtration							
Average filtration		Ratio (ISO 16889) / particle size µm(c)				CODE	DESCRIPTION
2	10	75	100	200	1000		
N/A	N/A	N/A	N/A	N/A	4.5	02Q	Microglass III
N/A	N/A	4.5	5	6	7	05Q	
N/A	6	8.5	9	10	12	10Q	
6	11	17	18	20	22	20Q	
N/A	N/A	25	N/A	N/A	N/A	25W	Woven Wire Mesh
N/A	N/A	40	N/A	N/A	N/A	40W	
Par◇Gel Water Removal Media						WR	

Table 6

Language Options			
<i>Instruction leaflet language & appropriate moulded plug</i>			
Description	CODE	Description	CODE
English	UK	Dutch	NL
German	D	Swedish	S
French	F	Italian	I
Danish	DK	Spanish	E
Finnish	SF		

Table 7

Design Number	
Assigned to the Guardian by the Factory	

TROUBLESHOOTING GUIDE

Problem	Cause	Solution
Does not start	ON/OFF switch	Turn switch on, replace switch if defective
	No electrical power	Plug in Guardian, check for tripped circuit breakers, check for blown fuses
	Rectifier	Replace if defective
	Motor overheated 77°C (170°F)	Allow motor to cool, thermal overload will automatically reset
	Defective motor	Replace motor
Does not start or erratic motor noise	Worn motor brushes	Replace motor brushes
Intermittent start/stop operation	High viscosity fluids	High viscosity fluids can cause the motor to overheat and cycle intermittently
	Worn motor brushes	Replace motor brushes
	Defective motor	Replace motor
Hot motor	Pumping under heavy load	It is normal, under a heavy pumping load, for the motor to reach 71°C (160°F)
	Defective motor	Replace motor if the motor shell temperature reaches greater than 77°C (170°F)
No flow or erratic pump noise	Filter housing not filled with oil	Allow Guardian to run for a few seconds
	Suction leak	Check tightness of inlet fittings and hoses. Check gaskets are in place and are not damaged. Kink or restriction in the inlet hose
	Obstructed outlet	Clear outlet
	Element dirty	Replace or clean element
	Sheared pump key	Replace woodruff key
Defective Guardian	Replace unit	
No flow, erratic pump noise, motor overheats	Gears binding	Disassemble Guardian and thoroughly clean the gear set. Always use the inlet strainer provided to protect the unit. Replace defective gears.
No suction	Plugged strainer	Clean or replace the inlet strainer as required. Clean relief valve. Check for damaged internal o-rings.
Reduced oil flow	High viscosity fluids	High viscosity fluids can cause reduced flow, which is normal
	Element dirty	Replace or clean element
	Relief valve stick or lodged open	Clean relief valve or replace if defective
	Partially obstructed inlet or outlet hose	Clear the hose obstruction
	Suction leak	Check tightness of inlet fittings and hose.
	Worn gears	Replace gear set
Indicator moves to RED area	Element dirty	Replace or clean element
	Oil extremely cold or viscous	Change element to coarser micron rating
	Obstructed outlet	Clear outlet obstruction
	Defective indicator	Replace indicator
Indicator does not seem to move	No element	Install element
	Defective indicator	Replace indicator
Hoses discolour or are hard	Fluid compatibility	Certain fluids, over time, will cause the hoses to discolour. This does not impair their performance. But, some fluids will cause the hoses to become brittle, requiring replacement.
Oil formation under unit	Defective shaft seal	Replace the motor shaft seal

6A Series

Portable Filtration Systems



Global Filtration Technology

Portable Filtration Systems

6A Series

APPLICATIONS

- Paper Mills
- Injection and Blow Moulding Equipment
- Shipboard Systems
- Industrial & Mobile Equipment

The Parker Filtration Model 6A Portable Filtration System.

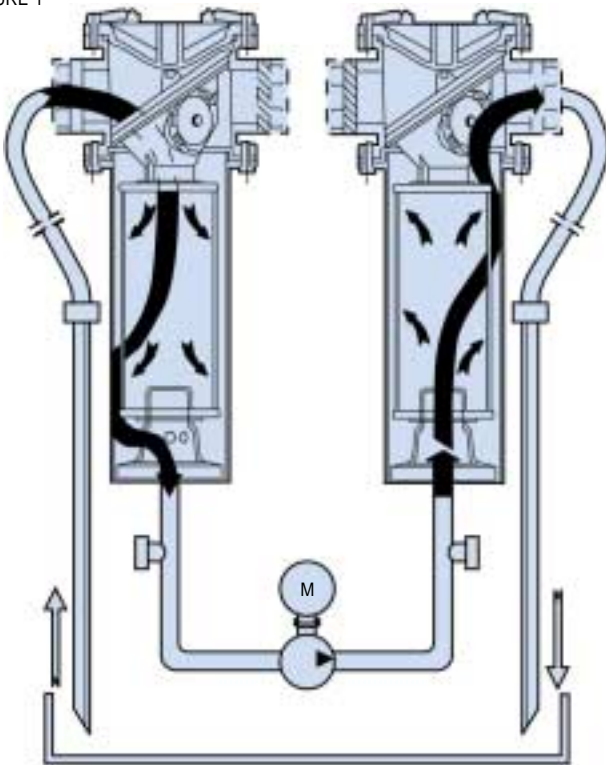
Parkers portable filtration units are designed for on-site preventative maintenance of fluid systems.

An internal pump draws fluid through a primary clean-up filter and through a high quality polishing filter to remove particulate contamination down to 4 m (c) absolute.



FEATURES

FIGURE 1



FLUID FLOW PATH THROUGH 6A PORTABLE FILTRATION SYSTEM WHEN VIEWED FROM FRONT, ELECTRICAL SWITCH TO REAR

The 6A Portable Filtration System is ideal for:

- Off-line contamination control of fluid systems
- Replenishing installations with filtered fluid
- Emptying waste fluid quickly

The 6A Filter system is designed for on-site preventive maintenance of fluid systems. Two high capacity filters are used, with fluid passing through a primary clean-up filter and then through the final filter giving effective contamination control.

- Two high capacity filters, complete with indicator
- Filters incorporate standard Parker media.
- 28 L/Min pressure balanced gear pump
- 0.75kW capacitor-start electric motor
- Robust all welded steel trolley, complete with drip tray and rubber tyred wheels
- Complete with stowable hoses

Quality

Parker Filtration is accredited to the ISO9002 quality standard.



Certificate No. 802127



This equipment conforms with directive 89/392/EEC.
The following standards apply EN982, EN982-1, EN982-2.

SPECIFICATION

Pump Drive Options:

0.75kW Electric motor 240v A.C. Single phase 50HZ
 0.75kW Electric motor 110V A.C. Single phase 50HZ

Pump:

28 l/min pressure balanced gear pump

Filters:

Moduflow CF2.1 & RF2.1 filters, refer to brochure 2350-GB

Electrical Details:

On/Off switch to IP65. 2 metre cable with appropriate moulded plug

Weight:

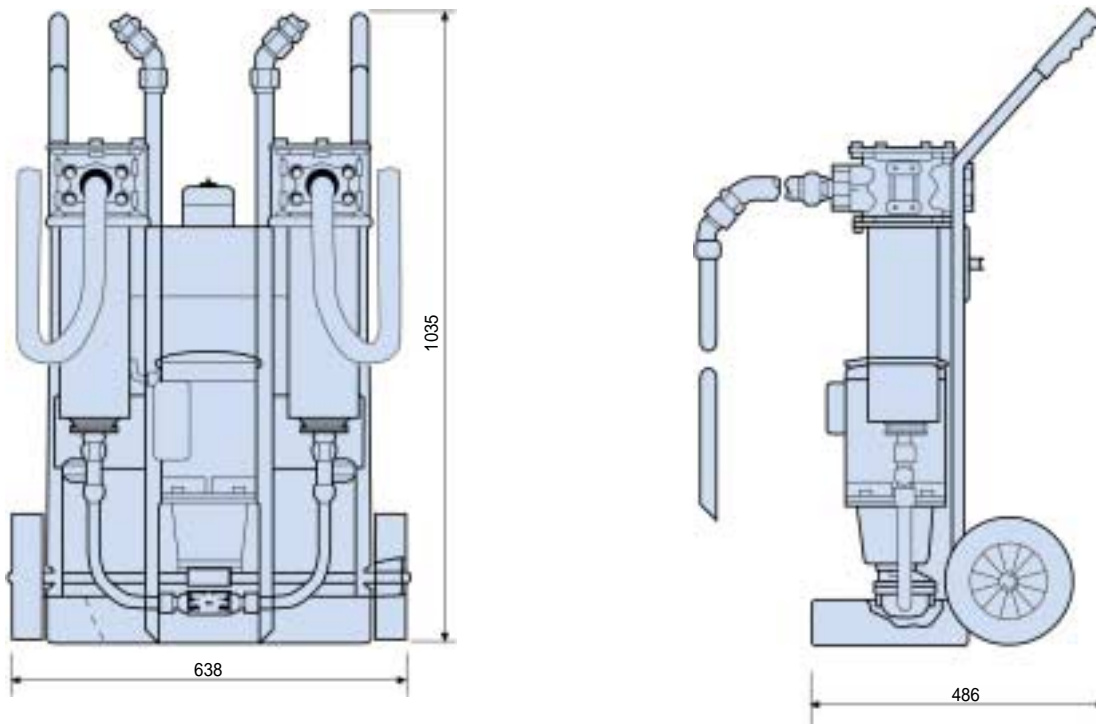
56 kg (dry)

Fluid Compatibility:

Suitable for use with mineral oils. For other fluids, please consult Parker Filtration. Maximum fluid viscosity 100 cSt

Quality:

Parker Filtration is accredited to the ISO9002 quality standard



Filtering Performance								
Reservoir Capacity	Approximate Clean-Up Time (Hours)				Desired Cleanliness Class (ISO 4406)			
	hrs	class	hrs	class	hrs	class	hrs	class
200	1/2	18/15	1	15/12	2	14/11	–	–
375	1	16/13	2	15/12	4	14/11	–	–
750	2	17/14	3	16/13	5	15/12	6	14/11
1150	3	17/14	5	16/13	6	15/12	9	14/11

Based on the following conditions:

- a) Initial contamination: 500,000 Particles /100 ML, 10 micron or greater
- b) 40W inlet and 20Q outlet filters.
- c) Ingression rate equal to 100,000 Particles/min, 10 Micron or greater

Portable Filtration Systems

6A Series

PART NUMBER MATRIX

Table 1

F3

Table 2

6A

Table 3

40W

Table 4

10Q

Table 5

I

Table 6

2

Table 7

3

Table 8

UK

Table 9

-

Table 1

Seals	
Description	SYMBOL
Nitrile (Standard)	O
Fluoroelastomer	F3

Table 2

Model Number	
Symbol	6A

Table 3

Element Media Inlet Filter	
Description	CODE
Reusable Wire Mesh 74 micron absolute	74W
Reusable Wire Mesh 40 micron absolute	40W
Reusable Wire Mesh 25 micron absolute	25W

Table 4

Element Media Outlet Filter Degree of Filtration						
Typical filtration ratio β (ISO 16889) / particle size $\mu\text{m(c)}$						CODE
2	10	75	100	200	1000	
N/A	N/A	74	N/A	N/A	N/A	74W
N/A	N/A	40	N/A	N/A	N/A	40W
N/A	N/A	25	N/A	N/A	N/A	25W
N/A	N/A	N/A	N/A	N/A	4.5	02Q
N/A	N/A	4.5	5	6	7	05Q
N/A	6	8.5	9	10	12	10Q
6	11	17	18	20	22	20Q
Par<-Gel Water Removal Media						WR

Table 5

Cable Reel	
Description	CODE
Standard 2 metre cable	I

Table 6

Motor Options	
Description	CODE
0.75kW 240V Motor	1
0.75kW 110V Motor	2

Table 7

Options	
Description	CODE
None	I
Magnets	3

Table 8

Language Option	
<i>Instruction leaflet language & appropriate moulded plug</i>	
Description	CODE
English	UK
German	D
French	F
Danish	DK
Finnish	SF
Dutch	NL
Swedish	S
Italian	I
Spanish	E

Table 9

Design Number
Assigned to the filter assembly by Parker Filtration

Spare Elements (with Nitrile seals) for 6A portable filtration system

Inlet Filter (RF2-1)	Media	Outlet Filter (CF2-1)
G00967	74W	G00967
G00968	40W	G00968
G00969	25W	G00969
G02525Q	20Q	G02525Q
N/A	10Q	G00973Q
N/A	05Q	932687Q
N/A	02Q	G04687Q
N/A	WR	927584

Seal Kits

Description	CODE
Buna	S01266
Fluoroelastomer	S01053

Indicators

Description	CODE
No Indicator Blanking Kit	S01224
1 Bar Indicator	S01053

Portable Filtration Systems

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TYPICAL APPLICATIONS

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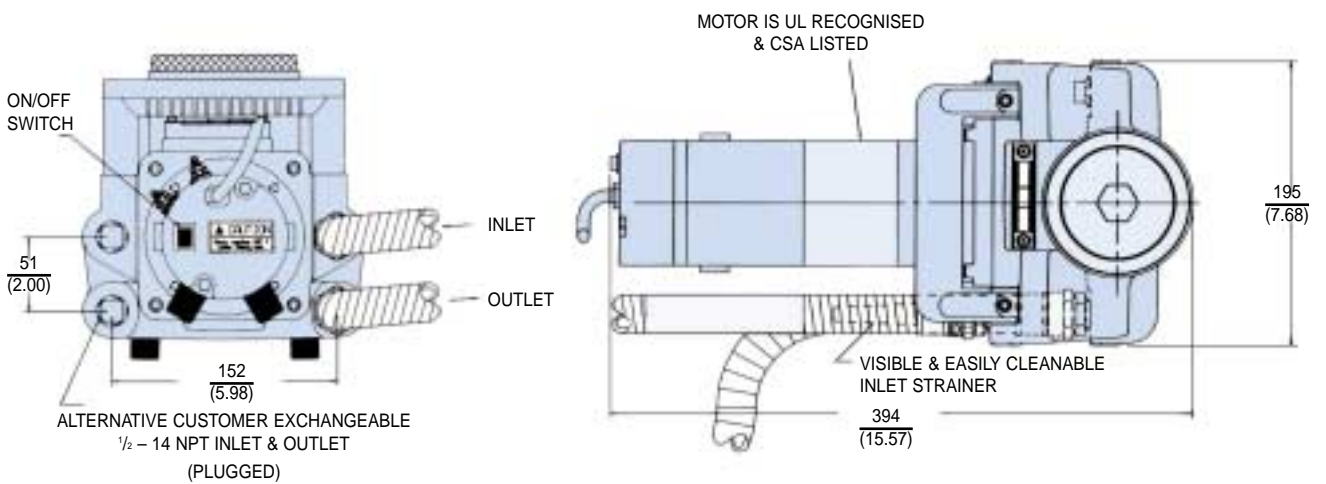
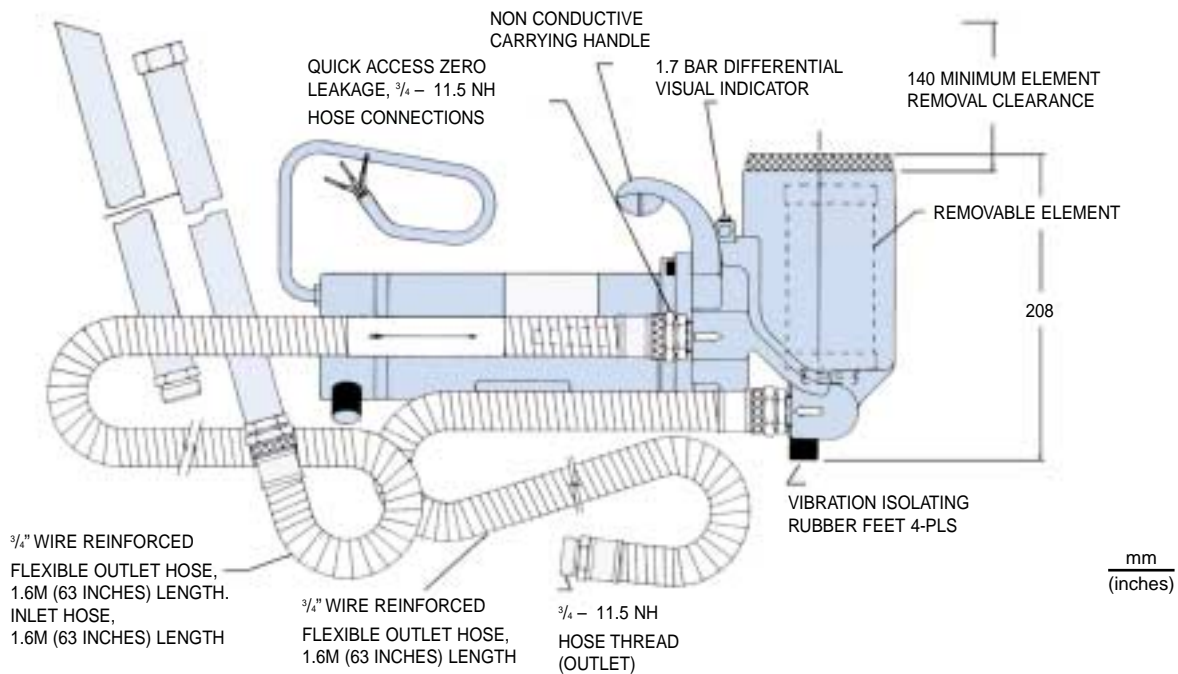
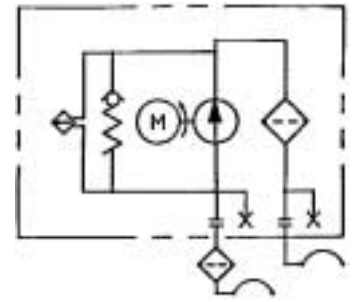
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TYPICAL APPLICATIONS



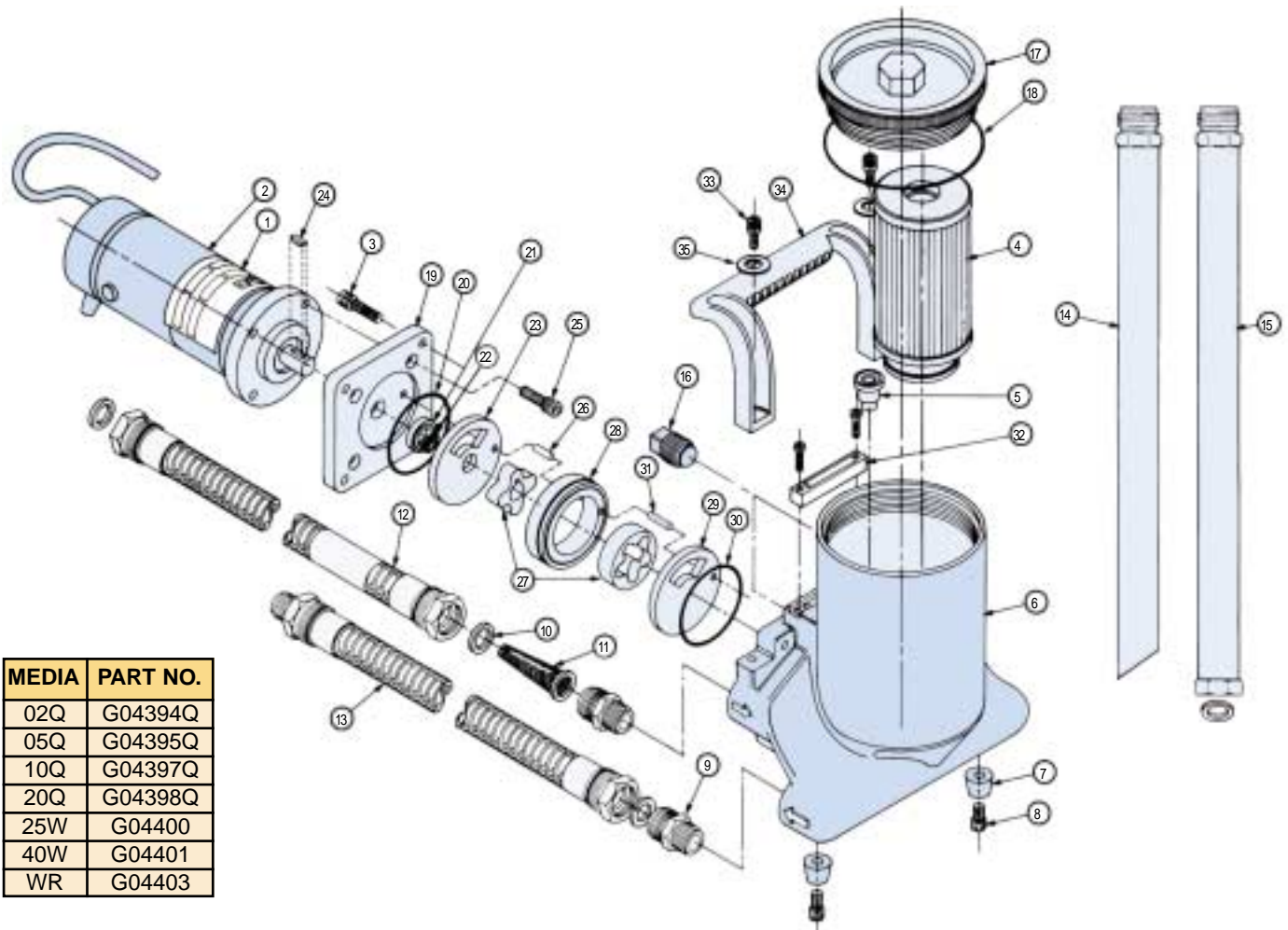
FEATURES AND DIMENSIONS



Portable Filtration Systems

Guardian®

REPLACEMENT PARTS



MEDIA	PART NO.
02Q	G04394Q
05Q	G04395Q
10Q	G04397Q
20Q	G04398Q
25W	G04400
40W	G04401
WR	G04403

PARTS LIST

1 Label.....	932495	23 Shadow Plate	
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2b Motor, 2110 VAC.....	933729	25 SHCS (4)	
3 SHCS (4).....	01-01-UNC 04x008	26 Roll Pin	
4 Element	See table	27 Gerotor Set	
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10 Gasket (4).....	931956	Handle Assembly Kit.....	S04183
11 Inlet Screen	931927	33 SHCS (2)	
12 Inlet Hose Assembly.....	931936	34 Handle	
13 Outlet Hose Assembly	931937	35 Washer (2)	
14 Tube Assembly	931965	Quick Disconnect Kit.....	932097
15 Tube Extension Assembly	931966	Wiring Instruction Card.....	932494
16 Brass Pipe Plug	931920	Protective Case.....	601727
17 End Cap		Brush Kit (110 V).....	G34329
18 O-Ring		Brush Kit (220 V).....	G34327
Seal Kit.....	S04180	Brush Kit (24 V DC).....	932761
Pump Unit Assembly Kit.....	S04181	Bowl Extension Kit.....	932081
19 Adaptor Plate		Cover Assembly Kit.....	S04179
20 Housing O-Ring			
21 Polypak Seal			
22 Washer			

Note: SHCS denotes "Socket Head Cap Screw".

PART NUMBER MATRIX

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Model Number	
Description	SYMBOL
Guardian®	GT4E

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Motor Options	
Description	CODE
220/240 VAC, 50Hz	1
110 VAC, 50Hz	2

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Table 4

Element Media Degree of Filtration							
Average filtration		Ratio (ISO 16889) / particle size µm(c)				CODE	DESCRIPTION
2	10	75	100	200	1000		
N/A	N/A	N/A	N/A	N/A	4.5	02Q	Microglass III
N/A	N/A	4.5	5	6	7	05Q	
N/A	6	8.5	9	10	12	10Q	
6	11	17	18	20	22	20Q	
N/A	N/A	25	N/A	N/A	N/A	25W	Woven Wire Mesh
N/A	N/A	40	N/A	N/A	N/A	40W	
Par◇Gel Water Removal Media						WR	

Table 6

Language Options			
Instruction leaflet language & appropriate moulded plug			
Description	CODE	Description	CODE
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Table 7

Design Number	
Assigned to the Guardian by the Factory	

TROUBLESHOOTING GUIDE

Problem	Cause	Solution
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	No electrical power	Plug in Guardian, check for tripped circuit breakers, check for blown fuses
	Rectifier	Replace if defective
	Motor overheated 77°C (170°F)	Allow motor to cool, thermal overload will automatically reset
	Defective motor	Replace motor
Does not start or erratic motor noise	Worn motor brushes	Replace motor brushes
Intermittent start/stop operation	High viscosity fluids	High viscosity fluids can cause the motor to overheat and cycle intermittently
	Worn motor brushes	Replace motor brushes
	Defective motor	Replace motor
Hot motor	Pumping under heavy load	It is normal, under a heavy pumping load, for the motor to reach 71°C (160°F)
	Defective motor	Replace motor if the motor shell temperature reaches greater than 77°C (170°F)
No flow or erratic pump noise	Filter housing not filled with oil	Allow Guardian to run for a few seconds
	Suction leak	Check tightness of inlet fittings and hoses. Check gaskets are in place and are not damaged. Kink or restriction in the inlet hose
	Obstructed outlet	Clear outlet
	Element dirty	Replace or clean element
	Sheared pump key	Replace woodruff key
Defective Guardian	Replace unit	
No flow, erratic pump noise, motor overheats	Gears binding	Disassemble Guardian and thoroughly clean the gear set. Always use the inlet strainer provided to protect the unit. Replace defective gears.
No suction	Plugged strainer	Clean or replace the inlet strainer as required. Clean relief valve. Check for damaged internal o-rings.
Reduced oil flow	High viscosity fluids	High viscosity fluids can cause reduced flow, which is normal
	Element dirty	Replace or clean element
	Relief valve stick or lodged open	Clean relief valve or replace if defective
	Partially obstructed inlet or outlet hose	Clear the hose obstruction
	Suction leak	Check tightness of inlet fittings and hose.
	Worn gears	Replace gear set
Indicator moves to RED area	Element dirty	Replace or clean element
	Oil extremely cold or viscous	Change element to coarser micron rating
	Obstructed outlet	Clear outlet obstruction
	Defective indicator	Replace indicator
Indicator does not seem to move	No element	Install element
	Defective indicator	Replace indicator
Hoses discolour or are hard	Fluid compatibility	Certain fluids, over time, will cause the hoses to discolour. This does not impair their performance. But, some fluids will cause the hoses to become brittle, requiring replacement.
Oil formation under unit	Defective shaft seal	Replace the motor shaft seal

Models

FU1147/FU1302/FU1303

Portable Filtration Systems



Global Filtration Technology

Portable Filtration Systems

Models FU1147/FU1302/FU1303

APPLICATIONS

- Hydraulic Systems
- Lubrication Systems
- Oil Handling
- Storage of Oil
- Outlet of Oil
- Cleaning Circulation
- Cutting Fluids
- Fill-in of Systems

The Parker Filtration Models FU1147/ FU1302/FU1303 Portable Filtration Systems.

Parkers portable filtration units are designed for on-site preventative maintenance of fluid systems.

An internal pump draws fluid through a primary clean-up filter and through a high quality polishing filter to remove particulate contamination.



COMPATIBLE FLUIDS

- Mineral Oils
- Synthetic Oils
- Turbin Oils
- Cutting Fluids



FU1147



FU1302



FU1303

Max. flow	20 l/min (5.26 USG/min)	40 l/min (10.53 USG/min)	100 l/min (26.31 USG/min)
Viscosity	320 cSt	320 cSt	320 cSt
Power	0.75 kW/1450 rpm	0.75 kW/1450 rpm	2.2 kW/1450 rpm
Voltage	380V	380V	380V
Pump type	Geared pump, Helical-type	Geared pump, Helical-type	Geared pump, Helical-type
Filter housing type	FG1147.GT20.BS35	FG1302.GT20.BA35	FG1303.GT20.BA35
Δp-indication	FPC.V25.BM	FPC.V25.BM	FPC.V25.BM
Closing valve	Ball Valve	Ball Valve	Ball Valve
Bypass (bar)	3.5±.2	3.5±.2	3.5±.2
Seals	NBR	NBR	NBR
OPTIONS: (will be marked with dash after the type marking)			
Voltage	YV (220V)	YV (220V)	—

Note: FU1147 and FU1302 are always equipped with hose, connecting cable and electric plug.

