15P/30P Series

High Pressure Filters
Max 200 l/min - 207 bar

When it comes to lightweight filter solutions

Compact aluminium housing and lightweight design

The 15P/30P Series utilizes a compact aluminium housing with 2 head sizes and 2 bowl lengths, large ports and wide flow paths. Maximum pressure 207 bar. Maximum flow 200 l/min. Efficient filtration and maximized element life.

Contact Information:

Parker Hannifin
Hydraulic Filter Division Europe

European Product Information Centre
Freephone: 00800 27 27 5374
(from AT, BE, CH, CZ, DE, EE, ES, FI, FR, IE, IT, PT, SE, SK, UK)
filtrationinfo@parker.com

www.parkerhfde.com

Product Features:

- 15P/30P utilizes a compact aluminium housing with 2 head sizes and 2 bowl lengths.
- Microglass III filter media.
- Maximum pressure 207 bar. Maximum flow 200 l/min.
- A quality filter for better control and long component life.

15P/30P Series
High Pressure Filters

Features & Benefits

Features	Advantages	Benefits
Compact aluminium housing	Light weight but still robust design	Reliable and continuous operation both in mobile and industrial applications
Two head sizes and two bowl lengths	Optimised sizing	Efficient filtration
		Right filter for each application
Large ports and wide flow paths	Low differential pressure across housing and element	Higher flow rates possible
		Less lost energy
Microglass III replacement elements	Multi-layered design produced high capacity and efficiency	Great performance value
		Reliable performance throughout element life
	Wire support reduces pleat bunching, keeps performance consistent	Reduces downtime, maximises element life
Visual, electrical and electronic indicators available	Check element condition at a glance	Optimise element life, prevent bypassing
	Right style for the application	Matches your system electrical connections

Typical Applications

- Saw mills
- Aircraft ground support equipment
- Asphalt pavers
- Hydraulic fan drives
- Power steering circuits
- Domestic refuse vehicles
- Cement trucks
- Servo control protection
- Logging equipment

The Parker Filtration 15P/30P Series High Pressure Filters.

These application examples have one thing in common...the need for clean hydraulic fluid.

Modern high pressure hydraulic systems are demanding. Better controls and long component life are expected. To deliver the high standards of performance, hydraulic components are built with tighter tolerances which increases their sensitivity to contamination.

That's where Parker pressure filters come into play. They filter out ingressed contamination before it jams a valve or scores a cylinder. They block pump generated debris before it gets to servo or proportional valves. Parker pressure filters are a key ingredient in meeting today's system demands.

Put your hydraulic systems in the care of Parker Filtration. We are committed to designing and building the best filters available to industry.

Specification

Pressure ratings:
Maximum allowable operating pressure 207 bar.
Filter housing pressure pulse fatigue tested: 138 bar.

Connections:
Inlet and outlet connections are threaded.

Connection style	*Model*	
	15P	30P
BSPF(G)	3/4"	1"
ISO 6149	M27	M33

Filter housing:
Head material extruded aluminium (anodised 6061-T6).
Bowl material impacted aluminium (anodised 6061-T6).

Seal material:
Nitrile or Fluoroelastomer.

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

Bypass valve:
Opening pressure 3.5 bar.

Filter element:
Degree of filtration:
Determined by multipass-test according to ISO 16889.

Flow fatigue characteristics:
Filter media is supported so that the optimal fatigue life is achieved (ISO 3724).

Microglass III:
Supported with epoxy coated metal wire mesh, end cap material reinforced composite and metal inner core. Collapse rating 24 bar (ISO 2941).

High collapse elements:
High collapse elements available. For details please contact Parker Filtration.

Indicator options:
Indicating differential pressure: 2.5 ± 0.3 bar.
- visual M3.
- electrical T1.
- electronic F1(PNP).
- electronic F2(NPN).

For indicator details see catalogue section 6.

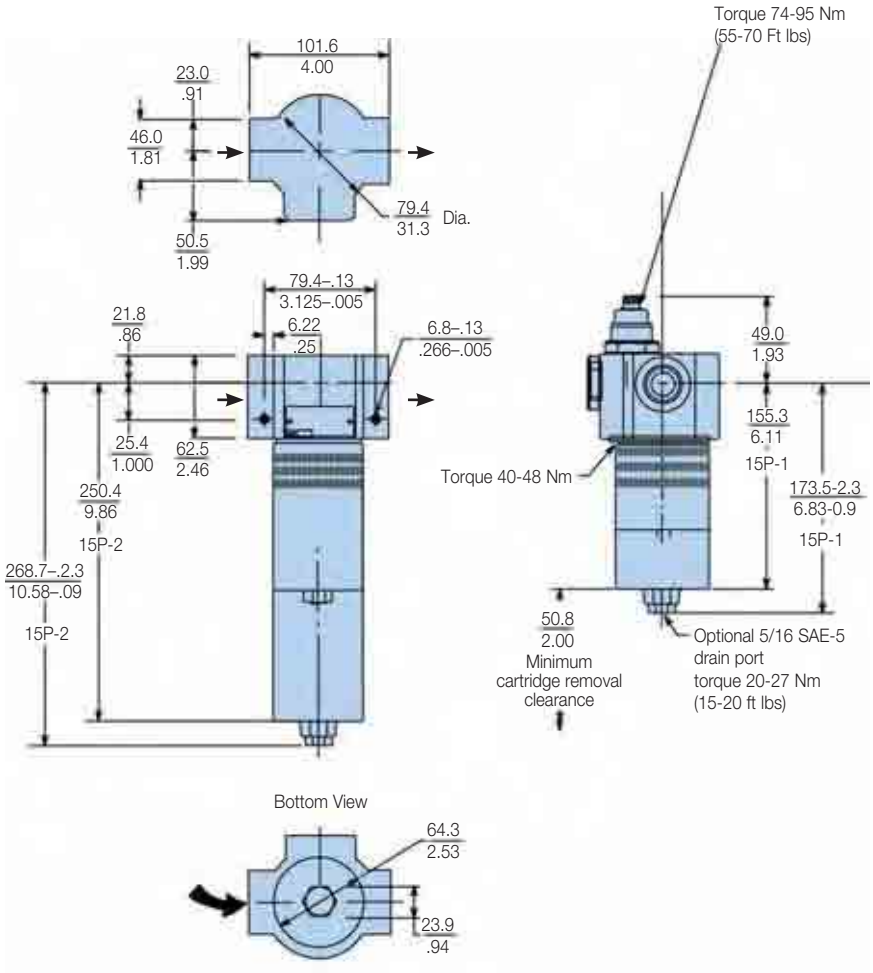
Weights (kg):

Model	*Length 1*	*Length 2*
15P	1.6	2.1
30P	2.9	3.9

Fluid compatibility:
Suitable for use with mineral and vegetable oils, and some synthetic oils. For other fluids, please consult Parker Filtration.

Installation Details

15P Series



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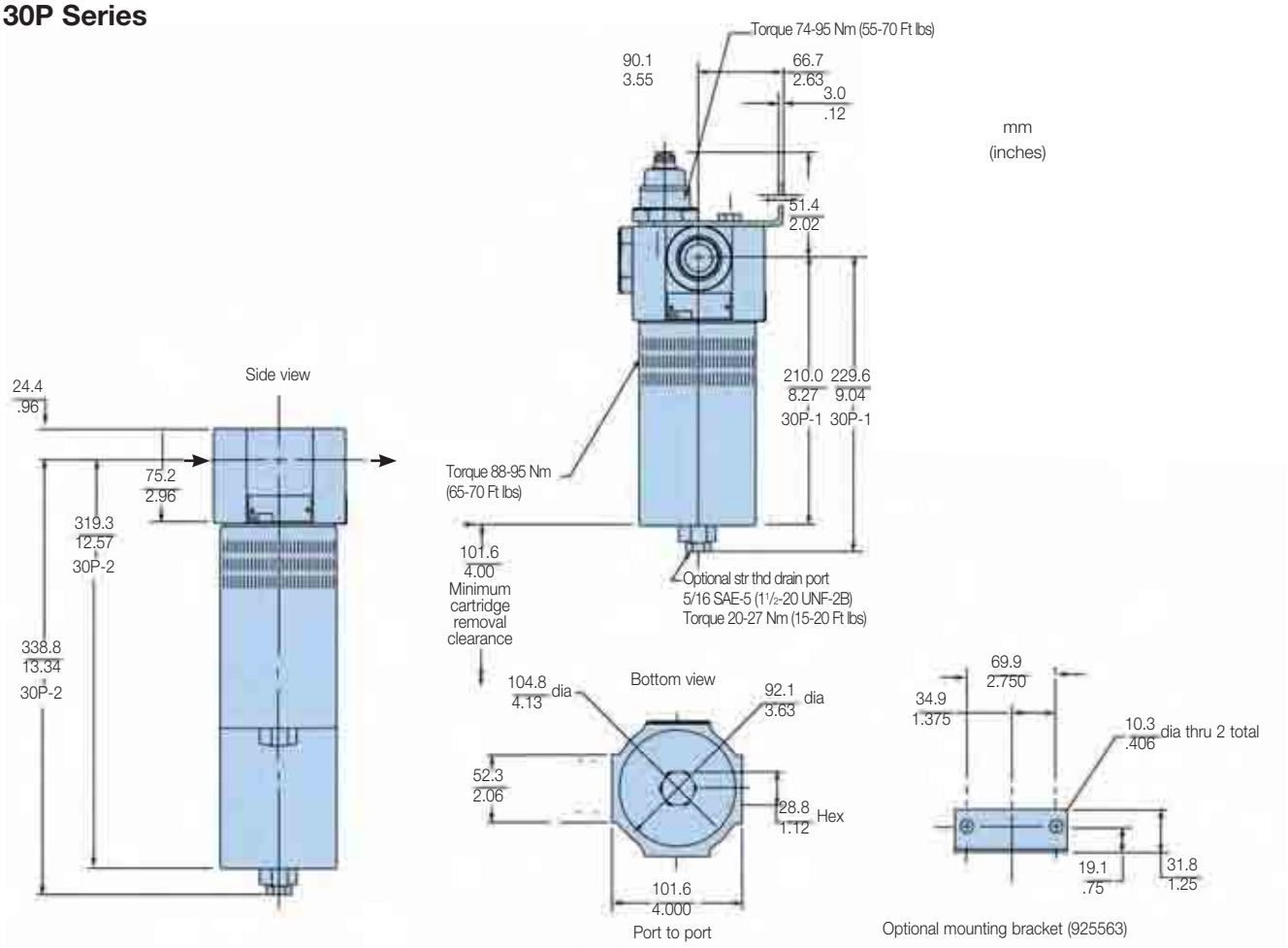
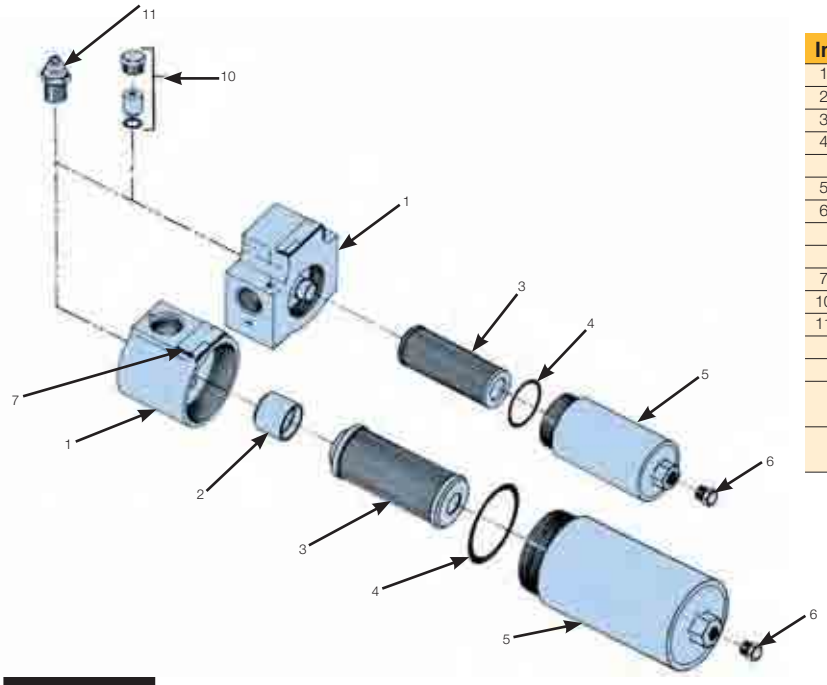
Hydraulic Filter Division Europe
FDHB500UK.

15P/30P Series
High Pressure Filters

Installation Details (cont.)

30P Series



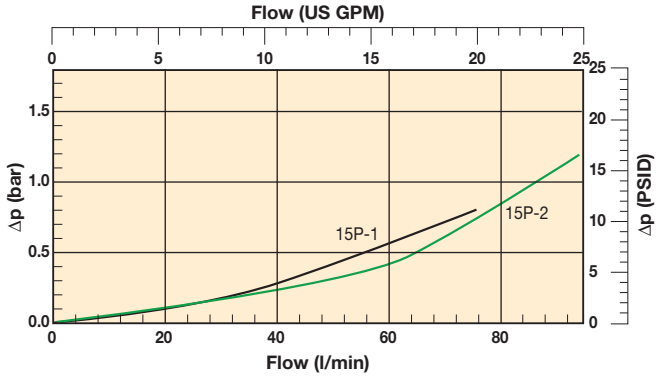


Index	Description	15P	30P
1	Head		
2	Bypass assembly		
3	Element	See chart in product configurator	
4	Bowl O-ring – Nitrile	OR04074	OR06037
	Bowl O-ring – fluoroelastomer	V92138	V92151
5	Bowl		
6	Drain plug – c/w buna seal		
	Drain plug – c/w		
	Fluoroelastomer seal		
7	Nameplate		
10	Blank indicator kit		
11	Indicators		
	M3 – Visual auto reset indicator	FMUM3KVAU14M	
	T1 – Electrical indicator	FMUT1KVAU14M	
	F1 – Electronic indicator PNP with 4 LED	FMUF1KVAU14M	
	F2 – Electronic indicator NPN with 4 LED	FMUF2KVAU14M	

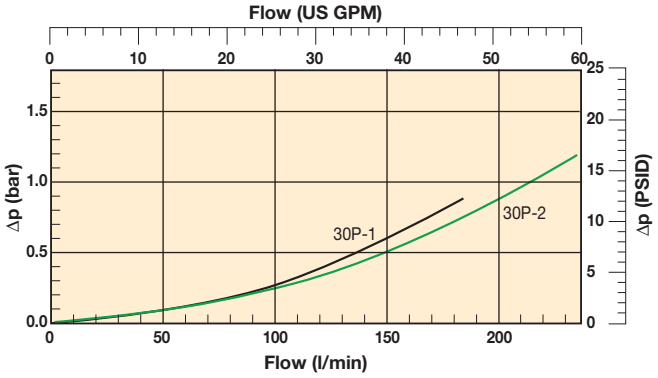
Pressure Drop Curves

The recommended level of the initial pressure drop is max. 1.2 bar.
If the medium used has a viscosity different from 30 cSt, pressure drop over the filter can be estimated as follows:
Δp = (Δp30 x viscosity of medium used) / 30 cSt.

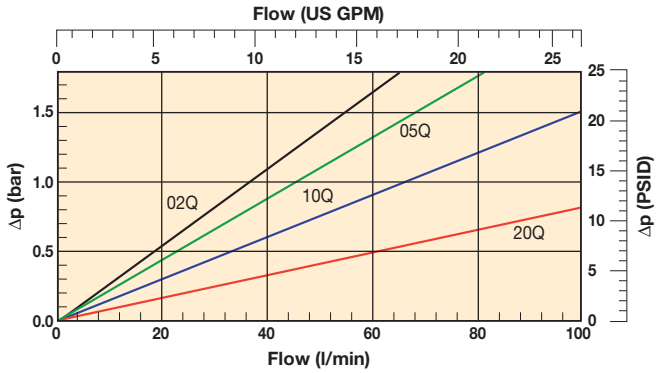
15P Empty Housing



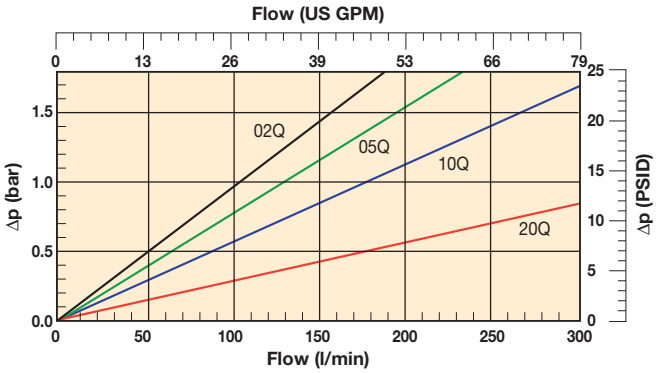
30P Empty Housing



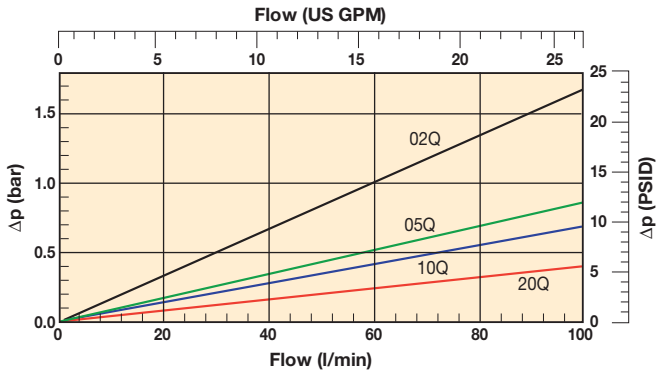
15P-1 Elements



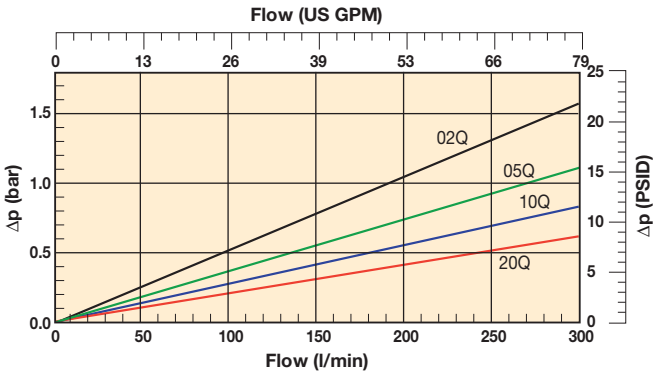
30P-1 Elements



15P-2 Elements



30P-2 Elements



15P/30P Series
High Pressure Filters

Ordering Information

Standard products table

Part number	Supersedes	Flow (l/min)	Model number	Element length	Media rating (µ)	Seals	Indicator	Bypass settings	Ports	Replacement elements
15P110QBM3KG121	15P-1-10Q-M2-50-B2B2-1	45	15P	Length 1	10	Nitrile	Visual	3.5 bar	G¾"	**939102Q**
15P110QBT1KG121	15P-1-10Q-TW3-50-B2B2-1	45	15P	Length 1	10	Nitrile	Electrical	3.5 bar	G¾"	**939102Q**
15P210QBM3KG121	15P-2-10Q-M2-50-B2B2-1	70	15P	Length 2	10	Nitrile	Visual	3.5 bar	G¾"	**939106Q**
15P210QBT1KG121	15P-2-10Q-TW3-50-B2B2-1	70	15P	Length 2	10	Nitrile	Electrical	3.5 bar	G¾"	**939106Q**
30P110QBM3KG161	30P-1-10Q-M2-50-C2C2-1	120	30P	Length 1	10	Nitrile	Visual	3.5 bar	G1"	**939110Q**
30P110QBT1KG161	30P-1-10Q-TW3-50-C2C2-1	120	30P	Length 1	10	Nitrile	Electrical	3.5 bar	G1"	**939110Q**
30P210QBM3KG161	30P-2-10Q-M2-50-C2C2-1	170	30P	Length 2	10	Nitrile	Visual	3.5 bar	G1"	**939114Q**
30P210QBT1KG161	30P-2-10Q-TW3-50-C2C2-1	170	30P	Length 2	10	Nitrile	Electrical	3.5 bar	G1"	**939114Q**

Note: Filter assemblies ordered from the product configurator below are on extended lead times. Where possible, please make your selection from the table above.

Note 1: Part numbers featured with bold highlighted codes will ensure a 'standard' product selection.
Note 2: Alternate displayed part number selection will require you to contact Parker Filtration for availability.

Product configurator

Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8
15P	**1**	**10Q**	**B**	**M3**	**K**	**G12**	**1**

Box 1

Code	
Model	**Code**
High pressure filter, T-port	**15P**
High pressure filter, T-port	**30P**

Highlights Key (Denotes part number availability)

123	Item is standard
123	Item is standard green option
123	Item is semi standard
123	Item is non standard

Note: Standard items are in stock, semi standard items are available within four weeks

Box 2

Filter type	
Length	**Code**
Length 1	**1**
Length 2	**2**

Box 3

Degree of filtration				
Element media	**Glass fibre**			
	Media code			
Microglass III element	**02Q**	**05Q**	**10Q**	**20Q**

Box 4

Seal type	
Seal material	**Code**
Nitrile	**B**
Fluoroelastomer	V

Box 5

Indicator	
	Code
Plugged with steel plug	**P**
Visual indicator	**M3**
Electrical indicator	**T1**
No indicator port	N
Electronic 4 LED, PNP, N.O.	F1
Electronic 4 LED, NPN, N.O.	F2
Electronic 4 LED, PNP, N.C.	F3
Electronic 4 LED, NPN, N.C.	F4

Box 6

Bypass and indicator settings		
Bypass valve	**Indicator**	**Code**
3.5 bar	2.5 bar	**K**

When filter includes a bypass valve but not an indicator, code denotes bypass setting.

Box 7

Filter connection	
Connections	**Code**
15P: Thread G¾	**G12**
Thread M27, ISO 6149	M27
30P: Thread G 1	**G16**
Thread M33, ISO 6149	M33

Box 8

Options	
Options	**Code**
Standard	**1**
Drain port on bowl	4

Replacement elements with nitrile seals				
Media	15P-1	15P-2	30P-1	30P-2
02Q	**939100Q**	**939104Q**	**939108Q**	**939112Q**
05Q	**939101Q**	**939105Q**	**939109Q**	**939113Q**
10Q	**939102Q**	**939106Q**	**939110Q**	**939114Q**
20Q	**939103Q**	**939107Q**	**939111Q**	**939115Q**

Nominal flow (l/min) at viscosity 30 cSt				
Filter model	02Q	05Q	10Q	20Q
15P-1	25	30	45	70
15P-2	40	60	70	90
30P-1	70	90	120	170
30P-2	120	150	170	200

Degree of filtration						Code
Average filtration beta ratio ß (ISO 16889) / particle size µm [c]						
ßx(c)=2	**ßx(c)=10**	**ßx(c)=75**	**ßx(c)=100**	**ßx(c)=200**	**ßx(c)=1000**	
% efficiency, based on the above beta ratio (ßx)						Disposable
50.0%	**90.0%**	**98.7%**	**99.0%**	**99.5%**	**99.9%**	Microglass III
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**

Parker Hannifin
Hydraulic Filter Division Europe
FDHB500UK.

100P Series

High Pressure Filters
Max 1000 l/min - 414 bar

When it comes to high flow capacity for high pressure systems

A high flow rate filter solution

The 100P Series design means on element change only the bowl end-cap has to be removed. Microglass III glassfibre media is standard. Maximum pressure 414 bar. Maximum flow 1000 l/min. An ideal solution where space is at a premium.

Contact Information:

Parker Hannifin
Hydraulic Filter Division Europe

European Product Information Centre
Freephone: 00800 27 27 5374
(from AT, BE, CH, CZ, DE, EE, ES, FI, FR, IE, IT, PT, SE, SK, UK)
filtrationinfo@parker.com

www.parkerhfde.com

Product Features:

- 100P design, only the bowl end-cap is removed on element change.
- Microglass III glassfibre media is standard.
- Maximum pressure 414 bar. Maximum flow 1000 l/min.
- An ideal solution where space is at a premium.

100P Series
High Pressure Filters

Features & Benefits

Features	Advantages	Benefits
High 414 bar pressure rating	Strong and robust housing for heavy duty applications	Reliable and continuous operation for open and closed loop applications
Flow rates up to 1000 l/min	Pressure filtration possible for high flow rates	Excellent protection of high performance machinery
Optional reverse flow valve	Allows reverse flow and prevents back wash of element	Ideal for applications where back flow is expected
Bottom access bowl	Only bottom of the bowl must be opened for element change	Easy service
Microglass III replacement elements	Multi-layered design produced high capacity and efficiency	Great performance value
		Reliable performance throughout element life
	Wire support reduces pleat bunching, keeps performance consistent	Reduces downtime, maximises element life
Visual and electrical indicators available	Check element condition at a glance	Optimises element life, prevents bypassing
	Right style for the application	Matches your system electrical connections

Typical Applications

- Drilling rigs
- Power packs
- Oil/gas industry
- Flight simulators
- Test rigs

The Parker Filtration Model 100P High Pressure Filters.

The 100P Series is designed to meet the growing demand for high-pressure filters with a flow rate capacity of up to 1000 l/min at 414 bar working pressure. For systems where reverse flow can be expected, an optional integrated reverse flow valve avoids back wash of contamination. When changing the element, only the end cap of the bowl has to be removed. The filter is ideal for applications where space is at a premium. The filter media used in the elements is high quality Microglass III glass fibre.

Specification

Pressure ratings:
Maximum allowable operating pressure 414 bar.
Filter housing pressure pulse fatigue tested: $3*10^6$ pulses 0 - 276 bar.

Connections:
Inlet and outlet connections are threaded internally or flange faced.
Threads G1½", G2" (ISO 228/1), SAE 24, SAE 32.
or flanges 1½" SAE 6000, 2" SAE 6000, 1½" SAE 6000-M,
2" SAE 6000-M.
*6000-M is a SAE style with appropriate metric fixing threads.

Filter housing:
Head material cast iron (GSI).
Bowl material extruded steel, max torque 200 Nm.

Seal material:
Nitrile or Fluoroelastomer.

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

Bypass valve:
Opening pressure 7.0 bar.

Options:
Reverse flow valve, which directs back flow from port to port.

Filter element:

Degree of filtration:
Determined by Multipass-test according to ISO 16889.

Flow fatigue characteristics:
Filter media is supported so that the optimal fatigue life is achieved (ISO 3724).

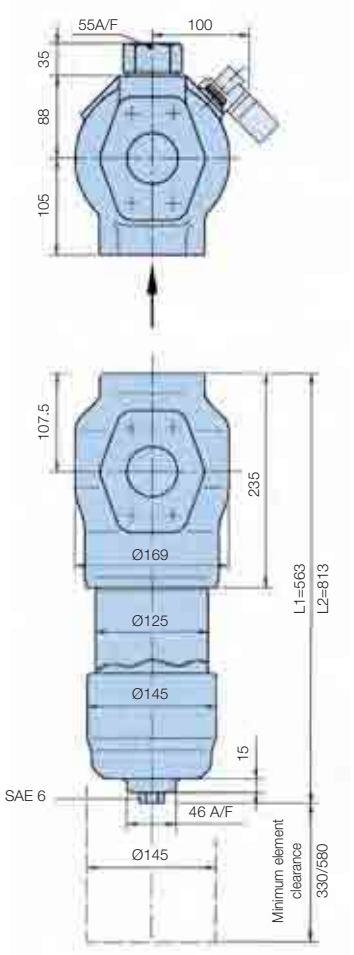
Microglass III:
Supported with epoxy coated metal wire mesh, end cap material reinforced composite and metal inner core.
Collapse rating 20 bar (ISO 2941).

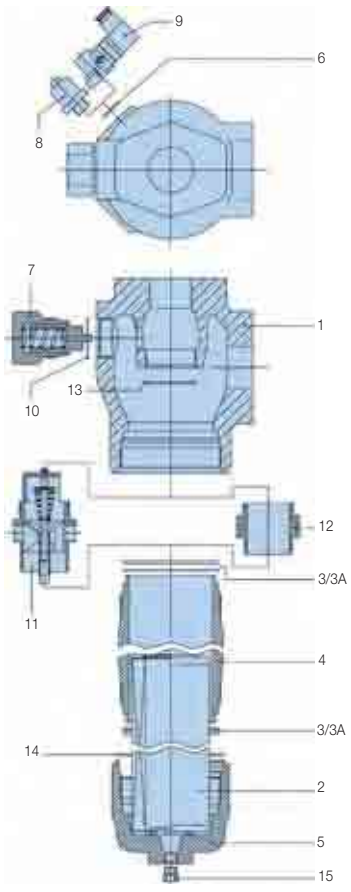
Indicator options:
Indicating differential pressure: 5.0 bar.
- visual indicator.
- electrical indicator.

Weights (kg):
100P-1: 37 kg.
100P-2: 47 kg.

Fluid compatibility:
Suitable for use with mineral and vegetable oils, and some synthetic oils. For other fluids, please consult Parker Filtration.

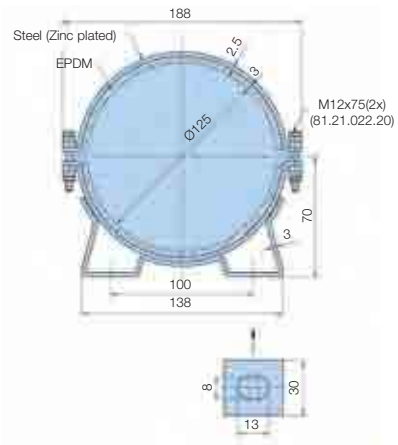
Installation Details





Note: For installation drawings of the SAE 1½" and 2" flanges, contact Parker.

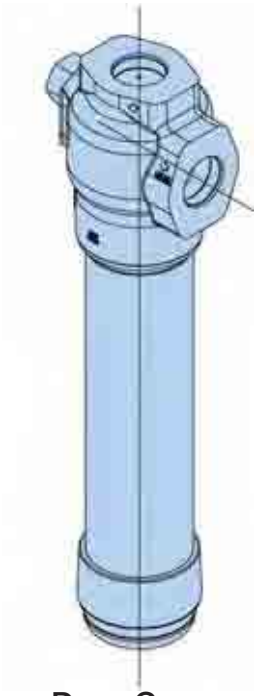
Mounting Clamp Item 16



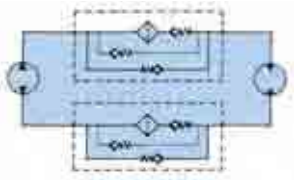
Type H model 1000	
1	Filter head
2	Filter element
3	Bowl seal
3A	Bowl back-up ring
4	Housing
5	Cover
6	Indicator seal
7	Bypass set
8	Visual indicator
9	Electrical indicator
10	Bypass seal
11	Reverse flow set
12	Adaptor
13	Adaptor/reverse flow seal
14	Cover seal
15	Drain plug
16	Mounting clamp

100P Series
High Pressure Filters

Additional Information

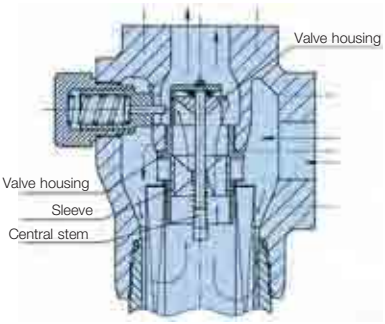


Filter with Reverse Flow Valve

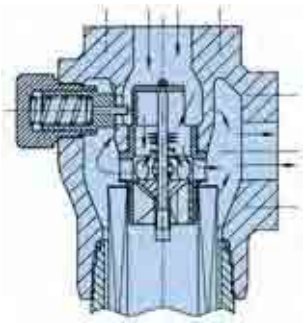


Circuit symbol

Normal Flow Condition



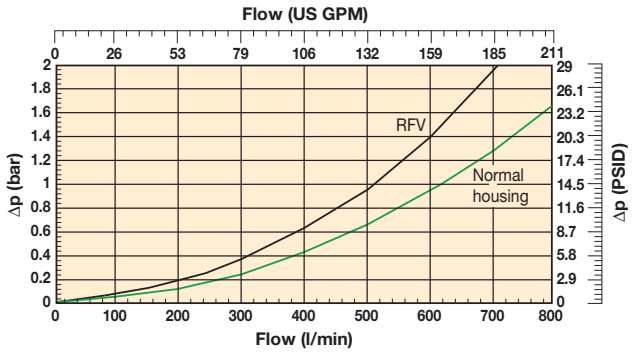
Reverse Flow Condition



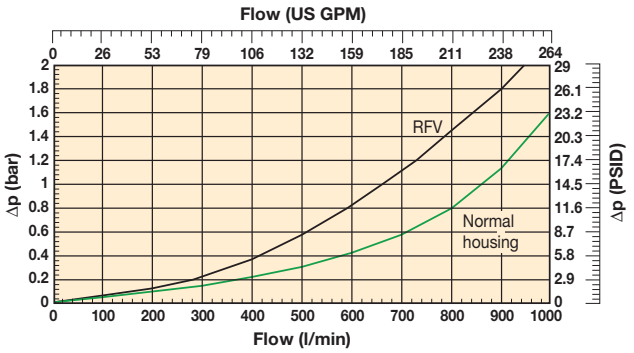
Pressure Drop Curves

The recommended level of the initial pressure drop is max. 2.3 bar.
If the medium used has a viscosity different from 30 cSt, pressure drop can be estimated as follows:
The total Δp = housing Δph + (element Δpe x working viscosity/30).

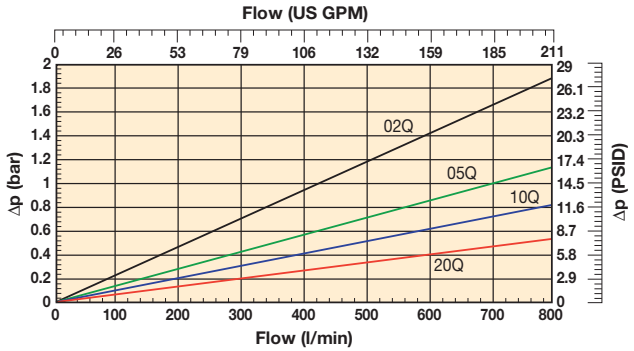
100P-1 Empty Housing (G1¹/₂", SAE 24, SAE 1¹/₂")



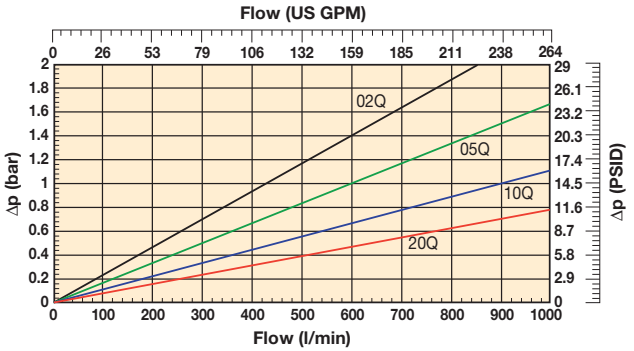
100P-2 Empty Housing (G2", SAE 32, SAE 2")



100P-1 Elements



100P-2 Elements



Ordering Information

Standard products table

Part number	Supersedes	Flow (l/min)	Model number	Element length	Media rating (µ)	Seals	Indicator	Bypass settings	Ports	Replacement elements	Supersedes
100P105QBM4MF241	1074A.2HN70.FZ1210	600	100P	Length 1	5	Nitrile	Visual	7.0 bar	SAE flange 1½" 6000	**939061Q**	1070Z121A
100P110QBM4MF241	1074A.2HN70.FZ1220	700	100P	Length 1	10	Nitrile	Visual	7.0 bar	SAE flange 1½" 6000	**939062Q**	1070Z122A
100P120QBM4MF241	1074A.2HN70.FZ1230	800	100P	Length 1	20	Nitrile	Visual	7.0 bar	SAE flange 1½" 6000	**939063Q**	1070Z123A
100P205QBM4MF321	1074A.2HN70.TZ2210	840	100P	Length 2	5	Nitrile	Visual	7.0 bar	SAE flange 2" 6000	**939065Q**	1070Z221A
100P210QBM4MF321	1074A.2HN70.TZ2220	920	100P	Length 2	10	Nitrile	Visual	7.0 bar	SAE flange 2" 6000	**939066Q**	1070Z222A
100P220QBM4MF321	1074A.2HN70.TZ2230	1000	100P	Length 2	20	Nitrile	Visual	7.0 bar	SAE flange 2" 6000	**939067Q**	1070Z223A

Note: Filter assemblies ordered from the product configurator below are on extended lead times. Where possible, please make your selection from the table above.

Product configurator

Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8
100P	**2**	**10Q**	**B**	**M4**	**M**	**F32**	**1**

Box 1

Code	
Model	**Code**
Large HP filter, L-port	**100P**

Box 2

Filter type	
Length	**Code**
Length 1	**1**
Length 2	**2**

Box 3

Degree of filtration				
Element media	**Glass fibre**			
	Media code			
Microglass III element	**02Q**	**05Q**	**10Q**	**20Q**

Box 4

Seal type	
Seal material	**Code**
Nitrile	**B**
Fluoroelastomer	V

Box 5

Indicator	
	Code
Indicator port plugged	**P**
Visual indicator	**M4**
Electrical indicator	**T2**
Electrical indicator with red lamp 28 Vdc, N.O.	T3
Electrical indicator with red lamp 110 VAC, N.O.	T4
Electrical indicator with red lamp 250 VAC, N.O.	T5

Box 6

Bypass and indicator settings		
Bypass valve	**Indicator**	**Code**
7.0 bar	5.0 bar	**M**

When filter includes a bypass valve but not an indicator, code denotes bypass setting.

Box 7

Filter connection	
Connections	**Code**
Thread G 1½	G24
Thread G 2	G32
Thread SAE 24	S24
Thread SAE 32	S32
SAE flange 1½" 6000	**F24**
SAE flange 1½" 6000-M	on request
SAE flange 2" 6000	**F32**
SAE flange 2" 6000-M	on request

Box 8

Options	
Options	**Code**
Standard	**1**
Reverse flow valve	3

Indicator Options	
Part Number	**Option**
8060050033	M4
8060070002	T2
8060070007	T3
8060070006	T5

Note: Refer to Box 5 for options explanation.

Replacement elements with nitrile seals		
Media	Length 1	Length 2
02Q	**939060Q**	**939064Q**
05Q	**939061Q**	**939065Q**
10Q	**939062Q**	**939066Q**
20Q	**939063Q**	**939067Q**

Nominal flow (l/min) at viscosity 30 cSt				
Filter port size	02Q	05Q	10Q	20Q
100P-1, 1½"	540	600	700	800
100P-2, 2"	700	840	920	1000

Seal Kit and Mounting Clamp	
Options	**Code**
Seal kit (nitrile)	8069000070
Seal kit (fluoroelastomer)	8069000013
Mounting Clamp	84.47.265.01

Degree of filtration						Code
Average filtration beta ratio ß (ISO 16889) / particle size µm [c]						
ßx(c)=2	**ßx(c)=10**	**ßx(c)=75**	**ßx(c)=100**	**ßx(c)=200**	**ßx(c)=1000**	
% efficiency, based on the above beta ratio (ßx)						Disposable
50.0%	**90.0%**	**98.7%**	**99.0%**	**99.5%**	**99.9%**	Microglass III
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**

Highlights Key (Denotes part number availability)

123	Item is standard
123	Item is standard green option
123	Item is semi standard
123	Item is non standard

Note: Standard items are in stock, semi standard items are available within four weeks

Note 1: Part numbers featured with bold highlighted codes will ensure a 'standard' product selection.
Note 2: Alternate displayed part number selection will require you to contact Parker Filtration for availability.

Grab the benefits of a greener future

ENVIRONMENTALLY-FRIENDLY FILTRATION SOLUTIONS

Trust Parker to provide you with a range of 'green' filter products that impact positively on the environment. Now with new E-series element ranges your customers benefit from a solution that's smarter, safer and more responsible when it comes to filtration.

By significantly reducing waste levels, E-Series elements are designed to increase the lifespan of hydraulic machinery. CN medium pressure filters feature Ecoglass elements that can be crushed, shredded, baled and when incinerated offer minimal residue causing little or no damage to the environment. Available in three models 15CN, 40CN and 80CN, they provide a reliable service and trouble-free operation under tough conditions.

Through Parker's advanced Laser CM technology, all vehicle operators can monitor fluid contamination on-site through a simple two minute test. This accurate monitoring method helps prevent catastrophic failure in critical systems instantly.

When it comes to filtration solutions you can rely on - the future is Parker.

Enjoy the benefits of 'green' filtration, email filtrationinfo@parker.com

Parker Hannifin
Hydraulic Filter Division Europe
FDHB500UK.

EPF *i*protect® Series

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

An ecological filter design solution

When Ecology meets Economy

The EPF Series utilizes the unique patented iprotect® element design. The ecological design reduces environmental impact by over 50% typically and covers flow rates up to 700 l/min at 450 bar. The 'smart' element in the bowl design ensures that minimum space is needed to service the filter. The patented design protects the quality of filtration and the aftermarket, offering improved aftermarket revenues.

Contact Information:

Parker Hannifin
Hydraulic Filter Division Europe

European Product Information Centre
Freephone: 00800 27 27 5374
(from AT, BE, CH, CZ, DE, EE, ES, FI, FR, IE, IT, PT, SE, SK, UK)
filtrationinfo@parker.com

www.parkerhfde.com

Product Features:

- A new generation of high pressure filters.
- Rated at 450 bar for flows up to 700 l/min.
- The quality of filtration is protected.
- The element remains in the filter bowl for a more compact solution.

EPF *i*protect® Series

High Pressure Filters

Specification

Pressure Rating: 414 bar

Flow Capacity:
- Size 1: 40 l/min
- Size 2: 100 l/min
- Size 3: 160 l/min
- Size 4: 320 l/min
- Size 5: up to 700 l/min

Filter housing:
- In-line with threaded and flanged ports
- Manifold type filter heads

Filter Element:
Patented filter element technology based on ecological design.

Bypass settings:
- 3.5, 5 and 7 bar and blocked

Indicators:
Visual, electrical and electronical
- ATEX certified filters
- Service-friendly design (minimizes space needed for servicing filter, element remains in filter bowl)
- Automatic element positioning prevents misakes during filter service events
- New *i*protect® filter filter element includes replacement bypass valve seals
- Ecological design minimizes waste over 50%

Benefits

- Modular product architecture allows easy and compact integration of the *i*protect® element in systems and manifold blocks.
- New product design reduces energy consumption across filter due to optimized flow path.
- Patented filter technology protects system performance and optimal protection of components.
- Patented filter technology protects filter element after market and usage of genuine OEM parts.

Applications

EPF iprotect inline filter

5 standard sizes with multiple bowl lengths for optimal filter performance

EPF *i*protect® manifold filter

4 standard sizes with ability to provide custom specific interface for flange

Element Options:

REDUCING COSTS BY INNOVATION

Introducing the NEW EPF 'Ecological High Pressure Filter' designed to support Parker Filtration's drive towards reducing costs by innovation.

Hydraulic filter solutions for the future require a radically different approach and Parker Filtration's objective underlines an ability to support our customers with the design and realization of 'new generation' filters such as the EPF.

Parker Filtration offers hydraulic system designers the possibility to integrate various system functions into single components. This can result in cost reductions for the application in manufacturing and end-user maintenance and can realize more compact solutions and lower environmental impact by reducing leak points for example. Integrating high pressure filters such as the EPF with unique, quality media and patented elements will guarantee filter performance and maximize system component protection.

At 450 bar maximum working pressure and flow options up to 700 l/min, the EPF Series offers a new ecological style filter element named iprotect®, typically reducing disposal waste and cost by over 50%. Designed with high quality filter media, the EPF range will provide benefits for OEM and End Users alike maximizing the productivity and Profitability from their equipment.

- Hydraulic system protection – EPF *i*protect® Series help safeguard system fluid cleanliness by using patented elements in the assembly.
- System performance – EPF *i*protect® guaranteed filter quality improves system controllability, productivity and reliability.
- Saving time saves cost – EPF *i*protect® unique element design reduces time to change and eliminates oil spillage during change-over as the element remains in the bowl when it's removed from the filter head.
- Space saving installation – bowl removal requires no tools, is fast and best of all requires the minimum of space keeping the filter envelope to a minimum

Parker Hannifin
Hydraulic Filter Division Europe
FDHB500UK.

EADPF *i*protect® Series

High Pressure Duplex Filters
Max. 320 l/min - 350 bar

Automatic duplex filters increase safety

New patented duplex filter technology offers continuous automated protection

The EADPF Series utilizes a unique patented element design named *i*protect®. The ecological design reduces environmental impact over 50% typically and covers flow rates up to 320 l/min at 350 bar. This 'smart' element is integrated into a duplex head featuring a fully automatic change over. One or two differential pressure indicators are used to control the duplex filter. A unique aspect is that the system pressure is used for the pilot lines operating the flow control valves, isolating or putting the filter bowl with the clean element into service.

Contact Information:

Parker Hannifin
Hydraulic Filter Division Europe

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(from AT, BE, CH, CZ, DE, EE, ES, FI, FR, IE, IT, PT, SE, SK, UK)
filtrationinfo@parker.com

www.parkerhfde.com

Product Features:

- The quality of filtration is protected.
- Rated at 350 bar for flows up to 320 l/min.
- Multiple bypass settings up to 7 bar or blocked with 210 bar rated high collapse element.
- EADPF duplex filters feature fully automatic element change-over.

EMDPF *i*protect® Series

High Pressure Duplex Filters
Max. 320 l/min - 350 bar

Manually operated duplex filters with the *i*protect® element family

New patented *i*protect® element family provides system-matched duplex filter solutions

The EMDPF Series utilizes the unique patented *i*protect® element design. The ecological design reduces environmental impact by over 50% typically and covers flow rates up to 320 l/min at 350 bar. This 'smart' element is integrated into a manually operated duplex head. One or two differential pressure indicators are used to control the duplex filter. A unique aspect is that the system pressure is used for the pilot lines operating the flow control valves, isolating or putting the filter bowl with the clean element into service.

Contact Information:

Parker Hannifin
Hydraulic Filter Division Europe

European Product Information Centre
Freephone: 00800 27 27 5374
(from AT, BE, CH, CZ, DE, EE, ES, FI, FR, IE, IT, PT, SE, SK, UK)
filtrationinfo@parker.com

www.parkerhfde.com

Product Features:

- The quality of filtration is protected.
- Rated at 350 bar for flows up to 320 l/min.
- Multiple bypass settings up to 7 bar or blocked with 210 bar rated high collapse element.
- EMDPF duplex filters feature leakage-free valve technology.

18/28/38P Series

High Pressure Filters
Max 700 l/min - 414 bar

The all-round high pressure filter solution

Robust housing for heavy duty applications

The 18/28/38P Series features a range of head and bowl sizes and connection options. Microglass III glassfibre media is standard. Maximum pressure 414 bar. Maximum flow 700 l/min. A globally proven filter with optimized sizing for a wide range of industrial applications.

Contact Information:

Parker Hannifin
Hydraulic Filter Division Europe

European Product Information Centre
Freephone: 00800 27 27 5374
(from AT, BE, CH, CZ, DE, EE, ES, FI, FR, IE, IT, PT, SE, SK, UK)
filtrationinfo@parker.com

www.parkerhfde.com

Product Features:

- Multiple bypass settings up to 7 bar.
- 18/28/38P features a range of head and bowl sizes and connection options.
- Microglass III glassfibre media is standard.
- Maximum pressure 414 bar. Maximum flow 700 l/min.
- A proven filter solution for ‘heavy duty’ hydraulic systems.

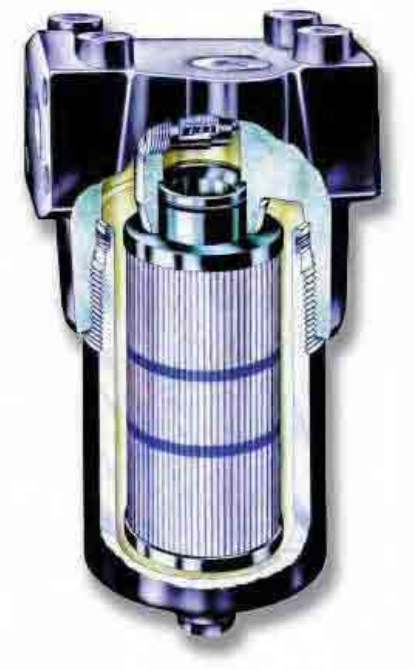
18/28/38P Series
High Pressure Filters

Features & Benefits

Features	Advantages	Benefits
Fatigue tested to full pressure rating	Strong and robust housing for heavy duty applications	Reliable and continuous operation both in mobile and industrial applications
Several head sizes	Optimised sizing	Efficient filtration
		Covers wide flow range
Several connection options	Easy mounting	Global design, global acceptance
		Right filter for each application
Microglass III replacement elements	Multi-layered design produced high capacity and efficiency	Great performance value
		Reliable performance throughout element life
	Wire support reduces pleat bunching, keeps performance consistent	Reduces downtime, maximises element life
Visual, electrical and electronic indicators available	Check element condition at a glance	Optimises element life, prevents bypassing
	Right style for the application	Matches your system electrical connections

Typical Applications

- Injection moulding
- Die casting
- Servo controls
- Machine tools
- Mobile equipment



The Parker Filtration 18/28/38P Series High Pressure Filters

Parker Filtration engineered the 18/28/38P series of high pressure filters to satisfy demanding applications in the mobile and industrial markets throughout the world. With metric mounting and optional ISO 6149 ports, this new series is truly a global design.

Installed downstream of the pump, this new series with their wide range of high capacity Microglass III elements, offer excellent protection to system components.

Standard filters come complete with industry proven spool type bypass valve. For more critical applications such as servo or proportional controls, a no bypass high strength element combination ensures maximum protection.

The modular low hysteresis differential pressure indicator fitted to this series is unrivaled in its performance. Tests prove its accuracy and foolproof design to be a major advance in indicator technology.

Specification

Pressure ratings:
Maximum allowable operating pressure 414 bar.
Filter housing pressure pulse fatigue tested: 10^6 pulses 0 - 414 bar.

Connections:
Inlet and outlet connections are threaded internally or flange faced.

Connection style	*Model*		
	18P	28P	38P
BSPF(G)	3/4"	1"	1 1/4", 1 1/2"
SAE	12	16	20, 24
ISO 6149	M27	M33	M42, M48
Flange SAE 6000	3/4"	1"	1 1/4"
Flange SAE 6000-M*	3/4"	1"	1 1/4"

*6000-M is a SAE style with appropriate metric fixing threads.

Filter housing:
Head material cast iron (GSI).
Bowl material steel.

Seal material:
Nitrile or Fluoroelastomer.

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

Bypass valve & indicator settings:
Table below gives bypass valve and corresponding indicator setting.

Bypass	*Indicator*
3.5 bar	2.5 bar
7.0 bar	5.0 bar

Filter element:
Degree of filtration:
Determined by multipass-test according to ISO 16889.

Flow fatigue characteristics:
Filter media is supported so that the optimal fatigue life is achieved (ISO 3724).

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

High collapse elements:
(To be used when no bypass function in filter housing).
Microglass III media supported with epoxy coated metal wire mesh on upstream and stainless steel on downstream, end cap material steel. Strong metal inner core. Collapse rating 210 bar (ISO 2941).

Indicator options:
Indicating differential pressure: 2.5 ± 0.3 bar or 5.0 ± 0.5 bar.
- visual M3.
- electrical T1.
- electronic F1(PNP).
- electronic F2(NPN).

For indicator details see catalogue section 6.

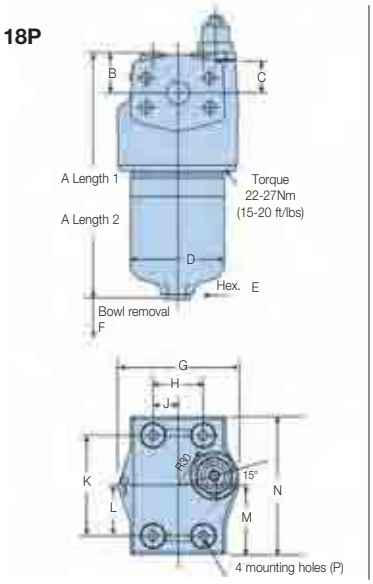
Weights (kg):

Model	*Length 1*	*Length 2*
18P	4.2	5.7
28P	6.7	9.2
38P	15.8	20.3

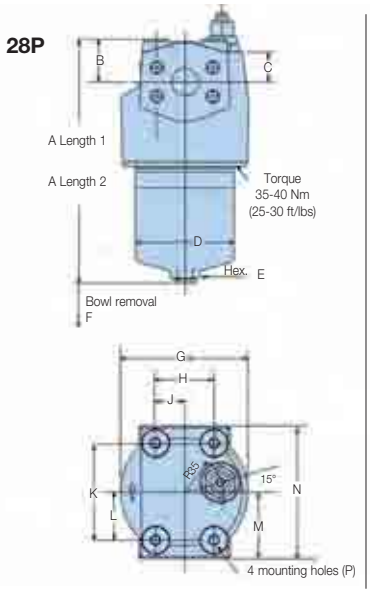
Fluid compatibility:
Suitable for use with mineral and vegetable oils, and some synthetic oils.
For other fluids, please consult Parker Filtration.

Model	A	B	C	D	E (A/F)	F	G	H	J	K	L	M	N	P
18P-1	198 (7.79)	32 (1.26)	26 (1.02)	75 (2.95)	24 (0.94)	100 (3.94)	98 (3.86)	40 (1.57)	20 (0.79)	80 (3.15)	40 (1.57)	55 (2.16)	110 (4.33)	M8 x 1.25 x12 deep
18P-2	293 (11.53)													
28P-1	228 (8.97)	40 (1.57)	29 (1.14)	93 (3.66)	24 (0.94)		120 (4.72)	55 (2.16)	27.5 (1.07)	90 (3.54)	45 (1.77)	62 (2.44)	124 (4.88)	M10 x 1.5 x11 deep
28P-2	337 (13.26)													
38P-1	329 (12.95)	44 (1.73)	35 (1.38)	128 (5.04)	36 (1.42)		160 (6.30)	50 (1.97)	25 (0.98)	120 (4.72)	60 (2.36)	81 (3.19)	162 (6.38)	M10 x 1.5 x12 deep
38P-2	448 (17.64)													

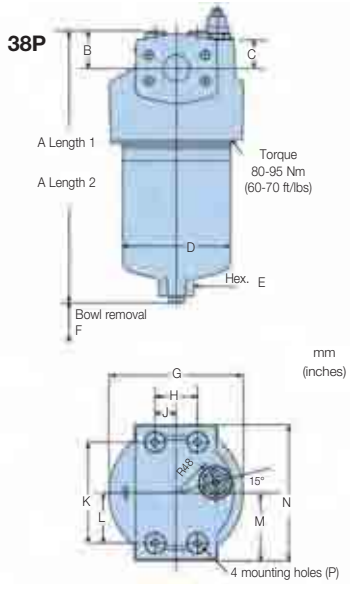
18P



28P



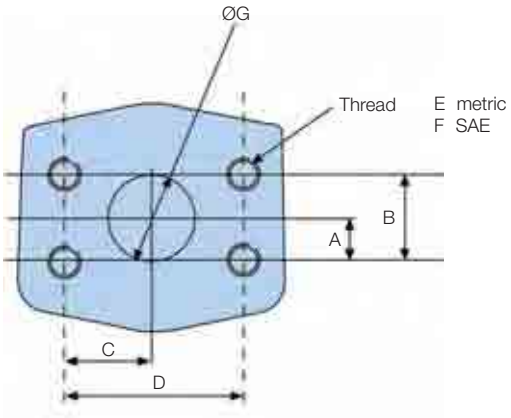
38P



mm
(inches)

18/28/38P Series
High Pressure Filters

Flange Face Details

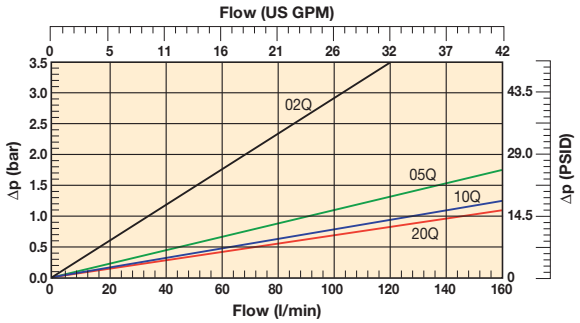


Model mm (inches)	A	B	C	D	E	F	G
18P (3/4")	11.9 (0.47)	23.8 (0.94)	25.4 (1.00)	50.8 (2.0)	M10 x 1.5-6H x 18 Deep	3/8-16 UNC-2B x 18 deep	19.0 (0.75)
28P (1")	14 (0.55)	27.8 (1.09)	28.0 (1.10)	57.1 (2.25)	M12 x 1.75-6H x 20 Deep	7/16-14 UNC-2B x 20 deep	25.4 (1.0)
38P (1 1/4")	15.7 (0.62)	31.7 (1.25)	33.0 (1.30)	66.7 (2.62)	M14 x 2-6H x 20 Deep	1/2-13 UNC-2B x 20 deep	31.8 (1.25)

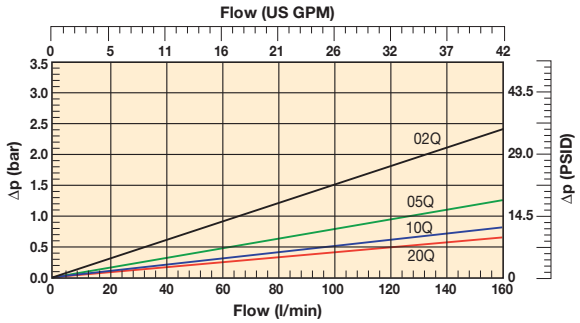
Pressure Drop Curves

With 3.5 bar bypass the recommended initial pressure drop is max 1.2 bar.
With 7.0 bar bypass the recommended initial pressure drop is max 2.3 bar.
If the medium used has a viscosity different from 30 cSt, pressure drop over the filter can be estimated as follows:
The total Δp = housing Δph + (element Δpe x working viscosity/30).

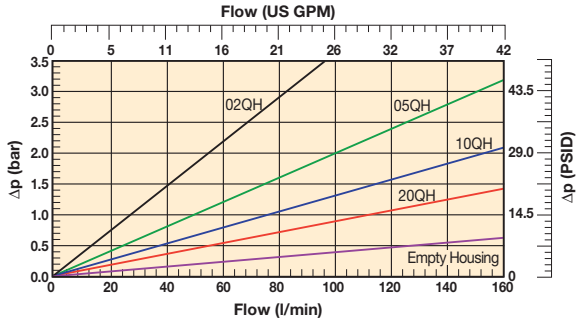
18P-1 Elements



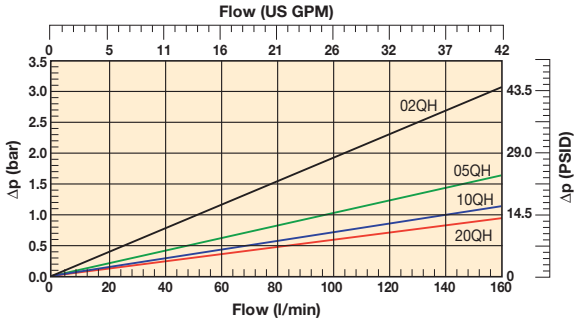
18P-2 Elements



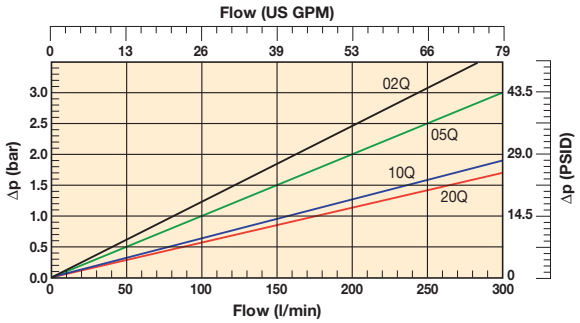
18P-1 Empty Housing and High Collapse



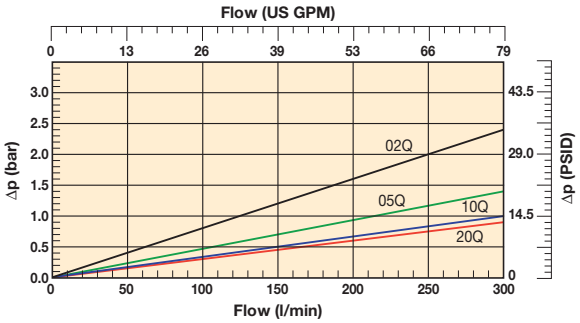
18P-2 High Collapse Elements



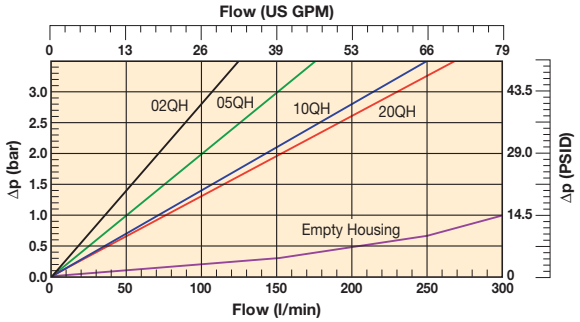
28P-1 Elements



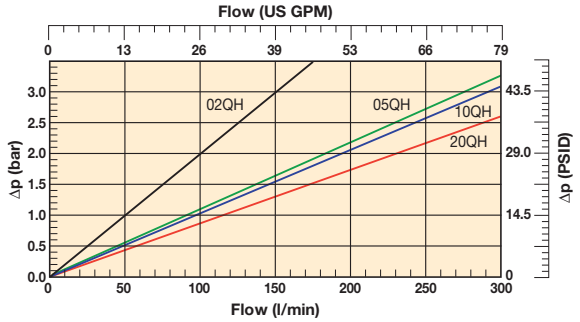
28P-2 Elements



28P-1 Empty Housing and High Collapse



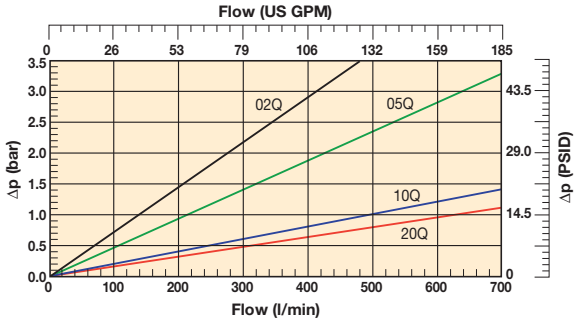
28P-2 High Collapse Elements



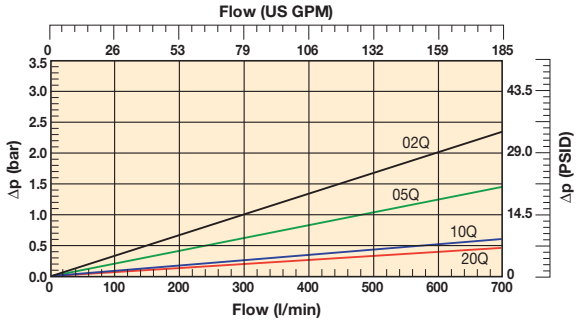
18/28/38P Series
High Pressure Filters

Pressure Drop Curves (cont.)

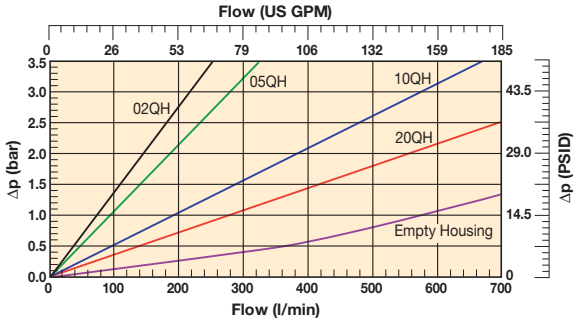
38P-1 Elements



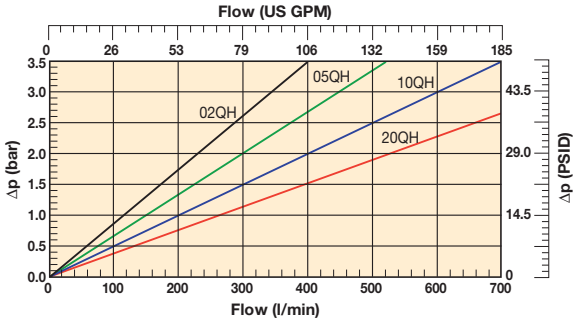
38P-2 Elements



38P-1 Empty Housing and High Collapse



38P-2 High Collapse Elements



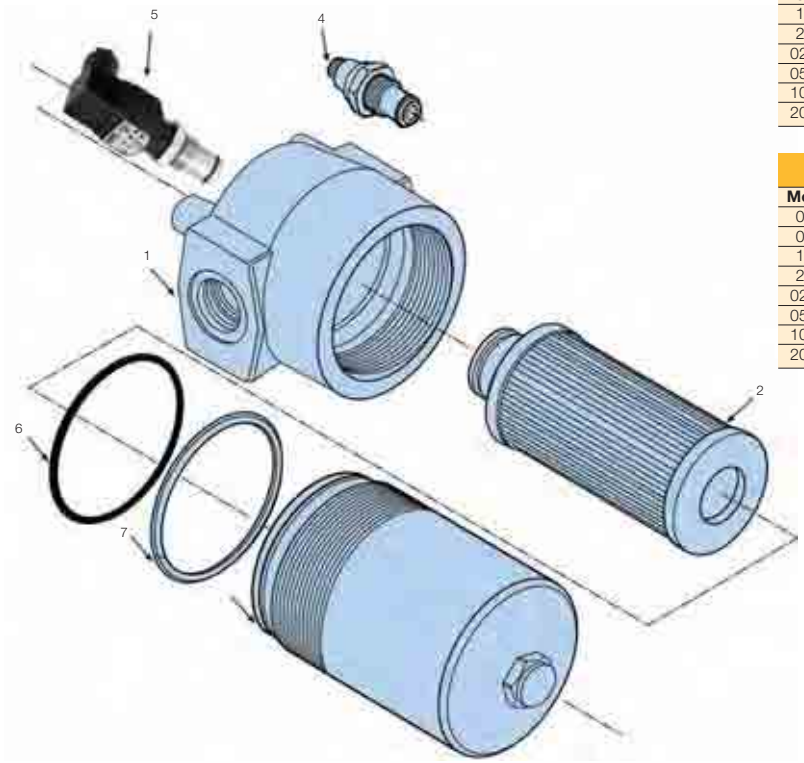
Element Service

A. Stop the system's power unit.
B. Relieve any system pressure in the filter line.
C. Drain the filter bowl if drain port option is provided.
D. Rotate the bowl clockwise (left) and remove.
E. Remove element by pulling downward with a slight twisting motion and discard.
F. Check bowl o-ring and anti-extrusion ring for damage and replace if necessary.
G. Lubricate element o-ring with system fluid and locate element in filter head.
H. Install bowl by rotating counter-clockwise (right) and tighten to specified torque.
   18P - 22-27 Nm (16-20 ft. lbs.)
   28P - 35-40 Nm (25-30 ft. lbs.)
   38P - 80-95 Nm (60-70 ft. lbs.)
I. Confirm there are no leaks after powering the system.

Parts List

Index	Description	Part number
1	**Head Assembly**	
2	**Element**	see table on
3	**Bowl**	next page
	Indicators	
4	M3 – Visual auto reset; 2.5 bar	
	M3 – Visual auto reset; 5.0 bar	
5	T1 – Electrical; 2.5 bar with DIN 43650 Connector	
	T1 – Electrical; 5.0 bar with DIN 43650 Connector	
	F1 – Electronic PNP; 2.5 bar with 4 LED	
	F2 – Electronic NPN; 2.5 bar with 4 LED	
	F1 – Electronic PNP; 5.0 bar with 4 LED	
	F2 – Electronic NPN; 5.0 bar with 4 LED	
6	**Bowl Seal**	
7	**Bowl Anti-extrusion Ring**	
	Seal Kits	
	Seal kit 18P (std) – Nitrile	S04350
	Seal kit 18P (F3) – Fluoroelastomer	S04351
	Seal kit 28P (std) – Nitrile	S04352
	Seal kit 28P (F3) – Fluoroelastomer	S04353
	Seal kit 38P (std) – Nitrile	S04354
	Seal Kit 38P (F3) – Fluoroelastomer	S04355

Element Service (cont.)



Replacement element part numbers

Elements with Nitrile seals						
Model	**18P-1**	**18P-2**	**28P-1**	**28P-2**	**38P-1**	**38P-2**
02Q	**G04242**	**G04250**	**G04258**	**G04266**	**G04274**	**G04282**
05Q	**G04243**	**G04251**	**G04259**	**G04267**	**G04275**	**G04283**
10Q	**G04244**	**G04252**	**G04260**	**G04268**	**G04276**	**G04284**
20Q	**G04245**	**G04253**	**G04261**	**G04269**	**G04277**	**G04285**
02QH	**G04290**	**G04298**	**G04306**	**G04314**	**G04322**	**G04330**
05QH	**G04291**	**G04299**	**G04307**	**G04315**	**G04323**	**G04331**
10QH	**G04292**	**G04300**	**G04308**	**G04316**	**G04324**	**G04332**
20QH	**G04293**	**G04301**	**G04309**	**G04317**	**G04325**	**G04333**

Elements with Fluoroelastomer seals						
Model	**18P-1**	**18P-2**	**28P-1**	**28P-2**	**38P-1**	**38P-2**
02Q	G04246	G04254	G04262	G04270	G04278	G04286
05Q	G04247	G04255	G04263	G04271	G04279	G04287
10Q	G04248	G04256	G04264	G04272	G04280	G04288
20Q	G04249	G04257	G04265	G04273	G04281	G04289
02QH	G04294	G04302	G04310	G04318	G04326	G04334
05QH	G04295	G04303	G04311	G04319	G04327	G04335
10QH	G04296	G04304	G04312	G04320	G04328	G04336
20QH	G04297	G04305	G04313	G04321	G04329	G04337

Ordering Information

Standard products table

Part number	Supersedes	Flow (l/min)	Model number	Element length	Media rating (µ)	Seals	Indicator	Bypass settings	Ports	Replacement elements
18P110QBT1MG121	18P-1-10Q-TW6-98-B2B2-1	80	18P	Length 1	10	Nitrile	Electrical	7.0 bar	G¾"	**G04244**
18P110QBM3MG121	18P-1-10Q-M2-98-B2B2-1	80	18P	Length 1	10	Nitrile	Visual	7.0 bar	G¾"	**G04244**
18P120QBT1MG121	18P-1-20Q-TW6-98-B2B2-1	100	18P	Length 1	20	Nitrile	Electrical	7.0 bar	G¾"	**G04245**
18P120QBM3MG121	18P-1-20Q-M2-98-B2B2-1	100	18P	Length 1	20	Nitrile	Visual	7.0 bar	G¾"	**G04245**
18P210QBT1MG121	18P-2-10Q-TW6-98-B2B2-1	130	18P	Length 2	10	Nitrile	Electrical	7.0 bar	G¾"	**G04252**
18P210QBM3MG121	18P-2-10Q-M2-98-B2B2-1	130	18P	Length 2	10	Nitrile	Visual	7.0 bar	G¾"	**G04252**
18P220QBT1MG121	18P-2-20Q-TW6-98-B2B2-1	150	18P	Length 2	20	Nitrile	Electrical	7.0 bar	G¾"	**G04253**
18P220QBM3MG121	18P-2-20Q-M2-98-B2B2-1	150	18P	Length 2	20	Nitrile	Visual	7.0 bar	G¾"	**G04253**
28P110QBT1MG161	28P-1-10Q-TW6-98-C2C2-1	120	28P	Length 1	10	Nitrile	Electrical	7.0 bar	G1"	**G04260**
28P110QBM3MG161	28P-1-10Q-M2-98-C2C2-1	120	28P	Length 1	10	Nitrile	Visual	7.0 bar	G1"	**G04260**
28P120QBT1MG161	28P-1-20Q-TW6-98-C2C2-1	150	28P	Length 1	20	Nitrile	Electrical	7.0 bar	G1"	**G04261**
28P120QBM3MG161	28P-1-20Q-M2-98-C2C2-1	150	28P	Length 1	20	Nitrile	Visual	7.0 bar	G1"	**G04261**
28P210QBT1MG161	28P-2-10Q-TW6-98-C2C2-1	250	28P	Length 2	10	Nitrile	Electrical	7.0 bar	G1"	**G04268**
28P210QBM3MG161	28P-2-10Q-M2-98-C2C2-1	250	28P	Length 2	10	Nitrile	Visual	7.0 bar	G1"	**G04268**
38P110QBT1MG201	38P-1-10Q-TW6-98-D2D2-1	340	38P	Length 1	10	Nitrile	Electrical	7.0 bar	G1¼"	**G04276**
38P110QBM3MG201	38P-1-10Q-M2-98-D2D2-1	340	38P	Length 1	10	Nitrile	Visual	7.0 bar	G1¼"	**G04276**
38P120QBT1MG201	38P-1-20Q-TW6-98-D2D2-1	420	38P	Length 1	20	Nitrile	Electrical	7.0 bar	G1¼"	**G04277**
38P120QBM3MG201	38P-1-20Q-M2-98-D2D2-1	420	38P	Length 1	20	Nitrile	Visual	7.0 bar	G1¼"	**G04277**
38P210QBT1MG201	38P-2-10Q-TW6-98-D2D2-1	560	38P	Length 2	10	Nitrile	Electrical	7.0 bar	G1¼"	**G04284**
38P210QBM3MG201	38P-2-10Q-M2-98-D2D2-1	560	38P	Length 2	10	Nitrile	Visual	7.0 bar	G1¼"	**G04284**
38P220QBT1MG201	38P-2-20Q-TW6-98-D2D2-1	700	38P	Length 2	20	Nitrile	Electrical	7.0 bar	G1¼"	**G04285**
38P220QBM3MG201	38P-2-20Q-M2-98-D2D2-1	700	38P	Length 2	20	Nitrile	Visual	7.0 bar	G1¼"	**G04285**

Note: Filter assemblies ordered from the product configurator on the next page are on extended lead times. Where possible, please make your selection from the table above.

18/28/38P Series
High Pressure Filters

Ordering Information (cont.)

Product configurator

Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8
38P	**1**	**10Q**	**B**	**M3**	**M**	**G20**	**1**

Box 1

Code	
Model	**Code**
Small size high pressure filter, T-port	**18P**
Medium size high pressure filter, T-port	**28P**
Large size high pressure filter, T-port	**38P**

Highlights Key (Denotes part number availability)

123	Item is standard
123	Item is standard green option
123	Item is semi standard
123	Item is non standard

Note: Standard items are in stock, semi standard items are available within four weeks

Box 2

Filter type	
Length	**Code**
Length 1	**1**
Length 2	**2**

Box 3

Degree of filtration				
Element media	**Glass fibre**			
	Media code			
Microglass III element	**02Q**	**05Q**	**10Q**	**20Q**
High collapse element	**02QH**	**05QH**	**10QH**	**20QH**

Box 4

Seal type	
Seal material	**Code**
Nitrile	**B**
Fluoroelastomer	V

Box 5

Indicator	
	Code
No indicator port	**N**
Visual indicator	**M3**
Electrical indicator	**T1**
Plugged with steel plug	P
Electronic 4 LED, PNP, N.O.	F1
Electronic 4 LED, NPN, N.O.	F2
Electronic 4 LED, PNP, N.C.	F3
Electronic 4 LED, NPN, N.C.	F4

Box 6

Bypass and indicator settings			
Bypass valve	**Indicator**	**Code**	
3.5 bar	2.5 bar	**K**	
7.0 bar	5.0 bar	**M**	
No bypass	5.0 bar	**M**	+ Box 8: code 2
No bypass	No indicator	**X**	+ Box 8: code 2

When filter includes a bypass valve but not an indicator, code denotes bypass setting.

Box 7

Filter connection	
Ports	**Code**
18P: Thread G ³/₄	**G12**
Thread SAE 12	S12
Thread M27, ISO 6149	M27
SAE flange ³/₄" 6000-M	H12
SAE flange ³/₄" 6000	F12
28P: Thread G 1	**G16**
Thread SAE 16	S16
Thread M33, ISO 6149	M33
SAE flange 1" 6000-M	H16
SAE flange 1" 6000	F16
38P: Thread G 1 ¼	**G20**
Thread G 1 ½	**G24**
Thread SAE 20	S20
Thread SAE 24	S24
Thread M42, ISO 6149	M42
Thread M48, ISO 6149	M48
SAE flange 1 ¼" 6000-M	**H20**
SAE flange 1 ¼" 6000	F20

Box 8

Options	
Options	**Code**
Standard	**1**
No bypass	**2**

Nominal flow (l/min) at viscosity 30 cSt				
Filter model	02Q	05Q	10Q	20Q
18P-1	35	60	80	100
18P-2	70	110	130	150
28P-1	80	100	120	150
28P-2	140	200	250	300
38P-1	140	220	340	420
38P-2	320	440	560	700

18/28/38P Series Seal Kits	
Part Number	**Description**
S04350	NITRILE SEAL KIT 18P
S04351	FLUOROELASTOMER SEAL KIT 18P
S04352	NITRILE SEAL KIT 28P
S04353	FLUOROELASTOMER SEAL KIT 28P
S04354	NITRILE SEAL KIT 38P
S04355	FLUOROELASTOMER SEAL KIT 38P

Degree of filtration						Code	
Average filtration beta ratio ß (ISO 16889) / particle size µm [c]							
ßx(c)=2	**ßx(c)=10**	**ßx(c)=75**	**ßx(c)=100**	**ßx(c)=200**	**ßx(c)=1000**		
% efficiency, based on the above beta ratio (ßx)						Disposable Microglass III	High collapse element
50.0%	**90.0%**	**98.7%**	**99.0%**	**99.5%**	**99.9%**		
N/A	N/A	N/A	N/A	N/A	4.5	**02Q**	**02QH**
N/A	N/A	4.5	5	6	7	**05Q**	**05QH**
N/A	6	8.5	9	10	12	**10Q**	**10QH**
6	11	17	18	20	22	**20Q**	**20QH**

Note 1: Part numbers featured with bold highlighted codes will ensure a 'standard' product selection.
Note 2: Alternate displayed part number selection will require you to contact Parker Filtration for availability.

Parker Hannifin
Hydraulic Filter Division Europe
FDHB500UK.

70/70 Eco Series

High Pressure Filters
Max 450 l/min - 420 bar

When flexibility meets reducing environmental impact

A proven filter offering reduced space and piping

The 70/70 Eco Series features a range of head and bowl sizes and connection options. Microglass III glassfibre and Ecoglass III media is available. Maximum pressure 420 bar. Maximum flow 450 l/min. A proven, strong and robust filter for heavy duty applications.

Contact Information:

Parker Hannifin
Hydraulic Filter Division Europe

European Product Information Centre
Freephone: 00800 27 27 5374
(from AT, BE, CH, CZ, DE, EE, ES, FI, FR, IE, IT, PT, SE, SK, UK)
filtrationinfo@parker.com

www.parkerhfde.com

Product Features:

- 70/70 Eco features a range of head and bowl sizes and connection options.
- Microglass III glassfibre and Ecoglass III media is available.
- Maximum pressure 420 bar. Maximum flow 450 l/min.
- A proven filter offering high levels of system protection.

70/70 Eco Series
High Pressure Filters

Features & Benefits

Features	Advantages	Benefits
Fatigue tested to full pressure rating	Strong and robust housing for heavy duty applications	Reliable and continuous operation both in mobile and industrial applications
Several head options and connection sizes	Easy mounting	Reduced space and piping
		Right filter for each application
Several bowl lengths	Optimised sizing	Efficient filtration
Microglass III replacement elements	Multi-layered design produced high capacity and efficiency	Great performance value
		Reliable performance throughout element life
	Wire support reduces pleat bunching, keeps performance consistent	Reduces downtime, maximises element life
Coreless Ecoglass III replacement elements	No metal content in element	Environmentally friendly disposal by incineration
	Reduced overall weight of 50%	
	Easy compaction of used elements	Lower element replacement costs
	Eco adaptors available	Lower disposal costs
		Retrofit coreless design to housings already installed
Visual, electrical and electronic indicators available	Check element condition at a glance	Optimise element life, prevent bypassing
	Right style for the application	Matches your system electrical connections

Typical Applications

- Forestry equipment
- Industrial power units
- Pulp and paper
- Port handling equipment
- Mining and quarrying equipment

The Parker Filtration 70/70 Eco Series High Pressure Filters.

High quality 420 bar in-line pressure filters designed to offer high levels of protection at flows up to 450 l/min.

Dirt sensitive systems can be protected with confidence using the 70 Series high pressure filters.

The 70 Series also available with environmentally friendly Ecoglass III elements.

Parker Hannifin
Hydraulic Filter Division Europe
FDHB500UK.

Specification

Pressure ratings:
Maximum allowable operating pressure 420 bar.
Filter housing pressure pulse fatigue tested: 10^6 pulses 0 - 414 bar.

Connections:
Threads G1, G1¼, G1½ (ISO 228/1).
or flanges 1¼" SAE 3000-M, 1½" SAE 3000-M, 1¼" SAE 6000-M, 1½" SAE 6000-M.

Filter housing:
Head material cast iron (GSI).
Bowl material steel. Max torque 40 Nm.

Seal material:
Nitrile or Fluoroelastomer.

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

Bypass valve:
Opening pressure 3.5 bar.

Filter element:
Degree of filtration:
Determined by Multipass-test according to ISO 16889.

Flow fatigue characteristics:
Filter media is supported so that the optimal fatigue life is achieved (ISO 3724).

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

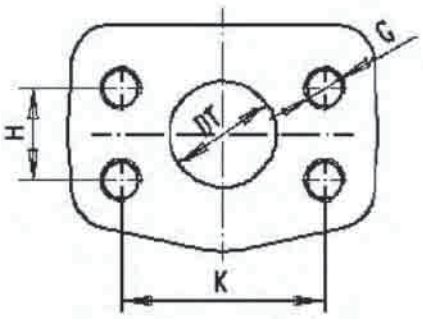
Ecoglass III:
Supported with plastic net, end cap material reinforced composite.
No metal parts.
Collapse rating 10 bar (ISO 2941).
Filter element can only be used together with reusable FEA Eco-adapter.
Note: Ecoglass III contributes to ISO 14001 quality.

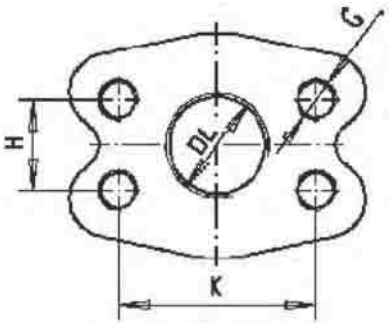
High collapse elements:
(To be used when no bypass function in filter housing).
Microglass III media supported with epoxy coated metal wire mesh on upstream and stainless steel on downstream, end cap material steel. Strong metal inner core. Collapse rating 210 bar (ISO 2941).

Indicator options:
Indicating differential pressure: 2.5 ± 0.3 bar or 7.0 ± 0.5 bar.
2.5 bar indicators to be used with 3.5 bar bypass valve and 7.0 bar indicators with no bypass function.
- visual M3.
- electrical T1.
- electronic F1(PNP).
- electronic F2(NPN).

For indicator details see catalogue section 6.

Fluid compatibility:
Suitable for use with mineral and vegetable oils, and some synthetic oils. For other fluids, please consult Parker Filtration.





SAE Flange Dimensions

Type	K	H	DL	DT	G
1.1/4 SAE 3000 psi	58,7	30,2	Ø 36	31,8	M10-15
1.1/2 SAE 3000 psi	69,9	35,7	G1.1/4	38,1	M12-18
1.1/4 SAE 6000 psi	66,7	31,7	Ø 30,3	31,8	M14-19
1.1/4 SAE 6000 psi	79,4	36,5	G1.1/4	38,1	M16-21

Spare Eco adaptors that are needed for use with or changing to Eco elements are as follows

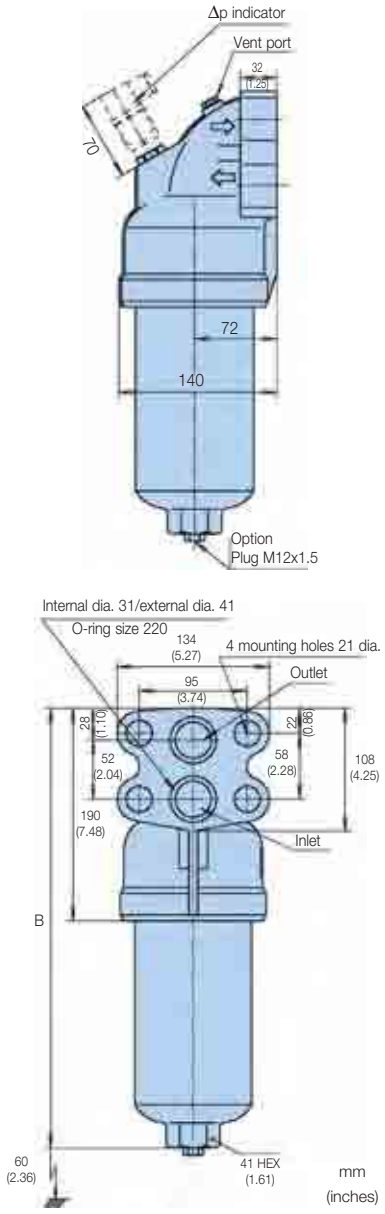
Filter Type	Eco Adaptor	Part Number
70-1	FEA7005.B	**911042090**
70-2	FEA7006.B	**911042087**
70-3	FEA7007.B	**911042091**
70-4	FEA7008.B	**911042092**

70/70 Eco Series

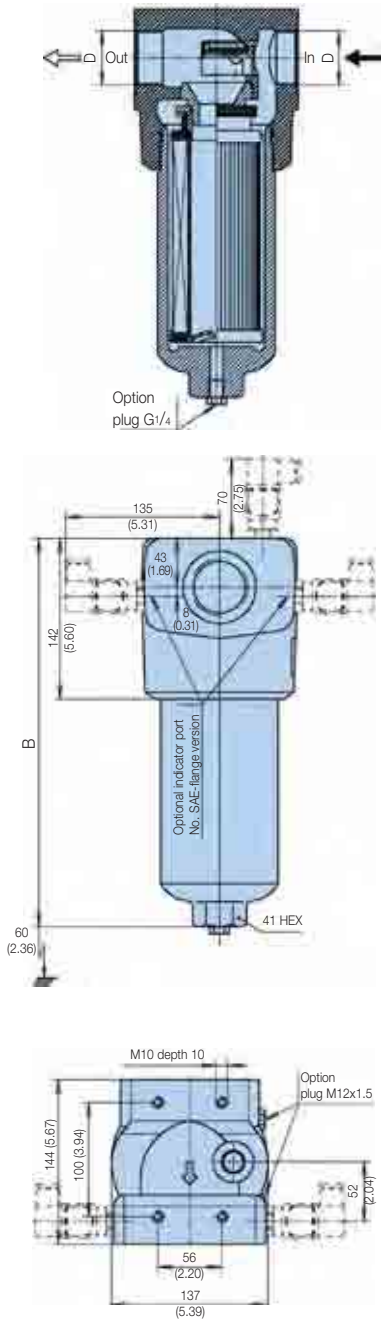
High Pressure Filters

Specification

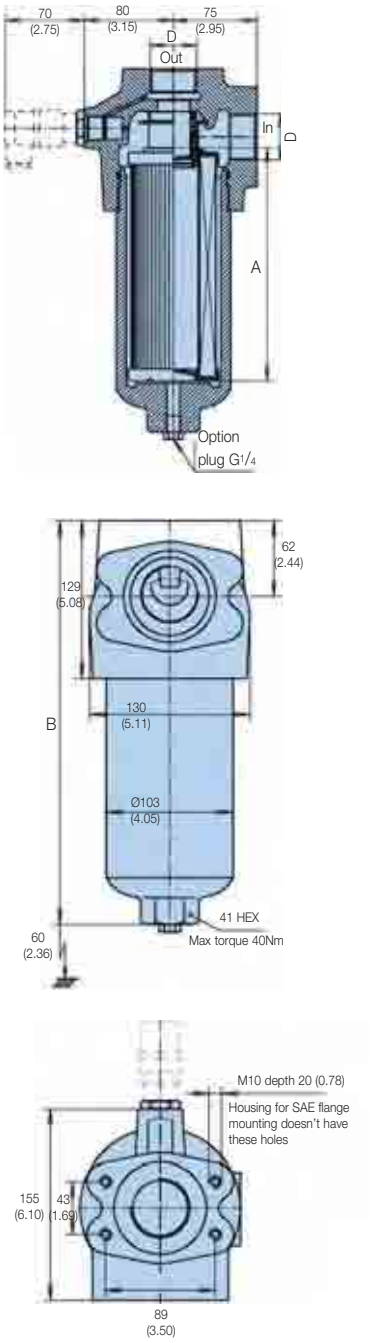
70B



70T



70L



Weights (kg)			
Type	**70T**	**70L**	**70B**
Length 1	14	10.5	11.5
Length 2	16.5	13	14
Length 3	19	15.5	16.5
Length 4	22	18.5	19.5

Type	A	B 70T	B 70B	B 70L	Max working pressure	Port D
Length 1	116 (4.57)	249 (9.80)	295 (11.61)	235 (9.25)	420 bar	G1, G1 1/4 or G1 1/2 Flange 1 1/2 SAE 3000-M Flange 1 1/4 SAE 3000-M Flange 1 1/2 SAE 6000-M Flange 1 1/4 SAE 6000-M
Length 2	208 (8.19)	342 (13.46)	390 (15.35)	330 (13.00)		
Length 3	329 (12.95)	462 (18.19)	510 (20.08)	450 (17.72)		
Length 4	428 (16.85)	562 (22.12)	610 (24.01)	550 (21.65)	350 bar	

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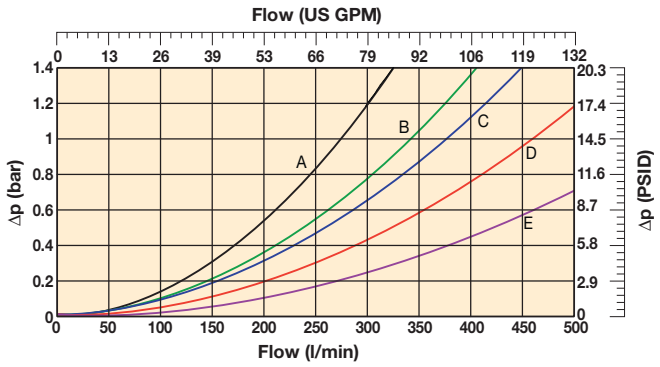
Pressure Drop Curves

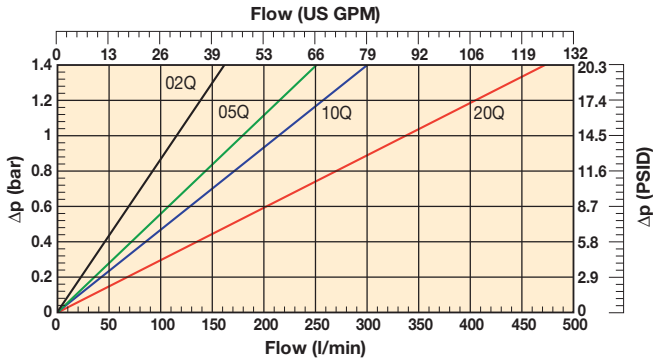
With 3.5 bar bypass the recommended initial pressure drop is max 1.2 bar.
If the medium used has a viscosity different from 30 cSt, pressure drop over the filter can be estimated as follows:
The total Δp = housing Δph + (element Δpe x working viscosity/30).

70 Series Empty Housing

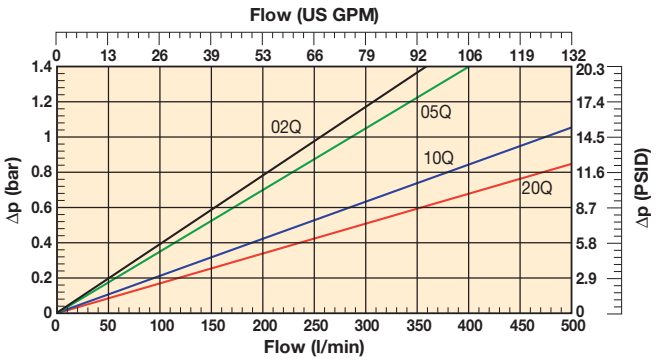


A: 70T with G16 connections
B: 70T with G20 connections and 70L with G16 connections
C: 70L with G20 connections and 70B
D: 70T with G24 connections
E: 70L with G24 connections

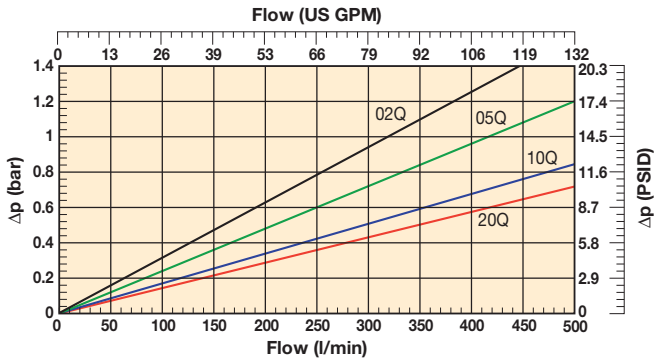
70-1 Elements with Microglass III



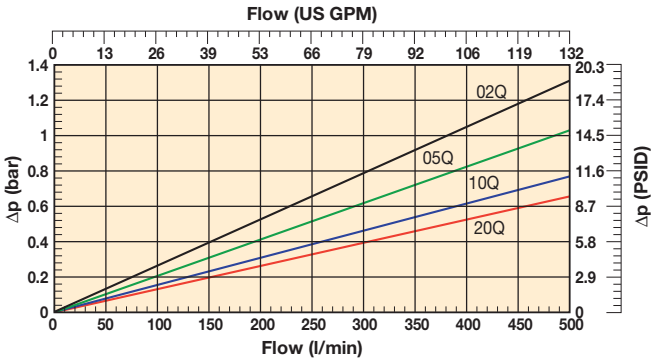
70-2 Elements with Microglass III



70-3 Elements with Microglass III



70-4 Elements with Microglass III

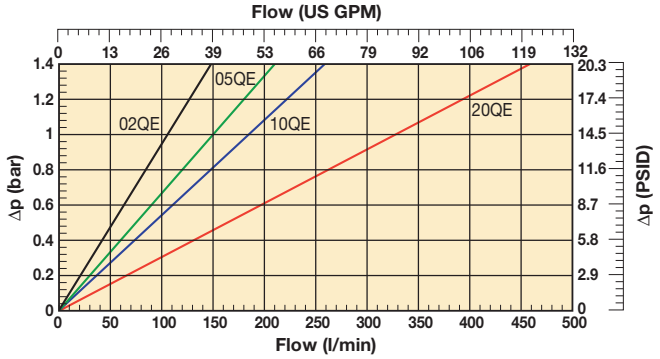


70/70 Eco Series

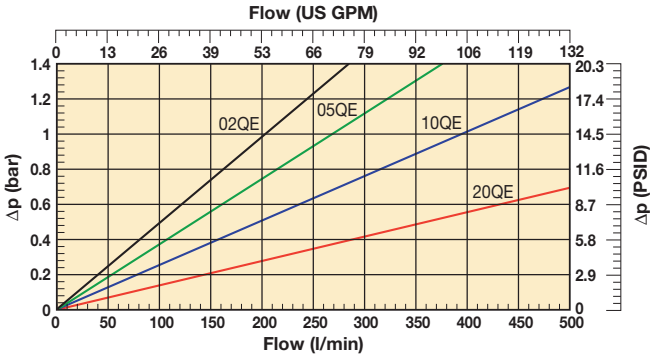
High Pressure Filters

Pressure Drop Curves (cont.)

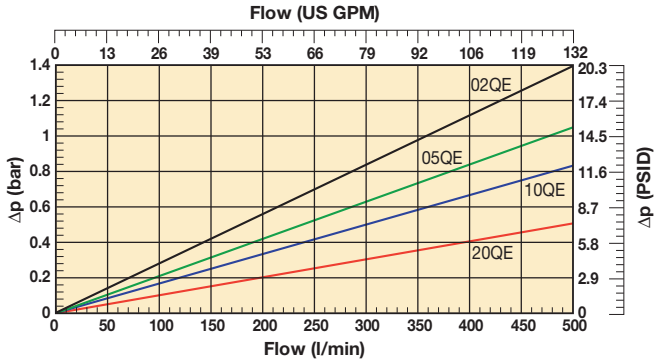
70-1 Elements with Ecoglass III



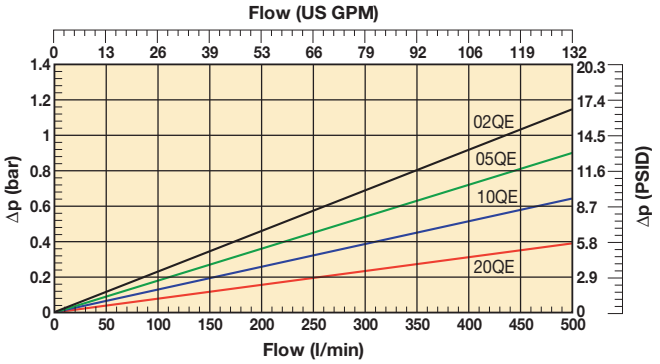
70-2 Elements with Ecoglass III



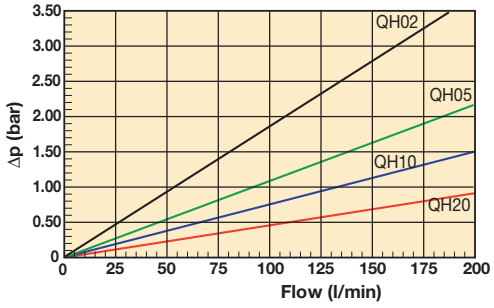
70-3 Elements with Ecoglass III



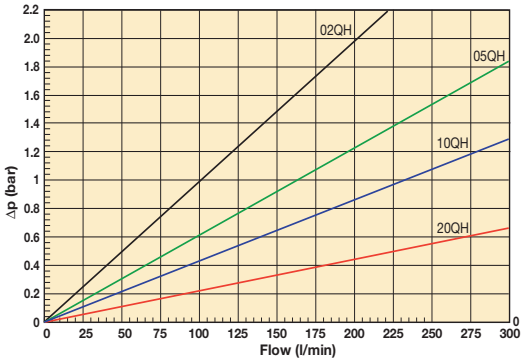
70-4 Elements with Ecoglass III



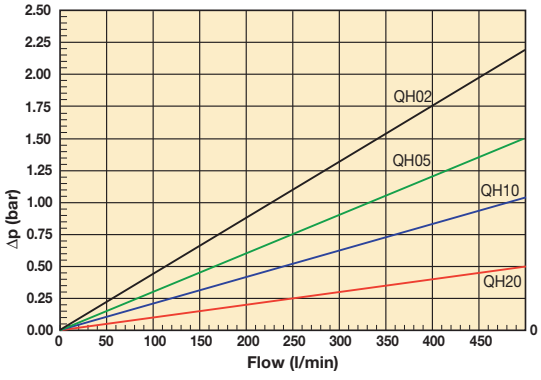
70-1 PRESSURE DROP CURVE
High Collapse FC7005



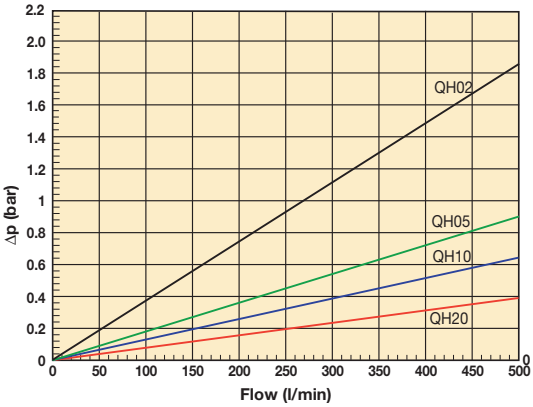
PRESSURE DROP CURVE
70-2 High Collapse FC7006



70-3 PRESSURE DROP CURVE
High Collapse FC7007



70-4 PRESSURE DROP CURVE
High Collapse FC7008



Ordering Information

Standard products table

Part number	Supersedes	Flow (l/min)	Model number	Element length	Media rating (µ)	Seals	Indicator	Bypass settings	Ports	Replacement elements	Supersedes
70L110QBPKG161	FF7005.Q010.BS35.GL16	150	70L	1	10	Nitrile	Plugged	3.5 bar	G1"	**938773Q**	FC7005.Q010.BK
70L120QBPKG161	FF7005.Q020.BS35.GL16	230	70L	1	20	Nitrile	Plugged	3.5 bar	G1"	**938774Q**	FC7005.Q020.BK
70L210QBPKG201	FF7006.Q010.BS35.GL20	280	70L	2	10	Nitrile	Plugged	3.5 bar	G1¼"	**938777Q**	FC7006.Q010.BK
70L220QBPKG201	FF7006.Q020.BS35.GL20	300	70L	2	20	Nitrile	Plugged	3.5 bar	G1¼"	**938778Q**	FC7006.Q020.BK
70L310QBPKG241	FF7007.Q010.BS35.GL24	400	70L	3	10	Nitrile	Plugged	3.5 bar	G1½"	**938781Q**	FC7007.Q010.BK
70L320QBPKG241	FF7007.Q020.BS35.GL24	430	70L	3	20	Nitrile	Plugged	3.5 bar	G1½"	**938782Q**	FC7007.Q020.BK
70L410QBPKG241	FF7008.Q010.BS35.GL24	430	70L	4	10	Nitrile	Plugged	3.5 bar	G1½"	**938785Q**	FC7008.Q010.BK
70L420QBPKG241	FF7008.Q020.BS35.GL24	450	70L	4	20	Nitrile	Plugged	3.5 bar	G1½"	**938786Q**	FC7008.Q020.BK
70L110QEBPKG161	FF7005.QE10.BS35.GL16	150	70L	1	10	Nitrile	Plugged	3.5 bar	G1"	**938789Q**	FC7005.QE10.BK
70L120QEBPKG161	FF7005.QE20.BS35.GL16	230	70L	1	20	Nitrile	Plugged	3.5 bar	G1"	**938790Q**	FC7005.QE20.BK
70L210QEBPKG201	FF7006.QE10.BS35.GL20	280	70L	2	10	Nitrile	Plugged	3.5 bar	G1¼"	**938793Q**	FC7006.QE10.BK
70L220QEBPKG201	FF7006.QE20.BS35.GL20	300	70L	2	20	Nitrile	Plugged	3.5 bar	G1¼"	**938794Q**	FC7006.QE20.BK
70L310QEBPKG241	FF7007.QE10.BS35.GL24	400	70L	3	10	Nitrile	Plugged	3.5 bar	G1½"	**938797Q**	FC7007.QE10.BK
70L320QEBPKG241	FF7007.QE20.BS35.GL24	430	70L	3	20	Nitrile	Plugged	3.5 bar	G1½"	**938798Q**	FC7007.QE20.BK
70L410QEBPKG241	FF7008.QE10.BS35.GL24	430	70L	4	10	Nitrile	Plugged	3.5 bar	G1½"	**938801Q**	FC7008.QE10.BK
70L420QEBPKG241	FF7008.QE20.BS35.GL24	450	70L	4	20	Nitrile	Plugged	3.5 bar	G1½"	**938802Q**	FC7008.QE20.BK
70T110QBPKG161	FF7005.Q010.BS35.GT16	150	70T	1	10	Nitrile	Plugged	3.5 bar	G1"	**938773Q**	FC7005.Q010.BK
70T120QBPKG161	FF7005.Q020.BS35.GT16	200	70T	1	20	Nitrile	Plugged	3.5 bar	G1"	**938774Q**	FC7005.Q020.BK
70T210QBPKG201	FF7006.Q010.BS35.GT20	260	70T	2	10	Nitrile	Plugged	3.5 bar	G1¼"	**938777Q**	FC7006.Q010.BK
70T220QBPKG201	FF7006.Q020.BS35.GT20	280	70T	2	20	Nitrile	Plugged	3.5 bar	G1¼"	**938778Q**	FC7006.Q020.BK
70T310QBPKG241	FF7007.Q010.BS35.GT24	360	70T	3	10	Nitrile	Plugged	3.5 bar	G1½"	**938781Q**	FC7007.Q010.BK
70T320QBPKG241	FF7007.Q020.BS35.GT24	380	70T	3	20	Nitrile	Plugged	3.5 bar	G1½"	**938782Q**	FC7007.Q020.BK
70T410QBPKG241	FF7008.Q010.BS35.GT24	360	70T	4	10	Nitrile	Plugged	3.5 bar	G1½"	**938785Q**	FC7008.Q010.BK
70T420QBPKG241	FF7008.Q020.BS35.GT24	380	70T	4	20	Nitrile	Plugged	3.5 bar	G1½"	**938786Q**	FC7008.Q020.BK
70T110QEBPKG161	FF7005.QE10.BS35.GT16	150	70T	1	10	Nitrile	Plugged	3.5 bar	G1"	**938789Q**	FC7005.QE10.BK
70T120QEBPKG161	FF7005.QE20.BS35.GT16	200	70T	1	20	Nitrile	Plugged	3.5 bar	G1"	**938790Q**	FC7005.QE20.BK
70T210QEBPKG201	FF7006.QE10.BS35.GT20	260	70T	2	10	Nitrile	Plugged	3.5 bar	G1¼"	**938793Q**	FC7006.QE10.BK
70T220QEBPKG201	FF7006.QE20.BS35.GT20	280	70T	2	20	Nitrile	Plugged	3.5 bar	G1¼"	**938794Q**	FC7006.QE20.BK
70T310QEBPKG241	FF7007.QE10.BS35.GT24	360	70T	3	10	Nitrile	Plugged	3.5 bar	G1½"	**938797Q**	FC7007.QE10.BK
70T320QEBPKG241	FF7007.QE20.BS35.GT24	380	70T	3	20	Nitrile	Plugged	3.5 bar	G1½"	**938798Q**	FC7007.QE20.BK
70T410QEBPKG241	FF7008.QE10.BS35.GT24	360	70T	4	10	Nitrile	Plugged	3.5 bar	G1½"	**938801Q**	FC7008.QE10.BK
70T420QEBPKG241	FF7008.QE20.BS35.GT24	380	70T	4	20	Nitrile	Plugged	3.5 bar	G1½"	**938802Q**	FC7008.QE20.BK

Note: Filter assemblies ordered from the product configurator on next page are on extended lead times. Where possible, please make your selection from the table above.

CN Series Seal Kits	
Part Number	**Description**
911045021	NITRILE SEAL KIT 70/70 Eco
911045051	FLUOROELASTOMER SEAL KIT 70/70 Eco

70/70 Eco Series
High Pressure Filters

Ordering Information (cont.)

Product configurator

Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8
70L	**3**	**10Q**	**B**	**M3**	**K**	**G24**	**1**

Box 1

Code	
Model	**Code**
High pressure filter with L-port	**70L**
High pressure filter with T-port	**70T**
High pressure filter with side manifold mounting	70B

Box 2

Filter type	
Length	**Code**
Length 1	**1**
Length 2	**2**
Length 3	**3**
Length 4	**4**

Box 3

Degree of filtration				
Element media	**Glass fibre**			
	Media code			
Microglass III element	**02Q**	**05Q**	**10Q**	**20Q**
Ecoglass III element	**02QE**	**05QE**	**10QE**	**20QE**
High collapse element	02QH	05QH	10QH	20QH

Note: When using Ecoglass III elements reusable Eco-adaptor is required

Box 4

Seal type	
Seal material	**Code**
Nitrile	**B**
Fluoroelastomer	V

Box 5

Indicator	
	Code
Plugged with steel plug	**P**
Visual indicator	**M3**
Electrical indicator	**T1**
Electronic 4 LED, PNP, N.O.	F1
Electronic 4 LED, NPN, N.O.	F2
Electronic 4 LED, PNP, N.C.	F3
Electronic 4 LED, NPN, N.C.	F4

Box 6

Bypass and indicator settings			
Bypass valve	**Indicator**	**Code**	
3.5 bar	2.5 bar	**K**	
No bypass	7.0 bar	N	+ Box 8: code 2
No bypass	No indicator (P)	X	+ Box 8: code 2

When filter includes a bypass valve but not an indicator, code denotes bypass setting.

Box 7

Filter connection					
Connections	**Code**	Length 1	Length 2	Length 3	Length 4
Thread G 1	**G16**	**S**	**S**	x	x
Thread G 1 ¼	**G20**	**S**	**S**	**S**	**S**
Thread G 1 ½	**G24**	x	**S**	**S**	**S**
SAE flange 1 ¼" 3000-M	R20	x	x	x	x
SAE flange 1 ½" 3000-M	R24	x	x	x	x
SAE flange 1 ¼" 6000-M	H20	x	x	x	x
SAE flange 1 ½" 6000-M	H24	x	x	x	x
Side manifold (70B only)	X32	x	x	x	x

Availability: **S** = standard product
x = non-standard, ask for availability

Box 8

Options	
Options	**Code**
Standard	**1**
No bypass	2
Drain port	4
70T: side indicator ports	6
70T: options 2 + 6	8

Options 6 and 8: in 70T model there is an option for 2 x indicator ports on filter outlet flange (standard indicator port not machined)
P: both side indicator ports plugged with steel plug
M3 or other indicator chosen: right side (in flow direction) port plugged with a plastic plug, left with a steel plug

Nominal flow (l/min) at viscosity 30 cSt

Filter length	Media	G16 T-port	G16 L-port & G20 T-port	G20 L-port & Side manifold	G24 T-port	G24 L-port
Length 1	02Q/02QE	80	80	80	80	80
	05Q/05QE	120	120	120	120	120
	10Q/10QE	150	150	150	150	150
	20Q/20QE	200	230	230	230	230
Length 2	02Q/02QE	160	160	160	160	160
	05Q/05QE	180	200	200	200	200
	10Q/10QE	220	260	280	300	320
	20Q/20QE	240	280	300	330	350
Length 3	02Q/02QE	200	220	220	220	220
	05Q/05QE	220	250	280	280	280
	10Q/10QE	240	280	300	350	400
	20Q/20QE	250	300	320	380	430
Length 4	02Q/02QE	220	250	270	270	270
	05Q/05QE	230	260	300	330	330
	10Q/10QE	250	280	330	360	430
	20Q/20QE	260	300	350	380	450

Replacement elements with nitrile seals

Media	Length 1	Length 2	Length 3	Length 4
02Q	**938771Q**	**938775Q**	**938779Q**	**938783Q**
05Q	**938772Q**	**938776Q**	**938780Q**	**938784Q**
10Q	**938773Q**	**938777Q**	**938781Q**	**938785Q**
20Q	**938774Q**	**938778Q**	**938782Q**	**938786Q**
02QE	**938787Q**	**938791Q**	**938795Q**	**938799Q**
05QE	**938788Q**	**938792Q**	**938796Q**	**938800Q**
10QE	**938789Q**	**938793Q**	**938797Q**	**938801Q**
20QE	**938790Q**	**938794Q**	**938798Q**	**938802Q**
02QH	938803Q	938807Q	938811Q	938815Q
05QH	938804Q	938808Q	938812Q	938816Q
10QH	938805Q	938809Q	938813Q	938817Q
20QH	938806Q	938810Q	938814Q	938818Q

Highlights Key (Denotes part number availability)

123	Item is standard
123	Item is standard green option
123	Item is semi standard
123	Item is non standard

Note: Standard items are in stock, semi standard items are available within four weeks

Degree of filtration						Code		
Average filtration beta ratio ß (ISO 16889) / particle size µm [c]								
ßx(c)=2	**ßx(c)=10**	**ßx(c)=75**	**ßx(c)=100**	**ßx(c)=200**	**ßx(c)=1000**			
% efficiency, based on the above beta ratio (ßx)						Disposable	Metal free	High collapse
50.0%	**90.0%**	**98.7%**	**99.0%**	**99.5%**	**99.9%**	Microglass III	Ecoglass III	element
N/A	N/A	N/A	N/A	N/A	4.5	**02Q**	**02QE**	02QH
N/A	N/A	4.5	5	6	7	**05Q**	**05QE**	05QH
N/A	6	8.5	9	10	12	**10Q**	**10QE**	10QH
6	11	17	18	20	22	**20Q**	**20QE**	20QH

Note 1: Part numbers featured with bold highlighted codes will ensure a 'standard' product selection.
Note 2: Alternate displayed part number selection will require you to contact Parker Filtration for availability.

Parker Hannifin
Hydraulic Filter Division Europe
FDHB500UK.

22PD/32PD Series

High Pressure Duplex Filters
Max 260 l/min - 210 bar

A duplex design with a wide application capability

Designed to offer continuous operation during element change

The 22PD/32PD Series utilizes a duplex design with integrated balancing valve and vent ports. Microglass lll glassfibre media is standard. Maximum pressure 210 bar. Maximum flow 260 l/min. A changeover valve operates on the upstream side of the filter, ensuring a contamination free system.

Contact Information:

Parker Hannifin
Hydraulic Filter Division Europe

European Product Information Centre
Freephone: 00800 27 27 5374
(from AT, BE, CH, CZ, DE, EE, ES, FI, FR, IE, IT, PT, SE, SK, UK)
filtrationinfo@parker.com

www.parkerhfde.com

Product Features:

- 22PD/32PD utilizes a duplex design with integrated balancing valve and vent ports.
- Microglass III glassfibre media is standard.
- Maximum pressure 210 bar. Maximum flow 260 l/min.
- Designed to offer continuous operation during element change.

22PD/32PD Series

High Pressure Duplex Filters

Features & Benefits

Features	Advantages	Benefits
Duplex design	Element service possible during operation	Allows to keep machine running with full contamination protection
Integrated balancing valve	No external piping required	Safety and reliability
Vent ports	Purges all trapped air in filter	Get the maximum performance from the elements
		Prevents a "flabby" system
Microglass III replacement elements	Multi-layered design produced high capacity and efficiency	Great performance value
		Reliable performance throughout element life
	Wire support reduces pleat bunching, keeps performance consistent	Reduces downtime, maximises element life
Visual, electrical and electronic indicators available	Check element condition at a glance	Optimises element life, prevents bypassing
	Right style for the application	Matches your system electrical connections

Typical Applications

- Ship steering systems
- Continuous operation industrial systems
- High flow flushing systems

The Parker Filtration 22PD/32PD Series High Pressure Duplex Filters.

Specially designed to offer continuous operation, even during element change.

A changeover valve operates on the upstream side of the filter, ensuring a contamination free system.

Specification

Pressure ratings:
Maximum allowable operating pressure 210 bar.
Filter housing pressure pulse fatigue tested: 10^6 cycles 210 bar.

Connections:
Inlet and outlet connections are threaded.

Connection style	*Model* 22PD	32PD
BSPF(G)	1"	1¼"
Flange SAE 3000-M	1¼"	1½"

*3000-M is a SAE style with appropriate metric fixing threads.

Filter housing:
Head material cast iron (GSI).
Bowl material steel.

Seal material:
Nitrile or Fluoroelastomer.

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

Bypass valve:
Opening pressure 3.5 bar

Filter element:
Degree of filtration:
Determined by multipass-test according to ISO 16889.

Flow fatigue characteristics:
Filter media is supported so that the optimal fatigue life is achieved (ISO 3724).

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

High collapse elements:
(to be used when no bypass function in filter housing).
Microglass III media supported with epoxy coated metal wire mesh on upstream and stainless steel on downstream, end cap material steel. Strong metal inner core. Collapse rating 210 bar (ISO 2941).

Indicator options:
Indicating differential pressure: 2.5 ± 0.3 bar.
- visual M3.
- electrical T1.
- electronic F1(PNP).
- electronic F2(NPN).

For indicator details see catalogue section 6.

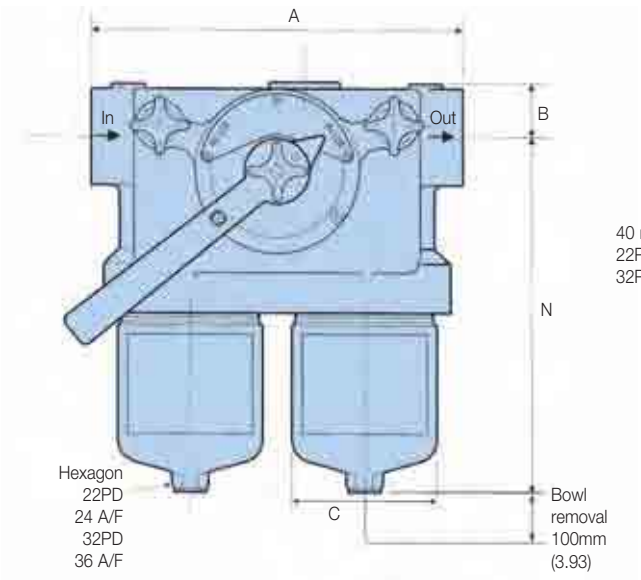
Weights (kg):

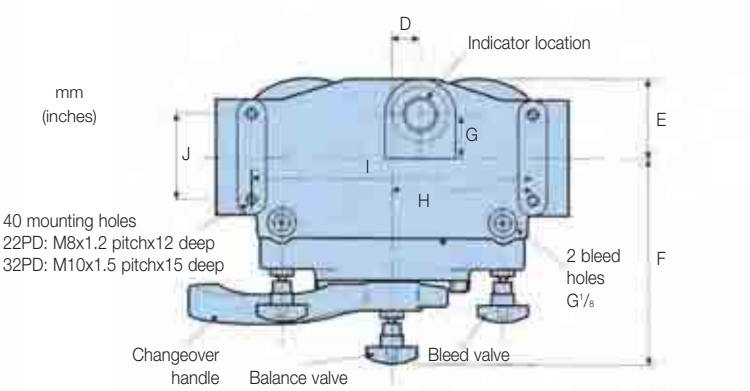
Model	*Length 1*	*Length 2*
22PD	22	27
32PD	44	50

Fluid compatibility:
Suitable for use with mineral and vegetable oils, and some synthetic oils. For other fluids, please consult Parker Filtration.

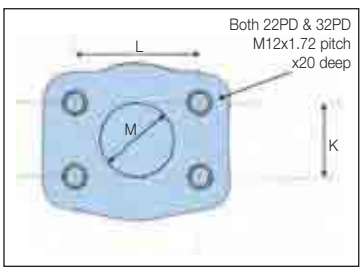
Dimensions mm (inches)

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N
22PD-1	240	35	92	18	55	150	150	96	192	60	30	59	30.75Ø	236 (9.29)
22-PD-2	(9.45)	(1.38)	(3.62)	(0.71)	(2.16)	(5.91)	(5.90)	(3.70)	(7.56)	(2.36)	(1.18)	(2.32)		345 (13.58)
32PD-1	306	42	130	20	78	170	165	120	240	75	36	70	38Ø	317 (12.48)
32PD-2	(12.05)	(1.65)	(5.12)	(0.79)	(3.07)	(6.69)	(6.49)	(4.72)	(9.45)	(2.95)	(1.42)	(2.75)		437 (17.20)





Flange face detail



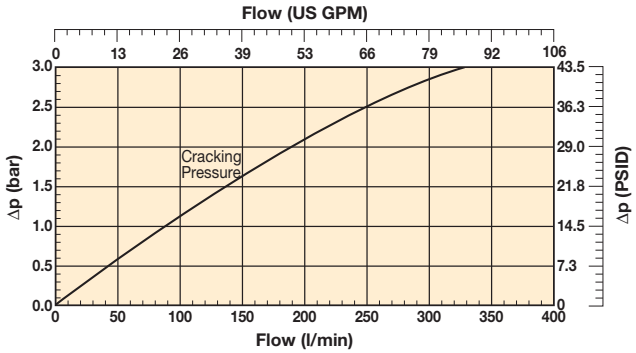
22PD/32PD Series

High Pressure Duplex Filters

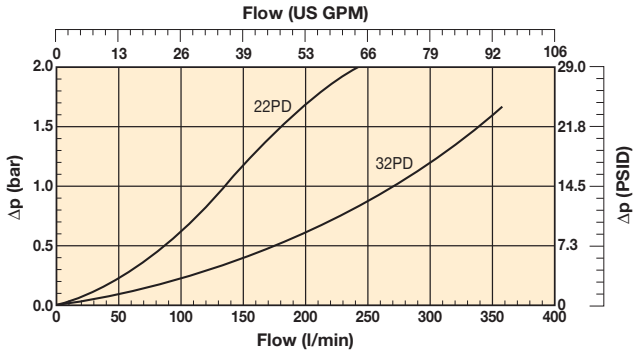
Pressure Drop Curves

The recommended level of initial pressure drop is max. 1.2 bar.
If the medium used has a viscosity different from 30 cSt, pressure drop over the filter can be estimated as follows:
Δp = (Δp30 x viscosity of medium used) / 30 cSt.
The total Δp = housing Δph + (element Δpe x working viscosity/30).

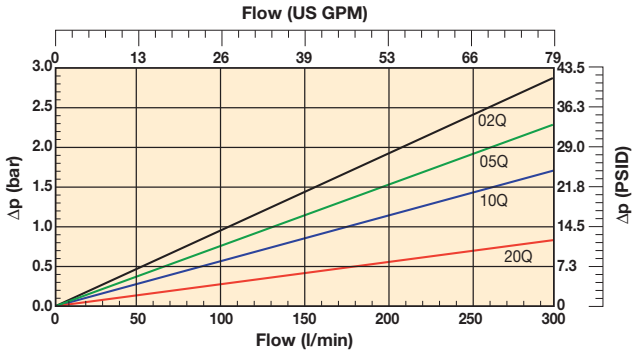
22PD/32PD Bypass Valve



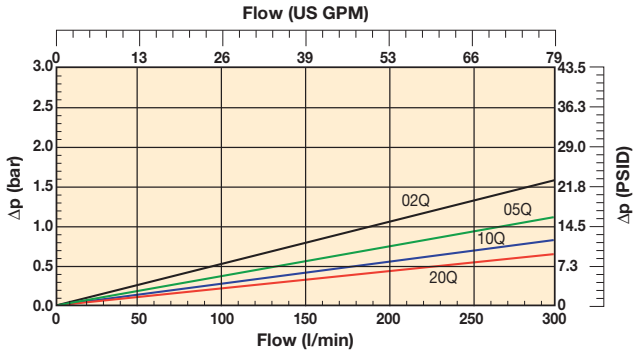
22PD/32PD Empty Housing



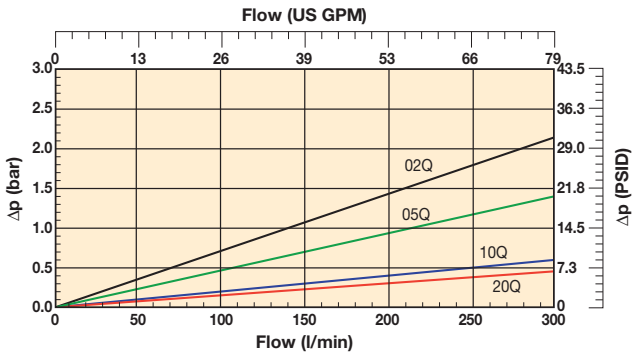
22PD-1 Elements



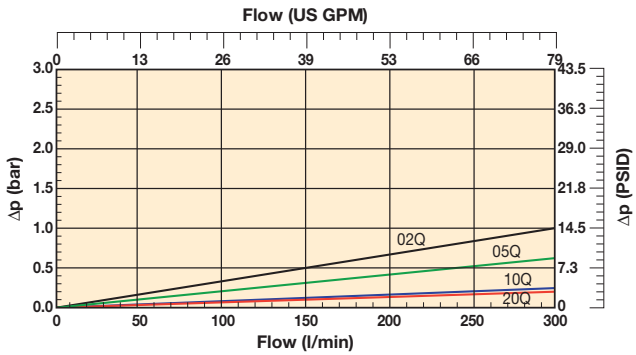
22PD-2 Elements



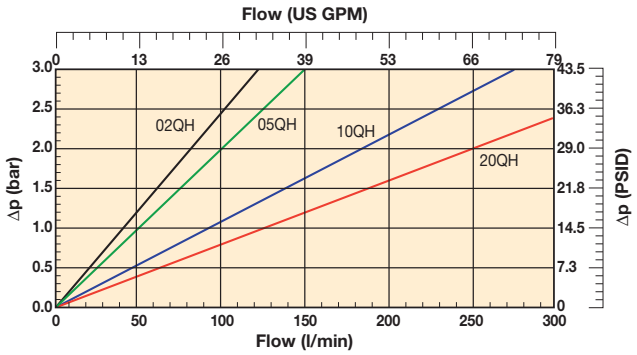
32PD-1 Elements



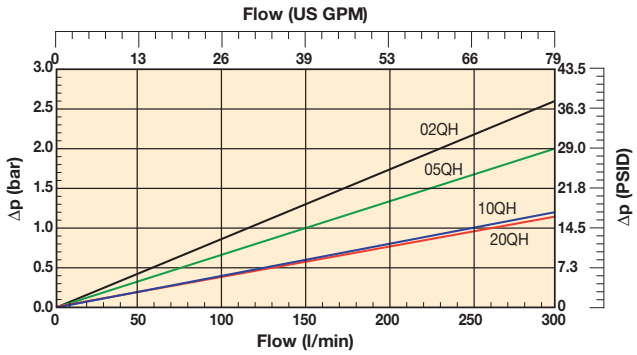
32PD-2 Elements



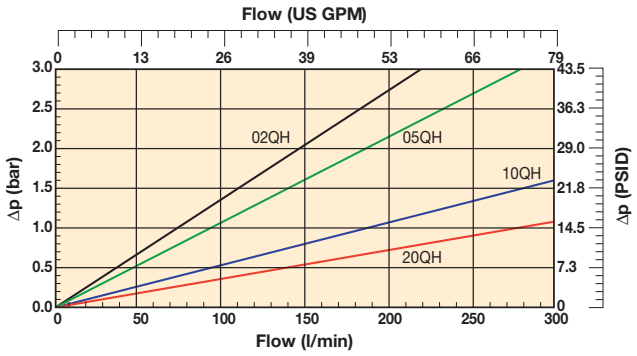
22PD-1 High Collapse Elements



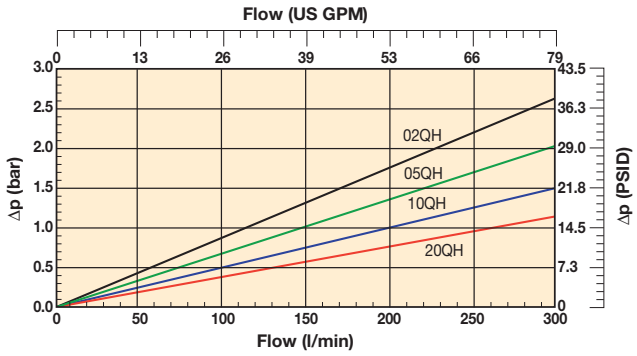
22PD-2 High Collapse Elements



32PD-1 High Collapse Elements



32PD-2 High Collapse Elements



Ordering Information

Standard products table

Part number	Supersedes	Flow (l/min)	Model number	Element length	Media rating (µ)	Seals	Indicator	Bypass settings	Ports	Replacement elements
22PD210QBM3KG161	0-22-PD-2-10Q-V-50-C-1	120	22PD	Length 2	10	Nitrile	Visual	3.5 bar	G1"	**G01315Q**
22PD210QBT1KG161	0-22-PD-2-10Q-TW3-50-C-1	120	22PD	Length 2	10	Nitrile	Electrical	3.5 bar	G1"	**G01315Q**
22PD220QBM3KG161	0-22-PD-2-20Q-V-50-C-1	140	22PD	Length 2	20	Nitrile	Visual	3.5 bar	G1"	**G01938Q**
22PD220QBT1KG161	0-22-PD-2-20Q-TW3-50-C-1	140	22PD	Length 2	20	Nitrile	Electrical	3.5 bar	G1"	**G01938Q**
32PD210QBM3KG201	0-32-PD-2-10Q-V-50-D-1	240	32PD	Length 2	10	Nitrile	Visual	3.5 bar	G1¼"	**G01098Q**
32PD210QBT1KG201	0-32-PD-2-10Q-TW3-50-D-1	240	32PD	Length 2	10	Nitrile	Electrical	3.5 bar	G1¼"	**G01098Q**
32PD220QBM3KG201	0-32-PD-2-20Q-V-50-D-1	260	32PD	Length 2	20	Nitrile	Visual	3.5 bar	G1¼"	**G01954Q**
32PD220QBT1KG201	0-32-PD-2-20Q-TW3-50-D-1	260	32PD	Length 2	20	Nitrile	Electrical	3.5 bar	G1¼"	**G01954Q**

Note: Filter assemblies ordered from the product configurator on the next page are on extended lead times. Where possible, please make your selection from the table above.

22PD/32PD Series Seal Kits	
Part Number	**Description**
S04233	NITRILE SEAL KIT 22PD
S04234	FLUOROELASTOMER SEAL KIT 22PD
S04234	NITRILE SEAL KIT 32PD
S04234	FLUOROELASTOMER SEAL KIT 32PD

22PD/32PD Series

High Pressure Duplex Filters

Ordering Information (cont.)

Product configurator

Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8
22PD	**2**	**10Q**	**B**	**M3**	**K**	**G16**	**1**

Box 1

Code	
Model	**Code**
Small high pressure duplex filter	**22PD**
Large high pressure duplex filter	**32PD**

Box 2

Filter type	
Length	**Code**
Length 1	**1**
Length 2	**2**

Box 3

Degree of filtration				
Element media	**Glass fibre**			
	Media code			
Microglass III element	02Q	05Q	**10Q**	**20Q**
High collapse element	02QH	05QH	10QH	20QH

Box 4

Seal type	
Seal material	**Code**
Nitrile	**B**
Fluoroelastomer	V

Box 5

Indicator	
	Code
Visual indicator	**M3**
Electrical indicator	**T1**
Plugged with steel plug	P
No indicator port	N
Electronic 4 LED, PNP, N.O.	F1
Electronic 4 LED, NPN, N.O.	F2
Electronic 4 LED, PNP, N.C.	F3
Electronic 4 LED, NPN, N.C.	F4

Box 6

Bypass and indicator settings			
Bypass valve	**Indicator**	**Code**	
3.5 bar	2.5 bar	**K**	
No bypass	5.0 bar	M	+ Box 8: code 2
No bypass	No indicator	X	+ Box 8: code 2

When filter includes a bypass valve but not an indicator, code denotes bypass setting.

Box 7

Filter connection	
Ports	**Code**
22PD: Thread G 1	**G16**
SAE flange 1 ¼" 3000-M	R20
32PD: Thread G 1 ¼	**G20**
SAE flange 1 ½" 3000-M	R24

Box 8

Options	
Options	**Code**
Standard	**1**
No bypass	2

Replacement elements with nitrile seals				
Media	22PD-1	22PD-2	32PD-1	32PD-2
02Q	**G01282Q**	**G01316Q**	**G01069Q**	**G01099Q**
05Q	**G02721Q**	**G02724Q**	**G02567Q**	**G02727Q**
10Q	**G01281Q**	**G01315Q**	**G01068Q**	**G01098Q**
20Q	**G01930Q**	**G01938Q**	**G01946Q**	**G01954Q**
02QH	G01442Q	G01448Q	G01454Q	G01460Q
05QH	G03737Q	G03738Q	G03739Q	G03740Q
10QH	G01441Q	G01447Q	G01453Q	G01459Q
20QH	G01932Q	G01940Q	G01948Q	G01956Q

Nominal flow (l/min) at viscosity 30 cSt				
Filter model	02Q	05Q	10Q	20Q
22PD-1	70	80	100	120
22PD-2	100	110	120	140
32PD-1	100	150	210	230
32PD-2	180	210	240	260

Seal kits		
Filter model	Nitrile	Fluoroelastomer
22PD	S04233	S04234
32PD	S03520	S03522

Replacement elements with fluoroelastomer seals				
Media	22PD-1	22PD-2	32PD-1	32PD-2
02Q	G01302Q	G01336Q	G01089Q	G01119Q
05Q	G02723Q	G02726Q	G02569Q	G02729Q
10Q	G01301Q	G01335Q	G01088Q	G01118Q
20Q	G01934Q	G01942Q	G01950Q	G01958Q
02QH	G01446Q	G01452Q	G01458Q	G01464Q
05QH	G04235Q	G04236Q	G04237Q	G04238Q
10QH	G01445Q	G01451Q	G01457Q	G01463Q
20QH	G01935Q	G01943Q	G01951Q	G01959Q

Highlights Key (Denotes part number availability)

123	Item is standard
123	Item is standard green option
123	Item is semi standard
123	Item is non standard

Note: Standard items are in stock, semi standard items are available within four weeks

Degree of filtration						Code	
Average filtration beta ratio ß (ISO 16889) / particle size µm [c]							
ßx(c)=2	**ßx(c)=10**	**ßx(c)=75**	**ßx(c)=100**	**ßx(c)=200**	**ßx(c)=1000**		
% efficiency, based on the above beta ratio (ßx)						Disposable	High collapse
50.0%	**90.0%**	**98.7%**	**99.0%**	**99.5%**	**99.9%**	Microglass III	element
N/A	N/A	N/A	N/A	N/A	4.5	**02Q**	02QH
N/A	N/A	4.5	5	6	7	**05Q**	05QH
N/A	6	8.5	9	10	12	**10Q**	10QH
6	11	17	18	20	22	**20Q**	20QH

Note 1: Part numbers featured with bold highlighted codes will ensure a 'standard' product selection.
Note 2: Alternate displayed part number selection will require you to contact Parker Filtration for availability.

Parker Hannifin
Hydraulic Filter Division Europe
FDHB500UK.