

GS Series

Medium Pressure Filters
Max. 350 l/min. - 40 bar



In-line peace of mind

Three different housing sizes and several media options allow a wide range of applications. Cast iron housings are operable up to 40 bars. Pre-filtration with magnets is available as well as several connection options.



Contact Information:

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Typical application examples.
At the top of each product
section, a 'typical application'
photo example has been
included.

Applications:

- Industrial gear boxes
- Heavy fuel oil filter for diesel engines
- Suction filter for fuel systems
- Medium pressure hydraulic filter

Providing heavy duty filtration solutions

Parker can provide correct filtration solutions for a multitude of fuel, gas, hydraulic oil and lubrication systems. A wide selection of low and medium pressure multi-purpose filters that offer several different filter elements – environmentally sound choices too – allowing highly customized solutions. Duplex filters and the ability to bank multiple filters together enables continuous filtration during element changes. Parker's heavy duty solutions for clean fluids and peace of mind.

Specification

Assembly:

In-line filter

Maximum operating pressure:

40 bar. For DN80 flanges 16 bar.

Nominal flow rate (30cSt):

350 l/min (21 m³/h)

Connections:

Threads G1 for GSN3 and G1½ for GS6 and GS7. GS7 is available also with flanges DN80/PN16.

Seal material:

Fluoroelastomer or optionally nitrile

Operating temperature:

-40°C...+100°C with Nitrile seals, -20°C...+120°C with Fluoroelastomer seals, -20°C...+160°C with metal mesh elements and Fluoroelastomer seals.

Housing material:

Cast iron

Weight:

See dimensions table

Magnet pack:

Available as option

Bypass valve:

Standard opening pressure 1.6 bar, optionally with blocked bypass

Indicator options:

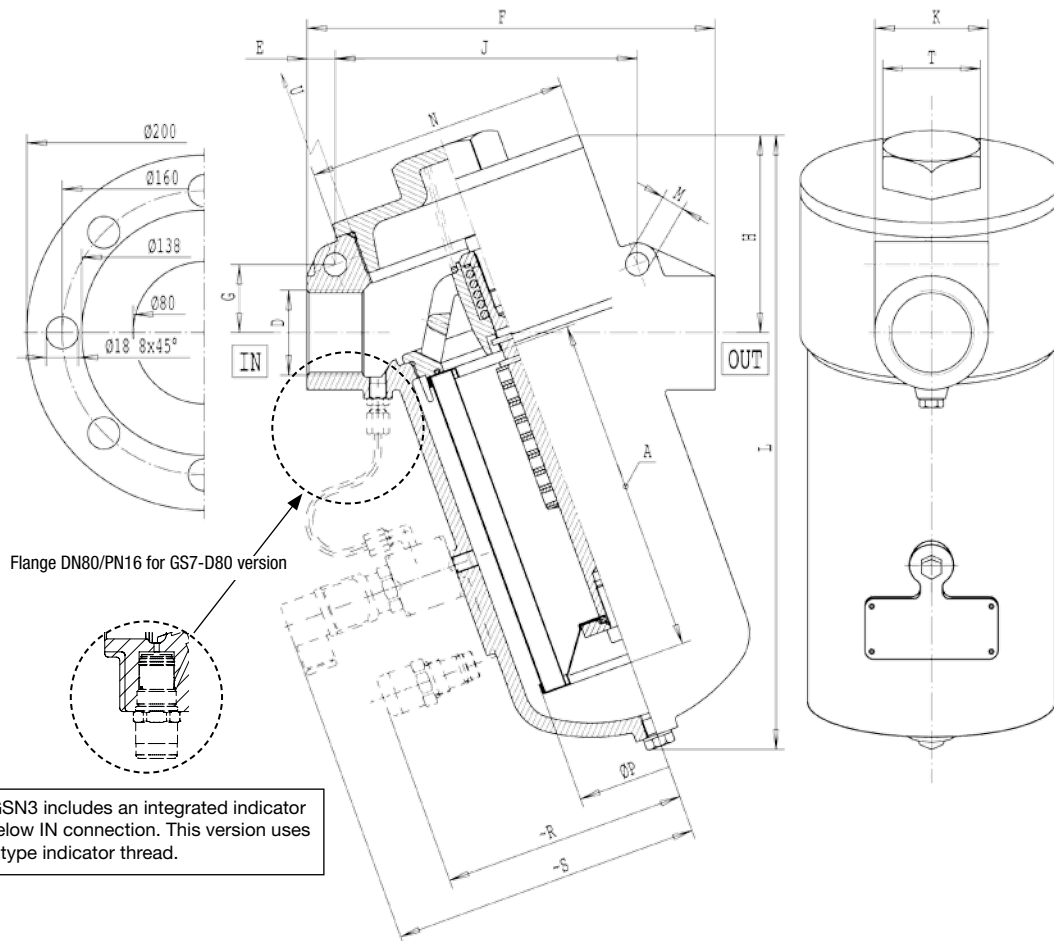
Visual, electrical or electronic indicator requires an indicator block. For details see indicator options table on product description page and catalogue section 4.

Filtration materials:

- Glassfibre Microglass III
- Cleanable metal mesh

Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils and fuel oils. For other fluids consult Parker Filtration.



Type	Weight	A	D	F	G	H	J	K	L	M	N	P	R	S	T	U
GSN3	5.5 kg	150	G1	170	27	83	125	45	280	11	108	71	118	159	32	200
GS6	12 kg	190	G1½	230	38	112	170	64	350	13	148	106	139	180	55	210
GS7	15 kg	260	G1½	230	38	112	170	64	420	13	148	106	139	180	55	240
GS7-D80	24 kg	260	80	310	-	112	-	200	420	-	148	106	139	180	55	240

GS Series

Pressure Drop Curves

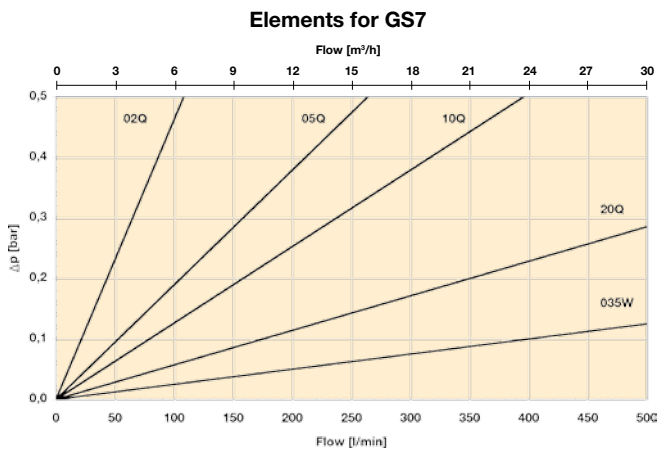
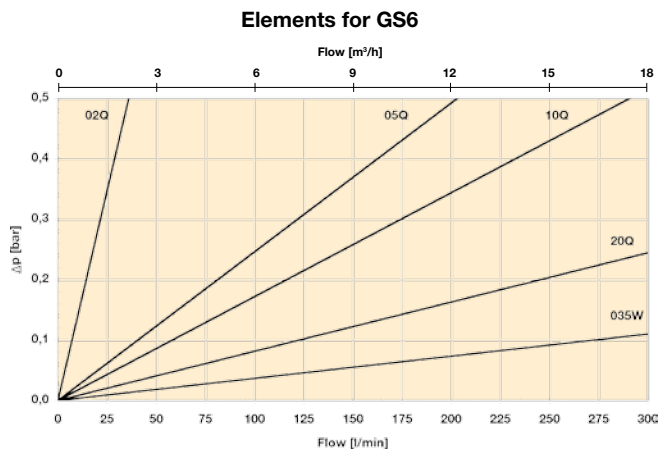
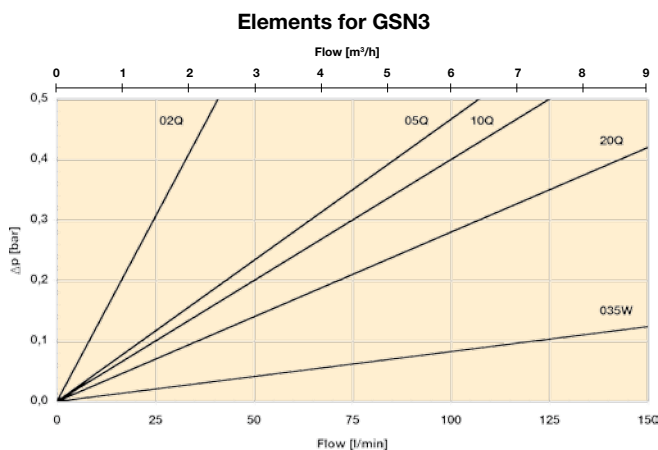
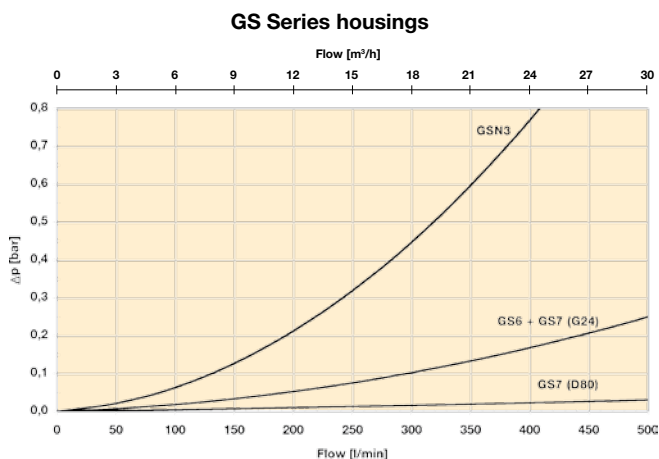
$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

The recommended level of the initial pressure drop for this filter is maximum 0.5 bar.

Δp -curves are measured at 30 cSt.

If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$



REPLACEMENT ELEMENTS (with Fluoroelastomer or Nitrile seal)

Media code	Order code for GSN3	Order code for GS6		Order code for GS7	
Glassfibre	Standard (no seal)	Fluoroelastomer	Nitrile	Fluoroelastomer	Nitrile
02Q	937973Q	938208Q	937747Q	938209Q	937746Q
05Q	937974Q	938361Q	937758Q	938364Q	937759Q
10Q	937952Q	938362Q	937783Q	938075Q	937782Q
20Q	937953Q	938363Q	937794Q	938005Q	937795Q
Cleanable metal mesh					
035W	939180	939182	NA	939184	NA
060W	939181	939183	NA	939185	NA

Product Description for GS Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Medium pressure filter, cast iron	GS

Table 2

FILTER SIZE	
Housing size - element length	CODE
1-90 (former 1087)	N3
2-170 (former 1088)	6
2-230 (former 1089)	7

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Microglass III	
Glassfibre 2 µm	02Q
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
Other medias	
Cleanable metal mesh 35 µm	035W
Cleanable metal mesh 60 µm	060W

Table 4

SEAL TYPE	
Seal material	CODE
Nitrile	B
Fluoroelastomer	V

Table 5

INDICATORS	
Options	CODE
No indicator block	N
Indicator port plugged	P
Visual indicator	M3
Electrical indicator	T1
Electronic indicator (PNP/N.O.)	F1
Electronic indicator (NPN/N.O.)	F2

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
1.6 bar/1.0 bar	F
No/No	X

Table 7

FILTER CONNECTIONS	
Port size	CODE
G1 (length N3)	G16
G1½ (length 6 and 7)	G24
Flange DN80 (length 7)	D80

Table 8

OPTIONS	
Options	CODE
With bypass and magnets	1
No bypass, with magnets	2
With bypass, no magnets	5
No bypass, no magnets	6
Safety guard, no bypass, no magnets	7

SPARE PARTS		
Seal kit	CODE	
Seal material	GSN3	GS6-7
Fluoroelastomer	918045044	918045038
Nitrile	918045034	918045023

Please note the bolded options reflect standard options with reduced lead-time.

GA Series

Medium Pressure Filters

Max. 230 l/min. 30 bar



Contamination-proof and customizable filter solution

Designed for various applications. In-out filter principle means there is no possibility for contaminated leak back into the system. Supplied with magnetic pre-filtration. Customizable for filter coolants thus ideal for metal cutting equipment. Visual or electronic differential pressure indicators and environmentally friendly filtration elements available.



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Applications:

- Gearboxes
- Bypass filtration
- Stone crushers
- Lube oil systems
- Metal cutting equipment

Specification

Assembly:

In-line filter

Maximum operating pressure:

30 bar

Nominal flow rate (30 cSt):

230 l/min (13.8 m³/h)

Connections:

Threaded BSP ports. SAE ports available by request.

Seal material:

Nitrile, optionally Fluoroelastomer or Neoprene

Operating temperature:

-40°C...+100°C with Nitrile seals, -20°C...+120°C with Fluoroelastomer seals. For other temperatures consult Parker Filtration.

Housing material:

Aluminium

Weight:

See dimensions table

Bypass setting:

Opening pressure standard 1.5 bar, optionally 0.8 bar, 2.0 bar or blocked bypass

Filtration materials:

- Ecoglass for *LEIF*® element with reusable metal element sleeve. *LEIF*® contributes to ISO14001.
- Glassfibre Microglass III
- Resin impregnated cellulose paper 10 µm nominal
- Cleanable metal mesh

Magnetic pack:

Standard

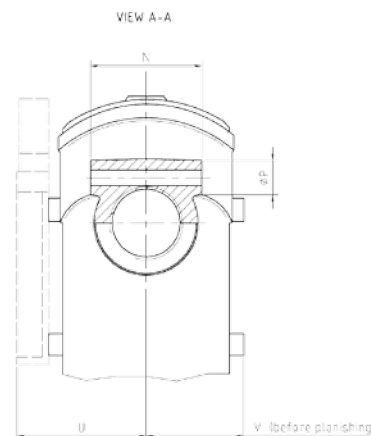
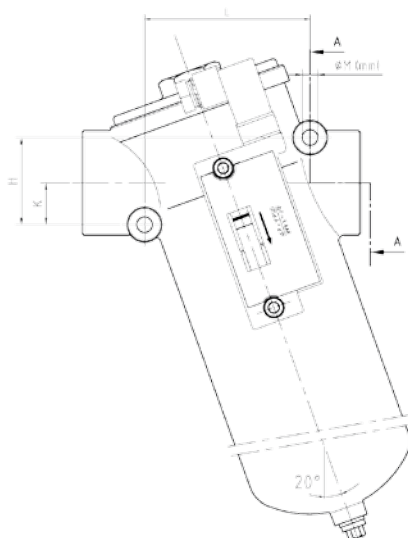
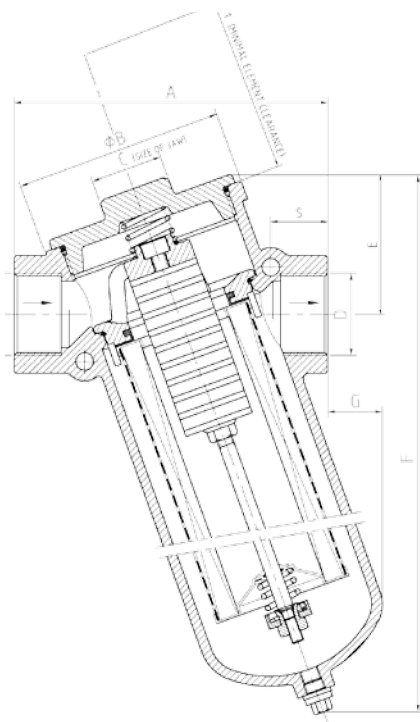
Differential pressure indicators:

Visual or Visual-electrical indicator

Setting 1.2 bar (for 2.0 bar and 1.5 bar bypass) or 0.7 bar (for 0.8 bar bypass)

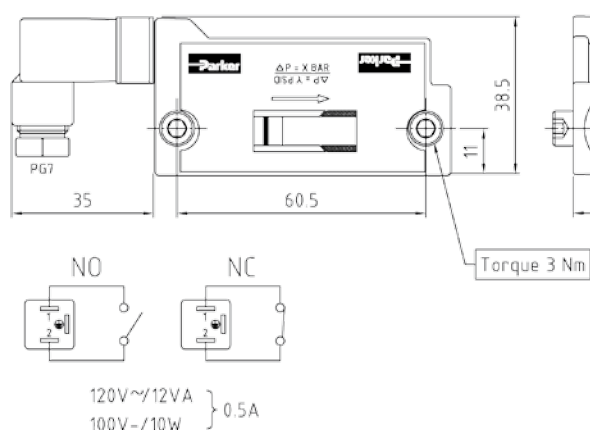
Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils. For other fluids consult Parker Filtration.

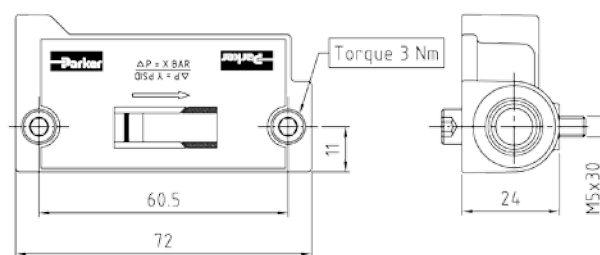


Type	A	B	C	D		E	F	G	H	K	L	M	N	P	S	T	U	V	Kg
				BSP ISO228	SAE														
GA1-30	150	106	32	G¾	12	70	180	3	50	24	95	9	44	20	28	143	86	63	2.1
GA1-60	160	106	32	G1	16	70	235	18	50	24	95	9	54	20	29	194	86	63	2.6
GA1-90	160	106	32	G1	16	70	275	29	50	24	95	9	54	20	29	238	86	63	3.2
GA1-120	160	106	32	G1¼	20	70	325	46	50	24	95	9	64	20	29	288	86	63	4.0
GA2-170	230	150	55	G1½	24	105	390	35	75	37	140	12	72	25	43	338	110	88	7.9
GA2-230	230	150	55	G1½	24	105	460	58	75	37	140	12	72	25	43	408	110	88	9.0

VISUAL/ELECTRICAL INDICATOR



VISUAL INDICATOR



Visual Indicator - Manifold connected to filter housing

Code (0.7 bar setting)	FMUD5BBAXXXL
Code (1.2 bar setting)	FMUD5EBAXXXL

Visual / Electrical Indicator - Manifold connected to filter housing

Code (0.7 bar setting and NO type switch)	FMUE5BBAXXXL
Code (1.2 bar setting and NO type switch)	FMUE5EBAXXXL
Electric rating	120Vac/12VA or 100Vdc/10W
Electrical connection	AMP terminal 6.3. x 0.8 with plugged cable gland
Protection	IP65
Switch type	NO (NC on request)

Pressure Drop Curves for Housing

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

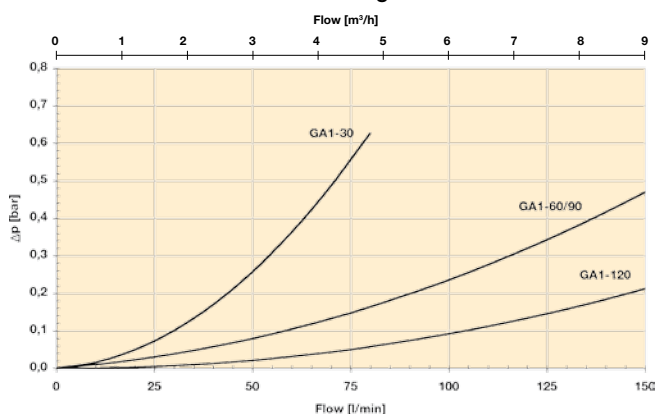
The recommended level of the initial pressure drop for this filter is maximum 0.5 bar.

Δp -curves are measured at 30 cSt.

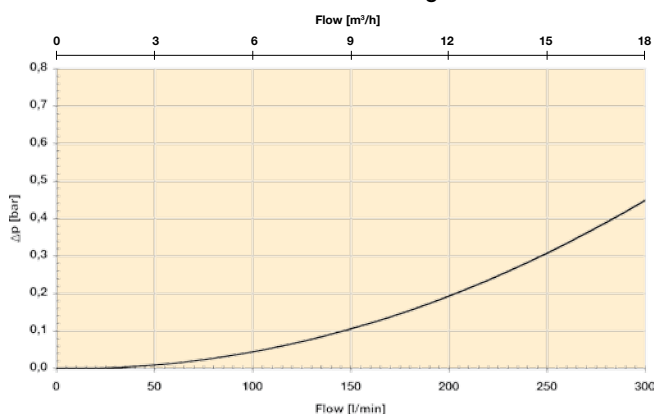
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

GA1 housings



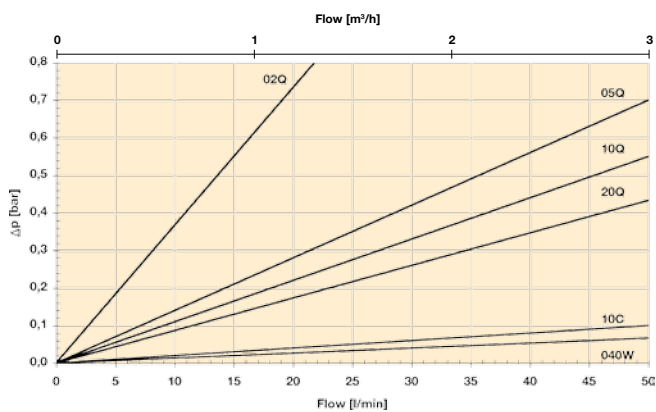
GA2-170/230 housings



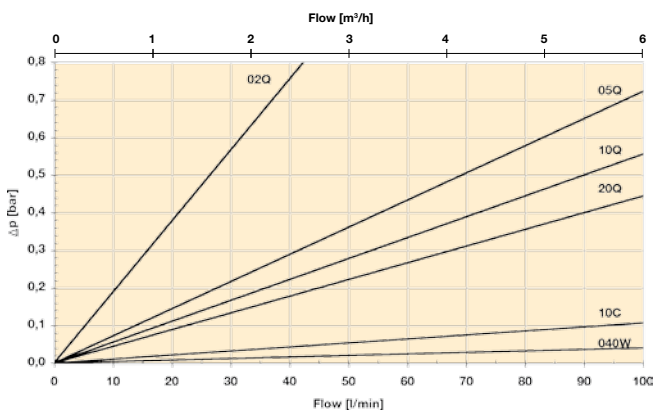
GA Series

Pressure Drop Curves for Elements

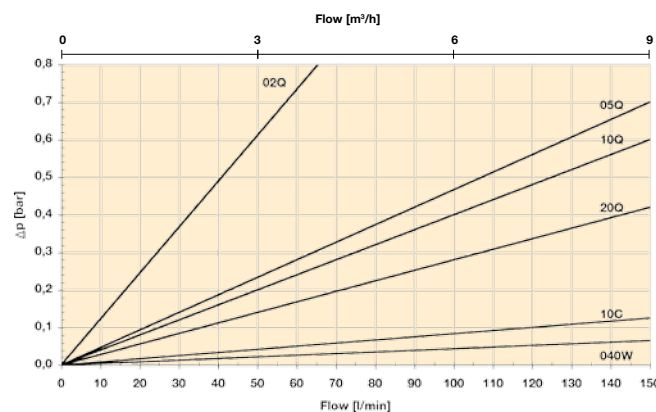
GA1-30 elements (Length 0)



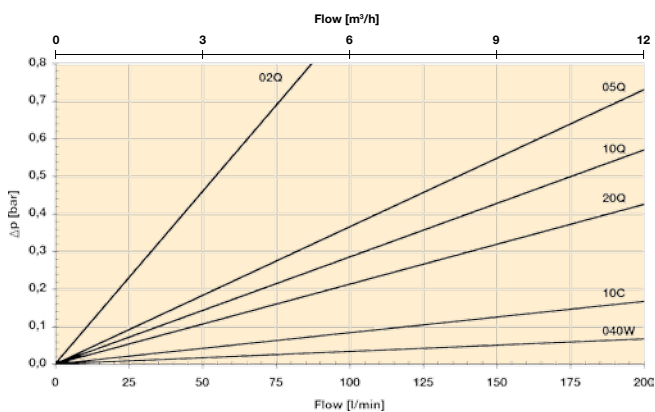
GA1-60 elements (Length 2)



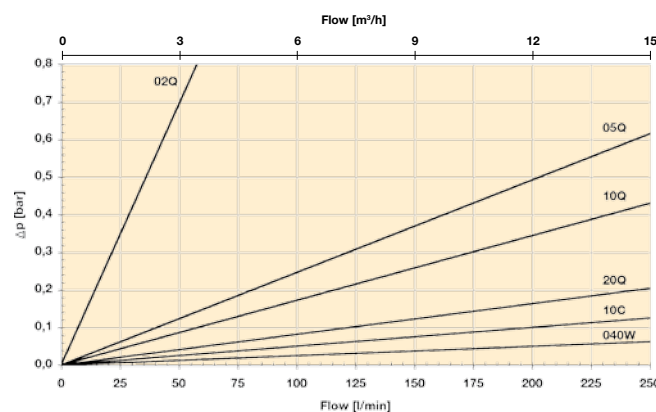
GA1-90 elements (Length 3)



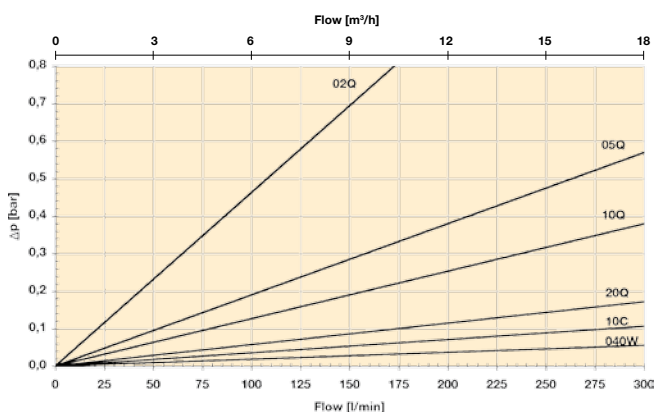
GA1-120 elements (Length 4)



GA2-170 elements (Length 6)



GA2-230 elements (Length 7)



GA Series

Medium Pressure Filters

Product Description for GA

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Medium pressure filter, aluminium	GA

Table 2

FILTER SIZE	
Housing size - element length	CODE
1-30	0
1-60	2
1-90	3
1-120	4
2-170	6
2-230	7

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Microglass III	
Glassfibre 2 µm	02Q
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
LEIF® elements	
Glassfibre 2 µm	02QL
Glassfibre 5 µm	05QL
Glassfibre 10 µm	10QL
Glassfibre 20 µm	20QL
Other medias	
Cellulose 10 µm (nom)	10C
Cleanable metal mesh 40 µm	040W

Table 4

SEAL TYPE	
Seal material	CODE
Nitrile	B
Fluoroelastomer	V
Neoprene	N

Table 5

INDICATORS	
Options	CODE
Visual indicator on right*	D3
Visual indicator on left*	D4
Visual-electrical indicator on right*	E3
Visual-electrical indicator on left*	E4
Both indicator ports plugged	P2

* Indicator ports on other side machined and plugged.

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
0.8 bar/0.7 bar	B
1.5 bar/1.2 bar	E
2.0 bar/1.2 bar	H
No/No	X

Table 7

FILTER CONNECTIONS	
Port size	CODE
G¾ (length 0)	G12
G1 (length 2 and 3)	G16
G1¼ (length 4)	G20
G1½ (length 6 and 7)	G24

Table 8

OPTIONS	
Options	CODE
With bypass and magnets	1
No bypass, with magnets	2
With bypass, no magnets	5
No bypass, no magnets	6

CONVENTIONAL TYPE REPLACEMENT ELEMENTS WITH NITRILE SEALS

Element length	Housing size	Microglass III				Cellulose 10 µm (nom)	Cleanable metal mesh 40 µm
		02Q	05Q	10Q	20Q		
0	1 - 30	937752Q	937753Q	937788Q	937789Q	937720	937821
2	1 - 60	937751Q	937754Q	937787Q	937790Q	937721	937820
3	1 - 90	937750Q	937755Q	937786Q	937791Q	937722	937819
4	1 - 120	937749Q	937756Q	937785Q	937792Q	937723	937818
6	2 - 170	937747Q	937758Q	937783Q	937794Q	937725	937816
7	2 - 230	937746Q	937759Q	937782Q	937795Q	937726	937815

LEIF® REPLACEMENT ELEMENTS

Element length	Housing size	Ecoglass III			
		02QL	05QL	10QL	20QL
0	1 - 30	937822Q	937885Q	937884Q	937883Q
2	1 - 60	937823Q	937880Q	937881Q	937882Q
3	1 - 90	937824Q	937879Q	937878Q	937877Q
4	1 - 120	937825Q	937850Q	937851Q	937876Q
6	2 - 170	937827Q	937848Q	937853Q	937874Q
7	2 - 230	937828Q	937847Q	937854Q	937873Q

SPARE PARTS

Seal kit	CODE	
Seal material	GA0-4	GA6-7
Nitrile	2049010009	2049010010
Fluoroelastomer	2049010031	2049010032
Neoprene	2049010038	2049010039

Please note the bolded options reflect standard options with reduced lead-time.

BGAH Series

Medium Pressure Filters

Max. 500 l/min. 25 bar



In-line solution for a straight pipeline

Pre-filtration by magnet column and a full-flow bypass with low hysteresis. Contamination-proof in-out filter principle. In- and outlet configuration allows integration in a straight pipeline. Nominal flow rate up to 500 l/min. Highly customizable for different applications.



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Applications:

- Industrial gearboxes
- Wind turbines
- Stone crushers
- Bypass and off-line filtration
- Designed for hydraulic and lube applications

Specification

Assembly:

In-line filter

Maximum operating pressure:

25 bar

Nominal flow rate (30 cSt):

500 l/min (30 m³/h)

Connections:

Flanges SAE 3" 3000-M

Seal material:

Nitrile, optionally Fluoroelastomer or Neoprene

Operating temperature:

-40°C...+100°C with Nitrile seals, -20°C...+120°C with Fluoroelastomer seals. For other temperatures consult Parker Filtration.

Housing material:

Aluminium

Weight:

BGAH 3-400: 21 kg

BGAH 3-500: 28 kg

Bypass setting:

Opening pressure standard 1.5 bar, optionally 0.8 bar, 2.0 bar or blocked bypass

Filtration materials:

- Ecoglass for **LEIF**® element with reusable metal element sleeve. **LEIF**® contributes to ISO14001.
- Glassfibre Microglass III
- Resin impregnated cellulose paper 10µm nominal
- Cleanable metal mesh

Magnetic pack:

Standard

Differential pressure indicators:

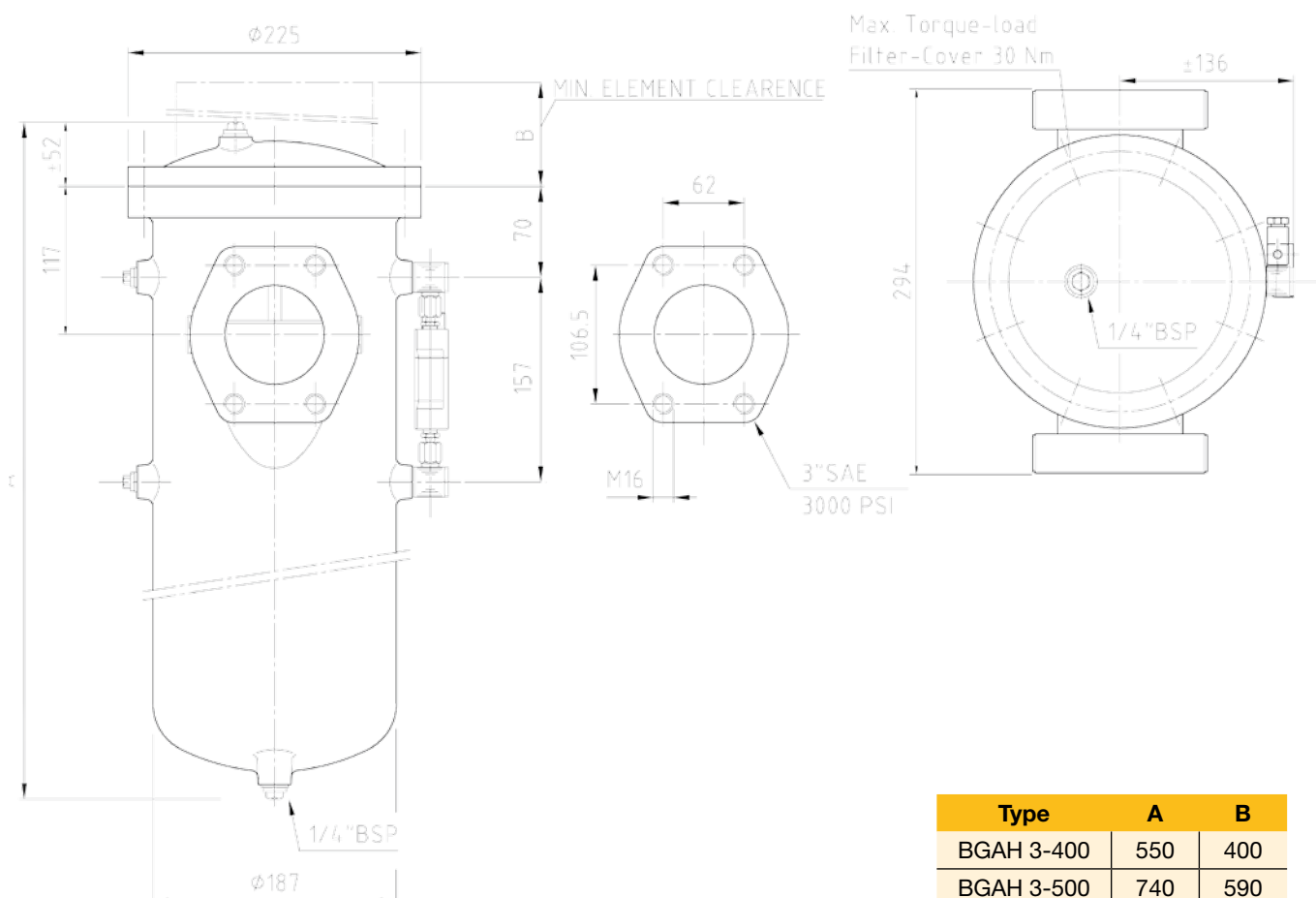
Visual or Visual-electrical indicator

Setting 1.2 bar (for 2.0 bar and 1.5 bar bypass)

or 0.7 bar (for 0.8 bar bypass)

Fluid compatibility:

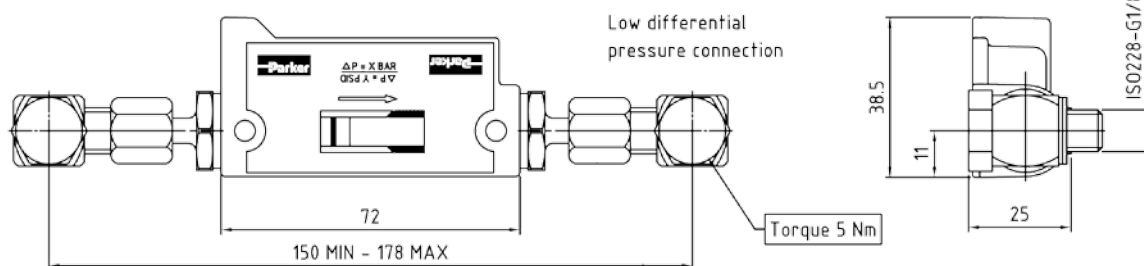
Suitable for use with regular hydraulic and lubrication oils. For other fluids consult Parker Filtration.



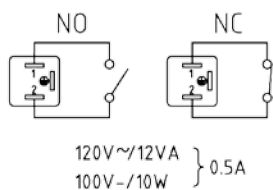
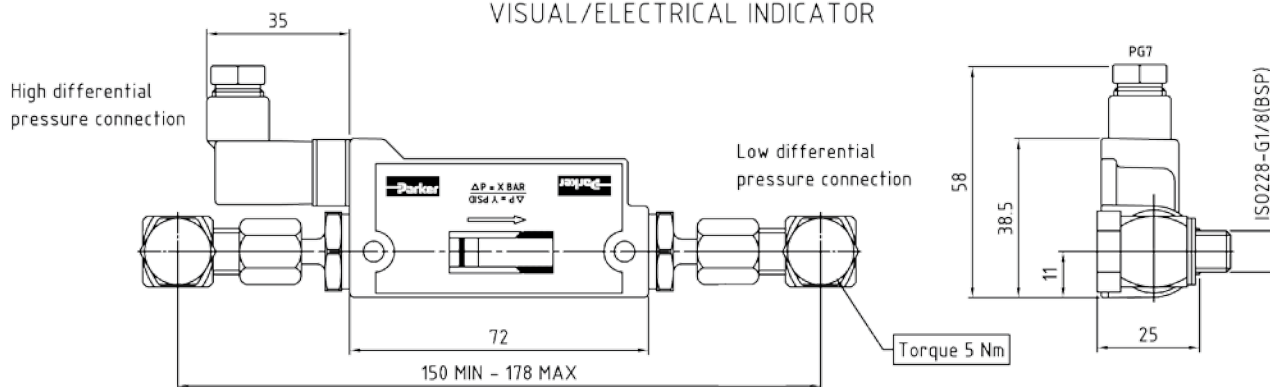
Type	A	B
BGAH 3-400	550	400
BGAH 3-500	740	590

High differential
pressure connection

VISUAL INDICATOR



VISUAL/ELECTRICAL INDICATOR



Visual Indicator - Mounted with couplings to filter housing

Code (0.7 bar setting)	FMUDABBA155L
Code (1.2 bar setting)	FMUDAEBBA155L

Visual / Electrical Indicator - Mounted with couplings to filter housing

Code (0.7 bar setting and NO type switch)	FMUEBBBA155L
Code (1.2 bar setting and NO type switch)	FMUEBEBBA155L
Electric rating	120Vac/12VA or 100Vdc/10W
Electrical connection	AMP terminal 6.3. x 0.8 with plugged cable gland
Protection	IP65
Switch type	NO (NC on request)

BGAH Series

Pressure Drop Curves

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

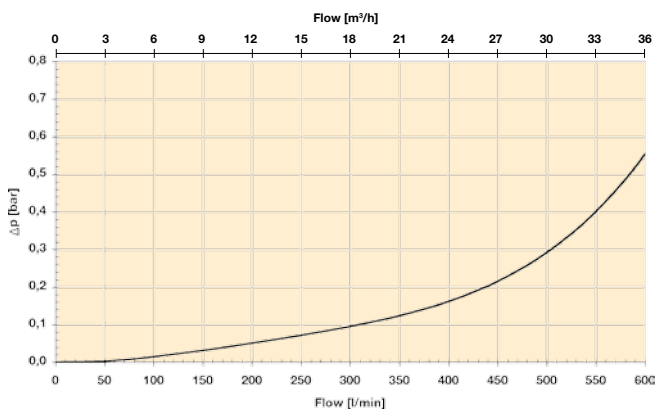
The recommended level of the initial pressure drop for this filter is maximum 0.5 bar.

Δp -curves are measured at 30 cSt.

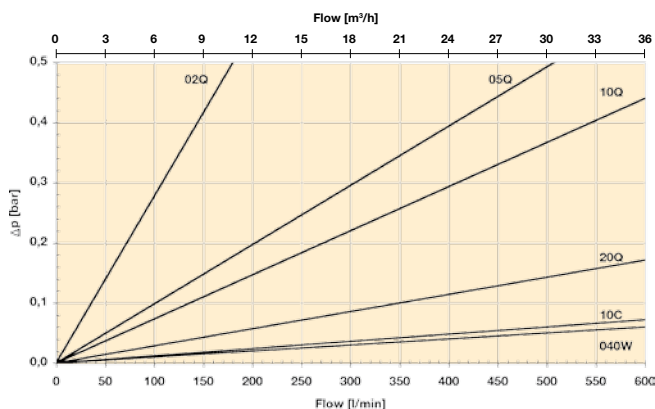
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

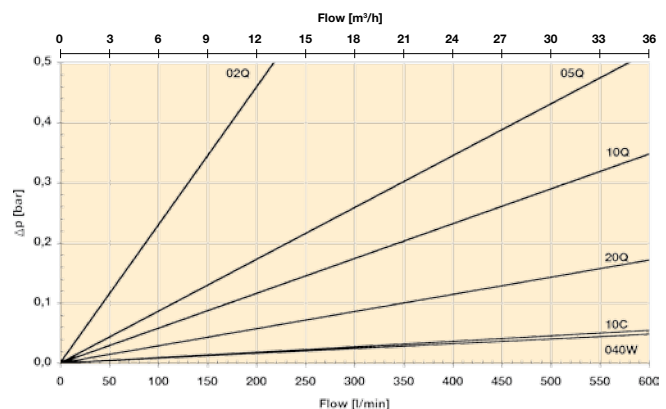
BGAH housing



BGAH 3-400 elements (Length 11)



BGAH 3-500 elements (Length 12)



BGAH Series

Medium Pressure Filters

Product Description for BGAH

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Medium pressure filter, aluminium	BGAH

Table 2

FILTER SIZE	
Housing size - element length	CODE
3-400	11
3-500	12

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Microglass III	
Glassfibre 2 µm	02Q
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
LEIF® elements	
Glassfibre 2 µm	02QL
Glassfibre 5 µm	05QL
Glassfibre 10 µm	10QL
Glassfibre 20 µm	20QL
Other medias	
Cellulose 10 µm (nom)	10C
Cleanable metal mesh 40 µm	040W

Table 4

SEAL TYPE	
Seal material	CODE
Nitrile	B
Fluoroelastomer	V
Neoprene	N

Table 5

INDICATORS	
Options	CODE
Visual indicator on right*	D8
Visual indicator on left*	D9
Visual-electrical indicator on right*	E9
Visual-electrical indicator on left*	EA
Both indicator ports plugged	P2

* Indicator ports on other side machined and plugged.

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
0.8 bar/0.7 bar	B
1.5 bar/1.2 bar	E
2.0 bar/1.2 bar	H
No/No	X

Table 7

FILTER CONNECTIONS	
Port size	CODE
SAE flange 3"-3000M	R48

Table 8

OPTIONS	
Options	CODE
With bypass and magnets	1
No bypass, with magnets	2
With bypass, no magnets	5
No bypass, no magnets	6

CONVENTIONAL TYPE REPLACEMENT ELEMENTS WITH NITRILE SEALS

Element length	Housing size	Microglass III				Cellulose 10 µm (nom)	Cleanable metal mesh 40 µm
		02Q	05Q	10Q	20Q		
11	3-400	937742Q	937763Q	937778Q	937799Q	937728	937813
12	3-500	937741Q	937764Q	937777Q	937800Q	937729	937812

LEIF® REPLACEMENT ELEMENTS

Element length	Housing size	Ecoglass III			
		02QL	05QL	10QL	20QL
11	3-400	937832Q	937843Q	937858Q	937869Q
12	3-500	937833Q	937842Q	937859Q	937868Q

SPARE PARTS

Seal kit	CODE
Seal material	
Nitrile	2049010000
Fluoroelastomer	2049010055
Neoprene	2049010034

Please note the bolded options reflect standard options with reduced lead-time.

BGLS Series

Low Pressure Filters

Max. 2000 l/min. 10 bar



Heavy duty in-line filter solution

Upper housing aluminium and lower housing steel allows low weight combined to high capacity. Magnetic pre-filtration and nominal flow up to 2000 l/min.



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.parker.com/hfde

Applications:

- Lubrication systems
- Wind turbines
- Hydraulic presses
- Large industrial gearboxes

Specification

Assembly:

In-line filter

Maximum operating pressure:

10 bar

Nominal flow rate (30 cSt):

2000 l/min (120 m³/h)

Connections:

Flanges SAE 3" 3000-M

Seal material:

Nitrile, optionally Fluoroelastomer

Operating temperature:

-40°C...+100°C with Nitrile seals, -20°C...+120°C with Fluoroelastomer seals. For other temperatures consult Parker Filtration.

Housing material:

Upper housing aluminium, lower housing steel

Weight:

BGLS 4-1000: 56 kg

BGLS 4-1500: 65 kg

BGLS 4-2000: 75 kg

Bypass setting:

Opening pressure standard 1.5 bar, optionally 0.8 bar, 2.0 bar or blocked bypass

Filtration materials:

- Ecoglass for *LEIF*® element with reusable metal element sleeve. *LEIF*® contributes to ISO14001.
- Glassfibre Microglass III
- Resin impregnated cellulose paper 10µm nominal
- Cleanable metal mesh

Magnetic pack:

Standard

Differential pressure indicators:

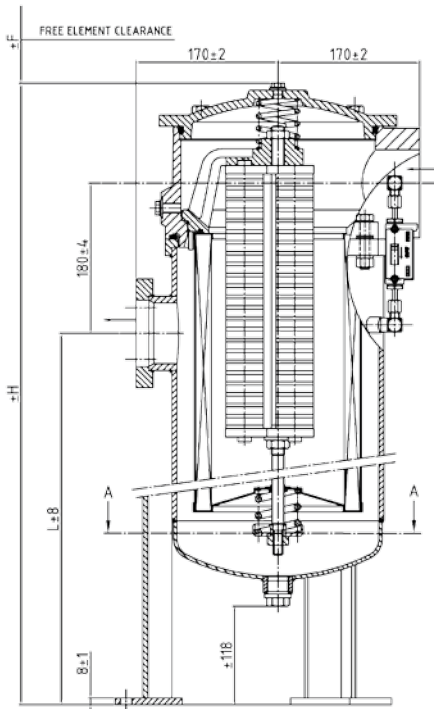
Visual or Visual-electrical indicator, see page 200.

(In ordering code, replace 155 with 178).

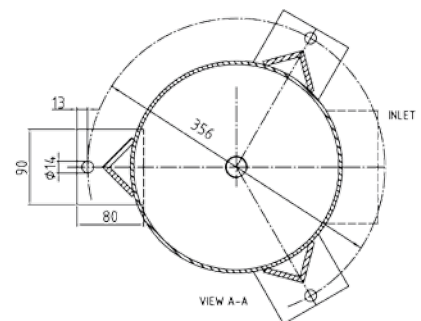
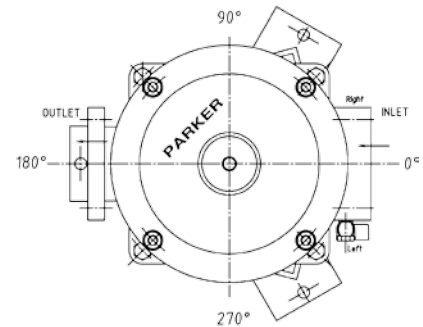
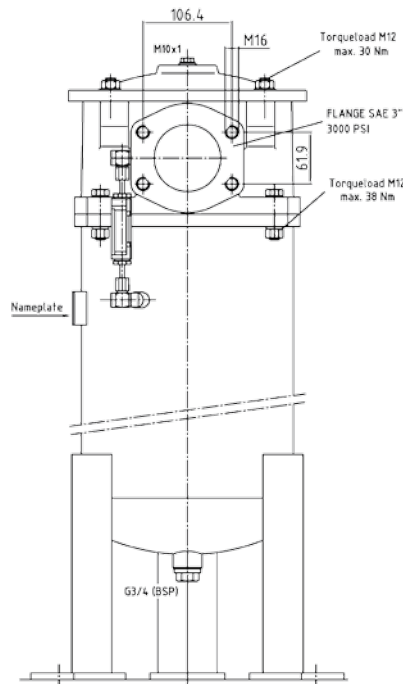
Setting 1.2 bar (for 2.0 bar and 1.5 bar bypass) or 0.7 bar (for 0.8 bar bypass).

Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils. For other fluids consult Parker Filtration.



Indicator details, see page 16.



Type	H	L	F
1000	975	635	735
1500	1255	915	1015
2000	1520	1180	1280

BGLS Series

Pressure Drop Curves

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

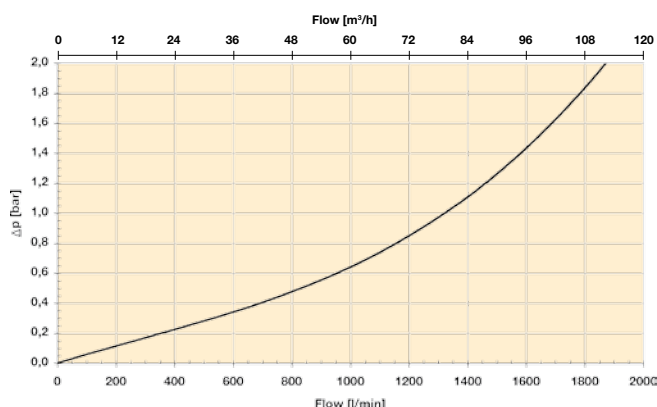
The recommended level of the initial pressure drop for this filter is maximum 0.5 bar.

Δp -curves are measured at 30 cSt.

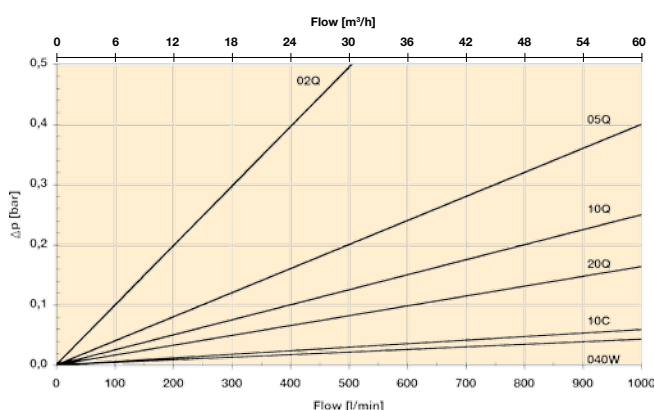
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

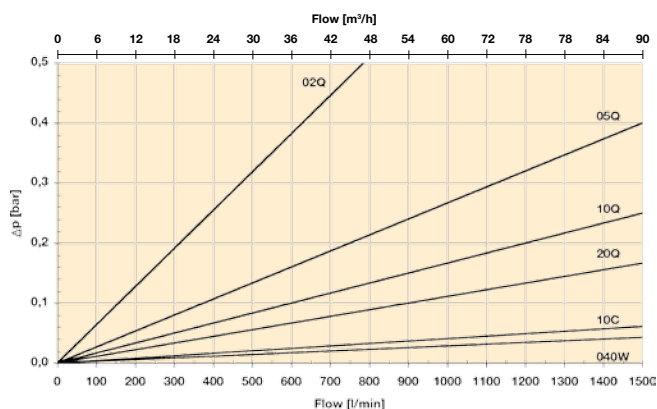
BGLS housing



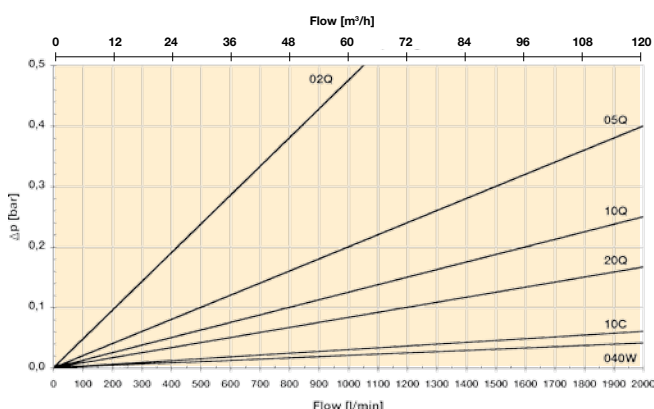
BGLS 4-1000 elements (Length 15)



BGLS 4-1500 elements (Length 16)



BGLS 4-2000 elements (Length 17)



CONVENTIONAL TYPE REPLACEMENT ELEMENTS WITH NITRILE SEALS

Element length	Housing size	Microglass III				Cellulose 10 µm (nom)	Cleanable metal mesh 40 µm
		02Q	05Q	10Q	20Q		
15	4-1000	937738Q	937767Q	937774Q	937803Q	937732	937809
16	4-1500	937737Q	937768Q	937773Q	937804Q	937733	937808
17	4-2000	937736Q	937769Q	937772Q	937805Q	937734	937807

Product Description for BGLS

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Medium pressure filter, upper housing aluminium, lower housing steel	BGLS

Table 2

FILTER SIZE	
Housing size - element length	CODE
4-1000	15
4-1500	16
4-2000	17

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Microglass III	
Glassfibre 2 µm	02Q
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
LEIF® elements (not available for length 17)	
Glassfibre 2 µm	02QL
Glassfibre 5 µm	05QL
Glassfibre 10 µm	10QL
Glassfibre 20 µm	20QL
Other medias	
Cellulose 10 µm (nom)	10C
Cleanable metal mesh 40 µm	040W

Table 4

SEAL TYPE	
Seal material	CODE
Nitrile	B
Fluoroelastomer	V

Table 5

INDICATORS	
Options	CODE
Visual indicator on right	D6
Visual indicator on left	D7
Visual-electrical indicator on right	E7
Visual-electrical indicator on left	E8
Plugged indicator ports on right	P

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
0.8 bar/0.7 bar	B
1.5 bar/1.2 bar	E
2.0 bar/1.2 bar	H
No/No	X

Table 7

FILTER CONNECTIONS	
Port size/outlet direction	CODE
SAE flange 3"-3000M/front (0°)	R48F
SAE flange 3"-3000M/right (90°)	R48R
SAE flange 3"-3000M/back (180°)	R48B
SAE flange 3"-3000M/left (270°)	R48L

Table 8

OPTIONS	
Options	CODE
With bypass and magnets	1
No bypass, with magnets	2
With bypass, no magnets	5
No bypass, no magnets	6

LEIF® REPLACEMENT ELEMENTS					
Element length	Housing size	Ecoglass III			
		02QL	05QL	10QL	20QL
15	4-1000	937836Q	937839Q	937862Q	937865Q
16	4-1500	937837Q	937838Q	937863Q	937864Q
17	4-2000	NA	NA	NA	NA

SPARE PARTS	
Seal kit	CODE
Seal material	
Nitrile	2049010023

Please note the bolded options reflect standard options with reduced lead-time.

SF1040 Series

Low Pressure Filters

Max. 1400 l/min. 10 bar



Multi-purpose filter for gas and high flow fluid systems

Strong welded steel construction housing features DN80 or DN100 connections. Several media options including PED 3 classified versions for gas applications. As options available safety filter to secure filtration even in by pass situations, and differential pressure indicator for accurate operation control.



Contact Information:

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FI, FR, IE, IT, PT, SE, SK, UK)**
filtrationinfo@parker.com

www.parker.com/hfde

Applications:

- Lubricating oil filter for industrial systems
- Gas fine filter for combustion engines
- Fuel oil filter for high flow systems
- Large in line low-pressure filter for hydraulic systems

Specification

Assembly:

In-line filter, vertical installation or optionally horizontal installation. Includes 2 elements.

Maximum operating pressure:

10 bar

Nominal flow rate (30 cSt):

1400 l/min (84 m³/h)

Connections:

Flanges DN80/PN16 or DN100/PN16

Seal material:

Fluoroelastomer

Operating temperature:

-20°C...+120°C, with Fluoroelastomer seals,

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

Housing material:

Steel or stainless steel

Weight:

100 kg

Bypass valve:

Standard without bypass. Optionally opening pressure 2.0 bar.

Filtration materials:

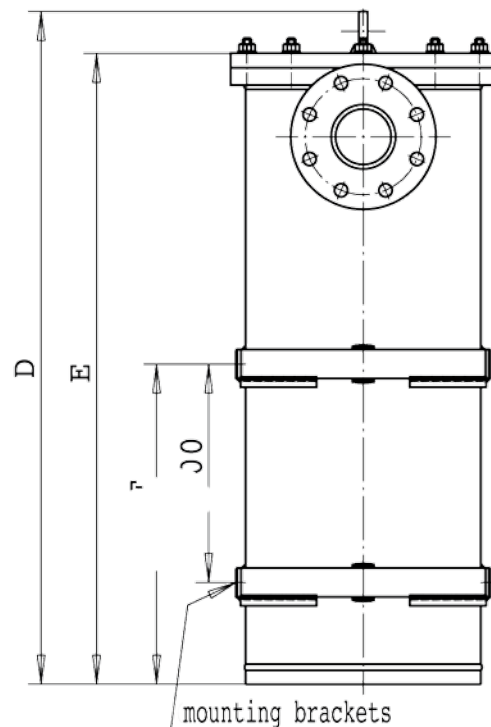
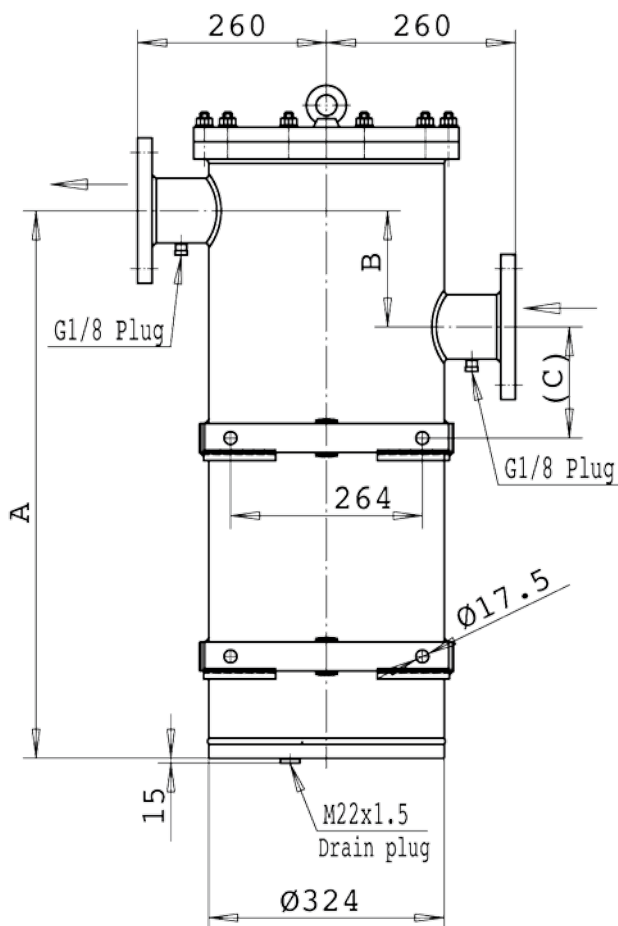
- Glassfibre Microglass III
- Resin impregnated cellulose paper 15 µm nominal
- Cleanable metal mesh

Indicator options:

Visual, electrical or electronic indicator requires an indicator block. For details see indicator options table in product description page and catalogue section 4.

Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils and fuel oils. For heavy fuel oil applications, please specify option P2 (see table 8 in product description) which ensures that filters are delivered with documentation according PED 97/23/EC category II. Respectively for combustible gas applications, specify option P3 for PED category III. For other fluids consult Parker Filtration.



Type	A	B	C	D	E	F
DN80/PN16	753	160	153	932	868	440
DN100/PN16	786	186	140	978	914	460

SF1040 Series

Pressure Drop Curves

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

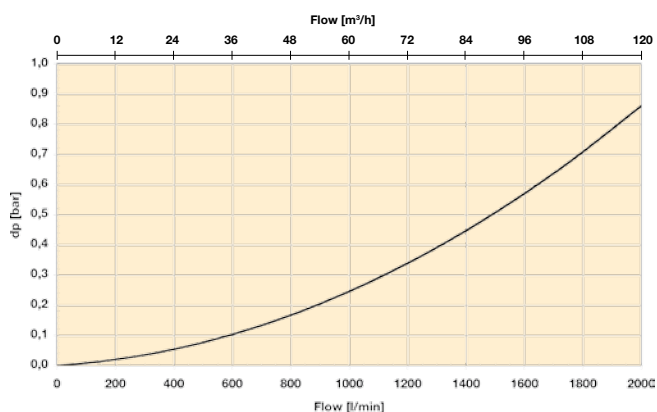
The recommended level of the initial pressure drop for this filter is maximum 0.5 bar.

Δp -curves are measured at 30 cSt.

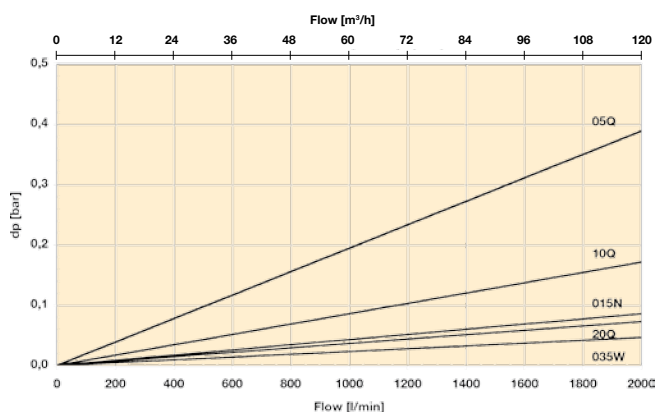
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

SF1040 DN80/PN16 housing



SF1040 element pack (2 pcs)



Product Description for SF1040

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Single filter	SF1040
Stainless steel housing	SFR1040
Horizontal installation	SFH1040

Table 2

FILTER SIZE	
Length/elements	CODE
2 elements housing	2

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Microglass III	
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
Other medias	
Cellulose 15 µm (nom)	015N
Cleanable metal mesh 35 µm	035W
Cleanable metal mesh 60 µm	060W

Table 4

SEAL TYPE	
Seal material	CODE
Fluoroelastomer	V

REPLACEMENT ELEMENTS	
Media code	Order code
Glassfibre	Microglass III
05Q	939381Q
10Q	939382Q
20Q	939383Q
Cellulose 15 µm (nom)	
015N	939384
Cleanable metal mesh	
035W	939385
060W	939386

Table 5

INDICATORS	
Options	CODE
No indicator block	N
Indicator port plugged	P
Visual indicator	M3
Electrical indicator	T1
Electronic indicator (PNP/N.O.)	F1
Electronic indicator (NPN/N.O.)	F2
ATEX indicator PNP/N.O.	X1

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
2.0 bar/1.5 bar	H
No/No	X

Table 7

FILTER CONNECTIONS	
Port size	CODE
DN80 T-port	D80T
DN80 C-port (both ports to same direction)	D80C
DN100 T-port	D100T

Table 8

OPTIONS	
Options	CODE
With bypass	1
No bypass	2
PED category 2	P2
PED category 3	P3
No mounting brackets	NB
Secondary element 60 µm	F

If several options are selected, please add the codes in order listed above.

SPARE PARTS	
Seal kit	CODE
Seal material	
Fluoroelastomer	916045044
Secondary element	CODE
Wire mesh 60 µm	939377

Please note the bolded options reflect standard options with reduced lead-time.

Eco130 Series

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



Modular system for industrial applications

High flow return filters for industrial use on hydraulic or lubrication systems. High flow and pressure up to 30 bar in single units. Ability to bank multiple filters together enables continuous filtration during element changes. Coreless Ecoglass III elements.



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.parker.com/hfde

Applications:

- Paper production plants
- Steel mills
- Aluminium mills
- Industrial power packs
- Lubrication systems
- Power generation

Specification

Assembly:

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

Maximum operating pressure:

Single filter: 30 bar

Dual and parallel units and filter systems: 16 bar

Nominal flow rate (30 cSt):

Single filter: 1000 l/min (60 m³/h)

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

Connections:

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

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

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

Seal material:

Nitrile or optionally fluoroelastomer

Operating temperature:

-40°C...+100°C with Nitrile seals, -20°C...+120°C with Fluoroelastomer seals. For other temperatures consult Parker Filtration.

Housing material:

Aluminium

Weight:

See a table in dimension drawing

Bypass valve:

Opening pressure 3.5 bar

Filtration materials:

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

Indicator options:

For details see indicator options table on product description page and catalogue section 4.

Differential pressure indicators:

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

Fluid compatibility:

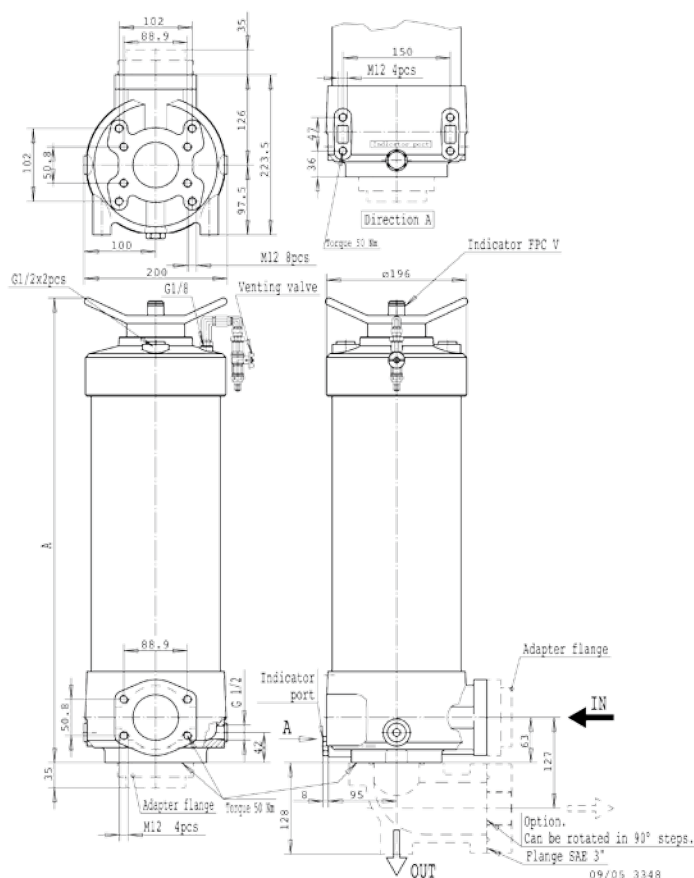
Suitable for use with regular hydraulic and lubrication oils. For other fluids consult Parker Filtration.

Single Assemblies 130M

Connection options	
Body flange	SAE 2" 3000-M
	SAE 2½" 3000-M
Adaptor flange	G1½
	G2
	SAE 3" 3000-M (90° elbow)

Weights (kg)	Length 2	Length 3
Single	25	33
Dual D2	70	86
Parallel P2	75	90
System S2	110	130
System S4	205	235
System S6	260	310
System S8	340	705

Type	A
Length 2	650
Length 3	1210



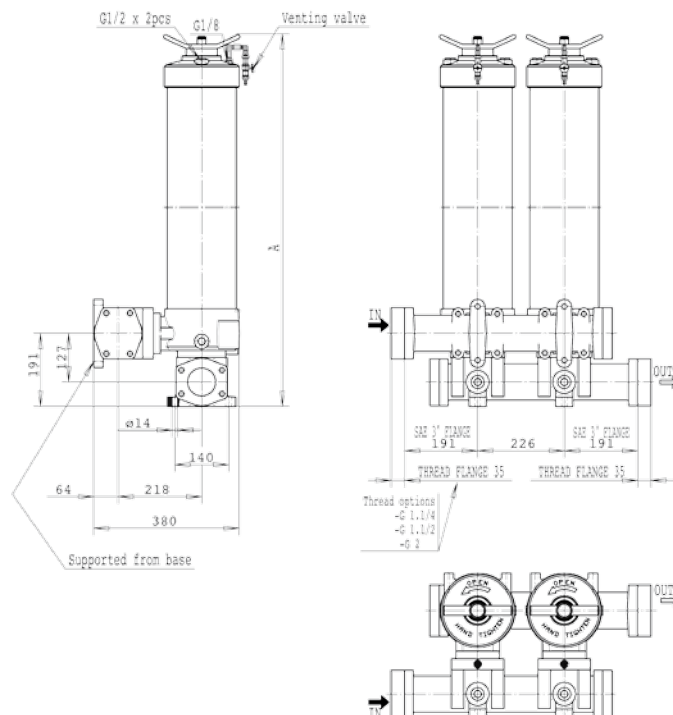
Eco130 Series

Medium Pressure Filters

Dual System 130D

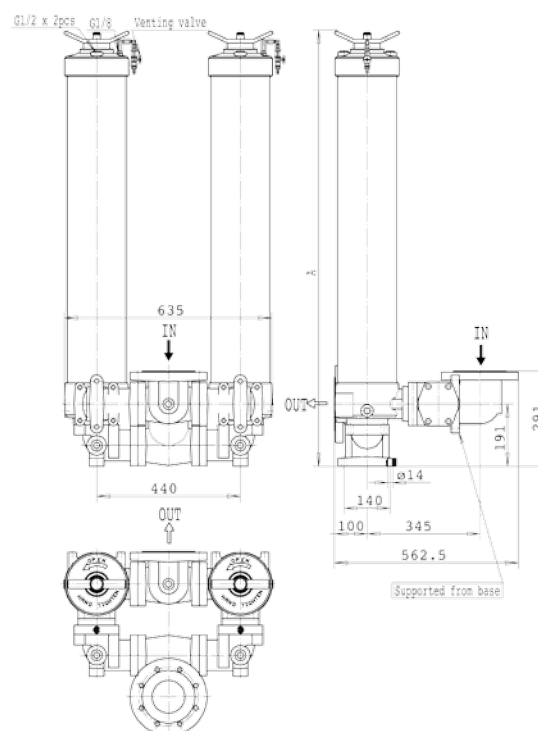
Connection options	
Body flange	SAE 3" 3000-M
Adaptor flange thread	G2

Type	A
Length 2	780
Length 3	1340



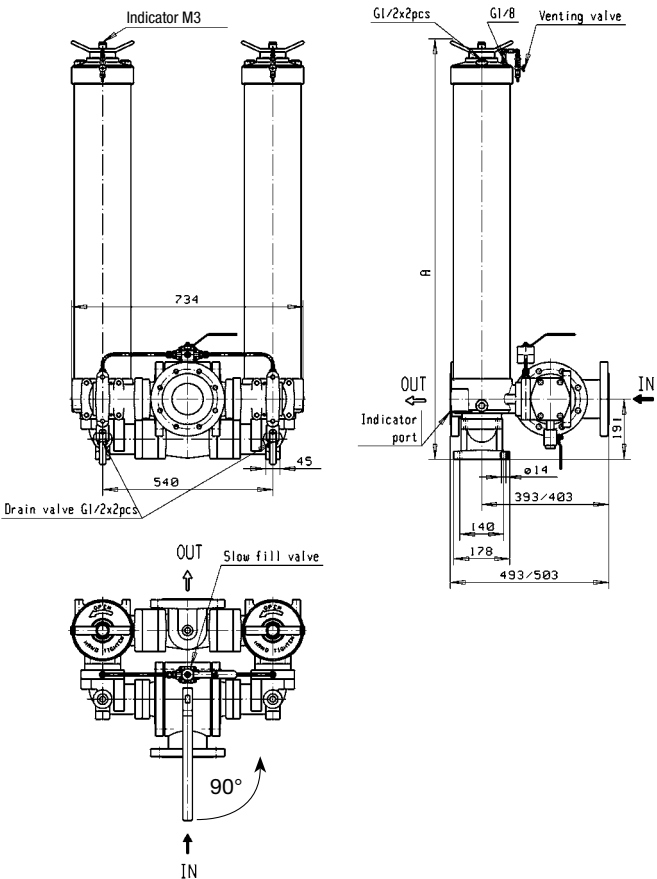
Parallel System 130N

Type	A
Length 2	780
Length 3	1340



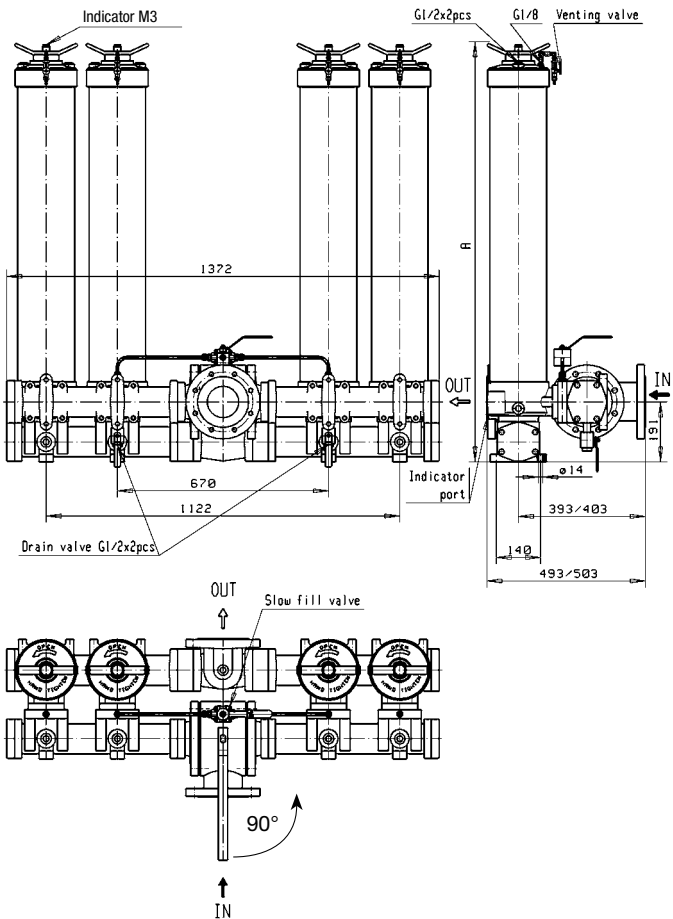
130S System 1 + 1 units T-model

Type	A
Length 2	780
Length 3	1340



130S System 2 + 2 units T-model

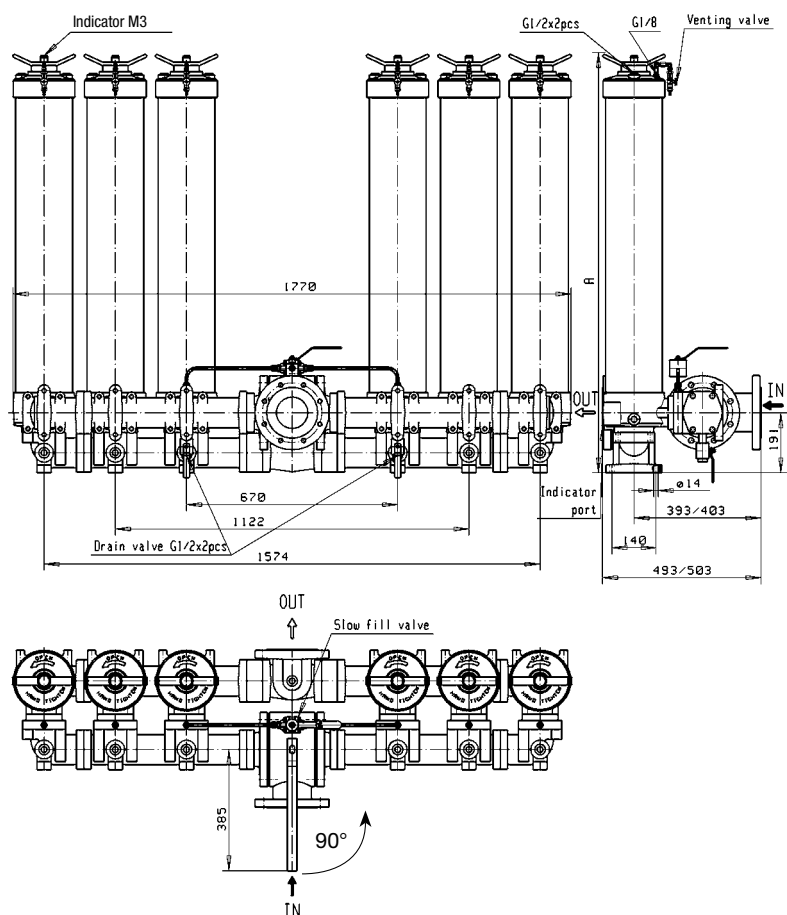
Type	A
Length 2	780
Length 3	1340



130S System 3 + 3 units

T-model

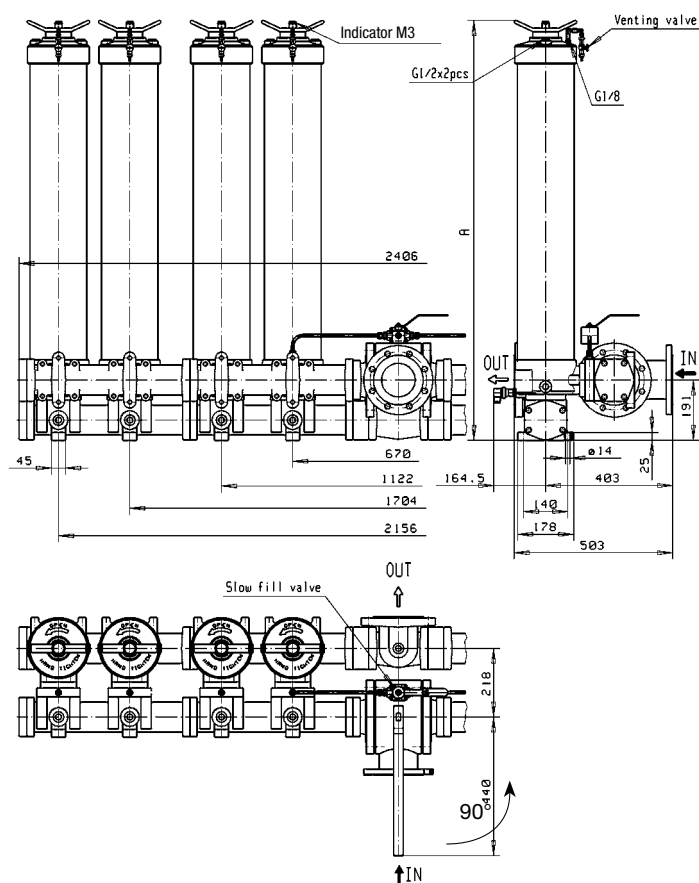
Type	A
Length 2	780
Length 3	1340



130S System 4 + 4 units

T-model

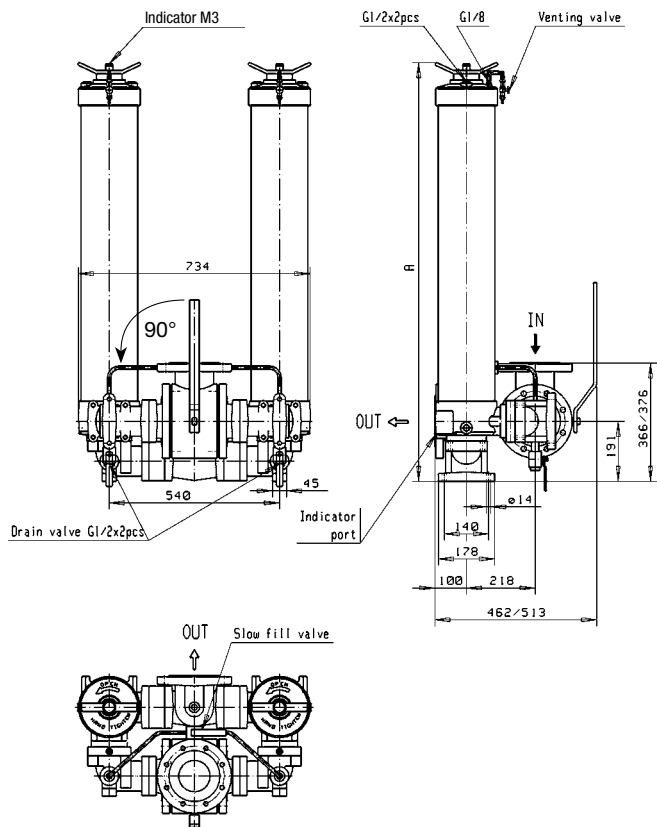
Type	A
Length 2	780
Length 3	1340



130S System

L-model

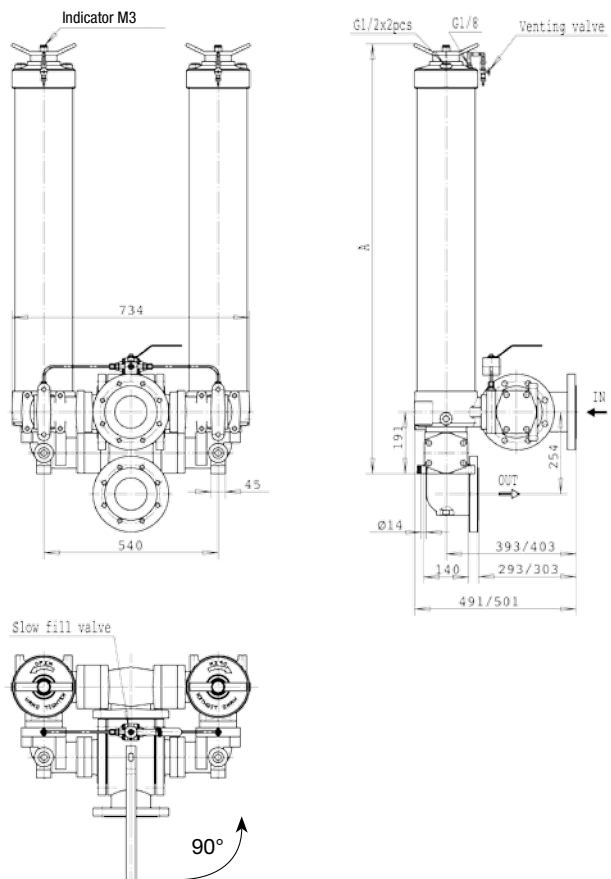
Type	A
Length 2	780
Length 3	1340



130S System

C-model

Type	A
Length 2	780
Length 3	1340



Eco130 Series

Pressure Drop Curves

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

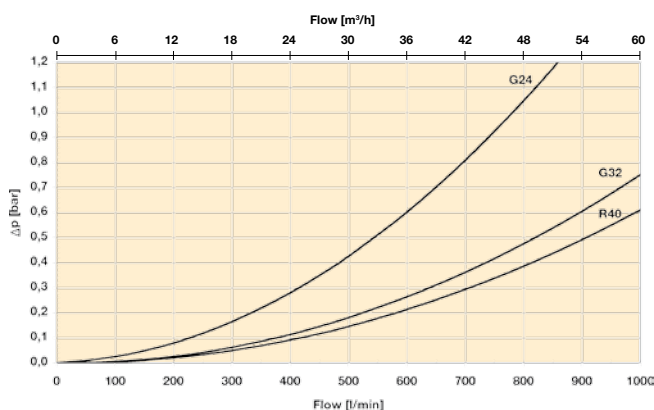
The recommended level of the initial pressure drop for this filter is maximum 0.8 bar.

Δp -curves are measured at 30 cSt.

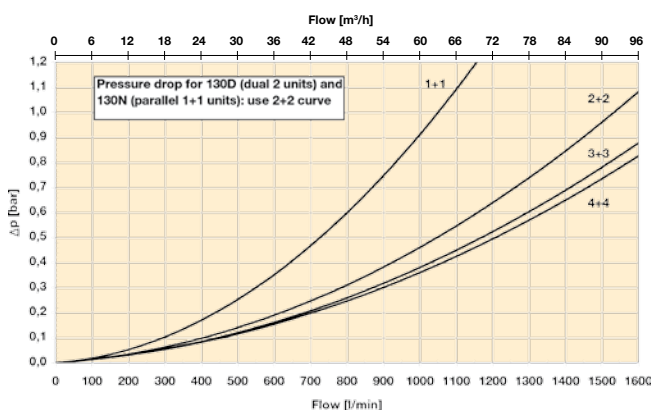
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

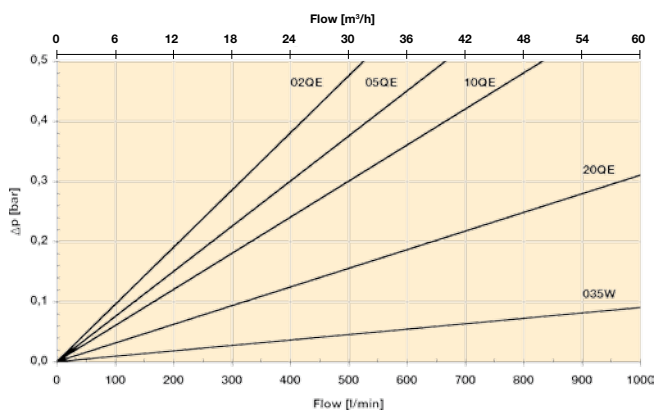
130M single unit housings



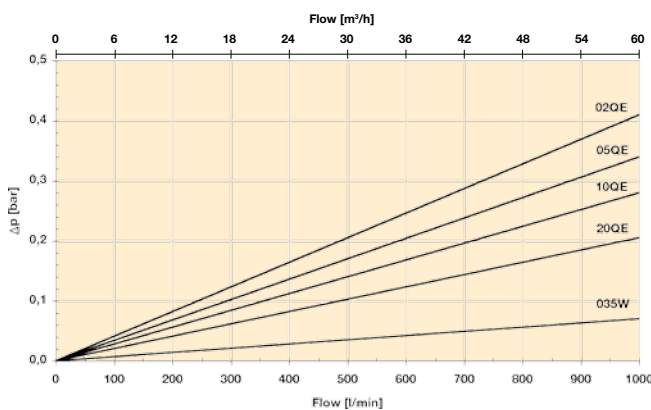
130S3 system housings with DN100



Length 2 elements



Length 3 elements



REPLACEMENT ECO-ELEMENTS WITH NITRILE SEALS

Media	Length 2	Length 3
02QE	938721Q	938725Q
05QE	938722Q	938726Q
10QE	938723Q	938727Q
20QE	938724Q	938728Q

REPLACEMENT ELEMENTS WITH NITRILE SEALS

Microglass III	Length 2	Length 3
02Q	938733Q	938737Q
05Q	938734Q	938738Q
10Q	938735Q	938739Q
20Q	938736Q	938740Q
Wire mesh		
035W	938760	938765
060W	938761	938766

Elements with fluoroelastomer seals: ask order codes from Parker Filtration.



Product Description for Eco130

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Single unit	130M
Dual unit	130D
Parallel unit	130N
System	130S

Table 5

INDICATORS	
Options	CODE
Visual indicator	M3
Electrical indicator	T1
Electronic indicator (PNP/N.O.)	F1
Electronic indicator (NPN/N.O.)	F2

Table 2

FILTER TYPE	
Element length	CODE
Length 2	2
Length 3	3

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
3.5 bar/2.5 bar	K

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Ecoglass III	
Glassfibre 2 µm	02QE
Glassfibre 5 µm	05QE
Glassfibre 10 µm	10QE
Glassfibre 20 µm	20QE

Filters with Microglass III and wire mesh elements available by request.

Table 7

FILTER CONNECTIONS		
Port size	Filter type	CODE
G1½	130M	G24
G2	130M, 130D	G32
SAE flange 2"-3000M	130M	R32
SAE flange 2½"-3000M	130M	R40
SAE flange 3"-3000M	130D	R48
DN80/PN16	130N, 130S	D80
DN100/PN16	130N, 130S	D100

Table 4

SEAL TYPE	
Seal material	CODE
Nitrile	B
Fluoroelastomer	V

Table 8

OPTIONS	
Options	CODE
Standard single	1
Dual 2 units	21
Dual 3 units	31
Parallel 1+1 units	21
Parallel 2+2 units	41
T-system 1+1 units	21
T-system 2+2 units	41
T-system 3+3 units	61
T-system 4+4 units	81
L-system 1+1 units	27
L-system 2+2 units	47
L-system 3+3 units	67
L-system 4+4 units	87

SPARE PARTS	
Seal kit	CODE
Seal material	
Nitrile	918045059
Fluoroelastomer	918045076
ECO adapter	
130M2	918042078
130M3	918042077

Please note the bolded options reflect standard options with reduced lead-time.

130S Valve Seal Kit	
Part Number	Description
918045062	NITRILE SEAL KIT 130S VALVE

HFS and HFD Series

High Flow Single and Duplex Filters
Max. 11200 l/min. 10 bar



Heavy Duty Reliability

New High Flow Single and Duplex Filters ensure reliability in industrial, marine, and power generation applications up to DN350 and flow rates up to 11200 l/min. One filter element size allows standardisation in multi-element housings. Equalising valve eases changeover of flow direction in filter housings. Parker's angular sealing arrangement aids installation of elements.



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.parker.com/hfde

Applications:

- Steel industry, paper mills, marine applications and power generation
- Lubricating systems
- Fuel filtration
- Coolant filtration

Specifications:**Assembly:**

In-line filter as a single filter or a duplex filter. Single filters are available with connections on the same side or on opposite sides. Duplex filters are available either with a L-bore ball valve in upstream and downstream lines or with two butterfly valves in the upstream line and two flap-type check valves in the downstream line.

Maximum operating pressure:

10 bar

Nominal flow rate (30 cSt):

Up to 11200 l/min (672 m³/h).

Connections:

Flanges: DN50 – DN350 / PN10
ANSI flanges upon request.

Seal material:

Nitrile

Other seal materials upon request.

Operating temperature:

0°C...+100°C

Housing material:

Steel

Stainless steel upon request.

Weight:

See a table on page 241.

Bypass valve:

Opening pressure 3,5 bar or without a bypass.

Filter elements:

Environmentally friendly Ecoglass III.

Resin impregnated heavy duty cellulose paper

15 µm nominal.

Cleanable wire mesh.

Differential pressure indicators:

Filter can be equipped with a visual, electrical or electronic indicator with setting 2,5 bar.

Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils. For suitability with other fluids consult Parker Filtration.



Filter vessels with multiple standardized elements. Bypass valves are fixed on the center tube inside the housing.



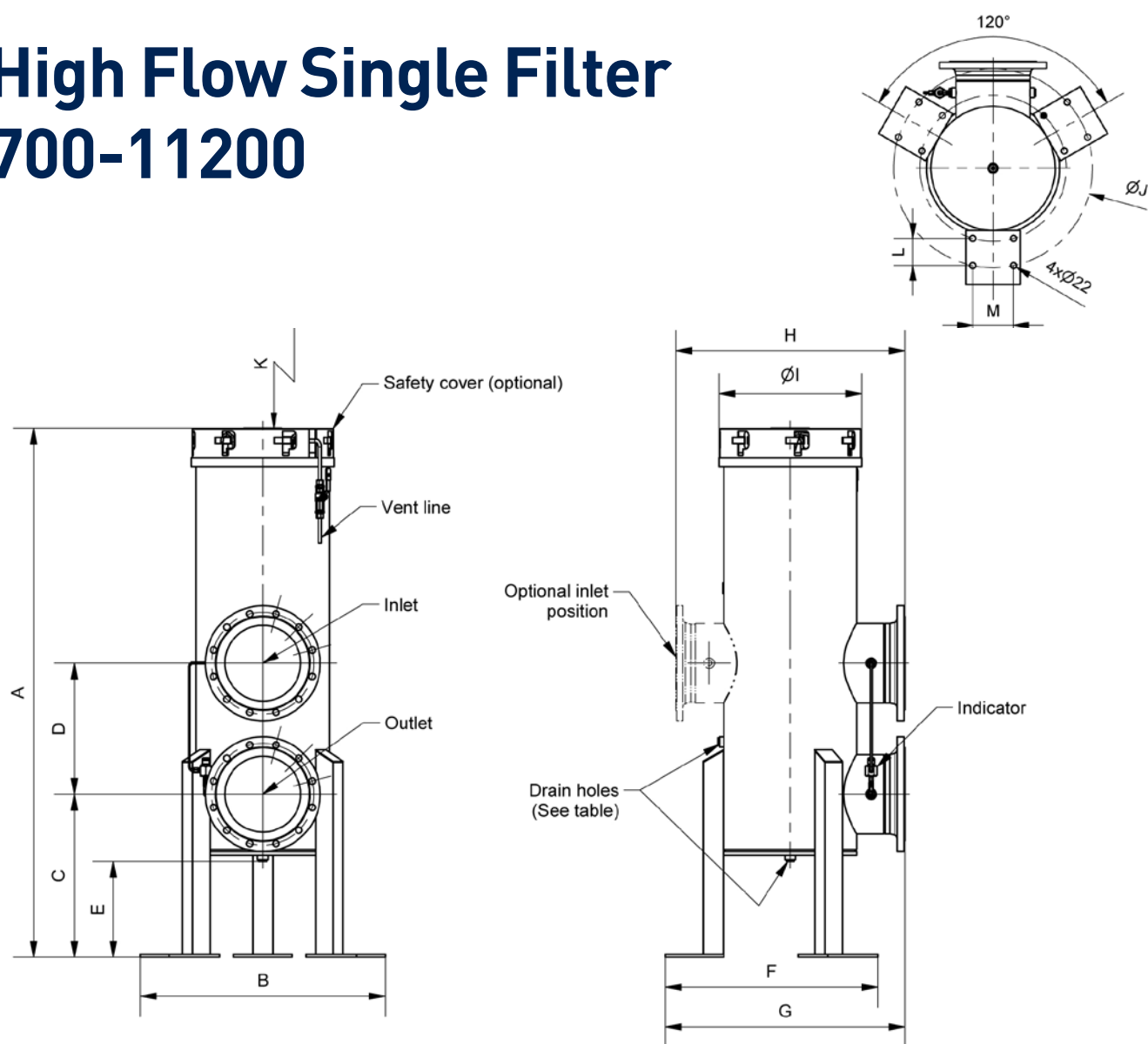
Optional safety cover prevents opening of a pressurized housing. Vent line comes with a ball valve.

In large connection sizes the change-over is made with a hand wheel that operates two butterfly valves. Either valve is always open to ensure flow to the system.



High Flow Single Filter

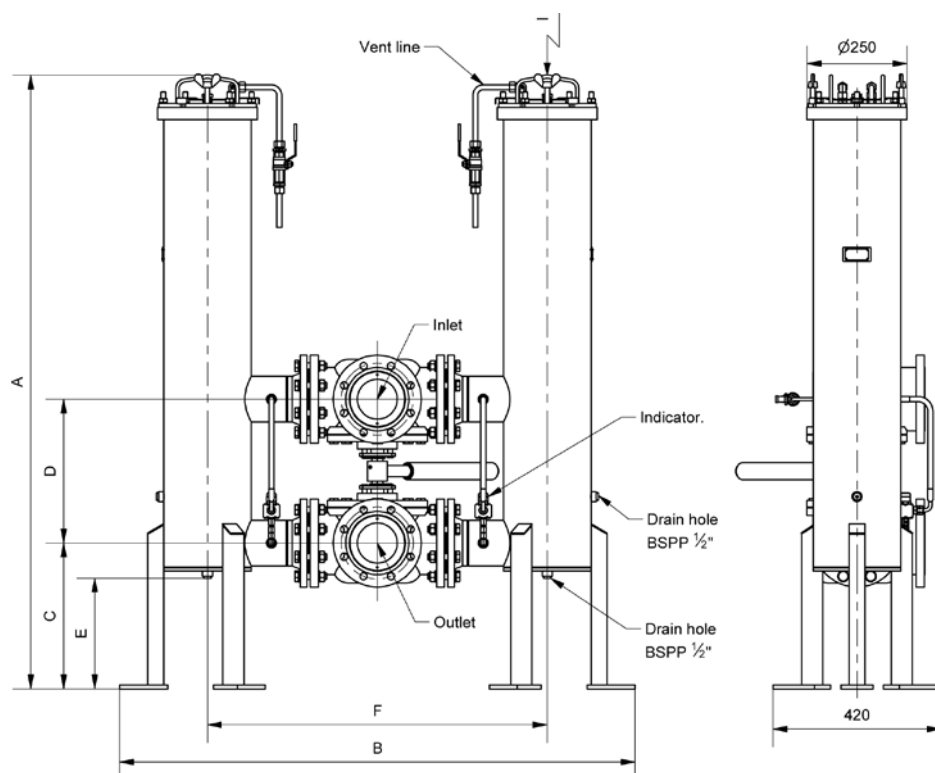
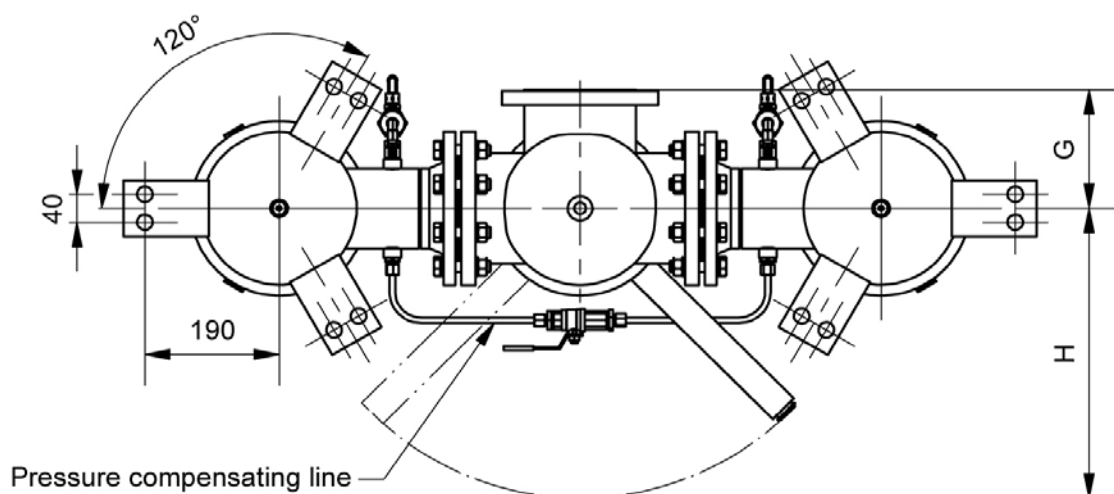
700-11200



Max.Flow L/min (30cSt)	Elements		Flange size	A	B	C	D	E	F	G	H	ØI	ØJ	K	L	M
	Qty	Size														
700	1	2	DN50	985	420	320	260	232	364	455	470	250	381	500	-	40
			DN65	985	420	320	300	232	364	455	470	250	381	500	-	40
			DN80	985	420	320	320	232	364	470	500	250	381	500	-	40
1400	1	3	DN80	1534	420	355	320	282	364	470	500	250	381	950	-	40
			DN100	1534	420	365	360	282	364	472	504	250	381	950	-	40
			DN125	1534	420	385	300	282	364	475	510	250	381	950	-	40
4200	3	3	DN125	1668	798	385	300	270	691	758	710	438	683	950	100	150
			DN150	1748	798	525	365	350	691	758	710	438	683	950	100	150
			DN200	1748	798	525	365	350	691	765	724	438	683	950	100	150
5600	4	3	DN150	1817	842	515	365	341	729	809	760	490	733	950	100	150
			DN200	1817	842	525	365	341	729	816	774	490	733	950	100	150
			DN250	1818	842	560	450	329	729	822	786	490	733	950	100	150
11200	8	3	DN250	1981	1018	655	450	402	882	1088	1116	700	932	950	100	150
			DN300	1996	1018	670	515	417	882	1088	1116	700	932	950	100	150
			DN350	1966	1018	640	550	387	882	1088	1116	700	932	950	100	150

High Flow Duplex Filter 700-1400

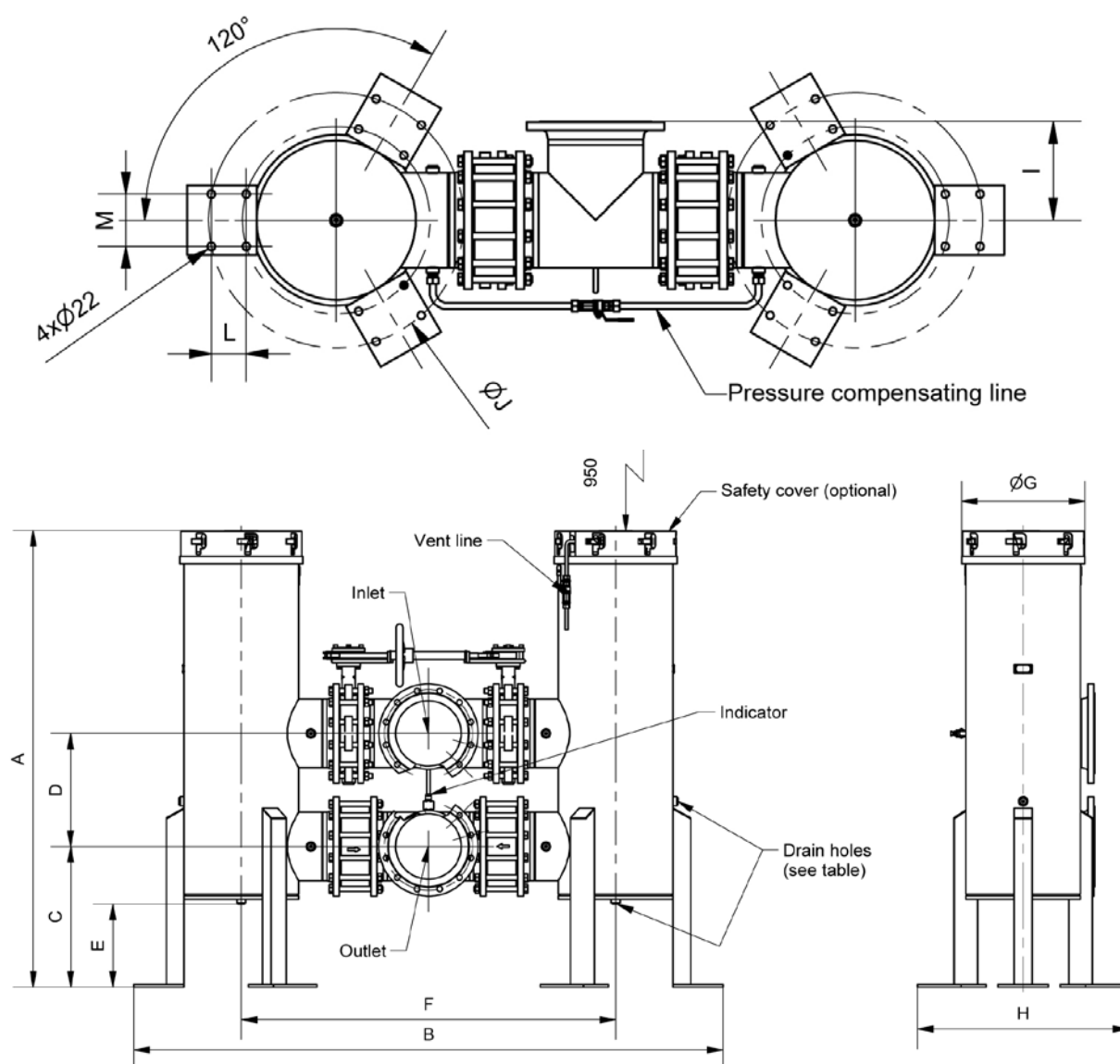
With ballvalves



Max.Flow L/min (30cSt)	Elements		Flange size	A	B	C	D	E	F	G	H	I
	Qty	Size										
700	1	2	DN50	985	1135	260	220	232	696	110	315	500
			DN65	985	1165	300	222	232	726	125	415	500
			DN80	985	1205	355	400	232	766	130	415	500
1400	1	3	DN80	1534	1205	355	320	282	766	130	415	950
			DN100	1534	1289	365	360	282	850	170	611	950

High Flow Duplex Filter 1400-11200

With butterfly valves



Max.Flow L/ min (30cSt)	Elements		Flange size	A	B	C	D	E	F	ØG	H	I	ØJ	L	M
	Qty	Size													
1400	1	3	DN125	1534	1461	385	300	282	1022	250	420	190	381	-	40
4200	3	3	DN125	1668	2028	385	300	270	1222	438	798	190	683	100	150
			DN150	1748	2130	525	365	350	1354	438	798	271	683	100	150
			DN200	1748	2226	525	365	350	1354	438	798	278	683	100	150
5600	4	3	DN150	1817	2231	525	365	341	1439	490	842	271	733	100	150
			DN200	1817	2327	525	365	341	1507	490	842	278	733	100	150
			DN250	1818	2347	560	450	329	1491	490	842	284	733	100	150
11200	8	3	DN250	1981	2880	655	450	402	1986	700	1018	284	932	100	150
			DN300	1996	3000	670	515	417	1986	700	1018	315	932	100	150
			DN350	1966	3078	640	550	387	1986	700	1018	348	932	100	150

HFS and HFD Series

Pressure Drop Curves

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

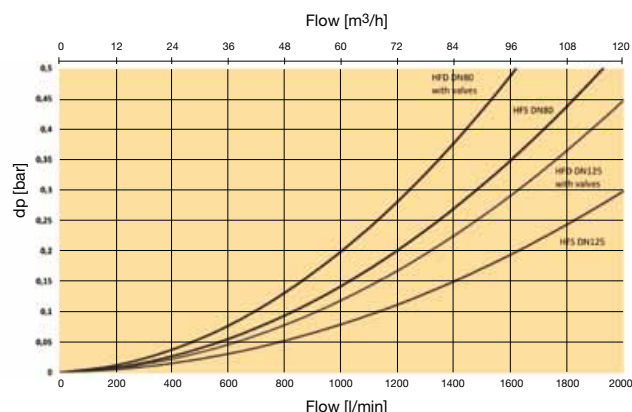
The recommended level of the initial pressure drop for the filter is maximum 0.8 bar.

Δp -curves are measured at 30 cSt.

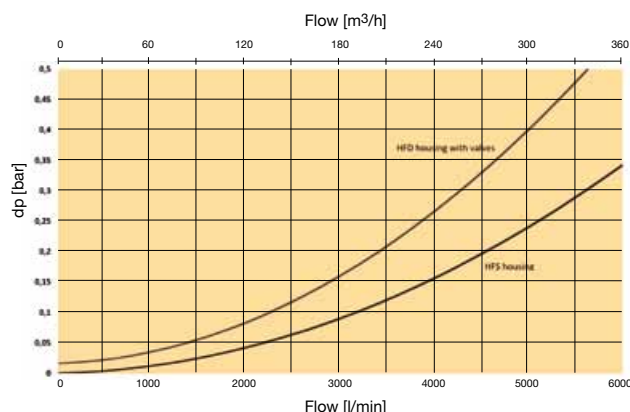
If the medium used has a viscosity different from 30 cSt, pressure drop over the filter can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

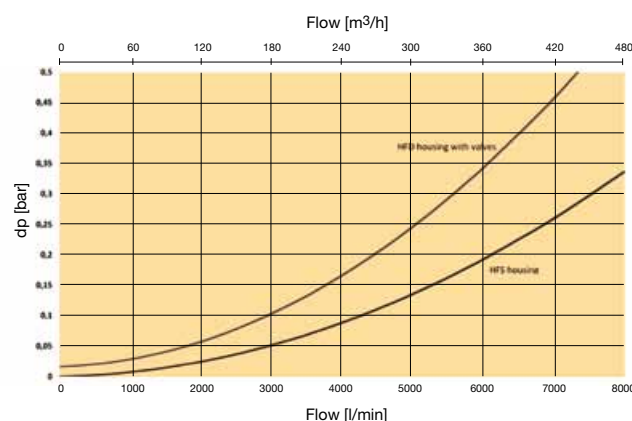
**HFS/HFD12 DN80 and HFS/HFD13 DN125
(1 element) Housing dp-curves**



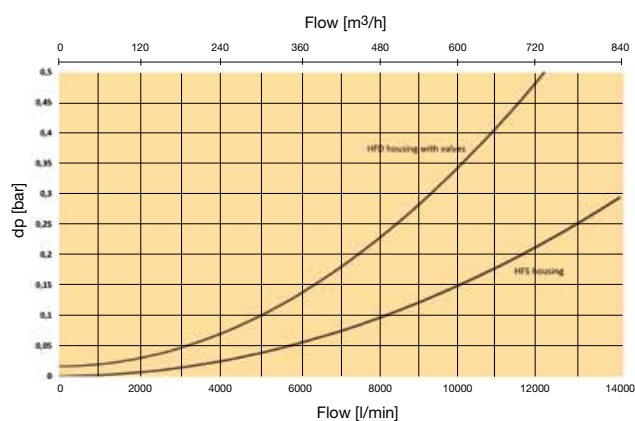
**HFS/HFD33 DN200 (3 elements)
Housing dp-curves**



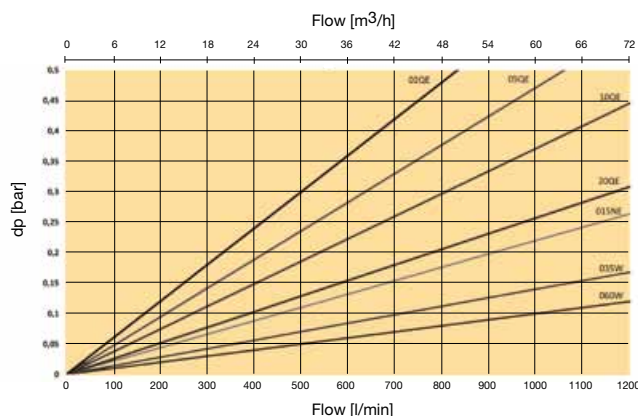
**HFS/HFD43 DN250 (4 elements)
Housing dp-curves**



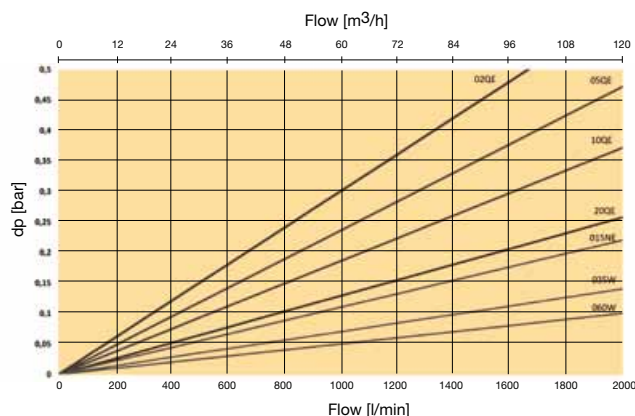
**HFS/HFD83 DN350 (8 elements)
Housing dp-curves**



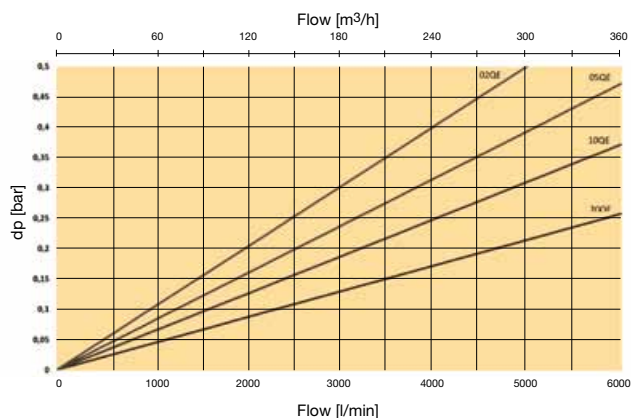
**Single element: Length 2
Element dp-curves**



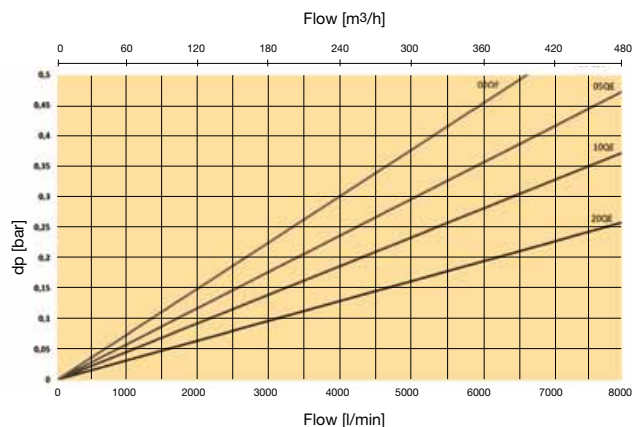
**Single element: Length 3
Element dp-curves**



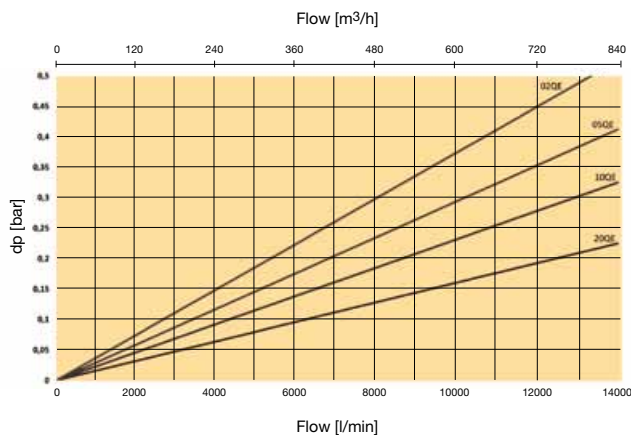
HFS/HFD33 (3 elements) QE element dp-curves



HFS/HFD43 (4 elements) QE element dp-curves



HFS/HFD83 (8 elements) QE element dp-curves



REPLACEMENT ELEMENTS WITH NITRILE SEALS

Media	Length 2	Length 3
02QE	939240Q	939244Q
05QE	939241Q	939245Q
10QE	939242Q	939246Q
20QE	939243Q	939247Q
Metal mesh		
035W	939248	939250
060W	939249	939251

Single Filters	Mass (kg)	Duplex Filters	Mass (kg)
11200		11200	
DN350	527	DN350	1701
DN300	518	DN300	1508
DN250	507	DN250	1329
5600		5600	
DN250	270	DN250	858
DN200	264	DN200	784
DN150	257	DN150	681
4200		4200	
DN200	217	DN200	691
DN150	208	DN150	589
DN125	205	DN125	526
1400		1400	
DN125	74	DN125	260
DN100	69	DN100	287
DN80	68	DN80	236
700		700	
DN80	53	DN80	206
DN65	51	DN65	165
DN50	50	DN50	111

Butterfly valves

Ball valves

WARNING – USER RESPONSIBILITY

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

- This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.
- The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalogue and in any other materials provided from Parker or its subsidiaries or authorized distributors.
- To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable of the components or systems.

HFS and HFD Series

Ordering information

Table 1	Table 2	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9	Table 10

Table 1: SERIES	
Model	CODE
Single	HFS
Duplex	HFD

Table 2: HOUSING SIZE	
Elements	CODE
1 element	1
3 elements	3
4 elements	4
8 elements	8

1 element vessel available with length 2 and 3
Other vessels available with length 3 only

Table 3: LENGTH	
Element length	CODE
Length 2	2
Length 3	3

Table 4: MICRON RATING	
Elements	CODE
Ecoglass III	
Glassfibre 2 µm	02QE
Glassfibre 5 µm	05QE
Glassfibre 10 µm	10QE
Glassfibre 20 µm	20QE
Cellulose 15 µm (nom)	015N
Metal mesh 35 µm	035W
Metal mesh 60 µm	060W

Table 5: SEALS	
Seal material	CODE
Nitrile	B

Table 6: INDICATOR	
Indicator	CODE
No indicator	N
Plugged indicator block	P
Visual indicator	M3
Electrical indicator	T1
Electronic indicator PNP/N.O.	F1
Electronic indicator NPN/N.O.	F2
Electronic indicator PNP/N.C.	F3
Electronic indicator NPN/N.C.	F4

Table 7: BYPASS & INDICATOR SETTING	
Bypass / indicator setting	CODE
3,5 bar / 2,5 bar	K

Table 8: CONNECTIONS		
Port size	Available housing size	CODE
DN50	1 element (Length 2)	D50
DN65	1 element (Length 2)	D65
DN80	1 element (Length 2 and 3)	D80
DN100	1 element (Length 3)	D100
DN125	1 element (Length 3) and 3 elements	D125
DN150	3 and 4 elements	D150
DN200	3 and 4 elements	D200
DN250	4 and 8 elements	D250
DN300	8 elements	D300
DN350	8 elements	D350

All flanges PN10

Table 9: DIRECTION OF CONNECTIONS	
For HFS	CODE
On same side	C
Opposite sides	T
For HFD	CODE
2 x Ball valves	A
Butterfly + check valves	U

Table 10: OPTIONS	
Options	CODE
Standard with bypass	1
No bypass	2
Other options	
Safety cover	C

FMB

Modular Filter Manifold Block



Modular manifold – ease of installation and capacity increase

Parker FMB – filter manifold block with integrated system pressure and temperature control boasts easy to install modular design. It makes exceptionally easy to increase capacity just by adding more blocks.

Integrated block design minimizes the risk of leakages and saves installation time. Extra benefit of compact design is low pressure drop.



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.parker.com/hfde

Features:

- Light weight aluminium design
- Easy to connect secondary pump – integrated non return valves
- Optional offline polishing filter

Applications:

- Wind turbine gearboxes
- Industrial gearboxes
- Industrial lube systems

Specification

Maximum operating pressure:..... 30 bar

Operating temperature: -20°C....+100°C

Survival temperature: -40°C....+100°C

Housing material: aluminum

Weight:

-1 filter block 80 kgs

-2 filter block 110 kgs

-extension block 50 kgs

Seal material: Nitrile

System pressure relief valve: Opening pressure 10, 15 or 20 bar

Thermal valve: Opening temperature 40°C, 45°C or 55°C

Bypass valve: 5 or 7 bar

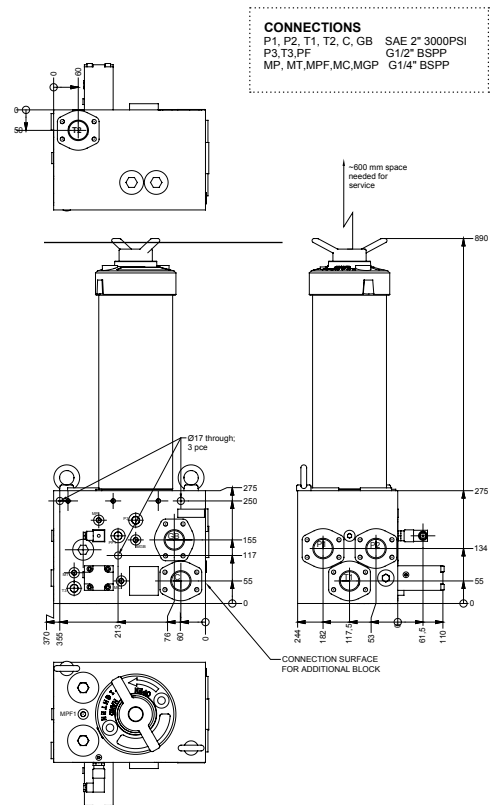
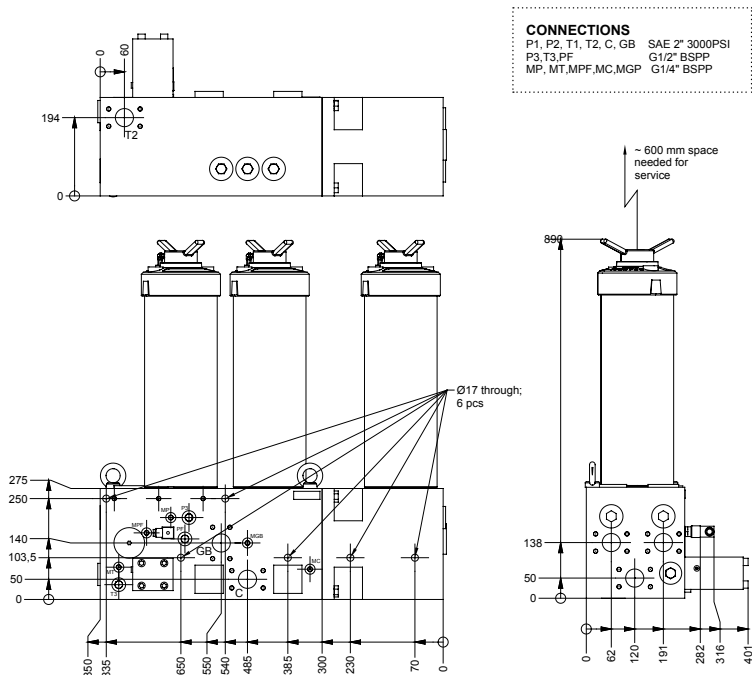
Indicator options: Visual, electrical or electronic switch type indicator

Filtration material:

- main element Glassfibre Microglass III

- by pass element Metal mesh

Fluid compatibility: Suitable for use with regular hydraulic and lubricating oils.
For other fluids consult Parker Filtration



Filter Manifold Block series, product description

FMB

Filter manifold block with integrated system pressure and temperature control

1 Series	2 Length	3 Element	4 Seals	5 Indicator	6 Indicator setting
FMB					
	7 Bypass setting	8 Connections	9 Pressure relief valve	10 Thermal valve	

1 Series

Manifold blocks	CODE
1 main + no extension	10
1 main + 1 extension	11
2 main + no extension	20
2 main + 1 extension	21
2 main + 2 extensions	22

2 Length

Element length	CODE
Length 1	1
Length 2	2

3 Element

Element	CODE
Glass fibre + 50 µm mesh	
5 µm, no safety element	05QN
10 µm, no safety element	10QN
5 µm + bypass safety	05QB
10 µm + bypass safety	10QB
5 µm + full flow safety	05QF
10 µm + full flow safety	10QF

4 Seals

Seal material	CODE
Nitrile	B

5 Indicator

Indicator	CODE
Electrical indicator	T1
Electronic indicator PNP/N.O.	F1
Electronic indicator NPN/N.O.	F2
Electronic indicator PNP/N.C.	F3
Electronic indicator NPN/N.C.	F4

6 Indicator setting

Indicator setting	CODE
3,0 bar	S
5,0 bar	M

7 Bypass setting

Bypass setting	CODE
5,0 bar	5
7,0 bar	7

8 Connections

Port size	CODE
SAE flange 2"-3000M	R32

9 Pressure relief valve

Setting	CODE
No PRV valve	N
10 bar	D
15 bar	E
20 bar	F

10 Thermal valve

Setting	CODE
No valve	N
40...55°	4
45...60°	5
55...70°	6

DF2145

Duplex Filters

Max. 80 l/min. 30 bar



Duplex safety for fuel, lube and hydraulic systems

Duplex operation for security and continuous flow. Several filtration media options include environmentally friendly Ecoglass III elements and allows wide selection of applications. Integrated differential pressure switch connection with shut off valve. Sturdy cast iron housing with pressure rating up to 30 bar. Block mounting available.



Contact Information:

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FI, FR, IE, IT, PT, SE, SK, UK)
filtrationinfo@parker.com

www.parker.com/hfde

Applications:

- Diesel engine fuel systems
- Industrial lube oil systems
- Industrial medium pressure hydraulic systems

Specification

Duplex filter:

Change-over valve with open center position. Handle locking device for both end positions. Vent valves with secured outlets on both sides. Integrated indicator port with test connections.

Maximum operating pressure:

30 bar

Connections:

Two sets of threads G $\frac{3}{4}$ or M26 x 1.5. Connections on flange are plugged with steel plug.

Seal material:

Fluoroelastomer

Operating temperature:

-20°C...+120°C with Fluoroelastomer seals,

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

Housing material:

Cast iron (GJS)

Weight:

15 kg

Nominal flow rate (30 cSt):

80 l/min (4,8 m³/h)

Bypass valve:

Standard without bypass, optional opening pressure 3.5 bar

Filtration materials:

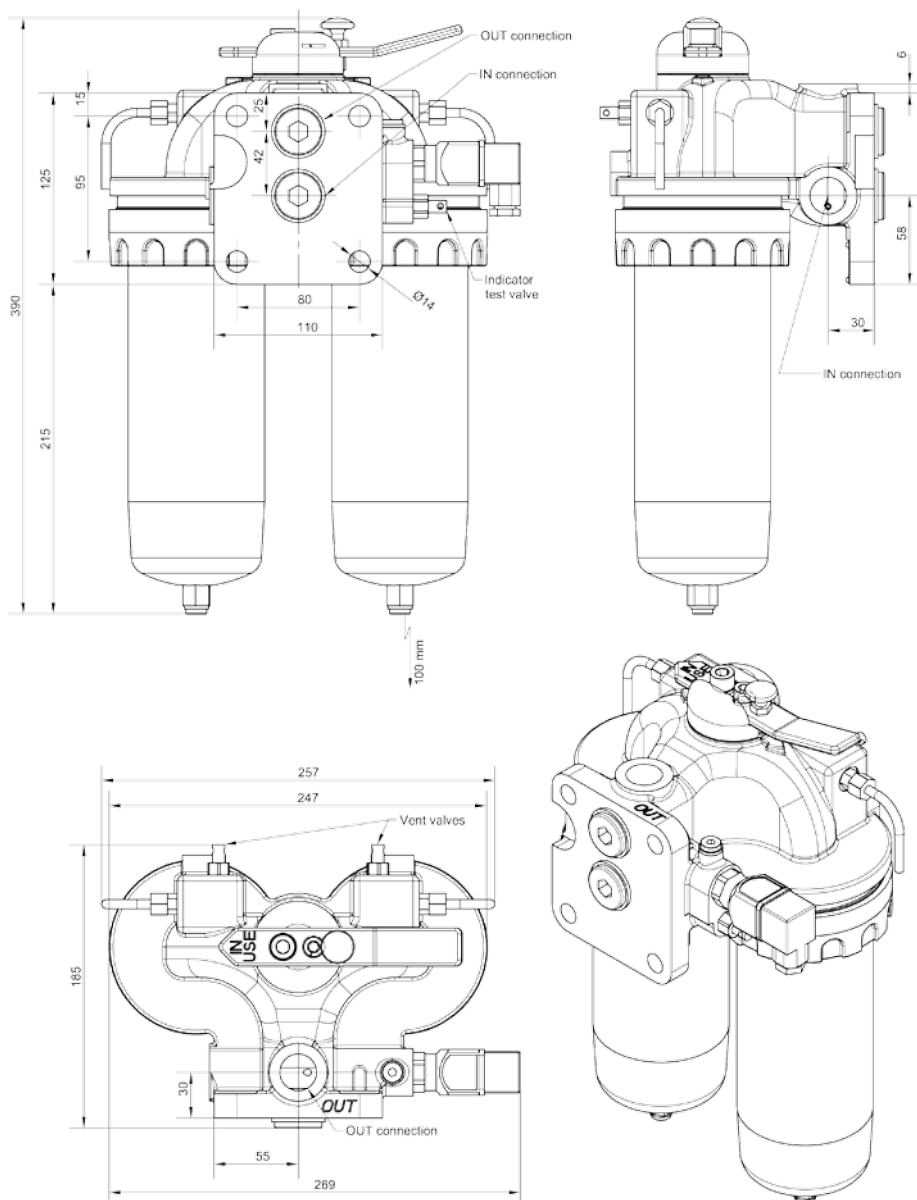
- Glassfibre Microglass III
- Environmentally friendly Ecoglass III. No metal parts. Ecoglass III contributes to ISO14001.
- Cleanable metall mesh
- Resin impregnated fine cellulose paper 10 µm nominal

Differential pressure indicators:

Integrated indicator port. Filter can be equipped with visual, electrical or electronic differential pressure indicator. Setting 2.5 bar, other settings available. For details see indicator options table on product description page and catalogue section 4.

Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils & light fuel oils (diesel). For heavy fuel oil applications, please specify option P2 (see table 8 in product description) which ensures that filters are delivered with documentation according PED 97/23/EC category II. For other fluids consult Parker Filtration.



DF2145

Pressure Drop Curves

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

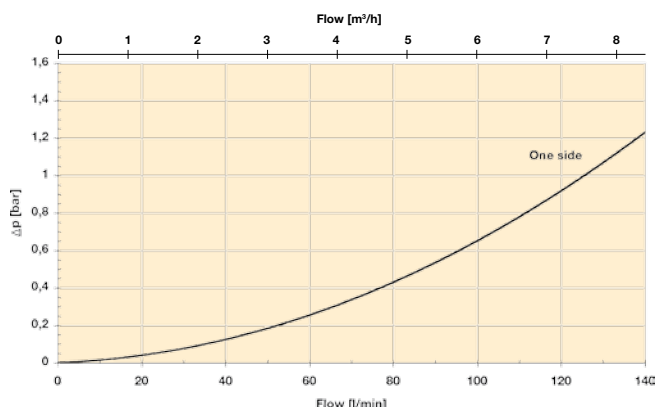
The recommended level of the initial pressure drop for this filter is maximum 1.0 bar.

Δp -curves are measured at 30 cSt.

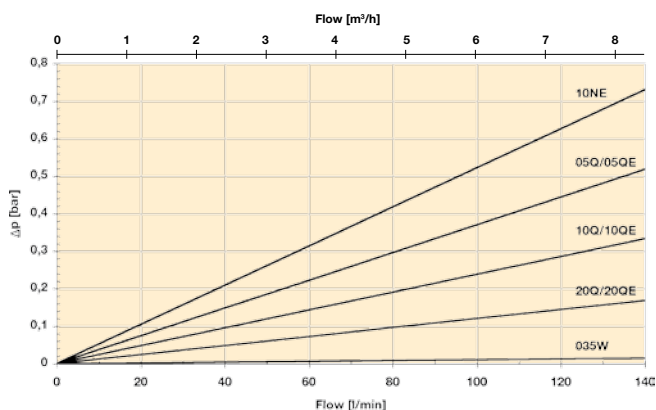
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

DF2145 housing



DF2145 length 2 elements



REPLACEMENT ELEMENTS WITH FLUOROELASTOMER SEALS

Media code		Order code
Glassfibre	Microglass III	Ecoglass III
05Q/05QE	939011Q	939014Q
10Q/10QE	939012Q	939015Q
20Q/20QE	939013Q	939016Q
Cellulose (Eco)		
NE10	939017	
Cleanable metal mesh		
035W	939018	
060W	939019	

Product Description for DF2145

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Duplex filter	DF2145

Table 2

FILTER SIZE	
Element length	CODE
Length 2	2

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Microglass III	
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
Ecoglass III	
Glassfibre 5 µm	05QE
Glassfibre 10 µm	10QE
Glassfibre 20 µm	20QE
Other medias	
Cellulose 10 µm (nom) ECO	10NE
Cleanable metal mesh 35 µm	035W
Cleanable metal mesh 60 µm	060W

Table 4

SEAL TYPE	
Seal material	CODE
Fluoroelastomer	V

Table 5

INDICATORS	
Options	CODE
Indicator port plugged	P
Visual indicator	M3
Electrical indicator	T1
Electronic indicator (PNP/N.O.)	F1
Electronic indicator (NPN/N.O.)	F2

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
3.5 bar/2.5 bar	K
No/No	X

Table 7

FILTER CONNECTIONS	
Port size	CODE
G $\frac{3}{4}$	G12
M26x1.5	M26

Table 8

OPTIONS	
Options	CODE
With bypass	1
No bypass	2
PED category 2	P2

If several options are selected, please add the codes in order listed above.

SPARE PARTS	
Seal kits (fluoroelastomer)	CODE
Complete seal kit (includes also valve spool seals)	916045088
Service seal kit (includes seals for bowl, drain and Eco-adapter)	916045093
ECO adapter	
For Ecoglass III and 10NE elements	911042096

Please note the bolded options reflect standard options with reduced lead-time.

DFBO Series

Duplex Fuel Filters
Max. 90 l/min. 10 bar



Continuous diesel filtration in Marine applications with DFBO duplex filter:

The new DFBO duplex filter brings Racor® FBO filters to engine room environment. The new duplex design ensures that fuel is efficiently filtered all the time. The cast iron head and steel bowls mean that it can be used in Marine applications.

The DFBO comes with two bowl lengths allowing diesel flows up to 90 l/min. Depending on the elements inside the unit can be used as a prefilter, a water separator/particle filter or a water absorptive filter. Easy service, no special tools are required.



Contact Information:

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filtrationinfo@parker.com

www.parker.com/hfde

Applications:

- Fuel systems on diesel engines
- Marine fuel docks
- Diesel fuel dispensing system

Specification

Duplex filter:

Change-over valve with open center position. Locking device for both end positions and center position. Manual vent valves and drain valves.

Maximum operating pressure:

10 bar (Marine assemblies 7 bar)

Connections:

Threaded ports M30 x 1,5 or optionally G1" facing downwards.

Seal material:

Fluoroelastomer

Operating temperature:

0°C...+80°C (Marine assemblies 0°C...+60°C), for other temperatures consult Parker Filtration.

Housing material:

Head material cast iron, bowl material steel.

Weight:

40 kg

Nominal flow rate (3 cSt):

DFBO-10: 70 l/min (4.2 m³/h)

DFBO-14: 90 l/min (5.4 m³/h)

Bypass valve:

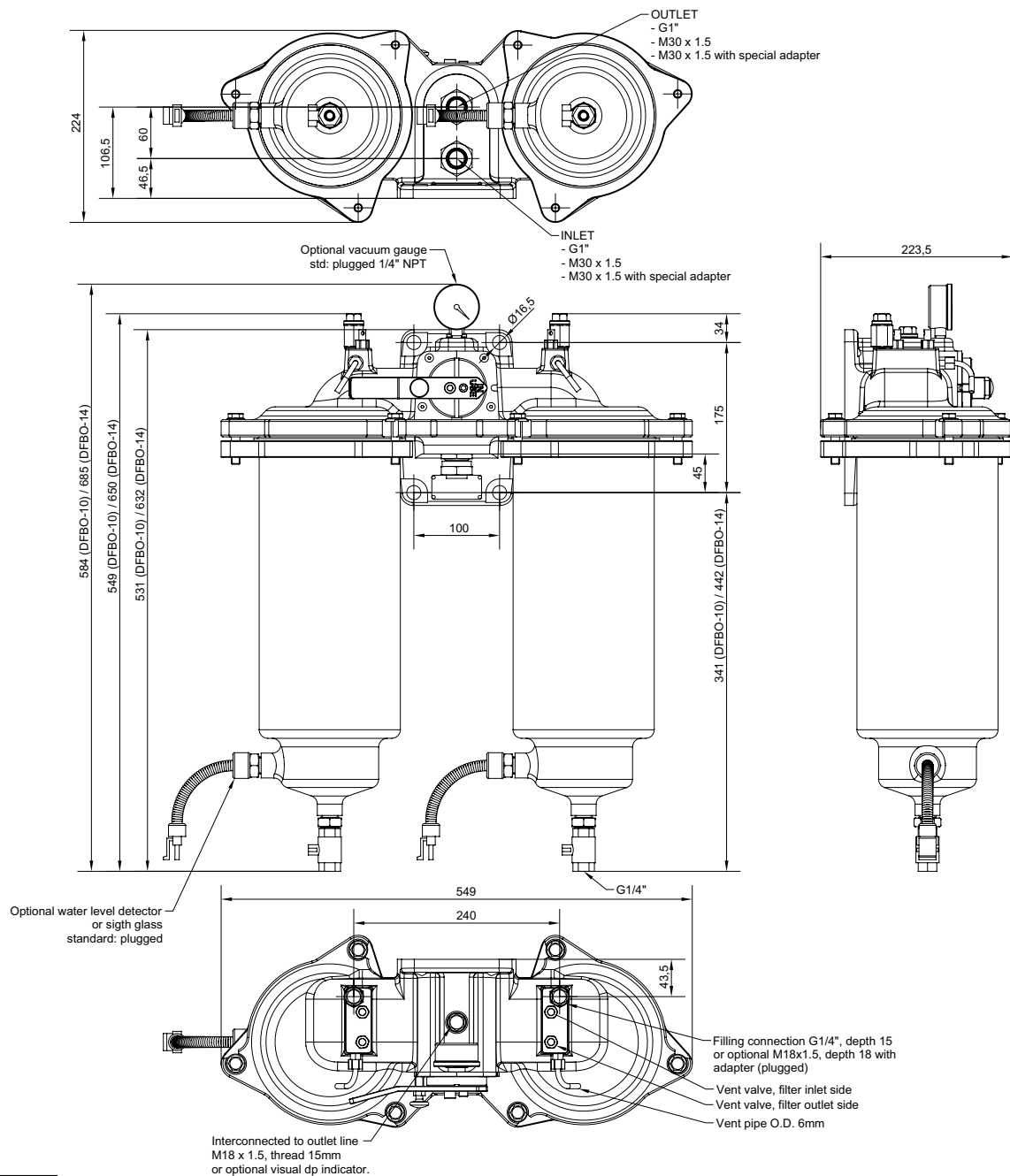
No bypass

Filter elements:

Filter separator elements with micron ratings 10 µm and 25 µm remove water and contaminants from fuel streams. Other types of FBO elements and other ratings are available, see replacement element table on the following page.

Fluid compatibility:

Suitable for use with diesel fuel, jet fuel, gasoline, kerosene, JP4, JP5 and JP8.



Product Description for DFBO

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Duplex filter	DFBO

Table 2

FILTER SIZE	
Element length	CODE
Length 10"	10
Length 14"	14

Table 3

MICRON RATING	
Filter separator element	CODE
Rating 10 µm	10FS
Rating 25 µm	25FS
Without elements	XXX

Table 4

SEAL TYPE	
Seal material	CODE
Fluoroelastomer	V

Table 5

INDICATORS	
Options	CODE
Indicator port plugged	P
Vacuum gauge in outlet side	A

Table 6

INDICATOR SETTING	
Options	CODE
No indicator	X
1,0 bar (15 psi)	F

Table 7

FILTER CONNECTIONS	
Port size	CODE
M30 x 1,5 connections down	MD30
G1" - connections down	GD16

Table 8

OPTIONS	
Options	CODE
Standard	1
Sight level glass in bowl	SG
Water level probe in bowl	WP
Marine assembly (max 7 bar)	MA

Max flow rate [l/min] with marine diesel oil at 3 cSt	One side in use		Both sides in use	
	10 micron	25 micron	10 micron	25 micron
DFBO-10	10FS	25FS	10FS	25FS
Vacuum side	45	45	60	60
Pressure side	70	70	100	100
DFBO-14	10FS	25FS	10FS	25FS
Vacuum side	60	60	80	80
Pressure side	90	90	130	130

All FBO elements fit in DFBO filter. Check the suitable replacement element from this table.

Element	Micron	Filter Separator	Pre-Filter	Water Absorber
FBO-10	1	FBO 60327	FBO 60330	FBO 60333
	5	FBO 60328	FBO 60331	FBO 60334
	10	FBO 60353	FBO 60354	FBO 60355
	25	FBO 60329	FBO 60332	FBO 60335
FBO-14	1	FBO 60336	FBO 60339	FBO 60342
	5	FBO 60337	FBO 60340	FBO 60343
	10	FBO 60356	FBO 60357	FBO 60358
	25	FBO 60338	FBO 60341	FBO 60344

DF40

Duplex Filters

Max. 200 l/min. 40 bar



Cast iron duplex filter for Marine applications:

The new DF40 duplex filter gives you extra flexibility in installation because it can be serviced from the top or the bottom. The durable cast iron housing makes it an especially good fit for engine room applications.

The DF40 with flow up to 200 l/min and pressure up to 40 bar contains Eco elements which help to save the environment and reduce the customer's disposal costs as no metal parts are included. This filter also disposes of a double indicator port and test connections which can be isolated with shut-off valves for possible assembly and maintenance.



Contact Information:

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FI, FR, IE, IT, PT, SE, SK, UK)**
filtrationinfo@parker.com

www.parker.com/hfde

Applications:

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

Specification

Duplex filter:

Change-over valve with open center position. Locking device for both end positions. Element change is possible by opening either the top cover or the bowl in the bottom. Safety guards ensure that pressure is released prior opening the filter.

Maximum operating pressure:

40 bar

Connections:

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

Seal material:

Fluoroelastomer

Operating temperature:

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

Housing material:

Cast iron (GJS)

Weight:

52 kg

Nominal flow rate (30 cSt):

200 l/min (12 m³/h)

Bypass valve:

Standard without bypass, optional opening pressure 3.5 bar

Indicators:

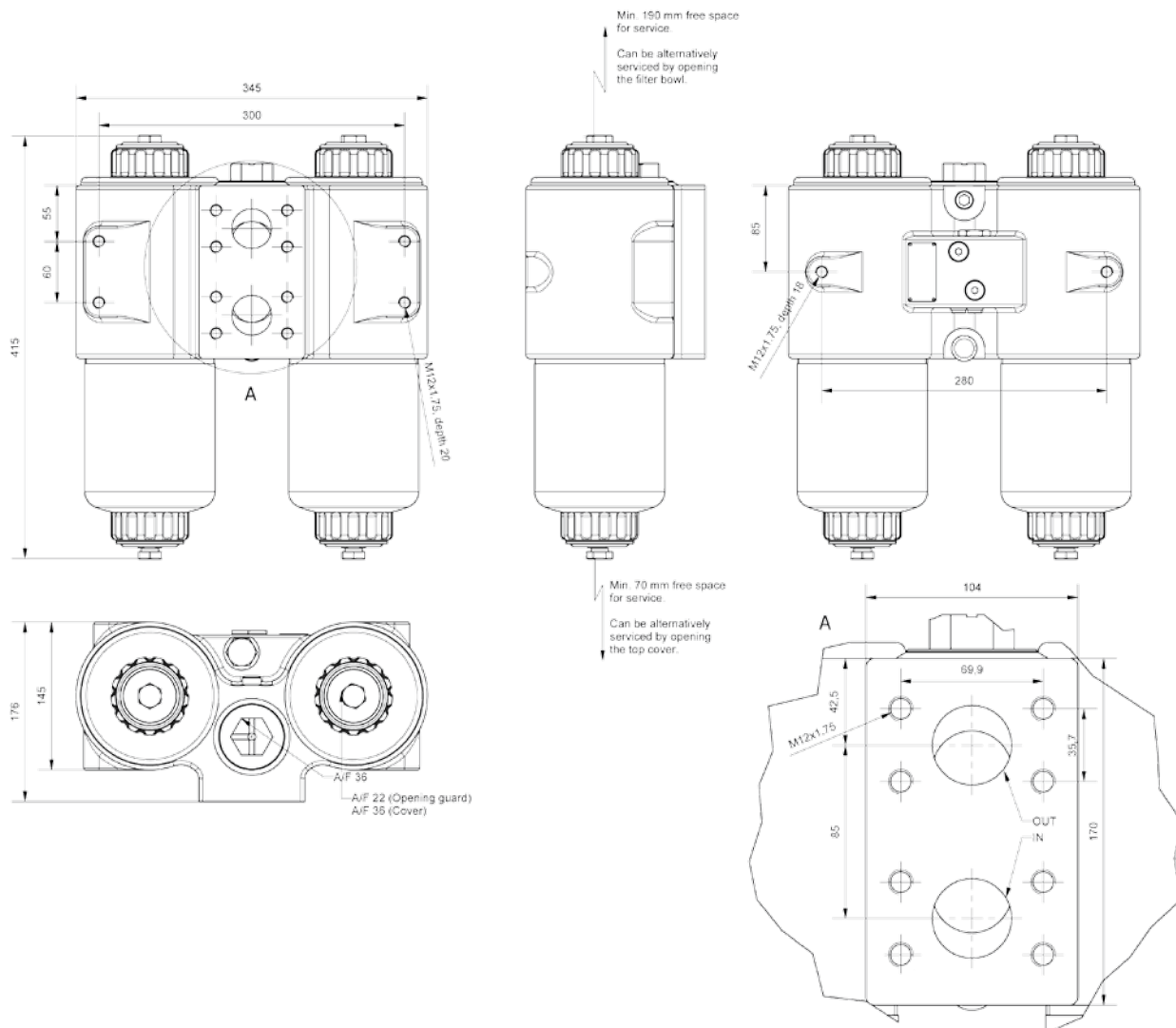
Integrated indicator port. Filter can be equipped with visual, electrical or electronic differential pressure indicator. Setting 2.5 bar, other settings available. Additional indicator port and isolation valves which also enable indicator testing are available by request. For details see indicator options table on product description page and catalogue section 4.

Filter elements:

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

Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils & light fuel oils. For heavy fuel oils and other fluids consult Parker Filtration.



DF40

Pressure Drop Curves

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

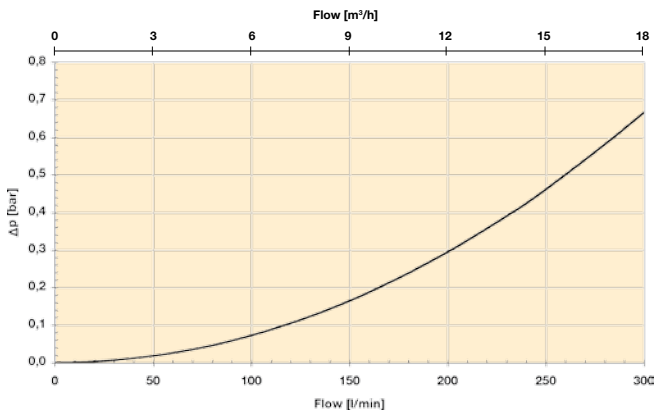
The recommended level of the initial pressure drop for this filter is maximum 1.0 bar.

Δp -curves are measured at 30 cSt.

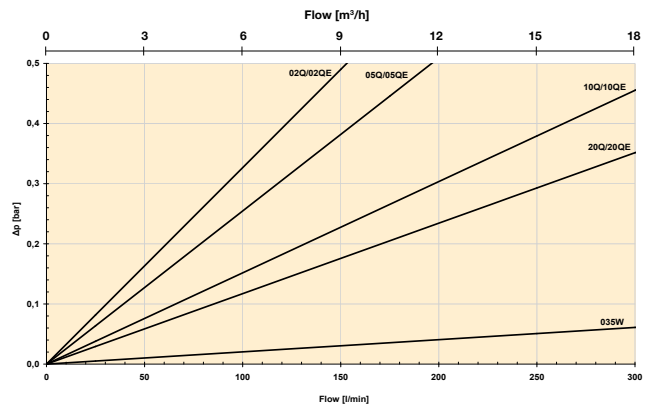
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

DF40 housing



DF40 elements



REPLACEMENT ELEMENTS WITH FLUOROELASTOMER SEALS

Media code		Order code	
Glassfibre		Microglass III	Ecoglass III
02Q/02QE		939200Q	939204Q
05Q/05QE		939201Q	939205Q
10Q/10QE		939202Q	939206Q
20Q/20QE		939203Q	939207Q
Cleanable metal mesh			
035W		939208	
060W		939209	

SPARE PARTS

Seal kit (fluoroelastomer)	CODE
For spool valve	939215

Seals needed in element service are included in Parker original replacement element package.

Product Description for DF40

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Duplex filter	DF40

Table 2

FILTER SIZE	
Element length	CODE
Length 1	1

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Microglass III	
Glassfibre 2 µm	02Q
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
Ecoglass III	
Glassfibre 2 µm	02QE
Glassfibre 5 µm	05QE
Glassfibre 10 µm	10QE
Glassfibre 20 µm	20QE
Other medias	
Cleanable metal mesh 35 µm	035W
Cleanable metal mesh 60 µm	060W

Table 4

SEAL TYPE	
Seal material	CODE
Fluoroelastomer	V

Table 5

INDICATORS	
Options	CODE
Indicator port plugged	P
Visual indicator	M3
Electrical indicator	T1
Electronic indicator (PNP/N.O.)	F1
Electronic indicator (NPN/N.O.)	F2

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
3.5 bar/2.5 bar	K
No/No	X

Table 7

FILTER CONNECTIONS	
Port size	CODE
SAE flange 1½" 3000-M	R24
G 1¼ with adaptor	G20
G 1½ with adaptor	G24

Table 8

OPTIONS	
Options	CODE
With bypass	1
No bypass	2
No safety covers, with bypass	N1
No safety covers, no bypass	N2
HFO use, no bypass, max. pressure 30 bar	H2

Please note the bolded options reflect standard options with reduced lead-time.

DF2089

Duplex Filters

Max. 350 l/min. 30 bar



Heavy duty duplex operation

Cast iron housing with pressure rating up to 40 bar features in-to out flow to keep the particles away even during the filter change. Differential pressure switch mounted on the filter for easy access. Several media options allow lube, fuel and hydraulic use – pre-filtration with magnets as option.



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www.parker.com/hfde

Applications:

- Propulsion system lube oil filter
- Heavy fuel oil safety filter
- Medium pressure hydraulic systems

Specification

Duplex filter:

One reservoir can be closed for service, vertical installation.

Connections:

Square flanges with port size 60 mm. Standard delivery includes blind counter flanges. Optionally available with SAE 2" -3000M flange adapters.

Maximum operating pressure:

30 bar

Seal material:

Fluoroelastomer

Operating temperature:

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

Housing material:

Cast iron (GJS)

Weight:

65 kg

Nominal flow rate (30 cSt):

350 l/min (21 m³/h)

Bypass valve:

Standard bypass opening pressure 2.0 bar, optional opening pressure 1.6 bar or blocked bypass

Indicator options:

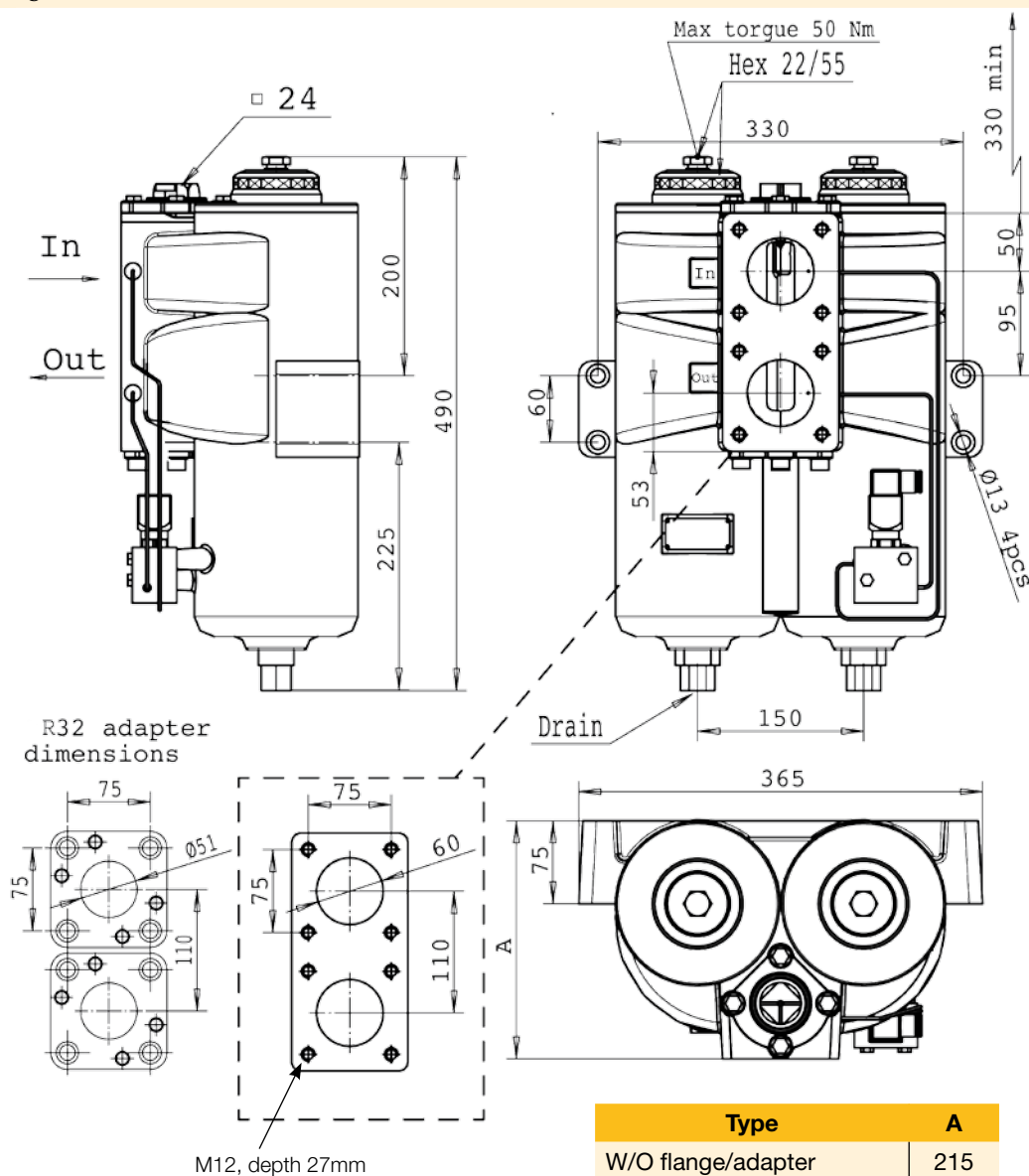
Visual, electrical or electronic indicator requires an indicator block. For details see indicator options table in product description page and catalogue section 4.

Filtration materials:

- Glassfibre Microglass III
- Cleanable metal mesh

Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils and fuel oils. Filters are delivered with documentation according PED 97/23/EC category II (required for heavy fuel oils). For other fluids consult Parker Filtration.



Type	A
W/O flange/adapter	215
With X60 flange	232
With R32 adapter	245

DF2089

Pressure Drop Curves

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

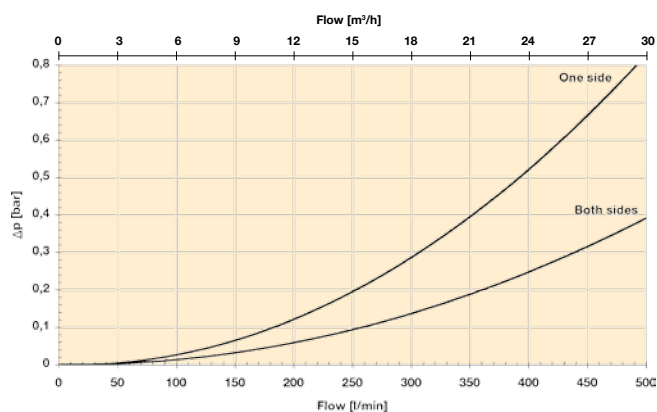
The recommended level of the initial pressure drop for this filter is maximum 0.5 bar.

Δp -curves are measured at 30 cSt.

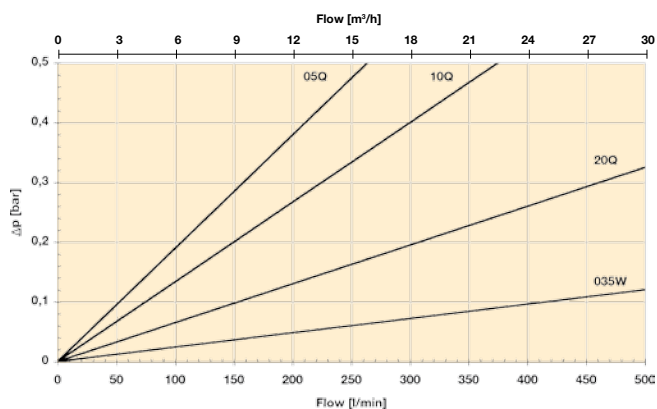
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

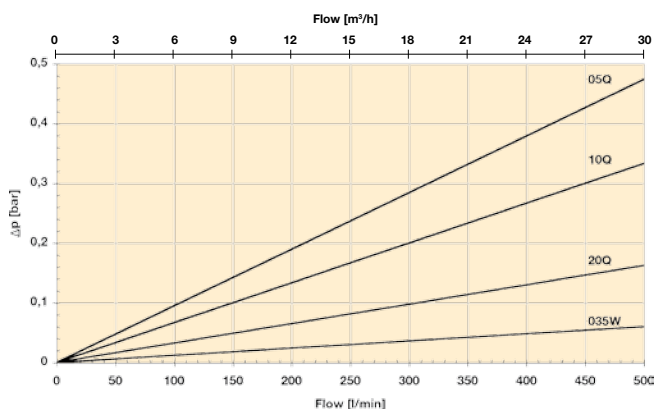
DF2089 housing



DF2089 elements/one side



DF2089 elements/both sides



Product Description for DF2089

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Duplex filter	DF2089

Table 2

FILTER SIZE	
Element length	CODE
Length 1	1

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Microglass III	
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
Other medias	
Cleanable metal mesh 35 µm	035W
Cleanable metal mesh 60 µm	060W

Table 4

SEAL TYPE	
Seal material	CODE
Fluoroelastomer	V

Table 5

INDICATORS	
Options	CODE
No indicator block	N
Indicator port plugged	P
Visual indicator	M3
Electrical indicator	T1
Electronic indicator (PNP/N.O.)	F1
Electronic indicator (NPN/N.O.)	F2

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
1.6 bar/1.0 bar	F
2.0 bar/1.5 bar	H
No/No	X

Table 7

FILTER CONNECTIONS	
Port size	CODE
Square flange 60 mm	X60
Flange adapter SAE 2"-3000M	R32

Table 8

OPTIONS	
Options	CODE
With bypass, no magnets	1
No bypass, no magnets	2
With bypass and magnets	3
No bypass, with magnets	4

REPLACEMENT ELEMENTS WITH FLUOROELASTOMER SEALS	
Media code	Order code
Glassfibre	Microglass III
05Q	938364Q
10Q	938075Q
20Q	938005Q
Cleanable metal mesh	
035W	939184
060W	939185

SPARE PARTS	
Seal kit	CODE
Seal material	
Fluoroelastomer	916045077

Please note the bolded options reflect standard options with reduced lead-time.

DF60

Duplex Filters

Max. 350 l/min. 30 bar



Heavy duty lubrication

This heavy duty lubrication filter offers maximum performance especially in those applications using high viscosity lubricating oil. Filtration area has been enlarged to minimize element pressure drop. A perfect choice for a gearbox lubrication system where duplex filter is needed for continuous operation.



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www.parker.com/hfde

Applications:

- Gearbox lube oil filter
- Turbine lubrication systems
- Medium pressure hydraulic systems

Specification

Duplex filter:

One reservoir can be closed for service, vertical installation.

Connections:

Square flanges with port size 60 mm. Standard delivery includes blind counter flanges. Optionally available with SAE 2"-3000M flange adapters.

Maximum operating pressure:

30 bar

Seal material:

Fluoroelastomer

Operating temperature:

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

Housing material:

Cast iron (GJS)

Weight:

65 kg

Nominal flow rate (30 cSt):

350 l/min (21 m³/h)

Bypass valve:

Standard bypass opening pressure 3.5 bar, optional opening pressure 1.7 bar or blocked bypass

Indicator options:

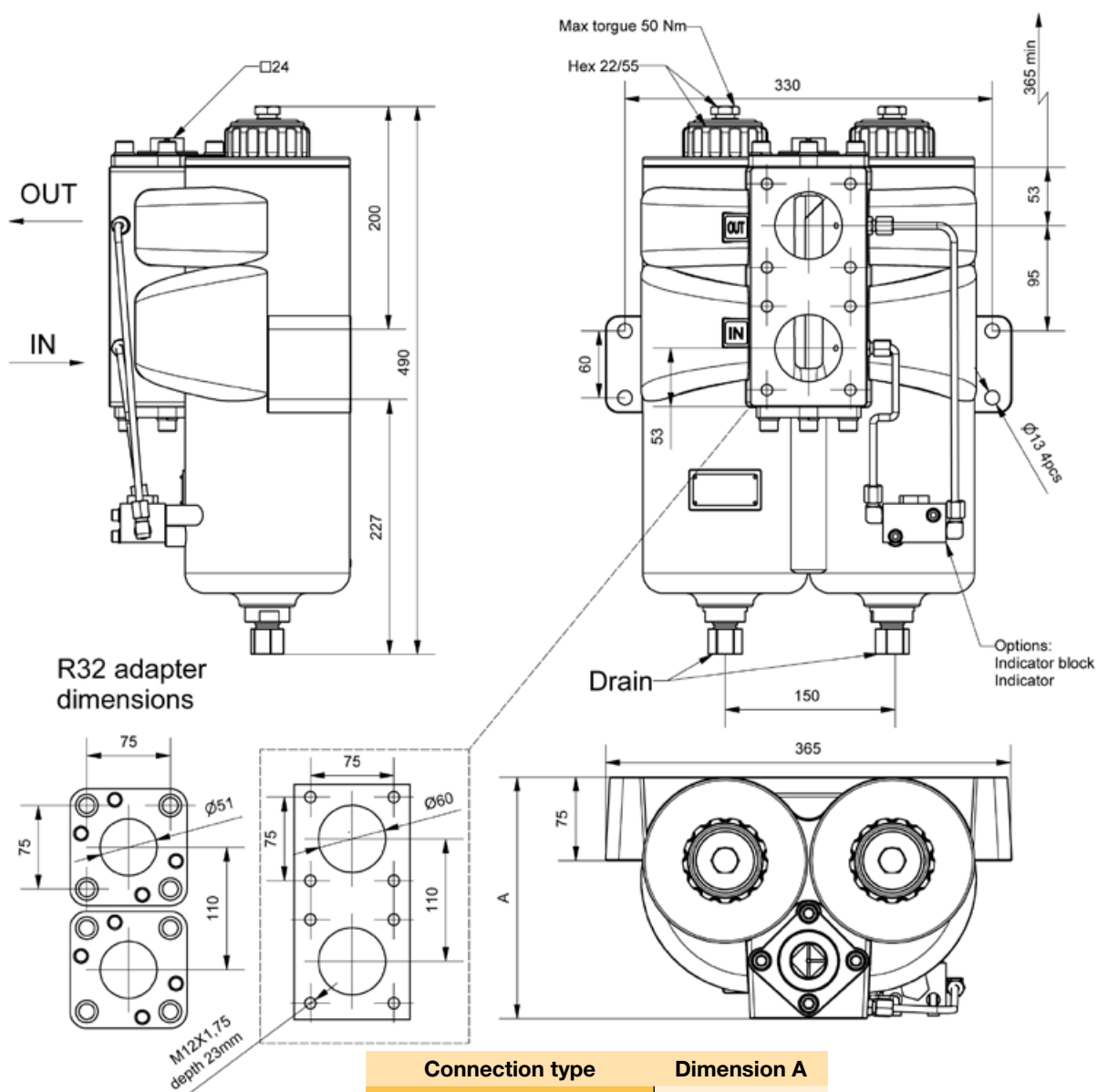
Visual, electrical or electronic indicator requires an indicator block. For details see indicator options table in product description page.

Filtration materials:

- Glassfibre Microglass III
- Cleanable metal mesh

Fluid compatibility:

Suitable for use with regular hydraulic and lubricating oils and diesel oil. For other fluids consult Parker Filtration.



DF60

Pressure Drop Curves

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

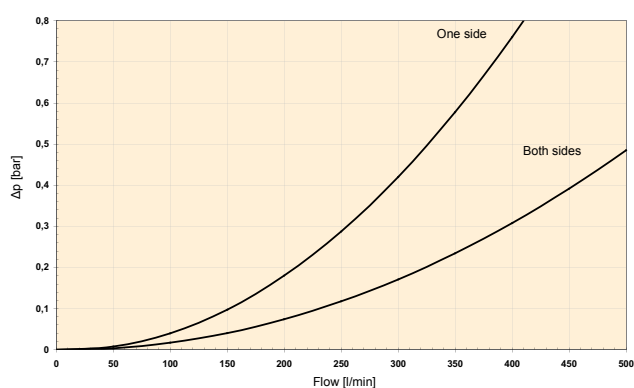
The recommended level of the initial pressure drop for this filter is maximum 0.5 bar.

Δp -curves are measured at 30 cSt.

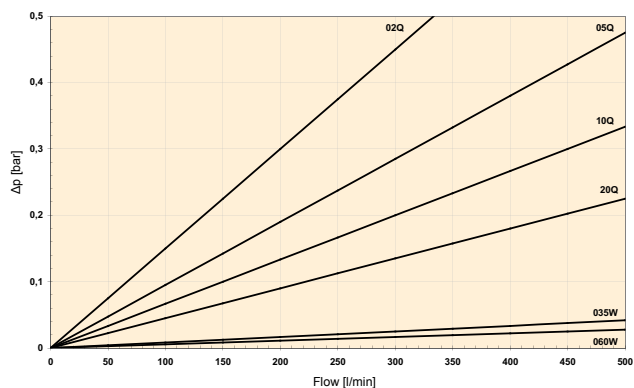
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

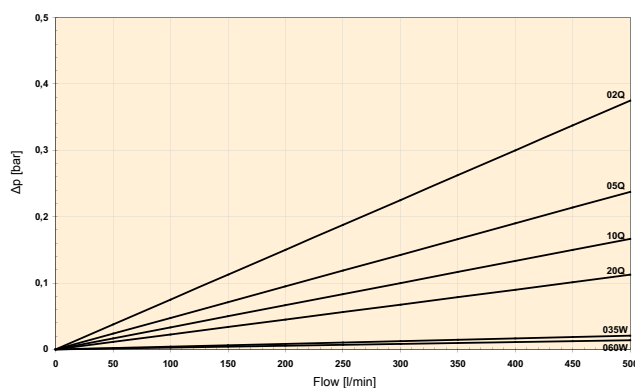
DF60 housing + element adapter



DF60 elements / one side



DF60 elements / both sides



Product Description for DF60

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Duplex filter	DF60

Table 2

FILTER SIZE	
Element length	CODE
Length 1	1

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Microglass III	
Glassfibre 2 µm	02Q
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
Other medias	
Cleanable metal mesh 35 µm	035W
Cleanable metal mesh 60 µm	060W

Table 4

SEAL TYPE	
Seal material	CODE
Fluoroelastomer	V

Table 5

INDICATORS	
Options	CODE
No indicator block	N
Indicator port plugged	P
Visual indicator	M3
Electrical indicator	T1
Electronic indicator (PNP/N.O.)	F1
Electronic indicator (NPN/N.O.)	F2

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
1.7 bar/1.2 bar	G
3.5 bar/2.5 bar	K
No/No	X

Table 7

FILTER CONNECTIONS	
Port size	CODE
Square flange 60 mm	X60
Flange adapter SAE 2"-3000M	R32

Table 8

OPTIONS	
Options	CODE
With bypass	1
No bypass	2

REPLACEMENT ELEMENTS WITH FLUOROELASTOMER SEALS	
Media code	Order code
Glassfibre	Microglass III
02Q	939230Q
05Q	939231Q
10Q	939232Q
20Q	939233Q
Cleanable metal mesh	
035W	939234
060W	939235

SPARE PARTS	
Seal kit for valve spool	CODE
Seal material	
Fluoroelastomer	916045096

Seals needed in element service are included in Parker original replacement element package.

Please note the bolded options reflect standard options with reduced lead-time.

WARNING – USER RESPONSIBILITY

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- The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalogue and in any other materials provided from Parker or its subsidiaries or authorized distributors.
- To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

DF65

Duplex Filters

Max. 800 l/min. 25 bar



Efficient Duplex filter for limited spaces.

The DF65 duplex filter has been designed especially for applications where space is limited. The unique design allows the installation of the filter in almost any position. For very tight height limitations, horizontal mounting position will save on critical available space. New purpose-designed iprotect® elements contain a broad filtration area providing low pressure loss, long service life and maximum protection even in cold conditions. The duplex arrangement allows continuous operation and element service to be made when most suitable for the maintenance staff.



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filtrationinfo@parker.com

www.parker.com/hfde

Applications:

- Gearbox lubrication systems
- Turbine lubrication systems
- Propulsion systems

Specification

Duplex filter:

Change-over valve with an open centre position. A locking device for both end positions and the middle position. Safety guards ensure that pressure is released prior to opening the filter.

Flow direction:

From out to in.

Connections:

Flanges SAE 2" 3000-M or SAE 2½" 3000-M. Inlet and outlet pressure connections 3/8" for an external differential pressure transmitter.

Maximum operating pressure:

25 bar

Seal material:

Fluoroelastomer

Operating temperature:

-20 ... +120°C

-20... + 160°C when using metal mesh elements

Housing material:

Cast iron (GSI)

Weight:

135 kg

Nominal flow rate (30 cSt):

800 l/min (48 m³/h)

Bypass valve:

Standard bypass opening pressure 3.5 bar, optional opening pressure 1.7 bar or a blocked bypass.

Indicator options:

Integrated indicator port. Filter can be equipped with a visual, an electrical or an electronic differential pressure indicator. Standard indicator setting 2.5 bar used with 3.5 bar and blocked bypass; and setting 1.2 bar with 1.7 bar bypass.

Filter elements:

- iprotect® glassfibre elements, micron ratings(abs): 2 µm, 5 µm, 10 µm and 20 µm
- iprotect® cleanable metal mesh elements, micron ratings(abs): 35 µm and 60 µm

Fluid compatibility:

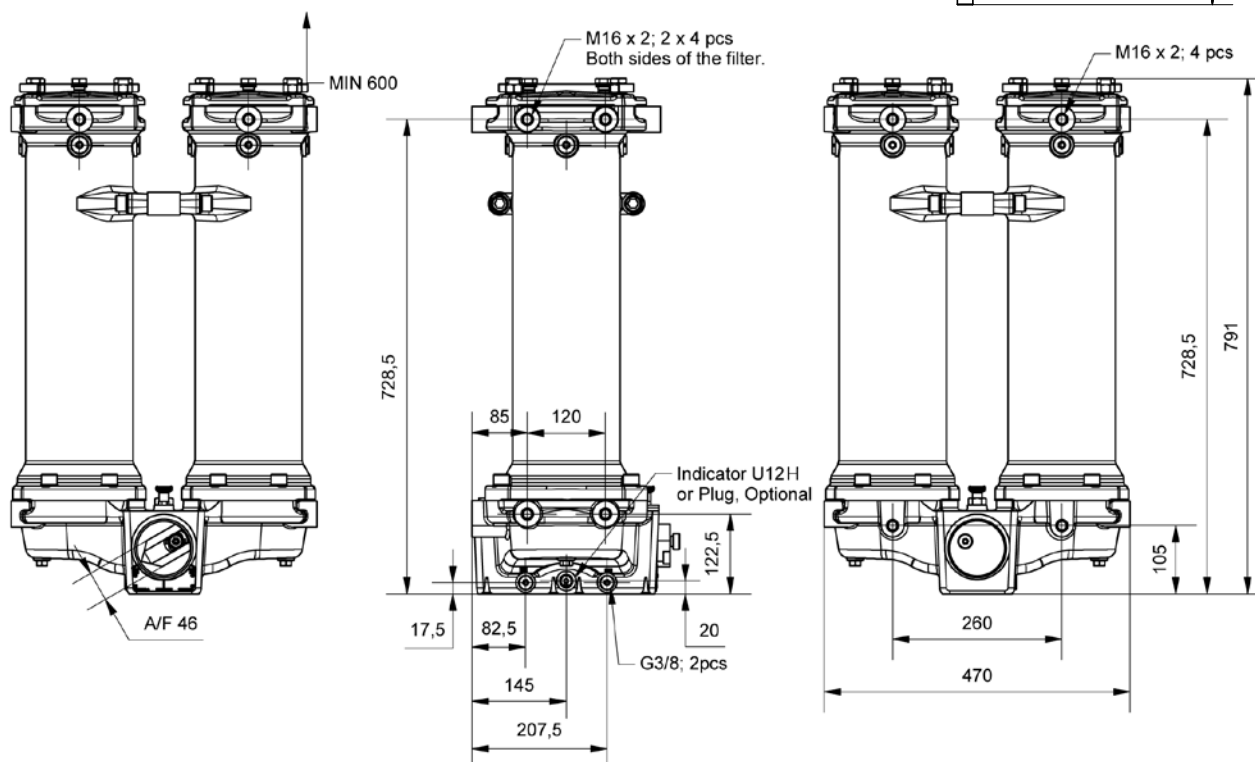
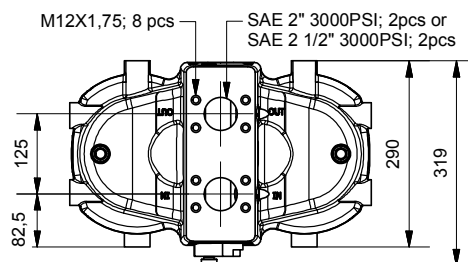
Suitable for use with regular hydraulic and lubrication oils and light fuel oils. For heavy fuel oils and other fluids consult Parker Filtration.

Parker's iprotect® family of filter elements represent the next generation of patented filter elements.

iprotect®

- Thanks to the patented construction of every iprotect element, the quality of filtration is guaranteed, as no 'pirate spare parts' can be used. This ensures that the iprotect element remains the truly protective 'DNA' of hydraulic & lubrication systems.
- In addition to the ultimate protection of the system, the iprotect family ensures that any environmental impact is minimised, by the retention and reuse of the filter element support core.
- Finally, 'iprotect' the environment by reducing environmental waste, typically, by 50%.

Dimensions and other details may be changed without notice. Please contact Parker for the latest information.



DF65

Pressure Drop Curves

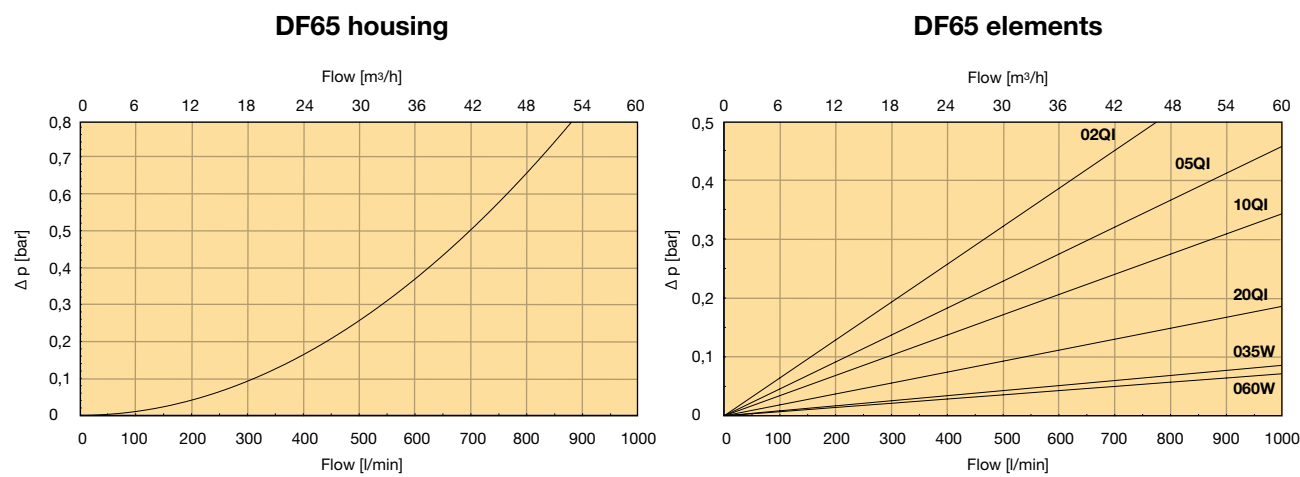
$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

The recommended level of the initial pressure drop for this filter is maximum 0.8 bar.

Δp -curves are measured at 30 cSt.

If the medium used has a viscosity different from 30 cSt, pressure drop over the filter can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$



REPLACEMENT ELEMENTS WITH FLUOROELASTOMER SEALS	
Media code	Order code
Glassfibre	
02QI	938944Q
05QI	938945Q
10QI	938946Q
20QI	938947Q
Cleanable metal mesh	
035W	938948
060W	938949

SPARE PARTS	
Service seal kit	CODE
Seal material	
Fluoroelastomer	930000053

Seals needed in element service are included in Parker original replacement element package.



Product Description for DF65

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Duplex filter	DF65

Table 2

FILTER SIZE	
Element length	CODE
Length 6	6

Table 3

DEGREE OF FILTRATION	
iprotect® Element type	CODE
Glassfibre 2 µm	02QI
Glassfibre 5 µm	05QI
Glassfibre 10 µm	10QI
Glassfibre 20 µm	20QI
Other medias	
Cleanable metal mesh 35 µm	035W
Cleanable metal mesh 60 µm	060W

Table 4

SEAL TYPE	
Elements	CODE
Fluoroelastomer	V

Please note the bolded codes reflect standard options with reduced lead-time.

Table 5

INDICATORS	
Options	CODE
No indicator block	N
Indicator port plugged	P
Visual indicator	M3
Electrical indicator	T1
Electronic indicator (PNP/N.O.)	F1
Electronic indicator (NPN/N.O.)	F2
Electronic indicator (NPN/N.O.)	F3
Electronic indicator (NPN/N.O.)	F4

Table 6

BYPASS AND INDICATOR SETTINGS	
Bypass/indicator setting	CODE
3.5 bar/2.5 bar	K
1.7 bar/1.2 bar	G
No/No	X

Code denotes settings only. Select with or no bypass in table 8.

Table 7

FILTER CONNECTIONS	
Port size	CODE
SAE flange 2" 3000-M	D32
SAE flange 2½" 3000-M	R40

Table 8

OPTIONS	
Options	CODE
With bypass	1
No bypass	2

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DF2110 Series

Duplex Filters

Max. 1200 l/min. 30 bar



Heavy duty performance

High dirt holding capacity yet low pressure drop. Heavy duty cast iron housing and several media options means a multitude of suitable applications. Maximum flow rate up to 1200 l/min and extended housing available for high viscosity oils and longer service intervals. DN80 PN 25 connection.



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Applications:

- Marine gear lubricating systems
- Propulsion systems
- Diesel engine lubricating systems
- Heavy fuel oil safety filter

Specification

Duplex filter:

One reservoir can be closed for service, vertical installation.

Connections:

Standard flange size DN80/PN25. Delivered without counter flanges.

Maximum operating pressure:

30 bar

Seal material:

Fluoroelastomer

Operating temperature:

-20°C...+120°C with Fluoroelastomer seals,

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

Housing material:

Cast iron (GJS)

Weight:

Length 1: 200 kg

Length 2: 240 kg

Nominal flow rate (30 cSt):

Length 1: 1000 l/min (60 m³/h)

Length 2: 1200 l/min (72 m³/h)

Bypass valve:

Standard bypass opening pressure 2.0 bar, optional opening pressure 3.0 bar or blocked bypass

Indicator options:

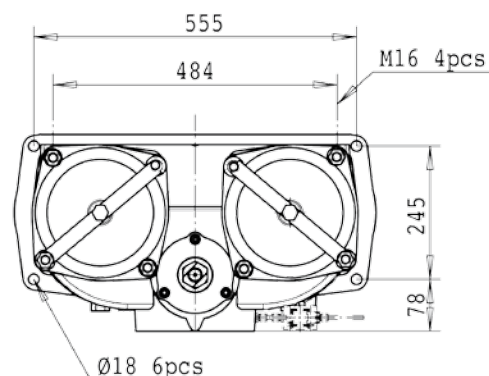
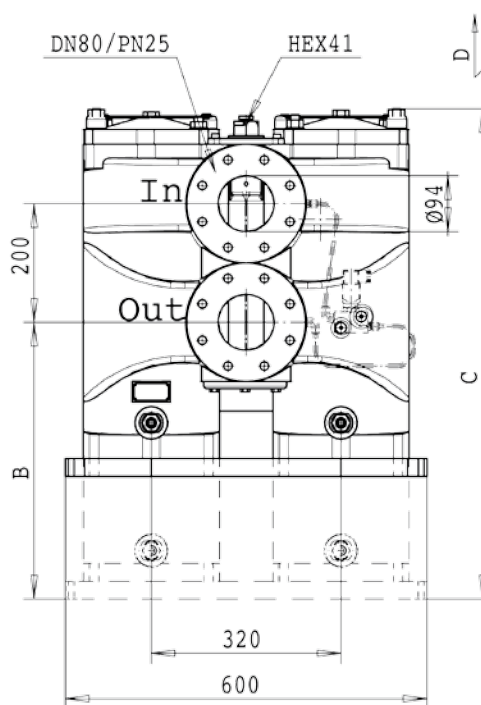
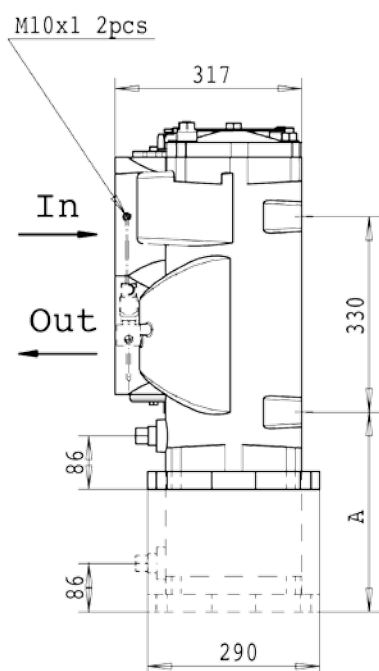
Visual, electrical or electronic indicator requires an indicator block. For details see indicator options table in product description page and catalogue section 4.

Filtration materials:

- Glassfibre Microglass III
- Cleanable metal mesh

Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils and fuel oils. For heavy fuel oil applications, please specify option P2 (see table 8 in product description) which ensures that filters are delivered with documentation according PED 97/23/EC category II. For other fluids consult Parker Filtration.



Type	A	B	C	D
Length 1	126	256	620	500
Length 2	386	516	880	700

DF2110 Series

Pressure Drop Curves

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

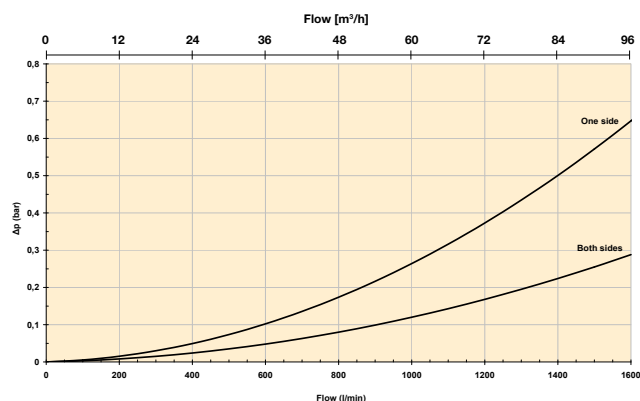
The recommended level of the initial pressure drop for this filter is maximum 0.5 bar.

Δp -curves are measured at 30 cSt.

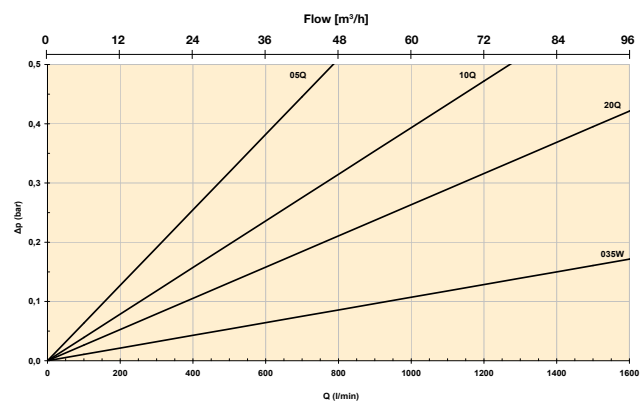
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

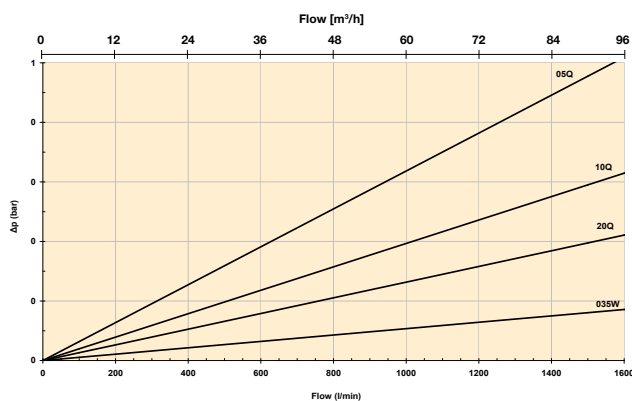
DF2110 housing



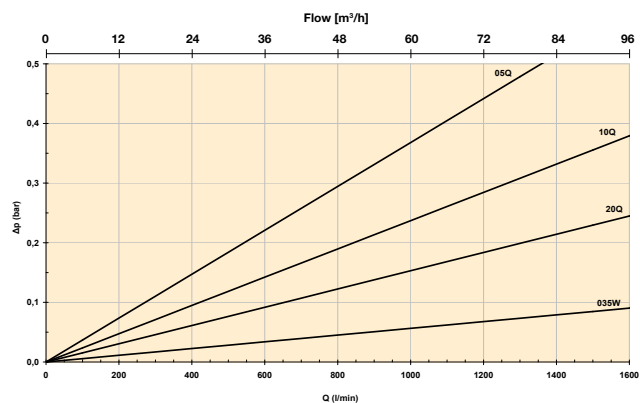
Length 1 elements/one side



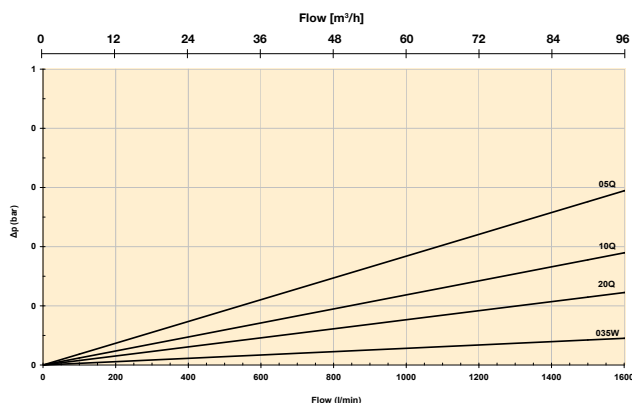
Length 1 elements/both sides



Length 2 elements/one side



Length 2 elements/both sides



Product Description for DF2110

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Duplex filter	DF2110

Table 2

FILTER SIZE	
Element length	CODE
Length 1	1
Length 2	2

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Microglass III	
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
Other medias	
Cleanable metal mesh 35 µm	035W
Cleanable metal mesh 60 µm	060W

Table 4

SEAL TYPE	
Seal material	CODE
Fluoroelastomer	V

Table 5

INDICATORS	
Options	CODE
No indicator block	N
Indicator port plugged	P
Visual indicator	M3
Electrical indicator	T1
Electronic indicator (PNP/N.O.)	F1
Electronic indicator (NPN/N.O.)	F2

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
2.0 bar/1.5 bar	H
3.0 bar/2.5 bar	J
No/No	X

Table 7

FILTER CONNECTIONS	
Port size	CODE
Flange DN80	D80

Table 8

OPTIONS	
Options	CODE
With bypass	1
No bypass	2
PED category 2	P2

If several options are selected, please add the codes in order listed above.

REPLACEMENT ELEMENTS WITH FLUOROELASTOMER SEALS		
Media code	Order code for Length1	Order code for Length2
Glassfibre	Microglass III	Microglass III
05Q	938365Q	938367Q
10Q	938373Q	938093Q
20Q	938366Q	938368Q
Cleanable metal mesh		
035W	939186	939188
060W	939187	939189

SPARE PARTS	
Seal kit	CODE
Seal material	
Fluoroelastomer	916045078

Please note the bolded options reflect standard options with reduced lead-time.

DF2050 Series

Duplex Filters

Max. 1000 l/min. 30 bar



Heavy duty performance

High dirt holding capacity yet low pressure drop. Heavy duty cast iron housing and same elements as in DF2035 means safety and continuity in your applications. Maximum flow rate up to 1000 l/min. DN80 PN 25 connection.



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www.parker.com/hfde

Applications:

- Marine gear lubricating systems
- Propulsion systems
- Diesel engine lubricating systems
- Heavy fuel oil safety filter

Specification

Duplex filter:

One reservoir can be closed for service, vertical installation. Length 2 includes 2 elements/side and length 3 includes 3 elements/side.

Connections:

Standard flange size DN80/PN25. Delivered without counter flanges.

Maximum operating pressure:

30 bar

Seal material:

Fluoroelastomer

Operating temperature:

-20°C...+100°C with elements with Nitrile seals,

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

Housing material:

Cast iron (GJS)

Weight:

Length 2: 200 kg

Length 3: 240 kg

Nominal flow rate (30 cSt):

Length 2: 900 l/min (54 m³/h)

Length 3: 1000 l/min (60 m³/h)

Bypass valve:

Standard with blocked bypass. Optional opening pressure 1.7 bar

Indicator options:

Visual, electrical or electronic indicator requires an indicator block. For details see indicator options table in product description page and catalogue section 4.

Filtration materials:

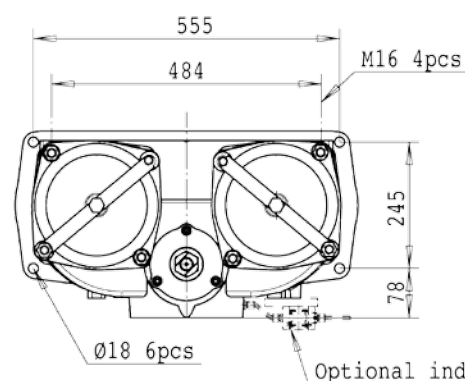
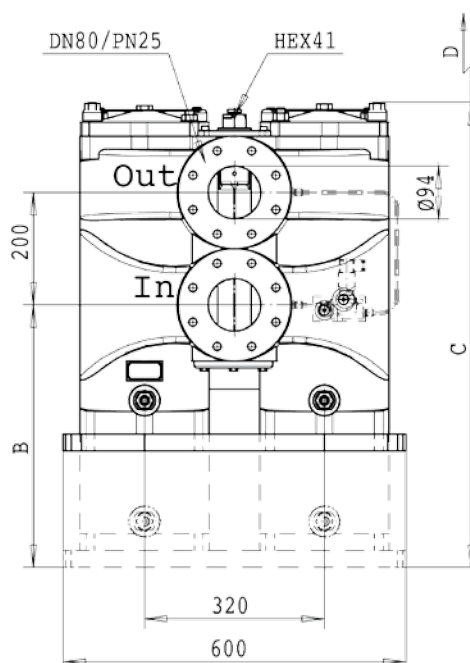
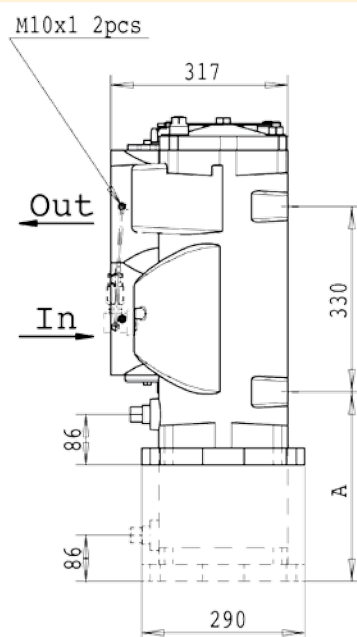
- Resin impregnated heavy duty cellulose paper 15µm nominal
- Glassfibre Microglass III
- Cleanable metal mesh

Secondary filter:

- Filtration material cleanable wire mesh
- Filtration degree 60 µm

Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils and fuel oils. For heavy fuel oil applications, please specify option P2 (see table 8 in product description) which ensures that filters are delivered with documentation according PED 97/23/EC category II. For other fluids consult Parker Filtration.



Type	A	B	C	D
Length 2	126	256	620	500
Length 3	386	516	880	700

DF2050 Series

Pressure Drop Curves

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

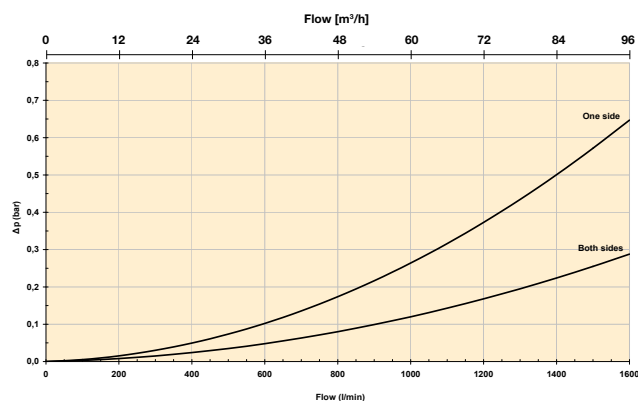
The recommended level of the initial pressure drop for this filter is maximum 0.5 bar.

Δp -curves are measured at 30 cSt.

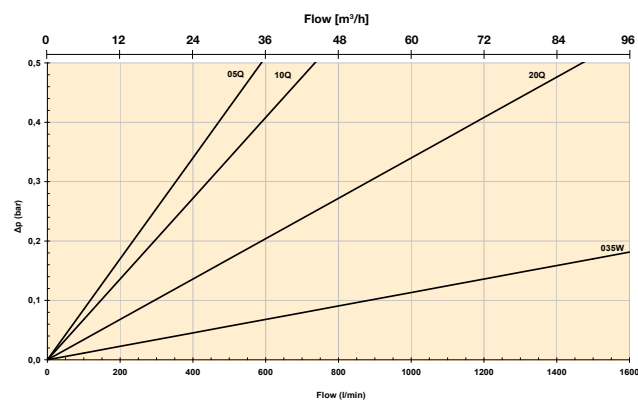
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

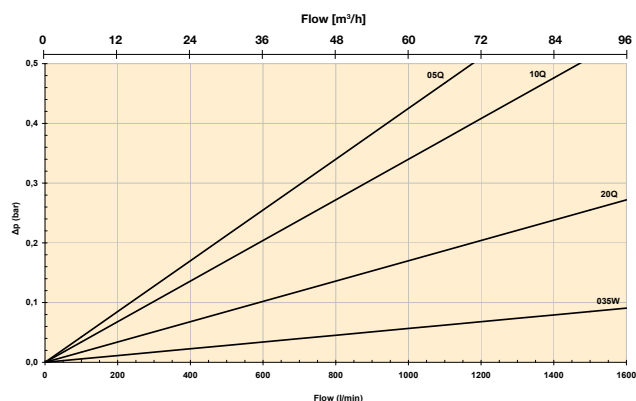
DF2050 housing



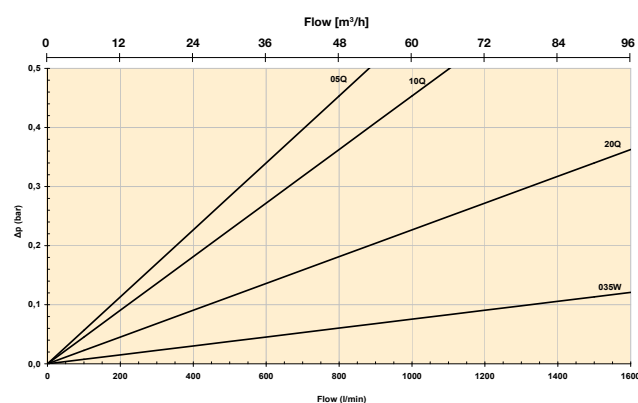
Length 2 element pack/one side



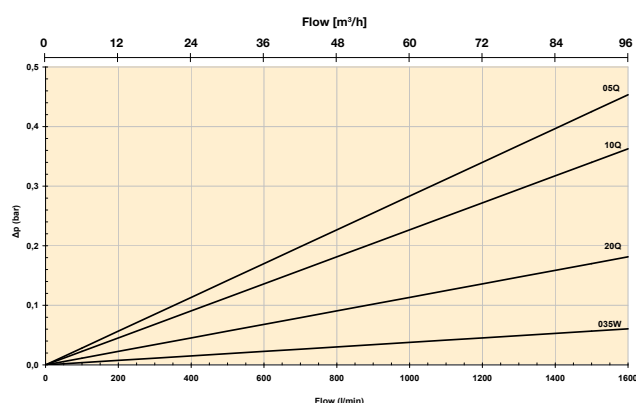
Length 2 element pack/both side



Length 3 element pack/one side



Length 3 element pack/both sides



Product Description for DF2050

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Duplex filter	DF2050

Table 2

FILTER SIZE	
Length/elements	CODE
2 elements/side	2
3 elements/side	3

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Microglass III	
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
Other medias	
Cellulose 15 µm (nom)	015N
Cleanable metal mesh 35 µm	035W
Cleanable metal mesh 60 µm	060W

Table 4

SEAL TYPE	
Seal material	CODE
Fluoroelastomer	V

Table 5

INDICATORS	
Options	CODE
No indicator block	N
Indicator port plugged	P
Visual indicator	M3
Electrical indicator	T1
Electronic indicator (PNP/N.O.)	F1
Electronic indicator (NPN/N.O.)	F2

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
1.7 bar/1.2 bar (select in table 8)	G
No/1.5 bar (select 2 in table 8)	H
No/No (select 2 in table 8)	X

Table 7

FILTER CONNECTIONS	
Port size	CODE
Flange DN80	D80

Table 8

OPTIONS	
Options	CODE
With bypass	1
No bypass	2
PED category 2	P2

If several options are selected, please add the codes in order listed above.

REPLACEMENT ELEMENTS	
Media code / Seal type	Order code
Glassfibre	Microglass III
05Q / Nitrile	939401Q
10Q / Nitrile	939402Q
20Q / Nitrile	939403Q
Cellulose 15 µm (nom)	
015N / Nitrile	939404
Cleanable metal mesh	
035W / Fluoroelastomer	939405
060W / Fluoroelastomer	939406

SPARE PARTS	
Secondary filter element (60 µm)	CODE
Length 2	939416
Length 3	939417
Seal kit	CODE
Seal material	
Fluoroelastomer	916045076

Please note the bolded options reflect standard options with reduced lead-time.

DF2035 Series

Duplex Filters

Max. 600 l/min. 8 bar



Light weight, high capacity

Several media options and high dirt holding capacity – up to three filter elements per reservoir. Aluminium housing offers light weight combined to considerably high capacity. Two different housing options.



Contact Information:

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www.parker.com/hfde

Applications:

- Industrial gear systems
- Diesel engine lubricating systems

Specification

Duplex filter:

One reservoir can be closed for service, vertical installation. Length 2 includes 2 elements/side and length 3 includes 3 elements/side.

Connections:

Square flanges with DN65/PN16 dimensioning. Standard delivery includes blind counter flanges according to DIN 2527.

Maximum operating pressure:

8 bar

Seal material:

Fluoroelastomer

Operating temperature:

-20°C...+100°C. For other temperatures consult Parker Filtration.

Housing material:

Aluminium

Weight:

Length 2: 49.0 kg

Length 3: 62.5 kg

Maximum flow rate:

600 l/min (36 m³/h)

Indicator options:

Visual, electrical or electronic indicator requires an indicator block. For details see indicator options table in product description page and catalogue section 4.

Primary filter:

- Length 2: two filter elements per reservoir
- Length 3: three filter elements per reservoir
- Filtration materials
 - Resin impregnated heavy duty cellulose paper 15µm nominal
 - Glassfibre Microglass III
 - Cleanable metal mesh

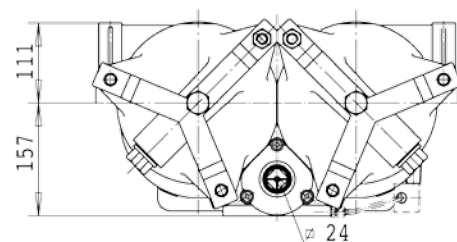
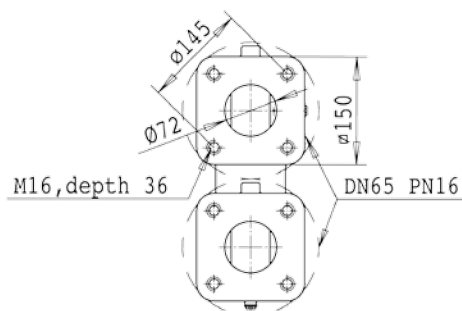
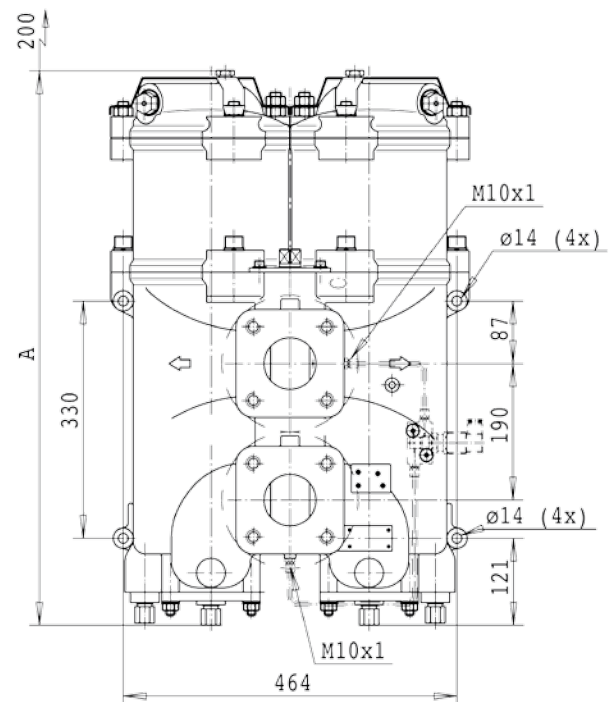
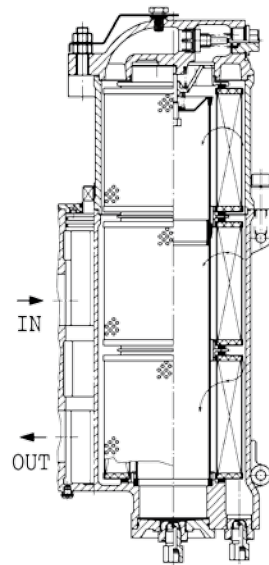
Secondary filter:

- Filtration material cleanable metal mesh
- Filtration degree 60µm

Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils. For other fluids consult Parker Filtration.

Type	A
Length 2	590
Length 3	775



DF2035 Series

Pressure Drop Curves

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

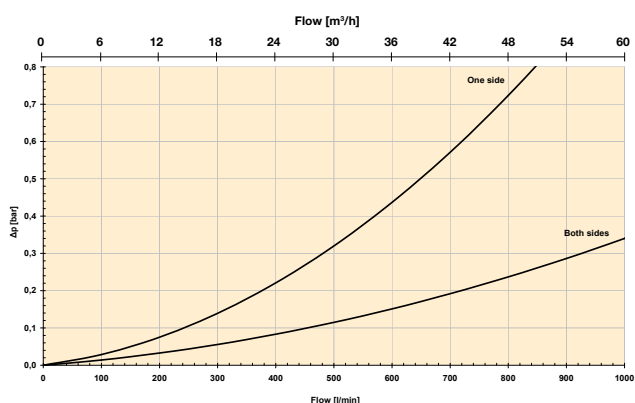
The recommended level of the initial pressure drop for this filter is maximum 0.5 bar.

Δp -curves are measured at 30 cSt.

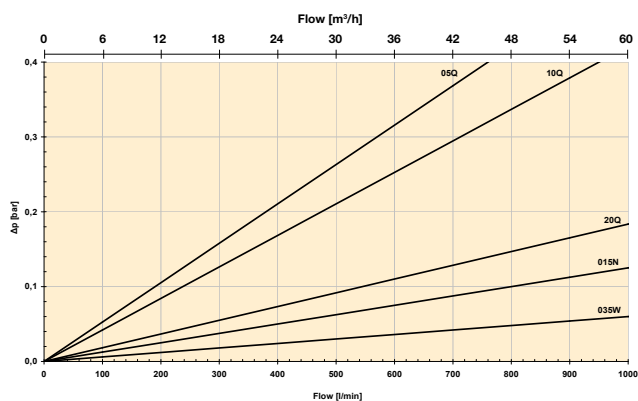
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

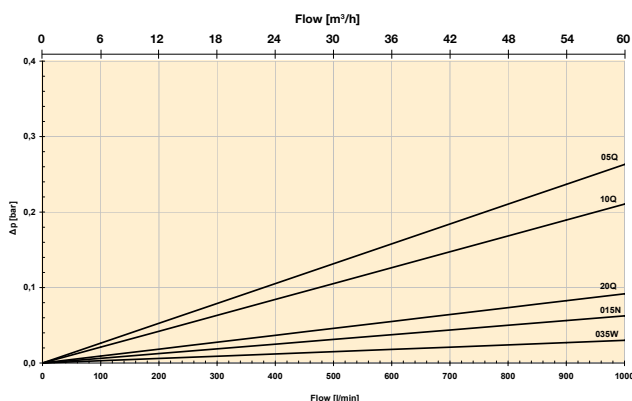
DF2035 housing



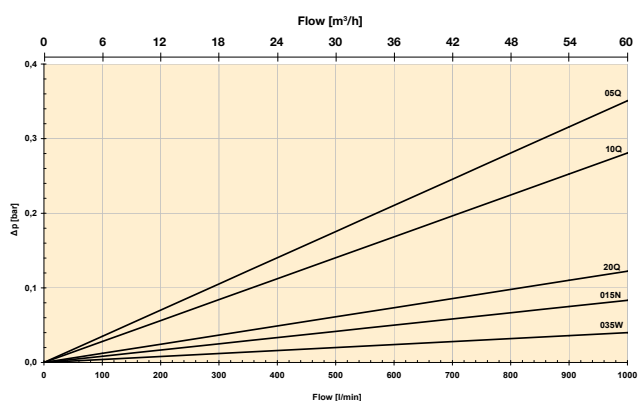
Length 2 element pack (2 pcs)/one side in use



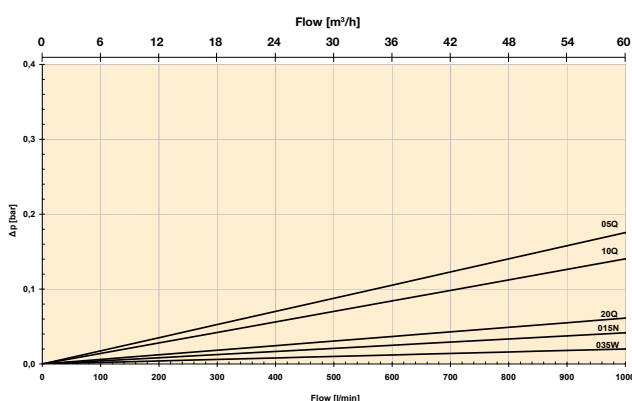
Length 2 element pack (2 + 2 pcs)/both sides in use



Length 3 element pack (3 pcs)/one side in use



Length 3 element pack (3 + 3 pcs)/both sides in use



Product Description for DF2035

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Duplex filter	DF2035

Table 2

FILTER SIZE	
Length/elements	CODE
2 elements/side	2
3 elements/side	3

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Microglass III	
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
Other medias	
Cellulose 15 µm (nom)	015N
Cleanable metal mesh 35 µm	035W
Cleanable metal mesh 60 µm	060W

Table 4

SEAL TYPE	
Seal material	CODE
Fluoroelastomer	V

Table 5

INDICATORS	
Options	CODE
No indicator block	N
Indicator port plugged	P
Visual indicator	M3
Electrical indicator	T1
Electronic indicator (PNP/N.O.)	F1
Electronic indicator (NPN/N.O.)	F2

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
2.0 bar/1.5 bar	H

Table 7

FILTER CONNECTIONS	
Port size	CODE
Square flange ref. DN65	D65

Table 8

OPTIONS	
Options	CODE
With bypass	1

REPLACEMENT ELEMENTS	
Media code / Seal type	Order code
Glassfibre	Microglass III
05Q / Nitrile	939401Q
10Q / Nitrile	939402Q
20Q / Nitrile	939403Q
Cellulose 15 µm (nom)	
015N / Nitrile	939404
Cleanable metal mesh	
035W / Fluoroelastomer	939405
060W / Fluoroelastomer	939406

SPARE PARTS	
Secondary filter element (60 µm)	CODE
Length 2	939414
Length 3 extension element*	939415
Seal kit	CODE
Seal material	
Fluoroelastomer	916045027

* Fully length 3 requires both 939414 + 939415.

Please note the bolded options reflect standard options with reduced lead-time.

DFH2060 Series

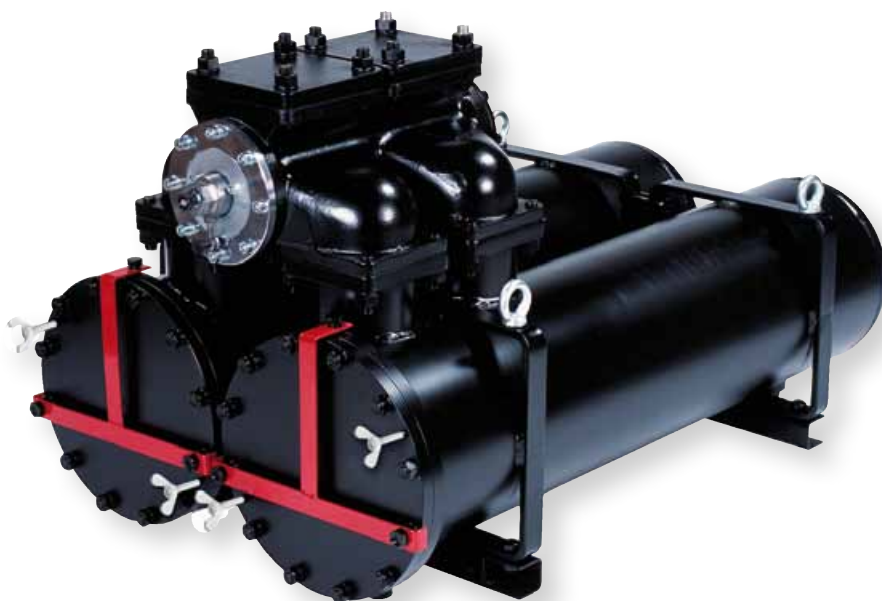
Duplex Filters

Max. 2200 l/min. 10 bar



Maximum performance – minimum height

Slim welded housing construction with cast iron change over valve section. Horizontal mounting makes assembly easier in cranked positions. High dirt holding capacity and low pressure drop. Several media options. One reservoir can be closed for service.



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Applications:

- Heavy duty diesel engine lubricating systems
- High flow industrial lubricating systems

Specification

Duplex filter:

One reservoir can be closed for service, horizontal installation. 1300 mm (1.3 m) free space must be reserved in front of the filter for filter element removal. Filter includes 3 elements/side.

Connections:

Square flanges with port size Ø160 mm. Standard delivery includes blind counter flanges.

Maximum operating pressure:

10 bar

Seal material:

Fluoroelastomer

Operating temperature:

-20°C...+100°C with elements with Nitrile seals,
-20°C...+160°C with metal mesh elements and
Fluoroelastomer seals.

Housing material:

Steel/cast iron (GJS)

Weight:

390 kg

Nominal flow rate (30 cSt):

2200 l/min (132 m³/h)

Bypass valve:

For the primary filter only, opening pressure 2.0 bar

Indicator options:

Visual, electrical or electronic indicator requires an indicator block. For details see indicator options table in product description page and catalogue section 4.

Primary filter:

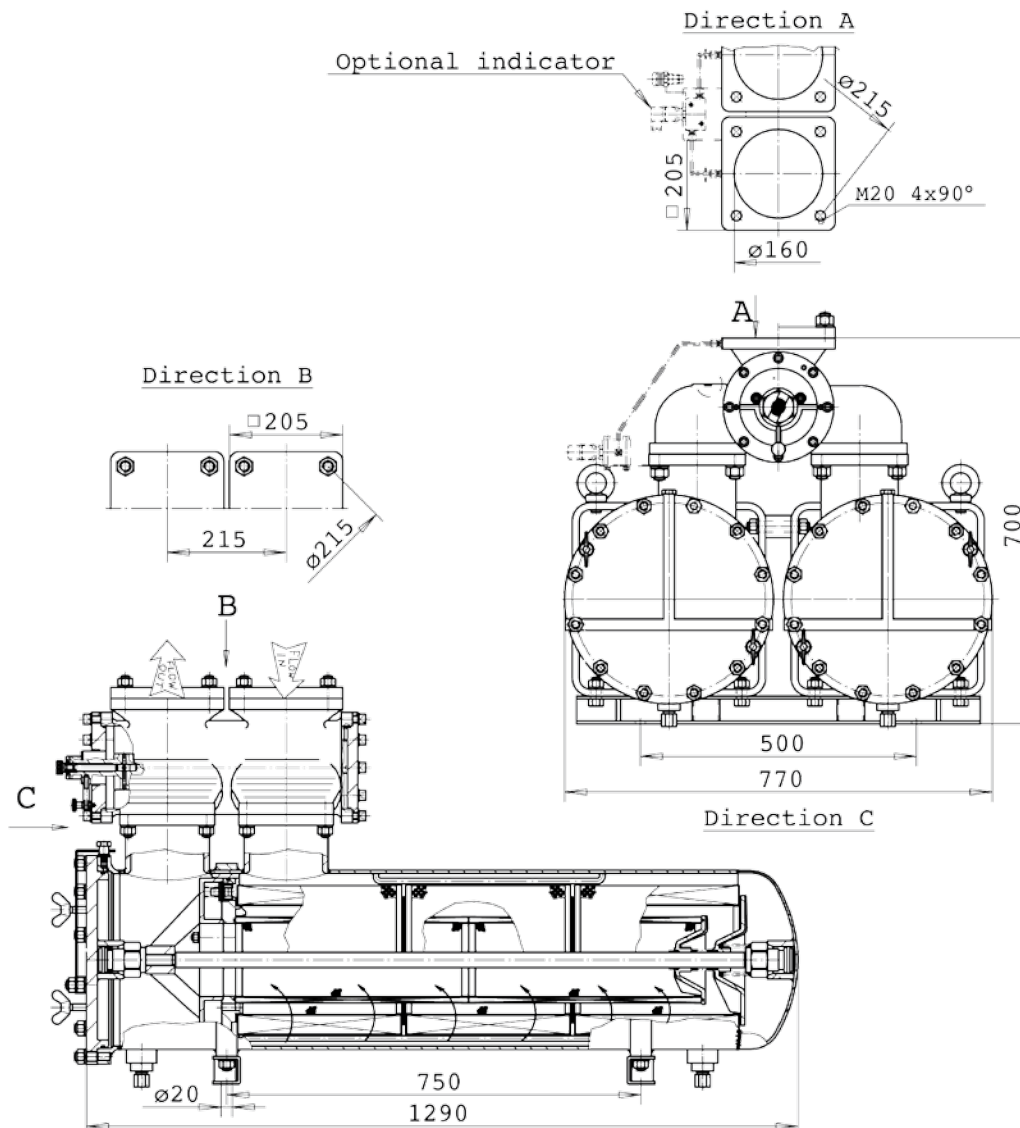
- Three filter elements per reservoir
- Filtration materials
 - Resin impregnated heavy duty cellulose paper 15µm nominal
 - Glassfibre Microglass III
 - Cleanable metal mesh

Secondary filter:

- One filter element per reservoir
- Filtration material cleanable wire mesh
- Filtration degree 60µm

Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils. For other fluids consult Parker Filtration.



DFH2060 Series

Pressure Drop Curves

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

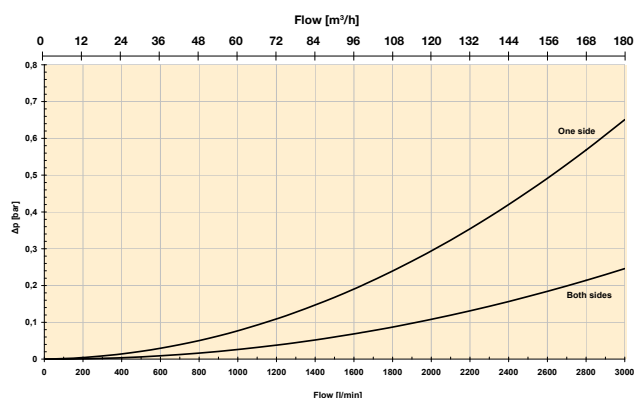
The recommended level of the initial pressure drop for this filter is maximum 0.5 bar.

Δp -curves are measured at 30 cSt.

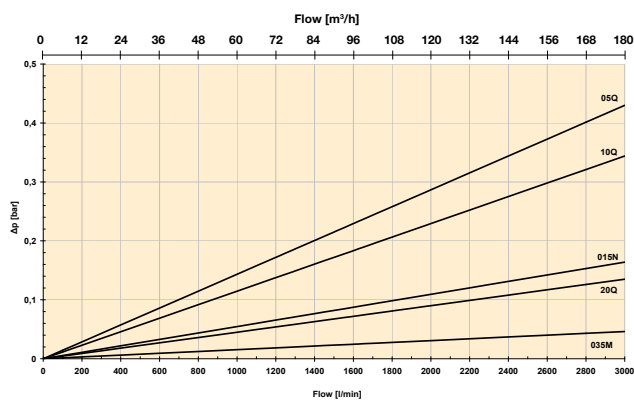
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

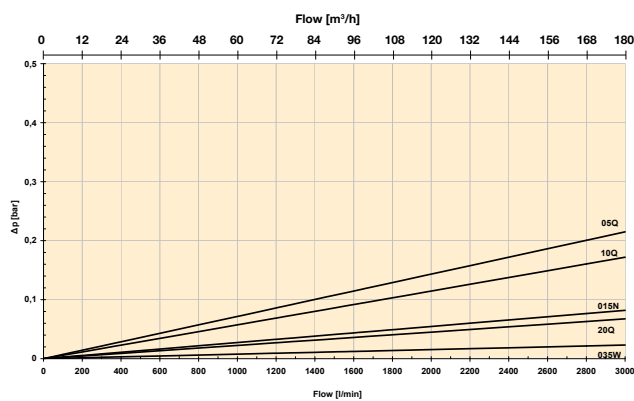
DFH2060 housing



DFH2060 element pack (3 pcs)/one side in use



DFH2060 element pack (3 + 3 pcs)/both sides in use



Product Description for DFH2060

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Duplex filter, horizontal installation	DFH2060

Table 2

FILTER SIZE	
Length/elements	CODE
3 elements/side	3

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Microglass III	
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
Other medias	
Cellulose 15 µm (nom)	015N
Cleanable metal mesh 35 µm	035W
Cleanable metal mesh 60 µm	060W

Table 4

SEAL TYPE	
Seal material	CODE
Fluoroelastomer	V

Table 5

INDICATORS	
Options	CODE
No indicator block	N
Indicator port plugged	P
Visual indicator	M3
Electrical indicator	T1
Electronic indicator (PNP/N.O.)	F1
Electronic indicator (NPN/N.O.)	F2

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
2.0 bar/1.5 bar	H

Table 7

FILTER CONNECTIONS	
Port size	CODE
Square flange 160 mm	X160

Table 8

OPTIONS	
Options	CODE
With bypass	1

REPLACEMENT ELEMENTS	
Media code / Seal type	Order code
Glassfibre	Microglass III
05Q / Nitrile	939381Q
10Q / Nitrile	939382Q
20Q / Nitrile	939383Q
Cellulose 15 µm (nom)	
015N / Nitrile	939384
Cleanable metal mesh	
035W / Fluoroelastomer	939385
060W / Fluoroelastomer	939386

SPARE PARTS	
Secondary filter element	CODE
Wire mesh 60 µm	939394
Seal kits	CODE
For valve assembly	916045064
For vessel (two kits required for complete filter)	916045066

Please note the bolded options reflect standard options with reduced lead-time.

DF2070 Series

Duplex Filters

Max. 1800 l/min. 10 bar



Big and tall for high flow

Welded housing construction with cast iron change over valve section. Compact, low-depth duplex construction for vertical mounting. High flow and good dirt holding capacity combined to low pressure drop. Several media options for heavy fuel oil and lube systems.



Contact Information:

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www.parker.com/hfde

Applications:

- Diesel engine lubricating systems
- High flow industrial lubricating systems
- High flow heavy fuel oil systems as safety filter

Specification

Duplex filter:

One reservoir can be closed for service, vertical installation. Length 2 includes 2 elements/side and length 3 includes 3 elements/side.

Connections:

Square flanges with port size Ø160 mm. Standard delivery includes blind counter flanges.

Maximum operating pressure:

10 bar

Seal material:

Fluoroelastomer

Operating temperature:

-20°C...+100°C. For other temperatures consult Parker Filtration.

Housing material:

Steel/cast iron (GJS)

Weight:

Length 2: 310 kg

Length 3: 400 kg

Nominal flow rate (30 cSt):

Length 2: 1500 l/min (90 m³/h)

Length 3: 1800 l/min (132 m³/h)

Bypass valve:

For the primary filter only, opening pressure 2.0 bar

Indicator options:

Visual, electrical or electronic indicator requires an indicator block. For details see indicator options table in product description page and catalogue section 4.

Primary filter:

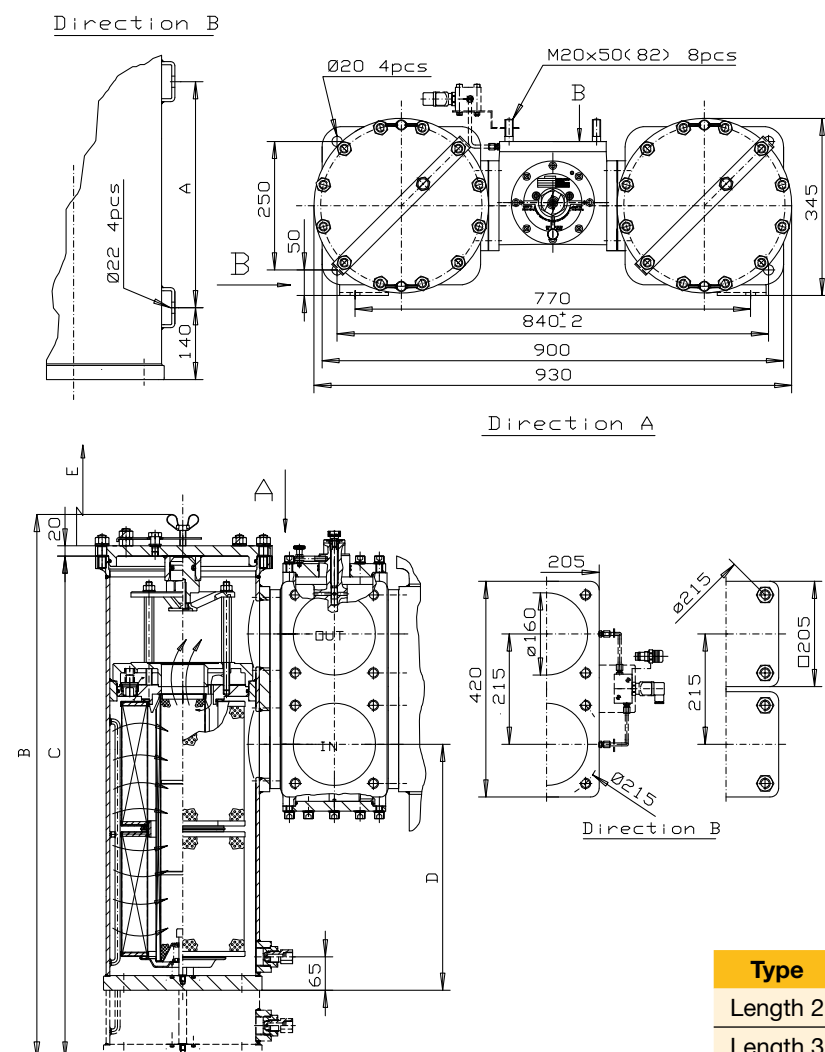
- Length 2: two filter elements per reservoir
- Length 3: three filter elements per reservoir
- Filtration materials
 - Resin impregnated heavy duty cellulose paper 15µm nominal
 - Glassfibre Microglass III
 - Cleanable metal mesh

Secondary filter:

- One filter element per reservoir
- Filtration material cleanable wire mesh
- Filtration degree 60 µm

Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils and fuel oils. For heavy fuel oil applications, please specify option P2 (see table 8 in product description) which ensures that filters are delivered with documentation according PED 97/23/EC category II. For other fluids consult Parker Filtration.



Type	A	B	C	D	E
Length 2	440	960	845	478	500
Length 3	706	1227	1112	745	560

DF2070 Series

Pressure Drop Curves

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

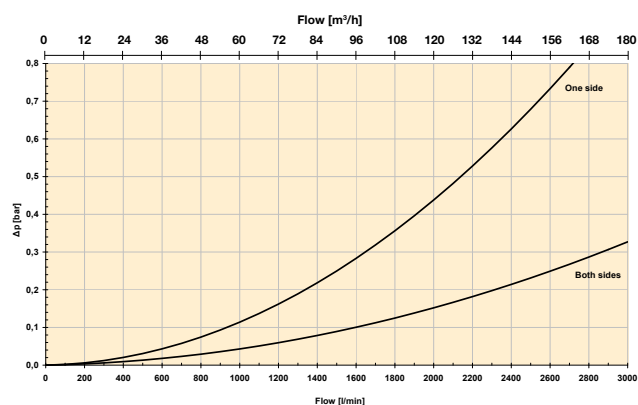
The recommended level of the initial pressure drop for this filter is maximum 0.5 bar.

Δp -curves are measured at 30 cSt.

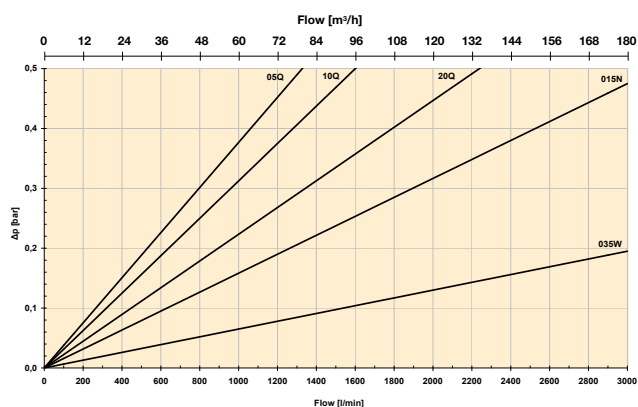
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$

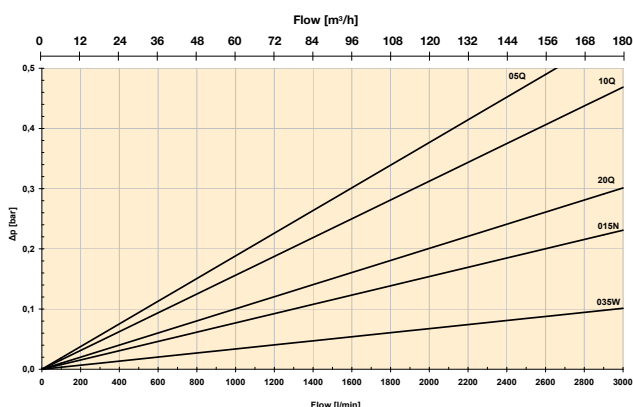
DF2070 housing



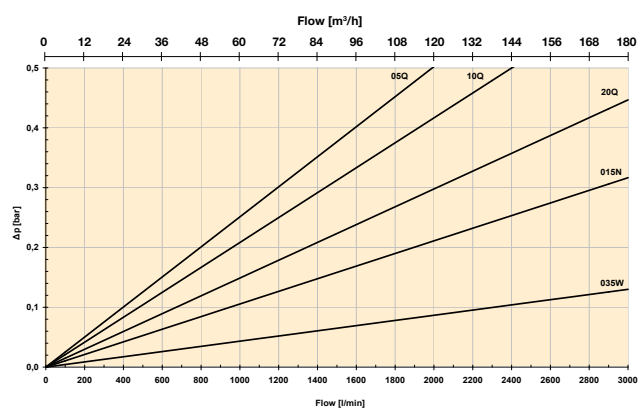
Length 2 element pack (2 pcs)/one side in use



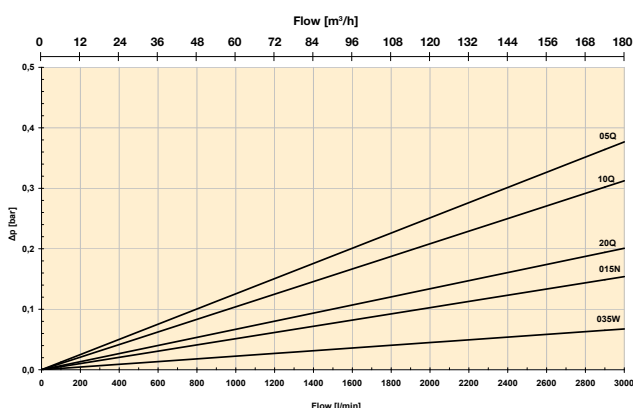
Length 2 element pack (2 + 2 pcs)/both sides in use



Length 3 element pack (3 pcs)/one side in use



Length 3 element pack (3 + 3 pcs)/both sides in use



Product Description for DF2070

Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Duplex filter	DF2070

Table 2

FILTER SIZE	
Length/elements	CODE
2 elements/side	2
3 elements/side	3

Table 3

DEGREE OF FILTRATION	
Element type	CODE
Microglass III	
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
Other medias	
Cellulose 15 µm (nom)	015N
Cleanable metal mesh 35 µm	035W
Cleanable metal mesh 60 µm	060W

Table 4

SEAL TYPE	
Seal material	CODE
Fluoroelastomer	V

Table 5

INDICATORS	
Options	CODE
No indicator block	N
Indicator port plugged	P
Visual indicator	M3
Electrical indicator	T1
Electronic indicator (PNP/N.O.)	F1
Electronic indicator (NPN/N.O.)	F2

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
2.0 bar/1.5 bar	H

Table 7

FILTER CONNECTIONS	
Port size	CODE
Square flange 160 mm	X160

Table 8

OPTIONS	
Options	CODE
With bypass	1
PED category 2	P2

If several options are selected, please add the codes in order listed above.

REPLACEMENT ELEMENTS	
Media code	Order code
Glassfibre	Microglass III
05Q	939361Q
10Q	939362Q
20Q	939363Q
Cellulose 15 µm (nom)	
015N	939364
Cleanable metal mesh	
035W	939365
060W	939366

SPARE PARTS	
Secondary filter element (60 µm)	CODE
Length 2	939374
Length 3	939375
Seal kits	CODE
For valve assembly	916045064
For vessel (two kits required for complete filter)	916045067

Please note the bolded options reflect standard options with reduced lead-time.



Together, we can change the course of hydraulic and lube maintenance history aboard ship and in dock.



DF40 Duplex Filters



EPF "iprotect" high pressure filter



iCountPD

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