

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. Patented angular sealing arrangement aids installation of elements.



Contact Information:

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Applications:

- steel industry, paper mills, marine applications and power generation
- lubricating systems
- fuel filtration
- coolant filtration



ENGINEERING YOUR SUCCESS.

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)

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:

-20°C...+100°C

Housing material:

Steel
Stainless steel upon request.

Weight:

See a table on page 7

Bypass valve:

Opening pressure 3,5 bar or without a bypass

Filter elements:

Environmentally friendly Ecoglass III
Cleanable wire mesh

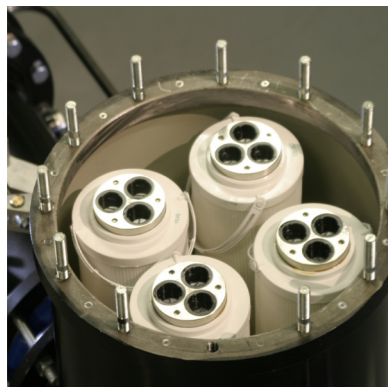
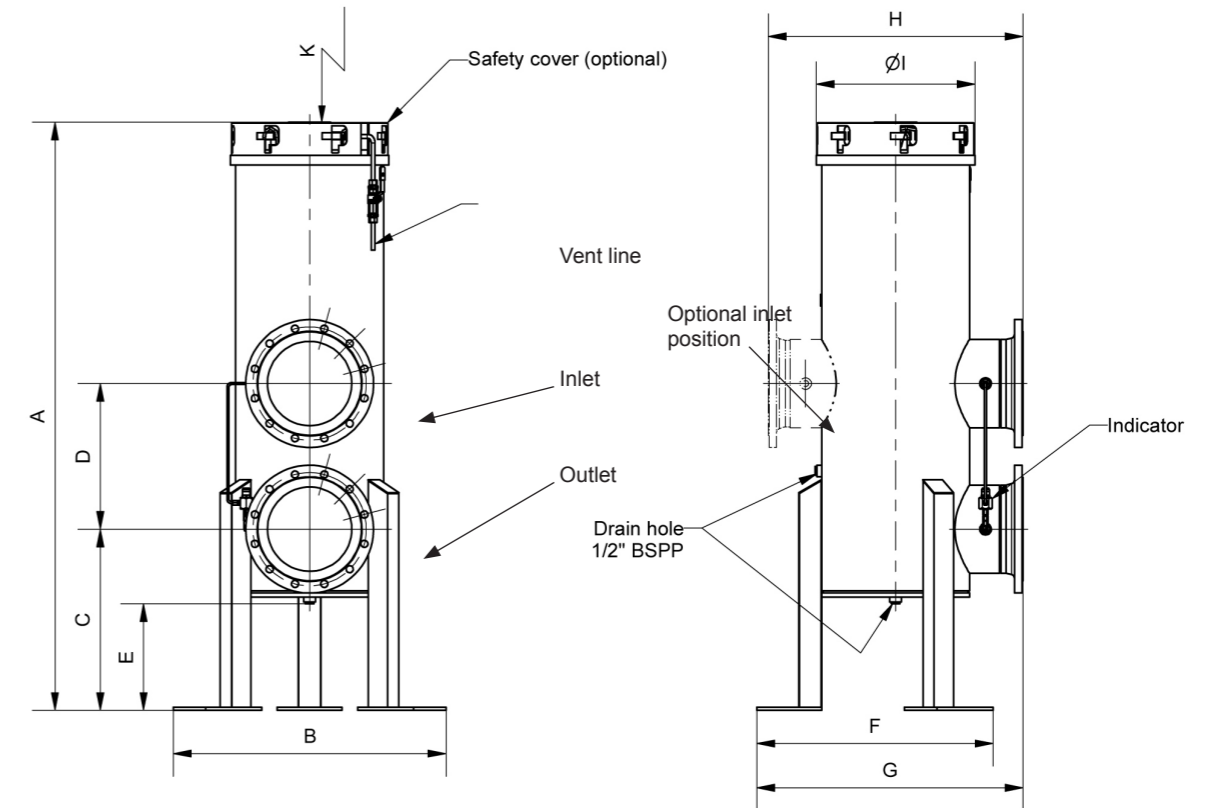
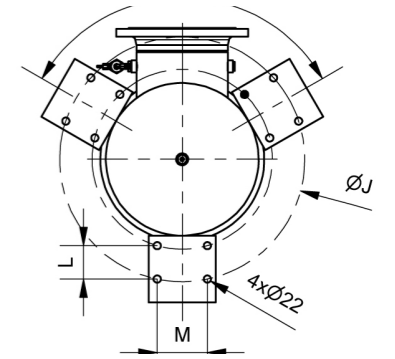
Differential pressure indicators:

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.

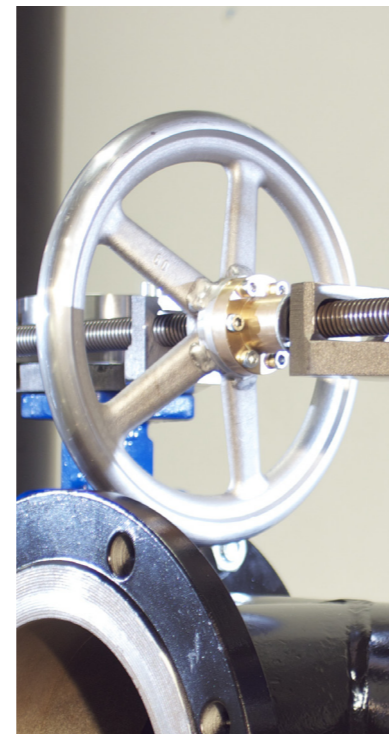
High Flow Single Filter 700-11200



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.



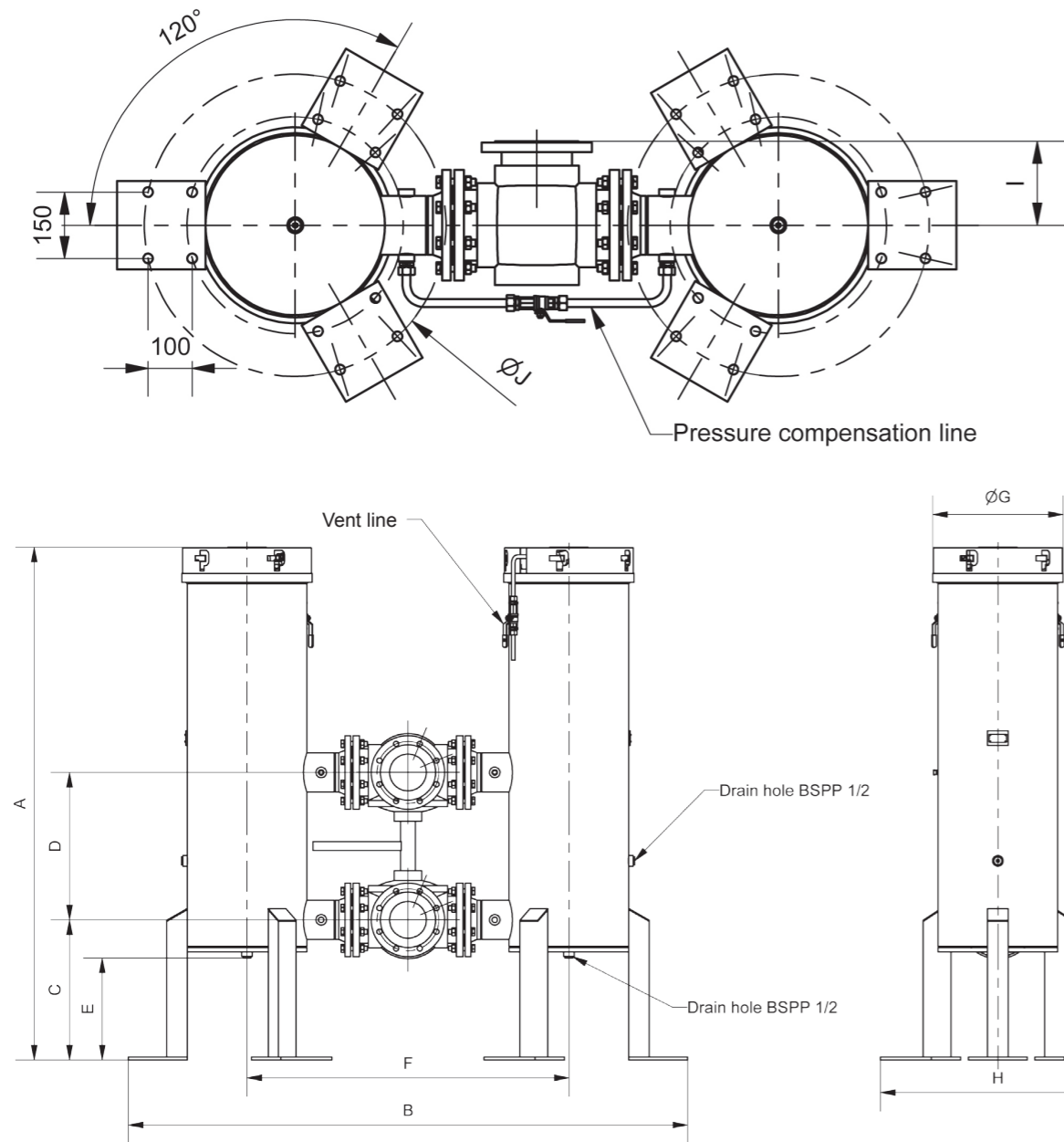
In large connection sizes the change-over is made with a hand wheel that operates two butterfly valves. Either valve is always open to ensure flow to the system.

Max.Flow L/min (30cSt)	Elements		Flange size	A	B	C	D	E	F	G	H	ØI	ØJ	K	L	M
	Size	Qty														
700	2	1	DN50	1005	420	320	220	237	364	495	540	250	381	500	-	40
			DN65	1005	420	320	222	237	364	495	540	250	381	500	-	40
			DN80	1005	420	320	400	237	364	495	540	250	381	500	-	40
1400	3	1	DN80	1567	420	355	400	282	364	470	500	250	381	950	-	40
			DN100	1567	420	385	470	282	364	472	504	250	381	950	-	40
4200	3	3	DN125	1567	420	385	500	282	364	505	570	250	381	950	-	40
			DN125	1749	798	475	500	351	691	758	710	438	683	950	100	150
			DN150	1749	798	525	365	351	691	758	710	438	683	950	100	150
5600	3	4	DN200	1749	798	525	365	346	691	765	724	438	683	950	100	150
			DN150	1818	842	525	365	335	729	809	760	490	733	950	100	150
			DN200	1818	842	525	365	335	729	820	774	490	733	950	100	150
11200	3	8	DN250	1818	842	560	450	329	729	822	787	490	733	950	100	150
			DN250	1963	1018	640	550	392	882	1089	1118	680	1011	950	100	150
			DN300	1963	1018	640	550	392	882	1089	1118	680	1011	950	100	150
			DN350	1963	1018	640	550	392	882	1089	1118	680	1011	950	100	150

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

High Flow Duplex Filter 650-3900

With ballvalves

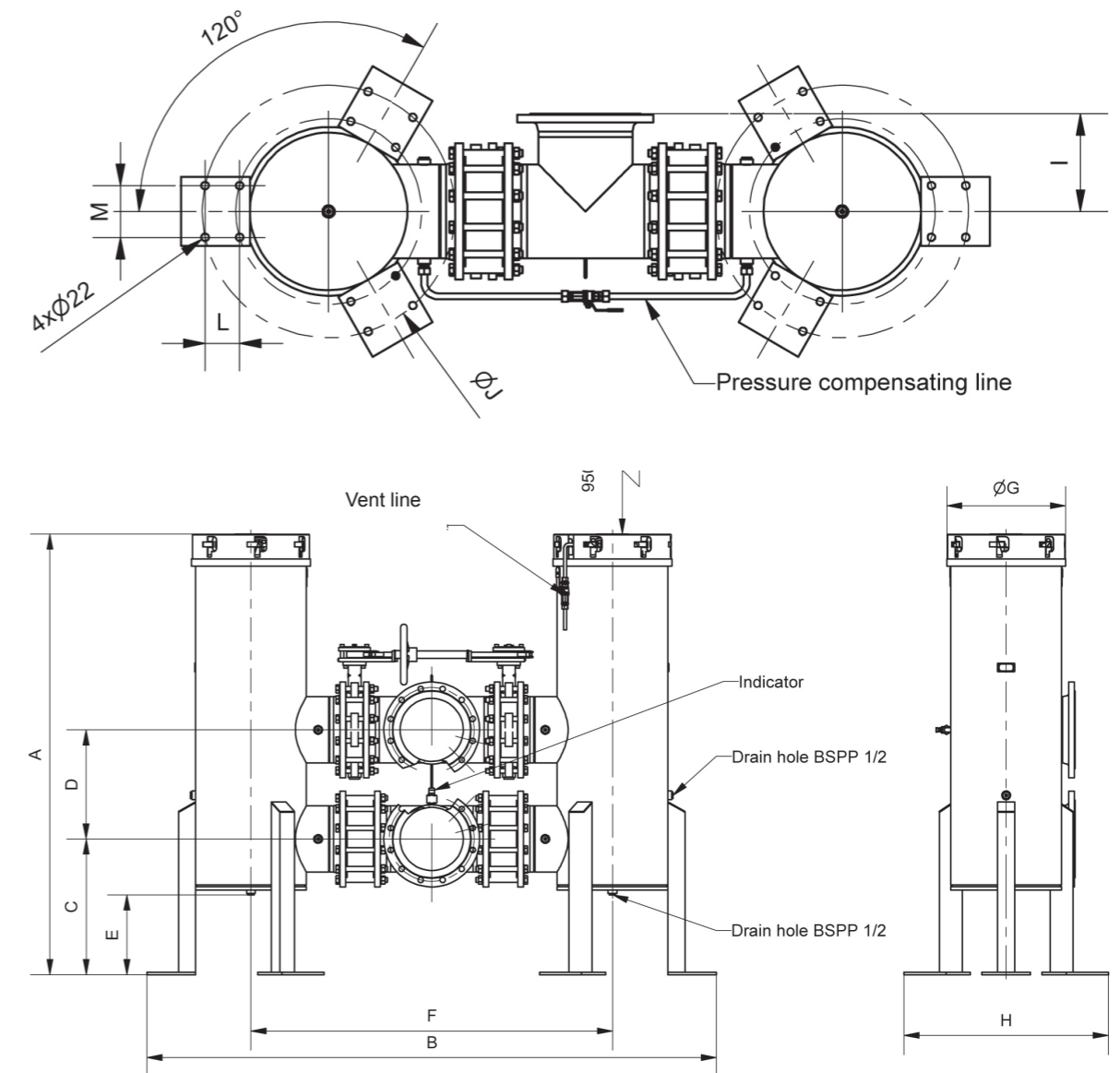


Max.Flow L/min (30cSt)	Elements		Flange size	A	B	C	D	E	F	ØG	H	I	ØJ
	Size	Qty											
700	2	1	DN50	950	1300	265	380	187	710	250	430	75	392
			DN65	950	1300	265	410	187	735	250	430	88	392
			DN80	950	1300	265	440	187	760	250	430	100	392
1400	3	1	DN80	1560	1405	265	440	187	760	250	430	100	392
			DN100	1560	1405	265	470	346	785	250	430	113	392
			DN125	1560	1405	305	500	346	820	250	430	125	392
4200	3	3	DN125	1739	1900	475	500	346	1094	443	798	125	683

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

High Flow Duplex Filter 4200-11200

With butterfly valves



Max.Flow L/min (30cSt)	Elements		Flange size	A	B	C	D	E	F	ØG	H	I	ØJ	L	M
	Size	Qty													
4200	3	3	DN150	1739	2160	525	365	347	1354	443	798	240	683	100	150
			DN200	1739	2160	525	365	347	1354	443	798	240	683	100	150
5600	3	4	DN150	1818	2296	525	365	330	1439	480	842	271	733	100	150
			DN200	1818	2364	525	365	330	1507	490	842	278	733	100	150
			DN250	1818	2348	560	450	330	1491	490	842	284	733	100	150
11200	3	8	DN250	1963	3046	560	450	392	1986	680	1018	341	1011	100	150
			DN300	1963	3046	640	450	392	1986	680	1018	341	1011	100	150
			DN350	1963	3046	640	550	392	1986	680	1018	341	1011	100	150

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HFS and HFD Series

Pressure Drop Curves

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

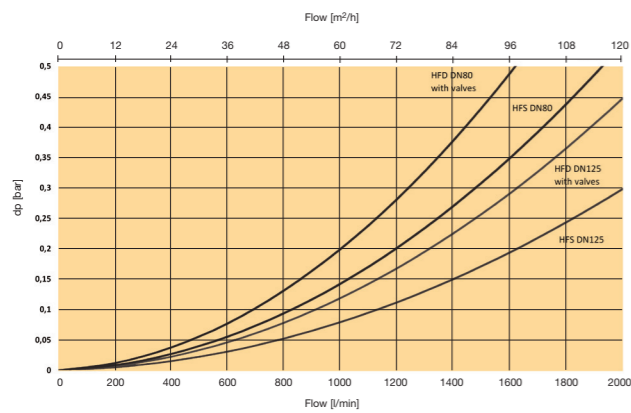
The recommended level of the initial pressure drop for this filter is maximum 0.8 bar.

Δp -curves are measured at 30 cSt.

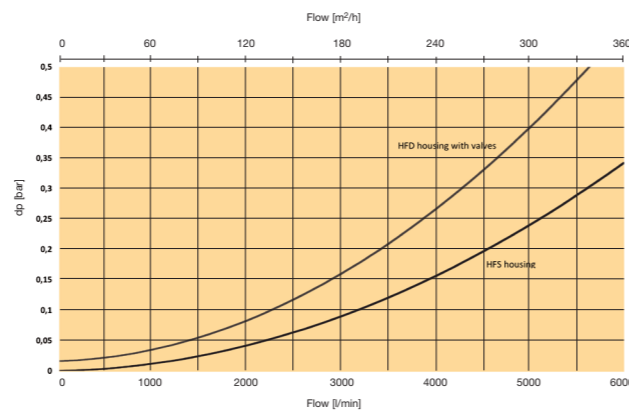
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

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

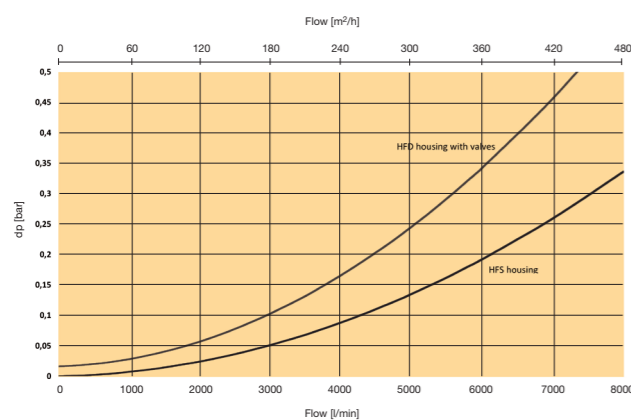
HFS/HFD12 DN80 and HFS/HFD13 DN125 (1 element) Housing dp-curves



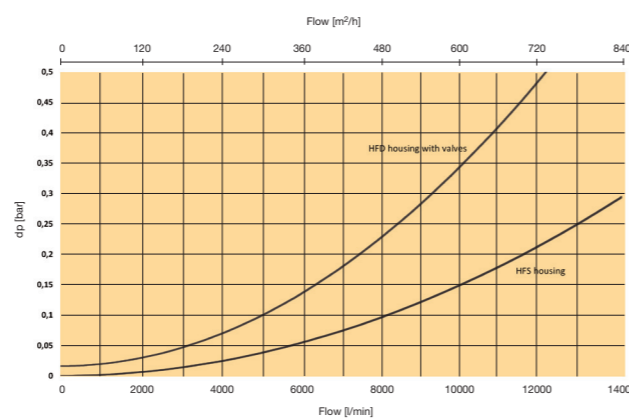
HFS/HFD33 DN200 (3 elements) Housing dp-curves



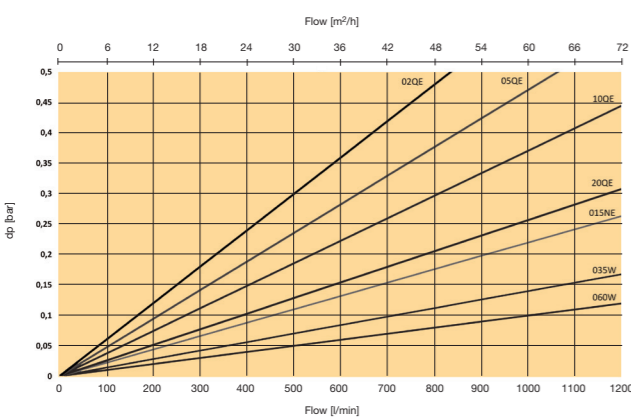
HFS/HFD43 DN250 (4 elements) Housing dp-curves



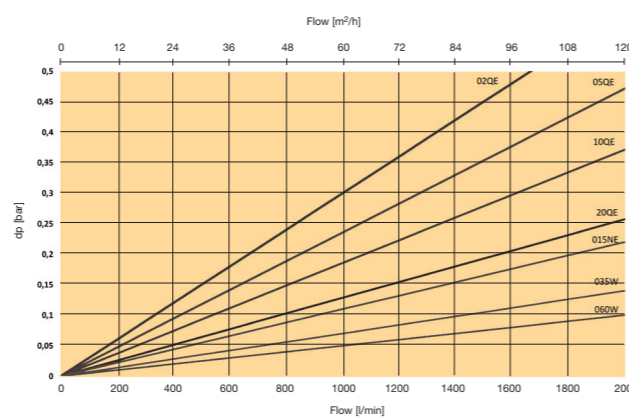
HFS/HFD83 DN350 (8 elements) Housing dp-curves



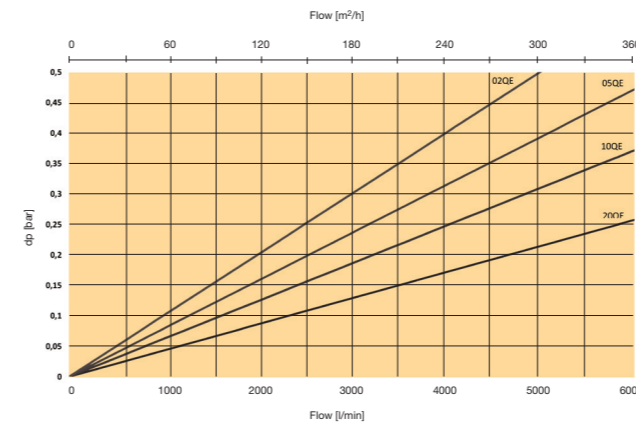
Single element: Length 2 Element dp-curves



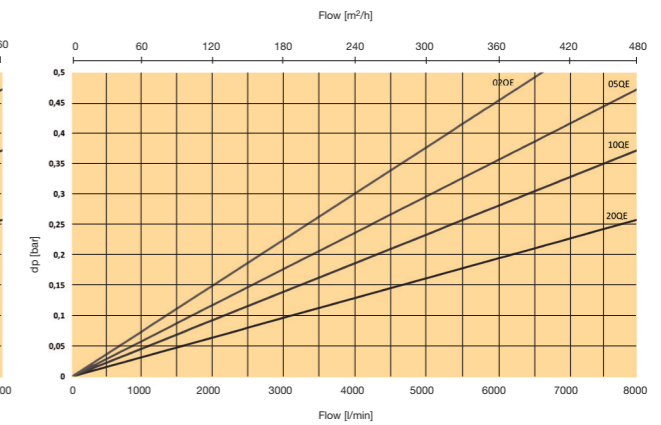
Single element: Length 3 Element dp-curves



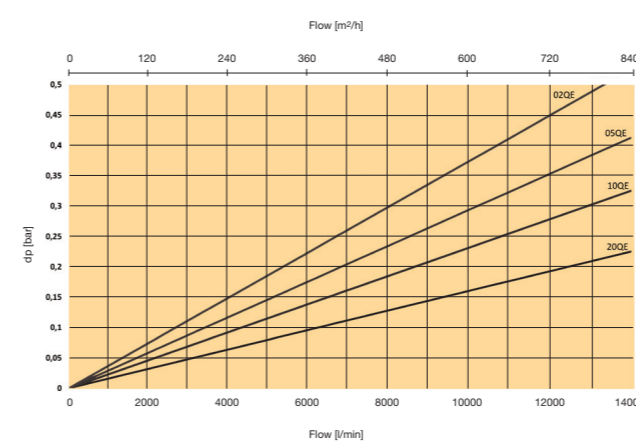
HFS/HFD33 (3 elements) QE element dp-curves



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



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



Single Filters	Mass (kg)	Duplex Filters	Mass (kg)
11200		11200	
DN350	519	DN350	1488
DN300	509	DN300	1398
DN250	499	DN250	1308
5600		5600	
DN250	270	DN250	852
DN200	264	DN200	740
DN150	257	DN150	657
4200		4200	
DN200	217	DN200	634
DN150	208	DN150	566
DN125	205	DN125	530
1400		1400	
DN125	73	DN125	226
DN100	68	DN100	196
DN80	66	DN80	182
700		700	
DN80	53	DN80	156
DN65	50	DN65	140
DN50	49	DN50	128

Butterfly valves

Ball valves

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 / Length 2	939249	939251

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

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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
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

European Product Information Centre

Free phone: 00 800 27 27 5374
(from AT, BE, CH, CZ, DE, EE, ES, FI, FR, IE,
IL, IS, IT, LU, MT, NL, NO, PT, SE, SK, UK)

US Product Information Centre

Free phone: 1-800-27 27 537

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