



FILTER SELECTION GUIDE

LEITFADEN ZUR AUSWAHL EINES FILTERS

GUIDA PER LA SCELTA DI UN FILTRO

GUIDE POUR CHOISIR UN FILTRE

GUÍA PARA LA SELECCIÓN DE UN FILTRO

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PRINCIPLES OF HYDRAULIC FILTRATION

INTRODUCTION

Contamination level of the hydraulic system fluid should never damage all components such as pumps, motors, valves, cylinders and servovalves.

The biggest quantity of failures in hydraulic systems is due to contamination which causes high maintenance costs, plus extra costs for the replacement and overhaul of damaged parts and high costs for machine downtime.

Standards about solid contamination have now been changed so that also some definitions of filtration have to be updated.

It has to be clear that these changes in standards are not going to modify filters performance, but have to be respected to avoid an incorrect use.

We explain all new provisions about solid contamination in the following pages; we also show the different steps for the correct choose of the filter for the hydraulic circuit.

CONTAMINANTS

Contaminant powders are utilized in tests to establish filters technical features.

The procedure ISO 11171 replaces ISO 4402 regarding particle sizes measurements.

ISO 4402 referred to the dimension of the circle diameter to include the whole particle. ISO 11171 refers to the diameter of the circle with the same particle area.

It becomes clear that a particle can have two different dimensions depending on the standard used to measure it, so that two different units of measure have been adopted to avoid glaring mistakes.

Classification “ μm ” refers to ISO 4402, while “ $\mu\text{m(c)}$ ” is utilized for ISO 11171.

	OLD ISO 4402	NEW ISO 11171
Particle type	ACFTD (Aircleaner Fine Dust Test)	ISO MTD (ISO Medium Dust Test)
Unit of measure	[μm]	[$\mu\text{m (c)}$]
Dimension	Diameter of the circle including the whole particle	Diameter of the circle with the same particle area

The table on the right shows the comparison between the two particle size classifications, ISO 4402 and ISO 11171.

COMPARISON OF PARTICLE SIZE	
ISO 4402 (ACFTD) [μm]	ISO 11171 (ISO-MTD) [$\mu\text{m (c)}$]
1	4,2
2	4,6
3	5,1
4	5,8
5	6,4
6	7,1
7	7,7
8	8,4
9	9,1
10	9,8
15	13,6
20	17,5
25	21,2
30	24,9
40	31,7
50	38,2

“ISO” SCALE NUMBER

Another important change is ISO 4406:1999 replacing old ISO 4406.

ISO 4406 measures the number of particles with dimension $\geq 5 \mu\text{m}$ and $\geq 15 \mu\text{m}$ per 100 mL of fluid.

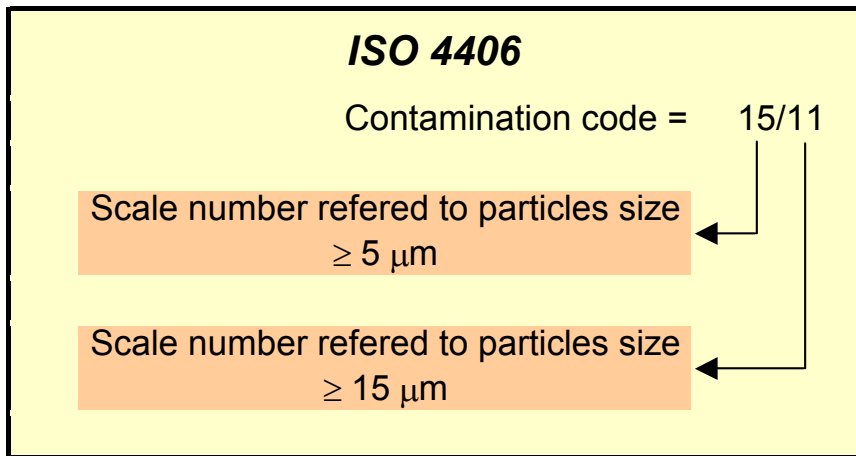
New ISO 4406:1999 measures the number of particles with dimension $\geq 4 \mu\text{m(c)}$, $\geq 6 \mu\text{m(c)}$ and $\geq 16 \mu\text{m(c)}$ per 1 mL of fluid.

Here are the tables of contamination code for ISO 4406 and ISO 4406:1999

<i>C ISO 4406 CONTAMINATION CODE (Old)</i>		
Number of particles per 100 mL of fluid		Scale number
More than	Up to/Including	
8.000.000	16.000.000	24
4.000.000	8.000.000	23
2.000.000	4.000.000	22
1.000.000	2.000.000	21
500.000	1.000.000	20
250.000	500.000	19
130.000	250.000	18
64.000	130.000	17
32.000	64.000	16
16.000	32.000	15
8.000	16.000	14
4.000	8.000	13
2.000	4.000	12
1.000	2.000	11
500	1.000	10
250	500	9
130	250	8
64	130	7
32	64	6
16	32	5
8	16	4
4	8	3
2	4	2
1	2	1

<i>ISO 4406:1999 CONTAMINATION CODE (New)</i>		
Number of particles per 1 mL of fluid		Scale number
More than	Up to/Including	
1.300.000	2.500.000	28
640.000	1.300.000	27
320.000	640.000	26
160.000	320.000	25
80.000	160.000	24
40.000	80.000	23
20.000	40.000	22
10.000	20.000	21
5.000	10.000	20
2.500	5.000	19
1.300	2.500	18
640	1.300	17
320	640	16
160	320	15
80	160	14
40	80	13
20	40	12
10	20	11
5	10	10
2.5	5	9
1.3	2.5	8
0.64	1.3	7
0.32	0.64	6
0.16	0.32	5
0.08	0.16	4
0.04	0.08	3
0.02	0.04	2
0.01	0.02	1
0.00	0.00	0

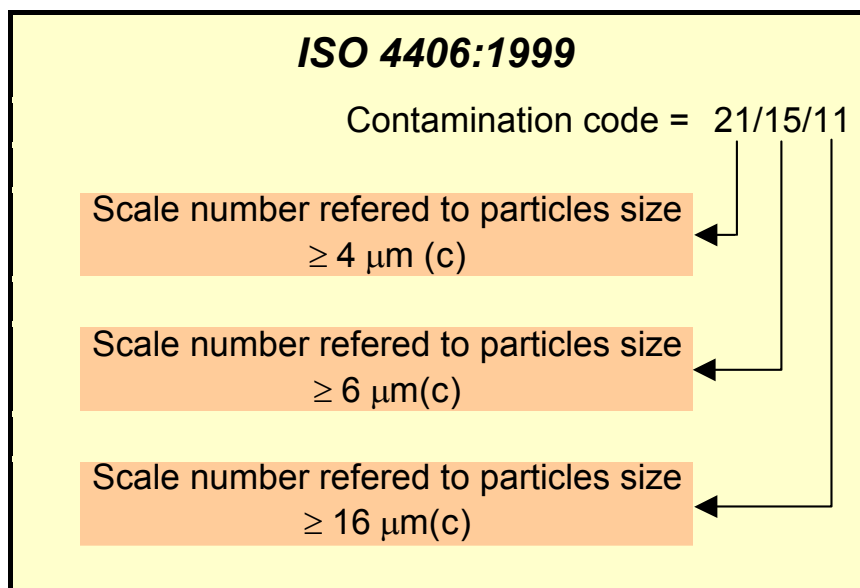
Following figures are meant to help in determining the ISO 4406 and ISO 4406:1999 rating.



With reference to the table of page 4, ISO 4406 code 15/11 refers to the presence per 100mL of fluid of the following particles quantities:

More than 16.000 and up to and including 32.000 with dimension $\geq 5 \mu\text{m}$;

More than 1.000 and up to and including 2.000 with dimension $\geq 15 \mu\text{m}$.



With reference to the table of page 4, ISO 4406:1999 code 21/15/11 refers to the presence per 1 mL of fluid of the following particles quantities:

More than 10.000 and up to and including 20.000 with dimension $\geq 4 \mu\text{m(c)}$;

More than 160 and up to and including 320 with dimension $\geq 6 \mu\text{m(c)}$;

More than 10 and up to and including 20 with dimension $\geq 16 \mu\text{m(c)}$.

FILTRATION RATIO “ β_x ” AND “ $\beta_{x(c)}$ ”

The “ β ” ratio is the value that expresses the particle capture efficiency of a filter and is based on the particle dimension.

The “ β ” ratio is determined by conducting a laboratory test called MULTI-PASS TEST. It consists in making a particular number of particles having different dimensions circulate through the filter and then to keep count of the particles downstream.

After replacing ISO 4402 with ISO 11171, it has been established to update the standard for MULTI-PASS TEST too, so that old ISO 4572 has been modified into new ISO 16889.

“ β_x ” ratio following ISO 4572:

$$\beta_x \geq \frac{\text{Upstream particles with dimension “x”}\mu\text{m}}{\text{Downstream particles with dimension “x”}\mu\text{m}}$$

where “x” stands for particle size in [μm]

“ $\beta_{x(c)}$ ” ratio following ISO 16889:

$$\beta_{x(c)} \geq \frac{\text{Upstream particles with dimension “x”}\mu\text{m(c)}}{\text{Downstream particles with dimension “x”}\mu\text{m(c)}}$$

dove “x” where “x” stands for particle size in [$\mu\text{m(c)}$]

For instance, to establish “ $\beta_{x(c)}$ ”, referred to particles size 10 $\mu\text{m(c)}$, for a filter with 1.000 particles upstream and 5 downstream, we write as following:

$$\begin{array}{l} \beta_{10(c)} \geq \frac{1.000 \mu\text{m(c)}}{5 \mu\text{m(c)}} \\ \beta_{10(c)} \geq 200 \end{array}$$

FILTRATION EFFICIENCY

Filtration efficiency is directly proportional to the “ β ” ratio and shows by a certain percentage the reduction of particles in a filter element from upstream to downstream.

Filtration efficiency can be obtained out of the following formula:

$$\text{Filtration Efficiency \%} = \frac{(\text{Ratio } \beta - 1)}{\text{Ratio } \beta} \times 100$$

In a filter with $\beta_{10(c)} \geq 200$ efficiency will be obtained as following:

$$\text{Filtration Efficiency \%} = \frac{(200 - 1)}{200} \times 100 = 99,5 \%$$

Efficiency at 99,5% means downstream contaminants at 0,5%.

"β" Value	% of Efficiency
≥ 2	50
≥ 20	95
≥ 50	98
≥ 75	98,7
≥ 100	99
≥ 200	99,5

“ β ” < 75 expresses nominal rating, while with “ β ” ≥ 75 an absolute rating is obtained.

SELECTION OF DEGREE OF FILTRATION

Selecting the proper degree of filtration is the first step in the final choice of filter for your application.

The following table will help you in your search.

SELECTION OF DEGREE OF FILTRATION					
COMPONENT	USE	PRESSURE LEVEL (bar)	NAS 1638	ISO 4406:1999	DEGREE OF FILTRATION IKRON
GEAR PUMPS AND MOTORS	OCCASIONAL	X<140	11	22/20/17	RP/SP025 - FB060
		140<X<210	10	21/19/16	RP/SP010 - FG025
		X>210	10	21/19/16	RP/SP010 - FG025
	CONTINUOUS	X<140	10	21/19/16	RP/SP010 - FG025
		140<X<210	9	20/18/15	FG010
		X>210	8	19/17/14	FG010
FIXED AND VARIABLE DISPLACEMENT PISTON PUMPS AND MOTORS	OCCASIONAL	X<140	9	20/18/15	RP/SP010 - FG025
		140<X<210	9	20/18/15	RP/SP010 - FG025
		X>210	8	19/17/14	FG010
	CONTINUOUS	X<140	8	19/17/14	FG010
		140<X<210	8	19/17/14	FG010
		X>210	7	18/16/13	FG006 - FG010
FIXED AND VARIABLE DISPLACEMENT VANE PUMPS AND MOTORS	OCCASIONAL	X<140	11	22/20/17	RP/SP025 - FB060
		140<X<210	10	21/19/16	RP/SP010 - FG025
		X>210	10	21/19/16	RP/SP010 - FG025
	CONTINUOUS	X<140	10	21/19/16	RP/SP010 - FG025
		140<X<210	9	20/18/15	FG010
		X>210	8	19/17/14	FG010
HIGH TORQUE LOW SPEED ORBIT MOTORS	OCCASIONAL	X<140	11	22/20/17	RP/SP025 - FB060
		140<X<210	10	21/19/16	RP/SP010 - FG025
		X>210	10	21/19/16	RP/SP010 - FG025
	CONTINUOUS	X<140	10	21/19/16	RP/SP010 - FG025
		140<X<210	9	20/18/15	FG010
		X>210	9	20/18/15	FG010
RELIEF AND FLOW CONTROL VALVES		X<210	11	22/20/17	RP/SP025 - FB060
		X>210	10	21/19/16	RP/SP010 - FG025
	ELECTRIC CONTROL	0<X<420	9	20/18/15	FG010
LOADSENSING VALVES		X<210	6	17/15/12	FG006
		X>210	5	16/14/11	FG003
SERVO VALVES		X<210	6	17/15/12	FG006
		X>210	5	16/14/11	FG003
DIRECTIONAL CONTROL VALVES		X<140	11	22/20/17	RP/SP025 - FB060
		140<X<210	10	21/19/16	RP/SP010 - FG025
		X>210	10	21/19/16	RP/SP010 - FG025
	ELECTRIC CONTROL	0<X<420	9	20/18/15	FG010
CYLINDERS		X<210	11	22/20/17	RP/SP025 - FB060
		X>210	10	21/19/16	RP/SP010
PILOT CONTROL VALVES		0<X<50	9	20/18/15	FG010

TO PROTECT COMPONENTS WITH DIFFERENT NEEDS, E.G. PUMPS-MOTORS AND SERVOVALVES, PLEASE SELECT THE FINEST DEGREE OF FILTRATION.

ALL INSTRUCTIONS ARE RELATED TO POLLUTED ENVIRONMENTAL CONDITIONS ON AVERAGE.

IN CASE OF HIGH CONTAMINATION, WE SUGGEST TO SELECT THE FINER DEGREE OF FILTRATION.

FILTERING MEDIA

Most popular IKRON filtering media are:

IKRON DEGREE OF FILTRATION	FILTERING MEDIA	"β" RATIO	PERCENTAGE OF EFFICIENCY
FG003	Microfibre glass	$\beta_3 \geq 200$	99,5%
FG006	Microfibre glass	$\beta_6 \geq 200$	99,5%
FG010	Microfibre glass	$\beta_{10} \geq 200$	99,5%
FG025	Microfibre glass	$\beta_{25} \geq 200$	99,5%
FB060	Phosphor bronze	$\beta_{60} \geq 75$	98,7%
FB125	Phosphor bronze	$\beta_{125} \geq 75$	98,7%
SP010	Cellulose	$\beta_{10} \geq 2$	50%
SP025	Cellulose	$\beta_{25} \geq 2$	50%
RP010	Reinforced cellulose	$\beta_{10} \geq 2$	50%
RP025	Reinforced cellulose	$\beta_{25} \geq 2$	50%

Filtering media can have a standard surface (IKRON code "AS"), or an oversize surface (IKRON code "FS").

Microfibre glass get reinforced by carbon steel mesh, while cellulose media and phosphore bronze get reinforced by zinc-plated steel mesh.

DIRT HOLDING CAPACITY

The main feature in element media's "life" is dirt holding capacity.

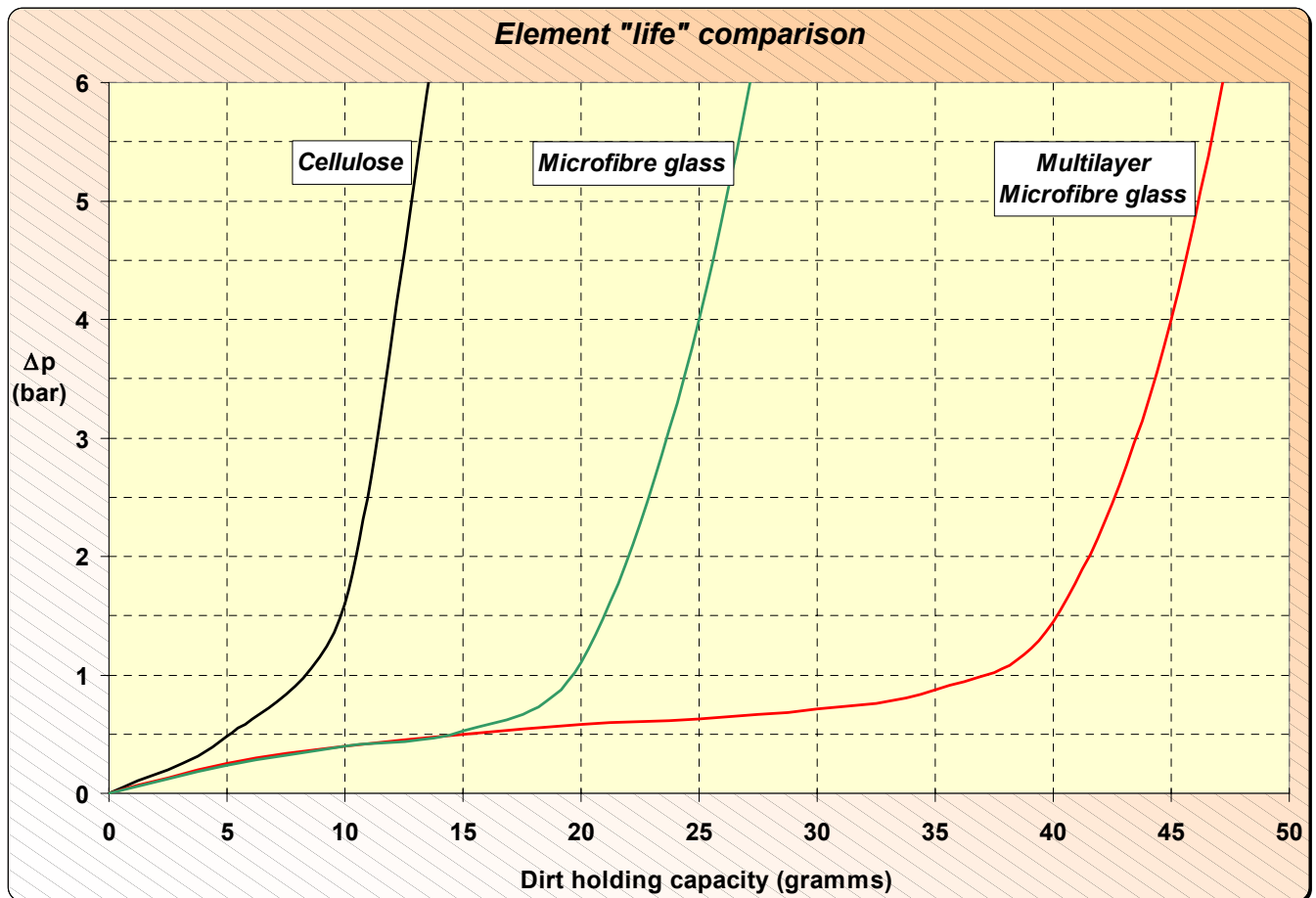
The dirt holding capacity expresses in grams the amount of contaminant which can be retained by the element, on the basis of specified pressure drop readings.

There are many types of filtering media, the best that can show a high dirt holding capacity with the same surface area is microfibre glass.

Microfibre glass is available on request with a multilayer surface, consisting of a prefiltering media plus main filtering media.

Multilayer microfibre glass media presents the best solution for a high dirt holding capacity and therefore a longer "life" for the element.

The following graph compares element "life" with the same filtering surface area but different types of media.



FILTER SIZE SELECTION

1. The hydraulic plant's maximum flow is obtained by the sum of the deliveries of all the pumps. The delivery of each pump is calculated as following:

$$Q_{\max} = n_{\max} \cdot V_{\max} / 1000$$

$$n = [\text{rpm}]$$

$$V = [\text{cm}^3/\text{rev}]$$

$$Q = [\text{l/min}]$$

2. The pressure drop of a complete filter is obtained adding housing's pressure drop to element's pressure drop.
3. Complete filter's pressure drop has to follow indications reported in the following table.

<i>FILTER TYPE</i>	<i>Accepted pressure drop</i>
HF410	Less / Up to 0,02 bar
HF502	Less / Up to 0,40 bar
HF550	Less / Up to 0,40 bar
HF554	Less / Up to 0,40 bar
HF570	Less / Up to 0,40 bar
HF595 (suction)	Less / Up to 0,20 bar
HF595 (return)	Less / Up to 0,40 bar
HF620 (suction)	Less / Up to 0,20 bar
HF620 (return)	Less / Up to 0,40 bar
HF625	Less / Up to 0,40 bar
HF650	Less / Up to 0,75 bar (*)
HF690	Less / Up to 1,20 bar
HF705	Less / Up to 15,00 bar
HF745	Less / Up to 0,75 bar (*)
HF760	Less / Up to 0,75 bar (*)

(*)
In hard working
situations
pressure drop is
acceptable to
reach 1,50 bar.

4. Once the degree of filtration has been identified, you need to select the correct size of the filter. Please refer to attached pressure drop curves to choose inlet port and element's length in accordance with the suggested parameters.
5. The attached curves have been obtained using mineral oil fluids SAE 10 at 30 mm²/sec (cSt) viscosity and flux density 0.856 Kg/dm³.

With different viscosity and density degrees, you need to determine special curves.

The housing's pressure drop is related to oil density, so that in oils with density different from 0.856 Kg/dm³, housing's Δp is:

$$\text{Housing } \Delta p = \Delta p \text{ curve} \times (\text{Oil density} / 0,856)$$

Element's pressure drop is related to oil viscosity and kinematics density. With features resulting different from the ones at point "5", element's pressure drop has to be determined as following:

$$\text{Element } \Delta p = \Delta p \text{ curve} \times (\text{Oil density} / 0,856) \times (\text{Kinematics viscosity} / 30)$$

At this point, housing's Δp has to be added together with element's Δp , always make sure that total Δp value is not more that the one reported at point "3".

$$\text{Total } \Delta p = \text{Housing } \Delta p + \text{Element } \Delta p$$

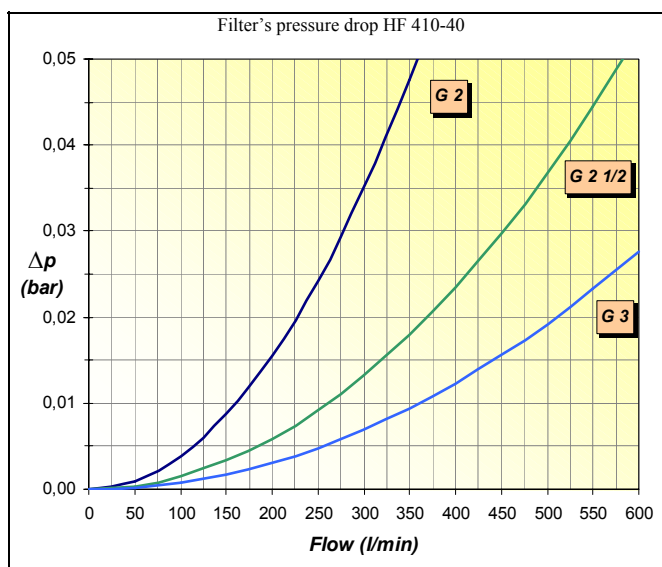
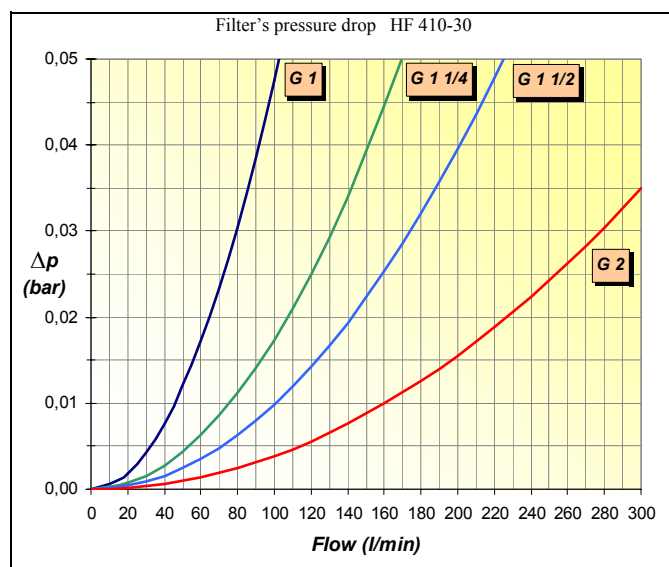
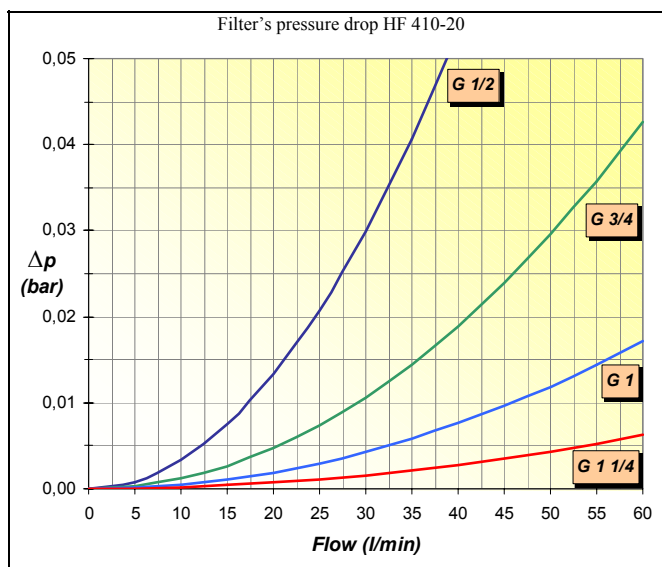
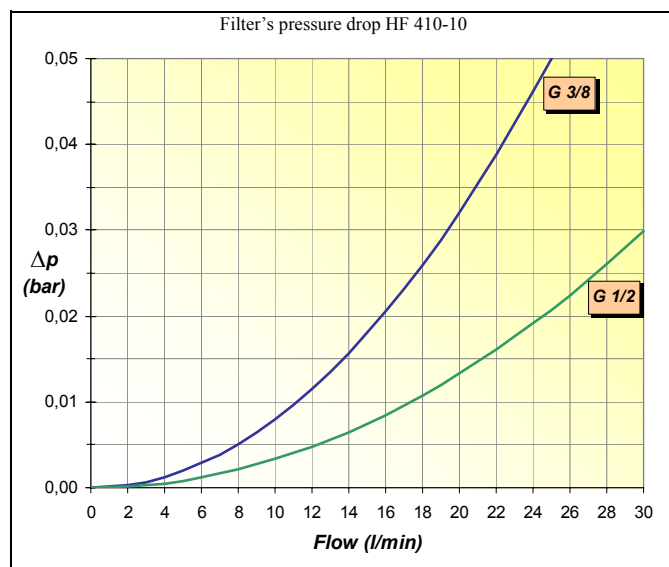
PRESSURE DROP CURVES

SUCTION FILTERS SERIES HF 410

PRESSURE DROP CURVES

The pressure drop for filters HF 410 is 0,02 bar max.

1) Filter's **pressure drop** is determined by the inlet port's dimension.

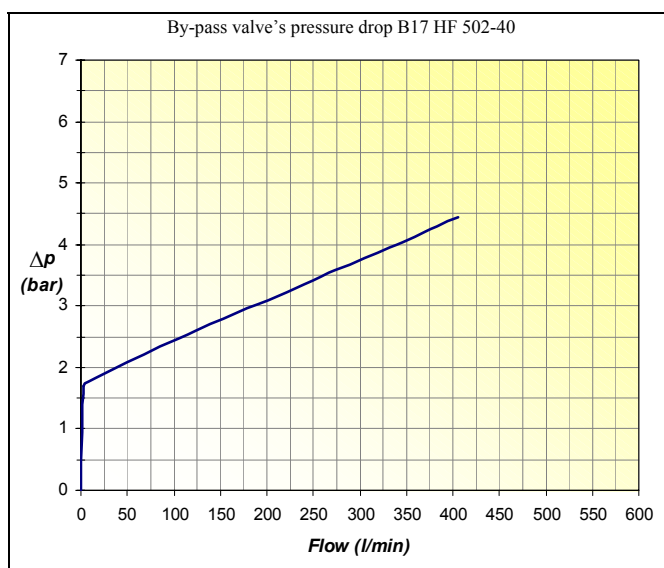
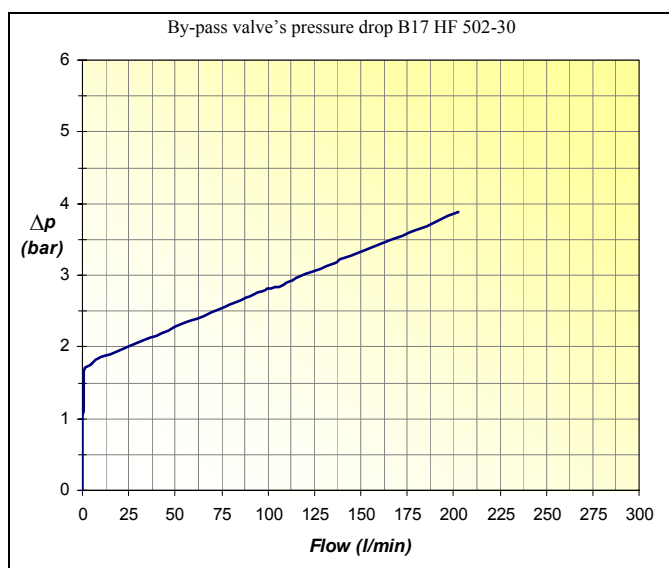
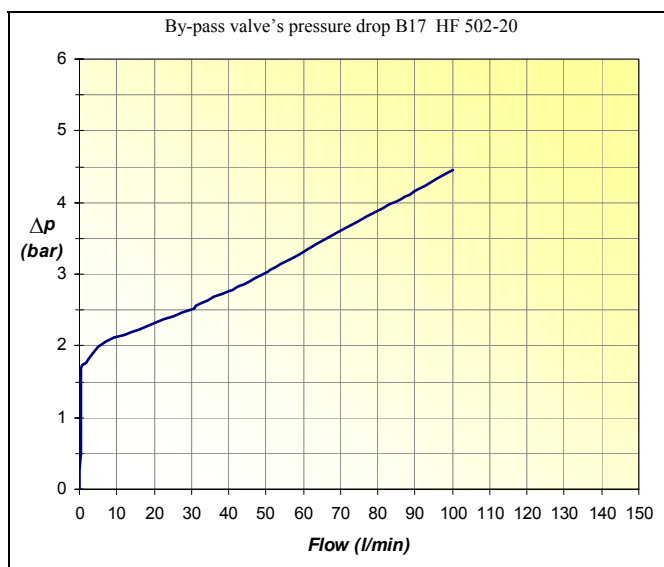
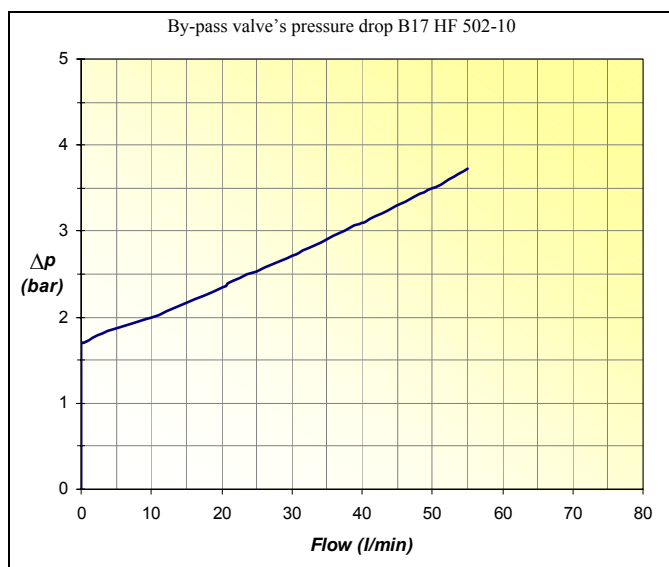


TANK MOUNTED RETURN LINE FILTERS SERIES HF 502

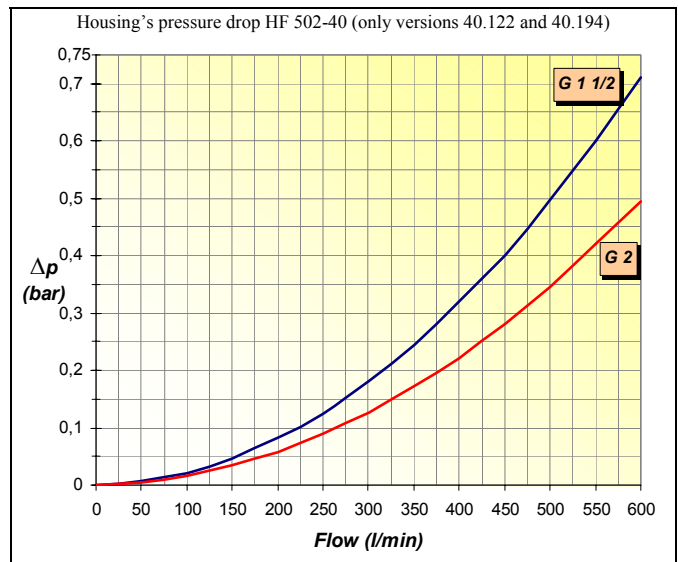
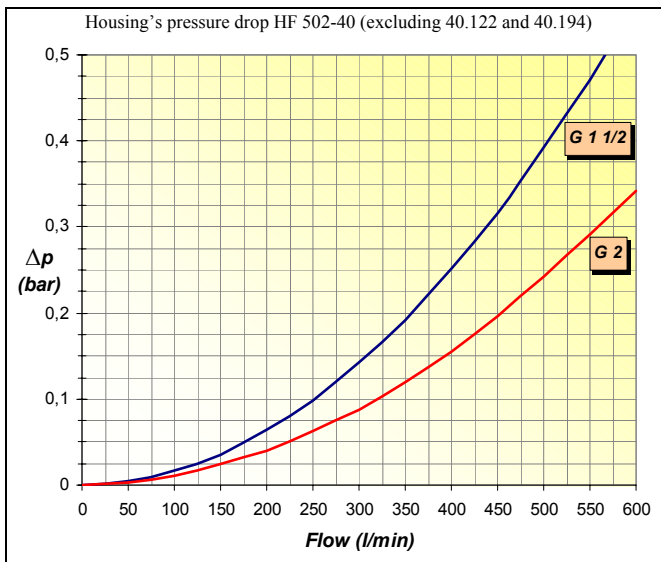
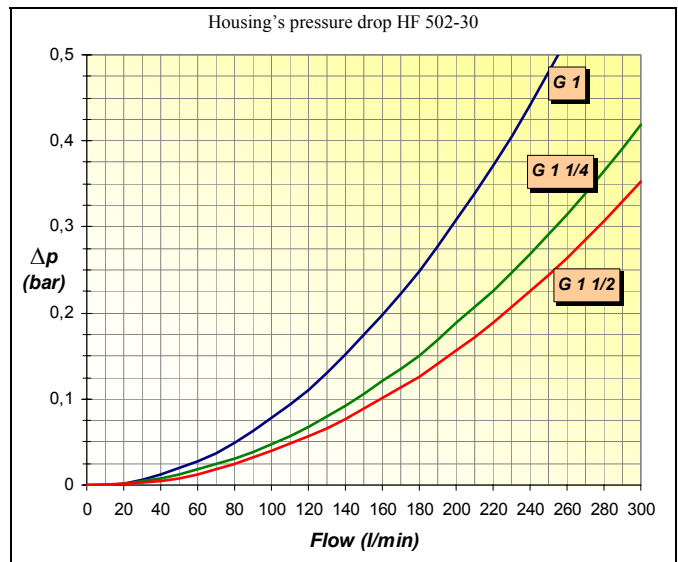
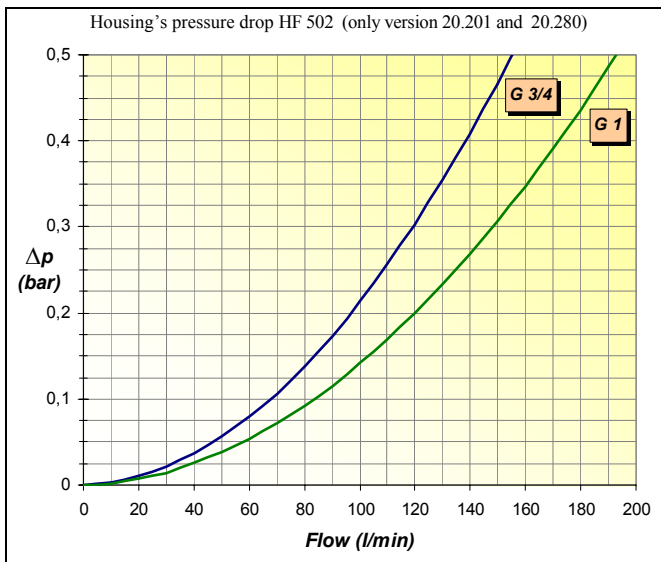
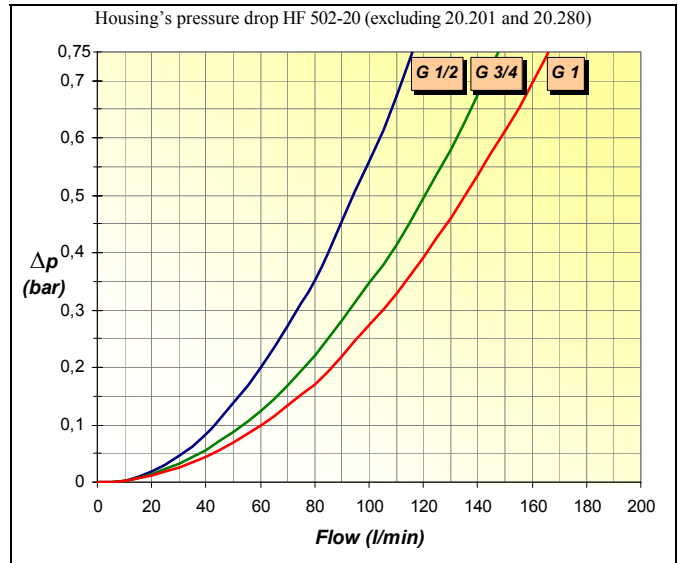
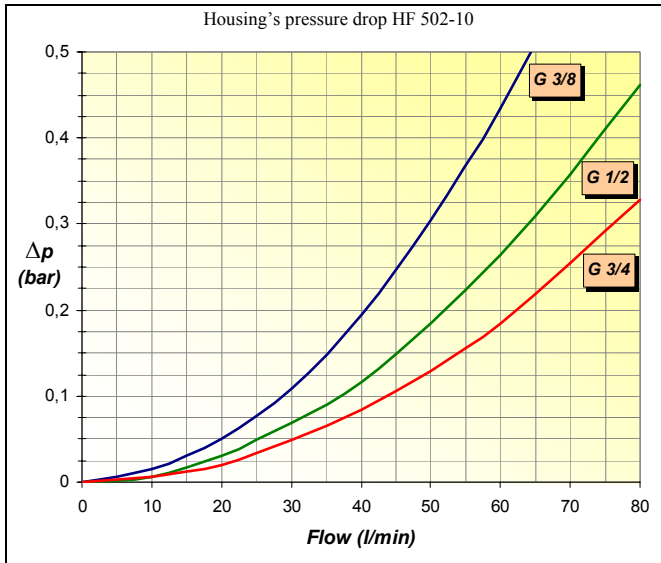
PRESSURE DROP CURVES

The pressure drop for return filters series HF 502 has to be between 0,2 and 0,4 bar.

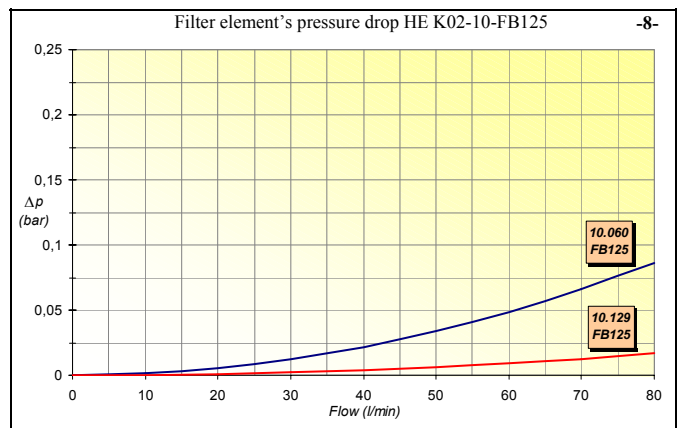
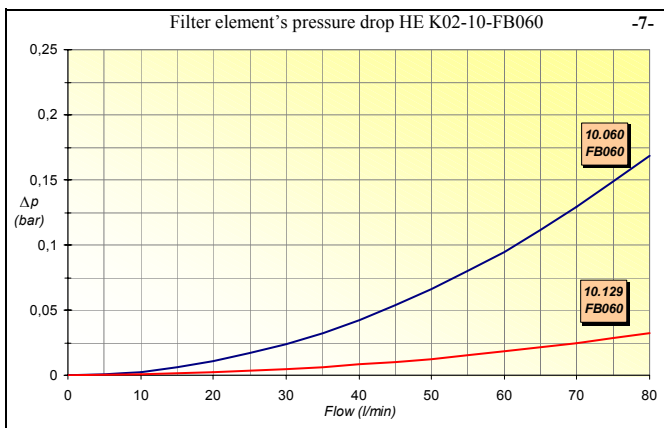
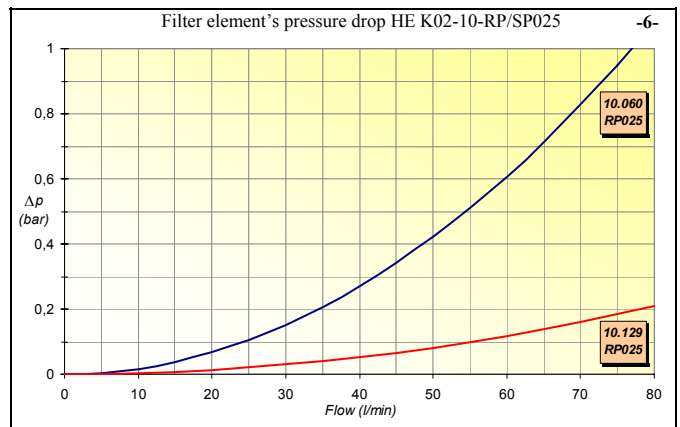
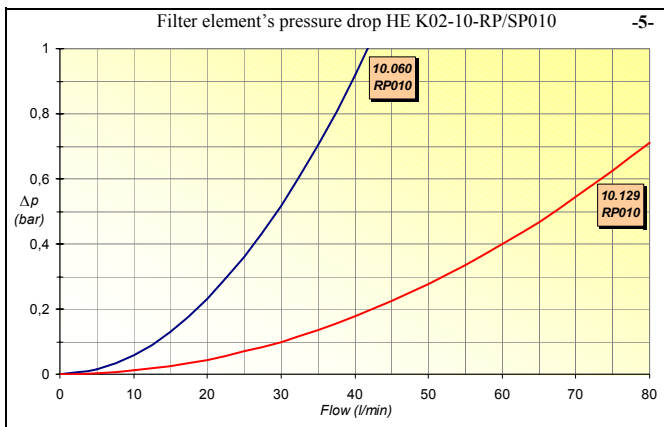
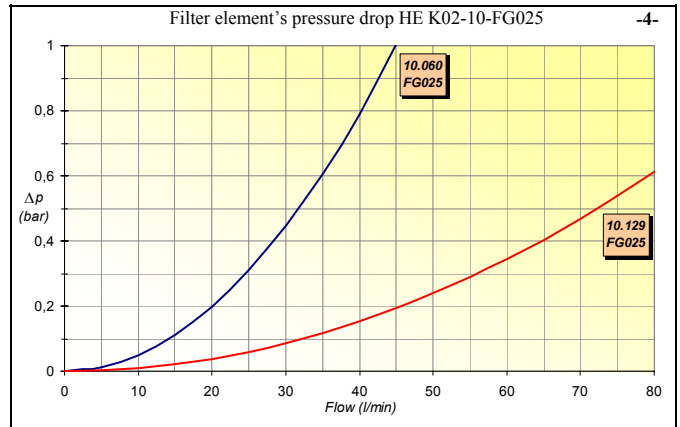
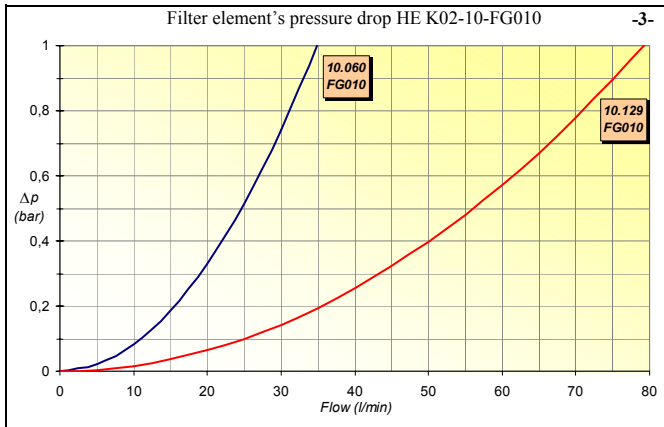
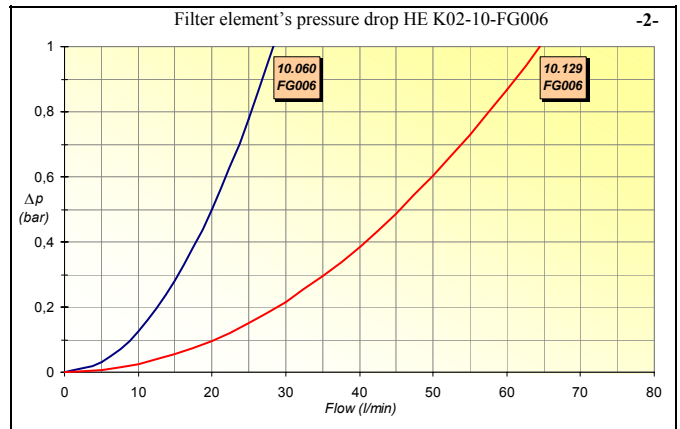
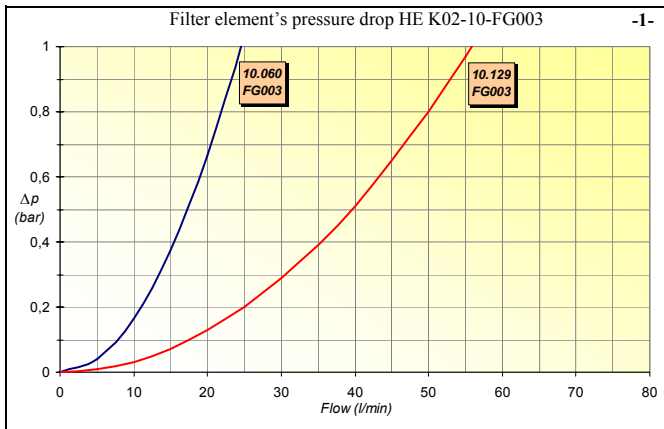
- 1) The **by-pass pressure drop** is directly proportional to fluid specific gravity and it's irrelevant to determine the total pressure drop.

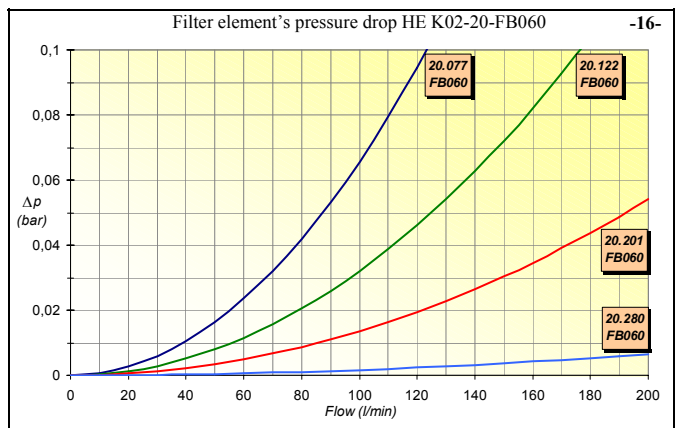
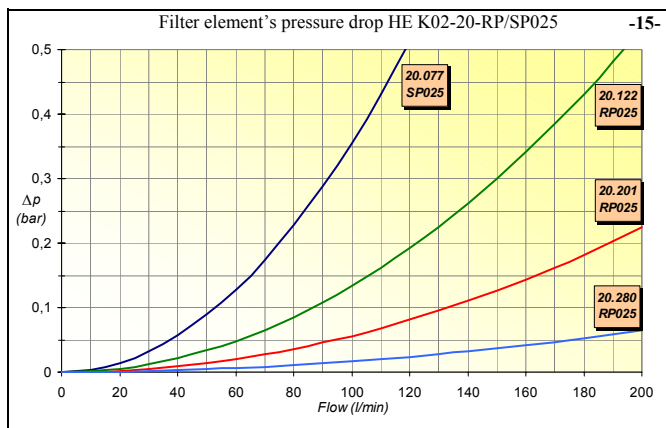
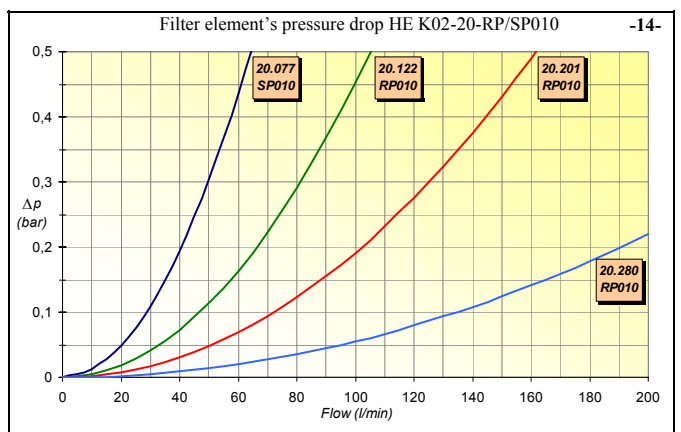
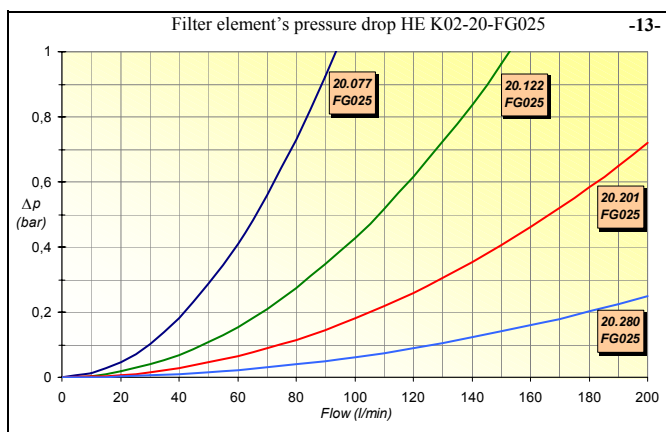
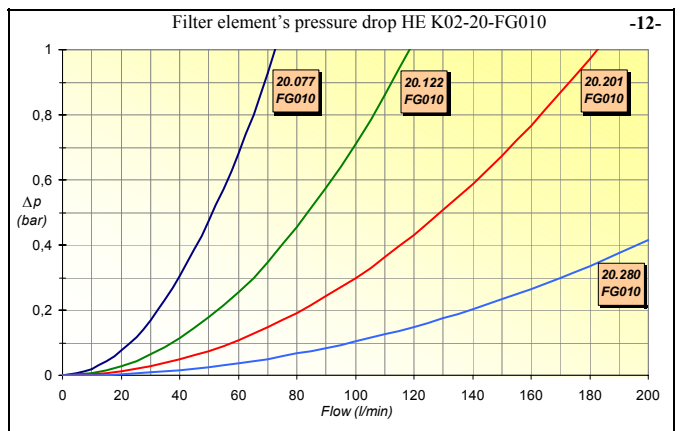
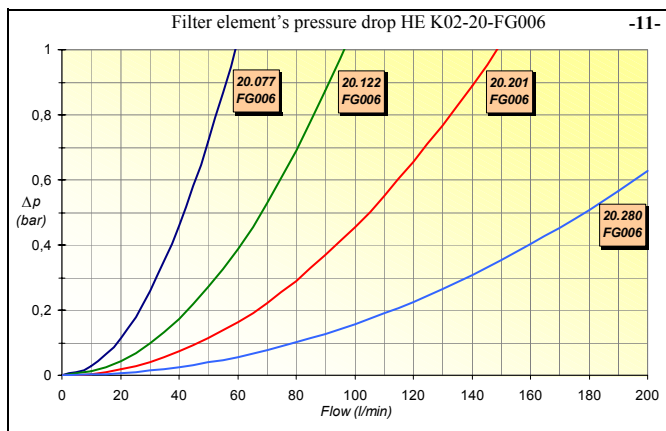
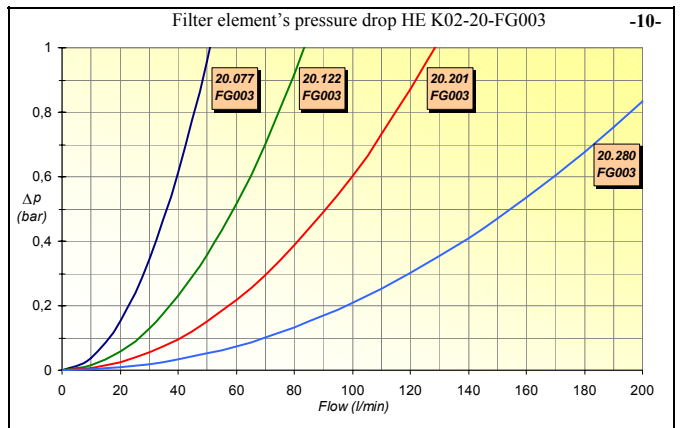
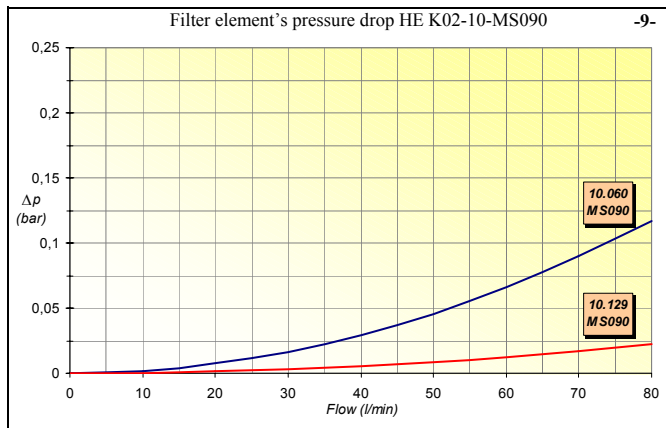


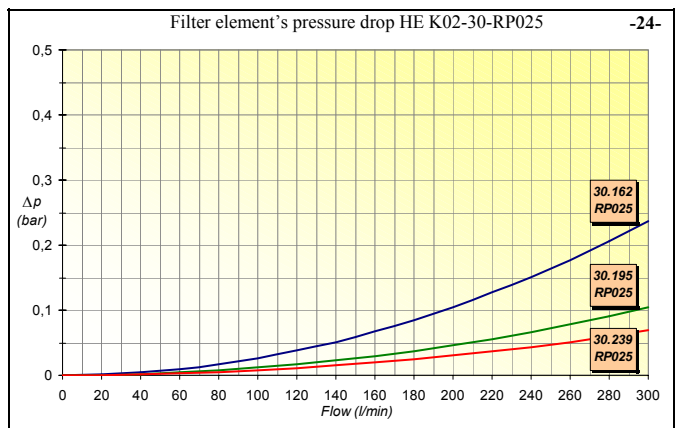
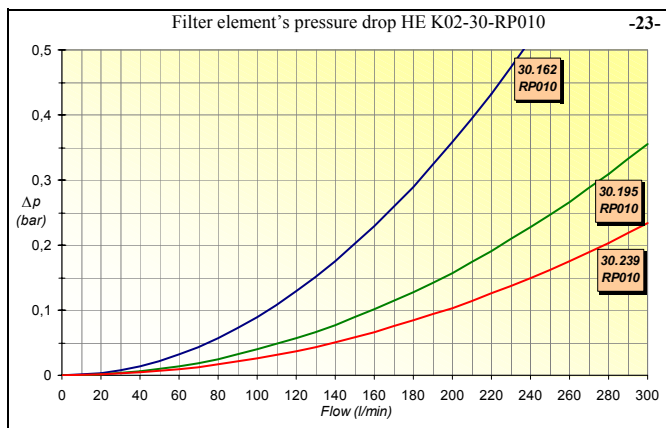
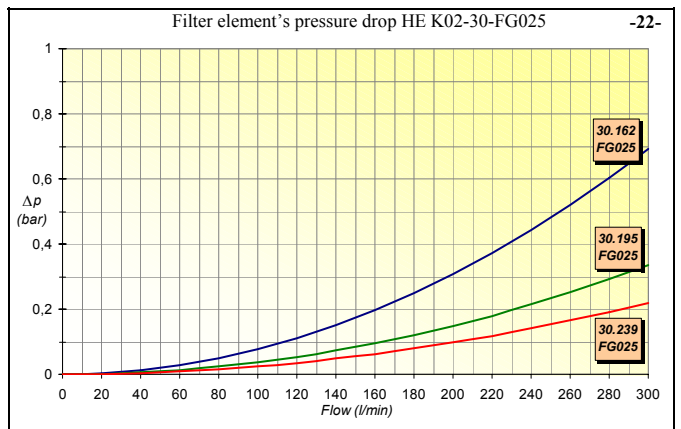
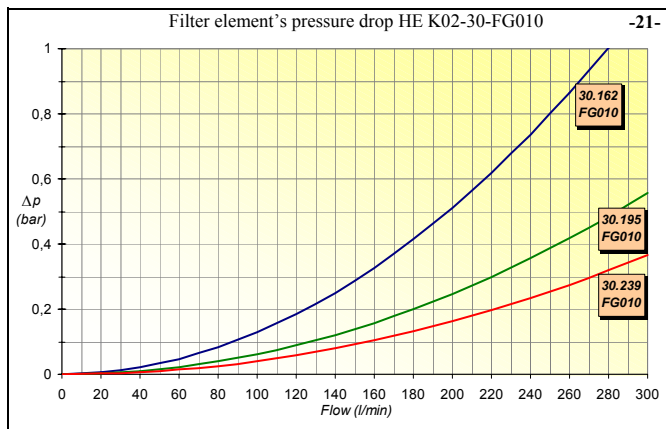
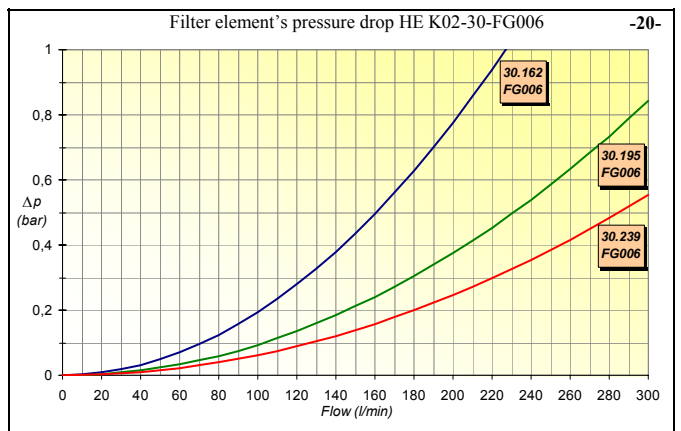
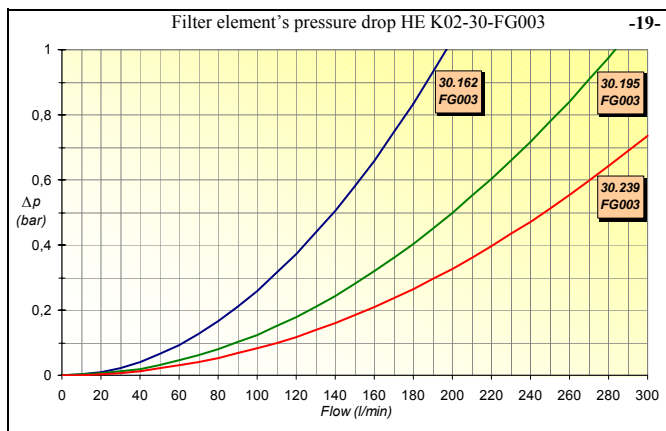
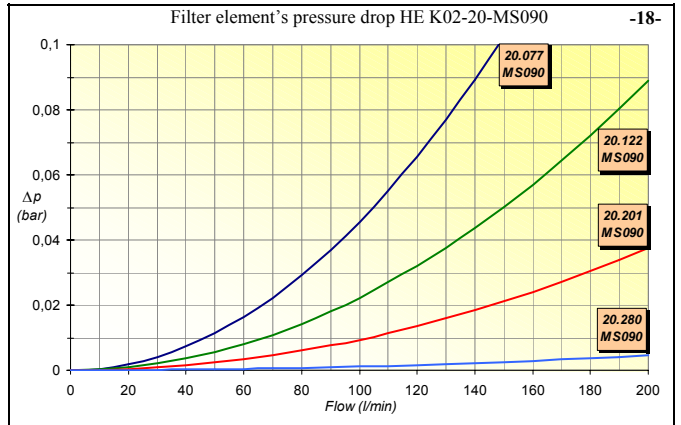
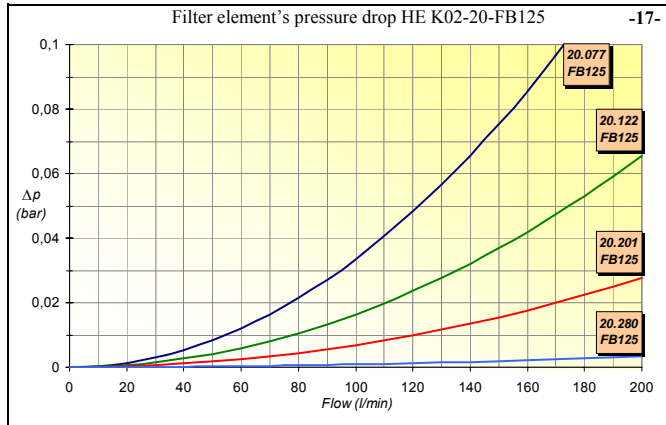
2) The **housing's pressure drop** is determined by the sum of the inlet and outlet port dimension.

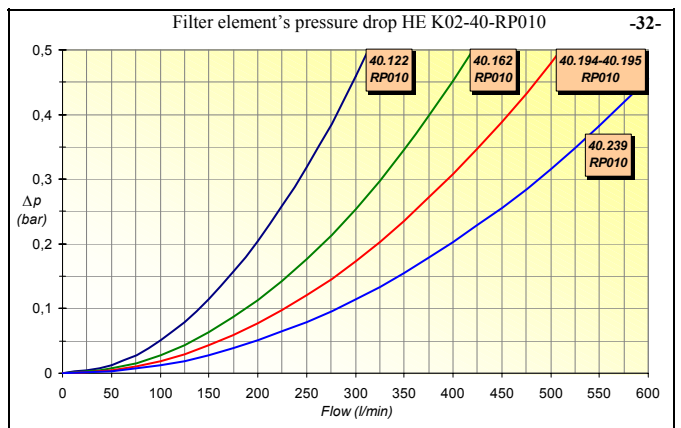
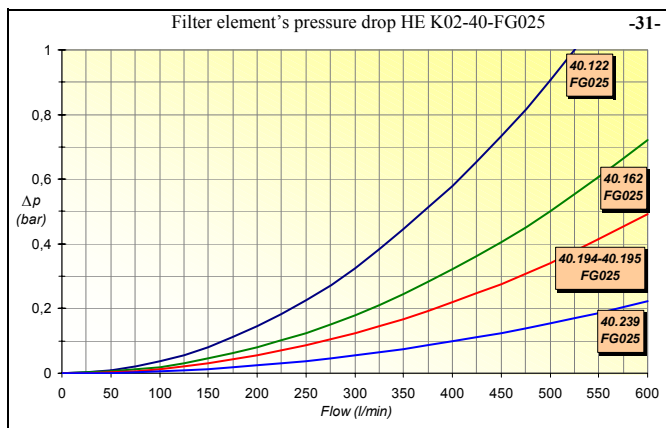
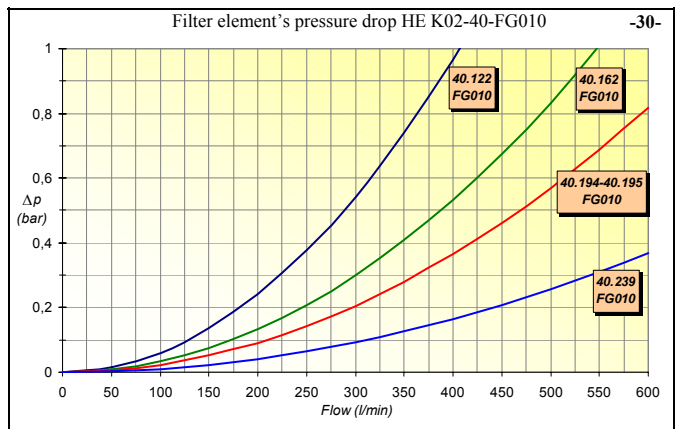
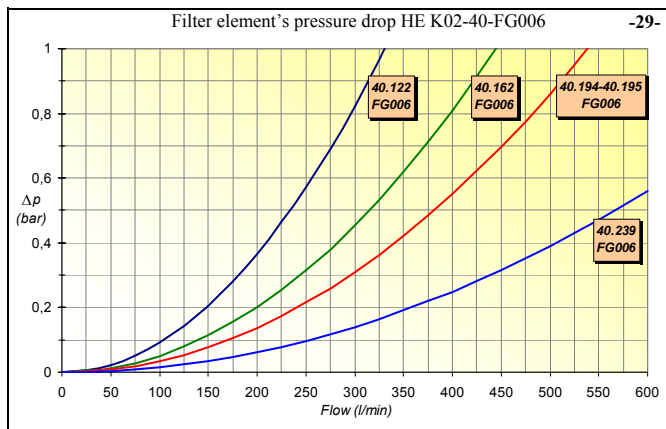
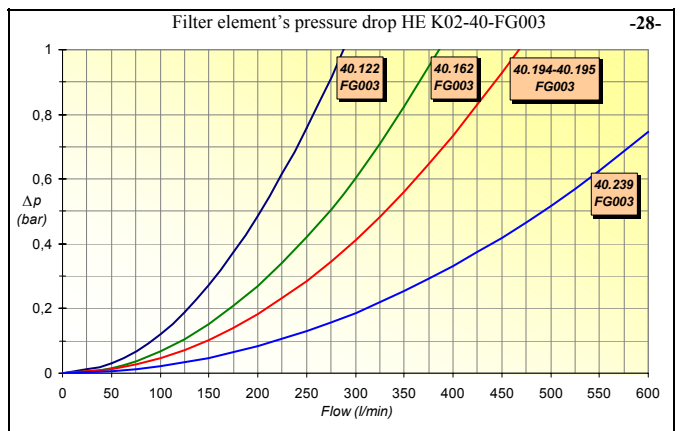
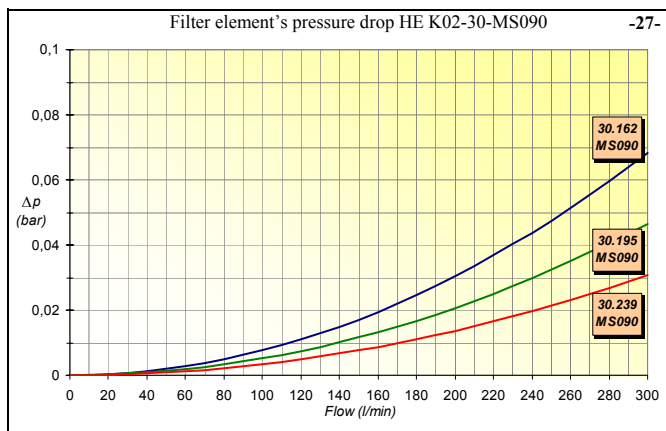
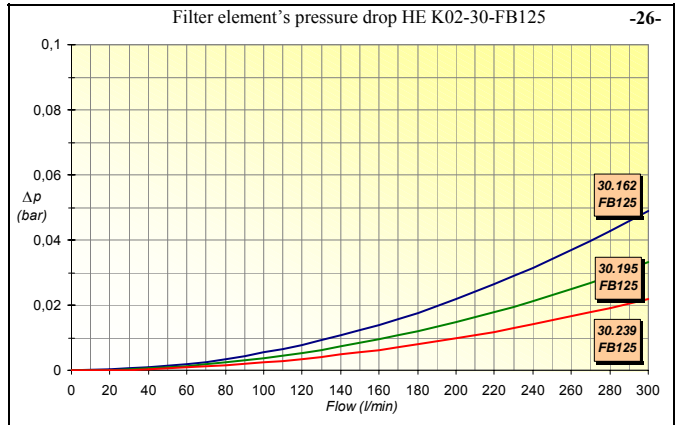
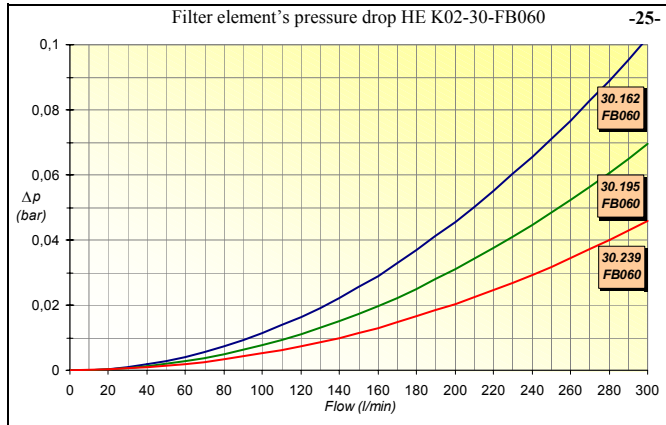


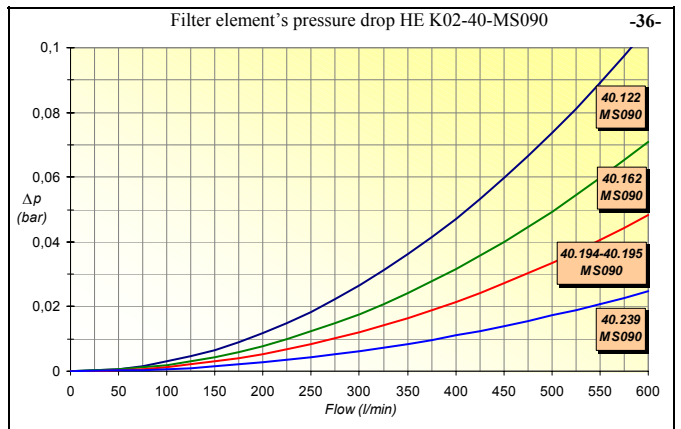
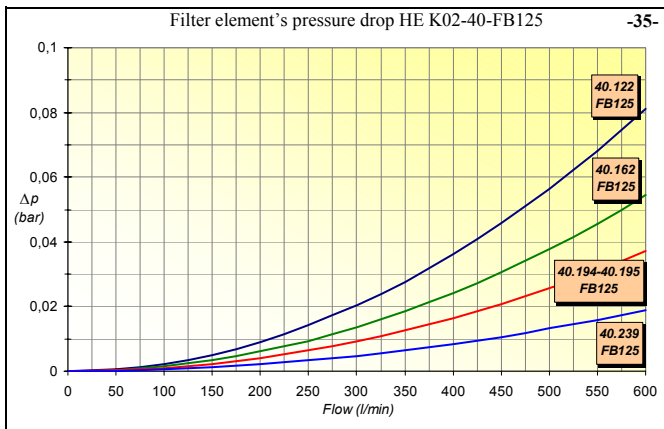
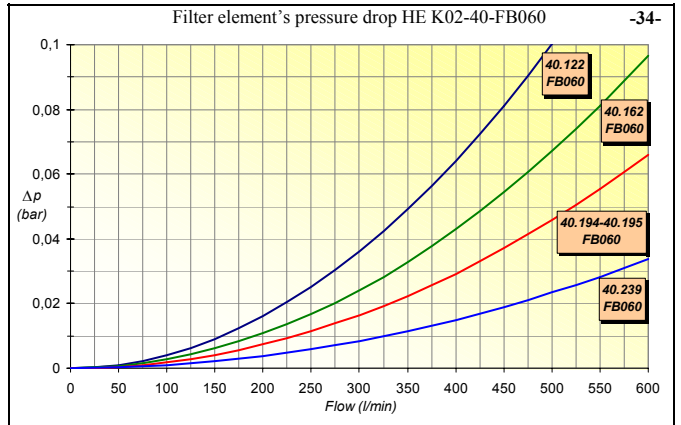
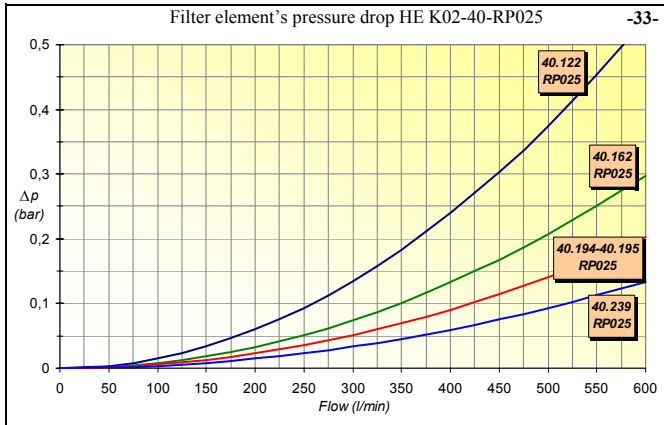
3) The **filter element's pressure drop** is determined by standard media and AS surface, they have been calculated experimentally and they are valid for clean elements.









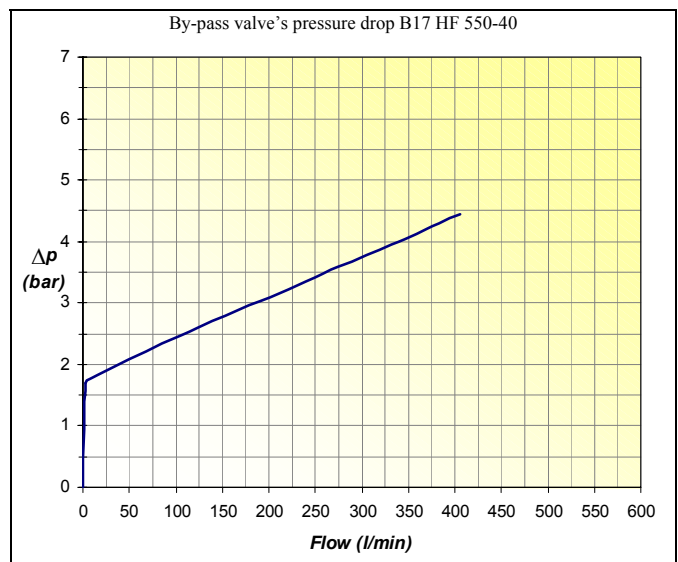
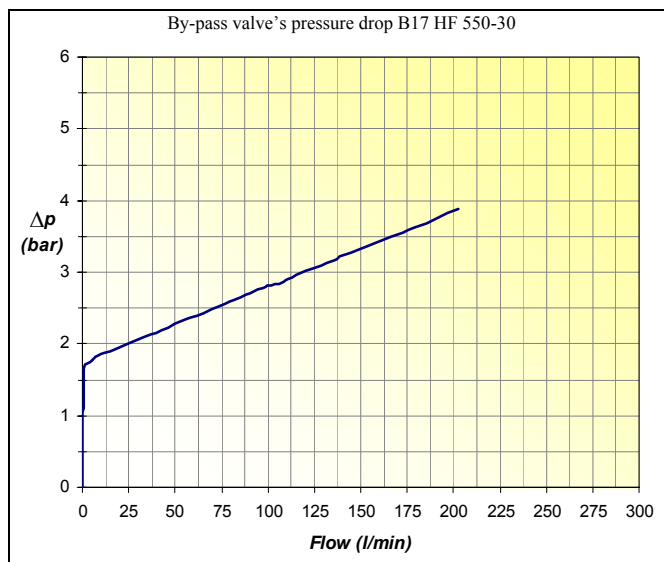
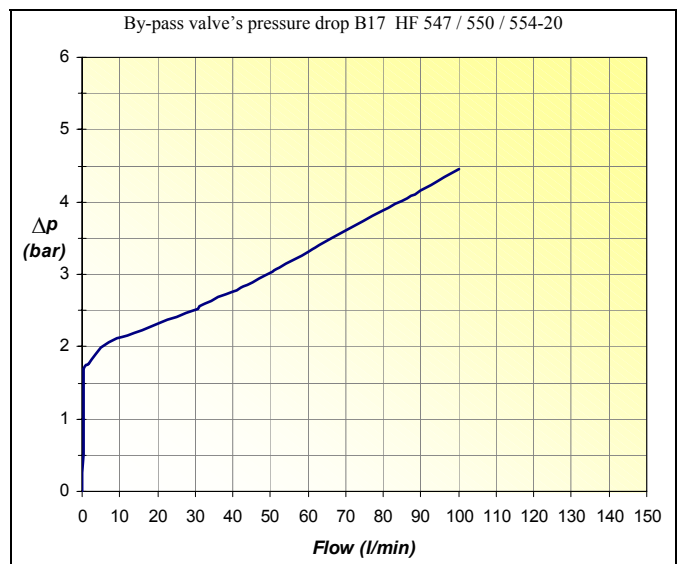
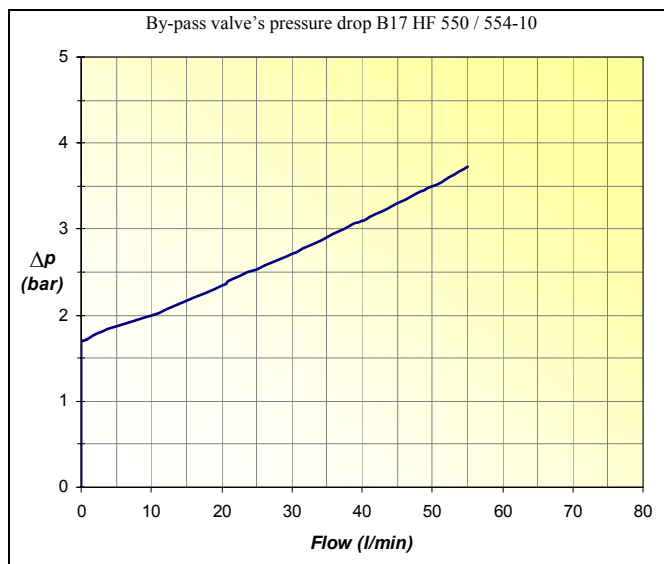


TANK MOUNTED RETURN LINE FILTERS SERIES HF 547 - 550 - 554

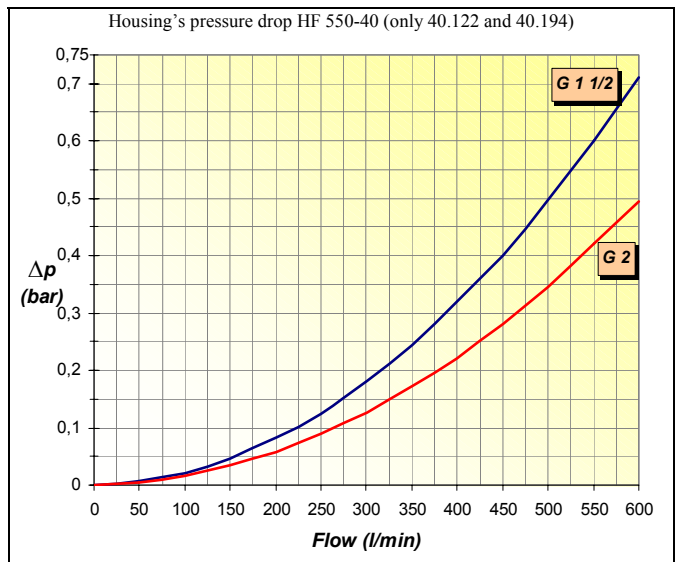
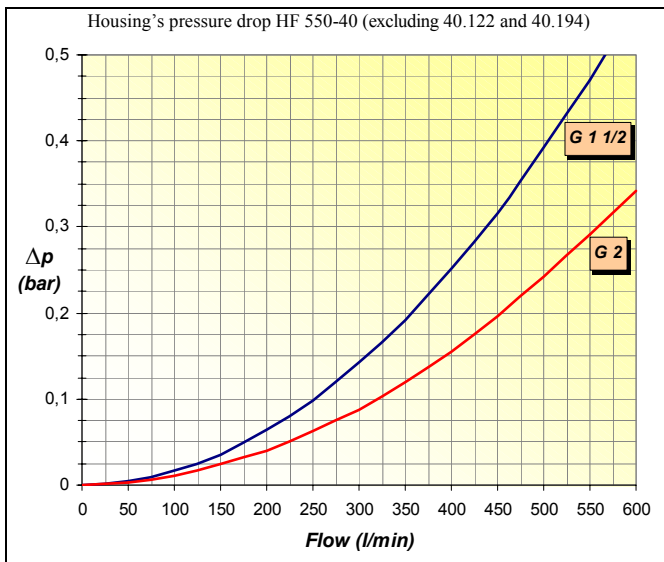
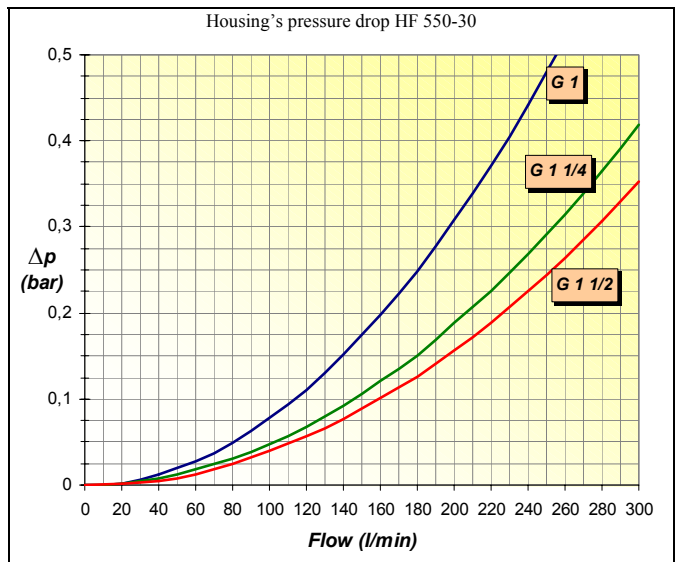
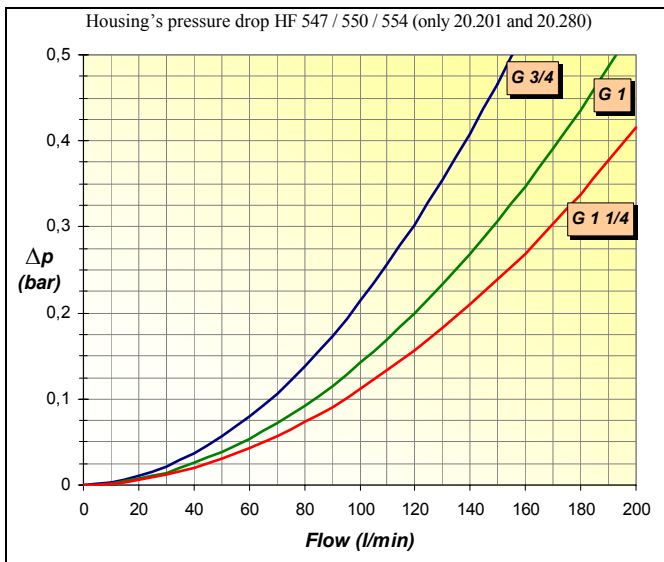
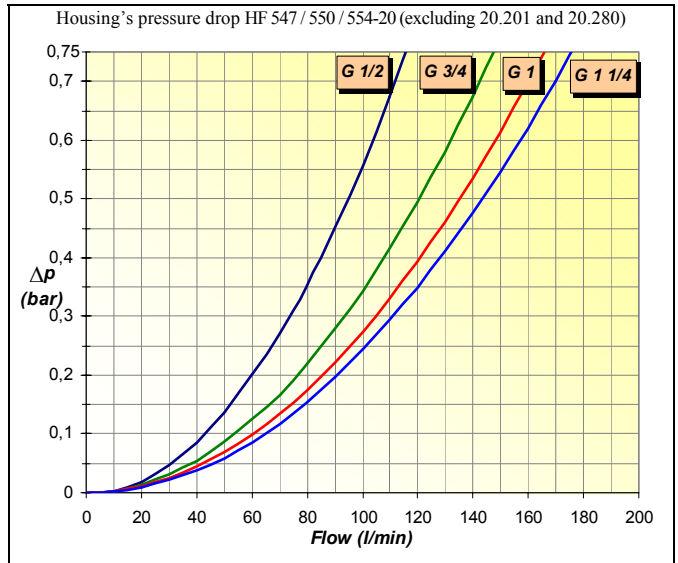
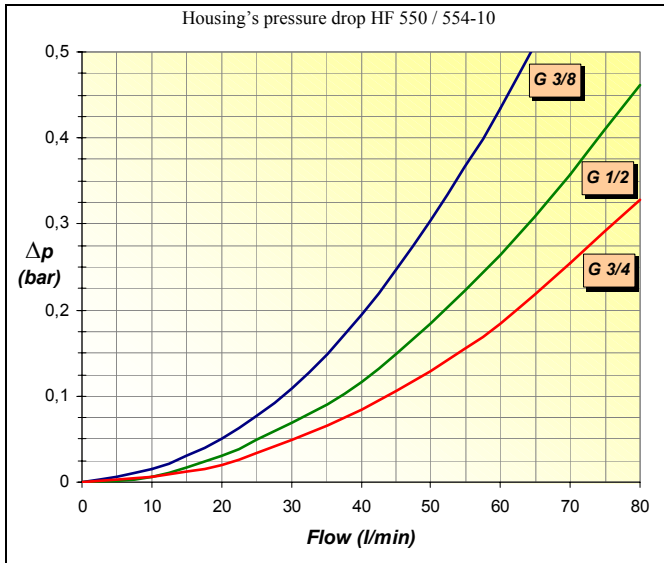
PRESSURE DROP CURVES

The pressure drop for return filters series HF 547 - HF 550 - HF 554 has to be between 0,2 and 0,4 bar.

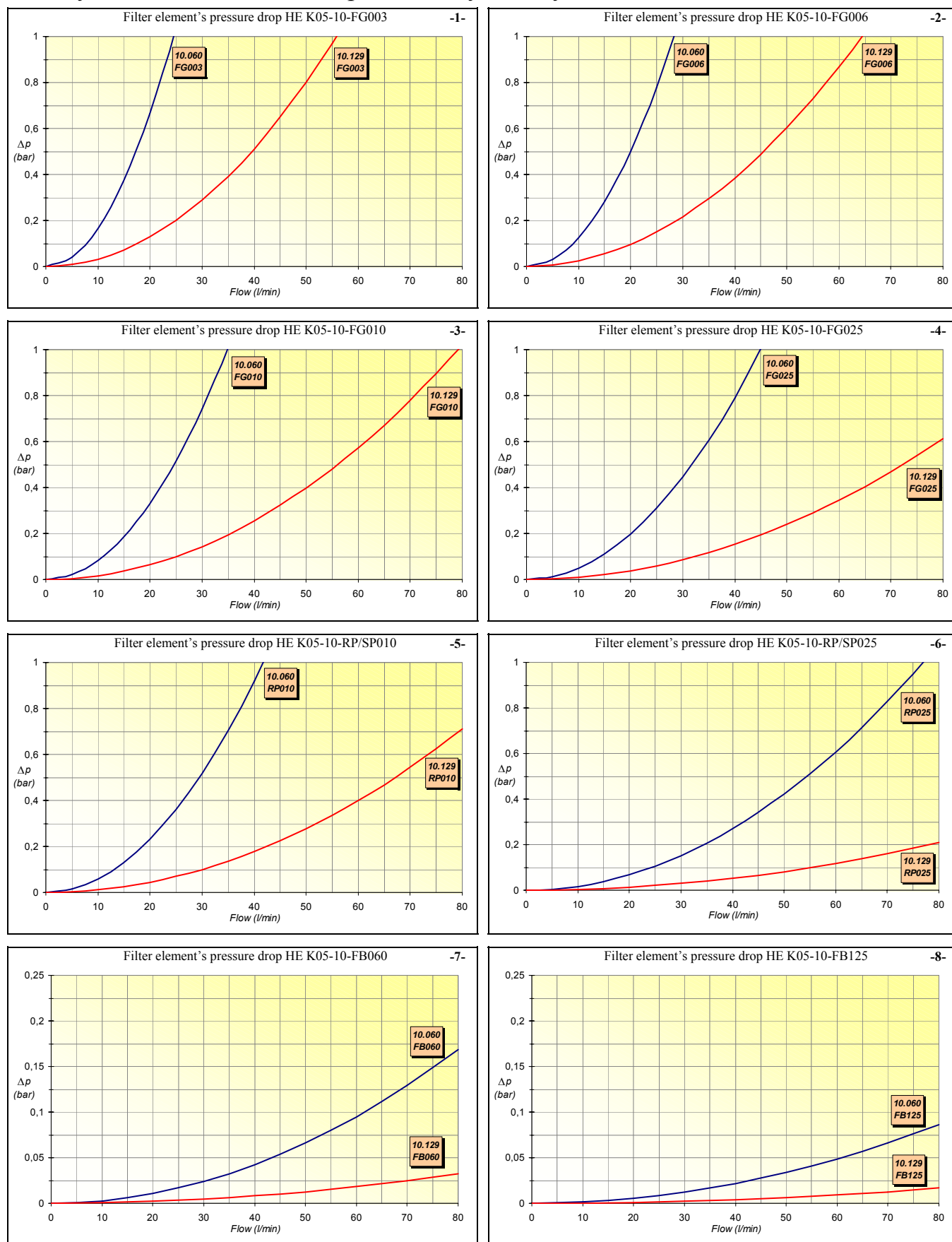
- 1) The **by-pass pressure drop** is directly proportional to fluid specific gravity and it's irrelevant to determine the total pressure drop.

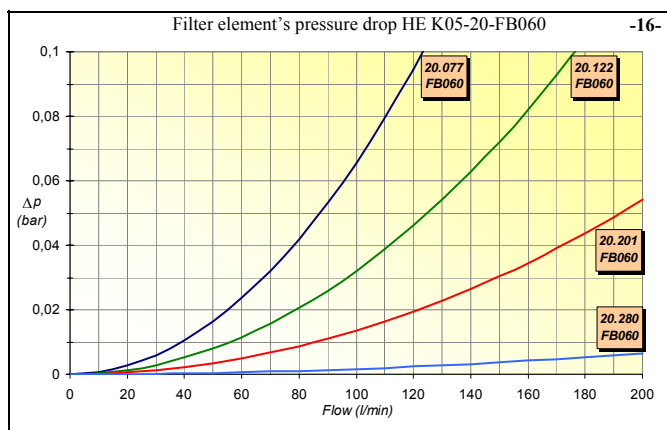
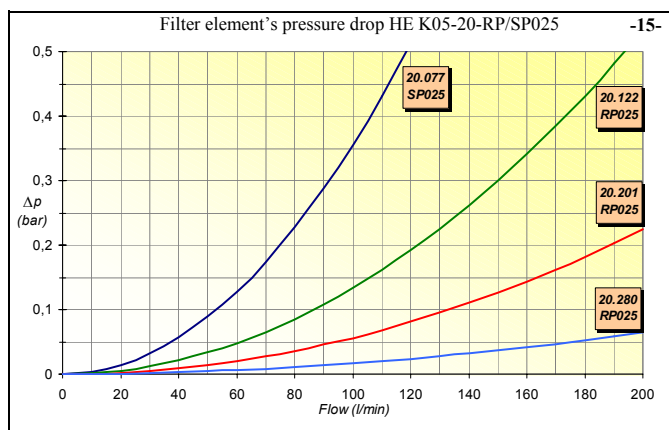
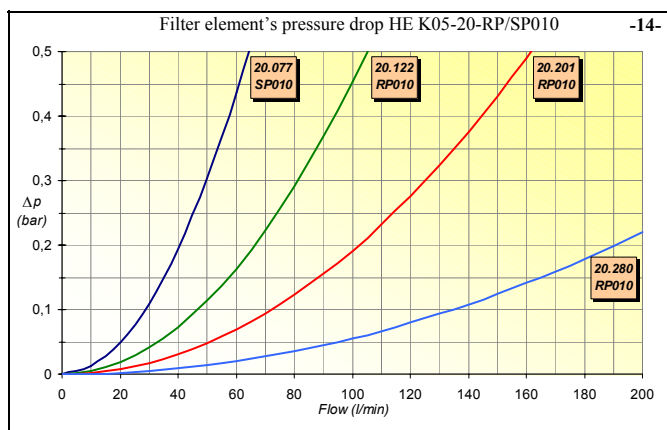
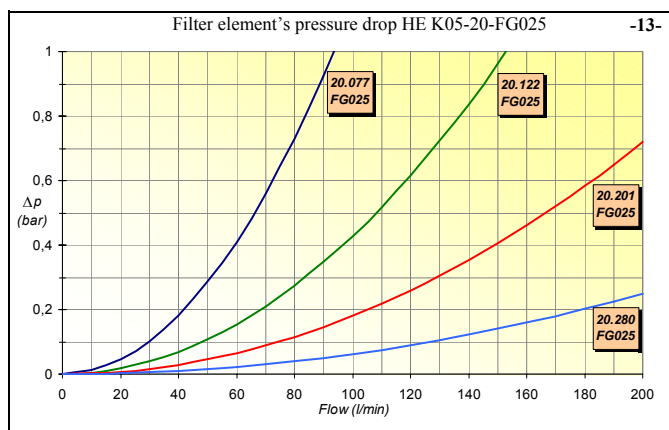
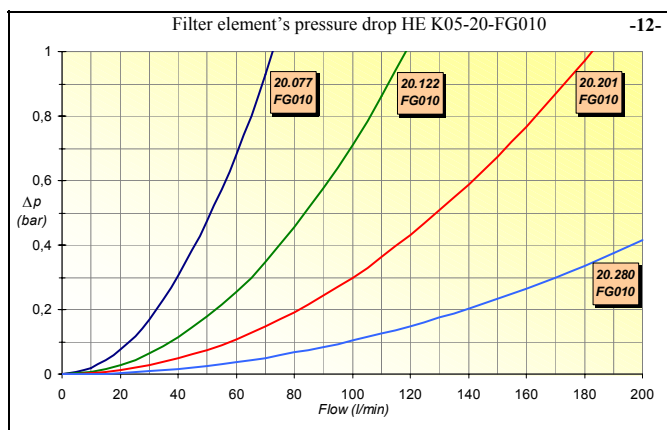
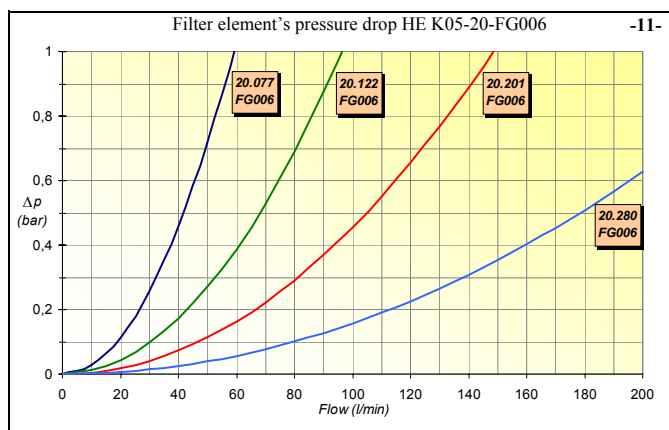
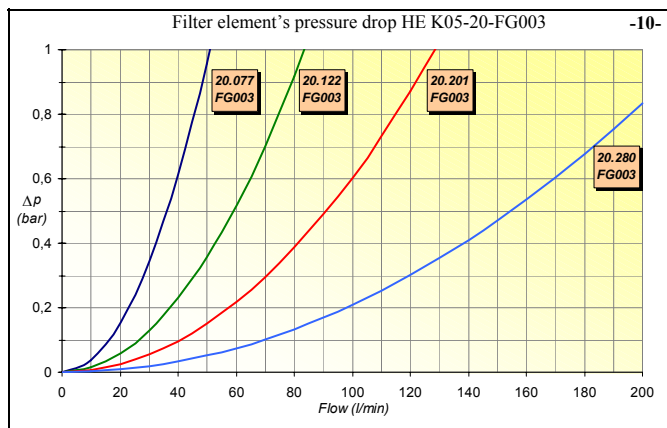
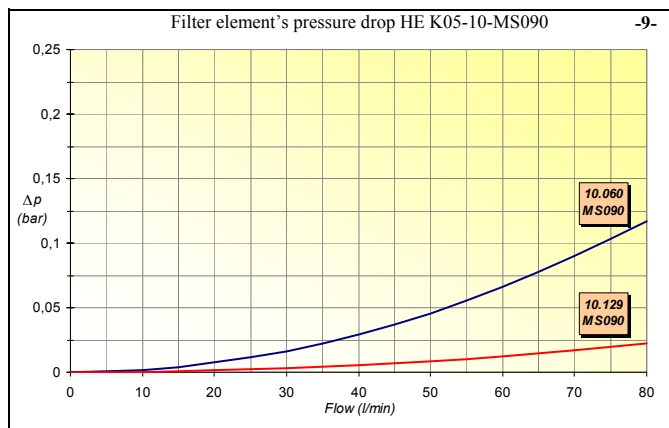


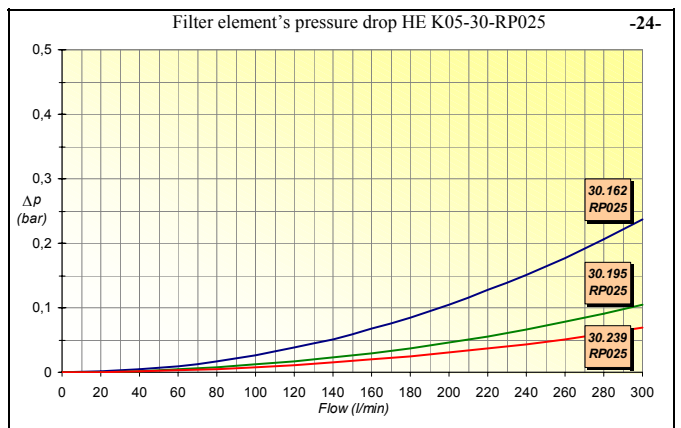
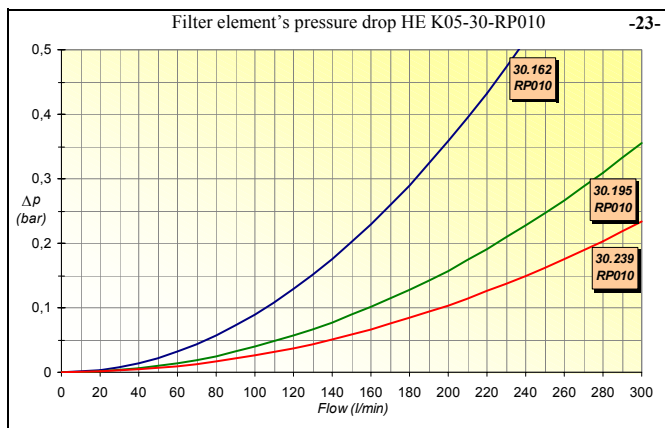
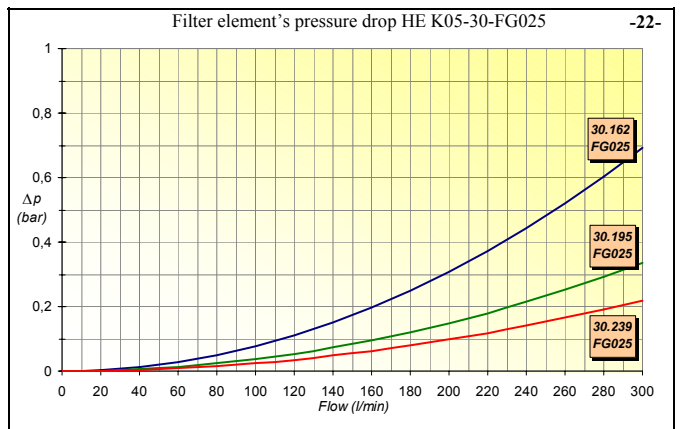
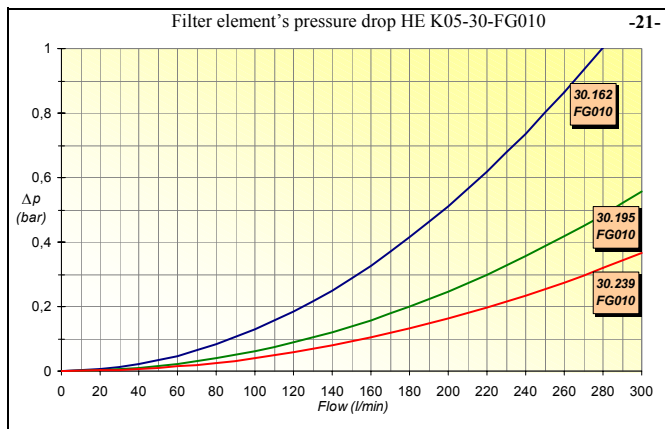
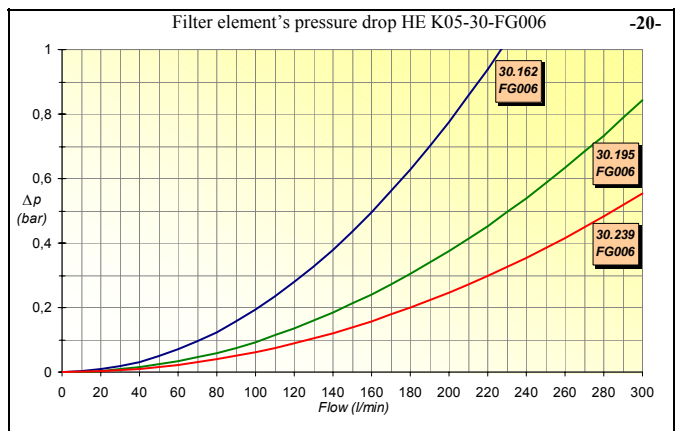
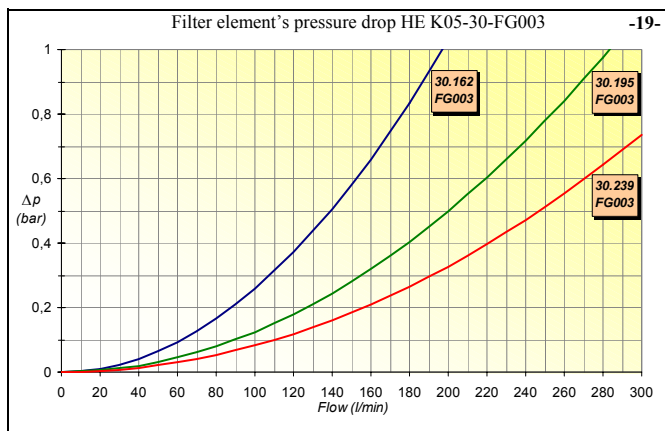
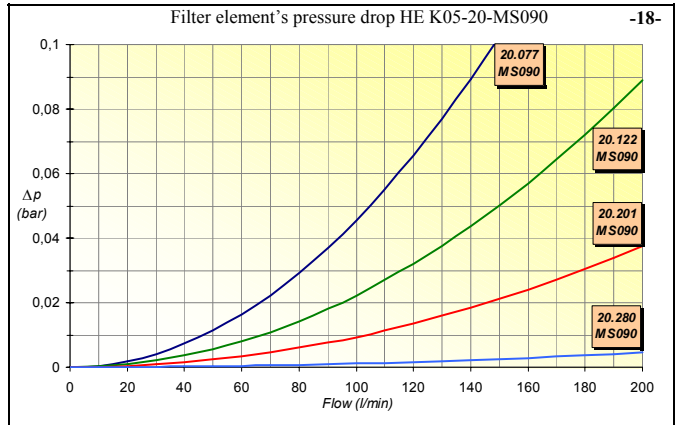
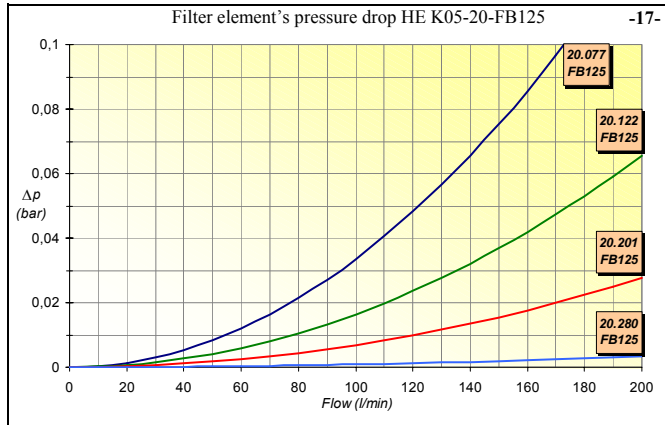
2) The **housing's pressure drop** is determined by the sum of the inlet and outlet port dimension.

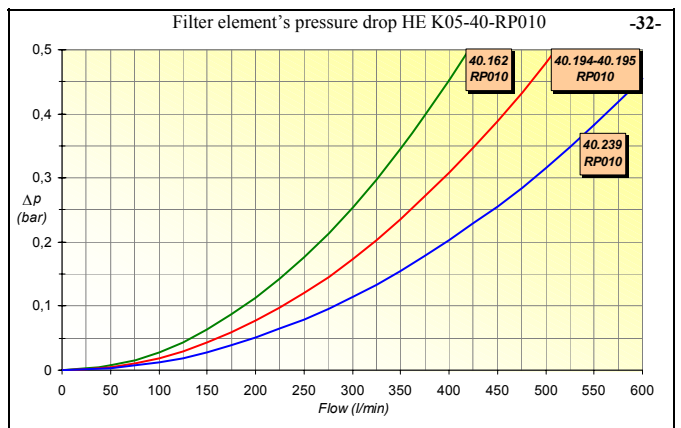
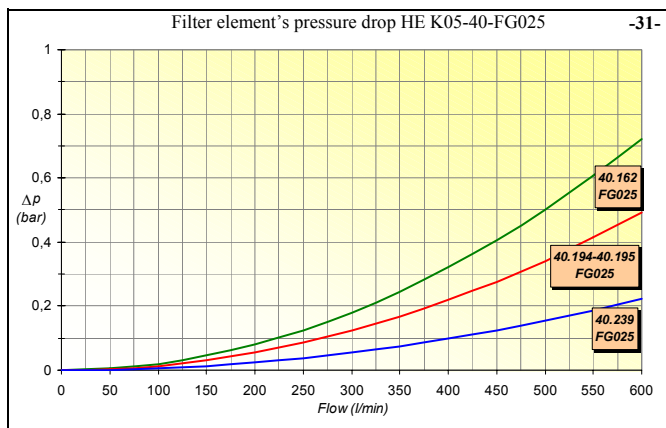
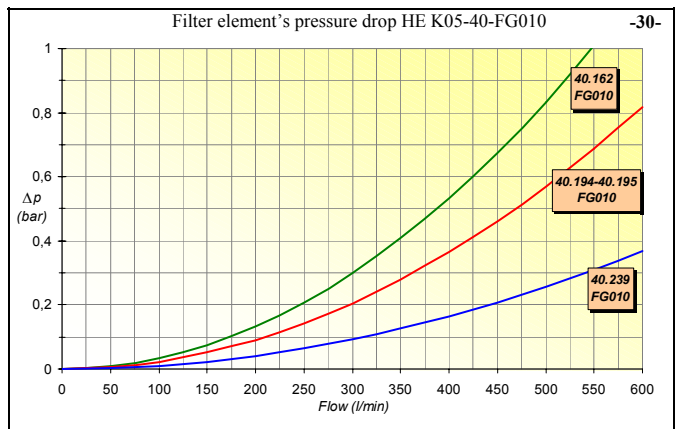
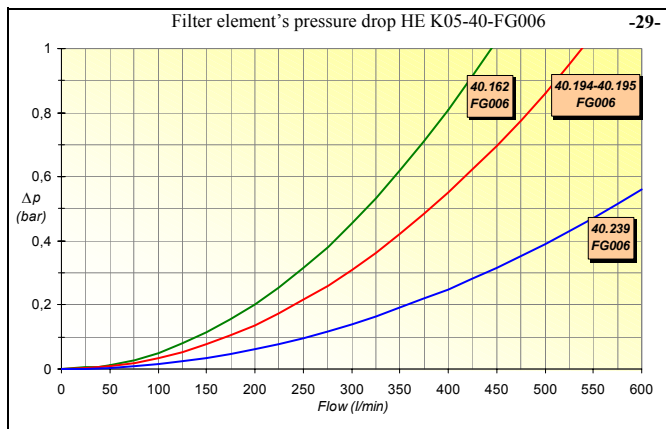
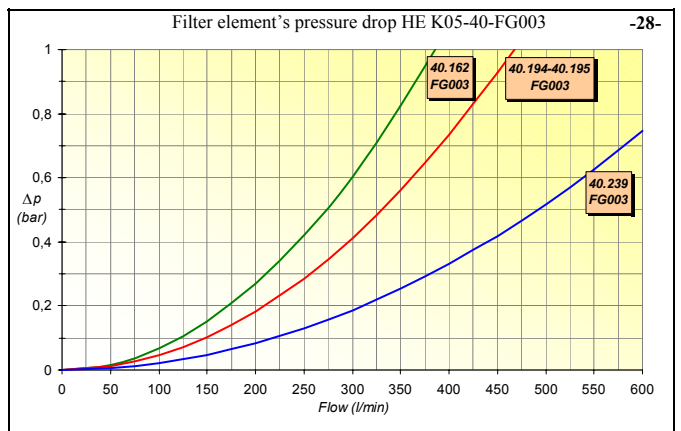
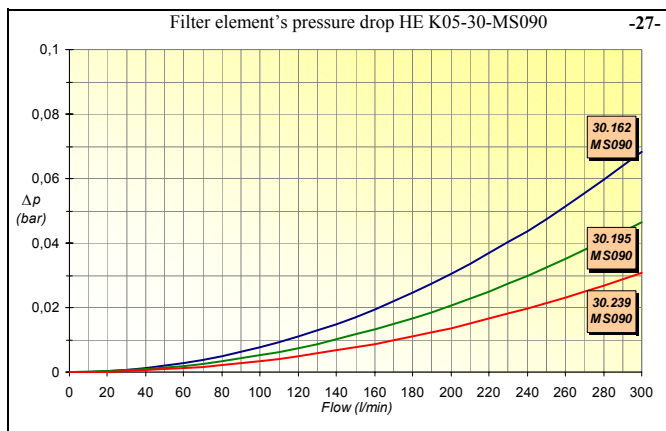
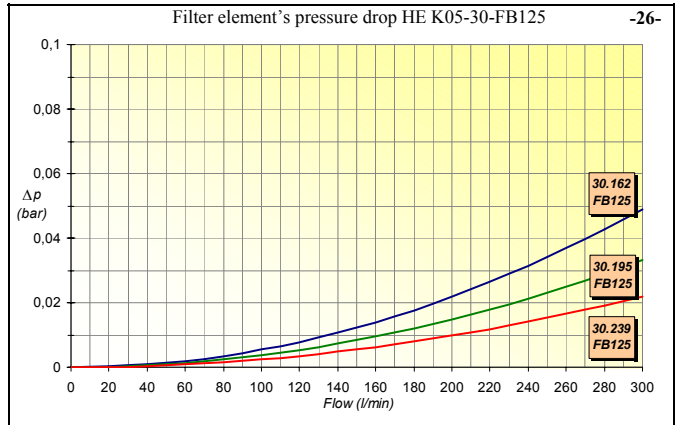
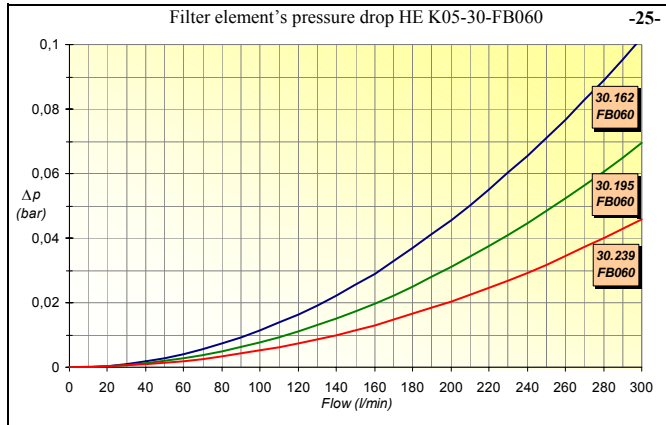


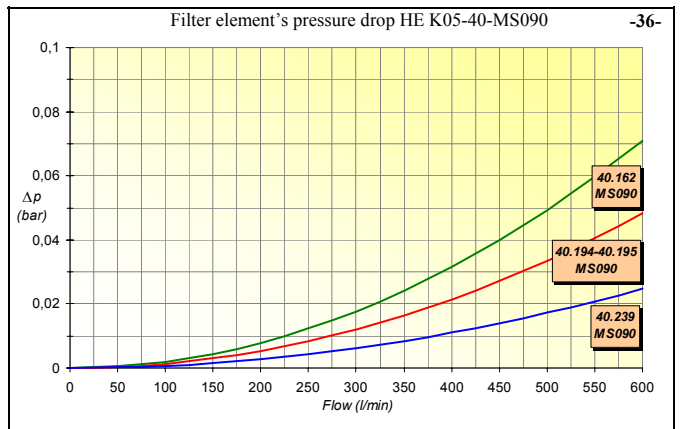
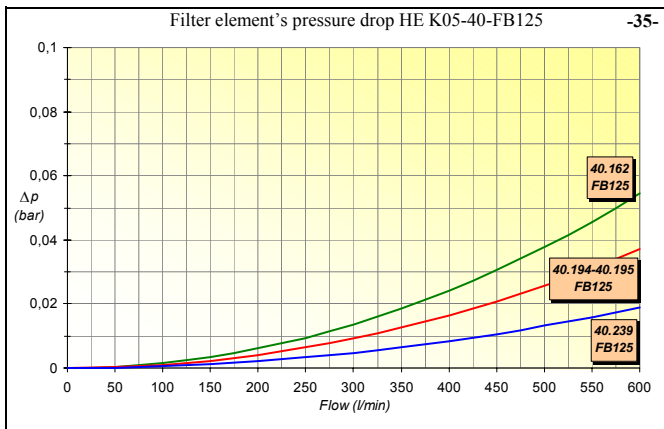
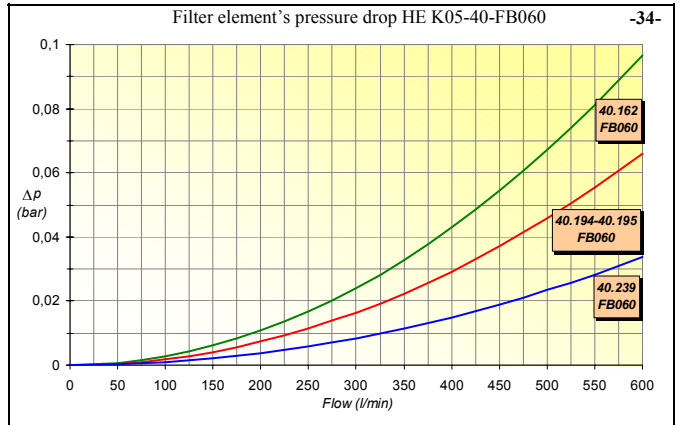
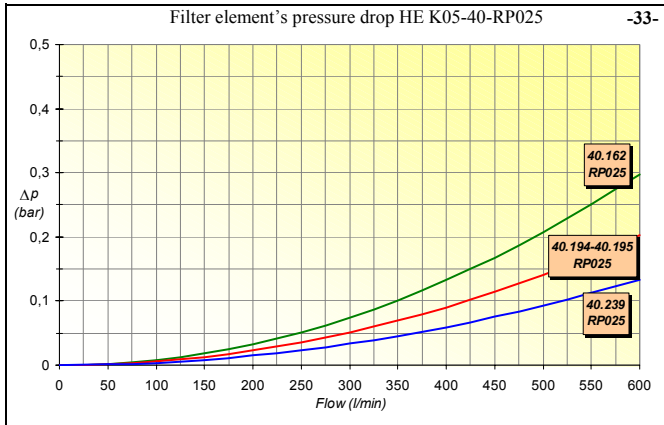
3) The **filter element's pressure drop** is determined by standard media and AS surface, they have been calculated experimentally and they are valid for clean elements.









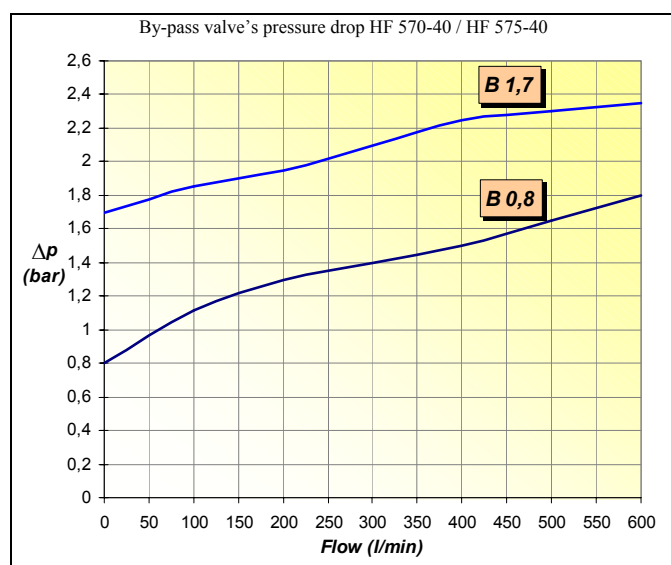
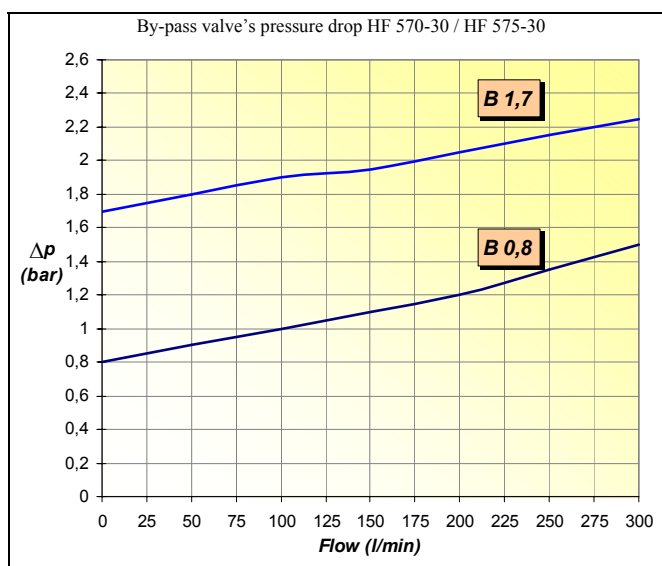
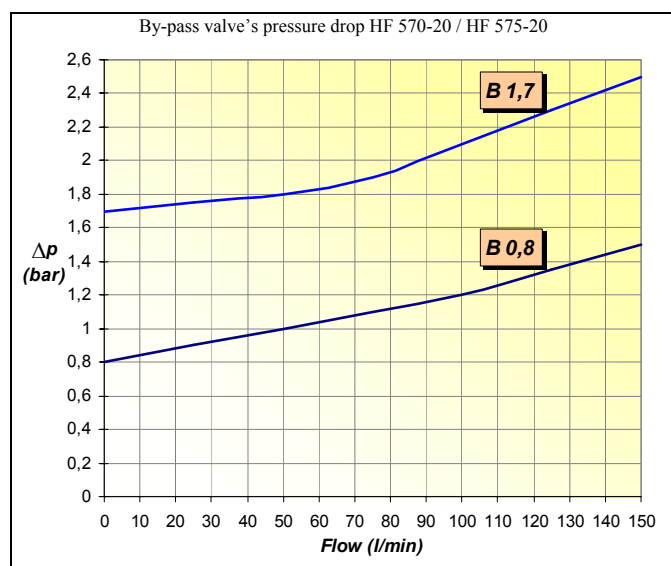


TANK MOUNTED RETURN LINE FILTERS SERIES 570 - 575

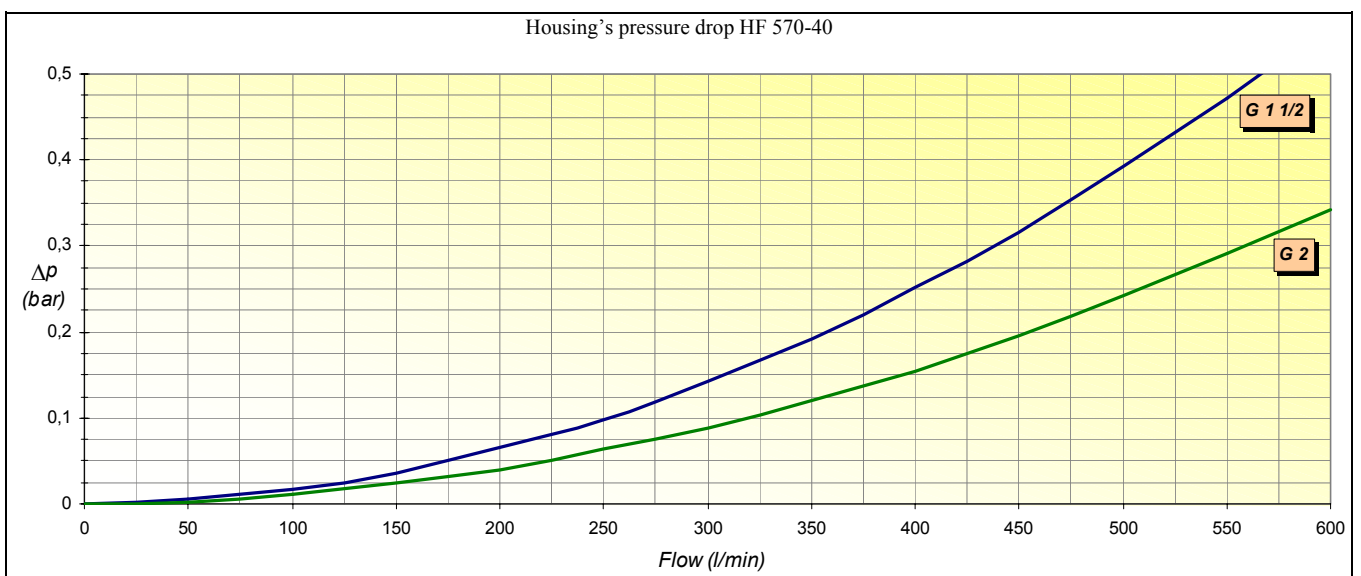
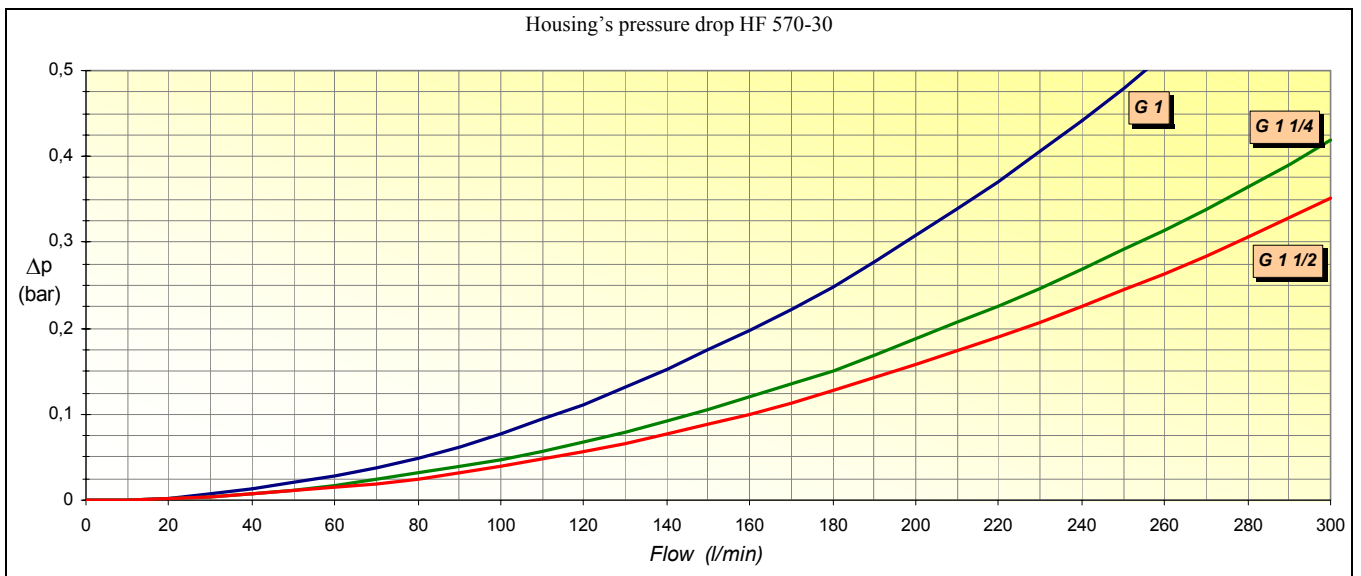
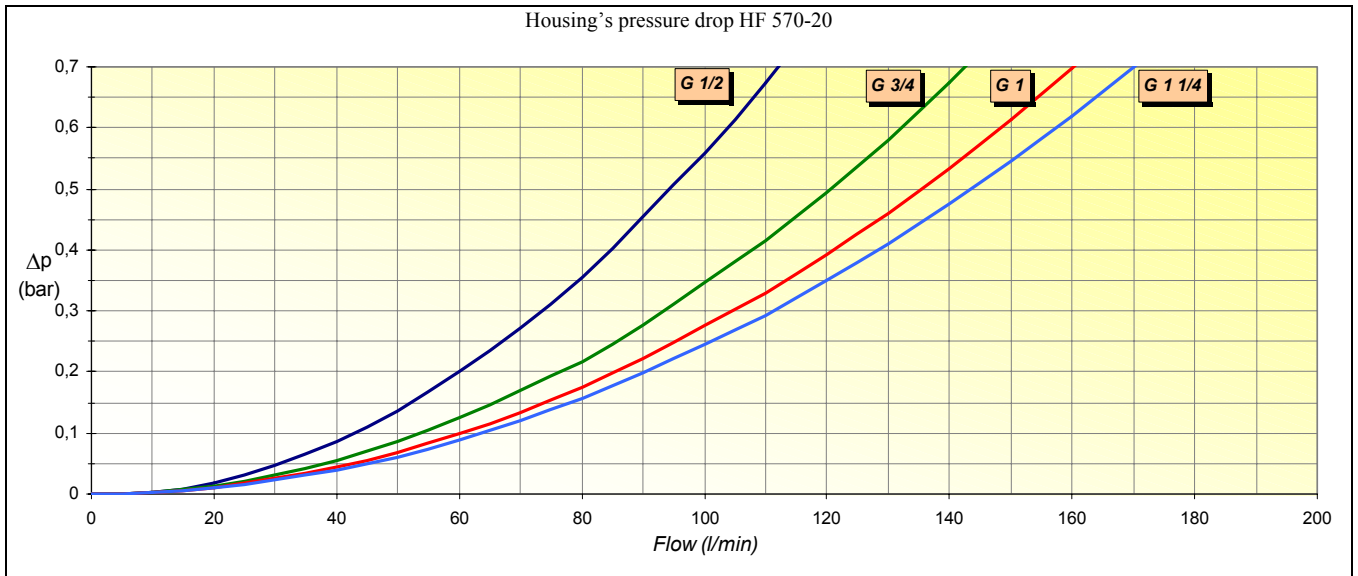
PRESSURE DROP CURVES

The pressure drop for return filters series HF 570 and HF 575 has to be between 0,2 and 0,4 bar.

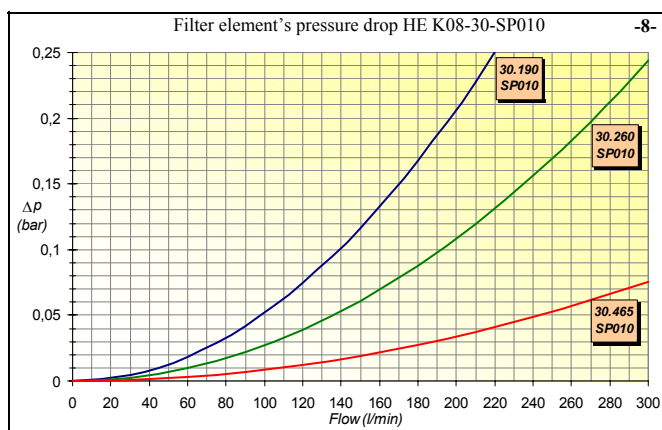
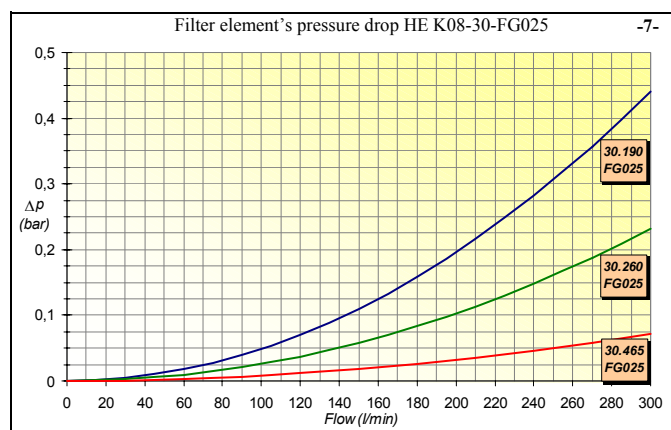
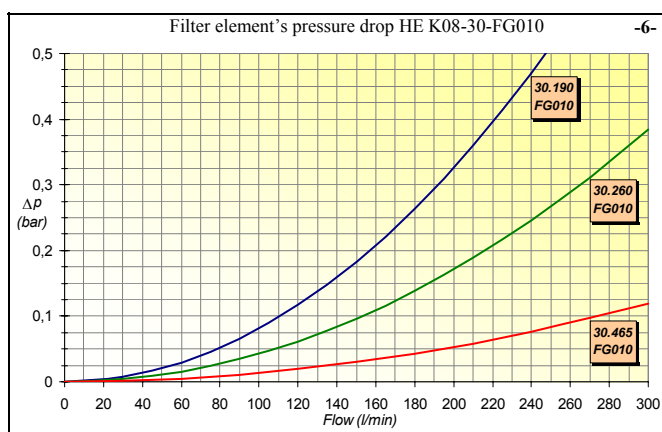
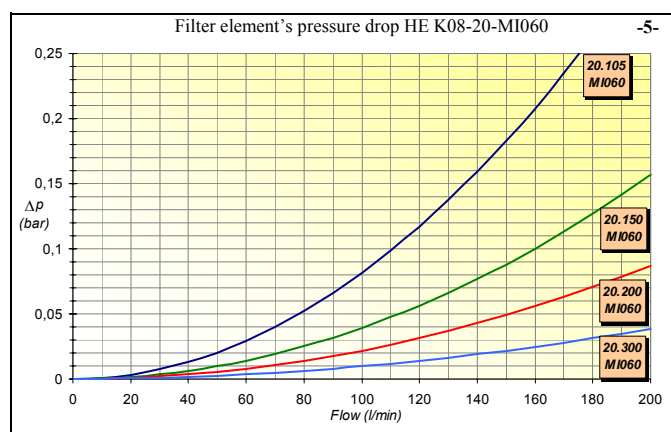
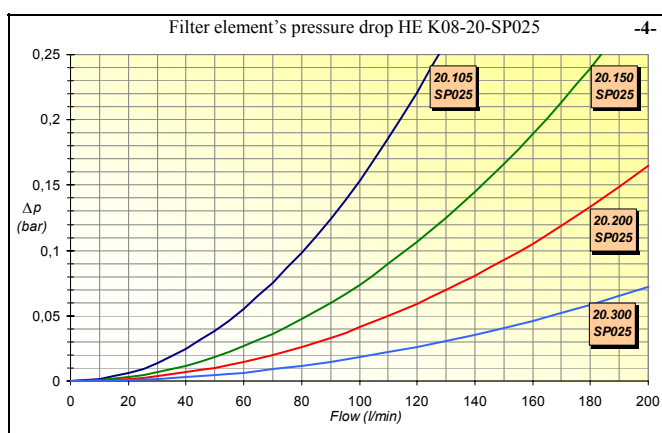
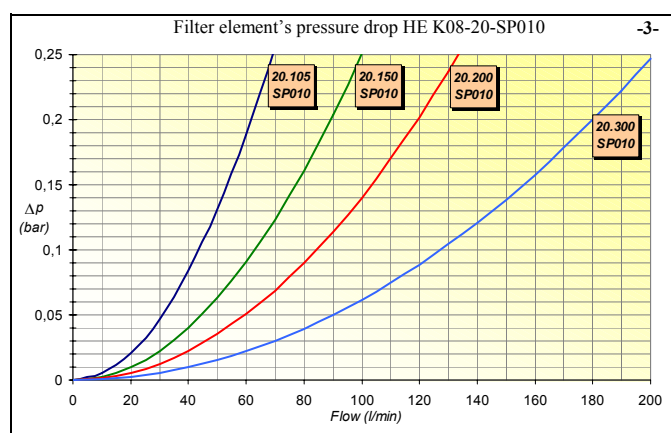
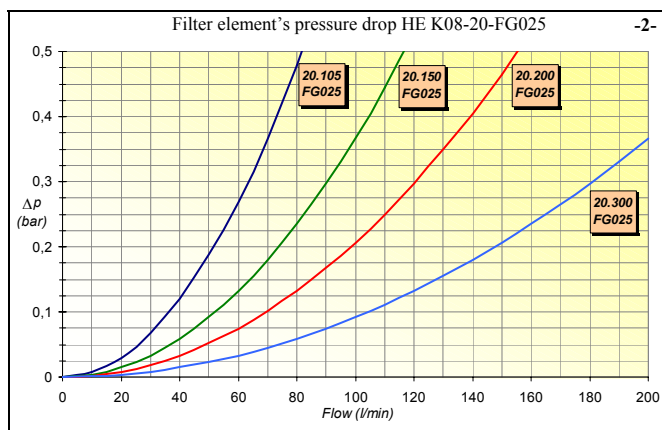
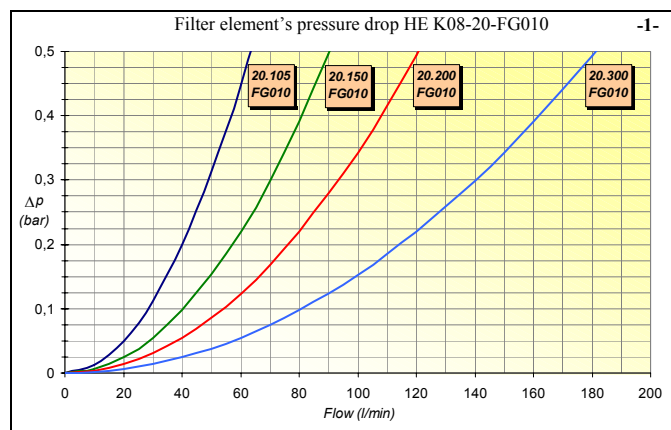
- 1) The by-pass pressure drop is directly proportional to fluid specific gravity and it's irrelevant to determine the total pressure drop.

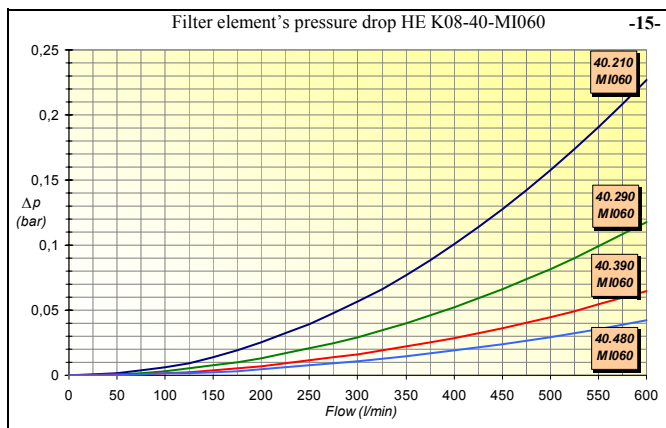
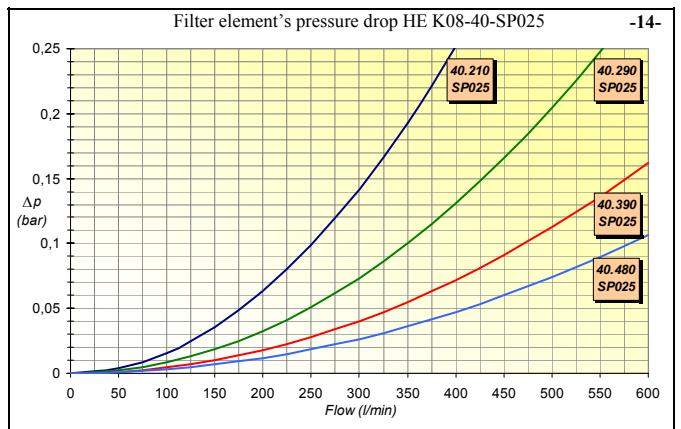
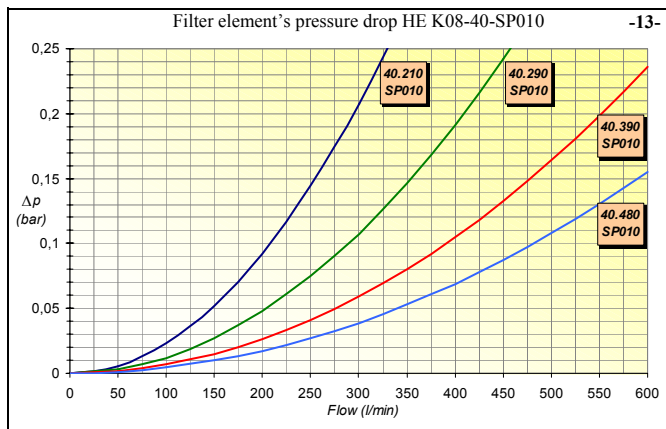
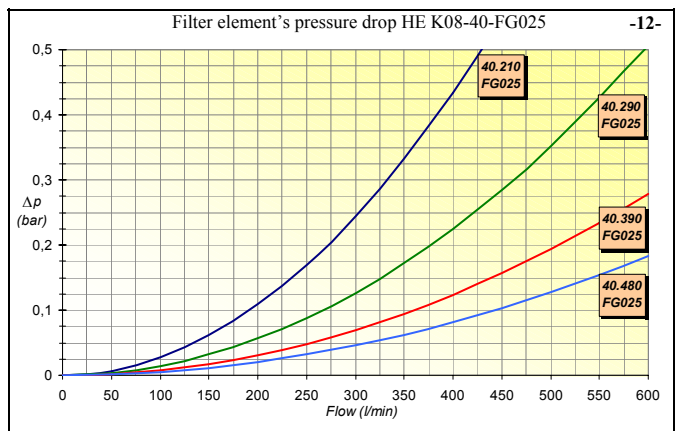
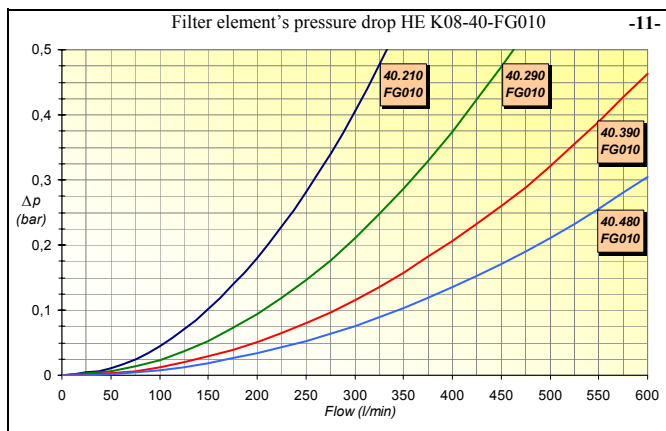
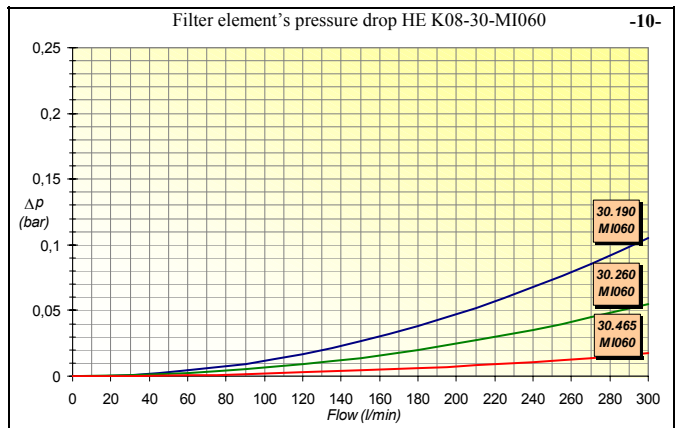
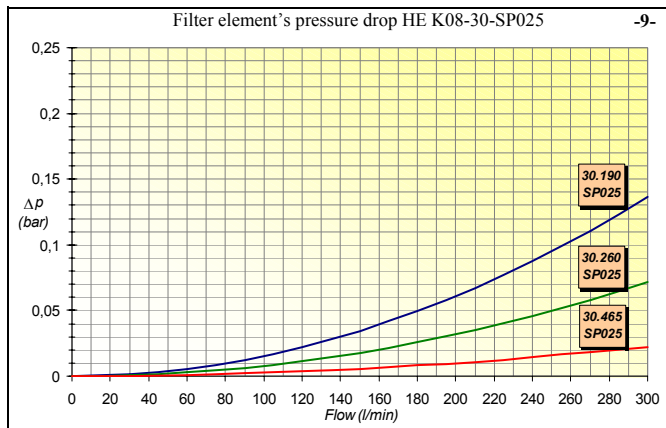


2) The housing's pressure drop is determined by the sum of the inlet port's dimension.



3) The filter element's pressure drop is determined by standard media and AS surface, they have been calculated experimentally and they are valid for clean elements.



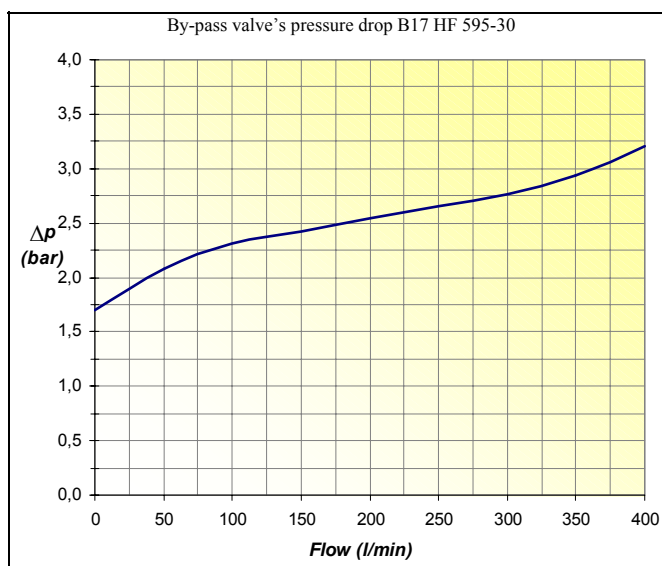
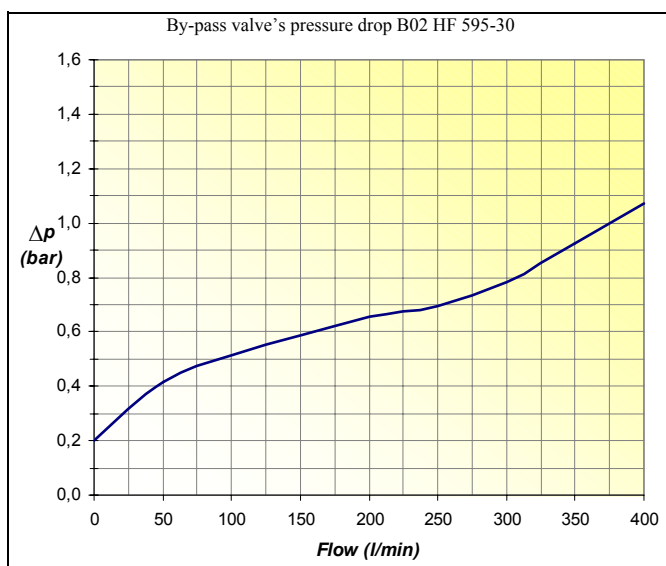
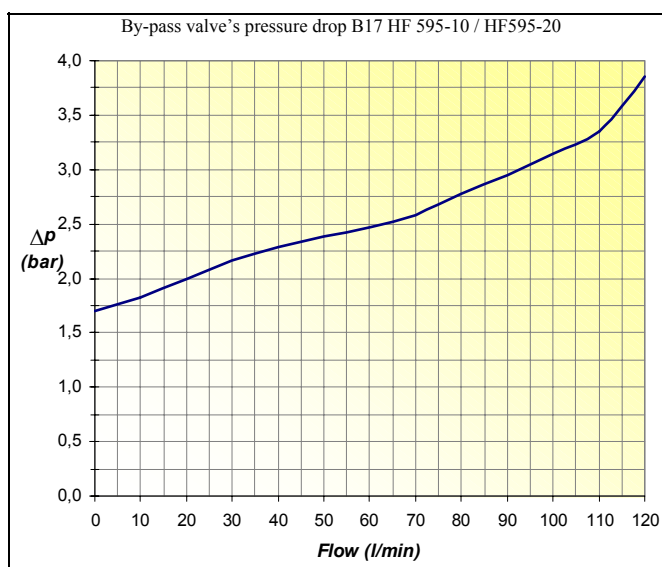
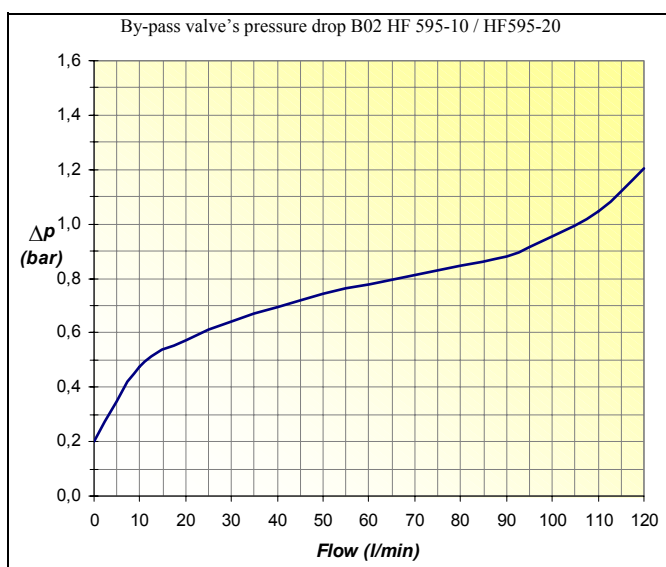


SUCTION AND RETURN FILTERS SERIES HF 595

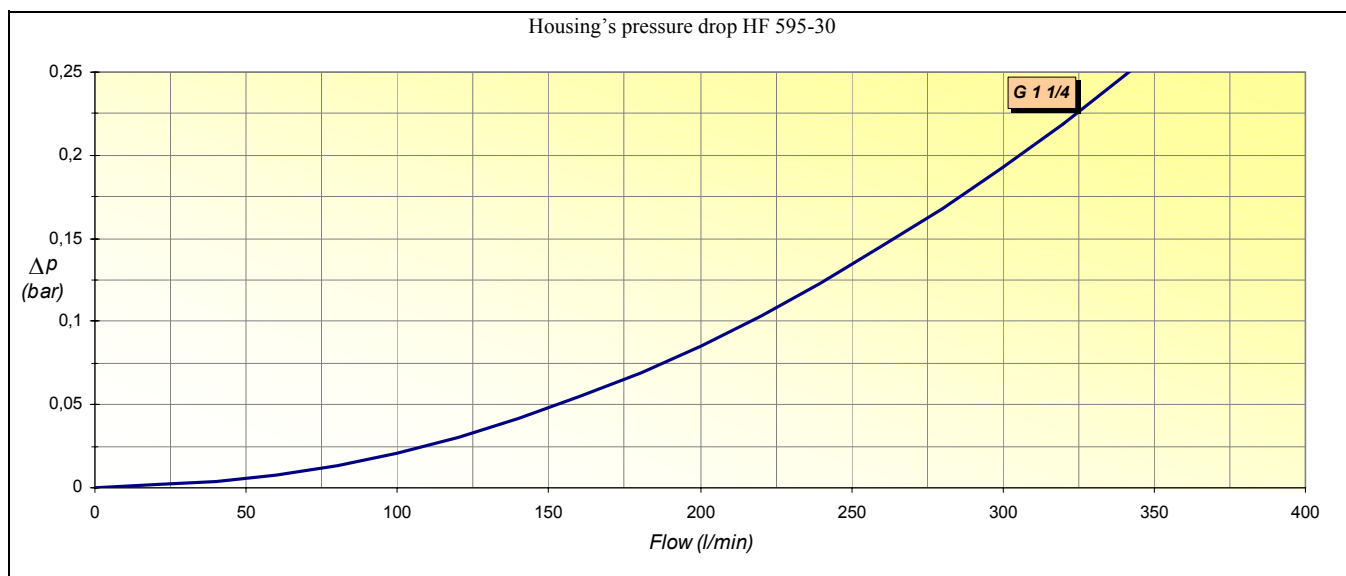
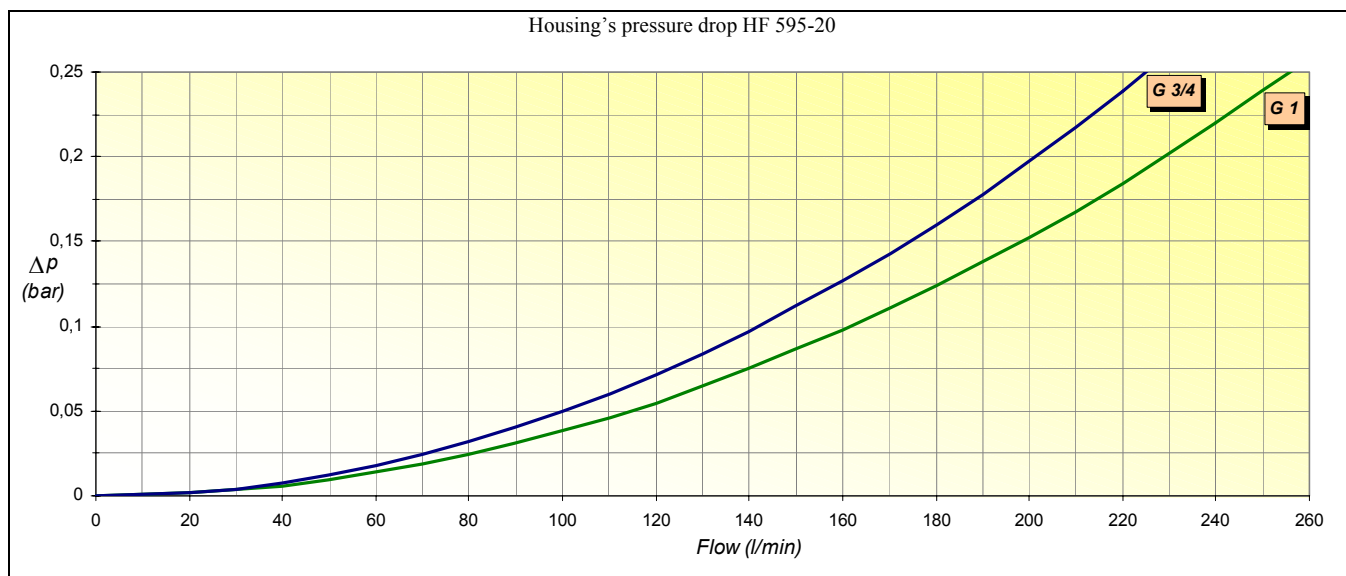
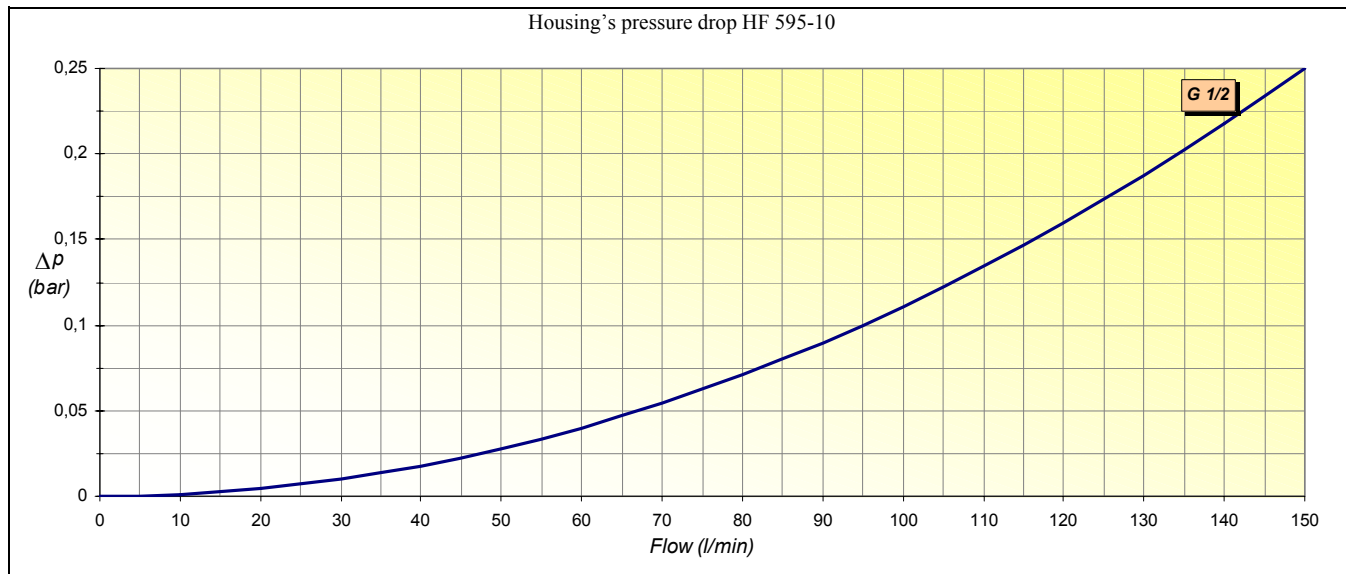
PRESSURE DROP CURVES

The pressure drop for filters series HF 595 on suction line is 0,2 bar max; the pressure drop for filters series HF 595 on return has to be between 0,2 and 0,4 bar.

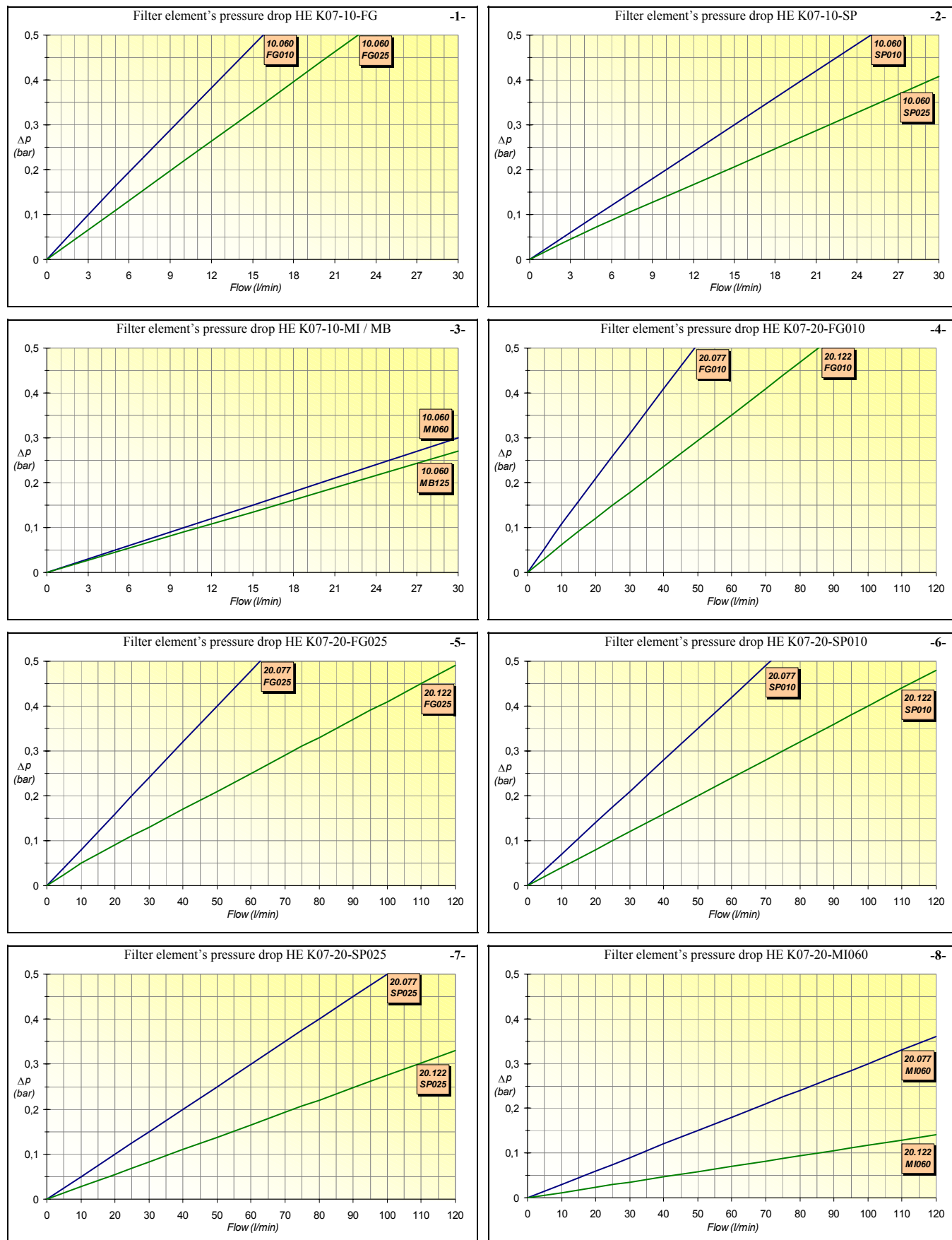
- 1) The by-pass pressure drop is directly proportional to fluid specific gravity and it's irrelevant to determine the total pressure drop.

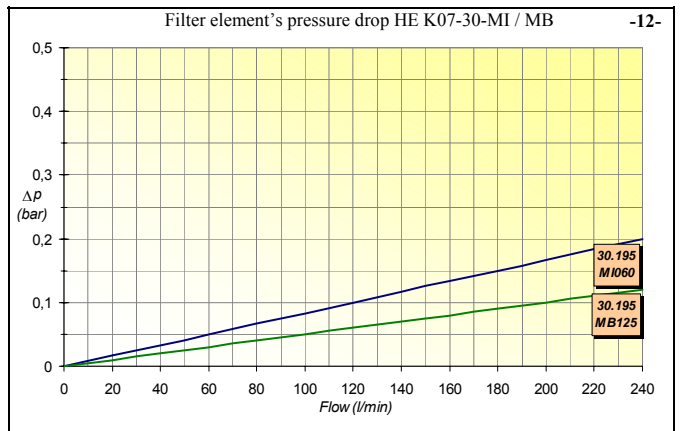
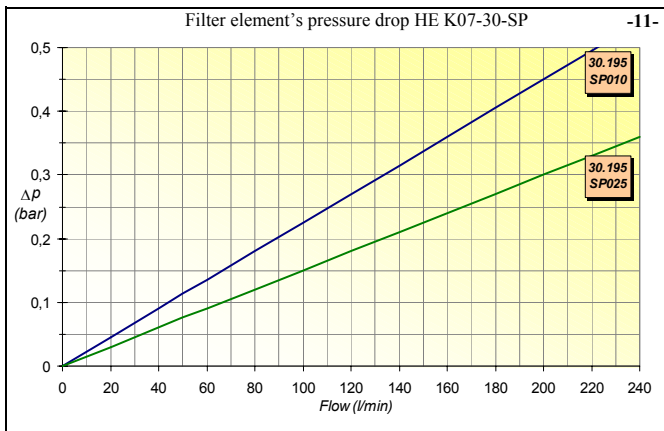
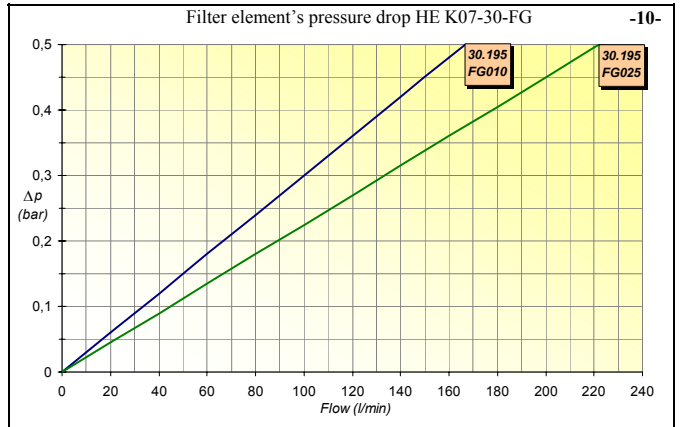
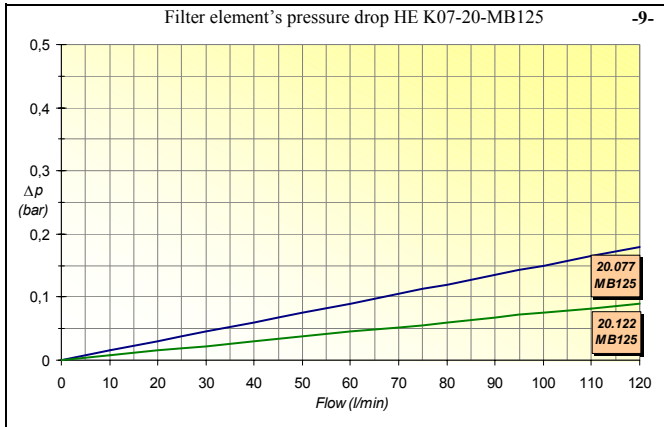


- 2) The housing's pressure drop is determined by the sum of the inlet and outlet port dimension.



3) The filter element's pressure drop is determined by standard media and AS surface, they have been calculated experimentally and they are valid for clean elements.





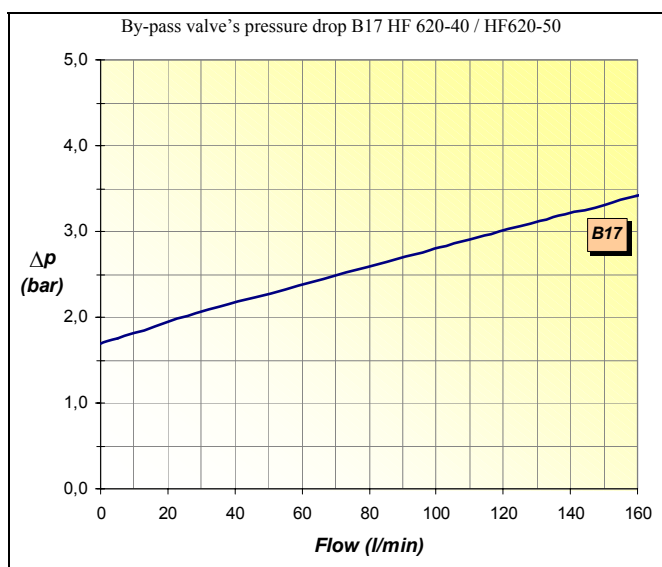
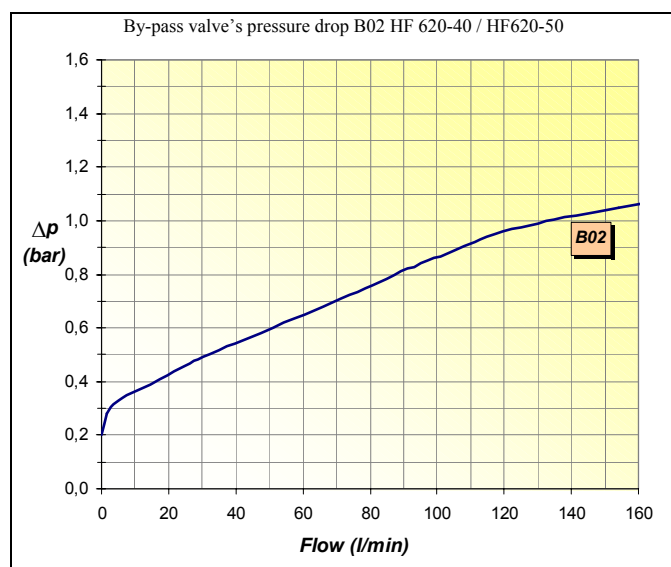
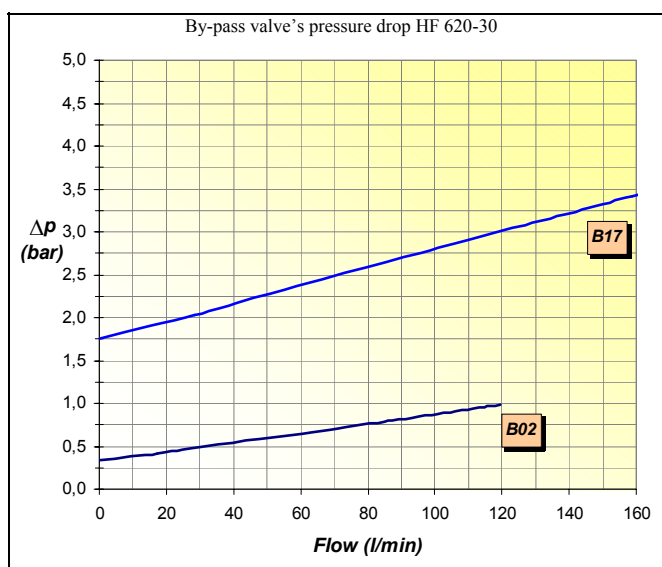
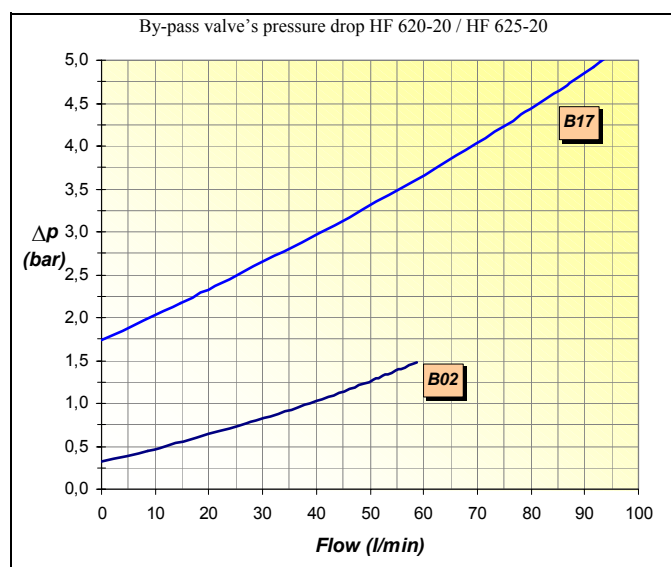
The curves (1-2-3) and (10-11-12) show the different degrees of filtration for the same element size.

SUCTION AND RETURN FILTERS SERIES HF 620 - 625

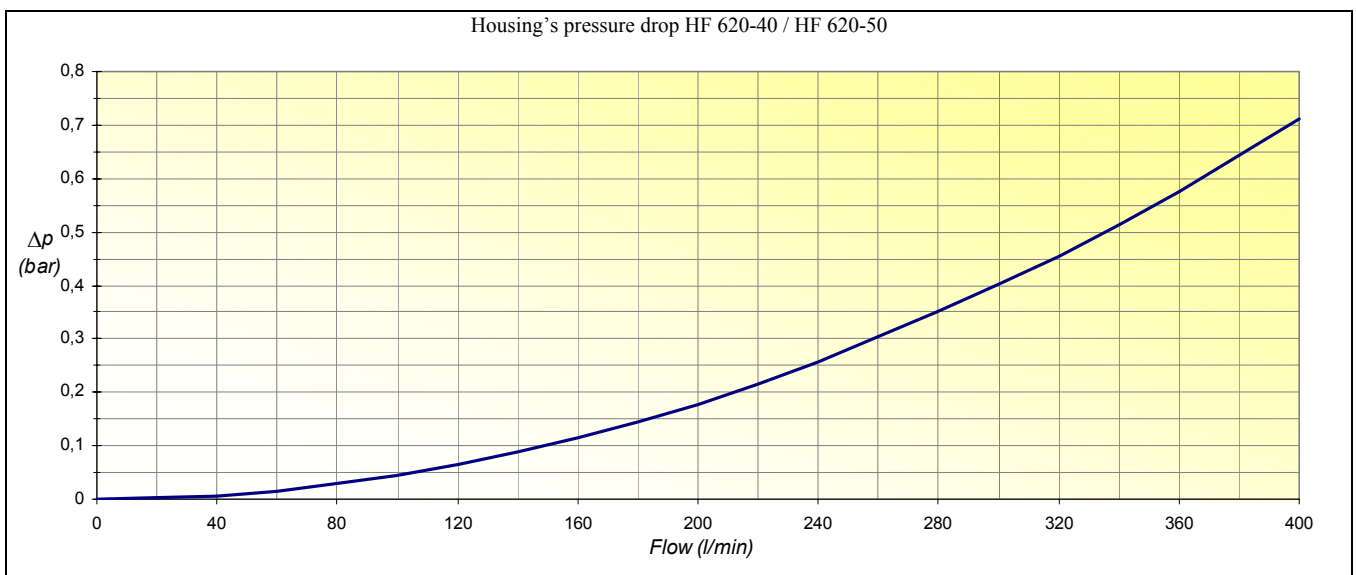
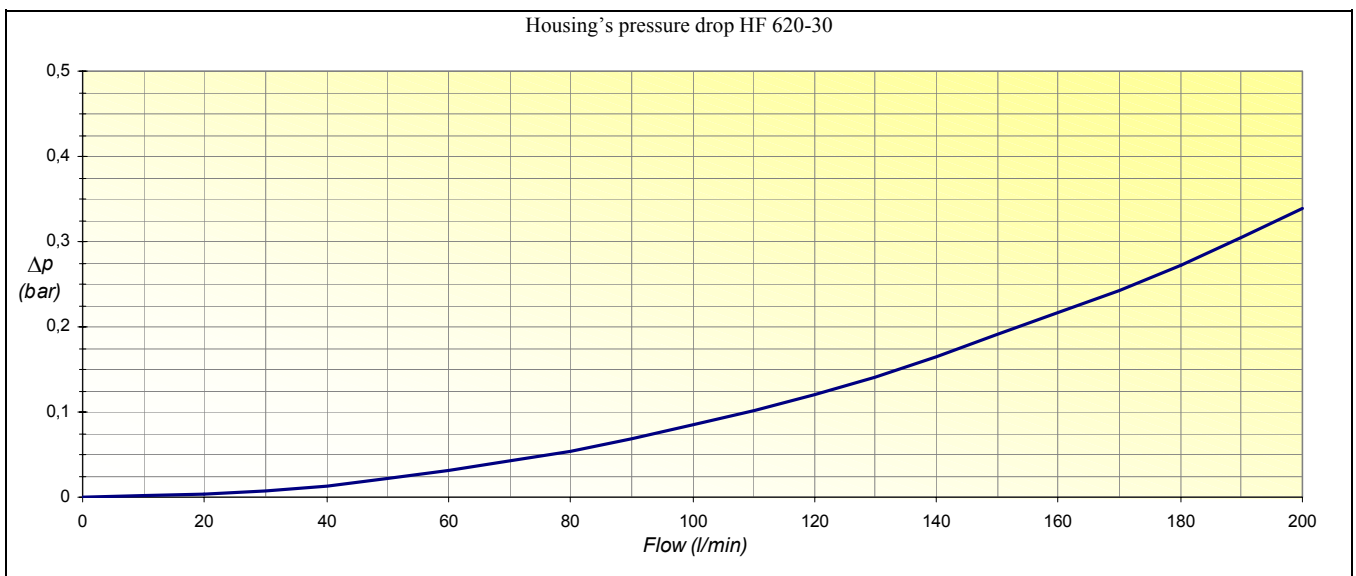
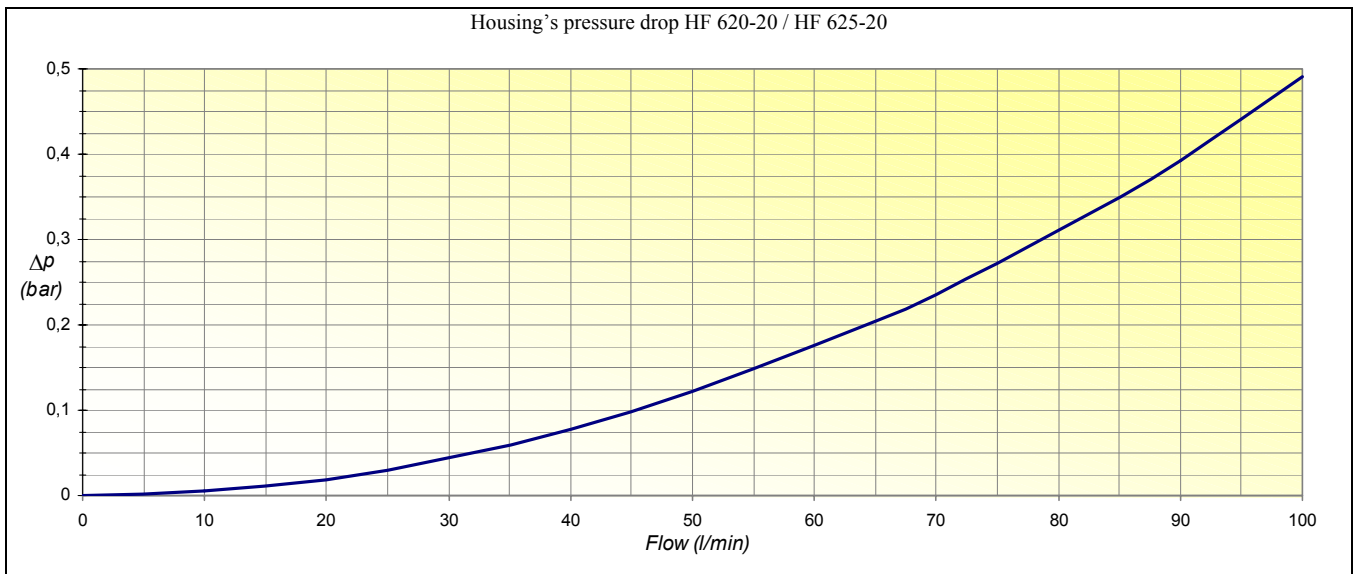
PRESSURE DROP CURVES

The pressure drop for filters series HF 620 on suction line is 0,2 bar max; the pressure drop for filters series HF 620 and HF 625 on return has to be between 0,2 and 0,4 bar.

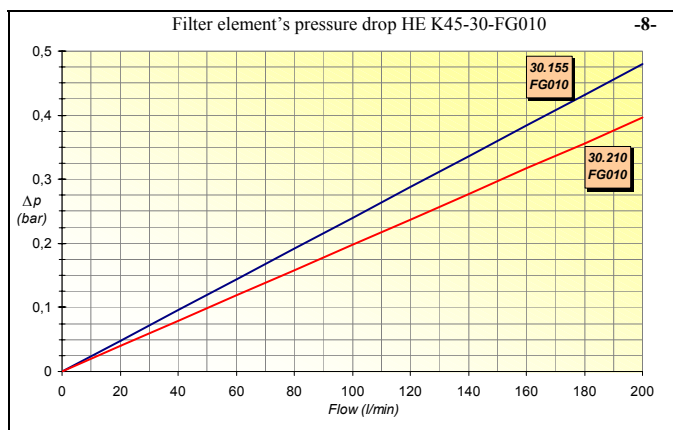
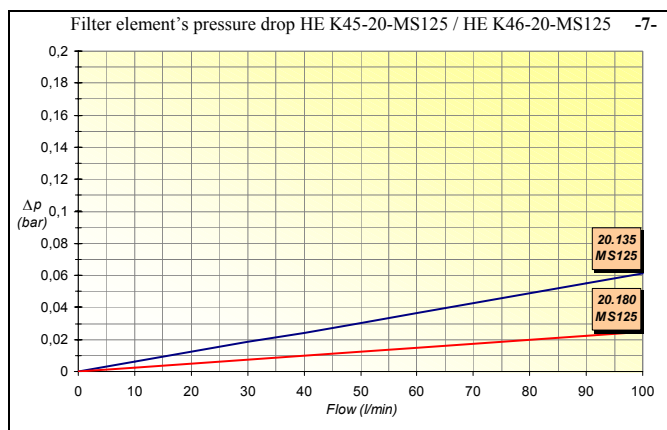
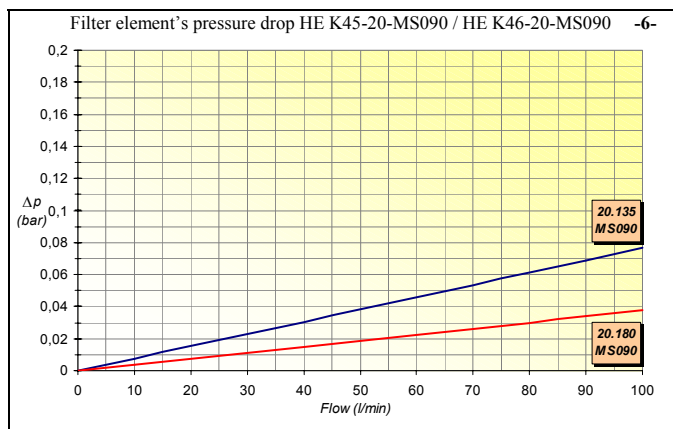
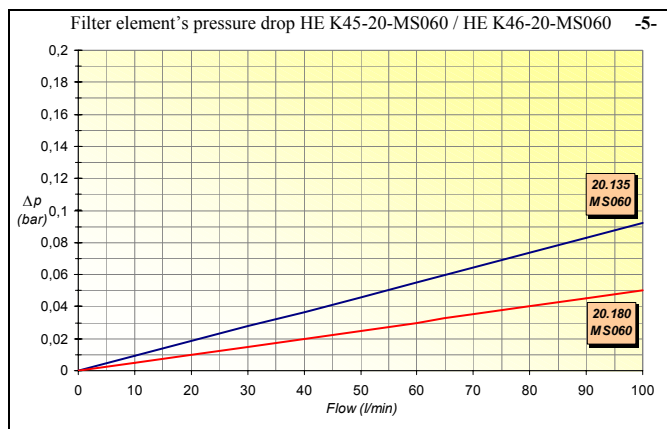
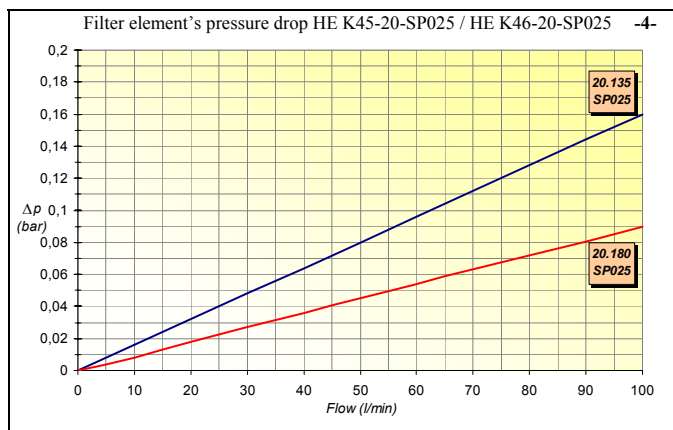
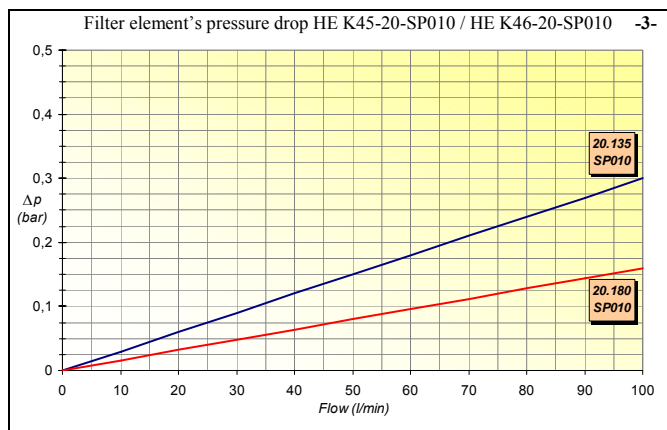
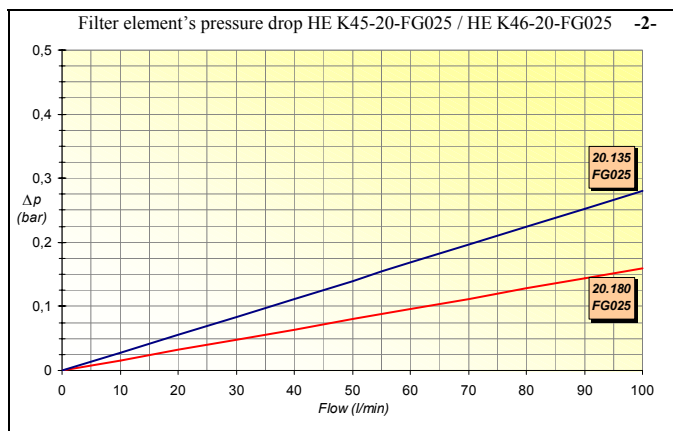
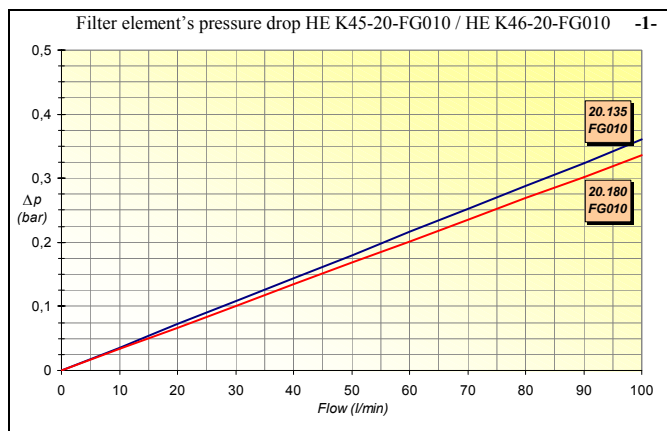
- 1) The **by-pass pressure drop** is directly proportional to fluid specific gravity and it's irrelevant to determine the total pressure drop.

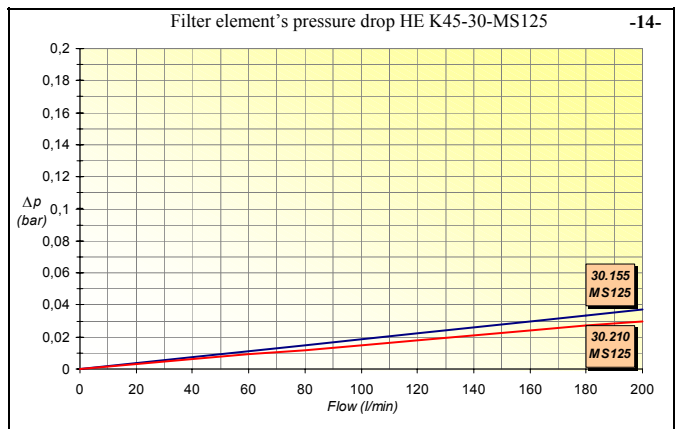
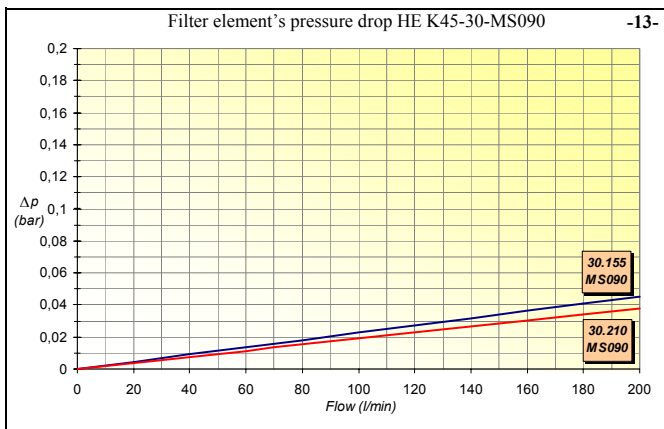
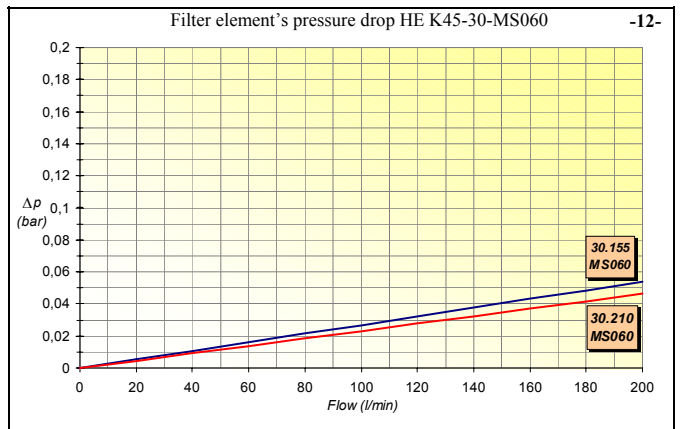
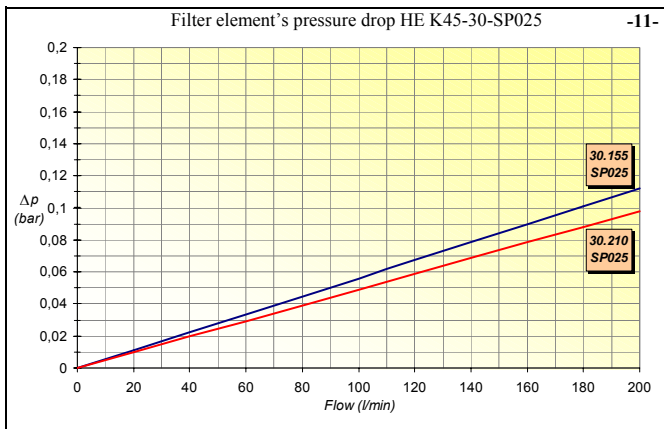
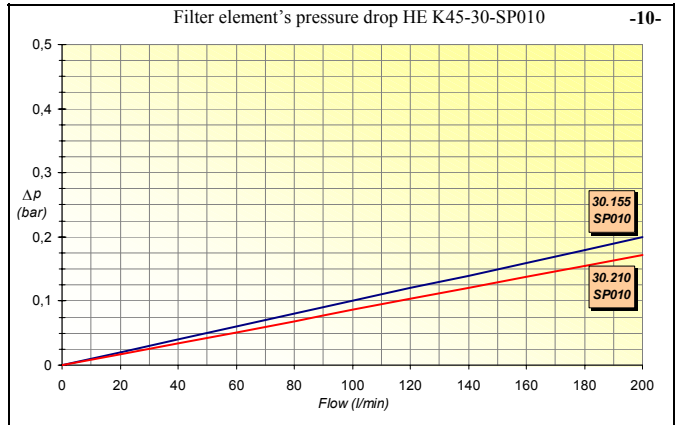
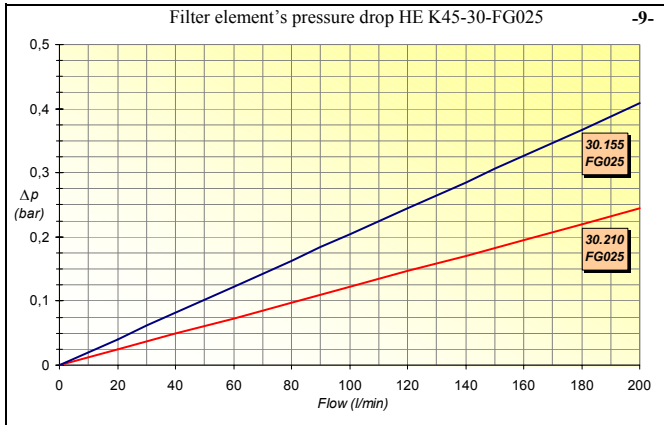


2) The **housing's pressure drop** is determined by the sum of the inlet and outlet port dimension.



3) The **filter element's pressure drop** is determined by standard media and AS surface, they have been calculated experimentally and they are valid for clean elements.



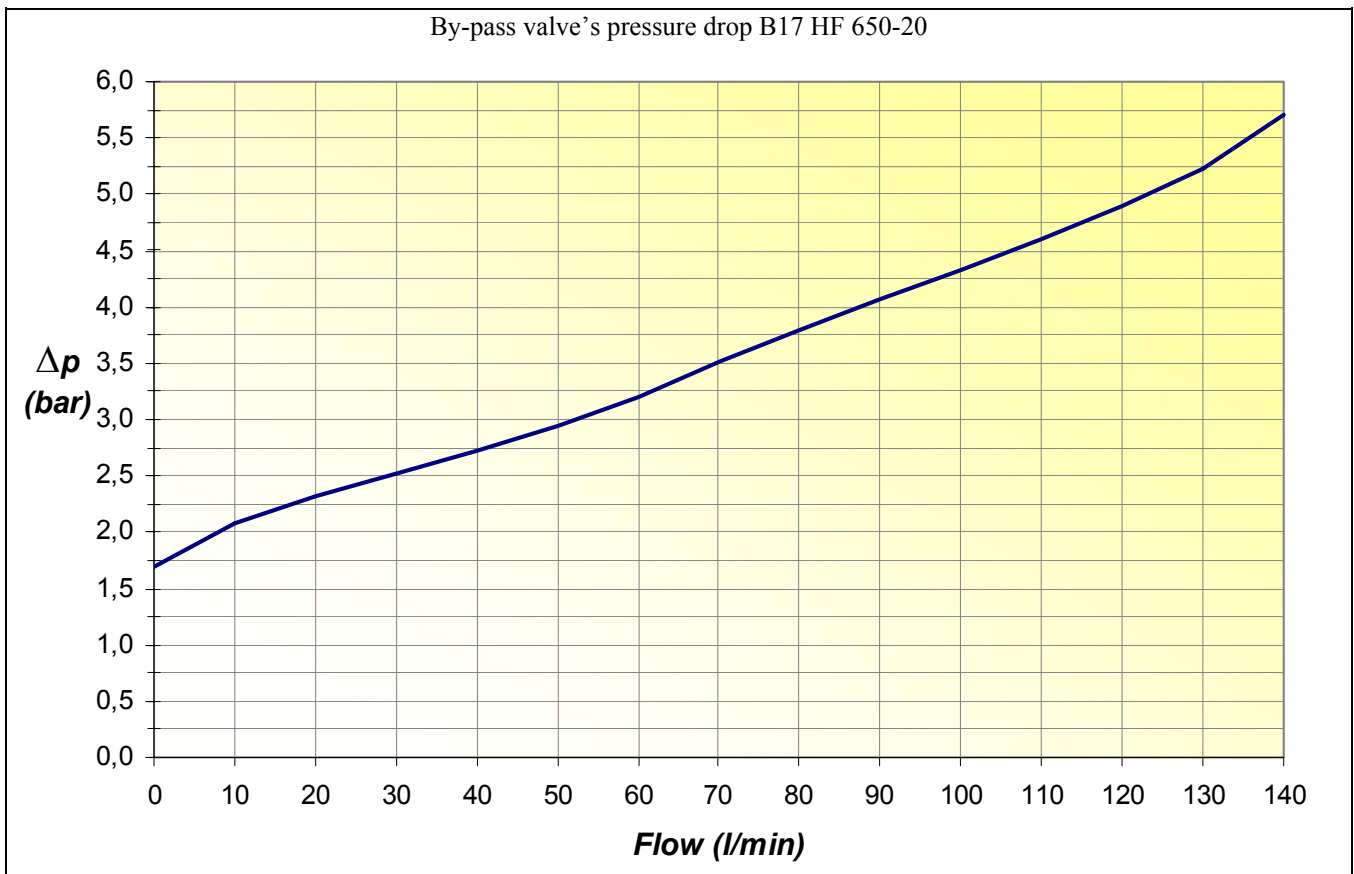


MEDIUM PRESSURE LINE FILTERS SERIES HF 650

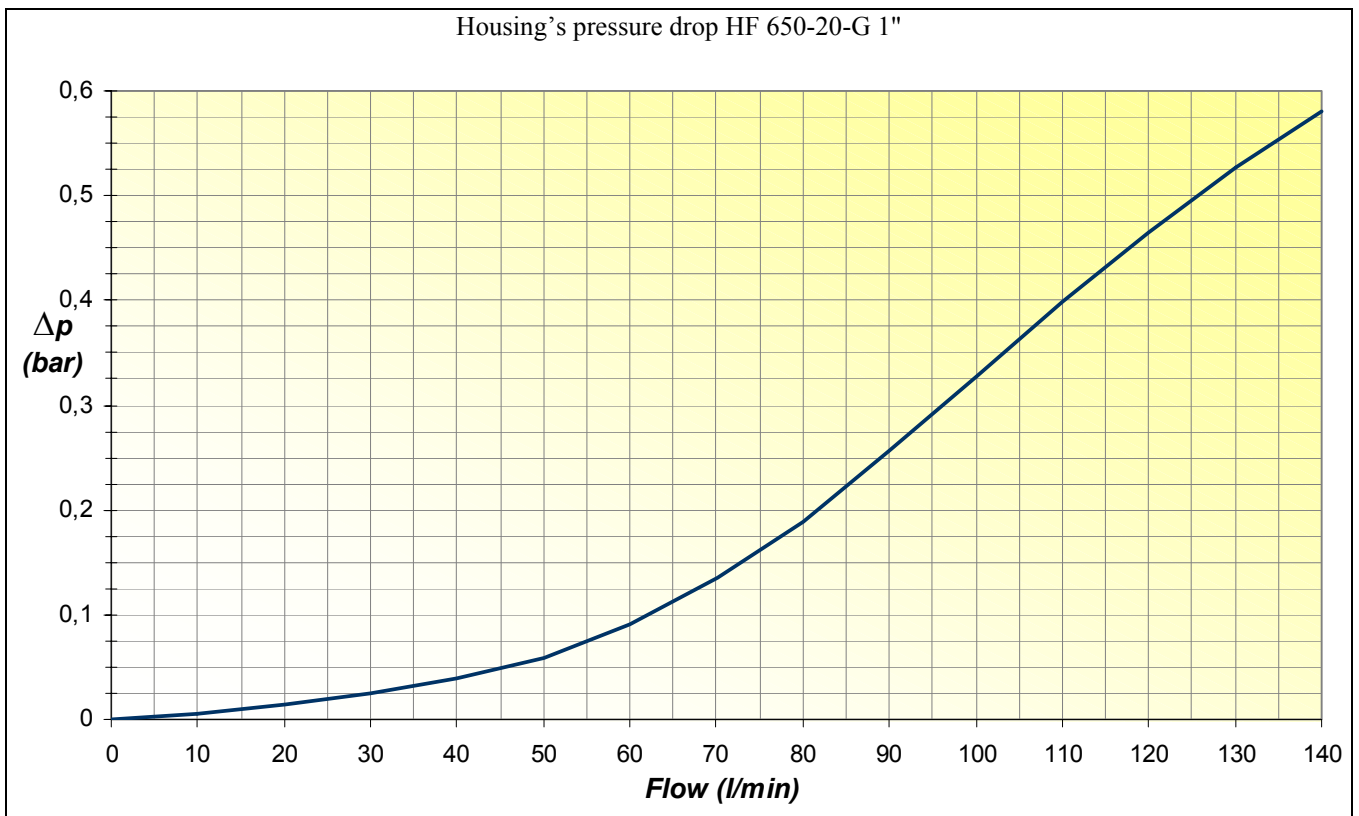
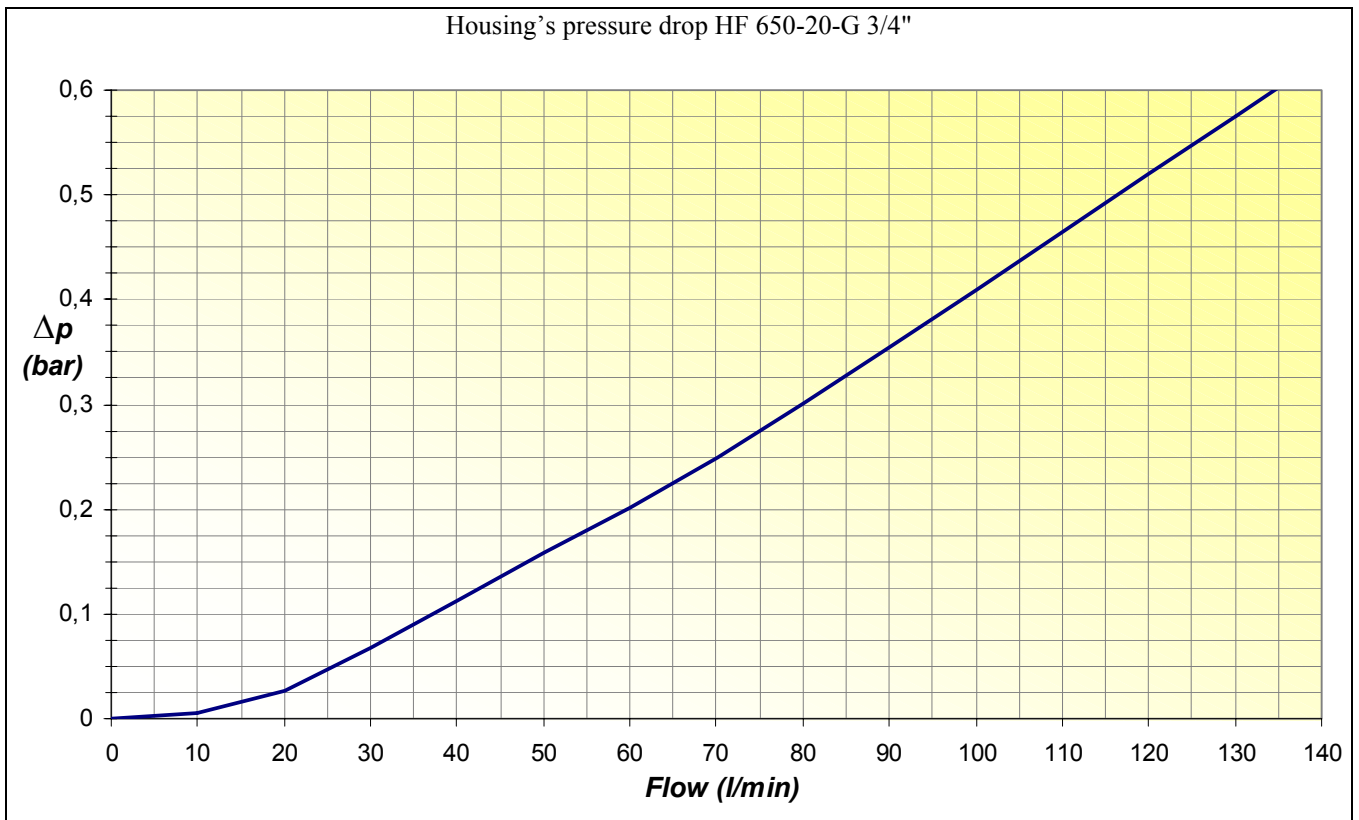
PRESSURE DROP CURVES

The pressure drop for medium pressure filters series HF 650 on equipments with regular use is 0,75 bar max, while the pressure drop has to be between 1 and 1,5 bar on equipments with heavy working.

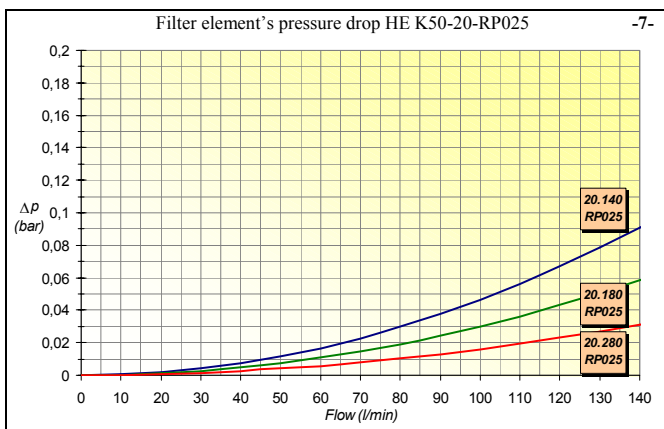
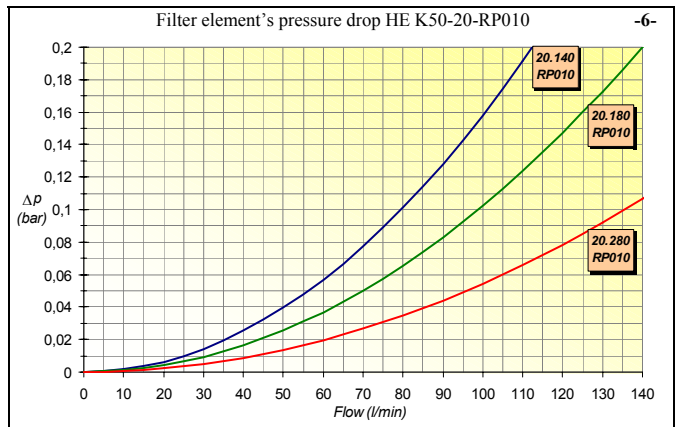
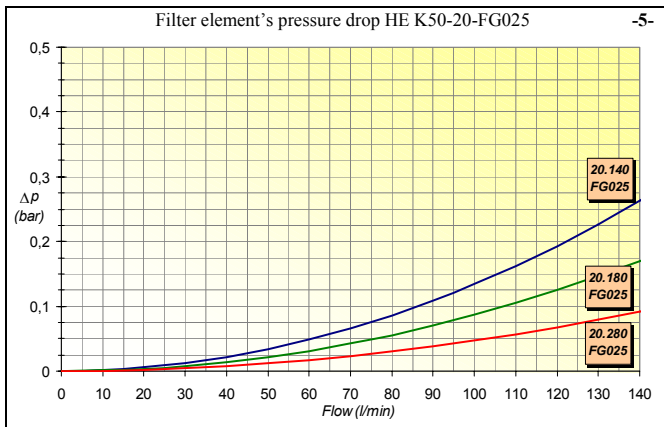
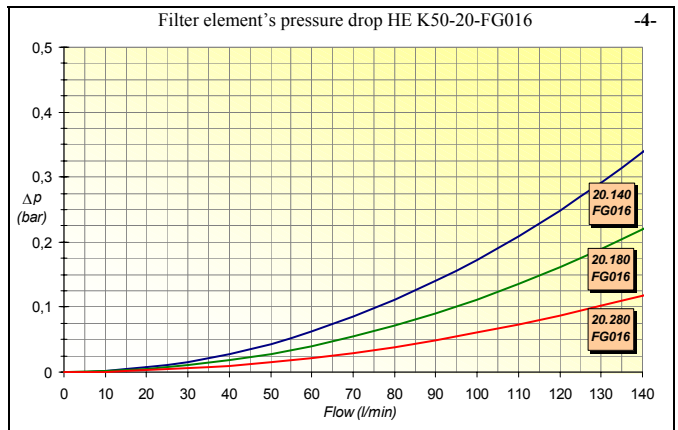
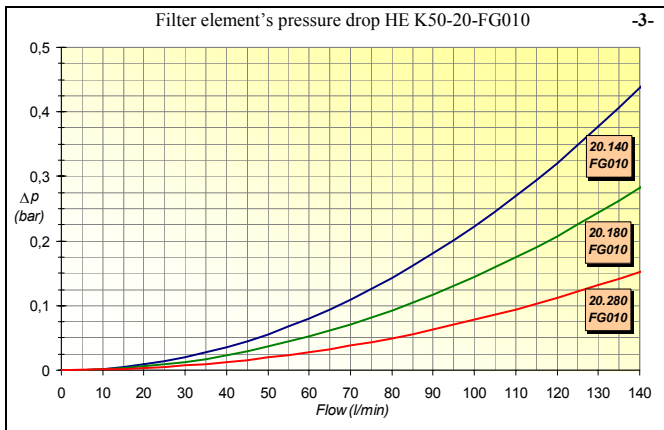
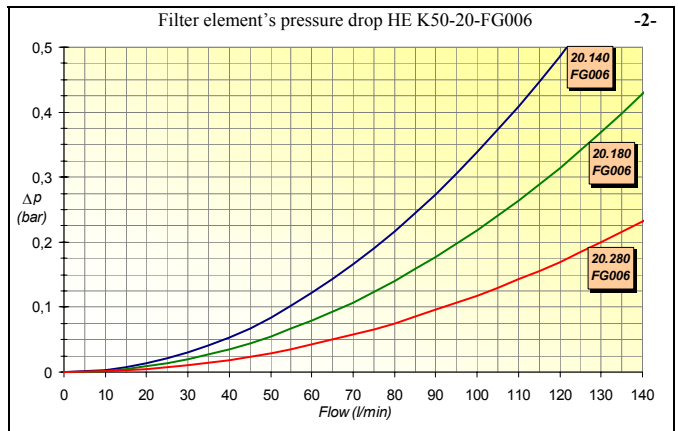
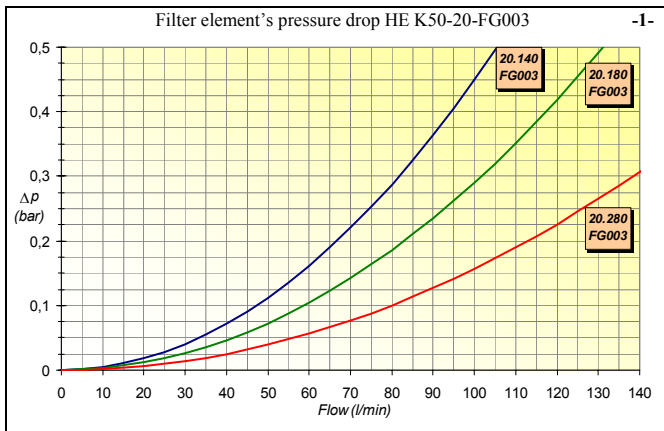
- 1) The by-pass pressure drop is directly proportional to fluid specific gravity and it's irrelevant to determine the total pressure drop.



- 2) The **housing's pressure drop** is determined by the sum of the inlet and outlet port dimension.



3) The **filter element's pressure drop** is determined by standard media and AS surface, they have been calculated experimentally and they are valid for clean elements.

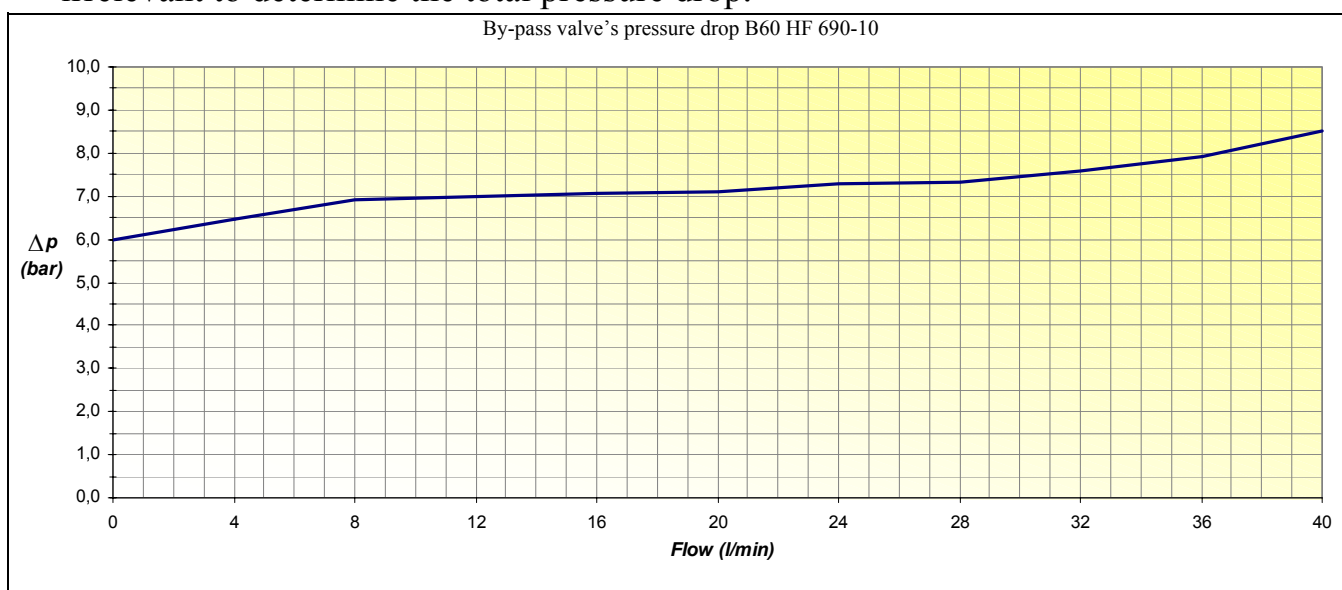


MEDIUM PRESSURE LINE FILTERS SERIES HF 690

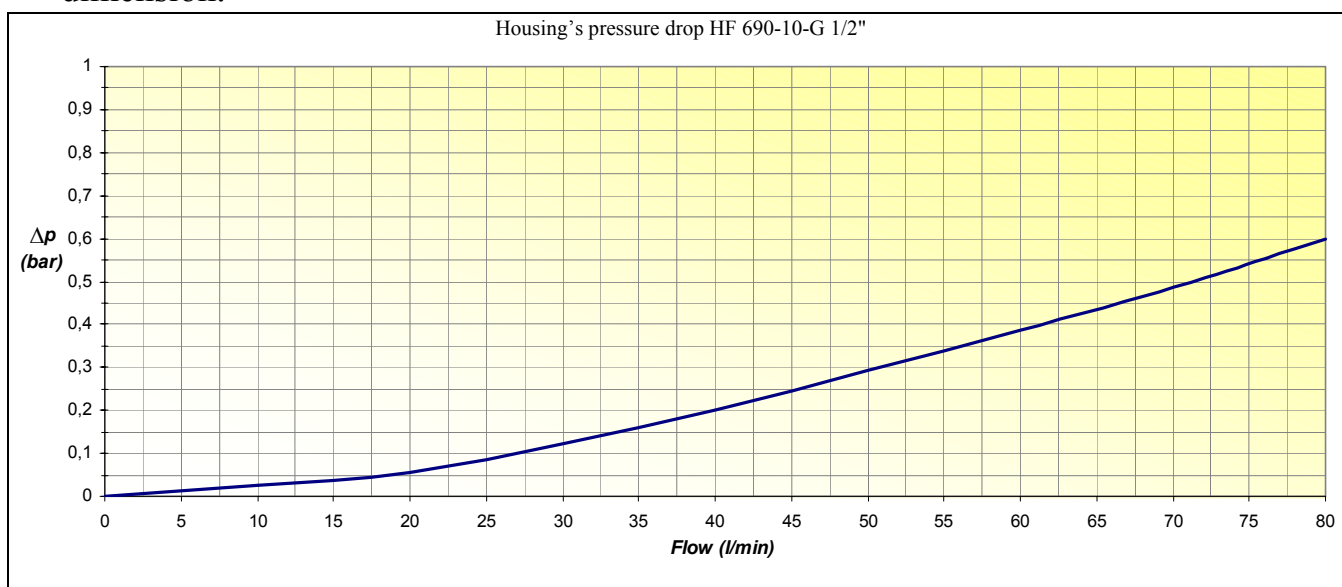
PRESSURE DROP CURVES

The pressure drop for medium pressure filters series HF 690 on equipments with regular use is 1,2 bar max.

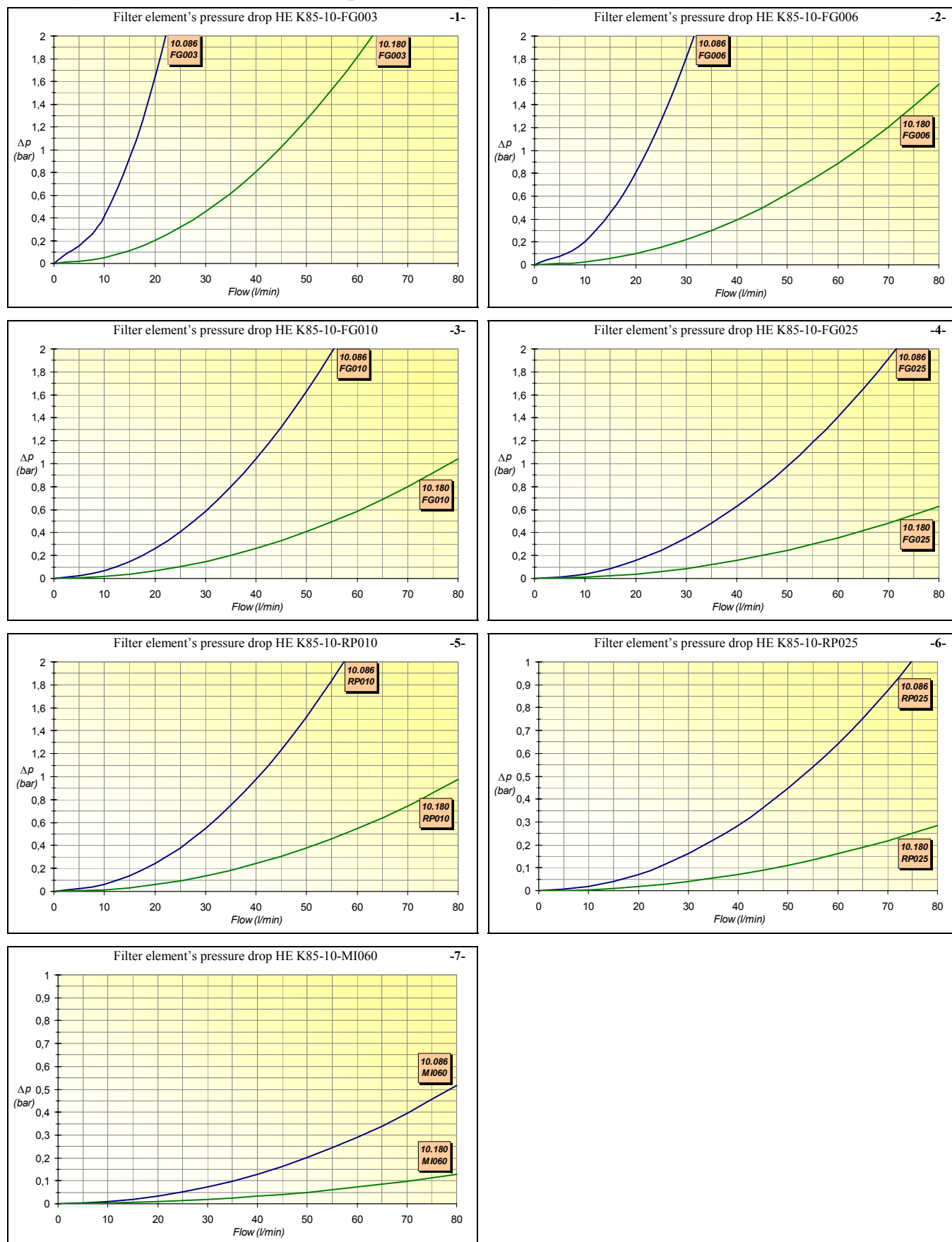
- 1) The by-pass pressure drop is directly proportional to fluid specific gravity and it's irrelevant to determine the total pressure drop.



- 2) The housing's pressure drop is determined by the sum of the inlet and outlet port dimension.



3) The filter element's pressure drop is determined by standard media and AS surface, they have been calculated experimentally and they are valid for clean elements.

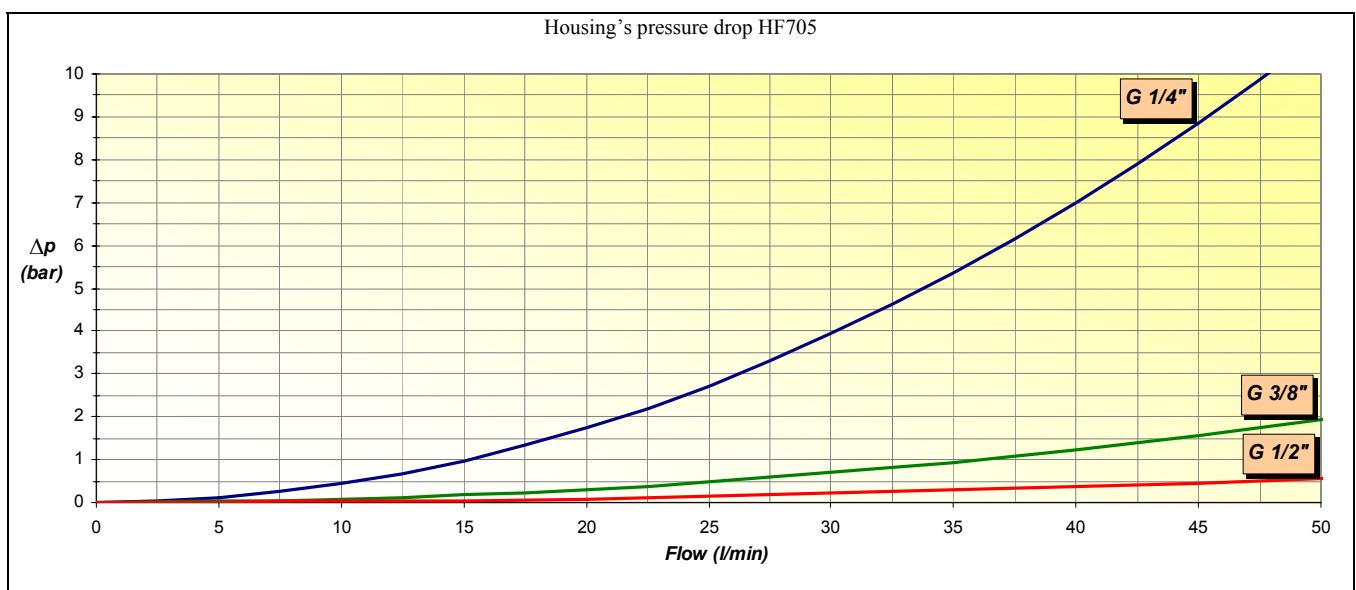


HIGH PRESSURE LINE FILTERS SERIES HF 705

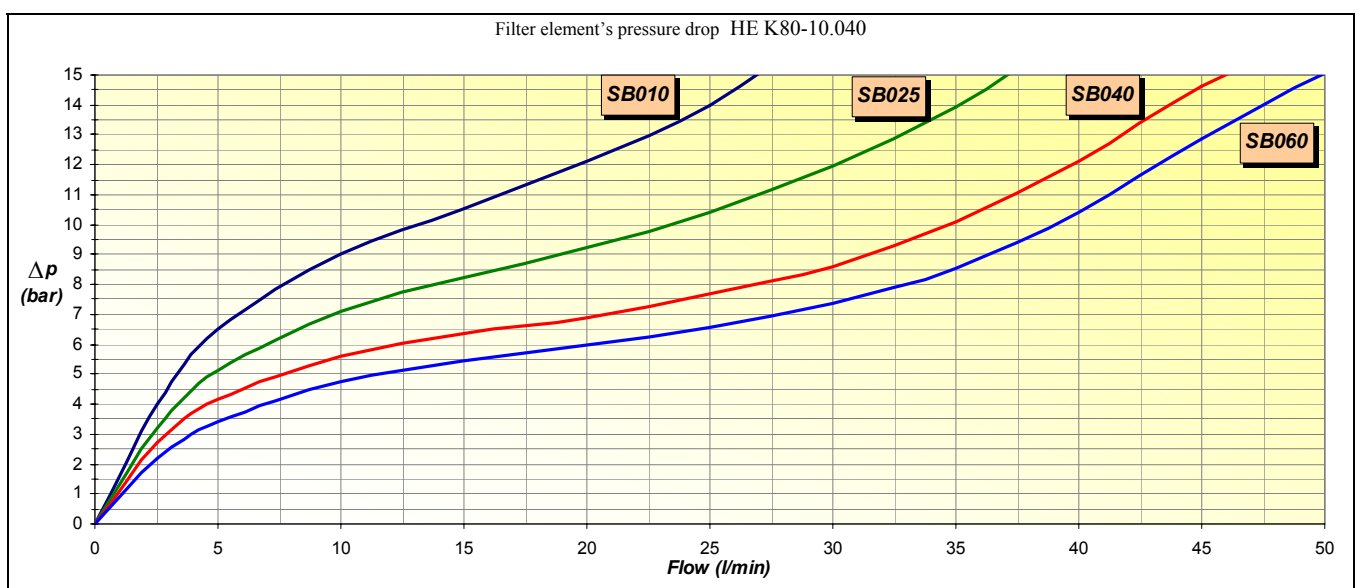
PRESSURE DROP CURVES

The pressure drop for filters series HF 705 is 15 bar max.

- 1) The housing's pressure drop is determined by the sum of the inlet and outlet port dimension.



- 2) The filter element's pressure drops have been calculated experimentally and are valid for clean elements.



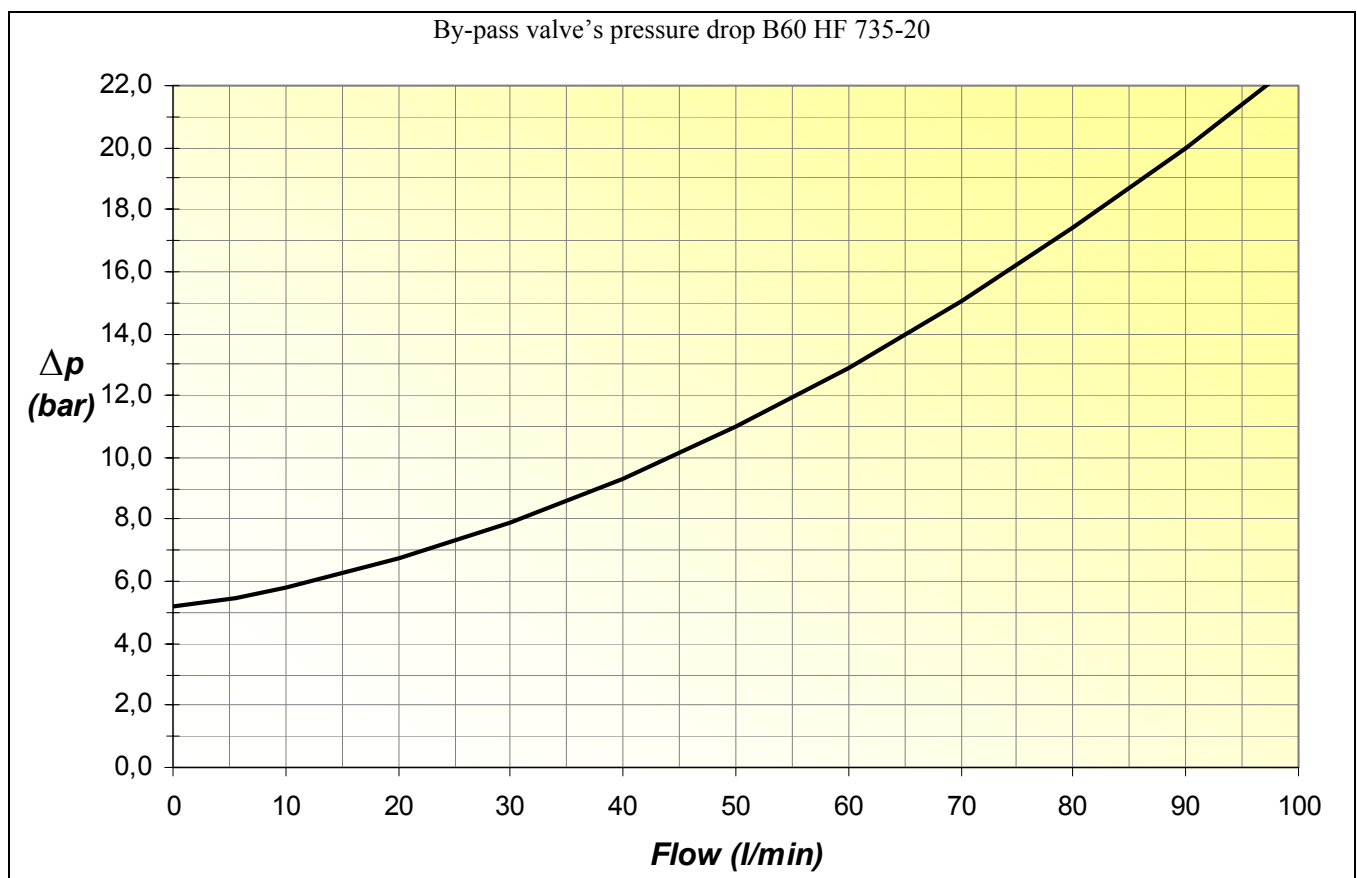
HIGH PRESSURE LINE FILTERS SERIES HF 735

PRESSURE DROP CURVES

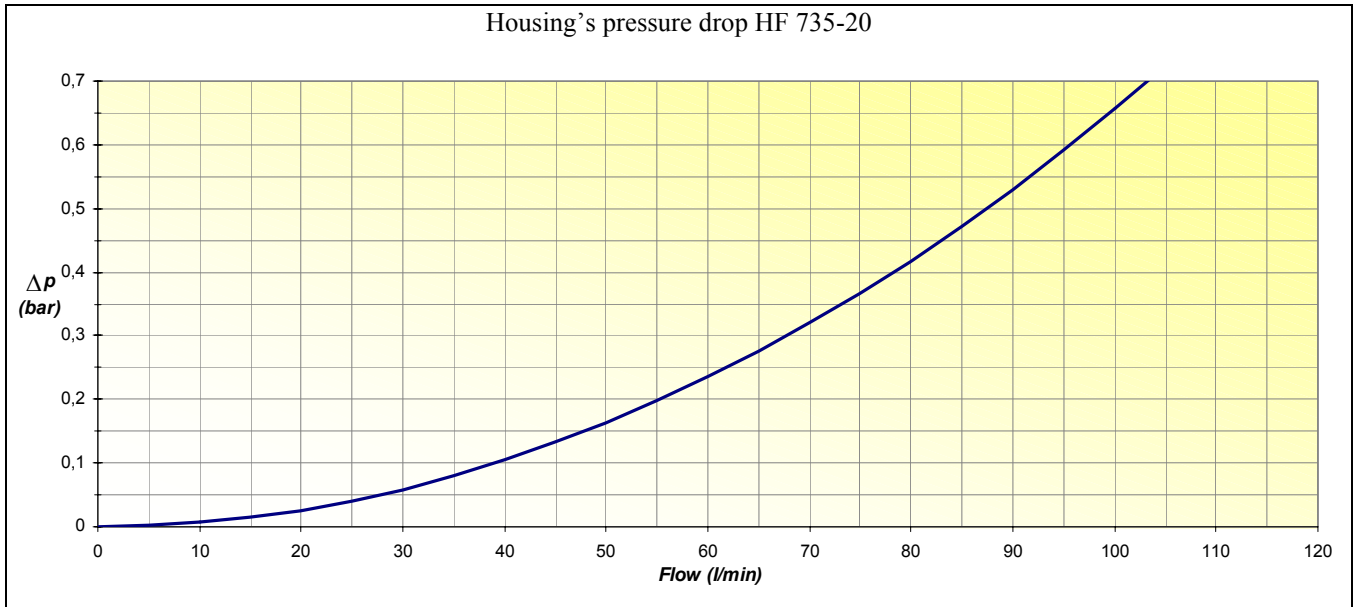
The pressure drop for medium pressure filters series HF 735 on equipments with regular use is 0,75 bar max, while the pressure drop has to be between 1 and 1,5 bar on equipments with heavy working.

The filters series HF 735 grants a ratio $\beta \geq 200$.

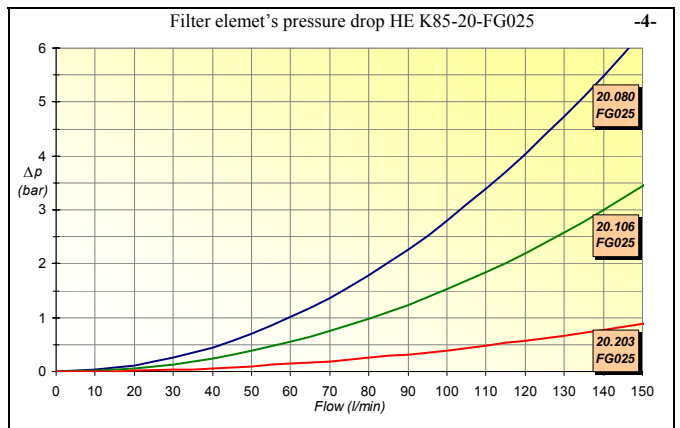
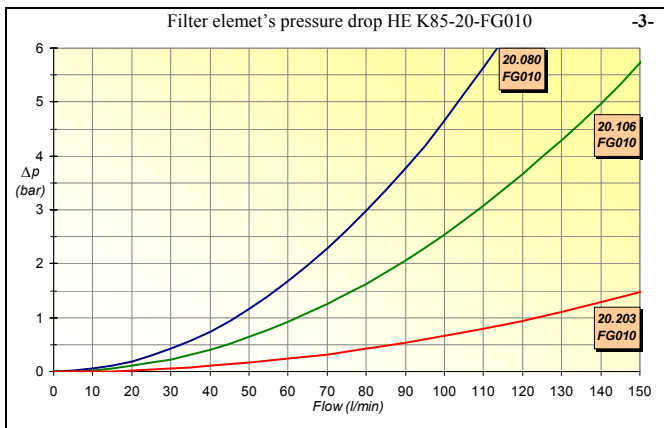
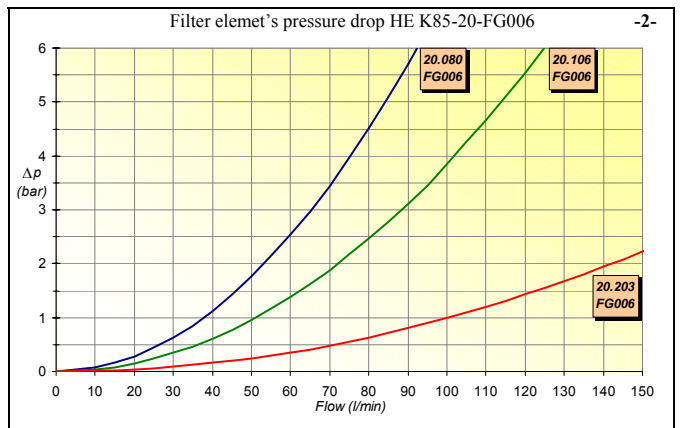
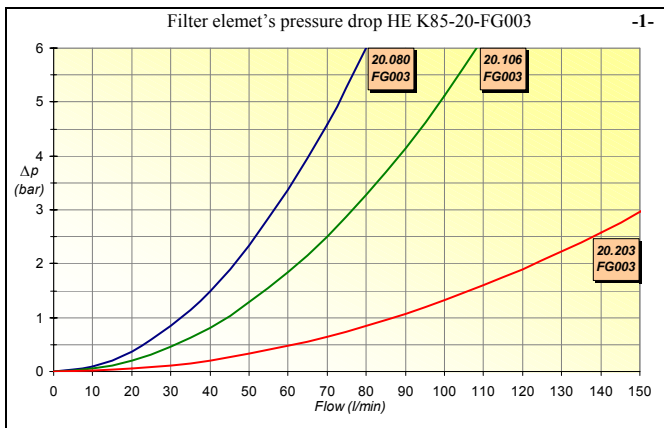
- 1) The **by-pass pressure drop** is directly proportional to fluid specific gravity and it's irrelevant to determine the total pressure drop.



- 2) The **housing's pressure drop** is determined by the sum of the inlet and outlet port dimension.



- 3) The filter element's pressure drop is determined by standard media and AS surface, they have been calculated experimentally and they are valid for clean elements.



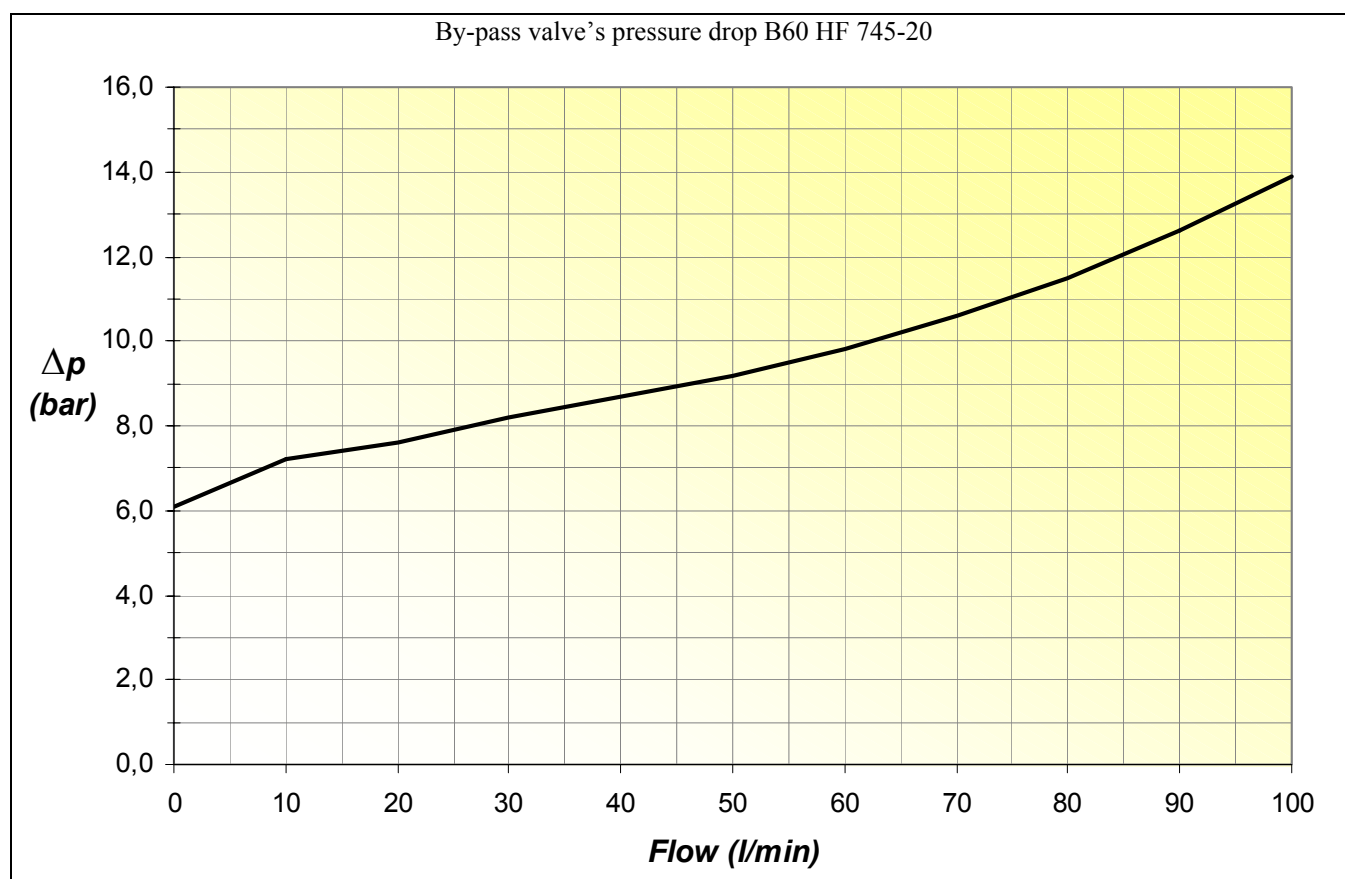
HIGH PRESSURE LINE FILTERS SERIES HF 745

PRESSURE DROP CURVES

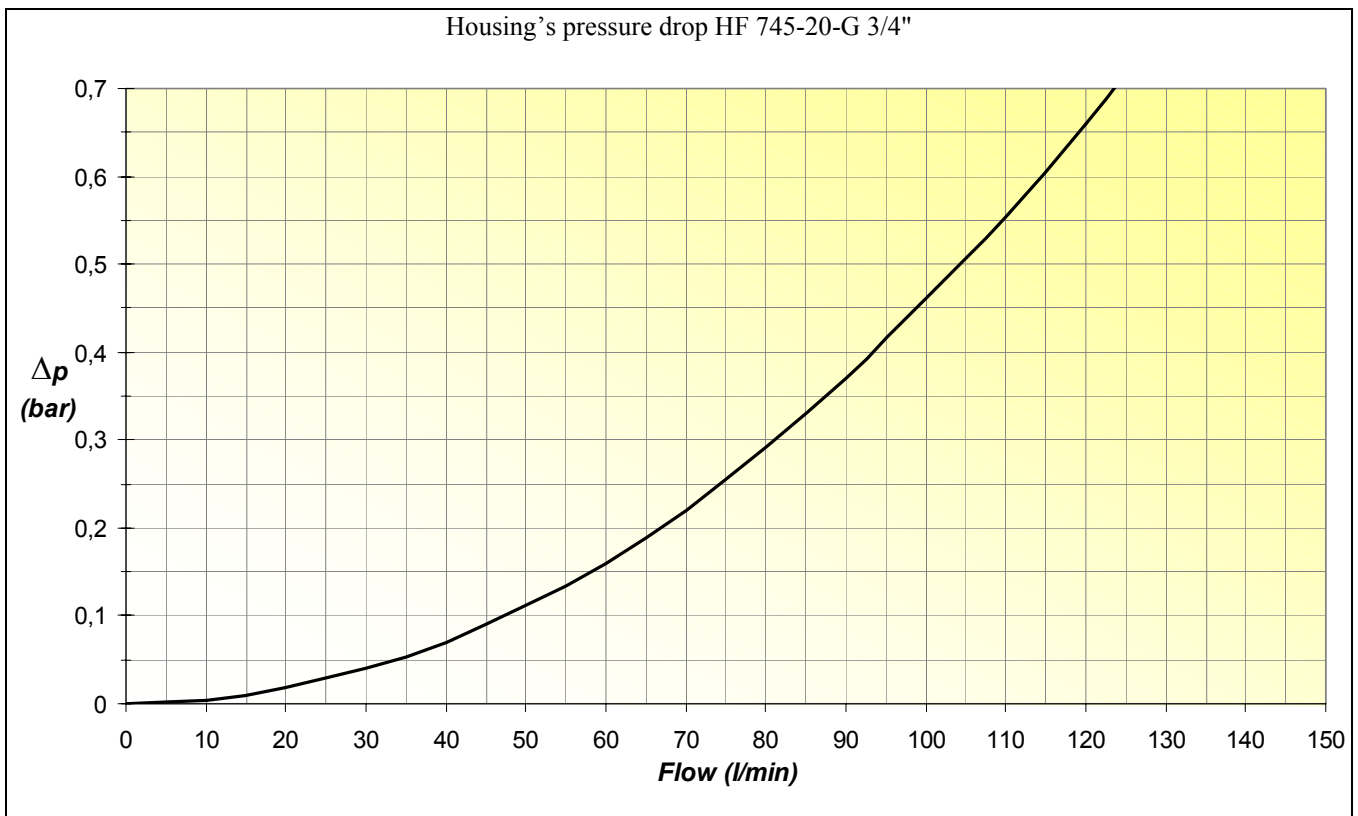
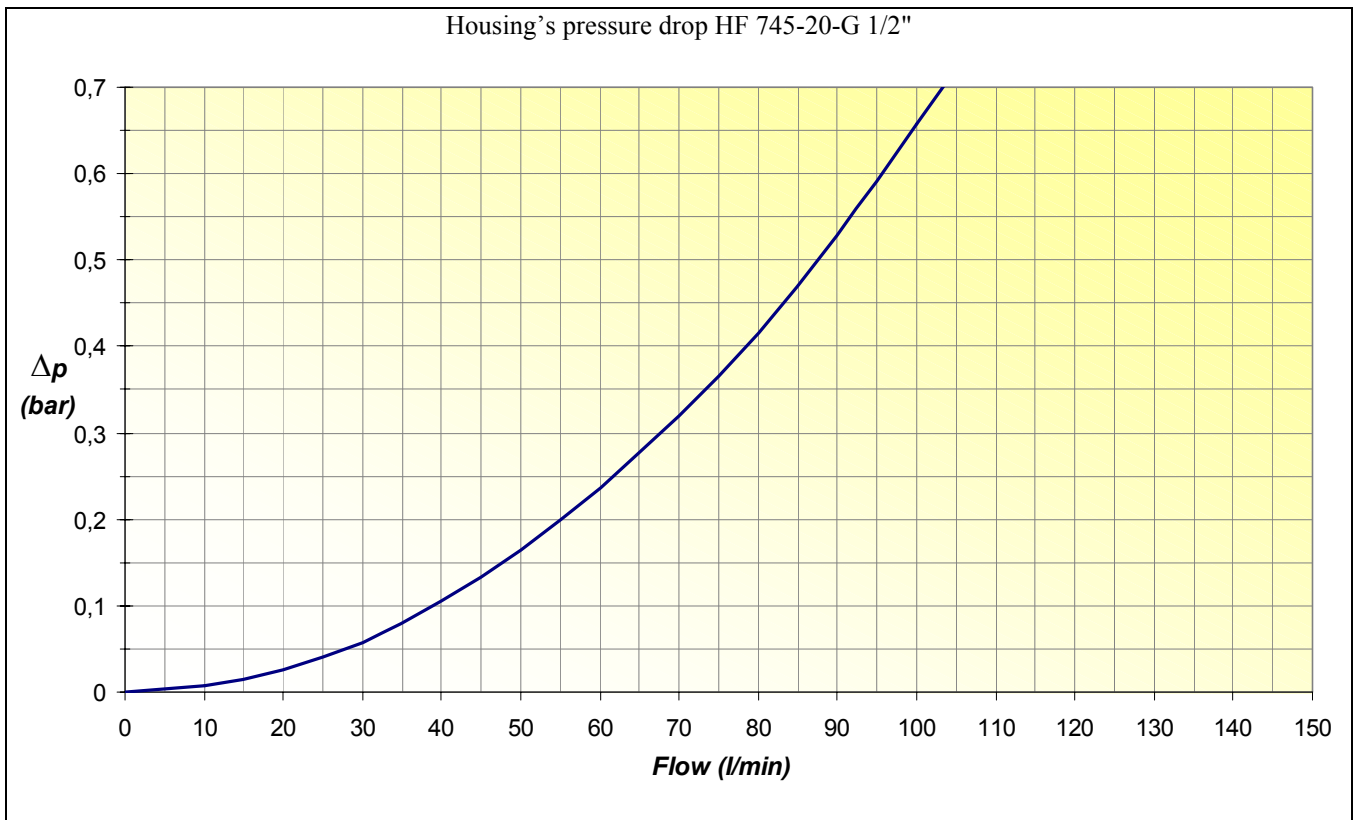
Per The pressure drop for medium pressure filters series HF 745 on equipments with regular use is 0,75 bar max, while the pressure drop has to be between 1 and 1,5 bar on equipments with heavy working.

The filters series HF 745 grants a ratio $\beta \geq 200$.

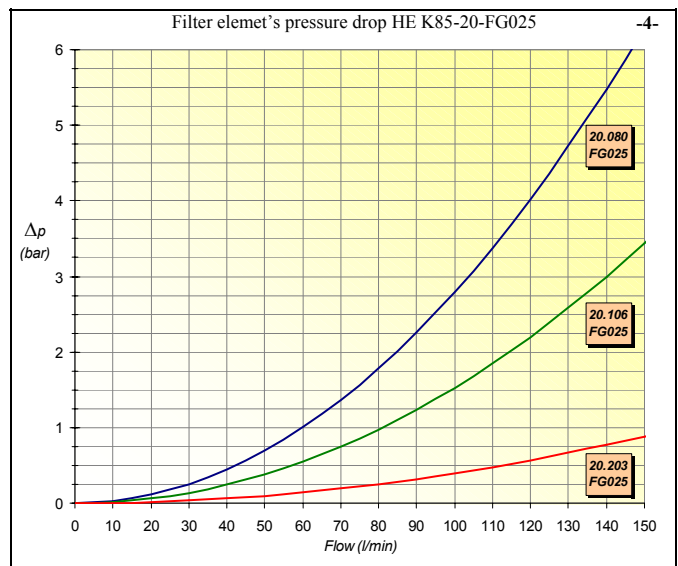
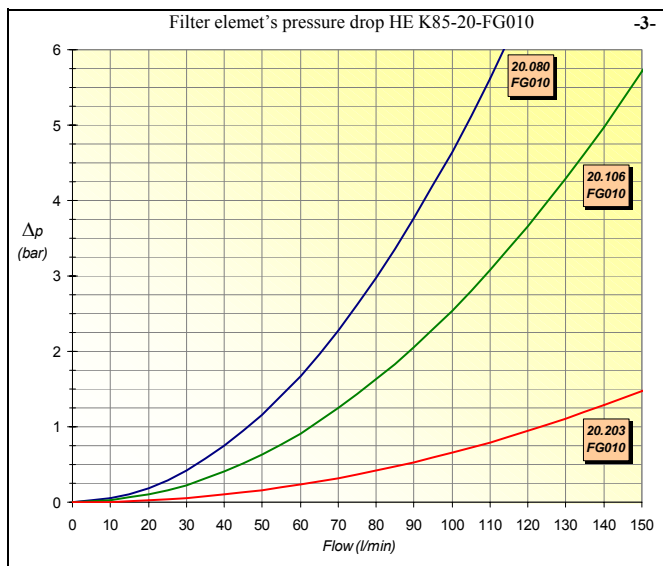
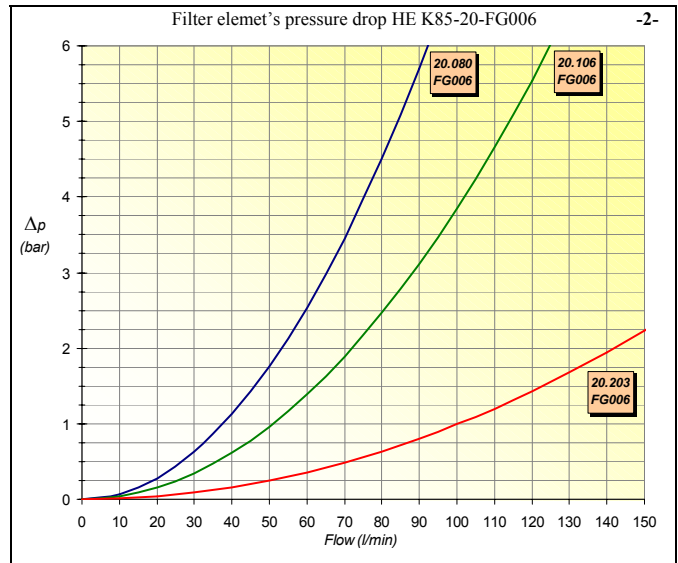
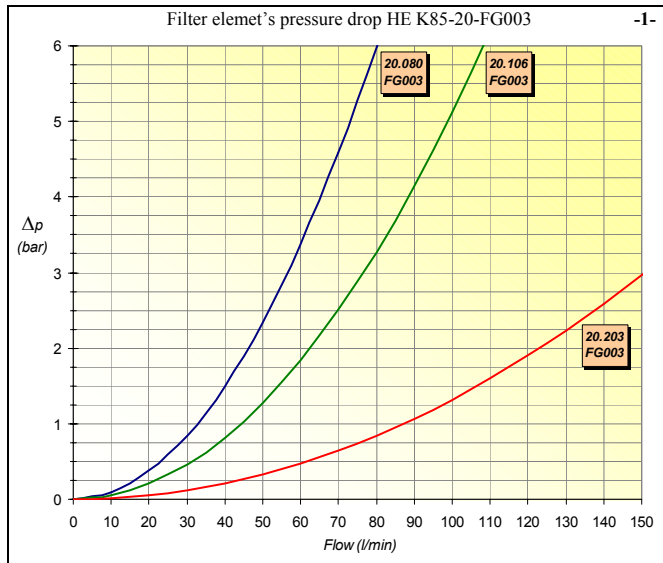
- 1) The **by-pass pressure drop** is directly proportional to fluid specific gravity and it's irrelevant to determine the total pressure drop.



- 2) The **housing's pressure drop** is determined by the sum of the inlet and outlet port dimension.



3) The filter element's pressure drop is determined by standard media and AS surface, they have been calculated experimentally and they are valid for clean elements.



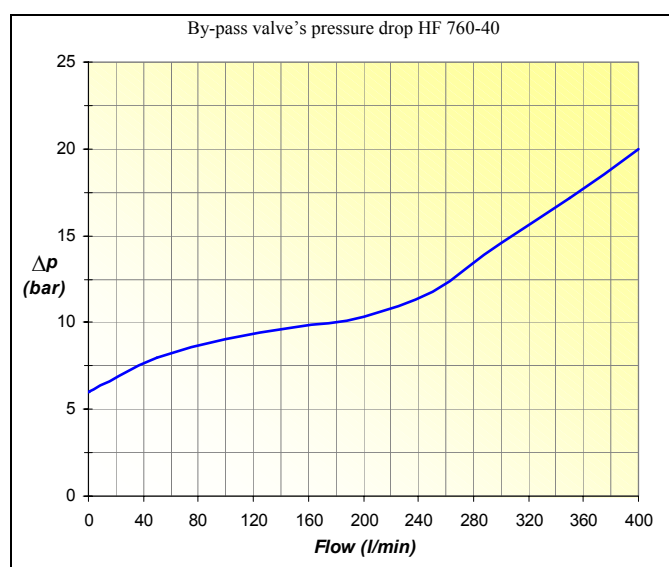
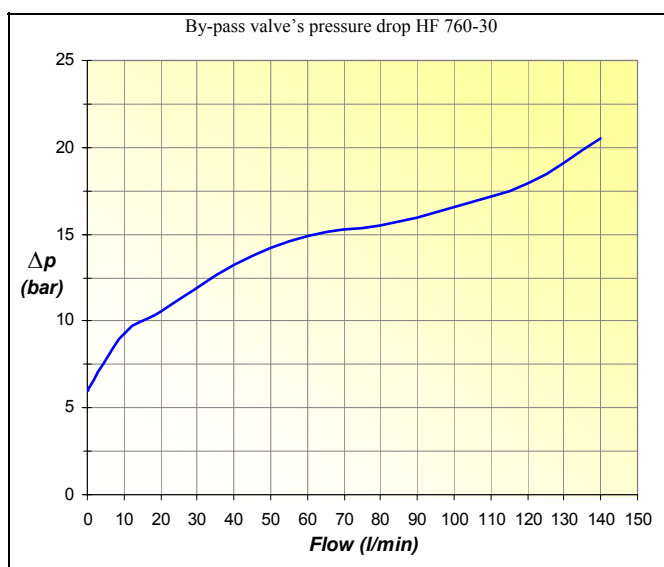
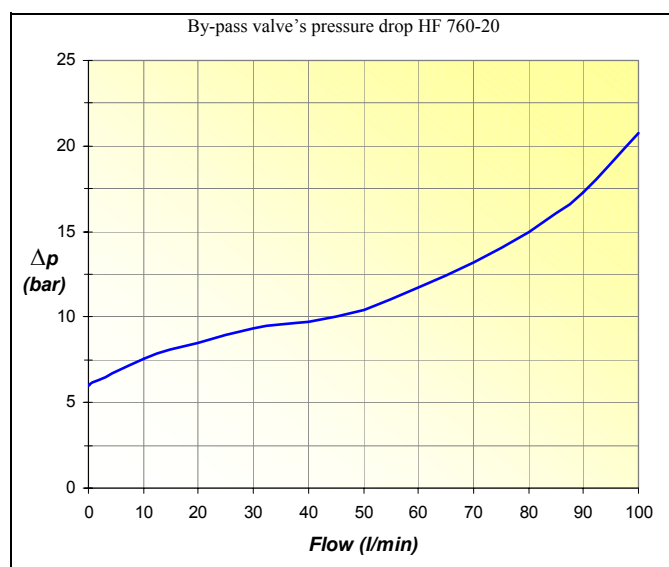
HIGH PRESSURE LINE FILTERS SERIES HF 760

PRESSURE DROP CURVES

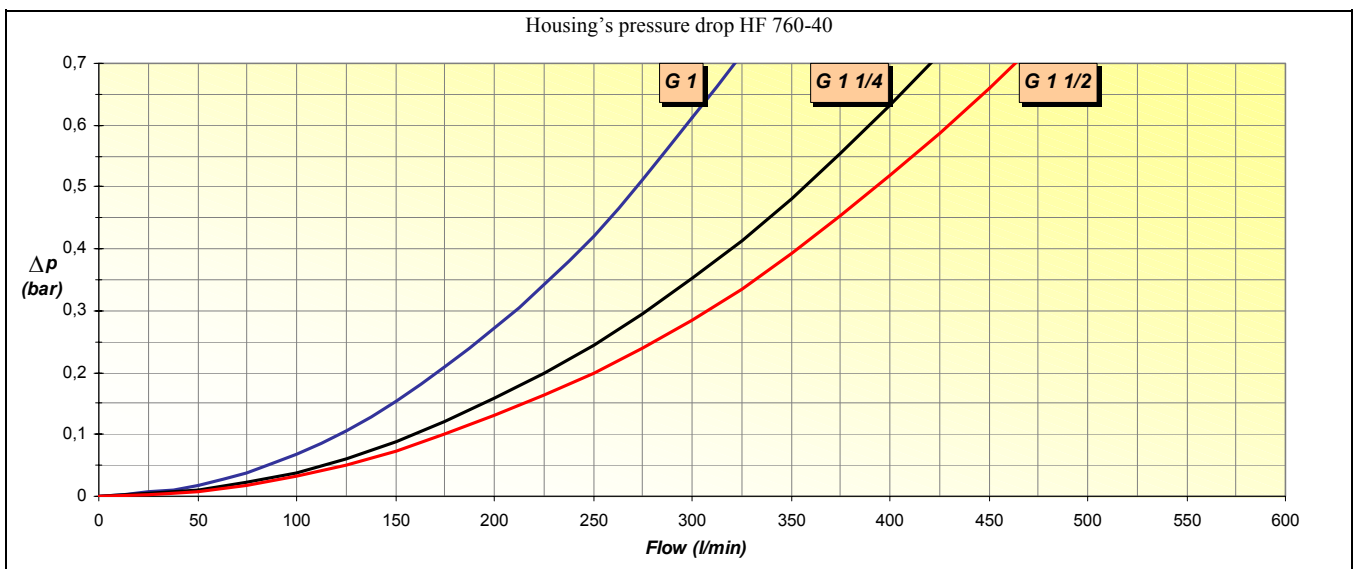
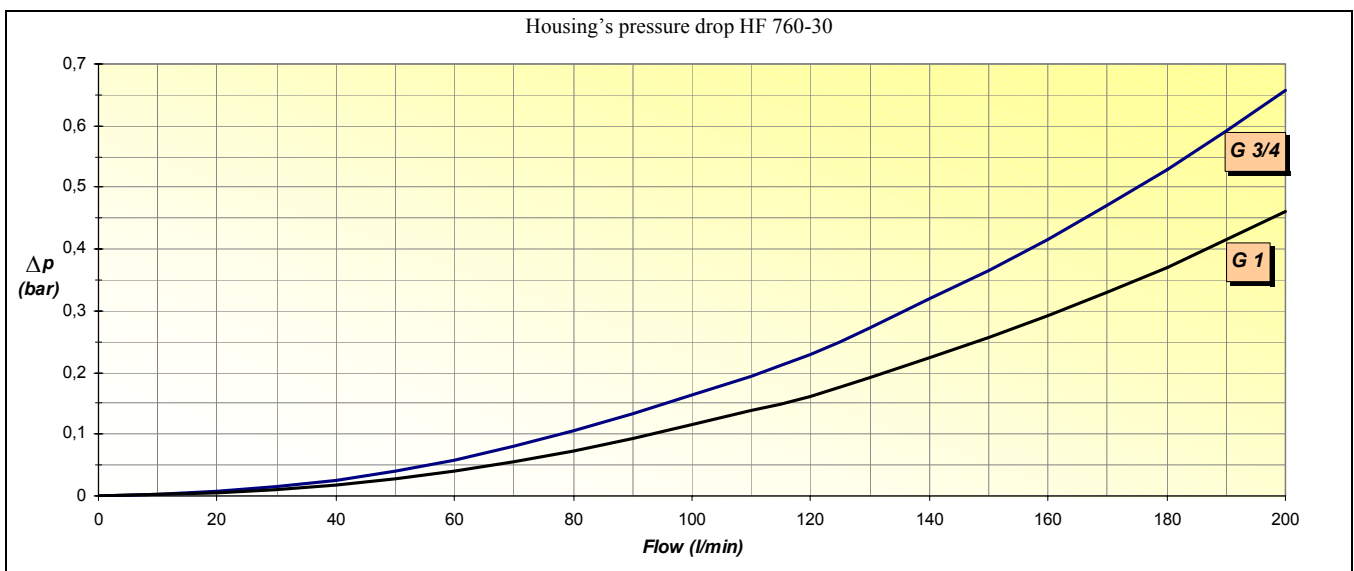
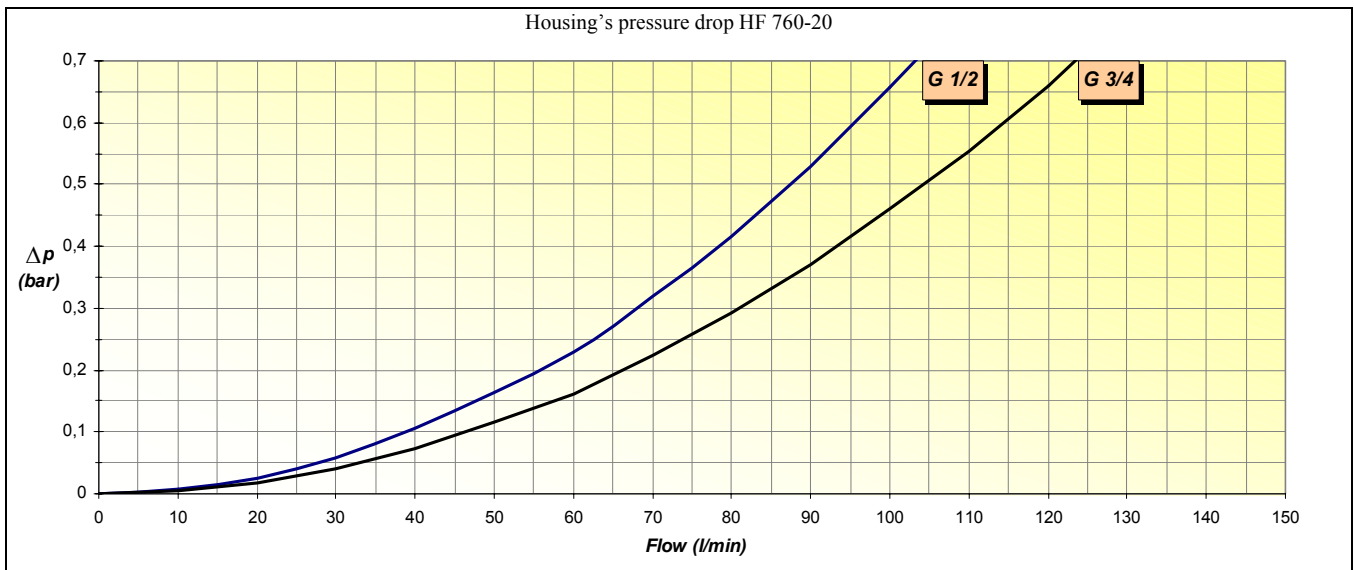
Per The pressure drop for medium pressure filters series HF 760 on equipments with regular use is 0,75 bar max, while the pressure drop has to be between 1 and 1,5 bar on equipments with heavy working.

The filters series HF 760 grants a ratio $\beta \geq 200$.

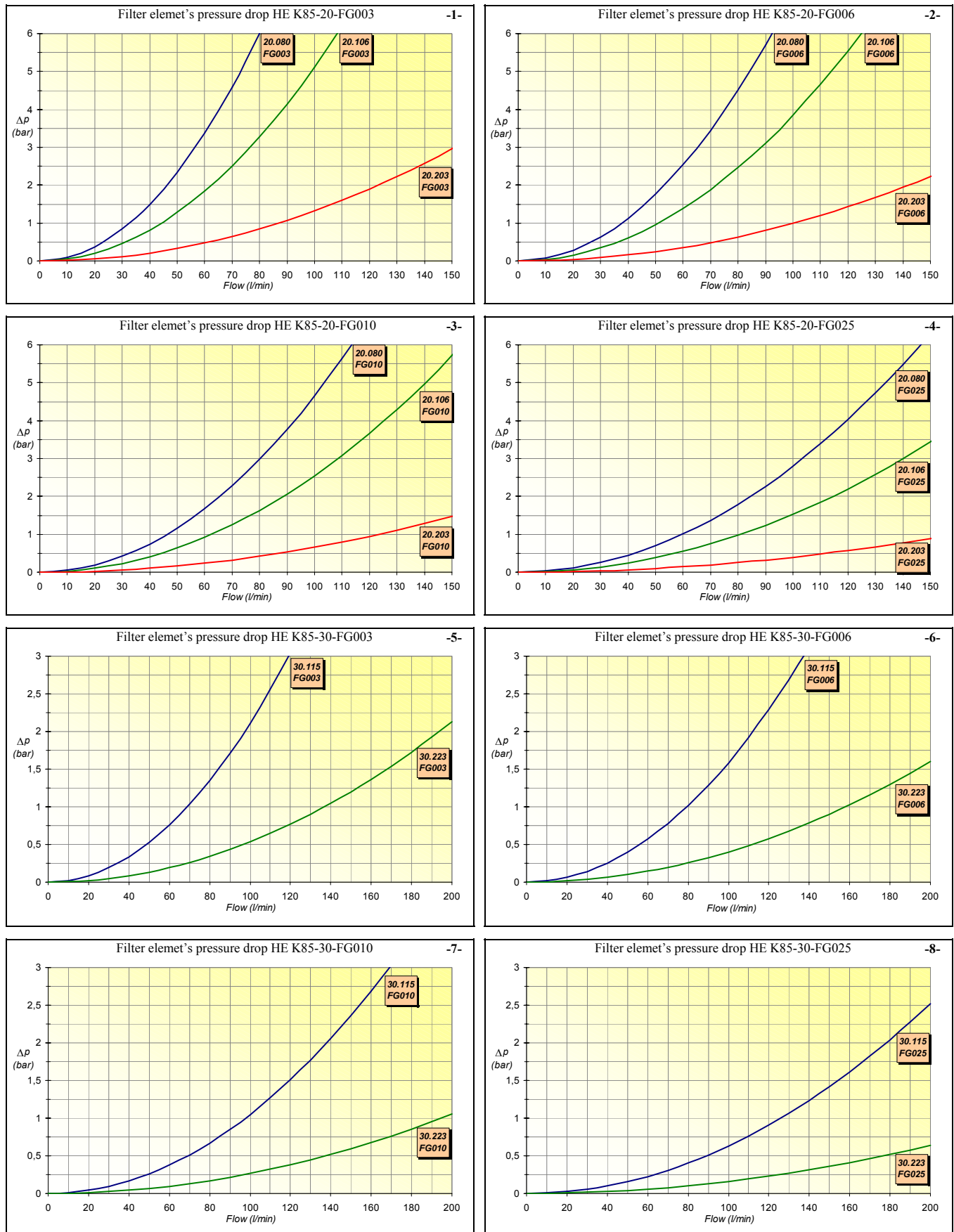
- 1) The **by-pass pressure drop** is directly proportional to fluid specific gravity and it's irrelevant to determine the total pressure drop.

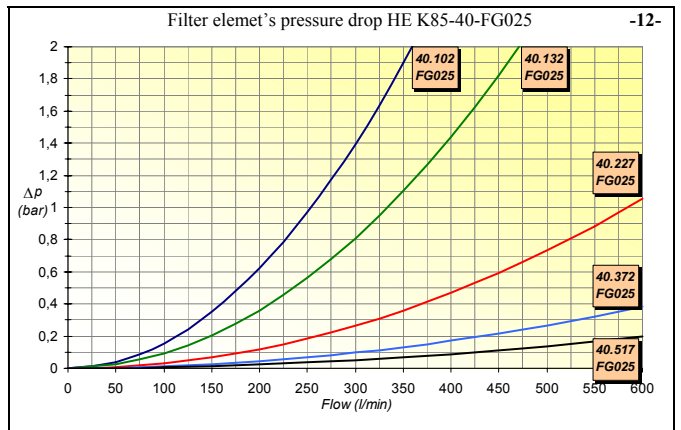
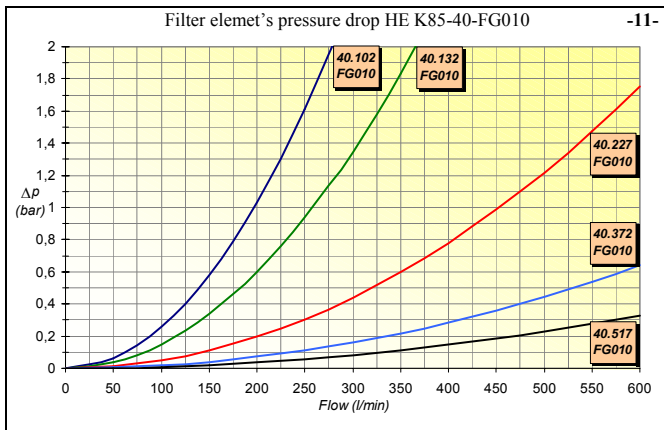
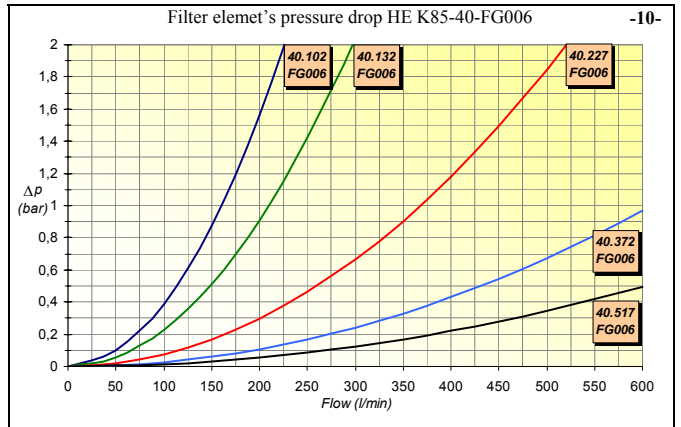
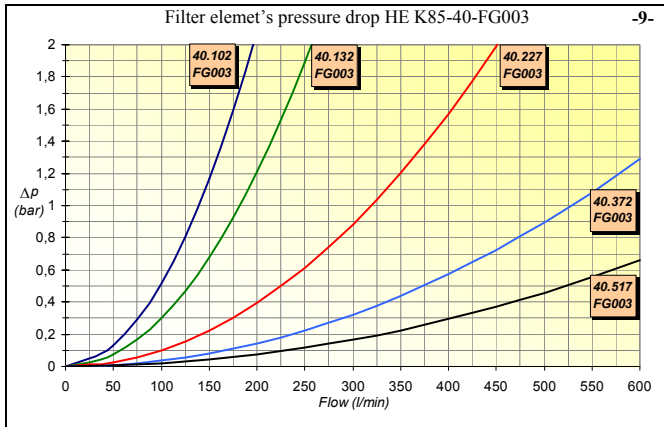


2) The **housing's pressure drop** is determined by the sum of the inlet and outlet port dimension.



3) The filter element's pressure drop is determined by standard media and AS surface, they have been calculated experimentally and they are valid for clean elements.





NOMINAL FLOW RATES

FILTRI HF 410 / FILTERS HF 410

Bocca Ingresso Inlet Port	25 MICRON		60 MICRON		90 MICRON		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/8"	5	HF410-10.060 MI025	15	HF410-10.060 FB060-MI060	15	HF410-10.060 MS090	0,1
G 1/2"	8		20		20		
G 1/2"	10	HF410-20.077 MI025	20	HF410-20.077 FB060-MI060	20	HF410-20.077 MS090	0,15
G 3/4"	15		30		30		
G 1"	20		45		45		
G 1"1/4	25		55		55		
G 1/2"	15	HF410-20.122 MI025	25	HF410-20.122 FB060-MI060	25	HF410-20.122 MS090	0,2
G 3/4"	20		40		40		
G 1"	25		55		55		
G 1"1/4	30		60		60		
G 1"	15	HF410-30.077 MI025	25	HF410-30.077 FB060-MI060	25	HF410-30.077 MS090	0,3
G 1"1/4	20		40		40		
G 1"1/2	25		55		55		
G 2"	30		60		60		
G 1"	30	HF410-30.122 MI025	60	HF410-30.122 FB060-MI060	60	HF410-30.122 MS090	0,35
G 1"1/4	35		80		80		
G 1"1/2	40		90		90		
G 2"	45		100		100		
G 1"	35	HF410-30.162 MI025	60	HF410-30.162 FB060-MI060	60	HF410-30.162 MS090	0,4
G 1"1/4	40		90		90		
G 1"1/2	45		120		120		
G 2"	50		130		130		
G 1"	40	HF410-30.195 MI025	65	HF410-30.195 FB060-MI060	65	HF410-30.195 MS090	0,45
G 1"1/4	45		110		110		
G 1"1/2	50		130		130		
G 2"	55		140		140		
G 2"	50	HF410-40.122 MI025	130	HF410-40.122 FB060-MI060	130	HF410-40.122 MS090	0,65
G 2"1/2	60		150		150		
G 3"	70		190		190		
G 2"	60	HF410-40.162 MI025	140	HF410-40.162 FB060-MI060	140	HF410-40.162 MS090	0,7
G 2"1/2	70		160		160		
G 3"	80		200		200		
G 2"	90	HF410-40.195 MI025	200	HF410-40.195 FB060-MI060	200	HF410-40.195 MS090	0,8
G 2"1/2	100		220		220		
G 3"	110		240		240		
G 2"	130	HF410-40.239 MI025	250	HF410-40.239 FB060-MI060	250	HF410-40.239 MS090	0,85
G 2"1/2	150		270		270		
G 3"	300		300		300		

FILTRI HF 410 / FILTERS HF 410

Bocca Ingresso Inlet Port	125 MICRON		250 MICRON		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/8"	15	HF410-10.060 FB125	15	HF410-10.060 MS250	0,1
G 1/2"	20		20		
G 1/2"	20	HF410-20.077 FB125	20	HF410-20.077 MS250	0,15
G 3/4"	30		30		
G 1"	45		45		
G 1"1/4	55		55		
G 1/2"	25	HF410-20.122 FB125	25	HF410-20.122 MS250	0,2
G 3/4"	40		40		
G 1"	55		55		
G 1"1/4	60		60		
G 1"	25	HF410-30.077 FB125	25	HF410-30.077 MS250	0,3
G 1"1/4	40		40		
G 1"1/2	55		55		
G 2"	60		60		
G 1"	60	HF410-30.122 FB125	60	HF410-30.122 MS250	0,35
G 1"1/4	80		80		
G 1"1/2	90		90		
G 2"	100		100		
G 1"	60	HF410-30.162 FB125	60	HF410-30.162 MS250	0,4
G 1"1/4	90		90		
G 1"1/2	120		120		
G 2"	130		130		
G 1"	65	HF410-30.195 FB125	65	HF410-30.195 MS250	0,45
G 1"1/4	110		110		
G 1"1/2	130		130		
G 2"	140		140		
G 2"	130	HF410-40.122 FB125	130	HF410-40.122 MS250	0,65
G 2"1/2	150		150		
G 3"	190		190		
G 2"	140	HF410-40.162 FB125	140	HF410-40.162 MS250	0,7
G 2"1/2	160		160		
G 3"	200		200		
G 2"	200	HF410-40.195 FB125	200	HF410-40.195 MS250	0,8
G 2"1/2	220		220		
G 3"	240		240		
G 2"	250	HF410-40.239 FB125	250	HF410-40.239 MS250	0,85
G 2"1/2	270		270		
G 3"	300		300		

FILTRI HF 502 / FILTERS HF 502

Bocca Ingresso Inlet Port	3 MICRON ASS./ABS.		6 MICRON ASS./ABS.		10 MICRON ASS./ABS.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/8"	7	HF502-10.060 FG003	8	HF502-10.060 FG006	10	HF502-10.060 FG010	0,4
G 1/2"	10		12		15		
G 3/4"	12		15		20		
G 3/8"	15	HF502-10.129 FG003	17	HF502-10.129 FG006	20	HF502-10.129 FG010	0,5
G 1/2"	20		22		25		
G 3/4"	25		27		30		
G 1/2"	20	HF502-20.077 FG003	22	HF502-20.077 FG006	25	HF502-20.077 FG010	0,9
G 3/4"	25		27		30		
G 1"	28		30		35		
G 1/2"	30	HF502-20.122 FG003	32	HF502-20.122 FG006	37	HF502-20.122 FG010	1
G 3/4"	35		40		45		
G 1"	45		50		55		
G 3/4"	55	HF502-20.201 FG003	60	HF502-20.201 FG006	65	HF502-20.201 FG010	1,2
G 1"	60		65		70		
G 3/4"	60	HF502-20.280 FG003	65	HF502-20.280 FG006	70	HF502-20.280 FG010	1,5
G 1"	70		75		80		
G 1"	70	HF502-30.162 FG003	75	HF502-30.162 FG006	80	HF502-30.162 FG010	2
G 1"1/4	75		80		85		
G 1"1/2	80		85		90		
G 1"	75	HF502-30.195 FG003	80	HF502-30.195 FG006	85	HF502-30.195 FG010	2,1
G 1"1/4	80		95		105		
G 1"1/2	90		105		115		
G 1"	80	HF502-30.239 FG003	85	HF502-30.239 FG006	90	HF502-30.239 FG010	2,2
G 1"1/4	90		100		110		
G 1"1/2	100		110		120		
G 1"1/2	100	HF502-40.122 FG003	110	HF502-40.122 FG006	120	HF502-40.122 FG010	3,1
G 2"	130		145		160		
G 1"1/2	110	HF502-40.162 FG003	120	HF502-40.162 FG006	130	HF502-40.162 FG010	3,2
G 2"	150		165		180		
G 1"1/2	150	HF502-40.194 FG003	165	HF502-40.194 FG006	180	HF502-40.194 FG010	3,4
G 2"	210		225		250		
G 1"1/2	155	HF502-40.195 FG003	170	HF502-40.195 FG006	185	HF502-40.195 FG010	3,4
G 2"	215		230		255		
G 1"1/2	210	HF502-40.239 FG003	230	HF502-40.239 FG006	260	HF502-40.239 FG010	3,5
G 2"	270		300		340		

FILTRI HF 502 / FILTERS HF 502

Bocca Ingresso Inlet Port	25 MICRON ASS./ABS.		10 MICRON NOM.		25 MICRON NOM.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/8"	13	HF502-10.060 FG025	15	HF502-10.060 SP010-RP010	20	HF502-10.060 SP025-RP025	0,4
G 1/2"	18		20		25		
G 3/4"	23		25		30		
G 3/8"	25	HF502-10.129 FG025	30	HF502-10.129 SP010-RP010	35	HF502-10.129 SP025-RP025	0,5
G 1/2"	30		35		40		
G 3/4"	35		40		45		
G 1/2"	30	HF502-20.077 FG025	35	HF502-20.077 SP010-RP010	40	HF502-20.077 SP025-RP025	0,9
G 3/4"	35		40		45		
G 1"	40		45		50		
G 1/2"	40	HF502-20.122 FG025	45	HF502-20.122 RP010	50	HF502-20.122 RP025	1
G 3/4"	50		55		60		
G 1"	60		65		70		
G 3/4"	75	HF502-20.201 FG025	90	HF502-20.201 RP010	100	HF502-20.201 RP025	1,2
G 1"	80		100		110		
G 3/4"	80	HF502-20.280 FG025	100	HF502-20.280 RP010	120	HF502-20.280 RP025	1,5
G 1"	85		110		130		
G 1"	90	HF502-30.162 FG025	95	HF502-30.162 RP010	115	HF502-30.162 RP025	2
G 1"1/4	110		115		125		
G 1"1/2	120		125		135		
G 1"	95	HF502-30.195 FG025	100	HF502-30.195 RP010	120	HF502-30.195 RP025	2,1
G 1"1/4	115		120		130		
G 1"1/2	125		130		140		
G 1"	100	HF502-30.239 FG025	110	HF502-30.239 RP010	130	HF502-30.239 RP025	2,2
G 1"1/4	120		130		140		
G 1"1/2	130		140		150		
G 1"1/2	130	HF502-40.122 FG025	140	HF502-40.122 RP010	150	HF502-40.122 RP025	3,1
G 2"	180		210		230		
G 1"1/2	140	HF502-40.162 FG025	150	HF502-40.162 RP010	160	HF502-40.162 RP025	3,2
G 2"	200		220		240		
G 1"1/2	190	HF502-40.194 FG025	200	HF502-40.194 RP010	220	HF502-40.194 RP025	3,4
G 2"	270		300		320		
G 1"1/2	195	HF502-40.195 FG025	205	HF502-40.195 RP010	225	HF502-40.195 RP025	3,4
G 2"	275		305		325		
G 1"1/2	280	HF502-40.239 FG025	320	HF502-40.239 RP010	410	HF502-40.239 RP025	3,5
G 2"	360		400		500		

FILTRI HF 502 / FILTERS HF 502

Bocca Ingresso Inlet Port	60 MICRON		90 MICRON		125 MICRON		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/8"	25	HF502-10.060 FB060	25	HF502-10.060 MS090	25	HF502-10.060 FB125	0,4
G 1/2"	30		30		30		
G 3/4"	35		35		35		
G 3/8"	45	HF502-10.129 FB060	50	HF502-10.129 MS090	50	HF502-10.129 FB125	0,5
G 1/2"	50		55		55		
G 3/4"	55		60		60		
G 1/2"	50	HF502-20.077 FB060	55	HF502-20.077 MS090	55	HF502-20.077 FB125	0,9
G 3/4"	55		60		60		
G 1"	60		65		65		
G 1/2"	70	HF502-20.122 FB060	75	HF502-20.122 MS090	75	HF502-20.122 FB125	1
G 3/4"	80		85		85		
G 1"	95		100		100		
G 3/4"	120	HF502-20.201 FB060	130	HF502-20.201 MS090	130	HF502-20.201 FB125	1,2
G 1"	130		140		140		
G 3/4"	130	HF502-20.280 FB060	135	HF502-20.280 MS090	135	HF502-20.280 FB125	1,5
G 1"	150		160		160		
G 1"	130	HF502-30.162 FB060	135	HF502-30.162 MS090	135	HF502-30.162 FB125	2
G 1"1/4	140		150		150		
G 1"1/2	150		160		160		
G 1"	160	HF502-30.195 FB060	170	HF502-30.195 MS090	170	HF502-30.195 FB125	2,1
G 1"1/4	170		180		180		
G 1"1/2	190		200		200		
G 1"	180	HF502-30.239 FB060	190	HF502-30.239 MS090	190	HF502-30.239 FB125	2,2
G 1"1/4	190		200		200		
G 1"1/2	210		220		220		
G 1"1/2	250	HF502-40.122 FB060	260	HF502-40.122 MS090	260	HF502-40.122 FB125	3,1
G 2"	340		350		350		
G 1"1/2	260	HF502-40.162 FB060	270	HF502-40.162 MS090	270	HF502-40.162 FB125	3,2
G 2"	350		360		360		
G 1"1/2	310	HF502-40.194 FB060	325	HF502-40.194 MS090	325	HF502-40.194 FB125	3,4
G 2"	410		425		425		
G 1"1/2	315	HF502-40.195 FB060	330	HF502-40.195 MS090	330	HF502-40.195 FB125	3,4
G 2"	415		430		430		
G 1"1/2	460	HF502-40.239 FB060	490	HF502-40.239 MS090	500	HF502-40.239 FB125	3,5
G 2"	560		590		600		

FILTRI HF 547 / FILTERS HF 547

Bocca Ingresso Inlet Port	3 MICRON ASS./ABS.		6 MICRON ASS./ABS.		10 MICRON ASS./ABS.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 1/2"	20	HF547-20.077 FG003	22	HF547-20.077 FG006	25	HF547-20.077 FG010	1,1
G 3/4"	25		27		30		
G 1"	28		30		35		
G 1"1/4	30		35		40		
G 1/2"	30	HF547-20.122 FG003	32	HF547-20.122 FG006	37	HF547-20.122 FG010	1,2
G 3/4"	35		40		45		
G 1"	45		50		55		
G 1"1/4	50		55		60		
G 3/4"	55	HF547-20.201 FG003	60	HF547-20.201 FG006	65	HF547-20.201 FG010	1,4
G 1"	60		65		70		
G 1"1/4	70		75		80		
G 3/4"	60	HF547-20.280 FG003	65	HF547-20.280 FG006	70	HF547-20.280 FG010	1,7
G 1"	70		80		85		
G 1"1/4	80		95		105		

Bocca Ingresso Inlet Port	25 MICRON ASS./ABS.		10 MICRON NOM.		25 MICRON NOM.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 1/2"	30	HF547-20.077 FG025	35	HF547-20.077 SP010-RP010	40	HF547-20.077 SP025-RP025	1,1
G 3/4"	35		40		45		
G 1"	40		45		50		
G 1"1/4	45		50		55		
G 1/2"	40	HF547-20.122 FG025	45	HF547-20.122 RP010	50	HF547-20.122 RP025	1,2
G 3/4"	50		55		60		
G 1"	60		65		70		
G 1"1/4	70		75		80		
G 3/4"	75	HF547-20.201 FG025	90	HF547-20.201 RP010	100	HF547-20.201 RP025	1,4
G 1"	80		100		110		
G 1"1/4	90		110		120		
G 3/4"	80	HF547-20.280 FG025	95	HF547-20.280 RP010	105	HF547-20.280 RP025	1,7
G 1"	95		100		120		
G 1"1/4	115		120		130		

FILTRI HF 547 / FILTERS HF 547

Bocca Ingresso Inlet Port	60 MICRON		90 MICRON		125 MICRON		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 1/2"	50	HF547-20.077 FB060	55	HF547-20.077 MS090	55	HF547-20.077 FB125	1,1
G 3/4"	55		60		60		
G 1"	60		65		65		
G 1"1/4	65		70		70		
G 1/2"	70	HF547-20.122 FB060	75	HF547-20.122 MS090	75	HF547-20.122 FB125	1,2
G 3/4"	80		85		85		
G 1"	95		100		100		
G 1"1/4	105		110		110		
G 3/4"	120	HF547-20.201 FB060	130	HF547-20.201 MS090	130	HF547-20.201 FB125	1,4
G 1"	130		140		140		
G 1"1/4	140		150		150		
G 3/4"	130	HF547-20.280 FB060	140	HF547-20.280 MS090	140	HF547-20.280 FB125	1,7
G 1"	160		170		170		
G 1"1/4	170		180		180		

FILTRI HF 550 / FILTERS HF 550

Bocca Ingresso Inlet Port	3 MICRON ASS./ABS.		6 MICRON ASS./ABS.		10 MICRON ASS./ABS.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/8"	7	HF550-10.060 FG003	8	HF550-10.060 FG006	10	HF550-10.060 FG010	0,5
G 1/2"	10		12		15		
G 3/4"	12		15		20		
G 3/8"	15	HF550-10.129 FG003	17	HF550-10.129 FG006	20	HF550-10.129 FG010	0,6
G 1/2"	20		22		25		
G 3/4"	25		27		30		
G 1/2"	20	HF550-20.077 FG003	22	HF550-20.077 FG006	25	HF550-20.077 FG010	1
G 3/4"	25		27		30		
G 1"	28		30		35		
G 1"1/4	30		35		40		
G 1/2"	30	HF550-20.122 FG003	32	HF550-20.122 FG006	37	HF550-20.122 FG010	1,1
G 3/4"	35		40		45		
G 1"	45		50		55		
G 1"1/4	50		55		60		
G 3/4"	55	HF550-20.201 FG003	60	HF550-20.201 FG006	65	HF550-20.201 FG010	1,3
G 1"	60		65		70		
G 1"1/4	70		75		80		
G 3/4"	60	HF550-20.280 FG003	65	HF550-20.280 FG006	70	HF550-20.280 FG010	1,6
G 1"	70		80		85		
G 1"1/4	80		95		105		
G 1"	60	HF550-30.162 FG003	65	HF550-30.162 FG006	70	HF550-30.162 FG010	3,3
G 1"1/4	65		75		85		
G 1"1/2	75		85		95		
G 1"	70	HF550-30.195 FG003	80	HF550-30.195 FG006	85	HF550-30.195 FG010	3,4
G 1"1/4	80		95		105		
G 1"1/2	90		105		115		
G 1"	80	HF550-30.239 FG003	85	HF550-30.239 FG006	90	HF550-30.239 FG010	3,5
G 1"1/4	90		100		110		
G 1"1/2	100		110		120		
G 1"1/2	110	HF550-40.162 FG003	120	HF550-40.162 FG006	130	HF550-40.162 FG010	4,6
G 2"	150		165		180		
G 1"1/2	150	HF550-40.194 FG003	165	HF550-40.194 FG006	180	HF550-40.194 FG010	4,8
G 2"	210		225		250		
G 1"1/2	155	HF550-40.195 FG003	170	HF550-40.195 FG006	185	HF550-40.195 FG010	4,8
G 2"	215		230		255		
G 1"1/2	210	HF550-40.239 FG003	230	HF550-40.239 FG006	260	HF550-40.239 FG010	4,9
G 2"	270		300		340		

FILTRI HF 550 / FILTERS HF 550

Bocca Ingresso Inlet Port	25 MICRON ASS./ABS.		10 MICRON NOM.		25 MICRON NOM.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/8"	13	HF550-10.060 FG025	15	HF550-10.060 SP010-RP010	20	HF550-10.060 SP025-RP025	0,5
G 1/2"	18		20		25		
G 3/4"	23		25		30		
G 3/8"	25	HF550-10.129 FG025	30	HF550-10.129 SP010-RP010	35	HF550-10.129 SP025-RP025	0,6
G 1/2"	30		35		40		
G 3/4"	35		40		45		
G 1/2"	30	HF550-20.077 FG025	35	HF550-20.077 SP010-RP010	40	HF550-20.077 SP025-RP025	1
G 3/4"	35		40		45		
G 1"	40		45		50		
G 1"1/4	45	HF550-20.122 FG025	50	HF550-20.122 RP010	55	HF550-20.122 RP025	1,1
G 1/2"	40		45		50		
G 3/4"	50		55		60		
G 1"	60	HF550-20.201 FG025	65	HF550-20.201 RP010	70	HF550-20.201 RP025	1,3
G 1"1/4	70		75		80		
G 3/4"	75		90		100		
G 1"	80	HF550-20.280 FG025	100	HF550-20.280 RP010	110	HF550-20.280 RP025	1,6
G 1"1/4	90		110		120		
G 3/4"	80		95		105		
G 1"	95	HF550-30.162 FG025	100	HF550-30.162 RP010	120	HF550-30.162 RP025	3,3
G 1"1/4	115		120		130		
G 1"1/2	100		105		115		
G 1"	95	HF550-30.195 FG025	100	HF550-30.195 RP010	120	HF550-30.195 RP025	3,4
G 1"1/4	115		120		130		
G 1"1/2	125		130		140		
G 1"	100	HF550-30.239 FG025	110	HF550-30.239 RP010	130	HF550-30.239 RP025	3,5
G 1"1/4	120		130		140		
G 1"1/2	130		140		150		
G 1"1/2	140	HF550-40.162 FG025	150	HF550-40.162 RP010	160	HF550-40.162 RP025	4,6
G 2"	200		220		240		
G 1"1/2	190	HF550-40.194 FG025	200	HF550-40.194 RP010	220	HF550-40.194 RP025	4,8
G 2"	270		300		320		
G 1"1/2	195	HF550-40.195 FG025	205	HF550-40.195 RP010	225	HF550-40.195 RP025	4,8
G 2"	275		305		325		
G 1"1/2	280	HF550-40.239 FG025	320	HF550-40.239 RP010	410	HF550-40.239 RP025	4,9
G 2"	360		400		500		

FILTRI HF 550 / FILTERS HF 550

Bocca Ingresso Inlet Port	60 MICRON		90 MICRON		125 MICRON		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/8"	25	HF550-10.060 FB060	25	HF550-10.060 MS090	25	HF550-10.060 FB125	0,5
G 1/2"	30		30		30		
G 3/4"	35		35		35		
G 3/8"	45	HF550-10.129 FB060	50	HF550-10.129 MS090	50	HF550-10.129 FB125	0,6
G 1/2"	50		55		55		
G 3/4"	55		60		60		
G 1/2"	50	HF550-20.077 FB060	55	HF550-20.077 MS090	55	HF550-20.077 FB125	1
G 3/4"	55		60		60		
G 1"	60		65		65		
G 1"1/4	65	HF550-20.122 FB060	70	HF550-20.122 MS090	70	HF550-20.122 FB125	1,1
G 1/2"	70		75		75		
G 3/4"	80		85		85		
G 1"	95	HF550-20.201 FB060	100	HF550-20.201 MS090	100	HF550-20.201 FB125	1,3
G 1"1/4	105		110		110		
G 3/4"	120		130		130		
G 1"	130	HF550-20.280 FB060	140	HF550-20.280 MS090	140	HF550-20.280 FB125	1,6
G 1"1/4	140		150		150		
G 3/4"	130		140		140		
G 1"	160	HF550-30.162 FB060	170	HF550-30.162 MS090	170	HF550-30.162 FB125	3,3
G 1"1/4	170		180		180		
G 1"1/2	150		160		160		
G 1"	160	HF550-30.195 FB060	170	HF550-30.195 MS090	170	HF550-30.195 FB125	3,4
G 1"1/4	170		180		180		
G 1"1/2	190		200		200		
G 1"	180	HF550-30.239 FB060	190	HF550-30.239 MS090	190	HF550-30.239 FB125	3,5
G 1"1/4	190		200		200		
G 1"1/2	210		220		220		
G 1"1/2	260	HF550-40.162 FB060	270	HF550-40.162 MS090	270	HF550-40.162 FB125	4,6
G 2"	350		360		360		
G 1"1/2	310	HF550-40.194 FB060	325	HF550-40.194 MS090	325	HF550-40.194 FB125	4,8
G 2"	410		425		425		
G 1"1/2	315	HF550-40.195 FB060	330	HF550-40.195 MS090	330	HF550-40.195 FB125	4,8
G 2"	415		430		430		
G 1"1/2	460	HF550-40.239 FB060	490	HF550-40.239 MS090	500	HF550-40.239 FB125	4,9
G 2"	560		590		600		

FILTRI HF 554 / FILTERS HF 554

Bocca Ingresso Inlet Port	3 MICRON ASS./ABS.		6 MICRON ASS./ABS.		10 MICRON ASS./ABS.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/8"	7	HF554-10.060 FG003	8	HF554-10.060 FG006	10	HF554-10.060 FG010	0,5
G 1/2"	10		12		15		
G 3/4"	12		15		20		
G 3/8"	15	HF554-10.129 FG003	17	HF554-10.129 FG006	20	HF554-10.129 FG010	0,6
G 1/2"	20		22		25		
G 3/4"	25		27		30		
G 1/2"	20	HF554-20.077 FG003	22	HF554-20.077 FG006	25	HF554-20.077 FG010	1,1
G 3/4"	25		27		30		
G 1"	28		30		35		
G 1"1/4	30	HF554-20.122 FG003	35	HF554-20.122 FG006	40	HF554-20.122 FG010	1,2
G 1/2"	30		32		37		
G 3/4"	35		40		45		
G 1"	45	HF554-20.201 FG003	50	HF554-20.201 FG006	55	HF554-20.201 FG010	1,4
G 1"1/4	50		55		60		
G 3/4"	55		60		65		
G 1"	60	HF554-20.280 FG003	65	HF554-20.280 FG006	70	HF554-20.280 FG010	1,7
G 1"1/4	70		75		80		
G 3/4"	60		65		70		
G 1"	70	HF554-20.280 FG003	80	HF554-20.280 FG006	85	HF554-20.280 FG010	1,7
G 1"1/4	80		95		105		

Bocca Ingresso Inlet Port	25 MICRON ASS./ABS.		10 MICRON NOM.		25 MICRON NOM.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/8"	13	HF554-10.060 FG025	15	HF554-10.060 SP010-RP010	20	HF554-10.060 SP025-RP025	0,5
G 1/2"	18		20		25		
G 3/4"	23		25		30		
G 3/8"	25	HF554-10.129 FG025	30	HF554-10.129 SP010-RP010	35	HF554-10.129 SP025-RP025	0,6
G 1/2"	30		35		40		
G 3/4"	35		40		45		
G 1/2"	30	HF554-20.077 FG025	35	HF554-20.077 SP010-RP010	40	HF554-20.077 SP025-RP025	1,1
G 3/4"	35		40		45		
G 1"	40		45		50		
G 1"1/4	45	HF554-20.122 FG025	50	HF554-20.122 RP010	55	HF554-20.122 RP025	1,2
G 1/2"	40		45		50		
G 3/4"	50		55		60		
G 1"	60	HF554-20.201 FG025	65	HF554-20.201 RP010	70	HF554-20.201 RP025	1,4
G 1"1/4	70		75		80		
G 3/4"	75		90		100		
G 1"	80	HF554-20.280 FG025	100	HF554-20.280 RP010	110	HF554-20.280 RP025	1,7
G 1"1/4	90		110		120		
G 3/4"	80		95		105		
G 1"	95	HF554-20.280 FG025	100	HF554-20.280 RP010	120	HF554-20.280 RP025	1,7
G 1"1/4	115		120		130		

FILTRI HF 554 / FILTERS HF 554

Bocca Ingresso Inlet Port	60 MICRON		90 MICRON		125 MICRON		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/8"	25	HF554-10.060 FB060	25	HF554-10.060 MS090	25	HF554-10.060 FB125	0,5
G 1/2"	30		30		30		
G 3/4"	35		35		35		
G 3/8"	45	HF554-10.129 FB060	50	HF554-10.129 MS090	50	HF554-10.129 FB125	0,6
G 1/2"	50		55		55		
G 3/4"	55		60		60		
G 1/2"	50	HF554-20.077 FB060	55	HF554-20.077 MS090	55	HF554-20.077 FB125	1,1
G 3/4"	55		60		60		
G 1"	60		65		65		
G 1"1/4	65	HF554-20.122 FB060	70	HF554-20.122 MS090	70	HF554-20.122 FB125	1,2
G 1/2"	70		75		75		
G 3/4"	80		85		85		
G 1"	95	HF554-20.201 FB060	100	HF554-20.201 MS090	100	HF554-20.201 FB125	1,4
G 1"1/4	105		110		110		
G 3/4"	120		130		130		
G 1"	130	HF554-20.280 FB060	140	HF554-20.280 MS090	140	HF554-20.280 FB125	1,7
G 1"1/4	140		150		150		
G 3/4"	130		140		140		
G 1"	160	HF554-20.280 FB060	170	HF554-20.280 MS090	170	HF554-20.280 FB125	1,7
G 1"1/4	170		180		180		

FILTRI HF 570 - 575 / FILTERS HF 570 - 575

Bocca Ingresso Inlet Port	10 MICRON ASS./ABS.		25 MICRON ASS./ABS		10 MICRON NOM.		HF570 Peso Filtro Filter Weight (Kg)	HF575 Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type		
G 1/2"	30	HF570-20.106 HF575-20.106 FG010	40	HF570-20.106 HF575-20.106 FG025	50	HF570-20.106 HF575-20.106 SP010	1,2	0,9
G 3/4"	40		50		60			
G 1"	45		55		65			
G 1"1/4	50		60		70			
G 1/2"	40	HF570-20.150 HF575-20.150 FG010	50	HF570-20.150 HF575-20.150 FG025	60	HF570-20.150 HF575-20.150 SP010	1,4	1,1
G 3/4"	50		60		70			
G 1"	60		70		80			
G 1"1/4	65		75		85			
G 1/2"	50	HF570-20.200 HF575-20.200 FG010	55	HF570-20.200 HF575-20.200 FG025	60	HF570-20.200 HF575-20.200 SP010	1,5	1,2
G 3/4"	60		70		80			
G 1"	70		80		90			
G 1"1/4	75		85		100			
G 1/2"	65	HF570-20.300 HF575-20.300 FG010	70	HF570-20.300 HF575-20.300 FG025	90	HF570-20.300 HF575-20.300 SP010	1,8	1,5
G 3/4"	80		90		110			
G 1"	90		100		120			
G 1"1/4	95		110		130			
G 1"	95	HF570-30.190 HF575-30.190 FG010	100	HF570-30.190 HF575-30.190 FG025	110	HF570-30.190 HF575-30.190 SP010	4	3
G 1"1/4	120		130		140			
G 1"1/2	135		140		160			
G 1"	120	HF570-30.260 HF575-30.260 FG010	130	HF570-30.260 HF575-30.260 FG025	140	HF570-30.260 HF575-30.260 SP010	4,4	3,4
G 1"1/4	150		160		180			
G 1"1/2	170		180		200			
G 1"	140	HF570-30.465 HF575-30.465 FG010	155	HF570-30.465 HF575-30.465 FG025	170	HF570-30.465 HF575-30.465 SP010	4,8	3,8
G 1"1/4	180		200		220			
G 1"1/2	200		220		230			
G 1"1/2	200	HF570-40.210 HF575-40.210 FG010	220	HF570-40.210 HF575-40.210 FG025	250	HF570-40.210 HF575-40.210 SP010	8,2	3,2
G 2"	220		250		260			
G 1"1/2	300	HF570-40.290 HF575-40.290 FG010	320	HF570-40.290 HF575-40.290 FG025	340	HF570-40.290 HF575-40.290 SP010	8,5	3,5
G 2"	320		340		360			
G 1"1/2	320	HF570-40.390 HF575-40.390 FG010	340	HF570-40.390 HF575-40.390 FG025	360	HF570-40.390 HF575-40.390 SP010	9	4
G 2"	340		360		380			
G 1"1/2	380	HF570-40.480 HF575-40.480 FG010	400	HF570-40.480 HF575-40.480 FG025	420	HF570-40.480 HF575-40.480 SP010	9,8	4,8
G 2"	400		420		440			

FILTRI HF 570 - 575 / FILTERS HF 570 - 575

Bocca Ingresso Inlet Port	25 MICRON NOM.		60 MICRON		HF570 Peso Filtro Filter Weight (Kg)	HF575 Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type		
G 1/2"	60	HF570-20.106 HF575-20.106 SP025	80	HF570-20.106 HF575-20.106 MI060	1,2	0,9
G 3/4"	70		90			
G 1"	75		95			
G 1"1/4	80		100			
G 1/2"	70	HF570-20.150 HF575-20.150 SP025	90	HF570-20.150 HF575-20.150 MI060	1,4	1,1
G 3/4"	80		100			
G 1"	90		110			
G 1"1/4	95		115			
G 1/2"	70	HF570-20.200 HF575-20.200 SP025	90	HF570-20.200 HF575-20.200 MI060	1,5	1,2
G 3/4"	90		110			
G 1"	100		120			
G 1"1/4	110		130			
G 1/2"	100	HF570-20.300 HF575-20.300 SP025	120	HF570-20.300 HF575-20.300 MI060	1,8	1,5
G 3/4"	120		140			
G 1"	130		150			
G 1"1/4	140		160			
G 1"	130	HF570-30.190 HF575-30.190 SP025	150	HF570-30.190 HF575-30.190 MI060	4	3
G 1"1/4	160		180			
G 1"1/2	180		200			
G 1"	160	HF570-30.260 HF575-30.260 SP025	180	HF570-30.260 HF575-30.260 MI060	4,4	3,4
G 1"1/4	200		220			
G 1"1/2	220		240			
G 1"	190	HF570-30.465 HF575-30.465 SP025	210	HF570-30.465 HF575-30.465 MI060	4,8	3,8
G 1"1/4	240		260			
G 1"1/2	250		270			
G 1"1/2	260	HF570-40.210 HF575-40.210 SP025	290	HF570-40.210 HF575-40.210 MI060	8,2	3,2
G 2"	290		320			
G 1"1/2	360	HF570-40.290 HF575-40.290 SP025	390	HF570-40.290 HF575-40.290 MI060	8,5	3,5
G 2"	390		420			
G 1"1/2	380	HF570-40.390 HF575-40.390 SP025	410	HF570-40.390 HF575-40.390 MI060	9	4
G 2"	410		440			
G 1"1/2	440	HF570-40.480 HF575-40.480 SP025	460	HF570-40.480 HF575-40.480 MI060	9,8	4,8
G 2"	460		500			

FILTRI HF 595 / FILTERS HF 595

LINEA DI ASPIRAZIONE / SUCTION LINE

Bocca Ingresso Inlet Port	10 MICRON ASS./ABS.		25 MICRON ASS./ABS.		10 MICRON NOM.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 1/2"	5	HF595-10.060 FG010	8	HF595-10.060 FG025	10	HF595-10.060 SP010	0,7
G 3/4"	20	HF595-20.077 FG010	30	HF595-20.077 FG025	35	HF595-20.077 SP010	1,2
G 1"	40	HF595-20.122 FG010	45	HF595-20.122 FG025	55	HF595-20.122 SP010	1,5
G 1"1/4	70	HF595-30.195 FG010	90	HF595-30.195 FG025	115	HF595-30.195 SP010	3,5

Bocca Ingresso Inlet Port	25 MICRON NOM.		60 MICRON		125 MICRON		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 1/2"	15	HF595-10.060 SP025	25	HF595-10.060 MI060	30	HF595-10.060 MB125	0,7
G 3/4"	45	HF595-20.077 SP025	60	HF595-20.077 MI060	70	HF595-20.077 MB125	1,2
G 1"	65	HF595-20.122 SP025	90	HF595-20.122 MI060	120	HF595-20.122 MB125	1,5
G 1"1/4	135	HF595-30.195 SP025	160	HF595-30.195 MI060	180	HF595-30.195 MB125	3,5

FILTRI HF 595 / FILTERS HF 595

LINEA AL RITORNO / RETURN LINE

<i>Bocca Ingresso Inlet Port</i>	10 MICRON ASS./ABS.		25 MICRON ASS./ABS.		10 MICRON NOM.		<i>Peso Filtro Filter Weight (Kg)</i>
	<i>Portata Flow (lt/min)</i>	<i>Filtro Tipo Filter Type</i>	<i>Portata Flow (lt/min)</i>	<i>Filtro Tipo Filter Type</i>	<i>Portata Flow (lt/min)</i>	<i>Filtro Tipo Filter Type</i>	
G 1/2"	10	HF595-10.060 FG010	15	HF595-10.060 FG025	20	HF595-10.060 SP010	0,7
G 3/4"	35	HF595-20.077 FG010	45	HF595-20.077 FG025	50	HF595-20.077 SP010	1,2
G 1"	60	HF595-20.122 FG010	75	HF595-20.122 FG025	90	HF595-20.122 SP010	1,5
G 1"1/4	100	HF595-30.195 FG010	120	HF595-30.195 FG025	160	HF595-30.195 SP010	3,5

<i>Bocca Ingresso Inlet Port</i>	25 MICRON NOM.		60 MICRON		125 MICRON		<i>Peso Filtro Filter Weight (Kg)</i>
	<i>Portata Flow (lt/min)</i>	<i>Filtro Tipo Filter Type</i>	<i>Portata Flow (lt/min)</i>	<i>Filtro Tipo Filter Type</i>	<i>Portata Flow (lt/min)</i>	<i>Filtro Tipo Filter Type</i>	
G 1/2"	25	HF595-10.060 SP025	35	HF595-10.060 MI060	40	HF595-10.060 MB125	0,7
G 3/4"	60	HF595-20.077 SP025	130	HF595-20.077 MI060	150	HF595-20.077 MB125	1,2
G 1"	120	HF595-20.122 SP025	160	HF595-20.122 MI060	180	HF595-20.122 MB125	1,5
G 1"1/4	190	HF595-30.195 SP025	220	HF595-30.195 MI060	240	HF595-30.195 MB125	3,5

FILTRI HF 620 / FILTERS HF 620

LINEA DI ASPIRAZIONE / SUCTION LINE

Bocca Ingresso Inlet Port	10 MICRON ASS./ABS.		25 MICRON ASS./ABS.		10 MICRON NOM.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/4"	15	HF620-20.135 FG010	15	HF620-20.135 FG025	20	HF620-20.135 SP010	1
G 3/4"	20	HF620-20.180 FG010	20	HF620-20.180 FG025	25	HF620-20.180 SP010	1,2
G 1"1/4	60	HF620-30.155 FG010	60	HF620-30.155 FG025	70	HF620-30.155 SP010	1,9
G 1"1/4	80	HF620-30.210 FG010	80	HF620-30.210 FG025	90	HF620-30.210 SP010	2
G 1"1/2	150	HF620-40.155 FG010	150	HF620-40.155 FG025	170	HF620-40.155 SP010	3,4
G 1"1/2	160	HF620-40.210 FG010	160	HF620-40.210 FG025	180	HF620-40.210 SP010	3,5
G 1"1/2	150	HF620-50.155 FG010	150	HF620-50.155 FG025	170	HF620-50.155 SP010	5,3
G 1"1/2	160	HF620-50.210 FG010	160	HF620-50.210 FG025	180	HF620-50.210 SP010	5,4

Bocca Ingresso Inlet Port	25 MICRON NOM.		60 MICRON		90 - 125 MICRON		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/4"	25	HF620-20.135 SP025	30	HF620-20.135 MS060	35	HF620-20.135 MS090-MS125	1
G 3/4"	30	HF620-20.180 SP025	35	HF620-20.180 MS060	40	HF620-20.180 MS090-MS125	1,2
G 1"1/4	85	HF620-30.155 SP025	110	HF620-30.155 MS060	120	HF620-30.155 MS090-MS125	1,9
G 1"1/4	100	HF620-30.210 SP025	115	HF620-30.210 MS060	125	HF620-30.210 MS090-MS125	2
G 1"1/2	190	HF620-40.155 SP025	220	HF620-40.155 MS060	240	HF620-40.155 MS090-MS125	3,4
G 1"1/2	210	HF620-40.210 SP025	230	HF620-40.210 MS060	250	HF620-40.210 MS090-MS125	3,5
G 1"1/2	190	HF620-50.155 SP025	220	HF620-50.155 MS060	240	HF620-50.155 MS090-MS125	5,3
G 1"1/2	210	HF620-50.210 SP025	230	HF620-50.210 MS060	250	HF620-50.210 MS090-MS125	5,4

FILTRI HF 620 - 625 / FILTERS HF 620 – 625

LINEA AL RITORNO / RETURN LINE

Bocca Ingresso Inlet Port	10 MICRON ASS./ABS.		25 MICRON ASS./ABS.		10 MICRON NOM.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/4"	40	HF620-20.135 HF625-20.135 FG010	40	HF620-20.135 HF625-20.135 FG025	50	HF620-20.135 HF625-20.135 SP010	1
G 3/4"	50	HF620-20.180 HF625-20.180 FG010	50	HF620-20.180 HF625-20.180 FG025	60	HF620-20.180 HF625-20.180 SP010	1,2
G 1"1/4	120	HF620-30.155 FG010	120	HF620-30.155 FG025	140	HF620-30.155 SP010	1,9
G 1"1/4	140	HF620-30.210 FG010	140	HF620-30.210 FG025	160	HF620-30.210 SP010	2
G 1"1/2	280	HF620-40.155 FG010	280	HF620-40.155 FG025	300	HF620-40.155 SP010	3,4
G 1"1/2	300	HF620-40.210 FG010	300	HF620-40.210 FG025	320	HF620-40.210 SP010	3,5
G 1"1/2	280	HF620-50.155 FG010	280	HF620-50.155 FG025	300	HF620-50.155 SP010	5,3
G 1"1/2	300	HF620-50.210 FG010	300	HF620-50.210 FG025	320	HF620-50.210 SP010	5,4

Bocca Ingresso Inlet Port	25 MICRON NOM.		60 MICRON		90 - 125 MICRON		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/4"	60	HF620-20.135 HF625-20.135 SP025	70	HF620-20.135 HF625-20.135 MS060	75	HF620-20.135 HF625-20.135 MS090-MS125	1
G 3/4"	70	HF620-20.180 HF625-20.180 SP025	80	HF620-20.180 HF625-20.180 MS060	85	HF620-20.180 HF625-20.180 MS090-MS125	1,2
G 1"1/4	180	HF620-30.155 SP025	190	HF620-30.155 MS060	200	HF620-30.155 MS090-MS125	1,9
G 1"1/4	190	HF620-30.210 SP025	200	HF620-30.210 MS060	210	HF620-30.210 MS090-MS125	2
G 1"1/2	340	HF620-40.155 SP025	380	HF620-40.155 MS060	390	HF620-40.155 MS090-MS125	3,4
G 1"1/2	360	HF620-40.210 SP025	390	HF620-40.210 MS060	400	HF620-40.210 MS090-MS125	3,5
G 1"1/2	340	HF620-50.155 SP025	380	HF620-50.155 MS060	390	HF620-50.155 MS090-MS125	5,3
G 1"1/2	360	HF620-50.210 SP025	390	HF620-50.210 MS060	400	HF620-50.210 MS090-MS125	5,4

FILTRI HF 650 / FILTERS HF 650

Bocca Ingresso Inlet Port	3 MICRON ASS./ABS.		6 MICRON ASS./ABS.		10 MICRON ASS./ABS.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/4"	50	HF650-20.140 FG003	60	HF650-20.140 FG006	70	HF650-20.140 FG010	1,3
G 1"	70	HF650-20.140 FG003	80	HF650-20.140 FG006	90	HF650-20.140 FG010	1,3
G 3/4"	85	HF650-20.180 FG003	95	HF650-20.180 FG006	100	HF650-20.180 FG010	1,5
G 1"	95	HF650-20.180 FG003	105	HF650-20.180 FG006	110	HF650-20.180 FG010	1,5
G 3/4"	100	HF650-20.230 FG003	110	HF650-20.230 FG006	120	HF650-20.230 FG010	2
G 1"	110	HF650-20.230 FG003	120	HF650-20.230 FG006	130	HF650-20.230 FG010	2

Bocca Ingresso Inlet Port	16 MICRON ASS./ABS.		25 MICRON ASS./ABS.		10 MICRON NOM.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/4"	75	HF650-20.140 FG016	80	HF650-20.140 FG025	65	HF650-20.140 RP010	1,3
G 1"	95	HF650-20.140 FG016	100	HF650-20.140 FG025	85	HF650-20.140 RP010	1,3
G 3/4"	105	HF650-20.180 FG016	110	HF650-20.180 FG025	100	HF650-20.180 RP010	1,5
G 1"	115	HF650-20.180 FG016	120	HF650-20.180 FG025	105	HF650-20.180 RP010	1,5
G 3/4"	125	HF650-20.230 FG016	130	HF650-20.230 FG025	105	HF650-20.230 RP010	2
G 1"	135	HF650-20.230 FG016	140	HF650-20.230 FG025	110	HF650-20.230 RP010	2

Bocca Ingresso Inlet Port	25 MICRON NOM.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 3/4"	80	HF650-20.140 RP025	1,3
G 1"	100	HF650-20.140 RP025	1,3
G 3/4"	110	HF650-20.180 RP025	1,5
G 1"	120	HF650-20.180 RP025	1,5
G 3/4"	130	HF650-20.230 RP025	2
G 1"	140	HF650-20.230 RP025	2

FILTRI HF 690 / FILTERS HF 690

Bocca Ingresso Inlet Port	3 MICRON ASS./ABS.		6 MICRON ASS./ABS.		10 MICRON ASS./ABS.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 1/2"	10	HF690-10.086 FG003	15	HF690-10.086 FG006	25	HF690-10.086 FG010	0,9
G 1/2"	30	HF690-10.180 FG003	45	HF690-10.180 FG006	60	HF690-10.180 FG010	1,2

Bocca Ingresso Inlet Port	25 MICRON ASS./ABS.		10 MICRON NOM.		25 MICRON NOM.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 1/2"	40	HF690-10.086 FG025	30	HF690-10.086 RP010	40	HF690-10.086 RP025	0,9
G 1/2"	75	HF690-10.180 FG025	65	HF690-10.180 RP010	75	HF690-10.180 RP025	1,2

Bocca Ingresso Inlet Port	60 MICRON		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 1/2"	45	HF690-10.086 MI060	0,9
G 1/2"	80	HF690-10.180 MI060	1,2

FILTRI HF 705 / FILTERS HF 705

Bocca Ingresso Inlet Port	10 MICRON		25 MICRON		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 1/4"	15	HF705-10.040 SB010	25	HF705-10.040 SB025	0,1
G 3/8"	20		30		
G 1/2"	25		35		

Bocca Ingresso Inlet Port	40 MICRON		60 MICRON		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 1/4"	30	HF705-10.040 SB040	35	HF705-10.040 SB060	0,1
G 3/8"	40		45		
G 1/2"	45		50		

FILTRI HF 735 / FILTERS HF 735

3 MICRON ASS./ABS.		6 MICRON ASS./ABS.		Peso Filtro Filter Weight (Kg)
Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
25	HF735-20.080 FG003	30	HF735-20.080 FG006	3,7
30	HF735-20.106 FG003	40	HF735-20.106 FG006	4,1
50	HF735-20.203 FG003	55	HF735-20.203 FG006	5,6

10 MICRON ASS./ABS.		25 MICRON ASS./ABS.		Peso Filtro Filter Weight (Kg)
Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
35	HF735-20.080 FG010	45	HF735-20.080 FG025	3,7
45	HF735-20.106 FG010	60	HF735-20.106 FG025	4,1
60	HF735-20.203 FG010	80	HF735-20.203 FG025	5,6

FILTRI HF 745 / FILTERS HF 745

Bocca Ingresso Inlet Port	3 MICRON ASS./ABS.		6 MICRON ASS./ABS.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 1/2"	25	HF745-20.080 FG003	30	HF745-20.080 FG006	3,8
G 3/4"	25		35		
G 1/2"	30	HF745-20.106 FG003	40	HF745-20.106 FG006	4,2
G 3/4"	30		40		
G 1/2"	50	HF745-20.203 FG003	55	HF745-20.203 FG006	5,7
G 3/4"	55		60		

Bocca Ingresso Inlet Port	10 MICRON ASS./ABS.		25 MICRON ASS./ABS.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 1/2"	35	HF745-20.080 FG010	45	HF745-20.080 FG025	3,8
G 3/4"	40		50		
G 1/2"	45	HF745-20.106 FG010	60	HF745-20.106 FG025	4,2
G 3/4"	50		70		
G 1/2"	60	HF745-20.203 FG010	80	HF745-20.203 FG025	5,7
G 3/4"	70		90		

FILTRI HF 760 / FILTERS HF 760

Bocca Ingresso Inlet Port	3 MICRON ASS./ABS.		6 MICRON ASS./ABS.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 1/2"	25	HF760-20.080 FG003	30	HF760-20.080 FG006	5,3
G 3/4"	25		35		
G 1/2"	30	HF760-20.106 FG003	40	HF760-20.106 FG006	5,7
G 3/4"	30		40		
G 1/2"	50	HF760-20.203 FG003	55	HF760-20.203 FG006	7,2
G 3/4"	55		60		
G3/4"	55	HF760-30.115 FG003	60	HF760-30.115 FG006	8,2
G 1"	60		65		
G 3/4"	90	HF760-30.223 FG003	100	HF760-30.223 FG006	10
G 1"	100		110		
G1"	105	HF760-40.102 FG003	120	HF760-40.102 FG006	14,3
G1"1/4	105		120		
G1"1/2	110		125		
G1"	125	HF760-40.132 FG003	140	HF760-40.132 FG006	15,2
G1"1/4	140		160		
G1"1/2	140		160		
G1"	200	HF760-40.227 FG003	210	HF760-40.227 FG006	18
G1"1/4	210		225		
G1"1/2	225		250		
G1"	250	HF760-40.372 FG003	260	HF760-40.372 FG006	22
G1"1/4	260		275		
G1"1/2	270		290		
G1"	260	HF760-40.517 FG003	270	HF760-40.517 FG006	28,5
G1"1/4	290		300		
G1"1/2	330		350		

FILTRI HF 760 / FILTERS HF 760

Bocca Ingresso Inlet Port	10 MICRON ASS./ABS.		25 MICRON ASS./ABS.		Peso Filtro Filter Weight (Kg)
	Portata Flow (lt/min)	Filtro Tipo Filter Type	Portata Flow (lt/min)	Filtro Tipo Filter Type	
G 1/2"	35	HF760-20.080 FG010	45	HF760-20.080 FG025	5,3
G 3/4"	40		50		
G 1/2"	45	HF760-20.106 FG010	60	HF760-20.106 FG025	5,7
G 3/4"	50		70		
G 1/2"	60	HF760-20.203 FG010	80	HF760-20.203 FG025	7,2
G 3/4"	70		90		
G3/4"	70	HF760-30.115 FG010	90	HF760-30.115 FG025	8,2
G 1"	75		100		
G 3/4"	120	HF760-30.223 FG010	130	HF760-30.223 FG025	10
G 1"	130		150		
G1"	140	HF760-40.102 FG010	170	HF760-40.102 FG025	14,3
G1"1/4	150		190		
G1"1/2	150		200		
G1"	170	HF760-40.132 FG010	210	HF760-40.132 FG025	15,2
G1"1/4	190		225		
G1"1/2	200		240		
G1"	240	HF760-40.227 FG010	250	HF760-40.227 FG025	18
G1"1/4	260		280		
G1"1/2	280		300		
G1"	280	HF760-40.372 FG010	300	HF760-40.372 FG025	22
G1"1/4	310		330		
G1"1/2	320		350		
G1"	300	HF760-40.517	320	HF760-40.517 FG025	28,5
G1"1/4	350		370		
G1"1/2	380		400		