

## Filter

- Rücklauffilter  
Unteröl -



	Bestellnr. (ohne Filterelement)	Typ	Innengewinde G	Code
Serie HF 595	300-070-1000	HF595-10.060-GD-B-Z-DA-G	1/2"	HHLK0050
	300-070-1050	HF595-20.077-GE-B-Z-DA-G	3/4"	HHLK0100
	300-070-1100	HF595-20.122-GF-B-Z-DA-G	1"	HHLK0150
	300-070-1150	HF595-30.195-GG-B-Z-DA-G	1 1/4"	HHLK0200

- Rücklauffilterelement  
Unteröl -



Bestellnr.	für Filtergehäuse	Typ	max. Durchfluss l/min	Code
300-075-1000	HF595-10.060	HEK07-10.060-AS-FG010-VM-B17-B	10	HHC01102
300-075-1050		HEK07-10.060-AS-FG025-VM-B17-B	15	HHC01103
300-075-1100		HEK07-10.060-AS-SP010-VM-B17-B	20	HHC01098
300-075-1150	HF595-20.077	HEK07-20.077-AS-FG010-VM-B17-B	35	HHC01107
300-075-1200		HEK07-20.077-AS-FG025-VM-B17-B	45	HHC01108
300-075-1250		HEK07-20.077-AS-SP010-VM-B17-B	50	HHC01104
300-075-1300	HF595-20.122	HEK07-20.122-AS-FG010-VM-B17-B	60	HHC01113
300-075-1350		HEK07-20.122-AS-FG025-VM-B17-B	75	HHC01114
300-075-1400		HEK07-20.122-AS-SP010-VM-B17-B	90	HHC01109
300-075-1450	HF595-30.195	HEK07-30.195-AS-FG010-VM-B17-B	100	HHC01119
300-075-1500		HEK07-30.195-AS-FG025-VM-B17-B	120	HHC01120
300-075-1550		HEK07-30.195-AS-SP010-VM-B17-B	160	HHC01115

## SUCTION AND RETURN LINE FILTERS SERIES HF 595



The tank or external mounted filters series HF 595 are specifically designed to be connected on the suction or in the return line of the hydraulic circuit and provide versatility to safeguard the circuit components from contaminating particles.

- BY-PASS VALVE - REMOVABLE AND REUSABLE

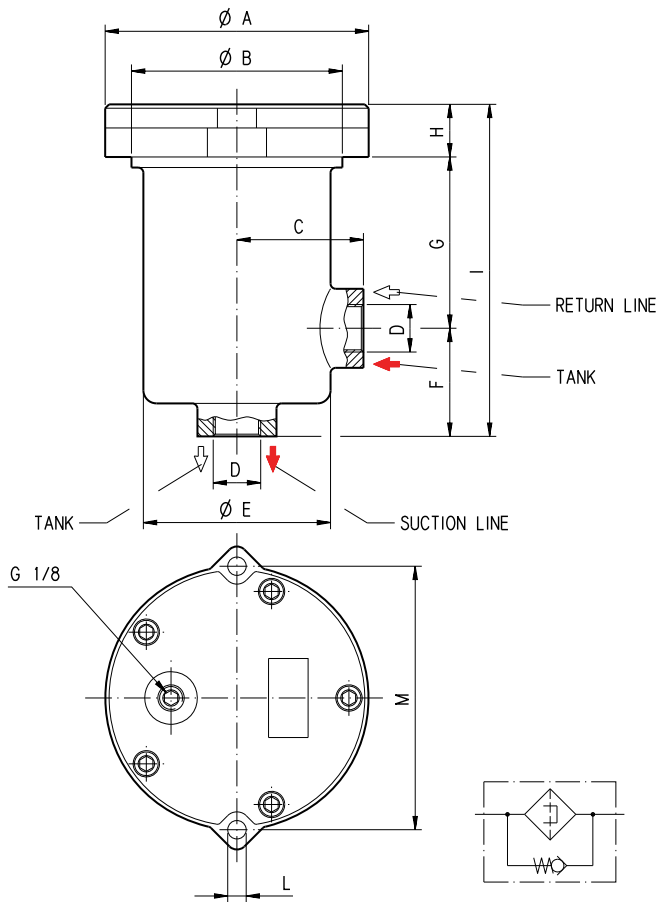
COMPLETE FILTER		
<b>MATERIALS</b>	Cover	Anodized aluminum
	Bowl	Aluminum
	Seals	Buna - Viton
<b>FLUID COMPATIBILITY CONFORMING TO ISO 2943</b>	With reference to ISO 6743/4	With fluid (HH-HL-HM-HR-HV-HG), and water emulsion (HFAE-HFAS) use filters with Buna seals. With water - glycol (HFC) ask for anodizing treatment.
		With synthetic fluid (HS-HFDR-HFDU-HFDS) use filters with Viton seals
<b>FLOW RANGE</b>	min.	20 [l/min]
	max.	180 [l/min]
<b>WORKING PRESSURE</b>		15 bar
<b>TESTING PRESSURE</b>		23 bar
<b>BURST PRESSURE</b>		30 bar
<b>OPERATING TEMPERATURE</b>	With Buna seals	- 30 + 90 [°C]
	With Viton seals	- 20 + 110 [°C]
FILTER ELEMENTS		
<b>MATERIALS</b>	End cap - Inner tube	Zinc plated steel. With water - glycol ask for tin treatment.
	Filter media	Micro-fibre glass
		Stainless steel
		Brass
		Cellulose
<b>REMOVAL RATING</b>		Conforming to ISO 16889
<b>ELEMENT COLLAPSE PRESSURE RATING</b>		Conforming to ISO 2941 1000 [kPa] 10 bar

Edition: 01/02.2002

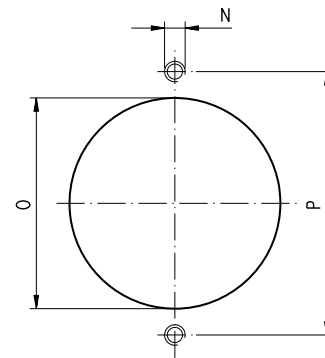
### IKRON S.r.l.

43044 Lemignano di Collecchio (PR) - Italy Via C. Prampolini, 2  
Telephone: (+ 39) 0521 304911 - Fax (+ 39) 0521 304900 - <http://www.casappa.com> - e-mail: [ikron@casappa.com](mailto:ikron@casappa.com)

**TECHNICAL DATA**



**TANK MOUNTING HOLE DIMENSIONS**



Filter type	N	O	P
	mm	mm	mm
<b>HF 595-10.060</b>	M 6	82	100
<b>HF 595-20.077</b>	M 8	108	125
<b>HF 595-20.122</b>	M 8	108	125

D109-D01/0302

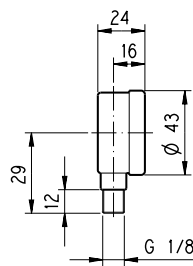
D109-D03/0202

D109-D04/0202

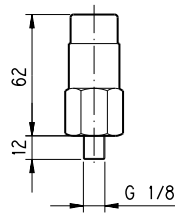
D109-D05/0202

D109-002 - 01/02.02

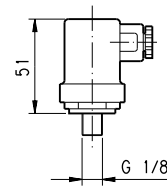
**MANO-VACUUM METER**



**VISUAL INDICATOR**

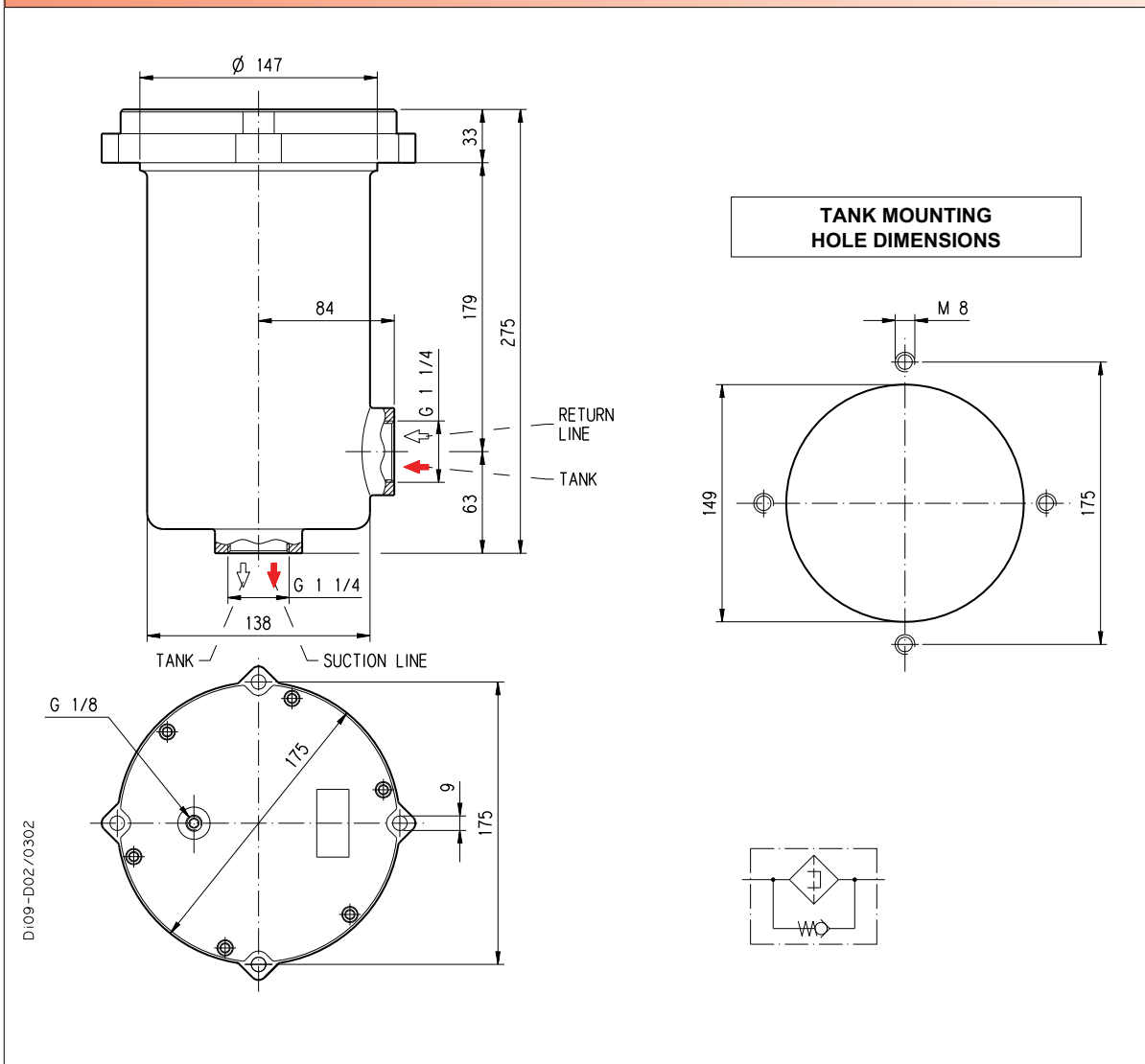


**ELECTRICAL INDICATOR**



Filter type	Ø A	Ø B	C	D	Ø E	F	G	H	I	L	M
	mm	mm	mm	GAS-BSPP	mm	mm	mm	mm	mm	mm	mm
<b>HF 595-10.060</b>	100	80	48	G 1/2	71	41	65	20	126	7	100
<b>HF 595-20.077</b>	125	106	59	G 3/4	91	52	72	27	151	9	125
<b>HF 595-20.122</b>				G 1			116				

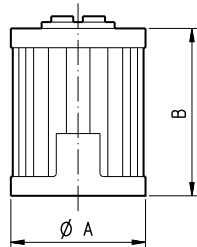
**TECHNICAL DATA - HF 595-30.195**



**FILTERING ELEMENTS - TECHNICAL DATA**

D:109-002 - 01/02.02

D:109-D06/0998



Element type	Ø A mm	B mm	Standard filtering surface cm <sup>2</sup>			
			FG	MI	MB	SP
<b>HE K07-10.060</b>	50	70	380	280	280	500
<b>HE K07-20.077</b>	70	85	820	450	450	890
<b>HE K07-20.122</b>	70	130	1260	700	700	1380
<b>HE K07-30.195</b>	99	210	3780	1870	1870	4650

300-070

## HOW TO ORDER A COMPLETE FILTER

1	2	3	4	5
HF 595-10.060	- AS	- FG010	- B00	- GD
6	7	8	9	
B	- Z	- DA	- G	

1	Filter type	CODE
	See table	HF595...
2	Filtering surface	CODE
	Standard	AS
3	Degree of filtration	CODE
	10 [µm] Micro-fibre glass	FG010
	25 [µm] Micro-fibre glass	FG025
	60 [µm] Stain. steel wire mesh	MI060
	125 [µm] Brass wire mesh	MB125
	10 [µm] Cellulose	SP010
	25 [µm] Cellulose	SP025
4	By-pass valve	CODE
	None	B00
	Setting 20 [kPa]; 0,2 [bar] (suction line)	B02
	Setting 170 [kPa]; 1,7 [bar] (return line)	B17

5	Ports IN/OUT	CODE
	Thread GAS (BSPP)	
	G 1/2	GD
	G 3/4	GE
	G 1	GF
	G 1 1/4	GG
6	Seals	CODE
	Buna	B
	Viton	V
7	Magnetic set	CODE
	None	Z
	With magnetic set	R

8	Dim. indicat. ports	CODE
	Thread GAS (BSPP)	
	G 1/8 with plug	DA
	G 1/4 with plug	DB
9	Indicators	CODE
	None	G
	Mano-vacuum meter rad. conn.	N
	Visual indicator - suction line	V
	Visual indicator - return line	P
	Electrical indicator - suction line	E
	Electrical indicator - return line	S

Standard  
 On request

## HOW TO ORDER A REPLACEMENT ELEMENT

1	2	3	4	5	6
HE K07-10.060	- AS	- FG010	- VM	- B02	- B

1	Cartuccia tipo	CODE
	See table page 3	HEK07...
2	Filtering surface	CODE
	Standard	AS

3	Degree of filtration	CODE
	10 [µm] Micro-fibre glass	FG010
	25 [µm] Micro-fibre glass	FG025
	60 [µm] Stain. steel wire mesh	MI060
	125 [µm] Brass wire mesh	MB125
	10 [µm] Cellulose	SP010
	25 [µm] Cellulose	SP025
4	By-pass valve	CODE
	With valve and spring	VM
	With valve - without spring	VV
	Without valve - without spring	OO

5	Setting valve	CODE
	Setting 20 [kPa]; 0,2 [bar] (suction line)	B02
	Setting 170 [kPa]; 1,7 [bar] (return line)	B17
6	Seals	CODE
	Buna	B
	Viton	V

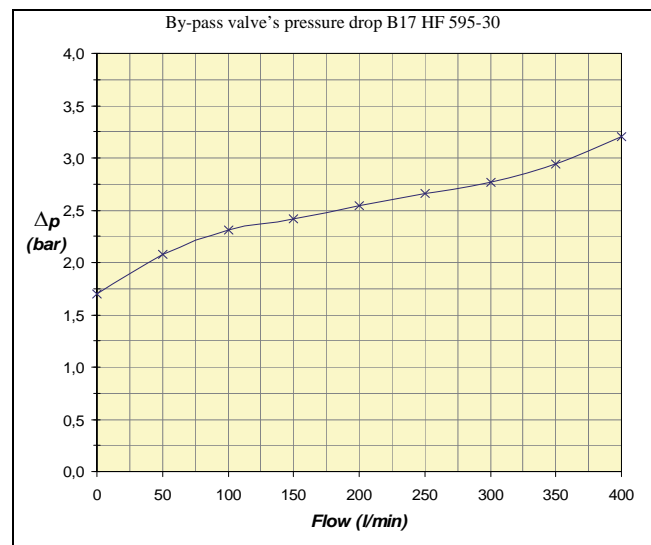
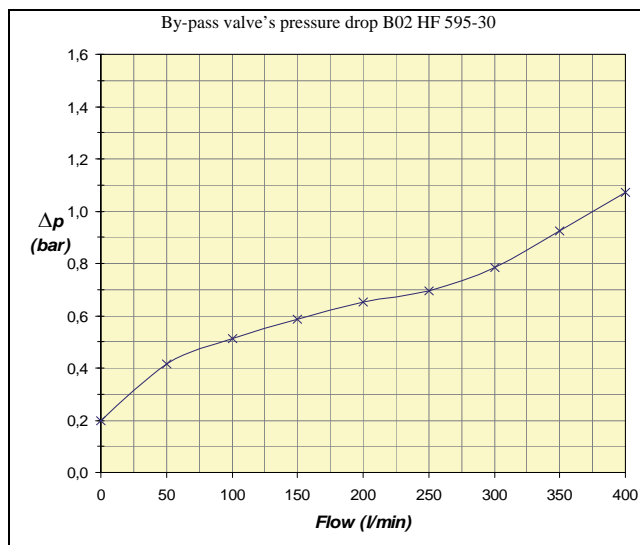
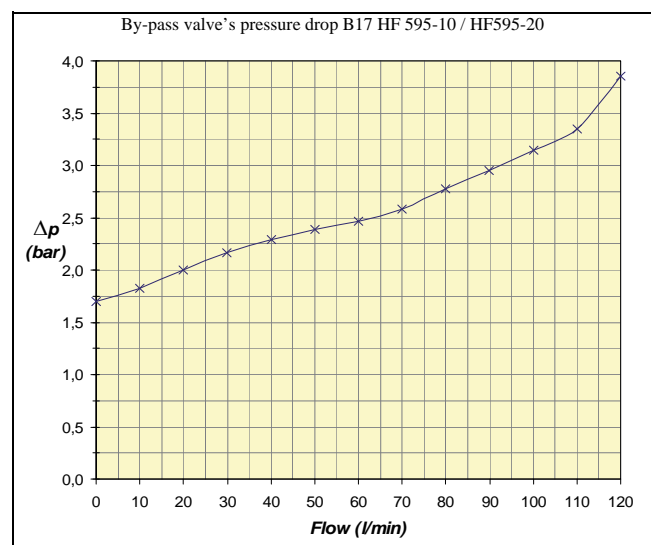
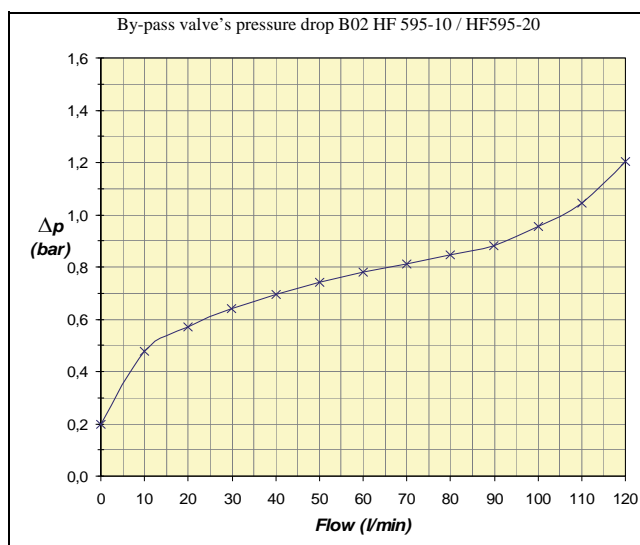
Standard  
 On request

D109-002 - 01/02.02

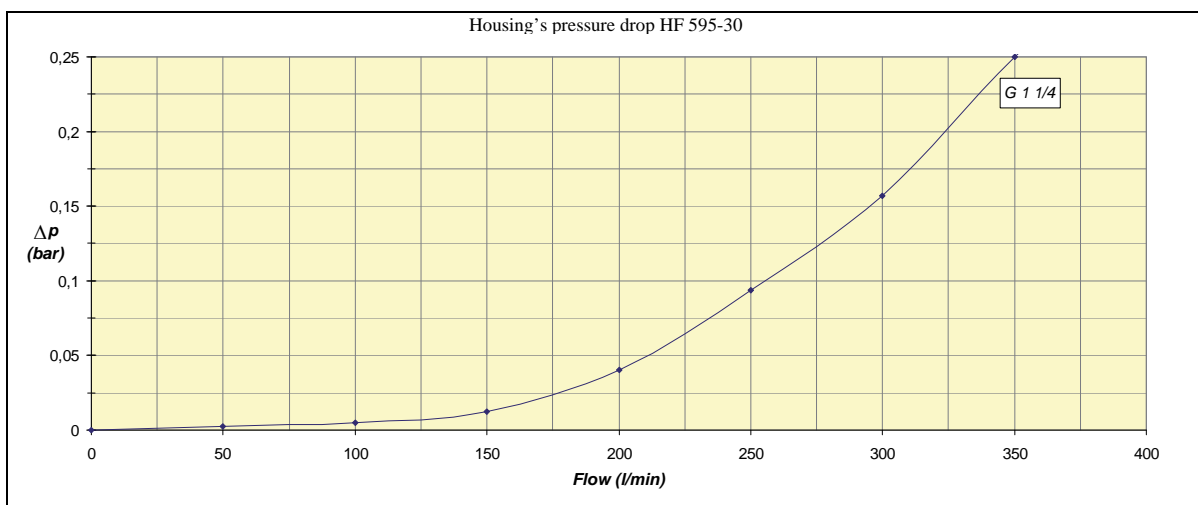
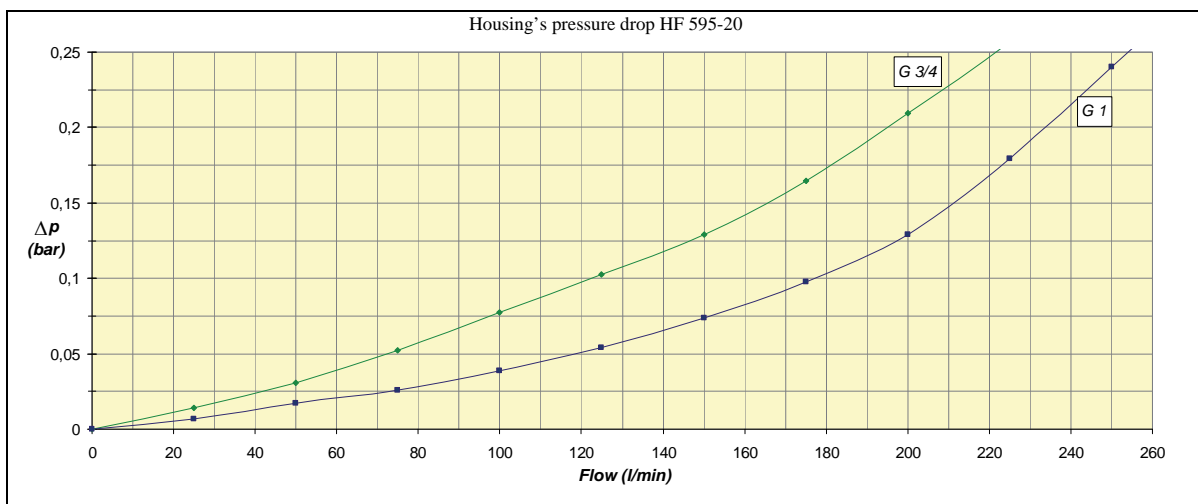
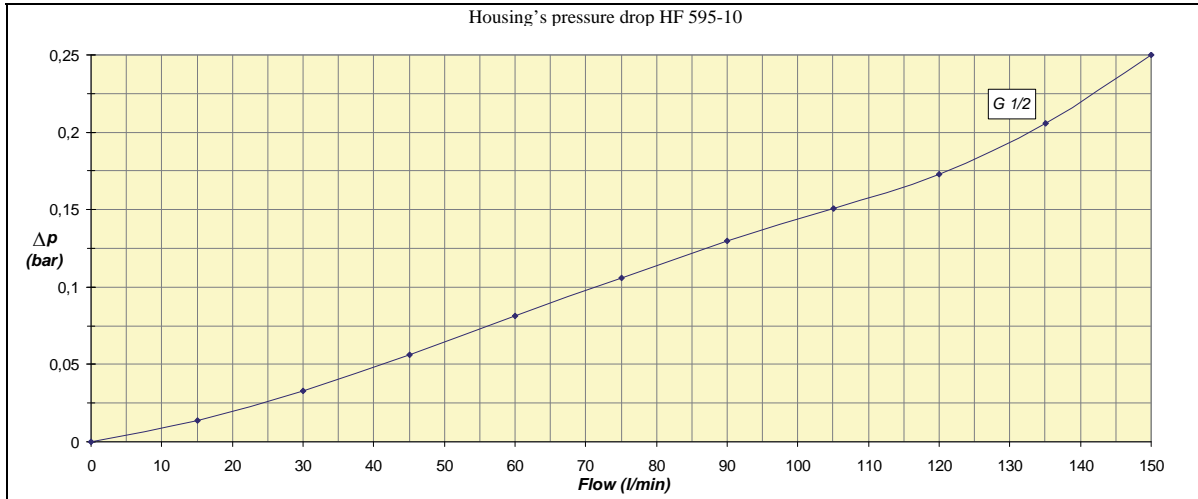
## PRESSURE DROP CURVES

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.

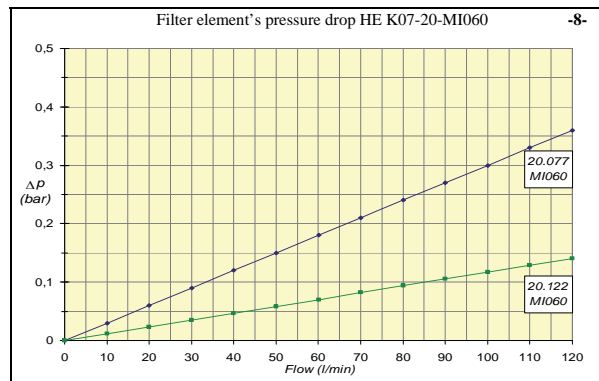
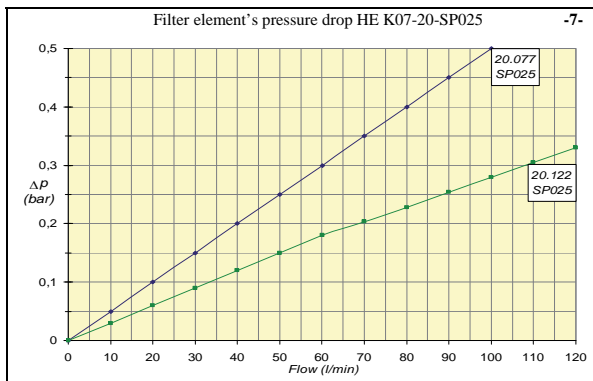
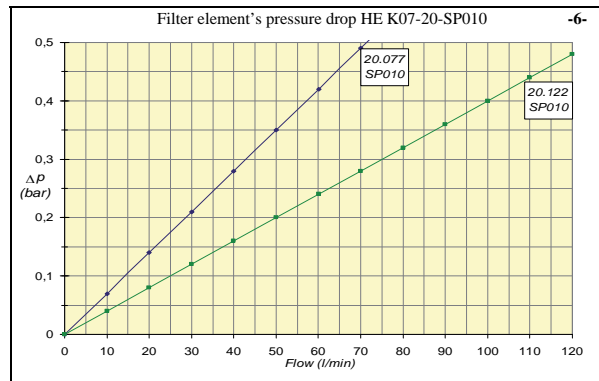
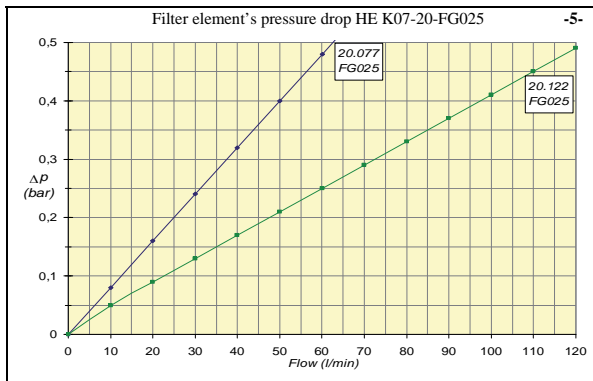
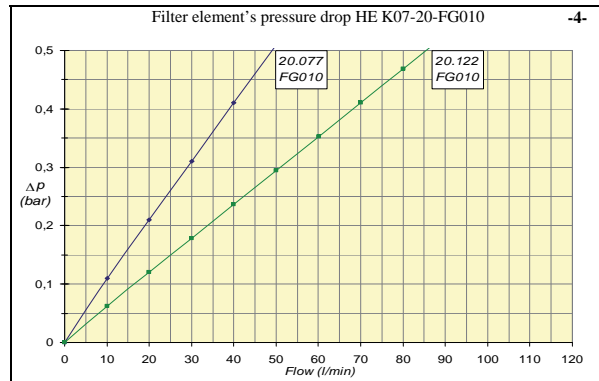
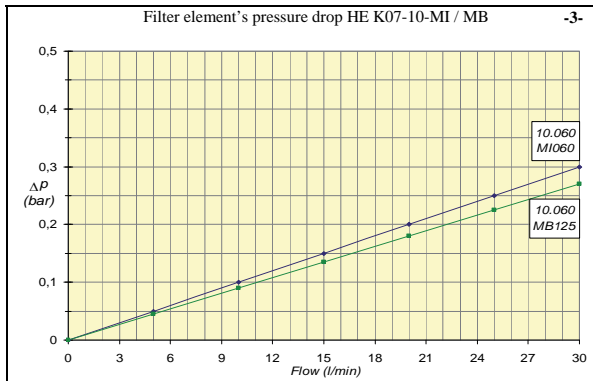
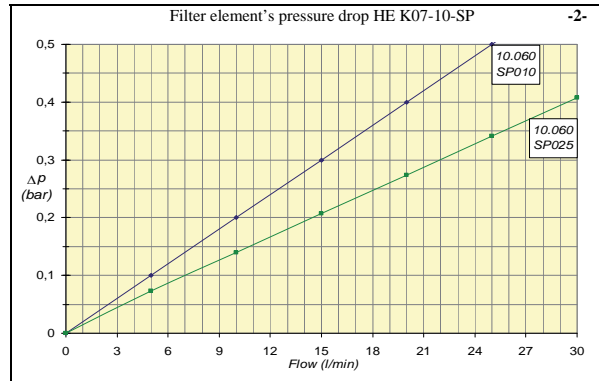
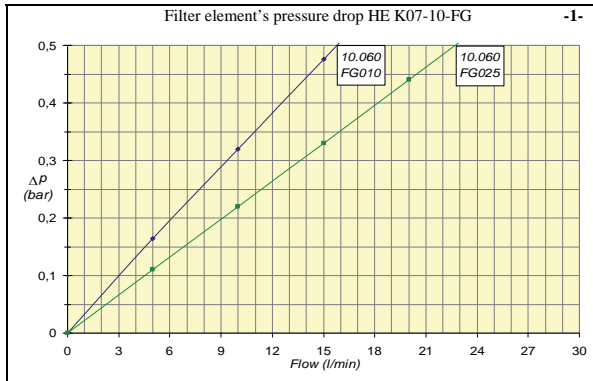
1) The **by-pass pressure drop** is directly proportional to fluid specific gravity and it's irrelevant to determine the total pressure drop.



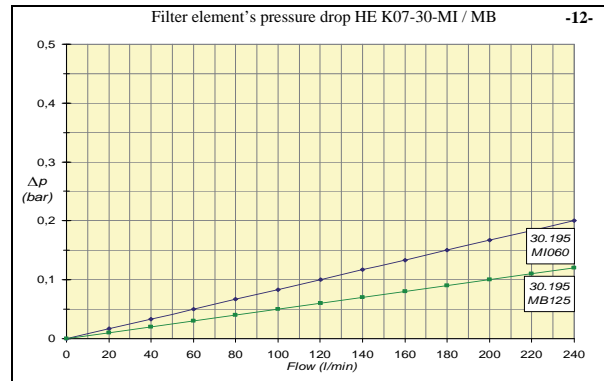
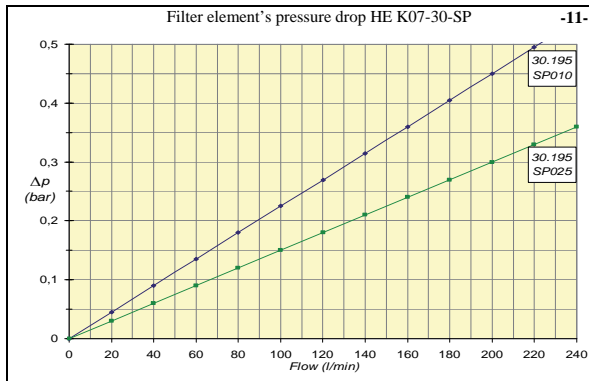
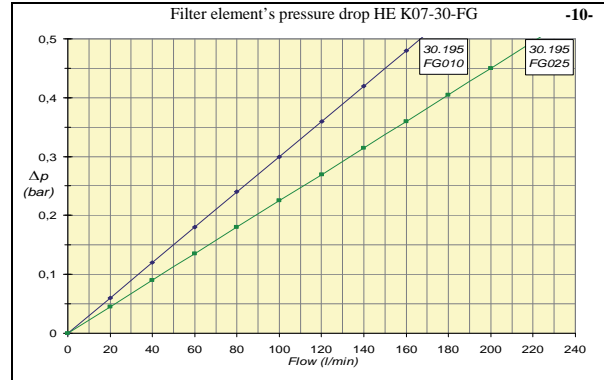
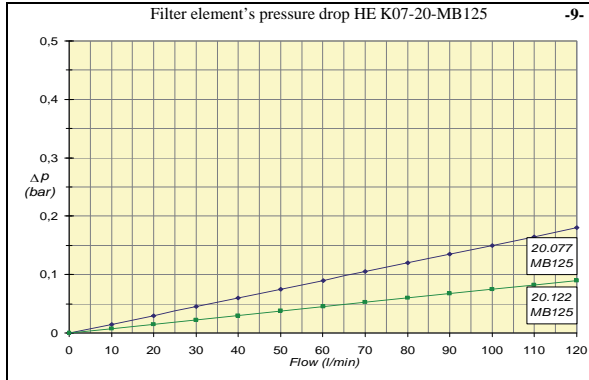
2) The **housing's pressure drop** is determined by the sum of the inlet and outlet port dimension.



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.

**FILTRI HF 595 / FILTERS HF 595**  
**LINEA DI ASPIRAZIONE / SUCTION LINE**

<b>Bocca Ingresso Inlet Port</b>	<b>10 MICRON ASS./ABS.</b>		<b>25 MICRON ASS./ABS.</b>		<b>10 MICRON NOM.</b>		<b>Peso Filtro Filter Weight (Kg)</b>
	<b>Portata Flow (lt/min)</b>	<b>Filtro Tipo Filter Type</b>	<b>Portata Flow (lt/min)</b>	<b>Filtro Tipo Filter Type</b>	<b>Portata Flow (lt/min)</b>	<b>Filtro Tipo Filter Type</b>	
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

<b>Bocca Ingresso Inlet Port</b>	<b>25 MICRON NOM.</b>		<b>60 MICRON</b>		<b>125 MICRON</b>		<b>Peso Filtro Filter Weight (Kg)</b>
	<b>Portata Flow (lt/min)</b>	<b>Filtro Tipo Filter Type</b>	<b>Portata Flow (lt/min)</b>	<b>Filtro Tipo Filter Type</b>	<b>Portata Flow (lt/min)</b>	<b>Filtro Tipo Filter Type</b>	
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**

<b>Bocca Ingresso Inlet Port</b>	<b>10 MICRON ASS./ABS.</b>		<b>25 MICRON ASS./ABS.</b>		<b>10 MICRON NOM.</b>		<b>Peso Filtro Filter Weight (Kg)</b>
	<b>Portata Flow (lt/min)</b>	<b>Filtro Tipo Filter Type</b>	<b>Portata Flow (lt/min)</b>	<b>Filtro Tipo Filter Type</b>	<b>Portata Flow (lt/min)</b>	<b>Filtro Tipo Filter Type</b>	
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

<b>Bocca Ingresso Inlet Port</b>	<b>25 MICRON NOM.</b>		<b>60 MICRON</b>		<b>125 MICRON</b>		<b>Peso Filtro Filter Weight (Kg)</b>
	<b>Portata Flow (lt/min)</b>	<b>Filtro Tipo Filter Type</b>	<b>Portata Flow (lt/min)</b>	<b>Filtro Tipo Filter Type</b>	<b>Portata Flow (lt/min)</b>	<b>Filtro Tipo Filter Type</b>	
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