



# AVC filters

## Brochure



Solid ideas made in steel

## AVC filters



The automatic self-cleaning filter with high efficiency due to the continuous filtration process and the low cleaning water consumption.

- Multi-layers screens with several filtration degrees
- No interruption flow during the cleaning cycle
- Minimum cleaning water consumption
- Very simple and reliable cleaning mechanism with suction scanner

Alfa Water AVC filters are automatic filters with suction scanning self-cleaning mechanism, driven by an electric motor.

Thanks to flexible mechanism of scanner, ensuring adherence to the screen, this filter has high cleaning efficiency.

AVC filters can support flow rates of up to 1400 m<sup>3</sup>/h (6164 US gpm) with seven sizes of screens up to 19800 cm<sup>2</sup>, with several multi-layers screens covering the range of filtration degree between 2000 and 10 µm and with different range of inlet/outlet flanged connections between 2" and 16".

Available 2 controllers:

- AWC Basic controller (differential pressure and/or preset time and/or manual start, IP54, 4DI, 4AI/DI, 4DO, LCD Display 1.5")
- AWC Full controller (as AWC Basic but it can be integrated into existing systems, no need monitoring, IP54, 4DI, 4AI/DI, 4PowerDO + 3DO, LCD Display 3.5")

*Filtro automatico autopulente ad alta efficienza che garantisce la continuità di flusso e ridotti consumi d'acqua in fase di pulizia.*

- *Reti multistrato con ampio range di filtrazione*
- *Continuità di flusso durante il ciclo di pulizia*
- *Minimo consumo d'acqua di pulizia*
- *Meccanismo di pulizia molto semplice e affidabile con "suction scanner"*

*I filtri Alfa Water AVC sono filtri automatici dotati di meccanismo autopulente "suction scanning", messo in rotazione da un motore elettrico.*

*Grazie al meccanismo di scanner flessibile, che assicura aderenza alla cartuccia filtrante, questo filtro ha un'elevata efficienza di pulizia.*

*I filtri AVC possono trattare una portata fino a 1400 m<sup>3</sup>/h (6164 US gpm) con sette taglie di cartucce con area filtrante fino a 19800 cm<sup>2</sup>, con molteplici cartucce multistrato con range di filtrazione compreso tra 2000 e 10 µm e con connessioni flangiate in ingresso e in uscita comprese tra 2" e 16".*

Disponibili 2 controller:

- AWC Basic controller (differenza di pressione e/o tempi pre-impostabili e/o avvio manuale, IP54, 4DI, 4AI/DI, 4DO, Display LCD 1.5")
- AWC Full controller (stesse caratteristiche di AWC Basic con possibilità di integrazione con sistemi esistenti, nessuna necessità di monitoraggio, IP54, 4DI, 4AI/DI, 4PowerDO + 3DO, Display LCD 3.5")



### TECHNICAL DATA - DATI TECNICI

Filter size - Taglia filtro	16	23	35	55
-----------------------------	----	----	----	----

#### General data - Dati generali

Inlet/outlet diameter Diametro connessioni IN/OUT	2" / 3" / 4" flanged EN 1092-1	3" / 4" / 6" flanged EN 1092-1	4" / 6" / 8" flanged EN 1092-1	4" / 6" / 8" flanged EN 1092-1
Max flow rate * Portata massima	100 m <sup>3</sup> /h 440 US gpm	180 m <sup>3</sup> /h 793 US gpm	270 m <sup>3</sup> /h 1189 US gpm	390 m <sup>3</sup> /h 1717 US gpm
Min working pressure Pressione minima	2.5 bar 36.25 psi			
Max working pressure Pressione massima	10 bar 145 psi			
Max working temperature Temperatura massima	60 °C 140 °F			

\* Portata riferita a filtri con rete filtrante da 100 µm, acqua con NTU<1 e temperatura di 20°C.

\* Flow rates are referred to filtrating mesh 100 µm, water with NTU < 1 - temperature 20 °C.

#### Screen elements - Elementi filtranti

Screen Area Area filtrante	1600 cm <sup>2</sup> 248 in <sup>2</sup>	2300 cm <sup>2</sup> 357in <sup>2</sup>	3500 cm <sup>2</sup> 543 in <sup>2</sup>	5500 cm <sup>2</sup> 853 in <sup>2</sup>
Filtration degrees Gradi di filtrazione	2000 / 1000 / 800 / 500 / 400 / 200 / 100 / 50 / 25 / 10 µm			
Screen types Tipologia elementi filtranti	Multi-layers screens: Stainless Steel AISI 316 or SS AISI316 + PETP (Polyester) Rete multistrato: Acciaio inox AISI 316 oppure Inox AISI316 + Poliestere PETP			

#### Cleaning Cycle - Ciclo di pulizia

Cleaning device Sistema di pulizia	Flexible Suction PADS - PVC material Pattini aspiranti flessibili - PVC			
Cleaning cycle time Durata ciclo di pulizia	16 - 20 sec			
Min cleaning flow rate (at 2.5 bar) Portata minima di pulizia	6 m <sup>3</sup> /h 26 US gpm	9 m <sup>3</sup> /h 40 US gpm	9 m <sup>3</sup> /h 40 US gpm	15 m <sup>3</sup> /h 66 US gpm
Drained water for cleaning (16 sec) Acqua di pulizia scaricata	30 L	40 L	40 L	70 L
Drain valve Valvola di scarico	1"½ F threaded			
Cleaning criteria Avvio ciclo di pulizia	Differential pressure (0.6 bar), time intervals and manual operation Pressione differenziale (0.6 bar), intervalli di tempo, manualmente			

#### Electrical data - Dati elettrici

Supply voltage Tensione di alimentazione	230 Vac 1-phase 50/60 Hz Optional: 400 Vac 3-phases 50/60 Hz
Control voltage Voltaggio di comando	24 Vdc
Electric motor power Potenza elettrica motore	110 W
Electric motor consumption Consumo motore elettrico	2,8 A

Filter size - Taglia filtro	81	110	198
-----------------------------	----	-----	-----

### General data - Dati generali

Inlet/outlet diameter Diametro connessioni IN/OUT	6" / 8" / 10" flanged EN 1092-1	8" / 10" / 12" flanged EN 1092-1	10" / 12" / 16" flanged EN 1092-1
Max flow rate Portata massima	600 m <sup>3</sup> /h 2642 US gpm	800 m <sup>3</sup> /h 3522 US gpm	1400 m <sup>3</sup> /h 6164 US gpm
Min working pressure Pressione minima	2.5 bar 36.25 psi		
Max working pressure Pressione massima	10 bar 145 psi		
Max working temperature Temperatura massima	60 °C 140 °F		

\* Flow rates are referred to filtrating screen 100 µm, water with NTU<1 and temperature of 20°C  
Portata riferita a filtri con rete filtrante da 100 µm, acqua con NTU<1 e temperatura di 20°C

### Screen elements - Elementi filtranti

Screen Area Area filtrante	8100 cm <sup>2</sup> 1256 in <sup>2</sup>	11000 cm <sup>2</sup> 1705 in <sup>2</sup>	19800 cm <sup>2</sup> 3069 in <sup>2</sup>
Filtration degrees Gradi di filtrazione	2000 / 1000 / 800 / 500 / 400 / 200 / 100 / 50 / 25 / 10 µm		
Screen types Tipologia elementi filtranti	Multi-layers screens: Stainless Steel AISI 316 or SS AISI316 + PETP (Polyester) Rete multistrato: Acciaio inox AISI 316 oppure Inox AISI316 + Poliestere PETP		

### Cleaning Cycle - Ciclo di pulizia

Cleaning device Sistema di pulizia	Flexible Suction PADS - PVC material Pattini aspiranti flessibili - PVC		
Cleaning cycle time Durata ciclo di pulizia	16 - 20 sec		
Min cleaning flow rate (at 2.5 bar) Portata minima di pulizia	20 m <sup>3</sup> /h	30 m <sup>3</sup> /h	40 m <sup>3</sup> /h
Drained water for cleaning (16 sec) Acqua di pulizia scaricata	70 liters	100 liters	130 liters
Drain valve Valvola di scarico	2" flanged EN 1092-1	3" flanged EN 1092-1	3" flanged EN 1092-1
Cleaning criteria Avvio ciclo di pulizia	Differential pressure (0.6 bar), time intervals and manual operation Pressione differenziale (0.6 bar), intervalli di tempo, manualmente		

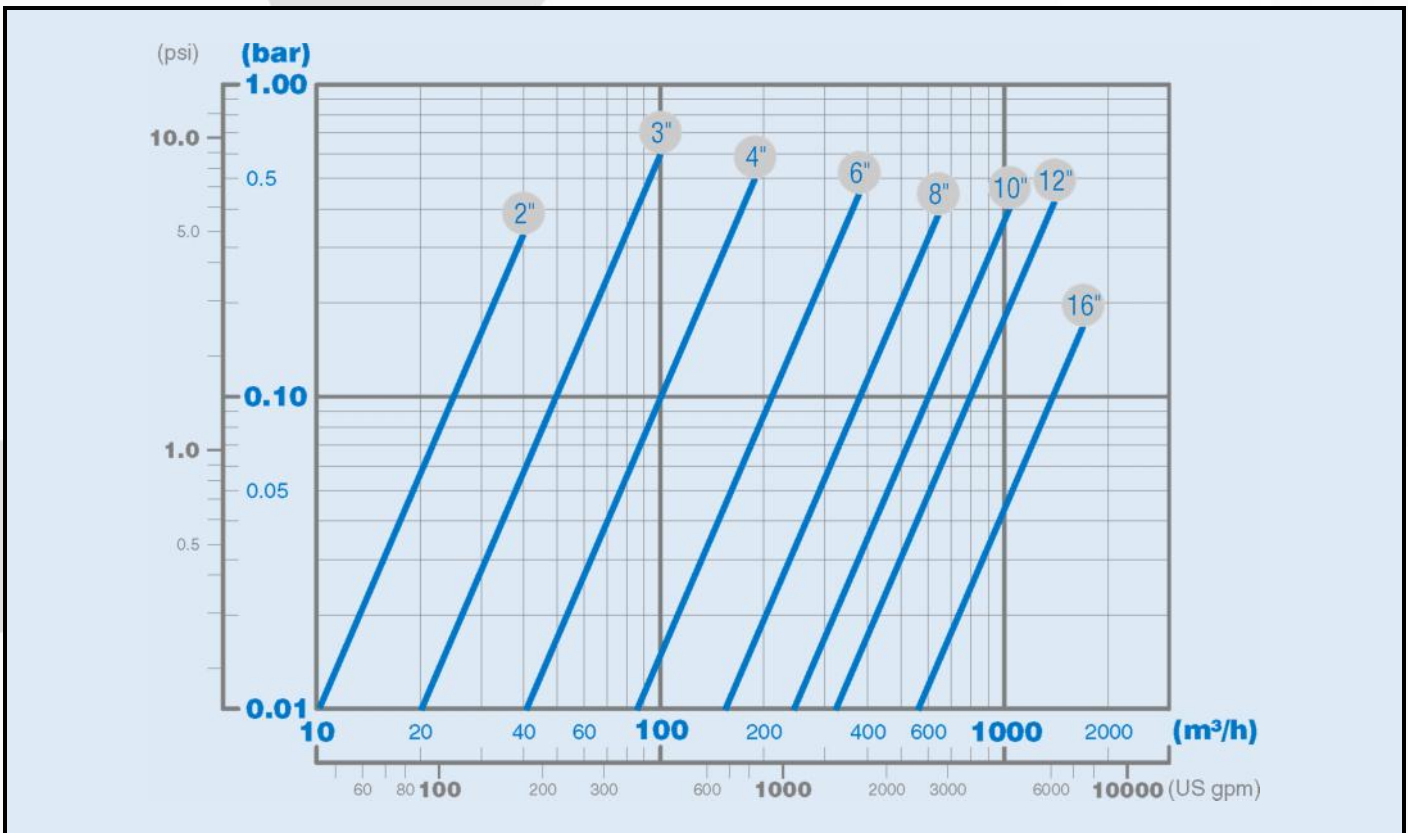
### Electrical data - Dati elettrici

Supply voltage Tensione di alimentazione	230 Vac 1-phase 50/60 Hz Optional: 400 Vac 3-phases 50/60 Hz		
Control voltage Vtaggio di comando	24 Vdc		
Electric motor power Potenza elettrica motore	180 W	220 W	360 W

### Materials - Materiali

Filter Body Corpo filtro	AISI 304 / AISI 316 / DUPLEX / 254 SMO
Cover Coperchio	AISI 304 / AISI 316 / DUPLEX / 254 SMO
Screen support Supporto rete	AISI 304 / AISI 316 / DUPLEX / TITANIUM
Gasket Guarnizioni	EPDM - NBR

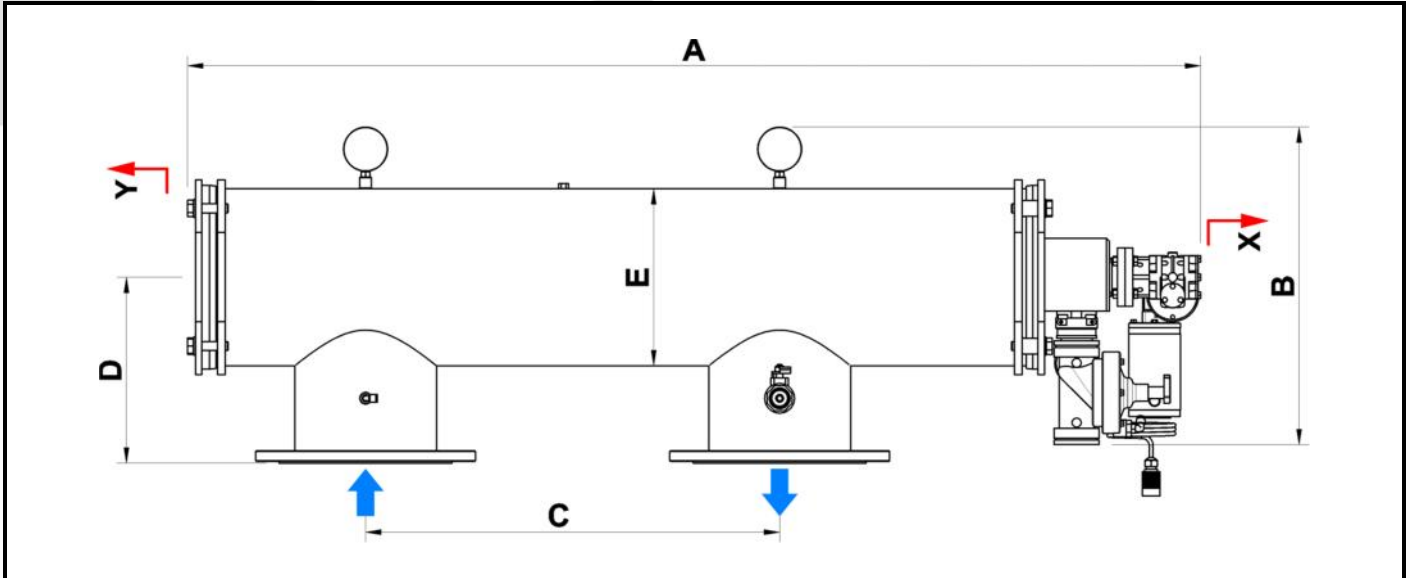
### Head loss - Perdite di carico\*



\* Head loss are referred to filtrating screen 100 µm, water with NTU<1 and temperature of 20°C  
 Perdite di carico riferita a filtri con rete filtrante da 100 µm, acqua con NTU<1 e temperatura di 20°C

### DIMENSIONS - DIMENSIONI

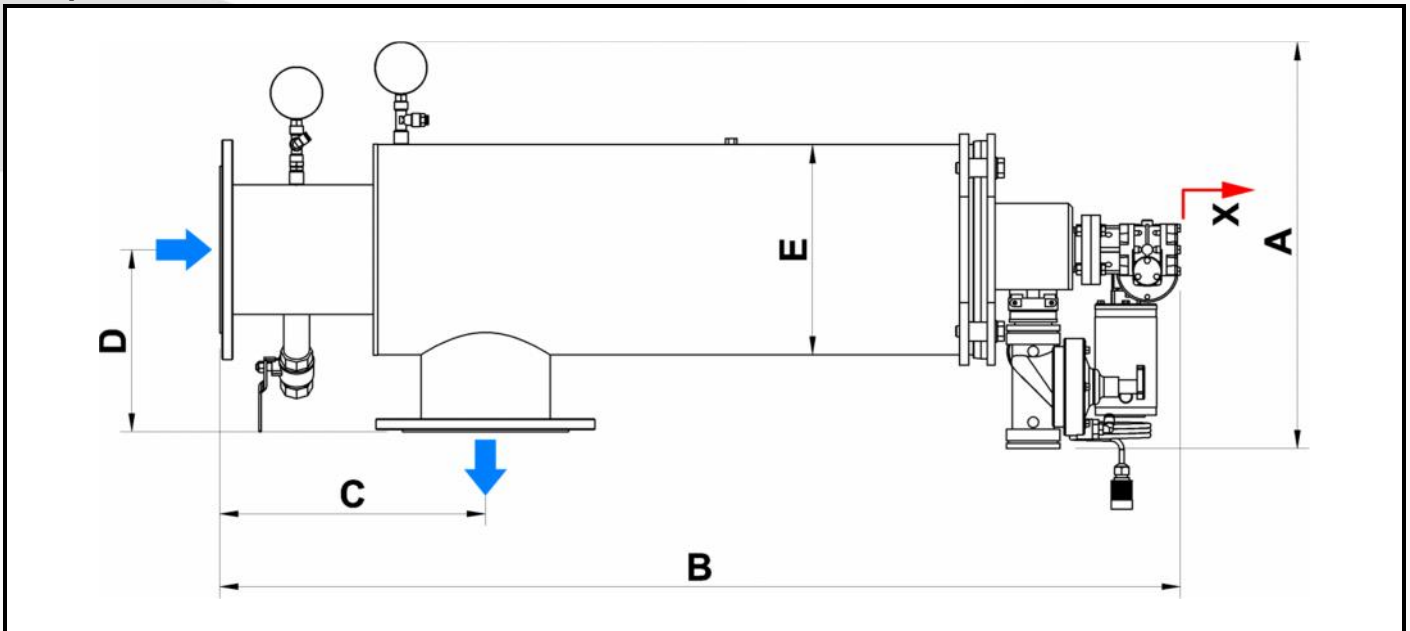
Shape H - Forma H



Filter Model <i>Modello filtro</i>	In/Out Conn.	Drain Conn.	Filter Area [cm <sup>2</sup> ]	Max Flow rate [m <sup>3</sup> /h]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	X [mm]	Y [mm]	Weight [Kg]
<b>AVC 16H2</b>	2" flg	1"½ thrdF	1600	30	1145	460	450	215	206	400	600	45
<b>AVC 16H3</b>	3" flg	1"½ thrdF	1600	60	1145	460	450	215	206	400	600	46
<b>AVC 16H4</b>	4" flg	1"½ thrdF	1600	100	1145	460	450	215	206	400	600	47
<b>AVC 23H3</b>	3" flg	1"½ thrdF	2300	60	1145	460	450	215	206	600	400	47
<b>AVC 23H4</b>	4" flg	1"½ thrdF	2300	100	1145	460	450	215	206	600	400	48
<b>AVC 23H6</b>	6" flg	1"½ thrdF	2300	180	1145	460	450	215	206	600	400	52
<b>AVC 35H4</b>	4" flg	1"½ thrdF	3500	100	1605	520	640	285	273	600	900	72
<b>AVC 35H6</b>	6" flg	1"½ thrdF	3500	220	1605	520	640	285	273	600	900	76
<b>AVC 35H8</b>	8" flg	1"½ thrdF	3500	270	1605	520	640	285	273	600	900	82
<b>AVC 55H4</b>	4" flg	1"½ thrdF	5500	100	1605	520	640	285	273	900	600	74
<b>AVC 55H6</b>	6" flg	1"½ thrdF	5500	220	1605	520	640	285	273	900	600	78
<b>AVC 55H8</b>	8" flg	1"½ thrdF	5500	390	1605	520	640	285	273	900	600	87

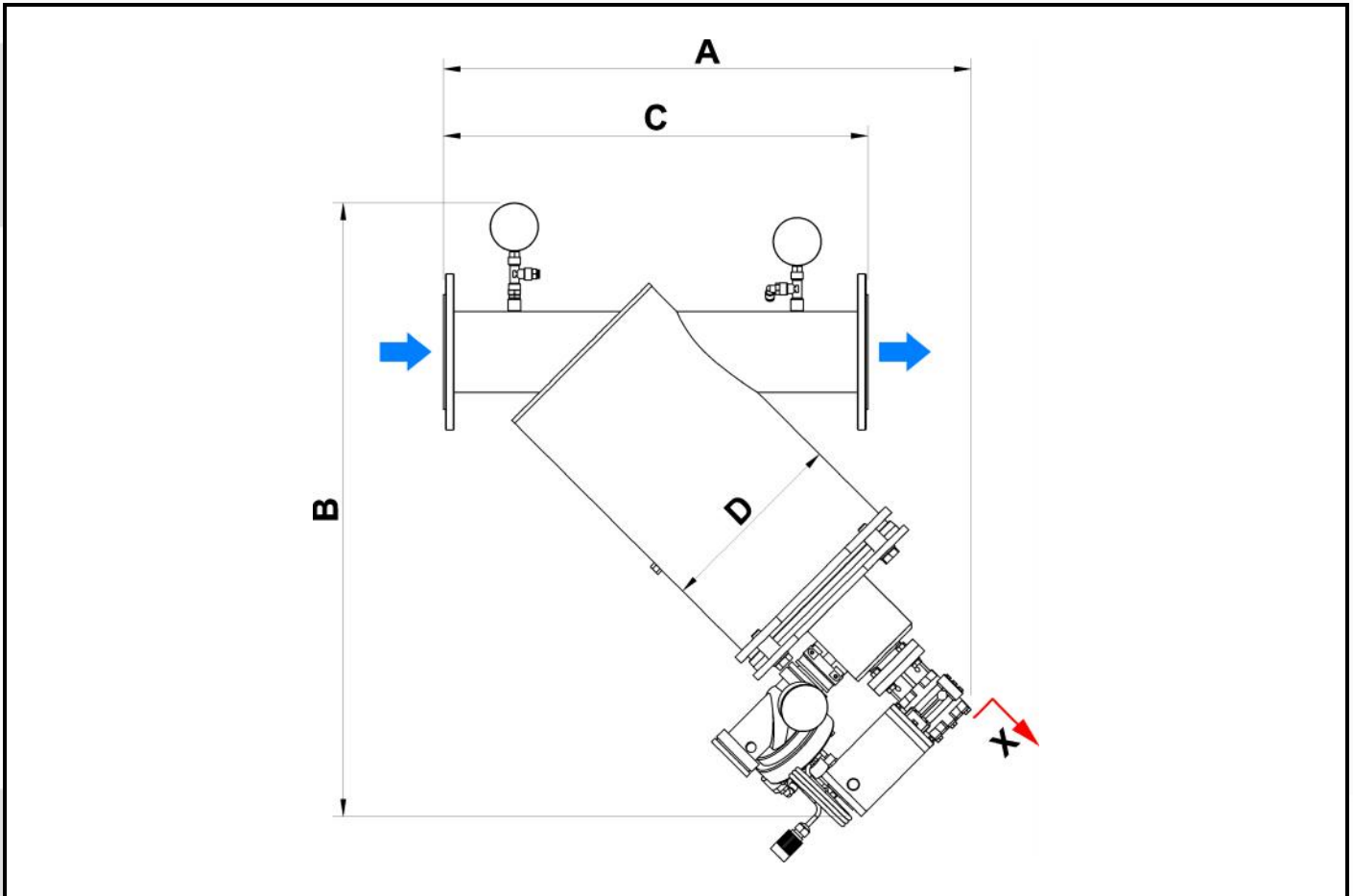


### Shape L - Forma L



Filter Model <i>Modello filtro</i>	In/Out Conn.	Drain Conn.	Filter Area [cm <sup>2</sup> ]	Max Flow rate [m <sup>3</sup> /h]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	X [mm]	Weight [Kg]
<b>AVC 16L2</b>	2" flg	1"½ thrdF	1600	30	500	760	295	203	206	400	30
<b>AVC 16L3</b>	3" flg	1"½ thrdF	1600	60	500	760	295	203	206	400	31
<b>AVC 16L4</b>	4" flg	1"½ thrdF	1600	100	500	760	295	203	206	400	32
<b>AVC 23L3</b>	3" flg	1"½ thrdF	2300	60	500	930	295	203	206	600	32
<b>AVC 23L4</b>	4" flg	1"½ thrdF	2300	100	500	930	295	203	206	600	35
<b>AVC 23L6</b>	6" flg	1"½ thrdF	2300	180	500	930	295	203	206	600	38
<b>AVC 35L4</b>	4" flg	1"½ thrdF	3500	100	540	980	345	236	273	600	44
<b>AVC 35L6</b>	6" flg	1"½ thrdF	3500	220	540	980	345	236	273	600	47
<b>AVC 35L8</b>	8" flg	1"½ thrdF	3500	270	540	980	345	236	273	600	52
<b>AVC 55L4</b>	4" flg	1"½ thrdF	5500	100	540	1270	345	236	273	900	52
<b>AVC 55L6</b>	6" flg	1"½ thrdF	5500	220	540	1270	345	236	273	900	57
<b>AVC 55L8</b>	8" flg	1"½ thrdF	5500	390	540	1270	345	236	273	900	62

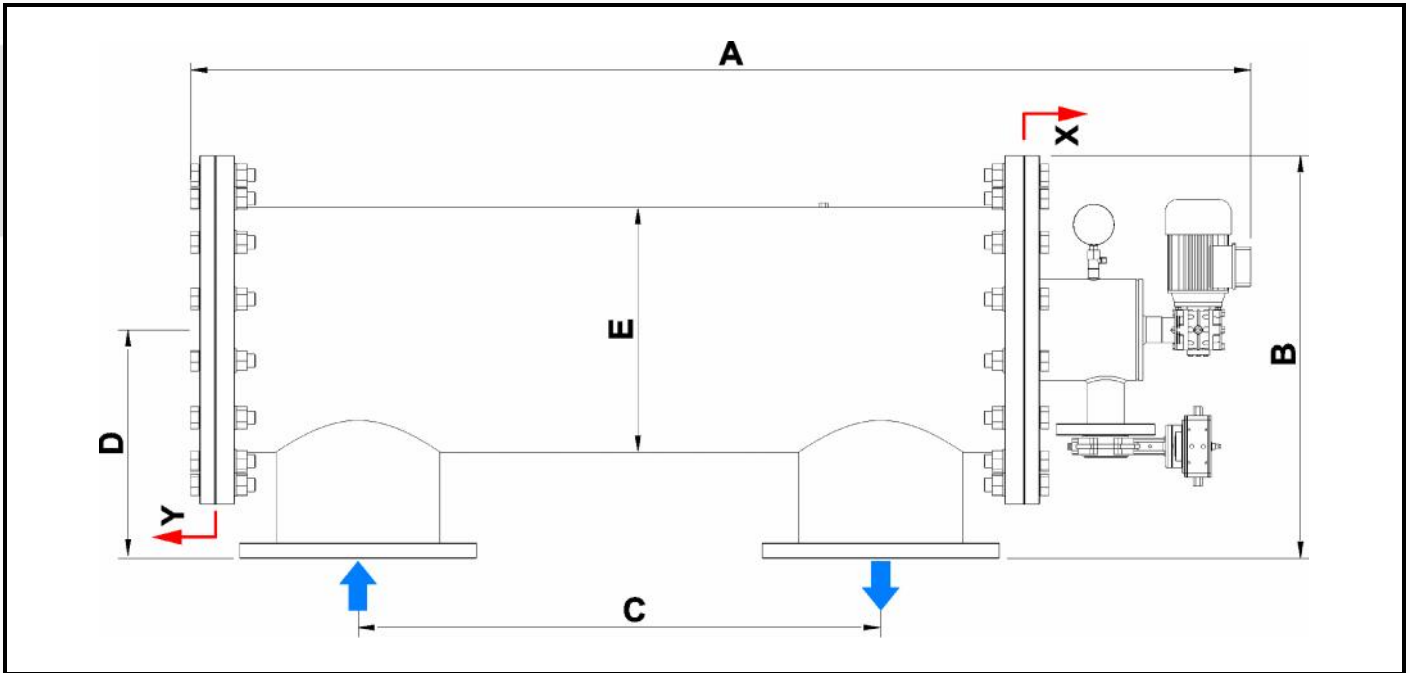
### Shape Y - Forma Y



Filter Model <i>Modello filtro</i>	In/Out Conn.	Drain Conn.	Filter Area [cm <sup>2</sup> ]	Max Flow rate [m <sup>3</sup> /h]	A [mm]	B [mm]	C [mm]	D [mm]	X [mm]	Weight [Kg]
<b>AVC 16Y2</b>	2" flg	1"½ thrdF	1600	30	585	745	395	206	400	30
<b>AVC 16Y3</b>	3" flg	1"½ thrdF	1600	60	605	765	450	206	400	31
<b>AVC 16Y4</b>	4" flg	1"½ thrdF	1600	100	645	775	550	206	400	32
<b>AVC 23Y3</b>	3" flg	1"½ thrdF	2300	60	725	875	450	206	600	32
<b>AVC 23Y4</b>	4" flg	1"½ thrdF	2300	100	765	885	550	206	600	35
<b>AVC 35Y4</b>	4" flg	1"½ thrdF	3500	100	775	895	600	273	600	44
<b>AVC 35Y6</b>	6" flg	1"½ thrdF	3500	220	845	925	745	273	600	47
<b>AVC 55Y4</b>	4" flg	1"½ thrdF	5500	100	975	1095	600	273	900	52
<b>AVC 55Y6</b>	6" flg	1"½ thrdF	5500	220	1045	1125	745	273	900	57

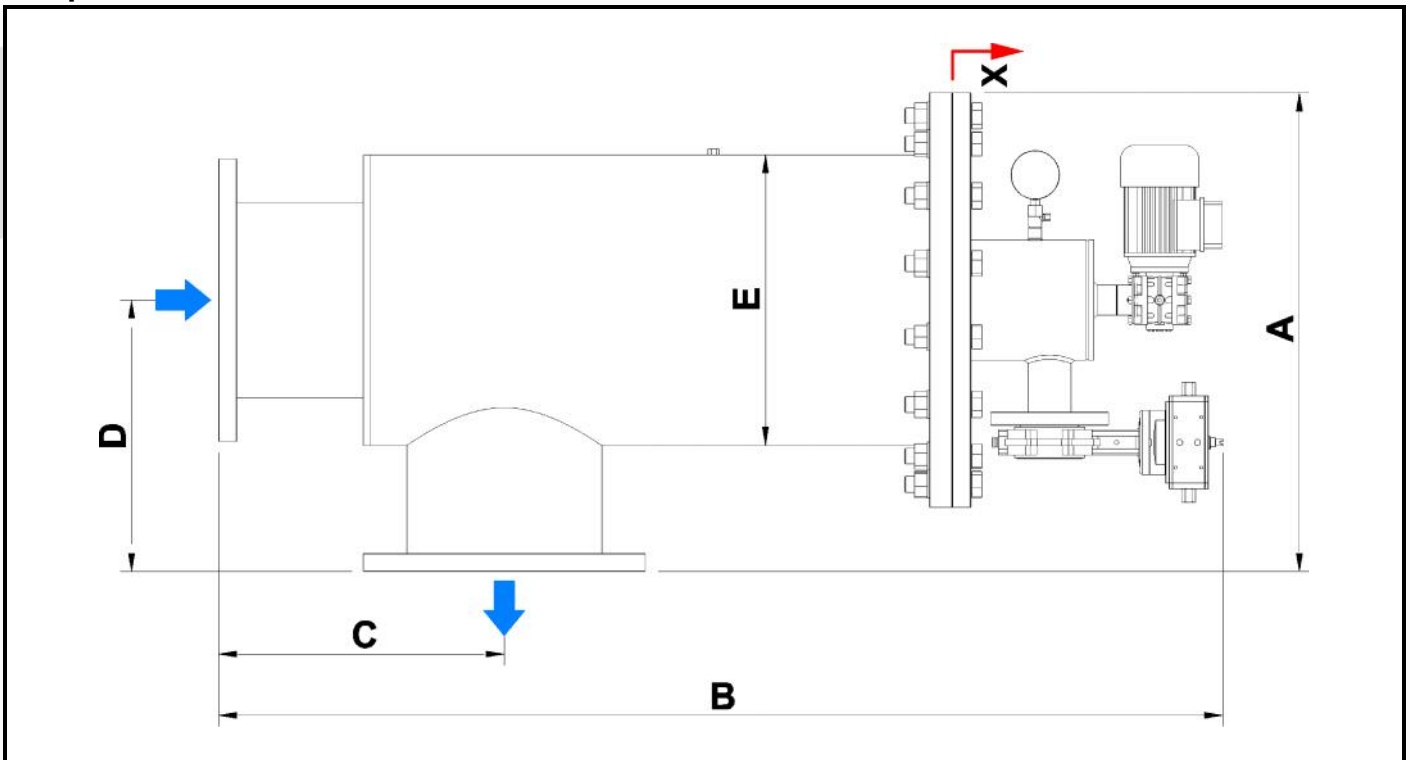


### Shape H - Forma H



Filter Model <i>Modello filtro</i>	In/Out Conn.	Drain Conn.	Filter Area [cm <sup>2</sup> ]	Max Flow rate [m <sup>3</sup> /h]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	X [mm]	Y [mm]	Weight [Kg]
<b>AVC 81H6</b>	6" flg	2" flg	8100	220	1750	650	640	350	406	900	600	265
<b>AVC 81H8</b>	8" flg	2" flg	8100	390	1750	650	640	350	406	900	600	275
<b>AVC 81H10</b>	10" flg	2" flg	8100	600	1750	650	640	350	406	900	600	285
<b>AVC 110H8</b>	8" flg	3" flg	11000	390	2100	680	640	380	457	1200	600	340
<b>AVC 110H10</b>	10" flg	3" flg	11000	600	2100	680	640	380	457	1200	600	350
<b>AVC 110H12</b>	12" flg	3" flg	11000	800	2100	680	640	380	457	1200	600	355
<b>AVC 198H10</b>	10" flg	3" flg	19800	600	2450	850	640	460	610	1500	600	545
<b>AVC 198H12</b>	12" flg	3" flg	19800	800	2450	850	640	460	610	1500	600	550
<b>AVC 198H16</b>	16" flg	3" flg	19800	1400	2450	850	640	460	610	1500	600	585

### Shape L - Forma L



Filter Model <i>Modello filtro</i>	In/Out Conn.	Drain Conn.	Filter Area [cm <sup>2</sup> ]	Max Flow rate [m <sup>3</sup> /h]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	X [mm]	Weight [Kg]
<b>AVC 81L6</b>	6" flg	2" flg	8100	220	640	1400	400	350	406	900	170
<b>AVC 81L8</b>	8" flg	2" flg	8100	390	640	1400	400	350	406	900	180
<b>AVC 81L10</b>	10" flg	2" flg	8100	600	640	1400	400	350	406	900	190
<b>AVC 110L8</b>	8" flg	3" flg	11000	390	680	1700	500	380	457	1200	225
<b>AVC 110L10</b>	10" flg	3" flg	11000	600	680	1700	500	380	457	1200	235
<b>AVC 110L12</b>	12" flg	3" flg	11000	800	680	1700	500	380	457	1200	240
<b>AVC 198L10</b>	10" flg	3" flg	19800	600	850	2000	600	460	610	1500	340
<b>AVC 198L12</b>	12" flg	3" flg	19800	800	850	2000	600	460	610	1500	345
<b>AVC 198L16</b>	16" flg	3" flg	19800	1400	850	2000	600	460	610	1500	380



Legal Headquarter:  
Via Visome, 149  
32100 Belluno - ITALY

Operational Headquarter:  
Via Cavalieri di Vittorio Veneto, 25  
32036 Sedico (BL) - ITALY

Tel. +39 0437 573039  
[info@alfawater.it](mailto:info@alfawater.it)  
[www.alfawater.it](http://www.alfawater.it)