



AQUA AURA
Leading Technologies

AVC Filters



AVC Filters

Description:

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 reliable and efficient 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 m³/h (6164 US gpm) with seven sizes of screens up to 19800 cm², with several multi-layers screens covering the range of filtration degree between 2000 and 25 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")

Section:



TECHNICAL DATA

Filter size - Taglia filtro	16	23	35	55
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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 ³ /h 440 US gpm	180 m ³ /h 793 US gpm	270 m ³ /h 1189 US gpm	390 m ³ /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 filtering mesh 100 µm, water with NTU < 1 - temperature 20 °C

Screen elements - Elementi filtranti

Screen Area Area filtrante	1600 cm ² 248 in ²	2300 cm ² 357 in ²	3500 cm ² 543 in ²	5500 cm ² 853 in ²
Filtration degrees Gradi di filtrazione	1000 / 800 / 500 / 400 / 200 / 100 / 50 / 25 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 flessibili in 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 ³ /h 26 US gpm	9 m ³ /h 40 US gpm	9 m ³ /h 40 US gpm	15 m ³ /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			

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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 - <i>Taglia filtro</i>	81	110	198
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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 ³ /h 2642 US gpm	800 m ³ /h 3522 US gpm	1400 m ³ /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		

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

*Flow rates are referred to filtering mesh 100 µm - water with NTU < 1 - temperature 20 °C

Screen elements - *Elementi filtranti*

Screen Area Area filtrante	8100 cm ² 1256 in ²	11000 cm ² 1705 in ²	19800 cm ² 3069 in ²
Filtration degrees Gradi di filtrazione	2000 / 1000 / 800 / 500 / 400 / 200 / 100 / 50 / 25 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 flessibili in PVC
Cleaning cycle time Durata ciclo di pulizia	16 - 20 sec

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Min cleaning flow rate (at 2.5 bar) Portata minima di pulizia	20 m ³ /h	30 m ³ /h	40 m ³ /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

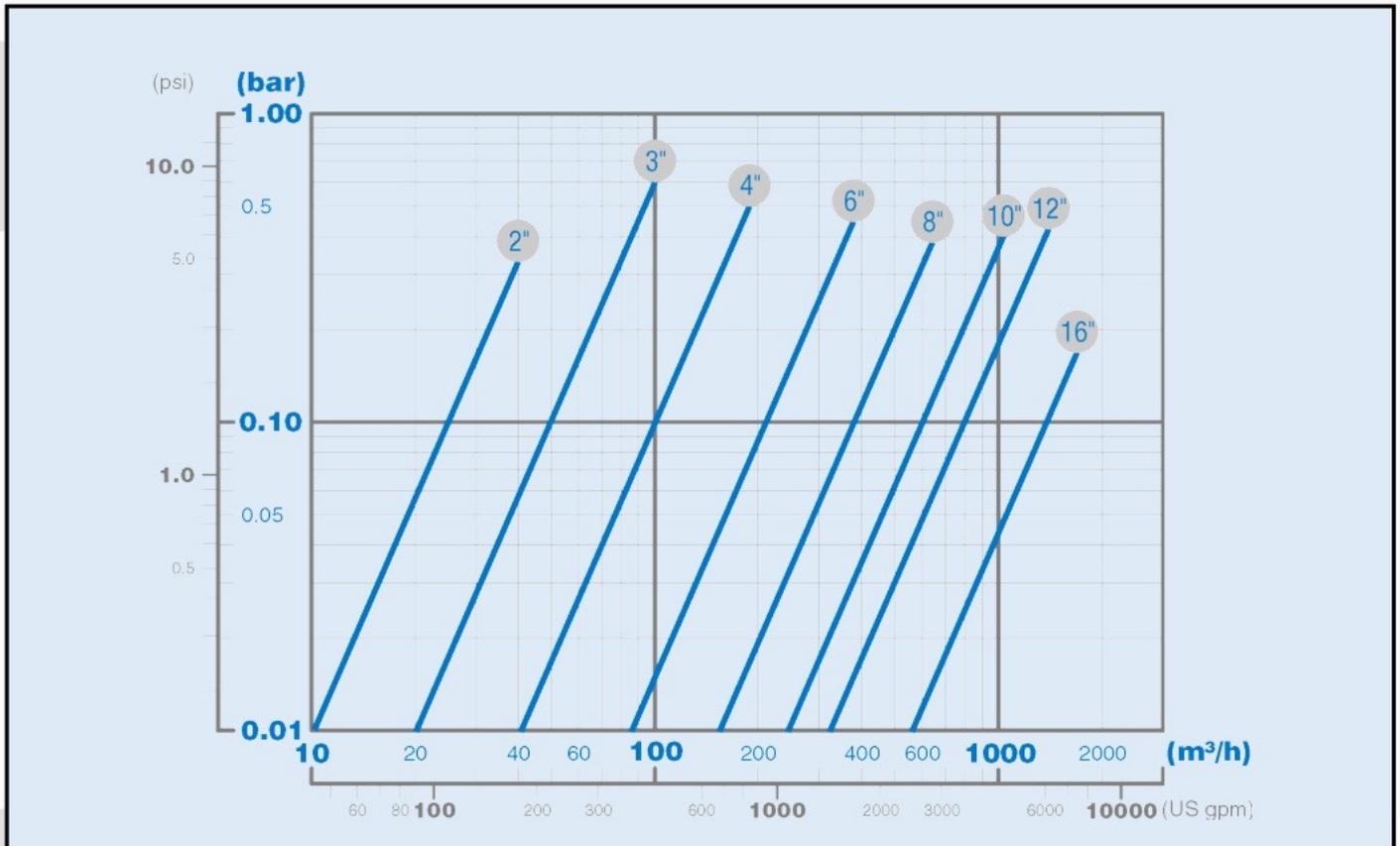
Supply voltage Tensione di alimentazione	230 Vac 1-phase 50/60 Hz Optional: 400 Vac 3-phases 50/60 Hz		
Control voltage Votaggio di comando	24 Vdc		
Electric motor power Potenza elettrica motore	110 W	220 W	360 W

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

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Head loss - *Perdite di carico**

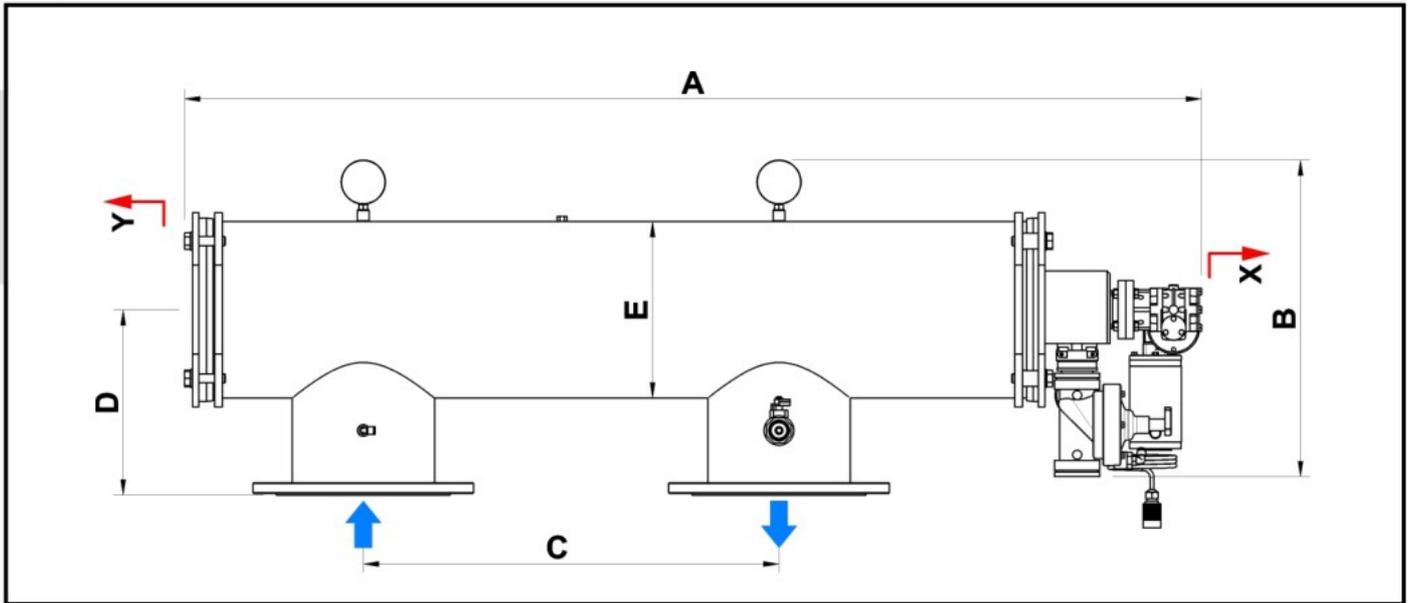


*Head loss are referred to filtrating mesh 100 μm - water with NTU < 1 - temperature of 20 °C

*Perdite di carico riferite a filtro con rete filtrante di 100 μm , acqua con NTU<1 e temperatura di 20°C

AVC Filters

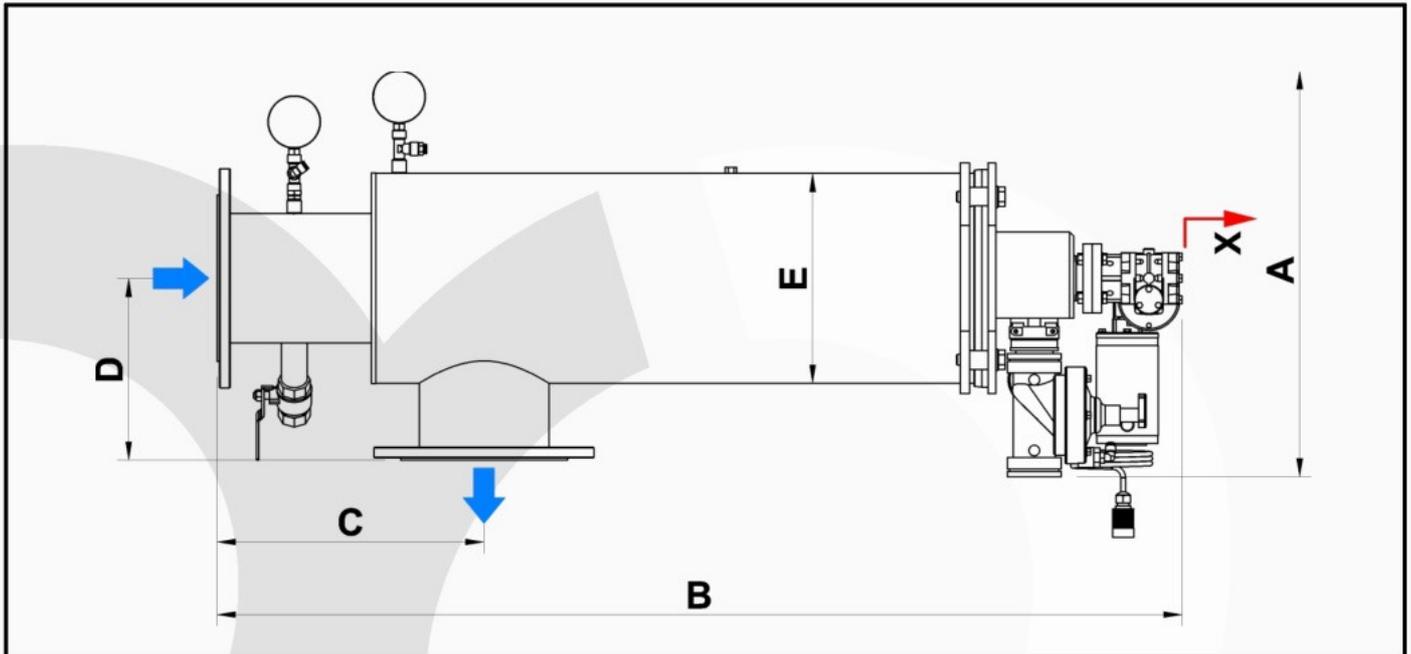
Shape H - Forma H



Filter Model <i>Modello filtro</i>	In/Out Conn.	Drain Conn.	Filter Area [cm ²]	Max Flow rate [m ³ /h]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	X [mm]	Y [mm]	Weight [Kg]
AVC 16H2	2" flg	1"½ thrdF	1600	30	114 5	460	450	215	206	400	600	45
AVC 16H3	3" flg	1"½ thrdF	1600	60	114 5	460	450	215	206	400	600	46
AVC 16H4	4" flg	1"½ thrdF	1600	100	114 5	460	450	215	206	400	600	47
AVC 23H3	3" flg	1"½ thrdF	2300	60	114 5	460	450	215	206	600	400	47
AVC 23H4	4" flg	1"½ thrdF	2300	100	114 5	460	450	215	206	600	400	48
AVC 23H6	6" flg	1"½ thrdF	2300	180	114 5	460	450	215	206	600	400	52
AVC 35H4	4" flg	1"½ thrdF	3500	100	160 5	520	640	285	273	600	900	72
AVC 35H6	6" flg	1"½ thrdF	3500	220	160 5	520	640	285	273	600	900	76
AVC 35H8	8" flg	1"½ thrdF	3500	270	160 5	520	640	285	273	600	900	82
AVC 55H4	4" flg	1"½ thrdF	5500	100	160 5	520	640	285	273	900	600	74
AVC 55H6	6" flg	1"½ thrdF	5500	220	160 5	520	640	285	273	900	600	78
AVC 55H8	8" flg	1"½ thrdF	5500	390	160 5	520	640	285	273	900	600	87

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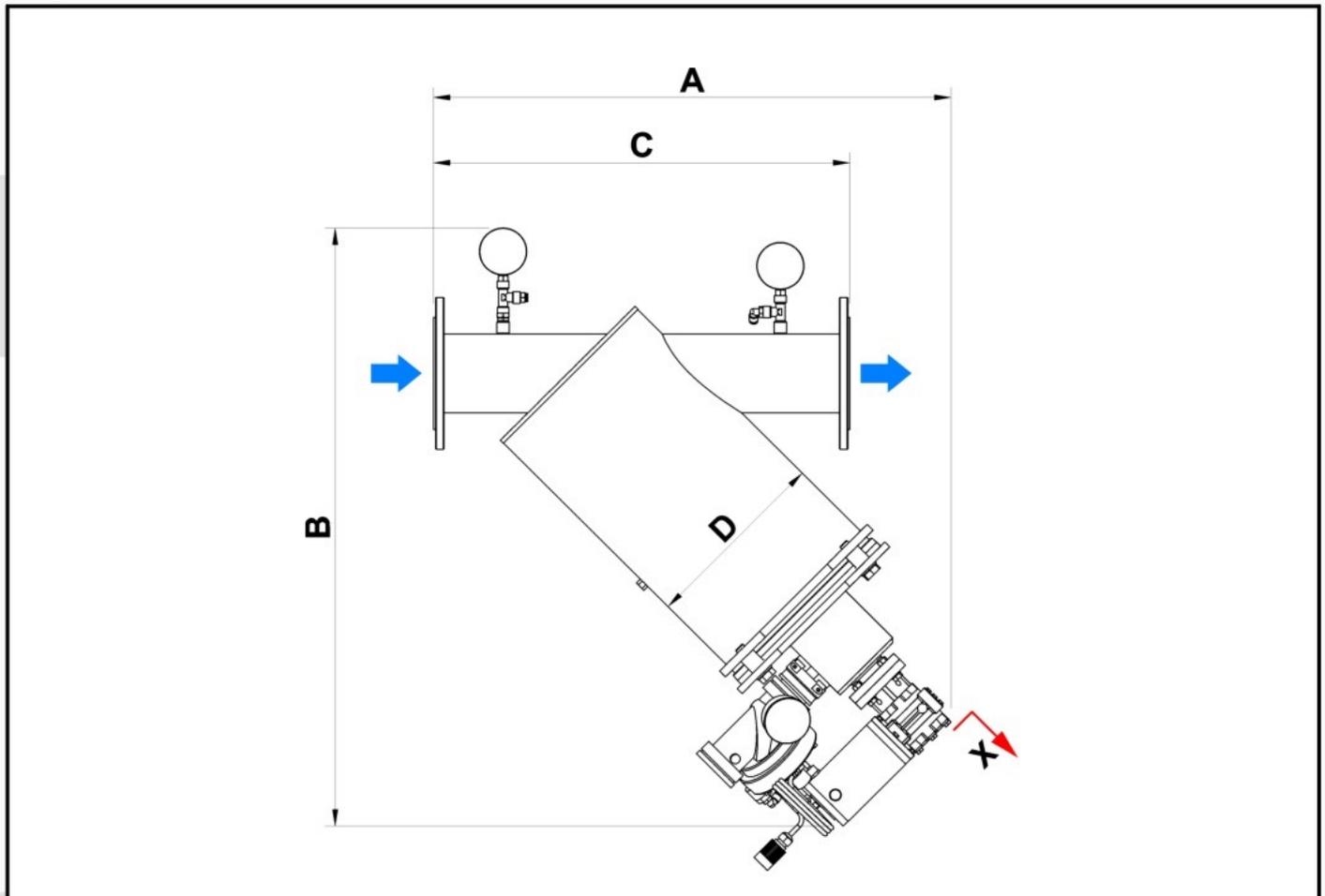
Shape L - Forma L



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

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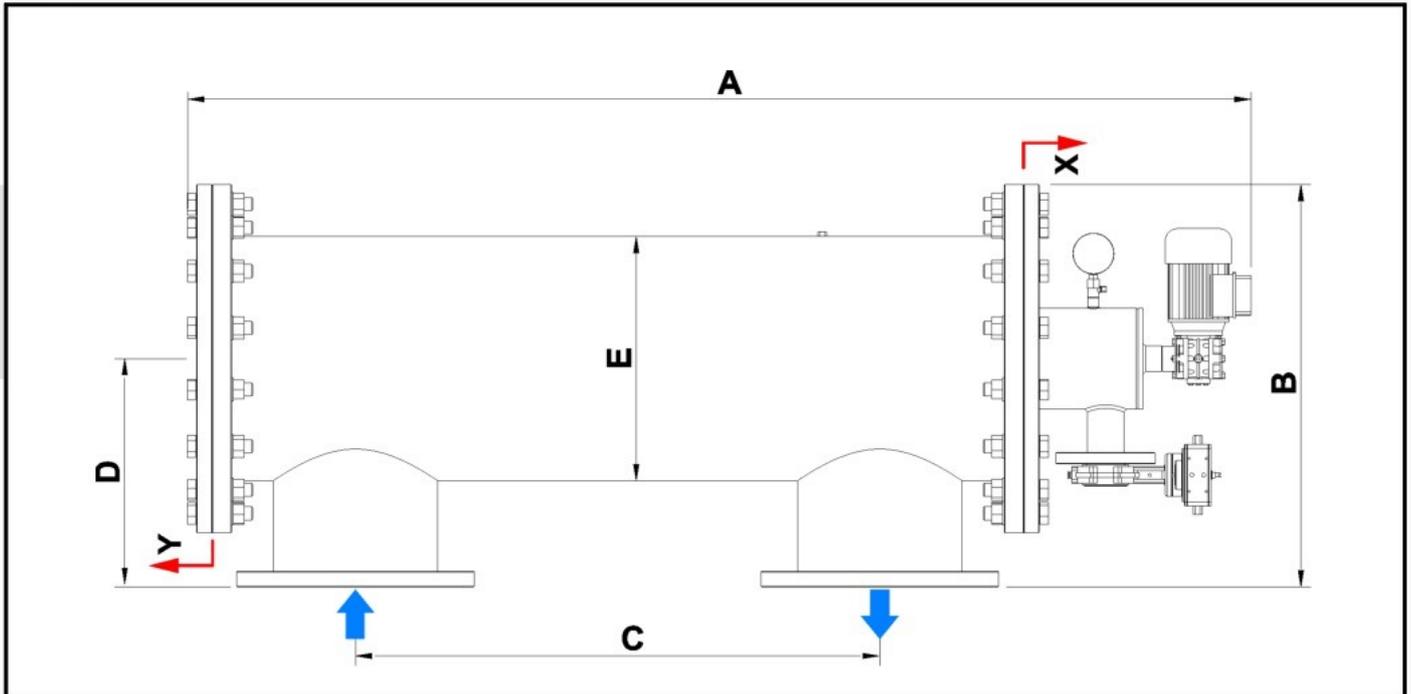
Shape Y - Forma Y



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

AVC Filters

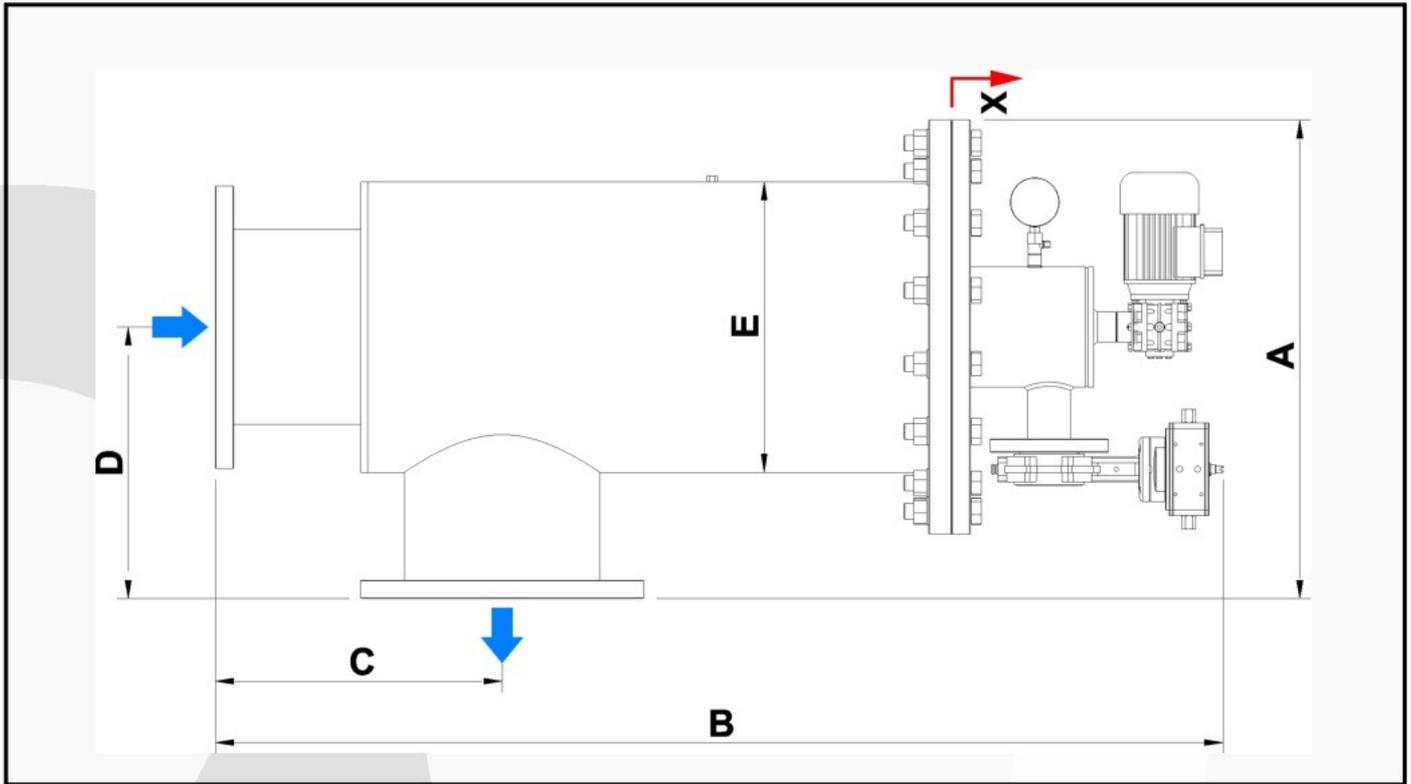
Shape H - Forma H



Filter Model <i>Modello filtro</i>	In/Out Conn.	Drain Conn.	Filter Area [cm ²]	Max Flow rate [m ³ /h]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	X [mm]	Y [mm]	Weight [Kg]
AVC 81H6	6" flg	2" flg	8100	220	175 0	650	640	350	406	900	600	265
AVC 81H8	8" flg	2" flg	8100	390	175 0	650	640	350	406	900	600	275
AVC 81H10	10" flg	2" flg	8100	600	175 0	650	640	350	406	900	600	285
AVC 110H8	8" flg	3" flg	11000	390	210 0	680	640	380	457	120 0	600	340
AVC 110H10	10" flg	3" flg	11000	600	210 0	680	640	380	457	120 0	600	350
AVC 110H12	12" flg	3" flg	11000	800	210 0	680	640	380	457	120 0	600	355
AVC 198H10	10" flg	3" flg	19800	600	245 0	850	640	460	610	150 0	600	545
AVC 198H12	12" flg	3" flg	19800	800	245 0	850	640	460	610	150 0	600	550
AVC 198H16	16" flg	3" flg	19800	1400	245 0	850	640	460	610	150 0	600	585

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Shape L - Forma L



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

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