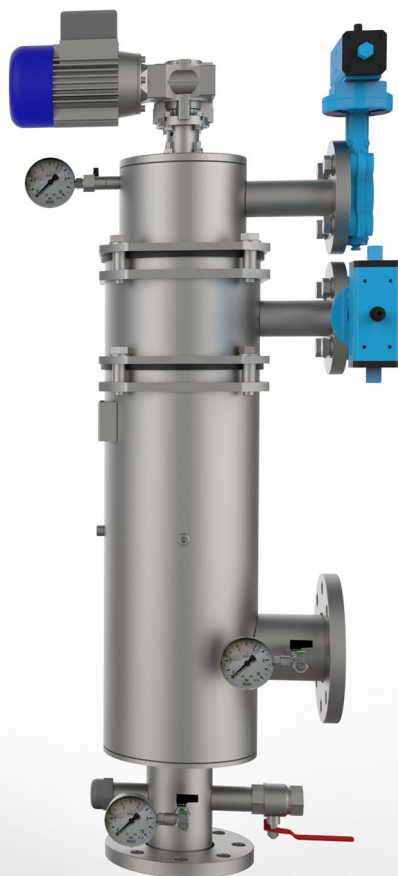




ABV filters

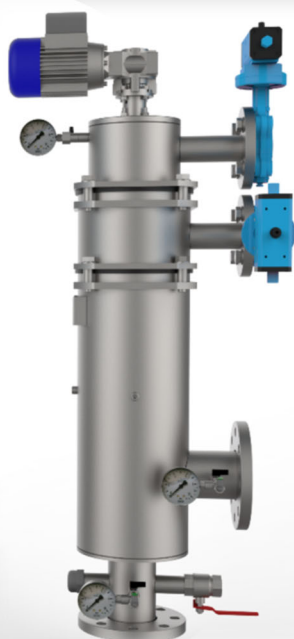
Brochure

alfawater™

Solid ideas made in steel

ABV filters

PATENT PENDING



The automatic self-cleaning filter with double cleaning system.

High efficiency due to the combined action of brushes and vacuum pads, particularly suitable for river water.

- Multi-layers screens with several filtration degrees
- No interruption flow during the cleaning cycle
- Economic and robust choice for automation of filtration
- Very simple and reliable cleaning mechanism with special pads with brushes

Alfa Water ABV filters are automatic filters equipped with a double cleaning system, which allows the filter to be used even in the presence of coarse suspended solids.

Thanks to this double system, this filter has a high cleaning efficiency: first, the brushes remove the most coarse solids from the screen, draining them through the opening of a first drain valve; then, through the opening of a second drain valve on the cover, the suction scanner effect is generated, in which the pads suck the smaller solids.

ABV filters can support flow rates of up to 800 m³/h (3522 US gpm) with five sizes of screens up to 11000 cm², with several multi-layers screens covering the range of filtration degree between 1000 and 10 µm and with different range of inlet/outlet flanged connections between 2" and 12"

Standard controller:

- AWC Basic controller (differential pressure and/or preset time and/or manual start, IP56, 4DI, 2AI, 4DO, Graphic Display 1x24 digit)

Available 2 controller:

- AWC FULL controller
- AWP FULL controller

Filtro automatico autopulente con doppio sistema di pulizia.

Alta efficienza dovuta all'azione combinata di spazzole e pattini aspiranti, particolarmente adatto ad acque di fiume.

- Reti multistrato con ampio range di filtrazione
- Continuità di flusso durante il ciclo di pulizia
- Scelta economica e robusta per sistemi automatici di pulizia
- Meccanismo di pulizia molto semplice e affidabile con speciali pattini e spazzole

I filtri Alfa Water ABV sono filtri automatici dotati di doppio sistema di pulizia, che permette l'utilizzo del filtro anche in presenza di solidi sospesi grossolani. Grazie a questo doppio sistema, questo filtro ha un'elevata efficienza di pulizia: prima le spazzole rimuovono i solidi più grossolani dalla rete, scaricandoli attraverso l'apertura di una prima valvola; successivamente, attraverso l'apertura di una seconda valvola posta sul coperchio, si genera l'effetto di suction scanner in cui i pattini aspirano i solidi più fini. I filtri ABV possono trattare una portata fino a 800 m³/h (3522 US gpm) con cinque taglie di cartucce con area filtrante fino a 11000 cm², con molteplici cartucce multistrato con range di filtrazione compreso tra 1000 e 10 µm e con connessioni flangiate in ingresso e in uscita comprese tra 2" e 12".

Controller standard:

- AWC Basic controller (differenza di pressione e/o tempi pre-impostabili e/o avvio manuale, IP56, 4DI, 2AI, 4DO, Display grafico 1x24 digit)

Disponibili 2 controller:

- AWC FULL controller
- AWP FULL controller

TECHNICAL DATA - DATI TECNICI

Filter size - Taglia filtro	16	23	35	55
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General data - Dati generali

Inlet/outlet diameter <i>Diametro connessioni IN/OUT</i>	2" / 3" / 4" flanged EN 1092-1	2" / 3" / 4" / 6" flanged EN 1092-1	2" / 3" / 4" / 6" / 8" flanged EN 1092-1	3" / 4" / 6" / 8" flanged EN 1092-1
Max flow rate * <i>Portata massima</i>	100 m ³ /h 440 US gpm	180 m ³ /h 793 US gpm	270 m ³ /h 1188 US gpm	390 m ³ /h 1717 US gpm
Min working pressure <i>Pressione minima</i>	2 bar - during cleaning cycle 29 psi			
Max working pressure <i>Pressione massima</i>	10 bar 145 psi			
Max working temperature <i>Temperatura massima</i>	60 °C 140 °F			

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

Screen elements - Elementi filtranti

Screen Area <i>Area filtrante</i>	1.600 cm ² 248 in ²	2.300 cm ² 357 in ²	3.500 cm ² 543 in ²	5.500 cm ² 853 in ²
Filtration degrees <i>Gradi di filtrazione</i>	1000 / 800 / 500 / 400 / 200 / 100 / 50 / 25 / 10 µm			
Screen types <i>Tipologia elementi filtranti</i>	Screens: Stainless Steel AISI 316 or Multi-layers SS AISI316 + PETP (Polyester) Reti: Acciaio inox AISI 316 oppure multistrato Inox AISI316 + Poliestere PETP			

Cleaning Cycle - Ciclo di pulizia

Cleaning device <i>Sistema di pulizia</i>	Flexible Suction PADS - PVC material – With BRUSH <i>Pattini aspiranti flessibili – PVC – Con SPAZZOLE</i>			
Cleaning cycle time <i>Durata ciclo di pulizia</i>	12 sec		24 sec	
Min cleaning flow rate <i>Portata minima di pulizia</i>	6 m³/h <i>26 US gpm</i>	9 m³/h <i>39 US gpm</i>		15 m³/h <i>66 US gpm</i>
Drained water for cleaning <i>Acqua di pulizia scaricata</i>	35 L	40 L	110 L	130 L
Drain valve <i>Valvola di scarico</i>	2 x 1"½ flanged EN 1092-1		1 x 1"½ + 1 x 2" flanged EN 1092-1	
Cleaning criteria <i>Avvio ciclo di pulizia</i>	Differential pressure (0.6 bar), time intervals and manual operation <i>Pressione differenziale (0.6 bar), intervalli di tempo, manualmente</i>			

Electrical data - Dati elettrici

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

Filter size - Taglia filtro	72	81	110
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General data - Dati generali

Inlet/outlet diameter <i>Diametro connessioni IN/OUT</i>	6" / 8" flanged EN 1092-1	6" / 8" / 10" flanged EN 1092-1	8" / 10" / 12" flanged EN 1092-1
Max flow rate <i>Portata massima</i>	450 m ³ /h 1981 US gpm	600 m ³ /h 2642 US gpm	800 m ³ /h 3522 US gpm
Min working pressure <i>Pressione minima</i>	2 bar - during cleaning cycle 29 psi		
Max working pressure <i>Pressione massima</i>	10 bar 145 psi		
Max working temperature <i>Temperatura massima</i>	60 °C 140 °F		

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

Screen elements - Elementi filtranti

Screen Area <i>Area filtrante</i>	7.200 cm ² 1116 in ²	8.100 cm ² 1256 in ²	11.000 cm ² 1705 in ²
Filtration degrees <i>Gradi di filtrazione</i>	1000 / 800 / 500 / 400 / 200 / 100 / 50 / 25 / 10 µm		
Screen types <i>Tipologia elementi filtranti</i>	Screens: Stainless Steel AISI 316 or Multi-layers SS AISI316 + PETP (Polyester) Reti: Acciaio inox AISI 316 oppure multistrato Inox AISI316 + Poliestere PETP		

Cleaning Cycle - Ciclo di pulizia

Cleaning device <i>Sistema di pulizia</i>	Flexible Suction PADS - PVC material – With BRUSH Pattini aspiranti flessibili – PVC – Con SPAZZOLE		
Cleaning cycle time <i>Durata ciclo di pulizia</i>	40 sec	30 sec	
Min cleaning flow rate <i>Portata minima di pulizia</i>	30 m ³ /h 132 US gpm	20 m ³ /h 88 US gpm	30 m ³ /h 132 US gpm
Drained water for cleaning <i>Acqua di pulizia scaricata</i>	290 L	180 L	220 L
Drain valve <i>Valvola di scarico</i>	2 x 2" flanged EN 1092-1		
Cleaning criteria <i>Avvio ciclo di pulizia</i>	Differential pressure (0.6 bar), time intervals and manual operation Pressione differenziale (0.6 bar), intervalli di tempo, manualmente		

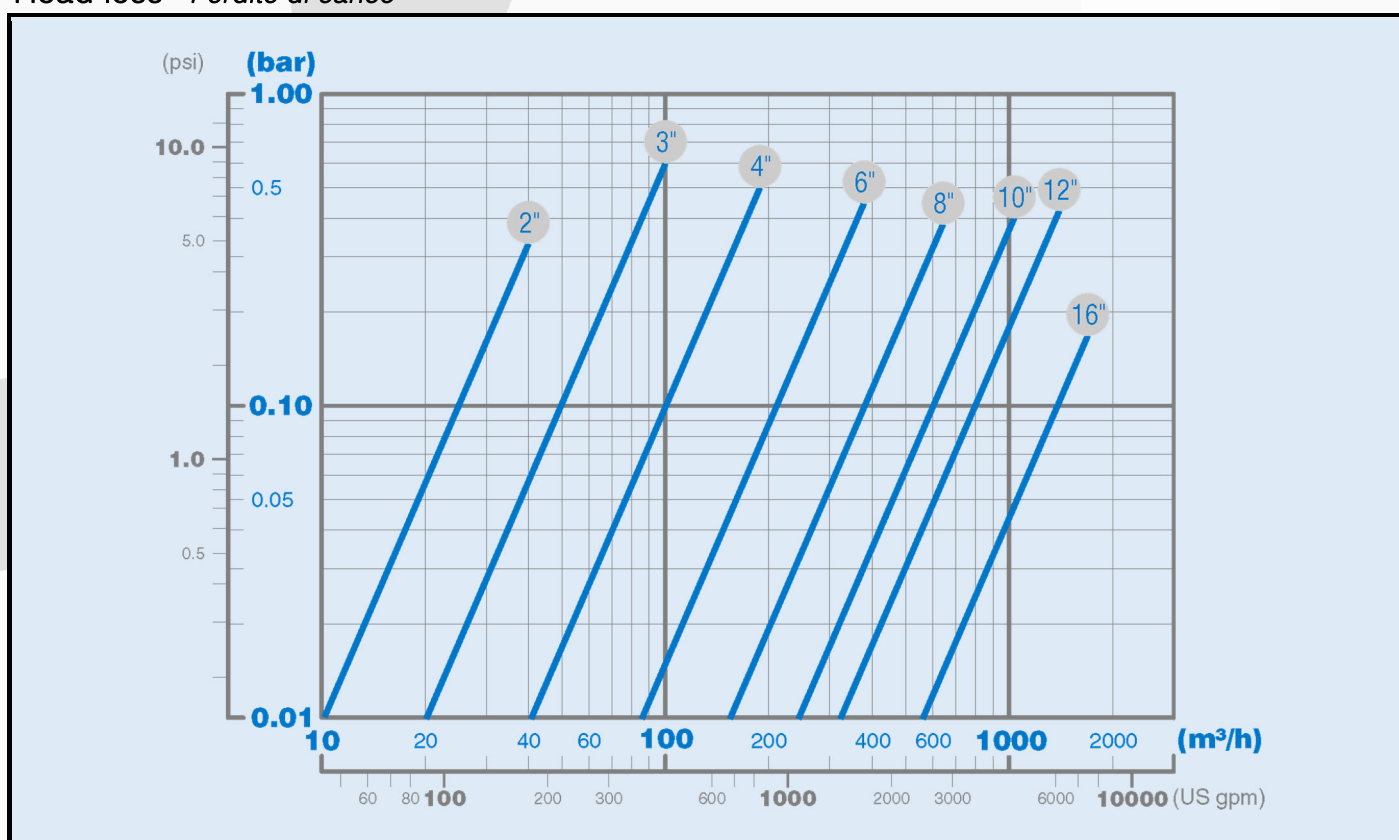
Electrical data - Dati elettrici

Supply voltage <i>Tensione di alimentazione</i>	230 Vac 1-phase 50/60 Hz Optional: 400 Vac 3-phases 50/60 Hz		
Control voltage <i>Voltaggio di comando</i>	24 Vdc		
Electric motor power <i>Potenza elettrica motore</i>	210 W		
Electric motor consumption <i>Consumo motore elettrico</i>	2,8 A		

Materials - Materiali

Filter Body <i>Corpo filtro</i>	AISI 304 / AISI 316 / SAF 2205 / 254 SMO
Cover <i>Coperchio</i>	AISI 304 / AISI 316 / SAF 2205 / 254 SMO
Screen support <i>Supporto rete</i>	AISI 316 / SAF 2205
Gasket <i>Guarnizioni</i>	EPDM - NBR

Head loss - Perdite di carico*

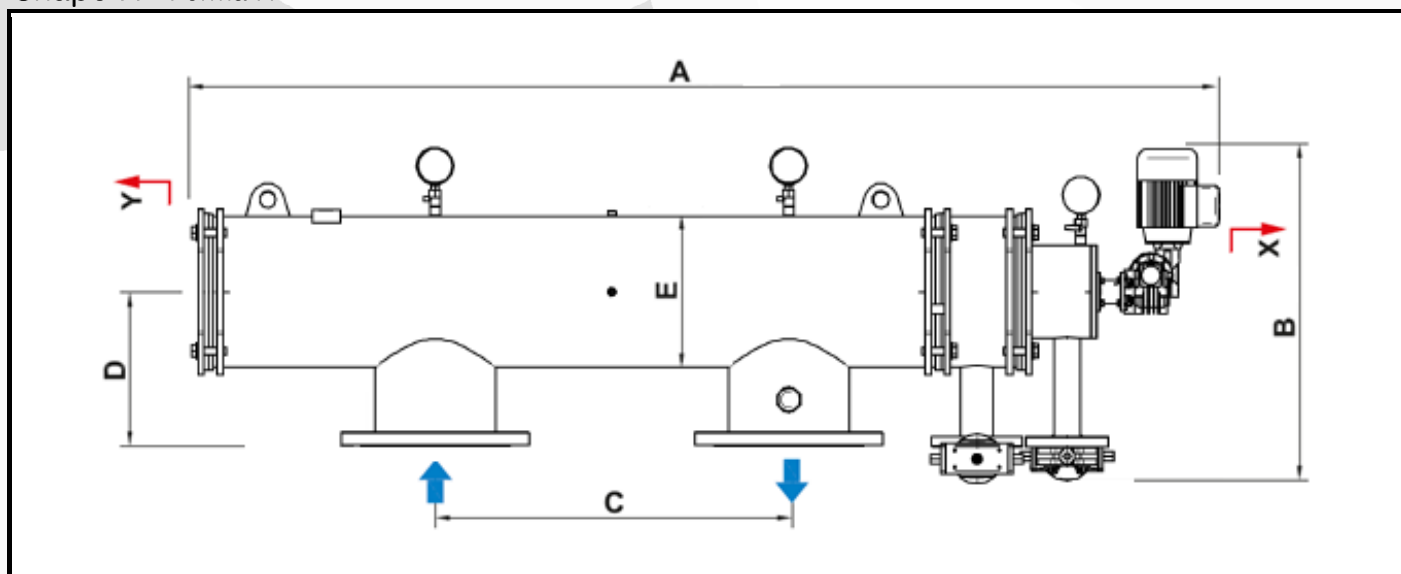


* Head loss are referred to filtrating screen 100 µm, water with NTU<1 and temperature of 20°C

Perdite di carico riferita a filtri con rete filtrante da 100 µm, acqua con NTU<1 e temperatura di 20°C

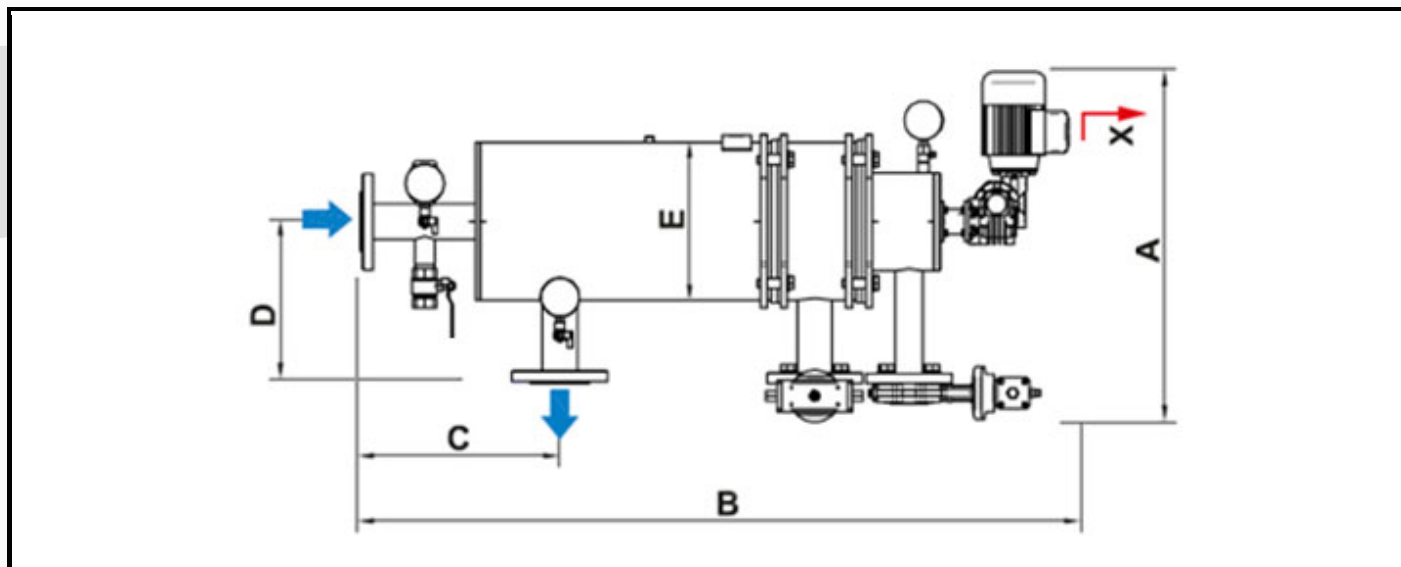
DIMENSIONS - DIMENSIONI

Shape H - Forma H



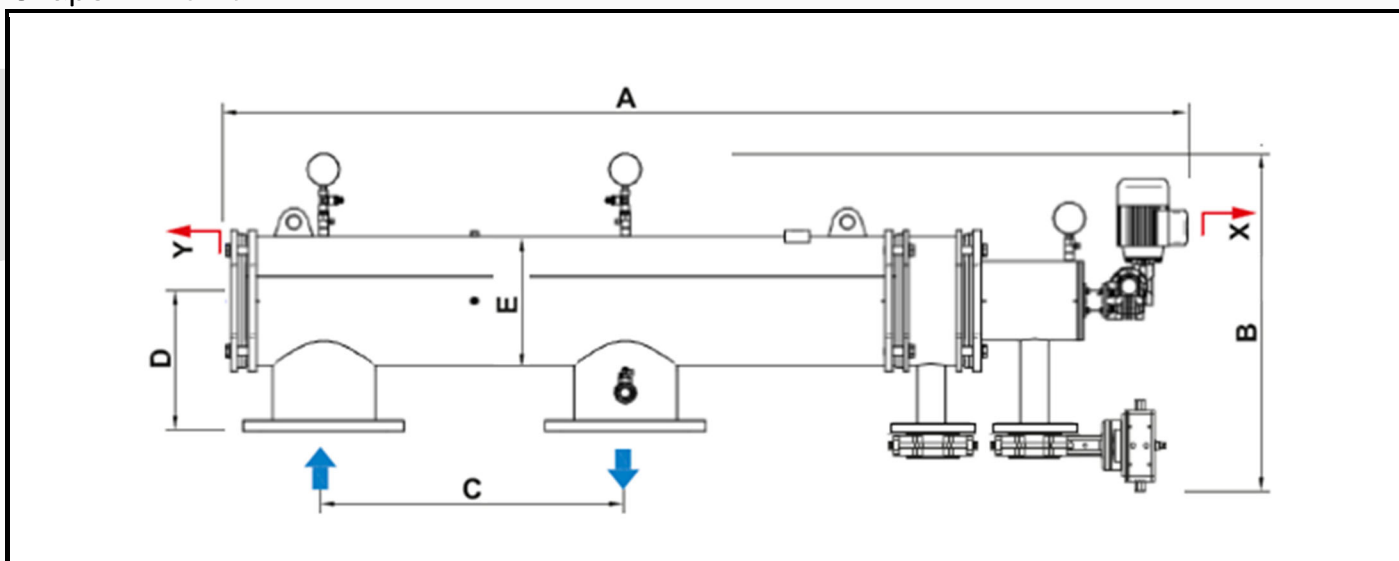
Filter Model <i>Modello filtro</i>	In/Out Conn.	Drain Conn.	Filter Area [cm ²]	Max Flow rate [m ³ /h]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	X [mm]	Y [mm]	Weight [Kg]
ABV 16H2	2" flg	1"½ flg	1600	30	1330	501	450	210	206	400	600	66
ABV 16H3	3" flg	1"½ flg	1600	60	1330	501	450	210	206	400	600	68
ABV 16H4	4" flg	1"½ flg	1600	100	1330	501	450	210	206	400	600	72
ABV 23H2	2" flg	1"½ flg	2300	30	1330	501	450	210	206	600	400	64
ABV 23H3	3" flg	1"½ flg	2300	60	1330	501	450	210	206	600	400	65
ABV 23H4	4" flg	1"½ flg	2300	100	1330	501	450	210	206	600	400	68
ABV 23H6	6" flg	1"½ flg	2300	180	1330	501	450	210	206	600	400	72
ABV 35H2	2" flg	1"½ flg + 2" flg	3500	30	1860	601	640	280	273	600	900	95
ABV 35H3	3" flg	1"½ flg + 2" flg	3500	60	1860	601	640	280	273	600	900	100
ABV 35H4	4" flg	1"½ flg + 2" flg	3500	100	1860	601	640	280	273	600	900	106
ABV 35H6	6" flg	1"½ flg + 2" flg	3500	220	1860	601	640	280	273	600	900	112
ABV 35H8	8" flg	1"½ flg + 2" flg	3500	270	1860	601	640	280	273	600	900	117
ABV 55H3	3" flg	1"½ flg + 2" flg	5500	60	1860	601	640	280	273	600	600	100
ABV 55H4	4" flg	1"½ flg + 2" flg	5500	100	1860	601	640	280	273	900	600	106
ABV 55H6	6" flg	1"½ flg + 2" flg	5500	220	1860	601	640	280	273	900	600	112
ABV 55H8	8" flg	1"½ flg + 2" flg	5500	390	1860	601	640	280	273	900	600	117

Shape L - Forma L



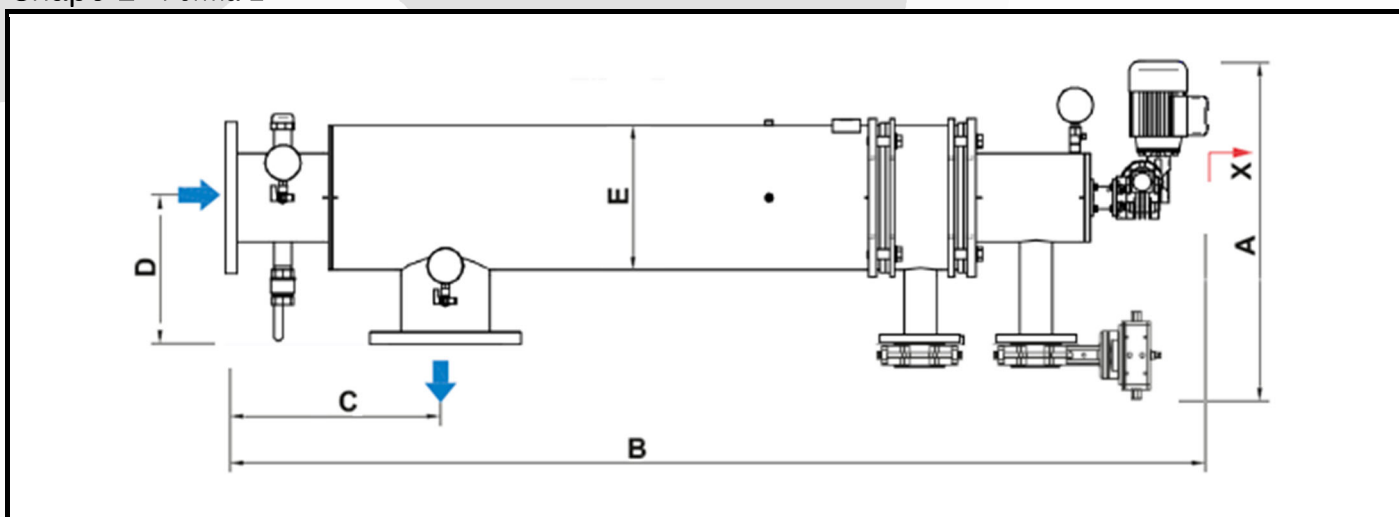
Filter Model <i>Modello filtro</i>	In/Out Conn.	Drain Conn.	Filter Area [cm ²]	Max Flow rate [m ³ /h]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	X [mm]	Weight [Kg]
ABV 16L2	2" flg	1"½ flg	1600	30	500	975	295	210	206	400	53
ABV 16L3	3" flg	1"½ flg	1600	60	500	975	295	210	206	400	55
ABV 16L4	4" flg	1"½ flg	1600	100	500	975	295	210	206	400	56
ABV 23L2	2" flg	1"½ flg	2300	30	500	1144	295	210	206	600	57
ABV 23L3	3" flg	1"½ flg	2300	60	500	1144	295	210	206	600	59
ABV 23L4	4" flg	1"½ flg	2300	100	500	1144	295	210	206	600	61
ABV 23L6	6" flg	1"½ flg	2300	180	500	1144	295	210	206	600	67
ABV 35L2	2" flg	1"½ flg + 2" flg	3500	30	600	1144	345	280	273	600	77
ABV 35L3	3" flg	1"½ flg + 2" flg	3500	60	600	1144	345	280	273	600	79
ABV 35L4	4" flg	1"½ flg + 2" flg	3500	100	600	1144	345	280	273	600	81
ABV 35L6	6" flg	1"½ flg + 2" flg	3500	220	600	1144	345	280	273	600	87
ABV 35L8	8" flg	1"½ flg + 2" flg	3500	270	600	1144	345	280	273	600	92
ABV 55L3	3" flg	1"½ flg + 2" flg	5500	60	600	1515	345	280	273	900	93
ABV 55L4	4" flg	1"½ flg + 2" flg	5500	100	600	1515	345	280	273	900	95
ABV 55L6	6" flg	1"½ flg + 2" flg	5500	220	600	1515	345	280	273	900	97
ABV 55L8	8" flg	1"½ flg + 2" flg	5500	390	600	1515	345	280	273	900	102

Shape H - Forma H



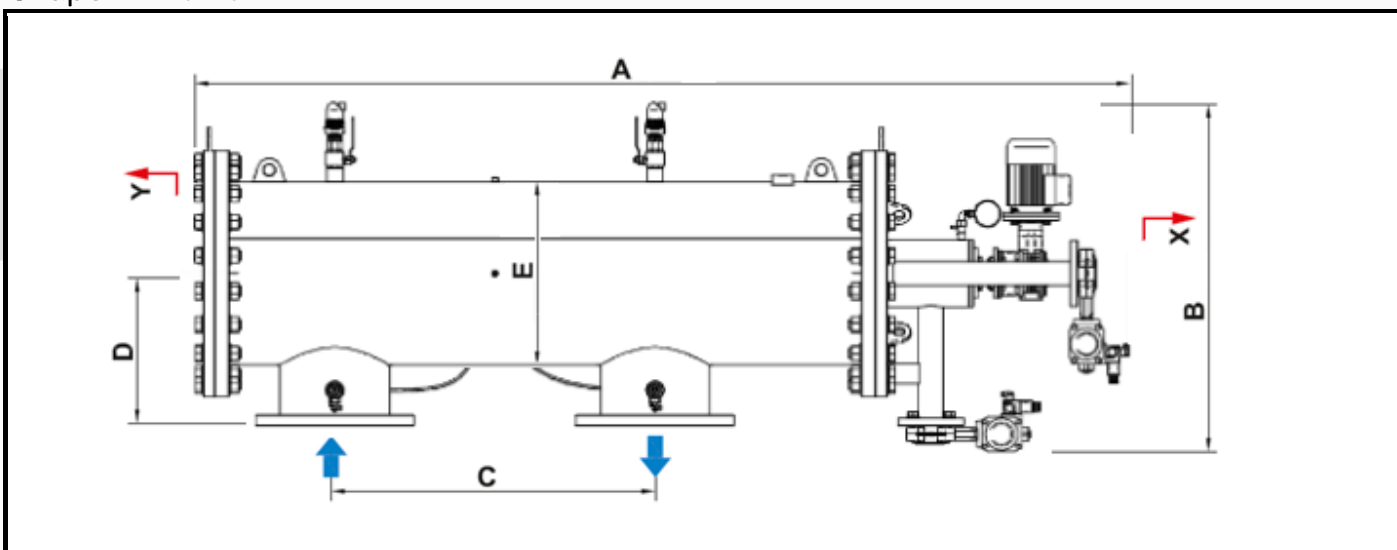
Filter Model <i>Modello filtro</i>	In/Out Conn.	Drain Conn.	Filter Area [cm ²]	Max Flow rate [m ³ /h]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	X [mm]	Y [mm]	Weight [Kg]
ABV 72H6	6" flg	2" flg	7200	220	2042	720	640	280	273	1100	400	123
ABV 72H8	8" flg	2" flg	7200	450	2042	720	640	280	273	1100	400	128

Shape L - Forma L



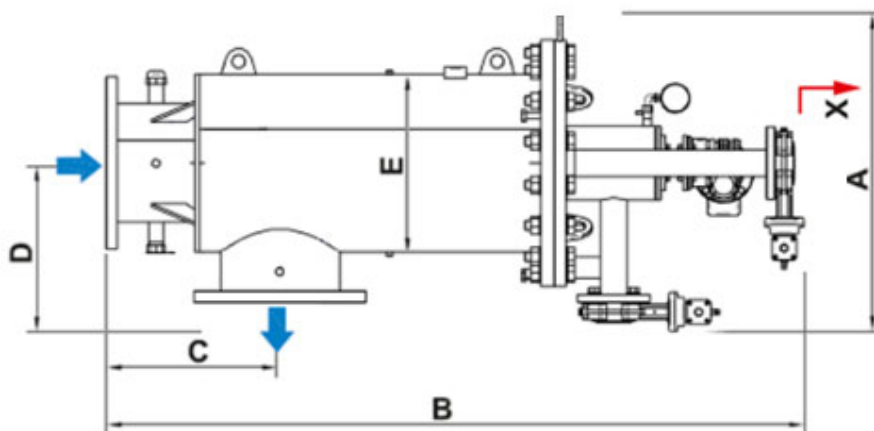
Filter Model <i>Modello filtro</i>	In/Out Conn.	Drain Conn.	Filter Area [cm ²]	Max Flow rate [m ³ /h]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	X [mm]	Weight [Kg]
ABV 72L6	6" flg	2" flg	7200	220	670	1862	420	280	273	1100	104
ABV 72L8	8" flg	2" flg	7200	450	670	1862	420	280	273	1100	109

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]
ABV 81H6	6" flg	2" flg	8100	220	1970	780	800	350	406	900	600	335
ABV 81H8	8" flg	2" flg	8100	390	1970	780	800	350	406	900	600	340
ABV 81H10	10" flg	2" flg	8100	600	1970	780	800	350	406	900	600	343
ABV 110H8	8" flg	2" flg	11000	390	2230	875	800	380	457	1200	600	406
ABV 110H10	10" flg	2" flg	11000	600	2230	875	800	380	457	1200	600	410
ABV 110H12	12" flg	2" flg	11000	800	2230	875	800	380	457	1200	600	420
ABV 198H10	10" flg	2" flg	19800	600	2495	850	1200	460	610	1500	600	570
ABV 198H12	12" flg	2" flg	19800	800	2495	850	1200	460	610	1500	600	580
ABV 198H16	16" flg	2" flg	19800	1400	2495	850	1200	460	610	1500	600	615

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]
ABV 81L6	6" flg	2" flg	8100	220	730	1604	400	320	406	900	196
ABV 81L8	8" flg	2" flg	8100	390	730	1604	400	320	406	900	198
ABV 81L10	10" flg	2" flg	8100	600	730	1604	400	320	406	900	204
ABV 110L8	8" flg	2" flg	11000	390	796	1963	500	380	457	1200	240
ABV 110L10	10" flg	2" flg	11000	600	796	1963	500	380	457	1200	247
ABV 110L12	12" flg	2" flg	11000	800	796	1963	500	380	457	1200	248
ABV 198L10	10" flg	2" flg	19800	600	978	2196	605	460	614	1500	420
ABV 198L12	12" flg	2" flg	19800	800	978	2196	605	460	614	1500	423
ABV 198L16	16" flg	2" flg	19800	1400	978	2196	605	460	614	1500	447

LENNTECH

WATER TREATMENT SOLUTIONS

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