



ABR filters

Brochure

alfawater™

Solid ideas made in steel

ABR filters



The automatic self-cleaning filter with brushes for the prefiltration of surface and process water containing not-colloids suspended solids.

- Stainless steel housing and filter cartridge
- Interchangeable screens with several filtration degrees
- Economic and robust choice for automation of filtration
- Low inlet pressure requested

Alfa Water ABR filters are automatic filters with a set of brushes mounted on a rotating shaft, driven by an electric motor.

ABR filters can support flow rates of up to 390 m³/h (1717 US gpm) with four sizes of screens up to 5500 cm², with several screens covering the range of filtration degree between 2000 and 10 µm and with different range of inlet/outlet connections between 2" and 8".

Controller standard:

- AWC Basic controller (differential pressure and/or preset time and/or manual start, IP54, 4DI, 4AI/DI, 4DO, LCD Display 1.5")

Available 2 controller:

- AWC FULL controller
- AWP FULL controller

Il filtro automatico autopulente con spazzole per la prefiltrazione di acqua di processo e di superficie contenente solidi sospesi non colloidali.

- *Corpo e cartuccia filtrante in acciaio inox*
- *Reti intercambiabili con ampio range di filtrazione*
- *Scelta economica e robusta per filtrazione automatica*
- *Richiesta bassa pressione in ingresso*

I filtri Alfa Water ABR sono filtri automatici dotati di spazzole montate su un albero messo in rotazione da un motore elettrico.

I filtri ABR sono in grado di trattare portate fino a 390 m³/h (1717 US gpm) con quattro taglie di cartucce con area filtrante fino a 5.500 cm², con range di filtrazione compreso tra 2000 e i 10 µm e connessioni flangiate in ingresso e in uscita comprese tra 2" e 8".

Controller standard:

- AWC Basic controller (differenza di pressione e/o tempi pre-impostabili e/o avvio manuale, IP54, 4DI, 4AI/DI, 4DO, Display LCD 1.5")

Disponibili 2 controller:

- AWC FULL controller
- AWP FULL controller



PATENT PENDING

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	3" / 4" / 6" flanged EN 1092-1	4" / 6" / 8" flanged EN 1092-1	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>	6 sec		12 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>	25 L		80 L
Drain valve <i>Valvola di scarico</i>	1"½ flanged EN 1092-1		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>		

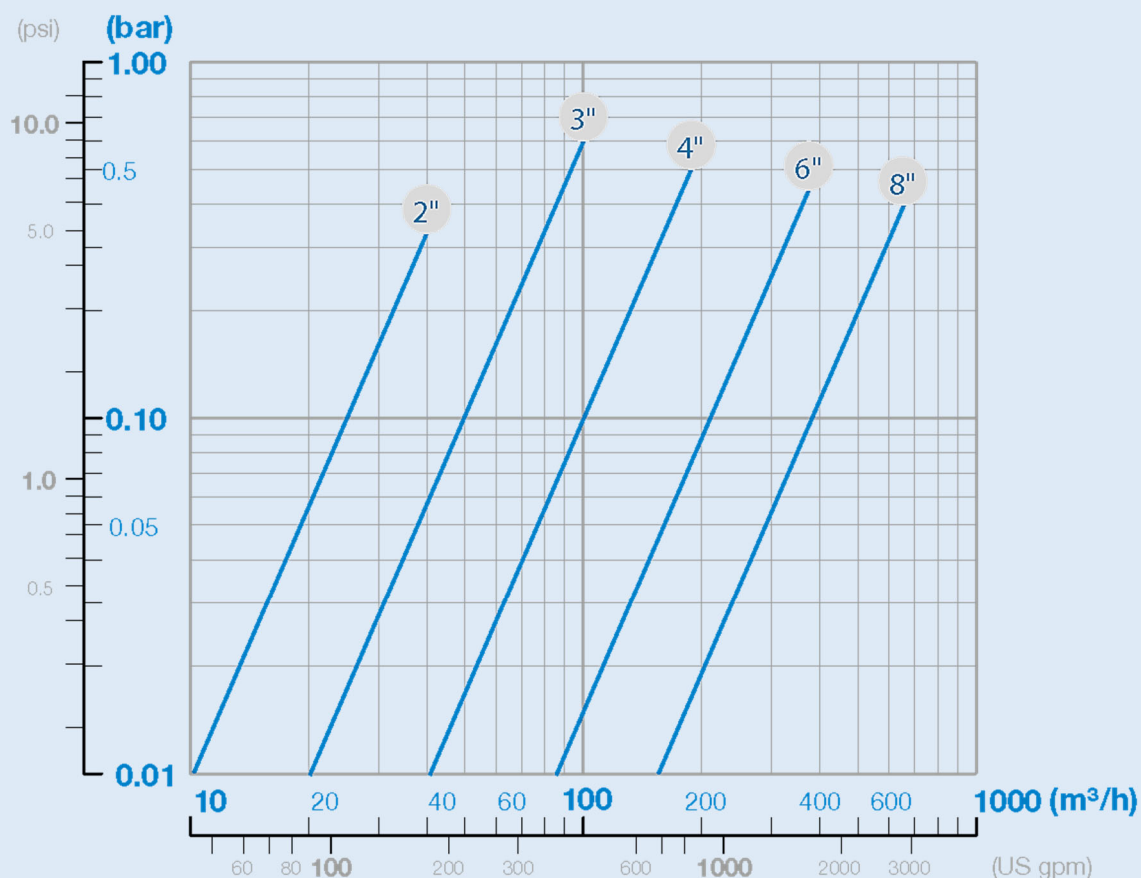
Electrical data - Dati elettrici

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			

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

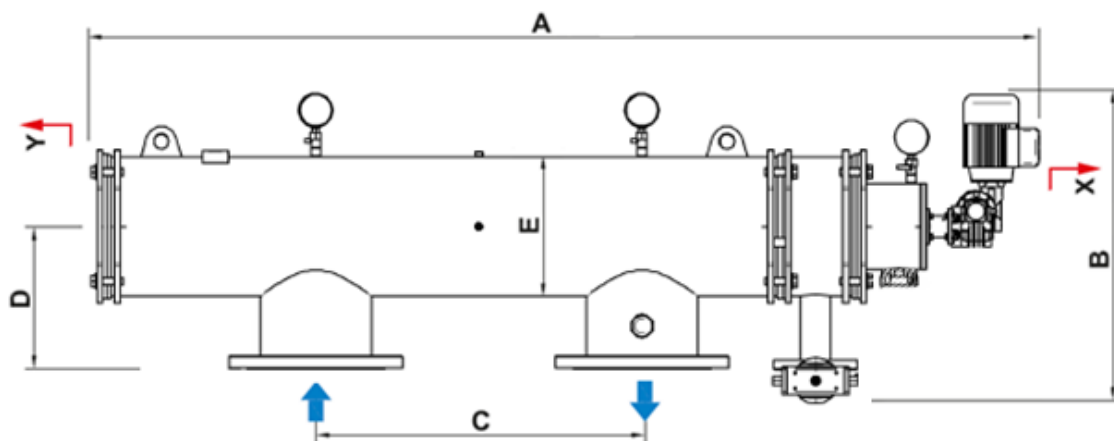
Head loss - Perdite di carico*



* 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

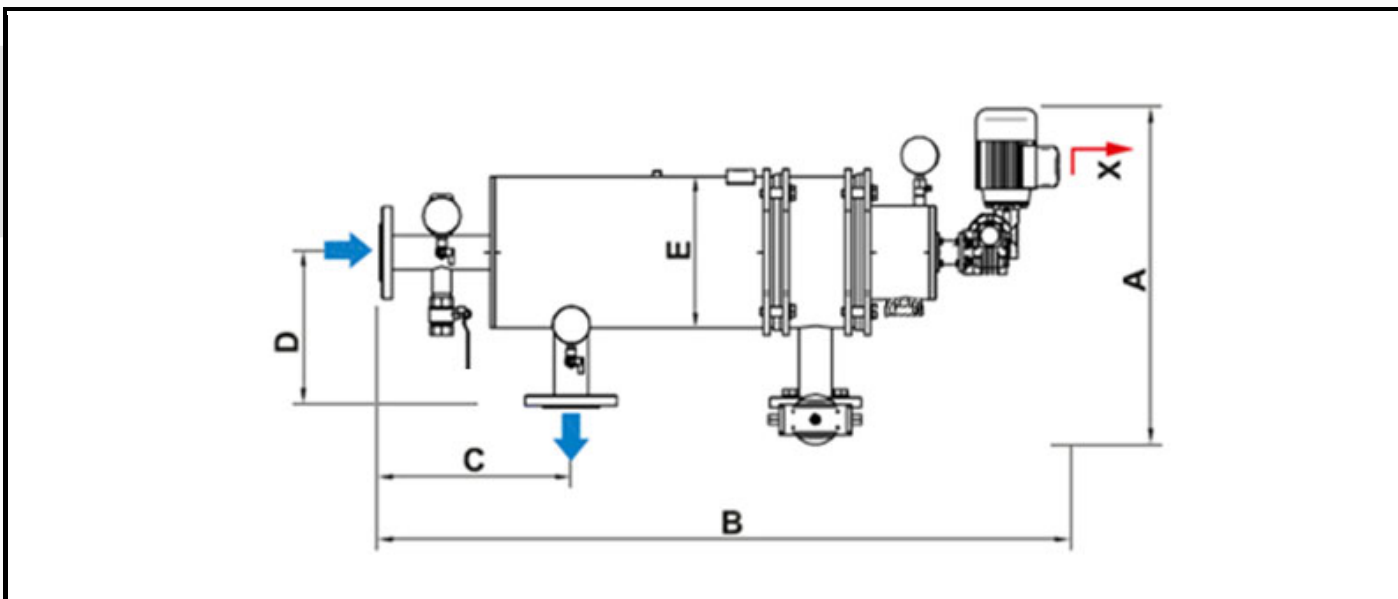
DIMENSIONS - DIMENSIONI

Shape H - Forma H



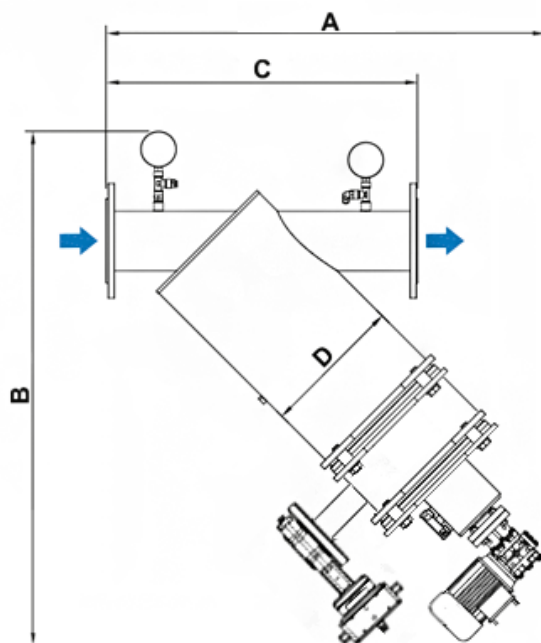
Filter Model <i>Modello filtro</i>	In/Out Conn.	Drain Conn.	Filter Area [cm ²]	Max Flow rate [m ³ /h]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	X [mm]	Y [mm]	Weight [Kg]
ABR 16H2	2" flg	1"½ flg	1600	30	1330	501	450	210	206	400	600	60
ABR 16H3	3" flg	1"½ flg	1600	60	1330	501	450	210	206	400	600	63
ABR 16H4	4" flg	1"½ flg	1600	100	1330	501	450	210	206	400	600	67
ABR 23H3	3" flg	1"½ flg	2300	60	1330	501	450	210	206	600	400	60
ABR 23H4	4" flg	1"½ flg	2300	100	1330	501	450	210	206	600	400	63
ABR 23H6	6" flg	1"½ flg	2300	180	1330	501	450	210	206	600	400	67
ABR 35H4	4" flg	2" flg	3500	100	1860	601	640	280	273	600	900	100
ABR 35H6	6" flg	2" flg	3500	220	1860	601	640	280	273	600	900	107
ABR 35H8	8" flg	2" flg	3500	270	1860	601	640	280	273	600	900	112
ABR 55H4	4" flg	2" flg	5500	100	1860	601	640	280	273	900	600	100
ABR 55H6	6" flg	2" flg	5500	220	1860	601	640	280	273	900	600	107
ABR 55H8	8" flg	2" flg	5500	390	1860	601	640	280	273	900	600	112

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]
ABR 16L2	2" flg	1"½ flg	1600	30	500	975	295	210	206	400	48
ABR 16L3	3" flg	1"½ flg	1600	60	500	975	295	210	206	400	50
ABR 16L4	4" flg	1"½ flg	1600	100	500	975	295	210	206	400	51
ABR 23L3	3" flg	1"½ flg	2300	60	500	1144	295	210	206	600	54
ABR 23L4	4" flg	1"½ flg	2300	100	500	1144	295	210	206	600	56
ABR 23L6	6" flg	1"½ flg	2300	180	500	1144	295	210	206	600	62
ABR 35L4	4" flg	2" flg	3500	100	600	1144	345	280	273	600	76
ABR 35L6	6" flg	2" flg	3500	220	600	1144	345	280	273	600	82
ABR 35L8	8" flg	2" flg	3500	270	600	1144	345	280	273	600	87
ABR 55L4	4" flg	2" flg	5500	100	600	1515	345	280	273	900	90
ABR 55L6	6" flg	2" flg	5500	220	600	1515	345	280	273	900	92
ABR 55L8	8" flg	2" flg	5500	390	600	1515	345	280	273	900	97

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]
ABR 16Y2	2" flg	1"½ flg	1600	30	835	820	395	206	400	19
ABR 16Y3	3" flg	1"½ flg	1600	60	865	860	450	206	400	22
ABR 16Y4	4" flg	1"½ flg	1600	100	915	875	550	206	400	25
ABR 23Y3	3" flg	1"½ flg	2300	60	985	985	450	206	600	27
ABR 23Y4	4" flg	1"½ flg	2300	100	1035	995	550	206	600	29
ABR 35Y4	4" flg	2" flg	3500	100	1075	995	600	273	600	35
ABR 35Y6	6" flg	2" flg	3500	220	1150	1045	745	273	600	42
ABR 55Y4	4" flg	2" flg	5500	100	1285	1200	600	273	900	44
ABR 55Y6	6" flg	2" flg	5500	220	1355	1225	745	273	900	53