

BRAVOMAX A

Automatic self cleaning filter



Finality

Impurities such as sand, rust flakes, lime deposits and coarse material can damage the water distribution line and household appliances (pipes, valves, mixers, faucets, washing machines, etc.). The installation of a protection filter is the most simple and efficient alternative to avoid such problems.

BravoMAX M is a semi-automatic self cleaning filter with brushing system for cartridge cleaning and discharge valve for dirt. The filter is complete with pressure gauges for checking pressure drop across the filtering cartridge.

BravoMAX M is designed with a standard filtration rating of 150 micron which retains coarse impurities from water preventing them from damaging the system.

Operation

water entering BravoMAX A flows from the inside toward the outside of the filtering cartridge. BravoMAX A is an automatic self cleaning filter with an electronic control board which starts the filter cleaning in an operator-independent way. The innovative filter cleaning cycle is composed by two

different actions: brushing of the filtering cartridge and opening of the discharge valve which creates an high speed tangential flow which removes impurities accumulated in the filter bowl. This method allows an efficient and thorough cleaning both of the filtering cartridge and the filter bowl. The filter cleaning cycle is started automatically by the electronic control board when the pressure drop across the filter cartridge reaches a pre-set value or a pre-set time interval has elapsed.

Key features



BravoMAX A is completely made in stainless steel. The filtering surface is in stainless steel soldered on a stretched wire netting. The particular

structure of the filtering cartridge makes it resistant to mechanical shocks and pressure gradients eliminating deformation and crushing of the filtering cartridge.

BravoMAX A is the ideal solution for the filtration of high water flow rates.

BravoMAX A meets Italian requirements for drinking water treatment. The standard filtration rating of BravoMAX A is 150 microns; other filtration ratings are available upon request (100 and 200 microns).

BravoMAX A is available with both threaded and flanged connections.

BravoMAX A is equipped with two pressure gauges to monitor pressure drop across the filtering cartridge enabling one to easily determine the degree of clogging.

BravoMAX A is available in two versions:

- *BravoMAX A – short cleaning cycle* (settable cleaning interval: each 2 – 4 – 6 – 8 hours);
- *BravoMAX A – long cleaning cycle* (settable cleaning interval: each 12 – 24 – 36 – 48 hours).

Water consumption for each washing cycle is 6 liters (referred to a pressure of 3 bar). BravoMAX A requires an electrical power supply (220V / 50Hz).

Furthermore BravoMAX A is equipped with a black button allowing to start manually, at any time, a washing cycle. Further, BravoMAX A is endowed with an output signal (voltage free contact) which can be used to control, through an electrical auxiliary board, pumps, solenoid valves, alarms, etc.

Optionals



BravoMAX A can be coupled with an auxiliary control panel (code 23022030) which

can control up to 2 24Vac units (backwash pumps, solenoid valves, alarms, etc.). The control panel is equipped with an internal voltage transformer and it requires an electrical power supply (220V / 50 Hz). A complete series of N.O. 24 Vac solenoid valves with connections ranging from 3/4" up to 2" is also available (code EVC001 – 3/4", EVC002 – 1", EVC003 – 1 1/4", EVC004 – 1 1/2", EVC005 – 2"). In

the case of heavy duty applications BravoMAX A can be equipped with an automatic discharge valve (24 Vac, 3/4" connections) which replaces the standard mechanical discharge valve. The automatic discharge valve is directly controlled by the electronic control board for BravoMAX A. To order BravoMAX A with automatic discharge valve select the code corresponding to the desired filter followed by the letters /EV (e.g. FT160/EV for BravoMAX A filter with long cleaning cycle, DN40 flanged connections and automatic discharge valve). The automatic discharge valve can also be ordered apart (code 23008004).

Intended use, use conditions

BravoMAX A has been specifically designed for the filtration of cold drinking water predominantly in civil applications but it may also be used for the protection of water distribution lines in technological applications (heating and cooling systems, industrial installations, etc.).

Maintenance and duration

BravoMAX A requires the periodic cleaning operation.

BravoMAX A must be included in the periodic sanitization program planned for the distribution system (who has built the distribution system is in charge of this planning). As a consequence any time the distribution system is sanitized BravoMAX A must be sanitized too. For a proper maintenance two annual inspections are recommended.

Installation

! The standard version of BravoMAX A is supplied with the inlet connection on the left and the outlet connection on the right ; in case you need the connection reversed please specify it in the order.

Install in agreement with local regulations. Install only in hygienically suitable places.

BravoMAX A should be installed in the cold water line upstream of the appliance (boiler, heat exchanger, etc.) to be protected. Do not install in

the hot water line or downstream of the appliance to be protected. Install by-pass valves. Read the Installation Manual supplied with BravoMAX A.

Warnings

Cleaning and self-cleaning filters are protection filters and they are not suitable for the filtration of water containing silt, large amounts of sand and/or suspended material. In these cases it is necessary to use other types of filters.

Raw water

BravoMAX A has been designed to treat only drinking water.

Compliance and Regulatory references

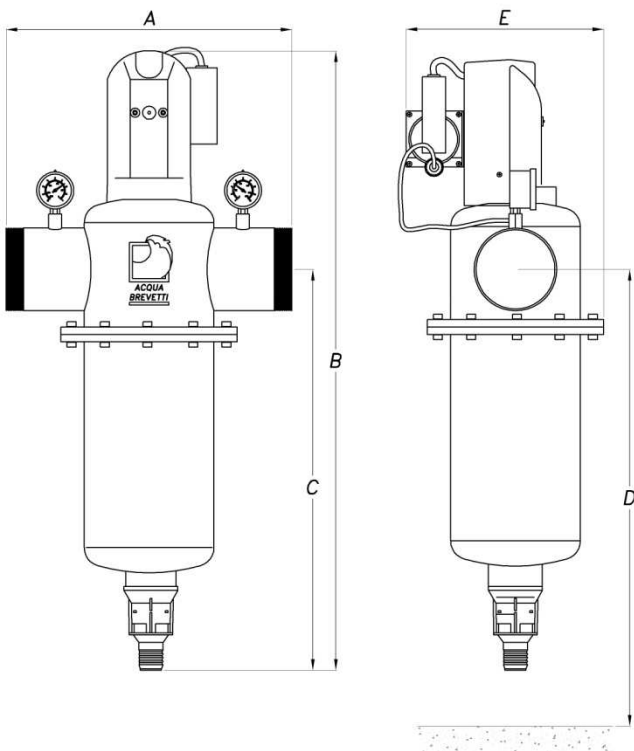
Acqua Brevetti s.r.l. works with a Quality System certified in compliance with the requirements of the UNI-EN ISO 9001:2008 with certificate 501007368 issued by TÜV Italy s.r.l..

Endowment

BravoMAX A is packaged in a wood box. The standard endowment includes: BravoMAX A filter, N°2 flanges (for flanged BravoMAX A), voltage transformer, instruction manual (including the conformity declaration), warranty certification.

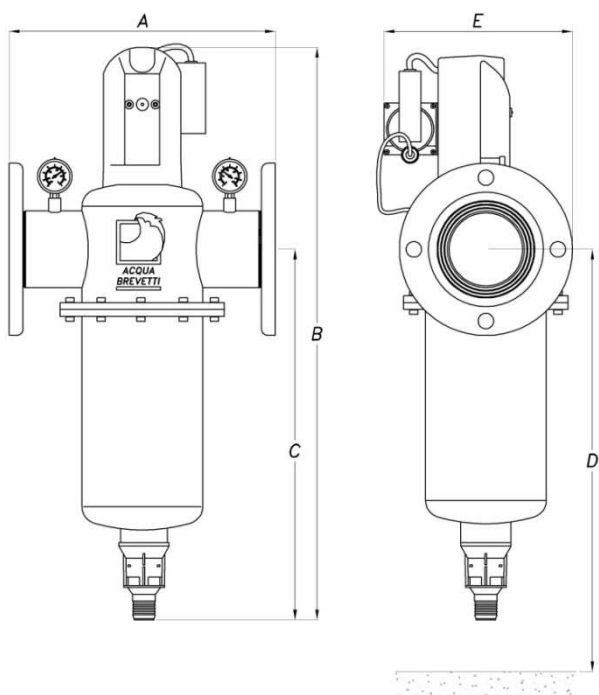
Performances and tecnica datasheet

BRAVOMAX A – THREADED CONNECTIONS					
Short cleaning cycle code		FT050	FT052	FT054	FT056
Long cleaning cycle code		FT060	FT062	FT064	FT066
	Units				
Connections	DN	1”½ M	2” M	2”½ M	3” M
Flow rate ($\Delta P=0.2$ bar)	m ³ /h	18.0	22.4	35.0	40.0
Flow rate ($\Delta P=0.5$ bar)	m ³ /h	30.0	40.0	49.6	54.0
Filtration rating	micron	150			
Min-max working pressure	bar	1.5 - 10			
Cleaning cycle type	hours	short cycle (2 – 4 – 6 – 8) ÷ long cycle (12 – 24 – 36 – 48)			
Cleaning time – water consumption	sec - lt	19 - 6			
Min-max water temperature	°C	5 – 30			
Min-max room temperature	°C	5 - 40			
Electrical power supply	V	230/18			
Dimensions					
Width (A)	mm	310	310	310	310
Total height (B)	mm	640	640	700	700
Height at connection (C)	mm	365	365	438	438
Distance from ground (D)	mm	500	500	700	700
Depth (E)	mm	190	190	190	190



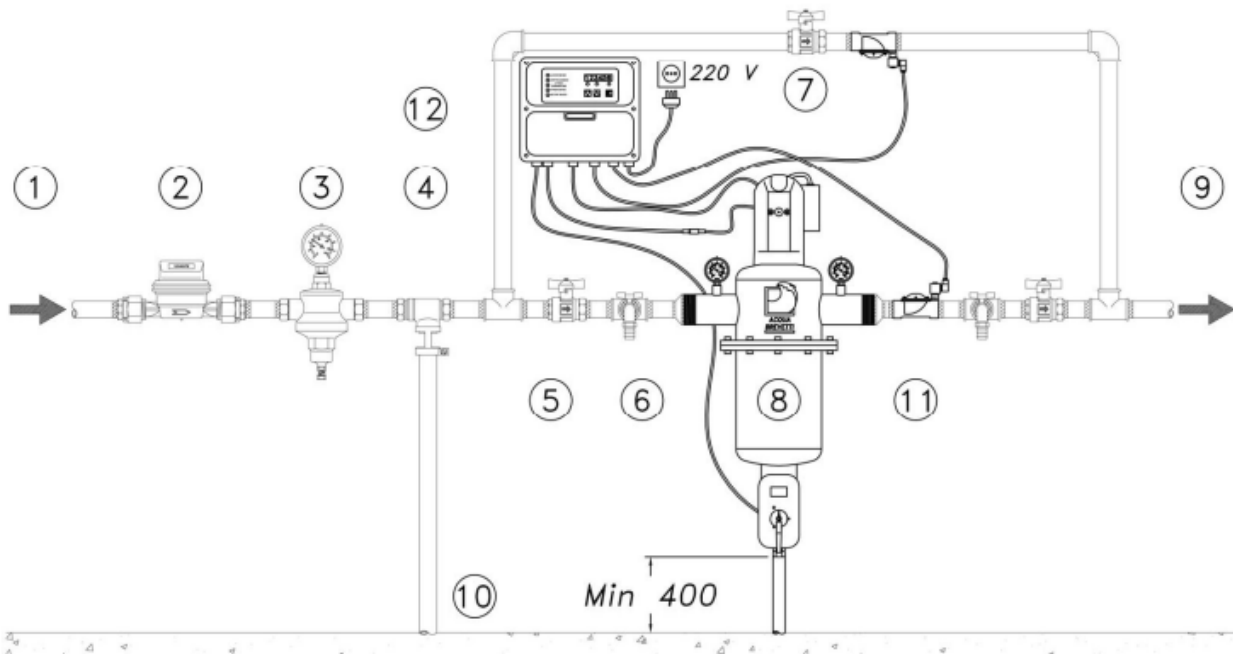
Trattare l'acqua è utile e vantaggioso

BRAVOMAX A – FLANGED CONNECTIONS					
Short cleaning cycle code		FT150	FT152	FT154	FT156
Long cleaning cycle code		FT160	FT162	FT164	FT166
	Units				
Connections	DN	40	50	65	80
Flow rate ($\Delta P=0.2$ bar)	m ³ /h	18.0	22.4	35.0	40.0
Flow rate ($\Delta P=0.5$ bar)	m ³ /h	30.0	40.0	49.6	54.0
Filtration rating	micron	150			
Min-max working pressure	bar	1.5 - 10			
Cleaning cycle type	hours	short cycle (2 – 4 – 6 – 8) ÷ long cycle (12 – 24 – 36 – 48)			
Cleaning time – water consumption	sec - lt	19 - 6			
Min-max water temperature	°C	5 – 30			
Min-max room temperature	°C	5 - 40			
Electrical power supply	V	230/18			
Dimensions					
Width (A)	mm	310	310	310	310
Total height (B)	mm	640	640	700	700
Height at connection (C)	mm	365	365	438	438
Distance from ground (D)	mm	500	500	700	700
Depth (E)	mm	190	190	190	200



Trattare l'acqua è utile e vantaggioso

Installation scheme



	 ACQUA BREVETTI Via A. Volta, 1/A 35030 Rubano (PD) tel.049/7974005 fax.049/8979649 www.acquabrevetti95.it info@acquabrevetti95.it	Installazione Filtro Automatico BravoMax con Quadro Comando	
		Normative di riferimento: UNI CTI 8065; DM 443/90; L.46/90	DISEGNO: D.Zago DATA: 12/02/'09

Legend

1. Water inlet • 2. Flow meter • 3. Pressure reducer • 4. Backflow preventer • 5. Shut off valve • 6. Sampling tap • 7. By-pass valve • 8. BravoMAX A filter • 9. Cold water outlet • 10. Drain • 11. Backwash valve (optional).



ACQUA BREVETTI SRL

APPARECCHIATURE TRATTAMENTO ACQUA
Via Molveno, 8 – 35035 Mestrino (PD)
Tel. 049/8974006 – Fax 049/8978649
e-mail: info@acquabrevetti.it
sito web: www.acquabrevetti.it



This Technical Datasheet is based on the experience of Acqua Brevetti s.r.l. and it is applied to the use in compliance with the instruction supplied by the manufacturer; any use different from those described must be authorized in a written form from Acqua Brevetti s.r.l. For a regular maintenance it is advised to enter into a contract with an authorized technical service. Acqua Brevetti s.r.l. reserves the right to any change to its products without any notification. The reproduction of this document or part of this document is forbidden. This document is property of Acqua Brevetti s.r.l.

Trattare l'acqua è utile e vantaggioso