



BERMAD Irrigation

BF200 FILTERS

Water Control Solutions







BF200 Filters

Polymeric hydraulic self-cleaning, hydraulically powered screen filters, combining suction-scanning screen technology with an innovative compact design



Features and Benefits

- Polymeric housing - Corrosion and fertilizer resistant
- Increased reliability and durability
- Suction-scanning screen technology
- Large filtration area
- Low water and energy consumption
- Compact design and small footprint
- Easy installation and maintenance
- Diverse open-field irrigation, landscaping,
- greenhouse and aquaculture applications
- AC/DC electronic controller

Technical data

Flow Rates:

- Up to 280 m³/h; 1,233 gpm

Minimum operating pressure:

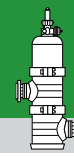
- 1.5 bar; 22 psi (with electrical controller)
- 2.2 bar; 32 psi (hydraulic controller)

Water for cleaning:

- A small amount, during a short operation

Filtration degrees:

- 80-300 micron



BF200 Filters

HOW IT WORKS

GENERAL

The Bermad BF200 Filters are automatic filters, with multiple screens, operated by hydraulic turbines mechanism, with a capacity up to 280 m³/h (1,233 gpm) and with filtration degrees from 80-500 micron Inlet/Outlet connections available: 100 mm (4"), 150 mm (6"), 200 mm (8") diameter, and exhaust valve is 50 mm (2").

The Filtration Process

Raw water enters from the filter inlet and passes through the multiple screens. Clean water flows through the filter outlet. The gradual dirt buildup on the screen's inner surface causes a filter cake to develop, which creates an increase in the pressure differential across the filter system. A differential pressure (DP) switch (hydraulic or electric) senses the pressure differential and when it reaches a pre-set value, the self-cleaning process begins.

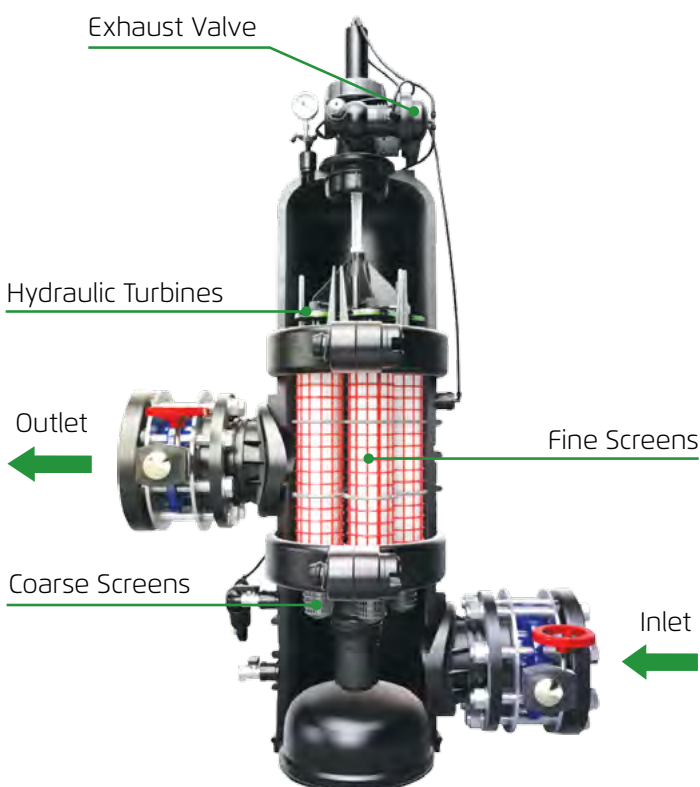
The Self-Cleaning Process

The self-cleaning cycle begins under any one of the following conditions:

1. Receiving a signal from the DP switch - which is preset at 0.5 bar (7 psi)
2. Time interval parameter set at the controller (electronic controller only)
3. Manual start, triggered by 3 way ball valve or via electronic controller keypad

The flush water flows through the hydraulic turbines, causing the gearbox to rotate and the suction scanners to spin.

The piston's pressure-drop forces the suction scanners into an axial movement upward, ensuring that the nozzles sweep and clean the entire inner side of the fine screens.





BF200 Models

Available as a stand alone or as filter battery assembly, with a single control system (AC/DC).

Bermad BF200 Series consists of the following sizes and types:

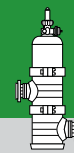
- BF200 4" - 6000 up to 120 m³/h; 528 gpm
- B200 6" - 8000 up to 180 m³/h; 792 gpm
- BF200 8" - 8000 up to 280 m³/h; 1233 gpm

Filtration systems of several units can be design according to the flow and the water condition in the form.

* Manifolds for the systems can be supply from PE or Iron. There is a possibility of production in my country of destination

Modular configuration, available as a stand alone or as filter battery assembly, with a single control system (AC/DC).

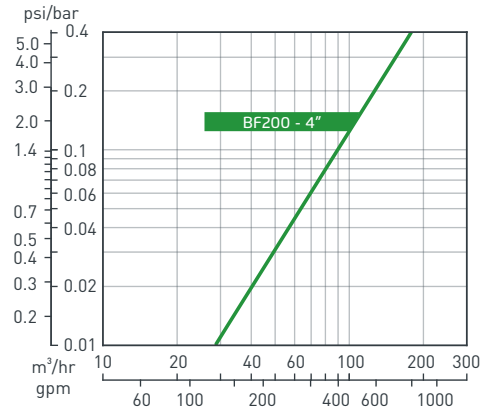
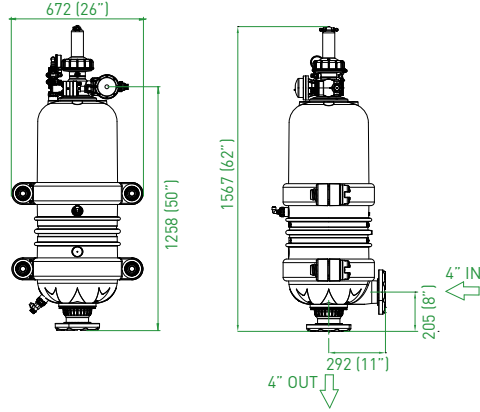




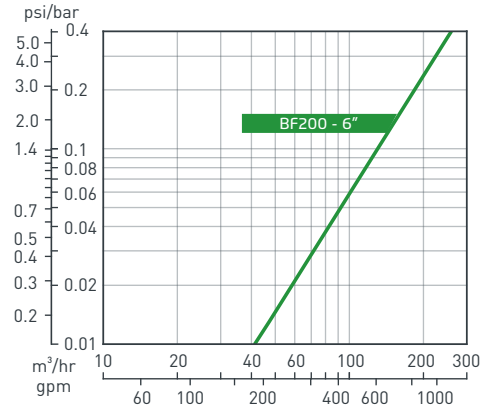
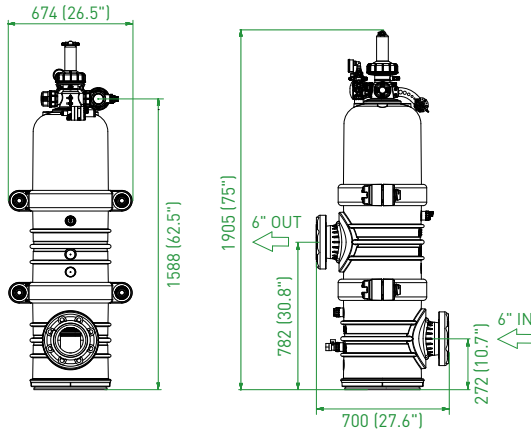
200 Models:

Dim: in mm (inch)

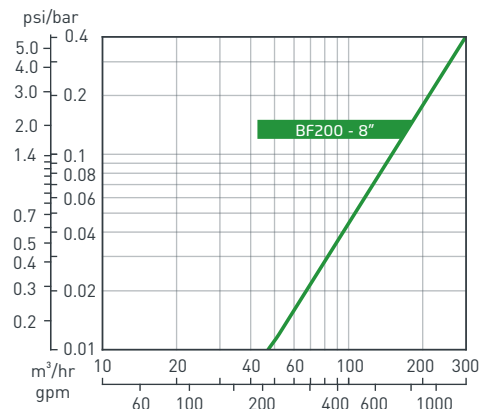
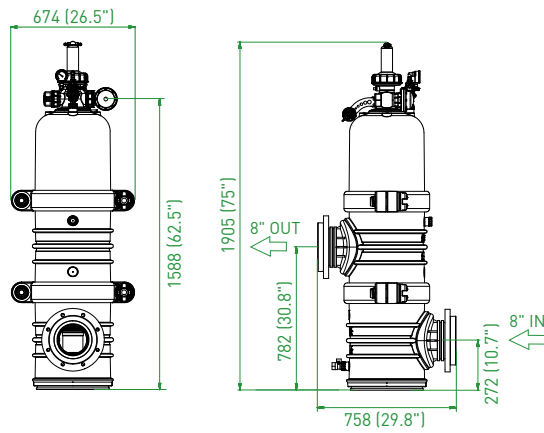
Pressure Loss Graph (in clean water)



BF200-4"-6000



BF200-6"-8000



BF200-8"-8000

Dim: mm (inch) *Approx. length required for maintenance

All images in this catalog are for illustration only



Technical Specifications

Filter Type	BF200- 4"-6000	BF200-6"-8000	BF200-8"-8000
General Data			
Max. flow rate* (130µ) in average water quality	120 m³/h (528 gpm)	180 m³/h (792 gpm)	280 m³/h (1,233 gpm)
Min. operating pressure when cleaning	1.5 bar (22 psi) - electronic controller 2.2 bar (32 psi) - hydraulic controller		
Max. operating pressure	10 bar (145 psi)		
Filtration area	6,000 cm² (930 in²)	8,000 cm² (1,240 in²)	8,000 cm² (1,240 in²)
Inlet/Outlet diameter	4" (100 mm) Flange & Victaulic	6" (150 mm)	8" (200 mm)
Weight	Empty: 75 kg (110 lb) Full: 145 kg (213 lb)	Empty: 110 kg (242 lb) Full: 225 kg (496 lb)	Empty: 120 kg (264 lb) Full: 235 kg (518 lb)

* Consult BERMAD for optimum flow depending on filtration degree and water quality.

Hydraulic controller	
Rinse controller	PP (Polypropylene), PA (Polyamide)
DP switch	Built-in rinse controller set at 0.5 bar (7 psi)
Operation mode	3 way ball valve, indicate: Automatic & Manual

Optional electronic controller	
Control voltage	6 VDC or 110/220 VAC
Control power supply	4 D type 1.5V batteries / AC power
Solenoid operation data	12-9 VDC latching solenoid or 24 VAC solenoid
DP switch	Dry contact switch

Flushing data			
Exhaust valve	2" (50 mm)		
Flushing time	10 sec		
Reject water volume per flush cycle	75 liters (20 gallons)	90 liters (23 gallons)	90 liters (23 gallons)

* Construction Materials	
Filter housing and lid	RPP (Reinforced polypropylene) / RPA (Reinforced polyamide)
Screens	Molded weavewire, stainless steel 316L screen
Cleaning mechanism	PBT (Polybutylene)
Exhaust valve	Polymeric
Seals	EPDM
Control command tubing	PE (Polyethylene)

* BERMAD offers a variety of construction materials. Consult us for specifications.



About BERMAD

BERMAD is a leading, privately-owned global company that designs, develops and manufactures tailor-made water & flow management solutions that include state-of-the-art hydraulic control valves, air valves and advanced metering solutions.

Founded in 1965, we have spent over 50 years interacting with the world's major end users, and accumulating knowledge and experience in multiple markets and industries. Today, we are recognized as a pioneer and established world-leading provider of water & flow management solutions that give our customers the unprecedented operational efficiency, and superior quality, durability and performance they need to meet the demanding challenges of the 21st century.

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