

BERMAD Irrigation BF300 FILTERS



Water Control Solutions

BERMAD



Irrigation





BF300 Filters

Metallic Semi automatic filters with "Scanaway" or "Brushaway" cleaning system



Features and Benefits

- Water required for cleaning Low consumption, for a short time
- Ideal solution for agricultural filtration requirements
- Automatic flushing according to pressure differential or time
- Reliable operating mechanism
- Simple construction and easy maintenance
- High reliability and durability

Technical data

Flow Rates:

■ Up to 300 m³/h; 1,320 gpm

Minimum operating pressure:

2 bar; 30 psi

Water for cleaning:

Low water consumption, for a short time

Filtration degrees:

■ 50 - 3500 micron

BF300 Filters

HOW IT WORKS

GENERAL

Bermad Semi-Automatic assemblies provide a quick and efficient way for cleaning manual filters. semi-automatic operation by adding simple turn-of-a-handle cleaning mechanism to the filter's screen. Bermad semi-automatic assemblies are fitted with a Clogging Indicator for visually monitoring the status of the filter element without disrupting the water flow. A red button pops-up from the indicator when the differential pressure across the screen reaches 0.5 bar.

How the "Clogging Indicator" Works

The Scanaway assembly consists of a suction-scanner, a hollow pipe with suction nozzles, that is facing the inner side of the screen. Outside the filter a handle is connected to the "suction" scanner, allowing turning of the scanner in a spiral movement so it rotates inside the screen surface without touching the screen mesh. Opening the exhaust valve at the filter lid creates low pressure conditions in the suction scanner, which cause the screen surface and expel the dislodged particles out through the exhaust valve. Scanning is done during the filtration process without having to stop the flow of process water through the filter.

The Self-Cleaning Process

The Clogging Indicator is a special feature mounted on the filter pressure check points and acts like a "traffic light". When the pressure differential across the screen reaches a pre-set value of 0.5 bar the red button of the Clogging Indicator pops-up to visually indicate that the filter needs cleaning.

How the "Brushaway" filter Works

The Brushaway assembly consists of nylon brushes fitted ona frame and inserted into the filter screen. A simple handle, outside the filter, allows brushing away particles from the inner screen surface and expel them out from the filter through the exhaust valve. Brushing is done during the filtering process without having to stop the flow of process water through the filter.





BF300 Filters

Available as a stand alone or as filter bank assembly.

Bermad BF300 Series consists of the following sizes and types:

Scanaway system

- BF300S-3"
- BF300S-4"S
- BF300S-6"C
- BF300S-6"S
- BF300S-8"

Brushaway system

- BF300B-3"
- BF300B-4"S
- BF300B-6"C
- BF300B-6"S
- BF300B-8"





Technical Specifications

Filter Type	BF300S-3" BF300B-3"	BF300S-4″S BF300B-4″S
General Data		
Maximum flow rate*	50 m³/h (220 gpm)	100 m³/h (440 gpm)
Inlet/Outlet diameter	3" (80 mm)	4″ 100 (mm)
Standard filtration degrees	50-500 Scanaway. 200 - 3500 Brushaway	
Minimum working pressure	2 bar (30 psi) For lower pressure please consult BERMAD	
Maximum working pressure	10 bar ((116 psi)
Maximum working temperature	55°C (131°F)
Weight [empty]	19 kg (42 lb)	44.5 kg (98 lb)

Screen Data		
Filter area	1,430 cm² (116 in²)	2,740 cm ² (349 in ²)
Screen types	Weave Wire Screen, Perforated Screen	

* Construction Materials	
Filter housing	Epoxy-coated carbon steel 37-2 (stainless steel 316L on request)
Filter lid	High density polypropylene, Epoxy coated carbon steel 37-2 (Stainless steel 316L on request)
Cleaning mechanism	PVC and stainless steel 316L
* BERMAD offers a variety of construction mater	ials Consult us for specifications







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



Technical Specifications

Filter Type	BF300S-6″C BF300B-6″C	BF300S-6″S BF300B-6″S	BF300S-8" BF300B-8"
General Data			
Maximum flow rate*	160 m³/h (704 gpm)	160 m³/h (704 gpm)	300 m³/h (1,320 gpm)
Inlet/Outlet diameter	6" 150 mm	6" 150 mm	8″ 200 mm
Standard filtration degrees	50-500 Scanaway. 200 - 3500 Brushaway		
Minimum working pressure	2 bar (30 psi) For lower pressure please consult BERMAD		
Maximum working pressure	10 bar (150 psi)		
Maximum working temperature	55°C (131°F)		
Weight [empty]	50 kg (110 lb)	63.5 kg (140 lb)	72.5 kg (160 lb)

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

Screen Data			
Filter area	2,740 cm ² (424.7 in ²)	5,720 cm² (886.6 in²)	5,720 cm² (886.6 in²)
Screen types	Мо	lded weavewire, stainless steel 316	L

* Construction Materials

Filter housing	Epoxy-coated carbon steel 37-2 (stainless steel 316L on request)
Filter lid	High density polypropylene, Epoxy coated carbon steel 37-2 (Stainless steel 316L on request)
Cleaning mechanism	PVC and stainless steel 316L

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





300 Models Typical Dimensional Drawing

Head Loss Graphs (in clean water)













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

All images in this catalog are for illustration only

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.



