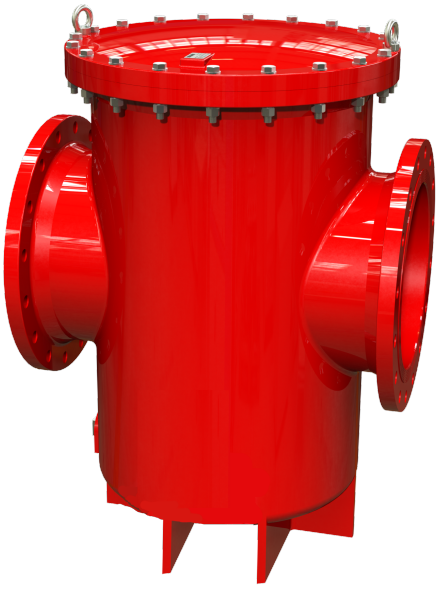
BERMAD LARGE SIZE BASKET STRAINER

Model FP-60F-LARGE



The BERMAD FP-60F-Large Basket Strainers (18, 20 & 24") are designed to be installed in fire protection pipelines primarily to prevent the clogging of fire system nozzles and other debris sensitive components or devices in water based fire protection/firefighting systems.
The FP-60F-Large strainers are also well suited for use upstream of Foam system water control valve and debris sensitive Fire System Devices.
The FP-60F-Large basket strainer ensures continued system operation even In the most debris-ridden firewater.
The high capacity of the FP-60F-Large also resulting in a lower pressure drop and enables longer intervals between cleaning and servicing.
The FP-60F-Large is designed for in-line maintenance with easy access, requiring only the top cover removal for basket screen cleaning and without removing the main strainer housing body from the pipeline.
NFPA standards state that a listed and adequate strainer shall be provided in the main pipeline of all systems using nozzles with waterways less than 3/8" (9.S mm) and for any system where the water is likely to contain obstructive material. Strainers shall be capable of removing all solids of sufficient size to obstruct fire protection devices and equipment waterways.

Features & Benefits

- Low Pressure Drop
- Quick and easy maintenance
- Clogging Prevention
- Large Screen Basket
- For Use with Corrosive Fluids and Harsh Environments

Typical Applications

- Automatic water spray systems
- Deluge systems
- Fire monitor installations
- Large scale foam systems

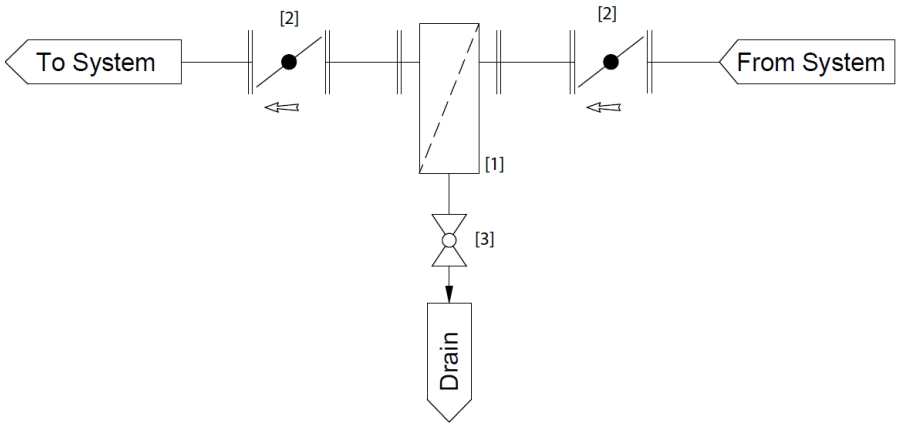
All images in this catalog are for illustration only

Operation

The BERMAD FP-60F Basket strainers are for use in firewater supply and are capable of preventing the entrance of solids of sufficient size that might block or clog the fire protection nozzles or other devices sensitive to debris contaminated firewater.
Install this large size Basket Strainer upstream of the the fire-water main, the Strainer must be located where there is adequate clearance for complete removal of the basket screen assembly to enable easy extraction and cleaning of the strainer basket. Take into consideration the release of water when draining the entire volume of the strainer and piping, as is required before maintenance or inspection.
The drain connection should be typically fitted with an appropriately sized normally closed valve and drain piping. The Basket Strainers are recommended to be installed in the horizontal position with the strainer cover facing upwards.
The strainers shall be instal led and maintained in compliance with the NFPA-25 standard in the addition to the instructions of any authorities having jurisdiction.
The Basket Strainer shall be provided in the main pipeline of all systems utilizing nozzles with waterways less than 3/8" (9.5 mm) and for any system where the water is likely to contain obstructive material.
Strainers shall be capable of removing from the water all solids of sufficient size to obstruct the nozzles.

System P&ID

	Components
1	60F Basket Strainer
2	Butterfly Service Valve
3	Optional Ball Valve

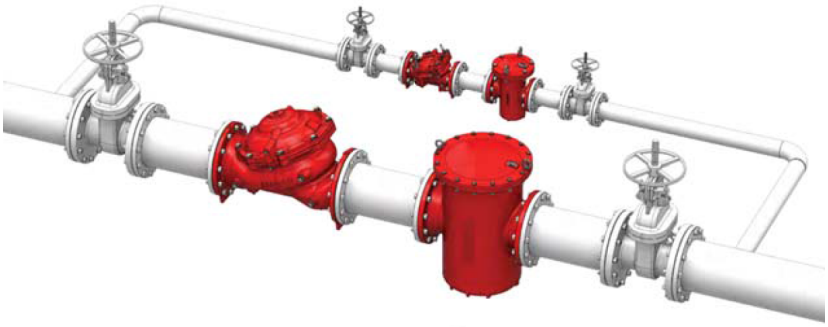


System Installation

Provide basket removal clearances and strainer installation provisions in accordance with the requirements given in the Design Engineer Guide section above.Install the strainer with the flow arrow on the body pointing in the desired flaw direction.
The strainer shall be installed on the fire main pipeline upstream of the sprinklers, pressure control valve, deluge valve or other sensitive system device.
Install a listed isolating valve upstream of the strainer. An adequate support shall be provided to carry the system installation as well as the dynamic loads.
It is recommended to install a differential pressure gauge rooted to upstream and downstream of the FP-60F strainer, in order to show strainer blockage, and if the maximum allowable pressure differential of 7 psi (0.5 bar) across the strainer screen has been exceeded.
Placing In Service:
Verify that all strainer cover bolts are well tightened, close the drain plug and/or drain valve, slowly open the supply isolating valve and check that there are no leakages. Observe the system pressure gauge: it should indicate that the normal supply of water pressure is maintained.

Standard Pressure Reducing System

- The BERMAD FP-60F strainer is ideal to be installed upstream of the BERMAD Pressure Control Valve, preventing the fouling of valve sealing surfaces and keeping the waterways clear from obstructions.



Sprinkler / Deluge System

- The BERMAD FP-60F strainer should be installed upstream of the Deluge, Foam system or Automatic Sprinkler system, preventing debris particles from clogging the nozzles and other sensitive devices.

Suggested Specifications

The Fire Line Strainer shall be a basket type strainer for 14 bar I 200 psi. The strainer shall be with a high flow capacity and a low pressure loss.
The strainer body and cover shall be ductile iron ASTM AS36 65-45-12 with anti-corrosion Fusion Bonded High Build Epoxy RAL 3002 coating, applied internally and externally, all other wetted parts shall be stainless steel 316.
The screen shall be an inline removable basket type made of stainless steel 316 with screen holes diameter of 3.2mm.
Strainer maintenance,inspection or service shall be carried out in-line and without disassembly of the strainer body from the pipeline.
The Strainer shall be supplied pre-assembled with stainless steel 316L bolting and hydraulically tested by a factory certified to IS0-9000 and 9001 standards.

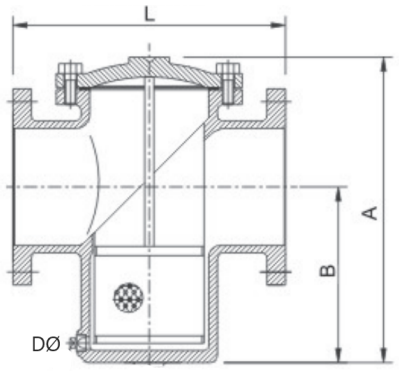
All images in this catalog are for illustration only

Technical Data

Available Sizes:
Flanged- 18, 20 and 24"

Pressure Rating:
ANSI#150 - 14 bar
Grooved - N/A bar
Setting range: N/A bar

Elastomer:
EPDM



Valve Size	L #150 (mm)	A (mm)	B (mm)	C (mm)	øD(in)	E (mm)	F (mm)	G (mm)	Weight #150 (Kg)
DN450 | 18"	842	970	435	-	2"	-	-	-	645
DN500 | 20"	842	1110	519	-	2"	-	-	-	850
DN600 | 24"	1054	1110	525	-	2"	-	-	-	1550

Flow Properties

Size	18”		20”		24”	
Units	metric	US	metric	US	metric	US
Kv /Cv(1)	5050	5893	6100	7119	8400	9803

Notes: (1) Flow coefficient Kv: flow in m^3/h at 1 bar differential pressure, Cv: flow in gpm at 1 psi differential pressure
The pressure loss formula: p = S G (Q / Cv or Kv)2
(2) These values are with a Clean Screen
(3) Recommended design pressure loss during operation: 3 psi, and maximum pipe flow velocity of 15 ft/ sec (4.57 m/sec).
(4) Maximum allowable pressure differential 7 psi (0.5 bar) across the strainer, basket screen shall be clean.