AF SERIES SELF-CLEANING SUCTION STRAINERS

F03-AF-FT-001

Product data sheet · Metal and automatic filters

Submerged strainers, from 4" to 16", installed at the suction of centrifugal pumps. The stainless steel screen is cleaned continuously by rotating nozzles. Flow rate up to 1,200 m³/h.



Technical data

Body	S235JR steel
Screen	Stainless steel AISI 304; 8 mesh (2,500 µm) as standard, fine screen 1,200 µm
Nozzle system	Bronze and PVC
Seals	EPDM
Surface treatment	Pickling, phosphating and polyester powder coating
Connections	DIN 2576 PN10 flanges; grooved from 4" to 8"; other standards and sizes on request
Backflushing pressure	2 to 3 bar (3 bar maximum)

Description

AF series strainers are fitted at the suction of centrifugal pumps. They protect the pump impeller and prevent flow restrictions and cavitation. They are suitable for pumping stations supplied with water carrying large particles (canal, river, reservoir).

The strainer is submerged. When pumping starts, the water passes through the stainless steel screen; organic debris and floating matter remain on the outer surface of the screen and enter neither the pump nor the irrigation network.

The screen is cleaned by water jets sprayed from the inside. The nozzles rotate continuously and cover the entire screen surface.

Specifications by model

Code	Inlet / outlet	Connection	Max. flow rate, 1,200 µm screen (m³/h)	Max. flow rate, 2,500 µm screen (m³/h)	Backwash (m³/h)
05-09-400	4"	F, G	80	100	7.4
05-09-600	6"	F, G	180	230	12.4
05-09-800	8"	F, G	300	380	13.7
05-09-110	10"	F	420	550	19.9
05-09-120	12"	F	600	750	19.9
05-09-140	14"	F	800	1000	24.8
05-09-160	16"	F	1000	1200	27.8

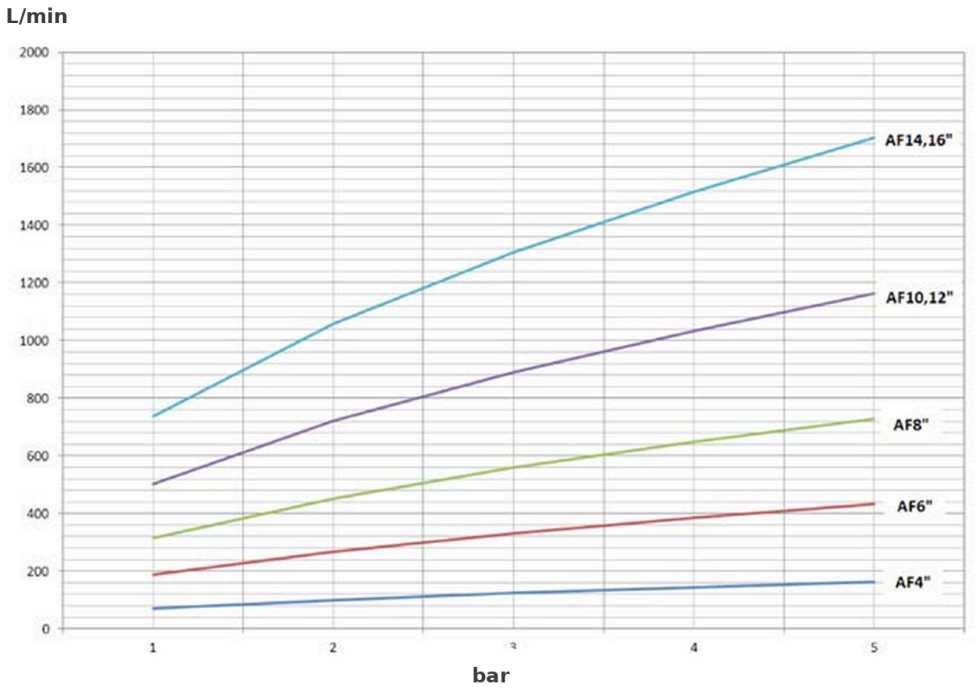
Connection: F = DIN 2576 PN10 flanges, G = grooved. Maximum flow rates according to the screen filtration grade.

Advantages

- Protection of the pump and the installation against large particles.
- Screen cleaned during pumping, without stopping the pump.
- Reduced maintenance.

Performance

Backflushing water consumption according to pressure, measured with a 2,500 µm screen.



Backflushing water consumption (L/min) according to pressure (bar)

Dimensions



Dimensions H and W

Dimensions and weight

Code	Inlet / outlet	H (mm)	W (mm)	Weight (kg)
05-09-400	4"	762	450	28
05-09-600	6"	904	500	42
05-09-800	8"	1025	500	48
05-09-110	10"	1260	600	68
05-09-120	12"	1340	600	74
05-09-140	14"	1370	900	124
05-09-160	16"	1370	900	128

Weights of the flanged models.

Installation



AF strainer at the pump suction in a canal

Submerge the strainer at the pump suction. Also install a check valve.

Operation

Backflushing starts when the backflushing valve is opened: pressurised water supplies the cleaning system through the pressure line, the nozzles spray water onto the screen and the whole assembly starts to rotate. The particles retained on the screen are dislodged.

The pressure line comprises a screen filter, a 3-way valve and a pressure gauge (see the exploded view, sheet F03-AF-VE-001).

Related documents : F03-AF-VE-001

Product codes : 05-09-400, 05-09-600, 05-09-800, 05-09-110, 05-09-120, 05-09-140, 05-09-160