

RF400AR-E Strainer with Backwash Pump

From £2,758.00 GBP



The RF400AR-E filters are self-cleaning intake filters for attachment to the suction hose of surface mounted pumps. These filters can be fitted with nylon or stainless steel mesh and are the same as the RF400AR strainers but with one difference. The filters have a separate motor to drive their internal self-cleaning backwash, so that the cleaning mechanism is driven independently of the surface mounted pump - they have their own integral backwash pump to keep the filter mesh clear. This allows you to vary the output of your pump without affecting the performance of the backwash in the filter - useful if you have a variable speed drive on your pump. These filters and strainers will deliver up to 1000 litres / minute of filtered output from 50 microns to 6mm.

Key Features

- Nylon or stainless steel filter mesh
- Filter sizes from 50 microns to 6mm
- High reliability and easy to install and use
- Works with most centrifugal and progressive cavity pumps
- Continuous backwash keeps filter mesh clear
- Ideal for variable speed pumps
- 60 cubic metres per hour maximum flow
- Reduced capital, installation and maintenance costs
- All Stainless Steel construction

Description

RF400AR-E Self-cleaning Filters



Rotorflush RF400AR-E self-cleaning intake filters provide suction intake protection for surface mounted pumps and other connected equipment. These are our successful RF400AR filters built with an internal self-cleaning backwash pump to keep the filter mesh free from debris even if the output of your surface mounted pump varies.

These are stainless steel dirty water suction intake filters with a capacity of up to 1000 litres / minute (60 m³ per hour), capable of filtering from 60 microns to 6mm.

RF400AR-E filters are powered by a small submersible pump to drive their internal self-cleaning backwash, so that the cleaning mechanism is driven independently of your surface mounted pump. They can be used where the pump output is variable without compromising the filter's backwash. The motor continuously backwashes the mesh screen blowing away anything that might cause it to block, whether your pump is pumping a low or high volume of water.

The RF400AR-E filter offers both fine and coarse self-cleaning filtration. It is available with replaceable nylon mesh inserts or stainless steel top mesh for fine filtration (up to 315 microns); on average nylon mesh inserts need replacing every 5000 hours continuous use for 315 micron mesh, and every 1000 - 2000 hours continuous use for 60 and 115 micron mesh. These maintenance intervals will of course vary according to water conditions.

The RF400AR-E can also be fitted with fine stainless steel filter mesh, and needs jet washing at similar intervals. For coarse filtration and compliance with EU Eel and Elver regulations, 1, 2, 3 or 6mm stainless steel filter meshes are available.

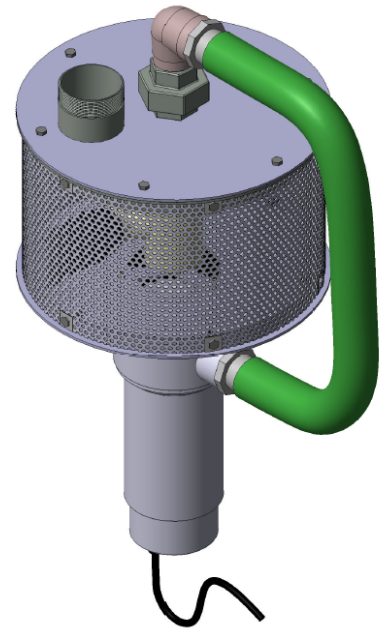
The RF200R-E is designed for coarser filtration and can be fitted with 1, 2, 3 or 3mm stainless steel filter mesh

The twin jets of the cleaning rotor rotate at about 60 rpm in each filter, clearing the whole screen every ½ second. As the cleaning mechanism is on the filtered side of the filter mesh debris in the water will not obstruct the mechanism, or affect the backwash pump.

For a larger capacities our [RF600AR self-cleaning filters](#) deliver up to 4,500 litres per minute, and we can [custom build](#) larger self-cleaning filters to your specifications. For smaller capacities see our [RF200 ranges of filters](#).

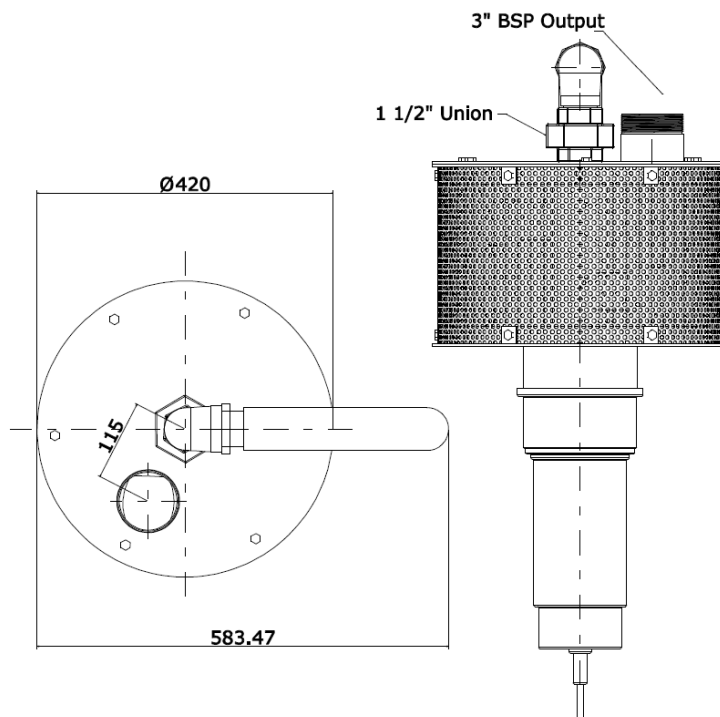
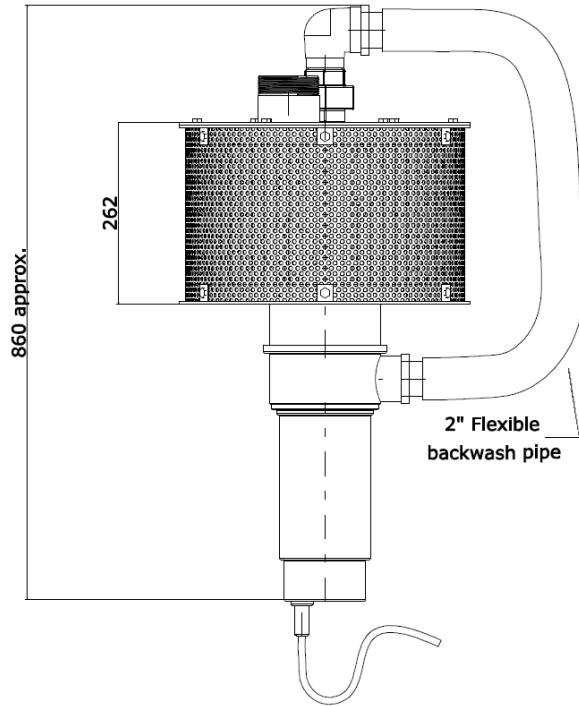
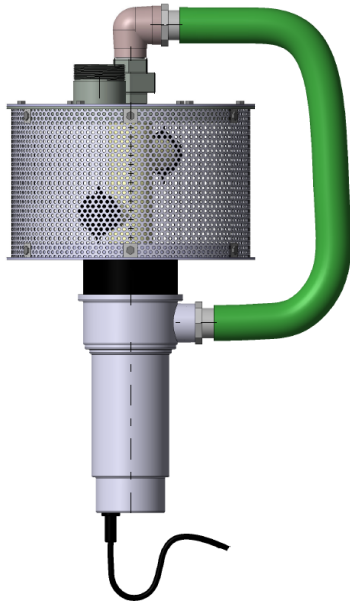
Models & Specification

RF400AR-E Self-cleaning Intake Filter



General Characteristics	RF400AR-E
Water supply to cleaning rotor	Supplied by built-in pump motor
Maximum pump output (m ³ /hour) (1)	60
Standard coarse screen apertures	3mm or 6mm perforated 304 stainless steel 1mm or 2mm woven 316 stainless steel mesh
Standard fine screen	50, 115 or 300 micron sintered stainless steel top mesh 60, 115 or 315 micron bias cut nylon mesh
Dimensions (diameter x height) (mm)	675 x 835
Weight (kg)	30
Suction pipe connection	3"
Return pipe connection	1.5 "

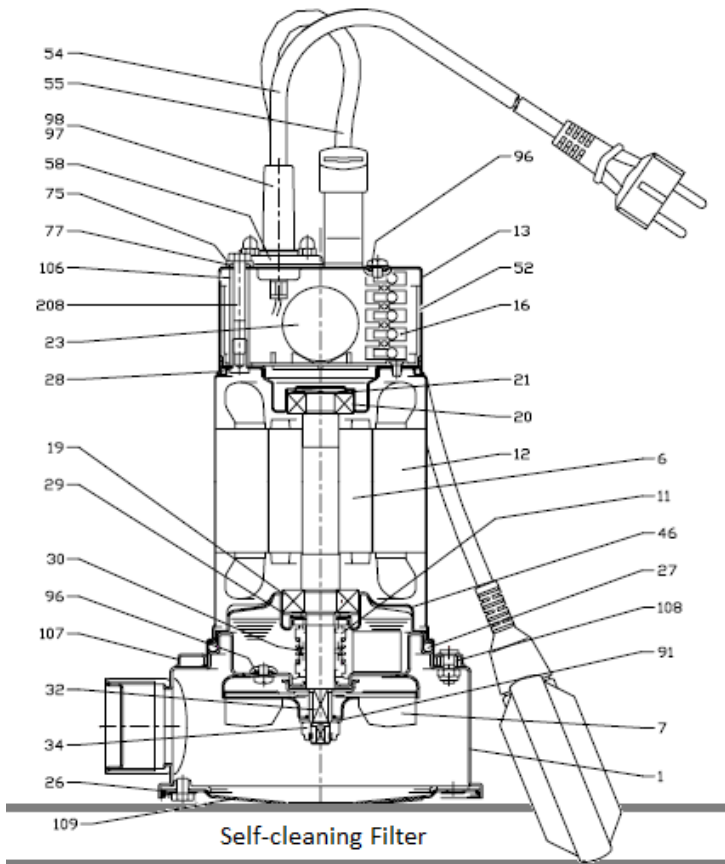
RF400AR-E Dimensions



RF400AR-E Backwash Pump Specifications

No.	Name	Material	Ref.	Name	Material
1	Pump body	AISI 304	34	Nut	AISI 303
6	Shaft with rotor	AISI 303	46	Lower bearing supp.	AISI 304
7	Impeller	AISI 304	52	Capacitor box	PA66 REINFORCED WITH FIBREGLASS
11	Mechanical seal	Ceramic/Carbon/NBR	54	Cable	-
12	Motor case	-	55	Float	AISI 304
13	Cover	AISI 304	58	Cable stay	AISI 303
16	Box	—	75	Washer	NBR
19	Lower bearing		77	O-Ring	AISI 304
20	Upper bearing		91	Washer	NBR
21	Adjusting ring	AISI 304	96	O-Ring	NBR
23	Capacitor	-	97	Cable gland	NBR
26	O-Ring	NBR	98	Cable gland	AISI 304
27	O-Ring	NBR	106	Spacer	AISI 304
28	O-Ring	NBR	107	Fixing flanges	NBR
29	Washer	AISI 304	108	Gasket	AISI 304
30	Spacer for mechanical seal	BRASS	109	Suction side lid	AISI 304
32	Key	AISI 304	208	Screw	

MODEL	Motor output (P2)		Power Motor (P1)		VOLT	In (A)	μF
	HP	kW	HP	kW			
RF200R-E	0.50	0.37	0.70	0.50	220 – 240	2.5	8



RF400AR-E Strainer Construction



Component	Material
Filter cage and lid	304 Stainless Steel
Central turbine	304 Stainless Steel
Jets	Food grade natural rubber
Bearings	Acetal copolymer
Standard coarse screen	3mm or 6mm perforated 304 stainless steel 1mm or 2mm woven 316 stainless steel mesh
Standard fine screen	50, 115 or 300 micron sintered stainless steel top mesh 60, 115 or 315 micron bias cut nylon mesh

Note: 316 marine grade stainless steel is an option for all RF200 filters

Ordering

Rotorflush RF400AR-E Self-cleaning Strainers with integral backwash pump - up to 1000 litres per minute



Rotorflush Filter Model No	Price £ (GBP - exc. VAT)
RF400AR-E nylon filter mesh	£2,874.00 (GBP)
RF400AR-E sintered stainless steel mesh	£3,674.00 (GBP)
RF400AR-E woven stainless steel mesh	£3,117.00 (GBP)
RF400AR-E perforated stainless steel mesh	£2,758.00 (GBP)

Please state filter mesh size:

RF400AR-E nylon mesh: 60, 115 or 315 micron bias cut nylon mesh is available

RF400AR-E sintered stainless steel mesh: 50, 155 and 300 microns sintered top mesh

RF400AR-E woven stainless steel mesh: 1mm or 2mm

RF400AR-E perforated stainless steel mesh: 3mm or 6mm

Standard fittings are 3 inch BSP outlet, and 1½ inch BSP inlet to the backwash.

If NPT connections are required please state when ordering and we can fit adaptors.

Please note:

Delivery is by carrier and is usually between 5 and 7 days from order depending on product and availability.

Carriage and packing charges are extra.

Can't find what you need? Want to talk with us directly?

We're here to help

Call us on +44(0) 1297 560229