

ASF Self-cleaning filter for water and process liquids



- Intake water
- Effluent waste water
- UV system protection
- Cooling water
- Wash water
- Degreasing and cleaning baths
- Pump protection
- Heat exchanger protection
- Prefiltration and final filtration
- Closing of water loops
- Cooling and lube oil filtration

ASF is a very versatile self-cleaning filter that can be used in numerous applications, involving cleaning of water and other industrial liquids. Its compact yet robust and versatile design makes it applicable in virtually all processes, requiring both continuous and batch operation. It can operate in very high dirt load applications and a very wide range of flows. It can process low as well as high viscous liquids. It has unique among self-cleaning filters ability to operate with low line pressures. Cleaning process is implemented, without interrupting the flow of filtered medium. Another unique feature is minimized loss of liquid during cleaning, thanks to the active cleaning concept, without the need of backwash water. Filter can also handle difficult fibrous and sticky type of impurities.

The heart of the system is a cylindrical wedge wire element, with the flow inside-to-outside and the scraper element. The construction of filtration element, with a very smooth surface and triangular gap geometry, makes possible to effectively clean it with a scraper that has a wiper shaped elastomer element. Filter housing has a sludge chamber into which impurities are swept. Every programmed number of movements of the scraper a discharge valve at the bottom of sludge chamber is opened to expel concentrated impurities.

Filter can be delivered in many configurations, as manual, semiautomatic and fully automatic unit. Single filters can be easily manifolded for greater output. It is delivered with a standard PLC and visualization control unit which allows to set up process parameters and monitor key values. Additionally control unit can be equipped with various communication protocols to be integrated with a plant central control system.

In explosive atmospheres filter can be delivered in 2014/34/UE (ATEX) compliant version. Filter meets PED 2014/68/UE pressure equipment directive and has a CE marking.

Standard filter body is made of 304 / 316L (1.4301, X 5 CrNi 18 10, 0H18N9 / 1.4404; X 2 CrNiMo 17 13 2; 00H17N13M2) type of stainless steel and the filter element is made of 316L (1.4301, X 5 CrNi 18 10, 0H18N9) grade steel. Other grades are available on request.

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Basic dimensions

Type ASFA/M	Max. Connection size	Max flow rate* [m3/h]	Dim A** [mm]	Dim B [mm]	Dim C [mm]	Dim D [mm]
6	DN100	110	1875	570	500	400
6L	DN100	110	2375	570	750	400
6XL	DN100	110	2875	570	1000	400
7	DN150	170	1960	600	500	450
7L	DN150	200	2460	600	750	450
7XL	DN150	250	2960	600	1000	450
8	DN200	400	2150	500	500	650
8L	DN250	500	2650	500	750	650
8XL	DN250	550	3150	500	1000	650
9	DN250	600	2300	750	550	900
9L	DN300	700	2700	750	750	900
9XL	DN300	800	3200	750	1000	900

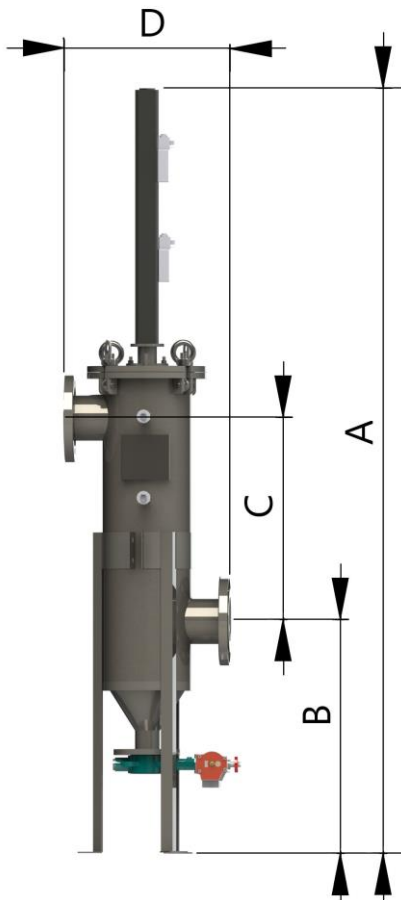
Type ASFE	Max. Connection size	Max flow rate* [m3/h]	Dim A** [mm]	Dim B [mm]	Dim C [mm]	Dim D [mm]
6	DN100	110	1500	570	500	400
6L	DN100	110	1750	570	750	400
6XL	DN100	110	2000	570	1000	400
7	DN150	170	1550	600	500	450
7L	DN150	200	1800	600	750	450
7XL	DN150	250	2050	600	1000	450

The table represents approximate dimensions of self-cleaning filters. Technical drawing will be sent after receiving an order.

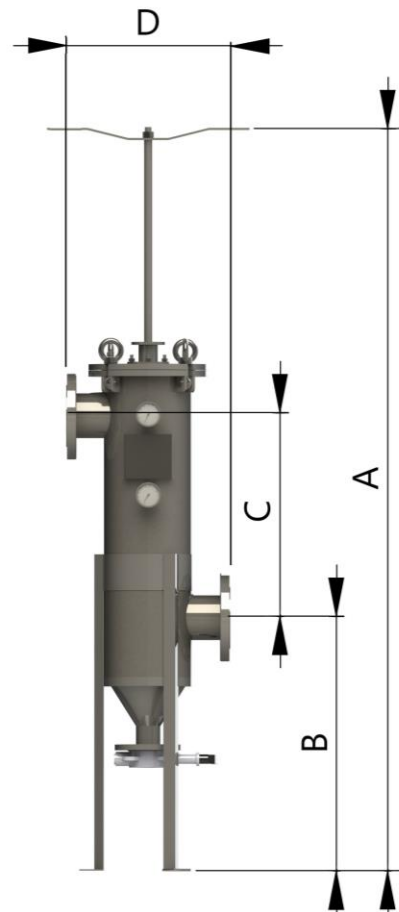
* Max. flow rate is given as an approximation. In the individual quotations, filter type can be chosen outside this boundaries.

** Filter legs are welded to the clamp which can be adjustable within ± 70 mm.

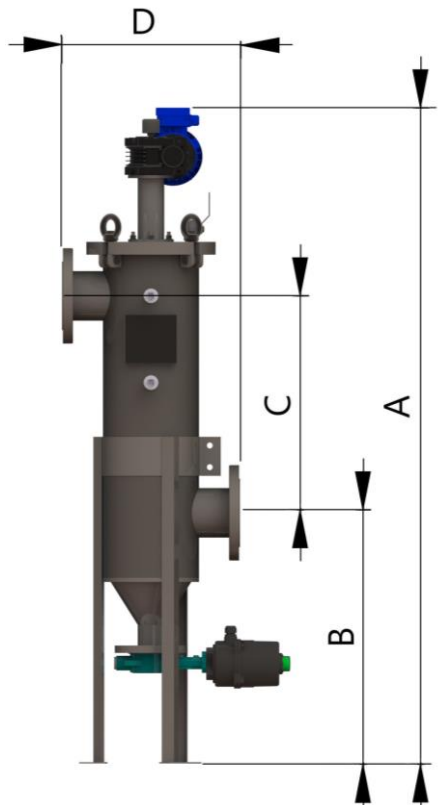
ASF Self-cleaning filter for water and process liquids



ASFA automatic pneumatic filter



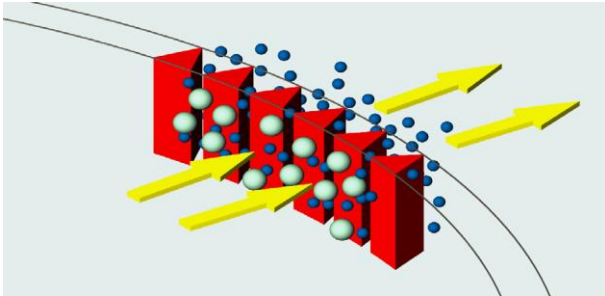
ASFM manual filter



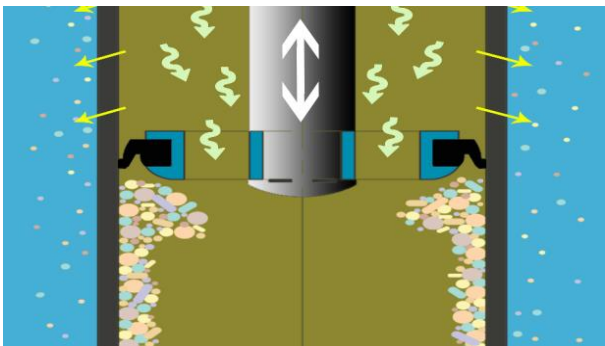
ASFE automatic electric filter

ASF Self-cleaning filter for water and process liquids

Operation principle



Triangular shape of sieve element makes cleaning easy



Principle of scraping/sweeping mechanism

Standards

- PED 2014/68/UE compliant for liquids group 1 and 2
- ATEX 2014/34/UE compliant on request

Parameters

- Available with filtration grades from 30 um to 5 mm
- Pressure rating from 2 to 40 bars
- Working temperature up to 142 C
- DIN; ANSI; SMS connection available
- Gaskets available in BUNA; EPDM; VITON; TEFLON; PU
- Body material: stainless steel 304; 316L; other*
- Filter element material: 316L; 1.4507; 1.4410

Ordering information

Type	Size	Material of housing	Material of gaskets	Finish	Connection size	Connection type
ASFA	6	04 = AISI 304	B = BUNA	S = Glass beaded	DN 50	FL = Kohnierz
ASFE	6L	06 = AISI 316L	E = EPDM	E = Electropolished	DN 100	BSP = Gwint
ASFM	6XL		S = Silicone	P = Polished	DN 125	CL = Camlock
	7		V = Viton		DN 150	VC = Victualic
	7L		U = PU		DN 200	
	7XL				DN 250	
	8				DN 300	
	8L					
	8XL					
	9					
	9L					
	9XL					

Example: ASFA6-04-B-S-DN100FL automatic self-cleaning filter, made of stainless steel 304, gaskets material BUNA, glass beaded finish, connection with flanges DN100.