



FULLY AUTOMATIC BACKFLUSHING FILTER TYPE ABF 50 - 1000

internormen 
process technology



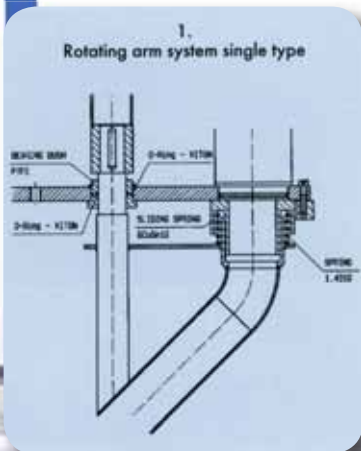
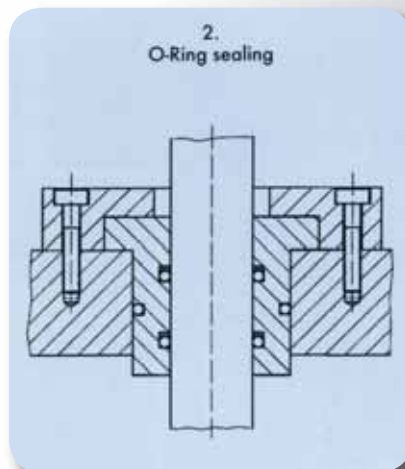


Application

INTERNORMEN - backflushing filters are primarily used for filtration of highly contaminated liquids. They are suitable for filtering fuels, lubrication oils, solvents, machine tool cooling lubricants, chemical process cleaning fluids, water treatment plants in the power industry, in the food sector and for filtration of cooling- and seawater. This filter type is designed to operate trouble free in batch format or continuously. ABF filters may also be used in hazardous areas, with all electrical components being designed in accordance with explosion proof classes, for example Eex d2 II CT4.

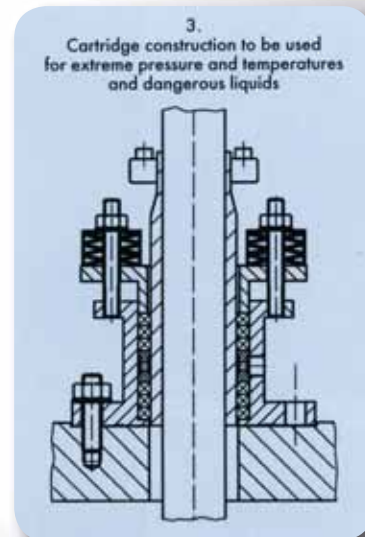
Construction

The filter type ABF consists of a filter housing with dished bottom and a flat removable cover. Manufactured in either carbon or specific stainless steels, for example 1.4541 (AISI 321), 1.4571 (AISI 316), 1.4539 (AISI 904L) or other high alloy steels, such as Hastelloy C22, Alloy 624, Inconel, CuNi 90/10. The housing cover sealing is being selected, depending on existing operational conditions, such as pressure, temperature and fluid to be filtered. Two different kinds of sealings are available, according to Pos. 2: O-Ring sealing, or according to Pos.3: as a special cartridge construction suitable for high pressure and high temperatures, as well as for dangerous liquids. The product inlet is located at the lower portion of the filter housing and the product outlet at the top, complete with connecting flanges according to DIN/ANSI as standard. The contaminant discharge point is installed at the lowest point of the filter and equipped with a shut-off valve and flange connection to DIN/ANSI as standard. The vent connection is located at the highest point of the housing.



The filter unit can be equipped with:

- 1 differential pressure gauge with output signals 0 to 20 mA
- 1 electrical gear motor
- 1 shut-off drain valve under electrical or pneumatic operation (optional)
- 1 electric control panel



Fully automatic backflushing Filter

Type ABF 50 - 1000

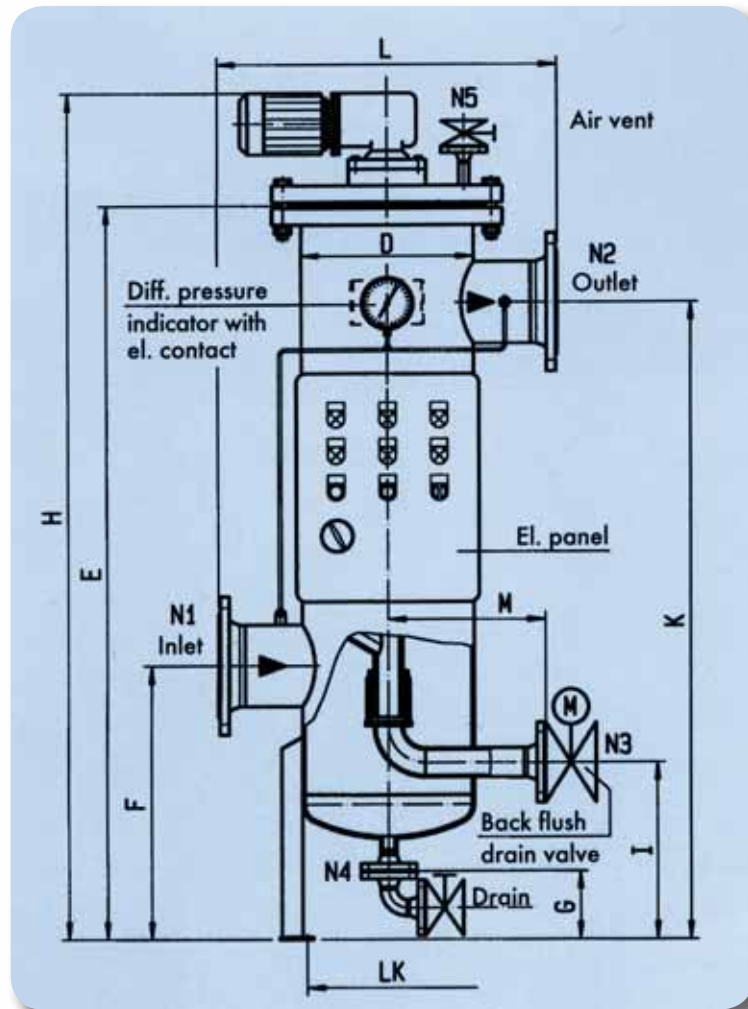
Housing material:

Carbon steel
Stainless steel SS304, SS316,
SS347 or CuNi 90/10

Filter element

wedge wire type:

Stainless steel SS304, SS316,
Monel or CuNi 90/10

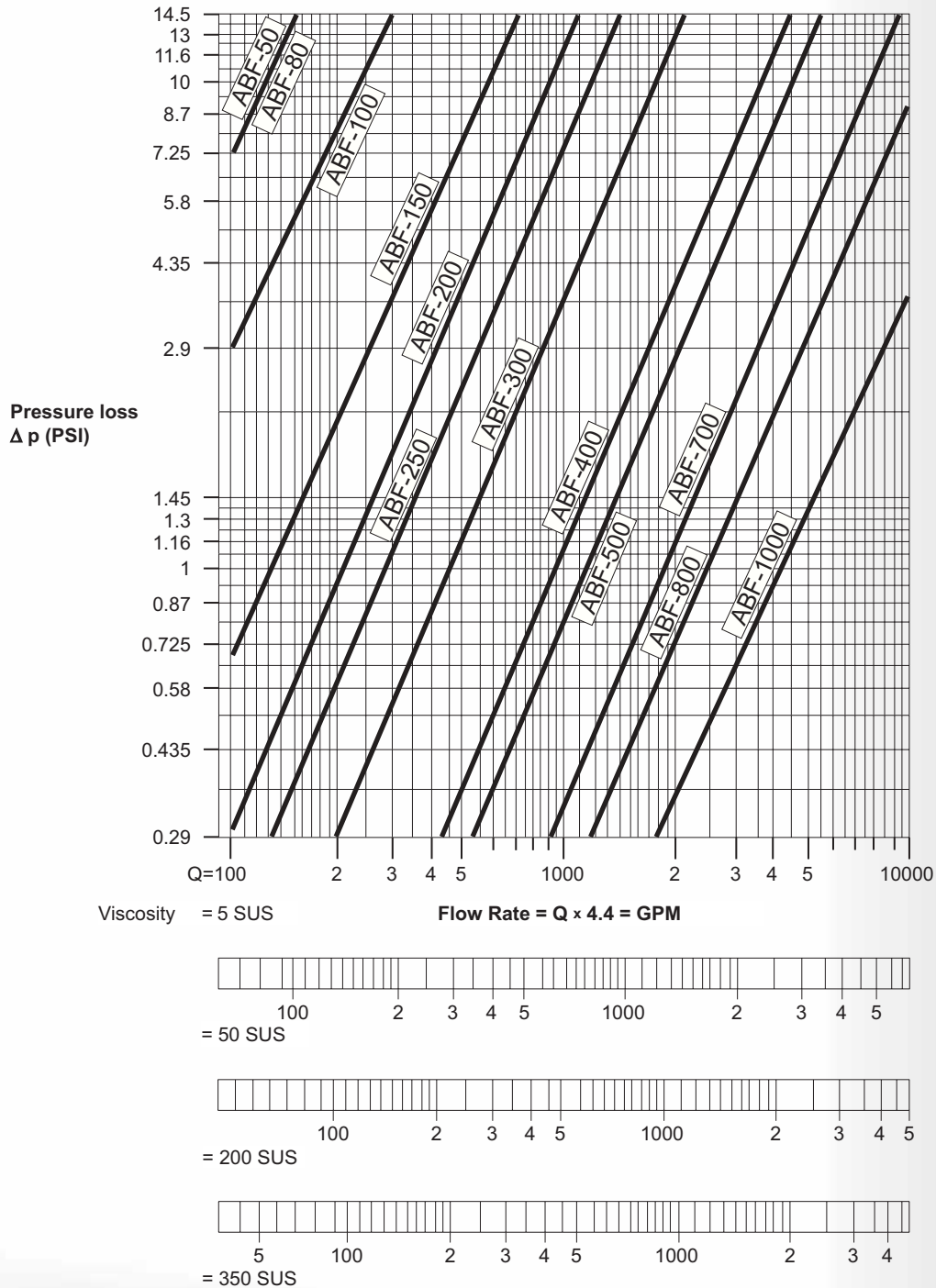


Filter Type	Connection max. N1/N2	Connection N3	Connection N4	Filter Area ft ²	Contents Gal	Dimensions in inches									
						D	E	F	G	H	I	K	L	M	LK
ABF 50	2"	1"	1/2"	7.53	13.21	8.63	70.87	18.89	7.87	80.71	17.72	62.99	19.67	9.06	8.66
ABF 80	3"	1"	1/2"	7.53	13.21	8.63	70.87	18.89	7.87	80.71	17.72	62.99	19.67	9.06	8.66
ABF 100	4"	1 1/2"	1/2"	9.69	21.13	10.75	70.87	20.08	7.87	80.71	18.50	61.02	23.22	10.63	10.83
ABF 150	6"	2"	1"	8.30	36.98	13.98	72.84	21.65	7.87	82.68	19.69	61.02	27.56	12.21	13.98
ABF 200	8"	2"	1"	23.10	63.40	17.99	74.80	23.62	7.87	86.61	20.47	61.02	33.47	14.17	17.99
ABF 250	10"	2 1/2"	1"	33.90	113.59	23.62	76.78	25.98	7.87	88.58	22.05	62.99	39.37	16.93	23.62
ABF 300	12"	2 1/2"	1"	52.74	153.22	27.56	78.74	27.95	7.87	90.55	22.84	62.99	45.28	18.89	27.56
ABF 400	16"	4"	2"	76.96	285.31	35.43	86.61	33.86	9.84	98.43	27.56	68.89	53.15	23.23	35.43
ABF 500	20"	4"	2"	91.49	359.27	39.37	102.36	35.83	9.84	118.11	28.35	84.65	59.06	25.19	39.37
ABF 700	28"	5"	2"	53.92	1027.50	55.12	125.98	44.09	9.84	141.73	32.28	102.36	72.84	33.47	55.12
ABF 800	32"	6"	2"	185.14	1320.90	59.06	133.86	47.24	9.84	149.61	33.86	108.27	78.74	35.43	59.06
ABF 1000	40"	6"	2"	245.42	2166.20	70.87	149.61	53.20	9.84	165.36	35.83	118.11	90.55	41.34	70.87

Pressure Drop:
Fully automatic backflushing filter
Type ABF 50 - 1000
Degree of filtration: 200 Microns
Density = 62.4 lbs/ft³

Pressure Drop Diagram

The flow diagram shows the pressure drop of a particular filter size in clean condition, taking into account the volume flow (gpm), viscosity and slot width (degree of filtration).



Installation and Start Up

ABF-backflushing filters are being installed vertically in an existing pipeline. Product inlet and outlet are equipped with appropriate valves and fittings, and connected to the existing pipework. Individual motors are internally wired and connected to the control box. Cable connection between the control box and mains is to be carried out on site. Care must be taken during the start up that all flange connections have been tightened via a torque wrench, thus ensuring a tight seal. Check if the discharge fitting is closed. Product inlet and outlet are then opened, and the filter housing must be vented until the product is discharged. The vent fitting must be closed then.

Press the start push button on the control box and the filter is now ready to operate.

Maintenance and Spare Parts

The maintenance of backflushing filters is simple. It is limited to checking electrical components such as the differential pressure gauge, the gear motor, the shut off valve and the control panel. The seats of the filter element, housing cover and shut off fitting must be checked for leakage from time to time, and if necessary seals should be replaced and flange connections retightened.

Possible spare parts:

Filter element, Seals, Bolts, nuts and washers, electrical components.

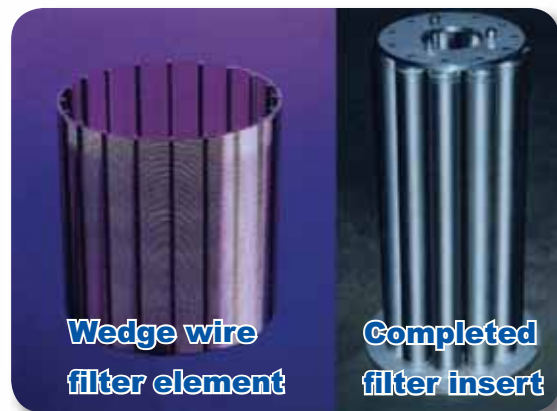
Spare parts should be ordered stating, if possible, the filter type and serial number, together with spare part name and serial number.

Filter Insert

Insert consists of a V-profile wire filter element, wound in various diameters and lengths. They are located in parallel, and loaded from inside to outside, while backflushing is made from outside to inside with a cleaned liquid. Filter elements are available in following materials:

Stainless steel AISI 304, AISI 347, AISI 316L, AISI 321,
Monel, Hastelloy C22, Inconel, CuNi 90/10

The minimum operating pressure has to be 29 PSI.



Automatically with geared motor, available in various configurations and voltages of 265-790 volts, 50 or 60 Hz, and protection classes from IP54 to IP65. Additionally hazardous protection to Eex d2 CT4 with PLC controlling system may be supplied.



Control panels are available either for direct mounting on the filter housing or on a separate location (see photo - right). IP54 and IP65 protection classes are available for the control unit. Additionally hazardous protection to Eex d2 CT4 with PLC controlling system may be supplied.

World Wide Presence



www.internormen.com

World Wide Locations

Germany Headquarters

D-68804 Altlussheim
info@internormen.com

Italy

I-35015 Schio
w.facchinelli@internormen.com

Poland

PL-42-200 Czestochowa
s.jarzabek@internormen.com

Brazil

BR-Sao Paulo
e.imamura@internormen.com

Office Essen

D-45136 Essen
hp.gerber@internormen.com

Office Austria

A-4030 Linz
m.schuhmann@internormen.com

USA

USA-Zanesville, OH 43701
sales@atico-internormen.com

India - West

IND-Mumbai 400 056
india@internormen.com

Japan

JP-Fujisawa, Kanagawa 251-0047
j.morita@internormen.com

Office South East Germany

D-82294 Oberschweinbach
h.prause@internormen.com

U.K.

GB-Sheffield S21 1TZ
g.mellard@internormen.com

China

RC-Beijing 100020
china@internormen.com

India - East

IND-Kolkata 700 026
j.bhatt@internormen.com

Africa Egypt Morocco South Africa Tunisia **Australia** Australia New Zealand

America Canada Argentina Brazil Chile Mexico Peru Ecuador

Asia Bahrain Bangladesh Iran Indonesia Israel Japan Korea Kuwait Malaysia Pakistan Philippines Saudi Arabia Taiwan Thailand Vietnam UAE Azerbaijan Kazakhstan Yemen Qatar

Europe Belarus Belgium Bulgaria Croatia Czech Republic Denmark France Finland Faroe Islands Greece Hungary Iceland Ireland Latvia Lithuania Luxembourg Liechtenstein Netherlands Norway Portugal Romania Russia Serbia and Montenegro Slovakia Slovenia Spain Sweden Switzerland Turkey Ukraina

LynchTM
Fluid Controls Inc.

1799 Argenta Road
Mississauga, Ontario, Canada
L5N 3A2

3940 Olympic Blvd. Suite 400
Erlanger, KY, USA, 41018



Phone: 905.363.2400 Fax: 905.363.1191 Toll Free: 888.626.4365