Alfafilter®
Filtrations und Separationstechnik

CAHn Series

High Efficiency Filter Housing

DESCRIPTION

Alfafilter's advanced CAHn Series compressed air filters reduce contamination in your air stream to help protect your critical processes and valuable equipment.
Our filters are rigorously tested and engineered with superior components to provide years of reliable performance and consistently high-quality air.

Without effective filtration, products and processes that depend on compressed air are subject to increased scrap, poor quality and additional maintenance. Alfafilter CAHn Series filters address these issues, helping to assure your compressed air system delivers clean, high-quality air throughout your facility.

Maintaining a low pressure drop on all compressed air components is critical for an energy-efficient system. Alfafilter CAHn Series filters have been engineered to deliver low pressure drop throughout the life of the filter element and to provide a unique dual indicator that illustrates the true cost of pressure drop on the system.

Every compressed air system has unique filtration requirements. CAHn Series filters are available in four different filtration grades, providing complete filtration solutions for all critical compressed air processes.

Complete Filtration Solution

CAHn Series filters are engineered to be a complete filtration solution, incorporating features that address air quality, energy efficiency and ease of maintenance.

The Standard for High-Quality Air

CAHn Series filters provide clean, high-quality air as defined by ISO 8573.1:2010, and are certified by a third party under ISO 12500-1. With multiple filter element grades available, there is a filtration solution that will meet your unique requirements.

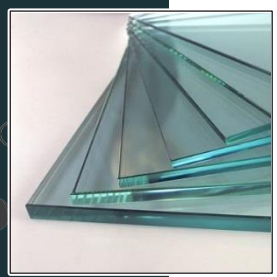
Energy Efficient Through and Through

Pressure drop accounts for over three-quarters of the ownership cost of a compressed air filter. Even when a filter element is clean and dry, it can rob a compressed air system of pressure, causing the air compressor to work harder and increase energy costs. The flow path through the CAHn Series filter housing reduces turbulence and enhances efficiency, while the deep-pleated element design further minimizes pressure drop.

Designed with Maintenance in Mind

Features such as no-touch element replacement and visual bowl-to-head alignment indicators make maintaining the CAHn Series filter hassle-free. The "zero-clearance" design requires minimal space around the filter, allowing CAHn Series filters to be installed where other filters won't fit. Long element life provides efficient operation for up to one year between element changeouts, helping to reduce overall ownership costs*.

* Frequency of element changeout will depend on the unique conditions of each customer's air system.



PED 97/23/EC MOD - H MOD - H1

Superior Filtration Technology

A: Patented dual indicator (optional) shows differential pressure drop and economical operating efficiency

B: Patented smooth bore flow insert directs air into the filter element, minimizing turbulence and pressure losses

C: All-aluminum, precision die cast body suitable for 100°C and 20 bar g MAWP applications

D: Proprietary coating applied to the inside and outside surfaces provides corrosion protection in harsh industrial environments

E: Filter element with stainless steel mesh withstands high differential pressure while minimizing flow restriction through the element

F: Ergonomic bowl design with no-touch filter element simplifies element replacement

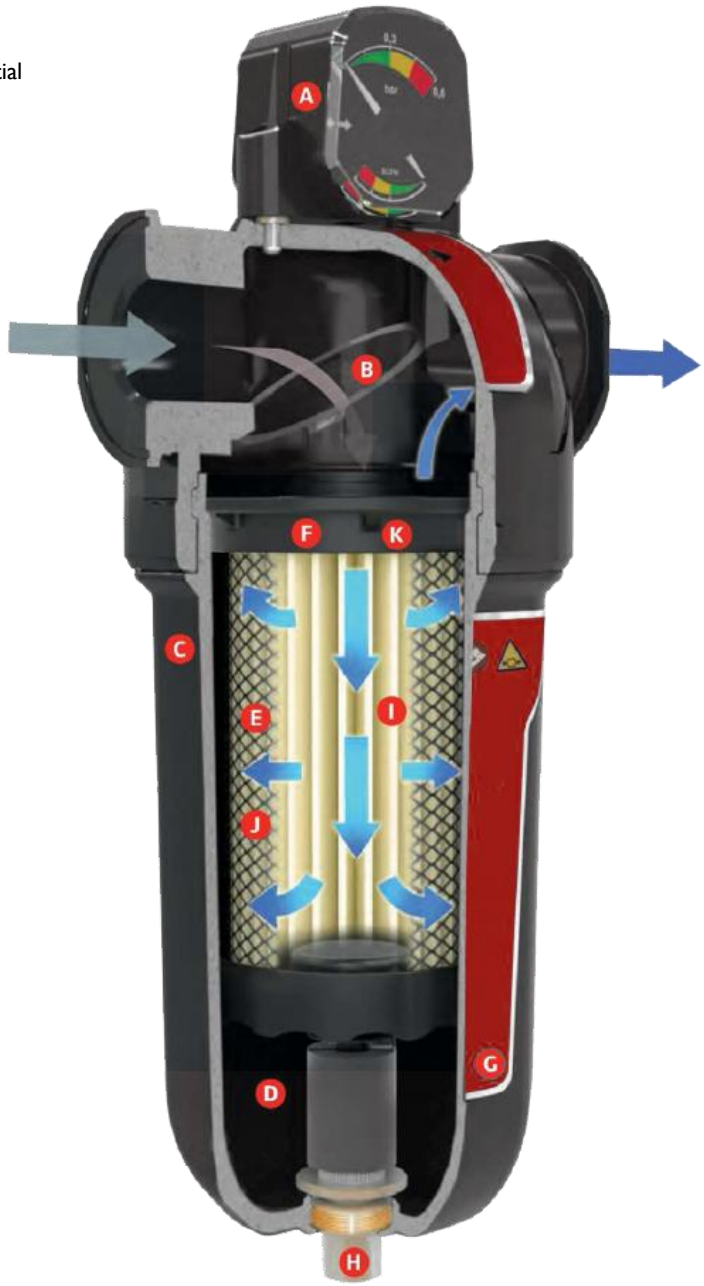
G: Time strip label indicates when it's time to change the element (CF Grade only)

H: Industrial-grade brass float drain (optional) discharges accumulated condensate and oil more reliably than lesser quality plastic drains (no-loss and manual drains also available)

I: Deep-pleated filter media reduces air flow velocity to maximize filtration efficiency and minimize pressure losses

J: High-efficiency drainage layer improves liquid drainage properties and enhances chemical compatibility

K: Simple visual alignment of the filter head and bowl ensures accurate assembly of components and helps to improve safety



SPECIFICATIONS

Model	Flow rate	Max Pressure	Connection	Dimensions			Weight
	m³/h	bar	BSPT	A	B	C	Kg
CAHn10FG_	30	20	3/8"	177	76	20	0.6
CAHn15FG_	40	20	½"	177	76	20	0.6
CAHn20FG_	75	20	¾"	232	98	26	1.1
CAHn21FG_	110	20	¾"	232	98	26	1.1
CAHn25FG_	190	20	1"	272	129	36	2.1
CAHn26FG_	260	20	1"	272	129	36	2.1
CAHn40FG_	400	20	1"1/2	362	129	36	2.4
CAHn41FG_	500	20	1"1/2	362	129	36	2.4
CAHn50FG_	800	20	2"	470	170	44	5.2
CAHn51FG_	1000	20	2"	470	170	44	5.3
CAHn80FG_	1560	20	3"	652	205	61	10.7
CAHn81FG_	1830	20	3"	652	205	61	10.7
CAHn82FG_	2720	20	3"	882	205	61	13.7

FG1 Grade

Particle removal down to 1 micron including coalesced liquid, water and oil, providing a maximum remaining oil aerosol content of 0,1 mg/m3 (0,1 ppm) @ 21°C

FGA Grade

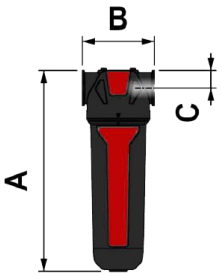
Particle removal down to 0,1 micron including coalesced liquid, water and oil, providing a maximum remaining oil aerosol content of 0,1 mg/m3 (0,1 ppm) @ 21°C

FGAA Grade

Particle removal down to 0,01 micron including water and oil aerosols, providing a maximum remaining oil aerosol content of 0,01 mg/m3 (0,01 ppm) @ 21°C

FGAC Grade

Oil vapor and hydrocarbon odor removal, providing a maximum remaining oil content of <0,003 mg/m³ (<0,003 ppm) @ 21°C



Correction Factors

Line pressure	1	2	3	5	7	9	11	13	15	16	17
Correction factor	0.38	0.53	0.65	0.85	1	1.13	1.25	1.36	1.46	1.51	1.56

Available options

DIFFERENTIAL PRESSURE GAUGE Displays the exact grade of saturation of the filter element. Max Temperature 80°C		MANUAL DRAIN ½" ball valve manual drain.	
AUTOMATIC DRAIN Automatic auto drain suitable for Alps series filters. Completed with manual testing drain. Max. Pressure: 20 bar – Max. Temperature: 80°C		SC-CHROM – TIMED DRAIN Thanks to the use of a timer that controls interval and duration of operation, this drain is widely used in compressed air industry. Max. Pressure: 20 bar	
SC-12M – FLOATING DRAIN This simple type of automatic drain is used to discharge the condensate from air tanks, filters, air dryers, etc. It is supplied with manual testing drain and connection nipple with compensation tube. Max. Pressure: 20 bar		ZERO DRAIN Specifically designed to reduce to zero: - the air consumption thanks to the capacitive control; - the maintenance thanks to the Replacement kit; - the space for the installation underneath the tank. Max. Pressure: 20 bar