

## Active Carbon Filters MS12N-LFX – Inch Series



Active carbon filters remove liquid and gaseous oil particles as well as odor and taste from compressed air. Pre-filtration with a grade of 0.01 micron is required.

- Pneumatic connection: 1 NPT, 1¼ NPT, 1½ NPT, 2 NPT
- Supply pressure 0 ... 294 psi
- Flow rate: 169.4 ... 211.8 scfm

Product Range Overview			
Type	Pneumatic connections	Bowl guard	Reverse flow
	Port plate	Metal bowl	Flow direction from right to left
<b>MS12N</b>	<b>AG...</b>	<b>U</b>	<b>Z</b>
LFX	1 NPT, 1¼ NPT, 1½ NPT, 2 NPT	■	■

### Features

- Removal of liquid and gaseous oil particles from compressed air using active carbon
- Eliminates odors and vapors
- Prefiltration with micro filter MS-LFM-A, filtration grade 0.01 µm, is required.

### Contents

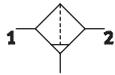
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→ [www.festo.com/catalog/ms12n-lfx](http://www.festo.com/catalog/ms12n-lfx)

# Active Carbon Filters MS12N-LFX – Inch Series

## Technical Data

### ISO Symbol



General Technical Data				
Pneumatic connection 1, 2 <sup>1)</sup>	1 NPT	1¼ NPT	1½ NPT	2 NPT
Air purity class at the output	1.7.1 to DIN ISO 8573-1			
Supply pressure [psi]	0 ... 294			

1) Dependent on port plate selected, must be ordered separately as an accessory → 1167

Standard Nominal Flow Rate qnN <sup>2)</sup> [scfm]				
Pneumatic connection 1, 2	1 NPT	1¼ NPT	1½ NPT	2 NPT
In main flow direction 1 → 2	169.4	176.5	194.2	211.8

2) Dependent on port plate selected, must be ordered separately as an accessory → 1167  
Measured at p<sub>1</sub> = 88 psi and Δp = 1.0 psi

Operating and Environmental Conditions	
Operating medium	Compressed air, filtered, unlubricated, filtration grade 0.01 µm
Bowl guard	Metal bowl
Ambient temperature [°F]	14 ... 140
Temperature of medium [°F]	41 ... 86
Storage temperature [°F]	14 ... 140
Assembly position	Vertical ±5°
Corrosion resistance CRC <sup>3)</sup>	2

3) Corrosion resistance class 2 according to Festo standard 940 070  
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Weights [lb]	
With metal bowl	14.00

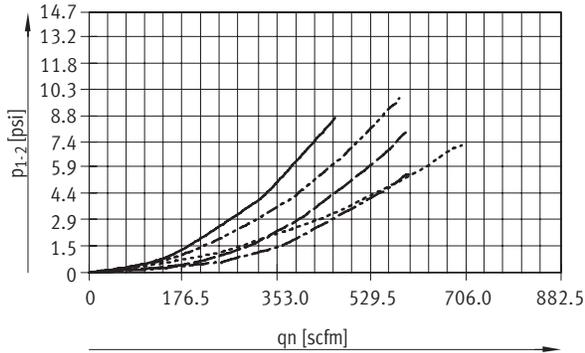
- Filter cartridges → 1169
- For spare parts go to: [www.festo.com/en/spare\\_parts\\_service](http://www.festo.com/en/spare_parts_service)

# Active Carbon Filters MS12N-LFX – Inch Series

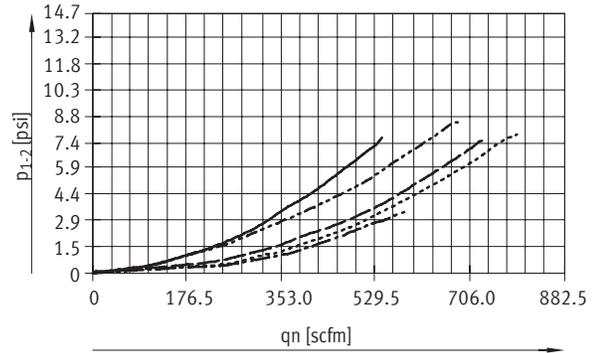
Technical Data

## Standard Flow Rate $q_n$ as a Function of the Differential Pressure $p_{1-2}$

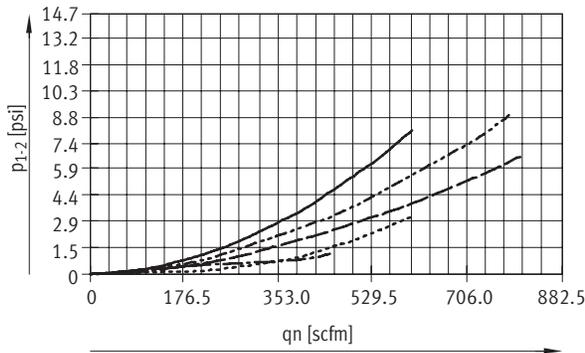
With port plate MS12-AGF, Pneumatic connection 1 NPT



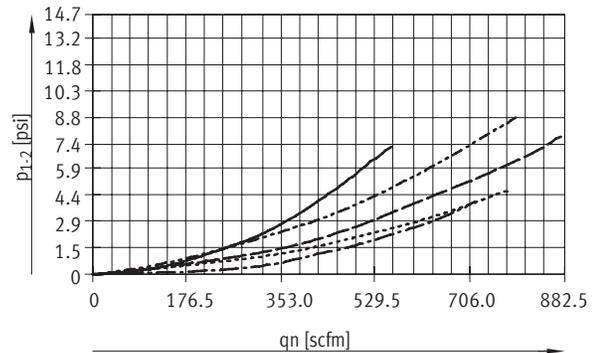
With port plate MS12-AGG, Pneumatic connection 1¼ NPT



With port plate MS12-AGH, Pneumatic connection 1½ NPT



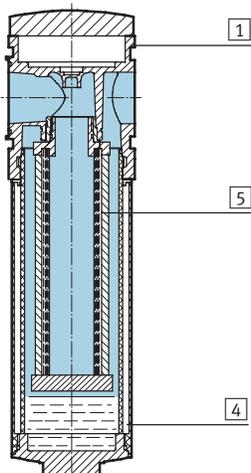
With port plate MS12-AGI, Pneumatic connection 2 NPT



- p1: 59 psi
- - - p1: 88 psi
- · - p1: 118 psi
- · · p1: 147 psi
- - - p1: 176 psi

## Materials

Sectional view



Active carbon filter		
1	Body	Die-cast aluminum
4	Metal bowl	Wrought aluminum alloy
5	Filter	Active carbon
-	Seals	Nitrile rubber
Note on materials		Free of copper and PTFE

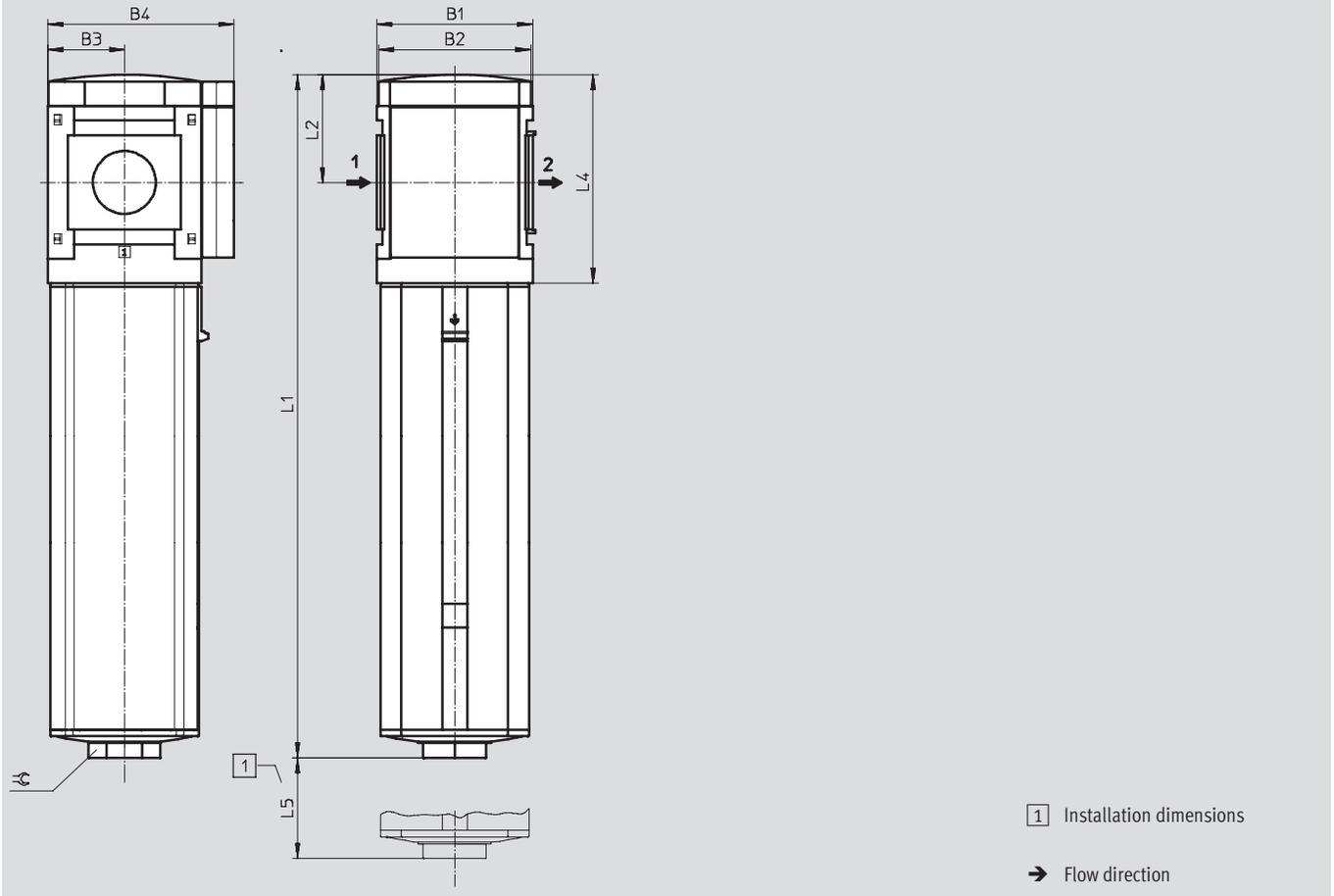
# Active Carbon Filters MS12N-LFX – Inch Series



Dimensional Drawings, Ordering Data – Pre-configured Products

## Dimensions<sup>1)</sup> – Standard

Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)



B1	B2	B3	B4	L1	L2	L4	L5	±
4.88	4.80	2.40	5.83	21.38	3.39	6.54	13.78	1.97

1) Dimensions are in inches, unless otherwise noted.

Ordering Data			
Metal bowl			
Connection	Part No.	Type	LT
1 NPT ... 2 NPT <sup>1)</sup>	537155	MS12-LFX-G-U	1D

LT = Lead time      1D typically ships same day/next day      1W typically ships within 1 week      Q request a quote for lead time

1) Port plate must be ordered separately as an accessory → 1167

# Active Carbon Filters MS12N-LFX – Inch Series



Ordering Data – Configurable Products

M Mandatory Data							O Options	
Part No.	Series	Size	Thread	Function	Connection size	Bowl	Type of mounting	Reverse flow direction
535046	MS	12	N	LFX	AQT AQU AQV AQW G	U	WP	Z
<b>Order example</b>								
<b>535046</b>	<b>MS</b>	<b>12</b>	<b>N</b>	<b>- LFX</b>	<b>- AQT</b>	<b>- U</b>	<b>- WP</b>	<b>- Z</b>

Ordering Table			
Grid dimension	[mm]	124	Conditions Code Enter code
<b>M</b>	Part No.	<b>535046</b>	
	Series	Standard	<b>MS</b> MS
	Size	12	<b>12</b> 12
	Thread	NPT thread	<b>N</b> N
	Function	Active carbon filter	<b>-LFX</b> -LFX
	Connection size	Port plate 1 NPT (dimensions → 1167)	<b>-AQT</b>
		Port plate 1¼ NPT (dimensions → 1167)	<b>-AQU</b>
		Port plate 1½ NPT (dimensions → 1167)	<b>-AQV</b>
		Port plate 2 NPT (dimensions → 1167)	<b>-AQW</b>
		Module without connecting thread, without port plate	<b>-G</b>
	Bowl	Metal bowl	<b>-U</b> -U
<b>O</b>	Type of mounting	Mounting bracket (dimensions → 1168)	<b>1</b> <b>-WP</b>
	Reverse flow direction	Flow direction from right to left	<b>-Z</b>

**1 WP** Only with port plate AQT, AQU, AQV or AQW

**Transfer order code**

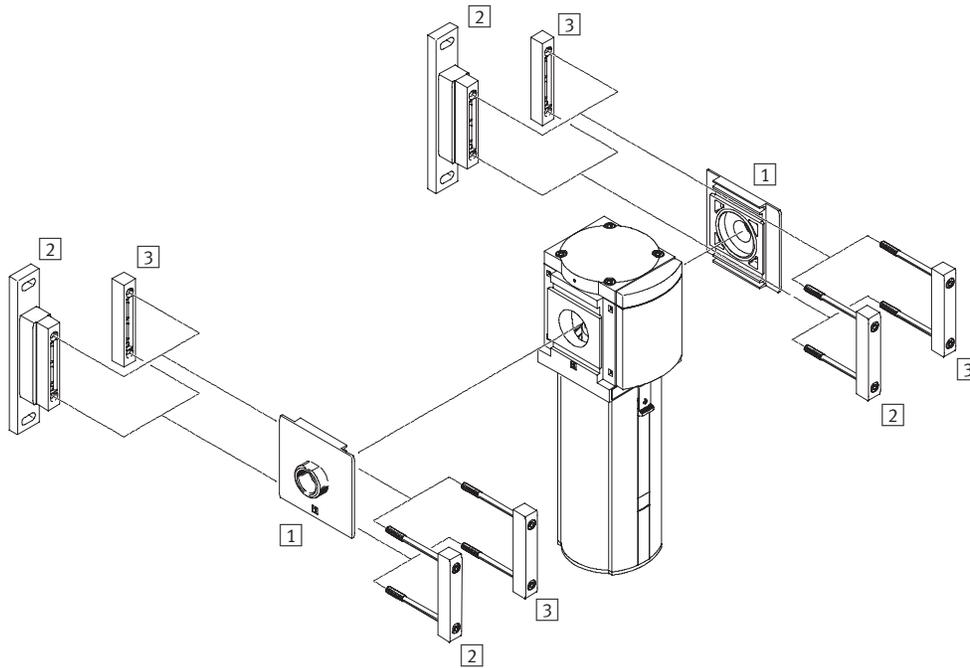
<b>535046</b>	<b>MS</b>	<b>12</b>	<b>N</b>	<b>- LFX</b>	<b>-</b>	<b>U</b>	<b>-</b>	<b>-</b>
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# Active Carbon Filters MS12N-LFX – Inch Series

Accessories Overview



## Mounting Attachments and Accessories



## Mounting Attachments and Accessories

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1	Port plate MS12-AQ...	1167
2	Mounting bracket MS12-WP	1168
3	Body connector MS12-MV	1167

# Active Carbon Filters MS12N-LFX – Inch Series



Accessories

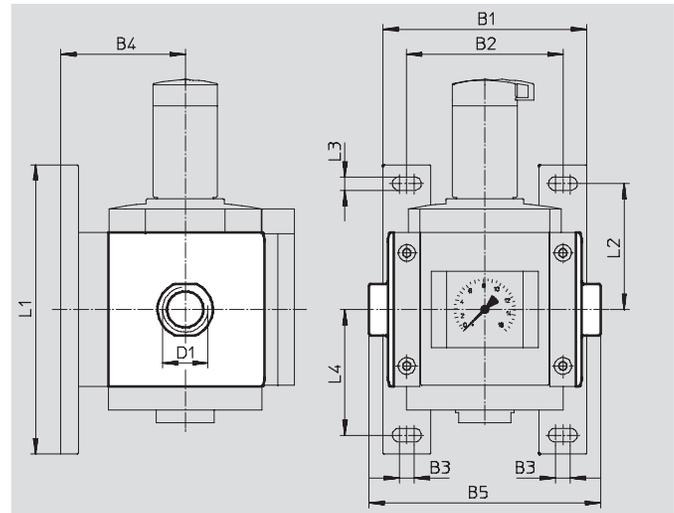
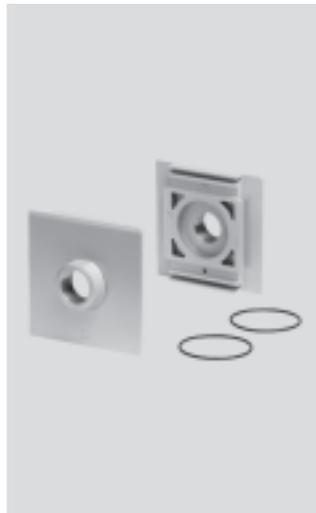
## 1 Port plate MS12-AQ...

- Adapter for pneumatic connection

Material:

Die-cast aluminum

Free of copper and PTFE



Dimensions and Ordering Data												
B1	B2	B3	B4	B5	D1	L1	L2	L3	L4	Weight [[lb]	Part No.	Type
6.38	4.88	0.47	3.90	7.24	1 NPT	9.06	3.94	0.43	3.94	2.60	537139	MS12-AQT
				7.24	1¼ NPT						537140	MS12-AQU
				7.24	1½ NPT						537141	MS12-AQV
				7.72	2 NPT						537142	MS12-AQW

## 3 Body connector MS12-MV

- For connecting modules

Material:

Die-cast aluminum,

Free of copper and PTFE



Ordering Data			
Size	Weight [[lb]	Part No.	Type
MS12	1.00	537134	MS12-MV

## Active Carbon Filters MS12N-LFX – Inch Series

Accessories

FESTO

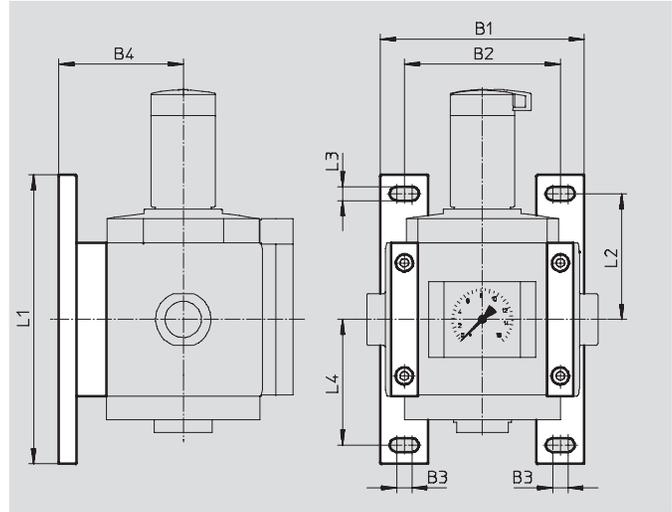
### 2 Mounting bracket MS12-WP

- To connect the modules for wall mounting
- In combination with a port plate for mounting an individual unit on a wall

Material:

Die-cast aluminum

Free of copper and PTFE



#### Dimensions and Ordering Data

Size	B1	B2	B3	B4	L1	L2	L3	L4	Weight [[b]	Part No.	Type
MS12	6.38	4.88	0.47	3.90	9.06	3.94	0.43	3.94	1.40	537133	MS12-WP

## Active Carbon Filters MS12N-LFX – Inch Series

Replacement Parts

FESTO



Ordering Data – Filter Cartridges			
Size	Filtration grade [ $\mu\text{m}$ ]	Part No.	Type
MS12	Residual oil content $\leq 0.003 \text{ mg/m}^3$	537147	MS12-LFX

- For spare parts go to: [www.festo.com/en/spare\\_parts\\_service](http://www.festo.com/en/spare_parts_service)



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## A Complete Suite of Automation Services

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**Email:** customer.service@us.festo.com

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