

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, 1 1/4 NPT, 1 1/2 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
MS12N	AG...	U	Z
LFX	1 NPT, 1 1/4 NPT, 1 1/2 NPT, 2 NPT	■	■

Features		Contents
• 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.	- Technical Data → 1162 - Dimensional Drawings → 1164 - Ordering Data → 1164 - Accessories → 1166
		→ www.festo.com/catalog/ms12n-lfx

Active Carbon Filters MS12N-LFX – Inch Series

Technical Data

FESTO

ISO Symbol



General Technical Data				
Pneumatic connection 1, 2 ¹⁾	1 NPT	1 1/4 NPT	1 1/2 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 ²⁾ [scfm]				
Pneumatic connection 1, 2	1 NPT	1 1/4 NPT	1 1/2 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 p₁ = 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 ³⁾	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

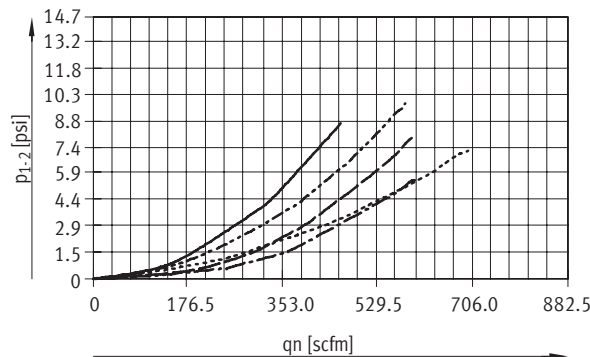
Active Carbon Filters MS12N-LFX – Inch Series

Technical Data

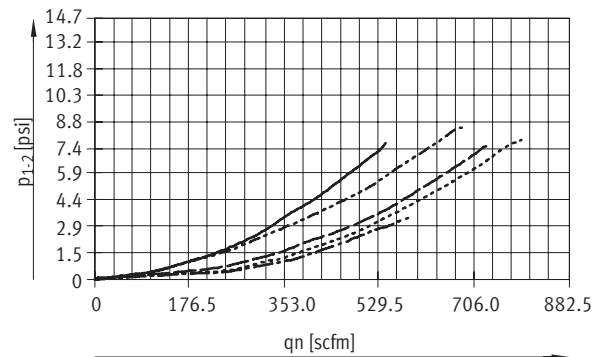
FESTO

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

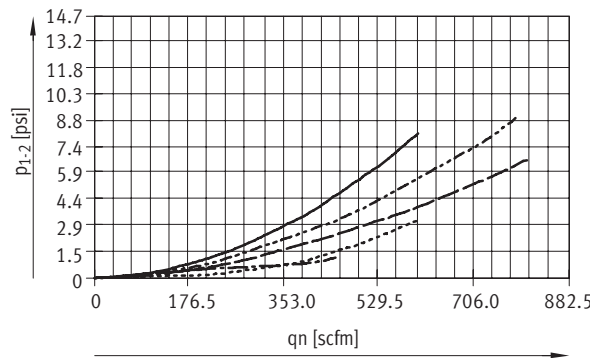
With port plate MS12-AGF, Pneumatic connection 1 NPT



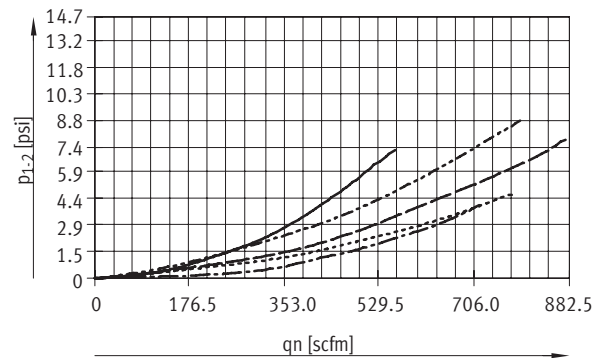
With port plate MS12-AGG, Pneumatic connection 1¼ NPT



With port plate MS12-AGH, Pneumatic connection 1½ NPT



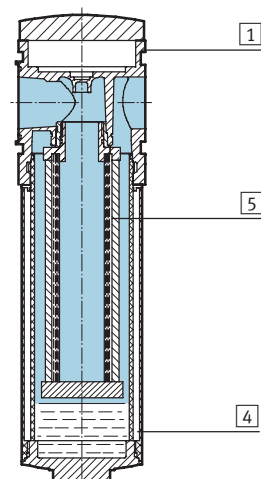
With port plate MS12-AGI, Pneumatic connection 2 NPT



- 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

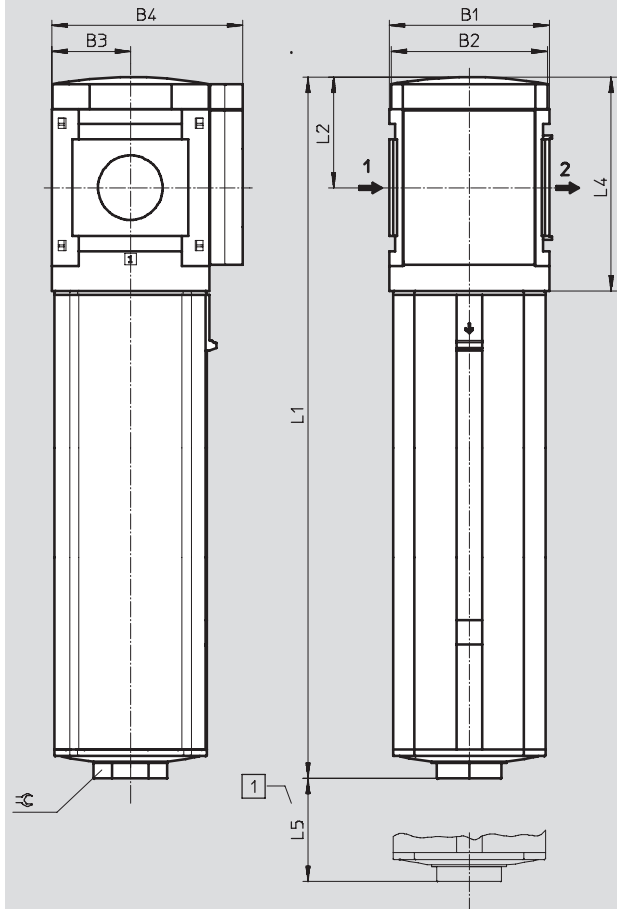
Active Carbon Filters MS12N-LFX – Inch Series

Dimensional Drawings, Ordering Data – Pre-configured Products

FESTO

Dimensions¹⁾ – Standard

Download CAD Data → www.festo.com/us/cad



1 Installation dimensions

→ Flow direction

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 ¹⁾	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

FESTO

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
Order example								
535046	MS	12	N	- LFX	- AQT	- U	- WP	- Z

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

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

Transfer order code

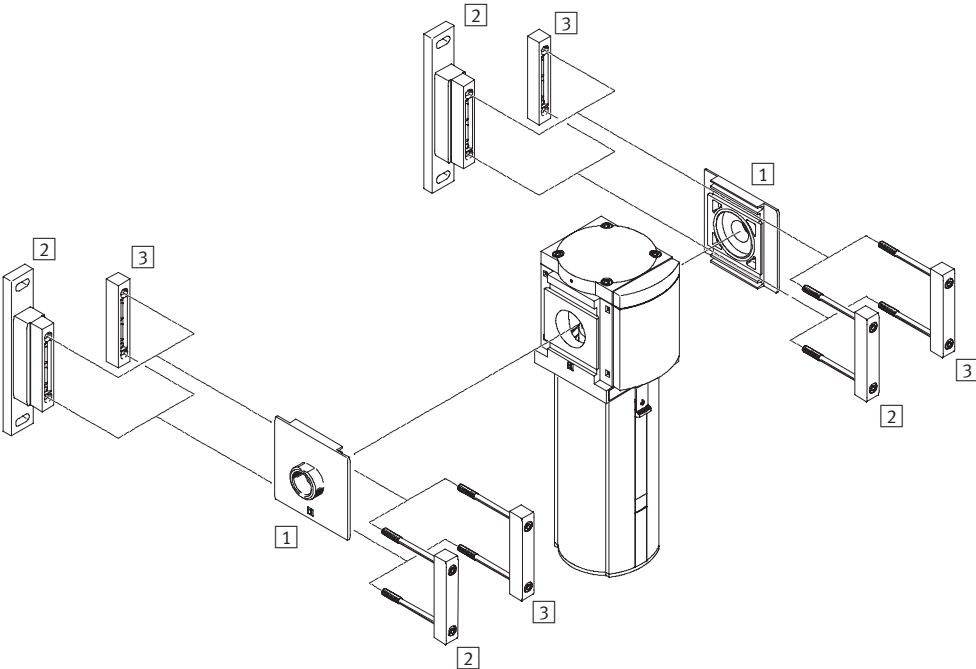
535046	MS	12	N	-	LFX	-		-	U	-		-	
--------	----	----	---	---	-----	---	--	---	---	---	--	---	--

Active Carbon Filters MS12N-LFX – Inch Series

Accessories Overview



Mounting Attachments and Accessories



Mounting Attachments and Accessories		→ Page
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

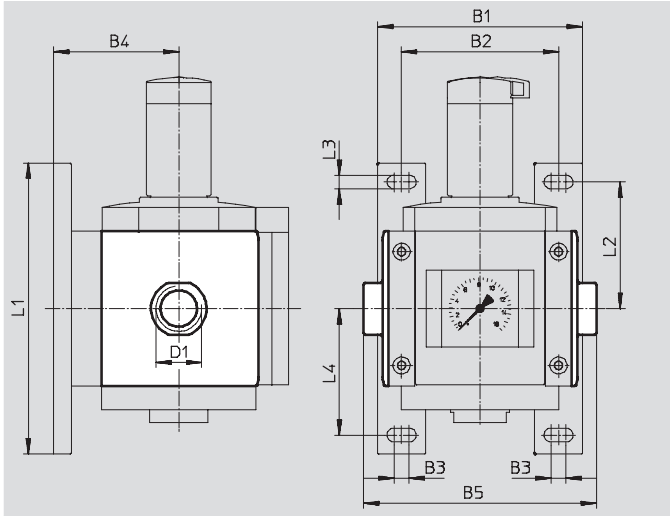
1 Port plate MS12-AQ...

- 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 [[b]	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 [[b]	Part No.	Type
MS12	1.00	537134	MS12-MV

Active Carbon Filters MS12N-LFX – Inch Series

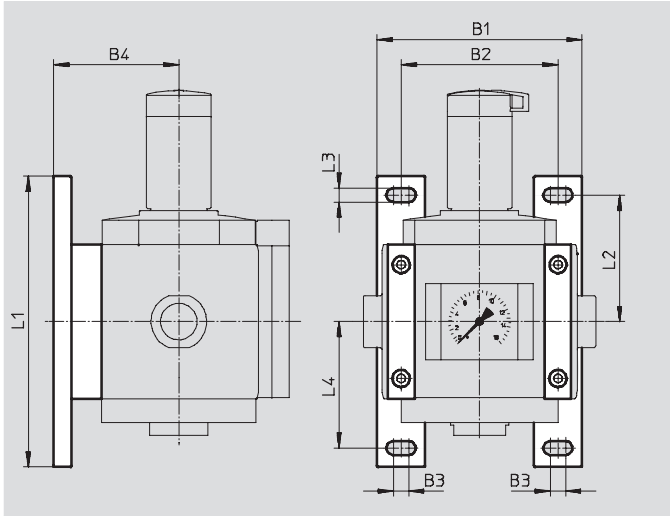


Accessories

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

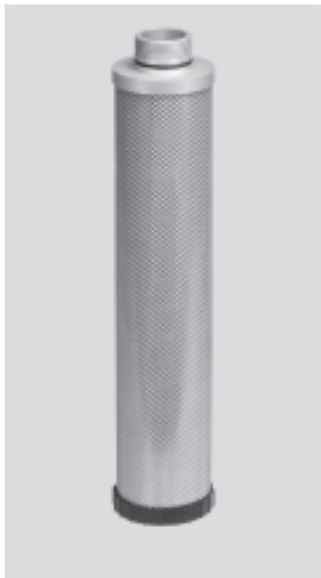
Material:
Die-cast aluminum
Free of copper and PTFE



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



Ordering Data – Filter Cartridges			
Size	Filtration grade [µm]	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

Festo - Your Partner in Automation



1 Festo Inc.
5300 Explorer Drive
Mississauga, ON L4W 5G4
Canada

Festo Customer Interaction Center
Tel: 1 877 463 3786
Fax: 1 877 393 3786
Email: customer.service.ca@festo.com



2 Festo Pneumatic
Av. Ceylán 3,
Col. Tequesquináhuac
54020 Tlalnepantla,
Estado de México

Multinational Contact Center
01 800 337 8669
ventas.mexico@festo.com



3 Festo Corporation
1377 Motor Parkway
Suite 310
Islandia, NY 11749

Festo Customer Interaction Center
1 800 993 3786
1 800 963 3786
customer.service.us@festo.com



4 Regional Service Center
7777 Columbia Road
Mason, OH 45040

Connect with us

www.festo.com/socialmedia



www.festo.com

Subject to change