

Filter MS12N-LF

FESTO



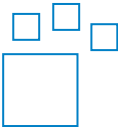
Characteristics

At a glance

- Sintered filter with centrifugal separation
- Good particle and condensate separation
 - High flow rate with minimal pressure drop

Ordering data - modular system

Link [ms12n-lf](#)



Configurable product
This product and all its product options can be ordered online via the configurator.

Size

- Grid dimension: 124 mm
Standard nominal flow rate:
- 11500 ... 14000 l/min (grade of filtration 5 µm)
 - 12500 ... 16000 l/min (grade of filtration 40 µm)

Pneumatic connection

- Depending on the size, different connection types can be selected:
- Individual fittings that are fastened via a female thread
 - Connecting plates with female thread

Grade of filtration

Grade of filtration of 5 µm or 40 µm can be selected.

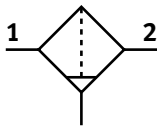
Bowl type

Bowl guard tanks to integrated metal bowl.

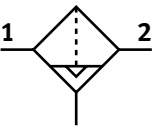
Condensate drain

- The following functions can be selected:
- Manual
 - Fully automatic

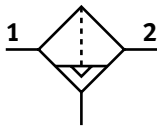
[M] Manually



[V] Automatic



[VC] Fully automatic, normally closed



Characteristics

Type of mounting

[WP] Mounting bracket basic design



- Mounting attachment and connector for service unit combination or for individual device with connecting plates
- For size 4, 6, 9 or 12

Flow direction

Available with flow in the opposite direction.

Type code

001	Series	
MS	MS series	

002	Size	
12	Grid dimension 124 mm	

003	Thread type	
N	NPT thread	

004	Function	
LF	Filter	

005	Pneumatic connection, inch	
AQT	Sub-base NPT1	
AQU	Sub-base NPT11/4	
AQV	Sub-base NPT11/2	
AQW	Sub-base NPT2	
G	Module without connecting thread, without sub-base	

006	Filter design	
C	5 µm	
E	40 µm	

007	Bowl type	
U	Aluminium	

008	Condensate drain	
E2	External fully automatic condensate drain, electric, 110 V AC, connection terminals	
E3	External fully automatic condensate drain, electric, 230 V AC, connection terminals	
E4	External fully automatic condensate drain, electric, 24 V DC, connection terminals	
M	Manual	
V	Fully automatic, normally open	
VC	Fully automatic, normally closed	

009	Type of mounting	
	Without mounting bracket	
WP	Mounting bracket basic design	

010	Flow direction	
	Flow direction from left to right	
Z	Flow direction from right to left	

Datasheet

General technical data

Pneumatic connection, port 1	Internal
Pneumatic connection, port 2	Internal
Size	12
Design	Sintered filter with centrifugal separator
Type of mounting	Either: In-line installation With accessories
Mounting position	Vertical $\pm 5^\circ$
Condensate drain	Fully automatic Fully automatic, electrically actuated Manual, non-detenting Manually rotating
Degree of condensate separation	>75%

Standard nominal flow rate q_{nN}

Pneumatic connection, port 1	1 NPT		1 1/4 NPT		1 1/2 NPT		2 NPT	
Grade of filtration	5 μm	40 μm	5 μm	40 μm	5 μm	40 μm	5 μm	40 μm
Standard nominal flow rate (standardised to DIN 1343) ¹⁾	11,500 l/min	12,500 l/min	12,500 l/min	13,000 l/min	13,500 l/min	14,000 l/min	14,000 l/min	16,000 l/min

1) Measured at $p_1 = 6$ bar and $\Delta p = 0,5$ bar

Operating and environmental conditions

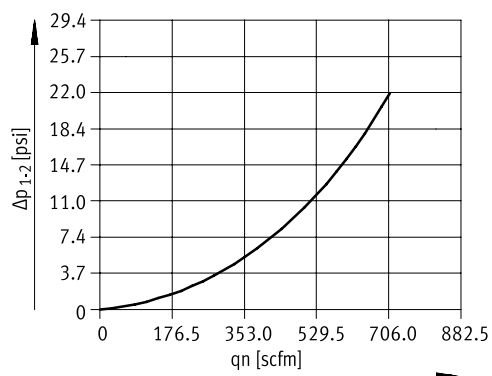
Condensate drain	Fully automatic, Fully automatic, electrically actuated, Manual, non-detenting, Manually rotating
Operating pressure	0.8 ... 20 bar
Operating medium ¹⁾	Compressed air to ISO 8573-1:2010 [-:9:-] Compressed air to ISO 8573-1:2010 [7:9:-] Inert gases
Ambient temperature	-10 ... 60°C
Media temperature	-10 ... 60°C
Storage temperature	-10 ... 60°C

1) Compressed air according to ISO 8573-1:2010 [7:9:-] applies to fully automatic condensate drain

Materials

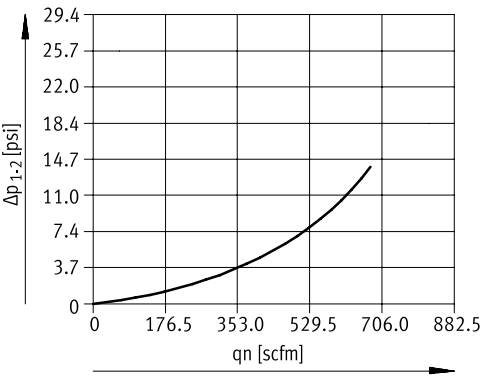
Material housing	Die-cast aluminium
Material bowl	Wrought aluminium alloy
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Standard flow rate q_n as a function of differential pressure Δp_{1-2} – with connecting plate MS12-AQT, pneumatic connection 1 NPT (grade of filtration 5 μm)

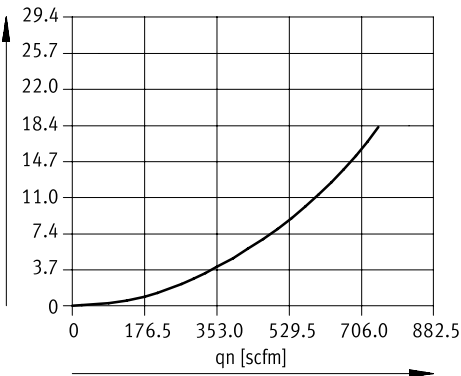


Datasheet

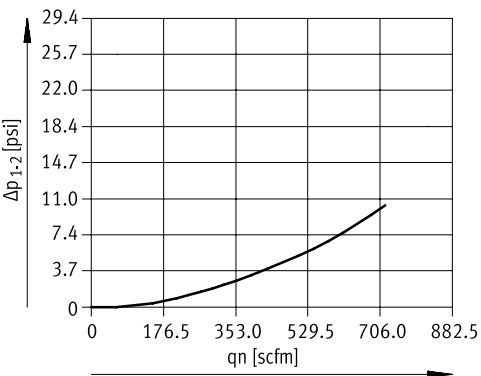
Standard flow rate q_n as a function of differential pressure Δp_{1-2} – with connecting plate MS12-AQW, pneumatic connection 2 NPT (grade of filtration 5 μm)



Standard flow rate q_n as a function of differential pressure Δp_{1-2} – with connecting plate MS12-AQT, pneumatic connection 1 NPT (grade of filtration 40 μm)

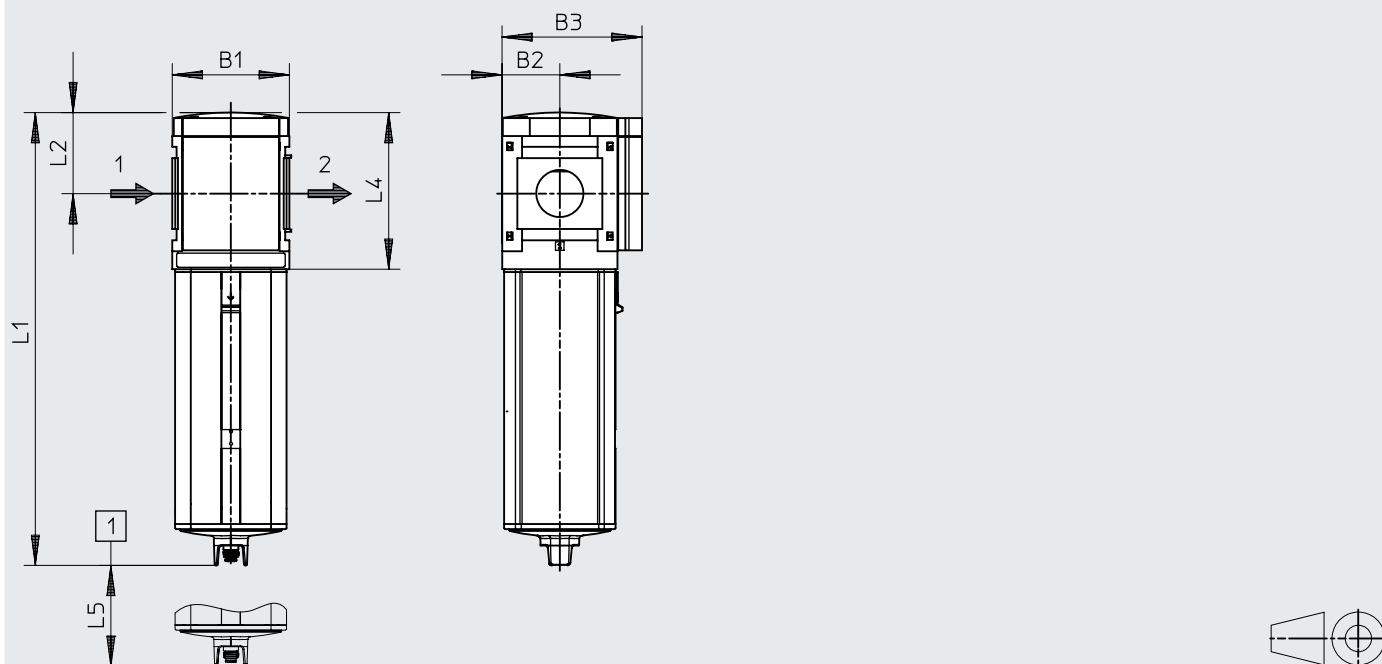


Standard flow rate q_n as a function of differential pressure Δp_{1-2} – with connecting plate MS12-AQW, pneumatic connection 2 NPT (grade of filtration 40 μm)



Dimensions

Dimensions – Basic type

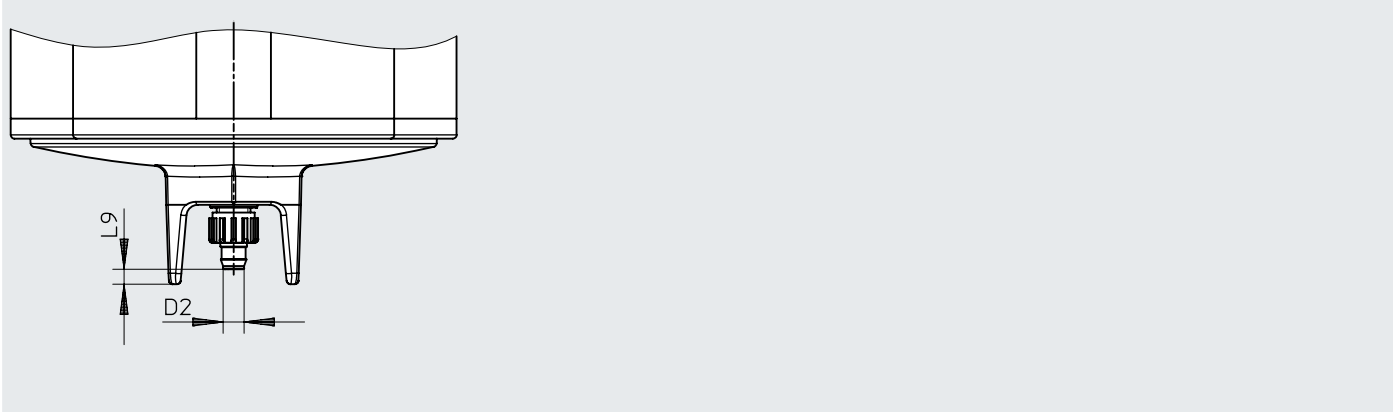
[Download CAD data](#) www.festo.com


[1] Installation dimension

	B1 [inch]	B2 [inch]	B3 [inch]	L1 [inch]	L2 [inch]	L4 [inch]	L5 [inch]
MS12N-LF	4,88	2,40	5,83	18,881	3,39	6,54	9,84

Dimensions

Dimensions – Condensate drain, manual, rotary Download CAD data www.festo.com

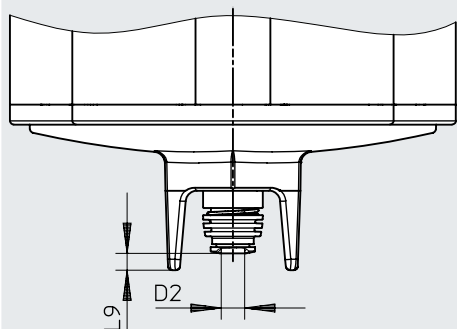


	D2 Ø [inch]	L9 [inch]
MS12M-LF-...-M	0,197	0,43

Dimensions

Dimensions – Condensate drain, fully automatic

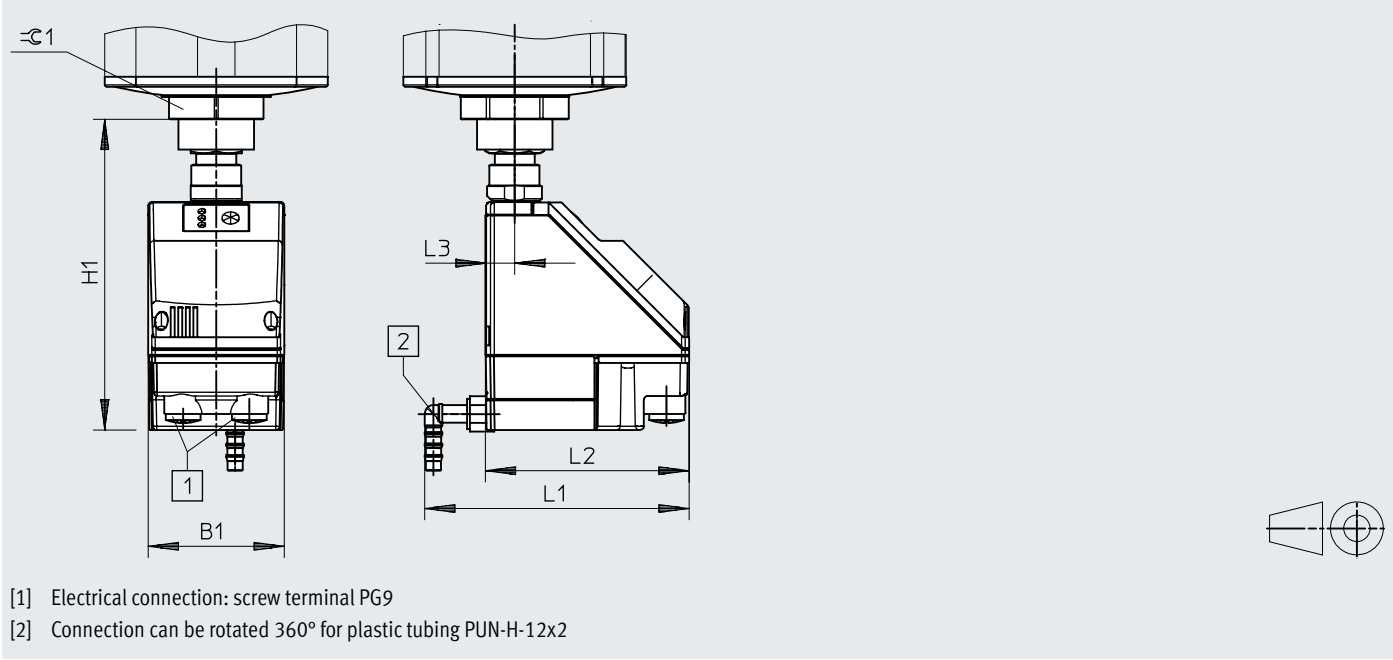
Download CAD data www.festo.com



	D2 Ø [inch]	L9 [inch]
MS12N-LF-...-V	0,197	0,51

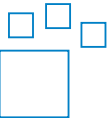
Dimensions

Dimensions – Condensate drain fully automatic, electrically controlled Download CAD data www.festo.com



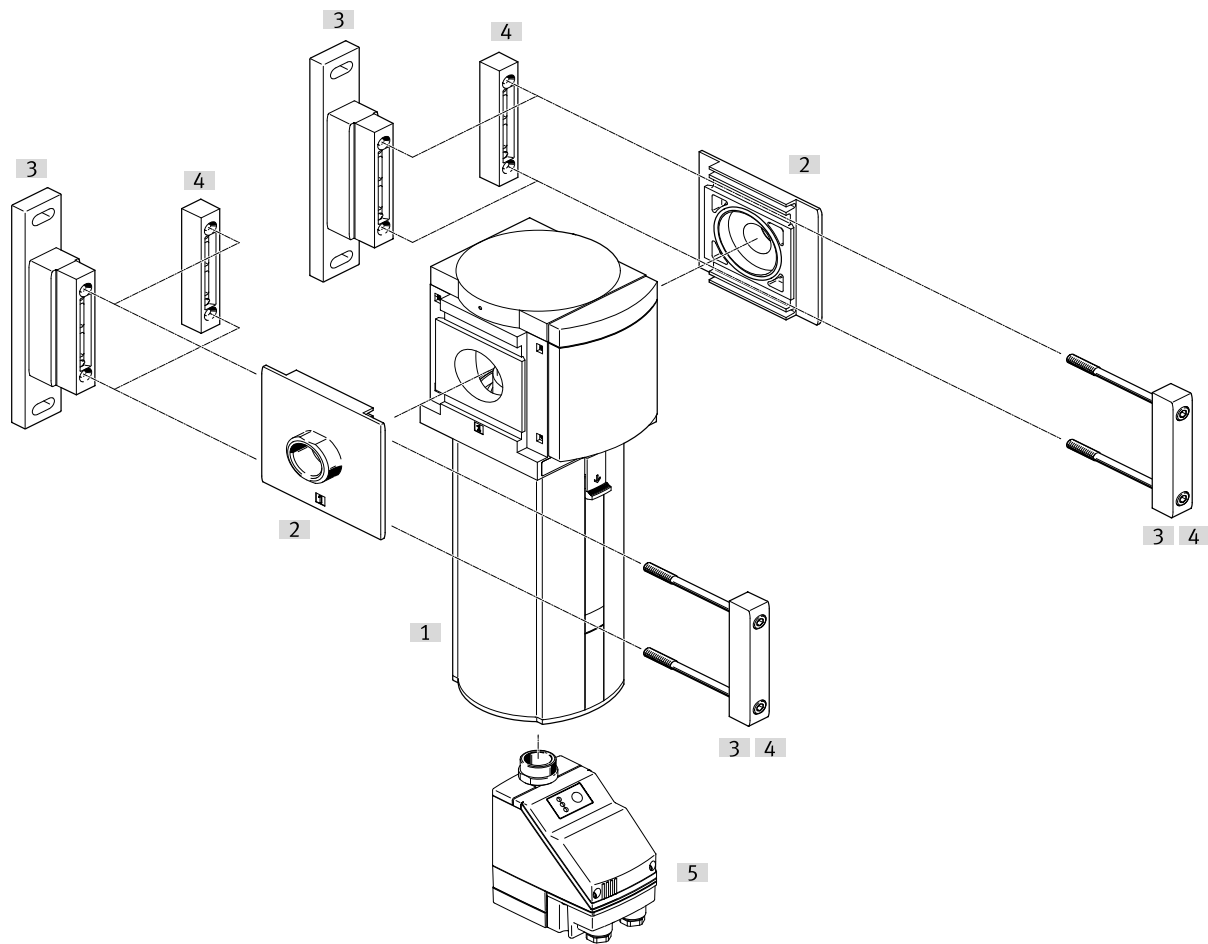
	B1 [inch]	H1 [inch]	L1 [inch]	L2 [inch]	L3 [inch]	$\approx \varnothing 1$ [inch]
MS12N-LF-...-E2, E3, E4	2,835	6,477	5,51	4,252	0,606	2,0

Ordering data

Ordering data – Modular product system			
	Short type code	Part no.	Type
	MS12	535026	MS12N-LF

Peripherals


Peripherals overview



Accessories		→ Link
Type/order code	Description	
[1] Filter MS12N-LF		ms12n-lf
[2] Connecting plateSET MS12-AQ...	Order code [AG...]; for device combinations	13
[3] Mounting bracket MS12-WP	For individual device	13
[4] Module connector MS12-MV	For device combinations and individual devices with connecting plate	13
[5] Fully automatic condensate drain, electrically actuated	Order code [E2], [E3], [E4]	pwea
[6] Filter cartridge MS12-LFP	No illustration	13


Accessories

Filter cartridge MS12-LFP


	Size	Grade of filtration	Material filter	Corrosion resistance class CRC ¹⁾	Part no.	Type
	12	5 µm	Sintered bronze	2 - Moderate corrosion stress	537143	MS12-LFP-C
		40 µm			537144	MS12-LFP-E

1) More information www.festo.com/x/topic/crc


Module connector MS6-MV1

	Size	Product weight	Part no.	Type
	12	500 g	537134	MS12-MV

Mounting bracket MS12-WP

	Size	Product weight	Part no.	Type
	12	700 g	537133	MS12-WP

Sub-base SET MS12-AQ...

	Size	Pneumatic connection, port 1	Product weight	Part no.	Type
	12	1 NPT	1,300 g	537139	MS12-AQT
		1 1/4 NPT		537140	MS12-AQU
		1 1/2 NPT		537141	MS12-AQV
		2 NPT		537142	MS12-AQW