

Fine filter MS12N-LFM

FESTO



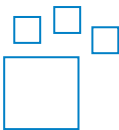
Characteristics

At a glance

- High-efficiency filter for exceptionally clean compressed air.
- With NPT connection thread
 - Removal of oil aerosols from compressed air
 - Air quality according to ISO 8573-1:2010
 - Filter inserts optionally with 1 µm or 0.01 µm
 - Available with manual, semi-automatic, fully automatic, or fully automatic electrically controlled condensate drain.
 - Available with differential pressure gauge to indicate contamination
 - Available with electronic filter clogging indicator

Ordering data - modular system

Link [ms12n-lfm](#)



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

Pneumatic connection

Individual fittings can be connected via connecting plates with internal threads.
The installation of connection plates makes it easier to replace the module if necessary (e.g., when using piping).

Filter design

Filter inserts optionally with 1 µm or 0.01 µm

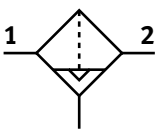
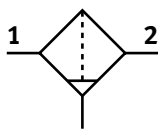
[B]	1 µm	[A]	0.01 µm
Fine filter		Micro filter	

Bowl type

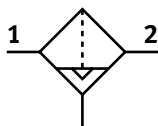
Shell protection by means of integrated metal shell.

Condensate drains

[M]	Manual	[V]	Automatic
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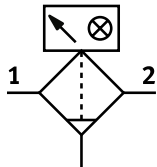
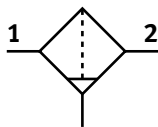
[VC]	Fully automatic, normally closed
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Filter change sensing

Optionally available with differential pressure display for filter contamination.

[]	Without	[DA]	Differential pressure display, visual
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Characteristics

Type of mounting

[WP] Mounting bracket standard design



Mounting attachment and connector for air preparation unit combination or for individual device with port plates

Flow direction

Available with opposite flow direction.

Type code

001	Series	
MS	MS series	
002	Size	
12	Width dimension 124 mm	
003	Thread type	
N	NPT thread	
004	Function	
LFM	Fine and micro filters	
005	Pneumatic connection	
AQT	Sub-base 1 NPT	
AQU	Sub-base 1 1/4 NPT	
AQV	Sub-base 1 1/2 NPT	
AQW	Sub-base 2 NPT	
006	Filter design	
A	0.01 µm	
B	1 µm	
007	Bowl type	
U	Aluminum	

008	Condensate drains	
E2	External fully automatic condensate drain, electric, 110 V AC, terminals	
E3	External fully automatic condensate drain, electric, 230 V AC, terminals	
E4	External fully automatic condensate drain, electric, 24 V DC, terminals	
M	Manual	
V	Automatic	
009	Flow rate	
	Standard	
HF	High flow rate	
010	Filter change sensing	
	Without	
DA	Differential pressure display, visual	
011	Type of mounting	
	Without mounting bracket	
WP	Mounting bracket standard design	
012	UL certification	
	None	
UL1	cULus ordinary location for Canada and USA	
013	Flow direction	
	Flow direction from left to right	
Z	Flow direction from right to left	

Datasheet

General technical data

Filter design	0.01 µm [A], 1 µm [B]
Size	12
Design	Fibre filter
Type of mounting	Either: In-line installation With accessories
Mounting position	Vertical +/-5°
Bowl guard	Metal bowl
Condensate drain	Fully automatic, Fully automatic, electrically actuated, Manual, non-detenting, Manually rotating

Standard nominal flow rate q_N – Micro filter MS12-LFM-A

Pneumatic connection	1 NPT	1 1/4 NPT	1 1/2 NPT	2 NPT
Standard nominal flow rate (standardised to DIN 1343) ¹⁾	5,000 l/min	6,000 l/min	6,500 l/min	7,000 l/min
Min. standard flow rate for clean air class ¹⁾	700 l/min	700 l/min	700 l/min	700 l/min
Max. standard flow rate for clean air class ¹⁾	22,990 l/min	22,990 l/min	22,990 l/min	22,990 l/min

1) Measured at p₁ = 6 bar and Δp = 0,7 bar

Standard nominal flow rate q_N – Fine filter MS12-LFM-B

Pneumatic connection	1 NPT	1 1/4 NPT	1 1/2 NPT	2 NPT
Standard nominal flow rate (standardised to DIN 1343) ¹⁾	5,200 l/min	6,200 l/min	7,500 l/min	7,600 l/min
Min. standard flow rate for clean air class ¹⁾	950 l/min	950 l/min	950 l/min	950 l/min
Max. standard flow rate for clean air class ¹⁾	22,990 l/min	22,990 l/min	22,990 l/min	22,990 l/min

1) Measured at p₁ = 6 bar and Δp = 0,7 bar

Operating and environmental conditions

Operating pressure	0.08 ... 2 MPa
Operating pressure	0.8 ... 20 bar
Operating pressure	11.6 ... 290 psi
Operating medium	Compressed air to ISO 8573-1:2010 [6:::4] Inert gases
Ambient temperature	-10 ... 60°C
Media temperature	-10 ... 60°C
Storage temperature	-10 ... 60°C
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress

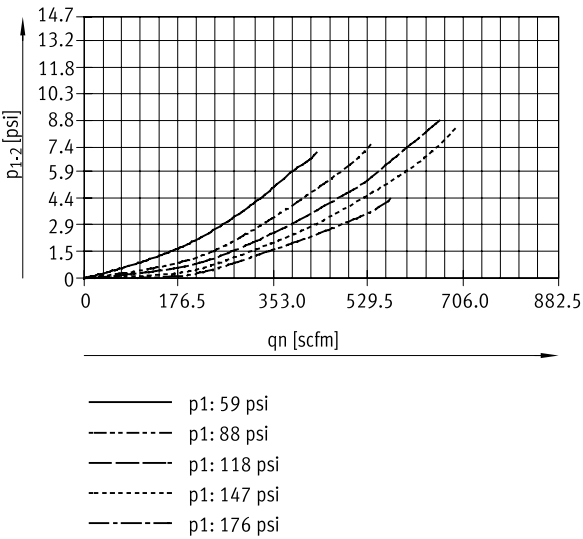
1) More information www.festo.com/x/topic/crc

Materials

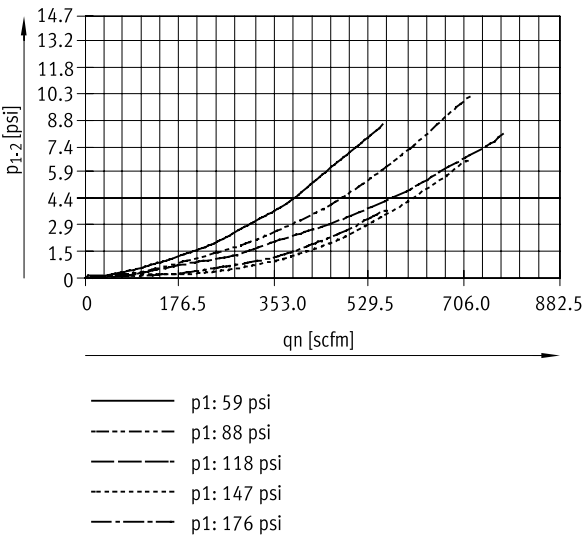
Material housing	Die-cast aluminium
Material bowl	Wrought aluminium alloy
Material filter	Borosilicate fibre
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Datasheet

Standard flow rate q_n as a function of the differential pressure Δp_{1-2} (with sub-base MS12-AQT, pneumatic connection 1 NPT, filter fineness 0.01 μm)

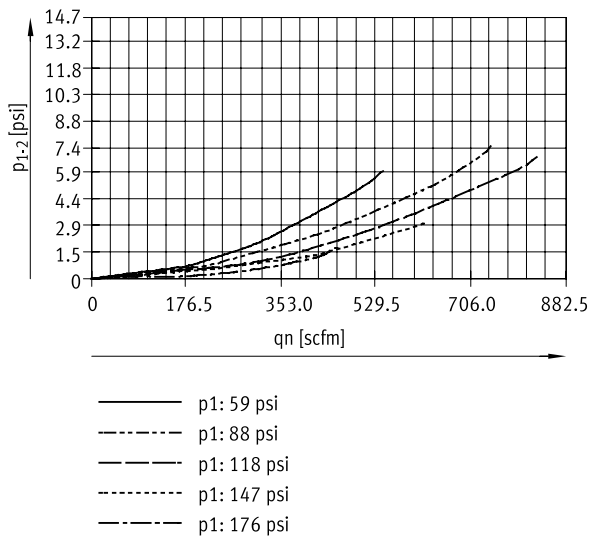


Standard flow rate q_n as a function of the differential pressure Δp_{1-2} (with sub-base MS12-AQU, pneumatic connection 1 1/4 NPT, filter fineness 0.01 μm)

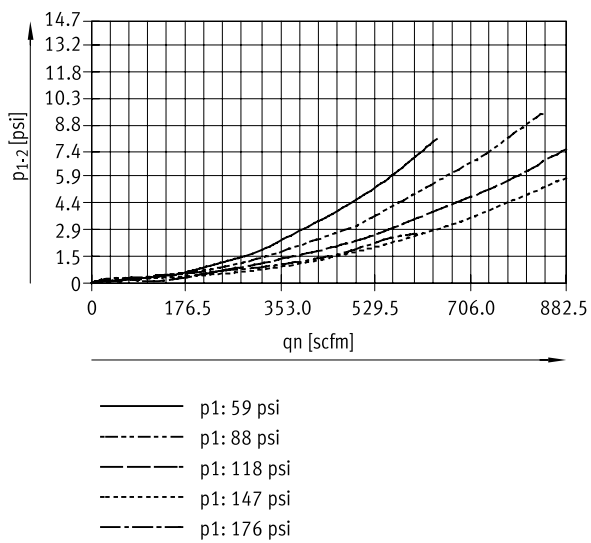


Datasheet

Standard flow rate q_n as a function of the differential pressure Δp_{1-2} (with sub-base MS12-AQV, pneumatic connection 1 1/2 NPT, filter fineness 0.01 μm)

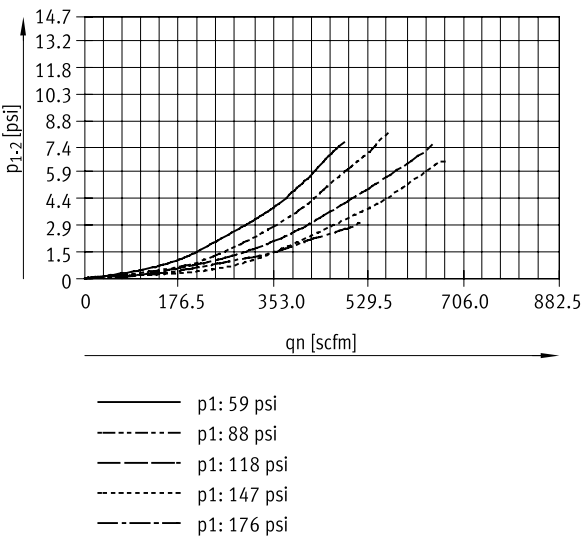


Standard flow rate q_n as a function of the differential pressure Δp_{1-2} (with sub-base MS12-AQW, pneumatic connection 2 NPT, filter fineness 0.01 μm)

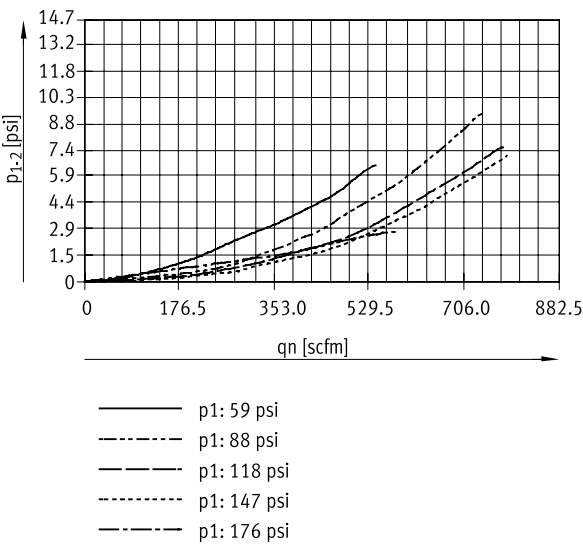


Datasheet

Standard flow rate q_n as a function of the differential pressure Δp_{1-2} (with sub-base MS12-AQT, pneumatic connection 1 NPT, filter fineness 1 μm)

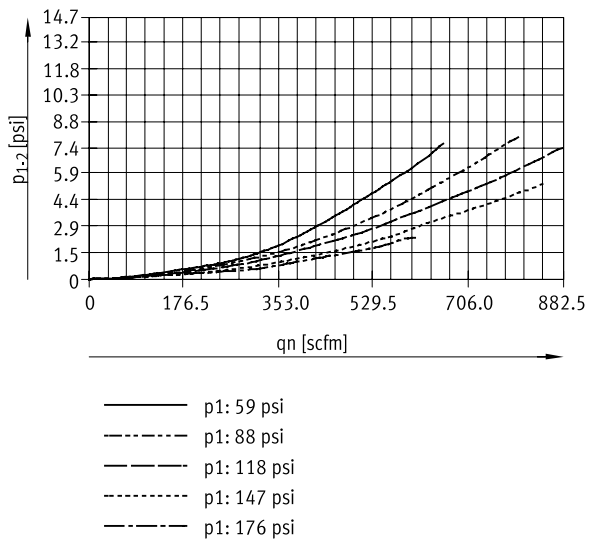


Standard flow rate q_n as a function of the differential pressure Δp_{1-2} (with sub-base MS12-AQU, pneumatic connection 1 1/4 NPT, filter fineness 1 μm)

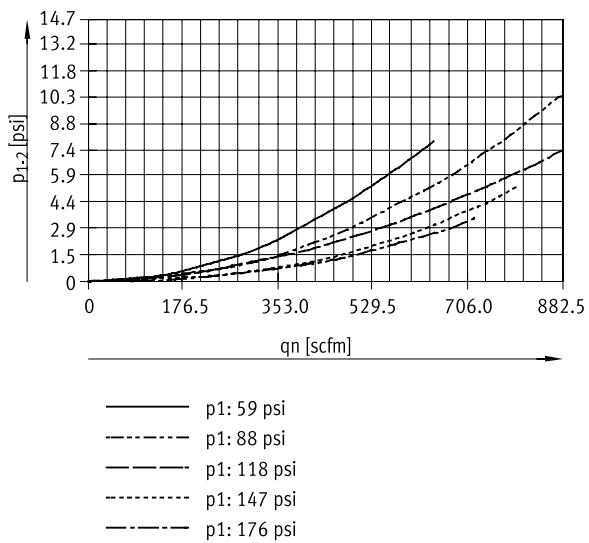


Datasheet

Standard flow rate q_n as a function of the differential pressure Δp_{1-2} (with sub-base MS12-AQV, pneumatic connection 1 1/2 NPT, filter fineness $1\mu\text{m}$)

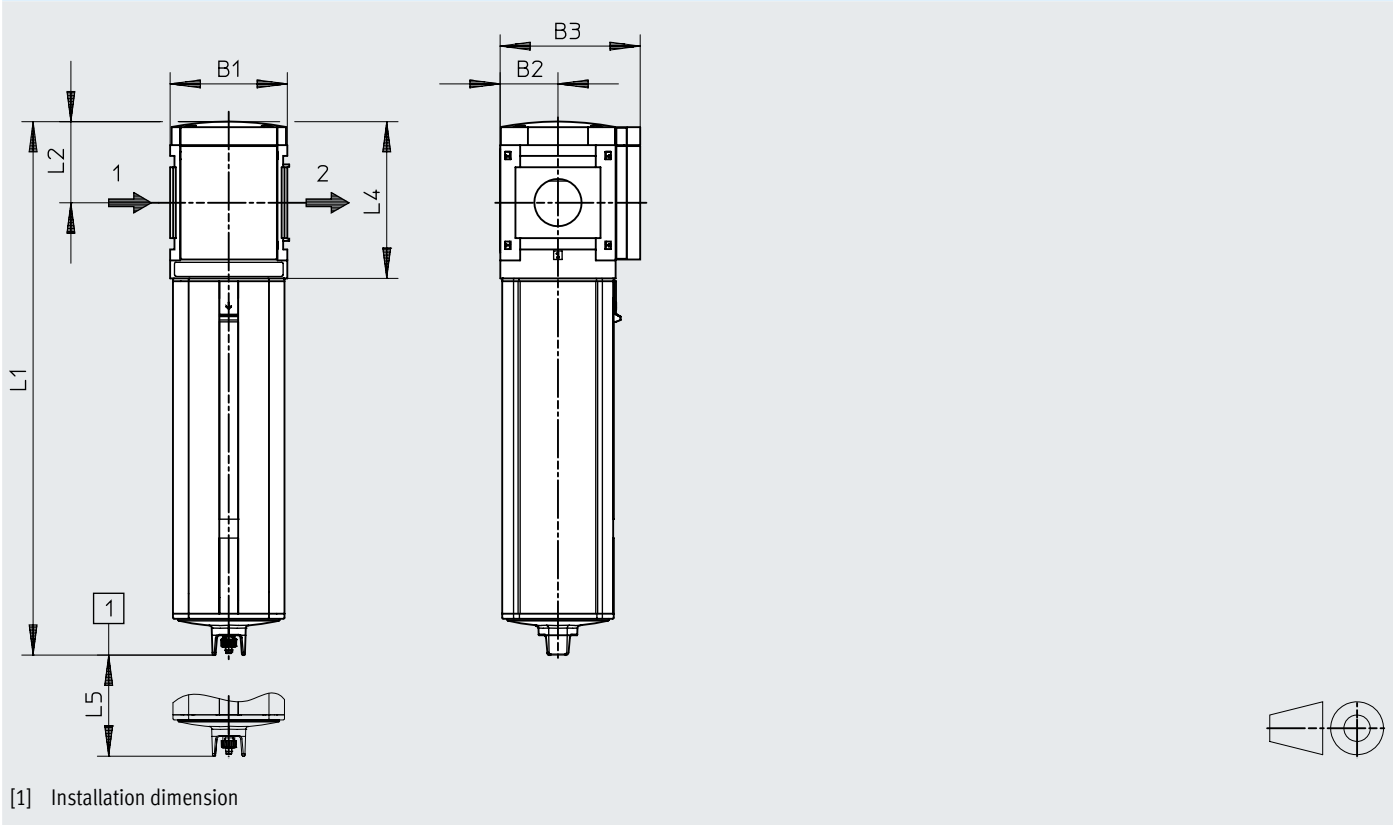


Standard flow rate q_n as a function of the differential pressure Δp_{1-2} (with sub-base MS12-AQW, pneumatic connection 2 NPT, filter fineness $1\mu\text{m}$)



Dimensions

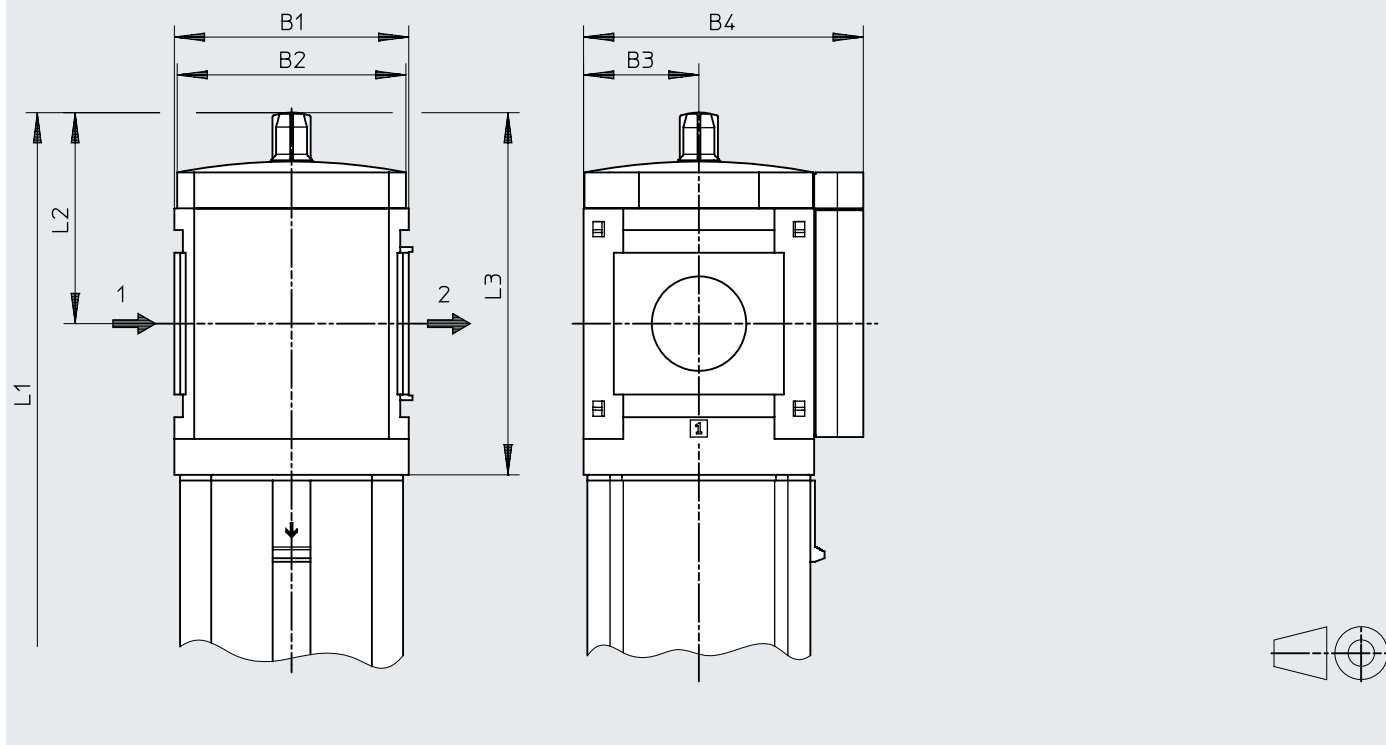
Dimensions – Basic type Download CAD data www.festo.com



	B1	B2	B3	L1	L2	L4	L5
MS12-LFM	124	61	148	565	86	166	350

Dimensions

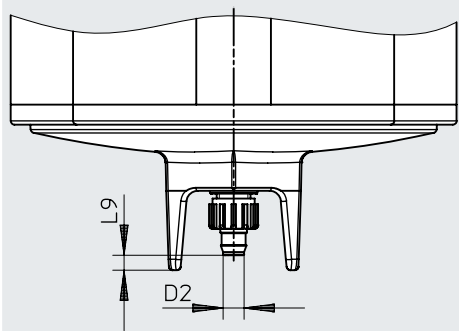
Dimensions – Differential pressure display

[Download CAD data](http://www.festo.com) www.festo.com


	B1	B2	B3	B4	L1	L2	L3
MS12-LFM-...-DA	124	122	61	148	590	112	192

Dimensions

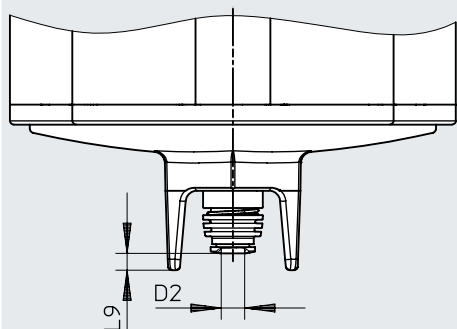
Dimensions – Condensate drain, manual rotary [Download CAD data](#) www.festo.com



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

Dimensions

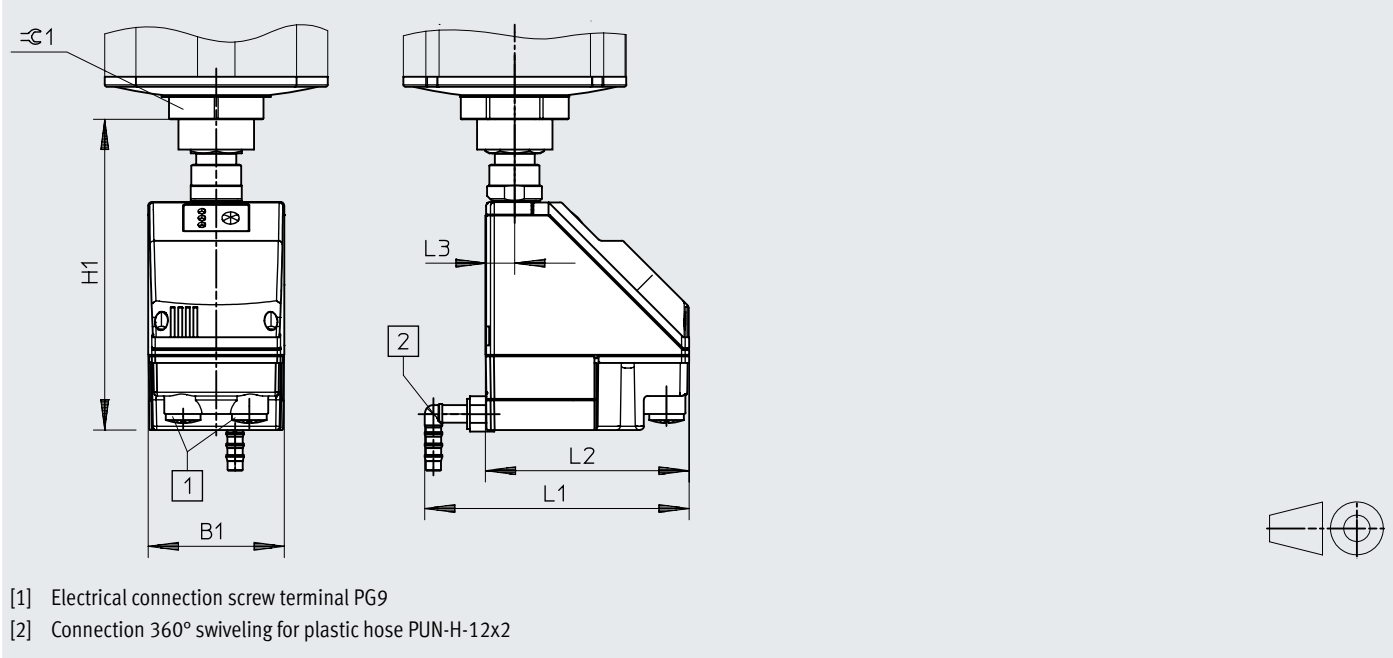
Dimensions – Condensate drain, fully automatic

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


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

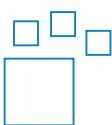
Dimensions

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



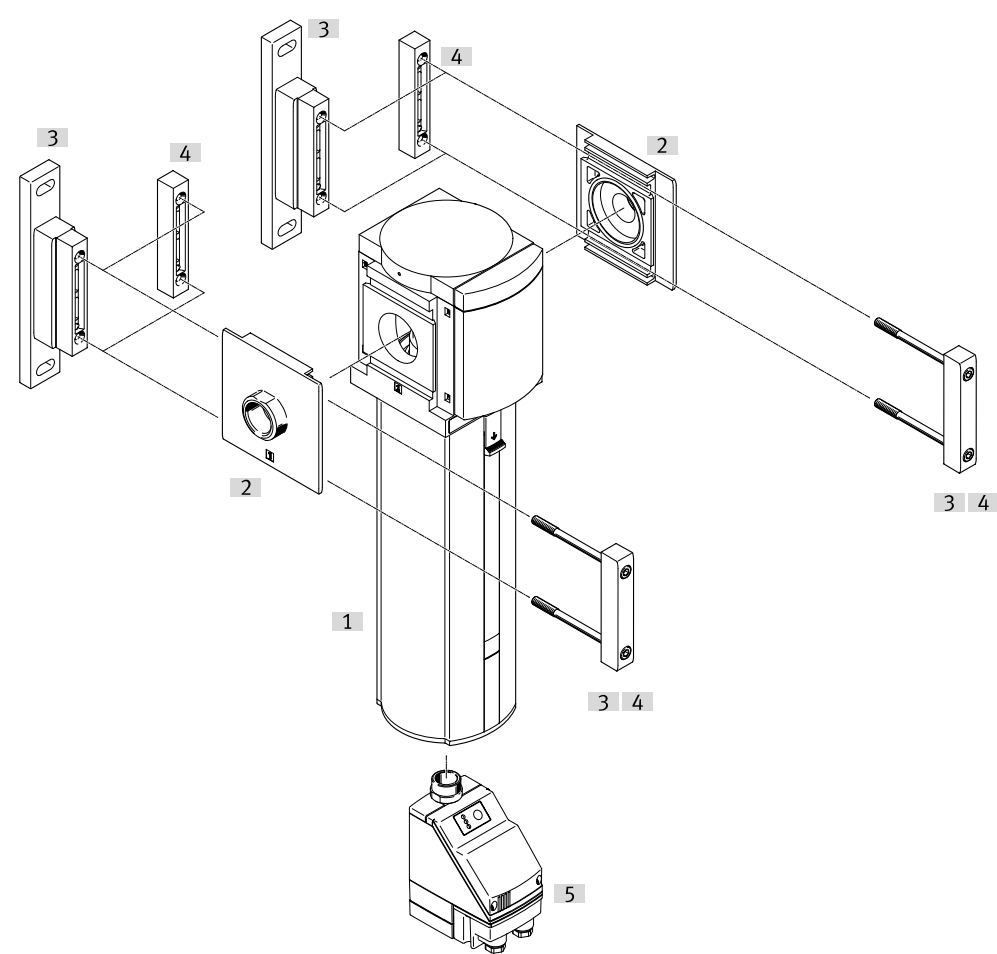
	B1 [inch]	H1 [inch]	L1 [inch]	L2 [inch]	L3 [inch]	$\approx \varnothing 1$ [inch]
MS12N-LF-...-E2, E3, E4	2,835	6,477	5,51	4,252	0,606	2,0

Ordering data

Ordering data- Modular product system			
	Type code	Part no.	Type
	MS12	535045	MS12N-LFM

Peripherals overview

Peripherals overview



Accessories		→ Page/Internet
Type/order code	Description	
[1] Fine/micro filter MS12N-LFM-A/B		ms12n-lfm
[2] Sub-base-SET MS12-AQ...	Order code [AQ...]; for device combinations	17
[3] Mounting bracket MS12-WP	Order code [WP]; for single device	17
[4] Module connector MS12-MV	For device combinations and individual devices with sub-base	17
[5] Condensate drain fully automatic, electrically controlled E2, E3, E4	Order code [E2], [E3], [E4]	pwea
[6] Filter cartridge MS12-LFM-A/B	Not shown	17

Accessories

Filter cartridge MS12-LFM-A/B

	Grade of filtration	Compressed air filter material	LABS (PWIS) conformity	Product weight	Part no.	Type
	0.01 µm	Borosilicate glass fiber	VDMA24364-B1/B2-L	425 g	537146	MS12-LFM-A
	1 µm			395 g	537145	MS12-LFM-B

Module connector MS6-MV1

	Plate material	LABS (PWIS) conformity	Product weight	Part no.	Type
	Die-cast aluminum	VDMA24364-B1/B2-L	500 g	537134	MS12-MV

Mounting bracket MS6-WP...

	Bracket material	LABS (PWIS) conformity	Product weight	Part no.	Type
	Die-cast aluminum	VDMA24364-B1/B2-L	700 g	537133	MS12-WP

Sub-base SET MS12-AG...

	Pneumatic connection 1	Material of sub-base	LABS (PWIS) conformity	Product weight	Part no.	Type
	1 NPT	Die-cast aluminum	VDMA24364-B1/B2-L	1,300 g	537139	MS12-AQT
	1 1/4 NPT		VDMA24364-B2-L		537140	MS12-AQU
	1 1/2 NPT		VDMA24364-B1/B2-L		537141	MS12-AQV
	2 NPT				537142	MS12-AQW