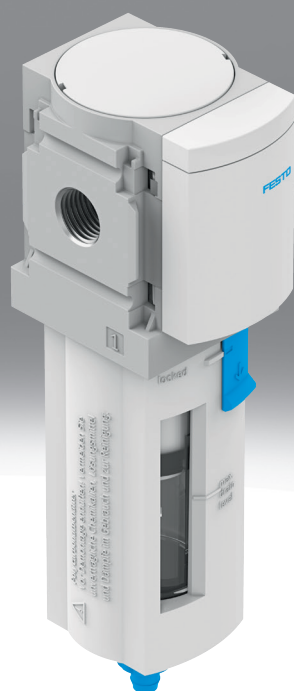


Fine filter MS4N-LFM-B

FESTO



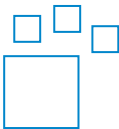
Characteristics

At a glance

High-efficiency filter for exceptionally clean compressed air.

- Removal of oil aerosols from compressed air
- Air quality according to ISO 8573-1:2010

Ordering data - modular system Link [ms4n-lfm-b](#)



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

Size

- Width dimension: 40 mm
Standard nominal flow rate:
- 6.4 scfm

Pneumatic connection

The installation of connection plates makes it easier to replace the module if necessary (e.g., when using piping).

Bowl type

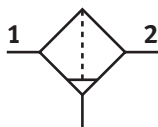
Shell guard selectable either as plastic bowl guard or integrated as metal shell.

Condensate drains

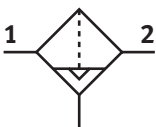
The following functions can be selected:

- Manual
- Semi-automatic
- Fully automatic

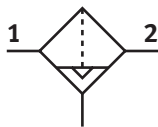
[M] Manual



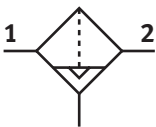
[H] Semi-automatic



[V] Automatic



[VC] Fully automatic, normally closed



Filter design

Optionally with differential pressure display for filter contamination or with electronic filter contamination indicator.

Characteristics

Type of mounting

[WB] Mounting centrally at rear (wall mounting top and bottom), sub-bases not required



- For wall mounting an individual device
- For size 4 or 6

[WBM] Mounting centrally at rear (wall mounting top), sub-bases not required



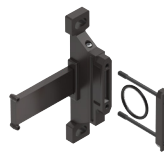
- For wall mounting an individual device
- For size 4

[WP] Mounting bracket standard design



- For connecting the modules for wall mounting
- In conjunction with sub-base MS4-AG... for wall mounting of an individual device
- In conjunction with mounting plate MS4-AEND for wall mounting of a single device
- With equal wall distance for mixing combination with series MS4 and MS6

[WPM] Mounting bracket for hooking in air preparation units



- Mounting attachment and connector for air preparation unit combination
- Mount and dismount the service unit combination quickly
- Spacer for maintaining the mounting gap
- For size 4, 6, or 9

UL certification

Optional device variant UL1, which meets the safety requirements for the Canadian and US markets.

Flow direction

Available with opposite flow direction.

Type code

001	Series	
MS	MS series	
002	Size	
4	Width dimension 40 mm	
003	Thread type	
N	NPT thread	
004	Function	
LFM	Fine and micro filters	
005	Pneumatic connection, inch	
1/8	Internal thread NPT 1/8	
1/4	Internal thread NPT 1/4	
AQK	Sub-base NPT1/8	
AQN	Sub-base NPT1/4	
AQP	Sub-base NPT3/8	
006	Filter design	
A	0.01 µm	
B	1 µm	
007	Bowl type	
R	Plastic bowl with plastic bowl guard	
U	Aluminum	

008	Condensate drains	
H	Semi-automatic	
M	Manual	
V	Automatic	
009	Filter change sensing	
	Without	
DA	Differential pressure display, visual	
DN	Filter contamination indicator, M8 plug, NPN, 3-pin	
DNI	Filter contamination indicator, M12 plug, NPN, 4-pin, analog output 4...20 mA	
DP	Filter contamination indicator, M8 plug, PNP, 3-pin	
DPI	Filter contamination indicator, M12 plug, PNP, 4-pin, analog output 4...20 mA	
010	Type of mounting	
	Without mounting bracket	
WB	Mounting centrally at rear (wall mounting top and bottom), sub-bases not required	
WBM	Mounting centrally at rear (wall mounting top), sub-bases not required	
WP	Mounting bracket standard design	
WPM	Mounting bracket for hooking in air preparation units	
011	UL certification	
	None	
UL1	cULus ordinary location for Canada and USA	
012	Flow direction	
	Flow direction from left to right	
Z	Flow direction from right to left	

Datasheet

General technical data		
Pneumatic connection 1	1/8 NPT	1/4 NPT
Pneumatic connection 2	1/8 NPT	1/4 NPT
Size	4	
Structural design	Fiber filter	
Grade of filtration	1 µm	
Type of mounting	Alternatively: In-line installation With accessories	
Mounting position	Vertical ±5°	
Air quality class at the output	Compressed air according to ISO 8573-1:2010 [5:4:3]	
Filter efficiency	99.99%	
Bowl guard	Plastic bowl guard, Integrated as metal bowl	
Condensate drain	Fully automatic, Manual, non-detenting, Manual, rotating	
Max. condensate volume	19 ... 25 ml	
Differential pressure display	–	Visual display
Filter efficiency, fine particles	99%	
Filter efficiency, oil aerosol	90%	

Standard nominal flow rate qnN	
Min. standard flow rate for air quality class	54 l/min
Max. standard flow rate for air quality class	360 l/min

Operating and environmental conditions		
Condensate drain	Fully automatic, Manual, non-detenting	Manual, rotating
Operating pressure	2 ... 12 bar	0 ... 14 bar
Operating medium	Compressed air as per ISO 8573-1:2010 [6:4:4] Inert gases	
Ambient temperature	-10 ... 60°C	
Temperature of medium	-10 ... 60°C	
Storage temperature	-10 ... 60°C	
Corrosion resistance class (CRC) ¹⁾	2 - Moderate corrosion stress	
For use in the food industry ²⁾	See supplementary material information	

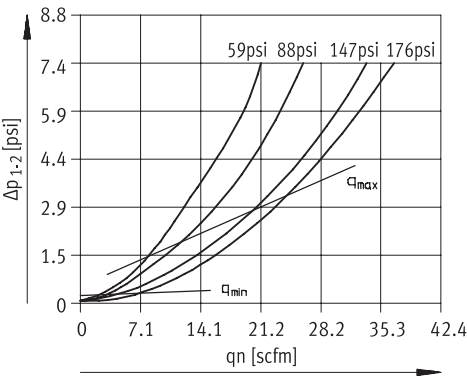
1) For more information, visit www.festo.com/x/topic/kbk

2) More information: www.festo.com/catalogue/ms4n-lfm → Support/Downloads.

Materials		
Bowl type	Plastic bowl with plastic bowl guard [R]	Aluminum [U]
Housing material	Die-cast aluminum	
Material of bowl	PC	Die-cast aluminum, Wrought aluminum alloy
Inspection window material	–	PA
Compressed air filter material	Borosilicate glass fiber	
Seals material	NBR	
Note on materials	RoHS compliant	
LABS (PWIS) conformity	VDMA24364-B1/B2-L	

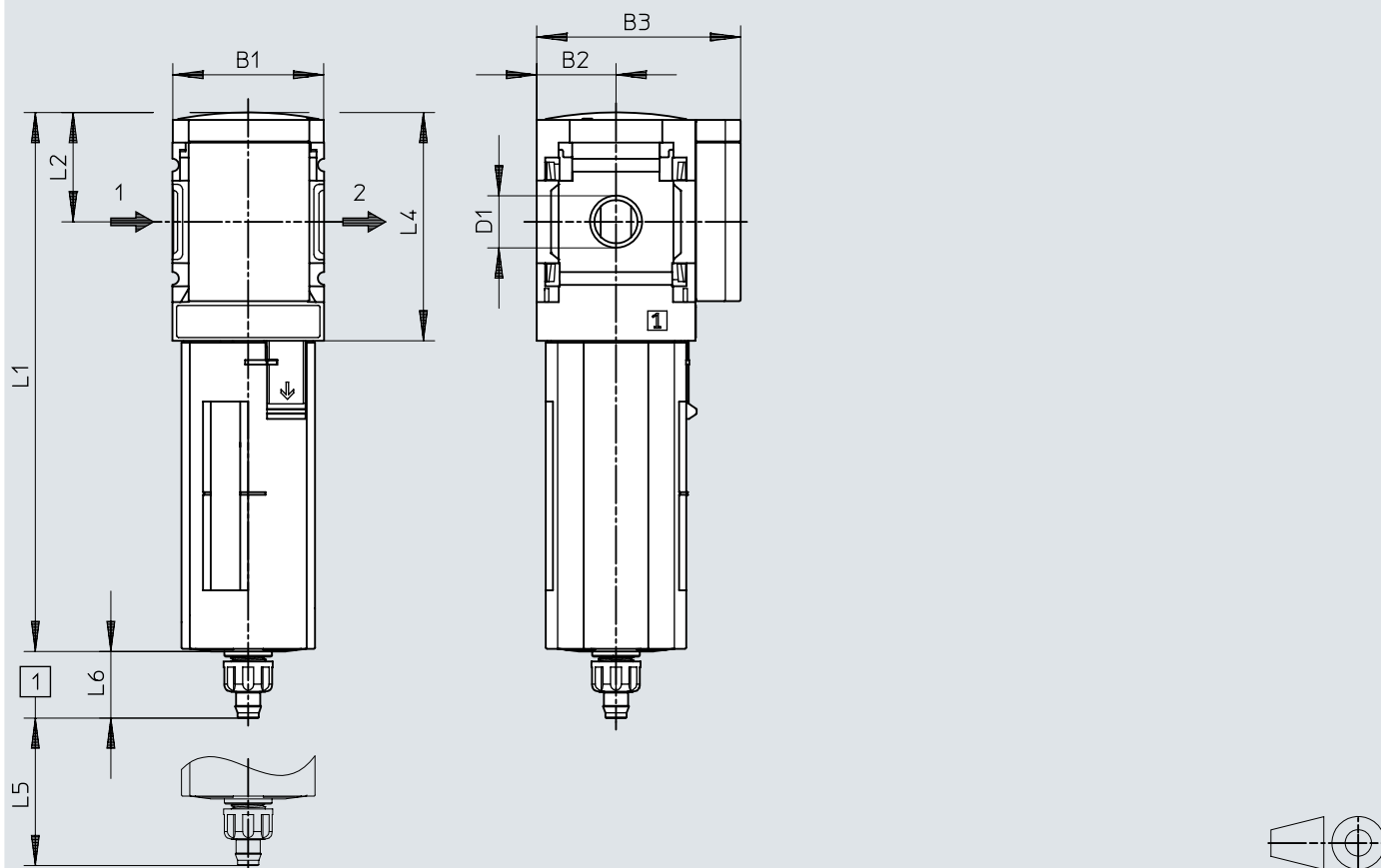
Datasheet

Normal flow rate q_n as a function of the differential pressure Δp_{1-2} (MS4N-LFM-1/8; MS4N-LFM-1/4)



Dimensions

Dimensions – Condensate drain, manual rotary, with plastic bowl guard R

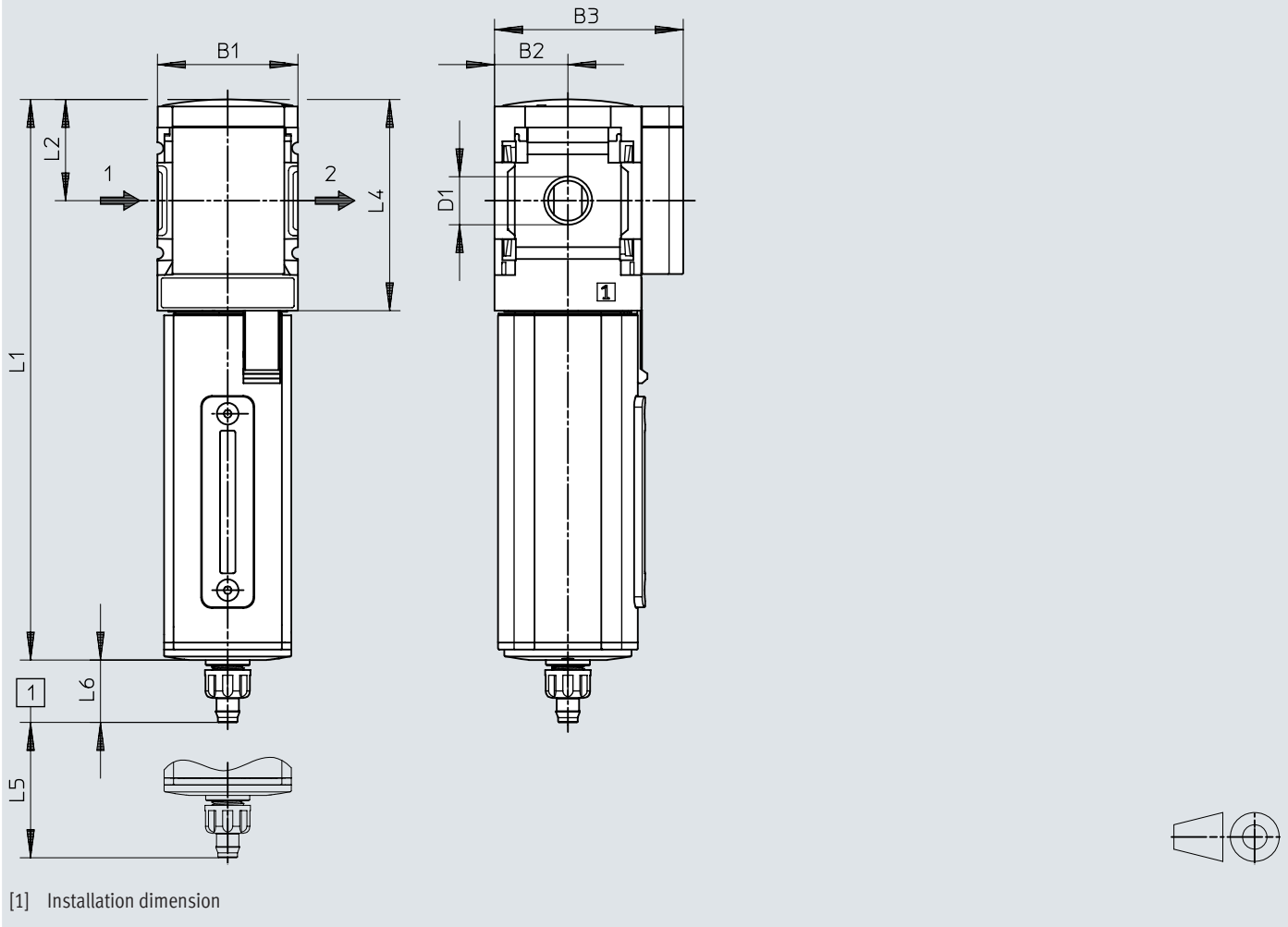
[Download CAD data](http://www.festo.com)


[1] Installation dimension

	B1 [inch]	B2 [inch]	B3 [inch]	D1	L1 [inch]	L2 [inch]	L4 [inch]	L5 [inch]	L6 [inch]
MS4N-LFM-1/8	1,58	0,83	2,13	1/8 NPT	5,58	1,14	2,38	2,36	0,70
MS4N-LFM-1/4				1/4 NPT					

Dimensions

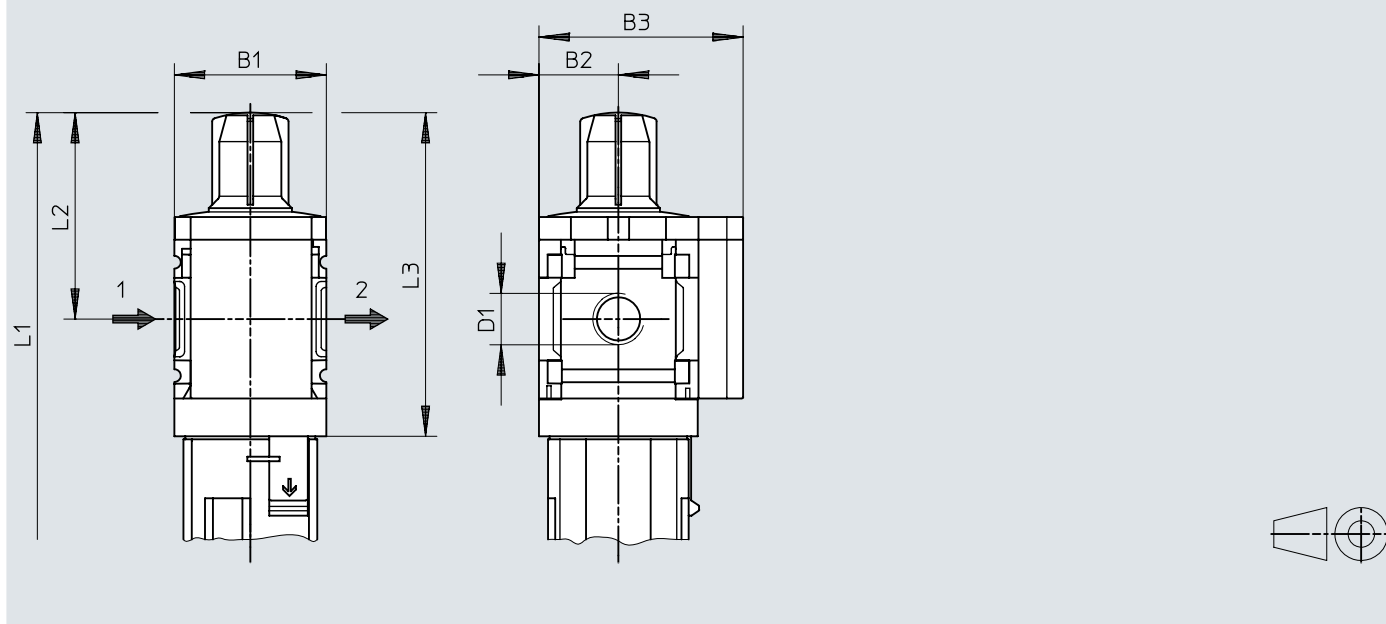
Dimensions – Condensate drain, manual rotary, with metal bowl U Download CAD data www.festo.com



	B1 [inch]	B2 [inch]	B3 [inch]	D1	L1 [inch]	L2 [inch]	L4 [inch]	L5 [inch]	L6 [inch]
MS4N-LFM-1/8	1,58	0,83	2,13	1/8 NPT	6,29	1,14	2,38	2,36	0,70
MS4N-LFM-1/4				1/4 NPT					

Dimensions

Dimensions – Differential pressure display DA

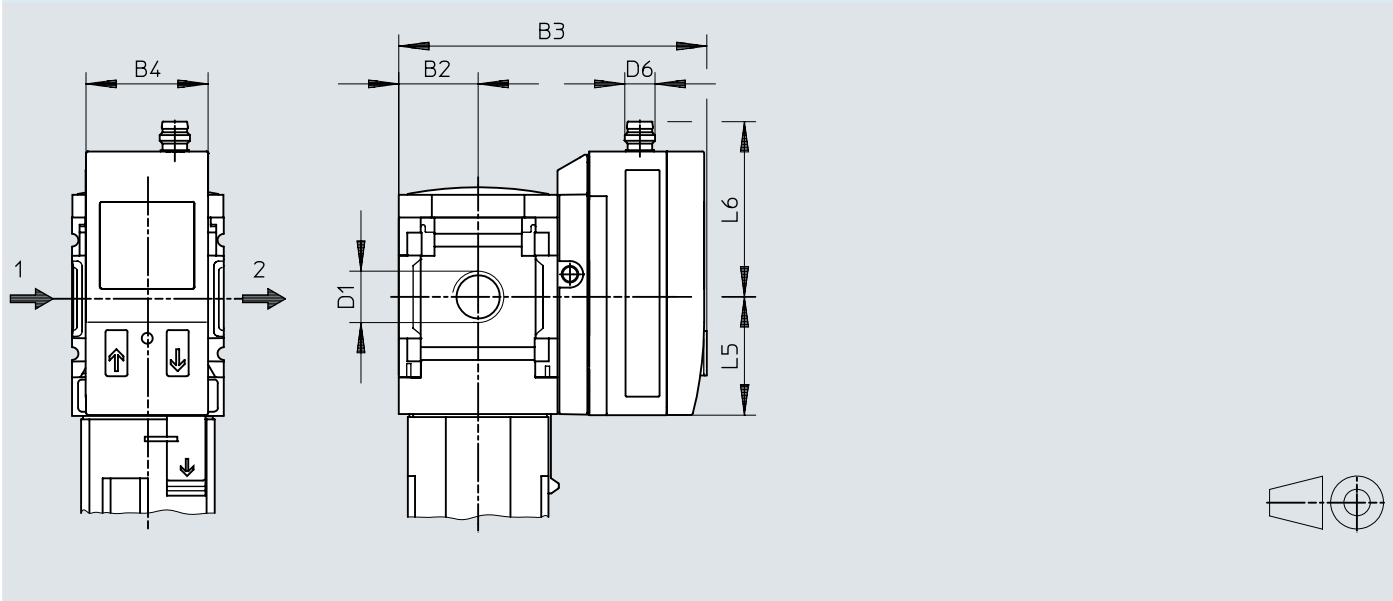
[Download CAD data](http://www.festo.com)


	B1	B2	B3	D1	L1	L2	L3
	[inch]	[inch]	[inch]		1) [inch]	2) [inch]	[inch]
MS4-LFM-1/8-...-DA	1,57	0,83	2,13	1/8 NPT	6,61	7,32	3,39
MS4-LFM-1/4-...-DA				1/4 NPT			

- 1) Bowl guard, polymer
2) Bowl guard, metal

Dimensions

Dimensions – Filter contamination indicator DP, DN, DPI, DNI [Download CAD data](http://www.festo.com) www.festo.com



	B2	B3	B4	D1	D6	L5	L6
MS4-LFM-1/8-...-DP/DN	21	82,6	32,3	G1/8	M8x1	35,1	46,7
MS4-LFM-1/4-...-DP/DN				G1/4			
MS4-LFM-1/8-...-DPI/DNI	21	82,6	32,3	G1/8	M12x1	35,1	55,8
MS4-LFM-1/4-...-DPI/DNI				G1/4			

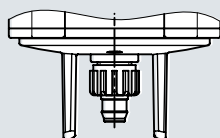
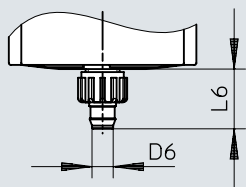
Dimensions

Dimensions – Condensate drain, manual rotary

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

MS4-...-R-M

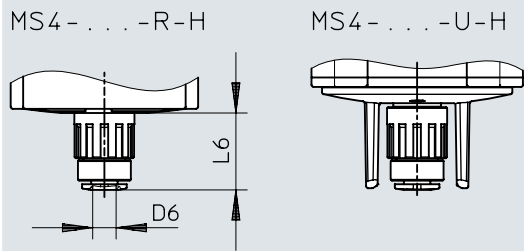
MS4-...-U-M



	D6 ø [inch]	L6 [inch]
MS4N-LFM-...-R-M	0,197	0,70
MS4N-LFM-...-U-M	0,197	0,70

Dimensions

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



	D6 ø [inch]	L6 [inch]
MS4N-LFM-...-R-H	0,236	0,87
MS4N-LFM-...-U-H	0,236	0,87

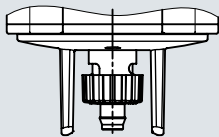
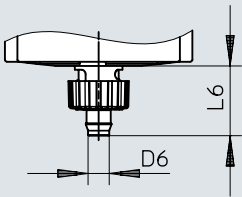
Dimensions

Dimensions – Condensate drain, fully automatic

Download CAD data www.festo.com

MS4-...-R-V

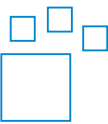
MS4-...-U-V



	D6 Ø [inch]	L6 [inch]
MS4N-LFM-...-R-V	0,197	0,80
MS4N-LFM-...-U-V	0,197	0,80

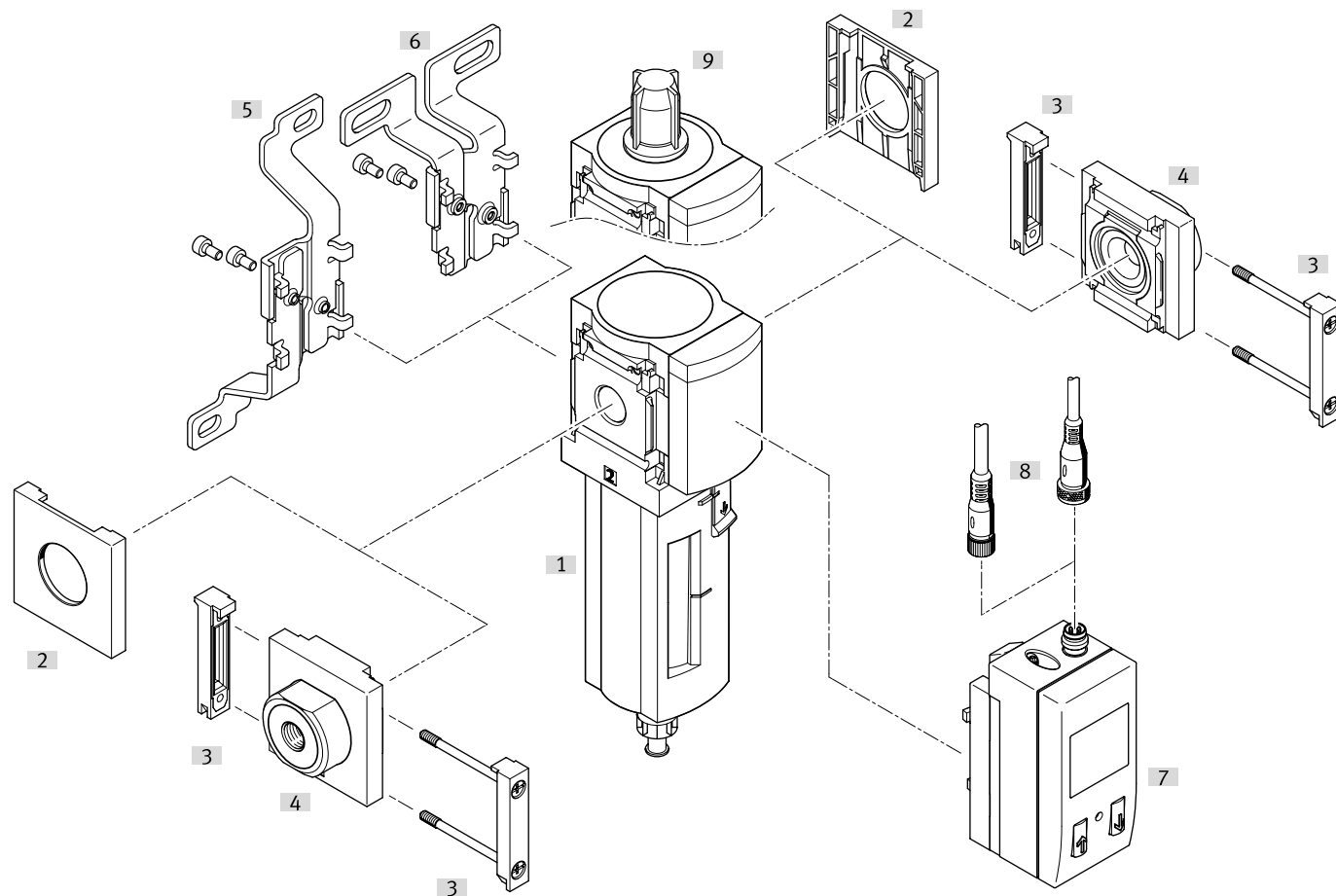
Ordering data

Ordering data						
	Pneumatic connection 1	Grade of filtration	Condensate drain	Product weight	Part no.	Type
	1/8 NPT	1 µm	Fully automatic, Manual, non-de-tenting	350 g	539206	MS4N-LFM-1/8-BUV
	1/4 NPT		Manual, rotating	190 g	536699	MS4N-LFM-1/8-BRM
			Fully automatic, Manual, non-de-tenting	350 g	535774	MS4N-LFM-1/4-BUV
			Manual, rotating	190 g	536826	MS4N-LFM-1/4-BRM-DA
					531810	MS4N-LFM-1/4-BRM

Ordering data– Modular product system			
	Type code	Part no.	Type
	MS4N-LFM	527698	MS4N-LFM

Peripherals overview

Peripherals overview



Accessories		→ Page/Internet
Type/order code	Description	
[1] Fine filter M4N-LFM-B		ms4n-lfm-b
[2] Cover cap MS4-END	for devices with sub-base	16
[3] Module connector MS4-MV	for device combinations and individual devices with sub-base	16
[4] Sub-base-SET MS4-AQ...	Order code [AQ...]; for device combinations	17
[5] Mounting bracket MS4-WB	for single device	16
[6] Mounting bracket MS4-WBM	for single device	16
[7] Filter contamination indicator DP/DN/DPI/DNI	Order code [DP], [DN], [DPI], [DNI]	ms4n-lfm-b
[8] Connecting cable NEBA-M8...-LE3, NEBA-M12...-LE4		17
[9] Differential pressure display DA	Order code [DA]	ms4n-lfm-b

Accessories

Fine-filter cartridges						
	Size	Grade of filtration	LABS (PWIS) conformity	Note on materials	Part no.	Type
	Mini	1 µm	VDMA24364-B1/B2-L	RoHS compliant	162677	MS4/D-MINI-LFM-B

Module connector MS4-MV1						
	Module connector material	LABS (PWIS) conformity	Product weight		Part no.	Type
	POM, high-alloy stainless steel	VDMA24364-B1/B2-L	13 g		8119201	MS4-MV1

Cover cap MS4-END						
	Housing material	LABS (PWIS) conformity			Part no.	Type
	PA-reinforced	VDMA24364-B1/B2-L			538779	MS4-END

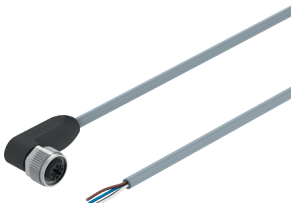
Mounting bracket MS4-WB						
	Bracket material	LABS (PWIS) conformity	Product weight		Part no.	Type
	Steel	VDMA24364-B1/B2-L	46 g		532185	MS4-WB

Mounting bracket MS4-WBM						
	Bracket material	LABS (PWIS) conformity	Product weight		Part no.	Type
	Steel	VDMA24364-B1/B2-L	48 g		526062	MS4-WBM

Accessories

Sub-base-SET MS4-AQ...						
	Pneumatic connection 1	Material of sub-base	LABS (PWIS) conformity	Product weight	Part no.	Type
	1/8 NPT	Die-cast aluminum	VDMA24364-B1/B2-L	128 g	526065	MS4N-AQK
	1/4 NPT				526066	MS4N-AQN
	3/8 NPT				526067	MS4N-AQP

Connecting cables NEBA, straight						
	Electrical connection 1, connection technology	Electrical connection 2, connection technology	Electrical connection 2, number of pins/wires	Cable length	Part no.	Type
	M12x1 A-coded as per EN 61076-2-101	Open end	4	2.5 m	8078239	NEBA-M12G5-U-2.5-N-LE4
				5 m	8078240	NEBA-M12G5-U-5-N-LE4
	M8x1 A-coded as per EN 61076-2-104		3	2.5 m	8078223	NEBA-M8G3-U-2.5-N-LE3
				5 m	8078224	NEBA-M8G3-U-5-N-LE3

Connecting cables NEBA, angled						
	Electrical connection 1, connection technology	Electrical connection 2, connection technology	Electrical connection 2, number of pins/wires	Cable length	Part no.	Type
	M12x1 A-coded as per EN 61076-2-101	Open end	4	2.5 m	8078248	NEBA-M12W5-U-2.5-N-LE4
				5 m	8078249	NEBA-M12W5-U-5-N-LE4
	M8x1 A-coded as per EN 61076-2-104		3	2.5 m	8078230	NEBA-M8W3-U-2.5-N-LE3
				5 m	8078231	NEBA-M8W3-U-5-N-LE3