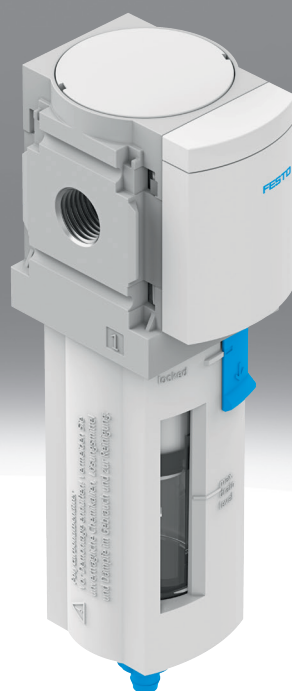


Micro filter MS4N-LFM-A

FESTO



Characteristics

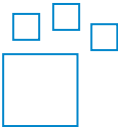
At a glance

High-efficiency filter for exceptionally clean compressed air.

- Removing oil aerosols from compressed air
- Air quality to ISO 8573-1:2010

Ordering data - modular system

Link [ms4n-lfm-a](#)



Configurable product

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

Size

Grid dimension: 40 mm

Standard nominal flow rate:

- 4.2 scfm

Pneumatic connection

By installing connecting plates it is easier to replace the module if necessary (e.g. when using piping).

Bowl type

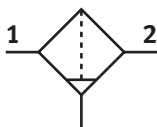
Bowl guard can be selected either as a plastic bowl guard or integrated as a metal bowl guard.

Condensate drain

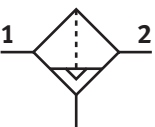
The following functions can be selected:

- Manual
- Semi-automatic
- Fully automatic

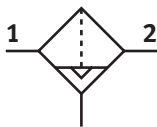
[M] Manually



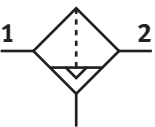
[H] Semi-automatic



[V] Automatic



[VC] Fully automatic, normally closed



Filter design

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

Characteristics

Type of mounting

[WB] Mounting centrally at rear (wall mounting top and bottom), connecting plates not required



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

[WBM] Mounting centrally at rear (wall mounting top), connecting plates not required



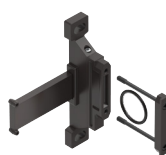
- For wall mounting an individual device
- For size 4

[WP] Mounting bracket basic design



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

[WPM] Mounting bracket for hooking in service unit components



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

Flow direction

Available with flow in the opposite direction.

Type code

001	Series	
MS	MS series	
002	Size	
4	Grid dimension 40 mm	
003	Thread type	
N	NPT thread	
004	Function	
LFM	Fine and micro filters	
005	Pneumatic connection, inch	
1/8	Female thread NPT 1/8	
1/4	Female thread NPT 1/4	
006	Filter design	
A	0.01 µm	

007	Bowl type	
R	Plastic tray with plastic basket	
U	Aluminium	
008	Condensate drain	
M	Manually	
V	Automatic	
009	Filter change sensing	
	None	
DA	Differential pressure display, visual	
010	Type of mounting	
	Without mounting bracket	
011	Flow direction	
	Flow direction from left to right	
Z	Flow direction from right to left	

Datasheet

General technical data		
Pneumatic connection, port 1	1/8 NPT	1/4 NPT
Pneumatic connection, port 2	1/8 NPT	1/4 NPT
Size	4	
Design	Fibre filter	
Grade of filtration	0.01 µm	
Type of mounting	Either: Inline installation With accessories	
Mounting position	Vertical +/-5°	
Air purity class at output	Compressed air to ISO 8573-1:2010 [3:4:2]	
Filter efficiency	99.9999%	
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 indicator
Filter efficiency, fine particles	99.995%	
Filter efficiency, oil aerosol	99%	
MPPS	0.05 µm	
Filter efficiency MPPS	99.95%	

Standard nominal flow rate q _N	
Min. standard flow rate for clean air class	54 l/min
Max. standard flow rate for clean air 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 ¹⁾	Compressed air to ISO 8573-1:2010 [6:4:4] Inert gas	
Ambient temperature	-10 ... 60°C	
Media temperature	-10 ... 60°C	
Storage temperature	-10 ... 60°C	
Corrosion resistance class CRC ²⁾	2 - Moderate corrosion stress	
Suitable for use with food ³⁾	See supplementary material information	

1) It is recommended to prefilter the compressed air for the micro filter MS-LFM-A using a fine filter MS-LFM-B (grade of filtration 1 µm).

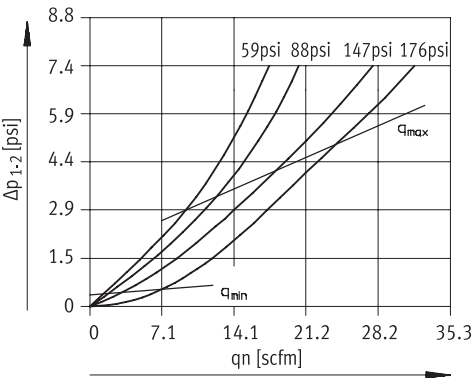
2) More information www.festo.com/x/topic/kbk

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

Materials	
Material housing	Die-cast aluminium
Material bowl	Die-cast aluminium, Wrought aluminium alloy, Makrolon®
Material screen	Process automation
Material filter	Borosilicate fibre
Material seals	NBR
Note on materials	RoHS compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Datasheet

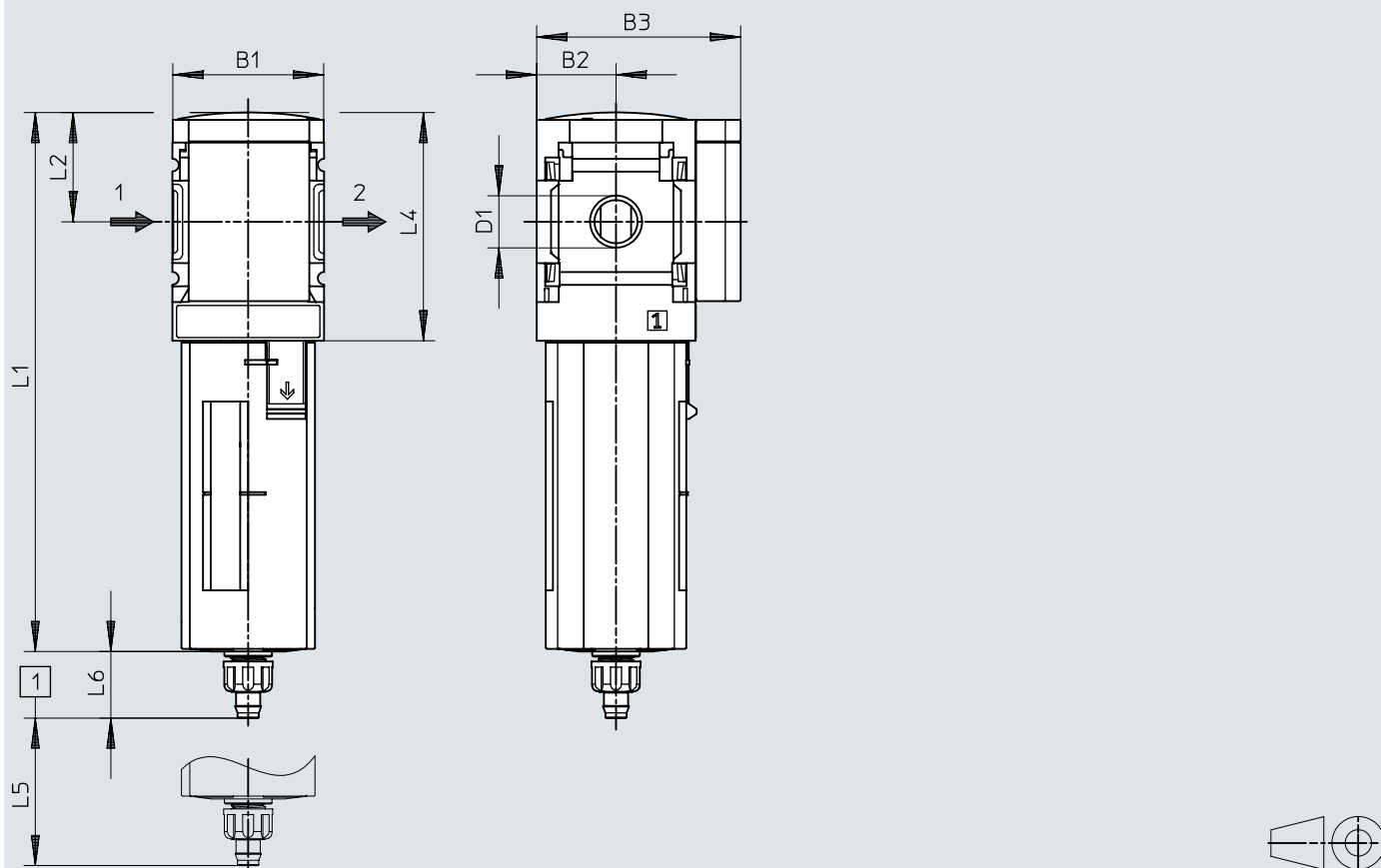
Standard flow rate q_n as a function of differential pressure Δp_{1-2} (MS4-LFM-1/8; MS4-LFM-1/4)



Dimensions

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

Download CAD data www.festo.com

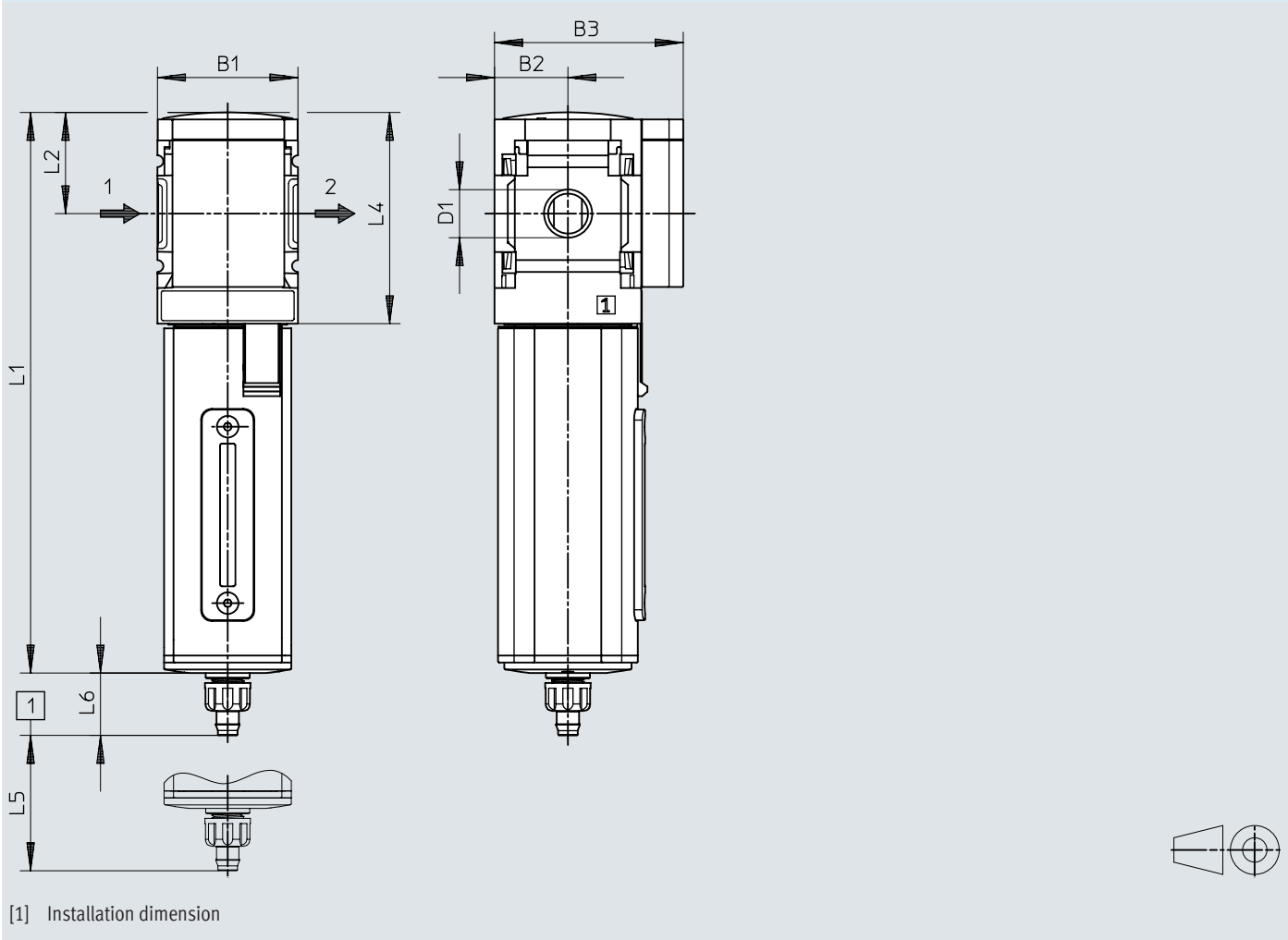


[1] Installation dimension

	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

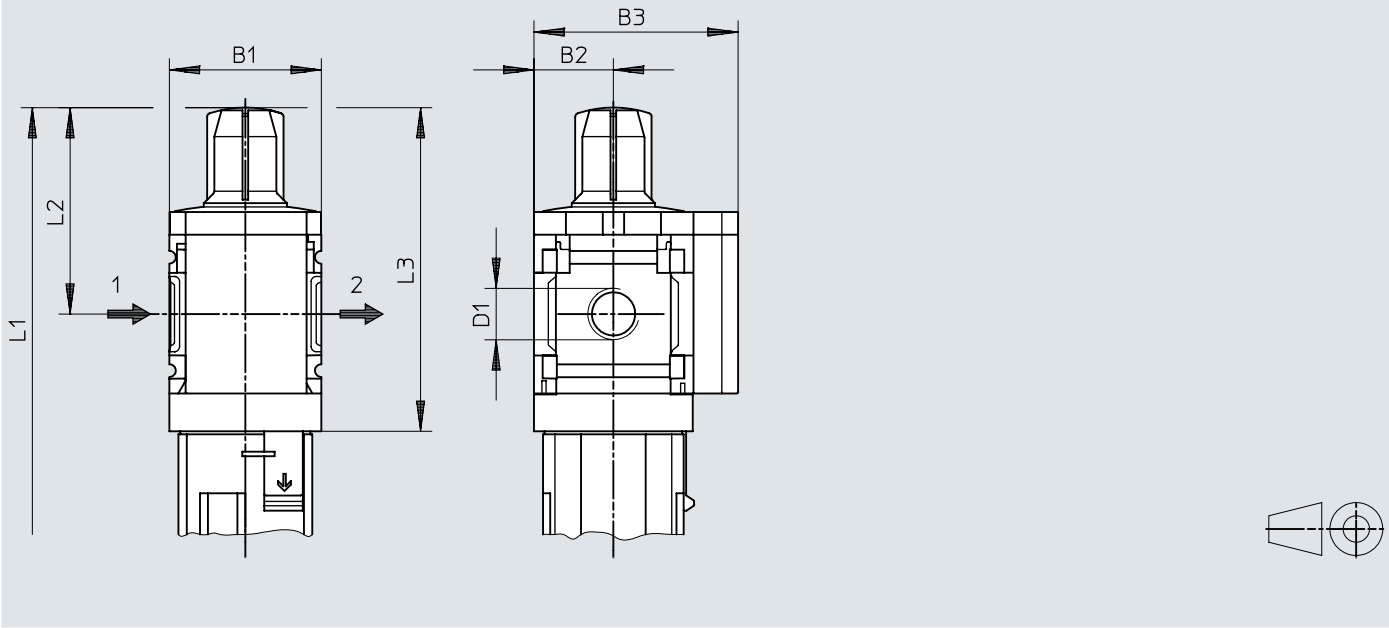


	B1 [inch]	B2 [inch]	B3 [inch]	D1	L1 [inch]	L2 [inch]	L4 [inch]	L5 [inch]	L6 [inch]
MS4N-LFM-1/8	1,58	0,83	2,13	1/8 NPT	6,29	1,14	2,38	2,36	0,70
MS4N-LFM-1/4				1/4 NPT					

Dimensions

Dimensions – Differential pressure display DA

Download CAD data www.festo.com

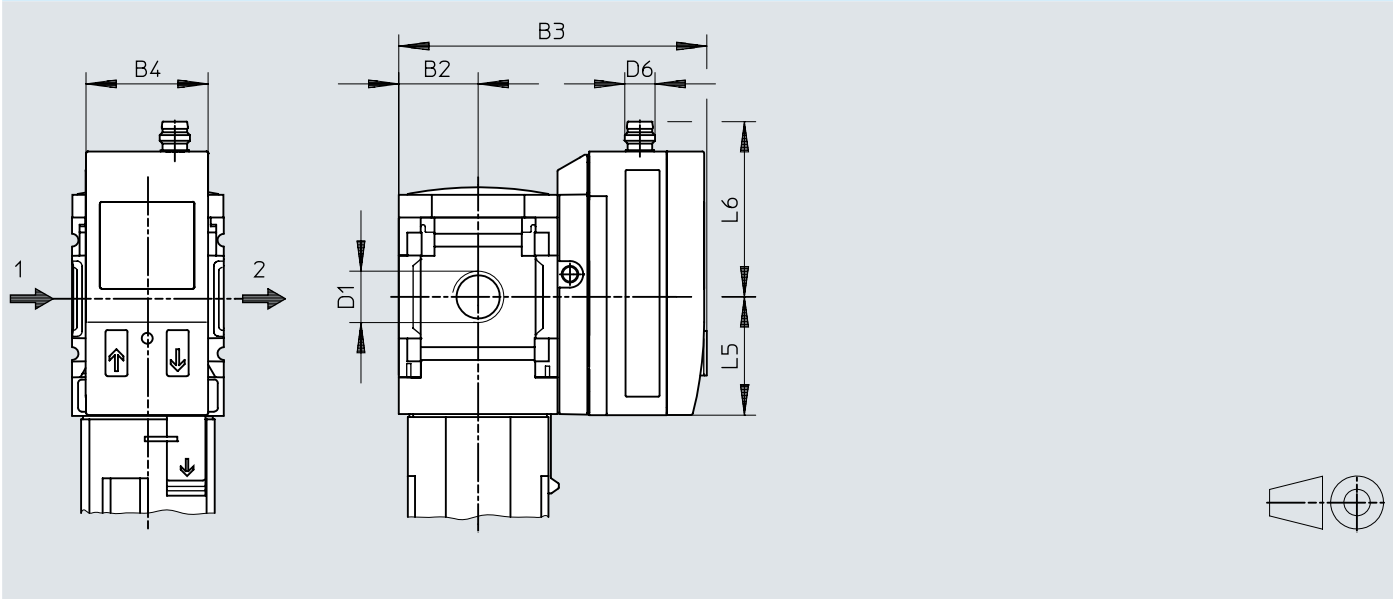


	B1	B2	B3	D1	1)	L1	2)	L2	L3
	[inch]	[inch]	[inch]		[inch]		[inch]	[inch]	[inch]
MS4-LFM-1/8-...-DA	1,57	0,83	2,13	1/8 NPT	6,61		7,32	2,17	3,39
MS4-LFM-1/4-...-DA				1/4 NPT					

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

Dimensions

Dimensions – Filter contamination indicator DP, DN, DPI, DNI 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			

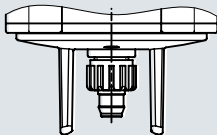
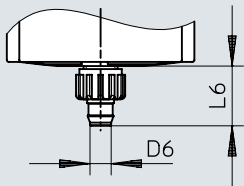
Dimensions

Dimensions – Condensate drain, manual, rotary

Download CAD data www.festo.com

MS4 - . . . -R-M

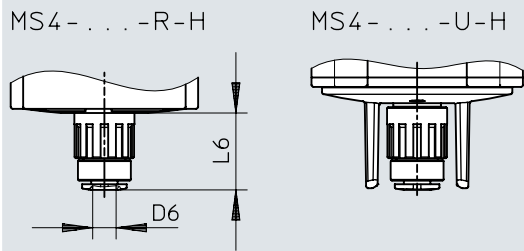
MS4 - . . . -U-M



	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, semi-automatic [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

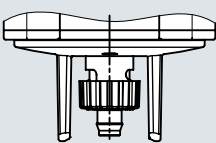
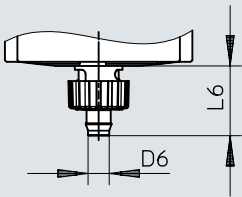
Dimensions

Dimensions – Condensate drain, fully automatic

Download CAD data www.festo.com

MS4-...-R-V

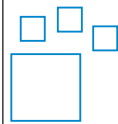
MS4-...-U-V



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

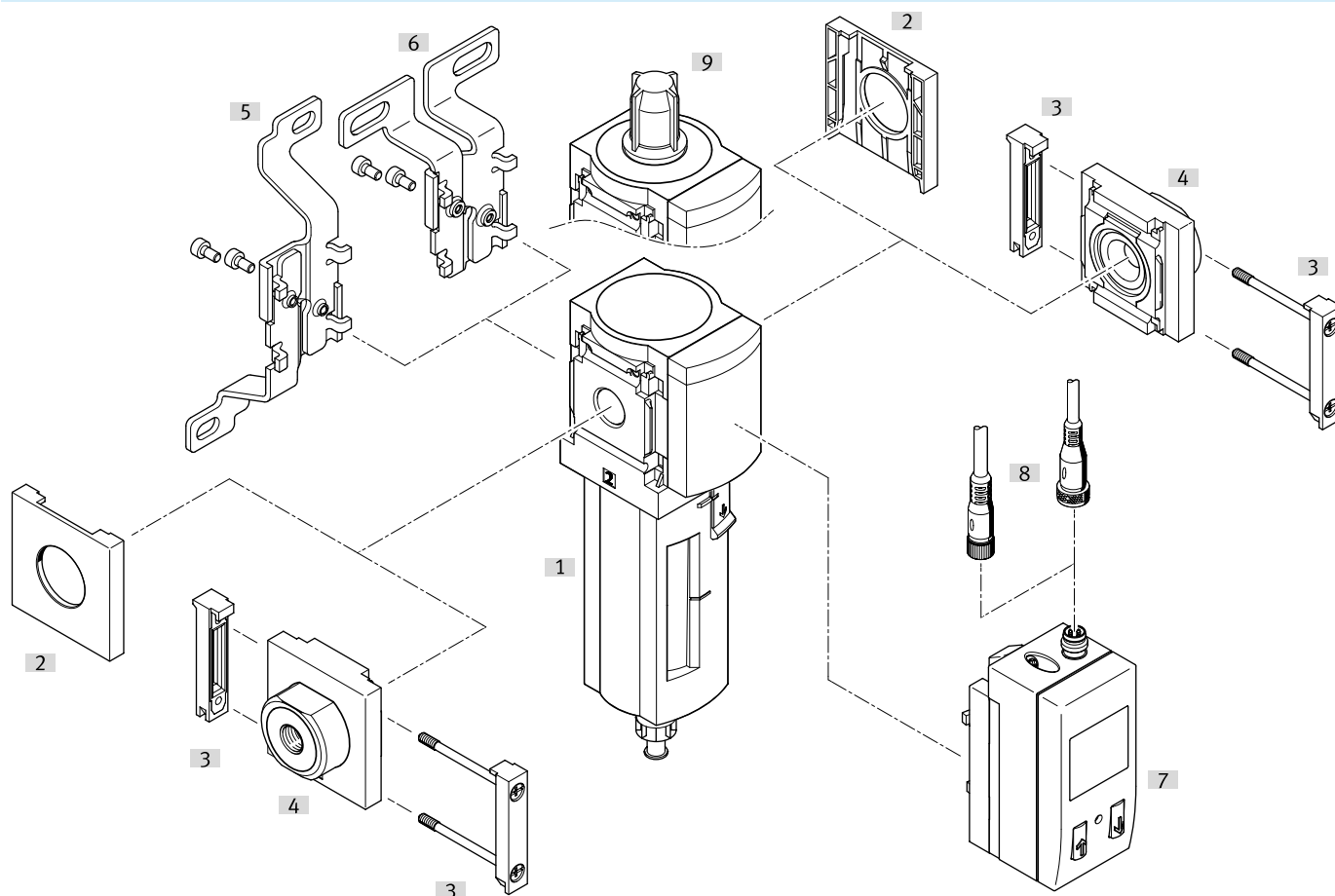
Ordering data

Ordering data						
	Pneumatic connection, port 1	Grade of filtration	Condensate drain	Product weight	Part no.	Type
	1/8 NPT	0.01 µm	Fully automatic, Manual, non-de-tenting	350 g	539210	MS4N-LFM-1/8-AUV
	1/4 NPT		Manual, rotating	190 g	536701	MS4N-LFM-1/8-ARM
			Fully automatic, Manual, non-de-tenting	350 g	535776	MS4N-LFM-1/4-AUV
					537222	MS4N-LFM-1/4-AUV-DA
					537224	MS4N-LFM-1/4-AUV-DA-Z
			Manual, rotating	190 g	531812	MS4N-LFM-1/4-ARM
					536830	MS4N-LFM-1/4-ARM-DA

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

Peripherals

Peripherals overview



Accessories		→ Link
Type/order code	Description	
[1] Micro filter MS4N-LFM-A		ms4n-lfm-a
[2] Cover cap MS4-END	For devices without connecting plate	16
[3] Module connector MS4-MV1	For device combinations and individual devices with connecting plate	16
[4] Connecting plateSET MS4-AQ...	Order code [AQ...]; for device combinations	17
[5] Mounting bracket MS4-WB	For individual device	16
[6] Mounting bracket MS4-WBM	For individual device	16
[7] Filter contamination indicator DP/DN/DPI/DNI	Order code [DP], [DN], [DPI], [DNI]	ms4n-lfm-a
[8] Connecting cable NEBA-M8...-LE3, NEBA-M12...-LE4		17
[9] Differential pressure display DA	Order code [DA]	ms4n-lfm-a

Accessories

Micro-filter cartridges						
	Size	Grade of filtration	LABS (PWIS) conformity	Note on materials	Part no.	Type
	Mini	0.01 µm	VDMA24364-B1/B2-L	RoHS compliant	162674	MS4/D-MINI-LFM-A

Module connector MS4-MV1						
	Material module connector	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						
	Material housing	LABS (PWIS) conformity			Part no.	Type
	Reinforced PA	VDMA24364-B1/B2-L			538779	MS4-END

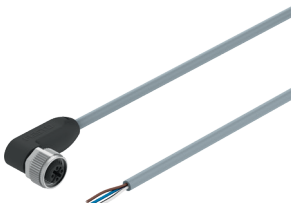
Mounting bracket MS4-WB						
	Material bracket	LABS (PWIS) conformity	Product weight		Part no.	Type
	Steel	VDMA24364-B1/B2-L	46 g		532185	MS4-WB

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

Accessories

Connecting plate SET MS4-AQ...						
	Pneumatic connection, port 1	Material sub-base	LABS (PWIS) conformity	Product weight	Part no.	Type
	1/8 NPT	Die-cast aluminium	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, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	M12x1, A-coded to 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, to 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, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/ cores	Cable length	Part no.	Type
	M12x1, A-coded to 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, to 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