

Filter MS6N-LF

FESTO



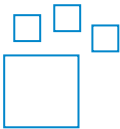
Characteristics

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 [ms6n-lf](#)



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

Size

- Grid dimension: 62 mm
Standard nominal flow rate:
- 70.6 ... 113.0 scfm (grade of filtration 5 µm)
 - 88.3 ... 144.7 scfm (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.

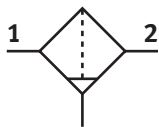
Bowl type

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

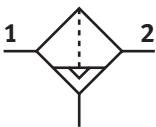
Condensate drain

- The following functions can be selected:
- Manual
 - Semi-automatic
 - Fully automatic
 - Fully automatic condensate drain with independent electric controller

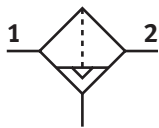
[M] Manually



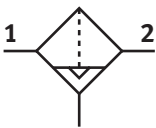
[H] Semi-automatic



[V] Automatic



[VC] Fully automatic, normally closed



Characteristics

Type of mounting

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



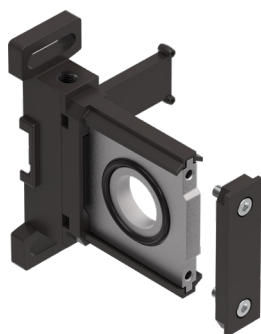
[WP] Mounting bracket basic design



For connecting the modules for wall mounting

- In combination with connecting plate MS6-AQ... for mounting an individual device on a wall
- In combination with mounting plate MS6-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	
6	Grid dimension 62 mm	
003	Thread type	
N	NPT thread	
004	Function	
LF	Filter	
005	Pneumatic connection, inch	
1/4	Female thread NPT 1/4	
3/8	Female thread NPT 3/8	
1/2	Female thread NPT 1/2	
AQN	Sub-base NPT 1/4	
AQP	Sub-base NPT 3/8	
AQR	Sub-base NPT 1/2	
AQS	Sub-base NPT 3/4	
006	Filter design	
C	5 µm	
E	40 µm	
007	Bowl type	
R	Plastic tray with plastic basket	
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	
H	Semi-automatic	
M	Manual	
V	Fully automatic, normally open	
VC	Fully automatic, normally closed	
009	Type of mounting	
	Without mounting bracket	
WP	Mounting bracket basic design	
WPM	Mounting bracket for hooking in service unit components	
WB	Mounting centrally at rear (wall mounting top and bottom), connecting plates not required	
010	UL certification	
	None	
UL1	cULus ordinary location for Canada and USA	
011	Flow direction	
	Flow direction from left to right	
Z	Flow direction from right to left	

Datasheet

General technical data		
Grade of filtration	5 µm	40 µm
Pneumatic connection, port 1	1/4 NPT, 3/8 NPT, 1/2 NPT	
Pneumatic connection, port 2	1/4 NPT, 3/8 NPT, 1/2 NPT	
Size	6	
Design	Sintered filter with centrifugal separator	
Type of mounting	Either., In-line installation, With accessories	
Mounting position	Vertical +/-5°	
Pore size	<5 µm	<40 µm
Air purity class at output	Compressed air to ISO 8573-1:2010 [6:8:4]	Compressed air to ISO 8573-1:2010 [7:8:4]
Bowl guard	Plastic bowl guard, Integrated as metal bowl	
Condensate drain	Fully automatic Manual, non-detenting Manually rotating	
Degree of condensate separation	>75%	
Max. condensate volume	38 cm ³	

Standard nominal flow rate q _N						
Pneumatic connection, port 1	1/4 NPT		3/8 NPT		1/2 NPT	
Grade of filtration	5 µm	40 µm	5 µm	40 µm	5 µm	40 µm
Standard nominal flow rate (standardised to DIN 1343)	2,000 l/min	2,500 l/min	3,000 l/min	3,800 l/min	3,200 l/min	4,100 l/min

Operating and environmental conditions		
Condensate drain	Fully automatic, Manual, non-detenting	Manually rotating
Operating pressure	2 ... 12 bar	0 ... 20 bar
Operating medium ¹⁾	Compressed air to ISO 8573-1:2010 [7:9:-] Inert gases	Compressed air to ISO 8573-1:2010 [-:9:-] Inert gases
Ambient temperature ²⁾	-10 ... 60°C	
Media temperature	-10 ... 60°C	
Storage temperature	-10 ... 60°C	
Corrosion resistance class CRC ³⁾	2 - Moderate corrosion stress	
Suitable for use with food ⁴⁾	See supplementary material information	

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

2) Ambient, medium and storage temperature at [E2], [E3], [E4]: +1 ... +60 °C

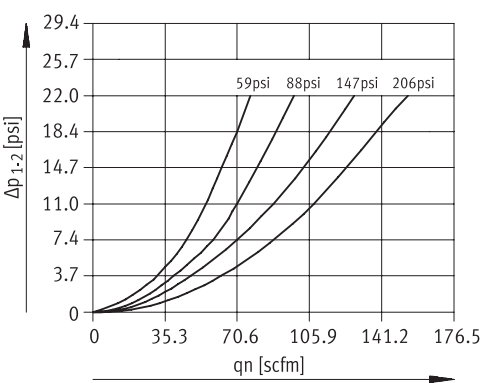
3) More information www.festo.com/x/topic/crc

4) More information www.festo.com/catalogue/ms6n-lr → Support/Downloads.

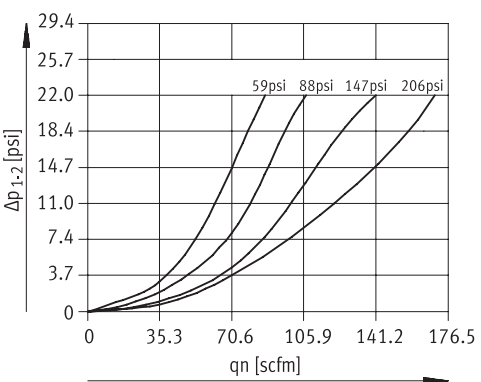
Materials		
Bowl type	Plastic tray with plastic basket [R]	Aluminium [U]
Material housing	Die-cast aluminium	
Material bowl	PC	Wrought aluminium alloy
Material filter	PE	
Material seals	NBR	
Material separating plate	POM	
Note on materials	RoHS-compliant	
LABS (PWIS) conformity	VDMA24364-B1/B2-L	

Datasheet

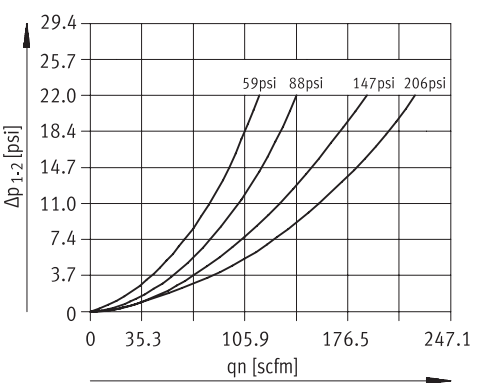
Standard flow rate q_n as a function of differential pressure Δp_{1-2} – MS6N-LF-1/4 (grade of filtration 5 μm)



Standard flow rate q_n as a function of differential pressure Δp_{1-2} – MS6N-LF-1/4 (grade of filtration 40 μm)

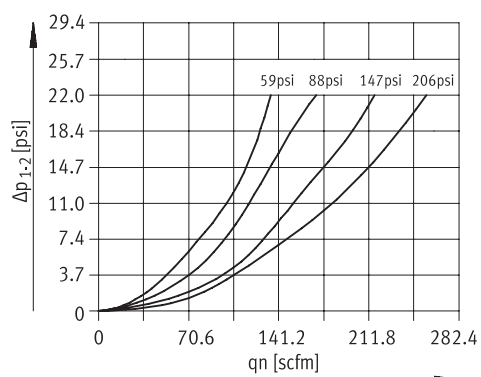


Standard flow rate q_n as a function of differential pressure Δp_{1-2} – MS6N-LF-3/8 (grade of filtration 5 μm)

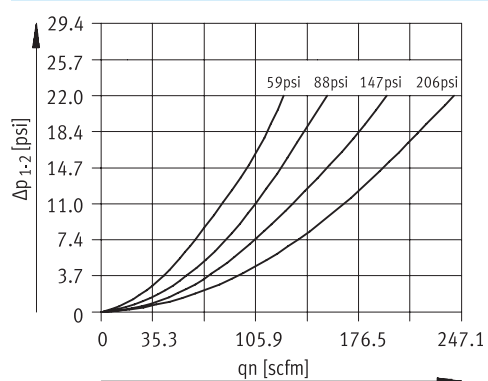


Datasheet

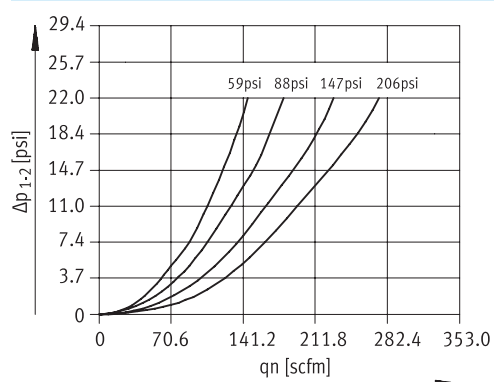
Standard flow rate q_n as a function of differential pressure Δp_{1-2} – MS6N-LF-3/8 (grade of filtration 40 μm)



Standard flow rate q_n as a function of differential pressure Δp_{1-2} – MS6N-LF-1/2 (grade of filtration 5 μm)



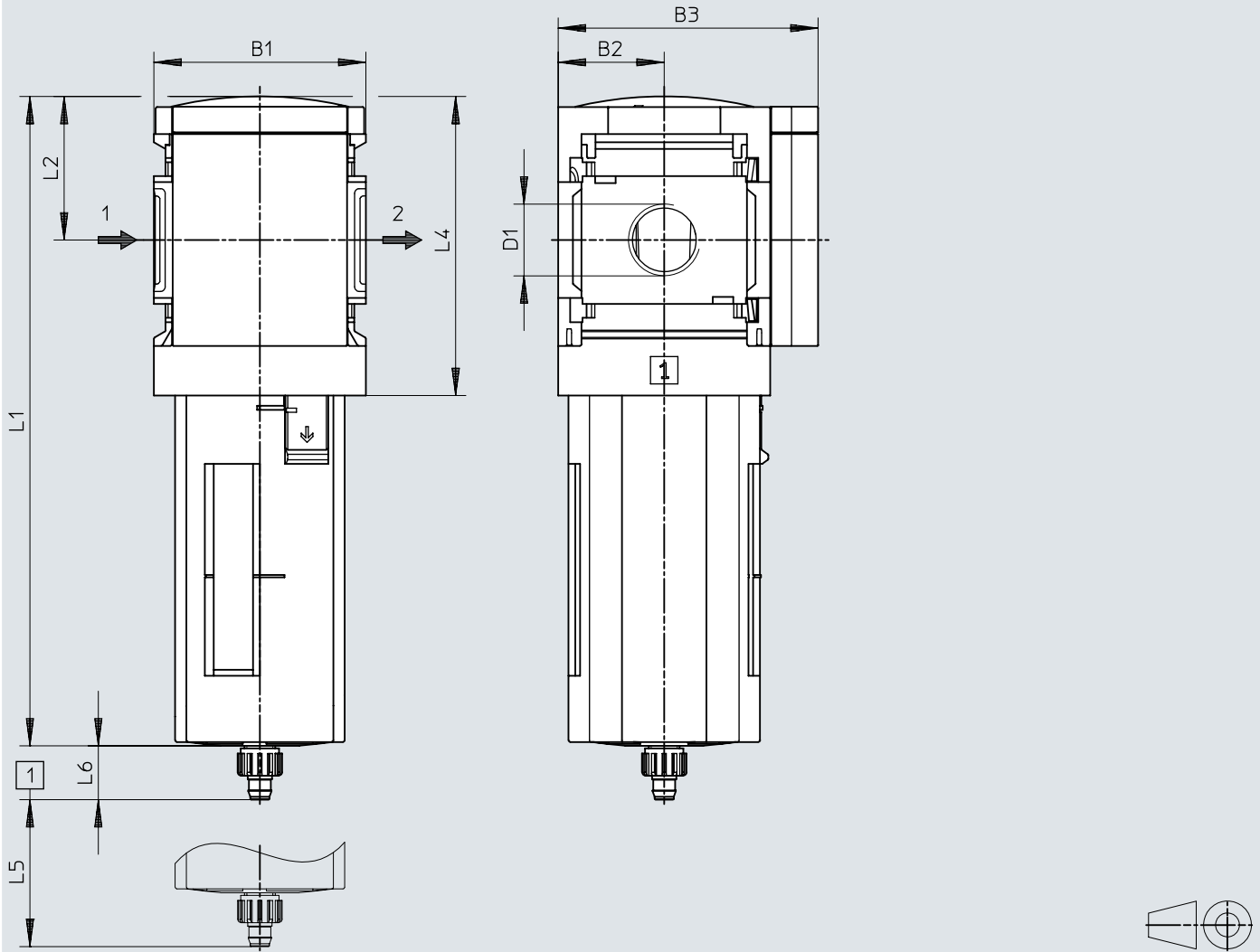
Standard flow rate q_n as a function of differential pressure Δp_{1-2} – MS6N-LF-1/2 (grade of filtration 40 μm)



Dimensions

Dimensions – Basic type MS6N-LF, condensate drain, manual, rotary, with plastic bowl guard R

Download CAD data www.festo.com



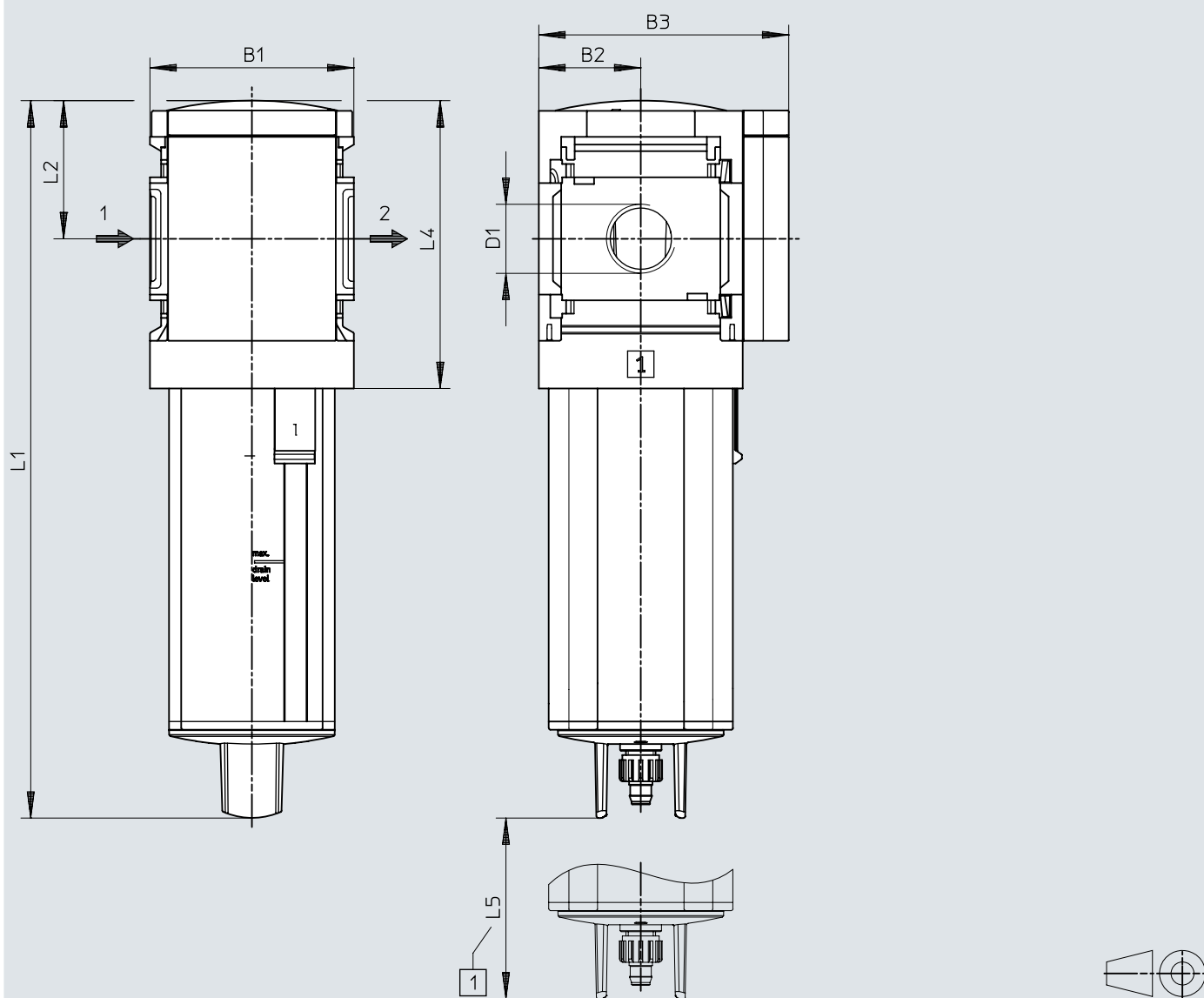
[1] Installation dimension

	B1 [inch]	B2 [inch]	B3 [inch]	D1	L1 [inch]	L2 [inch]	L4 [inch]	L5 [inch]	L6 [inch]
MS6N-LF-1/4	2,44	1,22	2,99	1/4 NPT	7,56	1,65	3,43	2,68	0,62
MS6N-LF-3/8				3/8 NPT					
MS6N-LF-1/2				1/2 NPT					

Dimensions

Dimensions – Basic type MS6N-LF, condensate drain, manual, rotary, with metal bowl U

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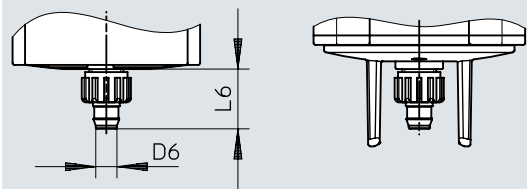
[1] Installation dimension

	B1 [inch]	B2 [inch]	B3 [inch]	D1	L1 [inch]	L2 [inch]	L4 [inch]	L5 [inch]	L6 [inch]
MS6N-LF-1/4	2,44	1,22	2,99	1/4 NPT	7,80	1,65	3,43	2,68	0,75
MS6N-LF-3/8				3/8 NPT					
MS6N-LF-1/2				1/2 NPT					

Dimensions

Dimensions – Condensate drain, manual, rotary (with push-in fitting for plastic tubing PCN-4) Download CAD data www.festo.com

MS6 – . . . -R-M MS6 – . . . -U-M



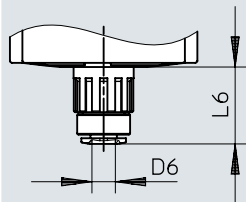
	D6 Ø [inch]	L6 [inch]
MS6N-LF-...-R-M	0,197	0,62
MS6N-LF-...-U-M	0,197	0,75

Dimensions

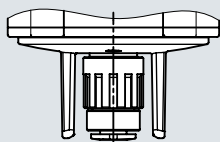
Dimensions – Condensate drain, semi-automatic (with QS fitting for plastic tubing PUN-6/PAN-6)

Download CAD data www.festo.com

MS6-...-R-H



MS6-...-U-H

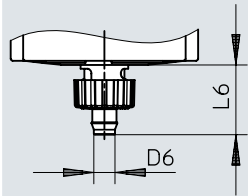


	D6 ∅ [inch]	L6 [inch]
MS6N-LF-...-R-H	0,236	0,80
MS6N-LF-...-U-H	0,236	0,90

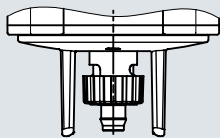
Dimensions

Dimensions – Condensate drain, fully automatic (with push-in fitting for plastic tubing PCN-4) [Download CAD data](http://www.festo.com)

MS6 – . . . –R–V



MS6 – . . . –U–V

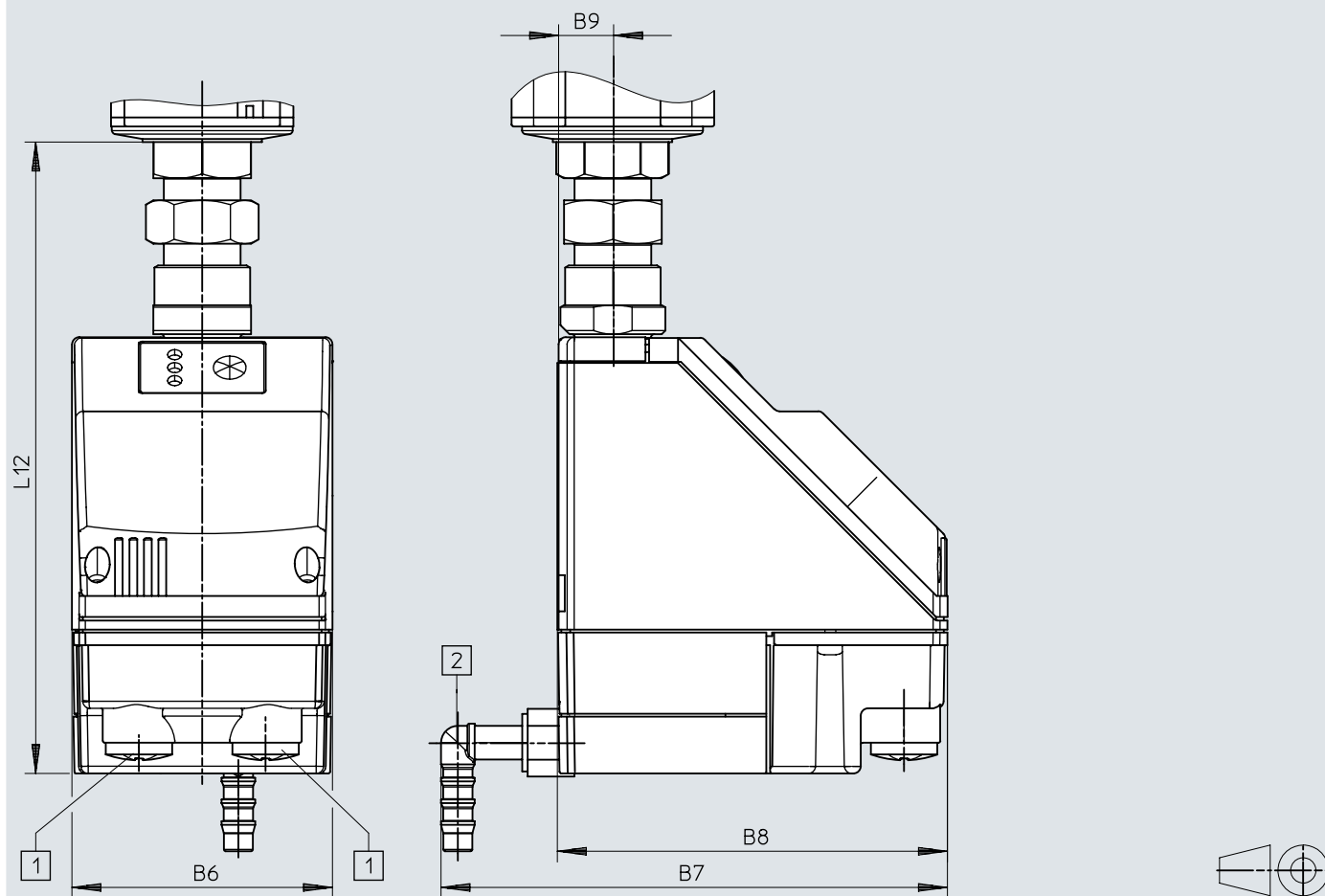


	D6 ø [inch]	L6 [inch]
MS6N-LF-...-R-V	0,197	0,73
MS6N-LF-...-U-V	0,197	0,87

Dimensions

Dimensions – Condensate drain fully automatic, electrically controlled

Download CAD data www.festo.com



[1] Electrical connection: screw terminal PG9

[2] Connection can be rotated 360° for plastic tubing PUN-H-12x2

	B6 [inch]	B7 [inch]	B8 [inch]	B9 [inch]	L12 [inch]
MS6N-LF-...-E2, E3, E4	2,835	5,512	4,252	0,591	6,868

Ordering data

Ordering data – With plastic bowl guard

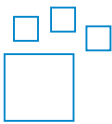
	Pneumatic connection, port 1	Grade of filtration	Condensate drain	Product weight	Part no.	Type
	1/4 NPT	5 µm	Fully automatic, Manual, non-de-tenting	600 g	531531	MS6N-LF-1/4-CRV
			Manually rotating		531525	MS6N-LF-1/4-CRM
		40 µm	Fully automatic, Manual, non-de-tenting		531513	MS6N-LF-1/4-ERV
			Manually rotating		531519	MS6N-LF-1/4-ERM
	3/8 NPT	5 µm	Fully automatic, Manual, non-de-tenting		531533	MS6N-LF-3/8-CRV
			Manually rotating		531527	MS6N-LF-3/8-CRM
		40 µm	Fully automatic, Manual, non-de-tenting		531515	MS6N-LF-3/8-ERV
			Manually rotating		531521	MS6N-LF-3/8-ERM
	1/2 NPT	5 µm	Fully automatic, Manual, non-de-tenting		531532	MS6N-LF-1/2-CRV
			Manually rotating		531526	MS6N-LF-1/2-CRM
		40 µm	Fully automatic, Manual, non-de-tenting		531514	MS6N-LF-1/2-ERV
			Manually rotating		531520	MS6N-LF-1/2-ERM

Ordering data – With metal bowl

	Pneumatic connection, port 1	Grade of filtration	Condensate drain	Product weight	Part no.	Type
	1/4 NPT	5 µm	Fully automatic, Manual, non-de-tenting	820 g	531543	MS6N-LF-1/4-CUV
			Manually rotating		531537	MS6N-LF-1/4-CUM
		40 µm	Fully automatic, Manual, non-de-tenting		531549	MS6N-LF-1/4-EUV
			Manually rotating		531555	MS6N-LF-1/4-EUM
	3/8 NPT	5 µm	Fully automatic, Manual, non-de-tenting		531545	MS6N-LF-3/8-CUV
			Manually rotating		531539	MS6N-LF-3/8-CUM
		40 µm	Fully automatic, Manual, non-de-tenting		531551	MS6N-LF-3/8-EUV
			Manually rotating		531557	MS6N-LF-3/8-EUM
	1/2 NPT	5 µm	Fully automatic, Manual, non-de-tenting		531544	MS6N-LF-1/2-CUV
			Manually rotating		531538	MS6N-LF-1/2-CUM
		40 µm	Fully automatic, Manual, non-de-tenting		531550	MS6N-LF-1/2-EUV
			Manually rotating			

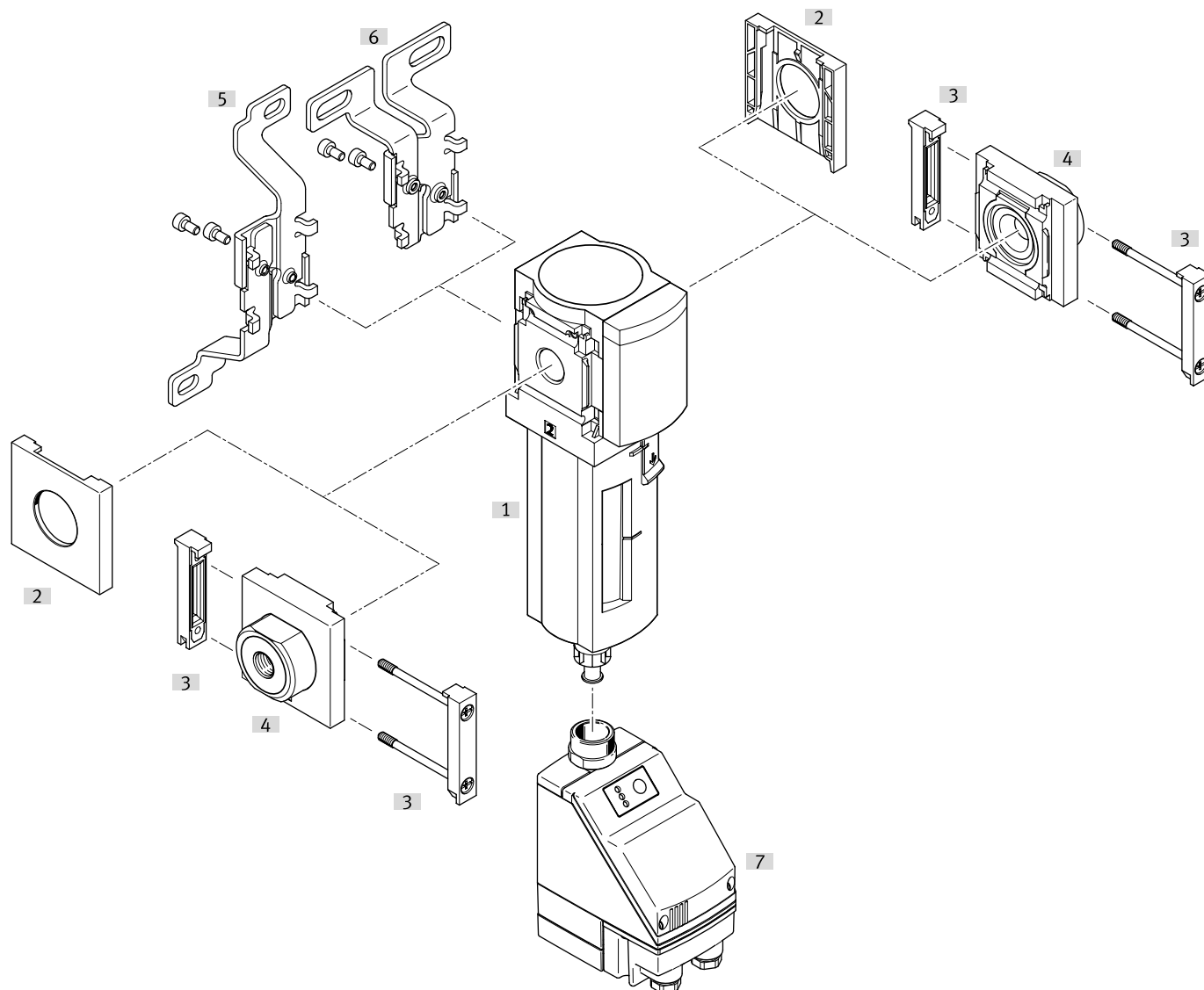
Ordering data

Ordering data – With metal bowl						
	Pneumatic connection, port 1	Grade of filtration	Condensate drain	Product weight	Part no.	Type
	1/2 NPT	40 µm	Manually rotating	820 g	531556	MS6N-LF-1/2-EUM

Ordering data – Modular product system			
	Short type code	Part no.	Type
	MS6N-LF	527669	MS6N-LF

Peripherals

Peripherals overview



Accessories			→ Link
Type/order code	Description		
[1] Filter MS6N-LF	Illustration based on MS4N-LF as an example		ms6-lfr
[2] Mounting bracket MS6-WB	For individual device		17
[2] Cover cap MS6-END	For devices without connecting plate		18
[3] Module connector MS6-MV1	For device combinations and individual devices with connecting plate		17
[4] Connecting plate SET MS6-AQ..	Order code [AG...]; for device combinations		18
[6] Connecting cable NEBA-M8...-LE4, NEBA-M12...-LE4			18
[7] Condensate drain PWEA	Order code [E2], [E3], [E4]		pwea
[8] Filter cartridge MS-LFP	No illustration		17
[9] Mounting bracket MS6-WP/WPB/WPE/WPM	Not shown		17

Accessories

Filter cartridge MS-LFP					
	Size	Grade of filtration	Part no.	Type	
	6	5 µm	534499	MS6-LFP-C	
		40 µm	534500	MS6-LFP-E	

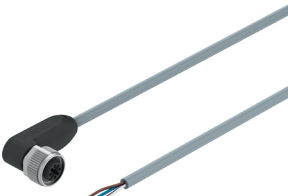
Module connector MS6-MV1						
	Size	Material module connector	LABS (PWIS) conformity	Product weight	Part no.	Type
	6	POM, High-alloy stainless steel	VDMA24364-B1/B2-L	33 g	8119204	MS6-MV1

Mounting bracket MS6-WP...						
	Size	Material bracket	LABS (PWIS) conformity	Product weight	Part no.	Type
	6	Die-cast aluminium	VDMA24364-B1/B2-L		1025936	MS6-WPE
				76 g	532195	MS6-WP
				115 g	526074	MS6-WPB
				144 g	526073	MS6-WPM-D
				154 g	532186	MS6-WPM-2D

Mounting bracket MS6-WB						
	Size	Material bracket	LABS (PWIS) conformity	Product weight	Part no.	Type
	6	Steel	VDMA24364-B1/B2-L	121 g	532196	MS6-WB

Accessories

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

Connecting plate SET MS6N-AQ...				
	Size	Pneumatic connection, port 1	Part no.	Type
	6	1/4 NPT	526076	MS6N-AQN
		3/8 NPT	526077	MS6N-AQP
		1/2 NPT	526078	MS6N-AQR
		3/4 NPT	526079	MS6N-AQS

Cover cap MS6-END			
	Size	Part no.	Type
	6	538780	MS6-END