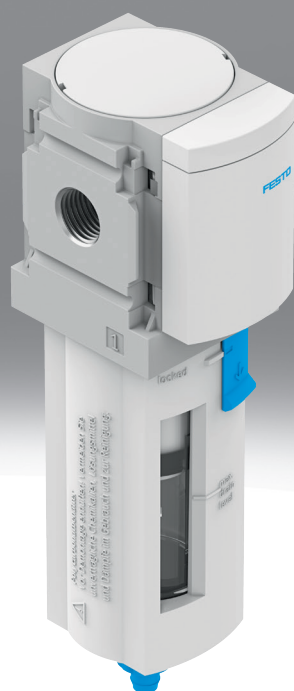


Filter MS4N-LF

FESTO



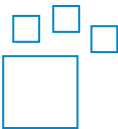
Characteristics

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 [ms4n-lf](#)



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:
- 35.3 ... 45.9 scfm (grade of filtration 5 µm)
 - 38.8 ... 60.0 scfm (grade of filtration 40 µm)

Pneumatic connection

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

Grade of filtration

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

Bowl type

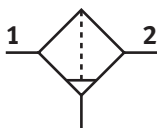
Bowl guard can be selected either as a plastic bowl guard or integrated as a metal bowl guard.

Condensate drain

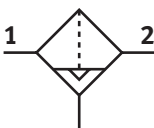
The following functions can be selected:

- Manual
- Semi-automatic
- Fully automatic

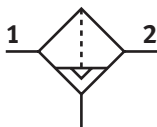
[M] Manually



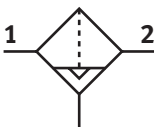
[H] Semi-automatic



[V] Automatic



[VC] Fully automatic, normally closed



Characteristics

Type of mounting

[WP] Mounting bracket basic design



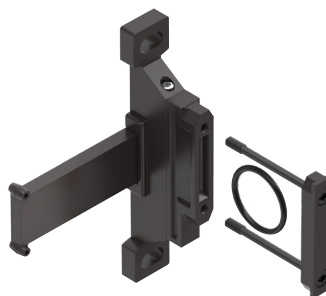
- For connecting the modules for wall mounting
- In combination with connecting plate MS4-AG... for mounting an individual device on a wall
- In conjunction with mounting plate MS4-AEND for wall mounting of a single device
- Same wall distance for mixed combination with MS4N and MS6N series

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



- For wall mounting an individual device

[WPM] Mounting bracket for hooking in service unit components



- For connecting the modules for wall mounting
- In combination with connecting plate MS4-AG... for mounting an individual device on a wall
- Fast hooking and unhooking
- For installing modules with the regulator knob pointing downwards

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



- For wall mounting an individual device

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	
LF	Filter	
005	Pneumatic connection, inch	
1/8	Female thread NPT 1/8	
1/4	Female thread NPT 1/4	
AQK	Sub-base NPT1/8	
AQN	Sub-base NPT1/4	
AQP	Sub-base NPT3/8	
006	Filter design	
C	5 µm	
E	40 µm	

007	Bowl type	
R	Plastic tray with plastic basket	
U	Aluminium	
008	Condensate drain	
H	Semi-automatic	
M	Manual	
V	Fully automatic, normally open	
VC	Fully automatic, normally closed	
009	Type of mounting	
	Without mounting bracket	
WB	Mounting centrally at rear (wall mounting top and bottom), connecting plates not required	
WBM	Mounting centrally at rear (wall mounting top), connecting plates not required	
WP	Mounting bracket basic design	
WPM	Mounting bracket for hooking in service unit components	
010	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	1/8 NPT	1/4 NPT	1/8 NPT	1/4 NPT
Pneumatic connection, port 2	1/8 NPT	1/4 NPT	1/8 NPT	1/4 NPT
Size	4			
Design	Sintered filter with centrifugal separator			
Type of mounting	Either., Inline 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		Plastic bowl guard	Plastic bowl guard, Integrated as metal bowl
Condensate drain	Fully automatic Manual, non-detenting Manual, rotating			
Degree of condensate separation	>75%			

Max. condensate volume		
Bowl type	Plastic tray with plastic basket [R]	Aluminium [U]
Max. condensate volume	19 ml	25 ml

Standard nominal flow rate q _N				
Pneumatic connection, port 1	1/8 NPT		1/4 NPT	
Grade of filtration	5 µm	40 µm	5 µm	40 µm
Standard nominal flow rate (standardised to DIN 1343)	1,000 l/min	1,100 l/min	1,300 l/min	1,700 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 to ISO 8573-1:2010 [7:9:-] Inert gas	Compressed air to ISO 8573-1:2010 [-:9:-] Inert gas
Ambient temperature ¹⁾	-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) Ambient, medium and storage temperature at [E2], [E3], [E4]: +1 ... +60 °C

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

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

Certification	
Approval ¹⁾	c UL us - Recognised (Oil)

1) More information www.festo.com/catalogue/ms4n-lr → Support/Downloads.

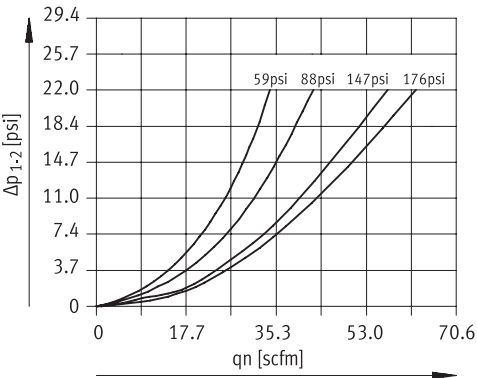
ATEX	
ATEX category gas	II 2G
Explosion ignition protection type for gas	Ex h IIC T6 Gb X
ATEX category dust	II 2D
Explosion ignition protection type for dust	Ex h IIIC T60°C Db X
Explosion ambient temperature	-10°C ≤ Ta ≤ +60°C
CE mark (see declaration of conformity) ¹⁾	To EU Explosion Protection Directive (ATEX)

1) More information www.festo.com/catalogue/ms-lr → Support/Downloads.

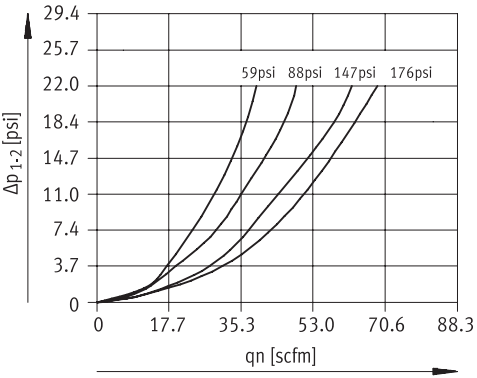
Datasheet

Materials		
Bowl type	Plastic tray with plastic basket [R]	Aluminium [U]
Material housing	Die-cast aluminium	
Material bowl	Makrolon®	Die-cast aluminium, Wrought aluminium alloy
Material screen	–	Process automation
Material filter	Packaging unit	
Material seals	NBR	
Material separating plate	POM	
Note on materials	RoHS compliant	
LABS (PWIS) conformity	VDMA24364-B1/B2-L	

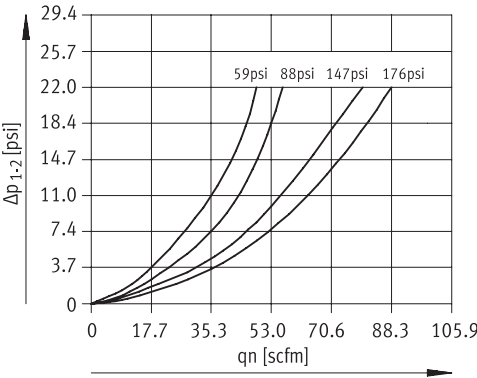
Standard flow rate qn as a function of differential pressure Δp1-2 – MS4N-LF-1/8 (grade of filtration 5 µm)



Standard flow rate qn as a function of differential pressure Δp1-2 – MS4N-LF-1/8 (grade of filtration 40 µm)

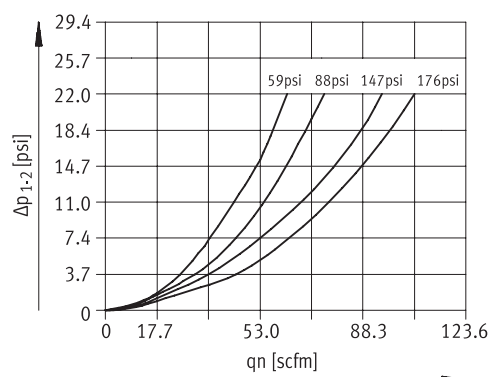


Standard flow rate qn as a function of differential pressure Δp1-2 – MS4N-LF-1/4 (grade of filtration 5 µm)



Datasheet

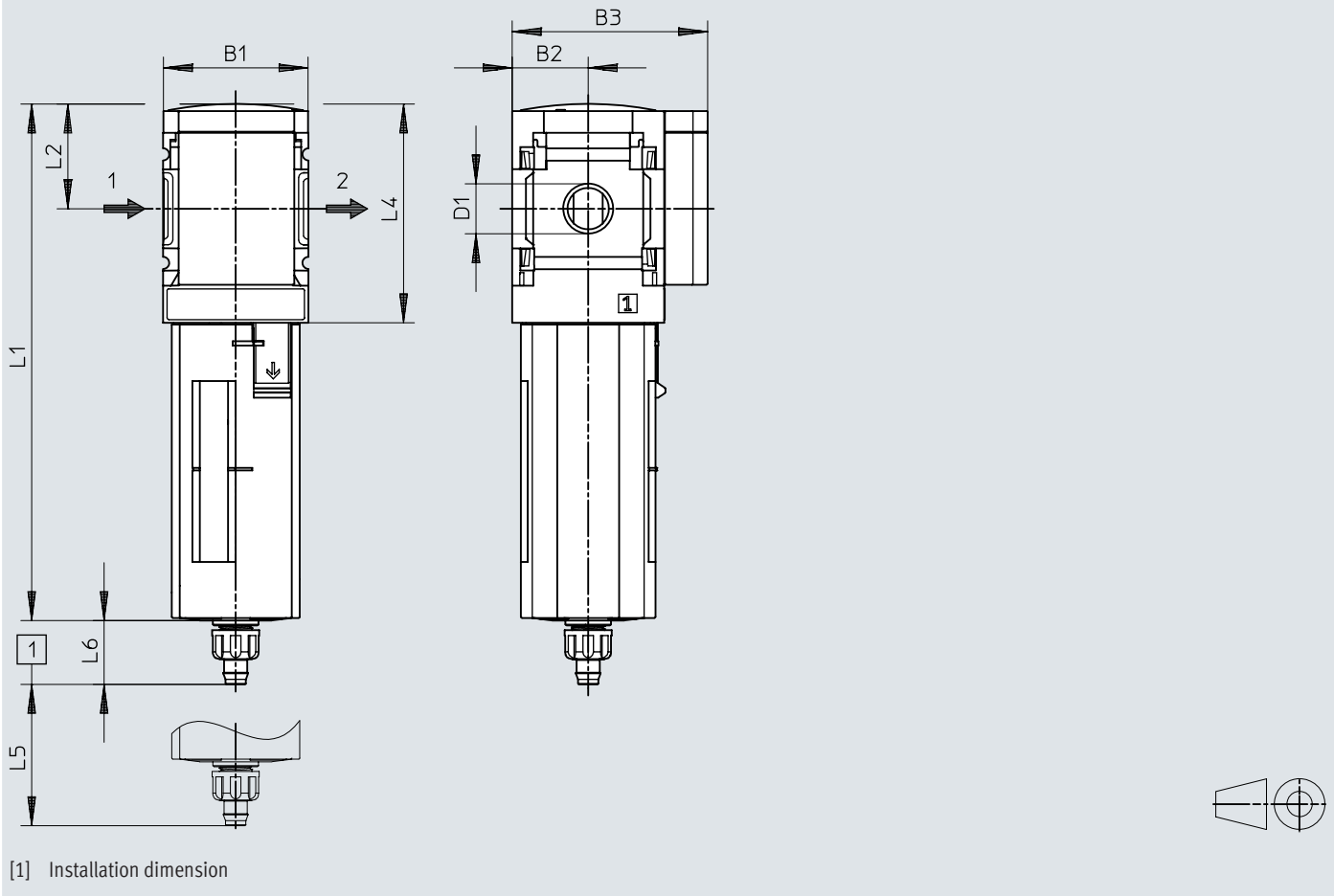
Standard flow rate q_n as a function of differential pressure Δp_{1-2} – MS4N-LF-1/4 (grade of filtration 40 μm)



Dimensions

Dimensions – Basic type MS4N-LF, manual condensate drain with plastic bowl guard R

Download CAD data www.festo.com

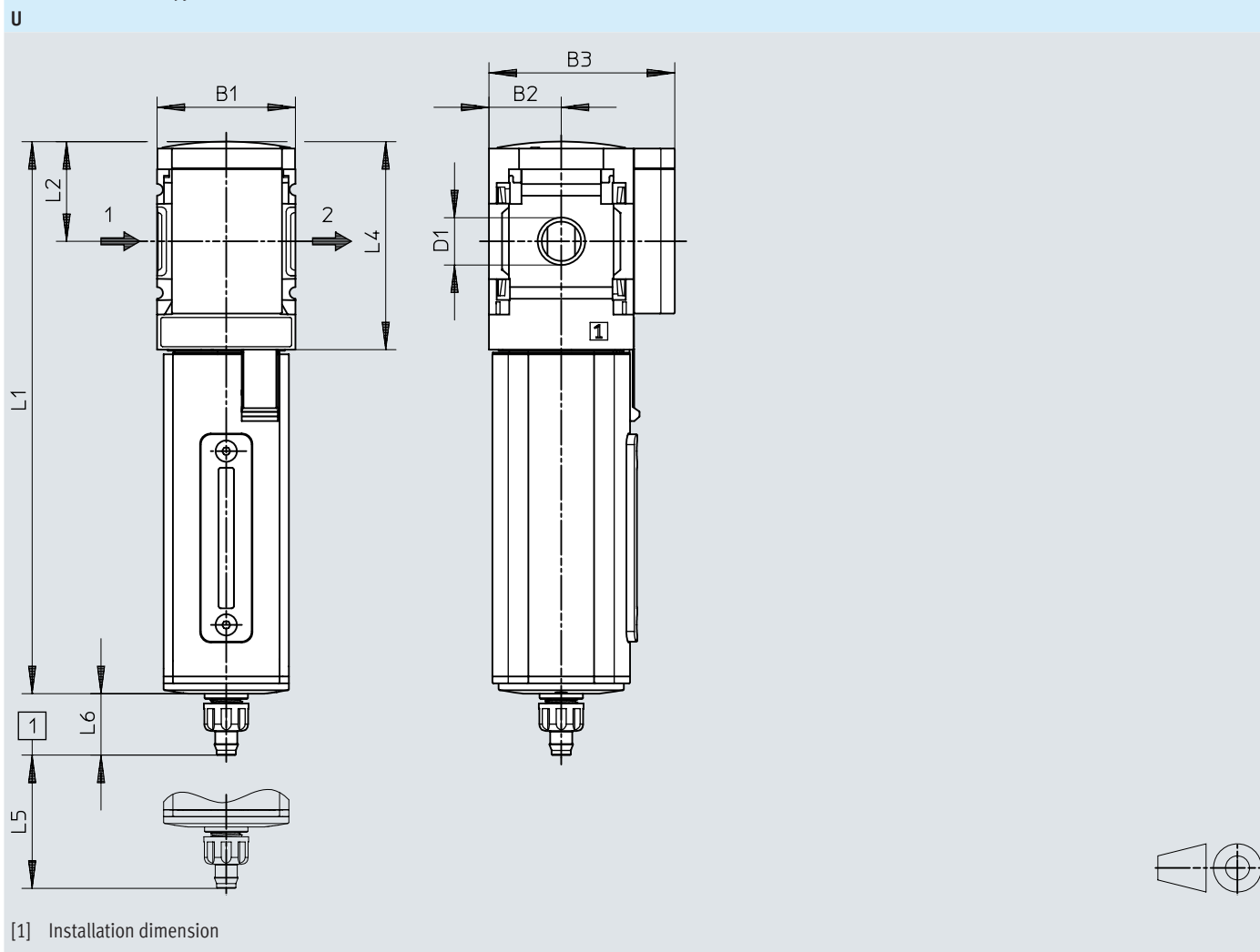


	B1 [inch]	B2 [inch]	B3 [inch]	D1	L1 [inch]	L2 [inch]	L4 [inch]	L5 [inch]	L6 [inch]
MS4N-LF-1/8	1,58	0,83	2,13	1/8 NPT	5,62	1,14	2,38	2,36	0,70
MS4N-LF-1/4				1/4 NPT					

Dimensions

Dimensions – Basic type MS4N-LF, manual condensate drain with metal bowl

Download CAD data www.festo.com

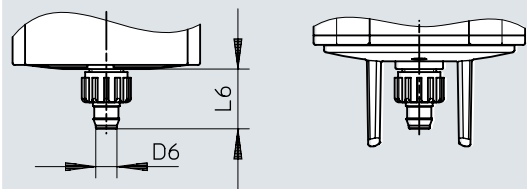


	B1 [inch]	B2 [inch]	B3 [inch]	D1	L1 [inch]	L2 [inch]	L4 [inch]	L5 [inch]	L6 [inch]
MS4N-LF-1/8	1,58	0,83	2,13	1/8 NPT	6,26	1,14	2,38	2,36	0,70
MS4N-LF-1/4				1/4 NPT					

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

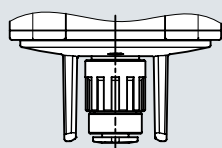
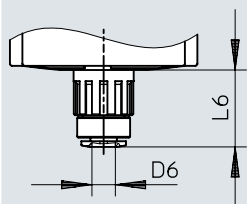
Dimensions

Dimensions – Condensate drain, semi-automatic

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

MS4-...-R-H

MS4-...-U-H



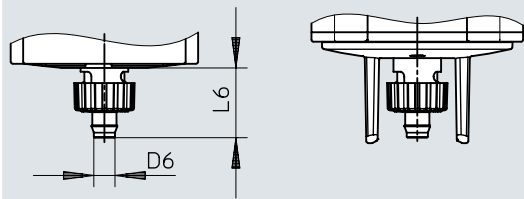
	D6 Ø [inch]	L6 [inch]
MS4N-LFM-...-R-H	0,236	0,87
MS4N-LFM-...-U-H	0,236	0,87

Dimensions

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

MS4 – . . . -R-V

MS4 – . . . -U-V

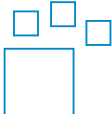


	D6 Ø [inch]	L6 [inch]
MS4N-LFM-...-R-V	0,197	0,80
MS4N-LFM-...-U-V	0,197	0,80

Ordering data

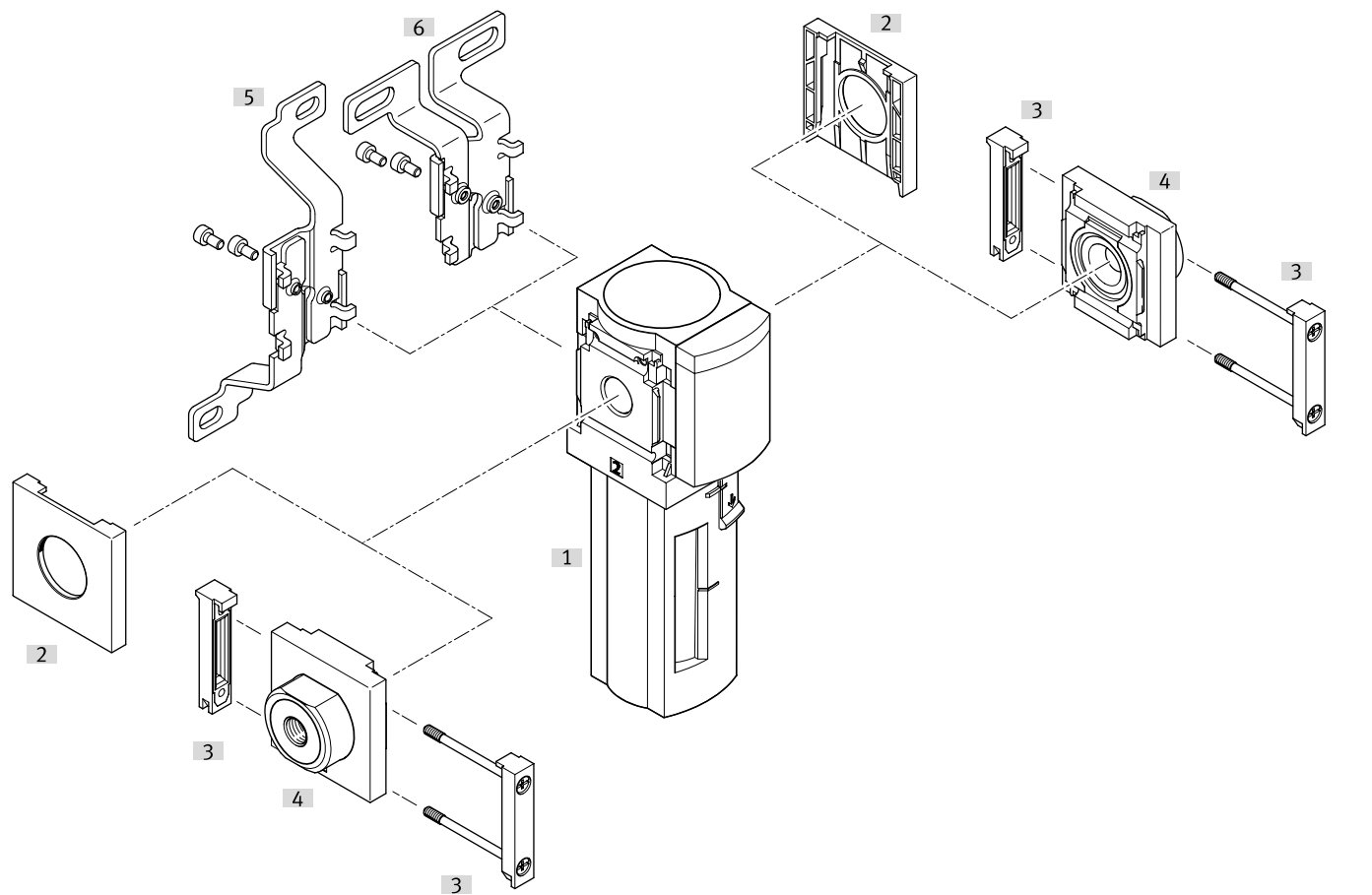
Ordering data – With plastic bowl guard						
	Pneumatic connection, port 1	Grade of filtration	Condensate drain	Product weight	Part no.	Type
	1/8 NPT	5 µm	Fully automatic, Manual, non-de-tenting	189 g	531494	MS4N-LF-1/8-CRV
			Manual, rotating		531490	MS4N-LF-1/8-CRM
		40 µm	Fully automatic, Manual, non-de-tenting		531482	MS4N-LF-1/8-ERV
			Manual, rotating		531486	MS4N-LF-1/8-ERM
	1/4 NPT	5 µm	Fully automatic, Manual, non-de-tenting		531493	MS4N-LF-1/4-CRV
			Manual, rotating		531489	MS4N-LF-1/4-CRM
		40 µm	Fully automatic, Manual, non-de-tenting		531481	MS4N-LF-1/4-ERV
			Manual, rotating		531485	MS4N-LF-1/4-ERM

Ordering data – With metal bowl						
	Pneumatic connection, port 1	Grade of filtration	Condensate drain	Product weight	Part no.	Type
	1/8 NPT	5 µm	Fully automatic, Manual, non-de-tenting	349 g	535672	MS4N-LF-1/8-CUV
	1/4 NPT		Manual, rotating		535688	MS4N-LF-1/4-CUV
			40 µm		Fully automatic, Manual, non-de-tenting	535686
		Manual, rotating			535690	MS4N-LF-1/4-EUV
						535692

Ordering data – Modular product system			
	Short type code	Part no.	Type
	MS4N-LF	527696	MS4N-LF

Peripherals

Peripherals overview

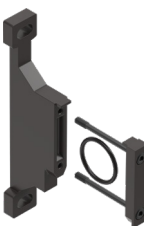


Accessories		→ Link
Type/order code	Description	
[1] Filter MS4N-LF		ms4n-lf
[2] Cover cap MS4-END	For devices without connecting plate	16
[3] Module connector MS4-MV	For device combinations and individual devices with connecting plate	15
[4] Connecting plate SET MS4-AQ...	Order code [AQ...]; for device combinations	16
[5] Mounting bracket MS4-WB	Order code [WB]; for single device	15
[6] Mounting bracket MS4-WBM	Order code [WBM]; for single device	15
[7] Mounting bracket MS6-WP/WPB/WPE/WPM	Not shown	15

Accessories

Filter cartridge MS-LFP					
	Grade of filtration	Material filter	LABS (PWIS) conformity	Part no.	Type
	5 µm	Packaging unit	VDMA24364-B1/B2-L	534501	MS4-LFP-C
	40 µm			534502	MS4-LFP-E

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

Mounting bracket MS4-WP...					
	Material bracket	LABS (PWIS) conformity	Product weight	Part no.	Type
	Die-cast aluminium	VDMA24364-B1/B2-L		558869	MS4-WPE
			39 g	541554	MS4-WP-EX
				532184	MS4-WP
			45 g	526060	MS4-WPM-D
			55 g	526063	MS4-WPB
				541552	MS4-WPB-EX
				526061	MS4-WPM-2D

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

Cover cap MS4-END					
	Material housing	LABS (PWIS) conformity	Part no.	Type	
	Reinforced PA	VDMA24364-B1/B2-L	538779	MS4-END	

Connecting plate SET MS4N-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