Standard Filters MS4-LF – Metric Series

Standard filters, with filtration grades of 5 microns or 40 microns, are equipped with a water separator that cleans the compressed air of impurities, rust, and condensate. For pre-filtering in pneumatic systems or for special applications.

- Pneumatic connection: G⅛, G¼, G⅜

- Supply pressure
  – For manual drain: 0 … 14 bar
  – For semiautomatic drain: 1.5 … 12 bar
  – For fully automatic drain: 2 … 12 bar

- Flow rate: 1,000 … 1,700 l/min

Product Range Overview													
Type	Pneumatic connections		Filtration grade [µm]				Bowl guard		Bowl drain			Contamination control	Reverse flow
	Body thread	Port plate	0.01	1	5	40	Plastic bowl guard	Metal bowl	Manual	Semiautomatic	Fully automatic	Differential pressure indicator	Flow direction from right to left
MS4		**AG…**	**A**	**B**	**C**	**E**	**R**	**U**	**M**	**H**	**V**	**DA**	**Z**
LF	G⅛, G¼	G⅛, G¼, G⅜	–	–	■	■	■	■	■	■	■	–	■

Features

- Sintered filter with centrifugal separation removes contamination, rust and condensate from the compressed air.
- High flow rate with minimal pressure drop
- Replaceable filter cartridges

Contents

➜ www.festo.com/catalog/ms4-lf

ISO Symbol

Manual bowl drain

Semi or fully automatic bowl drain

General Technical Data				
Pneumatic connection 1, 2			G⅛	G¼
Filtration grade		[μm]	5 (air purity class at the output 3.7.– to DIN ISO 8573-1)	
			40 (air purity class at the output 5.7.– to DIN ISO 8573-1)	
Supply pressure	M	[bar]	0 … 14 (manual drain)	
	H	[bar]	1.5 … 12 (semiautomatic drain)	
	V	[bar]	2 … 12 (fully automatic drain)	

Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Standard Nominal Flow Rate qnN[1] [l/min]				
Pneumatic connection 1, 2		G⅛		G¼
Filtration grade	5 μm	1,000		1,300
	40 μm	1,100		1,700

1)   Measured at p1 = 6 bar and Δp = 1 bar

Standard Filters MS4-LF – Metric Series

Technical Data

Operating and Environmental Conditions				
Bowl drain		Manual M	Semiautomatic H	Fully automatic V
Operating medium		Compressed air		
Max. condensate volume	[cm³]	19 (with plastic bowl guard)		
		25 (with metal bowl)		
Bowl guard		Plastic bowl guard		
		Metal bowl		
Ambient temperature	[°C]	−10 … +60	+5 … +60	+5 … +60
Temperature of medium	[°C]	−10 … +60	+5 … +60	+5 … +60
Storage temperature	[°C]	−10 … +60	−10 … +60	−10 … +60
Assembly position		Vertical ±5°		
Corrosion resistance	CRC[1]	2		

1) Corrosion resistance class 2 according to Festo standard 940 070
   Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

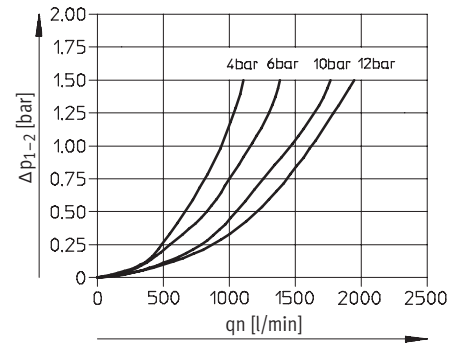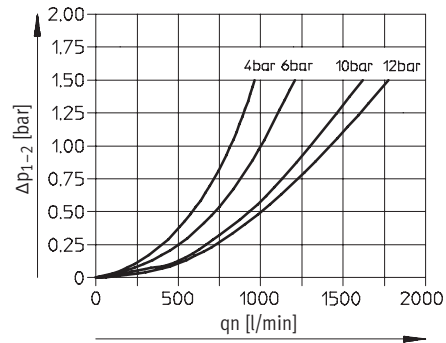| Weights [g]	
With plastic bowl guard	190
With metal bowl	350

- Wearing parts kits ➜ 222

- Filter cartridges ➜ 222

- For spare parts go to: www.festo.com/en/spare_parts_service

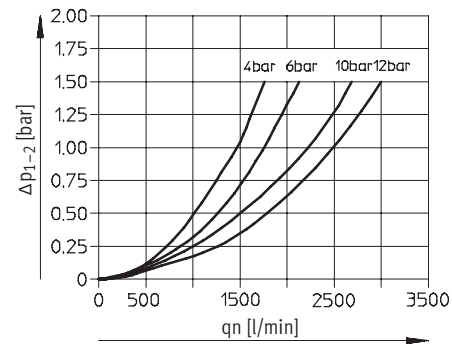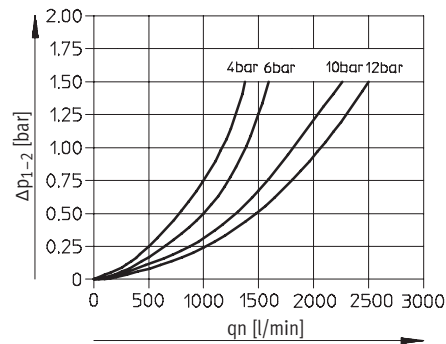# Standard Filters MS4-LF – Metric Series

Technical Data

Standard Flow Rate qn as a Function of the Differential Pressure Δp1-2

Filtration grade 5 μm · Filtration grade 40 μm

MS4-LF-⅛

MS4-LF-¼

Materials

Sectional view

Filters		
1	Body	Die-cast aluminum
2	Plastic bowl guard	Polycarbonate/polyamide
3	Metal bowl	Aluminum
	Viewing window	Polyamide
4	Filter element	Polyethylene
–	Seals	Nitrile rubber
	Note on materials	Free of copper and PTFE

Standard Filters MS4-LF – Metric Series

Dimensional Drawings

Dimensions[1] – Standard

Download CAD Data ➔ **www.festo.com/us/cad**

Manual bowl drain

☐1 Installation dimensions

➔ Flow direction
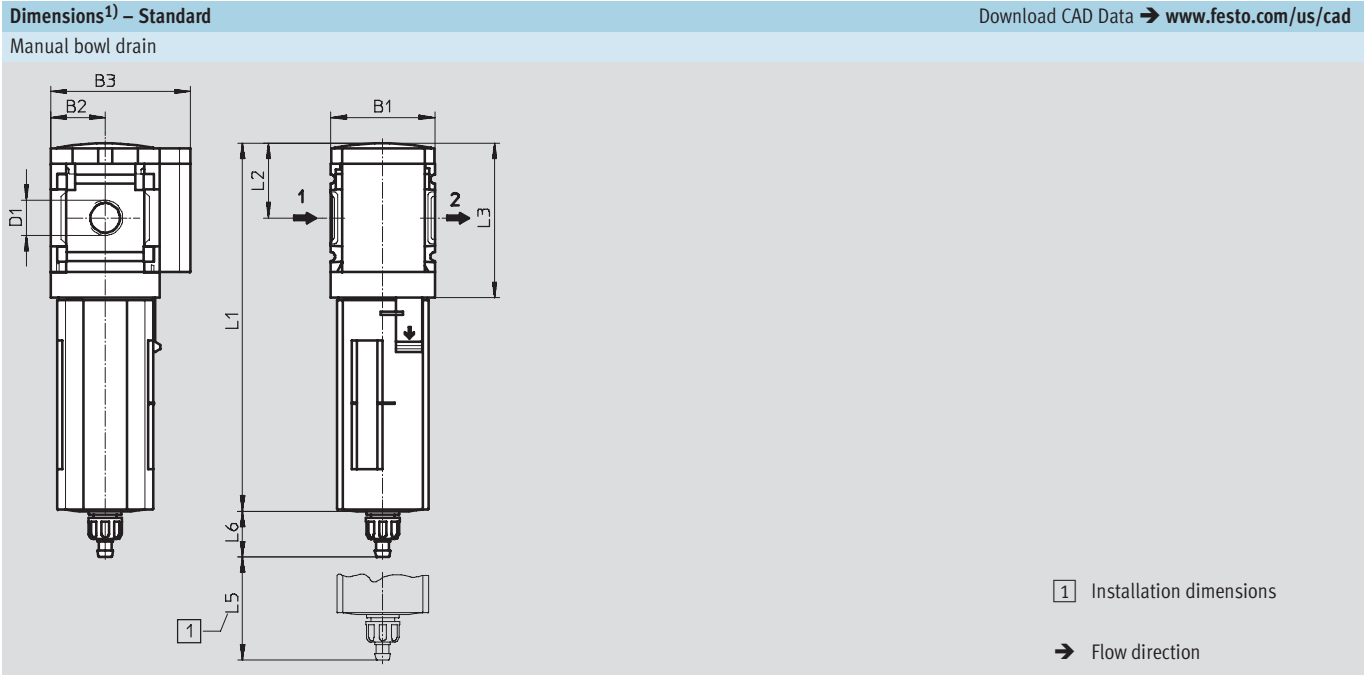
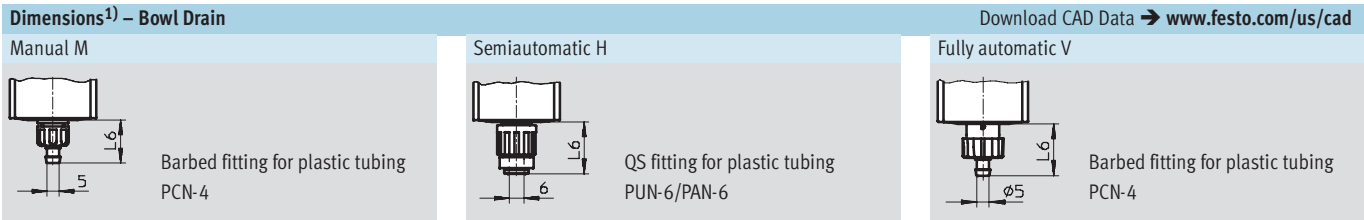| Type	B1	B2	B3	D1	L1 Bowl guard		L2	L3	L5	L6 Bowl guard	
					Plastic	Metal				Plastic	Metal
MS4-LF-⅛	40	21	54	G⅛	142.8	159.4	29	60.5	25	17.7	17.7
MS4-LF-¼				G¼							

1)   Dimensions are in millimeters, unless otherwise noted.

Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Dimensions[1] – Bowl Drain

Download CAD Data ➔ **www.festo.com/us/cad**

Manual M	Semiautomatic H	Fully automatic V
Barbed fitting for plastic tubing PCN-4	QS fitting for plastic tubing PUN-6/PAN-6	Barbed fitting for plastic tubing PCN-4

Type	L6
Plastic bowl guard	
MS4-LF-…-M	17.7
Metal bowl	
MS4-LF-…-M	17.7

Type	L6
Plastic bowl guard	
MS4-LF-…-H	22.1
Metal bowl	
MS4-LF-…-H	22.1

Type	L6
Plastic bowl guard	
MS4-LF-…-V	20.4
Metal bowl	
MS4-LF-…-V	20.4

1)   Dimensions are in millimeters, unless otherwise noted.

MS Series – Subject to change – 2007/10

Ordering Data – Pre-configured Products

Ordering Data							
Bowl drain	Connection	Filtration grade 5 µm			Filtration grade 40 µm		
		Part No.	Type	LT	Part No.	Type	LT
Plastic bowl guard							
Manual	G⅛	529403	MS4-LF-⅛-CRM	1D	529407	MS4-LF-⅛-ERM	Q
	G¼	529395	MS4-LF-¼-CRM	1D	529399	MS4-LF-¼-ERM	Q
Fully automatic	G⅛	529405	MS4-LF-⅛-CRV	1D	529409	MS4-LF-⅛-ERV	Q
	G¼	529397	MS4-LF-¼-CRV	1D	529401	MS4-LF-¼-ERV	Q
Metal bowl							
Manual	G⅛	535638	MS4-LF-⅛-CUM	Q	535644	MS4-LF-⅛-EUM	Q
	G¼	535654	MS4-LF-¼-CUM	Q	535660	MS4-LF-¼-EUM	Q
Fully automatic	G⅛	535640	MS4-LF-⅛-CUV	Q	535642	MS4-LF-⅛-EUV	Q
	G¼	535656	MS4-LF-¼-CUV	Q	535658	MS4-LF-¼-EUV	Q

LT = Lead time   **1D** typically ships same day/next day   **1W** typically ships within 1 week   **Q** request a quote for lead time

M	**Mandatory Data**					➔

Part No.	**Series**	**Size**	**Function**	**Connection size**	**Filtration grade**	**Bowl**
527695	MS	4	LF	⅛, ¼, AGA, AGB, AGC	E C	R U
Order example						
527695	**MS**	**4** –	**LF** –	**AGB** –	**E** –	**R**

Ordering Table					
Grid dimension [mm]	40		Conditions	Code	Enter code
M Part No.	**527695**				
Series	Standard			**MS**	MS
Size	4			**4**	4
Function	Filters			**-LF**	-LF
Connection size	Body thread G⅛			**-⅛**	
	Body thread G¼			**-¼**	
	Port plate G⅛ (dimensions ➔ 218)			**-AGA**	
	Port plate G¼ (dimensions ➔ 218)			**-AGB**	
	Port plate G⅜ (dimensions ➔ 218)			**-AGC**	
Filtration grade	40 µm			**-E**	
	5 µm			**-C**	
Bowl	Plastic bowl with plastic bowl guard			**-R**	
↓	Metal bowl			**-U**	

Transfer order code

527695	**MS**	**4** –	**LF** –	–	–	

Standard Filters MS4-LF – Metric Series

Ordering Data – Configurable Products

FESTO

➔	M	**Mandatory Data**

Bowl drain

M
H
V

– | **M**

O	**Options**

Type of mounting

WP
WPM
WB
WBM

– | **WP**

Reverse flow direction

Z

– | **Z**

Ordering Table					
Grid dimension [mm]	40		Conditions	Code	Enter code
↓ Bowl drain	Manual			**-M**	
M	Semiautomatic (P1 max. 12 bar)			**-H**	
	Fully automatic (P1 max. 12 bar)			**-V**	
O Type of mounting	Mounting bracket (dimensions ➔ 219)		1	**-WP**	
	Mounting bracket (dimensions ➔ 219)		1	**-WPM**	
	Mounting bracket (dimensions ➔ 216)			**-WB**	
	Mounting bracket (dimensions ➔ 216)			**-WBM**	
Reverse flow direction	Flow direction from right to left			**-Z**	

1   **WP, WPM**   Only with port plate AGA, AGB or AGC

Transfer order code

– | | – | | – | |

Mounting Attachments and Accessories
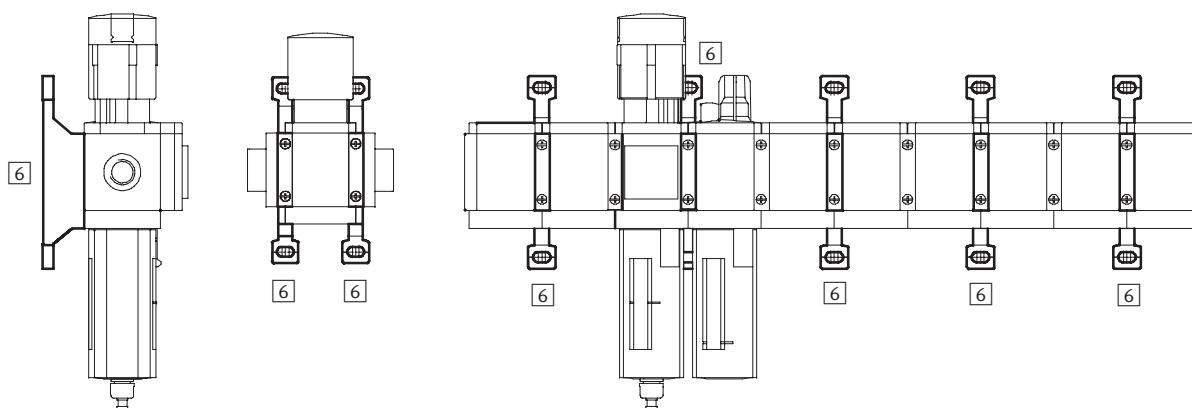
Single unit and combination unit mounting brackets.

Mounting Attachments and Accessories		Single unit		Combination unit → 2.1-1		→ Page
		without port plate	with port plate	without port plate	with port plate	
1	Cover cap MS4-END	■	–	■	–	217
2	Port plate MS4-AG...	–	■	–	■	218
3	Mounting bracket MS4-WB	■	■	–	–	216
4	Mounting bracket MS4-WBM	■	■	–	–	216
5	Body connector MS4-MV	–	■	■	■	218
6	Mounting bracket MS4-WP/WPB/WPM	–	■	■	■	219

Standard Filters MS4-LF – Metric Series

Accessories

3 **Mounting bracket MS4-WB**
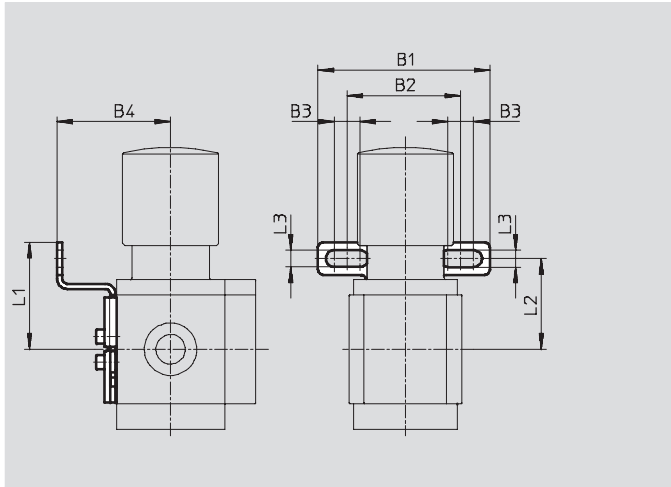
• For wall mounting
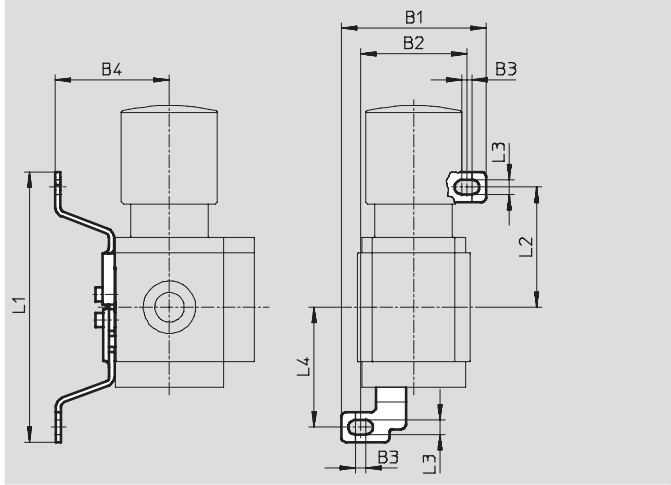
Material:
Steel

Dimensions and Ordering Data										
B1	B2	B3	B4	L1	L2	L3	L4	Weight [g]	Part No.	Type
56.2	41.2	4	44.2	104.6	46.6	5.6	46.5	46	**532185**	**MS4-WB**

4 **Mounting bracket MS4-WBM**

• For wall mounting

Material:
Steel

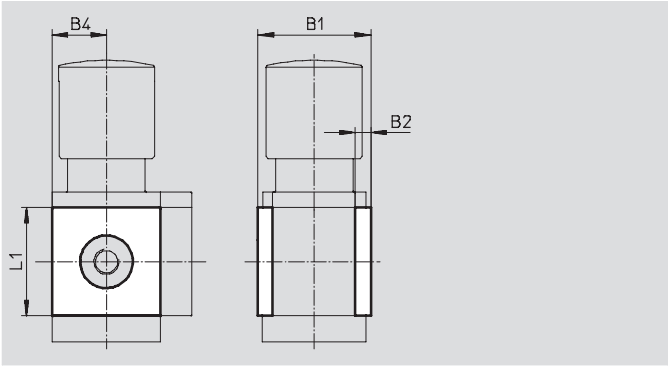| Dimensions and Ordering Data									
B1	B2	B3	B4	L1	L2	L3	Weight [g]	Part No.	Type
66.5	44	10	44	41.3	35	6.5	48	**526062**	**MS4-WBM**

Standard Filters MS4-LF – Metric Series

Accessories

1 Cover cap MS4-END

• Can be used to cover the body sides of the first and last module if port plates are not used.
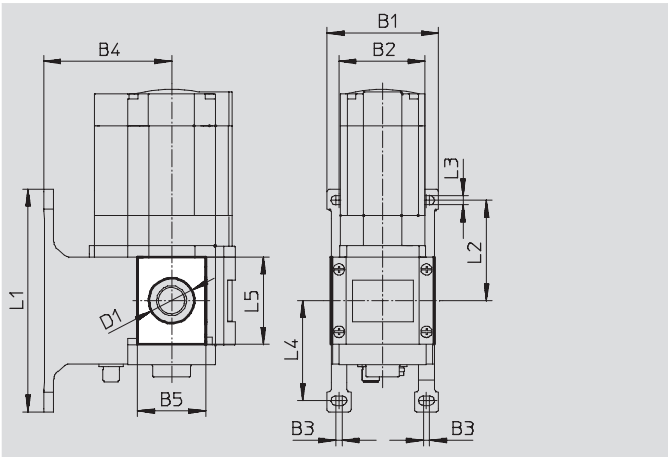
Material:
Reinforced polyamide
Free of copper and PTFE

Dimensions and Ordering Data					
B1	B2	B4	L1	Part No.	Type
43.6	6	21	42	**538779**	**MS4-END**

Mounting plate MS4-AEND

• In combination with mounting bracket MS-WP or MS-WPB for mounting an individual unit with body thread on a wall

Material:
Reinforced polyamide
Conforms to RoHS
Free of copper and PTFE

Dimensions and Ordering Data														
B1	B2	B3	B4		B5	D1	L1	L2	L3	L4	L5	CRC[1]	Weight	Part No.	Type
			WP	WPB		⌀							[g]		
55.2	40.2	4	44	66	30.4	20.3	106	46.5	5.6	46.7	42	2	4	**542966**	**MS4-AEND**

1) Corrosion resistance class 2 according to Festo standard 940 070
   Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.
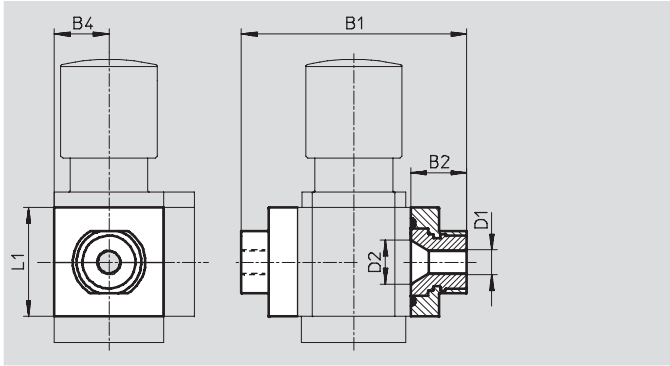
Filters MS4-LF/LFM/LFX – Metric Series

Accessories

FESTO

2 **Port plate MS4-AG…**
• Adapter for pneumatic connection

Material:
Aluminum

Dimensions and Ordering Data								
B1	B2	B4	D1	D2	L1	Weight [g]	Part No.	Type
83.5	21.5	21	G⅛	16.8	42	128	**526068**	**MS4-AGA**
			G¼				**526069**	**MS4-AGB**
			G⅜				**526070**	**MS4-AGC**

5 **Body connector MS4-MV**
• For connecting modules

Material:
Stainless steel/polyacetate

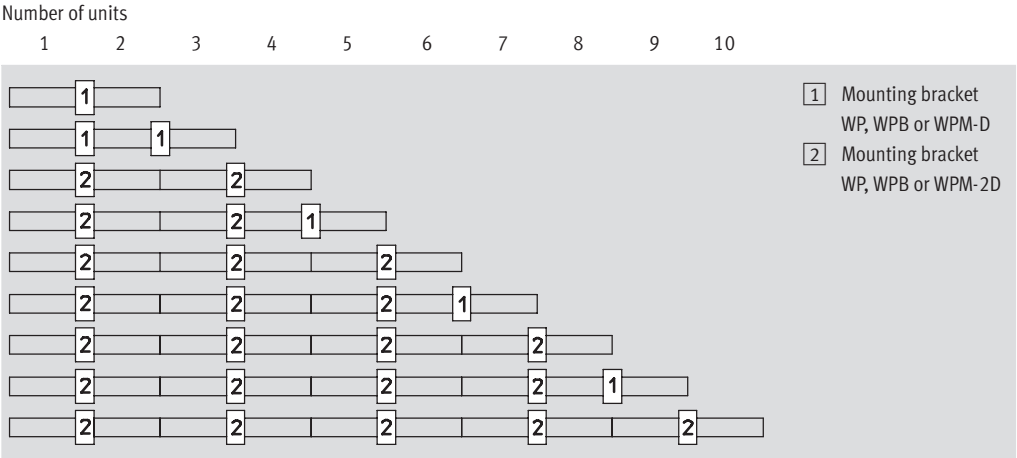| Ordering Data		
Weight [g]	Part No.	Type
36	**532798**	**MS4-MV**

6	**Mounting Bracket MS4-WP...**

Suggested placement of wall mounting brackets when mounting air preparation combinations

1 unit: 40 mm

2 units: 80 mm

Number of units

1   2   3   4   5   6   7   8   9   10

| 1 | Mounting bracket WP, WPB or WPM-D |
| 2 | Mounting bracket WP, WPB or WPM-2D |

Mounting dimensions
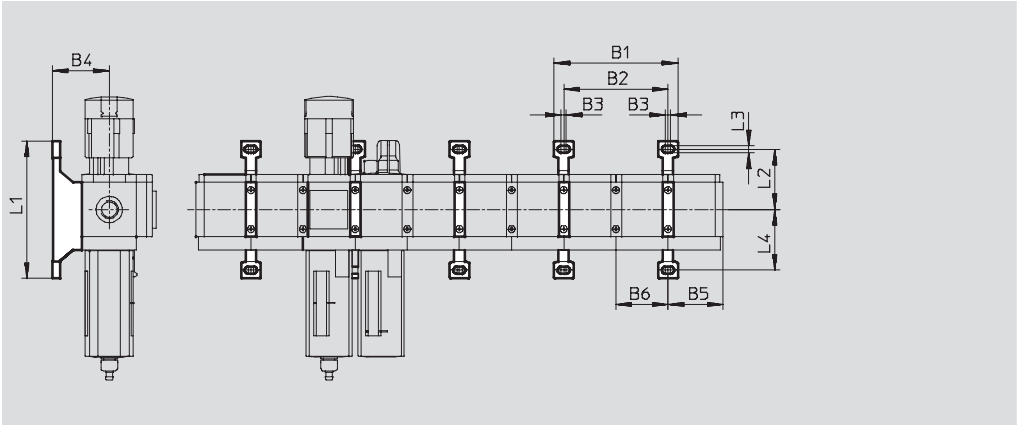
Type	B1	B2	B3	B4	B5	B6	L1	L2	L3	L4
MS4-WP	95.2	80	4	44	41.9	40	106	46.5	5.6	46.7
MS4-WPB				66						
MS4-WPM-...D				44			92.8	34.8		40

Standard Filters MS4-LF – Metric Series

Accessories

Mounting bracket MS4-WP

- To connect the modules for wall mounting
- In combination with a port plate MS-AG... for mounting an individual unit on a wall
- In combination with mounting plate MS-AEND or for mounting an individual unit with body thread on a wall
- For pressure regulator LRB with angled outlet block B... at rear

Material:
Die-cast aluminum

Dimensions and Ordering Data											
B1	B2	B3	B4	B5	L1	L2	L3	L4	Weight [g]	Part No.	Type
55.2	40.2	4	44	83.4	106	46.5	5.6	46.7	39	**532184**	**MS4-WP**

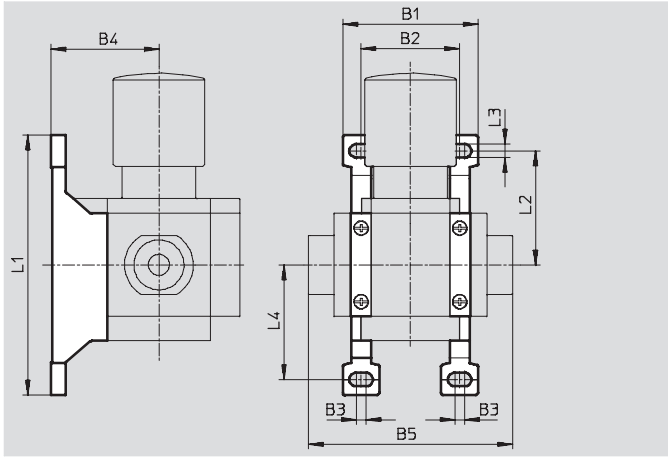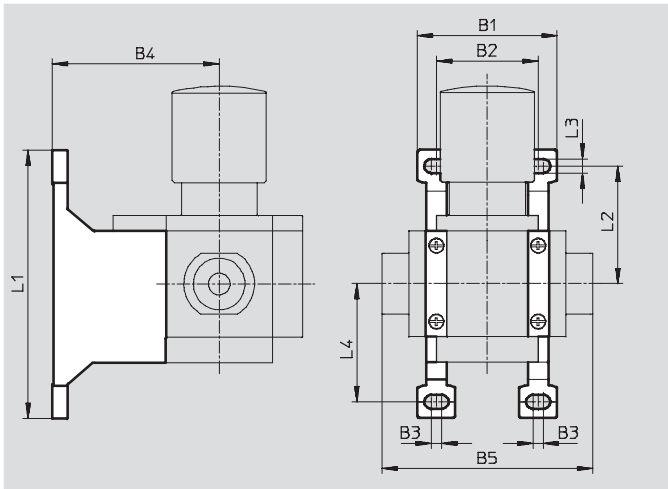**Mounting bracket MS4-WPB**

- To connect the modules for wall mounting
- In combination with a port plate MS-AG... for mounting an individual unit on a wall
- In combination with mounting plate MS-AEND or for mounting an individual unit with direct thread on a wall
- Provides large wall gap for pressure regulator

Material:
Die-cast aluminum

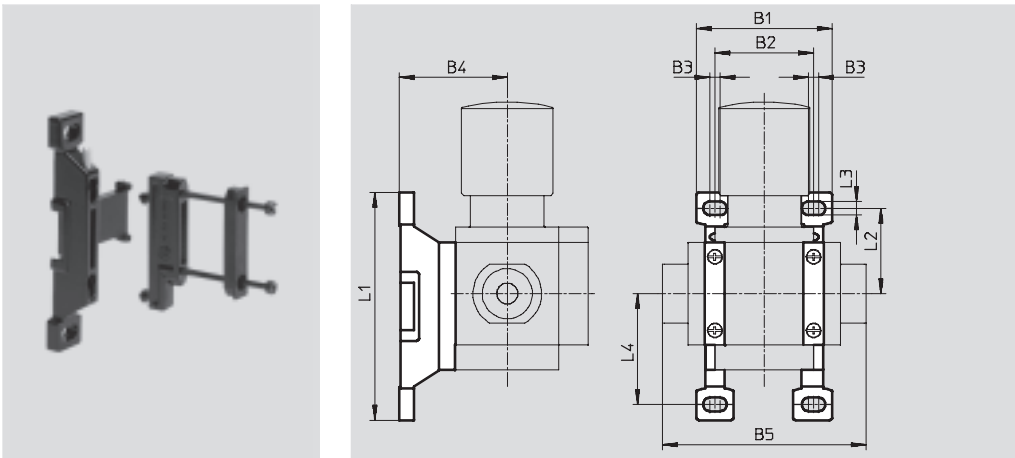| Dimensions and Ordering Data											
B1	B2	B3	B4	B5	L1	L2	L3	L4	Weight [g]	Part No.	Type
55.2	40.2	4	66	83.4	106	46.5	5.6	46.7	55	**526063**	**MS4-WPB**

Standard Filters MS4-LF – Metric Series

Accessories

Mounting bracket MS4-WPM
- To connect the modules for wall mounting
- In combination with a port plate MS-AG... for mounting an individual unit on a wall
- Speedy attachment and detachment
- For installation of modules with regulating knob pointing downwards

The distance piece D or 2D (designated in the type code) is included in the scope of delivery and ensures the correct clearance

Material:
Die-cast aluminum

Dimensions and Ordering Data												
B1	B2	B3	B4	B5	L1	L2	L3	L4	Clearance	Weight [g]	Part No.	Type
55.2	40	4	44	83.4	92.8	34.8	5.6	45.2	40	45	**526060**	**MS4-WPM-D**
95.2	80			123.4					80	55	**526061**	**MS4-WPM-2D**

Body connector MS4-MVM
- For installation of modules with regulating knob pointing downwards

Material:
Die-cast aluminum

Ordering Data		
Size	Part No.	Type
MS4	**532800**	**MS4-MVM**

Ordering Data – Wearing Parts Kits			
Size	Description	Part No.	Type
MS4	O-rings, screws, sealing ring	**673639**	**MS4-LF**

Ordering Data – Filter Cartridges			
Size	Filtration grade [µm]	Part No.	Type
MS4	5	**534501**	**MS4-LFP-C**
	40	**534502**	**MS4-LFP-E**

• For spare parts go to: www.festo.com/en/spare_parts_service

Standard Filters MS4N-LF – Inch Series

FESTO

Standard filters, with filtration grades of 5 microns or 40 microns, are equipped with a water separator that cleans the compressed air of impurities, rust, and condensate. For pre-filtering in pneumatic systems or for special applications.

- Pneumatic connection: ⅛ NPT, ¼ NPT, ⅜ NPT

- Supply pressure
  – For manual drain: 0 … 235 psi
  – For semiautomatic drain: 22 … 176 psi
  – For fully automatic drain: 29 … 176 psi

- Flow rate: 35.3 … 60.0 scfm

Product Range Overview													
Type	Pneumatic connections		Filtration grade [µm]				Bowl guard		Bowl drain			Contamination control	Reverse flow
	Body thread	Port plate	0.01	1	5	40	Plastic bowl guard	Metal bowl	Manual	Semiautomatic	Fully automatic	Differential pressure indicator	Flow direction from right to left
MS4N		AG…	A	B	C	E	R	U	M	H	V	DA	Z
LF	⅛ NPT, ¼ NPT	⅛ NPT, ¼ NPT, ⅜ NPT	–	–	■	■	■	■	■	■	■	–	■

Features

- Sintered filter with centrifugal separation removes contamination, rust and condensate from the compressed air.
- High flow rate with minimal pressure drop
- Replaceable filter cartridges

Contents

Technical Data ➔ 224
Dimensional Drawings ➔ 228
Ordering Data ➔ 229
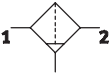Accessories ➔ 232
Replacement Parts ➔ 240

➔ www.festo.com/catalog/ms4n-lf

2007/10 – Subject to change – MS Series
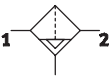223

Standard Filters MS4N-LF – Inch Series

Technical Data

ISO Symbol

Manual bowl drain

Semi or fully automatic bowl drain

General Technical Data				
Pneumatic connection 1, 2			⅛ NPT	¼ NPT
Filtration grade		[µm]	5 (air purity class at the output 3.7.– to DIN ISO 8573-1)	
			40 (air purity class at the output 5.7.– to DIN ISO 8573-1)	
Supply pressure	M	[psi]	0 … 206 (manual drain)	
	H	[psi]	22 … 176 (semiautomatic drain)	
	V	[psi]	29 … 176 (fully automatic drain)	

Standard Nominal Flow Rate qnN[1] [scfm]			
Pneumatic connection 1, 2		⅛ NPT	¼ NPT
Filtration grade	5 µm	35.3	45.9
	40 µm	38.8	60.0

1)   Measured at $p1$ = 88 psi and Δp = 15 psi

Standard Filters MS4N-LF – Inch Series

Technical Data

Operating and Environmental Conditions				
Bowl drain		Manual M	Semiautomatic H	Fully automatic V
Operating medium		Compressed air		
Max. condensate volume	[in³]	1.16 (with plastic bowl guard)		
		1.53 (with metal bowl)		
Bowl guard		Plastic bowl guard		
		Metal bowl		
Ambient temperature	[°F]	14 … 140	41 … 140	41 … 140
Temperature of medium	[°F]	14 … 140	41 … 140	41 … 140
Storage temperature	[°F]	14 … 140	14 … 140	14 … 140
Assembly position		Vertical ±5°		
Corrosion resistance	CRC[1]	2		

1) Corrosion resistance class 2 according to Festo standard 940 070
    Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

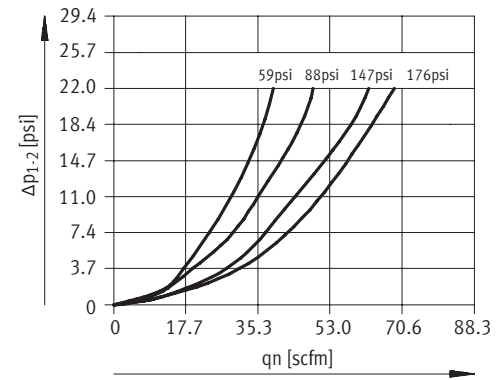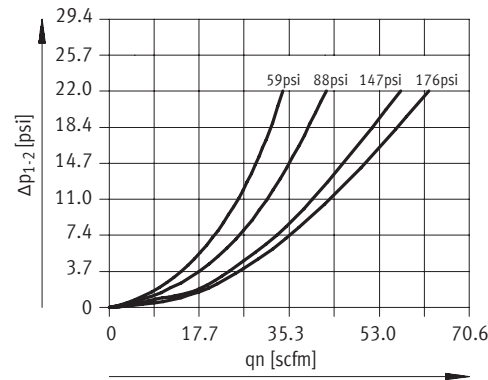| Weights [lb]	
With plastic bowl guard	0.38
With metal bowl	0.70

- Wearing parts kits ➔ 240

- Filter cartridges ➔ 240

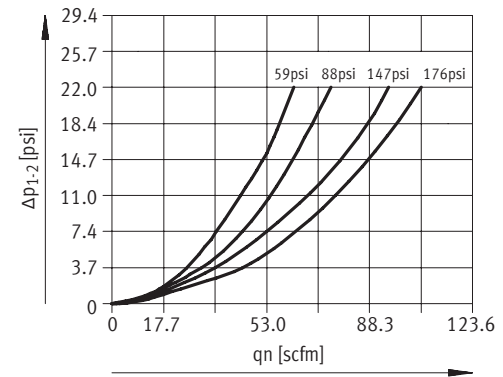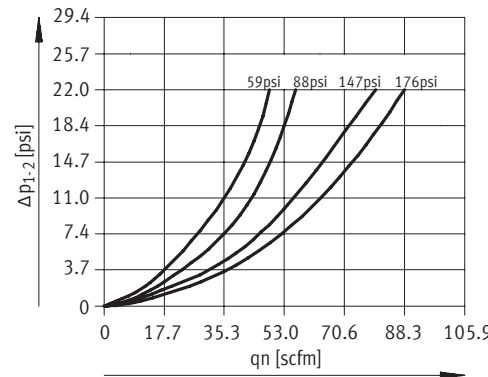- For spare parts go to: www.festo.com/en/spare_parts_service

Standard Flow Rate qn as a Function of the Differential Pressure Δp1-2	
Filtration grade 5 µm	Filtration grade 40 µm

MS4N-LF-⅛

Left chart (Filtration grade 5 µm):
- Y-axis: Δp$_{1-2}$ [psi], values: 0, 3.7, 7.4, 11.0, 14.7, 18.4, 22.0, 25.7, 29.4
- X-axis: qn [scfm], values: 0, 17.7, 35.3, 53.0, 70.6
- Curves labelled: 59psi, 88psi, 147psi, 176psi

Right chart (Filtration grade 40 µm):
- Y-axis: Δp$_{1-2}$ [psi], values: 0, 3.7, 7.4, 11.0, 14.7, 18.4, 22.0, 25.7, 29.4
- X-axis: qn [scfm], values: 0, 17.7, 35.3, 53.0, 70.6, 88.3
- Curves labelled: 59psi, 88psi, 147psi, 176psi

MS4N-LF-¼

Left chart (Filtration grade 5 µm):
- Y-axis: Δp$_{1-2}$ [psi], values: 0, 3.7, 7.4, 11.0, 14.7, 18.4, 22.0, 25.7, 29.4
- X-axis: qn [scfm], values: 0, 17.7, 35.3, 53.0, 70.6, 88.3, 105.9
- Curves labelled: 59psi, 88psi, 147psi, 176psi

Right chart (Filtration grade 40 µm):
- Y-axis: Δp$_{1-2}$ [psi], values: 0, 3.7, 7.4, 11.0, 14.7, 18.4, 22.0, 25.7, 29.4
- X-axis: qn [scfm], values: 0, 17.7, 53.0, 88.3, 123.6
- Curves labelled: 59psi, 88psi, 147psi, 176psi

Standard Filters MS4N-LF – Inch Series

Technical Data

Materials

Sectional view

Filters		
1	Body	Die-cast aluminum
2	Plastic bowl guard	Polycarbonate/polyamide
3	Metal bowl	Aluminum
	Viewing window	Polyamide
4	Filter element	Polyethylene
–	Seals	Nitrile rubber
	Note on materials	Free of copper and PTFE

Dimensions[1] – Standard

Download CAD Data ➔ **www.festo.com/us/cad**

Manual bowl drain

1 Installation dimensions

➔ Flow direction

Type	B1	B2	B3	D1	L1 Bowl guard		L2	L3	L5	L6 Bowl guard	
					Plastic	Metal				Plastic	Metal
MS4N-LF-⅛	1.57	0.83	2.13	⅛ NPT	5.62	6.28	1.14	2.38	0.98	0.70	0.70
MS4N-LF-¼				¼ NPT							

1) Dimensions are in inches, unless otherwise noted.

Dimensions[1] – Bowl Drain

Download CAD Data ➔ **www.festo.com/us/cad**

Manual M

0.197

Barbed fitting for plastic tubing PCN-4

Type	L6
Plastic bowl guard	
MS4N-LF-...-M	0.70
Metal bowl	
MS4N-LF-...-M	0.70

Semiautomatic H

0.236

QS fitting for plastic tubing PUN-6/PAN-6

Type	L6
Plastic bowl guard	
MS4N-LF-...-H	0.87
Metal bowl	
MS4N-LF-...-H	0.87

Fully automatic V

0.197

Barbed fitting for plastic tubing PCN-4

Type	L6
Plastic bowl guard	
MS4N-LF-...-V	0.80
Metal bowl	
MS4N-LF-...-V	0.80
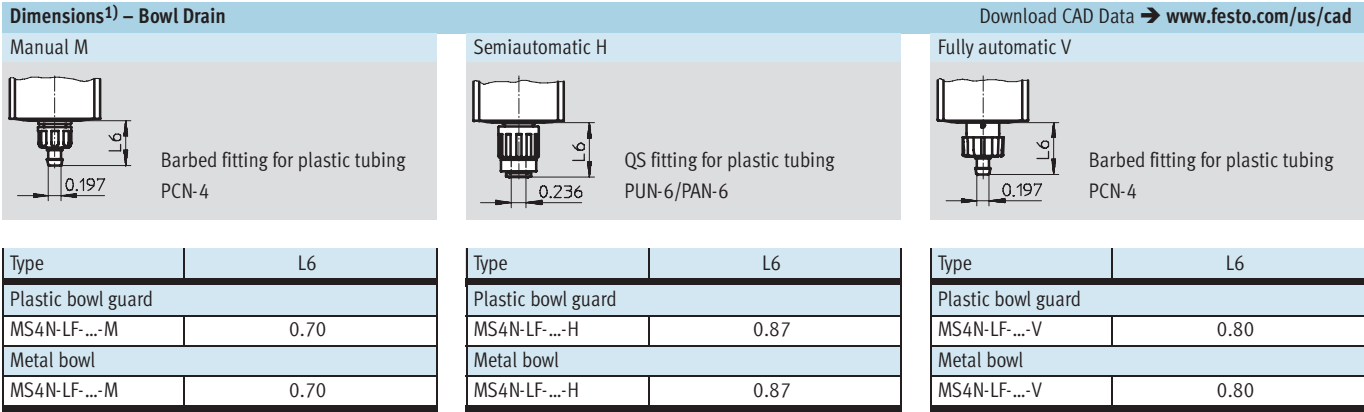
1) Dimensions are in inches, unless otherwise noted.

Standard Filters MS4N-LF – Inch Series

Ordering Data – Pre-configured Products

Ordering Data							
Bowl drain	Connection	Filtration grade 5 µm			Filtration grade 40 µm		
		Part No.	Type	LT	Part No.	Type	LT
Plastic bowl guard							
Manual	⅛ NPT	**531490**	**MS4N-LF-⅛-CRM**	1D	**531486**	**MS4N-LF-⅛-ERM**	Q
	¼ NPT	**531489**	**MS4N-LF-¼-CRM**	1D	**531485**	**MS4N-LF-¼-ERM**	Q
Fully automatic	⅛ NPT	**531494**	**MS4N-LF-⅛-CRV**	1D	**531482**	**MS4N-LF-⅛-ERV**	Q
	¼ NPT	**531493**	**MS4N-LF-¼-CRV**	1D	**531481**	**MS4N-LF-¼-ERV**	Q
Metal bowl							
Manual	⅛ NPT	**535670**	**MS4N-LF-⅛-CUM**	Q	**535676**	**MS4N-LF-⅛-EUM**	Q
	¼ NPT	**535686**	**MS4N-LF-¼-CUM**	Q	**535692**	**MS4N-LF-¼-EUM**	Q
Fully automatic	⅛ NPT	**535672**	**MS4N-LF-⅛-CUV**	Q	**535674**	**MS4N-LF-⅛-EUV**	Q
	¼ NPT	**535688**	**MS4N-LF-¼-CUV**	Q	**535690**	**MS4N-LF-¼-EUV**	Q

LT = Lead time   **1D** typically ships same day/next day   **1W** typically ships within 1 week   **Q** request a quote for lead time

M	**Mandatory Data**							➔

Part No.	Series	Size	Thread	Function	Connection size	Filtration grade	Bowl
527696	MS	4	N	LF	⅛, ¼, AQK, AQN, AQP	E C	R U
Order example							
527696	**MS**	**4**	**N** –	**LF** –	**AQK** –	**E** –	**R**

Ordering Table

	Grid dimension [mm]	40	Conditions	Code	Enter code
M	Part No.	**527696**			
	Series	Standard		**MS**	MS
	Size	4		**4**	4
	Thread	NPT thread		**N**	N
	Function	Filters		**-LF**	-LF
	Connection size	Body thread ⅛ NPT		**-⅛**	
		Body thread ¼ NPT		**-¼**	
		Port plate ⅛ NPT (dimensions ➔ 236)		**-AQK**	
		Port plate ¼ NPT (dimensions ➔ 236)		**-AQN**	
		Port plate ⅜ NPT (dimensions ➔ 236)		**-AQP**	
	Filtration grade	40 µm		**-E**	
		5 µm		**-C**	
↓	Bowl	Plastic bowl with plastic bowl guard		**-R**	
		Metal bowl		**-U**	

Transfer order code

527696	MS	4	N –	LF –	–	–

Ordering Data – Configurable Products

FESTO

➔	M	Mandatory Data

Bowl drain
M
H
V
– **M**

O	Options

Type of mounting
WP
WPM
WB
WBM
– **WP**

Reverse flow direction
Z
– **Z**

Ordering Table					
Grid dimension [mm]	40		Conditions	Code	Enter code
↓ M Bowl drain	Manual			**-M**	
	Semiautomatic (P1 max. 176 psi)			**-H**	
	Fully automatic (P1 max. 176 psi)			**-V**	
O Type of mounting	Mounting bracket (dimensions ➔ 237)		1	**-WP**	
	Mounting bracket (dimensions ➔ 237)		1	**-WPM**	
	Mounting bracket (dimensions ➔ 234)			**-WB**	
	Mounting bracket (dimensions ➔ 234)			**-WBM**	
Reverse flow direction	Flow direction from right to left			**-Z**	

1 **WP, WPM** Only with port plate AQK, AQN or AQP

Transfer order code

– _____ – _____ – _____
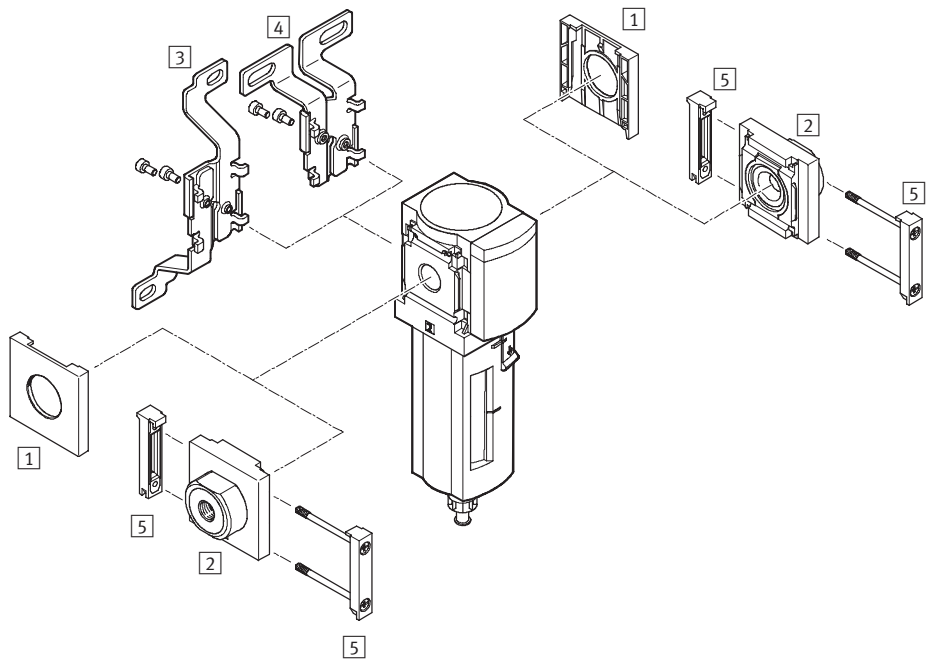
Mounting Attachments and Accessories
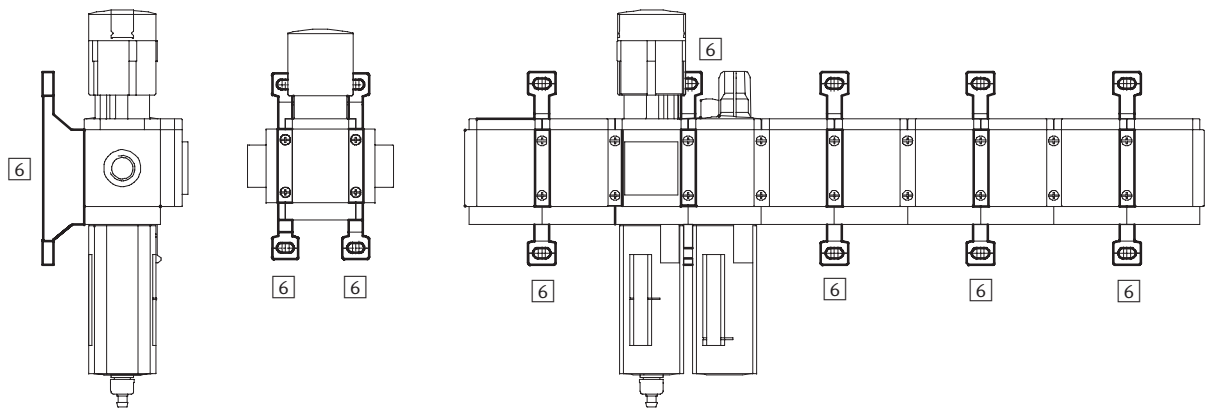
Single unit and combination unit mounting brackets.

Mounting Attachments and Accessories		Single unit		Combination unit ➜ 2.1-49		➜ Page
		without port plate	with port plate	without port plate	with port plate	
1	Cover cap MS4-END	■	–	■	–	235
2	Port plate MS4N-AQ…	–	■	–	■	236
3	Mounting bracket MS4-WB	■	■	–	–	234
4	Mounting bracket MS4-WBM	■	■	–	–	234
5	Body connector MS4-MV	–	■	■	■	236
6	Mounting bracket MS4-WP/WPB/WPM	–	■	■	■	237

3 **Mounting bracket MS4-WB**

• For wall mounting
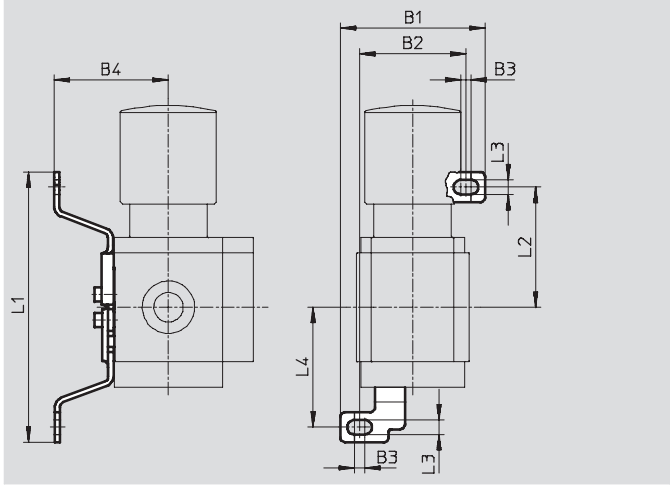
Material:
Steel

Dimensions and Ordering Data

B1	B2	B3	B4	L1	L2	L3	L4	Weight [lb]	Part No.	Type
2.21	1.62	0.16	1.74	4.12	1.83	0.22	1.79	0.09	**532185**	**MS4-WB**

4 **Mounting bracket MS4-WBM**

• For wall mounting

Material:
Steel
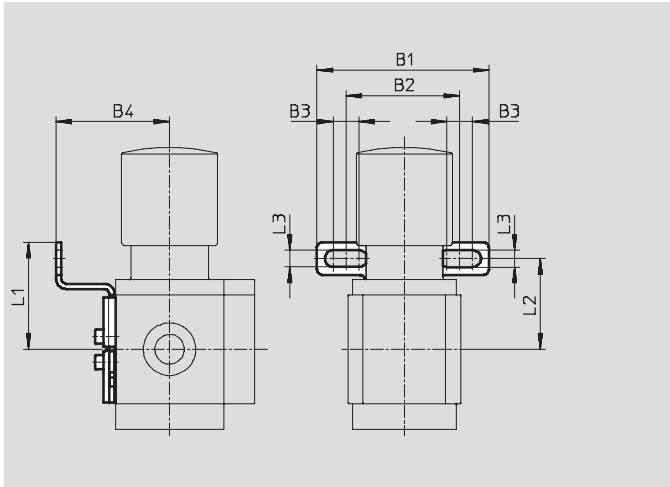
Dimensions and Ordering Data

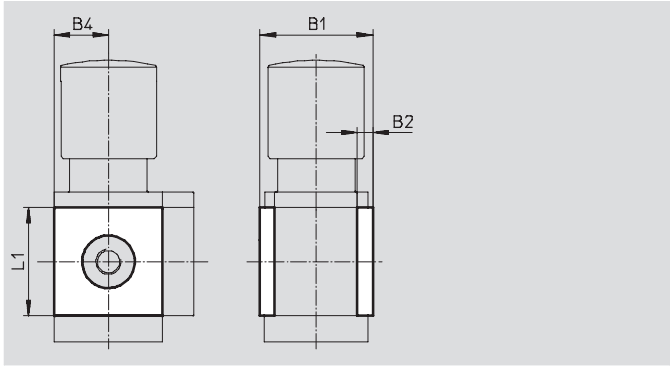| B1	B2	B3	B4	L1	L2	L3	Weight [lb]	Part No.	Type
2.62	1.73	0.39	1.73	1.63	1.38	0.26	0.10	**526062**	**MS4-WBM**

Standard Filters MS4N-LF – Inch Series

Accessories

1 **Cover cap MS4-END**
- Can be used to cover the body sides of the first and last module if port plates are not used.
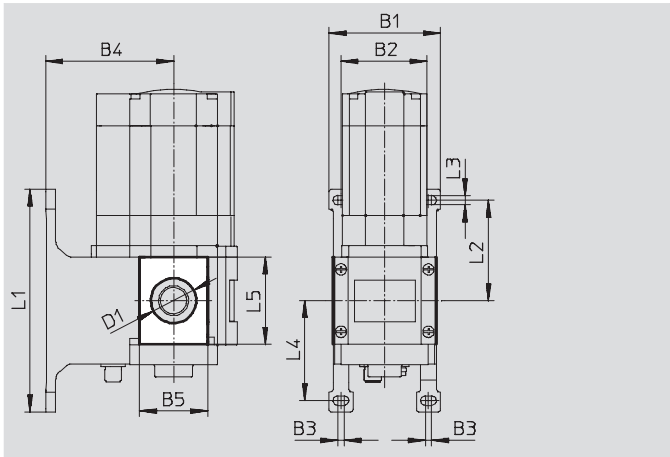
Material:
Reinforced polyamide
Free of copper and PTFE

Dimensions and Ordering Data					
B1	B2	B4	L1	Part No.	Type
1.72	0.24	0.83	1.65	**538779**	**MS4-END**

Mounting plate MS4-AEND
- In combination with mounting bracket MS-WP or MS-WPB for mounting an individual unit with body thread on a wall

Material:
Reinforced polyamide
Conforms to RoHS
Free of copper and PTFE

Dimensions and Ordering Data													
B1	B2	B3	B4		B5	D1	L1	L2	L3	L4	L5	CRC[1]	Weight
			WP	WPB		∅							[lb]
2.17	1.58	0.16	1.73	2.60	1.20	0.80	4.17	1.83	0.22	1.84	1.65	2	0.01

Part No.	Type
542966	**MS4-AEND**

1) Corrosion resistance class 2 according to Festo standard 940 070
   Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.
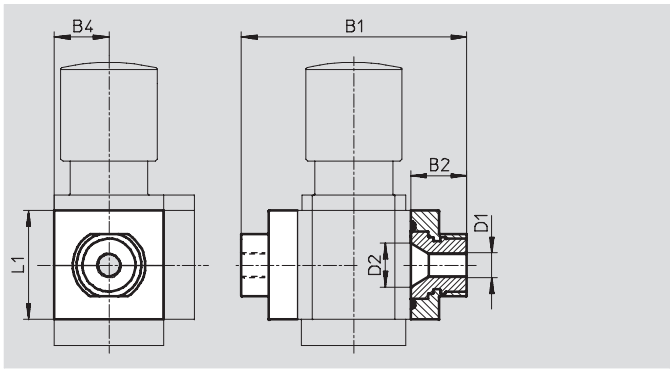
Standard Filters MS4N-LF – Inch Series

Accessories

2 **Port plate MS4N-AQ...**
- Adapter for pneumatic connection

Material:
Aluminum

Dimensions and Ordering Data								
B1	B2	B4	D1	D2	L1	Weight [lb]	Part No.	Type
3.29	0.85	0.83	⅛ NPT	0.66	1.65	0.26	**526065**	**MS4N-AQK**
			¼ NPT				**526066**	**MS4N-AQN**
			⅜ NPT				**526067**	**MS4N-AQP**

5 **Body connector MS4-MV**
- For connecting modules

Material:
Stainless steel/polyacetate

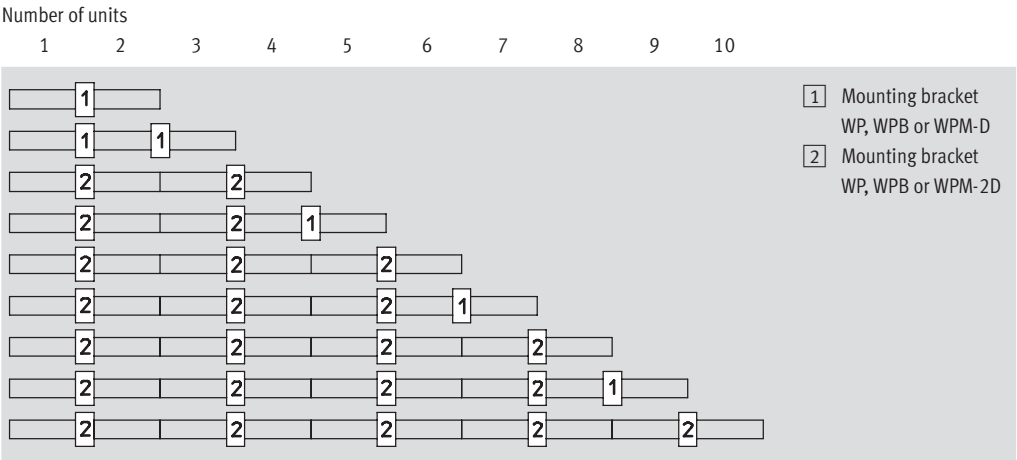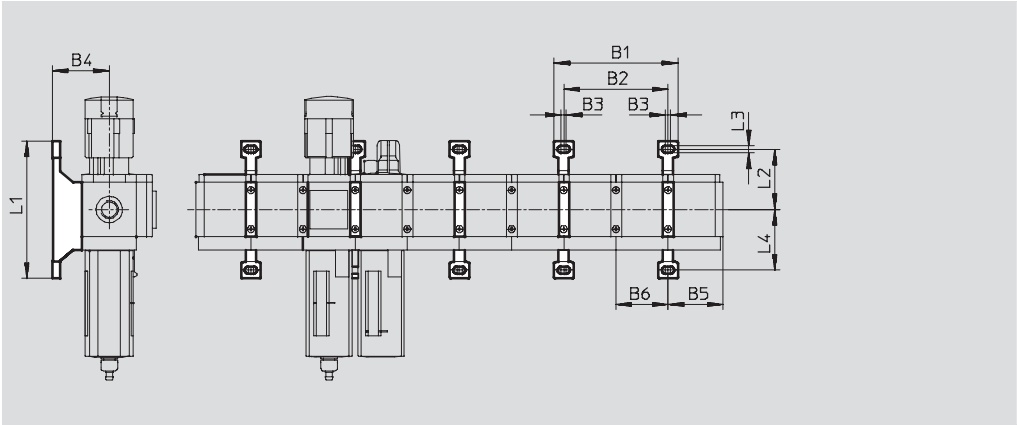| Ordering Data		
Weight [lb]	Part No.	Type
0.07	**532798**	**MS4-MV**

| 6 | **Mounting Bracket MS4-WP...** |

Suggested placement of wall mounting brackets when mounting air preparation combinations

1 unit: 1.575 in

2 units: 3.15 in

Number of units

1   2   3   4   5   6   7   8   9   10

| 1 | Mounting bracket WP, WPB or WPM-D |
| 2 | Mounting bracket WP, WPB or WPM-2D |

Mounting dimensions

Type	B1	B2	B3	B4	B5	B6	L1	L2	L3	L4
MS4-WP	3.75	3.15	0.16	1.73	1.65	1.57	4.17	1.83	0.22	1.84
MS4-WPB				2.60						
MS4-WPM-...D				1.73			3.65	1.37		1.57

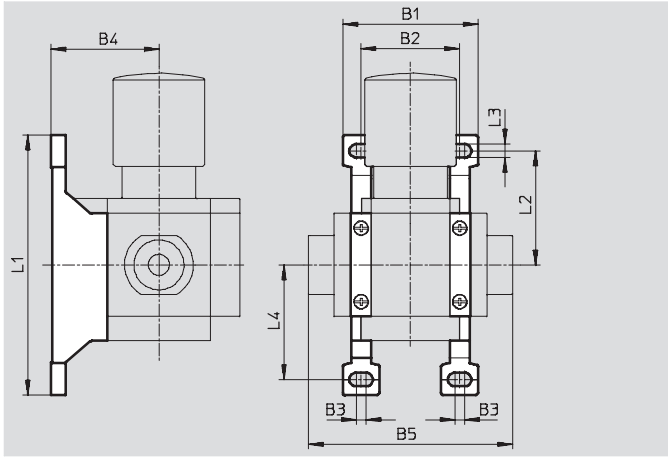# Standard Filters MS4N-LF – Inch Series

Accessories

Mounting bracket MS4-WP
- To connect the modules for wall mounting
- In combination with a port plate MS-AG... for mounting an individual unit on a wall
- In combination with mounting plate MS-AEND or for mounting an individual unit with body thread on a wall
- For pressure regulator LRB with angled outlet block B... at rear

Material:
Die-cast aluminum

Dimensions and Ordering Data											
B1	B2	B3	B4	B5	L1	L2	L3	L4	Weight [lb]	Part No.	Type
2.17	1.58	0.16	1.73	3.28	4.17	1.83	0.22	1.84	0.08	**532184**	**MS4-WP**

Mounting bracket MS4-WPB
- To connect the modules for wall mounting
- In combination with a port plate MS-AG... for mounting an individual unit on a wall
- In combination with mounting plate MS-AEND or for mounting an individual unit with direct thread on a wall
- Provides large wall gap for pressure regulator

Material:
Die-cast aluminum
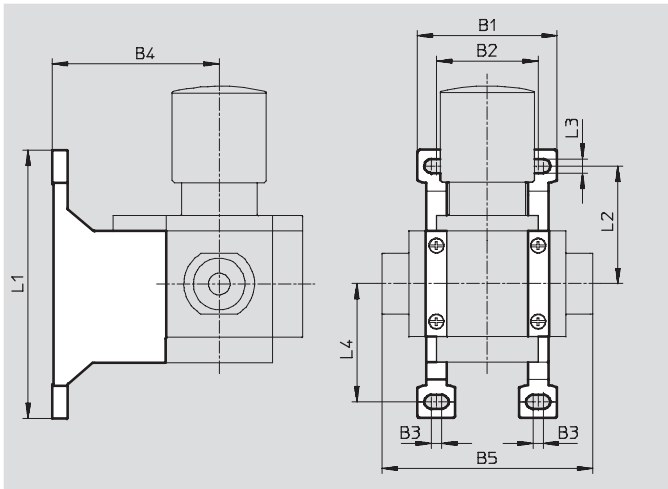
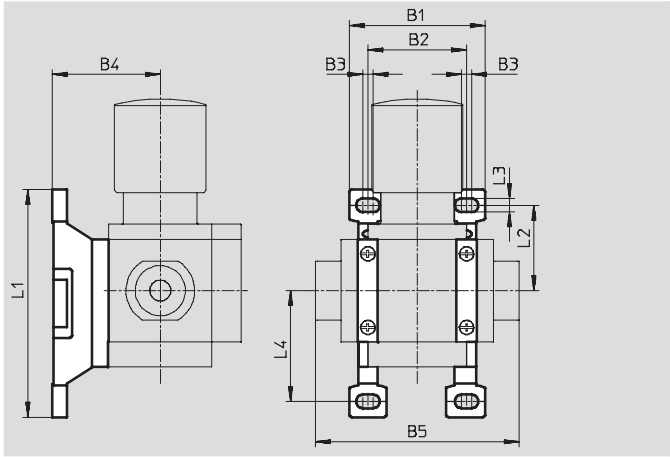| Dimensions and Ordering Data											
B1	B2	B3	B4	B5	L1	L2	L3	L4	Weight [lb]	Part No.	Type
2.17	1.58	0.16	2.60	3.28	4.17	1.83	0.22	1.84	0.11	**526063**	**MS4-WPB**

Standard Filters MS4N-LF – Inch Series

Accessories

Mounting bracket MS4-WPM

- To connect the modules for wall mounting
- In combination with a port plate MS-AG… for mounting an individual unit on a wall
- Speedy attachment and detachment
- For installation of modules with regulating knob pointing downwards

The distance piece D or 2D (designated in the type code) is included in the scope of delivery and ensures the correct clearance

Material:
Die-cast aluminum

Dimensions and Ordering Data												
B1	B2	B3	B4	B5	L1	L2	L3	L4	Clearance	Weight [lb]	Part No.	Type
2.17	1.57	0.16	1.73	3.28	3.65	1.37	0.22	1.78	1.57	0.09	**526060**	**MS4-WPM-D**
3.75	3.15			4.86					3.15	0.11	**526061**	**MS4-WPM-2D**

Body connector MS4-MVM

- For installation of modules with regulating knob pointing downwards

Material:
Die-cast aluminum

Ordering Data		
Size	Part No.	Type
MS4	**532800**	**MS4-MVM**

Standard Filters MS4N-LF – Inch Series

Replacement Parts

Ordering Data – Wearing Parts Kits			
Size	Description	Part No.	Type
MS4	O-rings, screws, sealing ring	**673639**	**MS4-LF**

Ordering Data – Filter Cartridges			
Size	Filtration grade [μm]	Part No.	Type
MS4	5	**534501**	**MS4-LFP-C**
	40	**534502**	**MS4-LFP-E**

• For spare parts go to: www.festo.com/en/spare_parts_service

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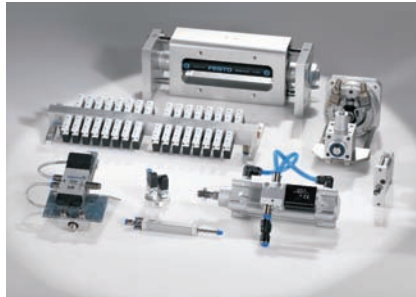
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