

Standard Filters MS6N-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: 1/4 NPT, 3/8 NPT, 1/2 NPT, 3/4 NPT
- Supply pressure
 - For manual drain: 0 ... 294 psi
 - For semiautomatic drain: 22 ... 176 psi
 - For fully automatic drain: 29 ... 176 psi
 - For fully automatic drain, electrically actuated: 12 ... 235 psi
- Flow rate: 70.6 ... 144.7 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	Electrical 24 V DC M12	Electrical 110 V AC with terminals	Electrical 230 V AC with terminals	Electrical 24 V DC with terminals	Differential pressure indicator	Flow direction from right to left	
MS6N		AG...	A	B	C	E	R	U	M	H	V	E1	E2	E3	E4	DA	Z	
LF	¼ NPT, ⅜ NPT, ½ NPT	¼ NPT, ⅜ NPT, ½ NPT, ¾ 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	→ 784
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Accessories	→ 792
Replacement Parts	→ 800

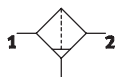
→ www.festo.com/catalog/ms6n-lf

Standard Filters MS6N-LF – Inch Series

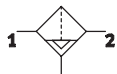
Technical Data

FESTO

ISO Symbol



Manual bowl drain



Semi or fully automatic bowl drain



General Technical Data				
Pneumatic connection 1, 2		1/4 NPT	3/8 NPT	1/2 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 ... 294 (manual drain)		
	H [psi]	22 ... 176 (semiautomatic drain)		
	V [psi]	29 ... 176 (fully automatic drain)		
	E... [psi]	12 ... 235 (fully automatic drain, electrically actuated)		

Standard Nominal Flow Rate q _N ¹⁾ [scfm]				
Pneumatic connection 1, 2		1/4 NPT	3/8 NPT	1/2 NPT
Filtration grade	5 μm	70.6	105.9	113.0
	40 μm	88.3	134.1	144.7

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

Standard Filters MS6N-LF – Inch Series

Technical Data

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Operating and Environmental Conditions				
Bowl drain	Manual M	Semiautomatic H	Fully automatic V	Fully automatic, electrically actuated E...
Operating medium	Compressed air			
Max. condensate volume [in ³]	2.32			
Bowl guard	Plastic bowl guard			
	Metal bowl			
Ambient temperature [°F]	14 ... 140	41 ... 140	41 ... 140	34 ... 140
Temperature of medium [°F]	14 ... 140	41 ... 140	41 ... 140	34 ... 140
Storage temperature [°F]	14 ... 140	14 ... 140	14 ... 140	34 ... 140
Assembly position	Vertical ±5°			
Corrosion resistance CRC ¹⁾	2			

1) Corrosion resistance class 2 according to Festo standard 940 070

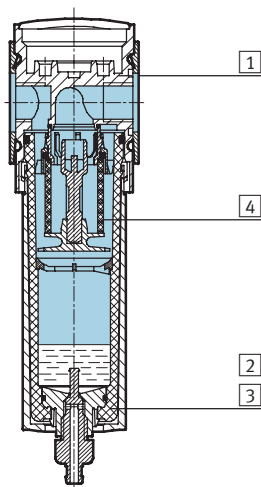
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Weights [lb]	
With plastic bowl guard	1.20
With metal bowl	1.64
With metal bowl and fully automatic, electrically actuated bowl drain	3.60

- Wearing parts kits → 800
- Filter cartridges → 800
- For spare parts go to: www.festo.com/en/spare_parts_service

Materials

Sectional view



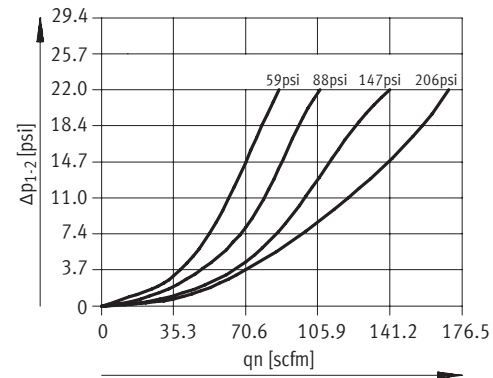
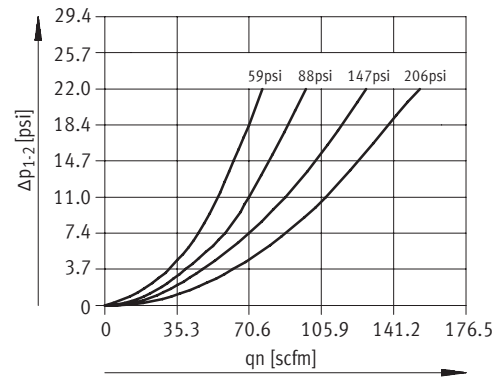
Filters		
1	Body	Die-cast aluminum
2	Plastic bowl guard	Polycarbonate/polyamide
3	Metal bowl	Aluminum
	Viewing window	Polyamide
4	Filter element	Polyethylene
-	Seals	Nitrile rubber
	Note on materials	Free of copper and PTFE

Standard Filters MS6N-LF – Inch Series

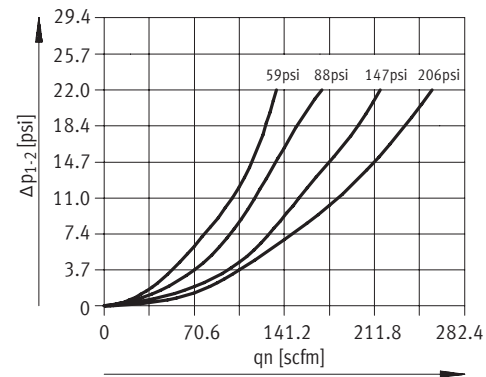
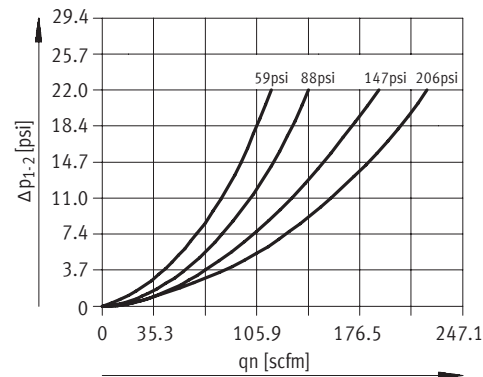
Technical Data

FESTO

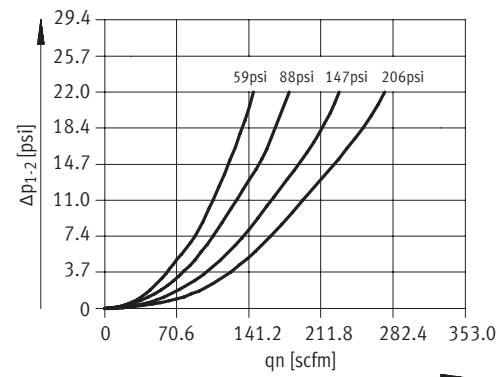
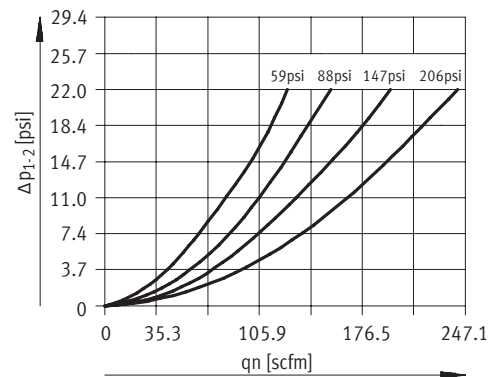
Standard Flow Rate q_n as a Function of the Differential Pressure Δp_{1-2}		
	Filtration grade 5 μm	Filtration grade 40 μm
MS6N-LF-1/4		



MS6N-LF-3/8

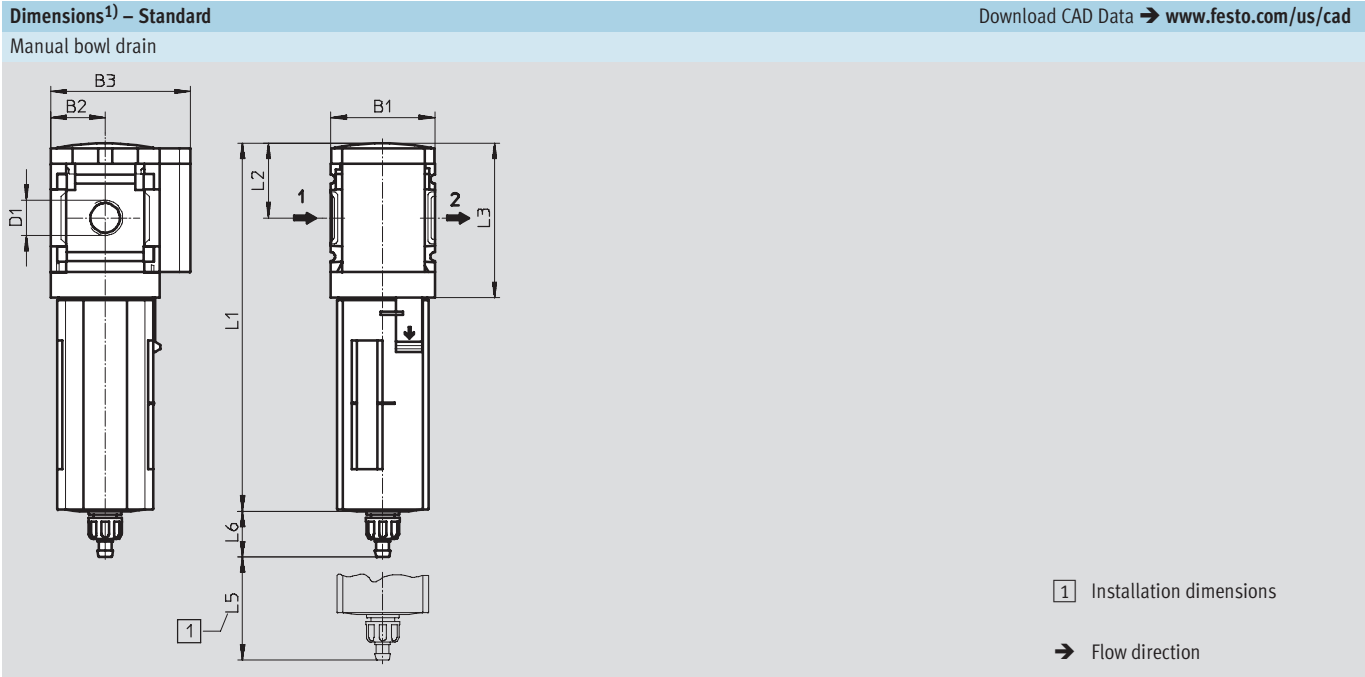


MS6N-LF-1/2



Standard Filters MS6N-LF – Inch Series

Dimensional Drawings

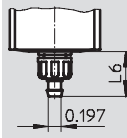
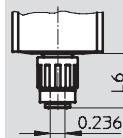
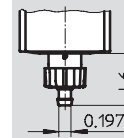


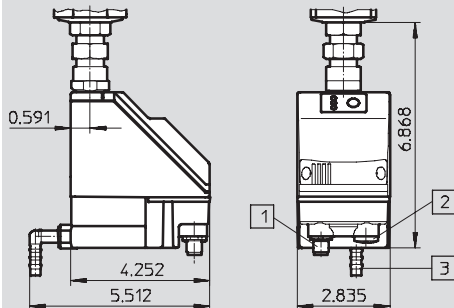
Type	B1	B2	B3	D1	L1		L2	L3	L5	L6	
					Bowl guard					Bowl guard	
					Plastic	Metal				Plastic	Metal
MS6N-LF-¼	2.44	1.22	2.99	¼ NPT	7.56	7.80	1.65	3.43	2.68	0.62	0.75
MS6N-LF-⅜				⅜ NPT							
MS6N-LF-½				½ NPT							

1) Dimensions are in inches, unless otherwise noted.

Standard Filters MS6N-LF – Inch Series

Dimensional Drawings

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	Type	L6
Plastic bowl guard		Plastic bowl guard	
MS6N-LF-...-M	0.62	MS6N-LF-...-H	0.80
Metal bowl		Metal bowl	
MS6N-LF-...-M	0.75	MS6N-LF-...-H	0.90
Type	L6	Type	L6
Plastic bowl guard		Plastic bowl guard	
MS6N-LF-...-V	0.73	MS6N-LF-...-V	0.87
Metal bowl		Metal bowl	
MS6N-LF-...-V	0.87	MS6N-LF-...-V	0.87

Fully automatic, electrically actuated E1 ... E4		Technical data PWEA → www.festo.com/catalog/pwea	
		1 Variant E1 PWEA-AP-... with M12x1 plug, 5-pin for SIM-M12-5GD-... 2 Variant E2/E3/E4 PWEA-AC-... with cable conduit fitting Pg9 3 Connection 360° rotatable for plastic tubing PUN-H-12x2-...	

1) Dimensions are in inches, unless otherwise noted.

Standard Filters MS6N-LF – Inch Series

Ordering Data – Pre-configured Products

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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	¼ NPT	531525	MS6N-LF-¼-CRM		1D	531519	MS6N-LF-¼-ERM	1D
	⅜ NPT	531527	MS6N-LF-⅜-CRM		1D	531521	MS6N-LF-⅜-ERM	1D
	½ NPT	531526	MS6N-LF-½-CRM		1D	531520	MS6N-LF-½-ERM	1D
Fully automatic	¼ NPT	531531	MS6N-LF-¼-CRV		1D	531513	MS6N-LF-¼-ERV	1D
	⅜ NPT	531533	MS6N-LF-⅜-CRV		1D	531515	MS6N-LF-⅜-ERV	1D
	½ NPT	531532	MS6N-LF-½-CRV		1D	531514	MS6N-LF-½-ERV	1D
Metal bowl								
Manual	¼ NPT	531537	MS6N-LF-¼-CUM		Q	531555	MS6N-LF-¼-EUM	Q
	⅜ NPT	531539	MS6N-LF-⅜-CUM		Q	531557	MS6N-LF-⅜-EUM	Q
	½ NPT	531538	MS6N-LF-½-CUM		Q	531556	MS6N-LF-½-EUM	Q
Fully automatic	¼ NPT	531543	MS6N-LF-¼-CUV		Q	531549	MS6N-LF-¼-EUV	Q
	⅜ NPT	531545	MS6N-LF-⅜-CUV		Q	531551	MS6N-LF-⅜-EUV	Q
	½ NPT	531544	MS6N-LF-½-CUV		Q	531550	MS6N-LF-½-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

Standard Filters MS6N-LF – Inch Series

Ordering Data – Configurable Products

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M Mandatory Data →

Part No.	Series	Size	Thread	Function	Connection size	Filtration grade	Bowl
527669	MS	6	N	LF	1/4, 3/8, 1/2, AQN, AQP, AQR, AQS	E C	R U
Order example							
527669	MS	6	N	- LF	- AQN	- E	- R

Ordering Table

Grid dimension [mm]		62	Conditions	Code	Enter code
M	Part No.	527669			
	Series	Standard		MS	MS
	Size	6		6	6
	Thread	NPT thread		N	N
	Function	Filters		-LF	-LF
	Connection size	Body thread 1/4 NPT		-1/4	
		Body thread 3/8 NPT		-3/8	
		Body thread 1/2 NPT		-1/2	
		Port plate 1/4 NPT (dimensions → 796)		-AQN	
		Port plate 3/8 NPT (dimensions → 796)		-AQP	
		Port plate 1/2 NPT (dimensions → 796)		-AQR	
		Port plate 3/4 NPT (dimensions → 796)		-AQS	
	Filtration grade	40 µm		-E	
		5 µm		-C	
	Bowl	Plastic bowl with plastic bowl guard		-R	
		Metal bowl		-U	

Transfer order code

527669	MS	6	N	- LF	-		-		-	
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Standard Filters MS6N-LF – Inch Series

Ordering Data – Configurable Products



→ [M] Mandatory Data		[O] Options	
Bowl drain		Type of mounting	Reverse flow direction
M H V E1 E2 E3 E4		WP WPM WB	Z
- M		- WP	- Z

Ordering Table					
Grid dimension	[mm]	62	Conditions	Code	Enter code
↓ [M]	Bowl drain	Manual		-M	
		Semiautomatic (P1 max. 176 psi)		-H	
		Fully automatic (P1 max. 176 psi)		-V	
		External fully automatic bowl drain, electrical, 24 V DC, M12	[1]	-E1	
		External fully automatic bowl drain, electrical, 110 V AC, terminals	[1]	-E2	
		External fully automatic bowl drain, electrical, 230 V AC, terminals	[1]	-E3	
		External fully automatic bowl drain, electrical, 24 V DC, terminals	[1]	-E4	
[O]	Type of mounting	Mounting bracket (dimensions → 797)	[2]	-WP	
		Mounting bracket (dimensions → 797)	[2]	-WPM	
		Mounting bracket (dimensions → 794)		-WB	
	Reverse flow direction	Flow direction from right to left		-Z	

[1] E1, E2, E3, E4

Only with metal bowl U

[2] WP, WPM

Only with port plate AQN, AQP, AQR or AQS

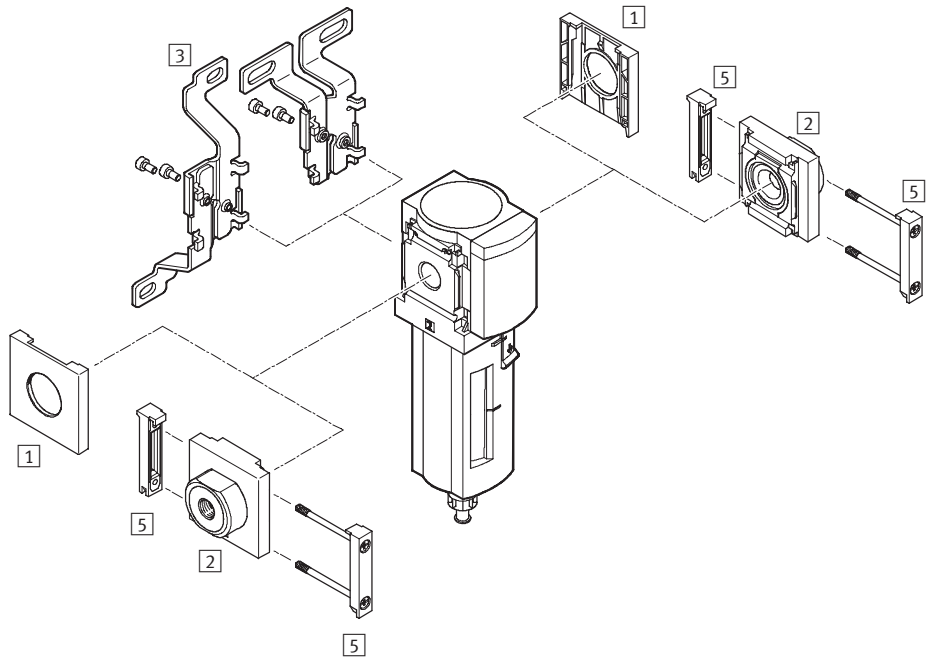
Transfer order code

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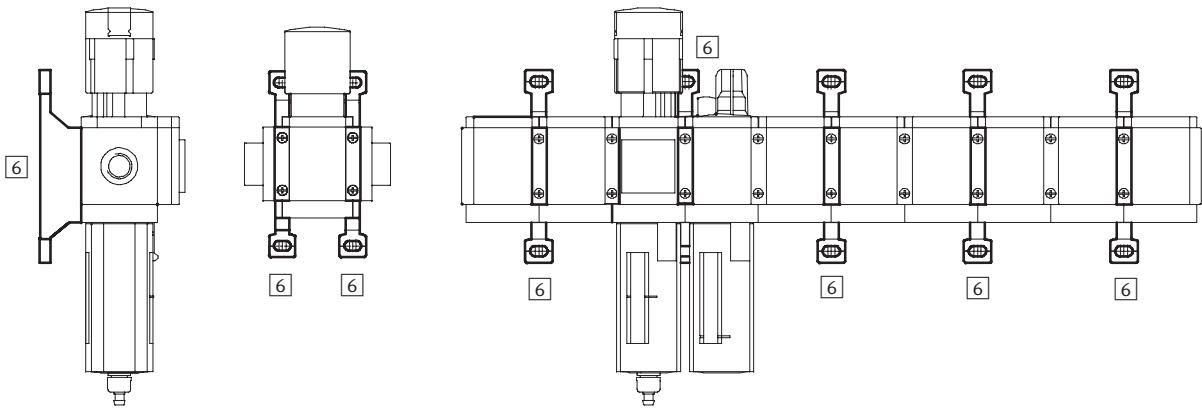
Standard Filters MS6N-LF – Inch Series

Accessories Overview

Mounting Attachments and Accessories



Single unit and combination unit mounting brackets.



Standard Filters MS6N-LF – Inch Series

Accessories Overview

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Mounting Attachments and Accessories						
		Single unit		Combination unit ➔ 3.1-49		➔ Page
		without port plate	with port plate	without port plate	with port plate	
1	Cover cap MS6-END	■	–	■	–	795
2	Port plate MS6N-AQ...	–	■	–	■	796
3	Mounting bracket MS6-WB	■	■	–	–	794
5	Body connector MS6-MV	–	■	■	■	796
6	Mounting bracket MS6-WP/WPB/WPM	–	■	■	■	797

Standard Filters MS6N-LF – Inch Series

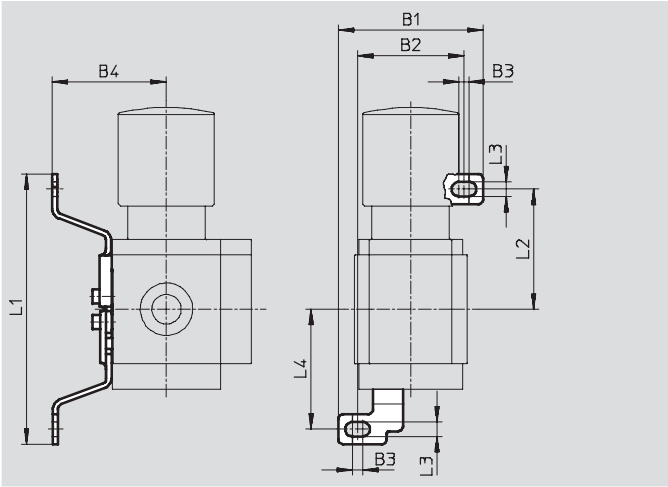


Accessories

3 Mounting bracket MS6-WB

- For wall mounting

Material:
Steel



Dimensions and Ordering Data										
B1	B2	B3	B4	L1	L2	L3	L4	Weight [lb]	Part No.	Type
3.13	2.44	0.18	2.17	6.20	2.80	0.26	2.80	0.24	532196	MS6-WB

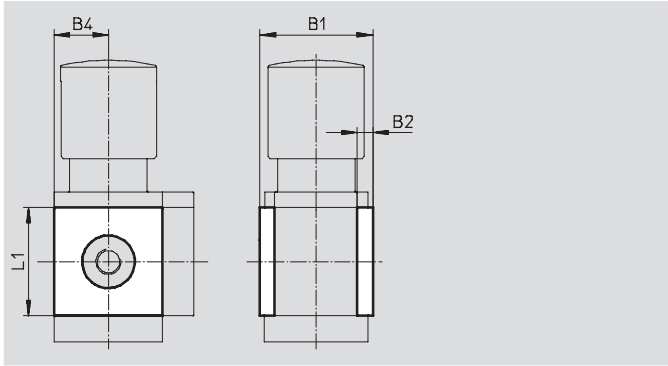
Standard Filters MS6N-LF – Inch Series

Accessories

1 Cover cap MS6-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

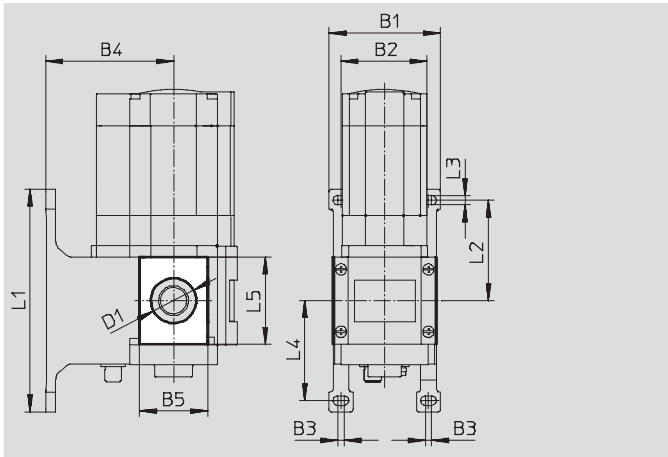


Dimensions and Ordering Data						
B1	B2	B4	L1	Part No.	Type	
2.64	0.31	1.22	2.44	538780	MS6-END	

Mounting plate MS6-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 Ø	L1	L2	L3	L4	L5	CRC ¹⁾	Weight [lb]	Part No.	Type
			WP	WPB											
3.11	2.44	0.18	2.13	3.56	1.91	1.26	6.22	2.80	0.26	2.80	2.44	2	0.03	535408	MS6-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.

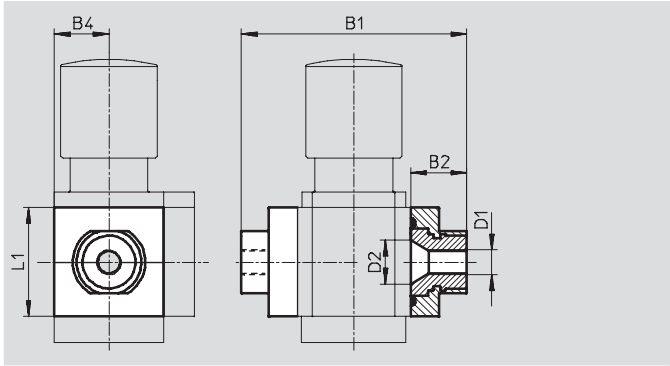
Standard Filters MS6N-LF – Inch Series

Accessories

2 Port plate MS6N-AQ...

- Adapter for pneumatic connection
- MS6-AGE for implementing threaded connection 3/4 NPT

Material:
Aluminum



Dimensions and Ordering Data								
B1	B2	B4	D1	D2	L1	Weight [lb]	Part No.	Type
4.53	1.04	1.22	1/4 NPT	0.94	2.44	0.60	526076	MS6N-AQN
			3/8 NPT				526077	MS6N-AQP
			1/2 NPT				526078	MS6N-AQR
			3/4 NPT				526079	MS6N-AQS

5 Body connector MS6-MV

- For connecting modules

Material:
Stainless steel/polyacetate



Ordering Data		
Weight [lb]	Part No.	Type
0.11	532799	MS6-MV

Standard Filters MS6N-LF – Inch Series

Accessories

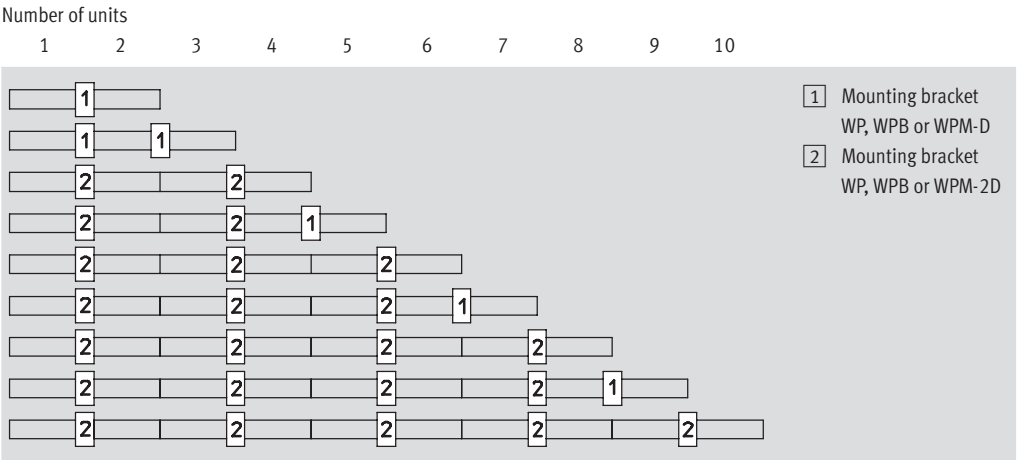
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Mounting Bracket MS6-WP...

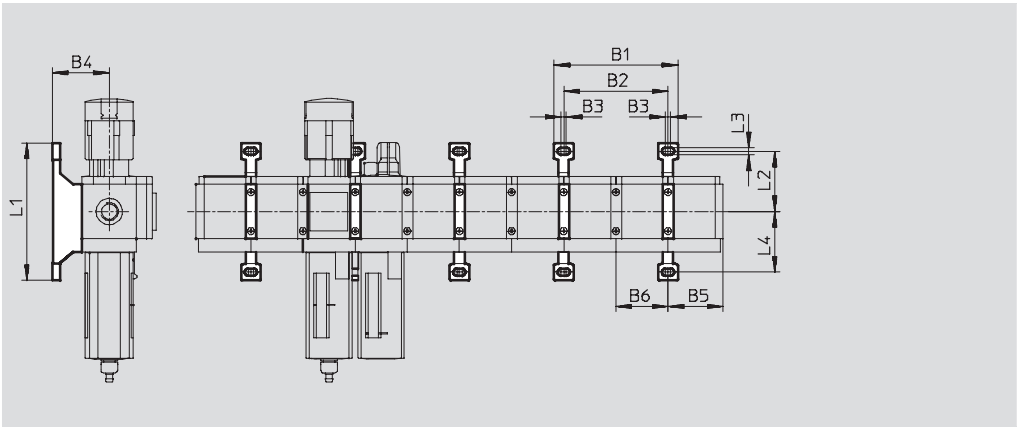
Suggested placement of wall mounting brackets when mounting air preparation combinations

1 unit: 2.44 in with WP, WPB
2.715 in with WPM-D

2 units: 4.88 in with WP, WPB
5.43 in with WPM-2D



Mounting dimensions



Type	B1	B2	B3	B4	B5	B6	L1	L2	L3	L4
MS6-WP	5.55	4.88	0.18	2.13	2.54	2.44	6.22	2.80	0.26	2.80
MS6-WPB				3.56						
MS6-WPM-...D	6.61	5.43	0.69	2.13	2.58	2.72	3.88	1.63		1.63

Standard Filters MS6N-LF – Inch Series

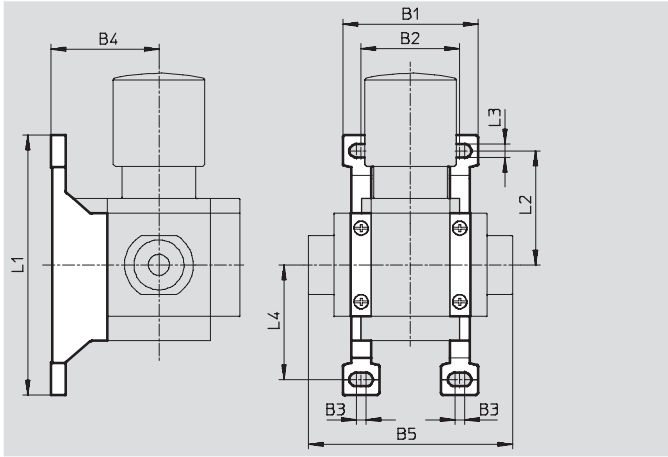
Accessories

Mounting bracket MS6-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



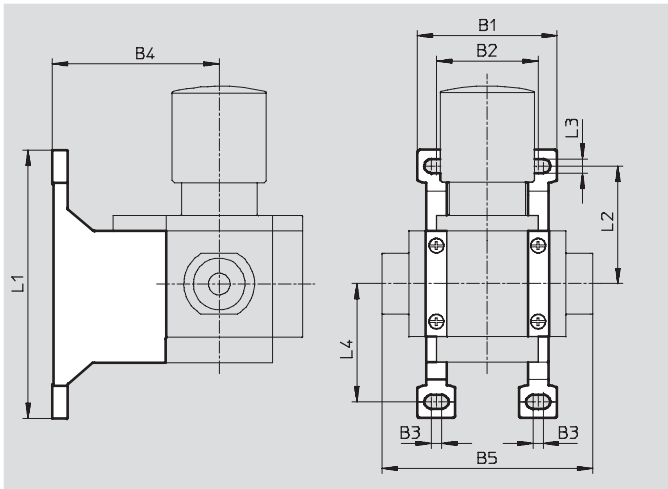
Dimensions and Ordering Data										
B1	B2	B3	B4	B5	L1	L2	L3	L4	Weight [lb]	Part No. Type
3.11	2.44	0.18	2.13	4.53	6.22	2.80	0.26	2.80	0.15	532195 MS6-WP

Mounting bracket MS6-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
3.11	2.44	0.18	3.56	4.53	6.22	2.80	0.26	2.80	0.23	526074 MS6-WPB

Standard Filters MS6N-LF – Inch Series

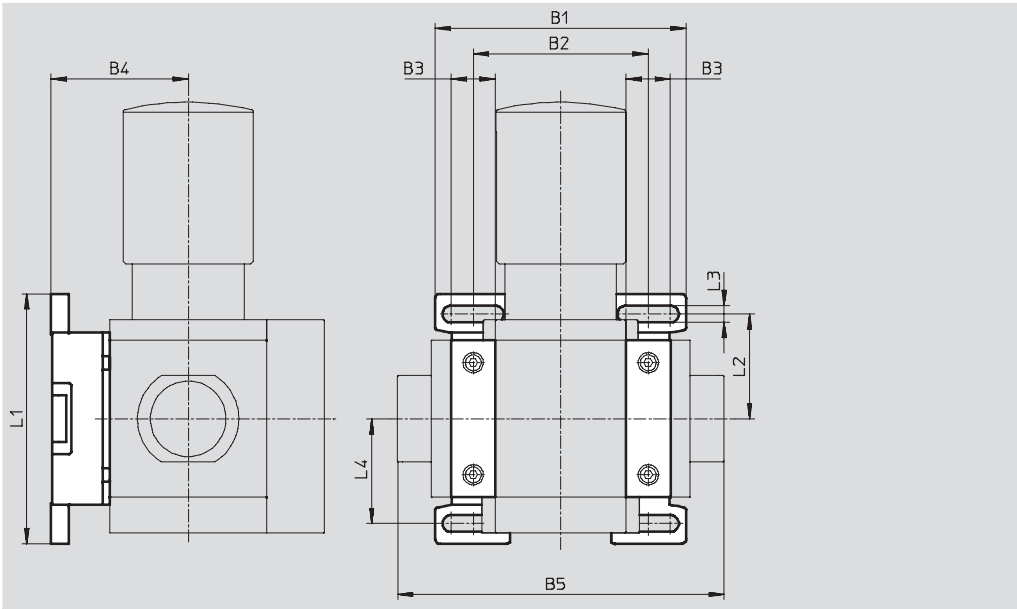
Accessories

Mounting bracket MS6-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

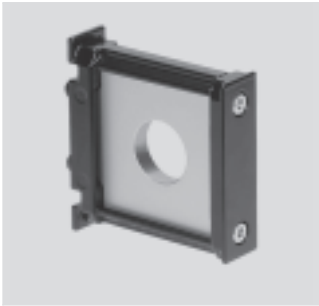


Dimensions and Ordering Data												
B1	B2	B3	B4	B5	L1	L2	L3	L4	Clearance	Weight [lb]	Part No.	Type
3.90	2.72	0.69	2.13	5.08	3.88	1.63	0.26	1.63	2.44	0.29	526073	MS6-WPM-D
6.61	5.43			7.80					4.88	0.31	532186	MS6-WPM-2D

Body connector MS6-MVM

- For installation of modules with regulating knob pointing downwards

Material:
Die-cast aluminum



Ordering Data		
Size	Part No.	Type
MS6	532801	MS6-MVM

Standard Filters MS6N-LF – Inch Series

Replacement Parts

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Ordering Data – Wearing Parts Kits			
Size	Description	Part No.	Type
MS6	O-rings, screws, sealing ring	673640	MS6-LF



Ordering Data – Filter Cartridges			
Size	Filtration grade [µm]	Part No.	Type
MS6	5	534499	MS6-LFP-C
	40	534500	MS6-LFP-E

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

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