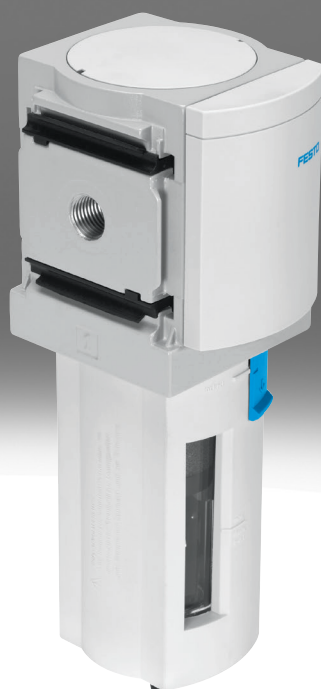


Fine filter MS6N-LFM-B

FESTO



Characteristics

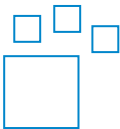
At a glance

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 [ms6n-lfm-b](#)



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:
- 19.4 ... 30.0 scfm

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

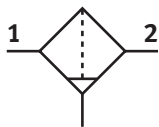
Bowl type

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

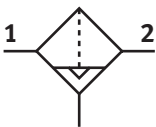
Condensate drain

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

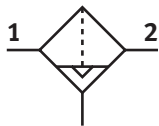
[M] Manually



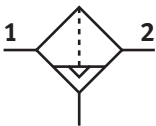
[H] Semi-automatic



[V] Automatic



[VC] Fully automatic, normally closed



Filter change sensing

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



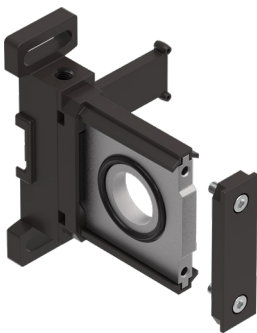
- For wall mounting an individual device
- For size 4 or 6

[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	
LFM	Fine and micro filters	
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	
A	0.01 µm	
B	1 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, terminals	
E3	External fully automatic condensate drain, electric, 230 V AC, terminals	
E4	External fully automatic condensate drain, electric, 24 V DC, terminals	
H	Semi-automatic	
M	Manually	
V	Automatic	

009	Flow rate	
	Standard	
HF	High flow rate	
010	Range of applications	
	None	
HP	Suitable for sealing air and purge air	
011	Filter change sensing	
	None	
DA	Differential pressure display, visual	
DN	Filter contamination indicator, M8 plug, NPN, 3-pin	
DNI	Filter contamination indicator, M12 plug, NPN, 4-pin, analogue output 4...20 mA	
DP	Filter contamination indicator, M8 plug, PNP, 3-pin	
DPI	Filter contamination indicator, M12 plug, PNP, 4-pin, analogue output 4...20 mA	
012	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	
WBM	Mounting centrally at rear (wall mounting top), connecting plates not required	
013	UL certification	
	None	
UL1	cULus ordinary location for Canada and USA	
014	Flow direction	
	Flow direction from left to right	
Z	Flow direction from right to left	

Datasheet

General technical data			
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	Fibre filter		
Grade of filtration	1 µm		
Type of mounting	Either: In-line installation With accessories		
Mounting position	Vertical +/-5°		
Air purity class at output	Compressed air to ISO 8573-1:2010:[5:-:3]		
Filter efficiency	99.99%		
Bowl guard	Plastic bowl guard, Integrated as metal bowl		
Condensate drain	Fully automatic, Manual, non-detenting, Manually rotating		
Max. condensate volume	38 cm³		
Differential pressure display	Visual display		
Filter efficiency, fine particles	99%		
Filter efficiency, oil aerosol	90%		

Standard nominal flow rate qnN	
Min. standard flow rate for clean air class	140 l/min
Max. standard flow rate for clean air class ¹⁾	950 l/min

1) High flow rate HF: 3000 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	Compressed air to ISO 8573-1:2010 [6:-:4] Inert gases	
Ambient temperature	-10 ... 60°C	
Media temperature	-10 ... 60°C	
Storage temperature	-10 ... 60°C	
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress	
Suitable for use with food ²⁾	See supplementary material information	

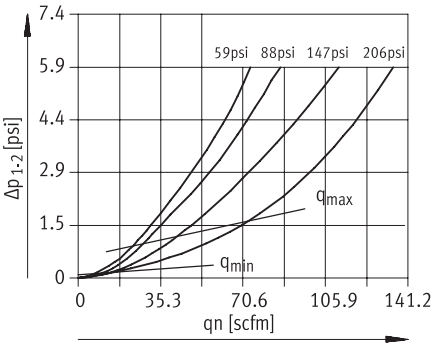
1) More information www.festo.com/x/topic/crc

2) More information www.festo.com/catalogue/ms-lfm → Support/Downloads.

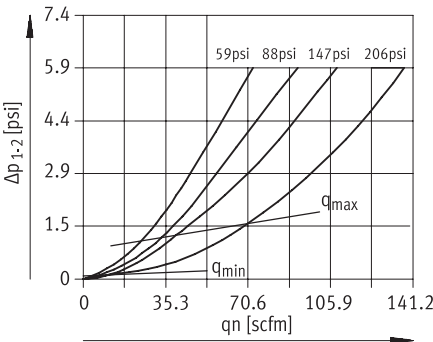
Materials		
Bowl type	Plastic tray with plastic basket [R]	Aluminium [U]
Material housing	Die-cast aluminium	
Material bowl	PC	Wrought aluminium alloy
Material filter	Borosilicate fibre	
Material seals	NBR	
Note on materials	RoHS-compliant	
LABS (PWIS) conformity	VDMA24364-B1/B2-L	

Datasheet

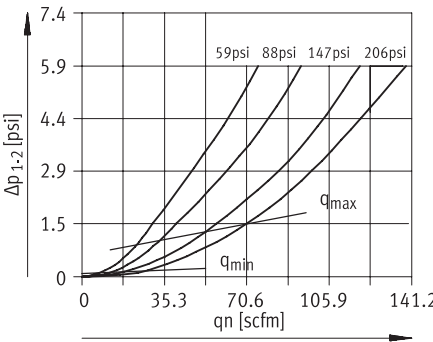
Standard flow rate q_n as a function of differential pressure Δp_{1-2} (MS6N-LFM-1/4)



Standard flow rate q_n as a function of differential pressure Δp_{1-2} (MS6N-LFM-3/8)



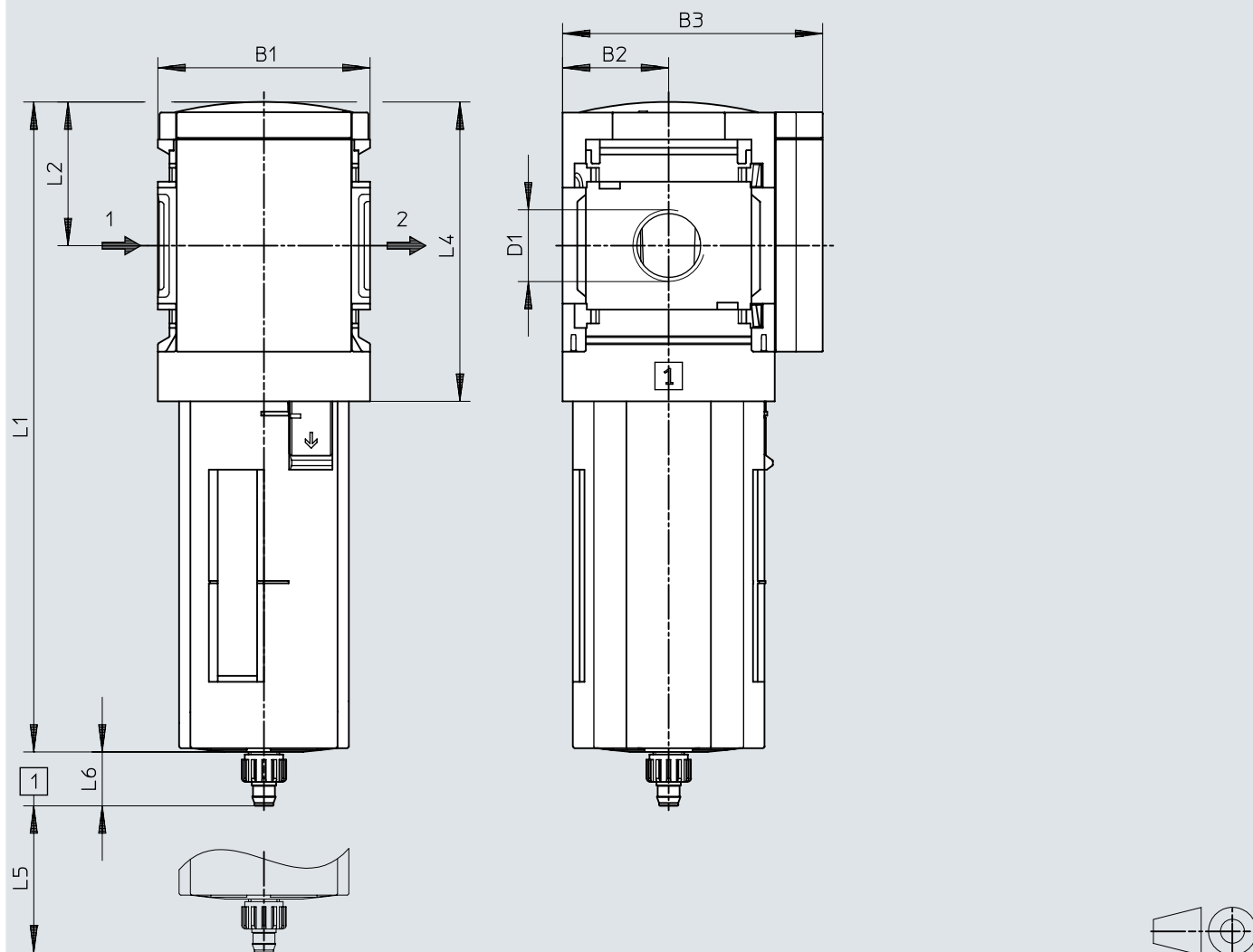
Standard flow rate q_n as a function of differential pressure Δp_{1-2} (MS6N-LFM-1/2)



Dimensions

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

Download CAD data www.festo.com

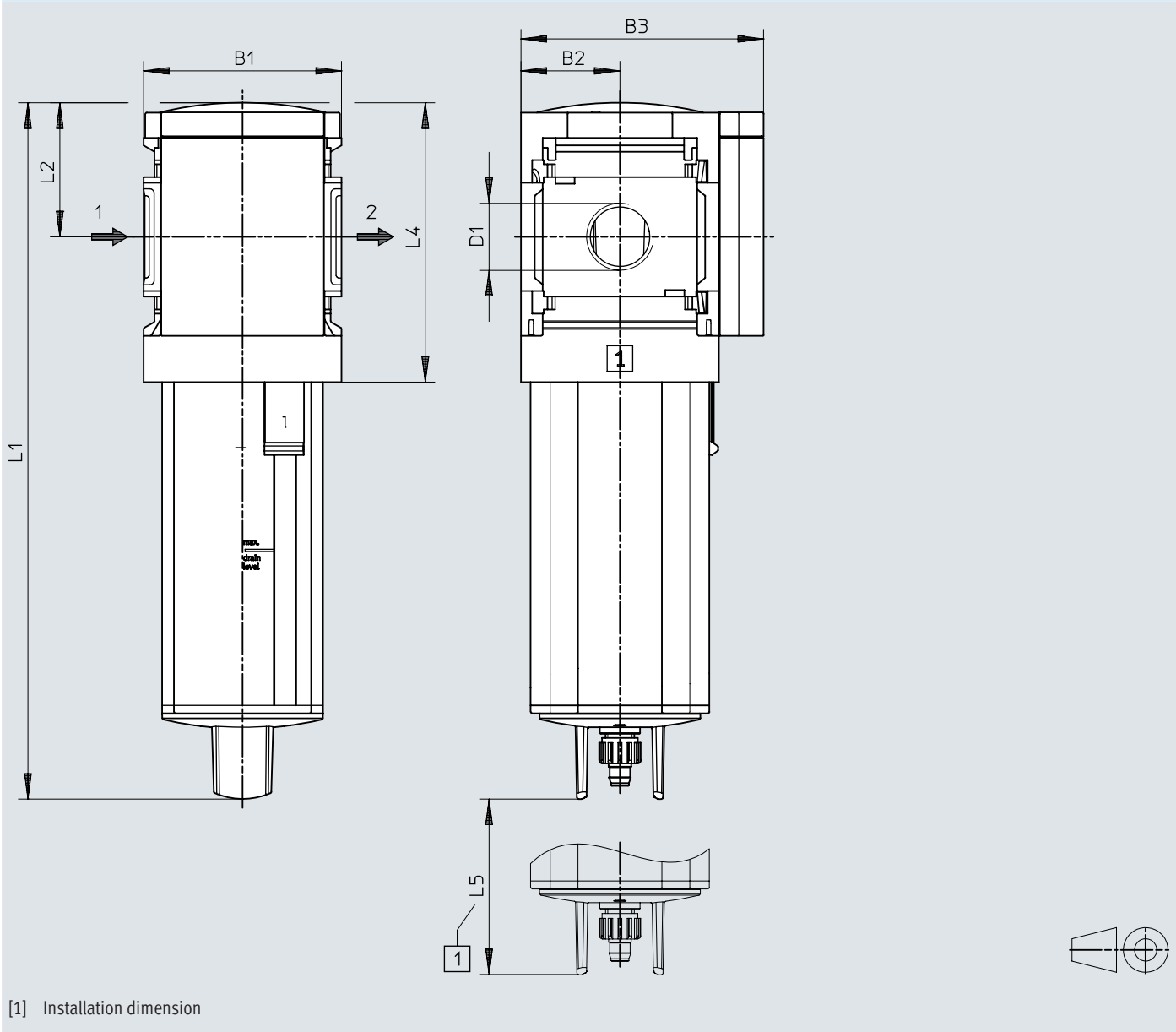


[1] Installation dimension

	B1 [inch]	B2 [inch]	B3 [inch]	D1	L1 [inch]	L2 [inch]	L4 [inch]	L5 [inch]	L5 [inch]
MS6N-LFM-1/4	2,44	1,22	2,99	1/4 NPT	7,44	1,65	3,43	3,15	0,62
MS6N-LFM-3/8				3/8 NPT					
MS6N-LFM-1/2				1/2 NPT					

Dimensions

Dimensions – Condensate drain, manual, rotary, with metal bowl U Download CAD data www.festo.com

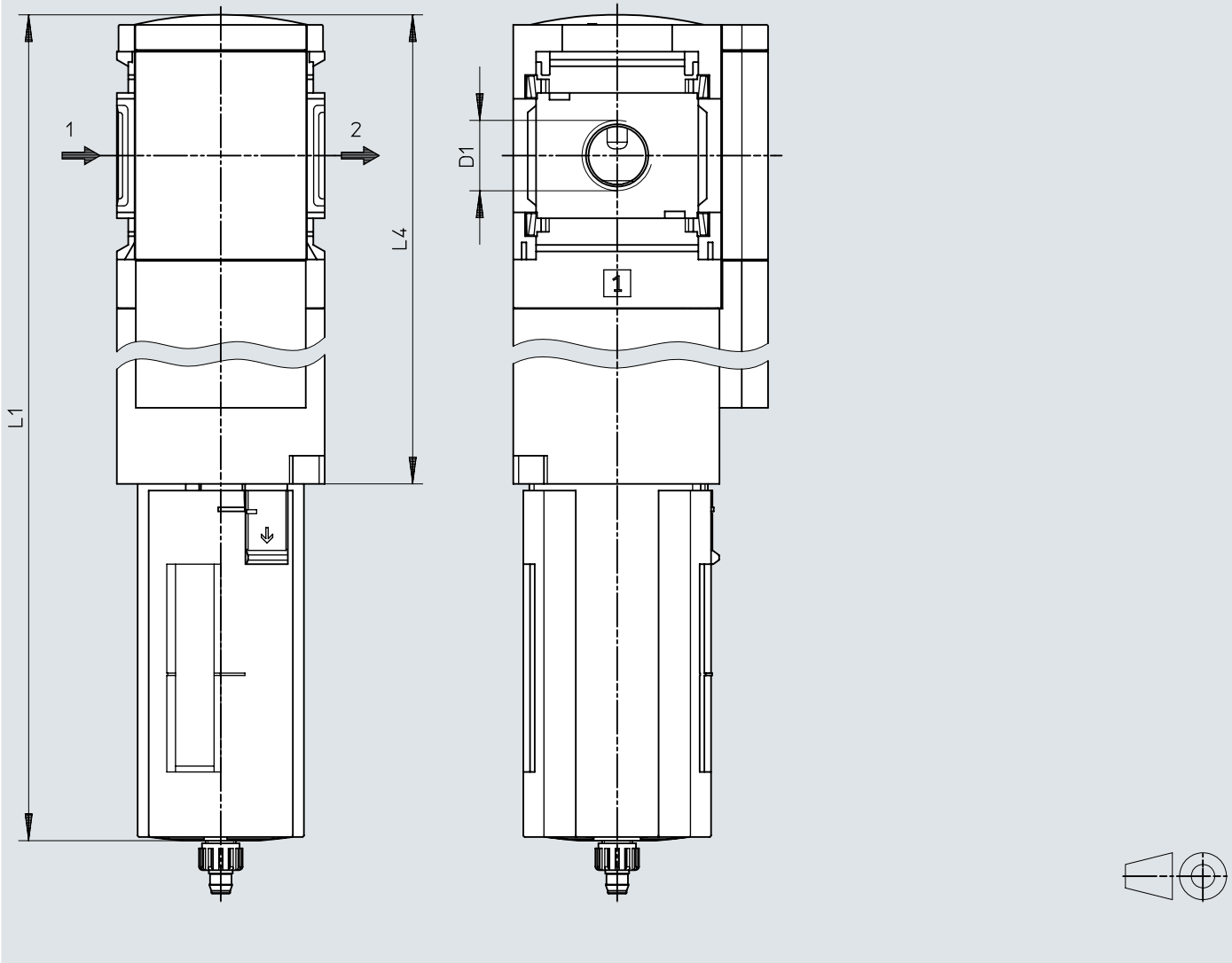


	B1 [inch]	B2 [inch]	B3 [inch]	D1	L1 [inch]	L2 [inch]	L4 [inch]	L5 [inch]
MS6N-LFM-1/4	2,44	1,22	2,99	1/4 NPT	7,80	1,65	3,43	3,15
MS6N-LFM-3/8				3/8 NPT				
MS6N-LFM-1/2				1/2 NPT				

Dimensions

Dimensions – High flow rate HF, with plastic bowl guard R

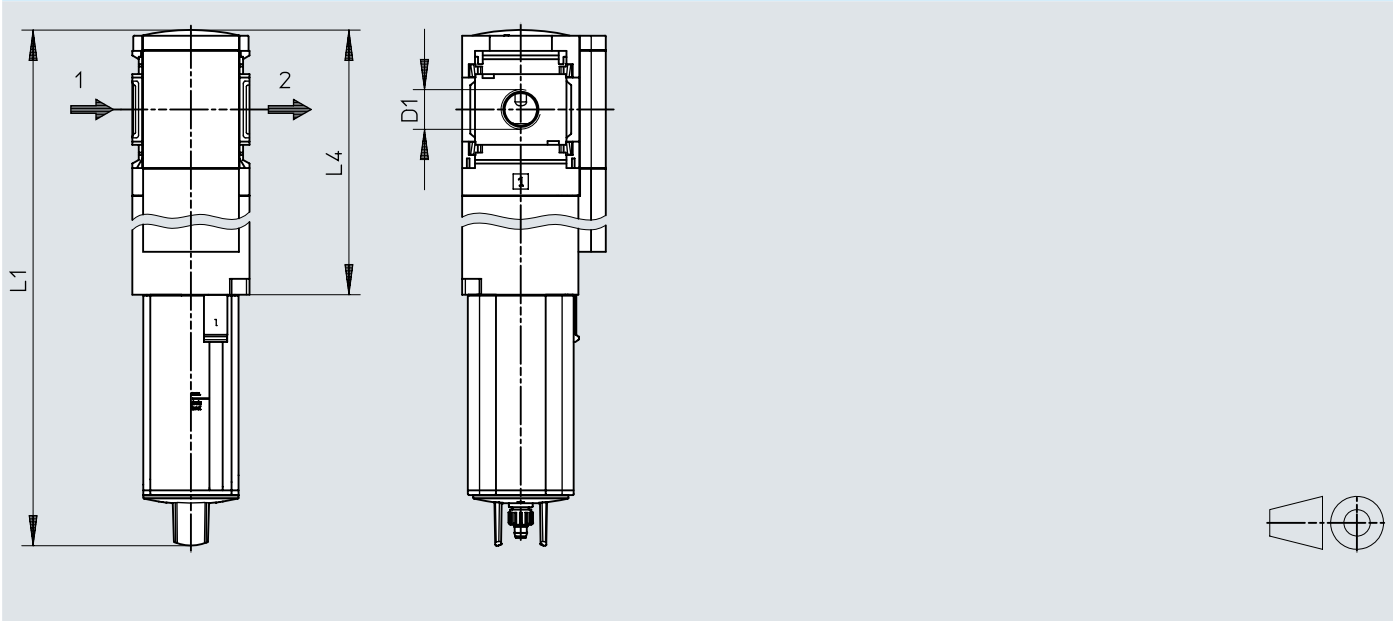
Download CAD data www.festo.com



	D1	L1 [inch]	L4 [inch]
MS6N-LFM-1/4-...-HF	1/4 NPT	12,32	8,15
MS6N-LFM-3/8-...-HF	3/8 NPT		
MS6N-LFM-1/2-...-HF	1/2 NPT		

Dimensions

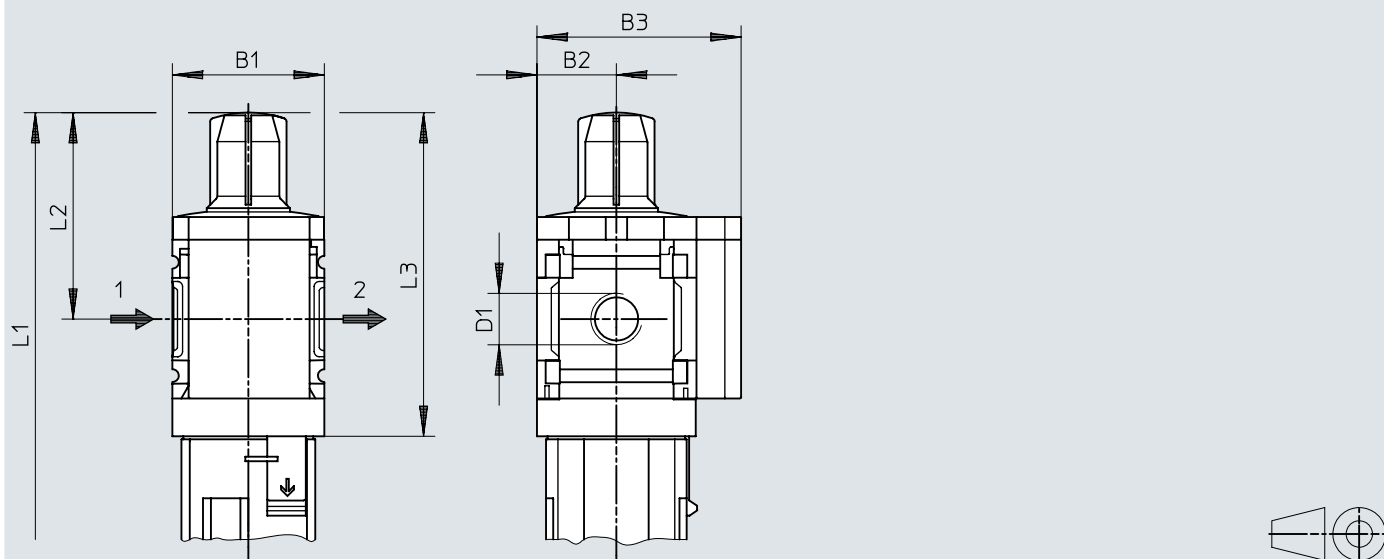
Dimensions – High flow rate HF, with metal bowl U Download CAD data www.festo.com



	D1	L1 [inch]	L4 [inch]
MS6N-LFM-1/4-...-HF	1/4 NPT	13,39	8,15
MS6N-LFM-3/8-...-HF	3/8 NPT		
MS6N-LFM-1/2-...-HF	1/2 NPT		

Dimensions

Dimensions – Differential pressure display DA

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


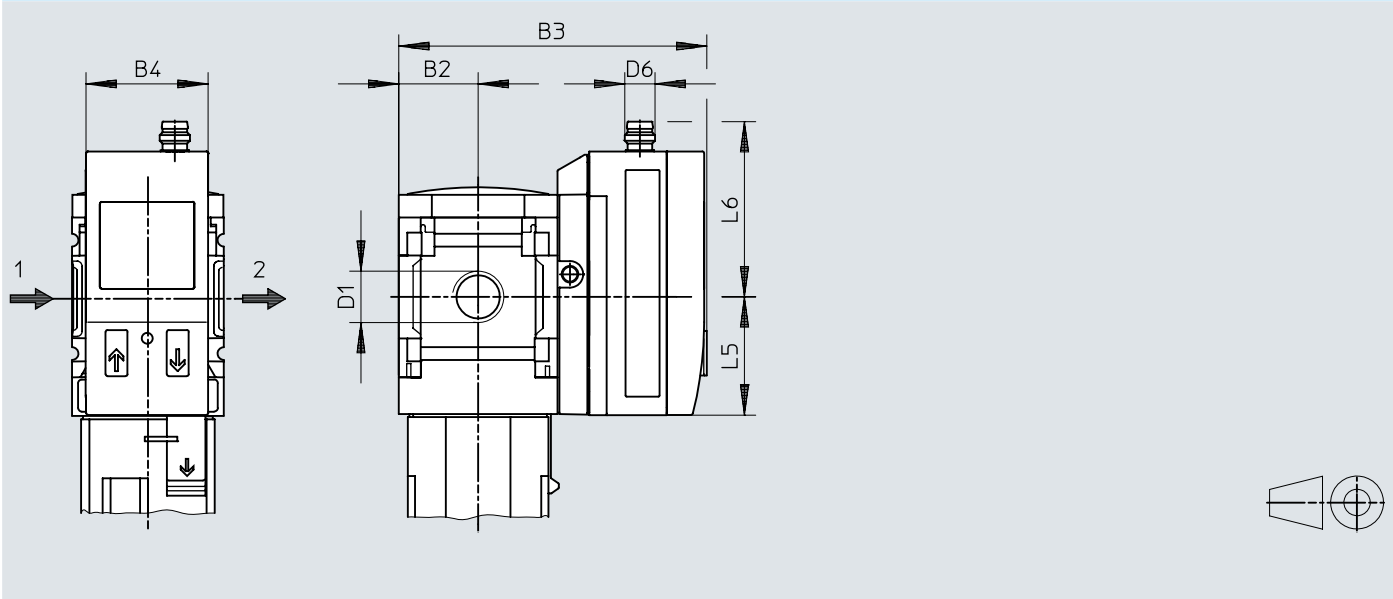
	B1 [inch]	B2 [inch]	B3 [inch]	D1	L1 [inch]		L2 [inch]	L3 [inch]
					1)	2)		
MS6N-LFM-1/4-...-DA	2,44	1,22	2,99	1/4 NPT	9,02	10,12	2,68	4,45
MS6N-LFM-3/8-...-DA				3/8 NPT				
MS6N-LFM-1/2-...-DA				1/2 NPT				
MS6N-LFM-1/4-...-HF-DA	2,44	1,22	2,99	1/4 NPT	13,74	14,80	2,68	4,45
MS6N-LFM-3/8-...-HF-DA				3/8 NPT				
MS6N-LFM-1/2-...-HF-DA				1/2 NPT				

1) Bowl guard, polymer

2) Bowl guard, metal

Dimensions

Dimensions – Filter contamination indicator DP, DN, DPI, DNI Download CAD data www.festo.com



	B2 [inch]	B3 [inch]	B4 [inch]	D1	D6	L5 [inch]	L6 [inch]
MS6N-LFM-1/4-...-DP/DN	1,22	4,06	1,27	1/4 NPT	M8x1	1,38	1,84
MS6N-LFM-3/8-...-DP/DN				3/8 NPT			
MS6N-LFM-1/2-...-DP/DN				1/2 NPT			
MS6N-LFM-1/4-...-DPI/DNI	1,22	4,06	1,27	1/4 NPT	M12x1	1,38	2,20
MS6N-LFM-3/8-...-DPI/DNI				3/8 NPT			
MS6N-LFM-1/2-...-DPI/DNI				1/2 NPT			

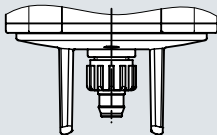
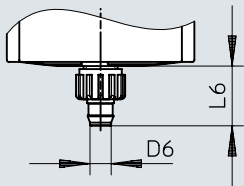
Dimensions

Dimensions – Condensate drain, manual, rotary

Download CAD data www.festo.com

MS6 – . . . -R-M

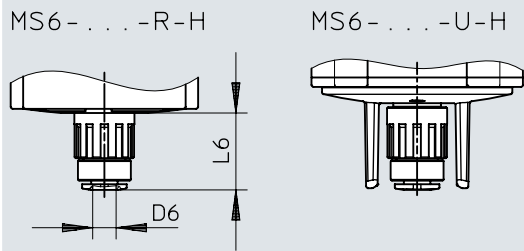
MS6 – . . . -U-M



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

Dimensions

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



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

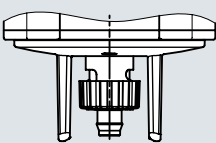
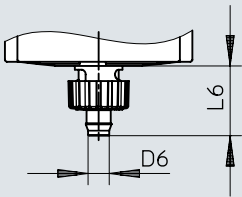
Dimensions

Dimensions – Condensate drain, fully automatic

Download CAD data www.festo.com

MS6-...-R-V

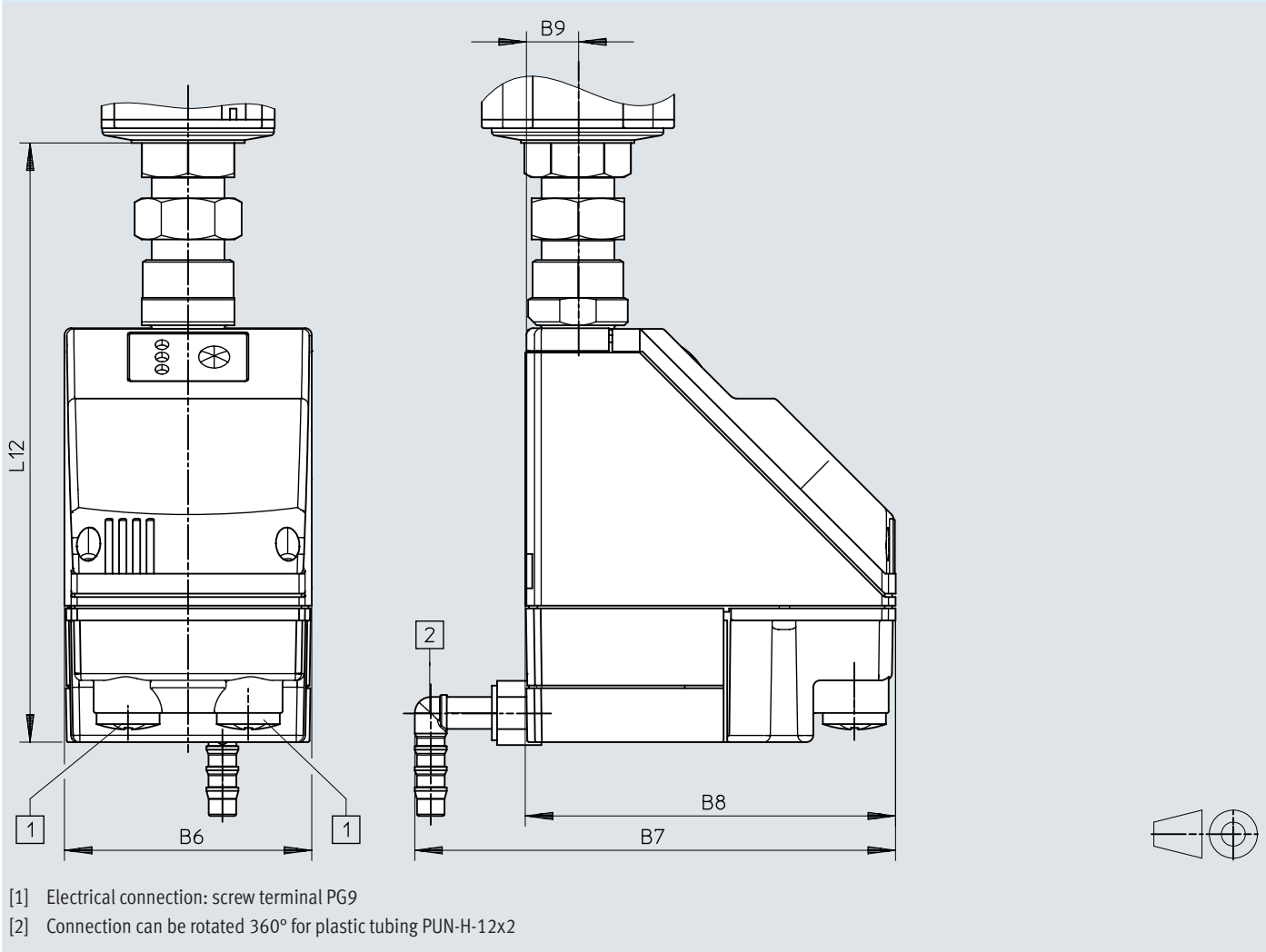
MS6-...-U-V



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

Dimensions

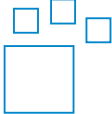
Dimensions – Condensate drain fully automatic, electrically controlled Download CAD data www.festo.com



	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

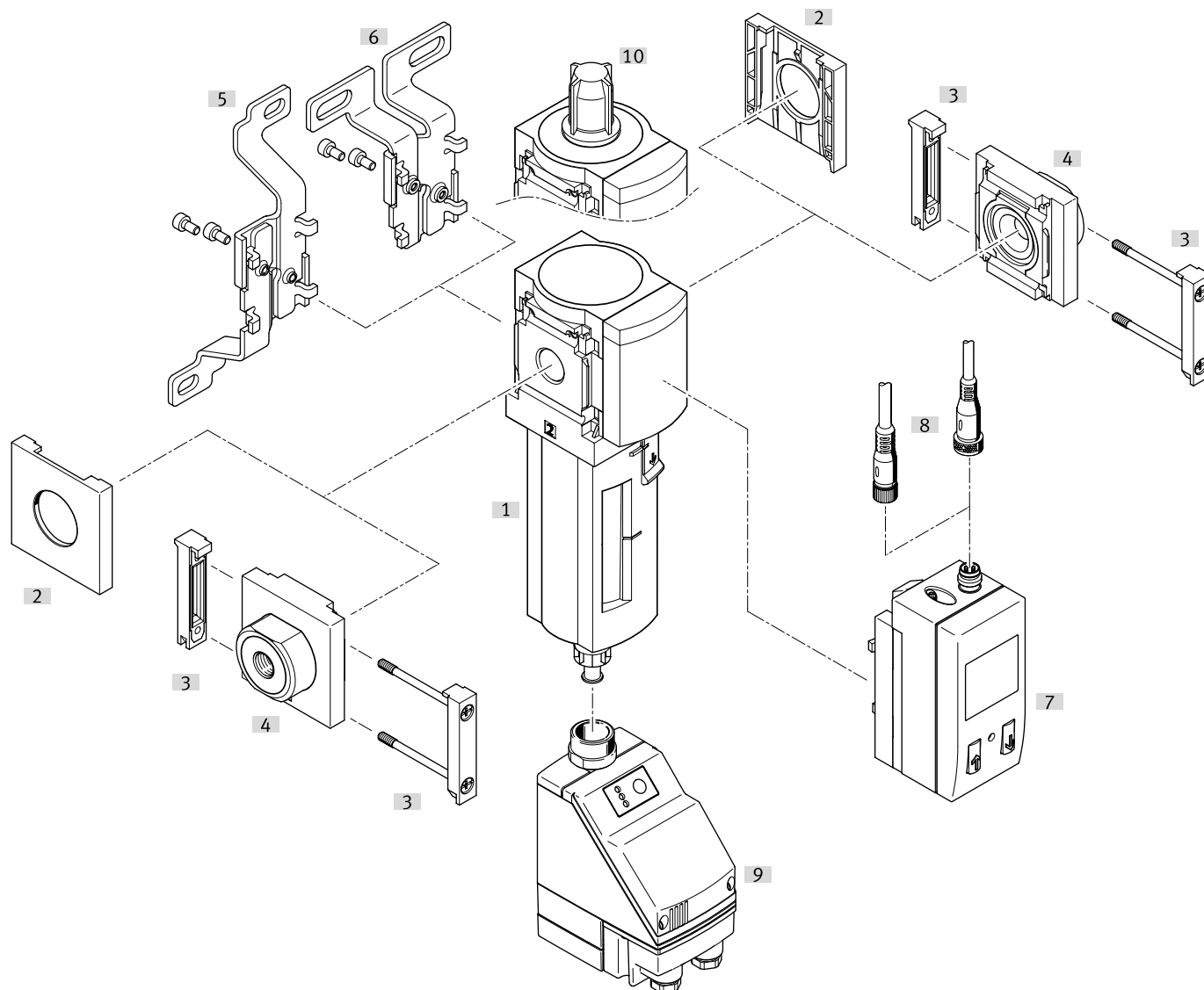
Ordering data

Ordering data						
	Pneumatic connection, port 1	Grade of filtration	Condensate drain	Product weight	Part no.	Type
	1/4 NPT	1 µm	Fully automatic, Manual, non-de-tenting	600 g	536857	MS6N-LFM-1/4-BRV-DA
					531854	MS6N-LFM-1/4-BRV
				820 g	531872	MS6N-LFM-1/4-BUV
					536863	MS6N-LFM-1/4-BUV-DA
			Manually rotating	600 g	536851	MS6N-LFM-1/4-BRM-DA
					531848	MS6N-LFM-1/4-BRM
	3/8 NPT		Fully automatic, Manual, non-de-tenting		531856	MS6N-LFM-3/8-BRV
					536858	MS6N-LFM-3/8-BRV-DA
				820 g	536864	MS6N-LFM-3/8-BUV-DA
					531874	MS6N-LFM-3/8-BUV
			Manually rotating	600 g	531853	MS6N-LFM-3/8-BRM-Z
					531850	MS6N-LFM-3/8-BRM
	1/2 NPT	Fully automatic, Manual, non-de-tenting		536852	MS6N-LFM-3/8-BRM-DA	
				536859	MS6N-LFM-1/2-BRV-DA	
				531855	MS6N-LFM-1/2-BRV	
				536862	MS6N-LFM-1/2-BRV-DA-Z	
		820 g	536865	MS6N-LFM-1/2-BUV-DA		
			531873	MS6N-LFM-1/2-BUV		
Manually rotating			600 g	531849	MS6N-LFM-1/2-BRM	
				536853	MS6N-LFM-1/2-BRM-DA	
		531852	MS6N-LFM-1/2-BRM-Z			

Ordering data – Modular product system			
	Short type code	Part no.	Type
	MS6N-LFM	527671	MS6N-LFM

Peripherals

Peripherals overview



Accessories		→ Link
Type/order code	Description	
[1] Fine filter M6N-LFM-B		ms6n-lfm-b
[2] Cover cap MS6-END	For devices without connecting plate	20
[3] Module connector MS6-MV1	For device combinations and individual devices with connecting plate	19
[4] Connecting plate SET MS6-AQ..	Order code [AQ...]; for device combinations	20
[5] Mounting bracket MS6-WB	For individual device	19
[6] Mounting bracket MS...-WBM	Only available for size 4	-
[7] Filter contamination indicator DP/DN/DPI/DNI	Order code [DP], [DN], [DPI], [DNI]	ms4n-lfm-b
[8] Connecting cable NEBA-M8...-LE3, NEBA-M12...-LE4		20
[9] Condensate drains PWEA	Order code [E2], [E3], [E4]	pwea
[10] Differential pressure display DA	Order code [DA]	ms6n-lfm-b
[11] Fine-filter cartridge	Not shown	19

Accessories

Fine-filter cartridges							
	Size	Grade of filtration	Material filter	Corrosion resistance class CRC ¹⁾	Note on materials ²⁾	Part no.	Type
	6	1 µm	Borosilicate fibre	2 - Moderate corrosion stress	RoHS-compliant	532910	MS6-LFM-B
						552092	MS6-LFM-B-HF
						547923	MS6-LFM-BI

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

2) MS...-HF: High flow rate; MS...-...I: Application area HP, suitable for sealing air and purge air

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
					541544	MS6-WP-EX
				115 g	526074	MS6-WPB
					541542	MS6-WPB-EX
				144 g	526073	MS6-WPM-D
				154 g	532186	MS6-WPM-2D

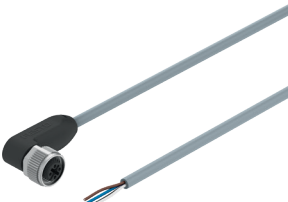
Mounting bracket MS6-WB						
	Size	Material bracket	LABS (PWIS) conformity	Product weight	Part no.	Type
	6	Steel	VDMA24364-B1/B2-L	121 g	532196	MS6-WB

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

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 MS6-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