

Activated carbon filter MS9N-LFX

FESTO



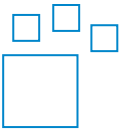
Characteristics

At a glance

- Removes liquid and gaseous oil particles from compressed air using activated carbon
- Eliminates odors and vapors
- Available with filter cartridge for low flow rates, suitable for sealing air and purge air applications
- Prefiltration with micro filter MS-LFM-A (grade of filtration 0.01 µm) is recommended
- Air quality class at the output [1.4.1] to ISO 8573-1

Ordering data - modular system

Link [ms9n-lfx](#)



Configurable product

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

Size

Width dimension: 90 mm

Standard nominal flow rate:

- 6500 l/min

Pneumatic connection

The installation of connection plates makes it easier to replace the module if necessary (e.g., when using piping).

Bowl type

Shell protection by means of integrated metal shell.

Type of mounting

[WP] Mounting bracket standard design



- Mounting attachment and connector for air preparation unit combination or for individual device with port plates
- In conjunction with connection plate MS9-AQ... for wall mounting of a single appliance

[WPB] Mounting bracket for large wall gap



- For connecting the modules for wall mounting
- In conjunction with connection plate MS9-AQ... for wall mounting of a single appliance

[WPM] Mounting bracket for hooking in air preparation units



- Mounting attachment and connector for air preparation unit combination
- Mount and dismount the service unit combination quickly
- Spacer for maintaining the mounting gap
- Same wall distance for mixing combination with series MS6 when using mounting bracket MS6-WPB

EX certification EU

Optional device variant EX4 for use in potentially explosive areas of zones 1, 2, 21 and 22

Characteristics

UL certification

Optional device variant UL1, which meets the safety requirements for the Canadian and US markets.

Flow direction

Available with opposite flow direction.

Type code

001	Series	
MS	MS series	
002	Size	
9	Width dimension 90 mm	
003	Function	
LFX	Active carbon filter	
004	Pneumatic connection	
3/4	Internal thread G3/4	
1	Internal thread G1	
AGD	Sub-base G1/2	
AGE	Sub-base G3/4	
AGF	Sub-base G1	
AGG	Sub-base G1 1/4	
AGH	Sub-base G1 1/2	
AQR	Sub-base 1/2 NPT	
AQS	Sub-base 3/4 NPT	
AQT	Sub-base 1 NPT	
AQU	Sub-base 1 1/4 NPT	
AQV	Sub-base 1 1/2 NPT	
N3/4	Internal thread 3/4 NPT	
N1	Internal thread 1 NPT	

005	Bowl type	
U	Aluminum	
006	Type of mounting	
	Without mounting bracket	
WP	Mounting bracket standard design	
WPB	Mounting bracket for large wall gap	
WPM	Mounting bracket for hooking in air preparation units	
007	EX certification EU	
	None	
EX2	II 3GD to EU Explosion Protection Directive (ATEX)	
EX4	II 2GD	
008	UL certification	
	None	
UL1	cULus ordinary location for Canada and USA	
009	Flow direction	
	Flow direction from left to right	
Z	Flow direction from right to left	

Datasheet

General technical data

Pneumatic connection 1	1 NPT
Pneumatic connection 2	1 NPT
Size	9
Structural design	Activated carbon filter
Type of mounting	Alternatively: In-line installation With accessories
Mounting position	Vertical $\pm 5^\circ$
Air quality class at the output	Compressed air according to ISO 8573-1:2010 [3:4:1]
Residual oil content	0.003 mg/m ³

Standard nominal flow rate qnN

Max. standard flow rate for air quality class	6,500 l/min
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Operating and ambient conditions

Operating pressure	0 ... 20 bar
Operating medium	Compressed air according to ISO 8573-1:2010 [3:4:2]
Ambient temperature	-10 ... 60°C
Temperature of medium	5 ... 30°C
Storage temperature	-10 ... 60°C
Corrosion resistance class (CRC) ¹⁾	2 - Moderate corrosion stress

1) Further information, visit www.festo.com/x/topic/kbk

ATEX

ATEX category gas	II 2G
Type of ignition protection for gas	Ex h IIC T6 Gb X
ATEX category for dust	II 2D
Type of (ignition) protection for dust	Ex h IIIC T60°C Db X
Explosive ambient temperature	-10°C ≤ Ta ≤ +60°C
CE marking (see declaration of conformity) ¹⁾	as per EU explosion protection directive (ATEX)
UKCA marking (see declaration of conformity) ²⁾	acc. to UK EX instructions

1) Further information www.festo.com/catalogue/ms-lfx → Support/Downloads.

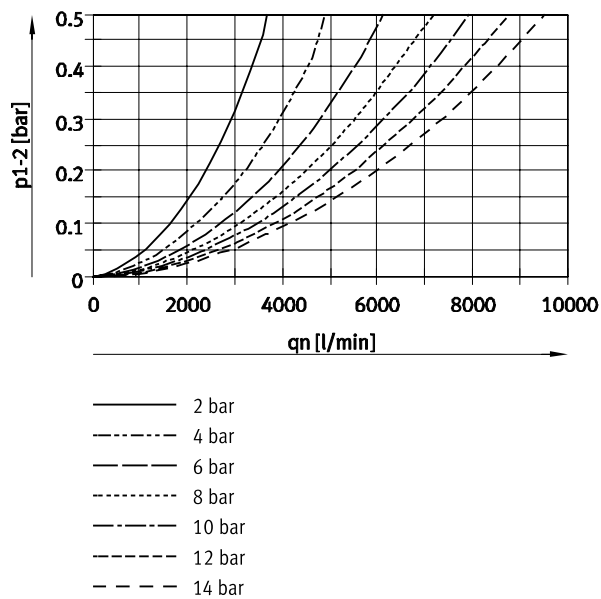
2) Further information www.festo.com/catalogue/ms-lfx → Support/Downloads.

Materials

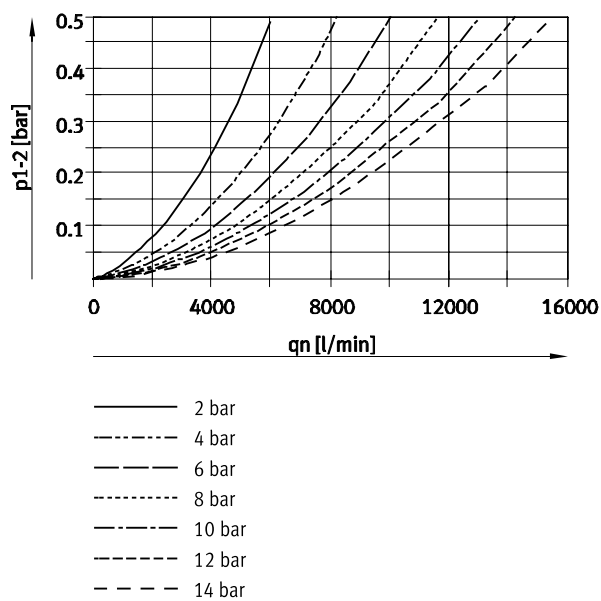
Housing material	Die-cast aluminum
Material of bowl	Wrought aluminum alloy
Inspection window material	PA
Compressed air filter material	Activated carbon
Seals material	NBR
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Datasheet

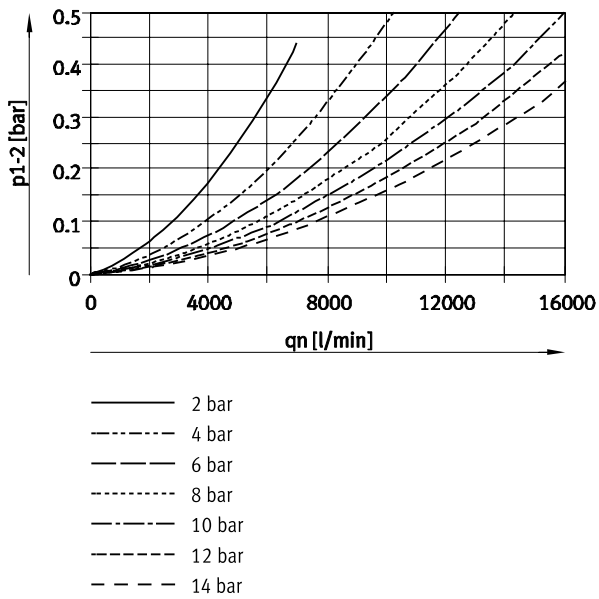
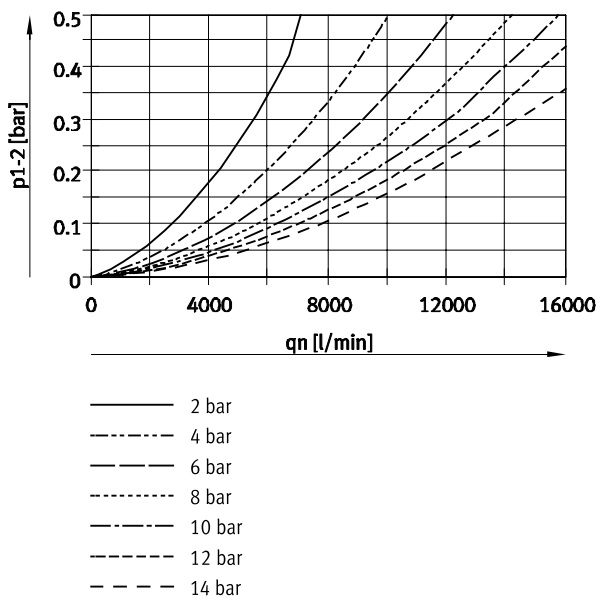
Standard flow rate q_n as a function of differential pressure Δp_{1-2} – (pneumatic connection G1/2 NPT)



Standard flow rate q_n as a function of differential pressure Δp_{1-2} – (pneumatic connection G3/4 NPT)

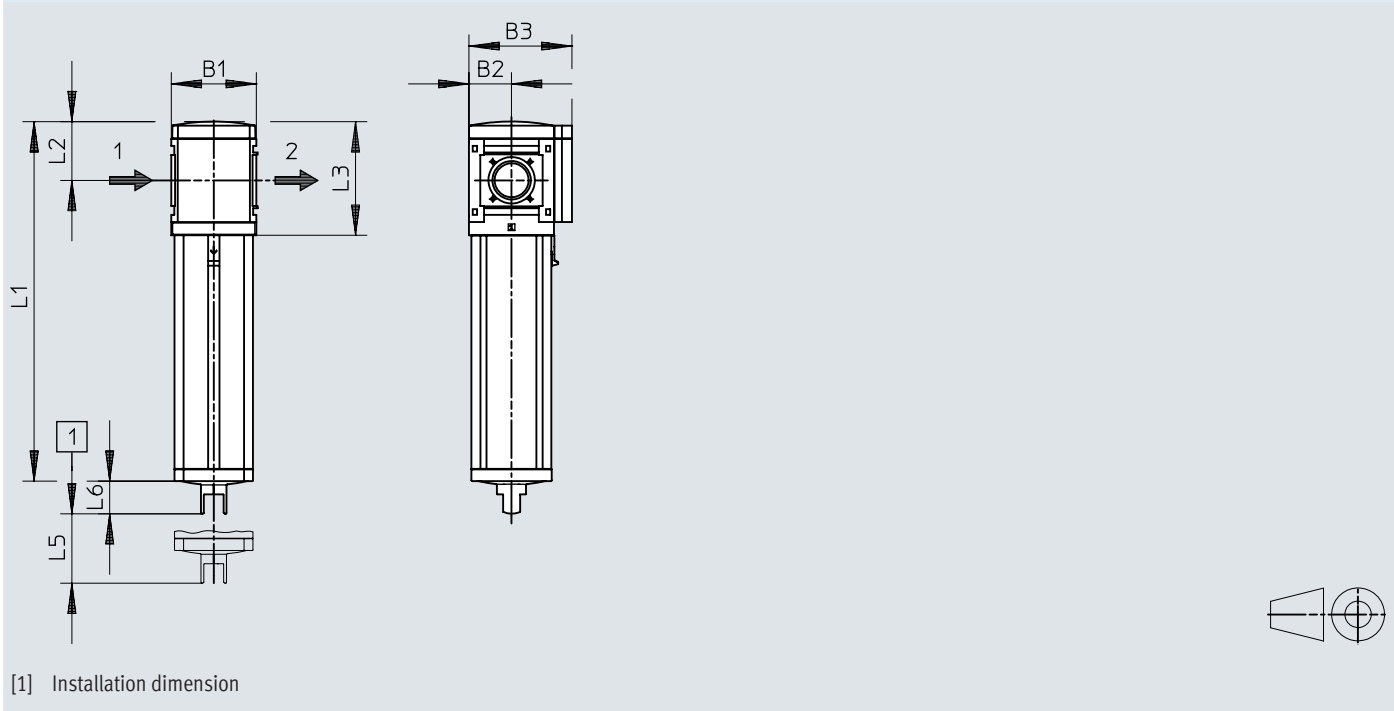


Datasheet

Standard flow rate q_n as a function of differential pressure Δp_{1-2} – (pneumatic connection G1 NPT)Standard flow rate q_n as a function of differential pressure Δp_{1-2} – (pneumatic connection 1 1/2 NPT)

Dimensions

Dimensions – Module without connecting thread, without connecting plate G Download CAD data www.festo.com

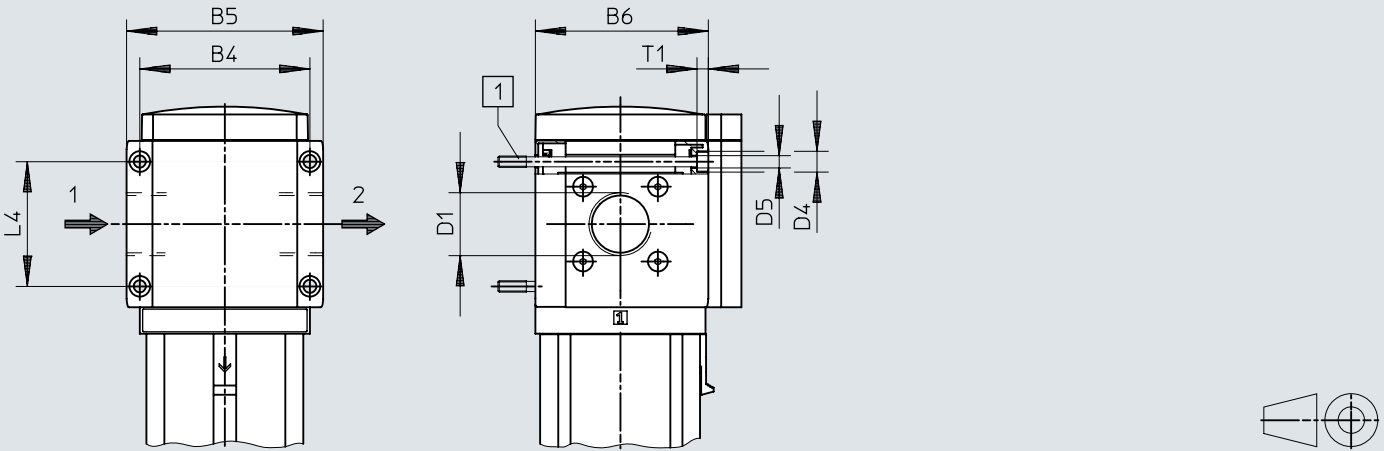


	B1	B2	B3	L1	L2	L3	L5	L6
MS9-LFX-G	90	45	109	380,5	62	120	50	34,5

Dimensions

Dimensions – Connecting thread/connecting plate with internal thread 3/4,
1, N3/4, N1

Download CAD data www.festo.com

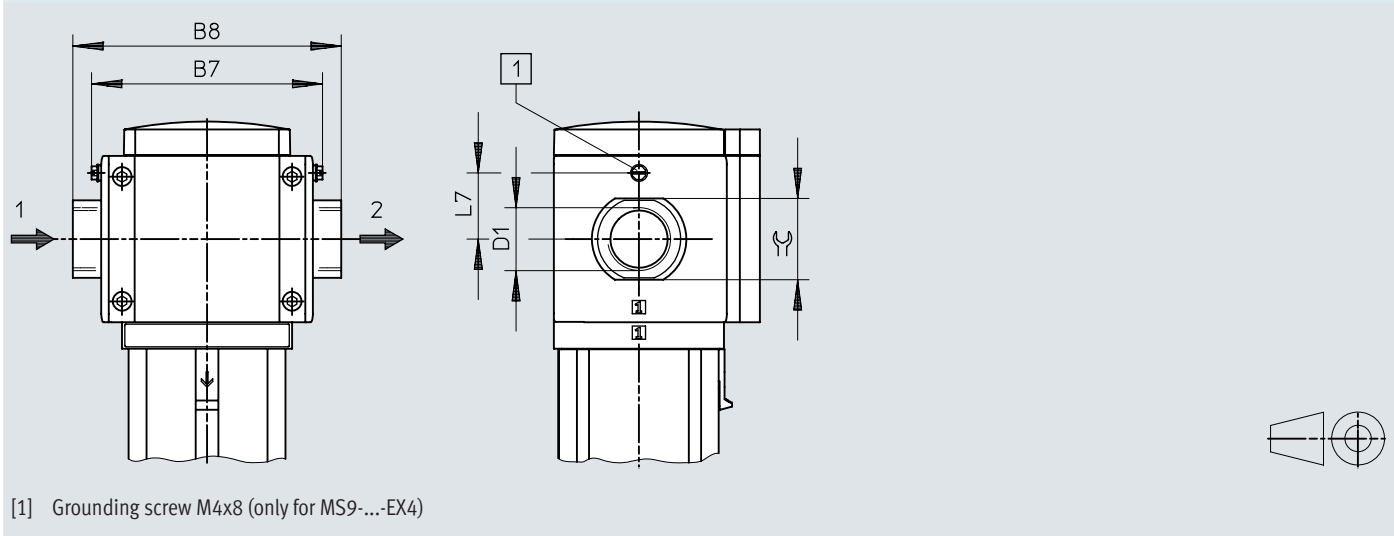


[1] Retaining screw M6xmin.90 according to DIN 912 (not in scope of delivery) for wall mounting without mounting bracket

	B4	B5	B6	D1	L4
MS9-LFX-3/4	90	104	91,5	G3/4	66
MS9-LFX-1				G1	
MS9-LFX-N3/4	90	104	91,5	3/4 NPT	66
MS9-LFX-N1				1 NPT	

Dimensions

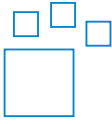
Dimensions – Connecting thread/connecting plate with connecting plate
AG.../AQ... Download CAD data www.festo.com



	B7		B8	D1	L7	≅
		EX4			EX4	
MS9-LFX-AGD	112	122	132	G1/2	35	30
MS9-LFX-AGE			132	G3/4		36
MS9-LFX-AGF			142	G1		41
MS9-LFX-AGG			162	G1 1/4		50
MS9-LFX-AGH			176	G1 1/2		55
MS9-LFX-AQR	112	122	132	1/2 NPT	35	30
MS9-LFX-AQS			132	3/4 NPT		36
MS9-LFX-AQT			142	1 NPT		41
MS9-LFX-AQU			162	1 1/4 NPT		50
MS9-LFX-AQV			176	1 1/2 NPT		55

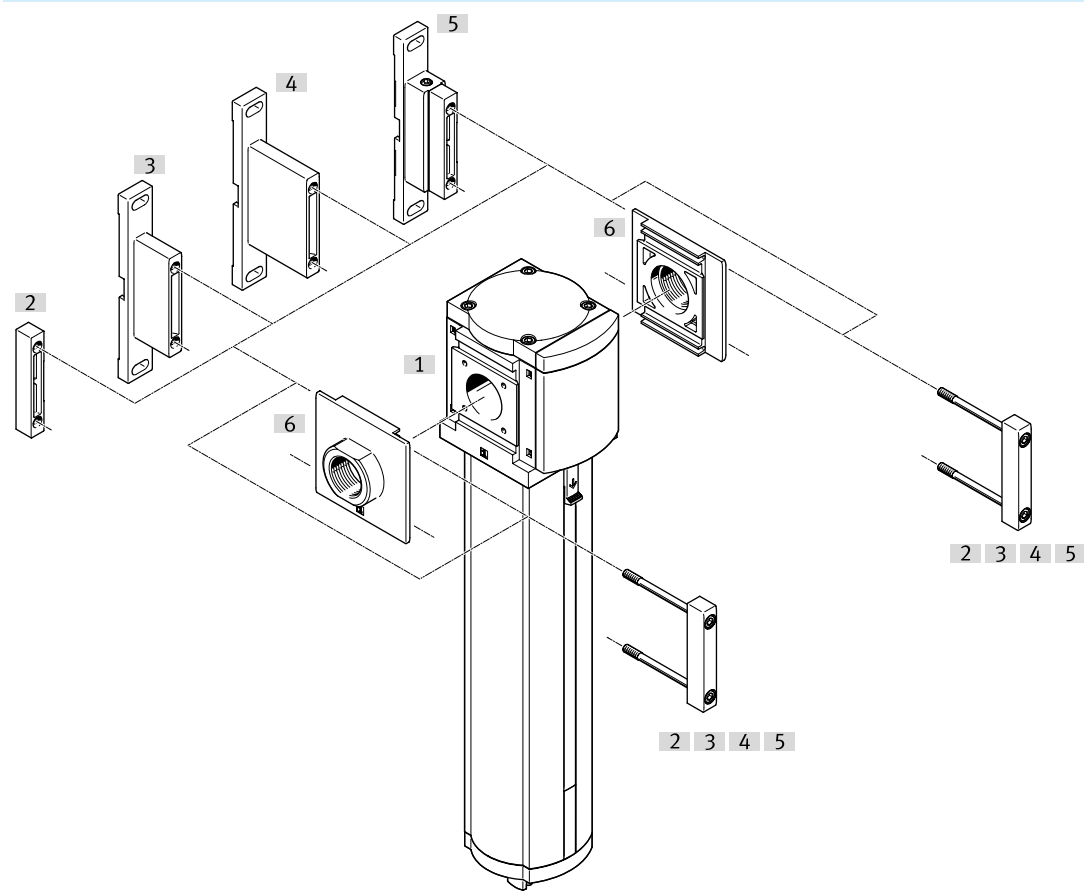
Ordering data

Ordering data				
	Pneumatic connection 1	Product weight	Part no.	Type
	1 NPT	2,000 g	553034	MS9-LFX-N1-U

Ordering data– Modular product system				
	Type code	Part no.	Type	
	MS9-LFX	552942	MS9-LFX	

Peripherals overview

Peripherals overview



Accessories		→ Page/Internet
Type/order code	Description	
[1] Ultra-fine filter MS9N-LFX		ms9-lfx
[2] Module connector MS9-MV	for appliance combinations and individual appliances with connection plate	13
[3] Mounting bracket MS9-WP	for single device	13
[4] Mounting bracket MS9-WPB	for single device	13
[5] Mounting bracket MS9-WPM	for single device	14
[6] Sub-base-SET MS9-AQ...	for device combinations	13
[7] Activated carbon filter cartridge MS9-LFX	Not shown	ms9-lfm

Accessories

Activated carbon filter cartridge - MS9-LFX					
	Compressed air filter material	LABS (PWIS) conformity	Part no.	Type	
	Activated carbon	VDMA24364-B1/B2-L	552946	MS9-LFX	

Sub-base-SET MS9-AG...					
	Pneumatic connection 1	LABS (PWIS) conformity	Product weight	Part no.	Type
	1/2 NPT	VDMA24364-B1/B2-L	300 g	552959	MS9-AQR
	3/4 NPT			552960	MS9-AQS
	1 NPT			552961	MS9-AQT
	1 1/4 NPT		400 g	552962	MS9-AQU
	1 1/2 NPT			552963	MS9-AQV

Module connector MS9-MV					
	Module connector material	LABS (PWIS) conformity	Product weight	Part no.	Type
	Die-cast aluminum	VDMA24364-B1/B2-L	110 g	552950	MS9-MV

Mounting bracket MS9-WP					
	Bracket material	LABS (PWIS) conformity	Product weight	Part no.	Type
	Die-cast aluminum	VDMA24364-B1/B2-L	180 g	552947	MS9-WP

Mounting bracket MS9-WPB					
	Bracket material	LABS (PWIS) conformity	Product weight	Part no.	Type
	Die-cast aluminum	VDMA24364-B1/B2-L	210 g	552949	MS9-WPB

Accessories

Mounting bracket MS9-WP					
	Bracket material	LABS (PWIS) conformity	Product weight	Part no.	Type
	Die-cast aluminum	VDMA24364-B1/B2-L	220 g	552948	MS9-WPM