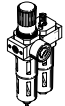
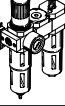
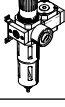
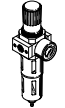
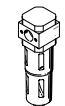
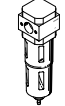
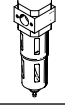
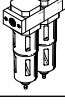
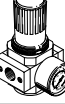


## Filters LF/LFMA/LFMB/LFX/LFMBA, D series

**FESTO**



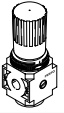
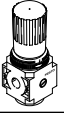
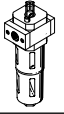
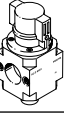
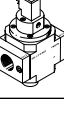
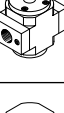

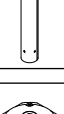


Product range overview – Service unit components, D series, metal

Type	Size	Pneumatic connection										Pressure regulation range [bar]			Grade of filtration [µm]				
		M5	M7	G1/8	G1/4	G3/8	G1/2	G3/4	G1	QS4	QS6	0.5 ...	0.5 ...	2.5 ...	0.01	1	5	40	
<b>Service units</b>																			
FRC/FRCS		Mini	-	-	■	■	■	-	-	-	-	-	■	■	-	-	-	■	■
		Midi	-	-	-	■	■	■	■	-	-	-	■	■	-	-	-	■	■
		Maxi	-	-	-	-	-	■	■	■	-	-	■	■	-	-	-	■	■
FRC-K		Micro	-	-	-	-	-	-	-	-	-	-	■	■	-	-	-	-	
		Mini	-	-	■	■	-	-	-	-	-	-	■	■	-	-	-	-	■
		Midi	-	-	-	■	■	■	-	-	-	-	■	■	-	-	-	-	■
		Maxi	-	-	-	-	-	■	■	-	-	-	■	■	-	-	-	-	■
LFR-K LFRS-K		Micro	-	-	-	-	-	-	-	-	-	-	■	■	-	-	-	-	
		Mini	-	-	■	■	-	-	-	-	-	-	■	■	-	-	-	-	■
		Midi	-	-	-	■	■	■	-	-	-	-	■	■	-	-	-	-	■
		Maxi	-	-	-	-	-	■	■	-	-	-	■	■	-	-	-	-	■
<b>Individual devices</b>																			
Filter regulators LFR/LFRS		Mini	-	-	■	■	■	-	-	-	-	-	■	■	-	-	-	■	■
		Midi	-	-	-	■	■	■	■	-	-	-	■	■	-	-	-	■	■
		Maxi	-	-	-	-	-	■	■	■	-	-	■	■	-	-	-	■	■
Filter LF		Mini	-	-	■	■	■	-	-	-	-	-	-	-	-	-	-	■	■
		Midi	-	-	-	■	■	■	■	-	-	-	-	-	-	-	-	■	■
		Maxi	-	-	-	-	-	■	■	■	-	-	-	-	-	-	-	■	■
Fine and micro filters LFMA/LFMB		Micro	-	-	-	-	-	-	-	-	-	-	-	-	■	■	-	-	
		Mini	-	-	■	■	■	-	-	-	-	-	-	-	■	■	-	-	
		Midi	-	-	-	■	■	■	■	-	-	-	-	-	■	■	-	-	
		Maxi	-	-	-	-	-	■	■	■	-	-	-	-	■	■	-	-	
Activated carbon filter LFX		Micro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Mini	-	-	■	■	■	-	-	-	-	-	-	-	-	-	-	-	
		Midi	-	-	-	■	■	■	■	-	-	-	-	-	-	-	-	-	
Filter combinations LFMBA		Micro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Mini	-	-	■	■	■	-	-	-	-	-	-	-	■	■	-	-	
		Midi	-	-	-	■	■	■	■	-	-	-	-	-	■	■	-	-	
Pressure regulators LRL/LRS		Mini	-	-	■	■	■	-	-	-	-	■	■	-	-	-	-	-	
		Midi	-	-	-	■	■	■	■	-	-	-	■	■	-	-	-	-	
		Maxi	-	-	-	-	-	■	■	■	-	-	■	■	-	-	-	-	

Product range overview – Service unit components, D series, metal

Type	Size	Bowl guard		Condensate drain			Pressure indicator		Actuator lock		Supply voltage			Options			→ Page/ Internet
		Metal bowl guard	Plastic bowl	Manual	Semi-automatic	Fully automatic	With pressure gauge	Without pressure gauge	Rotary knob with latch	Rotary knob with integrated lock	24 V DC	110 V AC	230 V AC	Directly actuated pressure regulator with integrated return flow function	Pilot actuated pressure regulator with integrated return flow function	Differential pressure display	
<b>Service units</b>																	
FRC/FRCS	Mini	■	-	■	-	■	■	■	■	■	-	-	-	-	-	-	frc
	Midi	■	-	■	-	■	■	■	■	■	-	-	-	-	-	-	
	Maxi	■	-	■	-	■	■	■	■	■	-	-	-	■	■	-	
FRC-K	Micro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	frc
	Mini	■	-	■	-	■	■	-	■	-	■	-	-	-	-	-	
	Midi	■	-	■	-	■	■	-	■	-	■	-	-	-	-	-	
	Maxi	■	-	■	-	■	■	-	■	-	■	-	-	■	■	-	
LFR-K LFRS-K	Micro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	frc
	Mini	■	-	■	-	■	■	-	■	■	■	-	-	-	-	-	
	Midi	■	-	■	-	■	■	-	■	■	■	-	-	-	-	-	
	Maxi	■	-	■	-	■	■	-	■	■	■	-	-	■	■	-	
<b>Individual devices</b>																	
Filter regulators LFR/LFRS	Mini	■	-	■	-	■	■	■	■	■	-	-	-	-	-	-	lfr
	Midi	■	-	■	-	■	■	■	■	■	-	-	-	-	-	-	
	Maxi	■	-	■	-	■	■	■	■	■	-	-	-	■	■	-	
Filter LF	Mini	■	-	■	-	■	-	-	-	-	-	-	-	-	-	-	6
	Midi	■	-	■	-	■	-	-	-	-	-	-	-	-	-	-	
	Maxi	■	-	■	-	■	-	-	-	-	-	-	-	-	-	-	
Fine and micro filters LFMA/LFMB	Micro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
	Mini	■	-	■	-	■	-	-	-	-	-	-	-	-	-	■	
	Midi	■	-	■	-	■	-	-	-	-	-	-	-	-	-	■	
	Maxi	■	-	■	-	■	-	-	-	-	-	-	-	-	-	■	
Activated carbon filter LFX	Micro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22
	Mini	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Midi	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Maxi	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Filter combinations LFMBA	Micro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28
	Mini	■	-	■	-	■	-	-	-	-	-	-	-	-	-	■	
	Midi	■	-	■	-	■	-	-	-	-	-	-	-	-	-	■	
	Maxi	■	-	■	-	■	-	-	-	-	-	-	-	-	-	■	
Pressure regulators LR/LRS	Mini	-	-	-	-	-	■	■	■	■	-	-	-	■	-	-	lr
	Midi	-	-	-	-	-	■	■	■	■	-	-	-	■	-	-	
	Maxi	-	-	-	-	-	■	■	■	■	-	-	-	■	■	-	

Product range overview – Service unit components, D series, metal

Type	Size	Pneumatic connection										Pressure regulation range [bar]		
		M5	M7	G1/8	G1/4	G3/8	G1/2	G3/4	G1	QS4	QS6	0.5 ... 7	0.5 ... 12	
<b>Individual devices</b>														
Pressure regulators <b>LRB/LRBS</b>		Micro	–											
		Mini	–	–	–	■	–	–	–	–	–	–	■	■
		Midi	–	–	–	–	■	–	–	–	–	–	■	■
		Maxi	–											
Pressure regulator manifolds <b>LRB-K</b>		Micro	–											
		Mini	–	–	–	■	■	–	–	–	–	–	■	■
		Midi	–	–	–	–	■	■	–	–	–	–	■	■
		Maxi	–											
Lubricators <b>LOE</b>		Mini	–	–	■	■	■	–	–	–	–	–	–	
		Midi	–	–	–	■	■	■	■	–	–	–	–	
		Maxi	–	–	–	–	–	■	■	■	–	–	–	
On/off valves <b>HE</b>		Micro	–											
		Mini	–	–	■	■	■	–	–	–	–	–	–	
		Midi	–	–	–	■	■	■	■	–	–	–	–	
		Maxi	–	–	–	–	–	■	■	■	–	–	–	
On/off valves <b>HEE</b>		Micro	–											
		Mini	–	–	■	■	■	–	–	–	–	–	–	
		Midi	–	–	–	■	■	■	■	–	–	–	–	
		Maxi	–	–	–	–	–	■	■	■	–	–	–	
On/off valves <b>HEP</b>		Micro	–											
		Mini	–	–	■	■	■	–	–	–	–	–	–	
		Midi	–	–	–	■	■	■	■	–	–	–	–	
		Maxi	–	–	–	–	–	■	■	■	–	–	–	
Soft-start valves <b>HEL</b>		Micro	–											
		Mini	–	–	■	■	■	–	–	–	–	–	–	
		Midi	–	–	–	■	■	■	■	–	–	–	–	
		Maxi	–	–	–	–	–	■	■	■	–	–	–	
Membrane air dryers <b>LDM1</b>		Micro	–											
		Mini	–											
		Midi	–											
		Maxi	–	–	–	–	–	■	■	■	–	–	–	
Branching modules <b>FRM</b>		Micro	–											
		Mini	–	–	■	■	■	–	–	–	–	–	–	
		Midi	–	–	–	■	■	■	■	–	–	–	–	
		Maxi	–	–	–	–	–	■	■	■	–	–	–	
Distributor block <b>FRZ</b>		Mini	–	–	–	–	–	–	–	–	–	–	–	
		Midi	–	–	–	–	–	–	–	–	–	–	–	
		Maxi	–	–	–	–	–	–	–	–	–	–	–	

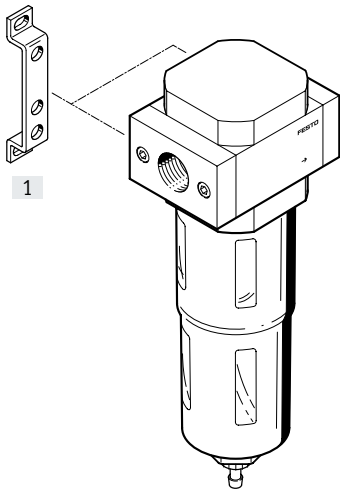
## Product range overview – Service unit components, D series, metal

Type	Size	Bowl guard		Pressure indication		Actuator lock		Supply voltage			Options		→ Page/ Internet	
		Metal bowl guard	Plastic bowl	With pressure gauge	Without pressure gauge	Rotary knob with latch	Rotary knob with integrated lock	24 V DC	110 V AC	230 V AC	With non-return function	Pressure switch		
<b>Individual devices</b>														
Pressure regulators <b>LRB/LRBS</b>	Micro	-				■	■	■	-	-	-	-	-	lrb
	Mini	-	-	-	■	■	■	-	-	-	-	-	-	
	Midi	-	-	-	■	■	■	-	-	-	-	-	-	
	Maxi	-	-											
Pressure regulator manifolds <b>LRB-K</b>	Micro	-												lrb
	Mini	-	-	-	■	■	-	-	-	-	-	-	-	
	Midi	-	-	-	■	■	-	-	-	-	-	-	-	
	Maxi	-	-											
Lubricators <b>LOE</b>	Mini	■	-	-	■	-	-	-	-	-	-	-	-	loe
	Midi	■	-	-	■	-	-	-	-	-	-	-	-	
	Maxi	■	-	-	■	-	-	-	-	-	-	-	-	
On/off valves <b>HE</b>	Micro	-												he
	Mini	-	-	-	■	■	-	-	-	-	-	-	-	
	Midi	-	-	-	■	■	-	-	-	-	-	-	-	
	Maxi	-	-	-	■	■	-	-	-	-	-	-	-	
On/off valves <b>HEE</b>	Micro	-												hee
	Mini	-	-	-	■	-	-	■	■	■	-	-	-	
	Midi	-	-	-	■	-	-	■	■	■	-	-	-	
	Maxi	-	-	-	■	-	-	■	■	■	-	-	-	
On/off valves <b>HEP</b>	Micro	-												hep
	Mini	-	-	-	■	-	-	-	-	-	-	-	-	
	Midi	-	-	-	■	-	-	-	-	-	-	-	-	
	Maxi	-	-	-	■	-	-	-	-	-	-	-	-	
Soft-start valves <b>HEL</b>	Micro	-												hel
	Mini	-	-	-	■	-	-	-	-	-	-	-	-	
	Midi	-	-	-	■	-	-	-	-	-	-	-	-	
	Maxi	-	-	-	■	-	-	-	-	-	-	-	-	
Membrane air dryers <b>LDM1</b>	Micro	-												ldm1
	Mini	-												
	Midi	-												
	Maxi	■	-	-	■	-	-	-	-	-	-	-	-	
Branching modules <b>FRM</b>	Micro	-												frm
	Mini	-	-	-	■	-	-	-	-	-	■	■		
	Midi	-	-	-	■	-	-	-	-	-	■	■		
	Maxi	-	-	-	■	-	-	-	-	-	■	■		
Distributor block <b>FRZ</b>	Mini	-	-	-	■	-	-	-	-	-	-	-	-	frz
	Midi	-	-	-	■	-	-	-	-	-	-	-	-	
	Maxi	-	-	-	■	-	-	-	-	-	-	-	-	

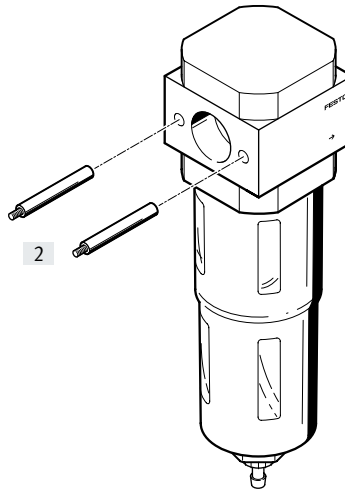
## Peripherals overview

### Mini/Midi/Maxi

Individual device with connecting plates



Individual device without connecting plates, for service unit combination



### Mounting attachments and accessories

	Individual device		Combination		→ Page/Internet
	With connecting plates	Without connecting plates	With connecting plates	Without connecting plates	
[1] Mounting bracket HFOE	■	–	■	–	hfoe-d
[2] Threaded bolt (included in the scope of delivery) FRB	–	–	■	■	frb-d

## Type codes

001	Series
LF	Filter

002	Pneumatic connection
	None
1/8	Female thread G1/8
1/4	Female thread G1/4
3/8	Female thread G3/8
1/2	Female thread G1/2
3/4	Female thread G3/4
1	Female thread G1

003	Version
D	D series, metal

004	Grade of filtration
	40 µm
5M	5 µm

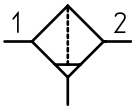
005	Size
MINI	Grid dimension 40 mm (without connecting plates)
MIDI	Grid dimension 55 mm (without connecting plates)
MAXI	Grid dimension 66 mm (without connecting plates)

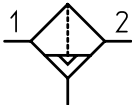
006	Condensate drain
	Manually rotating
A	Fully automatic

## Datasheet

Condensate drain, manual



Condensate drain, semi- or fully automatic



- - Flow rate  
170 ... 5300 l/min

- - Temperature range  
-10 ... +60 °C

- - Operating pressure  
0 ... 16 bar



- Good particle and condensate separation
- High flow rate with minimal pressure drop
- With or without connecting plates
- Choice of 5 µm or 40 µm filter inserts
- With manual or fully automatic condensate drain
- New filter cartridges → page 36

### General technical data

Size	Mini	Midi	Maxi
Pneumatic connection 1, 2 <sup>1)</sup>	G1/8, G1/4, G3/8, - <sup>2)</sup>	G1/4, G3/8, G1/2, G3/4, - <sup>2)</sup>	G1/2, G3/4, G1, - <sup>2)</sup>
Design	Sintered filter with centrifugal separator		
Type of mounting	Via accessories In-line installation		
Mounting position	Vertical ±5°		
Grade of filtration [µm]	5 40		
Air purity class at the output	Compressed air to ISO 8573-1:2010 [6:8:4] (grade of filtration 5 µm) Compressed air to ISO 8573-1:2010 [7:8:4] (grade of filtration 40 µm) Inert gases		
Bowl guard	Metal bowl guard		
Condensate drain	Manual Fully automatic		
Max. condensate volume [cm <sup>3</sup> ]	22	43	80

1) Connecting plates with threaded connection

2) Without connecting plates.

† Note: This product corresponds to ISO 1179-1 and ISO 228-1.

### Standard nominal flow rate $q_{nN}^{1)}$ [l/min]

Size	Mini			Midi				Maxi			
	G1/8	G1/4	G3/8	G1/4	G3/8	G1/2	G3/4	G1/2	G3/4	G1	
Grade of filtration	5 µm	800	950	1100	1600	1800	2000	2000	3700	3600	3800
	40 µm	1000	1200	1400	1900	2700	3000	3000	4400	5000	5300

1) Measured at  $p_1 = 6$  bar and  $\Delta p = 1$  bar.

† 125 l/min must be available for the fully automatic condensate drain to close correctly.



## Datasheet

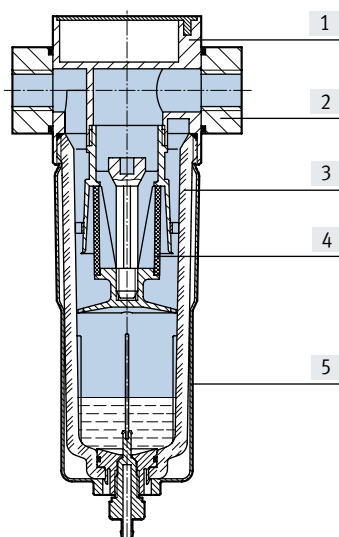
Operating and environmental conditions				
Condensate drain		Manual	Semi-automatic	Fully automatic
Size		Mini/Midi/Maxi	Micro	Mini/Midi/Maxi
Operating pressure [bar]		0 ... 16	1 ... 10	2 ... 12
Operating medium		Compressed air to ISO 8573-1:2010 [--:9:-]	Compressed air to ISO 8573-1:2010 [--:9:-]	Compressed air to ISO 8573-1:2010 [7:9:-]
		Inert gases		
Ambient temperature [°C]		-10 ... +60		+5 ... +60
Temperature of medium [°C]		-10 ... +60		+5 ... +60
Storage temperature [°C]		-10 ... +60		
Corrosion resistance class CRC <sup>1)</sup>		2		

1) More information [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

Weight [g]				
Size	Mini	Midi	Maxi	
			Connection G1/2, G3/4	Connection G1
Filter	250	700	1340	1440

### Materials

Sectional view

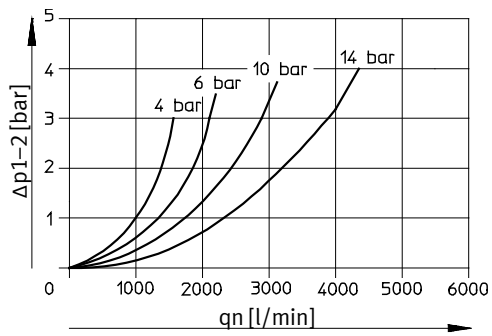


[1]	Housing	Die-cast zinc
[2]	Connecting plates	Die-cast zinc/aluminium
[3]	Bowl	PC
[4]	Filter cartridge	PE
[5]	Metal bowl guard	Aluminium
-	Seals	NBR
Note on materials		RoHS-compliant

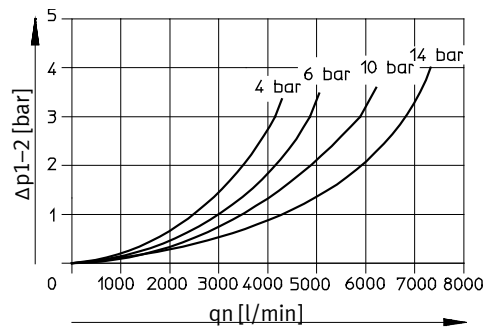
Datasheet

Standard flow rate  $q_n$  as a function of differential pressure  $\Delta p_{1-2}$

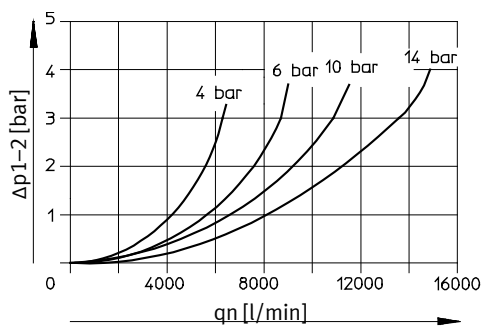
LF-1/4-D-MINI



LF-1/2-D-MIDI



LF-1-D-MAXI



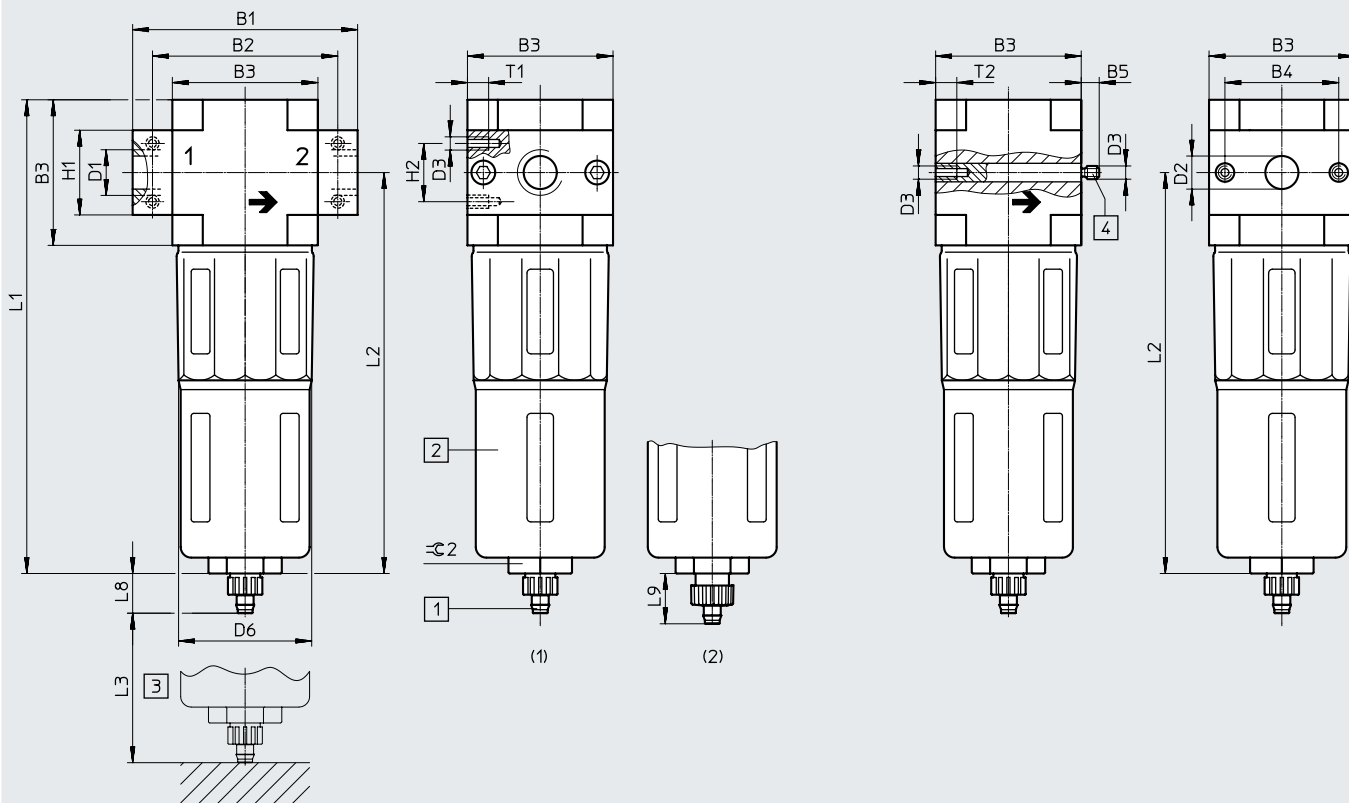
# Datasheet

## Dimensions – Mini/Midi/Maxi

Download CAD data → [www.festo.com](http://www.festo.com)

Connecting plates with threaded connection

Without connecting plates



- [1] Barbed connector for plastic tubing PUN(H)-8x1.25
- [2] Metal bowl guard
- [3] Installation dimension
- [4] Threaded bolt (exchangeable)
- (1) Manual condensate drain
- (2) Semi-automatic condensate drain
- Flow direction

Type	B1	B2	B3	B4	B5	D1	D2 ∅	D3	D6 ∅	H1	H2	L1	L2	L3	L8	L9	T1	T2	∅ 2
<b>Mini</b>																			
LF-1/8-D-MINI	64	52	40	30	-	G1/8	-	M4	38	20	11	144	124	60	15	19	7	-	22
LF-1/4-D-MINI						G1/4													
LF-3/8-D-MINI	70					G3/8													
LF-D-MINI	-	-			5.8	-	11			-	-						-	10	
<b>Midi</b>																			
LF-1/4-D-MIDI	85	70	55	43	-	G1/4	-	M5	52	32	22	179	151	80	15	19	8	-	24
LF-3/8-D-MIDI						G3/8													
LF-1/2-D-MIDI						G1/2													
LF-3/4-D-MIDI						G3/4													
LF-D-MIDI	-	-			6.8	-	24			-	-						-	11	
<b>Maxi</b>																			
LF-1/2-D-MAXI	96	80	66	46	-	G1/2	-	M5	65	32	22	203	170	90	15	19	8	-	24
LF3/4-D-MAXI						G3/4													
LF-1-D-MAXI	116	91				G1				40									
LF-D-MAXI	-	-			6.8	-	30			-	-						-	11	

↳ Note: This product corresponds to ISO 1179-1 and ISO 228-1.

Datasheet

Ordering data – Mini/Midi/Maxi						
Size	Condensate drain	Connection	Grade of filtration 5 µm		Grade of filtration 40 µm	
			Part no.	Type	Part no.	Type
<b>Without connecting plates</b>						
Mini	Manual	–	192557	LF-D-5M-MINI	192551	LF-D-MINI
	Fully automatic	–	192560	LF-D-5M-MINI-A	192554	LF-D-MINI-A
Midi	Manual	–	192558	LF-D-5M-MIDI	192552	LF-D-MIDI
	Fully automatic	–	192561	LF-D-5M-MIDI-A	192555	LF-D-MIDI-A
Maxi	Manual	–	192559	LF-D-5M-MAXI	192553	LF-D-MAXI
	Fully automatic	–	192562	LF-D-5M-MAXI-A	192556	LF-D-MAXI-A
<b>Connecting plates with threaded connection</b>						
Mini	Manual	G1/8	162610	LF-1/8-D-5M-MINI	159612	LF-1/8-D-MINI
		G1/4	162611	LF-1/4-D-5M-MINI	159613	LF-1/4-D-MINI
		G3/8	162612	LF-3/8-D-5M-MINI	162606	LF-3/8-D-MINI
	Fully automatic	G1/8	162618	LF-1/8-D-5M-MINI-A	159616	LF-1/8-D-MINI-A
		G1/4	162619	LF-1/4-D-5M-MINI-A	159617	LF-1/4-D-MINI-A
		G3/8	162620	LF-3/8-D-5M-MINI-A	162608	LF-3/8-D-MINI-A
Midi	Manual	G1/4	186460	LF-1/4-D-5M-MIDI	186459	LF-1/4-D-MIDI
		G3/8	162613	LF-3/8-D-5M-MIDI	159576	LF-3/8-D-MIDI
		G1/2	162614	LF-1/2-D-5M-MIDI	159578	LF-1/2-D-MIDI
		G3/4	162615	LF-3/4-D-5M-MIDI	162607	LF-3/4-D-MIDI
	Fully automatic	G1/4	186462	LF-1/4-D-5M-MIDI-A	186461	LF-1/4-D-MIDI-A
		G3/8	162621	LF-3/8-D-5M-MIDI-A	159577	LF-3/8-D-MIDI-A
		G1/2	162622	LF-1/2-D-5M-MIDI-A	159579	LF-1/2-D-MIDI-A
		G3/4	162623	LF-3/4-D-5M-MIDI-A	162609	LF-3/4-D-MIDI-A
Maxi	Manual	G1/2	186464	LF-1/2-D-5M-MAXI	186463	LF-1/2-D-MAXI
		G3/4	162616	LF-3/4-D-5M-MAXI	159614	LF-3/4-D-MAXI
		G1	162617	LF-1-D-5M-MAXI	159615	LF-1-D-MAXI
	Fully automatic	G1/2	186466	LF-1/2-D-5M-MAXI-A	186465	LF-1/2-D-MAXI-A
		G3/4	162624	LF-3/4-D-5M-MAXI-A	159618	LF-3/4-D-MAXI-A
		G1	162625	LF-1-D-5M-MAXI-A	159619	LF-1-D-MAXI-A

## Peripherals overview

### Mini/Midi/Maxi

Individual device with connecting plates

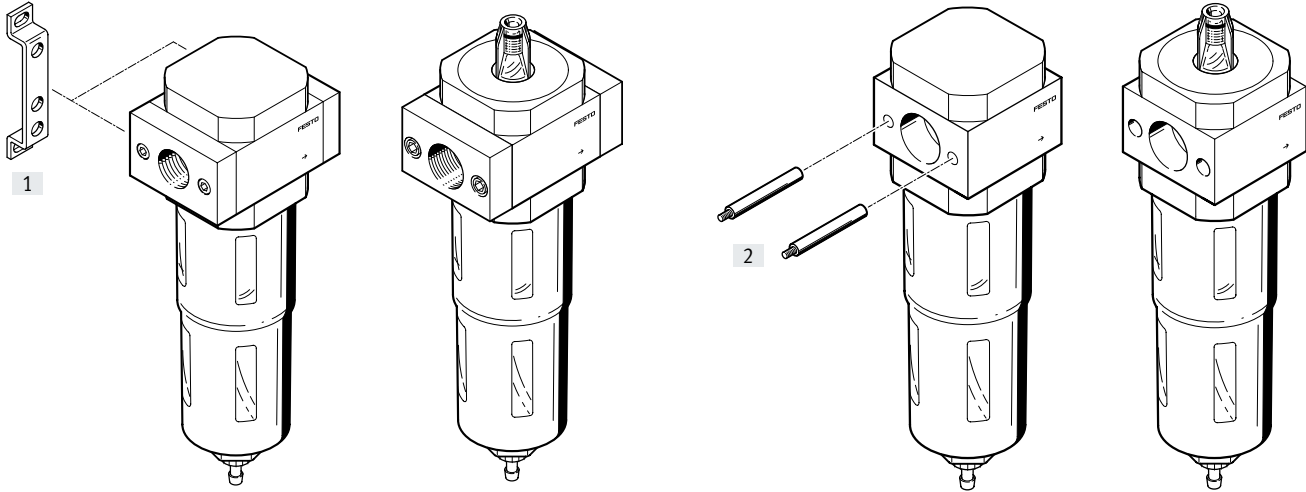
Without differential pressure display

With differential pressure display

Individual device without connecting plates, for service unit combination

Without differential pressure display

With differential pressure display



### Mounting attachments and accessories

		Individual device		Combination		→ Page/Internet
		With connecting plates	Without connecting plates	With connecting plates	Without connecting plates	
[1]	Mounting bracket HFOE	■	–	■	–	hfoe-d
[2]	Threaded bolt (included in the scope of delivery) FRB	–	–	■	■	frb-d

Type codes

<b>001</b>	<b>Series</b>	
<b>LFMA</b>	Micro filter	
<b>002</b>	<b>Pneumatic connection</b>	
	None	
<b>1/8</b>	Female thread G1/8	
<b>1/4</b>	Female thread G1/4	
<b>3/8</b>	Female thread G3/8	
<b>1/2</b>	Female thread G1/2	
<b>3/4</b>	Female thread G3/4	
<b>1</b>	Female thread G1	
<b>003</b>	<b>Version</b>	
<b>D</b>	D series, metal	

<b>004</b>	<b>Size</b>	
<b>MINI</b>	Grid dimension 40 mm (without connecting plates)	
<b>MIDI</b>	Grid dimension 55 mm (without connecting plates)	
<b>MAXI</b>	Grid dimension 66 mm (without connecting plates)	

<b>005</b>	<b>Filter change sensing</b>	
	None	
<b>DA</b>	Differential pressure display, visual	

<b>006</b>	<b>Condensate drain</b>	
	Manually rotating	
<b>A</b>	Fully automatic	

<b>001</b>	<b>Series</b>	
<b>LFMB</b>	Fine filter	
<b>002</b>	<b>Pneumatic connection</b>	
	None	
<b>1/8</b>	Female thread G1/8	
<b>1/4</b>	Female thread G1/4	
<b>3/8</b>	Female thread G3/8	
<b>1/2</b>	Female thread G1/2	
<b>3/4</b>	Female thread G3/4	
<b>1</b>	Female thread G1	
<b>003</b>	<b>Version</b>	
<b>D</b>	D series, metal	

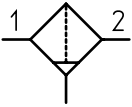
<b>004</b>	<b>Size</b>	
<b>MINI</b>	Grid dimension 40 mm (without connecting plates)	
<b>MIDI</b>	Grid dimension 55 mm (without connecting plates)	
<b>MAXI</b>	Grid dimension 66 mm (without connecting plates)	

<b>005</b>	<b>Filter change sensing</b>	
	None	
<b>DA</b>	Differential pressure display, visual	

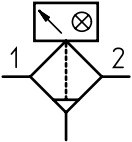
<b>006</b>	<b>Condensate drain</b>	
	Manually rotating	
<b>A</b>	Fully automatic	

## Datasheet

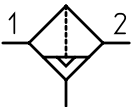
Condensate drain, manual,  
without differential pressure display



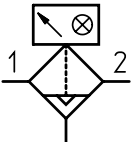
With differential pressure display






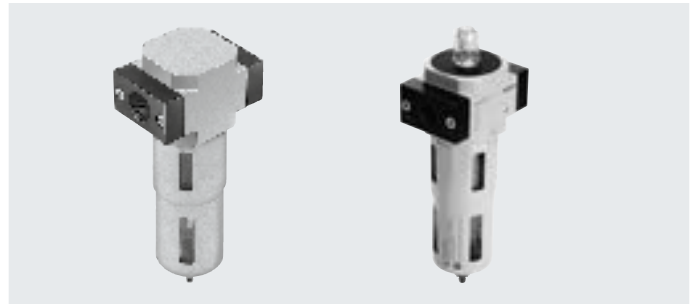
Condensate drain, fully automatic,  
without differential pressure display



With differential pressure display



-  - Flow rate  
80 ... 2780 l/min
-  - Temperature range  
-10 ... +60 °C
-  - Operating pressure  
1 ... 16 bar



- High-efficiency filter for special requirements
- Air quality to ISO 8573-1:2010
- With or without connecting plates
- Version with differential pressure display for visual indication of filter contamination
- Choice of filter inserts 0.01 µm or 1 µm
- New filter cartridges → page 36

General technical data			
Size	Mini	Midi	Maxi
Pneumatic connection 1, 2 <sup>1)</sup>	G1/8, G1/4, G3/8, - <sup>2)</sup>	G1/4, G3/8, G1/2, G3/4, - <sup>2)</sup>	G1/2, G3/4, G1, - <sup>2)</sup>
Design	Fibre filter		
Type of mounting	Via accessories In-line installation		
Mounting position	Vertical ±5°		
Grade of filtration [µm]	0.01 (micro filter LFMA) 1 (fine filter LFMB)		
Air purity class at the output	Compressed air to ISO 8573-1:2010 [1:7:2] (micro filter LFMA) Compressed air to ISO 8573-1:2010 [5:7:3] (fine filter LFMB) Inert gases		
Filter efficiency [%]	99.9999 (grade of filtration 0.01 µm, micro filter LFMA) 99.99 (grade of filtration 1 µm, fine filter LFMB)		
Bowl guard	Metal bowl guard		
Condensate drain	Manual Fully automatic		
Differential pressure display	Visual indicator		
Residual oil content [mg/m <sup>3</sup> ]	≤0.01 (micro filter LFMA) ≤0.5 (fine filter LFMB)		
Max. condensate volume [cm <sup>3</sup> ]	22	43	80

1) Connecting plates with threaded connection

2) Without connecting plates.

† Note: This product corresponds to ISO 1179-1 and ISO 228-1.

## Datasheet

Standard flow rate $q_n^{1)}$ [l/min]										
Size	Mini			Midi			Maxi			
Pneumatic connection 1, 2	G1/8	G1/4	G3/8	G1/4	G3/8	G1/2	G3/4	G1/2	G3/4	G1
<b>Micro filter LFMA</b>										
Max. standard flow rate for air purity class $q_{n \max}$	360	410	450	740	880	1120	1110	1500	1900	2200
Min. standard flow rate for air purity class $q_{n \min}$	80	100	100	240	250	330	300	500	500	480
<b>Fine filter LFMB</b>										
Max. standard flow rate for air purity class $q_{n \max}$	500	650	675	900	1420	1750	1980	2400	2220	2780
Min. standard flow rate for air purity class $q_{n \min}$	150	150	125	350	500	500	600	800	750	620

1) Measured at  $p_1 = 6$  bar.

† 125 l/min must be available for the fully automatic condensate drain to close correctly.

Operating and environmental conditions		
Condensate drain	Manual	Fully automatic
Operating pressure [bar]	1 ... 16	2 ... 12
Operating medium	Compressed air to ISO 8573-1:2010 [6:8:4] <sup>1)</sup> Inert gases	
Ambient temperature [°C]	-10 ... +60	+5 ... +60
Temperature of medium [°C]	+1.5 ... +60	+5 ... +60
Storage temperature [°C]	-10 ... +60	
Corrosion resistance class CRC <sup>2)</sup>	2	

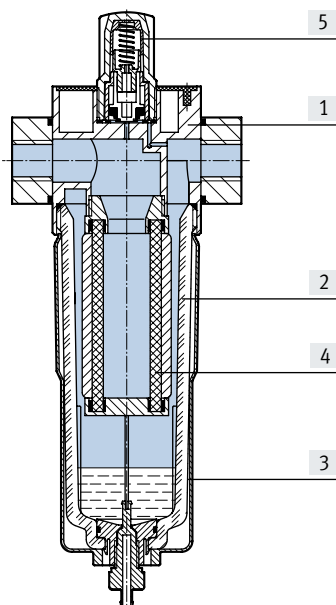
1) Prefiltering the compressed air for the micro filter LFMA with a fine filter LFMB (grade of filtration 1 µm) is recommended.

2) More information [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

Weight [g]			
Size	Mini	Midi	Maxi
Without differential pressure display	250	650	1200
With differential pressure display	368	834	1340

### Materials

Sectional view



Fine and micro filters		
[1]	Housing	Die-cast zinc
[2]	Bowl	PC
[3]	Metal bowl guard	Aluminium
[4]	Filter	Borosilicate fibre
[5]	Housing for version with differential pressure display	PC
-	Seals	NBR
Note on materials		RoHS-compliant



Datasheet

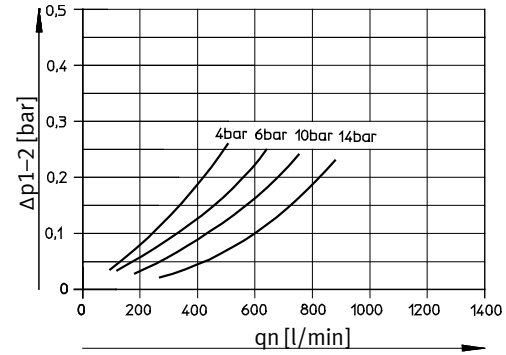
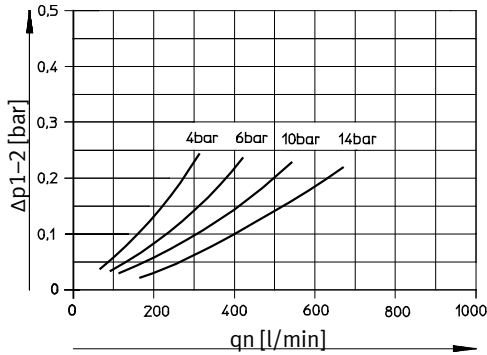
Standard flow rate  $q_n$  as a function of differential pressure  $\Delta p_{1-2}$

Grade of filtration 0.01  $\mu\text{m}$

Grade of filtration 1  $\mu\text{m}$

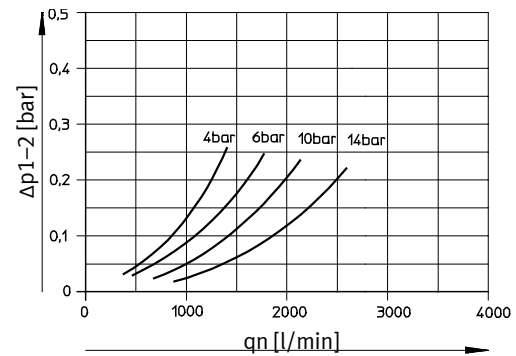
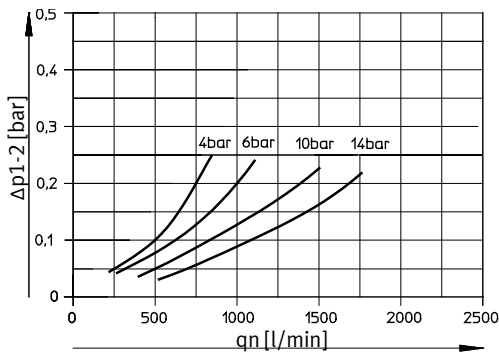
LFMA-1/4-D-MINI

LFMB-1/4-D-MINI



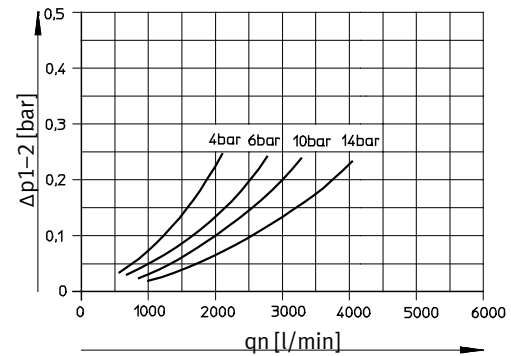
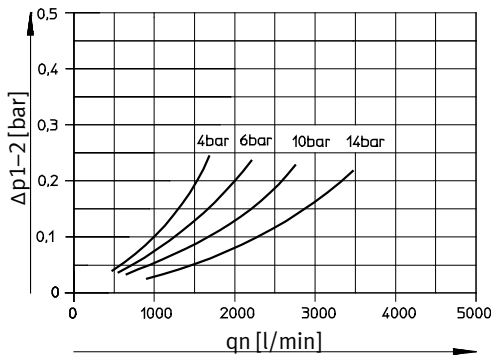
LFMA-1/2-D-MIDI

LFMB-1/2-D-MIDI



LFMA-1-D-MAXI

LFMB-1-D-MAXI



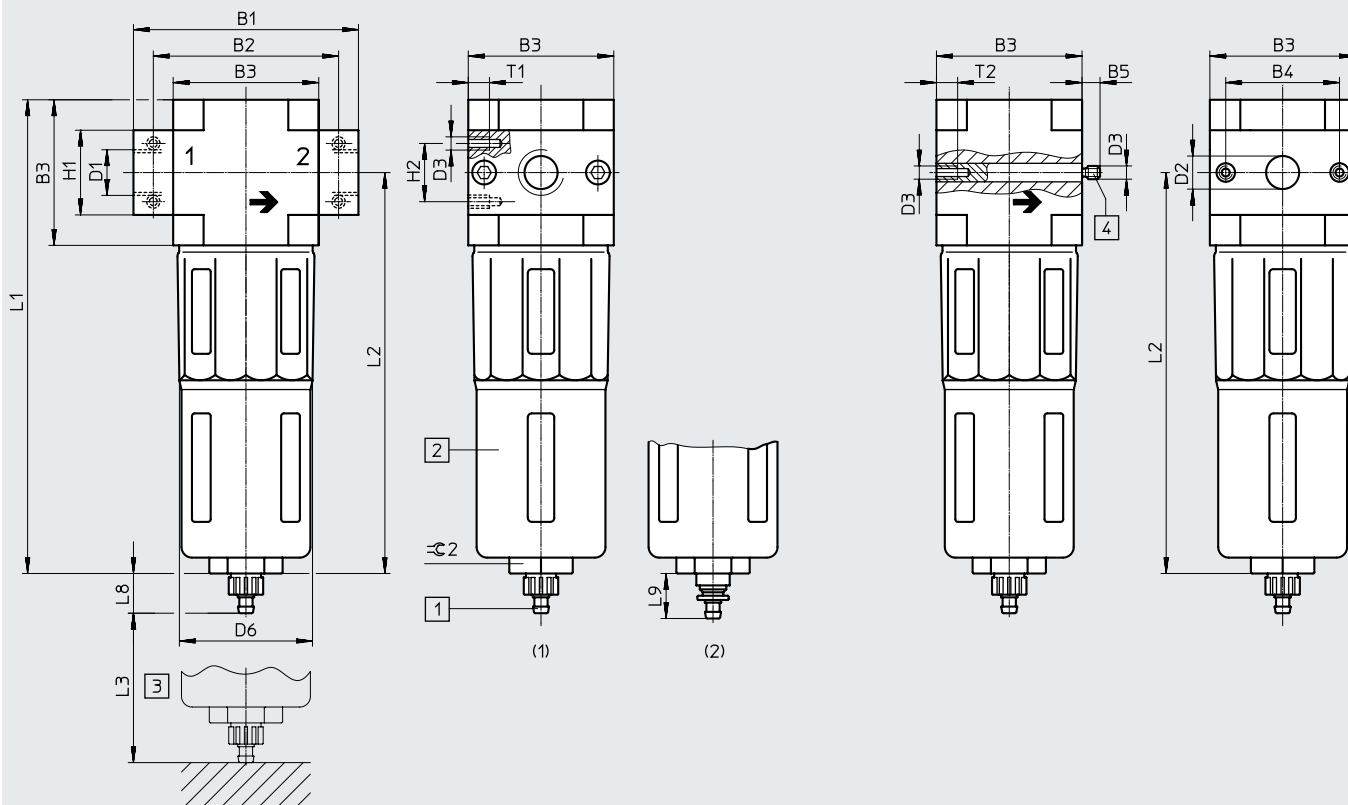
Datasheet

Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

Connecting plates with threaded connection

Without connecting plates



- [1] Barbed connector for plastic tubing PUN(-H)-8x1.25
- [2] Metal bowl guard
- [3] Installation dimension
- [4] Threaded bolt (exchangeable)
- (1) Manual condensate drain
- (2) Fully automatic condensate drain
- Flow direction

Type	B1	B2	B3	B4	B5	D1	D2 ∅	D3	D6 ∅	H1	H2	L1	L2	L3	L8	L9	T1	T2	∅ 2
<b>Mini</b>																			
LFMB/A-1/8-D-MINI	64	52	40	30	-	G1/8	-	M4	38	20	11	144	124	60	15	19	7	-	22
LFMB/A-1/4-D-MINI						G1/4													
LFMB/A-3/8-D-MINI	70					G3/8													
LFMB/A-D-MINI	-	-			5.8	-	11			-	-						-	10	
<b>Midi</b>																			
LFMB/A-1/4-D-MIDI	85	70	55	43	-	G1/4	-	M5	52	32	22	179	151	80	15	19	8	-	24
LFMB/A-3/8-D-MIDI						G3/8													
LFMB/A-1/2-D-MIDI						G1/2													
LFMB/A-3/4-D-MIDI						G3/4													
LFMB/A-D-MIDI	-	-			6.8	-	24			-	-						-	11	
<b>Maxi</b>																			
LFMB/A-1/2-D-MAXI	96	80	66	46	-	G1/2	-	M5	65	32	22	203	170	90	15	19	8	-	24
LFMB/A-3/4-D-MAXI						G3/4													
LFMB/A-1-D-MAXI	116	91				G1				40									
LFMB/A-D-MAXI	-	-			6.8	-	30			-	-						-	11	

† Note: This product corresponds to ISO 1179-1 and ISO 228-1.

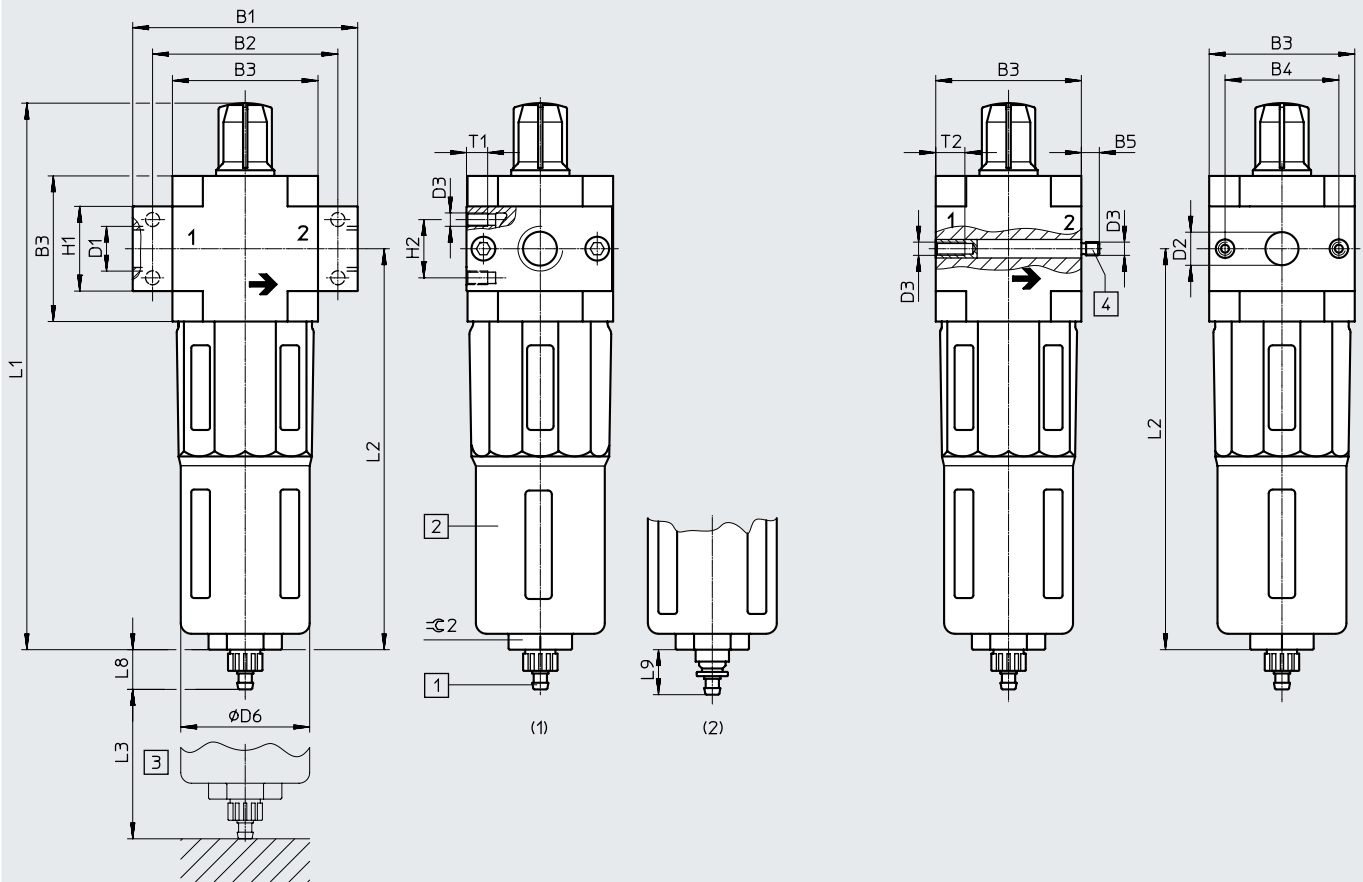
Datasheet

Dimensions with differential pressure display DA

Download CAD data → [www.festo.com](http://www.festo.com)

Connecting plates with threaded connection

Without connecting plates



- [1] Barbed connector for plastic tubing PUN(-H)-8x1.25
- [2] Metal bowl guard
- [3] Installation dimension
- [4] Threaded bolt (exchangeable)
- (1) Manual condensate drain
- (2) Fully automatic condensate drain
- Flow direction

Type	B1	B2	B3	B4	B5	D1	D2 Ø	D3	D6 Ø	H1	H2	L1	L2	L3	L8	L9	T1	T2	≈ 2
<b>Mini</b>																			
LFMB/A-1/8-D-MINI-DA	64	52	40	30	-	G1/8	-	M4	38	20	11	173	124	60	15	19	7	-	22
LFMB/A-1/4-D-MINI-DA						G1/4													
LFMB/A-3/8-D-MINI-DA	70					G3/8													
LFMB/A-D-MINI-DA	-	-			5.8	-	11			-	-						-	10	
<b>Midi</b>																			
LFMB/A-1/4-D-MIDI-DA	85	70	55	43	-	G1/4	-	M5	52	32	22	207	151	80	15	19	8	-	24
LFMB/A-3/8-D-MIDI-DA						G3/8													
LFMB/A-1/2-D-MIDI-DA						G1/2													
LFMB/A-3/4-D-MIDI-DA						G3/4													
LFMB/A-D-MIDI-DA	-	-			6.8	-	24			-	-						-	11	
<b>Maxi</b>																			
LFMB/A-1/2-D-MAXI-DA	96	80	66	46	-	G1/2	-	M5	65	32	22	232	170	90	15	19	8	-	24
LFMB/A-3/4-D-MAXI-DA						G3/4													
LFMB/A-1-D-MAXI-DA	116	91				G1				40									
LFMB/A-D-MAXI-DA	-	-			6.8	-	30			-	-						-	11	

† Note: This product corresponds to ISO 1179-1 and ISO 228-1.

Datasheet

**Ordering data – Micro filter LFMA**

Grade of filtration 0.01 µm, metal bowl guard

Size	Connection	Condensate drain		Condensate drain	
		Manual		Fully automatic	
		Part no.	Type	Part no.	Type

**Without connecting plates**

Mini	–	192563	LFMA-D-MINI	192566	LFMA-D-MINI-A
Midi	–	192564	LFMA-D-MIDI	192567	LFMA-D-MIDI-A
Maxi	–	192565	LFMA-D-MAXI	192568	LFMA-D-MAXI-A

**Connecting plates with threaded connection**

Mini	G1/8	162642	LFMA-1/8-D-MINI	162650	LFMA-1/8-D-MINI-A
	G1/4	162643	LFMA-1/4-D-MINI	162651	LFMA-1/4-D-MINI-A
	G3/8	162644	LFMA-3/8-D-MINI	162652	LFMA-3/8-D-MINI-A
Midi	G1/4	186469	LFMA-1/4-D-MIDI	186470	LFMA-1/4-D-MIDI-A
	G3/8	162645	LFMA-3/8-D-MIDI	162653	LFMA-3/8-D-MIDI-A
	G1/2	162646	LFMA-1/2-D-MIDI	162654	LFMA-1/2-D-MIDI-A
	G3/4	162647	LFMA-3/4-D-MIDI	162655	LFMA-3/4-D-MIDI-A
Maxi	G1/2	186476	LFMA-1/2-D-MAXI	186475	LFMA-1/2-D-MAXI-A
	G3/4	162648	LFMA-3/4-D-MAXI	162656	LFMA-3/4-D-MAXI-A
	G1	162649	LFMA-1-D-MAXI	162657	LFMA-1-D-MAXI-A

**Ordering data – Fine filter LFMB**

Grade of filtration 1 µm, metal bowl guard

Size	Connection	Condensate drain		Condensate drain	
		Manual		Fully automatic	
		Part no.	Type	Part no.	Type

**Without connecting plates**

Mini	–	192569	LFMB-D-MINI	192572	LFMB-D-MINI-A
Midi	–	192570	LFMB-D-MIDI	192573	LFMB-D-MIDI-A
Maxi	–	192571	LFMB-D-MAXI	192574	LFMB-D-MAXI-A

**Connecting plates with threaded connection**

Mini	G1/8	162626	LFMB-1/8-D-MINI	162634	LFMB-1/8-D-MINI-A
	G1/4	162627	LFMB-1/4-D-MINI	162635	LFMB-1/4-D-MINI-A
	G3/8	162628	LFMB-3/8-D-MINI	162636	LFMB-3/8-D-MINI-A
Midi	G1/4	186467	LFMB-1/4-D-MIDI	186468	LFMB-1/4-D-MIDI-A
	G3/8	162629	LFMB-3/8-D-MIDI	162637	LFMB-3/8-D-MIDI-A
	G1/2	162630	LFMB-1/2-D-MIDI	162638	LFMB-1/2-D-MIDI-A
	G3/4	162631	LFMB-3/4-D-MIDI	162639	LFMB-3/4-D-MIDI-A
Maxi	G1/2	186473	LFMB-1/2-D-MAXI	186474	LFMB-1/2-D-MAXI-A
	G3/4	162632	LFMB-3/4-D-MAXI	162640	LFMB-3/4-D-MAXI-A
	G1	162633	LFMB-1-D-MAXI	162641	LFMB-1-D-MAXI-A

Datasheet

**Ordering data – Micro filter LFMA with differential pressure display DA**

Grade of filtration 0.01 µm, metal bowl guard

Size	Connection	Condensate drain		Condensate drain	
		Manual	Fully automatic	Part no.	Type
		Part no.	Type	Part no.	Type
<b>Without connecting plates</b>					
Mini	–	532837	LFMA-D-MINI-DA	532840	LFMA-D-MINI-DA-A
Midi	–	532838	LFMA-D-MIDI-DA	532841	LFMA-D-MIDI-DA-A
Maxi	–	532839	LFMA-D-MAXI-DA	532842	LFMA-D-MAXI-DA-A
<b>Connecting plates with threaded connection</b>					
Mini	G1/8	532843	LFMA-1/8-D-MINI-DA	532853	LFMA-1/8-D-MINI-DA-A
	G1/4	532844	LFMA-1/4-D-MINI-DA	532854	LFMA-1/4-D-MINI-DA-A
	G3/8	532845	LFMA-3/8-D-MINI-DA	532855	LFMA-3/8-D-MINI-DA-A
Midi	G1/4	532846	LFMA-1/4-D-MIDI-DA	532856	LFMA-1/4-D-MIDI-DA-A
	G3/8	532847	LFMA-3/8-D-MIDI-DA	532857	LFMA-3/8-D-MIDI-DA-A
	G1/2	532848	LFMA-1/2-D-MIDI-DA	532858	LFMA-1/2-D-MIDI-DA-A
	G3/4	532849	LFMA-3/4-D-MIDI-DA	532859	LFMA-3/4-D-MIDI-DA-A
Maxi	G1/2	532850	LFMA-1/2-D-MAXI-DA	532860	LFMA-1/2-D-MAXI-DA-A
	G3/4	532851	LFMA-3/4-D-MAXI-DA	532861	LFMA-3/4-D-MAXI-DA-A
	G1	532852	LFMA-1-D-MAXI-DA	532862	LFMA-1-D-MAXI-DA-A

**Ordering data – Fine filter LFMB with differential pressure display DA**

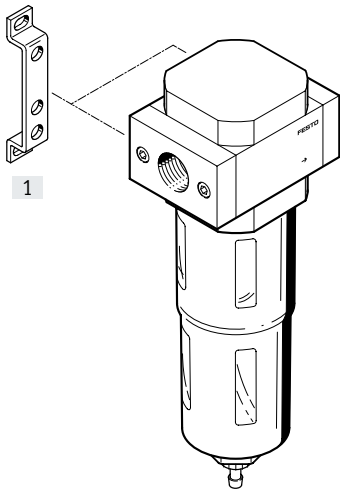
Grade of filtration 1 µm, metal bowl guard

Size	Connection	Condensate drain		Condensate drain	
		Manual	Fully automatic	Part no.	Type
		Part no.	Type	Part no.	Type
<b>Without connecting plates</b>					
Mini	–	532811	LFMB-D-MINI-DA	532814	LFMB-D-MINI-DA-A
Midi	–	532812	LFMB-D-MIDI-DA	532815	LFMB-D-MIDI-DA-A
Maxi	–	532813	LFMB-D-MAXI-DA	532816	LFMB-D-MAXI-DA-A
<b>Connecting plates with threaded connection</b>					
Mini	G1/8	532817	LFMB-1/8-D-MINI-DA	532827	LFMB-1/8-D-MINI-DA-A
	G1/4	532818	LFMB-1/4-D-MINI-DA	532828	LFMB-1/4-D-MINI-DA-A
	G3/8	532819	LFMB-3/8-D-MINI-DA	532829	LFMB-3/8-D-MINI-DA-A
Midi	G1/4	532820	LFMB-1/4-D-MIDI-DA	532830	LFMB-1/4-D-MIDI-DA-A
	G3/8	532821	LFMB-3/8-D-MIDI-DA	532831	LFMB-3/8-D-MIDI-DA-A
	G1/2	532822	LFMB-1/2-D-MIDI-DA	532832	LFMB-1/2-D-MIDI-DA-A
	G3/4	532823	LFMB-3/4-D-MIDI-DA	532833	LFMB-3/4-D-MIDI-DA-A
Maxi	G1/2	532824	LFMB-1/2-D-MAXI-DA	532834	LFMB-1/2-D-MAXI-DA-A
	G3/4	532825	LFMB-3/4-D-MAXI-DA	532835	LFMB-3/4-D-MAXI-DA-A
	G1	532826	LFMB-1-D-MAXI-DA	532836	LFMB-1-D-MAXI-DA-A

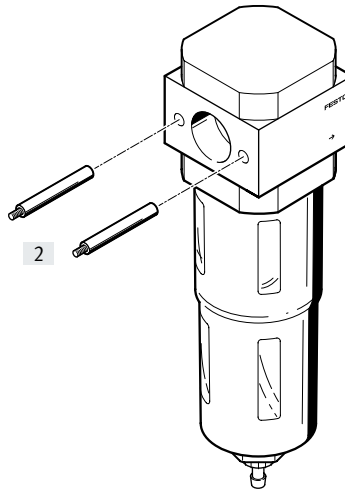
## Peripherals overview

### Mini/Midi/Maxi

Individual device with connecting plates



Individual device without connecting plates, for service unit combination



### Mounting attachments and accessories

	Individual device		Combination		→ Page/Internet
	With connecting plates	Without connecting plates	With connecting plates	Without connecting plates	
[1] Mounting bracket HFOE	■	–	■	–	hfoe-d
[2] Threaded bolt (included in the scope of delivery) FRB	–	–	■	■	frb-d

## Type codes

001	Series
<b>LFX</b>	Activated carbon filter

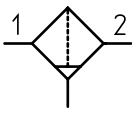
002	Pneumatic connection
	None
<b>1/8</b>	Female thread G1/8
<b>1/4</b>	Female thread G1/4
<b>3/8</b>	Female thread G3/8
<b>1/2</b>	Female thread G1/2
<b>3/4</b>	Female thread G3/4
<b>1</b>	Female thread G1




003	Version
<b>D</b>	D series, metal

004	Size
<b>MINI</b>	Grid dimension 40 mm (without connecting plates)
<b>MIDI</b>	Grid dimension 55 mm (without connecting plates)
<b>MAXI</b>	Grid dimension 66 mm (without connecting plates)

## Datasheet

### Function



-  - Flow rate  
360 ... 1100 l/min
-  - Temperature range  
-10 ... +60 °C
-  - Operating pressure  
0 ... 16 bar



- Removes liquid and gaseous oil particles from compressed air using activated carbon
- Activated carbon filter cartridges provide odour and oil-free air to food industry standard
- With or without connecting plates
- Prefiltration down to a particle size of 0.01 µm is recommended
- New filter cartridges → page 36

### General technical data

Size	Mini	Midi	Maxi
Pneumatic connection 1, 2 <sup>1)</sup>	G1/8, G1/4, G3/8, - <sup>2)</sup>	G1/4, G3/8, G1/2, G3/4, - <sup>2)</sup>	G1/2, G3/4, G1, - <sup>2)</sup>
Design	Fibre filter (filter fabric made of activated carbon)		
Type of mounting	Via accessories In-line installation		
Mounting position	Vertical ±5°		
Air purity class at the output	Compressed air to ISO 8573-1:2010 [1:4:1] Inert gases		
Bowl guard	Metal bowl guard		
Residual oil content [mg/m <sup>3</sup> ]	≤0.003		

1) Connecting plates with threaded connection

2) Without connecting plates.

† Note: This product corresponds to ISO 1179-1 and ISO 228-1.

### Standard flow rate $q_n^{1)}$ [l/min]

Size	Mini	Midi	Maxi
Max. standard flow rate for air purity class $q_{n \max}$	360	900	1100

1) Measured at  $p_1 = 6$  bar.

### Operating and environmental conditions

Operating pressure [bar]	0 ... 16
Operating medium	Compressed air to ISO 8573-1:2010 [1:4:2] Inert gases
Ambient temperature [°C]	-10 ... +60
Temperature of medium [°C]	+5 ... +30
Storage temperature [°C]	-10 ... +60
Corrosion resistance class CRC <sup>1)</sup>	2

1) More information [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

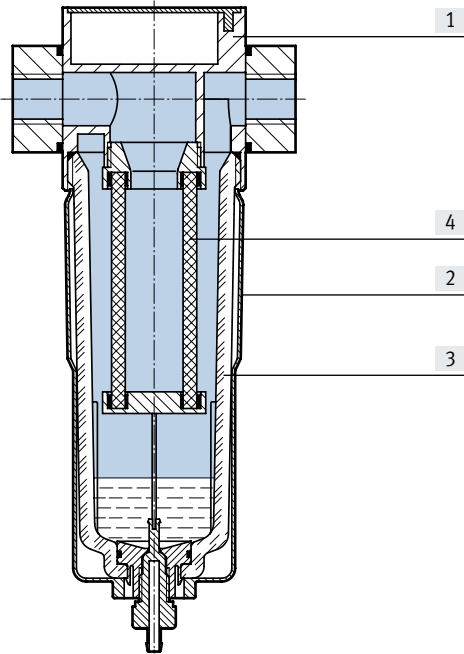


Datasheet

Weight [g]	Mini		Midi	Maxi
Size				
With connecting plates	376		816	1191
Without connecting plates	283		600	921

Materials

Sectional view

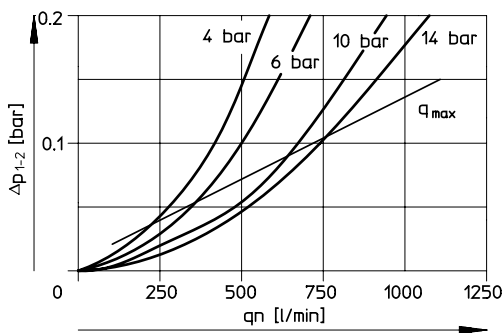


Activated carbon filter

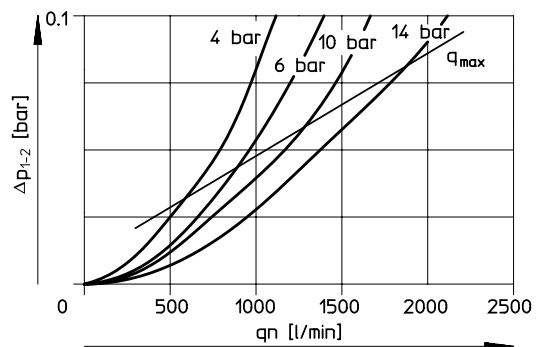
[1]	Housing	Die-cast zinc
[2]	Bowl	PC
[3]	Metal bowl guard	Aluminium
[4]	Filter	Filter fabric made of activated carbon
-	Seals	NBR
Note on materials		RoHS-compliant

Standard flow rate  $q_n$  as a function of differential pressure  $\Delta p_{1-2}$

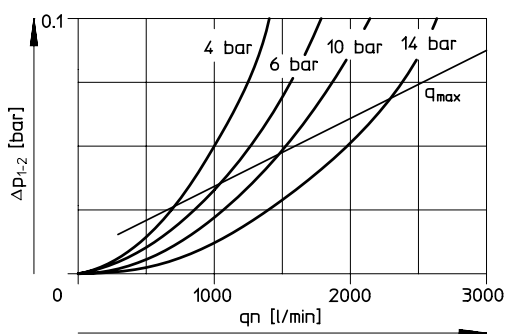
LFX-1/4-D-MINI



LFX-1/2-D-MIDI



LFX-1-D-MAXI



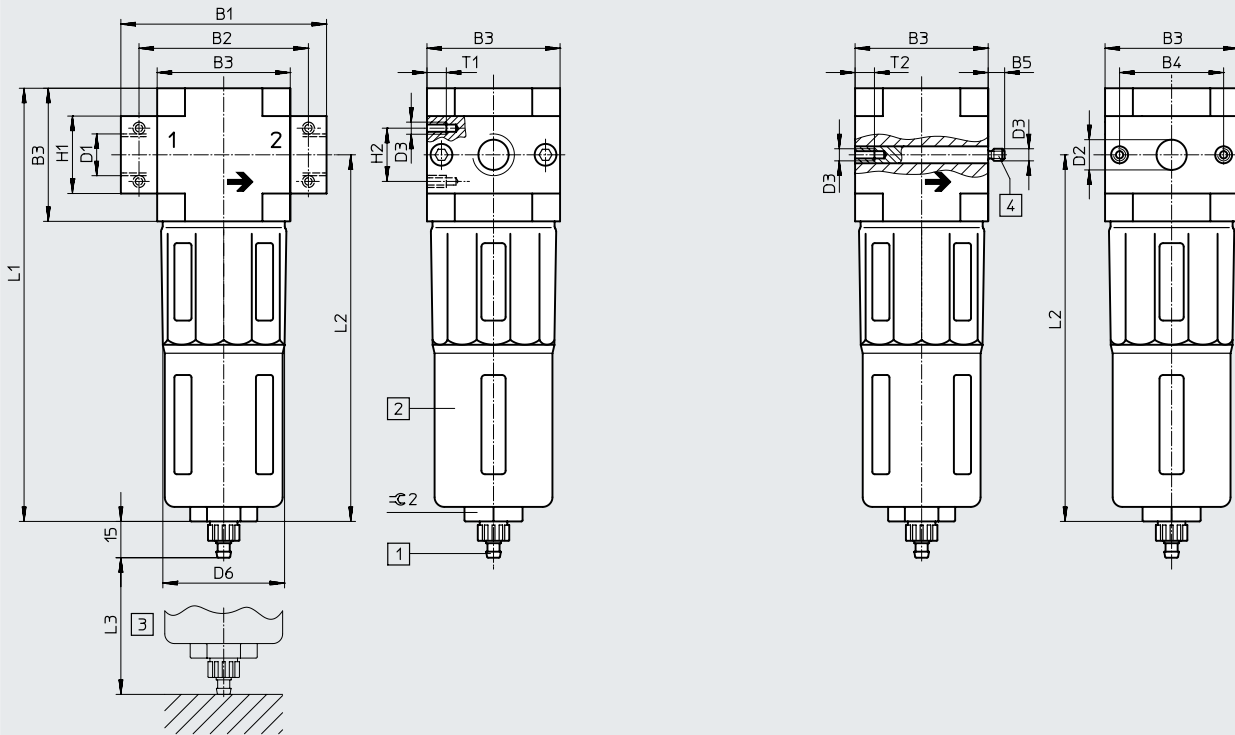
Datasheet

Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

Connecting plates with threaded connection

Without connecting plates



- [1] Barbed connector for plastic tubing PUN(H)-8x1.25
- [2] Metal bowl guard
- [3] Installation dimension
- [4] Threaded bolt (exchangeable)
- Flow direction

Type	B1	B2	B3	B4	B5	D1	D2 ∅	D3	D6 ∅	H1	H2	L1	L2	L3	T1	T2	≅2
<b>Mini</b>																	
LFX-1/8-D-MINI	64	52	40	30	-	G1/8	-	M4	38	20	11	144	124	60	7	-	22
LFX-1/4-D-MINI						G1/4											
LFX-3/8-D-MINI	70					G3/8											
LFX-D-MINI	-	-			5.8	-	11	-		-	-				-	10	
<b>Midi</b>																	
LFX-1/4-D-MIDI	85	70	55	43	-	G1/4	-	M5	52	32	22	179	151	80	8	-	24
LFX-3/8-D-MIDI						G3/8											
LFX-1/2-D-MIDI						G1/2											
LFX-3/4-D-MIDI						G3/4											
LFX-D-MIDI	-	-			6.8	-	24			-	-				-	11	
<b>Maxi</b>																	
LFX-1/2-D-MAXI	96	80	66	46	-	G1/2	-	M5	65	32	22	203	170	90	8	-	24
LFX-3/4-D-MAXI						G3/4											
LFX-1-D-MAXI	116	91				G1				40							
LFX-D-MAXI	-	-			6.8	-	30			-	-				-	11	

† Note: This product corresponds to ISO 1179-1 and ISO 228-1.

## Datasheet

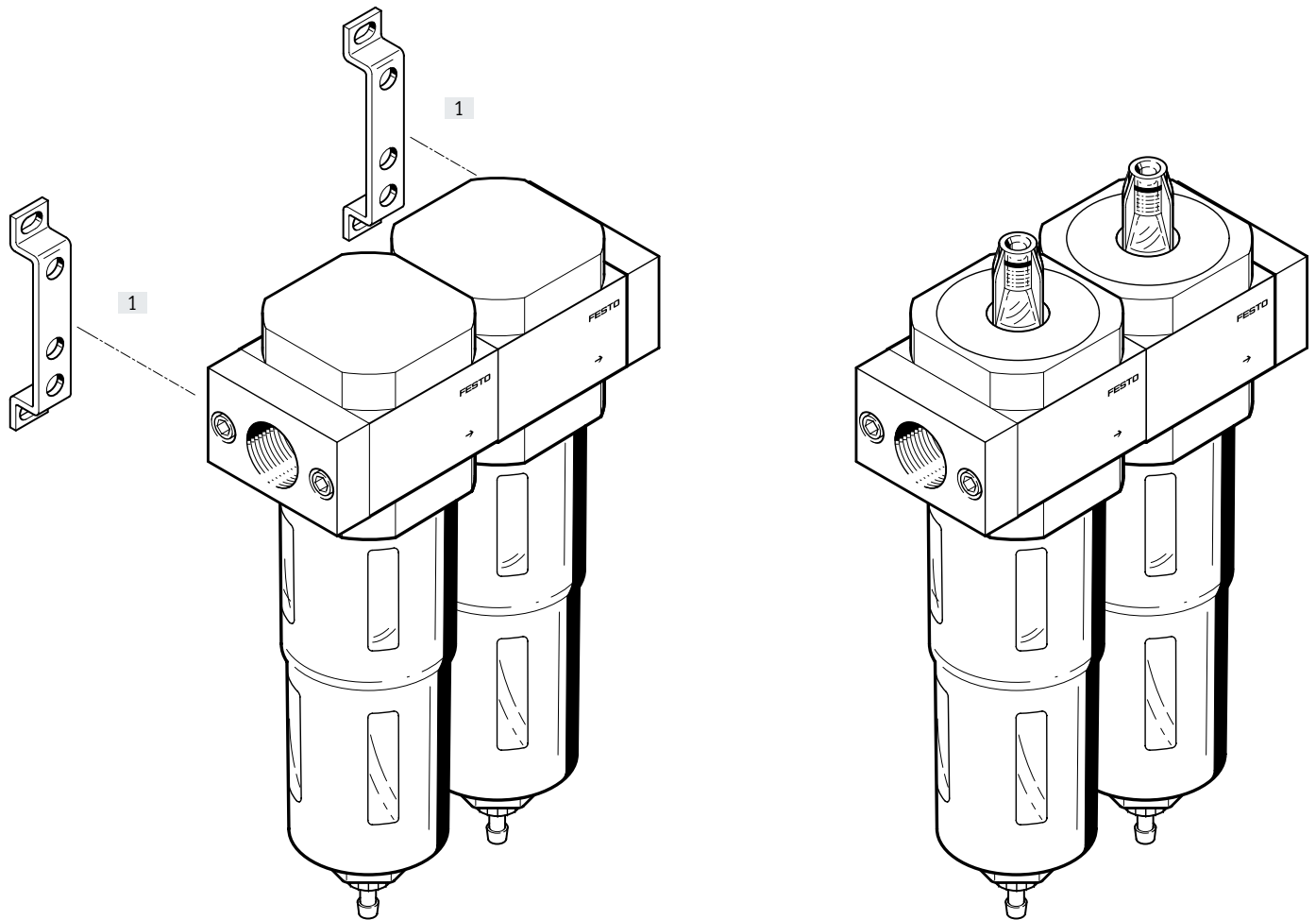
Ordering data			
Size	Connection	Part no.	Type
<b>Without connecting plates</b>			
Mini	–	532776	LFX-D-MINI
Midi	–	532777	LFX-D-MIDI
Maxi	–	532778	LFX-D-MAXI
<b>Connecting plates with threaded connection</b>			
Mini	G1/8	532779	LFX-1/8-D-MINI
	G1/4	532802	LFX-1/4-D-MINI
	G3/8	532780	LFX-3/8-D-MINI
Midi	G1/4	532781	LFX-1/4-D-MIDI
	G3/8	532782	LFX-3/8-D-MIDI
	G1/2	532783	LFX-1/2-D-MIDI
	G3/4	532784	LFX-3/4-D-MIDI
Maxi	G1/2	532785	LFX-1/2-D-MAXI
	G3/4	532786	LFX-3/4-D-MAXI
	G1	532787	LFX-1-D-MAXI

## Peripherals overview

### Mini/Midi/Maxi

Without differential pressure display

With differential pressure display



#### Mounting components

[1] Mounting bracket  
HFOE

→ Page/Internet

hfoe-d

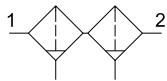
## Type codes

001	Series
LFMBA	Fine filter combination
002	Pneumatic connection
1/8	Female thread G1/8
1/4	Female thread G1/4
3/8	Female thread G3/8
1/2	Female thread G1/2
3/4	Female thread G3/4
1	Female thread G1
003	Version
D	D series, metal

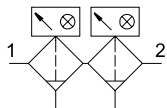
004	Size
MINI	Grid dimension 40 mm (without connecting plates)
MIDI	Grid dimension 55 mm (without connecting plates)
MAXI	Grid dimension 66 mm (without connecting plates)
005	Filter change sensing
	None
DA	Differential pressure display, visual
006	Condensate drain
	Manually rotating
A	Fully automatic

## Datasheet

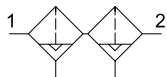
Condensate drain, manual,  
without differential pressure display



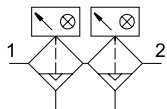
With differential pressure display






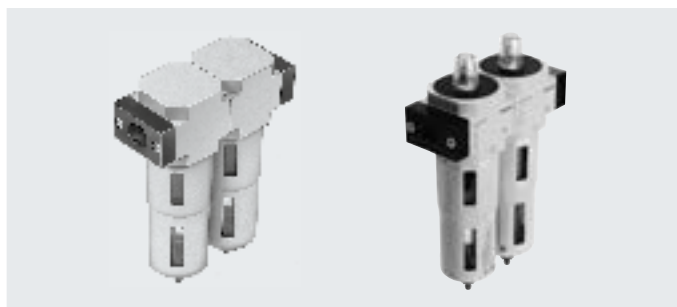
Condensate drain, fully automatic,  
without differential pressure display



With differential pressure display



-  - Flow rate  
125 ... 600 l/min
-  - Temperature range  
-10 ... +60 °C
-  - Input pressure  
1 ... 16 bar



- High-efficiency filter for special requirements
- Air quality to ISO85731:2010
- Available as pre-assembled filter combination
- Version with differential pressure display for visual indication of filter contamination
- Filter cartridges with 1 µm and 0.01 µm
- New filter cartridges → page 36

General technical data			
Size	Mini	Midi	Maxi
Pneumatic connection 1, 2 <sup>1)</sup>	G1/8, G1/4, G3/8	G1/4, G3/8, G1/2, G3/4	G1/2, G3/4, G1
Design	Fibre filter		
Type of mounting	Via accessories In-line installation		
Mounting position	Vertical ±5°		
Grade of filtration [µm]	1 and 0.01		
Air purity class at the output	Compressed air to ISO 8573-1:2010 [1:7:2] Inert gases		
Filter efficiency [%]	99.9999		
Bowl guard	Metal bowl guard		
Condensate drain	Manual Fully automatic		
Differential pressure display	Visual indicator		
Residual oil content [mg/m <sup>3</sup> ]	≤0.01		
Max. condensate volume [ml]	22	43	80

1) Connecting plates with threaded connection

† Note: This product corresponds to ISO 1179-1 and ISO 228-1.

Standard nominal flow rate <sup>1)</sup> qnN [l/min]										
Size	Mini			Midi				Maxi		
Pneumatic connection 1, 2	G1/8	G1/4	G3/8	G1/4	G3/8	G1/2	G3/4	G1/2	G3/4	G1
LFMBA	125	130	140	300	350	350	350	550	550	600

1) Measured at p<sub>1</sub> = 6 bar and Δp = 70 mbar.

† 125 l/min must be available for the fully automatic condensate drain to close correctly.

## Datasheet

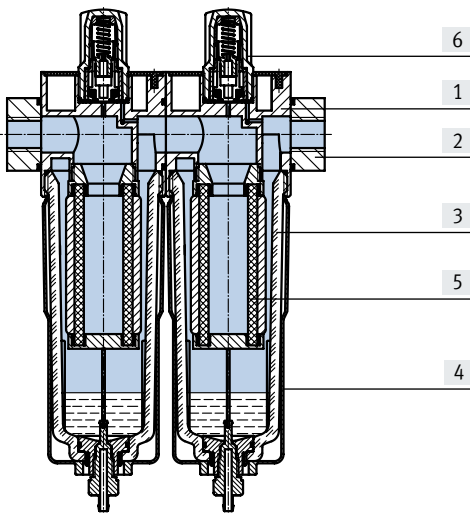
Operating and environmental conditions		
Condensate drain	Manual	Fully automatic
Operating pressure [bar]	1 ... 16	2 ... 12
Operating medium	Compressed air to ISO 8573-1:2010 [6:8:4]	
	Inert gases	
Ambient temperature [°C]	-10 ... +60	+5 ... +60
Temperature of medium [°C]	+1.5 ... +60	+5 ... +60
Storage temperature [°C]	-10 ... +60	
Corrosion resistance class CRC <sup>1)</sup>	2	

1) More information [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

Weight [g]			
Size	Mini	Midi	Maxi
Without differential pressure display	500	1300	2400
With differential pressure display	651	1429	2362

### Materials

Sectional view

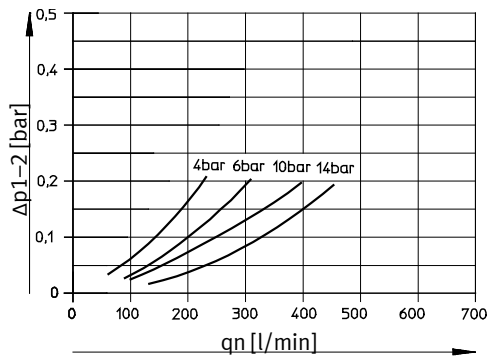


Filter combination		
[1]	Housing	Die-cast zinc
[2]	Connecting plates	Die-cast zinc
[3]	Bowl	PC
[4]	Metal bowl guard	Aluminium
[5]	Filter	Borosilicate fibre
[6]	Housing for version with differential pressure display	PC
-	Seals	NBR
Note on materials		RoHS-compliant

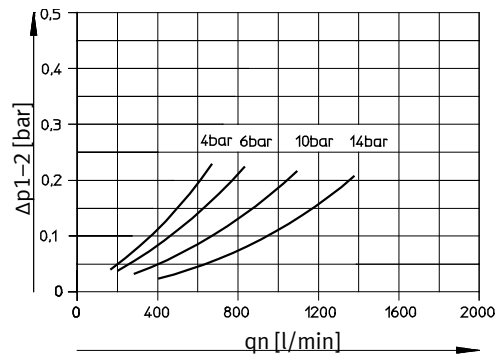
Datasheet

Standard flow rate  $q_n$  as a function of differential pressure  $\Delta p_{1-2}$

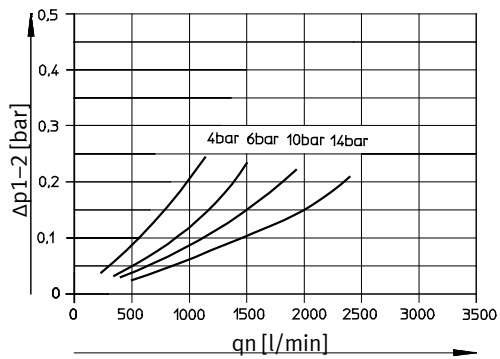
LFMBA-1/4-D-MINI



LFMBA-1/2-D-MID



LFMBA-1-D-MAXI

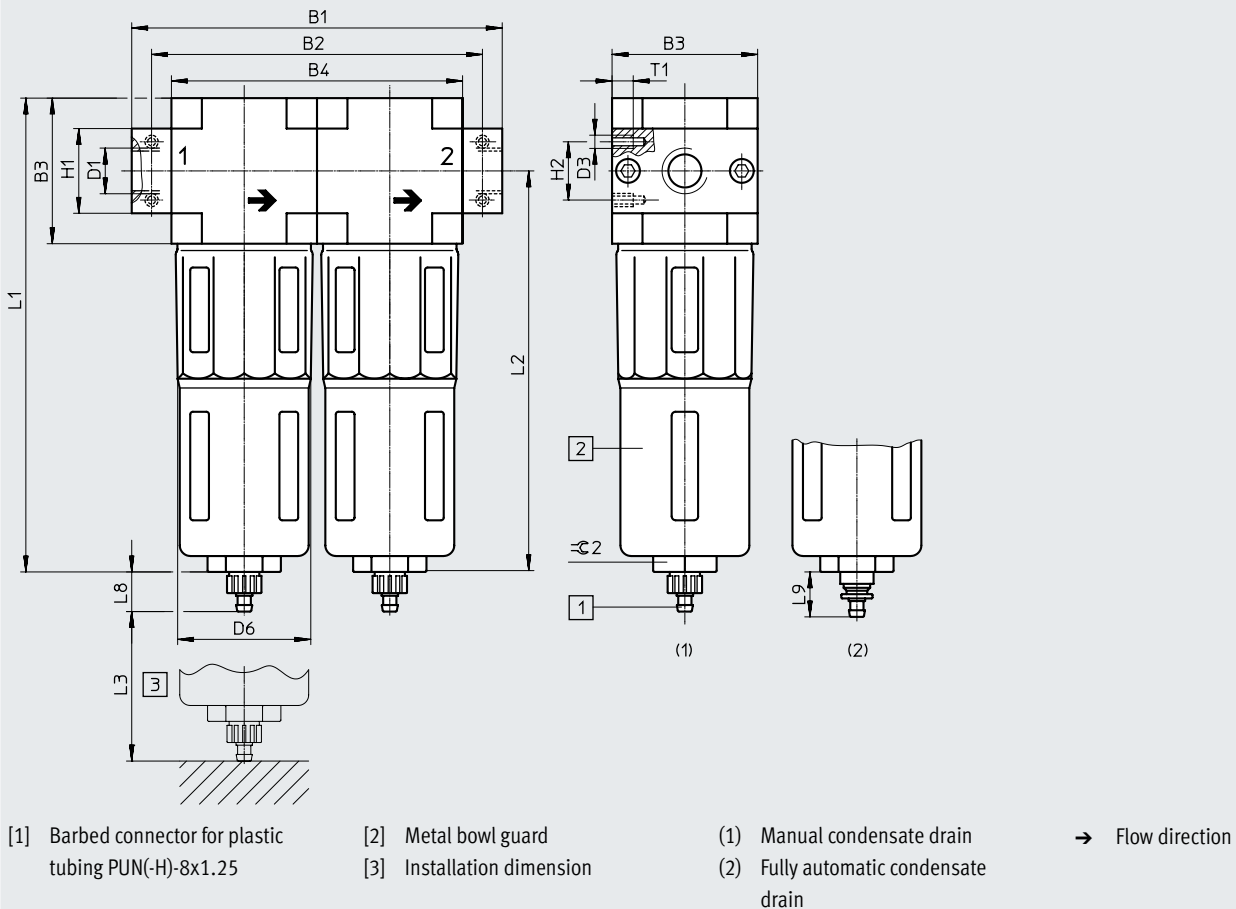




Datasheet

Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)



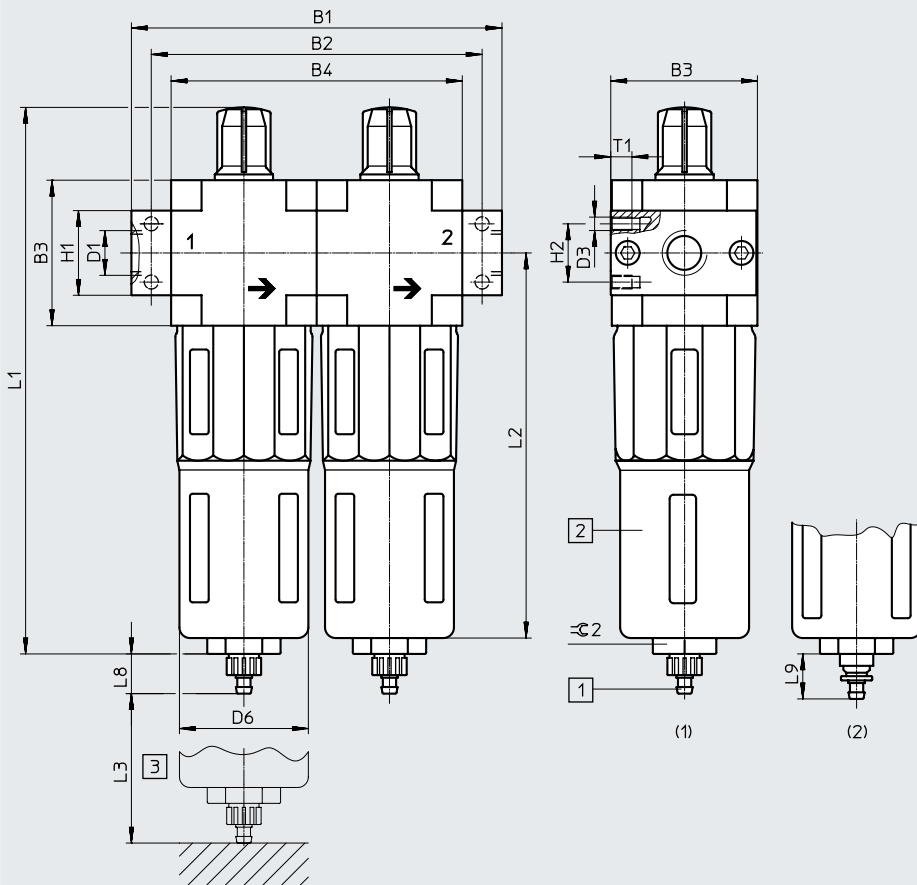
Type	B1	B2	B3	B4	D1	D3	D6 ∅	H1	H2	L1	L2	L3	L8	L9	T1	≈ 2
<b>Mini</b>																
LFMBA-1/8-D-MINI	104	92	40	80	G1/8	M4	38	20	11	144	124	60	15	19	7	22
LFMBA-1/4-D-MINI					G1/4											
LFMBA-3/8-D-MINI	110				G3/8											
<b>Midi</b>																
LFMBA-1/4-D-MIDI	140	125	55	110	G1/4	M5	52	32	22	179	151	80	15	19	8	24
LFMBA-3/8-D-MIDI					G3/8											
LFMBA-1/2-D-MIDI					G1/2											
LFMBA-3/4-D-MIDI					G3/4											
<b>Maxi</b>																
LFMBA-1/2-D-MAXI	162	146	66	132	G1/2	M5	65	32	22	203	170	90	15	19	8	24
LFMBA-3/4-D-MAXI					G3/4											
LFMBA-1-D-MAXI	182	157			G1			40								

Note: This product corresponds to ISO 1179-1 and ISO 228-1.

Datasheet

Dimensions with differential pressure display

Download CAD data → [www.festo.com](http://www.festo.com)



- [1] Barbed connector for plastic tubing PUN(-H)-8x1.25
- [2] Metal bowl guard
- [3] Installation dimension
- (1) Manual condensate drain
- (2) Fully automatic condensate drain
- Flow direction

Type	B1	B2	B3	B4	D1	D3	D6 ∅	H1	H2	L1	L2	L3	L8	L9	T1	≈ 2
<b>Mini</b>																
LFMBA-1/8-D-MINI-DA	104	92	40	80	G1/8	M4	38	20	11	173	124	60	15	19	7	22
LFMBA-1/4-D-MINI-DA					G1/4											
LFMBA-3/8-D-MINI-DA	110				G3/8											
<b>Midi</b>																
LFMBA-1/4-D-MIDI-DA	140	125	55	110	G1/4	M5	52	32	22	206	151	80	15	19	8	24
LFMBA-3/8-D-MIDI-DA					G3/8											
LFMBA-1/2-D-MIDI-DA					G1/2											
LFMBA-3/4-D-MIDI-DA					G3/4											
<b>Maxi</b>																
LFMBA-1/2-D-MAXI-DA	162	146	66	132	G1/2	M5	65	32	22	231	170	90	15	19	8	24
LFMBA-3/4-D-MAXI-DA					G3/4											
LFMBA-1-D-MAXI-DA	182	157			G1			40								

† Note: This product corresponds to ISO 1179-1 and ISO 228-1.

## Datasheet

Ordering data – Filter combination LFMBA					
Size	Connection	Condensate drain		Condensate drain	
		Manual		Fully automatic	
		Part no.	Type	Part no.	Type
Mini	G1/8	162658	LFMBA-1/8-D-MINI	162666	LFMBA-1/8-D-MINI-A
	G1/4	162659	LFMBA-1/4-D-MINI	162667	LFMBA-1/4-D-MINI-A
	G3/8	162660	LFMBA-3/8-D-MINI	162668	LFMBA-3/8-D-MINI-A
Midi	G1/4	186471	LFMBA-1/4-D-MIDI	186472	LFMBA-1/4-D-MIDI-A
	G3/8	162661	LFMBA-3/8-D-MIDI	162669	LFMBA-3/8-D-MIDI-A
	G1/2	162662	LFMBA-1/2-D-MIDI	162670	LFMBA-1/2-D-MIDI-A
	G3/4	162663	LFMBA-3/4-D-MIDI	162671	LFMBA-3/4-D-MIDI-A
Maxi	G1/2	186477	LFMBA-1/2-D-MAXI	186478	LFMBA-1/2-D-MAXI-A
	G3/4	162664	LFMBA-3/4-D-MAXI	162672	LFMBA-3/4-D-MAXI-A
	G1	162665	LFMBA-1-D-MAXI	162673	LFMBA-1-D-MAXI-A

Ordering data – Filter combination LFMBA with differential pressure display DA					
Size	Connection	Condensate drain		Condensate drain	
		Manual		Fully automatic	
		Part no.	Type	Part no.	Type
Mini	G1/8	532863	LFMBA-1/8-D-MINI-DA	532873	LFMBA-1/8-D-MINI-DA-A
	G1/4	532864	LFMBA-1/4-D-MINI-DA	532874	LFMBA-1/4-D-MINI-DA-A
	G3/8	532865	LFMBA-3/8-D-MINI-DA	532875	LFMBA-3/8-D-MINI-DA-A
Midi	G1/4	532866	LFMBA-1/4-D-MIDI-DA	532876	LFMBA-1/4-D-MIDI-DA-A
	G3/8	532867	LFMBA-3/8-D-MIDI-DA	532877	LFMBA-3/8-D-MIDI-DA-A
	G1/2	532868	LFMBA-1/2-D-MIDI-DA	532878	LFMBA-1/2-D-MIDI-DA-A
	G3/4	532869	LFMBA-3/4-D-MIDI-DA	532879	LFMBA-3/4-D-MIDI-DA-A
Maxi	G1/2	532870	LFMBA-1/2-D-MAXI-DA	532880	LFMBA-1/2-D-MAXI-DA-A
	G3/4	532871	LFMBA-3/4-D-MAXI-DA	532881	LFMBA-3/4-D-MAXI-DA-A
	G1	532872	LFMBA-1-D-MAXI-DA	532882	LFMBA-1-D-MAXI-DA-A

## Accessories

### Filter cartridges, D series, metal



#### Ordering data

Size	Filter cartridge	Grade of filtration [µm]	Part no.	Type
Mini	Micro filter cartridge	0.01	162674	MS4/D-MINI-LFM-A <sup>1)</sup>
	Fine filter cartridge	1	162677	MS4/D-MINI-LFM-B <sup>1)</sup>
	Filter cartridge (colour: blue)	5	159640	LFP-D-MINI-5M
	Filter cartridge (colour: white)	40	363665	LFP-D-MINI-40M <sup>1)</sup>
	Activated carbon filter cartridge	–	532912	MS4/D-MINI-LFX
Midi	Micro filter cartridge	0.01	162675	LFMAP-D-MIDI
	Fine filter cartridge	1	162678	LFMBP-D-MIDI
	Filter cartridge (colour: blue)	5	159594	LFP-D-MIDI-5M
	Filter cartridge (colour: white)	40	363667	LFP-D-MIDI-40M <sup>1)</sup>
	Activated carbon filter cartridge	–	532788	LFACP-MIDI
Maxi	Micro filter cartridge	0.01	162676	LFMAP-D-MAXI
	Fine filter cartridge	1	162679	LFMBP-D-MAXI
	Filter cartridge (colour: blue)	5	159641	LFP-D-MAXI-5M
	Filter cartridge (colour: white)	40	363664	LFP-D-MAXI-40M <sup>1)</sup>
	Activated carbon filter cartridge	–	532789	LFACP-MAXI

1) RoHS-compliant