

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

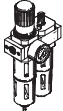
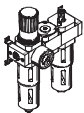
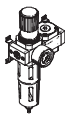
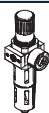
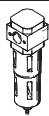
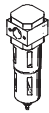
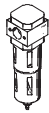
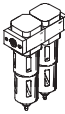
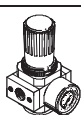
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Filters LF/LFMA/LFMB/LFX/LFMBA, D series, metal design

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Product range overview D series service units, metal design

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
Service units																			
FRC/FRCS		Micro	■	■	■	–	–	–	–	–	■	■	■	–	–	–	–	■	–
		Mini	–	–	■	■	■	–	–	–	–	–	■	■	–	–	–	■	■
		Midi	–	–	–	■	■	■	■	–	–	–	■	■	–	–	–	■	■
		Maxi	–	–	–	–	–	■	■	■	–	–	■	■	–	–	–	■	■
Service unit combinations																			
FRC-K		Micro	–																
		Mini	–	–	■	■	–	–	–	–	–	–	■	■	–	–	–	■	
		Midi	–	–	–	■	■	■	–	–	–	–	■	■	–	–	–	■	
		Maxi	–	–	–	–	–	■	■	–	–	–	■	■	–	–	–	■	
LFR-K LFRS-K		Micro	–																
		Mini	–	–	■	■	–	–	–	–	–	–	■	■	–	–	–	■	
		Midi	–	–	–	■	■	■	–	–	–	–	■	■	–	–	–	■	
		Maxi	–	–	–	–	–	■	■	–	–	–	■	■	–	–	–	■	
Individual devices																			
Filter regulators LFR/LFRS		Micro	■	■	■	–	–	–	–	–	■	■	■	–	–	–	–	■	–
		Mini	–	–	■	■	■	–	–	–	–	–	■	■	–	–	–	■	■
		Midi	–	–	–	■	■	■	■	–	–	–	■	■	–	–	–	■	■
		Maxi	–	–	–	–	–	■	■	■	–	–	■	■	–	–	–	■	■
Filters LF		Micro	■	■	■	–	–	–	–	–	■	■	–	–	–	–	–	■	–
		Mini	–	–	■	■	■	–	–	–	–	–	–	–	–	–	–	■	■
		Midi	–	–	–	■	■	■	■	–	–	–	–	–	–	–	–	■	■
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–	–	–	–	■	■
Fine and micro filters LFMA/LFMB		Micro	–																
		Mini	–	–	■	■	■	–	–	–	–	–	–	–	■	■	–	–	
		Midi	–	–	–	■	■	■	■	–	–	–	–	–	■	■	–	–	
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–	■	■	–	–	
Active carbon filters LFX		Micro	–																
		Mini	–	–	■	■	■	–	–	–	–	–	–	–	–	–	–	–	
		Midi	–	–	–	■	■	■	■	–	–	–	–	–	–	–	–	–	
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–	–	–	–	–	
Filter combinations LFMBA		Micro	–																
		Mini	–	–	■	■	■	–	–	–	–	–	–	–	■	■	–	–	
		Midi	–	–	–	■	■	■	■	–	–	–	–	–	■	■	–	–	
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–	■	■	–	–	
Pressure regulators LR/LRS		Micro	■	■	■	–	–	–	–	–	■	■	■	–	–	–	–	–	
		Mini	–	–	■	■	■	–	–	–	–	–	■	■	–	–	–	–	
		Midi	–	–	–	■	■	■	■	–	–	–	■	■	–	–	–	–	
		Maxi	–	–	–	–	–	■	■	■	–	–	■	■	–	–	–	–	

Filters LF/LFMA/LFMB/LFX/LFMBA, D series, metal design

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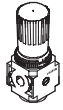
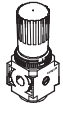
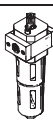
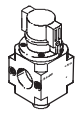
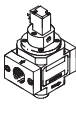
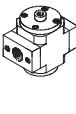
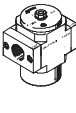
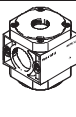
Product range overview D series service units, metal design

Type	Size	Bowl guard		Condensate drain			Pressure indication		Actuator lock		Supply voltage			Options			→ Page/ Internet
		Metal bowl guard	Plastic bowl	Manual rotary	Semi-automatic	Fully automatic	With pressure gauge	Without pressure gauge	Rotary knob with detent	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 indicator	
Service units																	
FRC/FRCS	Micro	–	■	■	■	–	■	■	■	–	–	–	–	–	–	–	frc
	Mini	■	–	■	–	■	■	■	■	■	–	–	–	–	–	–	
	Midi	■	–	■	–	■	■	■	■	■	–	–	–	–	–	–	
	Maxi	■	–	■	–	■	■	■	■	■	–	–	–	■	■	–	
Service unit combinations																	
FRC-K	Micro	–															frc
	Mini	■	–	■	–	■	■	–	■	–	–	–	–	–	–	–	
	Midi	■	–	■	–	■	■	–	■	–	–	–	–	–	–	–	
	Maxi	■	–	■	–	■	■	–	■	–	–	–	–	■	■	–	
LFR-K LFRS-K	Micro	–															lfr
	Mini	■	–	■	–	■	■	–	■	■	■	–	–	–	–	–	
	Midi	■	–	■	–	■	■	–	■	■	■	–	–	–	–	–	
	Maxi	■	–	■	–	■	■	–	■	■	■	–	–	■	■	–	
Individual devices																	
Filter regulators LFR/LFRS	Micro	–	■	■	■	–	■	■	■	–	–	–	–	–	–	–	lfr
	Mini	■	–	■	–	■	■	■	■	■	–	–	–	–	–	–	
	Midi	■	–	■	–	■	■	■	■	■	–	–	–	–	–	–	
	Maxi	■	–	■	–	■	■	■	■	■	–	–	–	■	■	–	
Filters LF	Micro	–	■	■	■	–	–	–	–	–	–	–	–	–	–	–	6
	Mini	■	–	■	–	■	–	–	–	–	–	–	–	–	–	–	
	Midi	■	–	■	–	■	–	–	–	–	–	–	–	–	–	–	
	Maxi	■	–	■	–	■	–	–	–	–	–	–	–	–	–	–	
Fine and micro filters LFMA/LFMB	Micro	–															16
	Mini	■	–	■	–	■	–	–	–	–	–	–	–	–	–	■	
	Midi	■	–	■	–	■	–	–	–	–	–	–	–	–	–	■	
	Maxi	■	–	■	–	■	–	–	–	–	–	–	–	–	–	■	
Active carbon filters LFX	Micro	–															25
	Mini	■	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	Midi	■	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	Maxi	■	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Filter combinations LFMBA	Micro	–															30
	Mini	■	–	■	–	■	–	–	–	–	–	–	–	–	–	■	
	Midi	■	–	■	–	■	–	–	–	–	–	–	–	–	–	■	
	Maxi	■	–	■	–	■	–	–	–	–	–	–	–	–	–	■	
Pressure regulators LR/LRS	Micro	–	–	–	–	–	■	■	■	–	–	–	–	–	–	–	lr
	Mini	–	–	–	–	–	■	■	■	■	–	–	–	■	–	–	
	Midi	–	–	–	–	–	■	■	■	■	–	–	–	■	–	–	
	Maxi	–	–	–	–	–	■	■	■	■	–	–	–	■	■	–	

Filters LF/LFMA/LFMB/LFX/LFMBA, D series, metal design

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Product range overview D series service units, metal design

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
Individual devices														
Pressure regulators LRB/LRBS		Micro	–											
		Mini	–	–	–	■	–	–	–	–	–	–	■	■
		Midi	–	–	–	–	■	–	–	–	–	–	■	■
		Maxi	–											
Pressure regulator combinations LRB-K		Micro	–											
		Mini	–	–	–	■	■	–	–	–	–	–	■	■
		Midi	–	–	–	–	■	■	–	–	–	–	■	■
		Maxi	–											
Lubricators LOE		Micro	■	■	■	–	–	–	–	–	■	■	–	–
		Mini	–	–	■	■	■	–	–	–	–	–	–	–
		Midi	–	–	–	■	■	■	■	–	–	–	–	–
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–
On-off valves HE		Micro	–											
		Mini	–	–	■	■	■	–	–	–	–	–	–	–
		Midi	–	–	–	■	■	■	■	–	–	–	–	–
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–
On-off valves, electrical HEE		Micro	–											
		Mini	–	–	■	■	■	–	–	–	–	–	–	–
		Midi	–	–	–	■	■	■	■	–	–	–	–	–
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–
On-off valves, pneumatic HEP		Micro	–											
		Mini	–	–	■	■	■	–	–	–	–	–	–	–
		Midi	–	–	–	■	■	■	■	–	–	–	–	–
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–
Soft-start valves HEL		Micro	–											
		Mini	–	–	■	■	■	–	–	–	–	–	–	–
		Midi	–	–	–	■	■	■	■	–	–	–	–	–
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–
Membrane air dryers LDM1		Micro	–											
		Mini	–											
		Midi	–											
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–
Branching modules FRM		Micro	–											
		Mini	–	–	■	■	■	–	–	–	–	–	–	–
		Midi	–	–	–	■	■	■	■	–	–	–	–	–
		Maxi	–	–	–	–	–	■	■	■	–	–	–	–
Distributor block FRZ		Micro	–	–	–	–	–	–	–	–	–	–	–	–
		Mini	–	–	–	–	–	–	–	–	–	–	–	–
		Midi	–	–	–	–	–	–	–	–	–	–	–	–
		Maxi	–	–	–	–	–	–	–	–	–	–	–	–

Filters LF/LFMA/LFMB/LFX/LFMBA, D series, metal design

Product range overview D series service units, metal design

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 detent	Rotary knob with integrated lock	24 V DC	110 V AC	230 V AC	Non-return function	Pressure switch		
Individual devices														
Pressure regulators LRB/LRBS	Micro	-											lrb	
	Mini	-	-	-	■	■	■	-	-	-	-	-		
	Midi	-	-	-	■	■	■	-	-	-	-	-		
	Maxi	-												
Pressure regulator combinations LRB-K	Micro	-											lrb	
	Mini	-	-	-	■	■	-	-	-	-	-	-		
	Midi	-	-	-	■	■	-	-	-	-	-	-		
	Maxi	-												
Lubricators LOE	Micro	-	■	-	■	-	-	-	-	-	-	-	loe	
	Mini	■	-	-	■	-	-	-	-	-	-	-		
	Midi	■	-	-	■	-	-	-	-	-	-	-		
	Maxi	■	-	-	■	-	-	-	-	-	-	-		
On-off valves HE	Micro	-											he	
	Mini	-	-	-	■	■	-	-	-	-	-	-		
	Midi	-	-	-	■	■	-	-	-	-	-	-		
	Maxi	-	-	-	■	■	-	-	-	-	-	-		
On-off valves, electrical HEE	Micro	-											hee	
	Mini	-	-	-	■	-	-	■	■	■	-	-		
	Midi	-	-	-	■	-	-	■	■	■	-	-		
	Maxi	-	-	-	■	-	-	■	■	■	-	-		
On-off valves, pneumatic HEP	Micro	-											hep	
	Mini	-	-	-	■	-	-	-	-	-	-	-		
	Midi	-	-	-	■	-	-	-	-	-	-	-		
	Maxi	-	-	-	■	-	-	-	-	-	-	-		
Soft-start valves HEL	Micro	-											hel	
	Mini	-	-	-	■	-	-	-	-	-	-	-		
	Midi	-	-	-	■	-	-	-	-	-	-	-		
	Maxi	-	-	-	■	-	-	-	-	-	-	-		
Membrane air dryers LDM1	Micro	-											ldm1	
	Mini	-												
	Midi	-												
	Maxi	■	-	-	■	-	-	-	-	-	-	-		
Branching modules FRM	Micro	-											frm	
	Mini	-	-	-	■	-	-	-	-	-	■	■		
	Midi	-	-	-	■	-	-	-	-	-	■	■		
	Maxi	-	-	-	■	-	-	-	-	-	■	■		
Distributor block FRZ	Micro	-	-	-	■	-	-	-	-	-	-	-	frz	
	Mini	-	-	-	■	-	-	-	-	-	-	-		
	Midi	-	-	-	■	-	-	-	-	-	-	-		
	Maxi	-	-	-	■	-	-	-	-	-	-	-		

127.Filters LF, D series, metal design

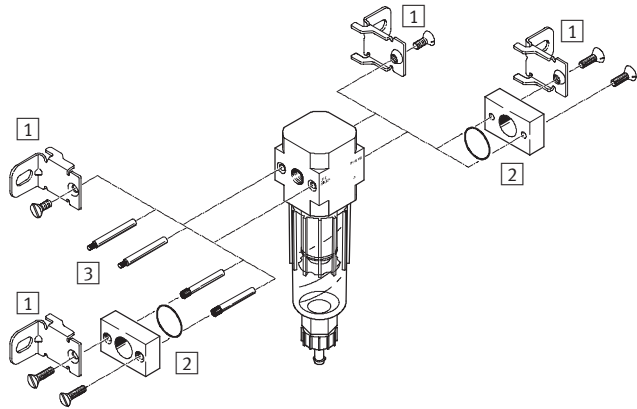
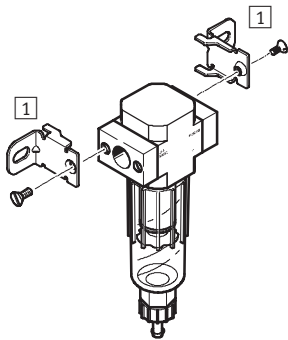
Peripherals overview

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Micro

Individual unit with connection plates,
connection size G $\frac{1}{8}$, QS4 or QS6

Individual unit without connection plates, for service unit combination
connection size M5 or M7 in housing

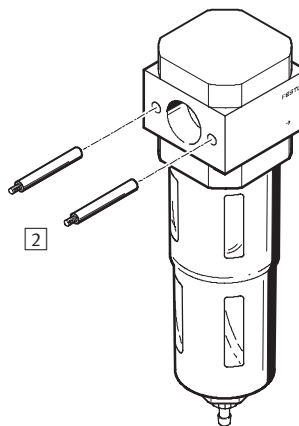
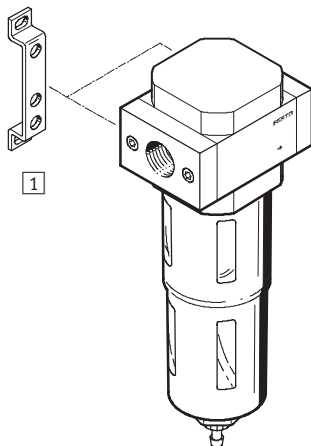


Mounting attachments and accessories					
	Individual unit		Combination		→ Page/ Internet
	with connection plates	without connection plates	with connection plates	without connection plates	
[1] Mounting bracket HFOE	■	■	■	■	hfoe-d
[2] Connecting plate kit PBL	–	■	–	■	pbl
[3] Threaded pin FRB	–	–	■	■	frb-d

Mini/Midi/Maxi

Individual unit with connection plates

Individual unit without connection plates, for service unit combination



Mounting attachments and accessories					
	Individual unit		Combination		→ Page/ Internet
	with connection plates	without connection plates	with connection plates	without connection plates	
[1] Mounting bracket HFOE	■	–	■	–	hfoe-d
[2] Threaded pin (included in scope of delivery) FRB	–	–	■	■	frb-d

128.Filters LF, D series, metal design

Type codes

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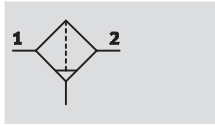
		LF	–	1/4	–	D	–	5M	–	MIDI	–	A
Basic function												
LF	Filter											
Pneumatic connection												
M5	Thread M5											
M7	Thread M7											
QS4	Push-in fitting QS4											
QS6	Push-in fitting QS6											
1/8	Thread G1/8											
1/4	Thread G1/4											
3/8	Thread G3/8											
1/2	Thread G1/2											
3/4	Thread G3/4											
1	Thread G1											
Series												
D	Series											
Grade of filtration												
5M	5 µm											
	40 µm											
Size												
MICRO	Grid dimension 25 mm (without connecting plates)											
MINI	Grid dimension 40 mm (without connecting plates)											
MIDI	Grid dimension 55 mm (without connecting plates)											
MAXI	Grid dimension 66 mm (without connecting plates)											
Condensate drain												
	Turned manually											
H	Semi-automatic											
A	Fully automatic											

Filters LF, D series, metal design

Technical data

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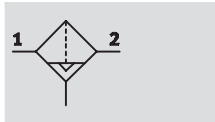
Manual rotary condensate drain



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

-  - Temperature range
-10 ... +60 °C

Semi or fully automatic condensate drain



-  - Input pressure
0 ... 16 bar



- Good particle and condensate separation
- High flow rate with minimal pressure drop
- With manual or fully automatic condensate drain
- Choice of filter cartridges: 5 µm or 40 µm
- New filter cartridges → 37

General technical data															
Size	Micro					Mini			Midi				Maxi		
Pneumatic connection	M5	M7	G1/8	QS4	QS6	G1/8	G1/4	G3/8	G1/4	G3/8	G1/2	G3/4	G1/2	G3/4	G1
Operating medium	Compressed air					Compressed air									
Design	Sintered filter with centrifugal separation					Sintered filter with centrifugal separation									
Type of mounting	Via accessories					Via accessories									
	In-line installation					In-line installation									
Assembly position	Vertical ±5°					Vertical ±5°									
Grade of filtration [µm]	5					5 or 40									
Max. condensate volume [cm³]	3					22			43				80		
Input pressure [bar]															
Condensate drain	turned manually	0 ... 10				0 ... 16									
	semi-automatic	1 ... 10				–									
	fully automatic	–				2 ... 12									

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

Standard nominal flow rate ¹⁾ qnN [l/min]					
Connection	Female thread		Connecting plate		
	M5	M7	G1/8	QS4	QS6
Micro					
LF	170	280	290	170	280

1) Measured at p1 = 6 bar and Δp = 1 bar.
A minimum flow rate of 125 l/min is required for flawless functioning.

Filters LF, D series, metal design

Technical data

FESTO

Standard nominal flow rate ¹⁾ q _N [l/min]						
Connection	G $\frac{1}{8}$	G $\frac{1}{4}$	G $\frac{3}{8}$	G $\frac{1}{2}$	G $\frac{3}{4}$	G1
Mini						
LF-...-D-...(-A)	1000	1200	1400	–	–	–
LF-...-D-5M-...(-A)	800	950	1100	–	–	–
Midi						
LF-...-D-...(-A)	–	1900	2700	3000	3000	–
LF-...-D-5M-...(-A)	–	1600	1800	2000	2000	–
Maxi						
LF-...-D-...(-A)	–	–	–	4400	5000	5300
LF-...-D-5M-...(-A)	–	–	–	3700	3600	3800

- 1) Measured at p₁ = 6 bar and Δp = 1 bar.
A minimum flow rate of 125 l/min is required for flawless functioning.

Screw-in depth of connecting thread [mm]					
Connection	M5	M7	G $\frac{1}{8}$	QS4	QS6
Micro					
In housing	5	6	–	–	–
In connecting plates	–	–	8	–	–

Ambient conditions				
Size	Micro	Mini	Midi	Maxi
Ambient temperature [°C]	–10 ... +60			
Temperature of medium [°C]	–10 ... +60			
Corrosion resistance class 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.

Weight [g]						
Size	Micro		Mini	Midi	Maxi	
	Female thread	Connecting plate			Connection G $\frac{1}{2}$, G $\frac{3}{4}$	Connection G1
LF-...	44	64	250	700	1340	1440

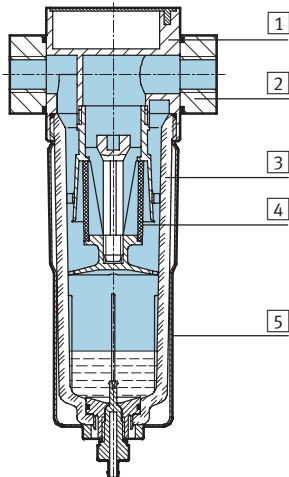
Filters LF, D series, metal design

Technical data

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Materials

Sectional view



Filter	Micro	Mini/Midi/Maxi
1 Housing	Wrought aluminium alloy	Die-cast zinc
2 Connecting plates	Wrought aluminium alloy	Die-cast zinc/aluminium
3 Bowl	Polycarbonate	Polycarbonate
4 Filter cartridge	Polyethylene	Polyethylene
5 Metal bowl guard	–	Aluminium
– Seals	Nitrile rubber	Nitrile rubber

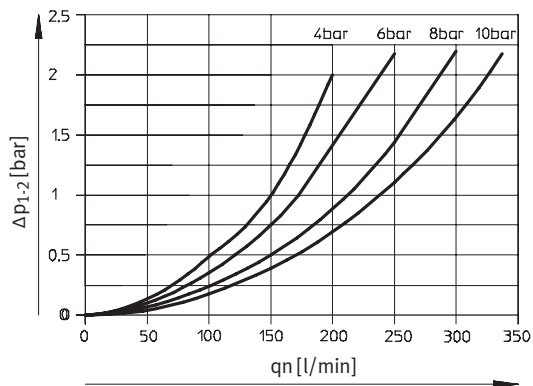
Filters LF, D series, metal design

Technical data

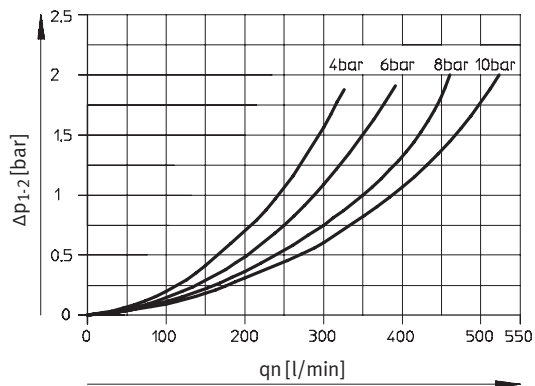
FESTO

Standard flow rate q_n as a function of the differential pressure Δp_{1-2}

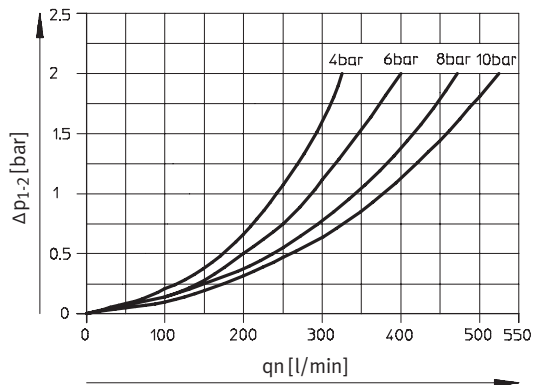
LF-M5-...-MICRO and LF-QS4-...-MICRO



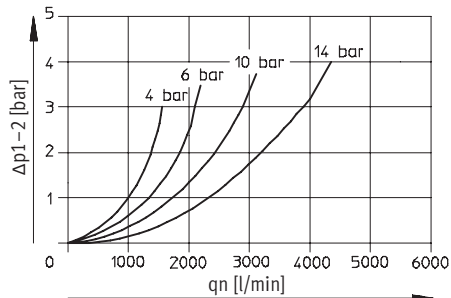
LF-1/8-...-MICRO



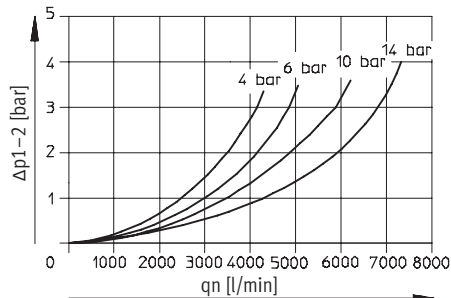
LF-M7-...-MICRO B and LF-QS6-...-MICRO



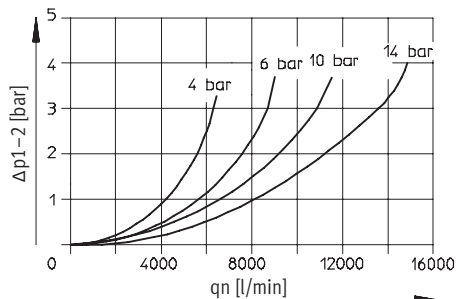
LF-1/4-D-MINI



LF-1/2-D-MIDI



LF-1-D-MAXI



Filters LF, D series, metal design

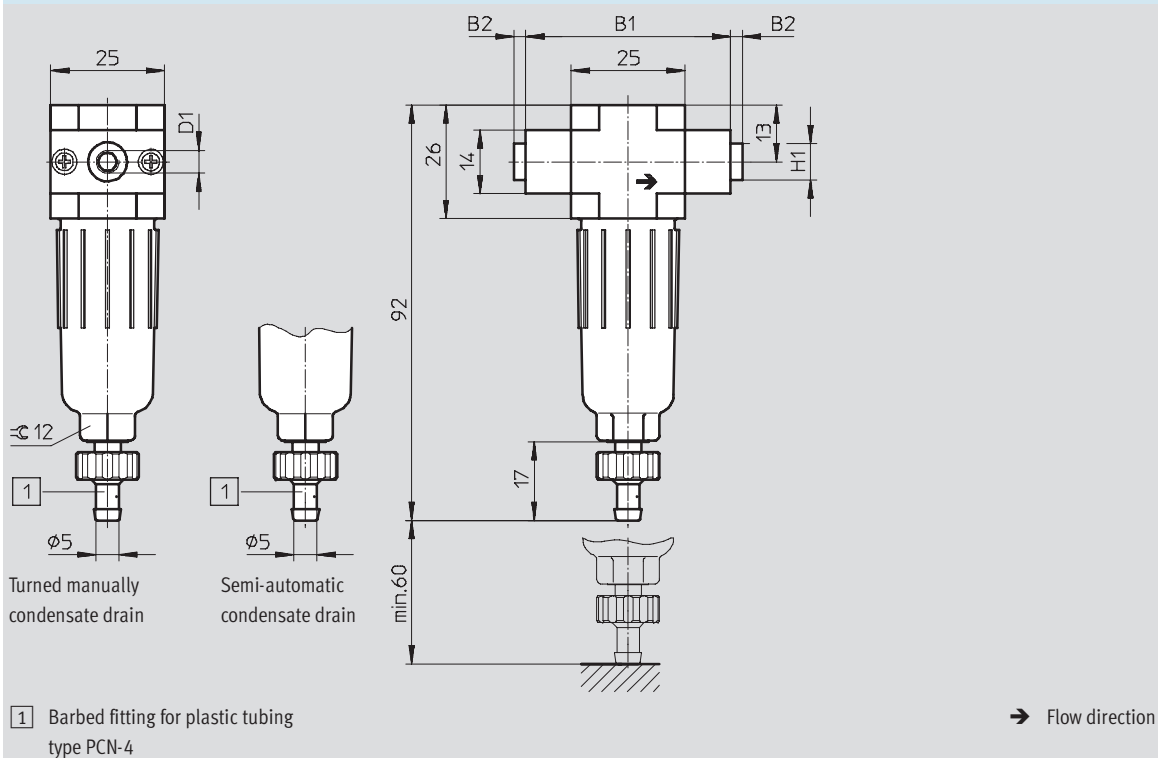
Technical data

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Dimensions

Download CAD data → www.festo.com

Micro



Type	B1	B2	D1	H1
LF-M5-D-5M-MICRO (H)	25	-	M5	-
LF-M7-D-5M-MICRO (H) B			M7	
LF-1/8-D-5M-MICRO (H)			G1/8	
LF-QS4-D-5M-MICRO (H)	45	~2.5	QS4	~8
LF-QS6-D-5M-MICRO (H)			QS6	~10

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

Filters LF, D series, metal design

Technical data

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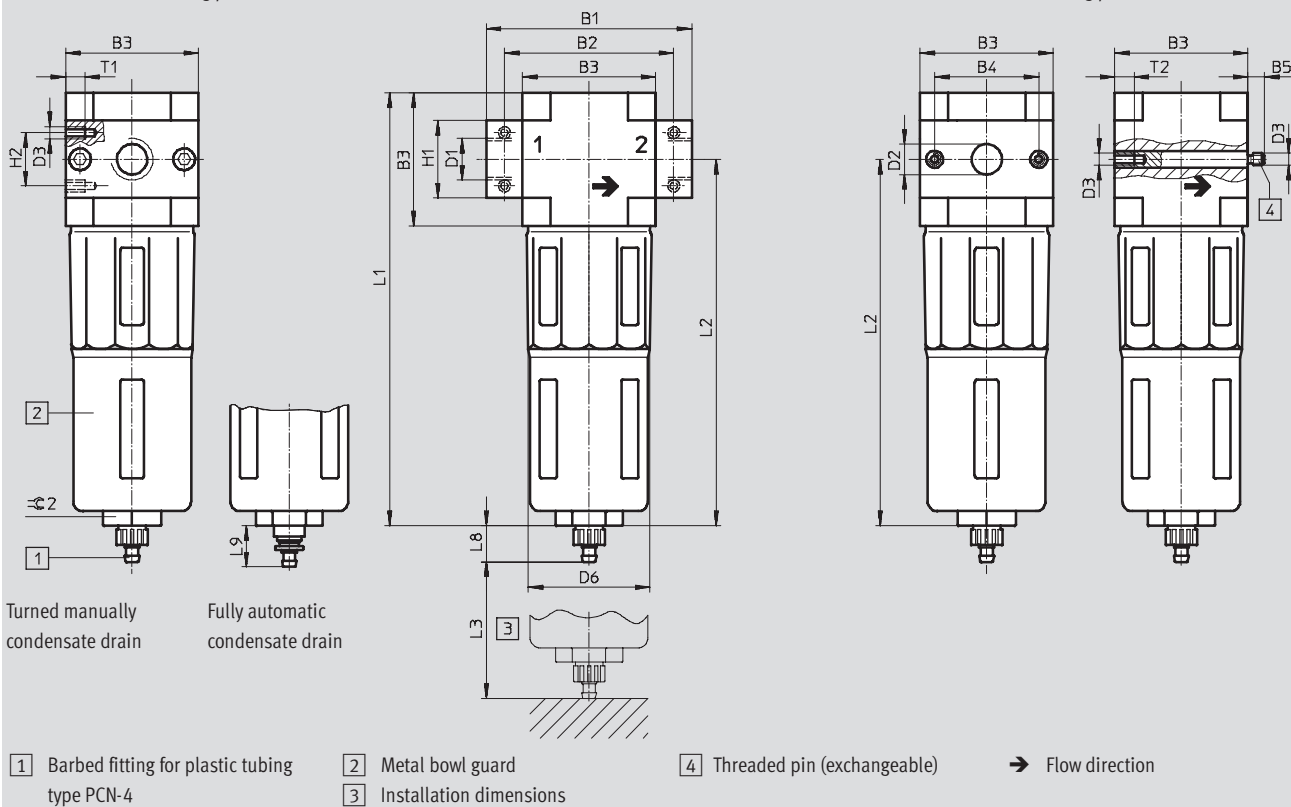
Dimensions

Download CAD data → www.festo.com

Mini/Midi/Maxi

With threaded connecting plates

Without threaded connecting plates



Type	B1	B2	B3	B4	B5	D1	D2	D3	D6	H1	H2	L1	L2	L3	L8	L9	T1	T2	≅ 2
Mini																			
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											-	10	
LF-3/8-D-MINI	70					G3/8											-	10	
LF-D-MINI	-	-			5.8	-	11			-	-						-	10	
Midi																			
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											-	11	
LF-1/2-D-MIDI						G1/2											-	11	
LF-3/4-D-MIDI						G3/4											-	11	
LF-D-MIDI	-	-			6.8	-	24			-	-						-	11	
Maxi																			
LF-1/2-D-MAXI	96	80	66	46	-	G1/2	-	M5	65	32	22	203	170	90	15	19	8	-	24
LF-3/4-D-MAXI						G3/4											-	11	
LF-1-D-MAXI	116	91				G1				40							-	11	
LF-D-MAXI	-	-			6.8	-	30			-	-						-	11	

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

Filters LF, D series, metal design

Technical data

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Ordering data			
Input pressure 1 ... 10 bar			
Condensate drain	Size	Connection	Grade of filtration 5 µm
			Part No. Type
Turned manually	Micro	Without threaded connecting plates, connecting thread in housing	
		M5	526297 LF-M5-D-5M-MICRO
		M7	534182 LF-M7-D-5M-MICRO-B
		With threaded connecting plates	
		G½	526299 LF-½-D-5M-MICRO
		With connecting plate and push-in fitting	
		QS4	526305 LF-QS4-D-5M-MICRO
		QS6	526307 LF-QS6-D-5M-MICRO
Semi-automatic	Micro	Without threaded connecting plates, connecting thread in housing	
		M5	526298 LF-M5-D-5M-MICRO-H
		M7	534183 LF-M7-D-5M-MICRO-H-B
		With threaded connecting plates	
		G½	526300 LF-½-D-5M-MICRO-H
		With connecting plate and push-in fitting	
		QS4	526306 LF-QS4-D-5M-MICRO-H
		QS6	526308 LF-QS6-D-5M-MICRO-H

Ordering data						
Input pressure 0 ... 16 bar, metal bowl guard						
Condensate drain	Size	Grade of filtration 5 µm			Grade of filtration 40 µm	
		Part No.	Type		Part No.	Type
Without threaded connecting plates						
Turned manually	Mini	192557	LF-D-5M-MINI		192551	LF-D-MINI
	Midi	192558	LF-D-5M-MIDI		192552	LF-D-MIDI
	Maxi	192559	LF-D-5M-MAXI		192553	LF-D-MAXI
Fully automatic	Mini	192560	LF-D-5M-MINI-A		192554	LF-D-MINI-A
	Midi	192561	LF-D-5M-MIDI-A		192555	LF-D-MIDI-A
	Maxi	192562	LF-D-5M-MAXI-A		192556	LF-D-MAXI-A

Filters LF, D series, metal design

Technical data

FESTO

Ordering data						
Input pressure 0 ... 16 bar, metal bowl guard						
Condensate drain	Size	Connection	Grade of filtration 5 µm		Grade of filtration 40 µm	
			Part No.	Type	Part No.	Type
With threaded connecting plates						
Turned manually	Mini	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
	Midi	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
	Maxi	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	Mini	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	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	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

137. Fine and micro filters LFMA/LFMB, D series, metal design

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Peripherals overview

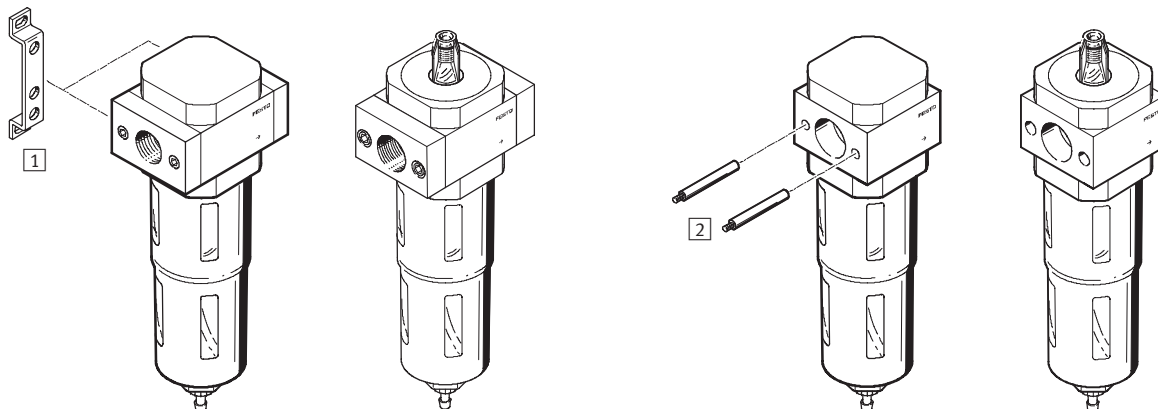
Mini/Midi/Maxi

Individual unit with connection plates
without differential pressure indicator

with differential pressure indicator

Individual unit without connection plates, for service unit combination
without differential pressure indicator

with differential pressure indicator



Mounting attachments and accessories

	Individual unit		Combination		→ Page/ Internet
	with connection plates	without connection plates	with connection plates	without connection plates	
1 Mounting bracket HFOE	■	–	■	–	hfoe-d
2 Threaded pin (included in scope of delivery) FRB	–	–	■	■	frb-d

138. Fine and micro filters LFMA/LFMB, D series, metal design

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Type codes

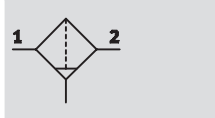
		LFMB	–	1/4	–	D	–	MIDI	–	DA	–	A
Basic function												
LFMA	Micro filter with grade of filtration 0.01 µm											
LFMB	Fine filter with grade of filtration 1 µm											
Pneumatic connection												
1/8	Thread G1/8											
1/4	Thread G1/4											
3/8	Thread G3/8											
1/2	Thread G1/2											
3/4	Thread G3/4											
1	Thread G1											
Series												
D	Series											
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)											
Filter change sensor												
	Without differential pressure indicator											
DA	With differential pressure indicator											
Condensate drain												
	Turned manually											
A	Fully automatic											

Fine and micro filters LFMA/LFMB, D series, metal design

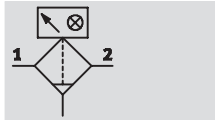
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Technical data

Manual rotary condensate drain,
without differential pressure indicator



with differential pressure indicator

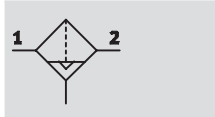


-  - Flow rate
80 ... 2,780 l/min

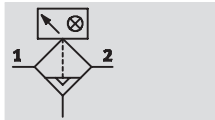
-  - Temperature range
-10 ... +60 °C

-  - Supply pressure
1 ... 16 bar

Fully automatic condensate drain,
without differential pressure indicator



with differential pressure indicator



- High efficiency filter for special requirements
- Air quality to DIN ISO 8573-1
- With or without threaded connecting plates
- Version with differential pressure indicator for optical indication of filter pollution
- Choice of filter cartridges: 0.01 µm or 1 µm
- New filter cartridges → 37

LFMA:
ISO class 1 for particles:
max. particle density 0.1 mg/m³
ISO class 2 for oil aerosols:
max. oil concentration 0.1 mg/m³
Filter efficiency 99.9999%

LFMB:
ISO class 2 for particles:
max. particle density 1 mg/m³
ISO class 3 for oil aerosols:
max. oil concentration 1 mg/m³
Filter efficiency 99.99%

General technical data											
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	
Constructional design	Fibre filter										
Type of mounting	Via accessories										
	In-line installation										
Mounting position	Vertical ±5°										
Grade of filtration [µm]	0.01 (micro filter LFMA, air purity class at the output 1.7.2 to DIN ISO 8573-1)										
	1 (fine filter LFMB, air purity class at the output 2.7.3 to DIN ISO 8573-1)										
Bowl guard	Metal bowl guard										
Condensate drain	Manual rotary										
	Fully automatic										
Differential pressure indication	Visual display										
Residual oil content [mg/m ³]	≤0.01 (micro filter LFMA)										
	≤0.5 (fine filter LFMB)										
Max. condensate volume [cm ³]	22			43				80			

-  - Note: This product conforms to ISO 1179-1 and to ISO 228-1

Fine and micro filters LFMA/LFMB, D series, metal design

FESTO

Technical data

Standard flow rate $q_n^{1)}$ [l/min]										
Connection	Mini			Midi				Maxi		
	G $\frac{1}{8}$	G $\frac{1}{4}$	G $\frac{3}{8}$	G $\frac{1}{4}$	G $\frac{3}{8}$	G $\frac{1}{2}$	G $\frac{3}{4}$	G $\frac{1}{2}$	G $\frac{3}{4}$	G1
Micro filter LFMA										
Max. standard flow rate for air purity class $q_{n \max}$	360	410	450	740	880	1,120	1,110	1,500	1,900	2,200
Min. standard flow rate for air purity class $q_{n \min}$	80	100	100	240	250	330	300	500	500	480
Fine filter LFMB										
Max. standard flow rate for air purity class $q_{n \max}$	500	650	675	900	1,420	1,750	1,980	2,400	2,220	2,780
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.

- $\downarrow$ - 125 l/min must be available for the fully automatic condensate drain to close correctly.

Operating and environmental conditions		
Condensate drain	Manual rotary	Fully automatic
Supply pressure [bar]	1 ... 16	1.5 ... 12
Operating medium for micro filter LFMA	Filtered compressed air, grade of filtration 1 μ m	
Operating medium for fine filter LFMB	Filtered compressed air, grade of filtration 5 μ m	
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 ¹⁾	2	

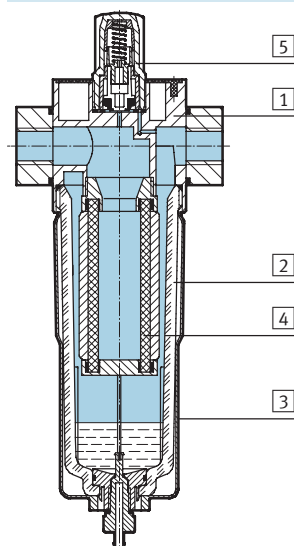
1) Corrosion resistance class 2 to Festo standard 940 070

Components subject to moderate corrosion stress. 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.

Weight [g]			
Size	Mini	Midi	Maxi
Without differential pressure indicator	250	650	1,200
With differential pressure indicator	368	834	1,340

Materials

Sectional view



Fine and micro filters		
1	Housing	Die-cast zinc
2	Bowl	PC (Polycarbonate)
3	Metal bowl guard	Aluminium
4	Filter	Borosilicate fibre
5	Housing for version with differential pressure indicator	PC (Polycarbonate)
-	Seals	Nitrile rubber
Note on materials		Free of copper and PTFE

Fine and micro filters LFMA/LFMB, D series, metal design

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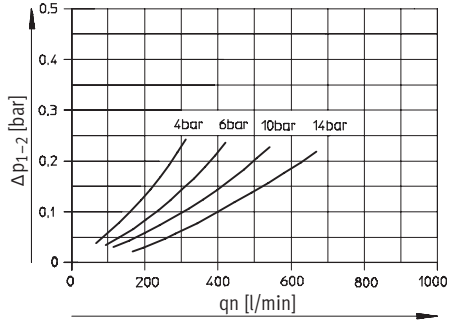
Technical data

Standard flow rate q_n as a function of the differential pressure Δp_{1-2}

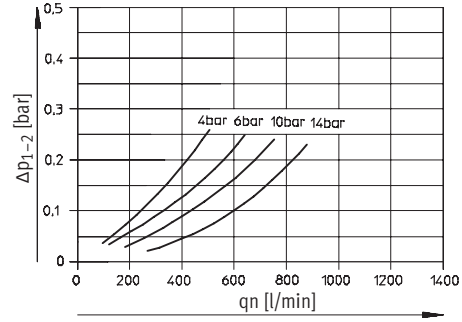
Grade of filtration 0.01 μm

Grade of filtration 1 μm

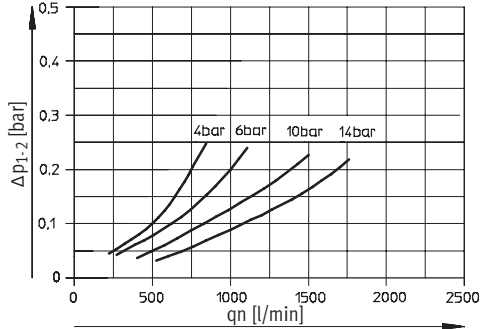
LFMA-1/4-D-MINI and LFMA-1/4-D-MINI-A



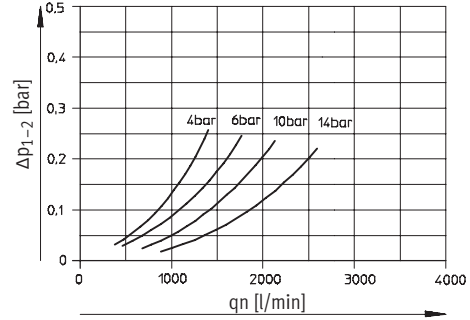
LFMB-1/4-D-MINI and LFMB-1/4-D-MINI-A



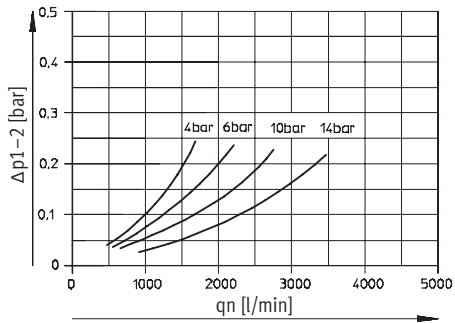
LFMA-1/2-D-MIDI and LFMA-1/2-D-MIDI-A



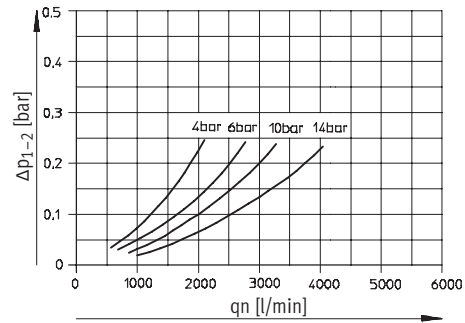
LFMB-1/2-D-MIDI and LFMB-1/2-D-MIDI-A



LFMA-1-D-MAXI and LFMA-1-D-MAXI-A



LFMB-1-D-MAXI and LFMB-1-D-MAXI-A



Fine and micro filters LFMA/LFMB, D series, metal design

Technical data

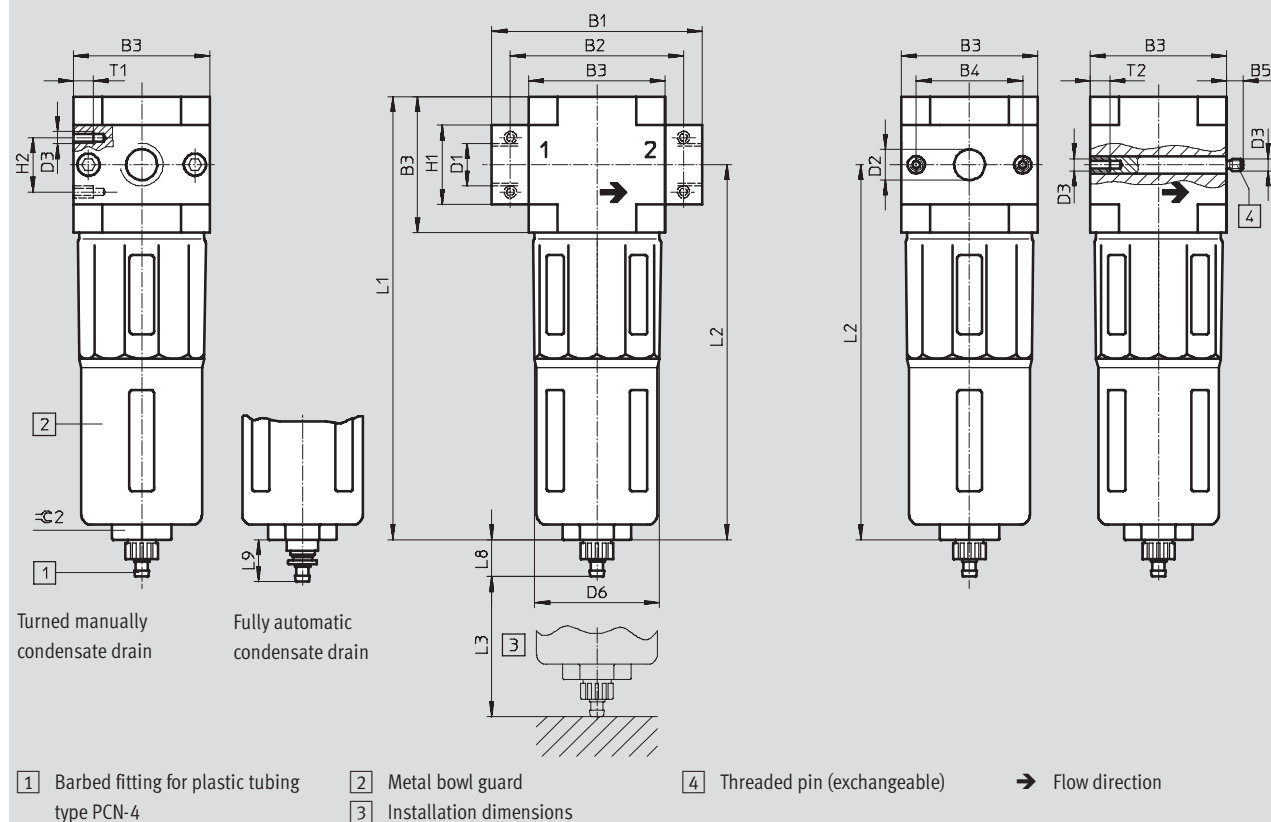
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Dimensions

Download CAD data → www.festo.com

With threaded connecting plates

Without threaded connecting plates



Type	B1	B2	B3	B4	B5	D1	D2	D3	D6	H1	H2	L1	L2	L3	L8	L9	T1	T2	≈C 2
Mini																			
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						G3/8	-										-	-	
LFMB/A-3/8-D-MINI						G1/2	-										-	10	
LFMB/A-D-MINI	-	-	-	-	5.8	-	11	-	-	-	-	-	-	-	-	-	-	-	-
Midi																			
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	-	-	-	-	-	-	-	-	-	-	-	-
Maxi																			
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						G1	-										-	-	
LFMB/A-D-MAXI	-	-	-	-	6.8	-	30	-	-	-	-	-	-	-	-	-	-	-	-

Note: This product conforms to ISO 1179-1 and to ISO 228-1

Fine and micro filters LFMA/LFMB, D series, metal design

FESTO

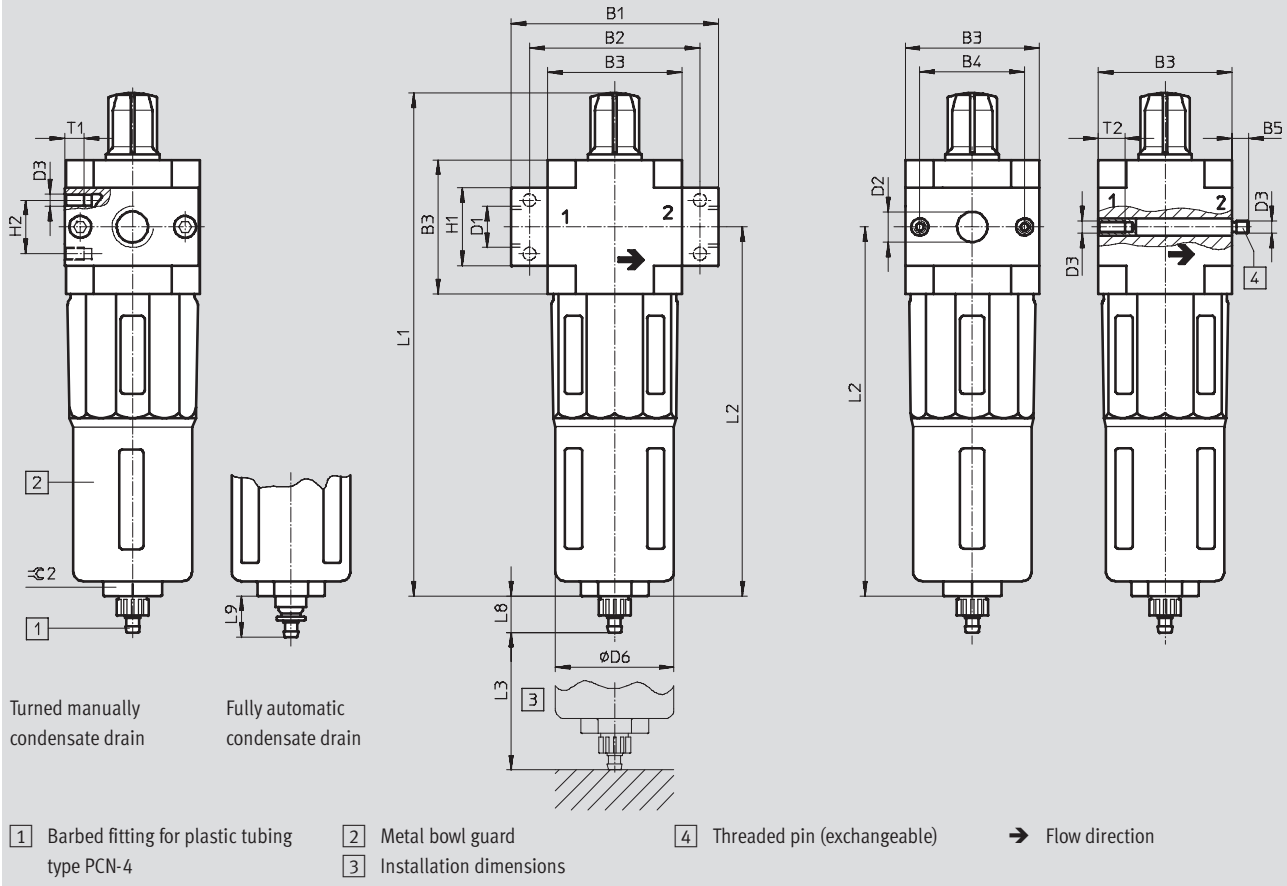
Technical data

Dimensions with differential pressure indicator DA

Download CAD data → www.festo.com

With threaded connecting plates

Without threaded connecting plates



Type	B1	B2	B3	B4	B5	D1	D2 Ø	D3	D6 Ø	H1	H2	L1	L2	L3	L8	L9	T1	T2	≈C 2	
Mini																				
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	-	-	5.8	-	11	-	-	-	-	-	-	-	-	-	-	-	10	-	
LFMB/A-D-MINI-DA	-				-															
Midi																				
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	-	
Maxi																				
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	6.8	-			30	-						-	-		-
LFMB/A-D-MAXI-DA	-	-			-		-			-	-						-	-		-

- Note: This product conforms to ISO 1179-1 and to ISO 228-1

Fine and micro filters LFMA/LFMB, D series, metal design

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Technical data

Ordering data – Micro filter LFMA					
Grade of filtration 0.01 µm, metal bowl guard					
Size	Connection	Input pressure 1 ... 16 bar		Input pressure 1.5 ... 12 bar	
		Condensate drain turned manually		Condensate drain fully automatic	
		Part No.	Type	Part No.	Type
Without threaded 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
With threaded connecting plates					
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	Input pressure 1 ... 16 bar		Input pressure 1.5 ... 12 bar	
		Condensate drain turned manually		Condensate drain fully automatic	
		Part No.	Type	Part No.	Type
Without threaded 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
With threaded connecting plates					
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

Fine and micro filters LFMA/LFMB, D series, metal design

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Technical data

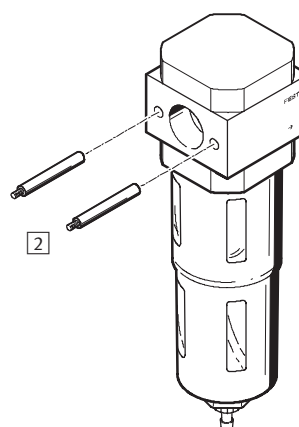
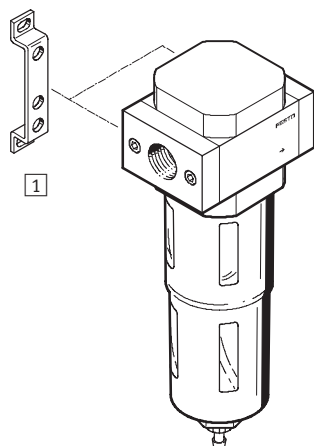
Ordering data – Micro filter LFMA with differential pressure indicator DA					
Working pressure 12 bar, grade of filtration 0.01 µm, metal bowl guard					
Size	Connection	Condensate drain turned manually		Condensate drain fully automatic	
		Part No.	Type	Part No.	Type
Without threaded connecting plates					
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
With threaded connecting plates					
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 indicator DA					
Working pressure 12 bar, grade of filtration 1 µm, metal bowl guard					
Size	Connection	Condensate drain turned manually		Condensate drain fully automatic	
		Part No.	Type	Part No.	Type
Without threaded connecting plates					
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
With threaded connecting plates					
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

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Mini/Midi/Maxi

Individual unit without connection plates, for service unit combination



Mounting attachments and accessories						
		Individual unit		Combination		➔ Page/ Internet
		with connection plates	without connection plates	with connection plates	without connection plates	
1	Mounting bracket HFOE	■	–	■	–	hfoe-d
2	Threaded pin (included in scope of delivery) FRB	–	–	■	■	frb-d

The technical drawing shows two views of the LFX 1000 filter unit:

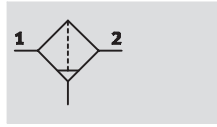
- Front View (Top):** A rectangular unit with a height of 100 mm and a width of 1000 mm.
- Side View (Bottom):** Shows the depth of the unit as 100 mm.
- Labels:** The top view is labeled "LFX" on the left and "MIDI" on the right. The bottom view is labeled "D".
- Dimensions:**
 - Overall height: 100 mm
 - Overall width: 1000 mm
 - Overall depth: 100 mm

Active carbon filters LFX, D series, metal design

FESTO

Technical data

Function



-  - Flow rate
360 ... 1,100 l/min
-  - Temperature range
-10 ... +60 °C
-  - Supply pressure
0 ... 16 bar



- Removal of liquid and gaseous oil particles from compressed air using active carbon
- Active carbon filter cartridges provide odour and oil-free air to food industry standard
- Prefiltration down to a particle size of 0.01µm is recommended
- New filter cartridges → 37

General technical data										
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
Constructional design	Fibre filter (filter fabric made of active carbon)									
Type of mounting	Via accessories									
	In-line installation									
Mounting position	Vertical ±5°									
Air purity class at the output	1.7.1 to DIN ISO 8573-1									
Bowl guard	Metal bowl guard									
Residual oil content	[mg/m³]	≤0.003								

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

Standard flow rate $q_n^{1)}$ [l/min]			
Connection	Mini	Midi	Maxi
Max. standard flow rate for air purity class $q_{n \max}$	360	900	1,100

1) Measured at $p_1 = 6$ bar.

Operating and environmental conditions	
Supply pressure	[bar] 0 ... 16
Operating medium	Compressed air, filtered, unlubricated, grade of filtration 0.01 µm
Ambient temperature	[°C] -10 ... +60
Temperature of medium	[°C] +5 ... +30
Storage temperature	[°C] -10 ... +60
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.

Active carbon filters LFX, D series, metal design

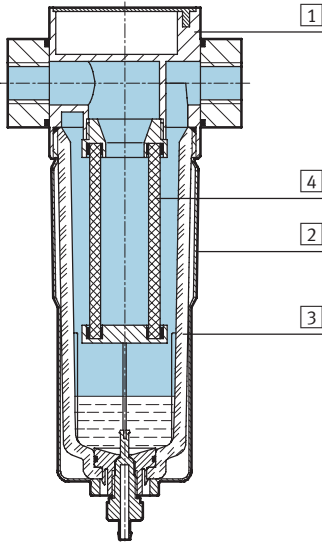
FESTO

Technical data

Weight [g]			
Size	Mini	Midi	Maxi
With connecting plates	376	816	1,191
Without connecting plates	283	600	921

Materials

Sectional view

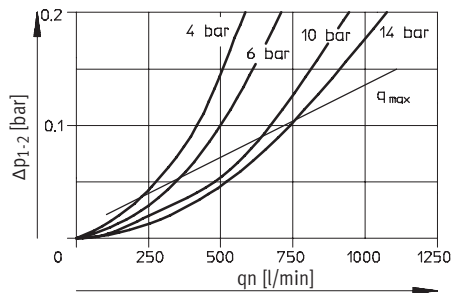


Active carbon filter

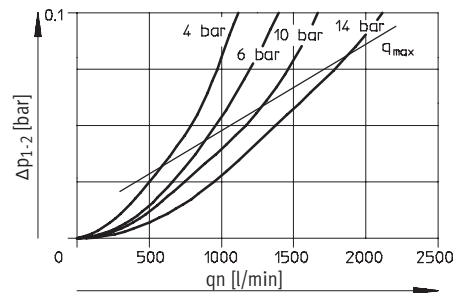
1	Housing	Die-cast zinc
2	Bowl	PC (Polycarbonate)
3	Metal bowl guard	Aluminium
4	Filters	Filter fabric made of active carbon
-	Seals	Nitrile rubber
Note on materials		Free of copper and PTFE

Standard flow rate q_n as a function of the differential pressure Δp_{1-2}

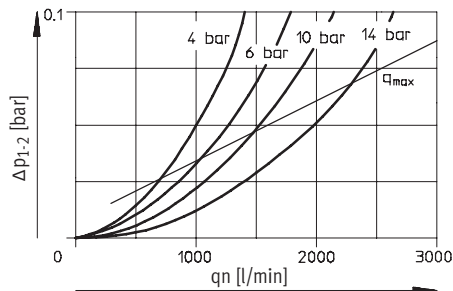
LFX-1/4-D-MINI



LFX-1/2-D-MIDI



LFX-1-D-MAXI



Active carbon filters LFX, D series, metal design

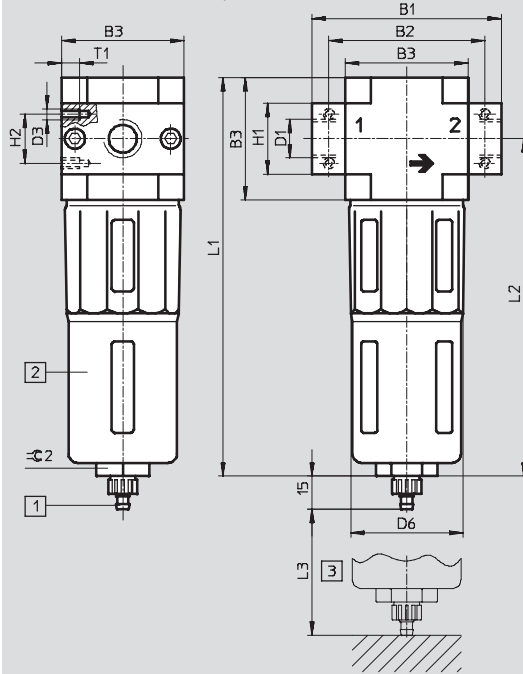
Technical data

FESTO

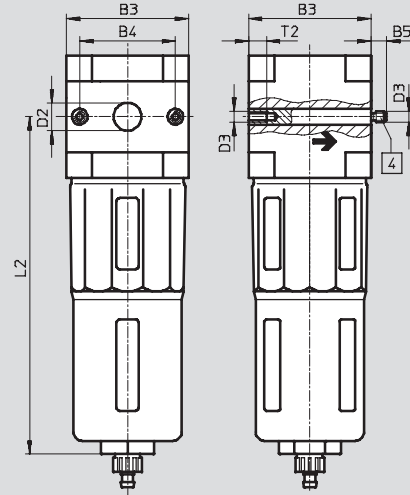
Dimensions

Download CAD data → www.festo.com

With threaded connecting plates



Without threaded connecting plates



1 Barbed fitting for plastic tubing type PCN-4

2 Metal bowl guard
3 Installation dimensions

4 Threaded pin (exchangeable)

→ Flow direction

Type	B1	B2	B3	B4	B5	D1	D2	D3	D6	H1	H2	L1	L2	L3	T1	T2	≅ 2
Mini																	
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						G3/8											
LFX-D-MINI	-	-			5.8	-	11	-		-	-				-	10	
Midi																	
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	
Maxi																	
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						G1											
LFX-D-MAXI	-	-			6.8	-	30			-	-				-	11	

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

Active carbon filters LFX, D series, metal design

FESTO

Technical data

Ordering data		
Active carbon filter with metal bowl guard		
Size	Part No.	Type
Without threaded connecting plates		
Mini	532776	LFX-D-MINI
Midi	532777	LFX-D-MIDI
Maxi	532778	LFX-D-MAXI

Ordering data			
Active carbon filter with metal bowl guard			
Size	Connection	Part No.	Type
With threaded connecting plates			
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

151.Filter combinations LFMBA, D series, metal design

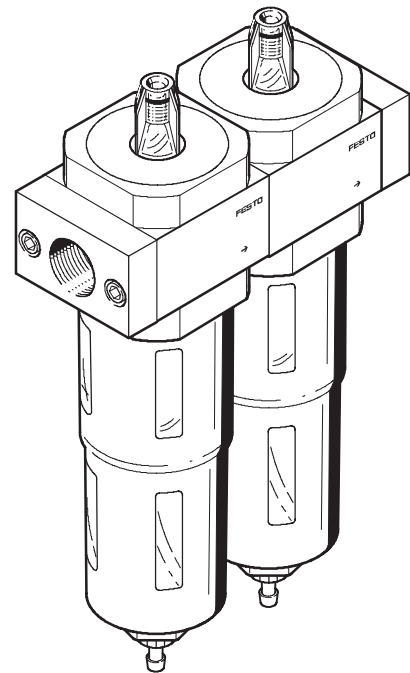
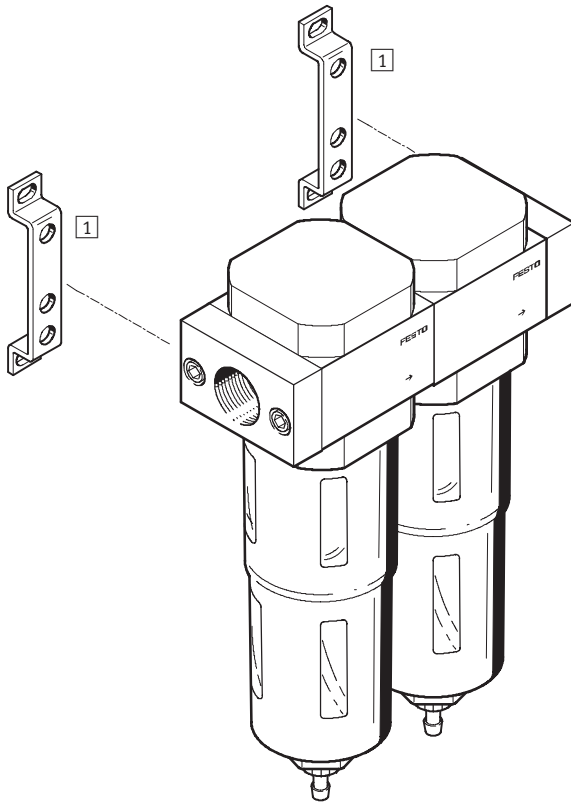
Peripherals overview

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Mini/Midi/Maxi

without differential pressure indicator

with differential pressure indicator



Mounting components

→ Page/
Internet

1 Mounting bracket
HFOE

hfoe-d

152.Filter combinations LFMBA, D series, metal design

Type codes

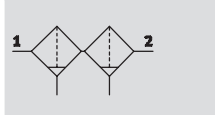
		LFMBA	–	1/4	–	D	–	MIDI	–	DA	–	A
Basic function												
LFMBA	Filter combination											
Pneumatic connection												
1/8	Thread G1/8											
1/4	Thread G1/4											
3/8	Thread G3/8											
1/2	Thread G1/2											
3/4	Thread G3/4											
1	Thread G1											
Series												
D	Series											
Size												
MINI	Grid dimension 40 mm (without connecting plates)											
MIDI	Grid dimension 55 mm (without connecting plates)											
MAXI	Grid dimension 60 mm (without connecting plates)											
Filter change sensor												
	Without differential pressure indicator											
DA	With differential pressure indicator											
Condensate drain												
	Turned manually											
A	Fully automatic											

Filter combinations LFMBA, D series, metal design

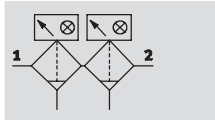
FESTO

Technical data

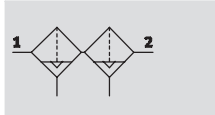
Manual rotary condensate drain,
without differential pressure indicator



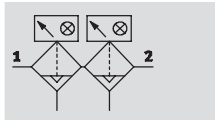
with differential pressure indicator



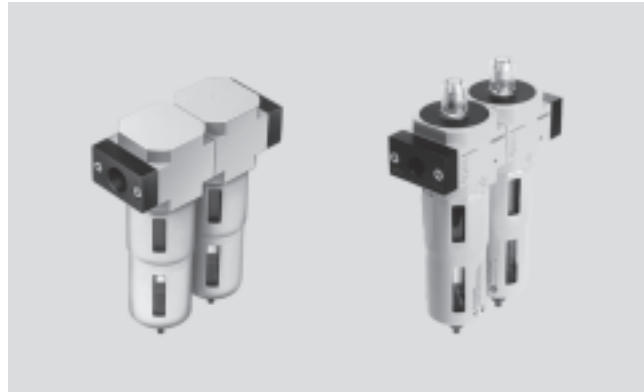
Fully automatic condensate drain,
without differential pressure indicator



with differential pressure indicator



- - 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 DIN ISO 8573-1
- Available as pre-assembled filter combination
- Version with differential pressure indicator for optical indication of filter pollution
- Filter cartridges with 1 µm and 0.01 µm
- New filter cartridges → 37

ISO class 1 for particles:
max. particle density 0.1 mg/m³
ISO class 2 for oil aerosols:
max. oil concentration 0.1 mg/m³
Filter efficiency 99.9999%

General technical data										
Size	Mini			Midi				Maxi		
Pneumatic connection	G1/8	G1/4	G3/8	G1/4	G3/8	G1/2	G3/4	G1/2	G3/4	G1
Operating medium	Filtered compressed air									
Design	Fibre filter									
Type of mounting	Via accessories									
	In-line installation									
Assembly position	Vertical ±5°									
Grade of filtration [µm]	0.01 and 1									
Residual oil content [mg/m³]	≤0.01									
Max. condensate volume [cm³]	22			43				80		
Input pressure [bar]										
Condensate drain	turned manually	1 ... 16								
	fully automatic	1.5 ... 12								

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

Standard nominal flow rate ¹⁾ qnN [l/min]										
Connection	Mini			Midi				Maxi		
	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 p₁ = 6 bar and Δp = 70 mbar.
A minimum flow rate of 125 l/min is required for flawless functioning.

Filter combinations LFMBA, D series, metal design

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Technical data

Ambient conditions			
Size	Mini	Midi	Maxi
Ambient temperature [°C]	-10 ... +60		
Temperature of medium [°C]	+1.5 ... +60		
Corrosion resistance class CRC ¹⁾	2		

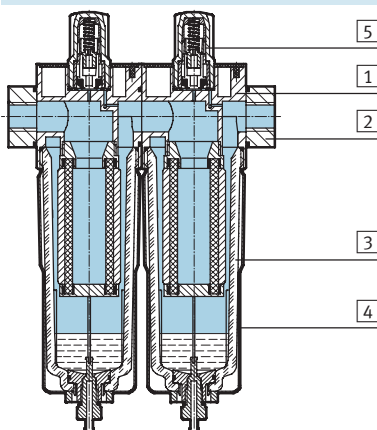
1) Corrosion resistance class 2 according to Festo standard 940 070

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.

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

Materials

Sectional view

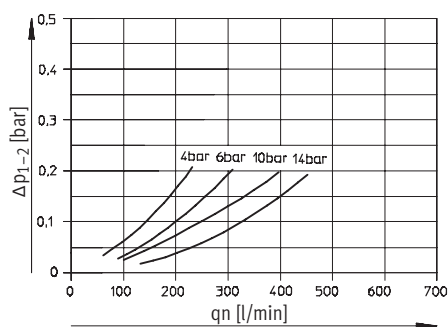


Filter combination

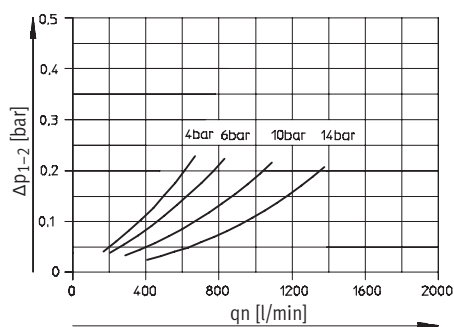
1	Housing	Die-cast zinc
2	Connecting plates	Die-cast zinc
3	Bowl	Polycarbonate
4	Bowl guard	Aluminium
5	Housing for version with differential pressure indicator	Polycarbonate
-	Seals	Nitrile rubber
-	Note on materials	Free of copper and PTFE

Standard flow rate q_n as a function of the differential pressure Δp_{1-2}

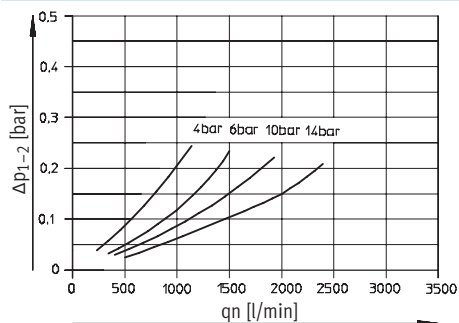
LFMBA-1/4-D-MINI and LFMBA-1/4-D-MINI-A



LFMBA-1/2-D-MIDI and LFMBA-1/2-D-MIDI-A



LFMBA-1-D-MAXI and LFMBA-1-D-MAXI-A



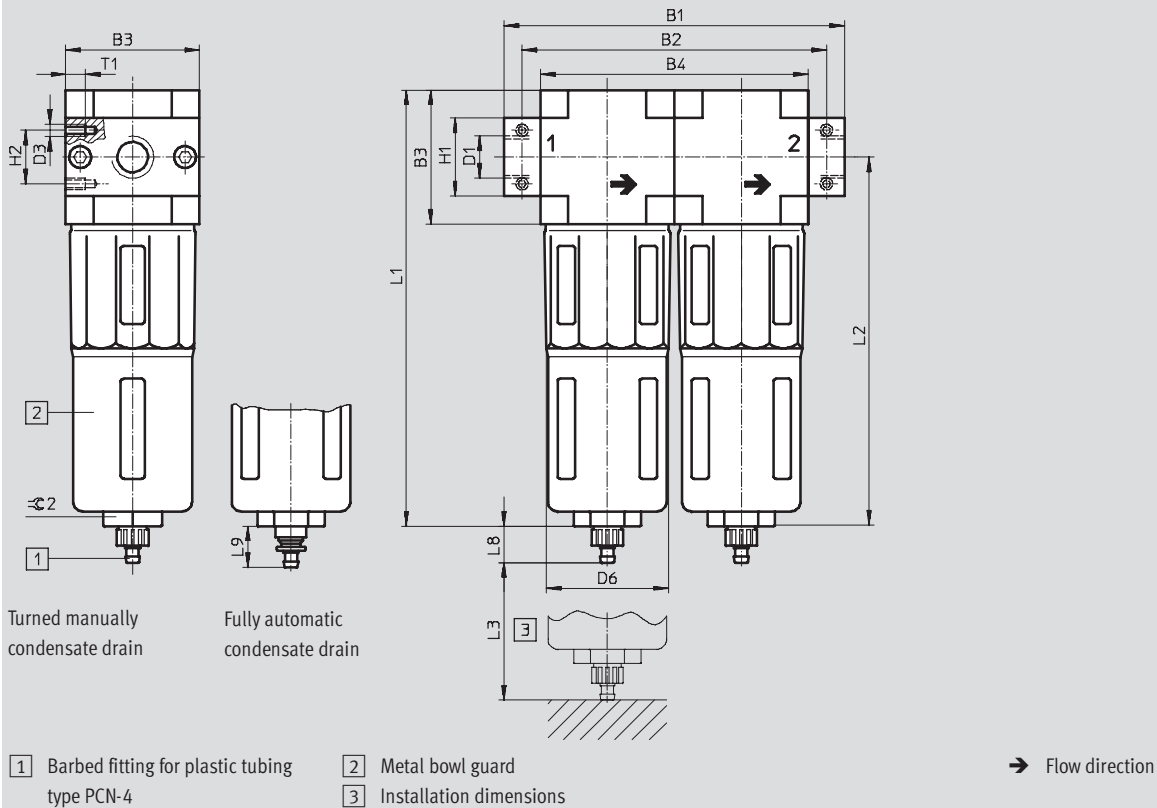
Filter combinations LFMBA, D series, metal design

Technical data

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Dimensions

Download CAD data → www.festo.com



Type	B1	B2	B3	B4	D1	D3	D6 Ø	H1	H2	L1	L2	L3	L8	L9	T1	≈ 2
Mini																
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					G3/8											
Midi																
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											
Maxi																
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			40								
LFMBA-1-D-MAXI		182			157			G1								

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

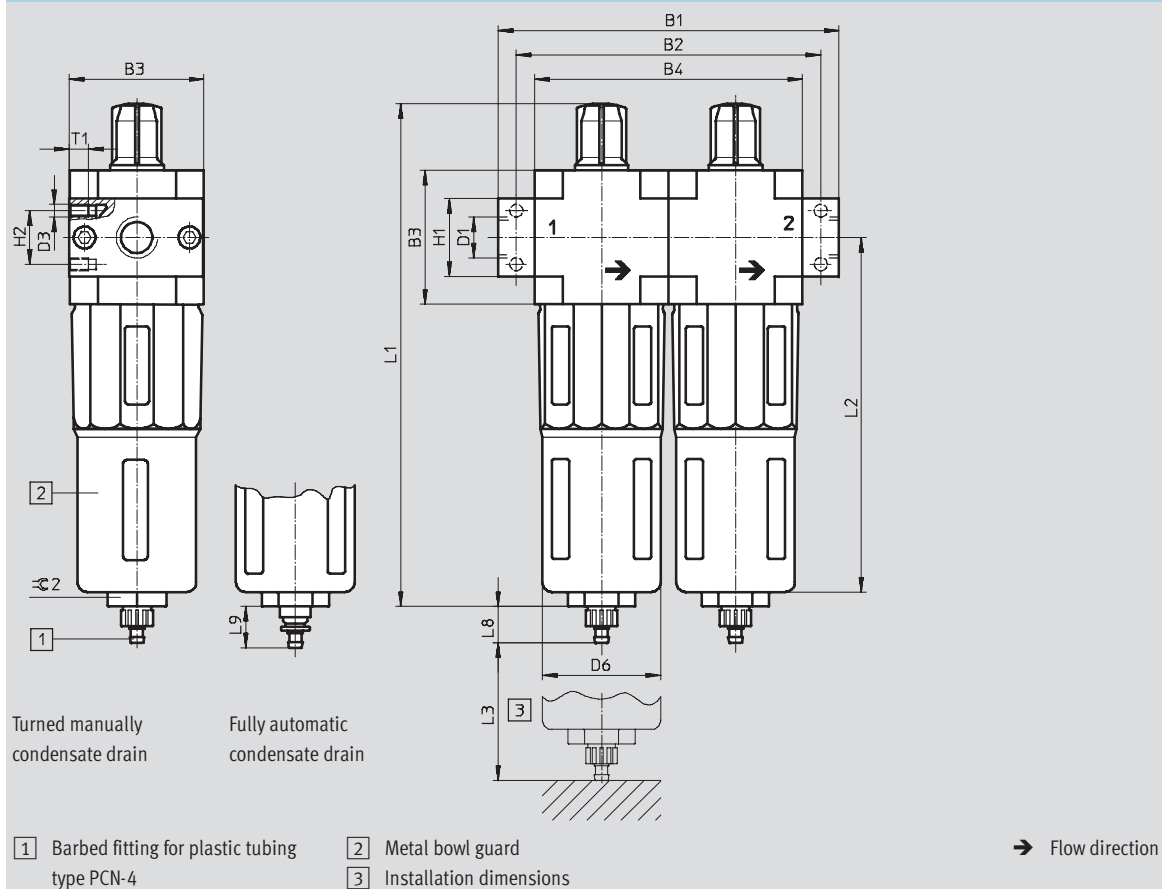
Filter combinations LFMBA, D series, metal design

Technical data

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Dimensions with differential pressure indicator

Download CAD data → www.festo.com



Type	B1	B2	B3	B4	D1	D3	D6 Ø	H1	H2	L1	L2	L3	L8	L9	T1	≈ 2
Mini																
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											
Midi																
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											
Maxi																
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 conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Filter combinations LFMBA, D series, metal design

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Technical data

Ordering data – Filter combination LFMBA					
Grade of filtration 1 µm and 0.01 µm, metal bowl guard					
Size	Connection	Input pressure 1 ... 16 bar		Input pressure 1.5 ... 12 bar	
		Condensate drain turned manually		Condensate drain 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 indicator DA					
Grade of filtration 1 µm and 0.01 µm, metal bowl guard					
Size	Connection	Input pressure 1 ... 16 bar		Input pressure 1.5 ... 12 bar	
		Condensate drain turned manually		Condensate drain 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

Filters LF/LFMA/LFMB/LFX/LFMBA, D series, metal design

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Accessories

Filter cartridges, D series, metal design



Ordering data				
Size	Filter cartridge	Grade of filtration [µm]	Part No.	Type
Micro	Filter cartridge	5	526818	LFP-D-MICRO-5M
Mini	Micro-filter cartridge	0.01	162674	MS4/D-MINI-LFM-A
	Fine-filter cartridge	1	162677	MS4/D-MINI-LFM-B
	Filter cartridge (colour: blue)	5	159640	LFP-D-MINI-5M
	Filter cartridge (colour: white)	40	363665	LFP-D-MINI-40M
	Active 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
	Active 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
	Active carbon filter cartridge	–	532789	LFACP-MAXI

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