

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

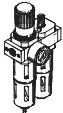
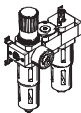
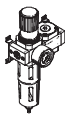
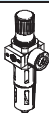
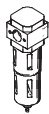
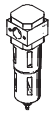
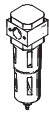
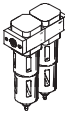
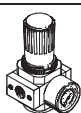
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Filters LF/LFMA/LFMB/LFX/LFMBA, D series, metal design

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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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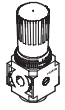
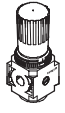
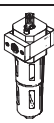
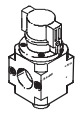
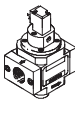
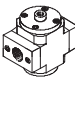
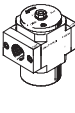
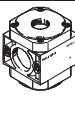
Product range overview D series service units, metal design

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	-	-	-	■	-	-	-	-	-	-	-		

Filters LF, D series, metal design

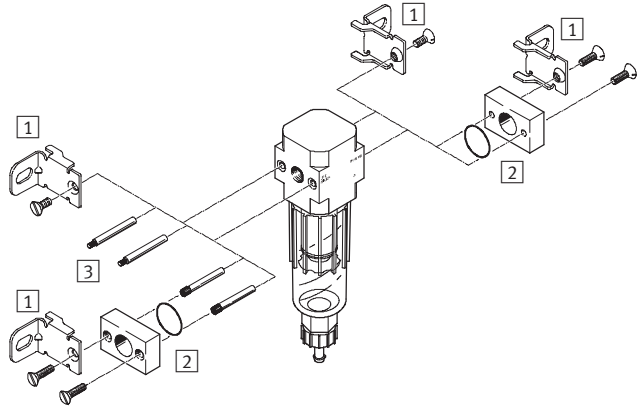
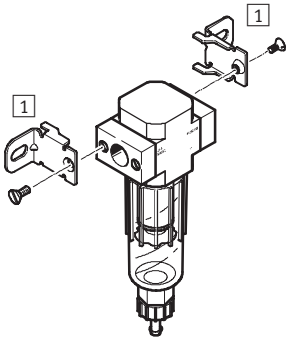
Peripherals overview

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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

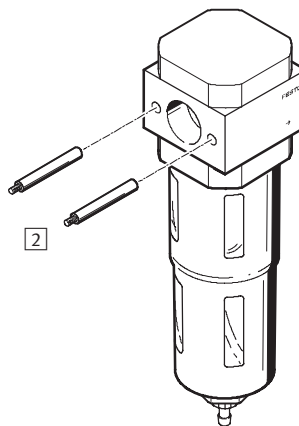
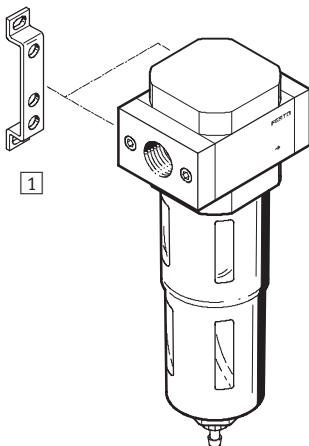


Mounting attachments and accessories					
	Individual unit		Combination		→ Page/ Internet
	with connection plates	without connection plates	with connection plates	without connection plates	
[1] Mounting bracket HFOE	■	■	■	■	hfoe-d
[2] Connecting plate kit PBL	–	■	–	■	pbl
[3] Threaded pin FRB	–	–	■	■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

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

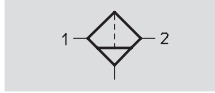
Filters LF, D series, metal design

Technical data

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Function

Condensate drain
turned manually



semi- or fully automatic



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

-  - Temperature range
-10 ... +60 °C

-  - 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

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Technical data

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

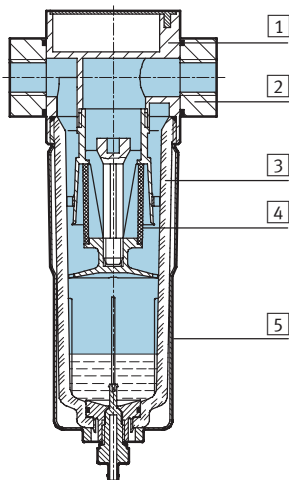
Filters LF, D series, metal design

Technical data

FESTO

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

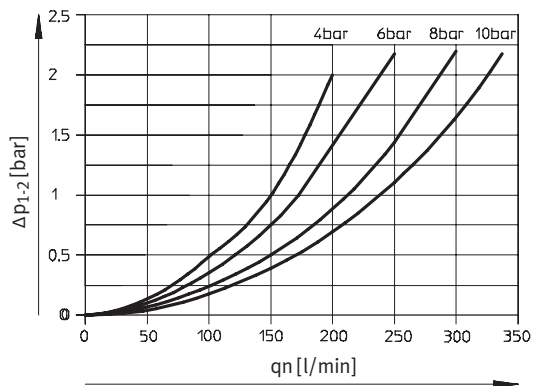
Filters LF, D series, metal design

Technical data

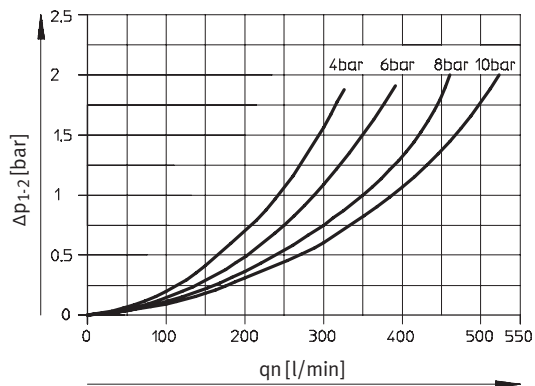
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Standard flow rate q_n as a function of the differential pressure Δp_{1-2}

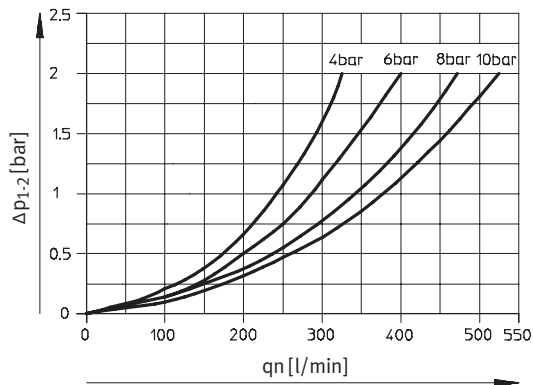
LF-M5-...-MICRO and LF-QS4-...-MICRO



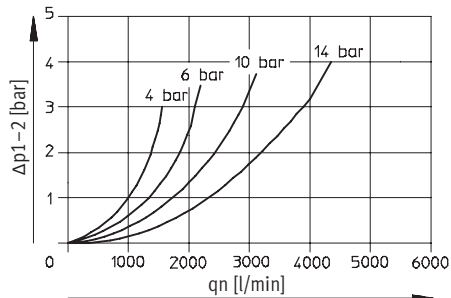
LF-1/8-...-MICRO



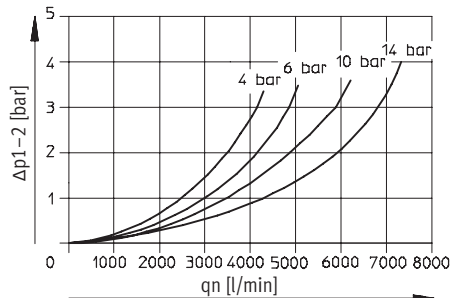
LF-M7-...-MICRO B and LF-QS6-...-MICRO



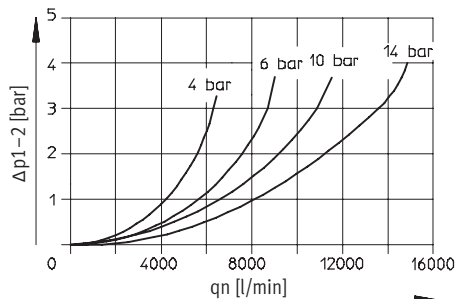
LF-1/4-D-MINI



LF-1/2-D-MIDI



LF-1-D-MAXI



Filters LF, D series, metal design

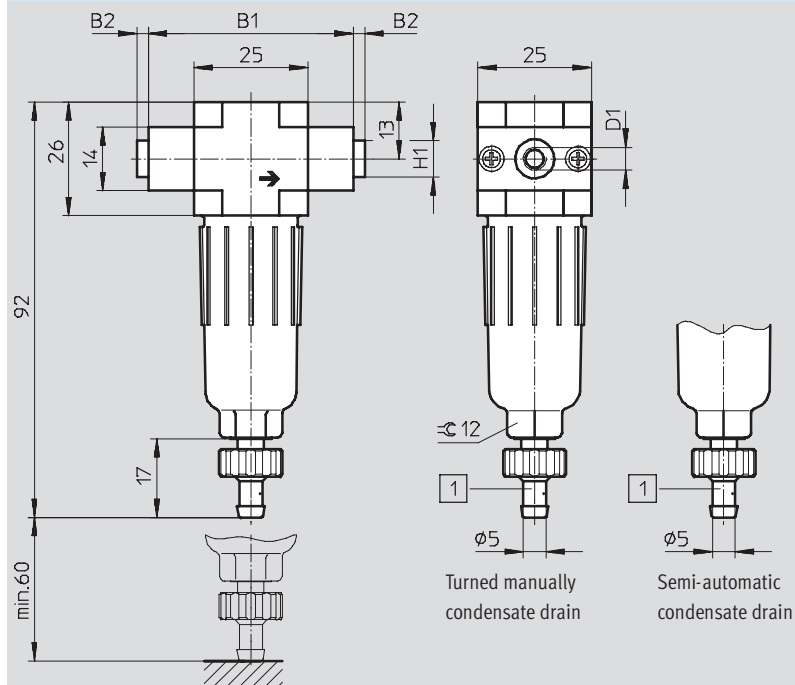
Technical data

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Dimensions

Download CAD data → www.festo.com

Micro



1 Barbed fitting for plastic tubing
type PCN-4

→ Flow direction

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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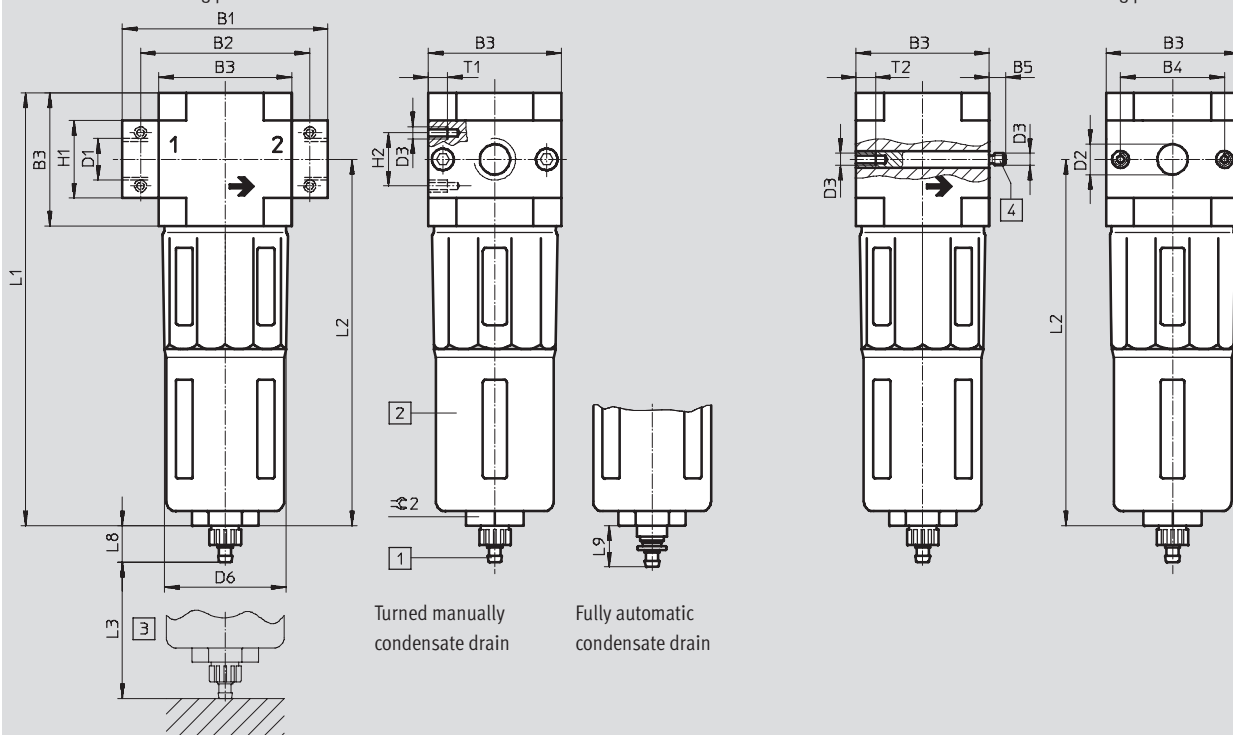
Dimensions

Download CAD data → www.festo.com

Mini/Midi/Maxi

With threaded connecting plates

Without threaded connecting plates



- 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 Ø	D3	D6 Ø	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											-	-	
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											-	-	
LF-1/2-D-MIDI					-	G1/2											-	-	
LF-3/4-D-MIDI					-	G3/4											-	-	
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											-	-	
LF-1-D-MAXI	116	91			-	G1				40	-						-	-	
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

FESTO

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	526 297 LF-M5-D-5M-MICRO
		M7	534 182 LF-M7-D-5M-MICRO B
		With threaded connecting plates	
		G½	526 299 LF-½-D-5M-MICRO
		With connecting plate and push-in fitting	
		QS4	526 305 LF-QS4-D-5M-MICRO
		QS6	526 307 LF-QS6-D-5M-MICRO
Semi-automatic	Micro	Without threaded connecting plates, connecting thread in housing	
		M5	526 298 LF-M5-D-5M-MICRO-H
		M7	534 183 LF-M7-D-5M-MICRO-H B
		With threaded connecting plates	
		G½	526 300 LF-½-D-5M-MICRO-H
		With connecting plate and push-in fitting	
		QS4	526 306 LF-QS4-D-5M-MICRO-H
		QS6	526 308 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.
Without threaded connecting plates					
Turned manually	Mini	192 557	LF-D-5M-MINI		192 551 LF-D-MINI
	Midi	192 558	LF-D-5M-MIDI		192 552 LF-D-MIDI
	Maxi	192 559	LF-D-5M-MAXI		192 553 LF-D-MAXI
Fully automatic	Mini	192 560	LF-D-5M-MINI-A		192 554 LF-D-MINI-A
	Midi	192 561	LF-D-5M-MIDI-A		192 555 LF-D-MIDI-A
	Maxi	192 562	LF-D-5M-MAXI-A		192 556 LF-D-MAXI-A

Filters LF, D series, metal design

FESTO

Technical data

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	162 610	LF-1/8-D-5M-MINI	159 612	LF-1/8-D-MINI
		G1/4	162 611	LF-1/4-D-5M-MINI	159 613	LF-1/4-D-MINI
		G3/8	162 612	LF-3/8-D-5M-MINI	162 606	LF-3/8-D-MINI
	Midi	G1/4	186 460	LF-1/4-D-5M-MIDI	186 459	LF-1/4-D-MIDI
		G3/8	162 613	LF-3/8-D-5M-MIDI	159 576	LF-3/8-D-MIDI
		G1/2	162 614	LF-1/2-D-5M-MIDI	159 578	LF-1/2-D-MIDI
		G3/4	162 615	LF-3/4-D-5M-MIDI	162 607	LF-3/4-D-MIDI
	Maxi	G1/2	186 464	LF-1/2-D-5M-MAXI	186 463	LF-1/2-D-MAXI
		G3/4	162 616	LF-3/4-D-5M-MAXI	159 614	LF-3/4-D-MAXI
		G1	162 617	LF-1-D-5M-MAXI	159 615	LF-1-D-MAXI
Fully automatic	Mini	G1/8	162 618	LF-1/8-D-5M-MINI-A	159 616	LF-1/8-D-MINI-A
		G1/4	162 619	LF-1/4-D-5M-MINI-A	159 617	LF-1/4-D-MINI-A
		G3/8	162 620	LF-3/8-D-5M-MINI-A	162 608	LF-3/8-D-MINI-A
	Midi	G1/4	186 462	LF-1/4-D-5M-MIDI-A	186 461	LF-1/4-D-MIDI-A
		G3/8	162 621	LF-3/8-D-5M-MIDI-A	159 577	LF-3/8-D-MIDI-A
		G1/2	162 622	LF-1/2-D-5M-MIDI-A	159 579	LF-1/2-D-MIDI-A
		G3/4	162 623	LF-3/4-D-5M-MIDI-A	162 609	LF-3/4-D-MIDI-A
	Maxi	G1/2	186 466	LF-1/2-D-5M-MAXI-A	186 465	LF-1/2-D-MAXI-A
		G3/4	162 624	LF-3/4-D-5M-MAXI-A	159 618	LF-3/4-D-MAXI-A
		G1	162 625	LF-1-D-5M-MAXI-A	159 619	LF-1-D-MAXI-A

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

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Peripherals overview

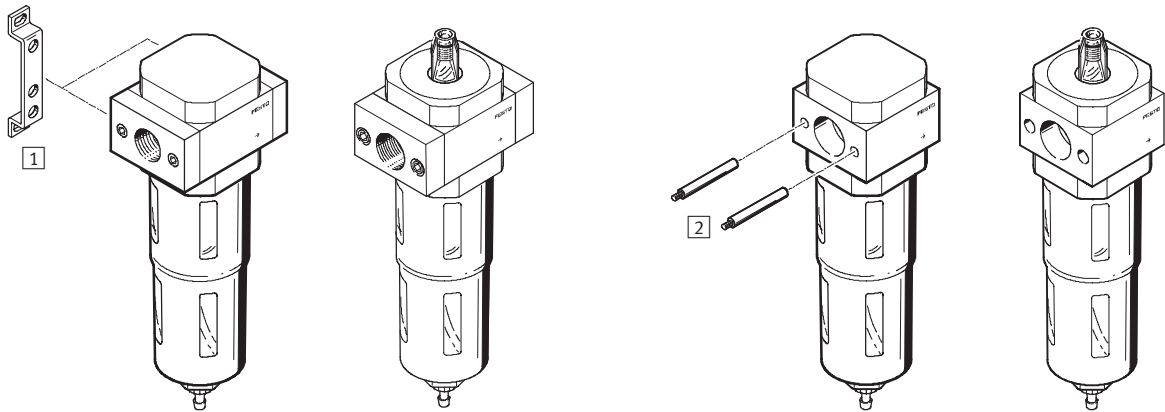
Mini/Midi/Maxi

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

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

FESTO

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											

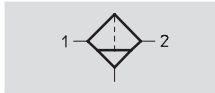
Fine and micro filters LFMA/LFMB, D series, metal design

FESTO

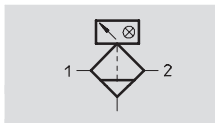
Technical data

Function

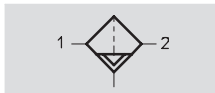
Condensate drain
turned manually
without differential pressure indicator



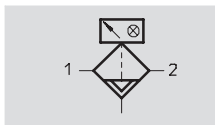
with differential pressure indicator



Condensate drain
fully automatic
without differential pressure indicator



with differential pressure indicator



- - Flow rate
130 ... 1250 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
- 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	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									
Assembly position	Vertical ±5°									
Operating medium										
Micro filter LFMA	Filtered compressed air, lubricated or unlubricated, grade of filtration 1 µm									
Fine filter LFMB	Filtered compressed air, lubricated or unlubricated, grade of filtration 5 µm									
Grade of filtration [µm]										
Micro filter LFMA	0.01									
Fine filter LFMB	1									
Air purity class at the output										
Grade of filtration	0.01 µm	1.7.2 to DIN ISO 8573-1								
	1 µm	2.7.3 to DIN ISO 8573-1								
Residual oil content [mg/m³]										
Micro filter LFMA	≤0.01									
Fine filter LFMB	≤0.5									
Input pressure [bar]										
Condensate drain	turned manually	1 ... 16								
	fully automatic	1.5 ... 12								
Max. condensate volume [cm³]										
Micro filter LFMA/fine filter LFMB	22			43				80		

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

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

FESTO

Technical data

Standard nominal flow rate ¹⁾ q _N [l/min]											
Connection	Mini			Midi				Maxi			
	G ¹ / ₈	G ¹ / ₄	G ³ / ₈	G ¹ / ₄	G ³ / ₈	G ¹ / ₂	G ³ / ₄	G ¹ / ₂	G ³ / ₄	G1	
Micro filter LFMA	130	160	180	350	380	400	460	750	900	950	
Fine filter LFMB	250	300	310	500	700	900	1000	1150	1200	1250	

- 1) Measured at p₁ = 6 bar and Δp = 70 mbar.
A minimum flow rate of 125 l/min is required for flawless functioning.

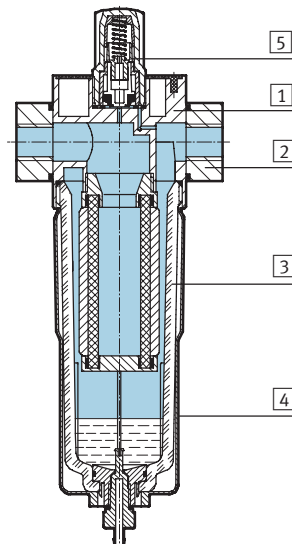
Ambient conditions			
Size	Mini	Midi	Maxi
Ambient temperature [°C]	-10 ... +60		
Temperature of medium [°C]	+1.5 ... +60		
Corrosion resistance class CRC ¹⁾	2		

- 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	250	650	1200
With differential pressure indicator	368	834	1340

Materials

Sectional view



Fine and micro filters		
1	Housing	Die-cast zinc
2	Connecting plates	Aluminium
3	Bowl	Polycarbonate
4	Metal bowl guard	Aluminium
5	Housing for version with differential pressure indicator	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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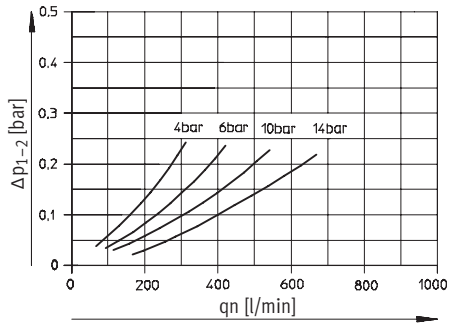
Technical data

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

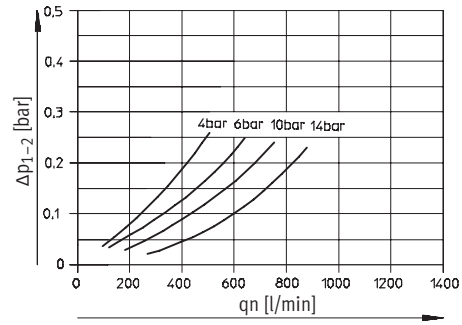
Grade of filtration 0.01 μm

Grade of filtration 1 μm

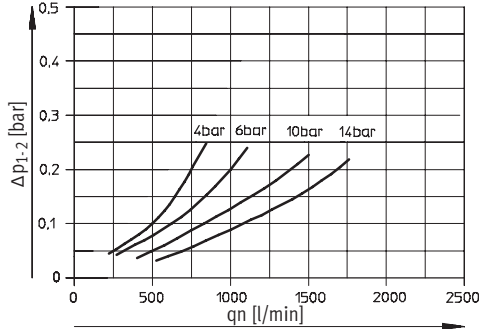
LFMA-1/4-D-MINI and LFMA-1/4-D-MINI-A



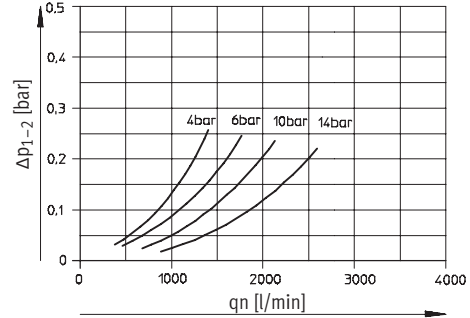
LFMB-1/4-D-MINI and LFMB-1/4-D-MINI-A



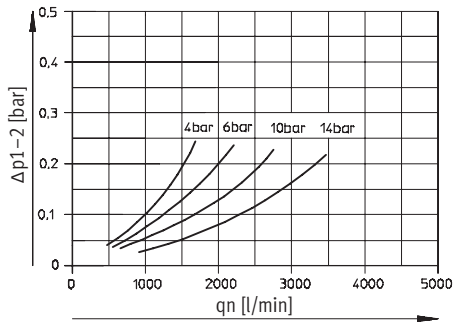
LFMA-1/2-D-MIDI and LFMA-1/2-D-MIDI-A



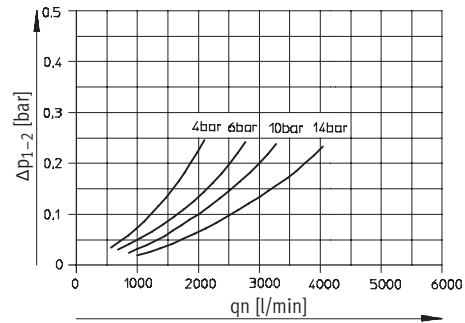
LFMB-1/2-D-MIDI and LFMB-1/2-D-MIDI-A



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

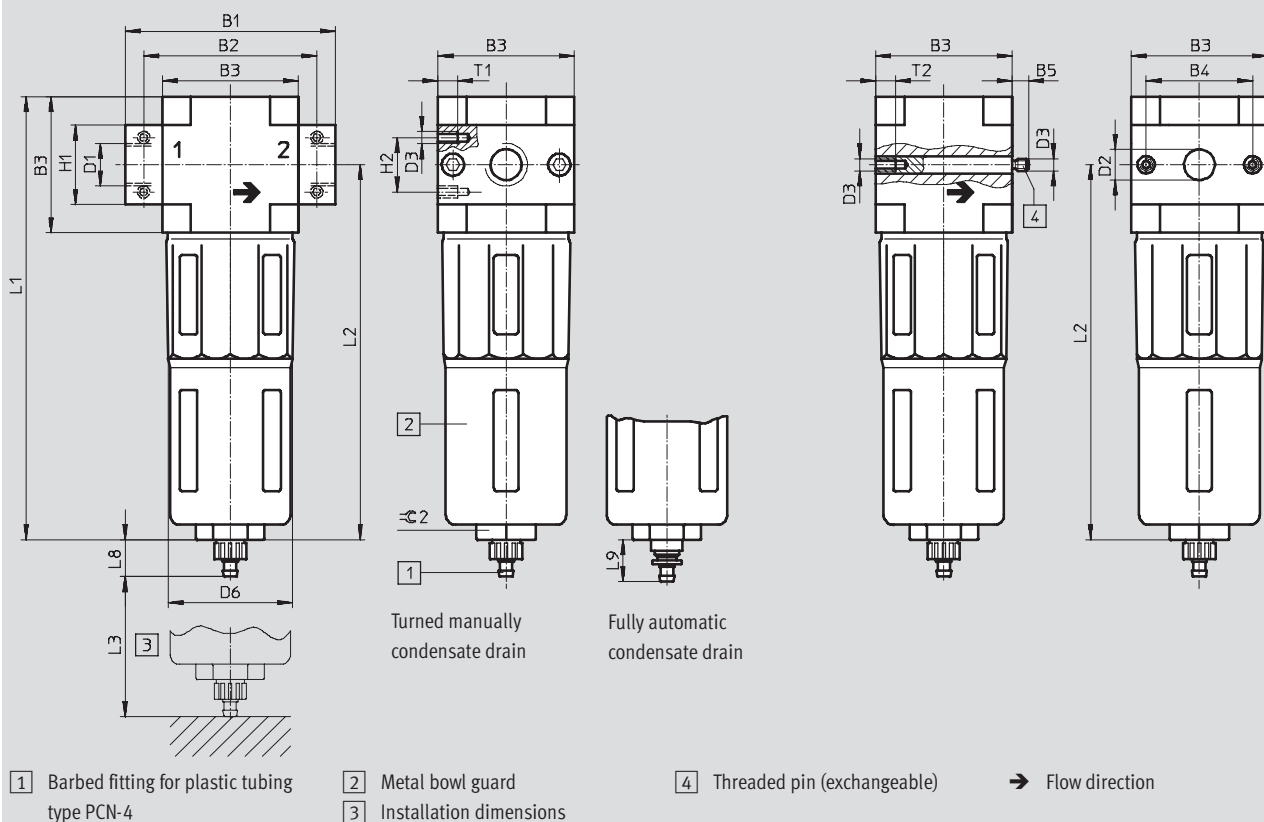
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Dimensions

Download CAD data → www.festo.com

With threaded connecting plates

Without threaded connecting plates



Type	B1	B2	B3	B4	B5	D1	D2 Ø	D3	D6 Ø	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						G1/4													
LFMB/A-3/8-D-MINI	70					G3/8													
LFMB/A-D-MINI	-	-			5.8	-	11			-	-						-	10	
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			-	-						-	11	
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	116	91				G1				40									
LFMB/A-D-MAXI	-	-			6.8	-	30			-	-						-	11	

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

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

Technical data

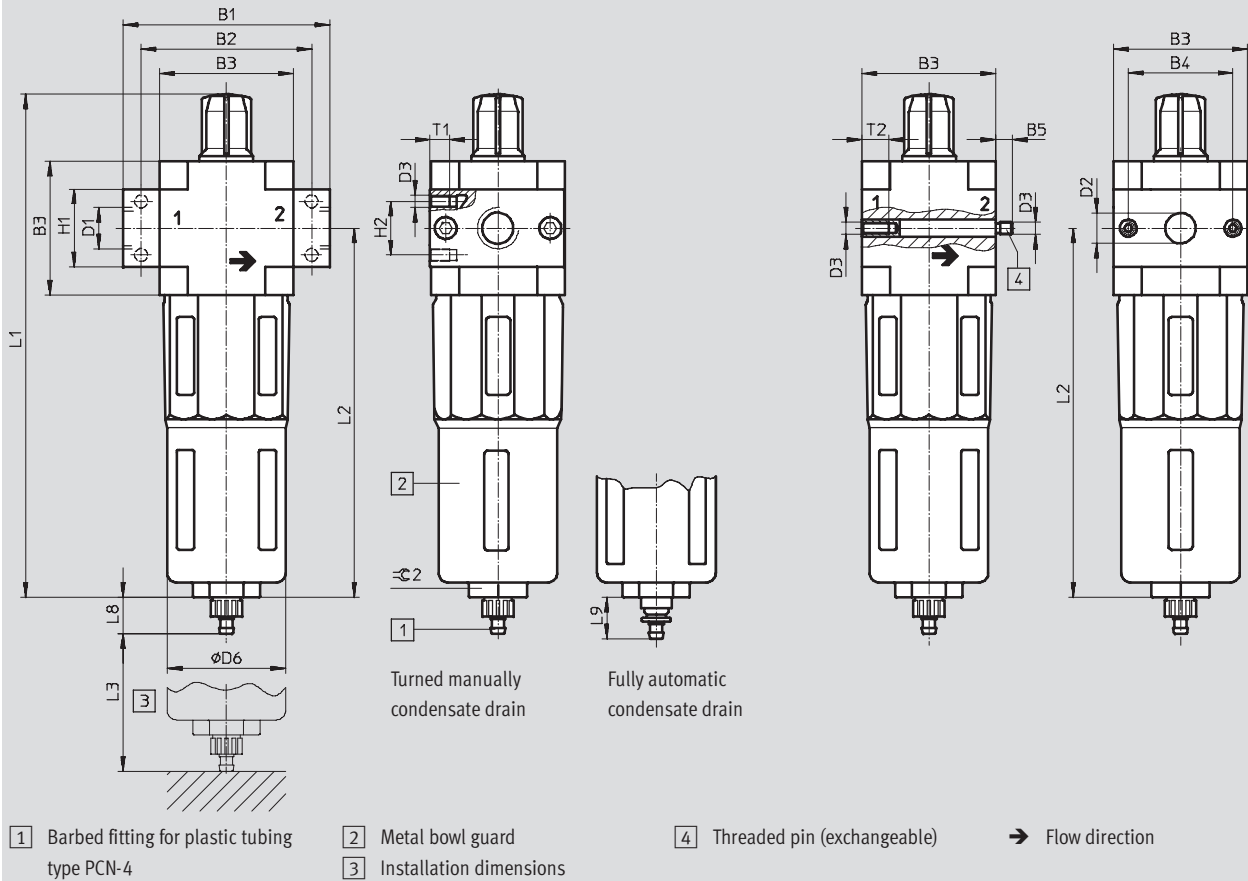
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Dimensions with differential pressure indicator DA

Download CAD data → www.festo.com

With threaded connecting plates

Without threaded connecting plates



Type	B1	B2	B3	B4	B5	D1	D2	D3	D6	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					-	G3/8													
LFMB/A-D-MINI-DA	-	-	-	-	5.8	-	11	-	-	-	-	-	-	-	-	-	-	10	-
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				40	-								
LFMB/A-D-MAXI-DA	-	-	-	-	6.8	-	30	-	-	-	-	-	-	-	-	-	-	11	-

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

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

FESTO

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		192 563	LFMA-D-MINI	192 566	LFMA-D-MINI-A
Midi		192 564	LFMA-D-MIDI	192 567	LFMA-D-MIDI-A
Maxi		192 565	LFMA-D-MAXI	192 568	LFMA-D-MAXI-A
With threaded connecting plates					
Mini	G1/8	162 642	LFMA-1/8-D-MINI	162 650	LFMA-1/8-D-MINI-A
	G1/4	162 643	LFMA-1/4-D-MINI	162 651	LFMA-1/4-D-MINI-A
	G3/8	162 644	LFMA-3/8-D-MINI	162 652	LFMA-3/8-D-MINI-A
Midi	G1/4	186 469	LFMA-1/4-D-MIDI	186 470	LFMA-1/4-D-MIDI-A
	G3/8	162 645	LFMA-3/8-D-MIDI	162 653	LFMA-3/8-D-MIDI-A
	G1/2	162 646	LFMA-1/2-D-MIDI	162 654	LFMA-1/2-D-MIDI-A
	G3/4	162 647	LFMA-3/4-D-MIDI	162 655	LFMA-3/4-D-MIDI-A
Maxi	G1/2	186 476	LFMA-1/2-D-MAXI	186 475	LFMA-1/2-D-MAXI-A
	G3/4	162 648	LFMA-3/4-D-MAXI	162 656	LFMA-3/4-D-MAXI-A
	G1	162 649	LFMA-1-D-MAXI	162 657	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		192 569	LFMB-D-MINI	192 572	LFMB-D-MINI-A
Midi		192 570	LFMB-D-MIDI	192 573	LFMB-D-MIDI-A
Maxi		192 571	LFMB-D-MAXI	192 574	LFMB-D-MAXI-A
With threaded connecting plates					
Mini	G1/8	162 626	LFMB-1/8-D-MINI	162 634	LFMB-1/8-D-MINI-A
	G1/4	162 627	LFMB-1/4-D-MINI	162 635	LFMB-1/4-D-MINI-A
	G3/8	162 628	LFMB-3/8-D-MINI	162 636	LFMB-3/8-D-MINI-A
Midi	G1/4	186 467	LFMB-1/4-D-MIDI	186 468	LFMB-1/4-D-MIDI-A
	G3/8	162 629	LFMB-3/8-D-MIDI	162 637	LFMB-3/8-D-MIDI-A
	G1/2	162 630	LFMB-1/2-D-MIDI	162 638	LFMB-1/2-D-MIDI-A
	G3/4	162 631	LFMB-3/4-D-MIDI	162 639	LFMB-3/4-D-MIDI-A
Maxi	G1/2	186 473	LFMB-1/2-D-MAXI	186 474	LFMB-1/2-D-MAXI-A
	G3/4	162 632	LFMB-3/4-D-MAXI	162 640	LFMB-3/4-D-MAXI-A
	G1	162 633	LFMB-1-D-MAXI	162 641	LFMB-1-D-MAXI-A

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

FESTO

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		532 837	LFMA-D-MINI-DA	532 840	LFMA-D-MINI-DA-A
Midi		532 838	LFMA-D-MIDI-DA	532 841	LFMA-D-MIDI-DA-A
Maxi		532 839	LFMA-D-MAXI-DA	532 842	LFMA-D-MAXI-DA-A
With threaded connecting plates					
Mini	G1/8	532 843	LFMA-1/8-D-MINI-DA	532 853	LFMA-1/8-D-MINI-DA-A
	G1/4	532 844	LFMA-1/4-D-MINI-DA	532 854	LFMA-1/4-D-MINI-DA-A
	G3/8	532 845	LFMA-3/8-D-MINI-DA	532 855	LFMA-3/8-D-MINI-DA-A
Midi	G1/4	532 846	LFMA-1/4-D-MIDI-DA	532 856	LFMA-1/4-D-MIDI-DA-A
	G3/8	532 847	LFMA-3/8-D-MIDI-DA	532 857	LFMA-3/8-D-MIDI-DA-A
	G1/2	532 848	LFMA-1/2-D-MIDI-DA	532 858	LFMA-1/2-D-MIDI-DA-A
	G3/4	532 849	LFMA-3/4-D-MIDI-DA	532 859	LFMA-3/4-D-MIDI-DA-A
Maxi	G1/2	532 850	LFMA-1/2-D-MAXI-DA	532 860	LFMA-1/2-D-MAXI-DA-A
	G3/4	532 851	LFMA-3/4-D-MAXI-DA	532 861	LFMA-3/4-D-MAXI-DA-A
	G1	532 852	LFMA-1-D-MAXI-DA	532 862	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		532 811	LFMB-D-MINI-DA	532 814	LFMB-D-MINI-DA-A
Midi		532 812	LFMB-D-MIDI-DA	532 815	LFMB-D-MIDI-DA-A
Maxi		532 813	LFMB-D-MAXI-DA	532 816	LFMB-D-MAXI-DA-A
With threaded connecting plates					
Mini	G1/8	532 817	LFMB-1/8-D-MINI-DA	532 827	LFMB-1/8-D-MINI-DA-A
	G1/4	532 818	LFMB-1/4-D-MINI-DA	532 828	LFMB-1/4-D-MINI-DA-A
	G3/8	532 819	LFMB-3/8-D-MINI-DA	532 829	LFMB-3/8-D-MINI-DA-A
Midi	G1/4	532 820	LFMB-1/4-D-MIDI-DA	532 830	LFMB-1/4-D-MIDI-DA-A
	G3/8	532 821	LFMB-3/8-D-MIDI-DA	532 831	LFMB-3/8-D-MIDI-DA-A
	G1/2	532 822	LFMB-1/2-D-MIDI-DA	532 832	LFMB-1/2-D-MIDI-DA-A
	G3/4	532 823	LFMB-3/4-D-MIDI-DA	532 833	LFMB-3/4-D-MIDI-DA-A
Maxi	G1/2	532 824	LFMB-1/2-D-MAXI-DA	532 834	LFMB-1/2-D-MAXI-DA-A
	G3/4	532 825	LFMB-3/4-D-MAXI-DA	532 835	LFMB-3/4-D-MAXI-DA-A
	G1	532 826	LFMB-1-D-MAXI-DA	532 836	LFMB-1-D-MAXI-DA-A

Active carbon filters LFX, D series, metal design

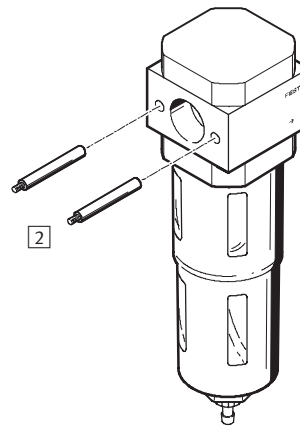
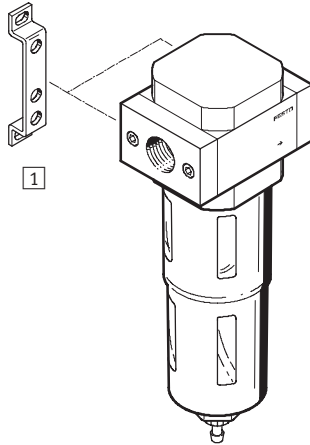
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Peripherals overview and Type codes

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

	LFX	—	1/4	—	D	—	MIDI
Basic function							
LFX	Activated carbon filters						
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 connection plates)						
MIDI	Grid dimension 55 mm (without connection plates)						
MAXI	Grid dimension 66 mm (without connection plates)						

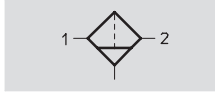
Active carbon filters LFX, D series, metal design

FESTO

Technical data

Function

Condensate drain
turned manually



-  - Flow rate
300 ... 1430 l/min

-  - Temperature range
-10 ... +60 °C

-  - Input 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	G1/8	G1/4	G3/8	G1/4	G3/8	G1/2	G3/4	G1/2	G3/4	G1	
Operating medium	Compressed air, filtered, unlubricated, grade of filtration 0.01 µm										
Design	Fibre filter (filter fabric made of active carbon)										
Type of mounting	Via accessories										
	In-line installation										
Assembly position	Vertical ±5°										
Residual oil content [mg/m ³]	≤0.003										
Air purity class at the output	1.7.1 to DIN ISO 8573-1										
Input pressure [bar]	0 ... 16										

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

Standard nominal flow rate ¹⁾ qnN and standard flow rate qn [l/min]						
Connection	G1/8	G1/4	G3/8	G1/2	G3/4	G1
Mini						
qnN	300	330	400	–	–	–
qn max	360	360	360	–	–	–
Midi						
qnN	–	650	950	1050	1100	–
qn max	–	900	900	900	900	–
Maxi						
qnN	–	–	–	1350	1400	1430
qn max	–	–	–	1100	1100	1100

1) Measured at p₁ = 6 bar and Δp = 70 mbar.
A minimum flow rate of 125 l/min is required for flawless functioning.

Ambient conditions		
Size	Mini	Maxi
Ambient temperature [°C]	-10 ... +60 °C	
Temperature of medium [°C]	+5 ... +30 °C	
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.

Active carbon filters LFX, D series, metal design

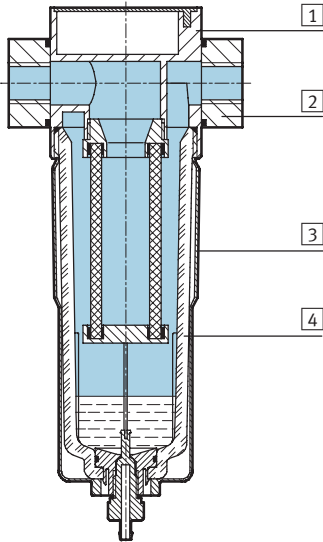
FESTO

Technical data

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

Materials

Sectional view

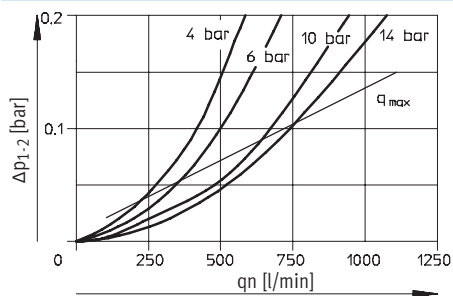


Active carbon filter

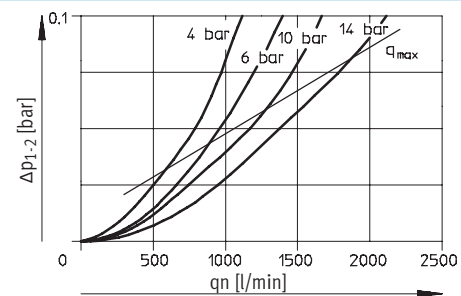
1	Housing	Die-cast zinc
2	Connecting plates	Aluminium
3	Bowl	Polycarbonate
4	Metal bowl guard	Aluminium
-	Seals	Nitrile rubber
Note on materials		Free of copper, PTFE and silicone

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

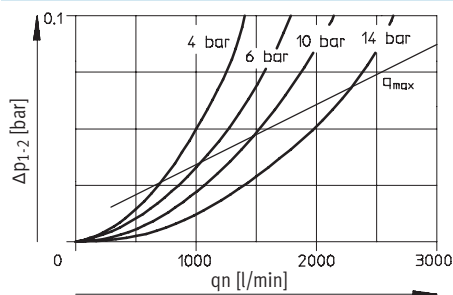
LFX-1/4-D-MINI



LFX-1/2-D-MIDI



LFX-1-D-MAXI



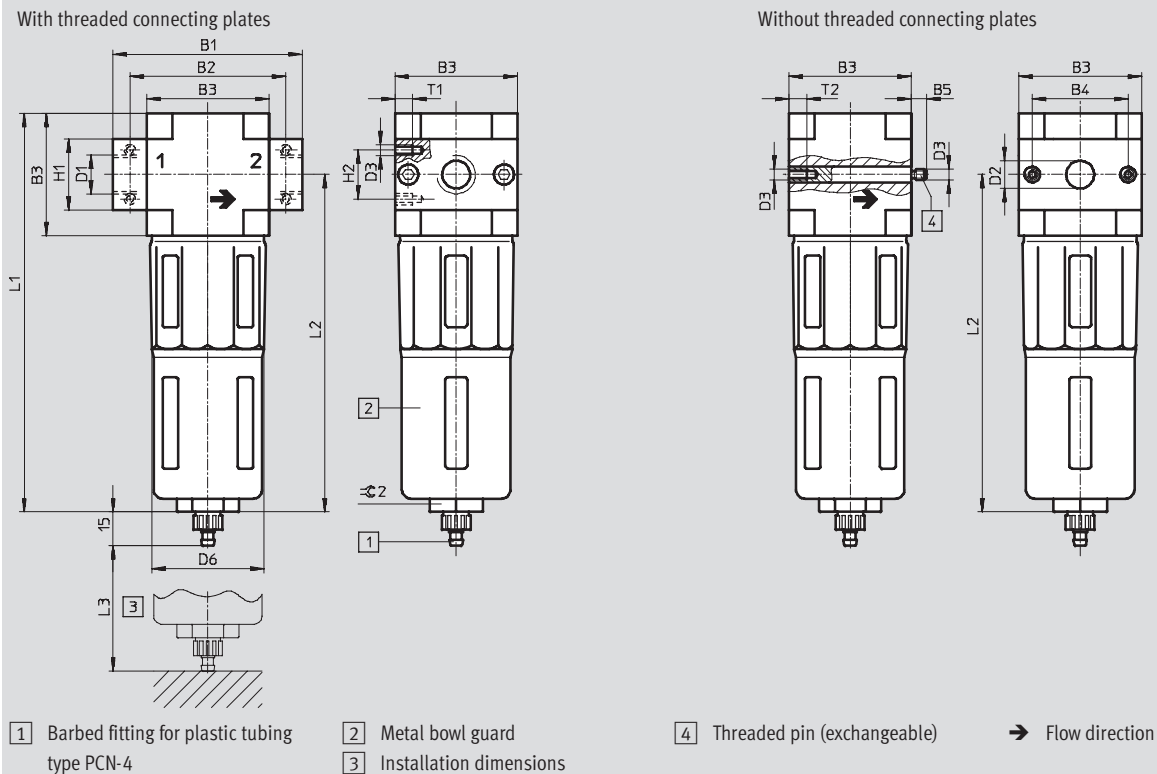
Active carbon filters LFX, D series, metal design

Technical data

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Dimensions

Download CAD data → www.festo.com



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	532 776	LFX-D-MINI
Midi	532 777	LFX-D-MIDI
Maxi	532 778	LFX-D-MAXI

Ordering data			
Active carbon filter with metal bowl guard			
Size	Connection	Part No.	Type
With threaded connecting plates			
Mini	G1/8	532 779	LFX-1/8-D-MINI
	G1/4	532 802	LFX-1/4-D-MINI
	G3/8	532 780	LFX-3/8-D-MINI
Midi	G1/4	532 781	LFX-1/4-D-MIDI
	G3/8	532 782	LFX-3/8-D-MIDI
	G1/2	532 783	LFX-1/2-D-MIDI
	G3/4	532 784	LFX-3/4-D-MIDI
Maxi	G1/2	532 785	LFX-1/2-D-MAXI
	G3/4	532 786	LFX-3/4-D-MAXI
	G1	532 787	LFX-1-D-MAXI

Filter combinations LFMBA, D series, metal design

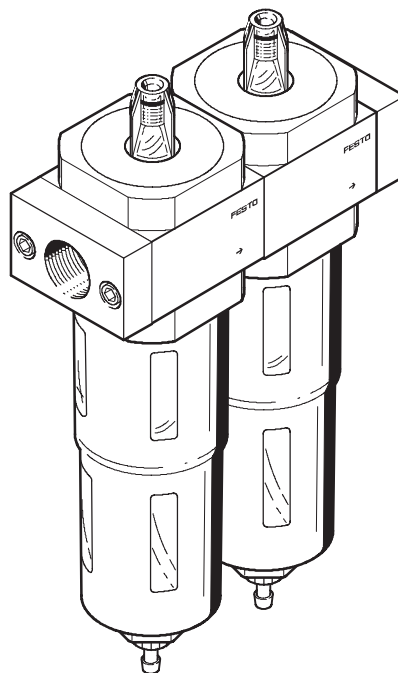
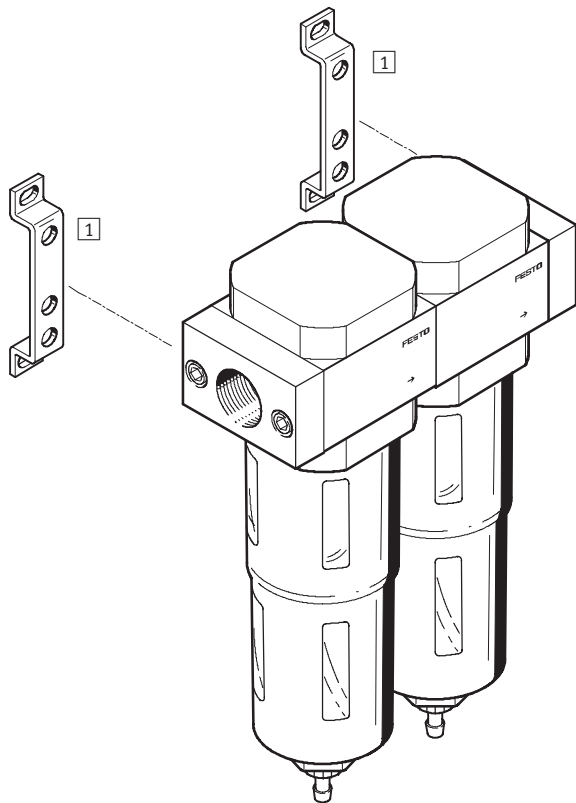
Peripherals overview

FESTO

Mini/Midi/Maxi

without differential pressure indicator

with differential pressure indicator



Mounting components

→ Page/
Internet

1 Mounting bracket
HFOE

hfoe-d

Filter combinations LFMBA, D series, metal design

FESTO

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											

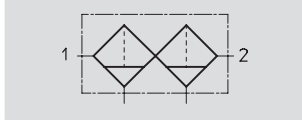
Filter combinations LFMBA, D series, metal design

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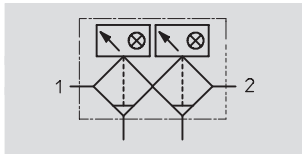
Technical data

Function

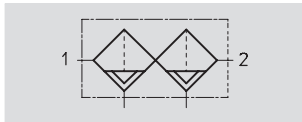
Condensate drain
turned manually
without differential pressure indicator



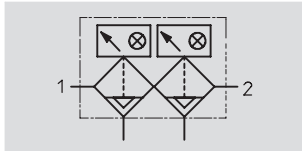
with differential pressure indicator



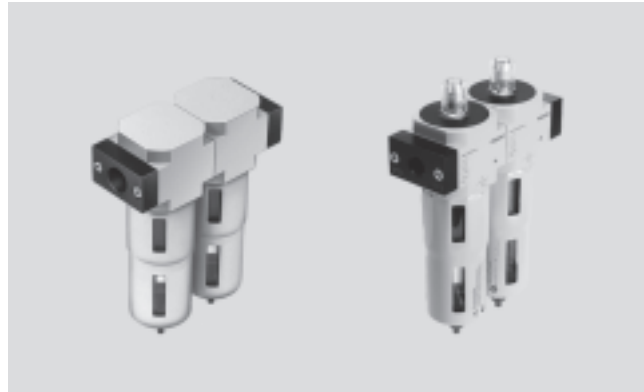
Condensate drain
fully automatic
without differential pressure indicator



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, lubricated or unlubricated									
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			
	G ¹ / ₈	G ¹ / ₄	G ³ / ₈	G ¹ / ₄	G ³ / ₈	G ¹ / ₂	G ³ / ₄	G ¹ / ₂	G ³ / 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

FESTO

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		

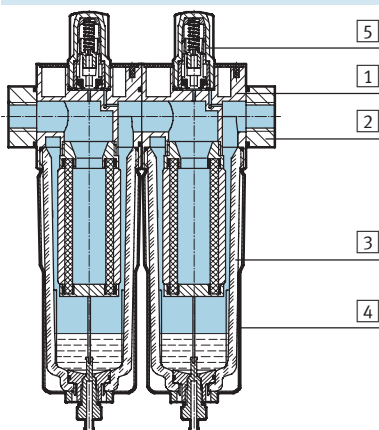
1) Corrosion resistance class 2 according to Festo standard 940 070

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

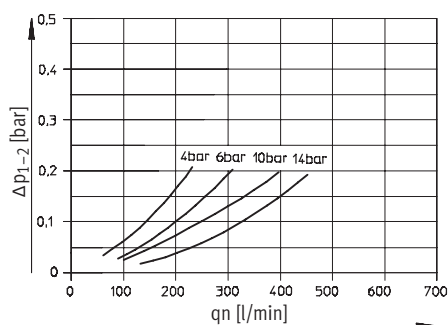


Filter combination

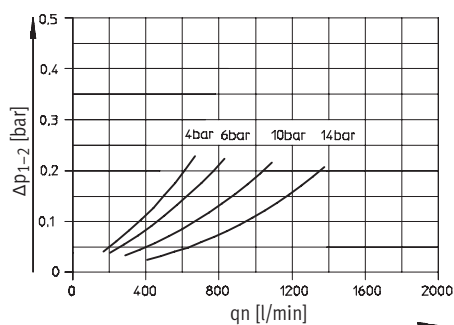
1	Housing	Die-cast zinc
2	Connecting plates	Die-cast zinc
3	Bowl	Polycarbonate
4	Bowl guard	Aluminium
5	Housing for version with differential pressure indicator	Polycarbonate
-	Seals	Nitrile rubber
Note on materials		Free of copper and PTFE

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

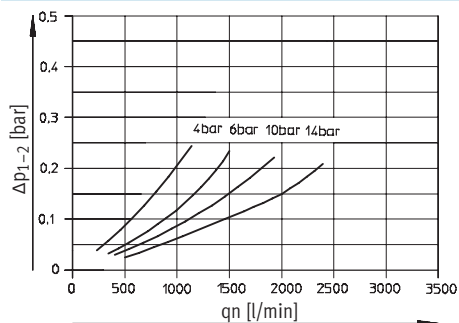
LFMBA-1/4-D-MINI and LFMBA-1/4-D-MINI-A



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



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



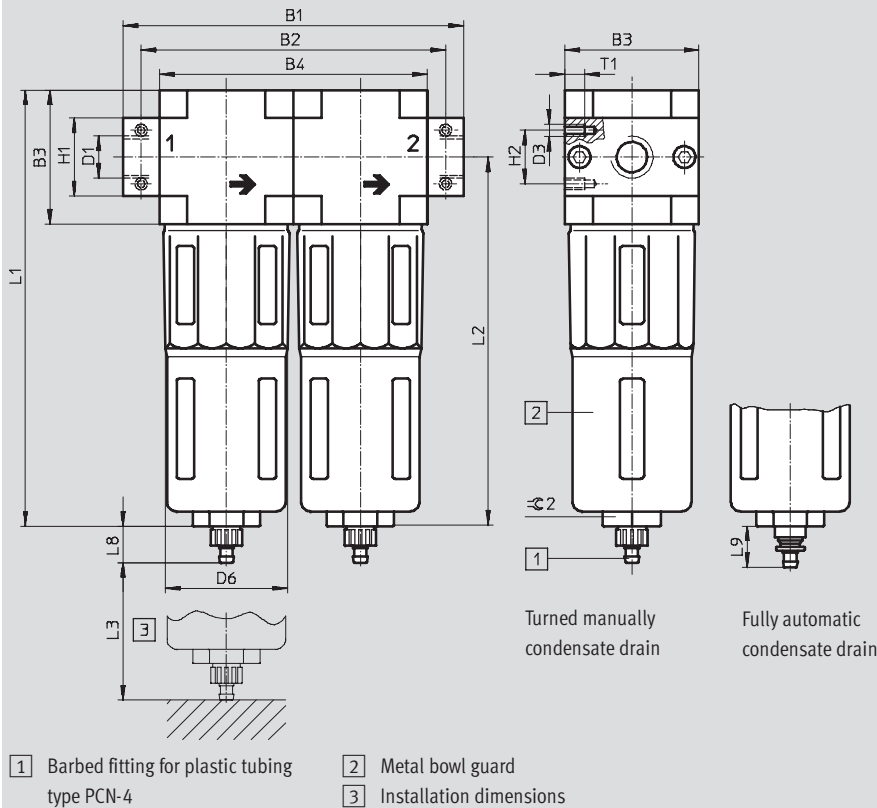
Filter combinations LFMBA, D series, metal design

Technical data

FESTO

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											
LFMBA-1-D-MAXI					G1											

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

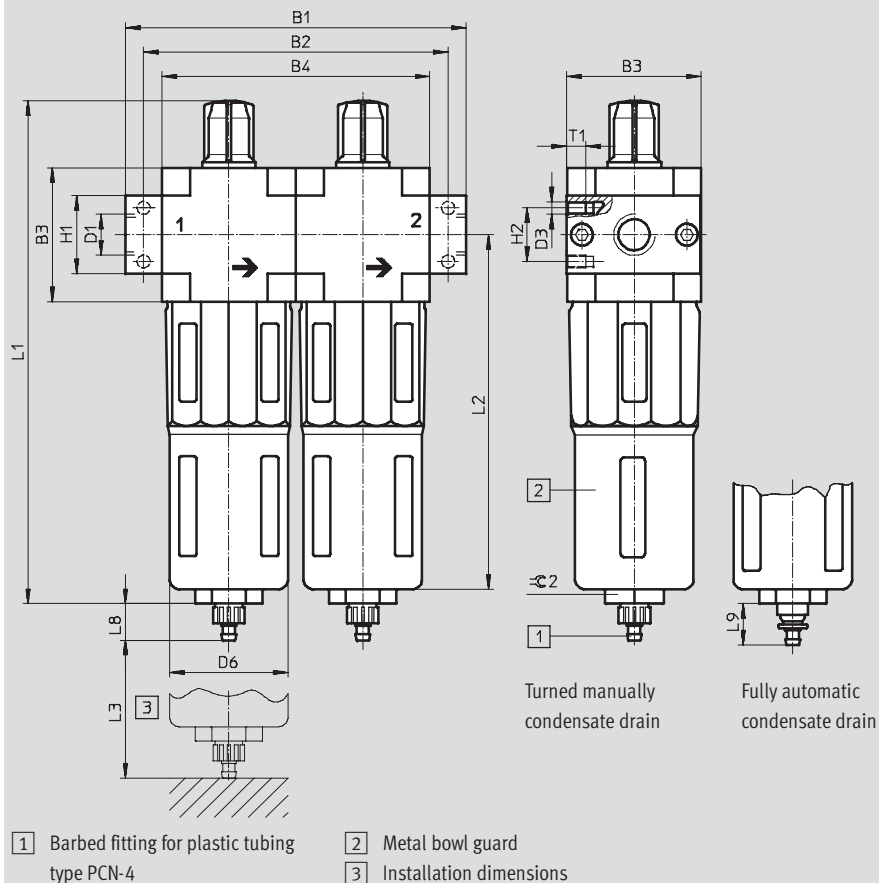
Filter combinations LFMBA, D series, metal design

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											

• 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	162 658	LFMBA-1/8-D-MINI	162 666 LFMBA-1/8-D-MINI-A
	G1/4	162 659	LFMBA-1/4-D-MINI	162 667 LFMBA-1/4-D-MINI-A
	G3/8	162 660	LFMBA-3/8-D-MINI	162 668 LFMBA-3/8-D-MINI-A
Midi	G1/4	186 471	LFMBA-1/4-D-MIDI	186 472 LFMBA-1/4-D-MIDI-A
	G3/8	162 661	LFMBA-3/8-D-MIDI	162 669 LFMBA-3/8-D-MIDI-A
	G1/2	162 662	LFMBA-1/2-D-MIDI	162 670 LFMBA-1/2-D-MIDI-A
	G3/4	162 663	LFMBA-3/4-D-MIDI	162 671 LFMBA-3/4-D-MIDI-A
Maxi	G1/2	186 477	LFMBA-1/2-D-MAXI	186 478 LFMBA-1/2-D-MAXI-A
	G3/4	162 664	LFMBA-3/4-D-MAXI	162 672 LFMBA-3/4-D-MAXI-A
	G1	162 665	LFMBA-1-D-MAXI	162 673 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	532 863	LFMBA-1/8-D-MINI-DA	532 873 LFMBA-1/8-D-MINI-DA-A
	G1/4	532 864	LFMBA-1/4-D-MINI-DA	532 874 LFMBA-1/4-D-MINI-DA-A
	G3/8	532 865	LFMBA-3/8-D-MINI-DA	532 875 LFMBA-3/8-D-MINI-DA-A
Midi	G1/4	532 866	LFMBA-1/4-D-MIDI-DA	532 876 LFMBA-1/4-D-MIDI-DA-A
	G3/8	532 867	LFMBA-3/8-D-MIDI-DA	532 877 LFMBA-3/8-D-MIDI-DA-A
	G1/2	532 868	LFMBA-1/2-D-MIDI-DA	532 878 LFMBA-1/2-D-MIDI-DA-A
	G3/4	532 869	LFMBA-3/4-D-MIDI-DA	532 879 LFMBA-3/4-D-MIDI-DA-A
Maxi	G1/2	532 870	LFMBA-1/2-D-MAXI-DA	532 880 LFMBA-1/2-D-MAXI-DA-A
	G3/4	532 871	LFMBA-3/4-D-MAXI-DA	532 881 LFMBA-3/4-D-MAXI-DA-A
	G1	532 872	LFMBA-1-D-MAXI-DA	532 882 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	526 818	LFP-D-MICRO-5M
Mini	Micro-filter cartridge	0.01	162 674	MS4/D-MINI-LFM-A
	Fine-filter cartridge	1	162 677	MS4/D-MINI-LFM-B
	Filter cartridge	5	159 640	LFP-D-MINI-5M
	Filter cartridge	40	363 665	LFP-D-MINI-40M
	Active carbon filter cartridge	–	532 912	MS4/D-MINI-LFX
Midi	Micro-filter cartridge	0.01	162 675	LFMAP-D-MIDI
	Fine-filter cartridge	1	162 678	LFMBP-D-MIDI
	Filter cartridge	5	159 594	LFP-D-MIDI-5M
	Filter cartridge	40	363 667	LFP-D-MIDI-40M
	Active carbon filter cartridge	–	532 788	LFACP-MIDI
Maxi	Micro-filter cartridge	0.01	162 676	LFMAP-D-MAXI
	Fine-filter cartridge	1	162 679	LFMBP-D-MAXI
	Filter cartridge	5	159 641	LFP-D-MAXI-5M
	Filter cartridge	40	363 664	LFP-D-MAXI-40M
	Active carbon filter cartridge	–	532 789	LFACP-MAXI