

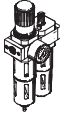
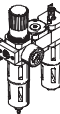
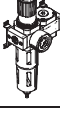
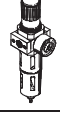
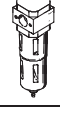




Filters LF/LFMA/LFMB/LFX/LFMBA, D series



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



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 LRS/LRS 	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		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



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	-	-	-	■	-	-	-	-	-	-	-	

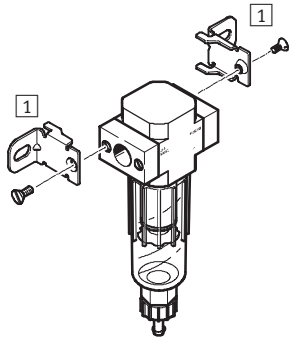
Filters LF, D series, metal design

Peripherals overview

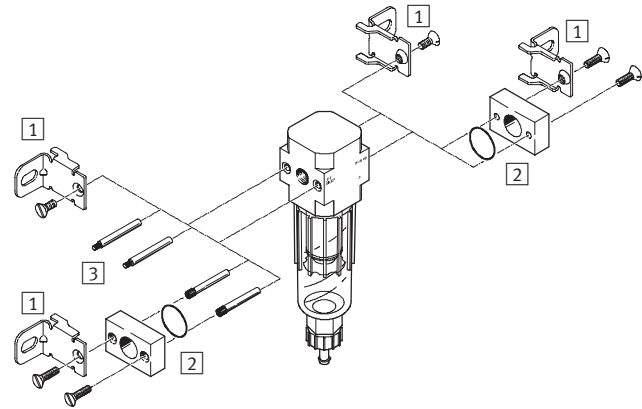
FESTO

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

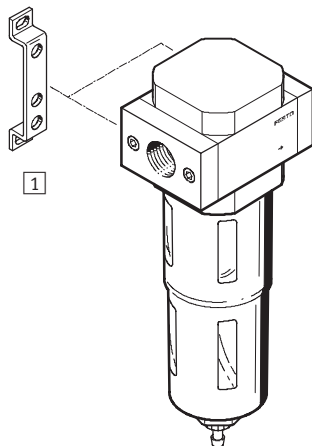


Mounting attachments and accessories

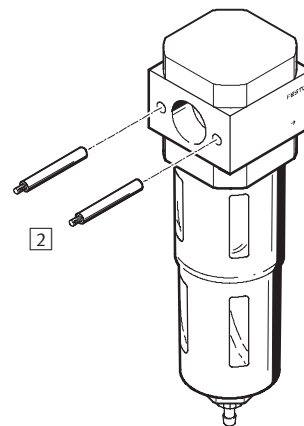
	Individual unit		Combination		→ Page/ Internet
	with connection plates	without connection plates	with connection plates	without connection plates	
1 Mounting bracket HFOE	■	■	■	■	hfoe-d
2 Connecting plate kit PBL	-	■	-	■	pbl
3 Threaded pin FRB	-	-	■	■	frb-d

Mini/Midi/Maxi

Individual unit with connection plates



Individual unit without connection plates, for service unit combination

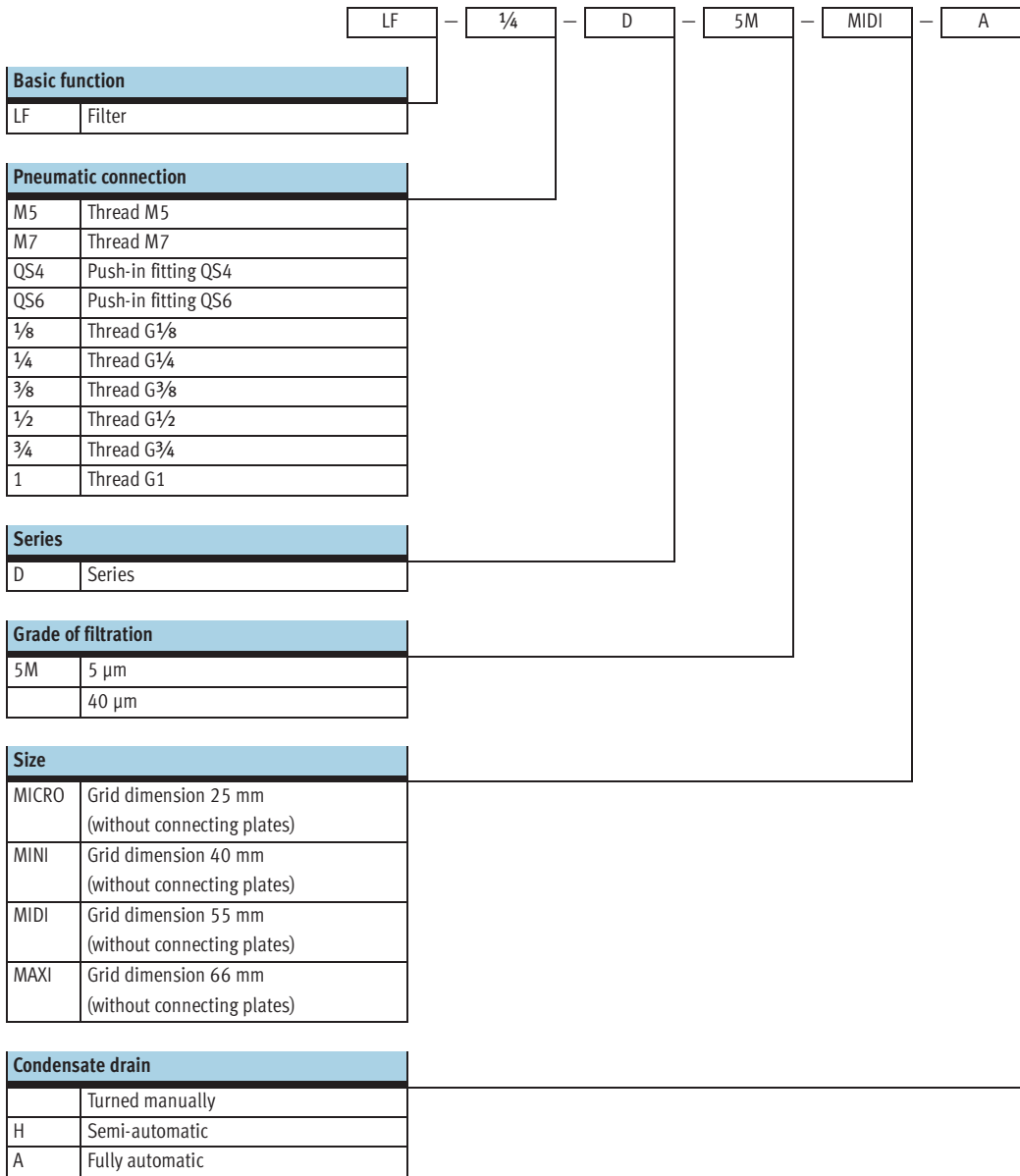


Mounting attachments and accessories

	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

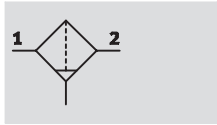


Filters LF, D series, metal design

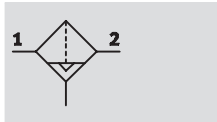
Technical data

FESTO

Manual rotary condensate drain



Semi or fully automatic condensate drain



- - 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	G ¹ / ₈	QS4	QS6	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
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 [cm ³]	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		G ¹ / 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

Standard nominal flow rate ¹⁾ qnN [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.

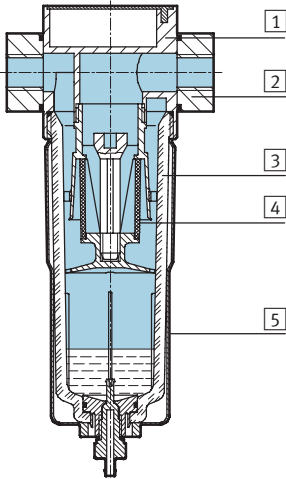
Weight [g]						
Size	Micro		Mini	Midi	Maxi	
	Female thread	Connecting plate			Connection G $\frac{1}{2}$, G $\frac{3}{4}$	Connection G1
LF-...	44	64	250	700	1340	1440

Filters LF, D series, metal design

Technical data

Materials

Sectional view



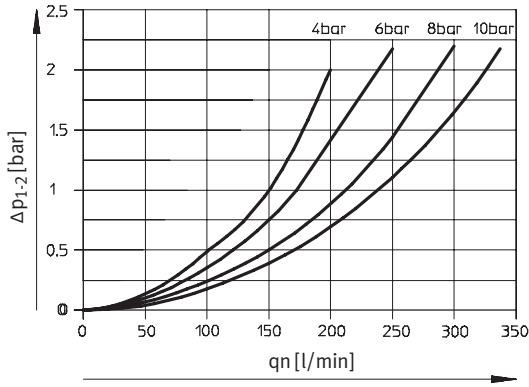
Filter	Micro	Mini/Midi/Maxi
1 Housing	Wrought aluminium alloy	Die-cast zinc
2 Connecting plates	Wrought aluminium alloy	Die-cast zinc/aluminium
3 Bowl	Polycarbonate	Polycarbonate
4 Filter cartridge	Polyethylene	Polyethylene
5 Metal bowl guard	-	Aluminium
- Seals	Nitrile rubber	Nitrile rubber

Filters LF, D series, metal design

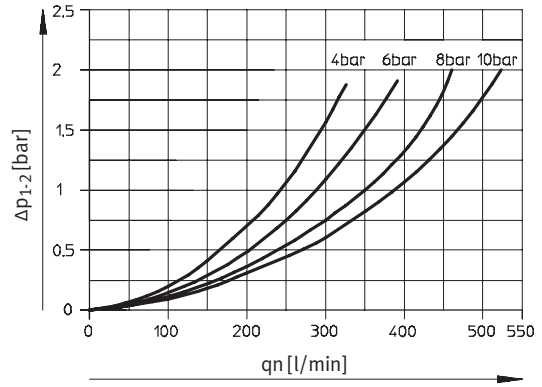
Technical data

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

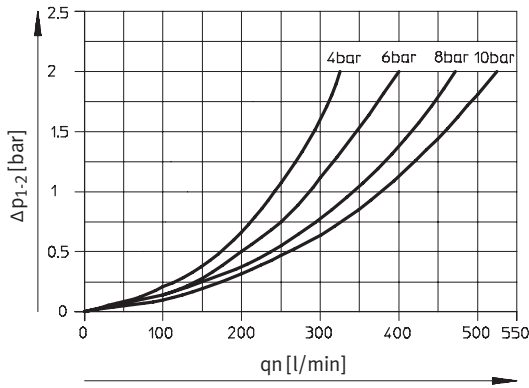
LF-M5-...-MICRO and LF-QS4-...-MICRO



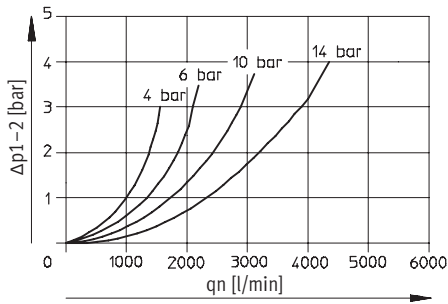
LF-1/8-...-MICRO



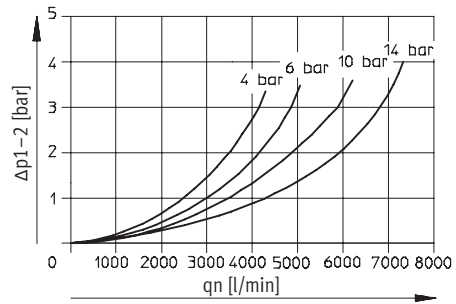
LF-M7-...-MICRO B and LF-QS6-...-MICRO



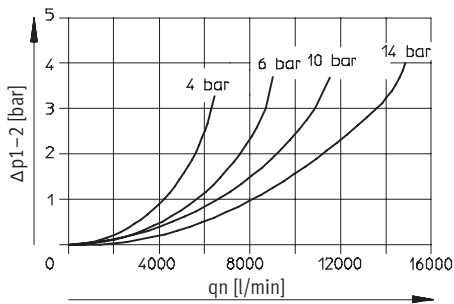
LF-1/4-D-MINI



LF-1/2-D-MIDI



LF-1-D-MAXI



Filters LF, D series, metal design

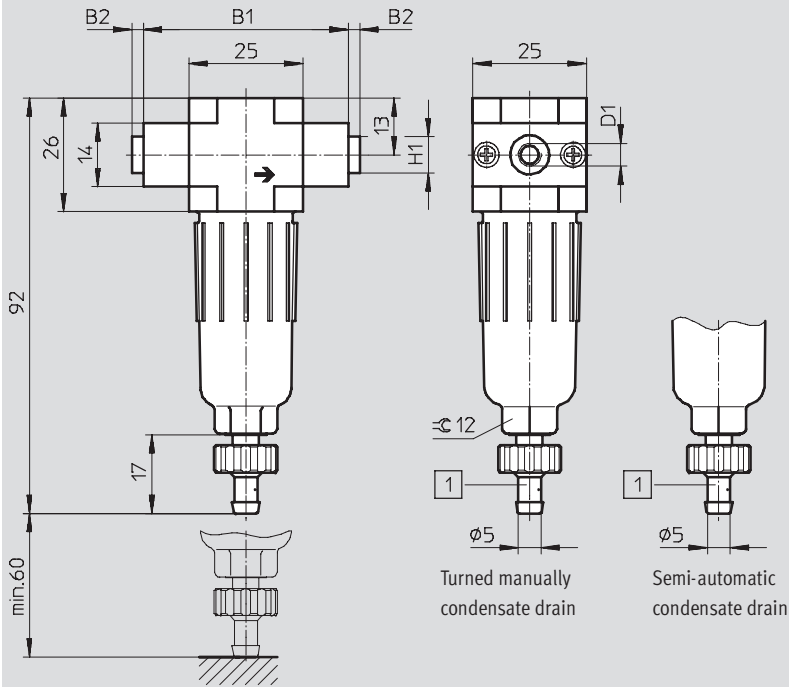
Technical data

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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

FESTO

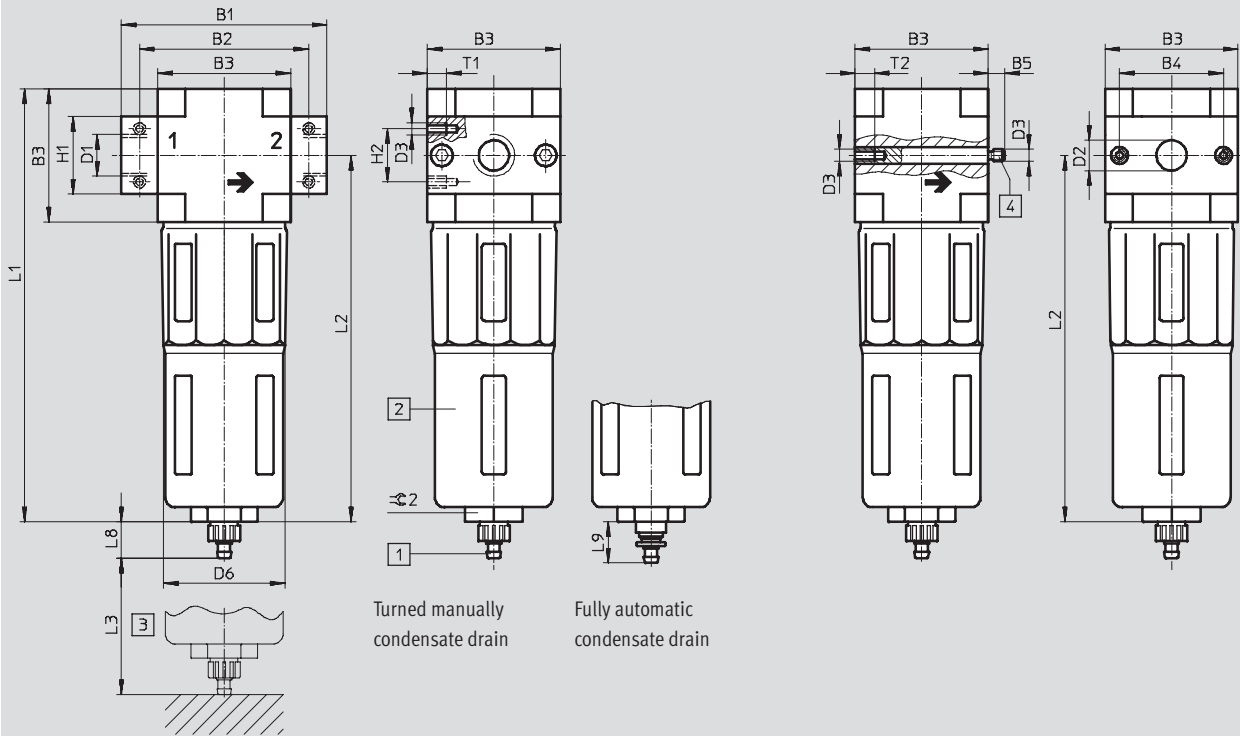
Dimensions

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	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																		
LF-3/8-D-MINI	70					G3/8													
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													
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

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	
		G ¹ / ₈	526299 LF-1/8-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	
		G ¹ / ₈	526300 LF-1/8-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

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						
	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	

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

Peripherals overview

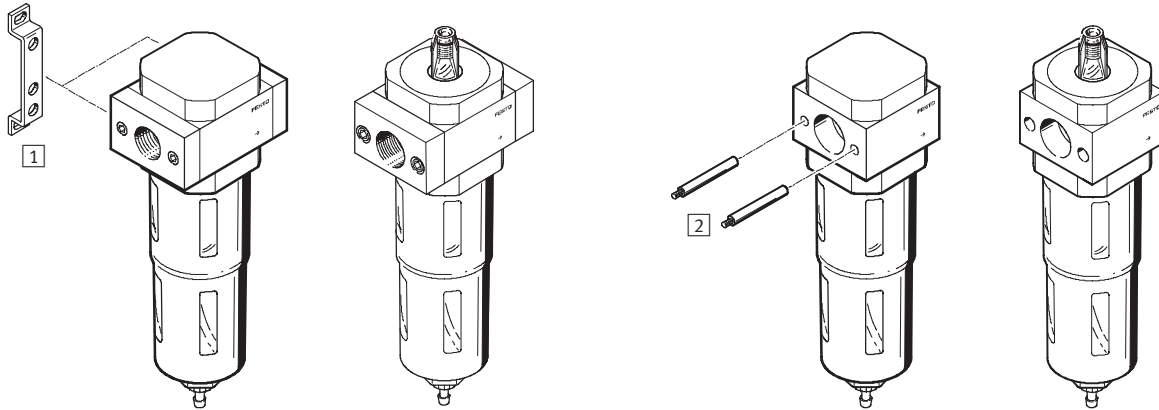
Mini/Midi/Maxi

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

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

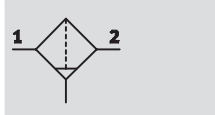
Condensate drain

	Turned manually
A	Fully automatic

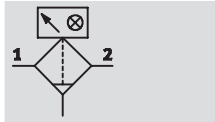
Fine and micro filters LFMA/LFMB, D series, metal design


Technical data


Manual rotary condensate drain,
without differential pressure indicator




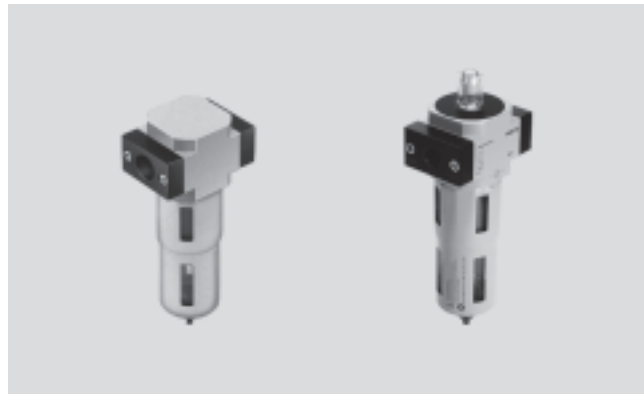
with differential pressure indicator



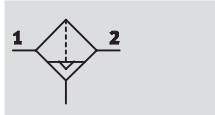
-  - Flow rate
130 ... 1250 l/min

-  - Temperature range
-10 ... +60 °C

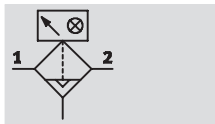
-  - Input pressure
1 ... 16 bar



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	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	
Design	Fibre filter										
Type of mounting	Via accessories In-line installation										
Assembly position	Vertical ±5°										
Operating medium											
Micro filter LFMA	Filtered compressed air, grade of filtration 1 µm										
Fine filter LFMB	Filtered compressed air, 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/m ³]											
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 [cm ³]											
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

Technical data

Standard nominal flow rate ¹⁾ qnN [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	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.

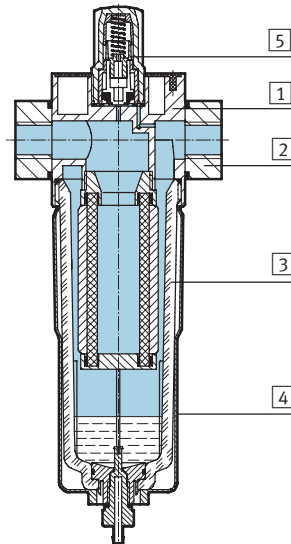
Ambient conditions				
Size		Mini	Midi	Maxi
Ambient temperature	[°C]	-10 ... +60		
Temperature of medium	[°C]	+1.5 ... +60		
Corrosion resistance class	CRC ¹⁾	2		

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



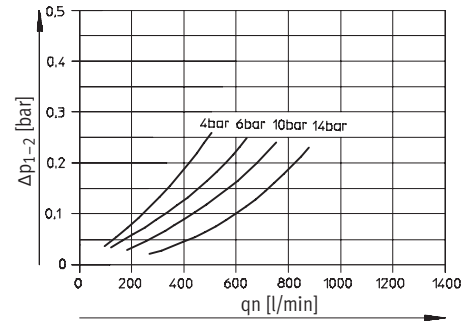
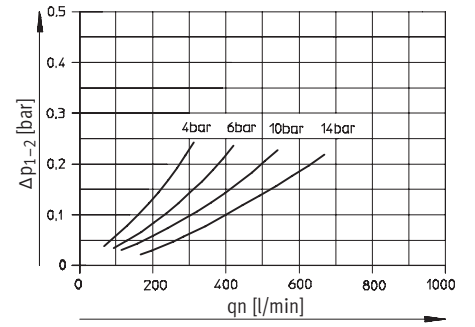
Fine and micro filters		
1	Housing	Die-cast zinc
2	Connecting plates	Aluminium
3	Bowl	Polycarbonate
4	Metal bowl guard	Aluminium
5	Housing for version with differential pressure indicator	Polycarbonate
-	Seals	Nitrile rubber
Note on materials		Free of copper and PTFE

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

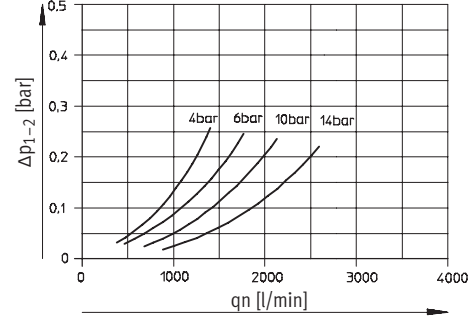
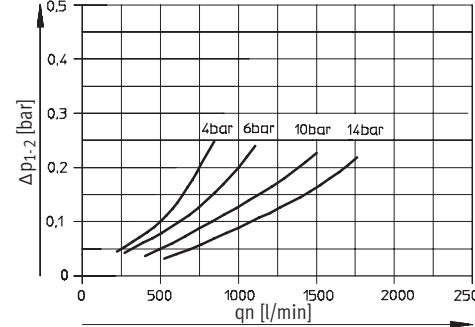
Technical data

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

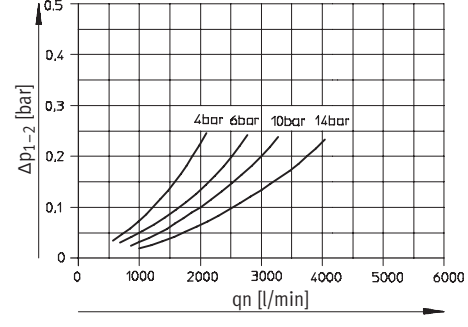
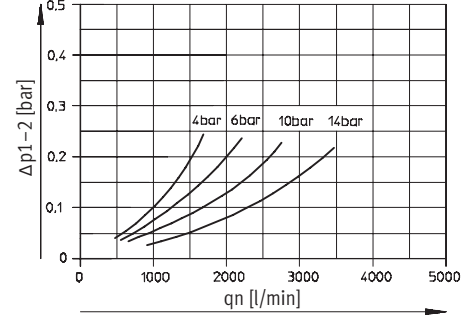
LFMA-1/4-D-MINI and LFMA-1/4-D-MINI-A LFMB-1/4-D-MINI and LFMB-1/4-D-MINI-A



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

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 4 Threaded pin (exchangeable) → Flow direction
 3 Installation dimensions

Type	B1	B2	B3	B4	B5	D1	D2	D3	D6	H1	H2	L1	L2	L3	L8	L9	T1	T2	∅ 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	70																		
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																	
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

FESTO

Technical data

Dimensions with differential pressure indicator DA 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 4 Threaded pin (exchangeable) → Flow direction

3 Installation dimensions

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						G3/8														
LFMB/A-3/8-D-MINI-DA	70																			
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								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

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.
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.
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

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		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	G $\frac{1}{8}$	532843	LFMA- $\frac{1}{8}$ -D-MINI-DA	532853	LFMA- $\frac{1}{8}$ -D-MINI-DA-A
	G $\frac{1}{4}$	532844	LFMA- $\frac{1}{4}$ -D-MINI-DA	532854	LFMA- $\frac{1}{4}$ -D-MINI-DA-A
	G $\frac{3}{8}$	532845	LFMA- $\frac{3}{8}$ -D-MINI-DA	532855	LFMA- $\frac{3}{8}$ -D-MINI-DA-A
Midi	G $\frac{1}{4}$	532846	LFMA- $\frac{1}{4}$ -D-MIDI-DA	532856	LFMA- $\frac{1}{4}$ -D-MIDI-DA-A
	G $\frac{3}{8}$	532847	LFMA- $\frac{3}{8}$ -D-MIDI-DA	532857	LFMA- $\frac{3}{8}$ -D-MIDI-DA-A
	G $\frac{1}{2}$	532848	LFMA- $\frac{1}{2}$ -D-MIDI-DA	532858	LFMA- $\frac{1}{2}$ -D-MIDI-DA-A
	G $\frac{3}{4}$	532849	LFMA- $\frac{3}{4}$ -D-MIDI-DA	532859	LFMA- $\frac{3}{4}$ -D-MIDI-DA-A
Maxi	G $\frac{1}{2}$	532850	LFMA- $\frac{1}{2}$ -D-MAXI-DA	532860	LFMA- $\frac{1}{2}$ -D-MAXI-DA-A
	G $\frac{3}{4}$	532851	LFMA- $\frac{3}{4}$ -D-MAXI-DA	532861	LFMA- $\frac{3}{4}$ -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	G $\frac{1}{8}$	532817	LFMB- $\frac{1}{8}$ -D-MINI-DA	532827	LFMB- $\frac{1}{8}$ -D-MINI-DA-A
	G $\frac{1}{4}$	532818	LFMB- $\frac{1}{4}$ -D-MINI-DA	532828	LFMB- $\frac{1}{4}$ -D-MINI-DA-A
	G $\frac{3}{8}$	532819	LFMB- $\frac{3}{8}$ -D-MINI-DA	532829	LFMB- $\frac{3}{8}$ -D-MINI-DA-A
Midi	G $\frac{1}{4}$	532820	LFMB- $\frac{1}{4}$ -D-MIDI-DA	532830	LFMB- $\frac{1}{4}$ -D-MIDI-DA-A
	G $\frac{3}{8}$	532821	LFMB- $\frac{3}{8}$ -D-MIDI-DA	532831	LFMB- $\frac{3}{8}$ -D-MIDI-DA-A
	G $\frac{1}{2}$	532822	LFMB- $\frac{1}{2}$ -D-MIDI-DA	532832	LFMB- $\frac{1}{2}$ -D-MIDI-DA-A
	G $\frac{3}{4}$	532823	LFMB- $\frac{3}{4}$ -D-MIDI-DA	532833	LFMB- $\frac{3}{4}$ -D-MIDI-DA-A
Maxi	G $\frac{1}{2}$	532824	LFMB- $\frac{1}{2}$ -D-MAXI-DA	532834	LFMB- $\frac{1}{2}$ -D-MAXI-DA-A
	G $\frac{3}{4}$	532825	LFMB- $\frac{3}{4}$ -D-MAXI-DA	532835	LFMB- $\frac{3}{4}$ -D-MAXI-DA-A
	G1	532826	LFMB-1-D-MAXI-DA	532836	LFMB-1-D-MAXI-DA-A

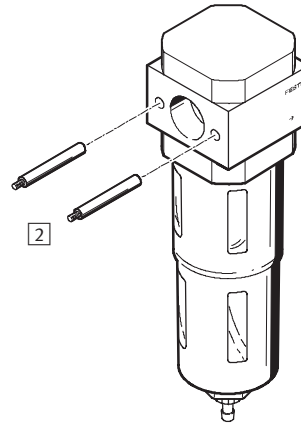
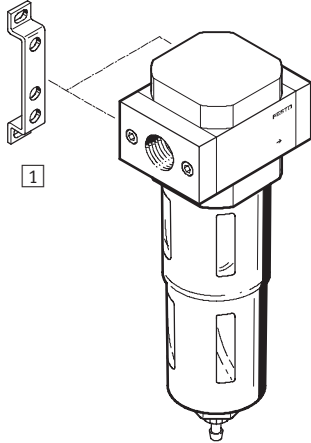
Active carbon filters LFX, D series, metal design

Peripherals overview and Type codes

Mini/Midi/Maxi

Individual unit with connection plates

Individual unit without connection plates, for service unit combination



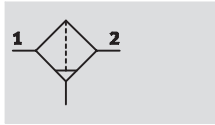
Mounting attachments and accessories						
		Individual unit		Combination		→ Page/ Internet
		with connection plates	without connection plates	with connection plates	without connection plates	
1	Mounting bracket HFOE	■	–	■	–	hfoe-d
2	Threaded pin (included in scope of delivery) FRB	–	–	■	■	frb-d

Basic function		LFX	–	1/4	–	D	–	MIDI
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

Technical data

Manual rotary condensate drain



- - 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.

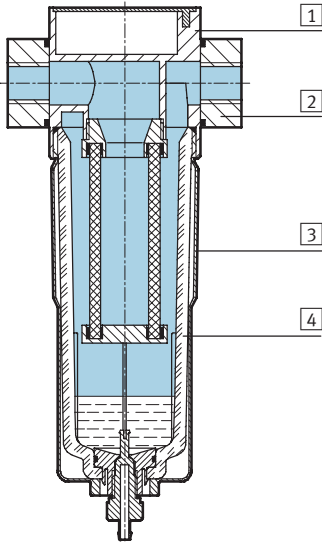
Active carbon filters LFX, D series, metal design

Technical data

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

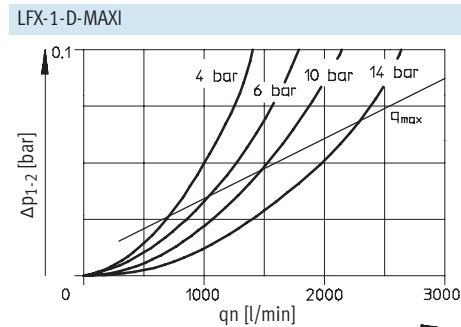
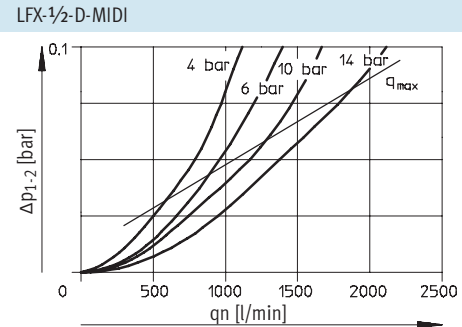
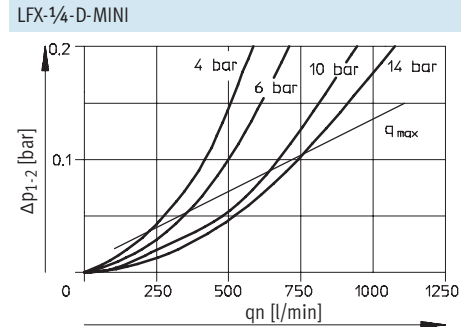
Materials

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}



Active carbon filters LFX, D series, metal design

Technical data

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
 4 Threaded pin (exchangeable)
 → Flow direction

3 Installation dimensions

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	70					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	116	91				G1				40							
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

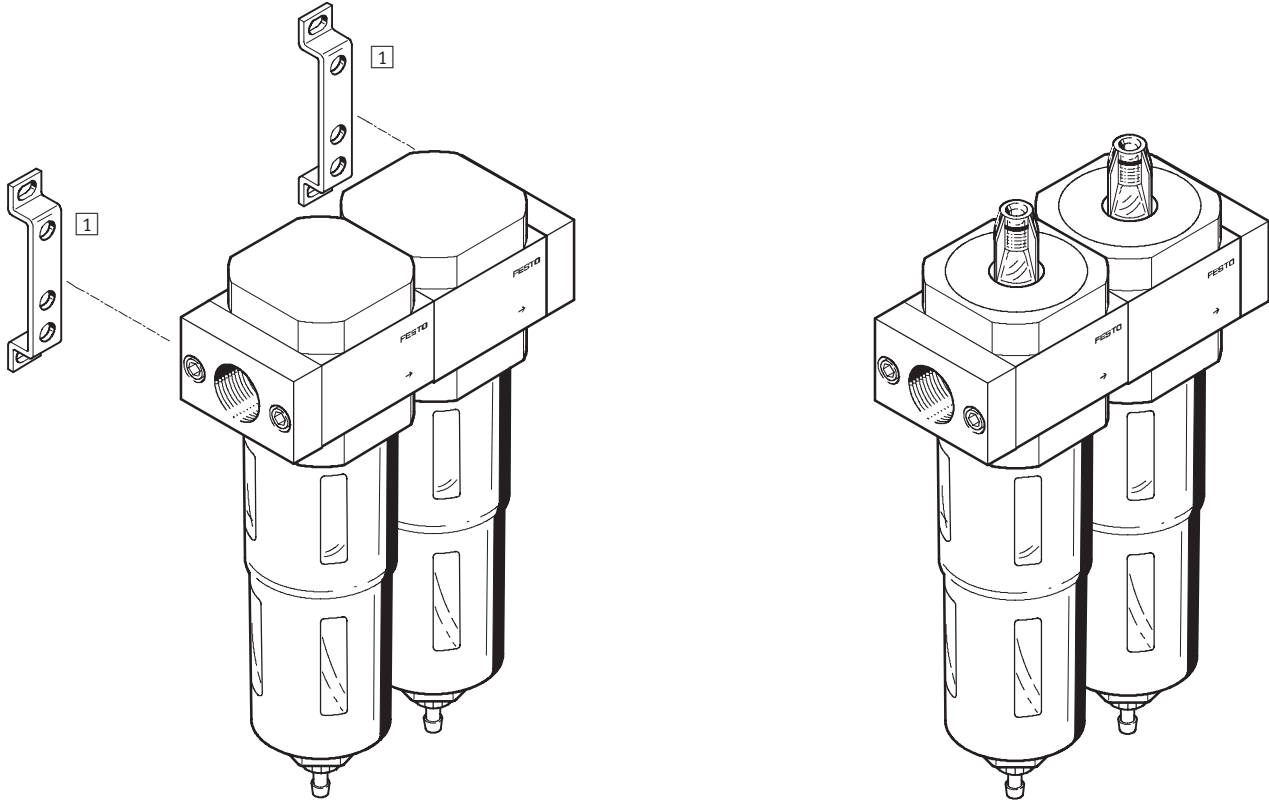
Ordering data			
Active carbon filter with metal bowl guard			
Size	Part No.	Type	
Without threaded connecting plates			
Mini	532776	LFX-D-MINI	
Midi	532777	LFX-D-MIDI	
Maxi	532778	LFX-D-MAXI	

Ordering data			
Active carbon filter with metal bowl guard			
Size	Connection	Part No.	Type
With threaded connecting plates			
Mini	G $\frac{1}{8}$	532779	LFX- $\frac{1}{8}$ -D-MINI
	G $\frac{1}{4}$	532802	LFX- $\frac{1}{4}$ -D-MINI
	G $\frac{3}{8}$	532780	LFX- $\frac{3}{8}$ -D-MINI
Midi	G $\frac{1}{4}$	532781	LFX- $\frac{1}{4}$ -D-MIDI
	G $\frac{3}{8}$	532782	LFX- $\frac{3}{8}$ -D-MIDI
	G $\frac{1}{2}$	532783	LFX- $\frac{1}{2}$ -D-MIDI
	G $\frac{3}{4}$	532784	LFX- $\frac{3}{4}$ -D-MIDI
Maxi	G $\frac{1}{2}$	532785	LFX- $\frac{1}{2}$ -D-MAXI
	G $\frac{3}{4}$	532786	LFX- $\frac{3}{4}$ -D-MAXI
	G1	532787	LFX-1-D-MAXI

Filter combinations LFMBA, D series, metal design

Peripherals overview

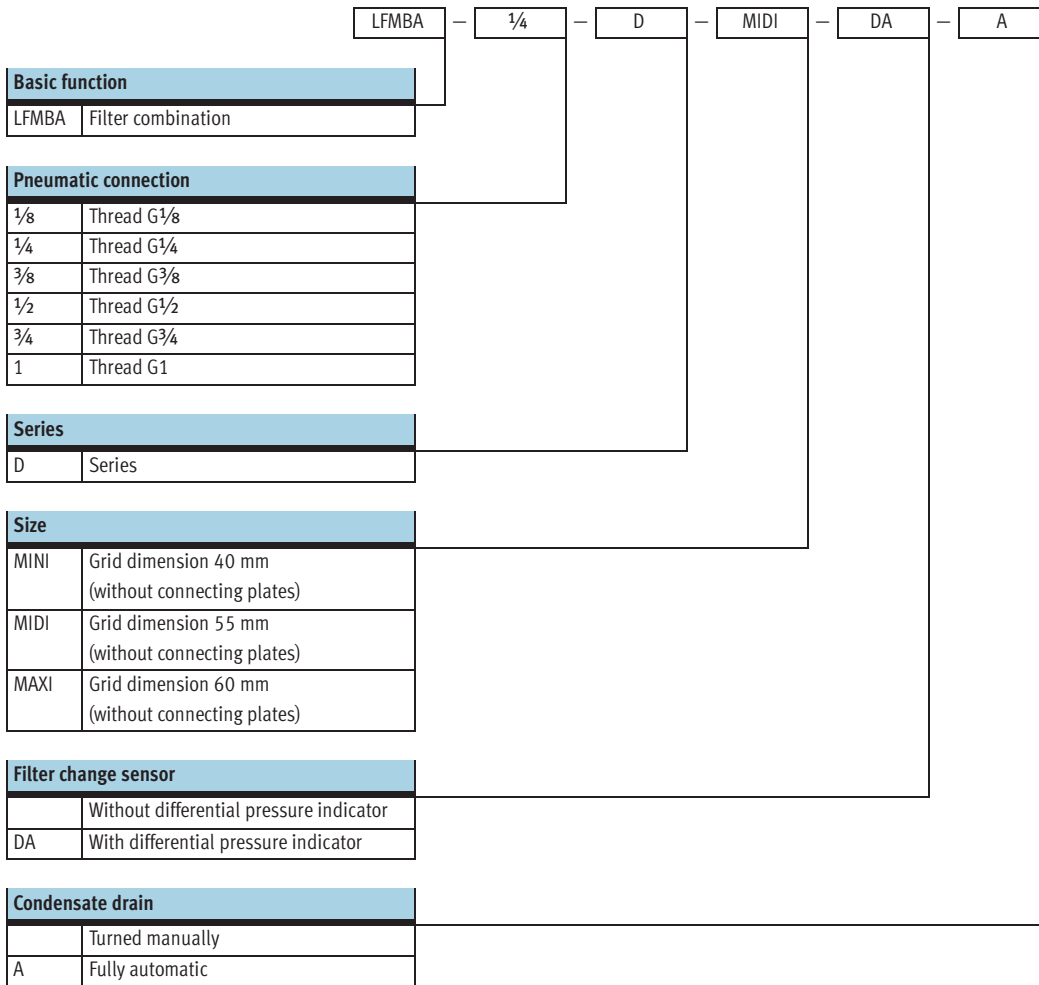
Mini/Midi/Maxi without differential pressure indicator	with differential pressure indicator
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Mounting components		→ Page/ Internet
1	Mounting bracket HFOE	hfoe-d

Filter combinations LFMBA, D series, metal design

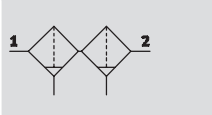
Type codes



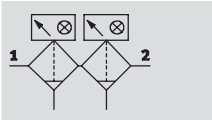
Filter combinations LFMBA, D series, metal design


Technical data


Manual rotary condensate drain,
without differential pressure indicator




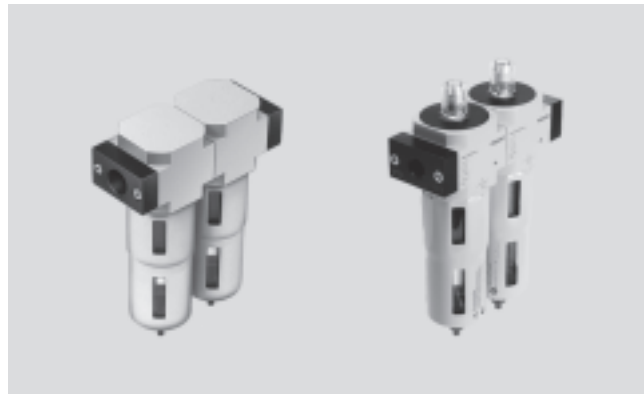
with differential pressure indicator



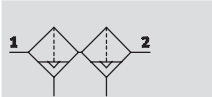
-  - Flow rate
125 ... 600 l/min

-  - Temperature range
-10 ... +60 °C

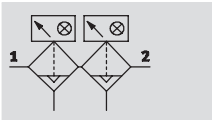
-  - Input pressure
1 ... 16 bar



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
- 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	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		
Operating medium	Filtered compressed air											
Design	Fibre filter											
Type of mounting	Via accessories											
	In-line installation											
Assembly position	Vertically ±5°											
Grade of filtration	[µm]	0.01 and 1										
Residual oil content	[mg/m ³]	≤0.01										
Max. condensate volume	[cm ³]	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

Technical data

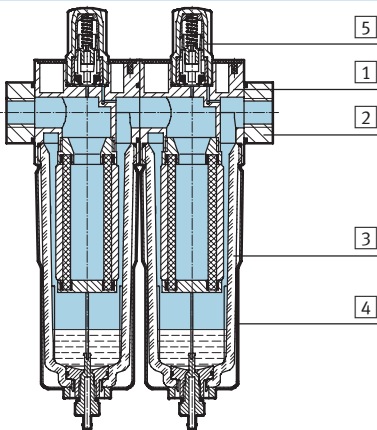
Ambient conditions			
Size	Mini	Midi	Maxi
Ambient temperature [°C]	-10 ... +60		
Temperature of medium [°C]	+1.5 ... +60		
Corrosion resistance class CRC ¹⁾	2		

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

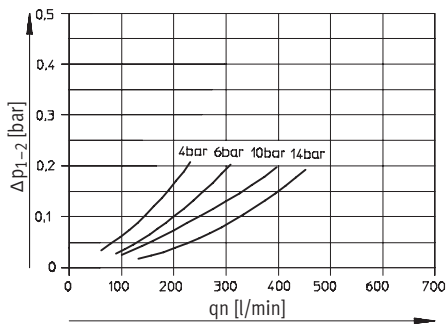
Sectional view



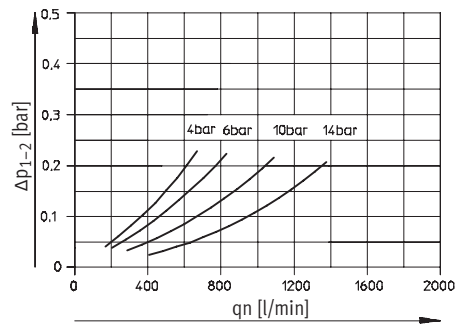
Filter combination		
1	Housing	Die-cast zinc
2	Connecting plates	Die-cast zinc
3	Bowl	Polycarbonate
4	Bowl guard	Aluminium
5	Housing for version with differential pressure indicator	Polycarbonate
-	Seals	Nitrile rubber
Note on materials		Free of copper and PTFE

Standard flow rate qn as a function of the differential pressure Δp1-2

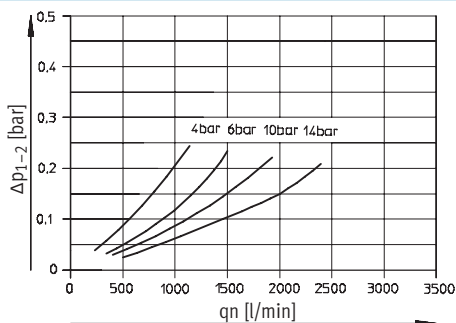
LFMBA-1/4-D-MINI and LFMBA-1/4-D-MINI-A



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

Download CAD data → www.festo.com

1 Barbed fitting for plastic tubing type PCN-4 2 Metal bowl guard → Flow direction
3 Installation dimensions

Type	B1	B2	B3	B4	D1	D3	D6	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.

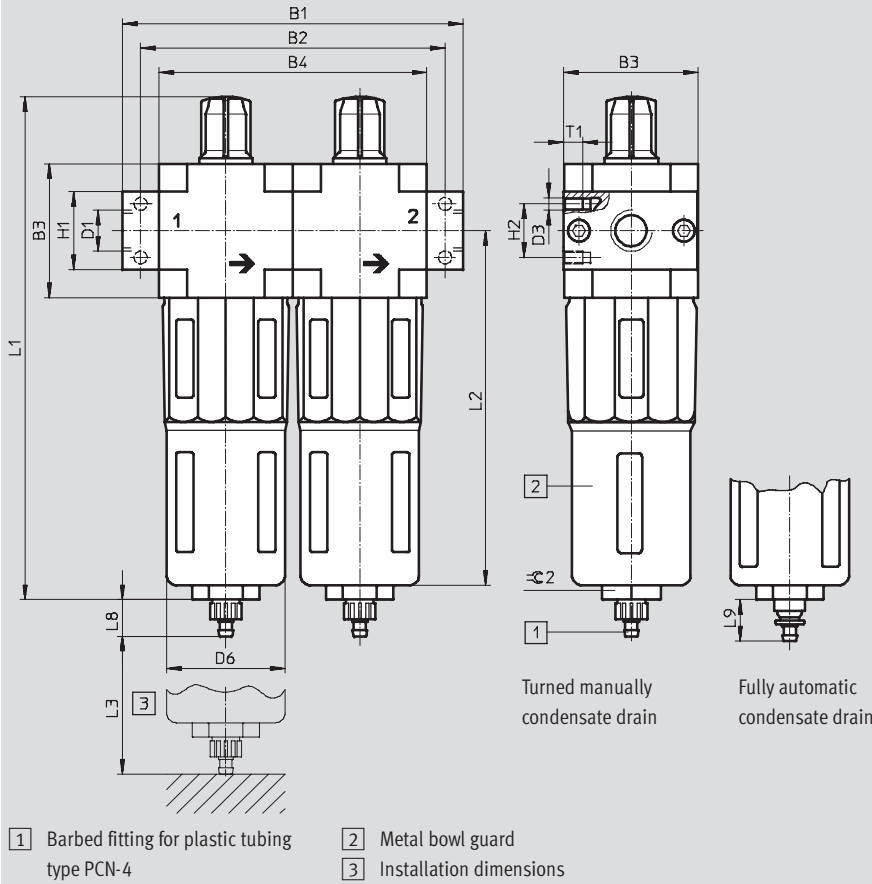
Filter combinations LFMBA, D series, metal design

Technical data

FESTO

Dimensions with differential pressure indicator

Download CAD data → www.festo.com



Type	B1	B2	B3	B4	D1	D3	D6	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					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					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

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.
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.
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

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	5	159640	LFP-D-MINI-5M
	Filter cartridge	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	5	159594	LFP-D-MIDI-5M
	Filter cartridge	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	5	159641	LFP-D-MAXI-5M
	Filter cartridge	40	363664	LFP-D-MAXI-40M
	Active carbon filter cartridge	-	532789	LFACP-MAXI