

Filter combination LFMB

FESTO



Characteristics

At a glance

High-efficiency filter for special requirements.

- Air quality to ISO 8573-1:2010
- Available as pre-assembled filter combination
- Optionally with differential pressure display for indicating filter contamination.
- Filter inserts optionally with 1 µm or 0.01 µm
- Choice of filter inserts 5 µm or 40 µm

Diagrams

[Link](#) [lfmba](#)



The diagrams shown in this document are also available online. These can be used to display precise values.

Version

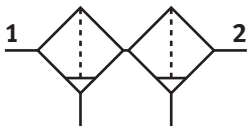
[D] D series, metal

Sturdy in full metal design for the specific requirements of the process automation industry

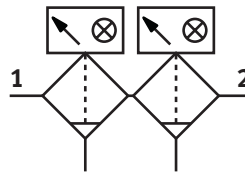
Filter change sensing

Optionally with differential pressure display for indicating filter contamination.

[] None



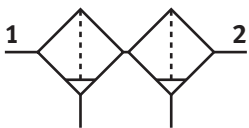
[DA] Differential pressure display, visual



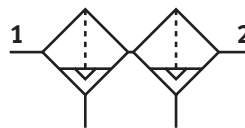
Condensate drain

Optionally with manual or fully automatic condensate drain

[] Manually rotating



[A] Fully automatic



Type code

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

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

Datasheet

General technical data

Size	Maxi	Midi	Mini
Pneumatic connection, port 1	G1/2, G3/4, G1	G1/4, G3/8, G1/2, G3/4	G1/8, G1/4, G3/8
Pneumatic connection, port 2	G1/2, G3/4, G1	G1/4, G3/8, G1/2, G3/4	G1/8, G1/4, G3/8
Design	Fibre filter		
Type of mounting	In-line installation With accessories		
Mounting position	Vertical +/-5°		
Grade of filtration	0.01 µm		
Air purity class at output	Compressed air to ISO 8573-1:2010 [1:7:2] Inert gases		
Filter efficiency	99.9999%		
Bowl guard	Metal bowl guard		
Condensate drain	Fully automatic Manually rotating		
Residual oil content	0.01 mg/m ³		
Max. condensate volume	80 ml	43 ml	22 ml

General technical data (NPT - not available in all markets)

Size	Midi	Mini
Pneumatic connection, port 1	3/8 NPT, 1/2 NPT, 3/4 NPT	1/8 NPT, 1/4 NPT
Pneumatic connection, port 2	3/8 NPT, 1/2 NPT, 3/4 NPT	1/8 NPT, 1/4 NPT
Type of mounting	In-line installation With accessories	
Mounting position	Vertical	
Grade of filtration	0.01 µm	
Air purity class at output	Compressed air to ISO 8573-1:2010 [1:7:2] Inert gases	
Filter efficiency	99.9999%	
Bowl guard	Metal bowl guard	
Condensate drain	Manual, non-detenting	Fully automatic Manual, non-detenting
Residual oil content	0.01 mg/m ³	

Operating and environmental conditions

Condensate drain	Fully automatic	Manually rotating
Operating pressure	0.15 ... 1.2 MPa	0.1 ... 1.6 MPa
Operating pressure	1.5 ... 12 bar	1 ... 16 bar
Operating pressure	21.75 ... 174 psi	14.5 ... 232 psi
Operating medium ¹⁾	Compressed air to ISO 8573-1:2010 [6:8:4] Inert gases	
Ambient temperature	-10 ... 60°C	
Media temperature	1.5 ... 60°C	

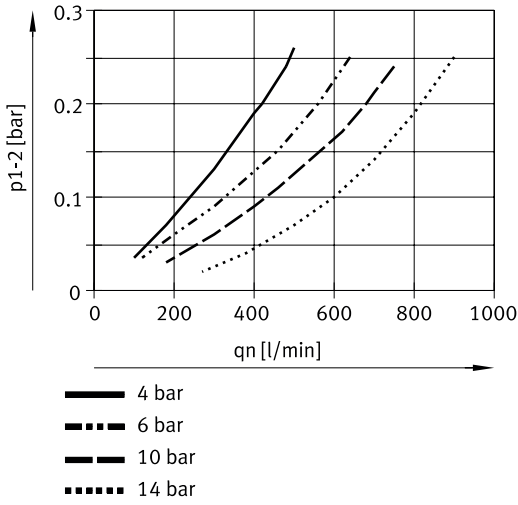
1) Compressed air according to ISO 8573-1:2010 [7:9:-] applies to fully automatic condensate drain

Materials

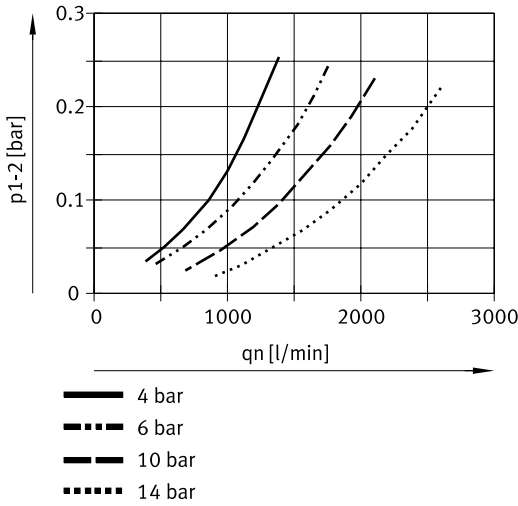
Material housing	Die-cast zinc
Material bowl	PC
Material filter	Borosilicate fibre
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Datasheet

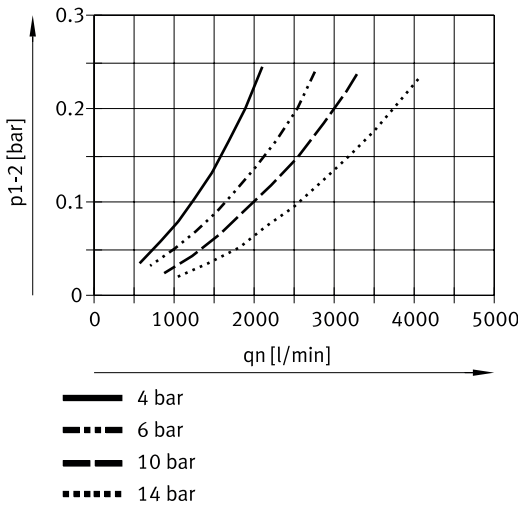
Standard flow rate q_n as a function of differential pressure Δp_{1-2} (LFMBA-1/4-D-MINI)



Standard flow rate q_n as a function of differential pressure Δp_{1-2} (LFMBA-1/2-D-MIDI)



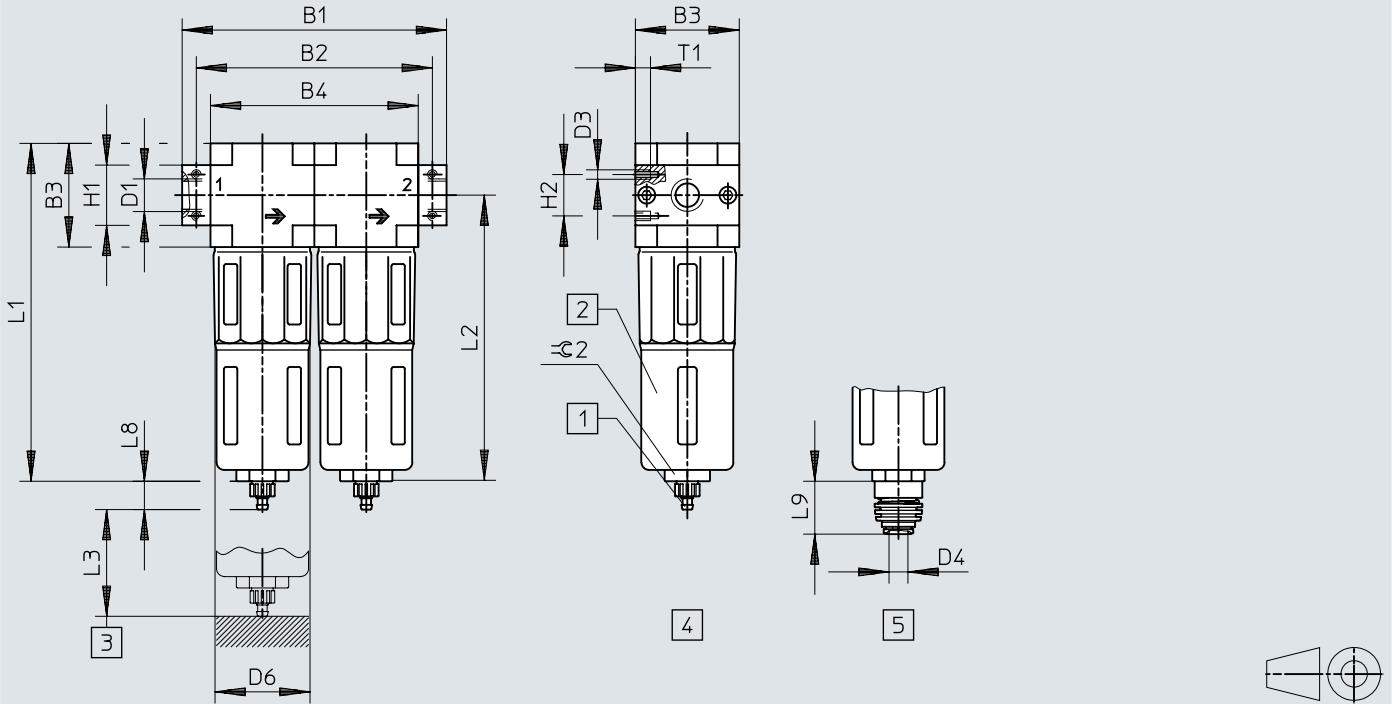
Standard flow rate q_n as a function of differential pressure Δp_{1-2} (LFMBA-1-D-MAXI)



Dimensions

Dimensions – Filter combinations LFMBA

Download CAD data www.festo.com



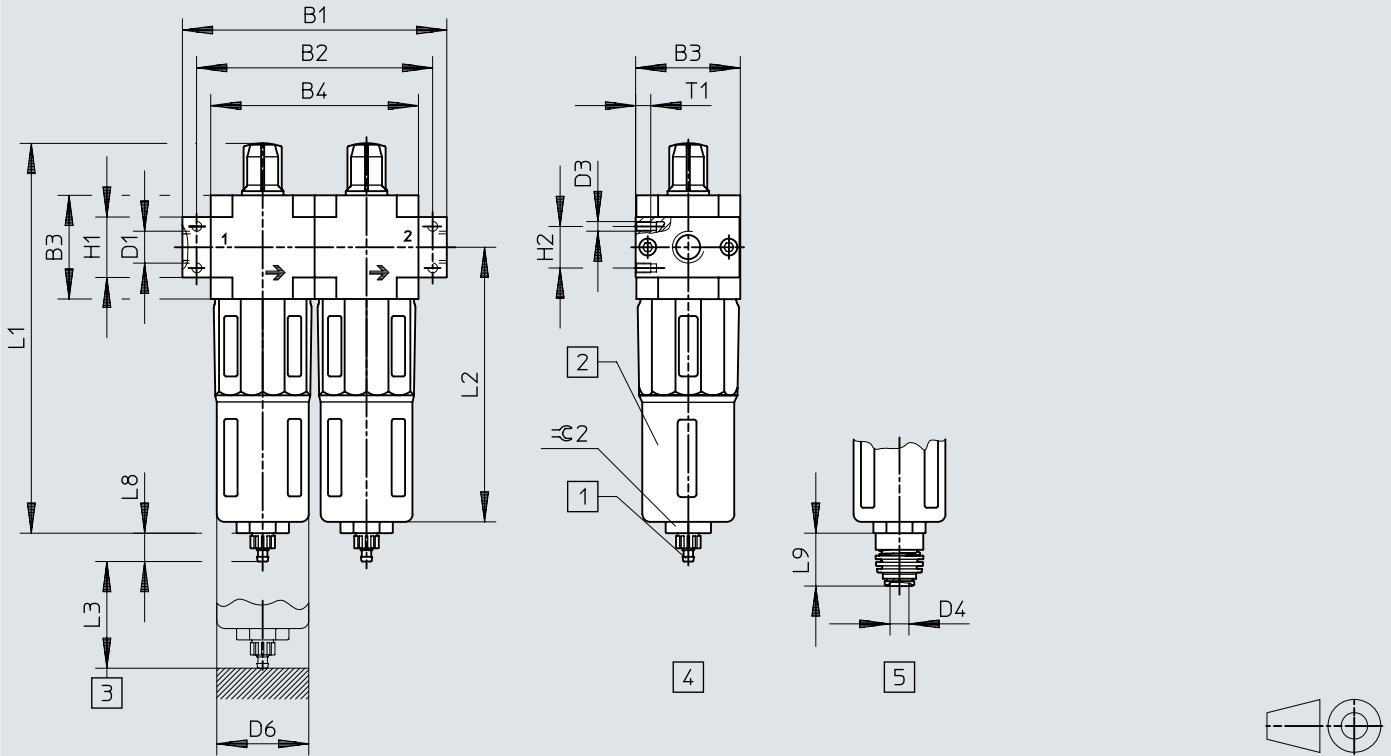
- [1] Barbed connector for plastic tubing PUN(-H)-8x1.25
- [2] Metal bowl guard
- [3] Installation dimension
- [4] Manual condensate drain
- [5] Fully automatic condensate drain for plastic tubing PUN-6/PAN-6

	B1	B2	B3	B4	D1	D3	D6 ø	H1	H2	L1	L2	L3	L8	L9	T1	±0.2
Mini																
LFMBA-1/8-D-MINI	104	92	40	80	G1/8	M4	38	20	11	144	124	60	15	19	7	22
LFMBA-1/4-D-MINI					G1/4											
LFMBA-3/8-D-MINI					G3/8											
Midi																
LFMBA-1/4-D-MIDI	140	125	55	110	G1/4	M5	52	32	22	179	151	80	15	19	8	24
LFMBA-3/8-D-MIDI					G3/8											
LFMBA-1/2-D-MIDI					G1/2											
LFMBA-3/4-D-MIDI					G3/4											
Maxi																
LFMBA-1/2-D-MAXI	162	146	66	132	G1/2	M5	65	32	22	203	170	90	15	19	8	24
LFMBA-3/4-D-MAXI					G3/4			40								
LFMBA-1-D-MAXI					G1			40								

Dimensions

Dimensions – With differential pressure display


Download CAD data www.festo.com





- [1] Barbed connector for plastic tubing PUN(-H)-8x1.25
- [2] Metal bowl guard
- [3] Installation dimension
- [4] Manual condensate drain
- [5] Fully automatic condensate drain for plastic tubing PUN-6/PAN-6

	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					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											


Ordering data

Filter combinations LFMBA						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Condensate drain	Product weight	Part no.	Type
	G1/8	G1/8	Fully automatic	500 g	162666	LFMBA-1/8-D-MINI-A
			Manually rotating		162658	LFMBA-1/8-D-MINI
	G1/4	G1/4	Fully automatic	1,300 g	162667	LFMBA-1/4-D-MINI-A
			Manually rotating		186472	LFMBA-1/4-D-MIDI-A
			Fully automatic	500 g	162659	LFMBA-1/4-D-MINI
			Manually rotating		186471	LFMBA-1/4-D-MIDI
	G3/8	G3/8	Fully automatic	500 g	162668	LFMBA-3/8-D-MINI-A
			Manually rotating		162669	LFMBA-3/8-D-MIDI-A
			Fully automatic	1,300 g	162660	LFMBA-3/8-D-MINI
			Manually rotating		162661	LFMBA-3/8-D-MIDI
	G1/2	G1/2	Fully automatic	2,400 g	162670	LFMBA-1/2-D-MIDI-A
			Manually rotating		186478	LFMBA-1/2-D-MAXI-A
			Fully automatic	1,300 g	162662	LFMBA-1/2-D-MIDI
			Manually rotating		186477	LFMBA-1/2-D-MAXI
G3/4	G3/4	Fully automatic	2,400 g	162672	LFMBA-3/4-D-MAXI-A	
		Manually rotating		162663	LFMBA-3/4-D-MIDI	
		Fully automatic	1,300 g	162664	LFMBA-3/4-D-MAXI	
		Manually rotating		162665	LFMBA-3/4-D-MIDI	
G1	G1	Fully automatic	2,400 g	162673	LFMBA-1-D-MAXI-A	
		Manually rotating		162665	LFMBA-1-D-MAXI	

Filter combinations LFMBA with differential pressure indication						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Condensate drain	Product weight	Part no.	Type
	G1/8	G1/8	Fully automatic	651 g	532873	LFMBA-1/8-D-MINI-DA-A
			Manually rotating		532863	LFMBA-1/8-D-MINI-DA
	G1/4	G1/4	Fully automatic	1,429 g	532874	LFMBA-1/4-D-MINI-DA-A
			Manually rotating		532876	LFMBA-1/4-D-MIDI-DA-A
			Fully automatic	651 g	532864	LFMBA-1/4-D-MINI-DA
			Manually rotating		532866	LFMBA-1/4-D-MIDI-DA
	G3/8	G3/8	Fully automatic	651 g	532875	LFMBA-3/8-D-MINI-DA-A
			Manually rotating		532877	LFMBA-3/8-D-MIDI-DA-A
			Fully automatic	1,429 g	532867	LFMBA-3/8-D-MINI-DA
			Manually rotating		532878	LFMBA-3/8-D-MIDI-DA
	G1/2	G1/2	Fully automatic	2,362 g	532880	LFMBA-1/2-D-MAXI-DA-A
			Manually rotating		532868	LFMBA-1/2-D-MIDI-DA
			Fully automatic	1,429 g	532870	LFMBA-1/2-D-MAXI-DA
			Manually rotating		532879	LFMBA-1/2-D-MIDI-DA
G3/4	G3/4	Fully automatic	2,362 g	532881	LFMBA-3/4-D-MAXI-DA-A	
		Manually rotating		532869	LFMBA-3/4-D-MIDI-DA	
		Fully automatic	1,429 g	532871	LFMBA-3/4-D-MAXI-DA	
		Manually rotating		532882	LFMBA-3/4-D-MIDI-DA	
G1	G1	Fully automatic	2,362 g	532872	LFMBA-1-D-MAXI-DA	
		Manually rotating		532872	LFMBA-1-D-MAXI-DA	

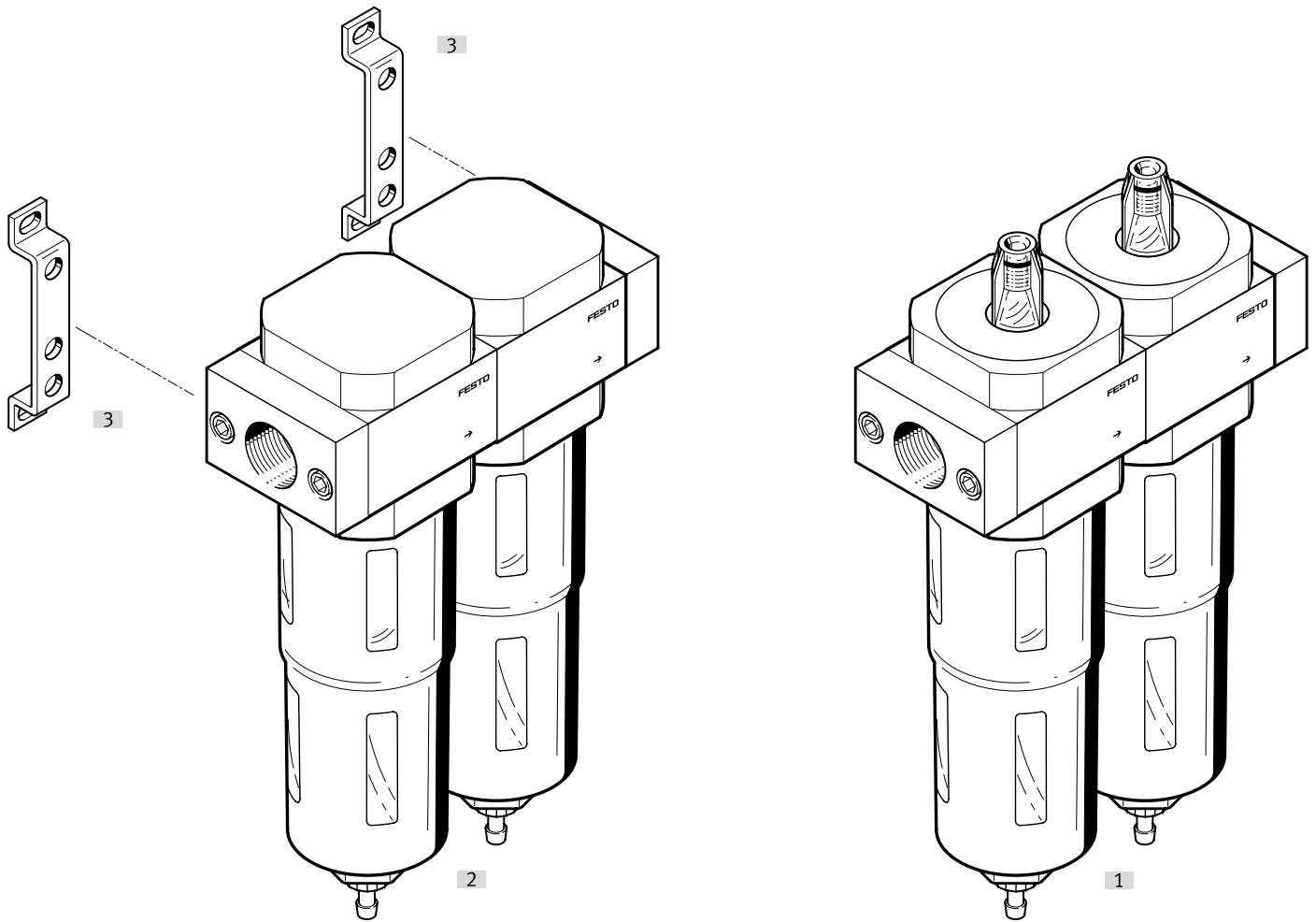
Filter combinations LFMBA (NPT - not available in all markets)						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Condensate drain	Product weight	Part no.	Type
	1/8 NPT	1/8 NPT	Manual, non-detenting		173740	LFMBA-1/8-D-MINI-NPT

Ordering data

Filter combinations LF MBA (NPT - not available in all markets)					
	Pneumatic connection, port 1	Pneumatic connection, port 2	Condensate drain	Part no.	Type
	1/4 NPT	1/4 NPT	Fully automatic	173743	LF MBA-1/4-D-MINI-A-NPT
			Manual, non-detenting	173742	LF MBA-1/4-D-MINI-NPT
	3/8 NPT	3/8 NPT		173746	LF MBA-3/8-D-MIDI-NPT
	1/2 NPT	1/2 NPT		173748	LF MBA-1/2-D-MIDI-NPT
	3/4 NPT	3/4 NPT		173750	LF MBA-3/4-D-MIDI-NPT

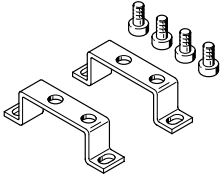
Peripherals

Peripherals overview

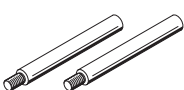


Accessories		→ Link
Type/order code	Description	
[1]	Filter combinations LFMBA with differential pressure indication	lfmba
[2]	Filter combinations LFMBA without differential pressure indication	lfmba
[3]	Mounting bracket HFOE-D	11

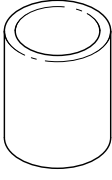
Accessories

Mounting bracket MS4-WP...				
	Short type code	Corrosion resistance class CRC ¹⁾	Part no.	Type
	HFOE	2 - Moderate corrosion stress	159638	HFOE-D-MINI
			159593	HFOE-D-MIDI/MAXI

1) More information www.festo.com/x/topic/crc

Mounting bracket MS4-WB				
	Short type code	Corrosion resistance class CRC ¹⁾	Part no.	Type
	FRB	2 - Moderate corrosion stress	159595	FRB-D-MIDI
			159643	FRB-D-MAXI
			159642	FRB-D-MINI

1) More information www.festo.com/x/topic/c

Filter cartridges, D series, metal				
	Size	Grade of filtration	Part no.	Type
	Maxi	0.01 µm	162676	LFMAP-D-MAXI
		1 µm	162679	LFMBP-D-MAXI
	Midi	0.01 µm	162675	LFMAP-D-MIDI
		1 µm	162678	LFMBP-D-MIDI
	Mini	0.01 µm	★ 162674	MS4/D-MINI-LFM-A
		1 µm	★ 162677	MS4/D-MINI-LFM-B