

# Filter combination LFMB

**FESTO**



## Characteristics

### At a glance

High-efficiency filter for special requirements.

- Air quality to ISO 8573-1:2010
- Optionally with differential pressure display for indicating filter contamination.
- 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

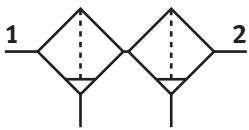
[D] D series, metal

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

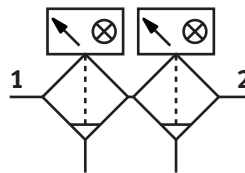
### Filter change sensing

Optionally with differential pressure display for indicating filter contamination.

[ ] None



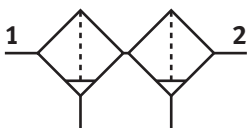
[DA] Differential pressure display, visual



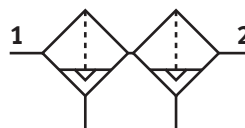
### Condensate drain

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	100%		
Bowl guard	Metal bowl guard		
Condensate drain	Fully automatic Manually rotating		
Differential pressure display	-		
Residual oil content	0.01 mg/m <sup>3</sup>		
Max. condensate volume	80 ml	43 ml	22 ml

Standard nominal low rate qnN (measured at p1 = 6 bar) <sup>1)</sup>										
Size	Mini			Midi				Maxi		
Pneumatic connection 1	G1/8	G1/4	G3/8	G1/4	G3/8	G1/2	G3/4	G1/2	G3/4	G1
LFMBA	125 l/min	130 l/min	140 l/min	300 l/min	350 l/min	350 l/min	350 l/min	550 l/min	550 l/min	600 l/min

1) Measured at p1 = 6 bar and Δp = 70 mbar.

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

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

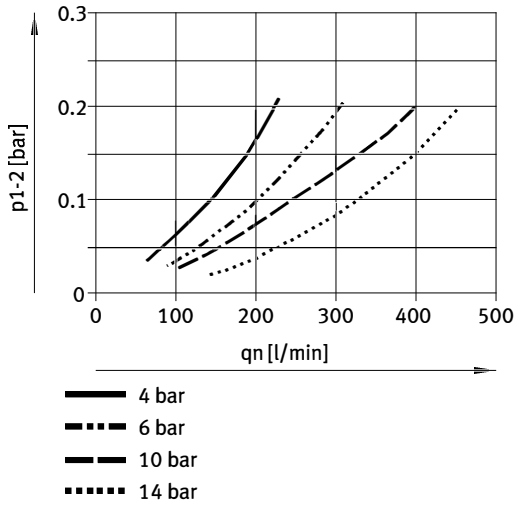
1) Compressed air according to ISO 8573-1:2010 [7:9:-] applies to fully automatic condensate drain

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

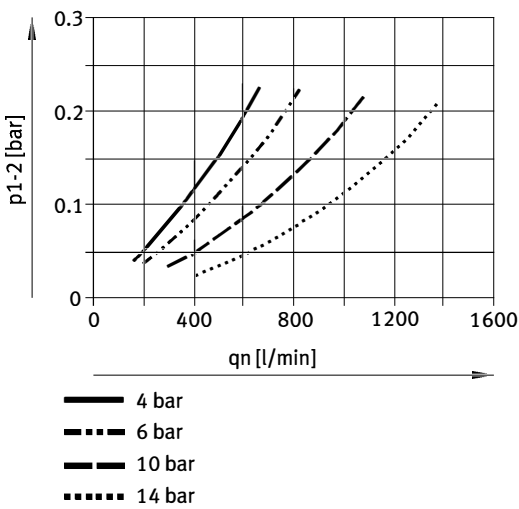
Materials	
Material housing	Die-cast zinc
Material bowl	PC
Material filter	Borosilicate fibre
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Datasheet

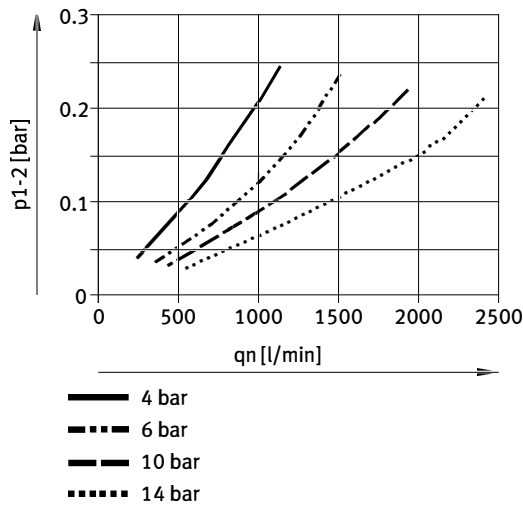
Standard flow rate  $q_n$  as a function of differential pressure  $\Delta p_{1-2}$  (LFMB-1/4-D-MINI)



Standard flow rate  $q_n$  as a function of differential pressure  $\Delta p_{1-2}$  (LFMB-1/2-D-MIDI)



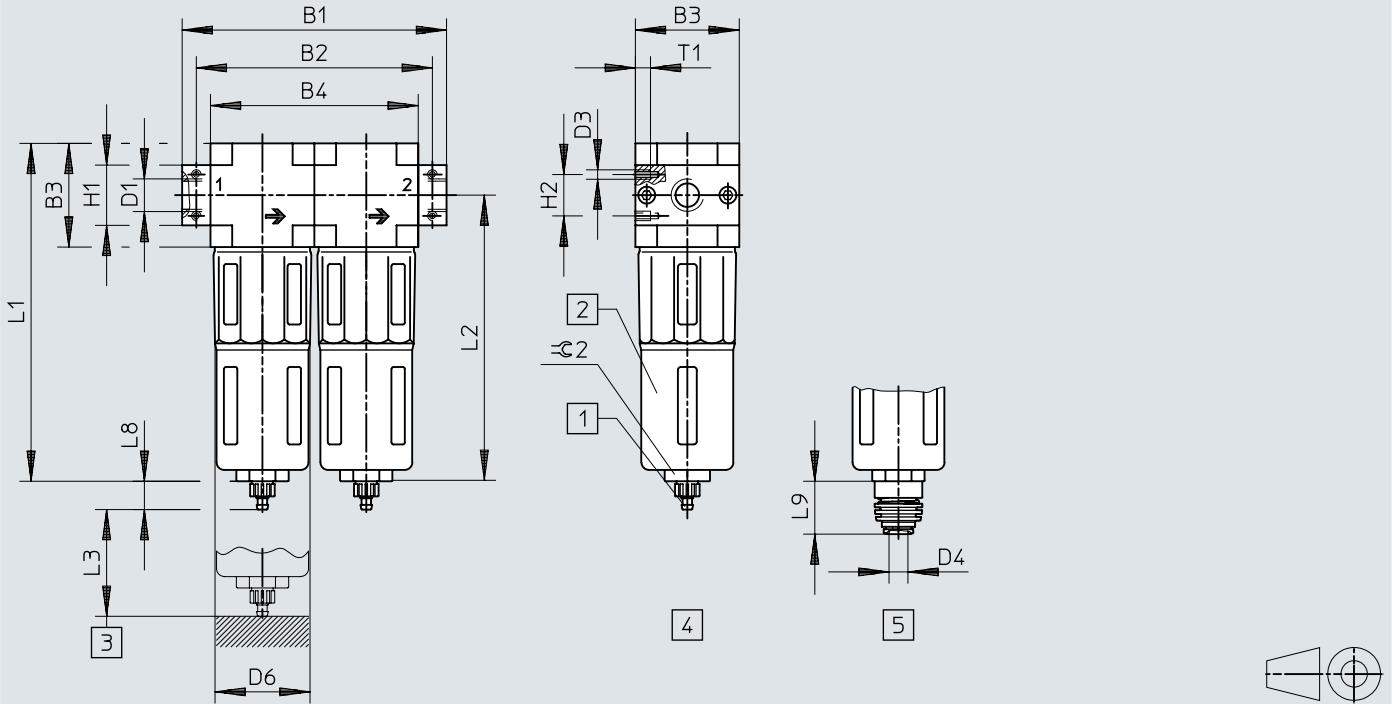
Standard flow rate  $q_n$  as a function of differential pressure  $\Delta p_{1-2}$  (LFMB-1-D-MAXI)



## Dimensions

### Dimensions – Filter combinations LFMBA

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



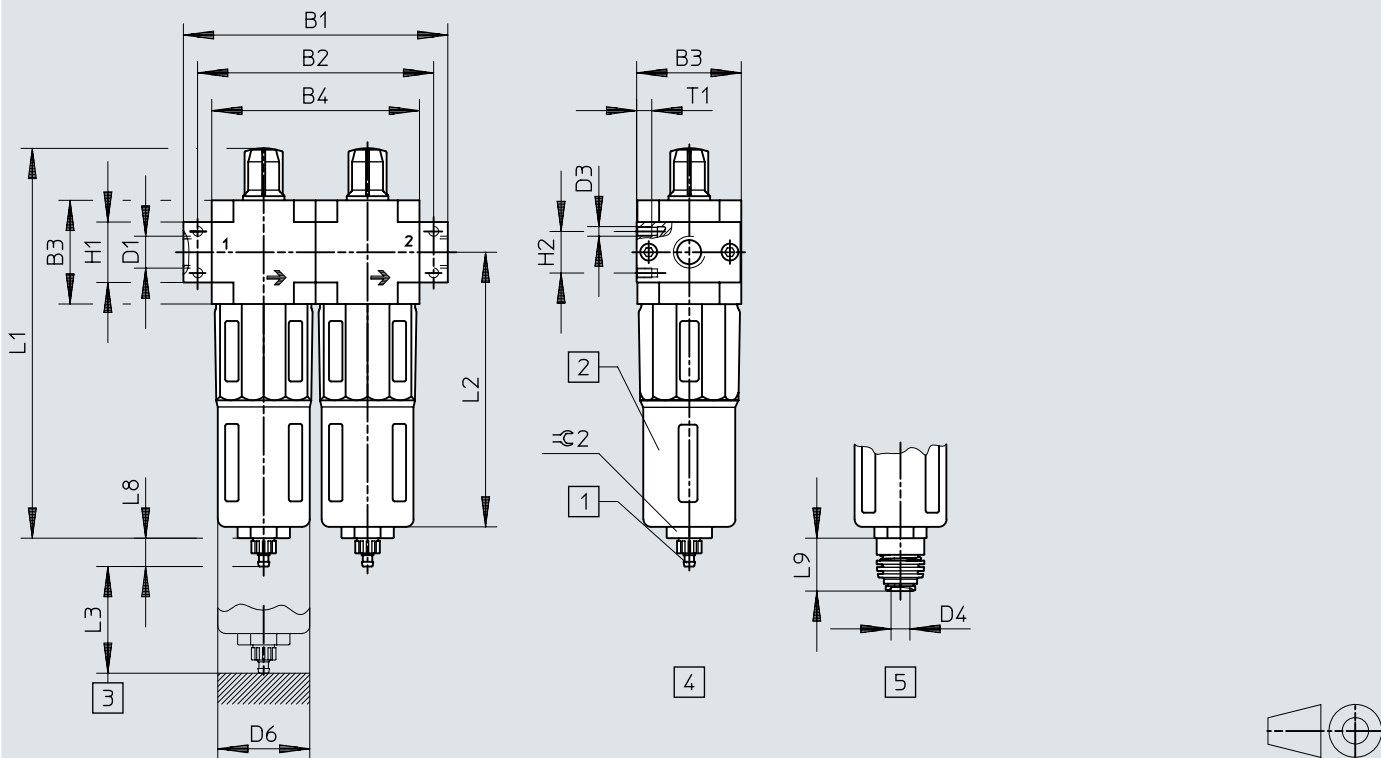
- [1] Barbed connector for plastic tubing PUN(-H)-8x1.25
- [2] Metal bowl guard
- [3] Installation dimension
- [4] Manual condensate drain
- [5] Fully automatic condensate drain

	B1	B2	B3	B4	D1	D3	D6 ø	H1	H2	L1	L2	L3	L8	L9	T1	±0.2
<b>Mini</b>																
LFMBA-1/8-D-MINI	104	92	40	80	G1/8	M4	38	20	11	144	124	60	15	19	7	22
LFMBA-1/4-D-MINI					G1/4											
LFMBA-3/8-D-MINI	110	G3/8														
<b>Midi</b>																
LFMBA-1/4-D-MIDI	140	125	55	110	G1/4	M5	52	32	22	179	151	80	15	19	8	24
LFMBA-3/8-D-MIDI					G3/8											
LFMBA-1/2-D-MIDI					G1/2											
LFMBA-3/4-D-MIDI					G3/4											
<b>Maxi</b>																
LFMBA-1/2-D-MAXI	162	146	66	132	G1/2	M5	65	32	22	203	170	90	15	19	8	24
LFMBA-3/4-D-MAXI					G3/4			40								
LFMBA-1-D-MAXI	182	157			G1											

## Dimensions

Dimensions – With differential pressure display

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




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


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

### Ordering data

Ordering data – Filter combination 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
			Manually rotating	500 g	162659	LFMBA-1/4-D-MINI
				1,300 g	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
			Manually rotating	500 g	162660	LFMBA-3/8-D-MINI
				1,300 g	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
			Manually rotating	1,300 g	162662	LFMBA-1/2-D-MIDI
				2,400 g	186477	LFMBA-1/2-D-MAXI
	G3/4	G3/4	Fully automatic	1,300 g	162671	LFMBA-3/4-D-MIDI-A
			Manually rotating		162672	LFMBA-3/4-D-MAXI-A
			Manually rotating	1,300 g	162663	LFMBA-3/4-D-MIDI
				2,400 g	162664	LFMBA-3/4-D-MAXI
G1	G1	Fully automatic		162673	LFMBA-1-D-MAXI-A	
		Manually rotating		162665	LFMBA-1-D-MAXI	

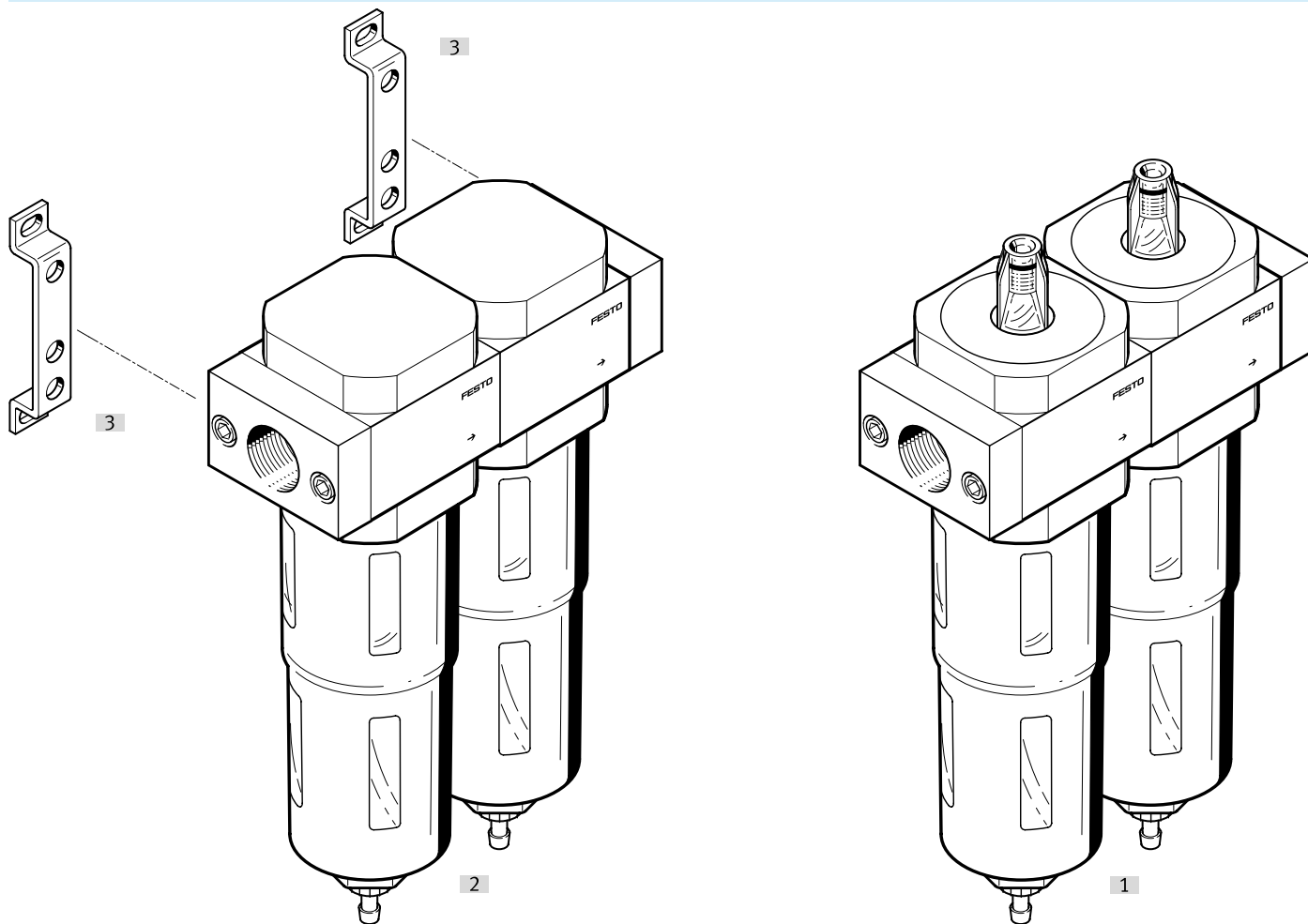
Ordering data – Filter combination LFMBA with differential pressure display DA

	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
			Manually rotating	651 g	532864	LFMBA-1/4-D-MINI-DA
				1,429 g	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
			Manually rotating	651 g	532865	LFMBA-3/8-D-MINI-DA
				1,429 g	532867	LFMBA-3/8-D-MIDI-DA
	G1/2	G1/2	Fully automatic	2,362 g	532878	LFMBA-1/2-D-MIDI-DA-A
			Manually rotating		532880	LFMBA-1/2-D-MAXI-DA-A
			Manually rotating	1,429 g	532868	LFMBA-1/2-D-MIDI-DA
				2,362 g	532870	LFMBA-1/2-D-MAXI-DA
	G3/4	G3/4	Fully automatic	1,429 g	532879	LFMBA-3/4-D-MIDI-DA-A
			Manually rotating		532881	LFMBA-3/4-D-MAXI-DA-A
			Manually rotating	1,429 g	532869	LFMBA-3/4-D-MIDI-DA
				2,362 g	532871	LFMBA-3/4-D-MAXI-DA
G1	G1	Fully automatic		532882	LFMBA-1-D-MAXI-DA-A	
		Manually rotating		532872	LFMBA-1-D-MAXI-DA	



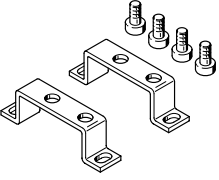
## Peripherals

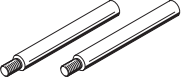
### Peripherals overview

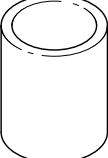


Accessories			→ Link
Type/order code	Description		
[1] Filter LFX-D	With differential pressure display		<a href="#">lfmba</a>
[2] Filter LFX-D	Without differential pressure display		<a href="#">lfmba</a>
[3] Mounting bracket HFOE-D			10

## Accessories

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

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

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