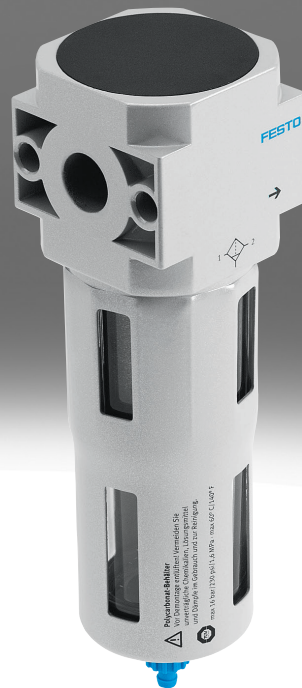


# Micro filter LFMA

FESTO



## Characteristics

### At a glance

High-efficiency filter for special requirements.

- Air quality to ISO 8573-1:2010
- With or without connecting plates

### Diagrams

Link [lfma-d](#)



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

### Version

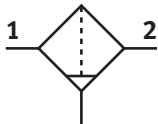
[D] D series, metal

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

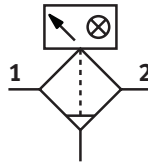
### Filter change sensing

Optionally with differential pressure display for indicating filter contamination.

[ ] None



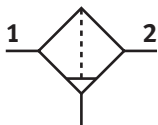
[DA] Differential pressure display, visual



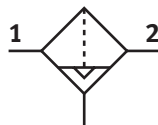
### Condensate drain

Optionally with manual or fully automatic condensate drain

[ ] Manually rotating



[A] Fully automatic



## Type code

001	Series
<b>LFMA</b>	Micro filter
002	Pneumatic connection
	None
<b>1/8</b>	Female thread G1/8
<b>1/4</b>	Female thread G1/4
<b>3/8</b>	Female thread G3/8
<b>1/2</b>	Female thread G1/2
<b>3/4</b>	Female thread G3/4
<b>1</b>	Female thread G1
003	Version
<b>D</b>	D series, metal

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

## Datasheet

General technical data				
Size	Maxi		Midi	Mini
Pneumatic connection, port 1	Sub-base, G1/2, G3/4, G1		Sub-base, G1/4, G3/8, G1/2, G3/4	Sub-base, G1/8, G1/4, G3/8
Pneumatic connection, port 2	Sub-base, G1/2, G3/4, G1		Sub-base, G1/4, G3/8, G1/2, G3/4	Sub-base, G1/8, G1/4, G3/8
Design	Fibre filter			
Type of mounting	Either: 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	99.99 ... 100%		100%	
Bowl guard	Metal bowl guard			
Condensate drain	Fully automatic Manually rotating			
Differential pressure display	Visual display			
Residual oil content	0.01 ... 0.5 mg/m <sup>3</sup>		0.01 mg/m <sup>3</sup>	
Max. condensate volume	-			

Standard nominal flow rate q <sub>N</sub> (measured at p <sub>1</sub> = 6 bar)										
Size	Maxi			Midi				Mini		
	G1/2	G3/4	G1	G1/4	G3/8	G1/2	G3/4	G1/8	G1/4	G3/8
Max. standard flow rate for clean air class	1,500 l/min	1,900 l/min	2,200 l/min	740 l/min	880 l/min	1,120 l/min	1,110 l/min	360 l/min	410 l/min	450 l/min
Min. standard flow rate for clean air class	500 l/min		480 l/min	240 l/min	250 l/min	330 l/min	300 l/min	80 l/min	100 l/min	

Operating and environmental conditions			
Condensate drain	Fully automatic		Manually rotating
Operating pressure	2 ... 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>	2 - Moderate corrosion stress		

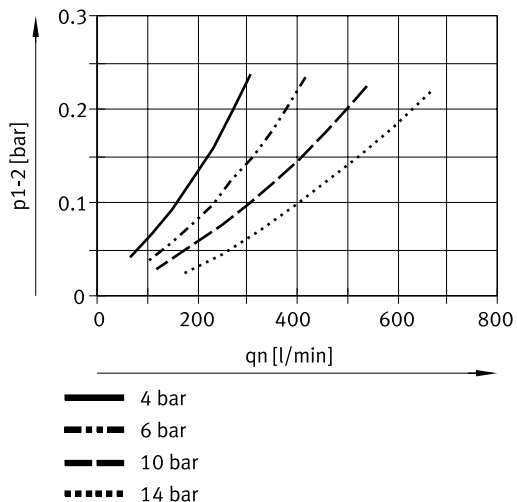
1) Compressed air according to ISO 8573-1:2010 [7:9:-] applies to fully automatic condensate drain

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

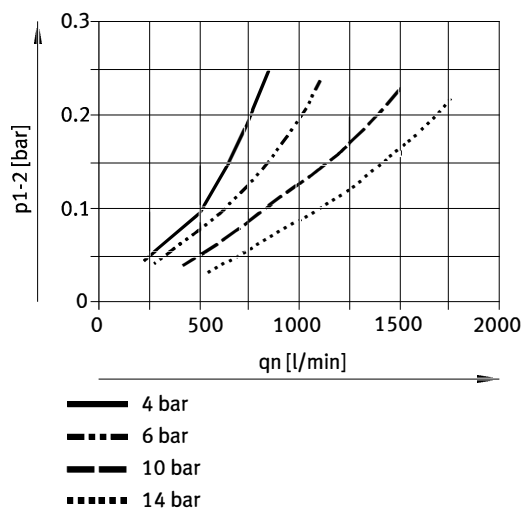
Materials	
Material housing	Die-cast zinc
Material bowl	PC
Material filter	Borosilicate fibre
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Datasheet

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

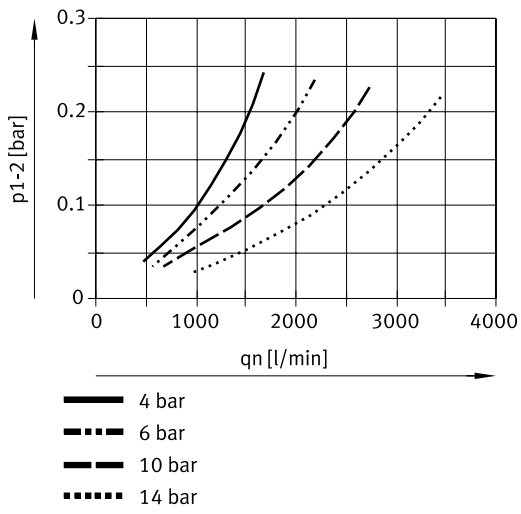


Standard flow rate  $q_n$  as a function of differential pressure  $\Delta p_{1-2}$  (LFMA-1/2-D-MIDI)



## Datasheet

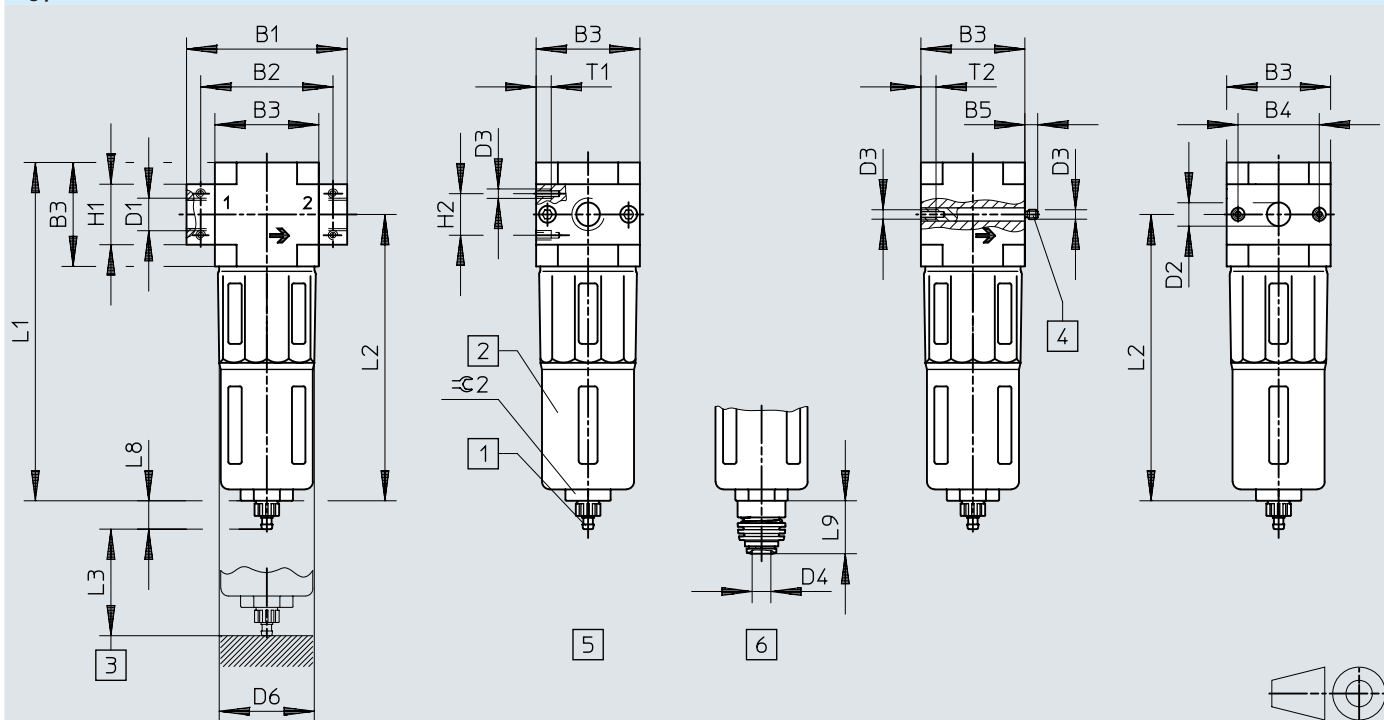
### Standard flow rate $q_n$ as a function of differential pressure $\Delta p_{1-2}$ (LFMA-1-D-MAXI)



## Dimensions

Dimensions – Connecting plates with threaded connection, without connecting plates

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



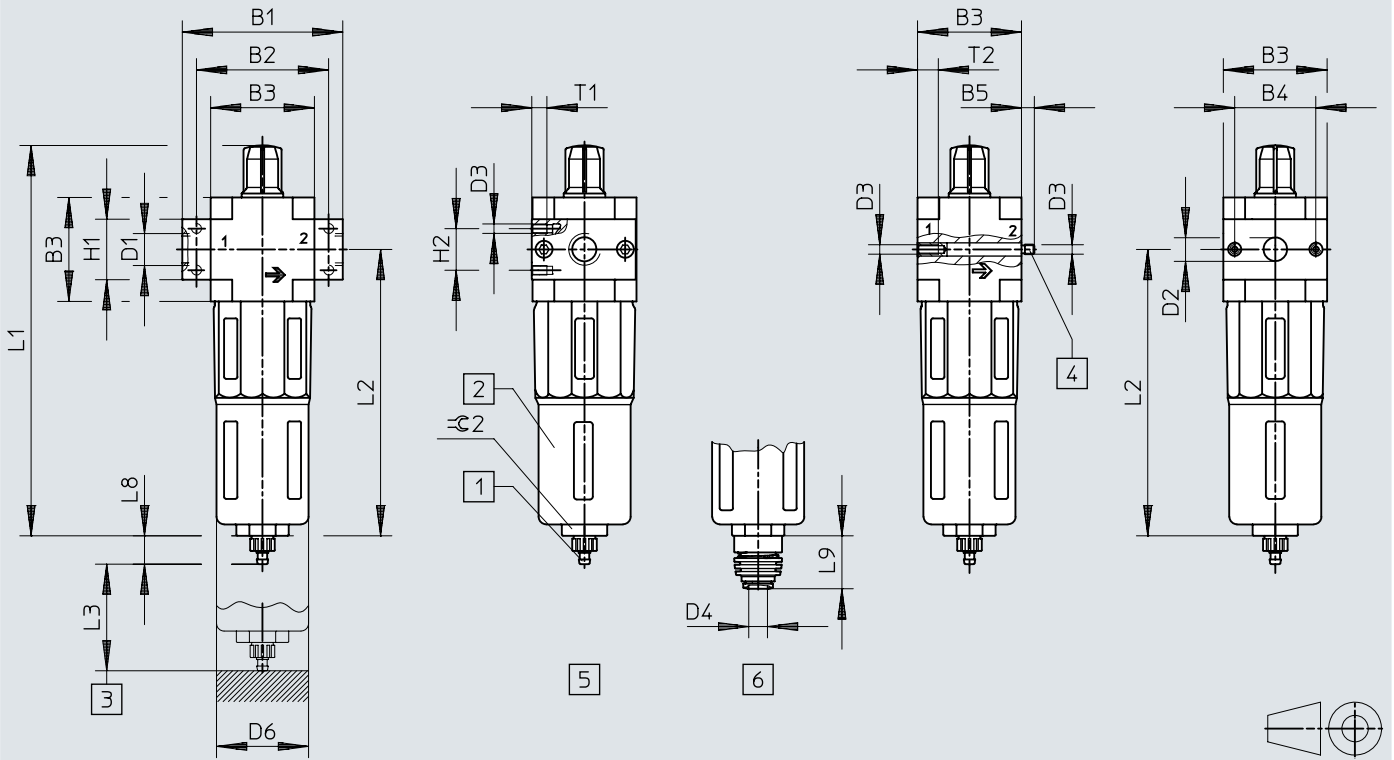
- [1] Barbed connector for plastic tubing PUN(-H)-8x1.25
- [2] Metal bowl guard
- [3] Installation dimension
- [4] Threaded bolt (exchangeable)
- [5] Manual condensate drain
- [6] Fully automatic condensate drain

	B1	B2	B3	B4	B5	D1	D2 ø	D3	D6 ø	H1	H2	L1	L2	L3	L8	L9	T1	T2	⊕ 2
<b>Mini</b>																			
LFMA-1/8-D-MINI	64	52	40	30	-	G1/8	-	M4	38	20	11	144	124	60	15	19	7	-	22
LFMA-1/4-D-MINI						G1/4													
LFMA-3/8-D-MINI	70					G3/8													
LFMA-D-MINI	-	-			5,8	-	11											-	10
<b>Midi</b>																			
LFMA-1/4-D-MIDI	85	70	55	43	-	G1/4	-	M5	52	32	22	179	151	80	15	19	8	-	24
LFMA-3/8-D-MIDI						G3/8													
LFMA-1/2-D-MIDI						G1/2													
LFMA-3/4-D-MIDI						G3/4													
LFMA-D-MIDI	-	-			6,8	-	24											-	11
<b>Maxi</b>																			
LFMA-1/2-D-MAXI	96	80	66	46	-	G1/2	-	M5	65	32	22	203	170	90	15	19	8	-	24
LFMA-3/4-D-MAXI						G3/4													
LFMA-1-D-MAXI	116	91				G1													
LFMA-D-MAXI	-	-				6,8													

## Dimensions

Dimensions – With differential pressure display DA

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] Threaded bolt (exchangeable)
- [5] Manual condensate drain
- [6] Fully automatic condensate drain

	B1	B2	B3	B4	B5	D1	D2 ∅	D3	D6 ∅	H1	H2	L1	L2	L3	L8	L9	T1	T2	⊕ 2	
<b>Mini</b>																				
LFMA-1/8-D-MINI-DA	64	52	40	30	-	G1/8	-	M4	38	20	11	173	124	60	15	19	7	-	22	
LFMA-1/4-D-MINI-DA						G1/4											-	-	-	
LFMA-3/8-D-MINI-DA	70					G3/8														
LFMA-D-MINI-DA	-	-				5,8	-	11										10		
<b>Midi</b>																				
LFMA-1/4-D-MIDI-DA	85	70	55	43	-	G1/4	-	M5	52	32	22	207	151	80	15	19	8	-	24	
LFMA-3/8-D-MIDI-DA						G3/8											-	-	-	
LFMA-1/2-D-MIDI-DA						G1/2											-	-	-	
LFMA-3/4-D-MIDI-DA						G3/4											-	-	-	
LFMA-D-MIDI-DA	-	-				6,8	-	24										11		
<b>Maxi</b>																				
LFMA-1/2-D-MAXI-DA	96	80	66	46	-	G1/2	-	M5	65	32	22	232	170	90	15	19	8	-	24	
LFMA-3/4-D-MAXI-DA						G3/4				-							-	-		
LFMA-1-D-MAXI-DA	116	91				G1				40										
LFMA-D-MAXI-DA	-	-				6,8	-	30										11		




## Ordering data

Micro filter LFMA						
	Size	Pneumatic connection, port 1	Condensate drain	Product weight	Part no.	Type
	Maxi	Sub-base	Fully automatic	1,200 g	192568	LFMA-D-MAXI-A
			Manually rotating		192565	LFMA-D-MAXI
		G1/2	Fully automatic		186475	LFMA-1/2-D-MAXI-A
			Manually rotating		186476	LFMA-1/2-D-MAXI
		G3/4	Fully automatic		162656	LFMA-3/4-D-MAXI-A
			Manually rotating		162648	LFMA-3/4-D-MAXI
	G1	Fully automatic	162657	LFMA-1-D-MAXI-A		
		Manually rotating	162649	LFMA-1-D-MAXI		
	Midi	Sub-base	Fully automatic	650 g	192567	LFMA-D-MIDI-A
			Manually rotating		192564	LFMA-D-MIDI
		G1/4	Fully automatic		186470	LFMA-1/4-D-MIDI-A
			Manually rotating		186469	LFMA-1/4-D-MIDI
		G3/8	Fully automatic		162653	LFMA-3/8-D-MIDI-A
			Manually rotating		162645	LFMA-3/8-D-MIDI
		G1/2	Fully automatic		162654	LFMA-1/2-D-MIDI-A
			Manually rotating		162646	LFMA-1/2-D-MIDI
		G3/4	Fully automatic		162655	LFMA-3/4-D-MIDI-A
			Manually rotating		162647	LFMA-3/4-D-MIDI
	Mini	Sub-base	Fully automatic	250 g	192566	LFMA-D-MINI-A
			Manually rotating		192563	LFMA-D-MINI
		G1/8	Fully automatic		162650	LFMA-1/8-D-MINI-A
			Manually rotating		162642	LFMA-1/8-D-MINI
		G1/4	Fully automatic		162651	LFMA-1/4-D-MINI-A
			Manually rotating		162643	LFMA-1/4-D-MINI
G3/8		Fully automatic	162652		LFMA-3/8-D-MINI-A	
		Manually rotating	162644		LFMA-3/8-D-MINI	

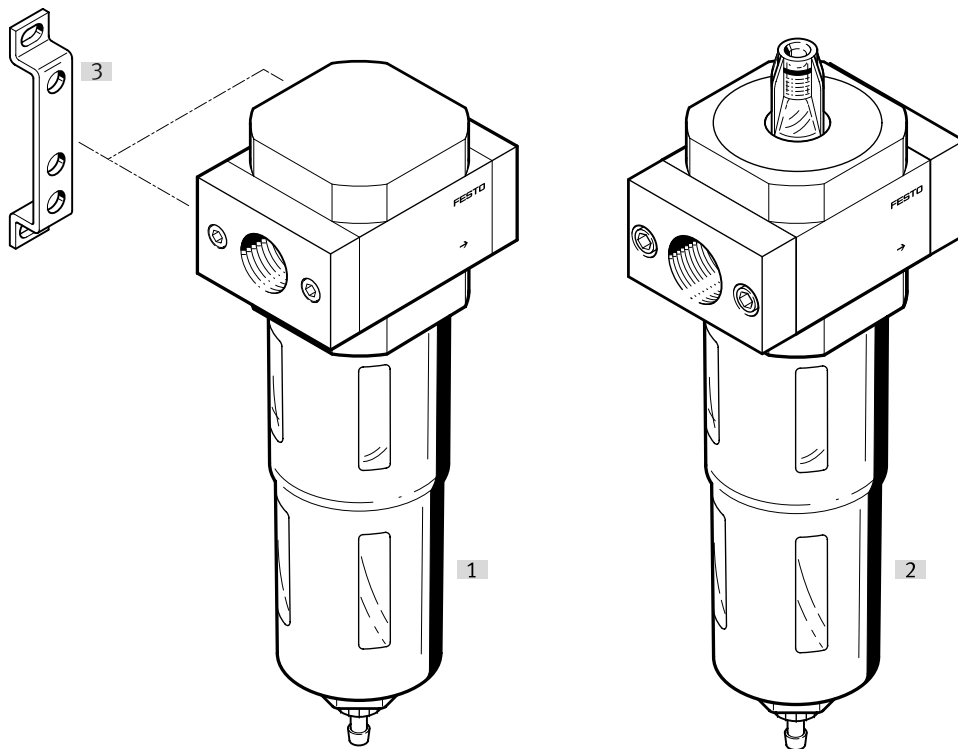
Micro filter LFMA with differential pressure display						
	Size	Pneumatic connection, port 1	Condensate drain	Product weight	Part no.	Type
	Maxi	Sub-base	Fully automatic	1,340 g	532842	LFMA-D-MAXI-DA-A
			Manually rotating		532839	LFMA-D-MAXI-DA
		G1/2	Fully automatic		532860	LFMA-1/2-D-MAXI-DA-A
			Manually rotating		532850	LFMA-1/2-D-MAXI-DA
		G3/4	Fully automatic		532861	LFMA-3/4-D-MAXI-DA-A
			Manually rotating		532851	LFMA-3/4-D-MAXI-DA
	G1	Fully automatic	532862	LFMA-1-D-MAXI-DA-A		
		Manually rotating	532852	LFMA-1-D-MAXI-DA		
	Midi	Sub-base	Fully automatic	834 g	532841	LFMA-D-MIDI-DA-A
			Manually rotating		532838	LFMA-D-MIDI-DA
		G1/4	Fully automatic		532856	LFMA-1/4-D-MIDI-DA-A
			Manually rotating		532846	LFMA-1/4-D-MIDI-DA
		G3/8	Fully automatic		532857	LFMA-3/8-D-MIDI-DA-A
			Manually rotating		532847	LFMA-3/8-D-MIDI-DA
		G1/2	Fully automatic		532858	LFMA-1/2-D-MIDI-DA-A
			Manually rotating		532848	LFMA-1/2-D-MIDI-DA
		G3/4	Fully automatic		532859	LFMA-3/4-D-MIDI-DA-A
			Manually rotating		532849	LFMA-3/4-D-MIDI-DA
	Mini	Sub-base	Fully automatic		532840	LFMA-D-MINI-DA-A

## Ordering data

Micro filter LFMA with differential pressure display						
	Size	Pneumatic connection, port 1	Condensate drain	Product weight	Part no.	Type
	Mini	Sub-base	Manually rotating	368 g	532837	LFMA-D-MINI-DA
		G1/8	Fully automatic		532853	LFMA-1/8-D-MINI-DA-A
			Manually rotating		532843	LFMA-1/8-D-MINI-DA
		G1/4	Fully automatic		532854	LFMA-1/4-D-MINI-DA-A
			Manually rotating		532844	LFMA-1/4-D-MINI-DA
		G3/8	Fully automatic		532855	LFMA-3/8-D-MINI-DA-A
			Manually rotating		532845	LFMA-3/8-D-MINI-DA

## Peripherals

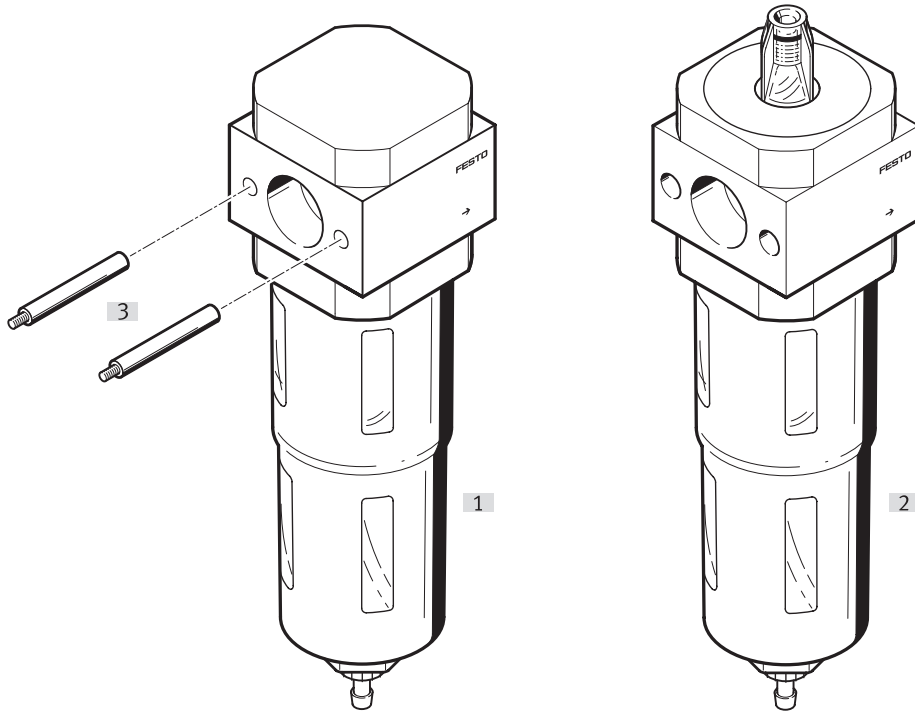
### Peripherals overview – single unit with connecting plates



Accessories		→ Link
Type/order code	Description	
[1] Fine filter LFMA-D		<a href="#">lfma-d</a>
[2] Fine filter LFMA-D	With differential pressure display	<a href="#">lfma-d</a>
[3] Mounting bracket HFOE-D		13

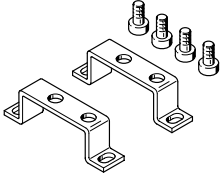
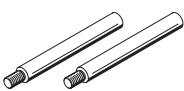
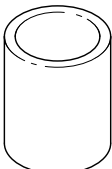
## Peripherals

Peripherals overview – individual unit without connecting plates, for service unit component combination



Accessories		→ Link
Type/order code	Description	
[1] Fine filter LFMA-D		<a href="#">lfma-d</a>
[2] Fine filter LFMA-D	With differential pressure display	<a href="#">lfma-d</a>
[3] Threaded bolt FRB-D	Included in the scope of delivery	13

## 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
Fine-filter cartridges				
	Size	Grade of filtration	Part no.	Type
	Maxi	0.01 µm	162676	LFMAP-D-MAXI
	Midi		162675	LFMAP-D-MIDI
	Mini		162674	MS4/D-MINI-LFM-A