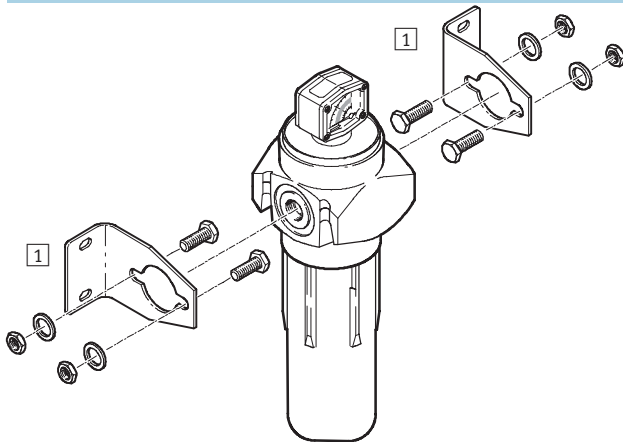


## 1. Fine and micro filters, LFMB-H/LFMA-H, H series

Peripherals overview and type codes

### Peripherals overview



Mounting attachments and accessories		→ Page/Internet
1	Mounting bracket (2 pcs.) LFMM	10

### Type codes

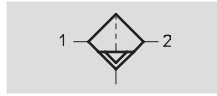
LFMB		–	1/2	–	H	–	A
<b>Service function</b>							
LFMA	Micro filter						
LFMB	Fine filter						
<b>Pneumatic connection</b>							
1/2	Thread G1/2						
3/4	Thread G3/4						
1	Thread G1						
<b>Series</b>							
H	Series						
<b>Condensate drain</b>							
A	Fully automatic						





- 1 - Type discontinued  
Available up until 12/2008

## Fine and micro filters, LFMB-H/LFMA-H, H series

Technical data

Function



-  - Flow rate  
1,100 ... 5,200 l/min
-  - Temperature range  
-10 ... +60 °C
-  - Input pressure  
0 ... 16 bar
-  - [www.festo.com/en/  
Spare\\_parts\\_service](http://www.festo.com/en/Spare_parts_service)



Various industries require fine or micro-filtered air: chemicals, pharmaceuticals, process technology, food industry, etc. Festo fine and micro filters clean compressed air almost completely of any remaining minute water and oil droplets, together with any dirt particles.

- Robust die-cast design
- Very high flow rates
- All filter units with automatic condensate drain and differential pressure gauge for displaying filter pollution

- Fine and micro-filters fulfil stringent air quality requirements in accordance with ISO 8573-1
- Easy replacement of filter components
- Resistant to mineral and synthetic lubricants

### Fine filter function

Compressed air flows through a filter cartridge made of borosilicate fibre-glass, from the inside to the outside. As the compressed air flows through the fibre tissues, large particles are prevented from passing the filtration bed by simple inertia, or are collected by collision with the fibres.

Separation of fine and very fine oil vapour particles and solid impurities down to 0.01 micron results from an extremely fine filter tissue. The smallest particles collect on the fibres where they form larger droplets (coalescing effect), which run off due to gravity.

The flow rate recommended for each filter must be observed in order to prevent the oil-water emulsion which has accumulated in the foam jacket from being drawn in by the compressed air. Compressed air should be pre-filtered to 5 µm where fine filters and micro-filters are used.

General technical data						
Type	Micro filters LFMA			Fine filters LFMB		
Pneumatic connection	G½	G¾	G1	G½	G¾	G1
Design	Fibre filter					
Type of mounting	In-line installation					
	Via accessories					
Mounting position	Vertical ±5°					
Operating medium	Compressed air, filtered, grade of filtration 1 µm			Compressed air, filtered, grade of filtration 5 µm		
Grade of filtration [µm]	0.01			1		
Residual oil content [mg/m³]	≤0.01			≤0.5		
Filter efficiency [%]	99.9999					
Input pressure [bar]	0 ... 16					
Air purity classes per ISO 8573-1						
Particulate	1			2		
Atomised oil	2			3		

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

## Fine and micro filters, LFMB-H/LFMA-H, H series

Technical data

Standard nominal flow rate <sup>1)</sup> q <sub>N</sub> [l/min]			
Connection	G½	G¾	G1
Micro filters LFMA	1,100	2,000	3,400
Fine filters LFMB	1,600	3,300	5,200

1) With 6 bar input pressure and Δp = 0.07 bar.

Ambient conditions		
Ambient temperature	[°C]	-10 ... +60
Corrosion resistance	CRC <sup>1)</sup>	2

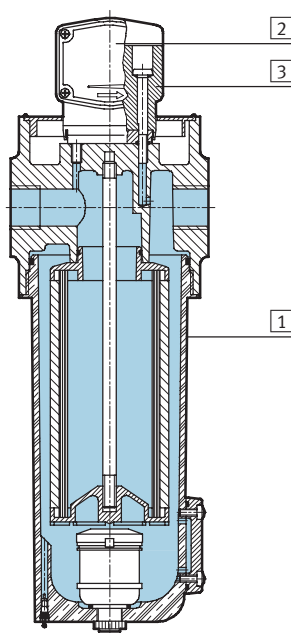
1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

Weights [g]			
	G½	G¾	G1
Micro filters LFMA	1,100	2,800	3,200
Fine filters LFMB	1,100	2,800	3,200

### Materials

Sectional view



Fine and micro filters		
1	Housing/bowl	Die-cast zinc
2	Pressure gauge sight glass	Polymethylmethacrylate
3	Pressure gauge housing	Polyamide
-	Seals	Nitrile rubber

- 1 - Type discontinued  
Available up until 12/2008

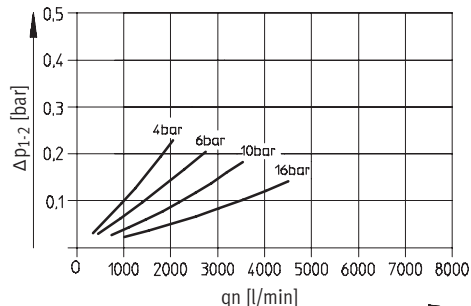
## Fine and micro filters, LFMB-H/LFMA-H, H series

Technical data

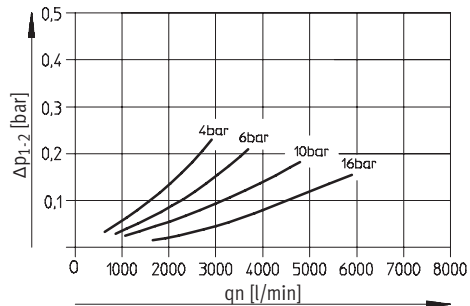
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### Standard flow rate $q_n$ as a function of the output pressure $\Delta p_{1-2}$

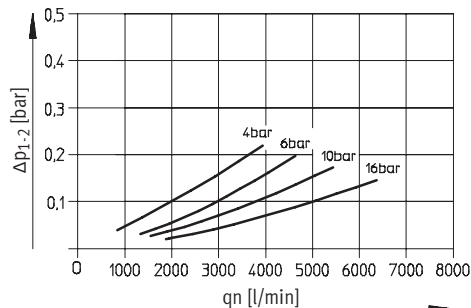
LFMA-1/2-H-A



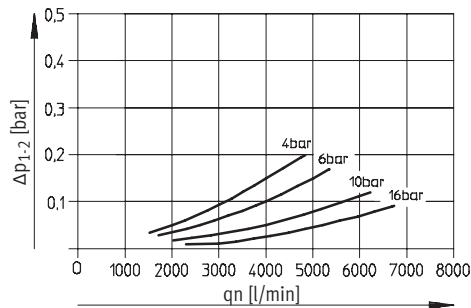
LFMB-1/2-H-A



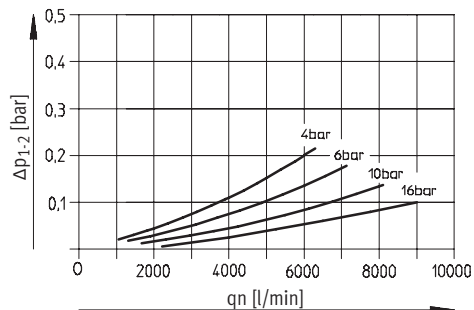
LFMA-3/4-H-A



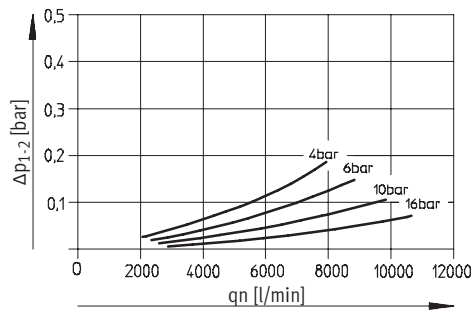
LFMB-3/4-H-A



LFMA-1-H-A



LFMB-1-H-A



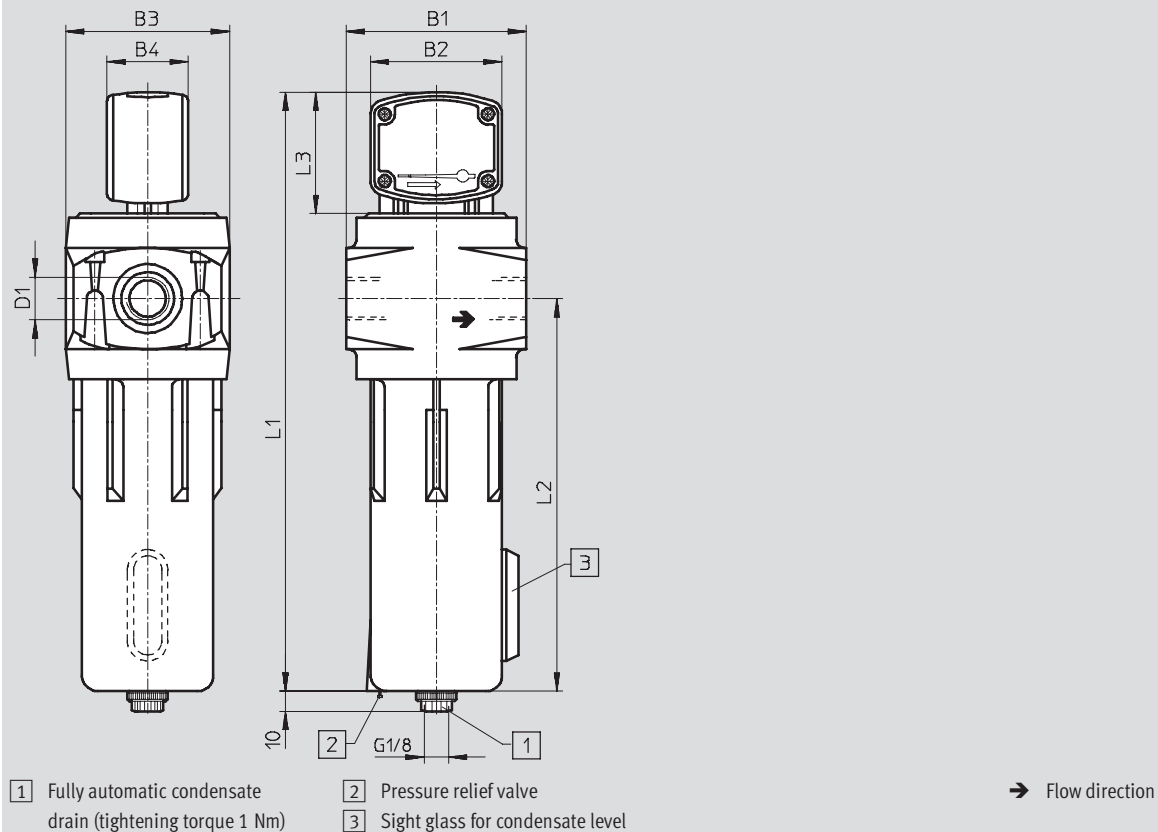
## Fine and micro filters, LFMB-H/LFMA-H, H series

Technical data

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### Dimensions

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



Type	B1	B2	B3	B4	D1	L1	L2	L3
LFMA-1/2-H-A	89	65	81	39	G1/2	294	194	60
LFMB-1/2-H-A								
LFMA-3/4-H-A	120		112		G3/4	366	251	
LFMB-3/4-H-A								
LFMA-1-H-A	120		112		G1	466	351	
LFMB-1-H-A								

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

### Ordering data

Connection	Grade of filtration 1 µm		Grade of filtration 0.01 µm	
	Part No.	Type	Part No.	Type
G1/2	162 818	LFMB-1/2-H-A	162 815	LFMA-1/2-H-A
G3/4	162 819	LFMB-3/4-H-A	162 816	LFMA-3/4-H-A
G1	162 820	LFMB-1-H-A	162 817	LFMA-1-H-A

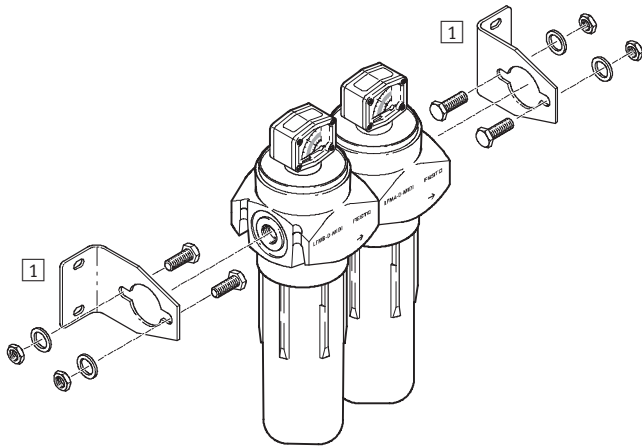
- 1 - Type discontinued  
Available up until 12/2008

## Filter combinations LFMBA-H, H series

Peripherals overview

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### Peripherals overview



Mounting attachments and accessories		→ Page/Internet
1	Mounting bracket (2 pcs.) LFMM	10

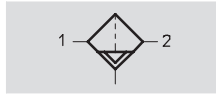
### Type codes

LFMBA		–	1/2	–	H	–	A
<b>Service function</b>							
LFMBA	Filter combination						
<b>Pneumatic connection</b>							
1/2	Thread G1/2						
3/4	Thread G3/4						
1	Thread G1						
<b>Series</b>							
H	Series						
<b>Condensate drain</b>							
A	Fully automatic						

## Filter combinations LFMBA-H, H series

Technical data

Function



- - Flow rate  
800 ... 2,600 l/min

- - Temperature range  
-10 ... +60 °C

- - Input pressure  
0 ... 16 bar

- - [www.festo.com/en/  
Spare\\_parts\\_service](http://www.festo.com/en/Spare_parts_service)



Various industries require fine or micro-filtered air: chemicals, pharmaceuticals, process technology, food industry, etc. Festo fine and micro filters clean compressed air almost completely of any remaining minute water and oil droplets, together with any dirt particles.

- Available as pre-assembled filter combination
- Very high flow rates
- All filter units with automatic condensate drain and differential pressure gauge for displaying filter pollution
- Fine and micro-filters fulfil stringent air quality requirements in accordance with ISO 8573-1
- Easy to replace filter components
- Resistant to mineral and synthetic lubricants

General technical data			
Type	Filter combination LFMB A		
Pneumatic connection	G½	G¾	G1
Design	Fibre filter		
Type of mounting	In-line installation		
	Via accessories		
Mounting position	Vertical ±5°		
Grade of filtration	[µm]	0.01	
Residual oil content	[mg/m³]	≤0.01	
Filter efficiency	[%]	99.9999	
Input pressure	[bar]	0 ... 16	
Air purity classes per ISO 8573-1			
Particulate	1		
Atomised oil	2		

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

Standard nominal flow rate <sup>1)</sup> qnN [l/min]			
Connection	G½	G¾	G1
LFMBA-...-H-A	800	1,400	2,600

1) With 6 bar input pressure and Δp = 0.07 bar.

Ambient conditions			
Variant	G½	G¾	G1
Ambient temperature [°C]	-10 ... +60		
Corrosion resistance CRC <sup>1)</sup>	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 surrounding industrial atmosphere or media such as cooling or lubricating agents.

- 1 - Type discontinued  
Available up until 12/2008

## Filter combinations LFMBA-H, H series

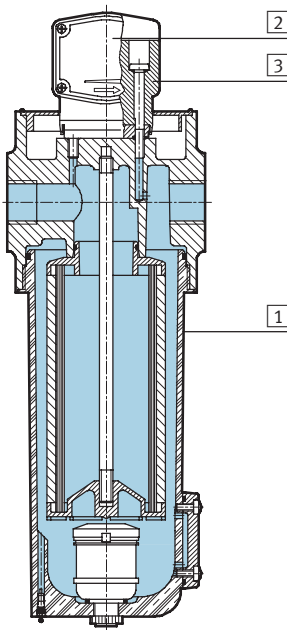
Technical data

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Weights [g]	G $\frac{1}{2}$	G $\frac{3}{4}$	G1
LFMBA-...	2,300	5,700	6,500

### Materials

Sectional view

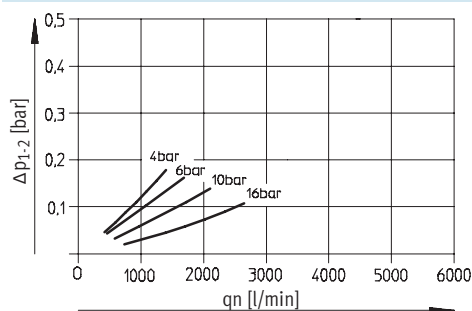


### Fine and micro filters

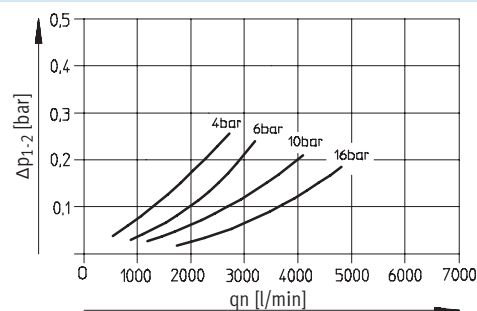
1	Housing/bowl	Die-cast zinc
2	Pressure gauge sight glass	Polymethylmethacrylate
3	Pressure gauge housing	Polyamide
-	Seals	Nitrile rubber

### Standard flow rate $q_n$ as a function of the output pressure $\Delta p_{1-2}$

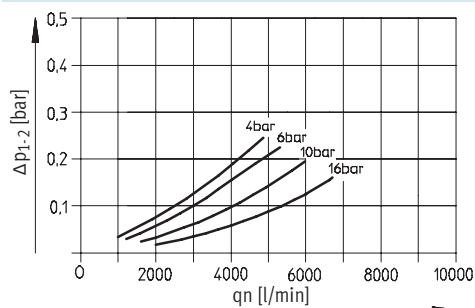
LFMBA- $\frac{1}{2}$ -H-A



LFMBA- $\frac{3}{4}$ -H-A



LFMBA-1-H-A



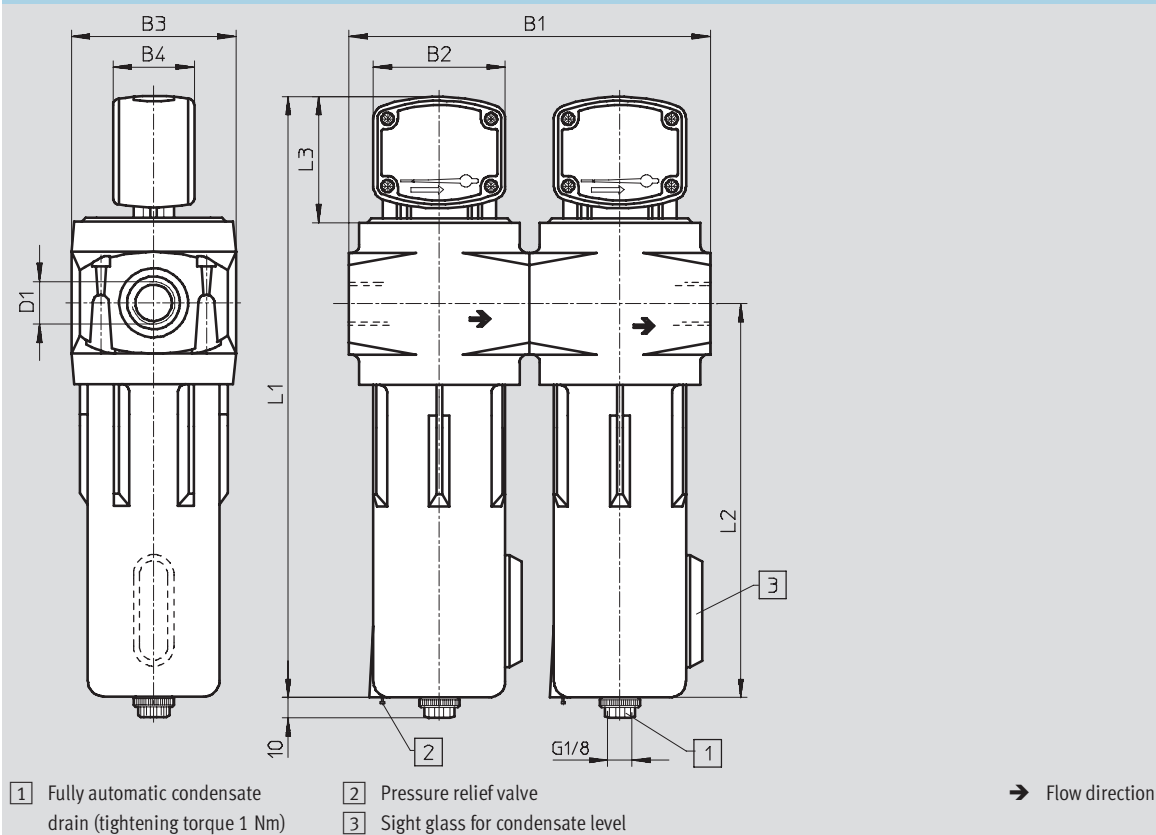


## Filter combinations LFMBA-H, H series

Technical data

### Dimensions

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



Type	B1	B2	B3	B4	D1	L1	L2	L3
LFMBA-1/2-H-A	178	65	81	39	G1/2	294	194	60
LFMBA-3/4-H-A	240		112		G3/4	366	251	
LFMBA-1-H-A	240		112		G1	466	351	

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

### Ordering data

Connection	Part No.	Type
G1/2	162 821	LFMBA-1/2-H-A
G3/4	162 822	LFMBA-3/4-H-A
G1	162 823	LFMBA-1-H-A

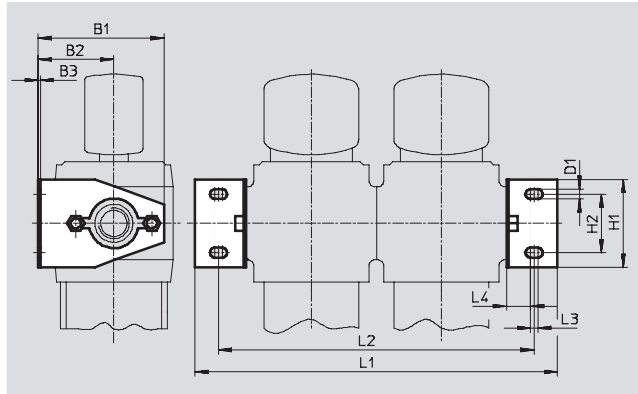
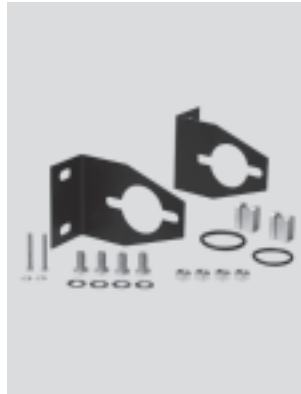
- 1 - Type discontinued  
Available up until 12/2008

## Filters, H series

Accessories

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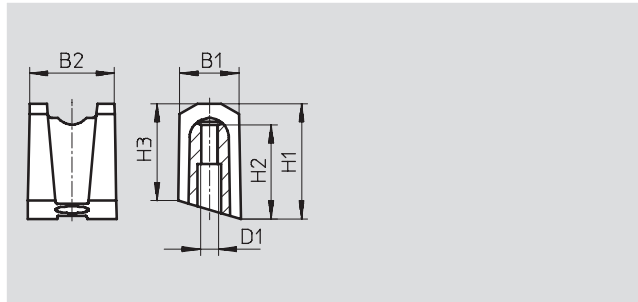
### Mounting bracket LFMM



#### Ordering data

Connection	B1	B2	B3	D1	H1	H2	L1	L2	L3	L4	Part No.	Type
G $\frac{1}{2}$	86	52	1.6	7	60	40	248	216	5	16.5	162 830	LFMM- $\frac{1}{2}$ -H
G $\frac{3}{4}$ , G1	116	68	2	9	80	60	320	277	5	16	162 831	LFMM- $\frac{3}{4}$ -1-H

### Connection piece for filter LFMV for connecting two filters



#### Ordering data

Connection	B1	B2	D1	H1	H2	H3	Part No.	Type
G $\frac{1}{2}$	9.75	14	M3x0.5	19	15.5	16	162 832	LFMV- $\frac{1}{2}$ -H
G $\frac{3}{4}$ , G1	12.5	20	M4	29	26	25.5	162 833	LFMV- $\frac{3}{4}$ -1-H

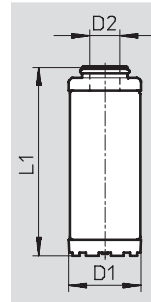
- 2 - Type discontinued  
Available up until 12/2014

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## Filters, H series

Accessories

### Filter cartridge LFMBP/LFMAP



Ordering data					
Connection	D1 Ø	D2 Ø	L1	Part No.	Type
For fine filter					
G1/2	48	21.7	126	<b>162 827</b>	<b>LFMBP-1/2-H</b>
G3/4	72	33	168.8	<b>162 828</b>	<b>LFMBP-3/4-H</b>
G1	72	33	268.8	<b>162 829</b>	<b>LFMBP-1-H</b>
For micro filter					
G1/2	48	21.7	126	<b>162 824</b>	<b>LFMAP-1/2-H</b>
G3/4	72	33	168.8	<b>162 825</b>	<b>LFMAP-3/4-H</b>
G1	72	33	268.8	<b>162 826</b>	<b>LFMAP-1-H</b>

## Product Range and Company Overview

### A Complete Suite of Automation Services

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



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Complete custom engineered solutions



#### Custom Control Cabinets

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#### Complete Systems

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With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.



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#### Pneumatics

Pneumatic linear and rotary actuators, valves, and air supply



#### PLCs and I/O Devices

PLC's, operator interfaces, sensors and I/O devices

### Supporting Advanced Automation... As No One Else Can!

Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 11,500 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

### Quality Assurance, ISO 9001 Certification

Festo Corporation is committed to provide Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

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