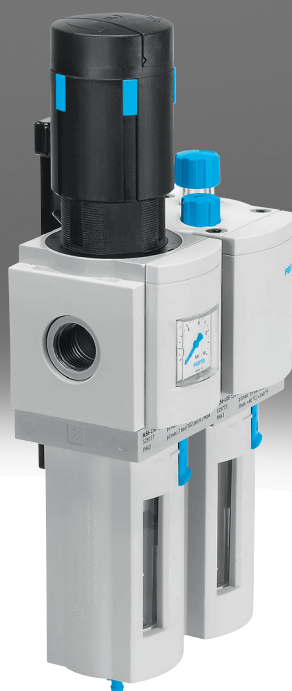


Service unit combination MSB6-FRC

FESTO



Characteristics

At a glance

Combination of filter regulator and lubricator.

- Grid dimension: 62 mm
- High flow rate and extremely efficient in removing contaminants
- Good regulation characteristics with minimal pressure hysteresis
- Setting values are secured by locking the rotary knob
- Lockable rotary knob
- Two pressure regulation ranges: 0.5...7 bar and 0.5...12 bar
- Optionally with manual or fully automatic condensate drain
- Choice of filter inserts 5 µm or 40 µm
- Available with flow in the opposite direction.
- Product complies with ISO 1179-1 and ISO 228-1

Product segmentation



Festo Core Range

Solves the majority of your automation tasks

With the Festo Core Range, we have selected the most important products and functions from our broad product catalogue, and added the quickest delivery. the Core Range offers you the best value with the expected high Festo quality.

- Quickest delivery, worldwide – wherever, whenever
- Expected high Festo quality
- Easy and fast to select

Engineering tools

Link [engineering tools](#)



A selection tool for sizing a suitable service unit component and the correct air purity class can be found under Engineering Tools.

Diagrams

Link [msb6-frc](#)



You can find the diagrams via the following link:

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

Type code

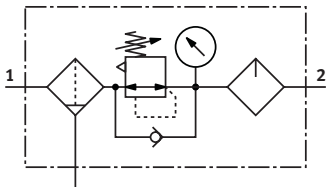
001	Series	
MSB	Service unit component MS series	
002	Size	
6	Grid dimension 62 mm	
003	Pneumatic connection	
1/4	Female thread G1/4	
3/8	Female thread G3/8	
1/2	Female thread G1/2	
004	Function	
FRC	Service unit combination	

005	Service unit component equipment	
J1	Filter regulator, 0.5 ... 12 bar, 40 µm, plastic bowl with plastic bowl guard, manual condensate drain, lockable rotary knob	
J2	Filter regulator, 0.5 ... 12 bar, 40 µm, plastic bowl with plastic bowl guard, fully automatic condensate drain, lockable rotary knob	
J3	Filter regulator, 0.5 ... 12 bar, 5 µm, plastic bowl with plastic bowl guard, manual condensate drain, lockable rotary knob	
J5	Filter regulator, 0.3 ... 7 bar, 40 µm, plastic bowl with plastic bowl guard, manual condensate drain, lockable rotary knob	
J9	Filter regulator, 0.5 ... 12 bar, 5 µm, metal bowl with manual condensate drain, lockable rotary knob	
J10	Filter regulator, 0.5 ... 12 bar, 5 µm, metal bowl with fully automatic condensate drain, lockable rotary knob	
J11	Filter regulator, 0.5 ... 12 bar, 40 µm, metal bowl with manual condensate drain, lockable rotary knob	
J12	Filter regulator, 0.5 ... 12 bar, 40 µm, metal bowl with fully automatic condensate drain, lockable rotary knob	
J120	Filter regulator, lockable, 0.3 ... 7 bar, 40 µm, plastic bowl with plastic bowl guard, manual condensate drain, MPa, lockable rotary knob	
M1	Lubricator, plastic bowl with plastic bowl guard	
M2	Lubricator, metal bowl	
006	Flow direction	
	Flow direction from left to right	
Z	Flow direction from right to left	

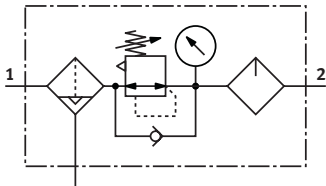
Datasheet

General technical data		
Grade of filtration	5	40
Pneumatic connection, port 1	G1/2	G1/4, G3/8, G1/2
Pneumatic connection, port 2	G1/2	G1/4, G3/8, G1/2
Design	Filter regulator with pressure gauge, Proportional standard mist lubricator	
Controller function	Output pressure constant, Via primary pressure compensation, With secondary venting, With return flow function	
Type of mounting	With accessories	
Mounting position	Vertical +/-5°	
Air purity class at output	Compressed air to ISO 8573-1:2010 [6:4:-]	Compressed air to ISO 8573-1:2010 [7:4:-]
Bowl guard	Plastic bowl guard Integrated as metal bowl	
Condensate drain	Fully automatic Manually rotating	
Actuator lock	Rotary knob with integrated lock	Rotary knob with detent Rotary knob with integrated lock can be closed with accessories
Pressure regulation range	0.5 ... 12 bar	0.3 ... 12 bar
Pressure gauge (ANALOG) or Pressure display (DIGITAL)	With pressure gauge	

Function (with manual condensate drain)



Function (with fully automatic condensate drain)



Standard nominal flow rate (measured at p1 = 10 bar, p2 = 6 bar and Δp = 1 bar)					
Pneumatic connection, port 1	G1/4	G3/8	G1/2		
Grade of filtration	40 µm		5 µm	40 µm	
Pressure regulation range	0.5 ... 12 bar			0.3 ... 7 bar	0.5 ... 7 bar
Standard nominal flow rate (standardised to DIN 1343) ¹⁾	1,900 l/min	3,500 l/min	3,600 l/min	3,700 l/min	4,800 l/min

1) 125 l/min must be available for the fully automatic condensate drain to close correctly.

Datasheet

Operating and environmental conditions

Condensate drain	Fully automatic		Manually rotating		
Pressure regulation range	0.5 ... 12 bar			0.3 ... 7 bar	0.5 ... 7 bar
Grade of filtration	5 µm	40 µm	5 µm	40 µm	
Operating pressure	1.5 ... 12 bar		1.5 ... 20 bar		0.8 ... 18 bar
Operating medium	Compressed air to ISO 8573-1:2010 [7:4-], Inert gases		Compressed air to ISO 8573-1:2010 [-:4-], Inert gases		
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)				
Ambient temperature	-10 ... 60°C				
Media temperature	-10 ... 60°C				
Storage temperature	-10 ... 60°C				
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress				
Suitable for use with food ²⁾	See supplementary material information				

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

2) Further information: www.festo.com/catalogue/msb6-frc → Support/Downloads.

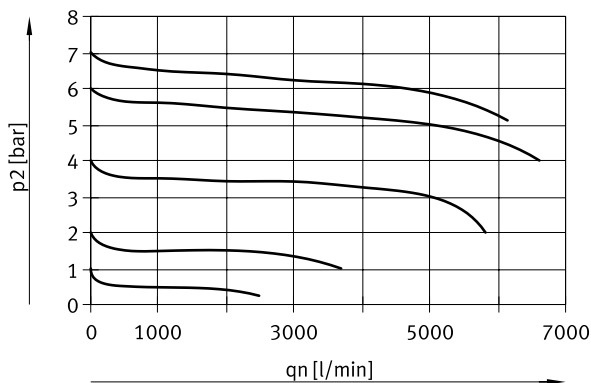
Weight

Bowl guard	Plastic bowl guard	Integrated as metal bowl
Product weight	1,500 g	1,700 g

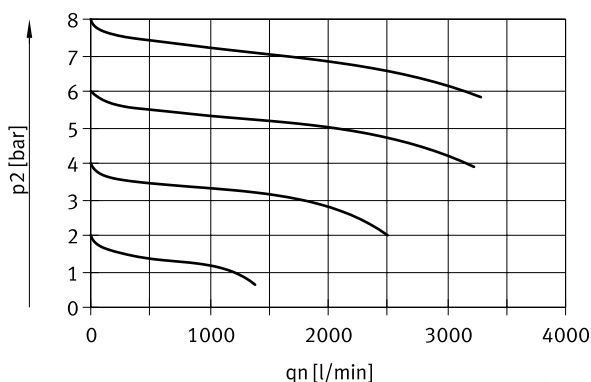
Materials

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

Standard flow rate q_n as a function of output pressure p_2 (MSB6-1/2; pressure regulation range 0.3 ... 7 bar; grade of filtration 40 µm)

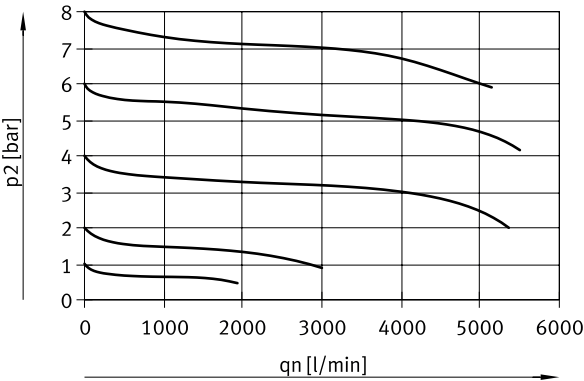


Standard flow rate q_n as a function of output pressure p_2 (MSB6-1/4; pressure regulation range 0.5 ... 12 bar; grade of filtration 40 µm)

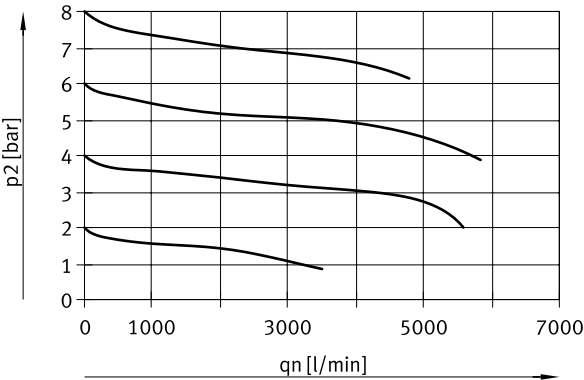


Datasheet

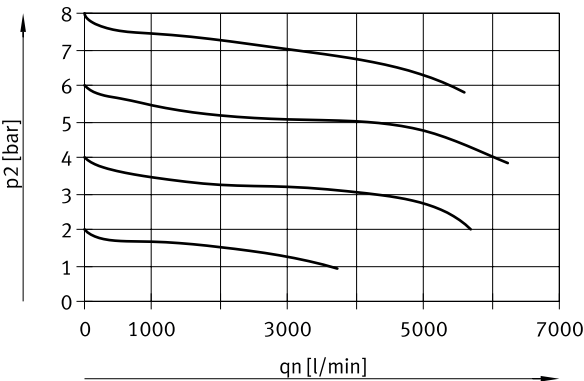
Standard flow rate q_n as a function of output pressure p_2 (MSB6-3/8; pressure regulation range 0.5 ... 12 bar; grade of filtration 40 μm)



Standard flow rate q_n as a function of output pressure p_2 (MSB6-1/2; pressure regulation range 0.5 ... 12 bar; grade of filtration 5 μm)



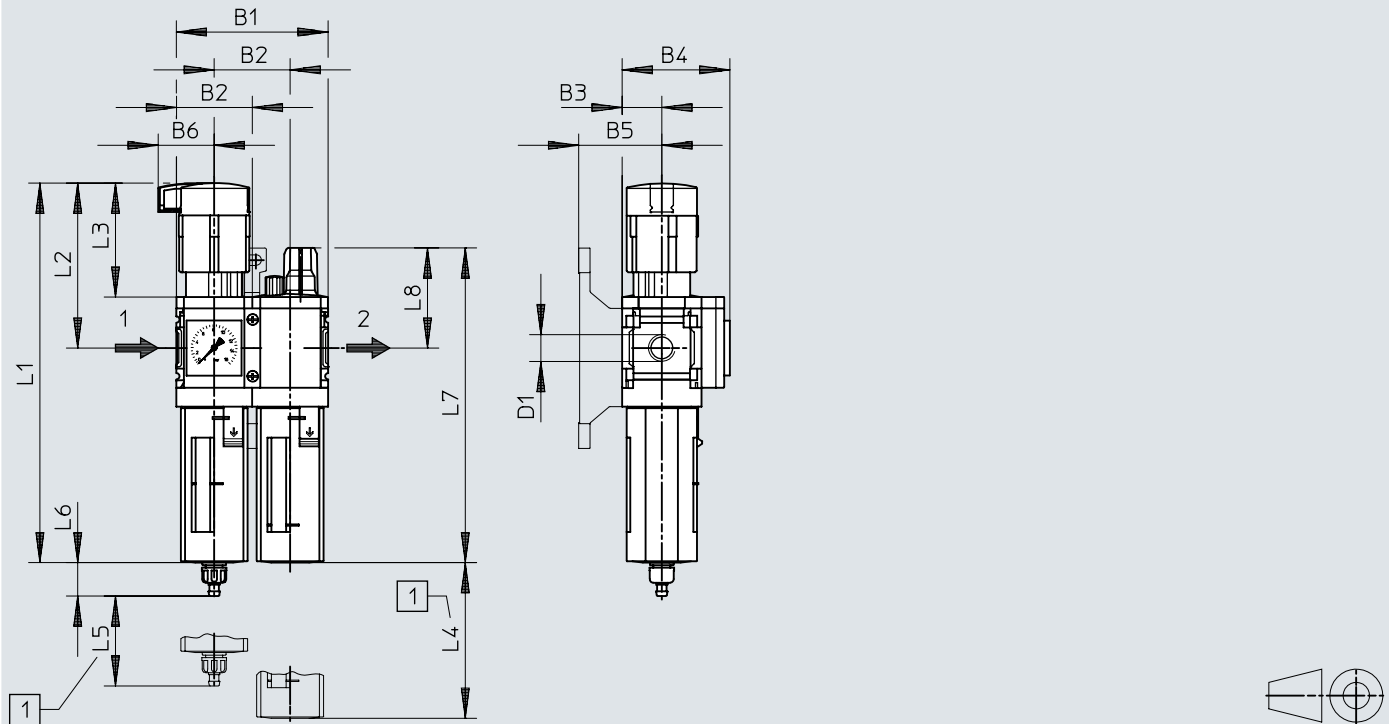
Standard flow rate q_n as a function of output pressure p_2 (MSB6-1/2; pressure regulation range 0.5 ... 12 bar; grade of filtration 40 μm)



Dimensions

Dimensions – with pressure gauge, display unit [bar]

Download CAD data www.festo.com




[1] Installation dimension

	B1	B2	B3	B4	B5	B6	D1	L1	L2	L3	L4	L5	L6		L7	L8
													1)	2)		
MSB6-1/4	124	62	31	77	54	38,8	G1/4	284,8	134,5	95,5	130	68	15,8	18,5	215,3	65,6
MSB6-3/8							G3/8									
MSB6-1/2							G1/2									

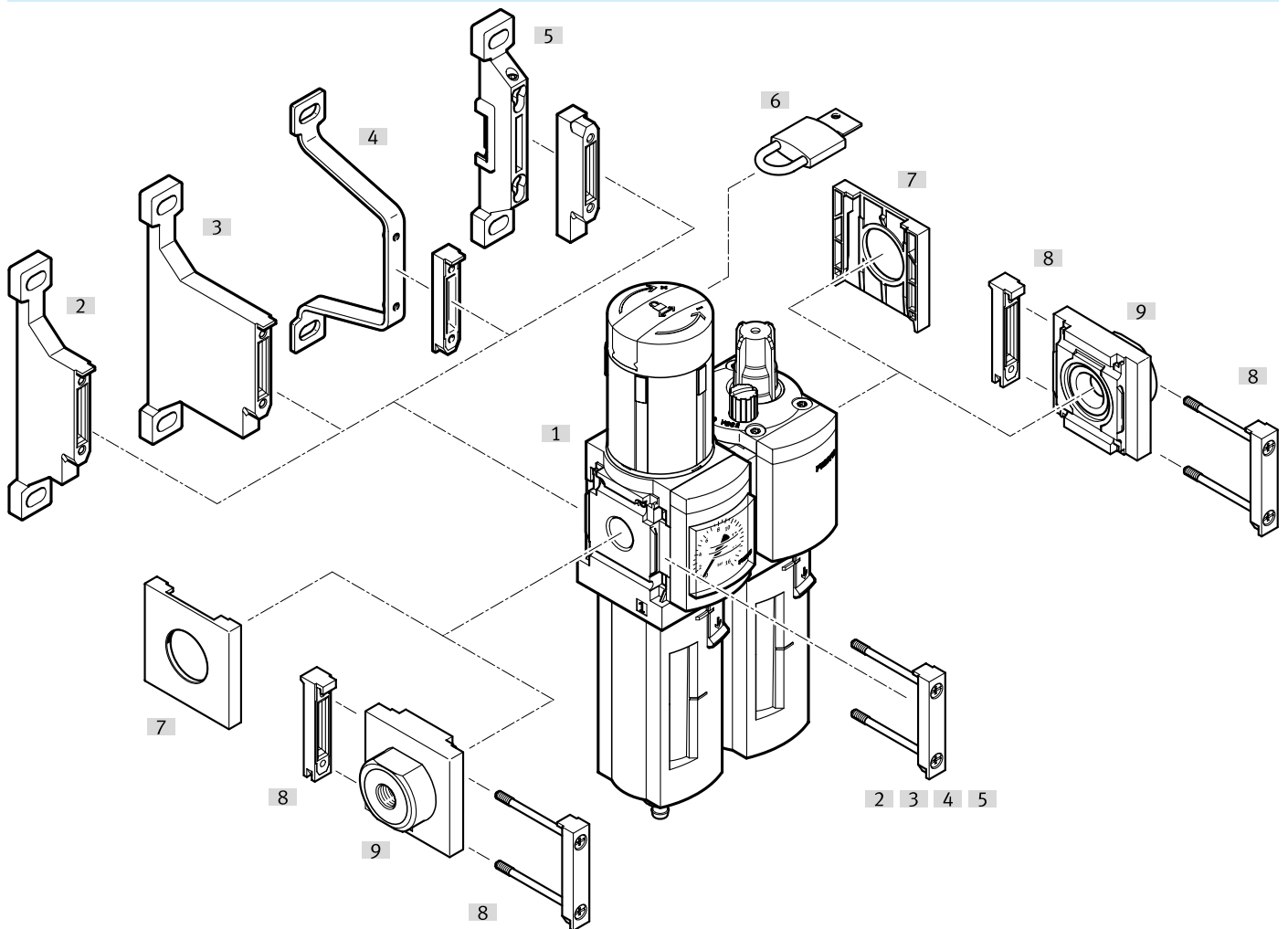
- 1) Manual condensate drain
2) Fully automatic condensate drain

Ordering data

Ordering data							
	Pneumatic connection, port 1	Condensate drain	Grade of filtration	Pressure regulation range	Part no.	Type	
	G1/4	Manually rotating	40 µm	0.5 ... 12 bar	★ 530268	MSB6-1/4-FRC5:J1M1	
	G3/8				★ 530292	MSB6-3/8-FRC5:J1M1	
	G1/2	Fully automatic	5 µm		530236	MSB6-1/2-FRC12:J10M2	
			40 µm		★ 530232	MSB6-1/2-FRC10:J12M2	
			Manually rotating		★ 530246	MSB6-1/2-FRC6:J2M1	
					★ 530248	MSB6-1/2-FRC7:J3M1	
					530234	MSB6-1/2-FRC11:J9M2	
		Manually rotating	5 µm	0.3 ... 7 bar	★ 530230	MSB6-1/2-FRC1:J5M1	
			40 µm		0.5 ... 7 bar	8042673	MSB6-1/2-FRC13:J120M1
					0.5 ... 12 bar	530252	MSB6-1/2-FRC9:J11M2
						★ 530244	MSB6-1/2-FRC5:J1M1
						530245	MSB6-1/2-FRC5:J1M1-Z

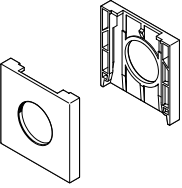
Peripherals

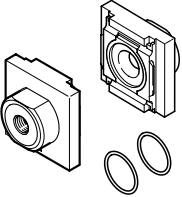
Peripherals overview

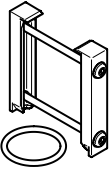


Accessories		→ Link
Type/order code	Description	
[1] Service unit component combination MSB6-FRC		msb4-frc
[2] Mounting bracket MS6-WP		10
[3] Mounting bracket MS6-WPB		10
[4] Mounting bracket MS6-WPE		10
[5] Mounting bracket MS6-WPM		10
[6] Padlock LRVS		11
[7] Cover cap MS6-END		10
[8] Module connector MS6-MV1		10
[9] Connecting plate MS6-AG...		10

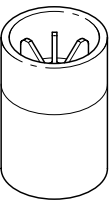
Accessories

Cover cap MS6-END				
	Size	Part no.	Type	
	6	538780	MS6-END	

Connecting plate-SET MS6-AG...				
	Size	Pneumatic connection, port 1	Part no.	Type
	6	G1/4	526080	MS6-AGB
			541538	MS6-AGB-EX
		G3/8	526081	MS6-AGC
			541539	MS6-AGC-EX
		G1/2	★ 526082	MS6-AGD
			541540	MS6-AGD-EX
		G3/4	526083	MS6-AGE
			541541	MS6-AGE-EX

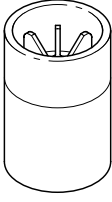
Module connector MS6-MV1				
	Size	Product weight	Part no.	Type
	6	33 g	★ 8119204	MS6-MV1

Mounting bracket MS6-WP...				
	Size	Part no.	Type	
	6	★ 532195	MS6-WP	
		532186	MS6-WPM-2D	
		526073	MS6-WPM-D	
		★ 526074	MS6-WPB	
		541542	MS6-WPB-EX	
		541544	MS6-WP-EX	

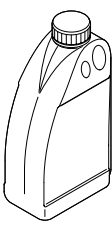
Filter cartridge MS-LFP				
	Size	Grade of filtration	Part no.	Type
	6	5 µm	★ 534499	MS6-LFP-C

Accessories

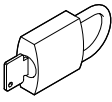
Filter cartridge MS-LFP

	Size	Grade of filtration	Part no.	Type
	6	40 µm	★ 534500	MS6-LFP-E

Special oil OPSW-32 (1 litre)

	Short type code	Part no.	Type
	OFSW	152811	OFSW-32

Padlock LRVS-D

	Short type code	Product weight	Part no.	Type
	LRVS-D	120 g	193786	LRVS-D