



Ten different types of pre-configured and assembled combination units are available. They consist of up to six different individual units with options for filtration grade and condensate drain (see table below). Mounting brackets are included. MS Series combination units have a high resistance to corrosion in typical industrial environments and offer high flow rates with compact components.

• Pneumatic connections: G1/4, G3/8, G1/2 (G3/4 with optional port plate)

• Flow rate: 1,900 ... 5,100 l/min\*

• Supply pressure: 1.5 ... 20 bar\*

• Pressure regulation range: 0.3 ... 12 bar\*

• Filtration grade: 5 µm and 40 µm

\* Individual combination units will vary depending on selected type and option.

Combination Units											
		MSB6-FRC	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9
Consisting of:											
On-off valve (manually actuated)	EM1	-	•	-	•	•	-	•	•	•	-
Filter regulator with pressure gauge, lockable	LFR	•	•	•	•	•	•	•	•	•	-
Pressure regulator with pressure gauge, lockable	LR	-	-	-	-	-	-	-	-	-	•
Filter	LF	-	-	-	-	-	-	-	-	-	•
Lubricator	LOE	•	•	•	•	-	-	-	-	•	•
On-off valve (solenoid actuated)	EE	-	-	•	•	-	•	-	•	-	-
Soft-start valve (pneumatically actuated)	DL	-	-	•	•	-	•	-	•	-	-
Distribution block with pressure switch	FRM	-	•	-	•	-	-	•	•	-	-
Mounting bracket	WP	-	•	•	•	•	•	•	•	•	•
Technical data → Page		474	480	483	487	491	494	498	501	505	508

#### Note

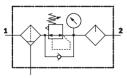
Should you require a custom combination unit, please go to our online catalog at: www.festo.com/catalog/msb6. Click on the blue basket icon viii next to P/N 531030. Then open the shopping basket on the right menu and click on the configuration icon . You can now configure your combination unit.



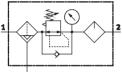


Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- Filter, regulator and lubricator function in a single unit
- High flow rate and highly efficient removal of contaminants
- Good regulating characteristics with minimal pressure hysteresis
- Setting values are secured by locking the rotary knob
- Lockable rotary knob
- Two pressure regulation ranges: 0.3 ... 7 bar and 0.5 ... 12 bar
- Choice of filter cartridges: 5  $\mu m$  or 40  $\mu m$
- With manual or integrated, fully automatic bowl drain



General Technical Data						
Pneumatic connection 1, 2		G1/4	G3/8	G½		
Design		Filter regulator with pressure gauge				
		Proportional standard m	ist lubricator			
Regulating function		With primary pressure co	ompensation			
		With secondary venting				
		With return flow function	1			
		Output pressure constan	nt			
Type of mounting		Via accessories				
Assembly position		Vertical ±5°				
Filtration grade	[µm]	5 (air purity class at the	output 3.7 to DIN ISO 8573-1)			
		40 (air purity class at the	e output 5.7.– to DIN ISO 8573-1)			
Bowl guard		Plastic bowl guard				
		Metal bowl guard				
Bowl drains		Manual				
		Fully automatic				
Pressure adjustment		Rotary knob with integra	ted lock			
Pressure regulation range	[bar]	0.3 7				
		0.5 12				
Pressure indicator		With pressure gauge				

# **Pre-configured Combination Units MSB6-FRC – Metric Series**Technical Data



Standard Nominal Flow Rate qnN <sup>1)</sup> [l/min]						
Pneumatic connection		G1/4	G3/8	G1/2		
Pressure regulation range 0.3	Pressure regulation range 0.3 7 bar					
Filtration grade	5 μm	2,000	4,400	4,600		
	40 μm	2,100	4,600	4,800		
Pressure regulation range 0.5	Pressure regulation range 0.5 12 bar					
Filtration grade	5 μm	1,700	3,400	3,600		
	40 μm	1,900	3,500	3,700		

<sup>1)</sup> Measured at p1 = 10 bar and p2 = 6 bar,  $\Delta p = 1$  bar.

Operating and Environmental Conditions					
Bowl drains		Manual	Fully automatic		
Supply pressure	[bar]	1.5 20	1.5 12		
Operating medium		Compressed air	·		
Ambient temperature	[°C]	-10 +60	+5 +60		
Temperature of medium	[°C]	-10 +60	+5 +60		
Storage temperature	[°C]	-10 +60	-10 +60		
Corrosion resistance	CRC <sup>2)</sup>	2			

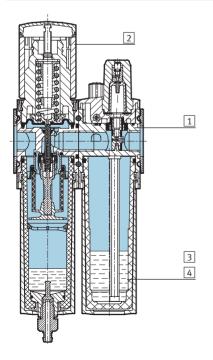
<sup>2)</sup> Corrosion resistance class 2 according to Festo standard 940 070 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Weights [g]	
With plastic bowl guard	1,495
With metal bowl guard	1,713

• For spare parts go to: www.festo.com/en/spare\_parts\_service

#### Materials

Sectional view

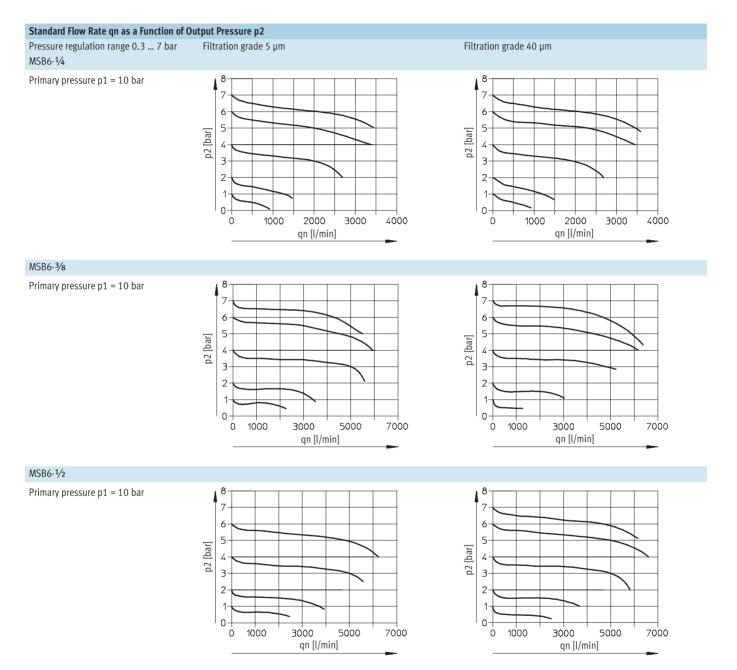


Serv	Service unit						
1	Body	Die-cast aluminum					
2	Regulating knob	Polyamide/polyacetate					
3	Plastic bowl guard	Polycarbonate					
4	Metal bowl guard	Wrought aluminum alloy					
_	Seals	Nitrile rubber					

2007/10 – Subject to change – MS Series

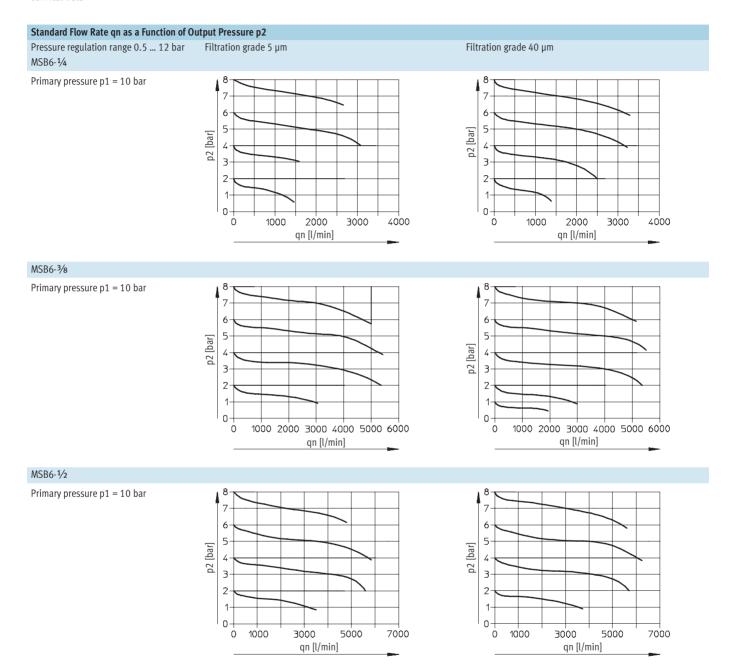


Technical Data



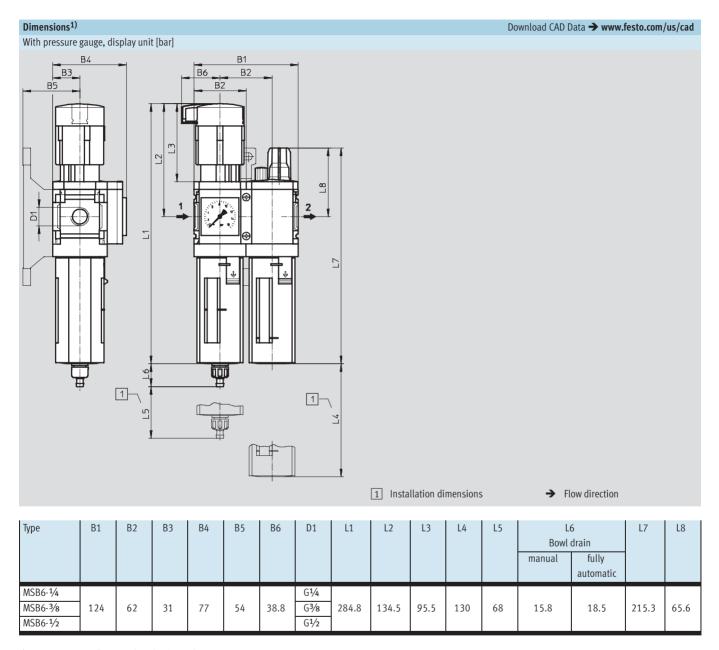


Technical Data





Dimensional Drawings



 $<sup>1) \</sup>quad \hbox{Dimensions are in millimeters, unless otherwise noted}.$ 

# Pre-configured Combination Units MSB6-FRC — Metric Series Ordering Data — Pre-configured Products



Ordering Data					
Pressure regulation r	range 0.3 7 bar				
Bowl drain	Connection	Filtration grade 5 µm	Filtration grade 40 µm		
		Part No. Type	LT	Part No. Type	LT
Plastic bowl guard					
Manual	G1/4	530264 MSB6-1/4-FRC3:J7M1	Q	530254 MSB6- <sup>1</sup> / <sub>4</sub> -FRC1:J5M1	Q
	G3/8	530288 MSB6-3/8-FRC3:J7M1	Q	530278 MSB6-3/8-FRC1:J5M1	Q
	G1/2	530240 MSB6-½-FRC3:J7M1	Q	530230 MSB6-½-FRC1:J5M1	Q
Fully automatic	G1/4	530266 MSB6- <sup>1</sup> / <sub>4</sub> -FRC4:J8M1	Q	530262 MSB6-1/4-FRC2:J6M1	Q
	G3/8	530290 MSB6-3/8-FRC4:J8M1	Q	530286 MSB6-3/8-FRC2:J6M1	Q
	G <sup>1</sup> / <sub>2</sub>	530242 MSB6-½-FRC4:J8M1	Q	530238 MSB6-½-FRC2:J6M1	Q

Ordering Data							
Pressure regulation ra	inge 0.5 12 bar						
Bowl drain	Connection	Filtration gra	ade 5 μm		Filtratio	n grade 40 μm	
		Part No.	Туре	LT	Part No.	Туре	LT
Plastic bowl guard							
Manual	G1/4	530272	MSB4-1/4-FRC7:J3M1	1D	530268	MSB6-1/4-FRC5:J1M1	1D
	G3/8	530296	MSB6-3/8-FRC7:J3M1	1D	530292	MSB6-3/8-FRC5:J1M1	1D
	G <sup>1</sup> / <sub>2</sub>	530248	MSB6-1/2-FRC7:J3M1	1W	530244	MSB6-1/2-FRC5:J1M1	1W
Fully automatic	G1/4	530274	MSB6-1/4-FRC8:J4M1	1D	530270	MSB6-1/4-FRC6:J2M1	1D
	G3/8	530298	MSB6-3/8-FRC8:J4M1	1D	530294	MSB6-3/8-FRC6:J2M1	1D
	G <sup>1</sup> / <sub>2</sub>	530250	MSB6-1/2-FRC8:J4M1	1W	530246	MSB6-½-FRC6:J2M1	1W
Metal bowl							
Manual	G1/4	530258	MSB6-1/4-FRC11:J9M2	Q	530276	MSB6-1/4-FRC9:J11M2	Q
	G3/8	530282	MSB6-3/8-FRC11:J9M2	Q	530300	MSB6-3/8-FRC9:J11M2	Q
	G <sup>1</sup> / <sub>2</sub>	530234	MSB6-1/2-FRC11:J9M2	Q	530252	MSB6-½-FRC9:J11M2	Q
Fully automatic	G1/4	530260	MSB6-1/4-FRC12:J10M2	Q	530256	MSB6-1/4-FRC10:J12M2	Q
	G3/8	530284	MSB6-3/8-FRC12:J10M2	Q	530280	MSB6-3/8-FRC10:J12M2	Q
	G <sup>1</sup> / <sub>2</sub>	530236	MSB6-½-FRC12:J10M2	Q	530232	MSB6-½-FRC10:J12M2	Q

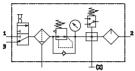
LT = Lead time 1D typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

2007/10 – Subject to change – MS Series

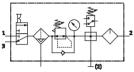
**FESTO** 

Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and lubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range
- The unit is vented when switched off
- Electrical pressure monitoring with adjustable switching pressure
- Removal of filtered and unlubricated compressed air at the distribution block connections



This combination consists of:

- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- Distribution block MS...-FRM-Y with pressure switch, without display
- Lubricator MS...-LOE-R
- Mounting bracket MS...-WP

General Technical Data		
Pneumatic connection 1, 2, 3		G1/2
Regulating function		With primary pressure compensation
		With return flow function
		With secondary venting
		Output pressure constant
Type of mounting		Via accessories
Assembly position		Vertical ±5°
Filtration grade [	[µm]	5 (air purity class at the output 3.7.– to DIN ISO 8573-1)
	Ì	40 (air purity class at the output 5.7.– to DIN ISO 8573-1)
Bowl guard		Plastic bowl guard
Bowl drain		Manual
	i	Fully automatic
Pressure adjustment		Rotary knob with detent
	Ì	Lockable with accessories
Pressure regulation range [	[bar]	1 12
Pressure indicator	_	With pressure gauge

Standard Nominal Flow Rate qnN [l/min]				
Filtration grade	5 μm	3,200		
	40 μm	3,300		



Technical Data

Operating and Environmental Conditions					
Bowl drain		Manual	Fully automatic		
Supply pressure	[bar]	1.5 18	1.5 12		
Operating medium		Filtered compressed air, lubricated or unlub	ricated, filtration grade 40 µm		
Ambient temperature	[°C]	-10 +60	+5 +60		
Temperature of medium	[°C]	-10 +60	+5 +60		
Storage temperature	[°C]	-10 +60	-10 +60		
Corrosion resistance	CRC <sup>1)</sup>	2			

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

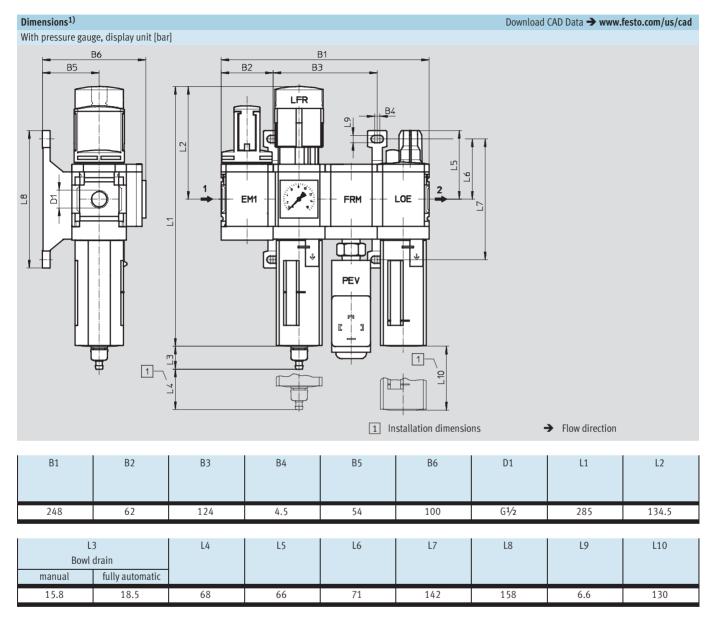
Weights [g]				
Service unit combination	2,550			
Mounting bracket	76			

• For spare parts go to: www.festo.com/en/spare\_parts\_service

# Standard Flow Rate qn as a Function of Output Pressure p2 Pressure regulation range 1 ... 12 bar MSB6-1/2 Primary pressure p1 = 10 bar 8 7 6 5 4 3 2 1 0 0 1000 3000 5000 7000 qn [l/min] Filtration grade 40 µm Filtration grade 40 µm

# Pre-configured Combination Unit 1 – Metric Series Dimensional Drawings, Ordering Data – Pre-configured Products

**FESTO** 



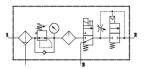
<sup>1)</sup> Dimensions are in millimeters, unless otherwise noted.

Ordering Data								
•								
Pressure regulation range 1	Pressure regulation range 1 12 bar							
Bowl drain Connection Filtration grade 5 µm					Filtration grade 40 µm			
		Part No. Type	LT		Part No. Type	LT		
Plastic bowl guard								
Manual	G <sup>1</sup> / <sub>2</sub>	542283 MSB6-1/2:C3J3F3M1-WP	1W		542271 MSB6-½:C3J1F3M1-WP	1W		
Fully automatic	G <sup>1</sup> / <sub>2</sub>	542289 MSB6- <sup>1</sup> / <sub>2</sub> :C3J4F3M1-WP	1W		542277 MSB6-½:C3J2F3M1-WP	1W		

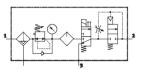
**FESTO** 

Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and lubricated compressed air
- Output pressure is infinitely adjustable within the pressure regulation range
- Gradual pressure build-up prevents sudden, unpredictable movements
- When supply pressure is closed, quick venting ensures rapid pressure reduction



This combination consists of:

- Filter regulator MS...-LFR-D7
- Lubricator MS...-LOE-R
- On-off valve MS...-EE-10V24 or MS...-EE-V24 solenoid actuated
- Soft-start valve MS...-DL pneumatically actuated
- Mounting bracket MS...-WP

General Technical Data		
Pneumatic connection 1, 2, 3		G½
Regulating function		With primary pressure compensation
		With return flow function
		With secondary venting
		Output pressure constant
Type of mounting		Via accessories
Assembly position		Vertical ±5°
Filtration grade	[µm]	5 (air purity class at the output 3.7. – to DIN ISO 8573-1)
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)
Bowl guard		Plastic bowl guard
Bowl drain		Manual
		Fully automatic
Pressure adjustment		Rotary knob with detent
		Lockable with accessories
Pressure regulation range	[bar]	4 9 (with on-off valve MSEE-10V24)
	[bar]	4 12 (with on-off valve MSEE-V24)
Pressure indicator		With pressure gauge
Coil characteristics	[V DC]	12
Supply voltage	[V DC]	24

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

Standard Nominal Flow Rate qnN [l/min]				
Filtration grade	5 μm	1,900		
	40 μm	2,000		

2007/10 - Subject to change - MS Series



Technical Data

Operating and Environmental Conditions							
		Pressure regulation ra	Pressure regulation range 4 9 bar		ange 4 12 bar		
Bowl drain		Manual	Fully automatic	Manual	Fully automatic		
Supply pressure	[bar]	4.5 10	4.5 10	4.5 18	4.5 12		
Operating medium		Filtered compressed air, lubricated or unlubricated, filtration grade 40 µm					
Ambient temperature	[°C]	-10 +50	+5 +50	-10 +60	+5 +60		
Temperature of medium	[°C]	-10 +50	+5 +50	-10 +60	+5 +60		
Storage temperature	[°C]	-10 +60	-10 +60	-10 +60	-10 +60		
Corrosion resistance	CRC <sup>1)</sup>	2					

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

Weights [g]	
Service unit combination	3,000
Mounting bracket	76

• For spare parts go to: www.festo.com/en/spare\_parts\_service

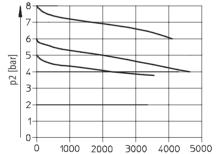
#### Standard Flow Rate qn as a Function of Output Pressure p2

Pressure regulation range

4 ... 9 bar / 4 ... 12 bar

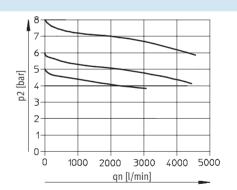
MSB6-1/2

Primary pressure p1 = 10 bar



qn [l/min]

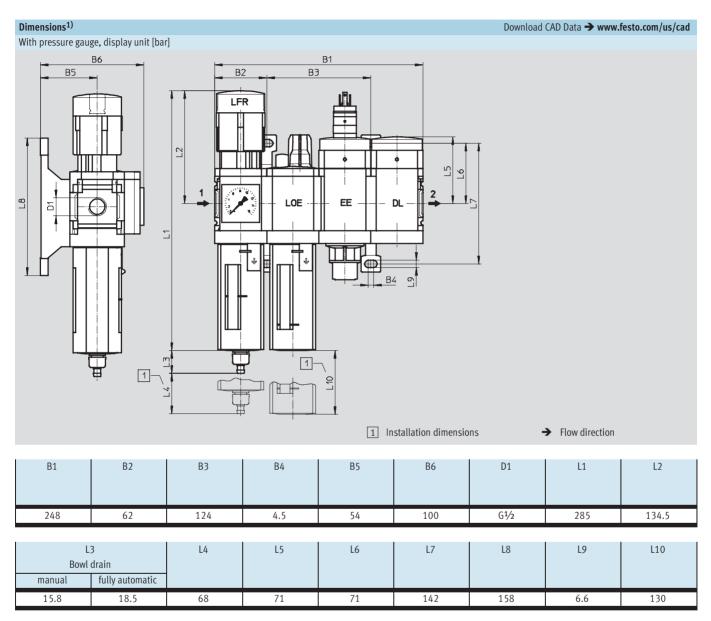
Filtration grade 5 µm



Filtration grade 40 µm

**FESTO** 

Dimensional Drawings



<sup>1)</sup> Dimensions are in millimeters, unless otherwise noted.

# Pre-configured Combination Unit 2 – Metric Series Ordering Data – Pre-configured Products



Ordering Data							
Pressure regulation range 4 9 bar							
Bowl drain Connection Filtration grade 5 µm					Filtration grade 40 µm		
		Part No. Type	LT		Part No. Type	LT	
Plastic bowl guard							
Manual	G <sup>1</sup> / <sub>2</sub>	542648 MSB6-½:J3M1D7A1-WP	Q		542644 MSB6- <sup>1</sup> / <sub>2</sub> :J1M1D7A1-WP	Q	
Fully automatic	G <sup>1</sup> / <sub>2</sub>	542650 MSB6-½:J4M1D7A1-WP	Q		542646 MSB6-½:J2M1D7A1-WP	Q	

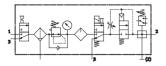
Ordering Data							
Pressure regulation range 4 12 bar							
Bowl drain Connection Filtration grade 5 µm Filtration						Filtration grade 40 μm	
		Part No.	Туре	LT		Part No. Type	LT
Plastic bowl guard							
Manual	G <sup>1</sup> / <sub>2</sub>	530227	MSB6-1/2:J3M1D1A1-WP	1W		530223 MSB6-½:J1M1D1A1-WP	1W
Fully automatic	G1/2	530229	MSB6-1/2:J4M1D1A1-WP	1W		530225 MSB6-½:J2M1D1A1-WP	1W

LT = Lead time 1D typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

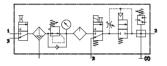
**FESTO** 

Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and lubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range
- Gradual pressure build-up prevents sudden, unpredictable movements
- To shut-off and vent the following device or the system
- Electrical pressure monitoring with adjustable switching pressure



This combination consists of:

- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- Lubricator MS...-LOE-R
- On-off valve MS...-EE-10V24 or MS...-EE-V24 solenoid actuated
- Soft-start valve MS...-DL pneumatically actuated
- Distribution block MS...-FRM-Y with pressure switch, without display
- Mounting bracket MS...-WP

General Technical Data		
Pneumatic connection 1, 2, 3		G½
Regulating function		With primary pressure compensation
		With return flow function
		With secondary venting
		Output pressure constant
Type of mounting		Via accessories
Assembly position		Vertical ±5°
Filtration grade	[µm]	5 (air purity class at the output 3.7. – to DIN ISO 8573-1)
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)
Bowl guard		Plastic bowl guard
Bowl drain		Manual
		Fully automatic
Pressure adjustment		Rotary knob with detent
		Lockable with accessories
Pressure regulation range	[bar]	4 9 (with on-off valve MSEE-10V24)
	[bar]	4 12 (with on-off valve MSEE-V24)
Pressure indicator		With pressure gauge
Coil characteristics	[V DC]	12
Supply voltage	[V DC]	24

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

Standard Nominal Flow Rate qnN [l/min]				
Filtration grade	5 μm	2,100		
	40 μm	2,300		

2007/10 - Subject to change - MS Series



Technical Data

Operating and Environmental Conditions							
		Pressure regulation range 4	Pressure regulation range 4 9 bar		12 bar		
Bowl drain		Manual	Fully automatic	Manual	Fully automatic		
Supply pressure	[bar]	4.5 10	4.5 10	4.5 18	4.5 12		
Operating medium	Operating medium Filtered compressed air, lubricated or unlubricated, filtratio			on grade 40 μm			
Ambient temperature	[°C]	-10 +50	+5 +50	-10 +60	+5 +60		
Temperature of medium	[°C]	-10 +50	+5 +50	-10 +60	+5 +60		
Storage temperature	[°C]	-10 +60	-10 +60	-10 +60	-10 +60		
Corrosion resistance	CRC <sup>1)</sup>	2					

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

Weights [g]	
Service unit combination	4,000
Mounting bracket	76

• For spare parts go to: www.festo.com/en/spare\_parts\_service

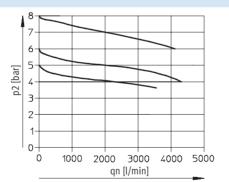
#### Standard Flow Rate qn as a Function of Output Pressure p2

Pressure regulation range

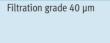
4 ... 9 bar / 4 ... 12 bar

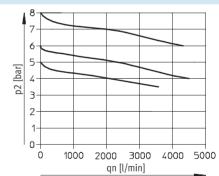
MSB6-1/2

Primary pressure p1 = 10 bar



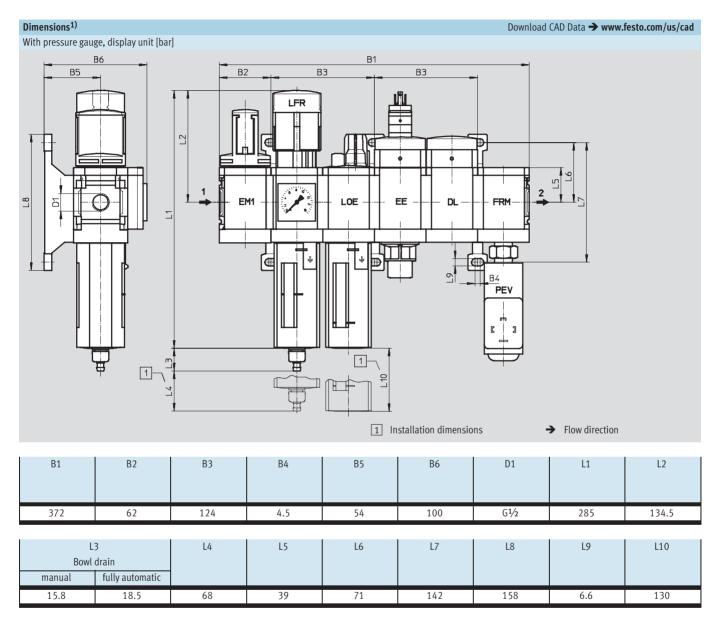
Filtration grade 5 µm





# **Pre-configured Combination Unit 3 – Metric Series**Dimensional Drawings

**FESTO** 



<sup>1)</sup> Dimensions are in millimeters, unless otherwise noted.

# Pre-configured Combination Unit 3 – Metric Series Ordering Data – Pre-configured Products



Ordering Data							
Pressure regulation range 4 9 bar							
Bowl drain Connection Filtration grade 5 µm					Filtration grade 40 µm		
		Part No. Type	LT		Part No. Type	LT	
Plastic bowl guard							
Manual	G1/2	542640 MSB6-½:C3J3M1D7A1F3-WP	Q		542636 MSB6-½:C3J1M1D7A1F3-WP	Q	
Fully automatic	G1/2	542642 MSB6-½:C3J4M1D7A1F3-WP	Q		542638 MSB6-½:C3J2M1D7A1F3-WP	Q	

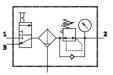
Ordering Data									
Pressure regulation range 4 12 bar									
Bowl drain	Connection	Filtration g	Filtration grade 5 µm			Filtration grade 40 µm			
		Part No.	Part No. Type LT			Part No. Type	LT		
Plastic bowl guard									
Manual	G <sup>1</sup> / <sub>2</sub>	542285	MSB6-1/2:C3J3M1D1A1F3-WP	1W		542273 MSB6-½:C3J1M1D1A1F3-WP	1W		
Fully automatic	G <sup>1</sup> / <sub>2</sub>	542291	MSB6-1/2:C3J4M1D1A1F3-WP	1W		542279 MSB6-½:C3J2M1D1A1F3-WP	1W		

LT = Lead time 1D typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

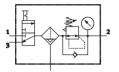


Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and unlubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range



This combination consists of:

- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- Mounting bracket MS...-WP

General Technical Data				
Pneumatic connection 1, 2, 3		G1/2		
Regulating function		With primary pressure compensation		
		With return flow function		
		With secondary venting		
		Output pressure constant		
Type of mounting		Via accessories		
Assembly position		Vertical ±5°		
Filtration grade	[µm]	5 (air purity class at the output 3.7. – to DIN ISO 8573-1)		
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)		
Bowl guard		Plastic bowl guard		
Bowl drain		Manual		
		Fully automatic		
Pressure adjustment		Rotary knob with detent		
		Lockable with accessories		
Pressure regulation range	[bar]	0.5 12		
Pressure indicator	_	With pressure gauge		

Standard Nominal Flow Rate qnN [l/min]				
Filtration grade	5 μm	4,800		
	40 μm	5,100		



Technical Data

Operating and Environmental Conditions							
Bowl drain		Manual	Fully automatic				
Supply pressure	[bar]	0.8 18	1.5 12				
Operating medium		Filtered compressed air, lubricated or unlubricated, filtration grade 40 µm					
Ambient temperature	[°C]	-10 +60	+5 +60				
Temperature of medium	[°C]	-10 +60	+5 +60				
Storage temperature	[°C]	-10 +60	-10 +60				
Corrosion resistance	CRC <sup>1)</sup>	2					

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

Weights [g]					
Service unit combination	1,100				
Mounting bracket	76				

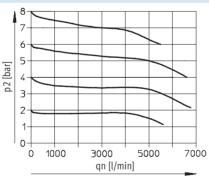
• For spare parts go to: www.festo.com/en/spare\_parts\_service

#### Standard Flow Rate qn as a Function of Output Pressure p2

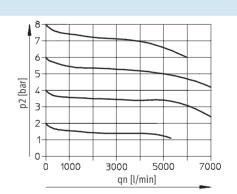
Pressure regulation range 0.5  $\dots$  12 bar MSB6- $\frac{1}{2}$ 

Primary pressure p1 = 10 bar

Filtration grade 5 μm

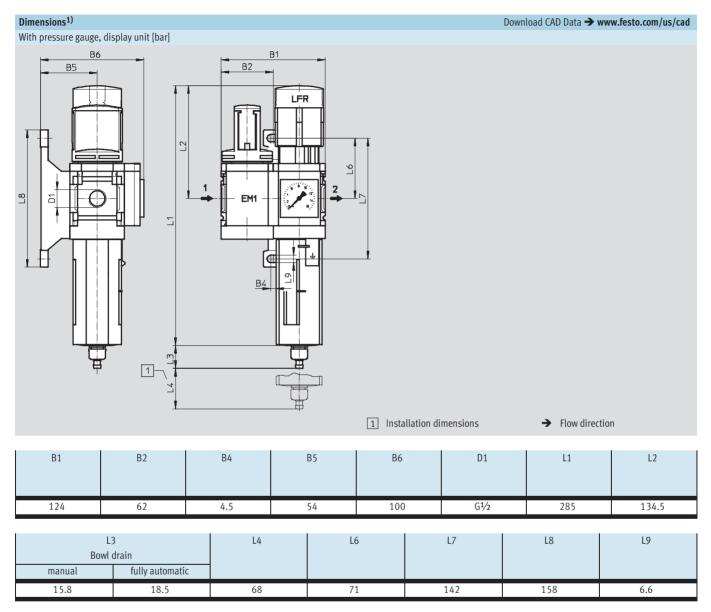


Filtration grade 40 μm



# **Pre-configured Combination Unit 4 – Metric Series**Dimensional Drawings, Ordering Data – Pre-configured Products

**FESTO** 



<sup>1)</sup> Dimensions are in millimeters, unless otherwise noted.

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

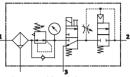
Ordering Data									
Pressure regulation range 0.5 12 bar									
Bowl drain	Connection	Filtration grade 5 µm Part No. Type LT			Filtration grade 40 μm				
					Part No. Type	LT			
Plastic bowl guard									
Manual	G½	542280 MSB6-½:C3J3-WP	1W		542268 MSB6-½:C3J1-WP	1W			
Fully automatic	G <sup>1</sup> / <sub>2</sub>	542286 MSB6-½:C3J4-WP	1W		542274 MSB6-1/2:C3J2-WP	1W			

LT = Lead time **1D** typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

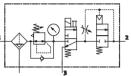
**FESTO** 

Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and unlubricated compressed air
- Output pressure is infinitely adjustable within the pressure regulation range
- Gradual pressure build-up prevents sudden, unpredictable movements
- When supply pressure is closed, quick venting ensures rapid pressure reduction



This combination consists of:

- Filter regulator MS...-LFR-D7
- On-off valve MS...-EE-10V24 or MS...-EE-V24 solenoid actuated
- Soft-start valve MS...-DL pneumatically actuated
- Mounting bracket MS...-WP

General Technical Data							
Pneumatic connection 1, 2, 3		G½					
Regulating function		With primary pressure compensation					
		With return flow function					
		With secondary venting					
		Output pressure constant					
Type of mounting		Via accessories					
Assembly position		Vertical ±5°					
Filtration grade	[µm]	5 (air purity class at the output 3.7.– to DIN ISO 8573-1)					
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)					
Bowl guard		Plastic bowl guard					
Bowl drain		Manual					
		Fully automatic					
Pressure adjustment		Rotary knob with detent					
		Lockable with accessories					
Pressure regulation range	[bar]	4 9 (with on-off valve MSEE-10V24)					
	[bar]	4 12 (with on-off valve MSEE-V24)					
Pressure indicator		With pressure gauge					
Coil characteristics	[V DC]	12					
Supply voltage	[V DC]	24					

Standard Nominal Flow Rate qnN [l/min]					
Filtration grade	5 μm	3,000			
	40 μm	3,100			



Technical Data

Operating and Environmental Conditions								
		Pressure regulation range 4	Pressure regulation range 4 9 bar		ange 4 12 bar			
Bowl drain		Manual	Fully automatic	Manual	Fully automatic			
Supply pressure	[bar]	4.5 10	4.5 10	4.5 18	4.5 12			
Operating medium		Filtered compressed air, lubricated or unlubricated, filtration grade 40 µm						
Ambient temperature	[°C]	-10 +50	+5 +50	-10 +60	+5 +60			
Temperature of medium	[°C]	-10 +50	+5 +50	-10 +60	+5 +60			
Storage temperature	[°C]	-10 +60	-10 +60	-10 +60	-10 +60			
Corrosion resistance	CRC <sup>1)</sup>	2		•				

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

Weights [g]	
Service unit combination	2,400
Mounting bracket	76

• For spare parts go to: www.festo.com/en/spare\_parts\_service

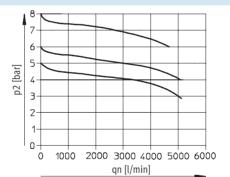
#### Standard Flow Rate qn as a Function of Output Pressure p2

Pressure regulation range

4 ... 9 bar / 4 ... 12 bar

MSB6-1/2

Primary pressure p1 = 10 bar



Filtration grade 5 µm



qn [l/min]

2000 3000 4000 5000 6000

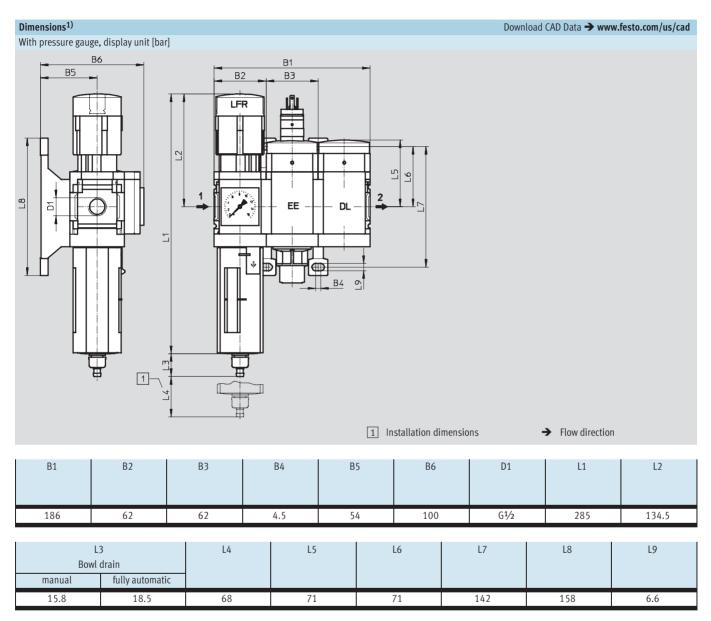
Filtration grade 40 µm

0

1000



Dimensional Drawings



<sup>1)</sup> Dimensions are in millimeters, unless otherwise noted.

# Pre-configured Combination Unit 5 – Metric Series Ordering Data – Pre-configured Products



Ordering Data									
Pressure regulation range 4 9 bar									
Bowl drain	Connection	iltration grade 5 μm			Filtration grade 40 µm				
		Part No. Type	Part No. Type LT			LT			
Plastic bowl guard	Plastic bowl guard								
Manual	G1/2	542647 MSB6-½:J3D7A1-WP	Q		542643 MSB6-½:J1D7A1-WP	Q			
Fully automatic	G <sup>1</sup> / <sub>2</sub>	542649 MSB6-½:J4D7A1-WP	Q		542645 MSB6-1/2:J2D7A1-WP	Q			

Ordering Data								
Pressure regulation range 4 12 bar								
Bowl drain Connection Filtration grade 5 µm						Filtration grade 40 µm		
	Part No. Type LT		LT		Part No. Type	LT		
Plastic bowl guard								
Manual	G <sup>1</sup> / <sub>2</sub>	530226	MSB6-½:J3D1A1-WP	1W		530222 MSB6-½:J1D1A1-WP	1W	
Fully automatic	G1/2	530228	MSB6-1/2:J4D1A1-WP	1W		530224 MSB6-½:J2D1A1-WP	1W	

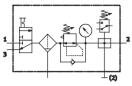
LT = Lead time 1D typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

2007/10 – Subject to change – MS Series

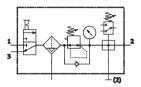
**FESTO** 

Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and unlubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range
- Electrical pressure monitoring with adjustable switching pressure



This combination consists of:

- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- Distribution block MS...-FRM-Y with pressure switch, without display
- Mounting bracket MS...-WP

General Technical Data		
Pneumatic connection 1, 2, 3		G1/2
Regulating function		With primary pressure compensation
		With return flow function
		With secondary venting
		Output pressure constant
Type of mounting		Via accessories
Assembly position		Vertical ±5°
Filtration grade	[µm]	5 (air purity class at the output 3.7. – to DIN ISO 8573-1)
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)
Bowl guard		Plastic bowl guard
Bowl drain		Manual
		Fully automatic
Pressure adjustment		Rotary knob with detent
		Lockable with accessories
Pressure regulation range	[bar]	0.5 12
Pressure indicator		With pressure gauge

Standard Nominal Flow Rate qnN [l/min]						
Filtration grade	5 μm	4,400				
	40 μm	4,500				



Technical Data

Operating and Environmental Conditions						
Bowl drain		Manual	Fully automatic			
Supply pressure	[bar]	0.8 18	1.5 12			
Operating medium		Filtered compressed air, lubricated or unl	ubricated, filtration grade 40 µm			
Ambient temperature	[°C]	-10 +60	+5 +60			
Temperature of medium	[°C]	-10 +60	+5 +60			
Storage temperature	[°C]	-10 +60	-10 +60			
Corrosion resistance	CRC <sup>1)</sup>	2	·			

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

Weights [g]				
Service unit combination	2,000			
Mounting bracket	76			

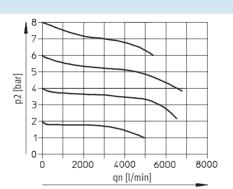
• For spare parts go to: www.festo.com/en/spare\_parts\_service

#### Standard Flow Rate qn as a Function of Output Pressure p2

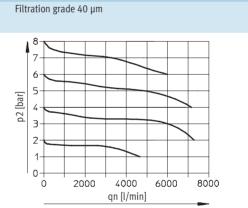
Pressure regulation range 0.5 ... 12 bar

MSB6-1/2

Primary pressure p1 = 10 bar

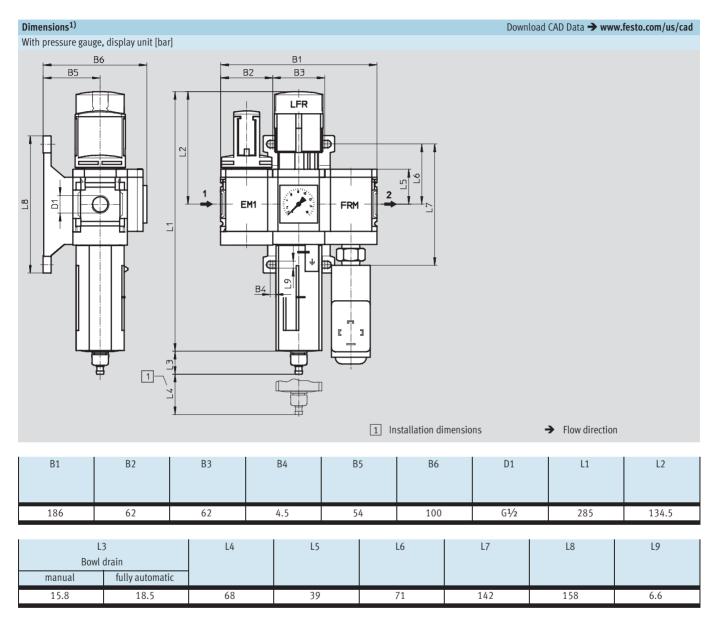


Filtration grade 5 μm



# **Pre-configured Combination Unit 6 – Metric Series**Dimensional Drawings, Ordering Data – Pre-configured Products





<sup>1)</sup> Dimensions are in millimeters, unless otherwise noted.

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

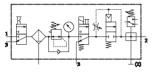
Ordering Data							
Pressure regulation range 0	.5 12 bar						
Bowl drain	Connection	Filtration grade 5 μm			Filtration grade 40 μm		
		Part No. Type	LT		Part No. Type	LT	
Plastic bowl guard							
Manual	G½	542282 MSB6-1/2:C3J3F3-WP	1W		542270 MSB6-1/2:C3J1F3-WP	1W	
Fully automatic	G½	542288 MSB6-½:C3J4F3-WP	1W		542276 MSB6-1/2:C3J2F3-WP	1W	

LT = Lead time 1D typically ships same day/next day 1W typically ships within 1 week **Q** request a quote for lead time

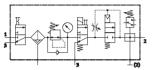
**FESTO** 

Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and unlubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range
- Gradual pressure build-up prevents sudden, unpredictable movements
- To shut-off and vent the following device or the system
- Electrical pressure monitoring with adjustable switching pressure



This combination consists of:

- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- On-off valve MS...-EE-10V24 or MS...-EE-V24 solenoid actuated
- Soft-start valve MS...-DL pneumatically actuated
- Distribution block MS...-FRM-Y with pressure switch without display
- Mounting bracket MS...-WP

General Technical Data		
Pneumatic connection 1, 2, 3	}	G1/2
Regulating function		With primary pressure compensation
		With return flow function
		With secondary venting
		Output pressure constant
Type of mounting		Via accessories
Assembly position		Vertical ±5°
Filtration grade	[µm]	5 (air purity class at the output 3.7.– to DIN ISO 8573-1)
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)
Bowl guard		Plastic bowl guard
Bowl drain		Manual
		Fully automatic
Pressure adjustment		Rotary knob with detent
		Lockable with accessories
Pressure regulation range	[bar]	4 9 (with on-off valve MSEE-10V24)
	[bar]	4 12 (with on-off valve MSEE-V24)
Pressure indicator		With pressure gauge
Coil characteristics	[V DC]	12
Supply voltage	[V DC]	24

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

Standard Nominal Flow Rate qnN [I/min]					
Filtration grade	5 μm	3,000			
	40 μm	3,100			

2007/10 - Subject to change - MS Series



Technical Data

Operating and Environmental Conditions						
		Pressure regulation range 4	. 9 bar	Pressure regulation range 4	12 bar	
Bowl drain		Manual	Fully automatic	Manual	Fully automatic	
Supply pressure	[bar]	4.5 10	4.5 10	4.5 18	4.5 12	
Operating medium		Filtered compressed air, lubricated or unlubricated, filtration grade 40 µm				
Ambient temperature	[°C]	-10 +50	+5 +50	-10 +60	+5 +60	
Temperature of medium	[°C]	-10 +50	+5 +50	-10 +60	+5 +60	
Storage temperature	[°C]	-10 +60	-10 +60	-10 +60	-10 +60	
Corrosion resistance	CRC <sup>1)</sup>	2				

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

Weights [g]	
Service unit combination	3,500
Mounting bracket	76

• For spare parts go to: www.festo.com/en/spare\_parts\_service

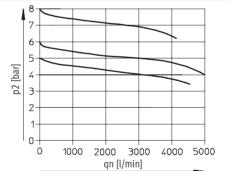
#### Standard Flow Rate qn as a Function of Output Pressure p2 Filtration grade 5 µm

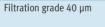
Pressure regulation range

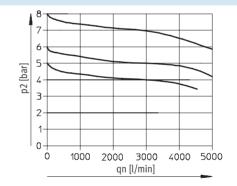
4 ... 9 bar / 4 ... 12 bar

MSB6-1/2

Primary pressure p1 = 10 bar

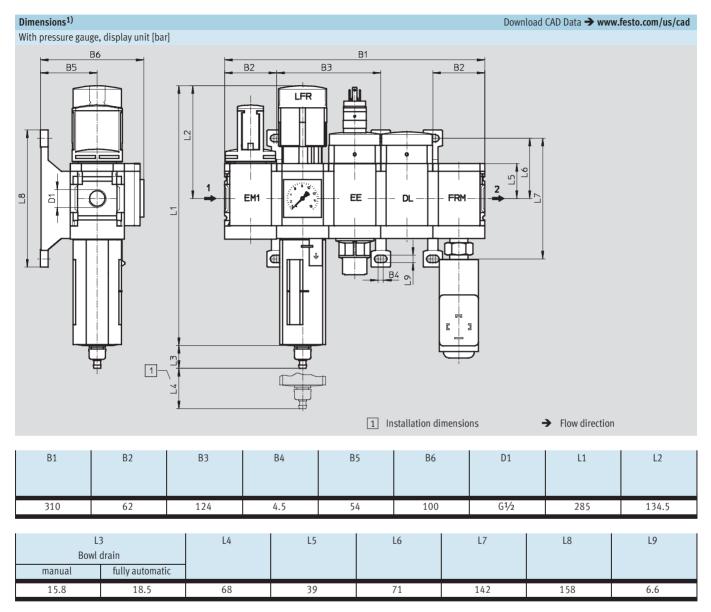






# **Pre-configured Combination Unit 7 – Metric Series**Dimensional Drawings

**FESTO** 



<sup>1)</sup> Dimensions are in millimeters, unless otherwise noted.

# Pre-configured Combination Unit 7 – Metric Series Ordering Data – Pre-configured Products



Ordering Data							
Pressure regulation range 4	9 bar						
Bowl drain	Connection	Filtration grade 5 μm			Filtration grade 40 µm		
		Part No. Type	LT		Part No. Type	LT	
Plastic bowl guard							
Manual	G1/2	542639 MSB6-½:C3J3D7A1F3-WP	Q		542635 MSB6-½:C3J1D7A1F3-WP	Q	
Fully automatic	G <sup>1</sup> / <sub>2</sub>	542641 MSB6-1/2:C3J4D7A1F3-WP	Q		542637 MSB6-1/2:C3J2D7A1F3-WP	Q	

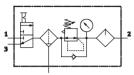
Ordering Data							
Pressure regulation range 4	12 bar						
Bowl drain	Connection	Filtration g	rade 5 μm			Filtration grade 40 μm	
		Part No.	Туре	LT		Part No. Type	LT
Plastic bowl guard							
Manual	G½	542281	MSB6-1/2:C3J3D1A1F3-WP	1W		542269 MSB6-½:C3J1D1A1F3-WP	1W
Fully automatic	G <sup>1</sup> / <sub>2</sub>	542287	MSB6-1/2:C3J4D1A1F3-WP	1W		542275 MSB6-½:C3J2D1A1F3-WP	1W

LT = Lead time 1D typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

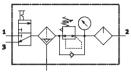
**FESTO** 

Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and lubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range



This combination consists of:

- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- Lubricator MS...-LOE-R
- Mounting bracket MS...-WP

General Technical Data		
Pneumatic connection 1, 2, 3		G1/2
Regulating function		With primary pressure compensation
		With return flow function
		With secondary venting
		Output pressure constant
Type of mounting		Via accessories
Assembly position		Vertical ±5°
Filtration grade	[µm]	5 (air purity class at the output 3.7. – to DIN ISO 8573-1)
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)
Bowl guard		Plastic bowl guard
Bowl drain		Manual
		Fully automatic
Pressure adjustment		Rotary knob with detent
		Lockable with accessories
Pressure regulation range	[bar]	1 12
Pressure indicator		With pressure gauge

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

Standard Nominal Flow Rate qnN [l/min]				
Filtration grade	5 μm	3,000		
	40 μm	3,100		

2007/10 – Subject to change – MS Series



Technical Data

Operating and Environmental Conditions				
Bowl drain		Manual	Fully automatic	
Supply pressure	[bar]	1.5 18	1.5 12	
Operating medium		Filtered compressed air, lubricated or unlubricated, filtr	ation grade 40 µm	
Ambient temperature	[°C]	-10 +60	+5 +60	
Temperature of medium	[°C]	-10 +60	+5 +60	
Storage temperature	[°C]	-10 +60	-10 +60	
Corrosion resistance	CRC <sup>1)</sup>	2		

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

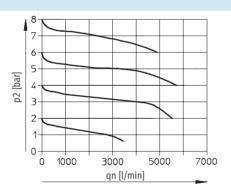
Weights [g]				
Service unit combination	1,750			
Mounting bracket	76			

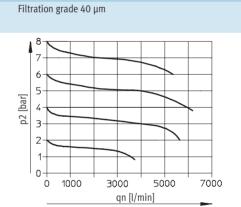
• For spare parts go to: www.festo.com/en/spare\_parts\_service

# Standard Flow Rate qn as a Function of Output Pressure p2 Pressure regulation range 1 ... 12 bar Filtration grade 5 µm

MSB6-1/2

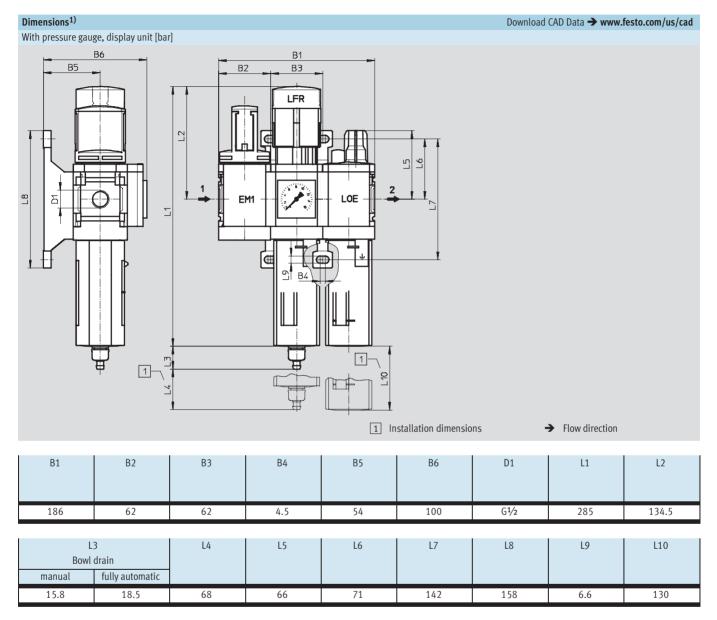
Primary pressure p1 = 10 bar





# **Pre-configured Combination Unit 8 – Metric Series**Dimensional Drawings, Ordering Data – Pre-configured Products

**FESTO** 



<sup>1)</sup> Dimensions are in millimeters, unless otherwise noted.

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

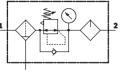
Ordering Data							
Pressure regulation range 1 12 bar							
Bowl drain	Connection	Filtration grade 5 µm		Filtration grade 40 µm			
		Part No. Type	LT		Part No. Type	LT	
Plastic bowl guard							
Manual	G1/2	542284 MSB6-½:C3J3M1-WP	1W		542272 MSB6-½:C3J1M1-WP	1W	
Fully automatic	G <sup>1</sup> / <sub>2</sub>	542290 MSB6-½:C3J4M1-WP	1W		542278 MSB6-½:C3J2M1-WP	1W	

LT = Lead time 1D typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

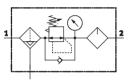


Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and lubricated compressed air
- Output pressure is infinitely adjustable within the pressure regulation range



This combination consists of:

- Filter MS...-LF
- Pressure regulator MS...-LR
- Lubricator MS...-LOE
- Mounting bracket MS...-WP

General Technical Data				
Pneumatic connection 1, 2			G½	
Type of mounting			Via accessories	
Assembly position			Vertical ±5°	
Filtration grade [µm]		[µm]	5 (air purity class at the output 3.7.– to DIN ISO 8573-1)	
			40 (air purity class at the output 5.7.– to DIN ISO 8573-1)	
Bowl guard			Plastic bowl guard	
			Metal bowl guard	
Bowl drain			Manual	
			Fully automatic	
Pressure adjustment			Rotary knob with detent	
			Lockable with accessories	
Pressure regulation	N2	[bar]	17	
range	N3	[bar]	112	
Pressure indicator			With pressure gauge	

Standard Nominal Flow Rate qnN [l/min]				
N2 – Pressure regulation range 1 7 bar				
Filtration grade	40 µm	4,700		
N3 – Pressure regulation range 1 12 bar				
Filtration grade	5 μm	3,500		
	40 μm	3,500		



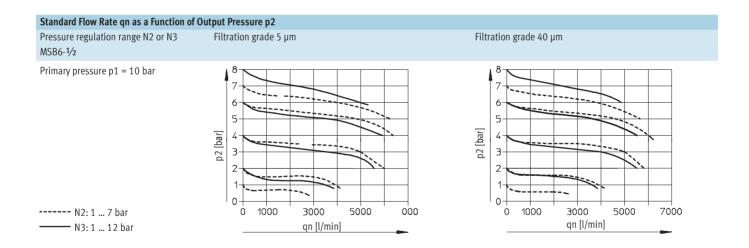
Technical Data

Operating and Environment	al Conditions							
Bowl drain		Manual	Fully automatic					
Supply pressure	[bar]	1.5 18	1.5 12					
Operating medium		Filtered compressed air, lubricated or unlubricated, filtration grade 40 µm						
Ambient temperature	[°C]	-10 +60	+5 +60					
Temperature of medium	[°C]	-10 +60	+5 +60					
Storage temperature	[°C]	-10 +60	-10 +60					
Corrosion resistance	CRC <sup>1)</sup>	2						

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

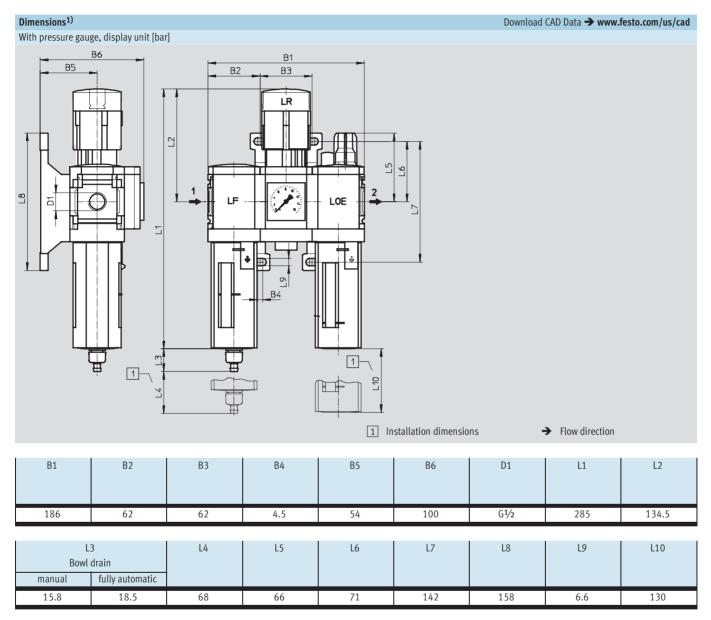
Weights [g]	Veights [g]									
Service unit combination										
With plastic bowl guard	2,000									
With metal bowl guard	2,400									
Mounting bracket	76									

• For spare parts go to: www.festo.com/en/spare\_parts\_service



# **Pre-configured Combination Unit 9 – Metric Series**Dimensional Drawings





<sup>1)</sup> Dimensions are in millimeters, unless otherwise noted.

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

# Pre-configured Combination Unit 9 – Metric Series Ordering Data – Pre-configured Products



Ordering Data										
Pressure regulation range 1 7 bar										
Bowl drain Connection Filtration grade 40 µm										
		Part No. Type	LT							
Plastic bowl guard										
Manual	G <sup>1</sup> / <sub>2</sub>	530212 MSB6-½:H2N2M1-WP	Q							
Fully automatic	G <sup>1</sup> / <sub>2</sub>	530206 MSB6-½:H1N2M1-WP	Q							

Ordering Data							
Pressure regulation rang	ge 1 12 bar						
Bowl drain	Connection	Filtration gra	ade 5 µm			Filtration grade 40 µm	
		Part No.	Туре	LT		Part No. Type	LT
Plastic bowl guard							
Manual	G <sup>1</sup> / <sub>2</sub>	530218	MSB6-1/2:H3N3M1-WP	1W		530214 MSB6-½:H2N3M1-WP	1W
Fully automatic	G <sup>1</sup> / <sub>2</sub>	530220	MSB6-1/2:H4N3M1-WP	1W	Ī	530208 MSB6-½:H1N3M1-WP	1W
Metal bowl guard							
Manual	G <sup>1</sup> / <sub>2</sub>	-				530216 MSB6-½:H8N3M2-WP	Q
Fully automatic	G <sup>1</sup> / <sub>2</sub>	-				530210 MSB6-½:H7N3M2-WP	Q

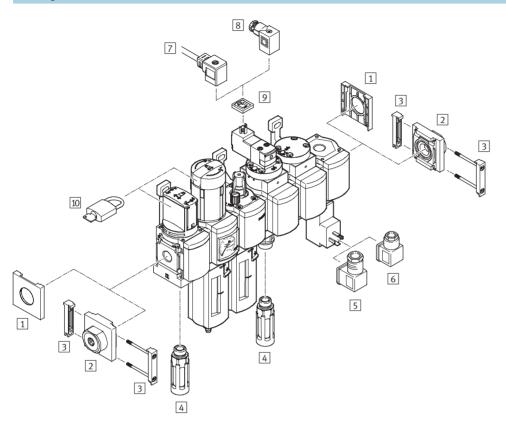
LT = Lead time **1D** typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

2007/10 – Subject to change – MS Series



Accessories Overview

#### **Mounting Attachments and Accessories**



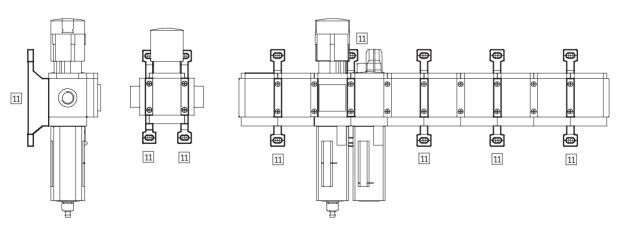
#### Note

The choice of accessories depends on the selected combination unit.

#### Range of accessories

→ See the accessories pages of the individual devices

Single unit and combination unit mounting brackets.



# Pre-configured Combination Units MSB6 – Metric Series Accessories Overview



Moun	ting Attachments and Accessories	
		→ Page
1	Cover cap	514
	MS6-END	
2	Port plate	515
	MS6-AG	
3	Body connector	515
	MS6-MV	
4	Silencer	520
	U	
5	Angled socket	520
	PEV-1/4-WD-LED	
6	Plug socket	520
	MSSD-C-4P	
7	Plug socket with cable	520
	KMEB	
8	Plug socket	520
	MSSD-EB	
9	Illuminating seal	520
	MEB-LD	
10	Padlock	520
	LRVS-D	
11	Mounting bracket (for service unit MSB-FRC)	516
	MS6-WP/WPB/WPM	

2007/10 - Subject to change - MS Series



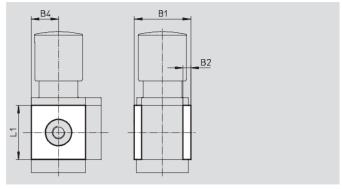
Accessories

#### 1 Cover cap MS6-END

• Can be used to cover the body sides of the first and last module if port plates are not used.

Material: Reinforced polyamide Free of copper and PTFE





<b>Dimensions and Ordering Data</b>	Dimensions and Ordering Data											
B1	B2	B4	L1	Part No.	Туре							
67	8	31	62	538780	MS6-END							

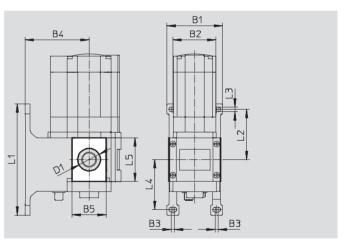
#### Mounting plate MS6-AEND

(order code: WBE; scope of delivery includes mounting bracket MS6-WPB)

 In combination with mounting bracket MS-WP or MS-WPB for mounting an individual unit on a wall with body thread

Material: Reinforced polyamide Conforms to RoHS Free of copper and PTFE





Dimens	Dimensions and ordering data														
B1	B2	В3	B	4	B5	D1	L1	L2	L3	L4	L5	CRC <sup>1)</sup>	Weight	Part No.	Туре
			WP	WPB		Ø							[g]		
79	62	4.5	54	90.5	48.4	32	158	71	6.6	71	62	2	17	535 408	MS6-AEND

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

**FESTO** 

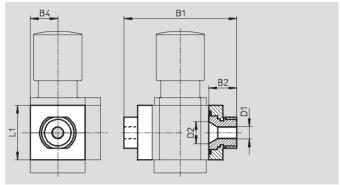
Accessories

#### 2 Port plate MS6-AG...

- Adapter for pneumatic connection
- MS6-AGE for implementing threaded connection G3/4

Material: Aluminum





Dimensions and C	Dimensions and Ordering Data													
B1	B2	В4	D1	D2		Weight [g]	Part No.	Туре						
		31	G1/4	24	62	300	526080	MS6-AGB						
115	26.5		G3/8				526081	MS6-AGC						
115	20.5		G <sup>1</sup> / <sub>2</sub>				526082	MS6-AGD						
			G3/4				526083	MS6-AGE						

#### 3 Body connector MS...-MV

• For connecting modules

Material:

Stainless steel/polyacetate



Ordering Data		
Weight	Part No.	Туре
[g]		
54	532799	MS6-MV



Accessories

#### 11 Mounting Bracket MS6-WP...

Suggested placement of wall mounting brackets when mounting air preparation combinations

1 unit: 62 mm with WP, WPB 69 mm with WPM-D

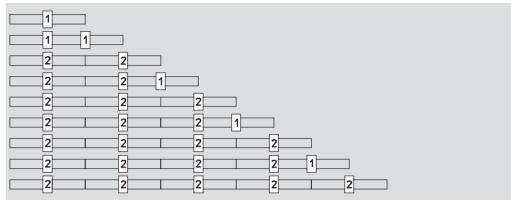
Number of units

1 2 3 4 5 6 7 8 9 10

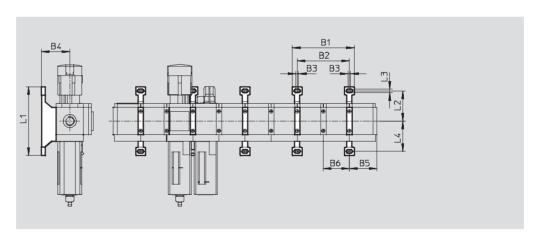
2 units: 124 mm with WP, WPB 138 mm with WPM-2D

1 Mounting bracket WP, WPB or

2 Mounting bracket WP, WPB or WPM-2D



#### Mounting dimensions



Туре	B1	B2	В3	B4	B5	В6	L1	L2	L3	L4
MS6-WP	141	124	4.5	54	64.5	62	158	71		71
MS6-WPB	141	124	4.5	90.5	04.5	62	130	/ 1	6.6	/1
MS6-WPMD	168	138	17.5	54	65.5	69	98.6	41.3		41.3



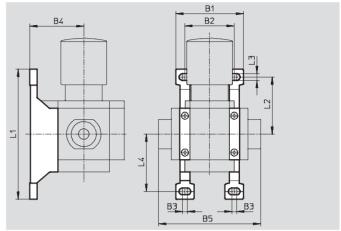
Accessories

#### Mounting bracket MS6-WP

- To connect the modules for wall mounting
- In combination with a port plate MS-AG... for mounting an individual unit on a wall
- In combination with mounting plate MS-AEND or for mounting an individual unit with body thread on a wall
- For pressure regulator LRB with angled outlet block B... at rear

Material: Die-cast aluminum





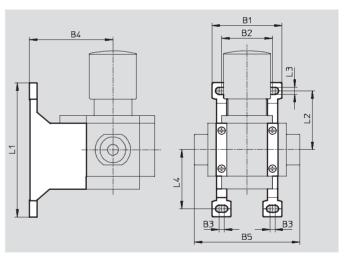
Dimensions	Dimensions and Ordering Data													
B1	B2	В3	B4	B5	L1	L2	L3		Weight [g]	Part No.	Туре			
79	62	4.5	54	115	158	71	6.6	71	76	532195	MS6-WP			

#### Mounting bracket MS6-WPB

- To connect the modules for wall mounting
- In combination with a port plate MS-AG... for mounting an individual unit on a wall
- In combination with mounting plate MS-AEND or for mounting an individual unit with direct thread on a wall
- Provides large wall gap for pressure regulator

Material: Die-cast aluminum





Dimensions	Dimensions and Ordering Data													
B1	B2	В3	B4	B5	L1	L2	L3	L4	Weight [g]	Part No.	Туре			
79	62	4.5	90.5	115	158	71	6.6	71	115	526074	MS6-WPB			

**FESTO** 

Accessories

#### Mounting bracket MS6-WPM

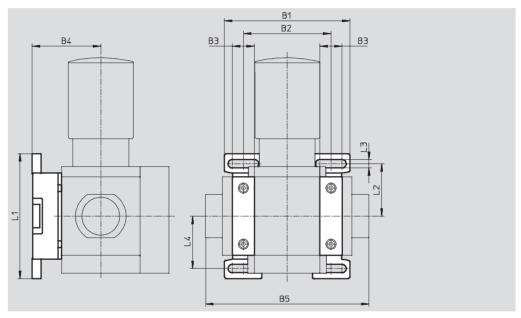
- To connect the modules for wall mounting
- In combination with a port plate MS-AG... for mounting an individual unit on a wall
- Speedy attachment and detachment
- For installation of modules with regulating knob pointing downwards

The distance piece D or 2D (designated in the type code) is included in the scope of delivery and ensures the correct clearance

Material:

Die-cast aluminum





Dimension	Dimensions and Ordering Data											
B1	B2	В3	B4	B5	L1	L2	L3	L4	Clearance	Weight	Part No.	Туре
										[g]		
99	69	17.5	54	129	98.6	41.3	6.6	41.3	62	144	526073	MS6-WPM-D
168	138	17.5	54	198	90.0	41.5	0.0	41.5	124	154	532186	MS6-WPM-2D

#### Body connector MS6-MVM

• For installation of modules with regulating knob pointing downwards

Material:

Die-cast aluminum



Ordering Data		
Size	Part No.	Туре
MS6	532801	MS6-MVM

**FESTO** 

Filter cartridge MS6-LF...







Ordering Data			
	Filtration grade	Part No. Type	
	[μm]		
Micro-filter cartridge	0.01	532909 MS6-LFM-A	1
Fine-filter cartridge	1	532910 MS6-LFM-E	3
Filter cartridge	5	534499 MS6-LFP-C	
Filter cartridge	40	534500 MS6-LFP-E	
Active carbon filter cartridge	Residual oil content ≤ 0.003 mg/m <sup>3</sup>	532911 MS6-LFX	



5 Ordering Data − Angled Socket PEV Technical data → www.festo.com/catalog/pev								
	Description	Operating voltage range		Switching status display	Part No.	Туре		
9	for PEV-1/4OD	15 30 V DC	4-pin	Yellow LED	164274	PEV-1/4-WD-LED-24		
		≤ 230 V AC ≤ 180 V DC	4-pin	Yellow LED	164275	PEV-1/4-WD-LED-230		

	6 Ordering Data	- Plug Socket MSSD				Technical data → www.festo.com/catalog/mssd		
		Description	Operating voltage range	Electrical connection	Type of mounting cable	Part No.	Туре	
					connection			
ľ		for PEV-1/4OD	≤ 250 V AC/DC	3-pin	Clamping screws	171157	MSSD-C-4P	
		for MS6-EE/DE	≤ 250 V AC/DC	3-pin	Clamping screws	151687	MSSD-EB	
				4-pin	Insulation	192745	MSSD-EB-S-M14	
					displacement			
L					technology			

7 Ordering Data	a – Plug Socket with Cabl	Technical data → www.festo.com/catalog/kmeb				
	Description	Operating voltage range	ŭ .	Cable length [m]	Part No.	Туре
	for MS6-EE/DE	24 V DC	LED	2.5	151688	KMEB-1-24-2,5-LED
***************************************		24 V DC	LED	5	151689	KMEB-1-24-5-LED
		24 V DC	LED	10	193457	KMEB-1-24-10-LED
		230 V AC	-	2.5	151690	KMEB-1-230AC-2,5
		230 V AC	_	5	151691	KMEB-1-230AC-5

9 Ordering Data	– Illuminating Seal MEB-LD		Technical data → www.festo.com/catalog/meb-ld		
	Description	Operating voltage range	Part No.	Туре	
	for plug socket with cable KMEB and plug socket	12 24 V DC	151717	MEB-LD-12-24DC	
	MSSD-EB	230 V DC/AC ±10%	151718	MEB-LD-230AC	

4 Ordering Data	a – Silencer U		Technical data → www.festo.com/catalog/u		
	Description	Pneumatic connection	Part No.	Туре	
	for MS6-EM1/EE	G1/2	6844	U-1/2-B	

10 Ordering Data – Padlock LRVS-D							
	Description	Weight [g]	Part No.	Туре			
1 // 11	for regulators, filter/regulators and manual on-off valves	120	193786	LRVS-D			

Ordering Data – Special Oil OFSW							
	Description	Scope of delivery	Part No.	Туре			
	for lubricators	1 litre	152811	OFSW-32			





Ten different types of pre-configured and assembled combination units are available. They consist of up to six different individual units with options for filtration grade and condensate drain (see table below). Mounting brackets are included. MS Series combination units have a high resistance to corrosion in typical industrial environments and offer high flow rates with compact components.

• Pneumatic connections: 1/4 NPT, 3/8 NPT, 1/2 NPT, (G3/4 NPT with optional port plate)

• Flow rates: 60 ... 180 scfm\*

• Supply pressure: 22 ... 294 psi\*

• Pressure regulation range: 4.4 ... 176 psi\*

• Filtration grade: 5 μm and 40 μm

\* Individual combination units will vary depending on selected type and option.

Combination Units											
		MSB6N-FRC	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9
Consisting of:											
On-off valve (manually actuated)	EM1	-	•	-	•	•	-	-	-	•	_
Filter regulator with pressure gauge, lockable	LFR	•	•	•	•	•	•	•	•	•	-
Pressure regulator with pressure gauge, lockable	LR	-	-	-	-	-	-	-	-	-	•
Filter	LF	-	-	-	-	-	-	-	-	-	•
Lubricator	LOE	•	•	•	•	-	-	-	-	•	•
On-off valve (solenoid actuated)	EE	-	-	•	•	-	•	-	•	-	-
Soft-start valve (pneumatically actuated)	DL	-	-	•	•	-	•	-	•	-	_
Distribution block with pressure switch	FRM	-		-	•	-	-		•	-	_
Mounting bracket	WP	-	•	•	•	•	•	•	•	•	•
Technical data → Page		522	528	531	535	539	542	546	549	553	556

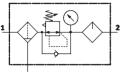
#### Note

Should you require a custom combination unit, please go to our online catalog at: www.festo.com/catalog/msb6n. Click on the blue basket icon
Then open the shopping basket on the right menu and click on the configuration icon
You can now configure your combination unit.

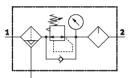


Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- Filter, regulator and lubricator function in a single unit
- High flow rate and highly efficient removal of contaminants
- Good regulating characteristics with minimal pressure hysteresis
- Setting values are secured by locking the rotary knob
- Lockable rotary knob
- Two pressure regulation ranges: 4.4 ... 103 psi and 7.4 ... 176 psi
- Choice of filter cartridges: 5  $\mu m$  or 40  $\mu m$
- With manual or integrated, fully automatic bowl drain



General Technical Data									
Pneumatic connection 1, 2		1/4 NPT	3/8 NPT	1/2 NPT					
Design		Filter regulator with press	Filter regulator with pressure gauge						
		Proportional standard mis	st lubricator						
Regulating function		With primary pressure cor	mpensation						
		With secondary venting							
		With return flow function							
		Output pressure constant							
Type of mounting		Via accessories							
Assembly position		Vertical ±5°							
Filtration grade	[µm]	5 (air purity class at the output 3.7.– to DIN ISO 8573-1)							
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)							
Bowl guard		Plastic bowl guard							
		Metal bowl guard							
Bowl drains		Manual							
		Fully automatic							
Pressure adjustment		Rotary knob with integrated lock							
Pressure regulation range [psi]		4.4 103							
		7.4 176							
Pressure indicator		With pressure gauge							

# **Pre-configured Combination Units MSB6N-FRC – Inch Series**Technical Data



Standard Nominal Flow Rate qnN <sup>1)</sup> [scfm]							
Pneumatic connection		1/4 NPT	3/8 NPT	1/2 NPT			
Pressure regulation range 4.4	103 psi						
Filtration grade	5 μm	70.6	155.3	162.4			
	40 μm	74.1	162.4	169.4			
Pressure regulation range 7.4	Pressure regulation range 7.4 176 psi						
Filtration grade	5 μm	60.0	120.0	127.1			
	40 μm	67.1	123.6	130.6			

<sup>1)</sup> Measured at p1 = 147 psi and p2 = 88 psi,  $\Delta$ p = 15 psi.

Operating and Environmental Conditions					
Bowl drains		Manual	Fully automatic		
Supply pressure	[psi]	22 294	22 176		
Operating medium		Compressed air			
Ambient temperature	[°F]	14 140	41 140		
Temperature of medium	[°F]	14 140	41 140		
Storage temperature	[°F]	14 140	14 140		
Corrosion resistance	CRC <sup>1)</sup>	2			

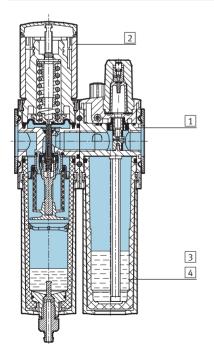
<sup>1)</sup> Corrosion resistance class 2 according to Festo standard 940 070 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Weights [lb]	
With plastic bowl guard	2.99
With metal bowl guard	3.43

• For spare parts go to: www.festo.com/en/spare\_parts\_service

#### Materials

Sectional view

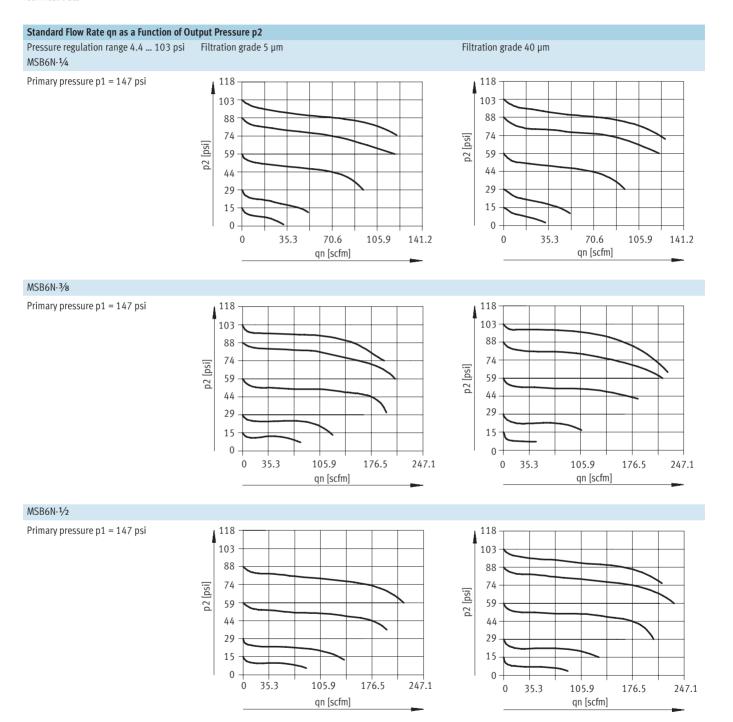


Serv	Service unit				
1	Body	Die-cast aluminum			
2	Regulating knob	Polyamide/polyacetate			
3	Plastic bowl guard	Polycarbonate			
4	Metal bowl guard	Wrought aluminum alloy			
_	Seals	Nitrile rubber			

2007/10 - Subject to change - MS Series 523

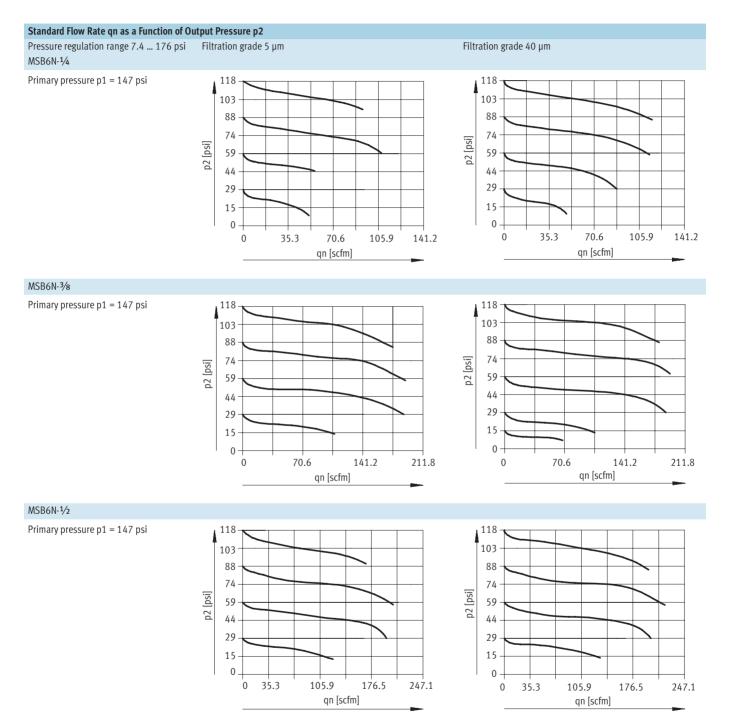


Technical Data



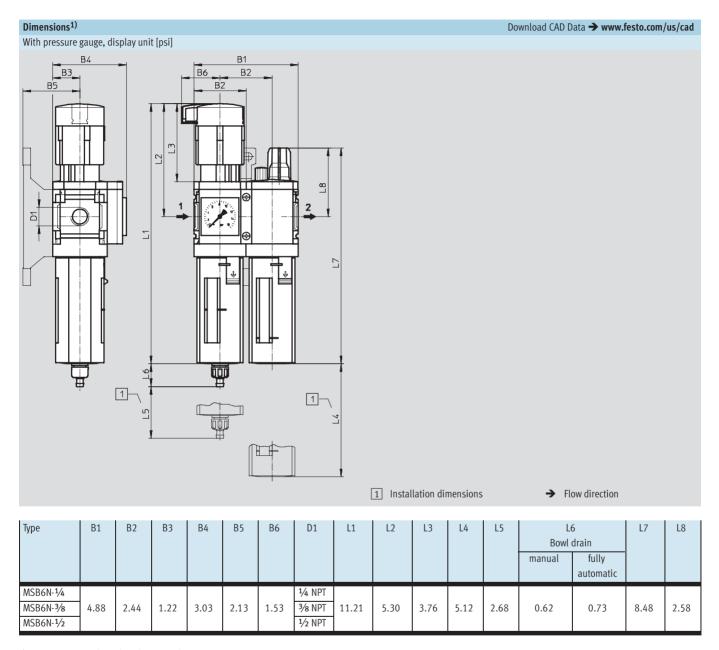


Technical Data





Dimensional Drawings



 $<sup>1) \</sup>quad \hbox{ Dimensions are in inches, unless otherwise noted.} \\$ 

# Pre-configured Combination Units MSB6N-FRC – Inch Series Ordering Data – Pre-configured Products



Ordering Data					
Pressure regulation ra	ange 4.4 103 psi				
Bowl drain	Connection	Filtration grade 5 µm		Filtration grade 40 μm	
		Part No. Type	LT	Part No. Type	LT
Plastic bowl guard					
Manual	½ NPT	534013 MSB6N-1/4-FRC3:J7M1	Q	534003 MSB6N- <sup>1</sup> / <sub>4</sub> -FRC1:J5M1	Q
	3/8 NPT	534037 MSB6N-3/8-FRC3:J7M1	Q	534027 MSB6N-3/8-FRC1:J5M1	Q
	½ NPT	533989 MSB6N-½-FRC3:J7M1	Q	533979 MSB6N-½-FRC1:J5M1	Q
Fully automatic	½ NPT	534015 MSB6N- <sup>1</sup> / <sub>4</sub> -FRC4:J8M1	Q	534011 MSB6N- <sup>1</sup> / <sub>4</sub> -FRC2:J6M1	Q
	3/8 NPT	534039 MSB6N-3/8-FRC4:J8M1	Q	534035 MSB6N-3/8-FRC2:J6M1	Q
	½ NPT	533991 MSB6N-½-FRC4:J8M1	Q	533987 MSB6N-½-FRC2:J6M1	Q

Ordering Data							
Pressure regulation ra	inge 7.4 176 psi						
Bowl drain	Connection	Filtration	grade 5 µm		Filtration	grade 40 µm	
		Part No.	Туре	LT	Part No.	Туре	LT
Plastic bowl guard							
Manual	1/4 NPT	534021	MSB6N-1/4-FRC7:J3M1	1D	534017	MSB6N-1/4-FRC5:J1M1	1D
	3/8 NPT	534045	MSB6N-3/8-FRC7:J3M1	1D	534041	MSB6N-3/8-FRC5:J1M1	1D
	1/2 NPT	533997	MSB6N-1/2-FRC7:J3M1	1W	533993	MSB6N-½-FRC5:J1M1	1W
Fully automatic	1/4 NPT	534023	MSB6N-1/4-FRC8:J4M1	1D	534019	MSB6N-1/4-FRC6:J2M1	1D
	3/8 NPT	534047	MSB6N-3/8-FRC8:J4M1	1D	534043	MSB6N-3/8-FRC6:J2M1	1D
	1/2 NPT	533999	MSB6N-1/2-FRC8:J4M1	1W	533995	MSB6N-1/2-FRC6:J2M1	1W
Metal bowl							
Manual	1/4 NPT	534007	MSB6N-1/4-FRC11:J9M2	Q	534025	MSB6N-1/4-FRC9:J11M2	Q
	3/8 NPT	534031	MSB6N-3/8-FRC11:J9M2	Q	534049	MSB6N-3/8-FRC9:J11M2	Q
	1/2 NPT	533983	MSB6N-1/2-FRC11:J9M2	Q	534001	MSB6N-½-FRC9:J11M2	Q
Fully automatic	1/4 NPT	534009	MSB6N-1/4-FRC12:J10M2	Q	534005	MSB6N-1/4-FRC10:J12M2	Q
	3/8 NPT	534033	MSB6N-3/8-FRC12:J10M2	Q	534029	MSB6N-3/8-FRC10:J12M2	Q
	1/2 NPT	533985	MSB6N-1/2-FRC12:J10M2	Q	533981	MSB6N-1/2-FRC10:J12M2	Q

LT = Lead time 1D typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

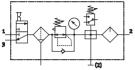
2007/10 – Subject to change – MS Series

## Pre-configured Combination Unit 1 – Inch Series

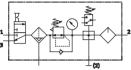
**FESTO** 

Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and lubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range
- The unit is vented when switched off
- Electrical pressure monitoring with adjustable switching pressure
- Removal of filtered and unlubricated compressed air at the Distribution block connections



This combination consists of:

- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- Distribution block MS...-FRM-Y with pressure switch, without display
- Lubricator MS...-LOE-R
- Mounting bracket MS...-WP

General Technical Data	
Pneumatic connection 1, 2, 3	1/2 NPT
Regulating function	With primary pressure compensation
	With return flow function
	With secondary venting
	Output pressure constant
Type of mounting	Via accessories
Assembly position	Vertical ±5°
Filtration grade [µm]	5 (air purity class at the output 3.7.– to DIN ISO 8573-1)
	40 (air purity class at the output 5.7. – to DIN ISO 8573-1)
Bowl guard	Plastic bowl guard
Bowl drain	Manual
	Fully automatic
Pressure adjustment	Rotary knob with detent
	Lockable with accessories
Pressure regulation range [psi]	15 176
Pressure indicator	With pressure gauge

Standard Nominal Flow Rate qnN [scfm]				
Filtration grade	5 μm	113.0		
	40 μm	116.5		

# **Pre-configured Combination Unit 1 – Inch Series**



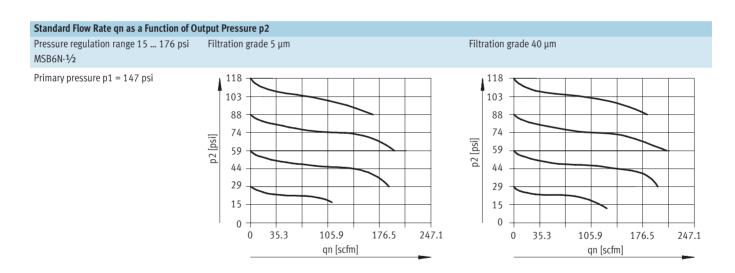
Technical Data

Operating and Environmental Conditions					
Bowl drain		Manual	Fully automatic		
Supply pressure	[psi]	22 265	22 176		
Operating medium		Filtered compressed air, lubricated or unlubricated, filtratic	on grade 40 μm		
Ambient temperature	[°F]	14 140	41 140		
Temperature of medium	[°F]	14 140	41 140		
Storage temperature	[°F]	14 140	14 140		
Corrosion resistance	CRC <sup>1)</sup>	2			

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

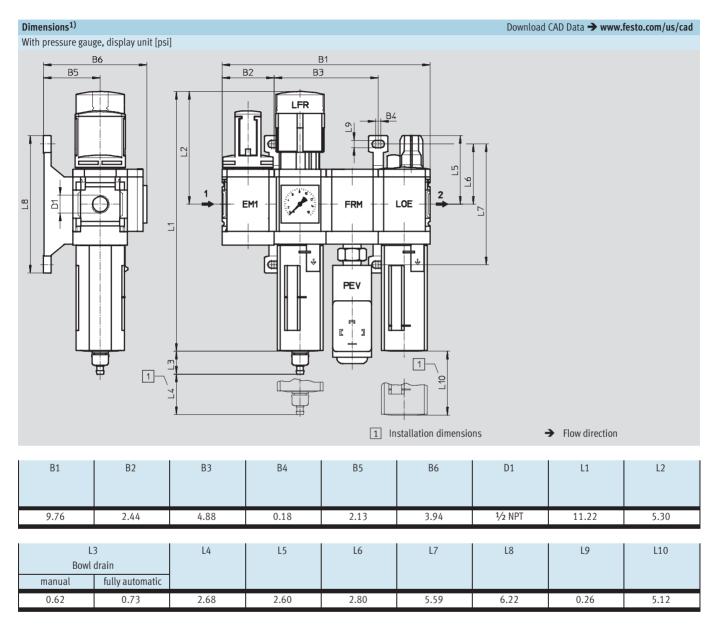
Weights [lb]	
Service unit combination	5.10
Mounting bracket	0.15

• For spare parts go to: www.festo.com/en/spare\_parts\_service



# Pre-configured Combination Unit 1 – Inch Series Dimensional Drawings, Ordering Data – Pre-configured Products

**FESTO** 



<sup>1)</sup> Dimensions are in inches, unless otherwise noted.

Ordering Data						
Pressure regulation range 1	5 176 psi					
Bowl drain	Connection	Filtration grade 5 μm			Filtration grade 40 μm	
		Part No. Type	LT		Part No. Type	LT
Plastic bowl guard	Plastic bowl guard					
Manual	½ NPT	543585 MSB6N-1/2:C3J3F3M1-WP	Q		543573 MSB6N-½:C3J1F3M1-WP	Q
Fully automatic	½ NPT	543591 MSB6N-½:C3J4F3M1-WP	Q		543579 MSB6N-½:C3J2F3M1-WP	Q

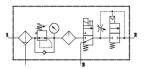
LT = Lead time 1D typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

# **Pre-configured Combination Unit 2 – Inch Series**

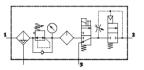
**FESTO** 

Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and lubricated compressed air
- Output pressure is infinitely adjustable within the pressure regulation range
- Gradual pressure build-up prevents sudden, unpredictable movements
- When supply pressure is closed, quick venting ensures rapid pressure reduction



This combination consists of:

- Filter regulator MS...-LFR-D7
- Lubricator MS...-LOE-R
- On-off valve MS...-EE-10V24 or MS...-EE-V24 solenoid actuated
- Soft-start valve MS...-DL pneumatically actuated
- Mounting bracket MS...-WP

General Technical Data		
Pneumatic connection 1, 2, 3		½ NPT
Regulating function		With primary pressure compensation
		With return flow function
		With secondary venting
		Output pressure constant
Type of mounting		Via accessories
Assembly position		Vertical ±5°
Filtration grade	[µm]	5 (air purity class at the output 3.7. – to DIN ISO 8573-1)
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)
Bowl guard		Plastic bowl guard
Bowl drain		Manual
		Fully automatic
Pressure adjustment		Rotary knob with detent
		Lockable with accessories
Pressure regulation range	[psi]	59 132 (with on-off valve MSEE-10V24)
	[psi]	59 176 (with on-off valve MSEE-V24)
Pressure indicator		With pressure gauge
Coil characteristics	[V DC]	12
Supply voltage	[V DC]	24

Standard Nominal Flow Rate qnN [scfm]			
Filtration grade	5 μm	67.1	
	40 μm	70.6	

# **Pre-configured Combination Unit 2 – Inch Series**



Technical Data

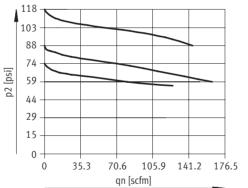
Operating and Environmental Conditions					
		Pressure regulation range 59	132 psi	Pressure regulation r	range 59 176 psi
Bowl drain		Manual	Fully automatic	Manual	Fully automatic
Supply pressure	[psi]	66 147	66 147	66 265	66 176
Operating medium		Filtered compressed air, lubricated or unlubricated, filtration grade 40 μm			
Ambient temperature	[°F]	14 122	41 122	14 140	41 140
Temperature of medium	[°F]	14 122	41 122	14 140	41 140
Storage temperature	[°F]	14 140	14 140	14 140	14 140
Corrosion resistance	CRC <sup>1)</sup>	2		•	·

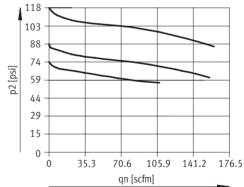
<sup>1)</sup> Corrosion resistance class 2 according to Festo standard 940 070 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Weights [lb]	
Service unit combination	6.00
Mounting bracket	0.15

• For spare parts go to: www.festo.com/en/spare\_parts\_service

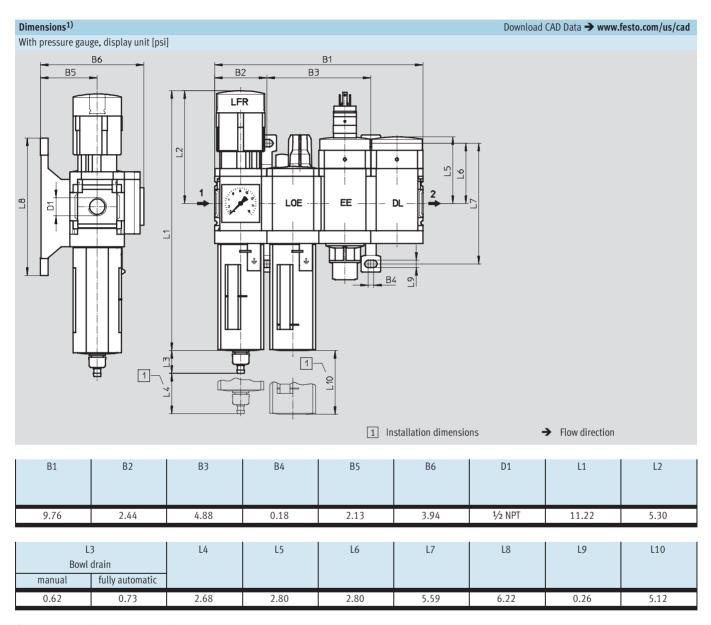
# Standard Flow Rate qn as a Function of Output Pressure p2 Pressure regulation range Filtration grade 5 μm 59 ... 132 psi / 59 ... 176 psi MSB6N-1/2 Primary pressure p1 = 147 psi 118 103 88





# Pre-configured Combination Unit 2 – Inch Series Dimensional Drawings





<sup>1)</sup> Dimensions are in inches, unless otherwise noted.

# Pre-configured Combination Unit 2 – Inch Series Ordering Data – Pre-configured Products



Ordering Data						
Pressure regulation range 5	9 132 psi					
Bowl drain	Connection	Filtration grade 5 μm			Filtration grade 40 µm	
		Part No. Type	LT		Part No. Type	LT
Plastic bowl guard	Plastic bowl guard					
Manual	½ NPT	550512 MSB6N-½:J3M1D7A1-WP	Q		550508 MSB6N-½:J1M1D7A1-WP	Q
Fully automatic	½ NPT	550514 MSB6N-½:J4M1D7A1-WP	Q		550510 MSB6N-½:J2M1D7A1-WP	Q

Ordering Data						
Pressure regulation range	59 176 psi					
Bowl drain	Connection	Filtration grade 5 μm			Filtration grade 40 μm	
		Part No. Type	LT		Part No. Type	LT
Plastic bowl guard						
Manual	1/2 NPT	541476 MSB6N-½:J3M1D1A1-WP	1W		541472 MSB6N-½:J1M1D1A1-WP	1W
Fully automatic	½ NPT	541478 MSB6N-½:J4M1D1A1-WP	1W		541474 MSB6N-½:J2M1D1A1-WP	1W

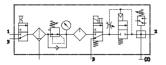
LT = Lead time **1D** typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

## **Pre-configured Combination Unit 3 – Inch Series**

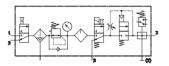
**FESTO** 

Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and lubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range
- Gradual pressure build-up prevents sudden, unpredictable movements
- To shut-off and vent the following device or the system
- Electrical pressure monitoring with adjustable switching pressure



This combination consists of:

- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- Lubricator MS...-LOE-R
- On-off valve MS...-EE-10V24 or MS...-EE-V24 solenoid actuated
- Soft-start valve MS...-DL pneumatically actuated
- Distribution block MS...-FRM-Y with pressure switch, without display
- Mounting bracket MS...-WP

General Technical Data		
Pneumatic connection 1, 2, 3		½ NPT
Regulating function		With primary pressure compensation
		With return flow function
		With secondary venting
		Output pressure constant
Type of mounting		Via accessories
Assembly position		Vertical ±5°
Filtration grade	[µm]	5 (air purity class at the output 3.7. – to DIN ISO 8573-1)
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)
Bowl guard		Plastic bowl guard
Bowl drain		Manual
		Fully automatic
Pressure adjustment		Rotary knob with detent
		Lockable with accessories
Pressure regulation range	[psi]	59 132 (with on-off valve MSEE-10V24)
	[psi]	59 176 (with on-off valve MSEE-V24)
Pressure indicator		With pressure gauge
Coil characteristics	[V DC]	12
Supply voltage	[V DC]	24

Standard Nominal Flow Rate qnN [scfm]			
Filtration grade	5 μm	74.1	
	40 μm	81.2	

2007/10 - Subject to change - MS Series

# **Pre-configured Combination Unit 3 – Inch Series**



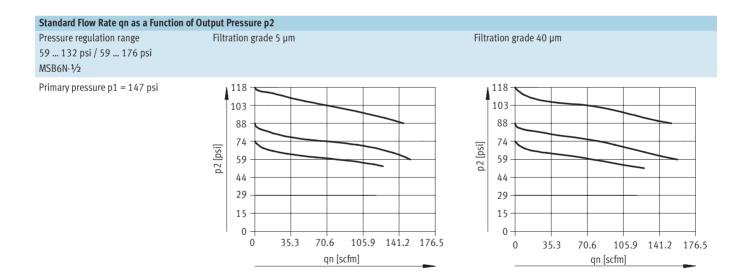
Technical Data

Operating and Environmental Conditions					
		Pressure regulation range 59.	132 psi	Pressure regulation range 59	. 176 psi
Bowl drain		Manual	Fully automatic	Manual	Fully automatic
Supply pressure	[psi]	66 147	66 147	66 265	66 176
Operating medium		Filtered compressed air, lubricated or unlubricated, filtration grade 40 µm			
Ambient temperature	[°F]	14 122	41 122	14 140	41 140
Temperature of medium	[°F]	14 122	41 122	14 140	41 140
Storage temperature	[°F]	14 140	14 140	14 140	14 140
Corrosion resistance	CRC <sup>1)</sup>	2			

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

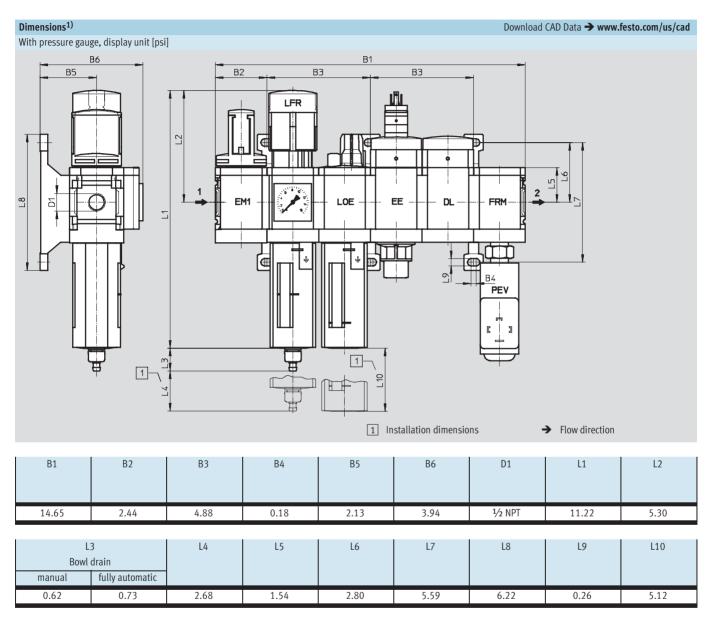
Weights [lb]	
Service unit combination	8.00
Mounting bracket	0.15

• For spare parts go to: www.festo.com/en/spare\_parts\_service



# Pre-configured Combination Unit 3 – Inch Series Dimensional Drawings





<sup>1)</sup> Dimensions are in inches, unless otherwise noted.

# Pre-configured Combination Unit 3 – Inch Series Ordering Data – Pre-configured Products



Ordering Data							
Pressure regulation range 5	9 132 psi						
Bowl drain	Connection	Filtration grade 5 μm			Filtration g	grade 40 µm	
		Part No. Type	LT		Part No.	Type	LT
Plastic bowl guard							
Manual	½ NPT	550504 MSB6N-½:C3J3M1D	7A1F3-WP Q		550500	MSB6N-1/2:C3J1M1D7A1F3-WP	Q
Fully automatic	½ NPT	550506 MSB6N-1/2:C3J4M1D	7A1F3-WP Q		550502	MSB6N-½:C3J2M1D7A1F3-WP	Q

Ordering Data						
Pressure regulation range	59 176 psi					
Bowl drain	Connection	Filtration grade 5 μm			Filtration grade 40 µm	
		Part No. Type	LT		Part No. Type	LT
Plastic bowl guard						
Manual	1/2 NPT	543587 MSB6N-½:C3J3M1D1A1F3-WP	Q		543575 MSB6N-½:C3J1M1D1A1F3-WP	Q
Fully automatic	1/2 NPT	543593 MSB6N-½:C3J4M1D1A1F3-WP	Q		543581 MSB6N-½:C3J2M1D1A1F3-WP	Q

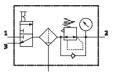
LT = Lead time **1D** typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

# **Pre-configured Combination Unit 4 – Inch Series**

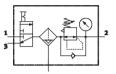
**FESTO** 

Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and unlubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range



This combination consists of:

- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- Mounting bracket MS...-WP

General Technical Data		
Pneumatic connection 1, 2, 3		1/2 NPT
Regulating function		With primary pressure compensation
		With return flow function
		With secondary venting
		Output pressure constant
Type of mounting		Via accessories
Assembly position		Vertical ±5°
Filtration grade	[µm]	5 (air purity class at the output 3.7.– to DIN ISO 8573-1)
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)
Bowl guard		Plastic bowl guard
Bowl drain		Manual
		Fully automatic
Pressure adjustment		Rotary knob with detent
		Lockable with accessories
Pressure regulation range	[psi]	4.4 176
Pressure indicator		With pressure gauge

Standard Nominal Flow Rate qnN [scfm]		
Filtration grade	5 μm	169.4
	40 μm	180.0

2007/10 – Subject to change – MS Series

# **Pre-configured Combination Unit 4 – Inch Series**



Technical Data

Operating and Environmental Conditions				
Bowl drain		Manual	Fully automatic	
Supply pressure	[psi]	12 265	22 176	
Operating medium		Filtered compressed air, lubricated or unlubricated, filtration gr	rade 40 µm	
Ambient temperature	[°F]	14 140	41 140	
Temperature of medium	[°F]	14 140	41 140	
Storage temperature	[°F]	14 140	14 140	
Corrosion resistance	CRC <sup>1)</sup>	2		

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

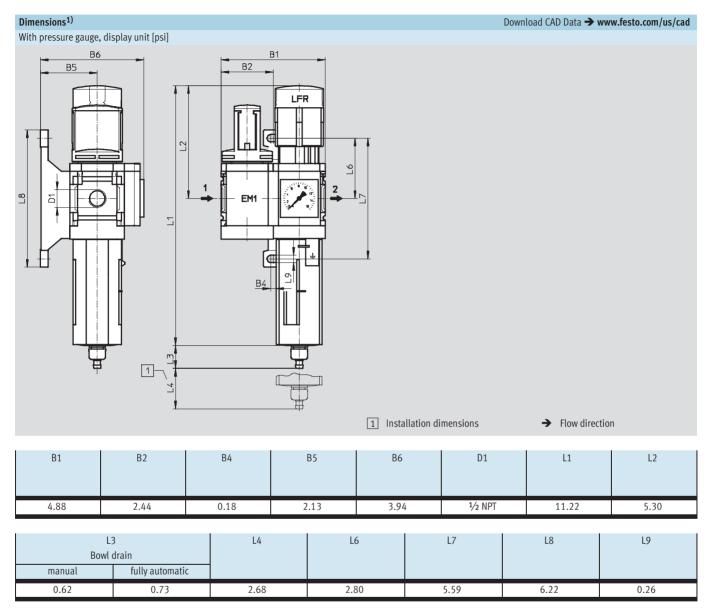
Weights [lb]	
Service unit combination	2.20
Mounting bracket	0.15

• For spare parts go to: www.festo.com/en/spare\_parts\_service

#### Standard Flow Rate qn as a Function of Output Pressure p2 Pressure regulation range 7.4 ... 176 psi Filtration grade 5 μm Filtration grade 40 µm MSB6N-1/2 Primary pressure p1 = 147 psi 118 118 103 103 88 88 74 74 p2 [psi] 59 59 44 44 29 29 15 15 0 35.3 0 35.3 105.9 176.5 247.1 0 105.9 176.5 247.1 qn [scfm] qn [scfm]

# Pre-configured Combination Unit 4 – Inch Series Dimensional Drawings, Ordering Data – Pre-configured Products





<sup>1)</sup> Dimensions are in inches, unless otherwise noted.

Ordering Data						
Pressure regulation range 7.4 176 psi						
Bowl drain	Connection	Filtration grade 5 µm			Filtration grade 40 µm	
		Part No. Type	LT		Part No. Type	LT
Plastic bowl guard						
Manual	½ NPT	543589 MSB6N-½:C3J3-WP	Q		543577 MSB6N-1/2:C3J1-WP	Q
Fully automatic	½ NPT	543595 MSB6N-½:C3J4-WP	Q		543583 MSB6N-½:C3J2-WP	Q

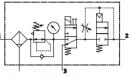
LT = Lead time 1D typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

# **Pre-configured Combination Unit 5 – Inch Series**

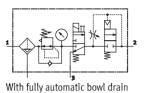
**FESTO** 

Technical Data

#### ISO Symbol



With manual bowl drain



• For filtered and unlubricated compressed air

- Output pressure is infinitely adjustable within the pressure regulation range
- Gradual pressure build-up prevents sudden, unpredictable movements
- When supply pressure is closed, quick venting ensures rapid pressure reduction



This combination consists of:

- Filter regulator MS...-LFR-D7
- On-off valve MS...-EE-10V24 or MS...-EE-V24 solenoid actuated
- Soft-start valve MS...-DL pneumatically actuated
- Mounting bracket MS...-WP

General Technical Data				
Pneumatic connection 1, 2, 3		1/2 NPT		
Regulating function		With primary pressure compensation		
		With return flow function		
		With secondary venting		
		Output pressure constant		
Type of mounting		Via accessories		
Assembly position		Vertical ±5°		
Filtration grade	[µm]	5 (air purity class at the output 3.7.– to DIN ISO 8573-1)		
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)		
Bowl guard		Plastic bowl guard		
Bowl drain		Manual		
		Fully automatic		
Pressure adjustment		Rotary knob with detent		
		Lockable with accessories		
Pressure regulation range	[psi]	59 132 (with on-off valve MSEE-10V24)		
	[psi]	59 176 (with on-off valve MSEE-V24)		
Pressure indicator		With pressure gauge		
Coil characteristics	[V DC]	12		
Supply voltage	[V DC]	24		

Standard Nominal Flow Rate qnN [scfm]			
Filtration grade	5 μm	105.9	
	40 μm	109.4	

# **Pre-configured Combination Unit 5 – Inch Series**



Technical Data

Operating and Environmental Conditions						
		Pressure regulation range 59 132 psi		Pressure regulation r	Pressure regulation range 59 176 psi	
Bowl drain		Manual	Fully automatic	Manual	Fully automatic	
Supply pressure	[psi]	66 147	66 147	66 265	66 176	
Operating medium		Filtered compressed air, lubricated or unlubricated, filtration grade 40 µm				
Ambient temperature	[°F]	14 122	41 122	14 140	41 140	
Temperature of medium	[°F]	14 122	41 122	14 140	41 140	
Storage temperature	[°F]	14 140	14 140	14 140	14 140	
Corrosion resistance	CRC <sup>1)</sup>	2				

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

Weights [lb]	
Service unit combination	4.80
Mounting bracket	0.15

• For spare parts go to: www.festo.com/en/spare\_parts\_service

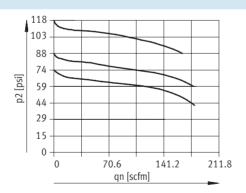
#### Standard Flow Rate qn as a Function of Output Pressure p2

Pressure regulation range 59 ... 132 psi / 59... 176 psi

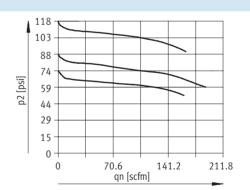
MSB6N-1/2

Primary pressure p1 = 147 psi

Filtration grade 5  $\mu m$ 



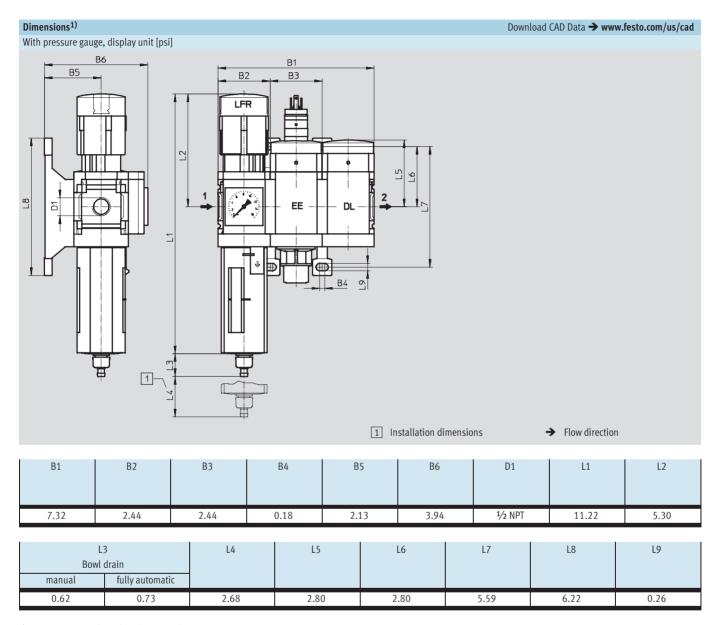
Filtration grade 40 µm



# **Pre-configured Combination Unit 5 – Inch Series**

**FESTO** 

Dimensional Drawings



 $<sup>1) \</sup>quad \hbox{ Dimensions are in inches, unless otherwise noted.} \\$ 

# Pre-configured Combination Unit 5 – Inch Series Ordering Data – Pre-configured Products



Ordering Data									
Pressure regulation range 5	Pressure regulation range 59 132 psi								
Bowl drain Connection Filtration grade 5 μm Filtration grade 40 μm									
		Part No. Type	LT		Part No. Type	LT			
Plastic bowl guard									
Manual	½ NPT	550511 MSB6N-½:J3D7A1-WP	Q		550507 MSB6N-½:J1D7A1-WP	Q			
Fully automatic	½ NPT	550513 MSB6N-½:J4D7A1-WP	Q		550509 MSB6N-½:J2D7A1-WP	Q			

Ordering Data								
Pressure regulation range 5	9 176 psi							
Bowl drain Connection Filtration grade 5 μm Filtration grade 40 μm								
		Part No. Type	LT		Part No. Type	LT		
Plastic bowl guard								
Manual	½ NPT	541475 MSB6N-½:J3D1A1-WP	1W		541471 MSB6N-½:J1D1A1-WP	1W		
Fully automatic	½ NPT	541477 MSB6N-½:J4D1A1-WP	1W		541473 MSB6N-½:J2D1A1-WP	1W		

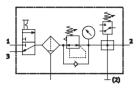
LT = Lead time **1D** typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

2007/10 – Subject to change – MS Series

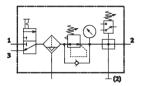
**FESTO** 

Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and unlubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range
- Electrical pressure monitoring with adjustable switching pressure



This combination consists of:

- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- Distribution block MS...-FRM-Y with pressure switch, without display
- Mounting bracket MS...-WP

General Technical Data							
Pneumatic connection 1, 2, 3		1/ <sub>2</sub> NPT					
Regulating function		With primary pressure compensation					
		With return flow function					
		With secondary venting					
		Output pressure constant					
Type of mounting		Via accessories					
Assembly position		Vertical ±5°					
Filtration grade	[µm]	5 (air purity class at the output 3.7. – to DIN ISO 8573-1)					
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)					
Bowl guard		Plastic bowl guard					
Bowl drain		Manual					
		Fully automatic					
Pressure adjustment		Rotary knob with detent					
		Lockable with accessories					
Pressure regulation range	[psi]	7.4 176					
Pressure indicator	•	With pressure gauge					

Standard Nominal Flow Rate qnN [scfm]				
Filtration grade	5 μm	155.3		
	40 μm	158.9		



Technical Data

lubricating agents.

Operating and Environmental Conditions					
Bowl drain		Manual	Fully automatic		
Supply pressure	[psi]	12 265	22 176		
Operating medium		Filtered compressed air, lubricated or unlubricated, filtration grade 40 μm			
Ambient temperature	[°F]	14 140	41 140		
Temperature of medium	[°F]	14 140	41 140		
Storage temperature	[°F]	14 140	14 140		
Corrosion resistance	CRC <sup>1)</sup>	2			

<sup>1)</sup> 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 normal industrial environment or media such as coolants or

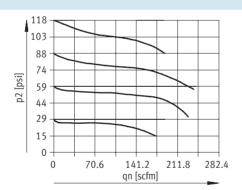
Weights [lb]	
Service unit combination	4.00
Mounting bracket	0.15

• For spare parts go to: www.festo.com/en/spare\_parts\_service

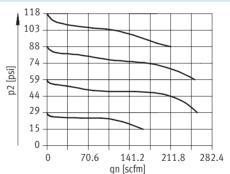
#### Standard Flow Rate qn as a Function of Output Pressure p2

Pressure regulation range 7.4 ... 176 psi  $\,$  Filtration grade 5  $\mu m$  MSB6N-1/2

Primary pressure p1 = 147 psi

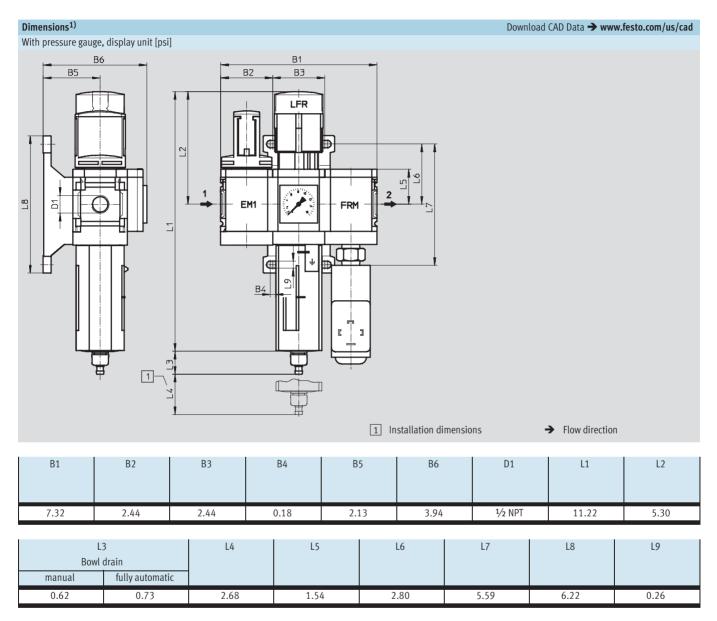


# Filtration grade 40 µm



# Pre-configured Combination Unit 6 – Inch Series Dimensional Drawings, Ordering Data – Pre-configured Products

**FESTO** 



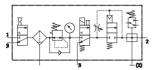
<sup>1)</sup> Dimensions are in inches, unless otherwise noted.

Ordering Data								
Pressure regulation range 7	Pressure regulation range 7.4 176 psi							
Bowl drain	Connection	Filtration grade 5 µm			Filtration grade 40 µm			
		Part No. Type	LT		Part No. Type	LT		
Plastic bowl guard								
Manual	½ NPT	543586 MSB6N-½:C3J3F3-WP	Q		543574 MSB6N-½:C3J1F3-WP	Q		
Fully automatic	½ NPT	543592 MSB6N-½:C3J4F3-WP	Q		543580 MSB6N-½:C3J2F3-WP	Q		

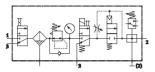
LT = Lead time 1D typically ships same day/next day 1W typically ships within 1 week **Q** request a quote for lead time

**FESTO** Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and unlubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range
- Gradual pressure build-up prevents sudden, unpredictable movements
- To shut-off and vent the following device or the system
- Electrical pressure monitoring with adjustable switching pressure



This combination consists of:

- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- On-off valve MS...-EE-10V24 or MS...-EE-V24 solenoid actuated
- Soft-start valve MS...-DL pneumatically actuated
- Distribution block MS...-FRM-Y with pressure switch, without display
- Mounting bracket MS...-WP

General Technical Data		
Pneumatic connection 1, 2, 3		1/2 NPT
Regulating function		With primary pressure compensation
		With return flow function
		With secondary venting
		Output pressure constant
Type of mounting		Via accessories
Assembly position		Vertical ±5°
Filtration grade	[µm]	5 (air purity class at the output 3.7. – to DIN ISO 8573-1)
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)
Bowl guard		Plastic bowl guard
Bowl drain		Manual
		Fully automatic
Pressure adjustment		Rotary knob with detent
		Lockable with accessories
Pressure regulation range	[psi]	59 132 (with on-off valve MSEE-10V24)
[psi]		59 176 (with on-off valve MSEE-V24)
Pressure indicator		With pressure gauge
Coil characteristics	[V DC]	12
Supply voltage	[V DC]	24

Standard Nominal Flow Rate qnN [scfm]			
Filtration grade	5 μm	105.9	
	40 μm	109.4	

2007/10 - Subject to change - MS Series



Technical Data

Operating and Environmental Conditions								
		Pressure regulation range 59.	Pressure regulation range 59 132 psi		. 176 psi			
Bowl drain		Manual	Fully automatic	Manual	Fully automatic			
Supply pressure	[psi]	66 147	66 147	66 265	66 176			
Operating medium		Filtered compressed air, lubricated or unlubricated, filtration grade 40 µm						
Ambient temperature	[°F]	14 122	41 122	14 140	41 140			
Temperature of medium	[°F]	14 122	41 122	14 140	41 140			
Storage temperature	[°F]	14 140	14 140	14 140	14 140			
Corrosion resistance	CRC <sup>1)</sup>	2						

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

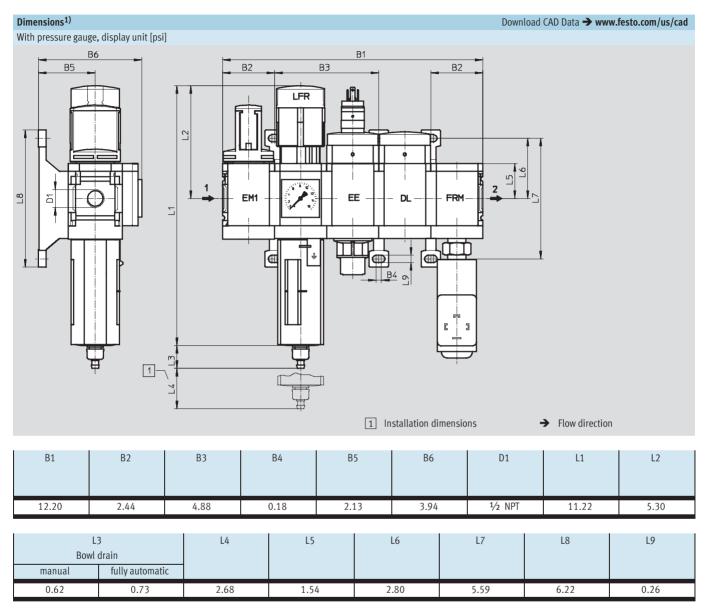
Weights [lb]	
Service unit combination	7.00
Mounting bracket	0.15

• For spare parts go to: www.festo.com/en/spare\_parts\_service

#### Standard Flow Rate qn as a Function of Output Pressure p2 Pressure regulation range Filtration grade 5 µm Filtration grade 40 µm 59 ... 132 psi / 59 ... 176 psi MSB6N-1/2 Primary pressure p1 = 147 psi 118 118 103 103 88 88 p2 [psi] 44 44 29 29 15 15 0 0 70.6 105.9 141.2 176.5 105.9 141.2 176.5 qn [scfm] qn [scfm]

# Pre-configured Combination Unit 7 – Inch Series Dimensional Drawings





<sup>1)</sup> Dimensions are in inches, unless otherwise noted.

# Pre-configured Combination Unit 7 – Inch Series Ordering Data – Pre-configured Products



Ordering Data									
Pressure regulation range 5	Pressure regulation range 59 132 psi								
Bowl drain Connection Filtration grade 5 µm						Filtration grade 40 μm			
		Part No.	Туре	LT		Part No. Type	LT		
Plastic bowl guard									
Manual	½ NPT	550503	MSB6N-1/2:C3J3D7A1F3-WP	Q		550499 MSB6N-½:C3J1D7A1F3-WP	Q		
Fully automatic	½ NPT	550505	MSB6N-1/2:C3J4D7A1F3-WP	Q		550501 MSB6N-½:C3J2D7A1F3-WP	Q		

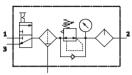
Ordering Data								
Pressure regulation range 5	Pressure regulation range 59 176 psi							
Bowl drain Connection Filtration grade 5 µm Filtration				Filtration grade 40 µm				
		Part No. Type	2	LT		Part No. Type	LT	
Plastic bowl guard								
Manual	½ NPT	543584 MSB	36N-½:C3J3D1A1F3-WP	Q		543572 MSB6N-½:C3J1D1A1F3-WP	Q	
Fully automatic	½ NPT	543590 MSB	36N-½:C3J4D1A1F3-WP	Q		543578 MSB6N-½:C3J2D1A1F3-WP	Q	

LT = Lead time 1D typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

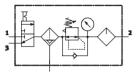
**FESTO** 

Technical Data

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and lubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range



This combination consists of:

- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- Lubricator MS...-LOE-R
- Mounting bracket MS...-WP

General Technical Data		
Pneumatic connection 1, 2, 3		1/2 NPT
Regulating function		With primary pressure compensation
		With return flow function
		With secondary venting
		Output pressure constant
Type of mounting		Via accessories
Assembly position		Vertical ±5°
Filtration grade	[µm]	5 (air purity class at the output 3.7.– to DIN ISO 8573-1)
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)
Bowl guard		Plastic bowl guard
Bowl drain		Manual
		Fully automatic
Pressure adjustment		Rotary knob with detent
		Lockable with accessories
Pressure regulation range	[psi]	15 176
Pressure indicator		With pressure gauge

Standard Nominal Flow Rate qnN [scfm]				
Filtration grade	5 μm	105.9		
	40 μm	109.4		



Technical Data

Operating and Environmental Conditions						
Bowl drain		Manual	Fully automatic			
Supply pressure	[psi]	22 265	22 176			
Operating medium		Filtered compressed air, lubricated or unlubricated, filtration grade 40 µm				
Ambient temperature	[°F]	14 140	41 140			
Temperature of medium	[°F]	14 140	41 140			
Storage temperature	[°F]	14 140	14 140			
Corrosion resistance	CRC <sup>1)</sup>	2				

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

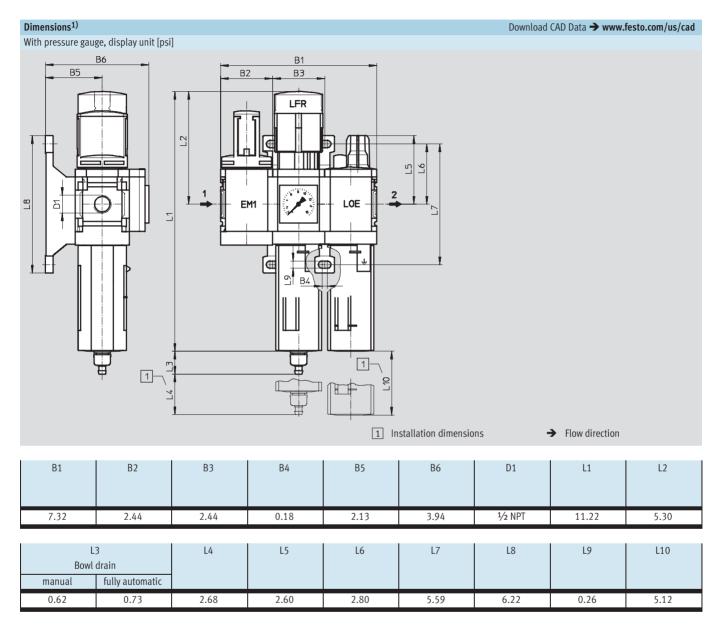
Weights [lb]	
Service unit combination	3.50
Mounting bracket	0.15

• For spare parts go to: www.festo.com/en/spare\_parts\_service

#### Standard Flow Rate qn as a Function of Output Pressure p2 Filtration grade 40 µm Pressure regulation range 15 ... 176 psi Filtration grade 5 μm MSB6N-1/2 Primary pressure p1 = 147 psi 118 118 103 103 88 88 74 74 p2 [psi] p2 [psi] 59 59 44 44 29 29 15 15 0 35.3 105.9 176.5 247.1 35.3 105.9 176.5 247.1 qn [scfm] qn [scfm]

# Pre-configured Combination Unit 8 – Inch Series Dimensional Drawings, Ordering Data – Pre-configured Products





<sup>1)</sup> Dimensions are in inches, unless otherwise noted.

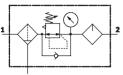
Ordering Data								
Pressure regulation range 1	Pressure regulation range 15 176 psi							
Bowl drain	Connection	Connection Filtration grade 5 µm			Filtration grade 40 µm			
		Part No. Type	LT		Part No. Type	LT		
Plastic bowl guard								
Manual	½ NPT	543588 MSB6N-½:C3J3M1-WP	Q		543576 MSB6N-½:C3J1M1-WP	Q		
Fully automatic	½ NPT	543594 MSB6N-½:C3J4M1-WP	Q		543582 MSB6N-½:C3J2M1-WP	Q		

LT = Lead time 1D typically ships same day/next day **1W** typically ships within 1 week **Q** request a quote for lead time

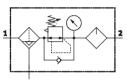
# **Pre-configured Combination Unit 9 – Inch Series**Technical Data

**FESTO** 

#### ISO Symbol



With manual bowl drain



With fully automatic bowl drain

- For filtered and lubricated compressed air
- Output pressure is infinitely adjustable within the pressure regulation range



This combination consists of:

- Filter MS...-LF
- Pressure regulator MS...-LR
- Lubricator MS...-LOE
- Mounting bracket MS...-WP

General Technical Data				
Pneumatic connection 1, 2		1/2 NPT		
Type of mounting		Via accessories		
Assembly position		Vertical ±5°		
Filtration grade	[µm]	5 (air purity class at the output 3.7.– to DIN ISO 8573-1)		
		40 (air purity class at the output 5.7.– to DIN ISO 8573-1)		
Bowl guard		Plastic bowl guard		
Bowl drain		Manual		
		Fully automatic		
Pressure adjustment		Rotary knob with detent		
		Lockable with accessories		
Pressure regulation range N3 [psi]		15 176		
Pressure indicator		With pressure gauge		

Standard Nominal Flow Rate qnN [scfm]					
Filtration grade	5 μm	123.6			
	40 μm	123.6			



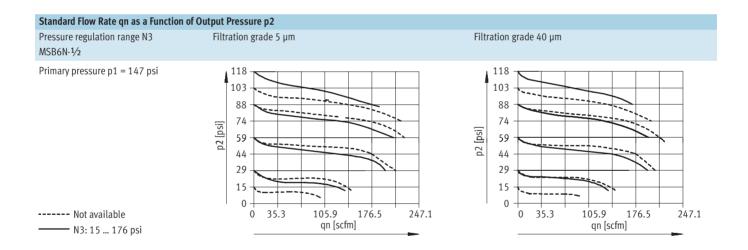
Technical Data

Operating and Environmental Conditions						
Bowl drain		Manual	Fully automatic			
Supply pressure	[psi]	22 265	22 176			
Operating medium		Filtered compressed air, lubricated or unlubricated, filtration grade 40 µm				
Ambient temperature	[°F]	14 140	41 140			
Temperature of medium	[°F]	14 140	41 140			
Storage temperature	[°F]	14 140	14 140			
Corrosion resistance	CRC <sup>1)</sup>	2				

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.

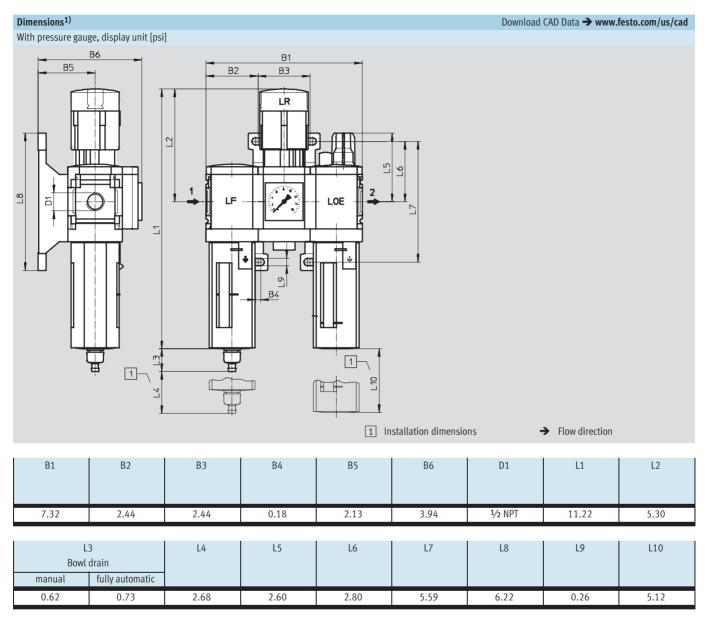
Weights [lb]				
With plastic bowl guard	4.00			
Mounting bracket	0.15			

• For spare parts go to: www.festo.com/en/spare\_parts\_service



# Pre-configured Combination Unit 9 – Inch Series Dimensional Drawings, Ordering Data – Pre-configured Products

**FESTO** 



<sup>1)</sup> Dimensions are in inches, unless otherwise noted.

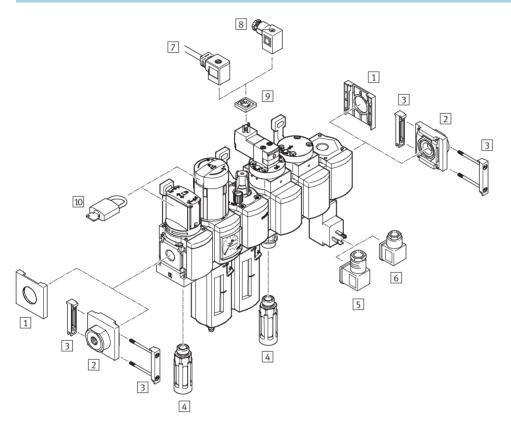
Ordering Data							
Pressure regulation range	15 176 psi						
Bowl drain	Connection	Filtration grade 5 µm			Filtration grade 40 µm		
		Part No. Type	LT		Part No. Type	LT	
Plastic bowl guard							
Manual	1/2 NPT	541469 MSB6N-½:H3N3M1-WP	1W		541468 MSB6N-½:H2N3M1-WP	1W	
Fully automatic	½ NPT	541470 MSB6N-1/2:H4N3M1-WP	1W		541467 MSB6N-½:H1N3M1-WP	1W	

LT = Lead time 1D typically ships same day/next day 1W typically ships within 1 week **Q** request a quote for lead time

# **Pre-configured Combination Units MSB6N – Inch Series**Accessories Overview



#### **Mounting Attachments and Accessories**



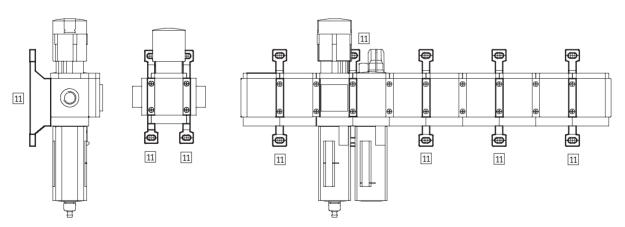
#### Note

The choice of accessories depends on the selected combination unit.

#### Range of accessories

→ See the accessories pages of the individual devices

Single unit and combination unit mounting brackets.



# **Pre-configured Combination Units MSB6N – Inch Series**Accessories Overview



Mount	ting Attachments and Accessories	
		→ Page
1	Cover cap	561
	MS6-END	
2	Port plate	562
	MS6N-AQ	
3	Body connector	562
	MS6-MV	
4	Silencer	567
	U	
5	Angled socket	567
	PEV-1/4-WD-LED	
6	Plug socket	567
	MSSD-C-4P	
7	Plug socket with cable	567
	KMEB	
8	Plug socket	567
	MSSD-EB	
9	Illuminating seal	567
	MEB-LD	
10	Padlock	567
	LRVS-D	
11	Mounting bracket (for service unit MSB-FRC)	563
	MS6-WP/WPB/WPM	

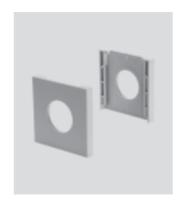


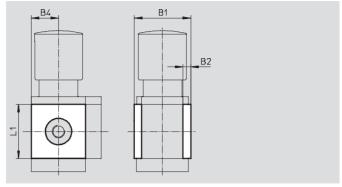
Accessories

#### 1 Cover cap MS6-END

• Can be used to cover the body sides of the first and last module if port plates are not used.

#### Material: Reinforced polyamide Free of copper and PTFE





Dimensions and Ordering Data											
B1	B2	B4	L1	Part No.	Туре						
2.64	0.31	1.22	2.44	538780	MS6-END						

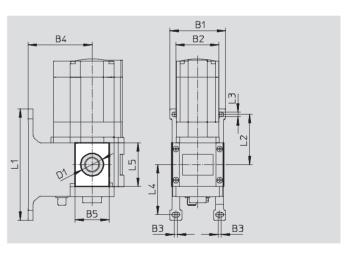
#### Mounting plate MS6-AEND

(order code: WBE; scope of delivery includes mounting bracket MS6-WPB)

 In combination with mounting bracket MS-WP or MS-WPB for mounting an individual unit on a wall with body thread

#### Material: Reinforced polyamide Conforms to RoHS Free of copper and PTFE





Dimens	Dimensions and ordering data														
B1	B2	В3	B	4	B5	D1	L1	L2	L3	L4	L5		o o	Part No.	Туре
			WP	WPB		Ø							[lb]		
3.11	2.44	0.18	2.13	3.56	1.91	1.26	6.22	2.80	0.26	2.80	2.44	2	0.03	535 408	MS6-AEND

<sup>1)</sup> 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 normal industrial environment or media such as coolants or lubricating agents.



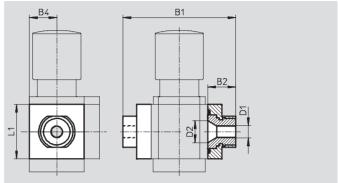
Accessories

#### 2 Port plate MS6N-AQ...

- Adapter for pneumatic connection
- MS6-AGE for implementing threaded connection 3/4 NPT

Material: Aluminum





Dimensions and C	Dimensions and Ordering Data										
B1	B2	B4	D1	D2	L1	Weight [lb]	Part No.	Туре			
			½ NPT				526076	MS6N-AQN			
4.53	1.04	1.22	3/8 NPT	0.94	2.44	0.60	526077	MS6N-AQP			
4.55	1.04	1.22	½ NPT	0.94	2.44	0.00	526078	MS6N-AQR			
			3/4 NPT				526079	MS6N-AQS			

#### 3 Body connector MS...-MV

• For connecting modules

Material:

Stainless steel/polyacetate



Ordering Data		
Weight	Part No.	Туре
[lb]		
0.11	532799	MS6-MV



Accessories

#### 11 Mounting Bracket MS6-WP...

Suggested placement of wall mounting brackets when mounting air preparation combinations

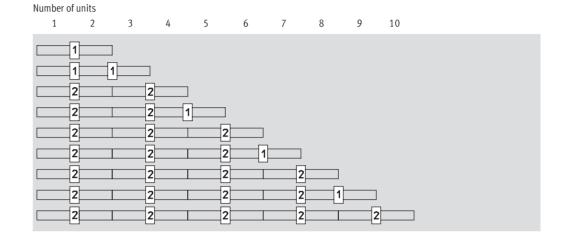
1 unit: 2.44 in with WP, WPB

2.715 in with WPM-D

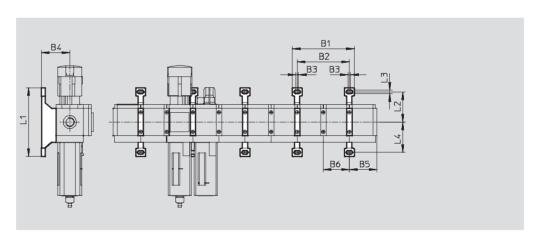
2 units: 4.88 in with WP, WPB 5.43 in with WPM-2D

1 Mounting bracket WP, WPB or

2 Mounting bracket WP, WPB or WPM-2D



#### Mounting dimensions



Туре	B1	B2	В3	B4	B5	В6	L1	L2	L3	L4
MS6-WP	5.55	4.88	0.18	2.13	2.54	2.44	6 22	2.80		2.80
MS6-WPB	5.55	4.00	0.10	3.56	2.54	2.44	0.22	2.00	0.26	2.00
MS6-WPMD	6.61	5.43	0.69	2.13	2.58	2.72	3.88	1.63		1.63



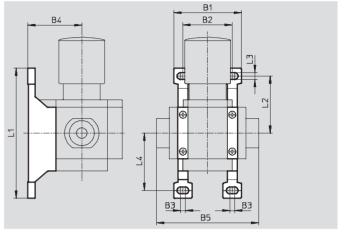
Accessories

#### Mounting bracket MS6-WP

- To connect the modules for wall mounting
- In combination with a port plate MS-AG... for mounting an individual unit on a wall
- In combination with mounting plate MS-AEND or for mounting an individual unit with body thread on a wall
- For pressure regulator LRB with angled outlet block B... at rear

Material: Die-cast aluminum





Dimensions	Dimensions and Ordering Data											
B1	B2	В3	B4	B5	L1	L2	L3		Weight [lb]	Part No.	Туре	
3.11	2.44	0.18	2.13	4.53	6.22	2.80	0.26	2.80	0.15	532195	MS6-WP	

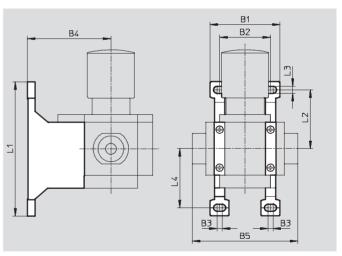
#### Mounting bracket MS6-WPB

- To connect the modules for wall mounting
- In combination with a port plate MS-AG... for mounting an individual unit on a wall
- In combination with mounting plate MS-AEND or for mounting an individual unit with direct thread on a wall
- Provides large wall gap for pressure regulator

Material:

Die-cast aluminum





Dimensions	Dimensions and Ordering Data												
B1	B2	В3	B4	B5	L1	L2	L3	L4	Weight [lb]	Part No.	Туре		
3.11	2.44	0.18	3.56	4.53	6.22	2.80	0.26	2.80	0.23	526074	MS6-WPB		

**FESTO** 

Accessories

#### Mounting bracket MS6-WPM

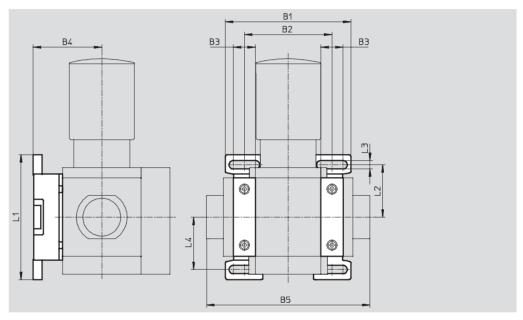
- To connect the modules for wall mounting
- In combination with a port plate MS-AG... for mounting an individual unit on a wall
- Speedy attachment and detachment
- For installation of modules with regulating knob pointing downwards

The distance piece D or 2D (designated in the type code) is included in the scope of delivery and ensures the correct clearance

Material:

Die-cast aluminum





Dimension	Dimensions and Ordering Data														
B1	B2	В3	B4	B5	L1	L2	L3	L4	Clearance	Weight	Part No.	Туре			
										[lb]					
3.90	2.72	0.60	2.13	5.08	3.88	1.63	0.26	1.63	2.44	0.29	526073	MS6-WPM-D			
6.61	5.43	0.69	0.69	0.69	0.69	2.13	7.80	7.00	1.05	0.20	1.05	4.88	0.31	532186	MS6-WPM-2D

#### Body connector MS6-MVM

• For installation of modules with regulating knob pointing downwards

Material:

Die-cast aluminum



Ordering Data		
Size	Part No.	Туре
MS6	532801	MS6-MVM



Filter cartridge MS6-LF...







Ordering Data			
	Filtration grade	Part No.	Туре
	[µm]		
Micro-filter cartridge	0.01	532909	MS6-LFM-A
Fine-filter cartridge	1	532910	MS6-LFM-B
Filter cartridge	5	534499	MS6-LFP-C
Filter cartridge	40	534500	MS6-LFP-E
Active carbon filter cartridge	Residual oil content ≤ 0.003 mg/m <sup>3</sup>	532911	MS6-LFX



5 Ordering Data	- Angled Socket PEV	Techni	cal data → www.festo.com/catalog/pev			
	Description	Operating voltage range	Electrical connection	Switching status display	Part No.	Туре
R	for PEV-1/4OD	15 30 V DC	4-pin	Yellow LED	164274	PEV-1/4-WD-LED-24
		≤ 230 V AC ≤ 180 V DC	4-pin	Yellow LED	164275	PEV-1/4-WD-LED-230

6 Ordering Data	- Plug Socket MSSD				Technica	ıl data → www.festo.com/catalog/mssd
	Description	Operating voltage range	Electrical connection	Type of mounting cable	Part No.	Туре
				connection		
	for PEV-1/4OD	≤ 250 V AC/DC	3-pin	Clamping screws	171157	MSSD-C-4P
	for MS6N-EE/DE	≤ 250 V AC/DC	3-pin	Clamping screws	151687	MSSD-EB
			4-pin	Insulation	192745	MSSD-EB-S-M14
				displacement		
				technology		

7 Ordering Data – Plug Socket with Cable KMEB					Technical data → www.festo.com/catalog/kmeb	
	Description	Operating voltage range	· ·	Cable length [ft]	Part No.	Туре
	for MS6N-EE/DE	24 V DC	LED	8.2	151688	KMEB-1-24-2,5-LED
		24 V DC	LED	16.4	151689	KMEB-1-24-5-LED
		24 V DC	LED	32.8	193457	KMEB-1-24-10-LED
		230 V AC	-	8.2	151690	KMEB-1-230AC-2,5
		230 V AC	_	16.4	151691	KMEB-1-230AC-5

9 Ordering Data – Illuminating Seal MEB-LD				Technical data → www.festo.com/catalog/meb-ld	
		Description	Operating voltage range	Part No.	Туре
	for plug socket with cable KMEB and plug socket MSSD-EB	12 24 V DC	151717	MEB-LD-12-24DC	
		230 V DC/AC ±10%	151718	MEB-LD-230AC	

4 Ordering Data − Silencer U Technical data → www.festo.com/catalog				nical data → www.festo.com/catalog/u
	Description	Pneumatic connection	Part No.	Туре
	for MS6N-EM1/EE	1/2 NPT	6844	U-1/2-B

10 Ordering Data – Padlock LRVS-D					
	Description	Weight [lb]	Part No.	Туре	
1 /XII	for regulators, filter/regulators and manual on-off valves	0.24	193786	LRVS-D	

Ordering Data – Special Oil OFSW					
	Description	Scope of delivery	Part No.	Туре	
	for lubricators	1 liter	152811	OFSW-32	

#### **FESTO**

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