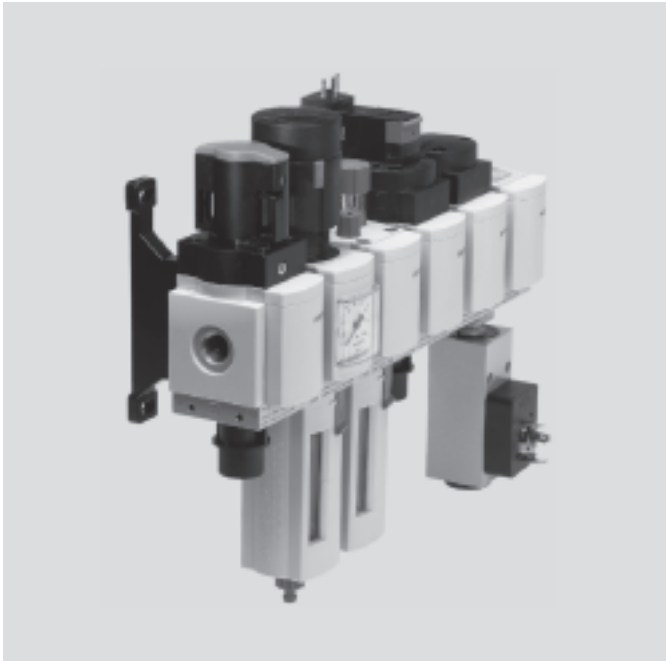


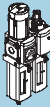
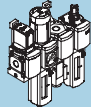
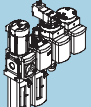
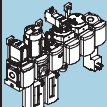
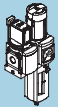
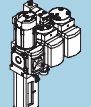
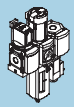
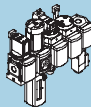
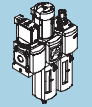
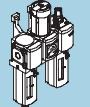
# Pre-configured Combination Units MSB6N – Inch Series



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
<b>Consisting of:</b>											
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	-	■	■	■	■	■	■	■	■	■
<b>Technical data → Page</b>		522	528	531	535	539	542	546	549	553	556

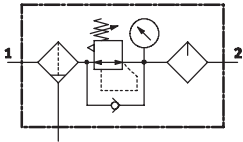
**Note**

Should you require a custom combination unit, please go to our online catalog at: [www.festo.com/catalog/msb6n](http://www.festo.com/catalog/msb6n). Click on the blue basket icon  next to P/N 532307. Then open the shopping basket on the right menu and click on the configuration icon . You can now configure your combination unit.

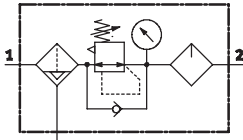
# Pre-configured Combination Units MSB6N-FRC – Inch Series

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 µm or 40 µm
- With manual or integrated, fully automatic bowl drain



General Technical Data		1/4 NPT	3/8 NPT	1/2 NPT
Pneumatic connection 1, 2		1/4 NPT	3/8 NPT	1/2 NPT
Design		Filter regulator with pressure gauge Proportional standard mist lubricator		
Regulating function		With primary pressure compensation		
		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 $q_{nN}^{1)}$ [scfm]				
Pneumatic connection		1/4 NPT	3/8 NPT	1/2 NPT
Pressure regulation range 4.4... 103 psi				
Filtration grade	5 $\mu\text{m}$	70.6	155.3	162.4
	40 $\mu\text{m}$	74.1	162.4	169.4
Pressure regulation range 7.4... 176 psi				
Filtration grade	5 $\mu\text{m}$	60.0	120.0	127.1
	40 $\mu\text{m}$	67.1	123.6	130.6

1) Measured at  $p_1 = 147$  psi and  $p_2 = 88$  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	

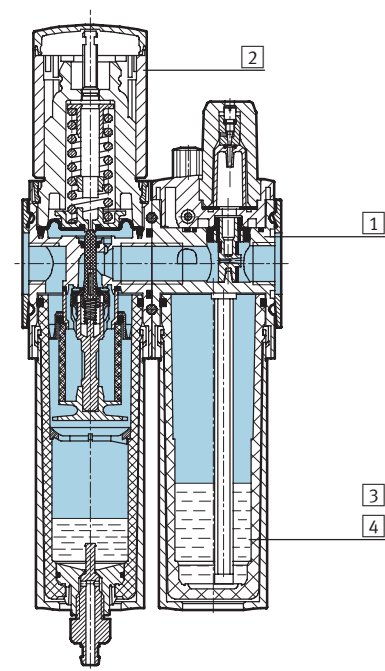
1) Corrosion resistance class 2 according to Festo standard 940 070  
 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating 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](http://www.festo.com/en/spare_parts_service)

## Materials

Sectional view



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

# Pre-configured Combination Units MSB6N-FRC – Inch Series



Technical Data

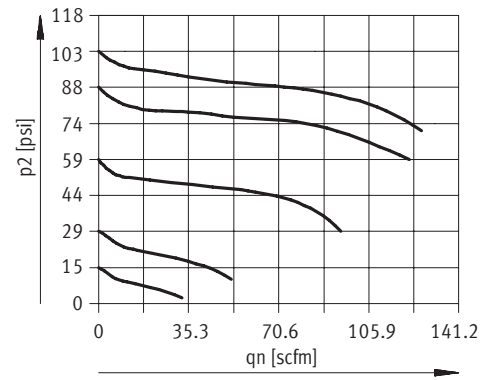
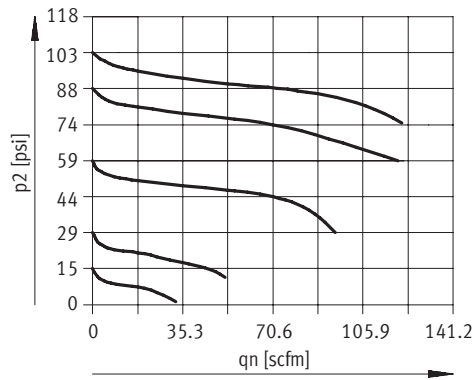
## Standard Flow Rate $q_n$ as a Function of Output Pressure $p_2$

Pressure regulation range 4.4 ... 103 psi Filtration grade 5  $\mu\text{m}$

Filtration grade 40  $\mu\text{m}$

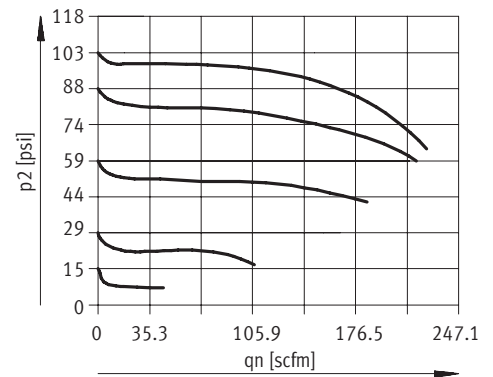
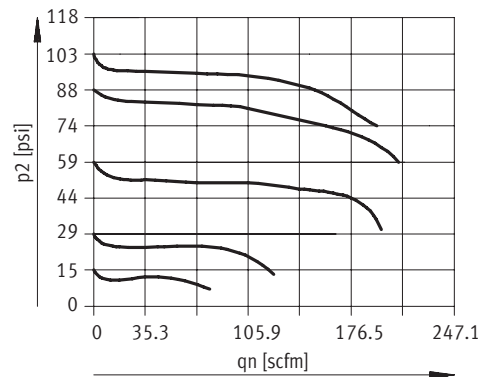
MSB6N- $\frac{1}{4}$

Primary pressure  $p_1 = 147$  psi



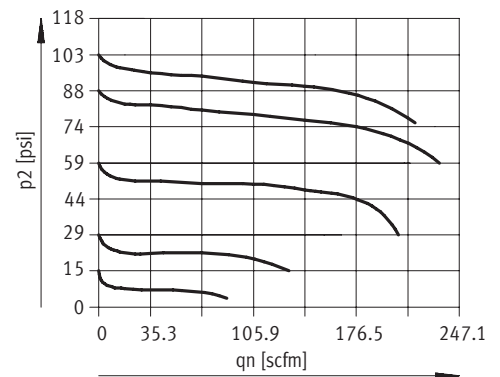
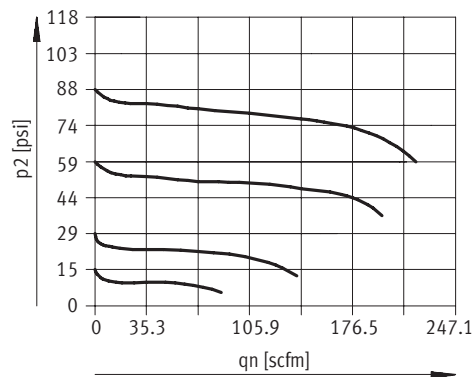
MSB6N- $\frac{3}{8}$

Primary pressure  $p_1 = 147$  psi



MSB6N- $\frac{1}{2}$

Primary pressure  $p_1 = 147$  psi



# Pre-configured Combination Units MSB6N-FRC – Inch Series



Technical Data

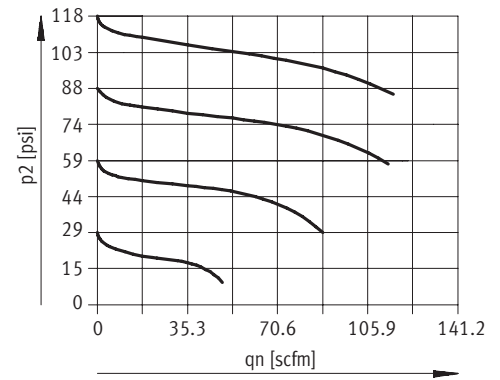
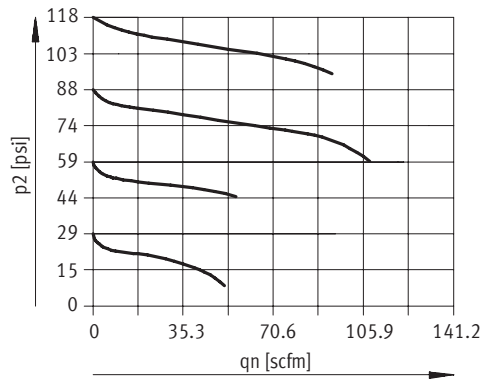
## Standard Flow Rate $q_n$ as a Function of Output Pressure $p_2$

Pressure regulation range 7.4 ... 176 psi Filtration grade 5  $\mu\text{m}$

Filtration grade 40  $\mu\text{m}$

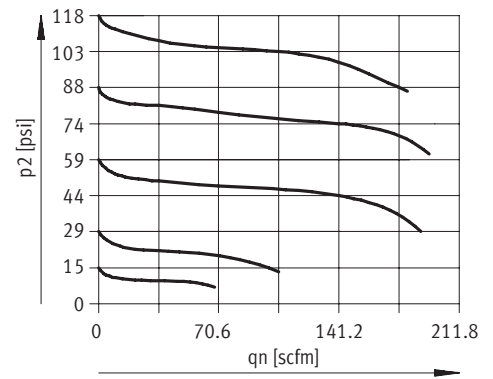
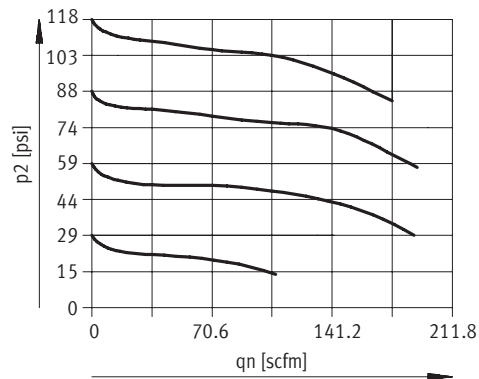
MSB6N-1/4

Primary pressure  $p_1 = 147$  psi



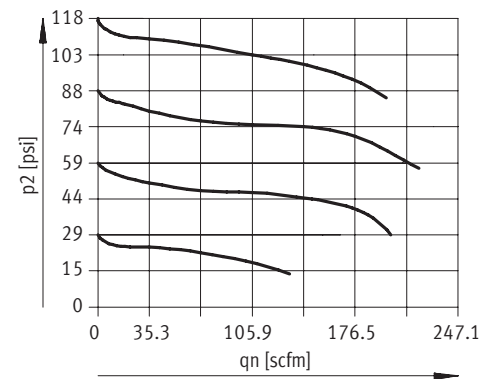
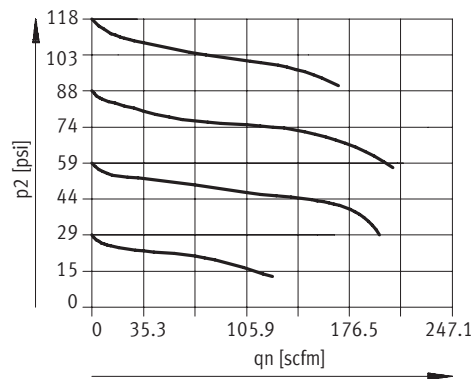
MSB6N-3/8

Primary pressure  $p_1 = 147$  psi



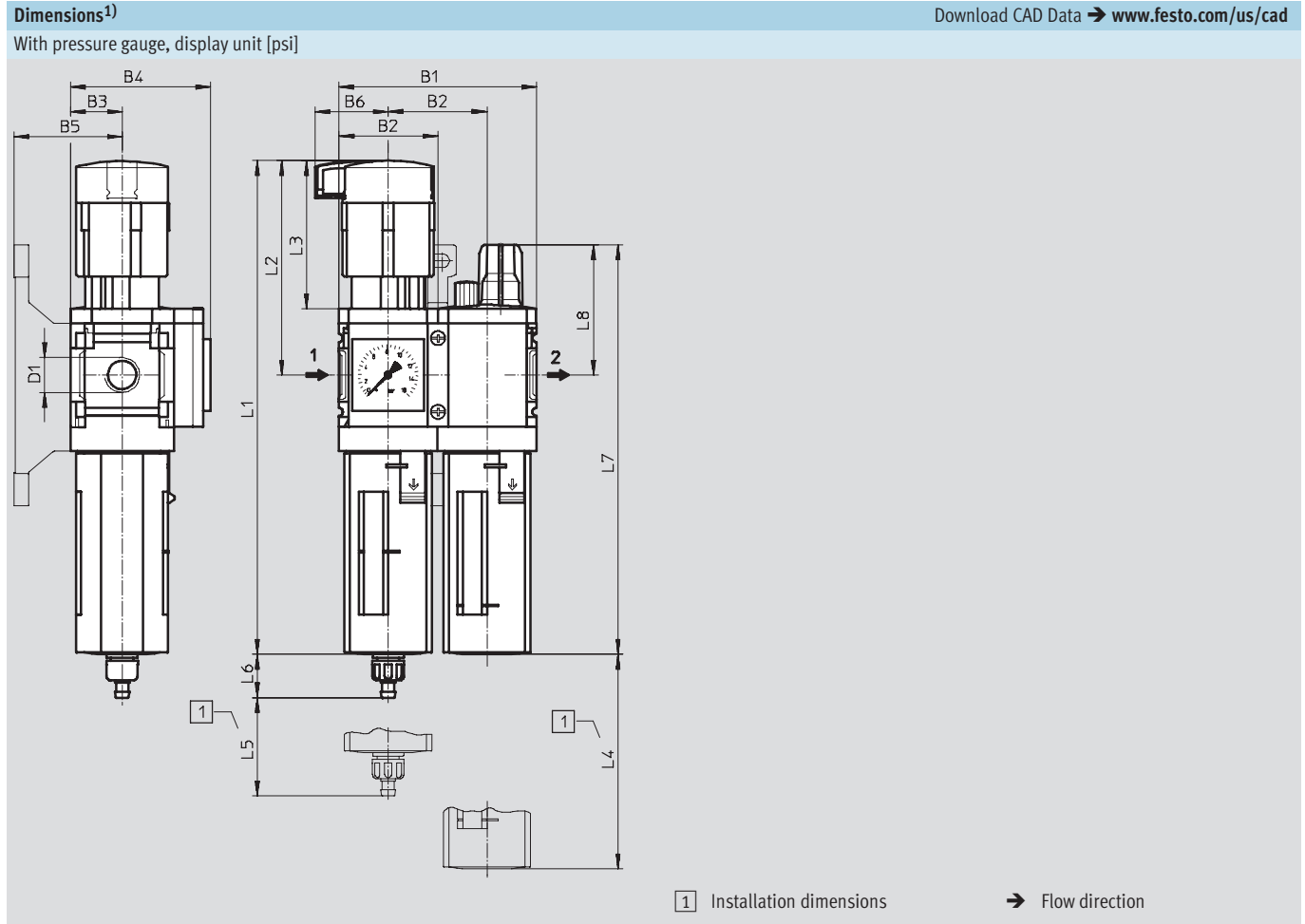
MSB6N-1/2

Primary pressure  $p_1 = 147$  psi



# Pre-configured Combination Units MSB6N-FRC – Inch Series

Dimensional Drawings



Type	B1	B2	B3	B4	B5	B6	D1	L1	L2	L3	L4	L5	L6		L7	L8
													manual	fully automatic		
MSB6N-1/4	4.88	2.44	1.22	3.03	2.13	1.53	1/4 NPT	11.21	5.30	3.76	5.12	2.68	0.62	0.73	8.48	2.58
MSB6N-3/8							3/8 NPT									
MSB6N-1/2							1/2 NPT									

1) Dimensions are in inches, unless otherwise noted.

# Pre-configured Combination Units MSB6N-FRC – Inch Series



Ordering Data – Pre-configured Products

Ordering Data							
Pressure regulation range 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	1/4 NPT	534013	MSB6N-1/4-FRC3:J7M1	Q	534003	MSB6N-1/4-FRC1:J5M1	Q
	3/8 NPT	534037	MSB6N-3/8-FRC3:J7M1	Q	534027	MSB6N-3/8-FRC1:J5M1	Q
	1/2 NPT	533989	MSB6N-1/2-FRC3:J7M1	Q	533979	MSB6N-1/2-FRC1:J5M1	Q
Fully automatic	1/4 NPT	534015	MSB6N-1/4-FRC4:J8M1	Q	534011	MSB6N-1/4-FRC2:J6M1	Q
	3/8 NPT	534039	MSB6N-3/8-FRC4:J8M1	Q	534035	MSB6N-3/8-FRC2:J6M1	Q
	1/2 NPT	533991	MSB6N-1/2-FRC4:J8M1	Q	533987	MSB6N-1/2-FRC2:J6M1	Q

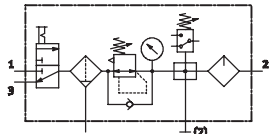
Ordering Data							
Pressure regulation range 7.4 ... 176 psi							
Bowl drain	Connection	Filtration grade 5 µm			Filtration grade 40 µm		
		Part No.	Type	LT	Part No.	Type	LT
Plastic bowl guard							
Manual	1/4 NPT	534021	MSB6N-1/4-FRC7:J3M1	1D	534017	MSB6N-1/4-FRC5:J1M1	1D
	3/8 NPT	534045	MSB6N-3/8-FRC7:J3M1	1D	534041	MSB6N-3/8-FRC5:J1M1	1D
	1/2 NPT	533997	MSB6N-1/2-FRC7:J3M1	1W	533993	MSB6N-1/2-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-1/2-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

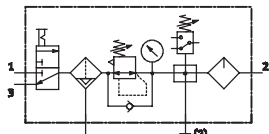
# Pre-configured Combination Unit 1 – Inch Series

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, 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	

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

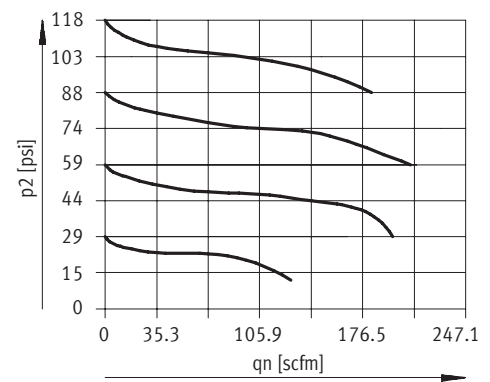
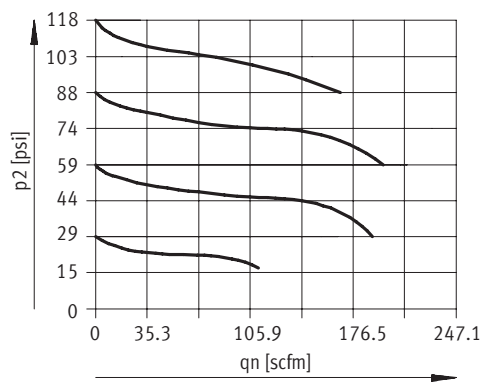
Weights [lb]	
Service unit combination	5.10
Mounting bracket	0.15

- For spare parts go to: [www.festo.com/en/spare\\_parts\\_service](http://www.festo.com/en/spare_parts_service)

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

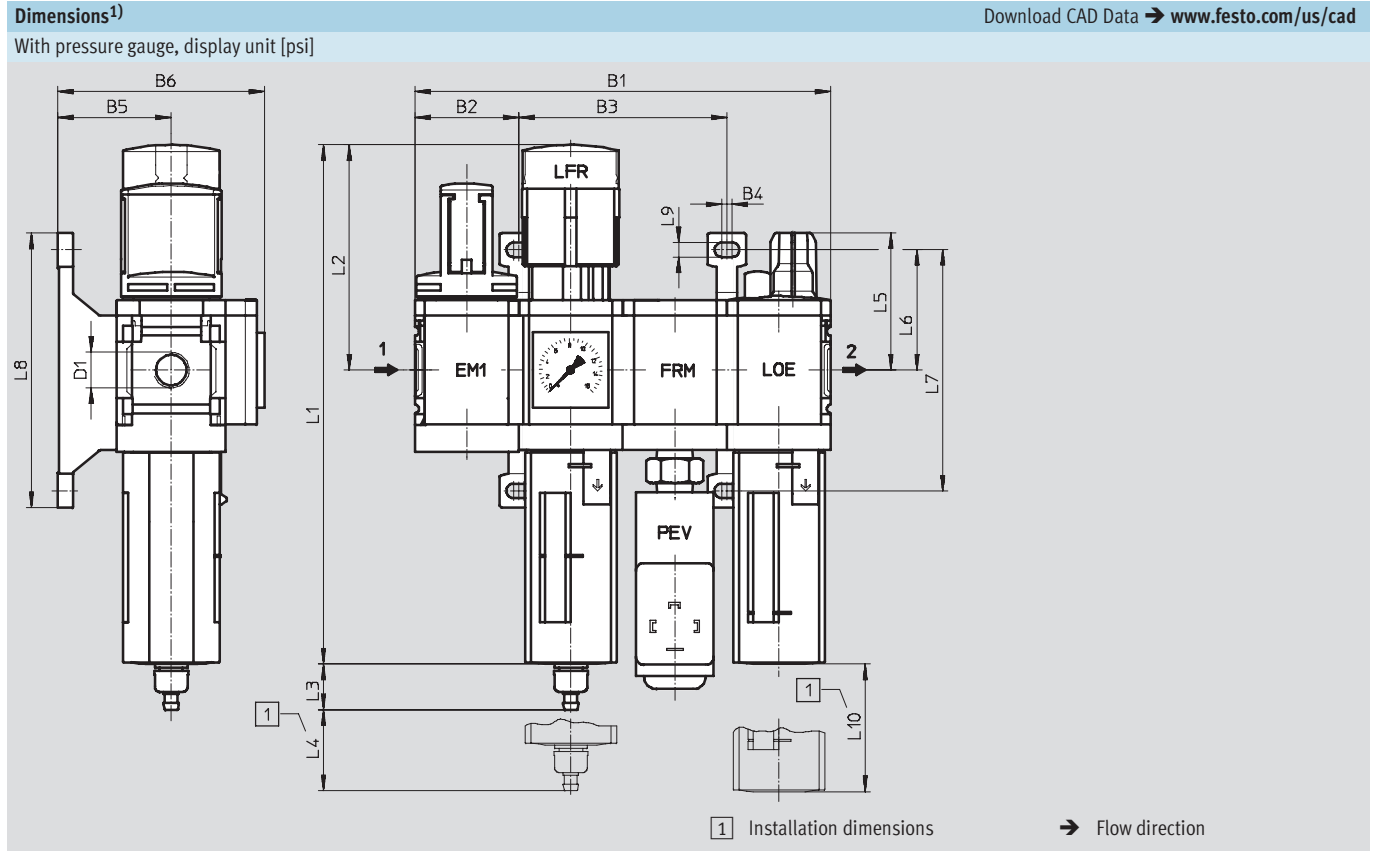
Pressure regulation range 15 ... 176 psi      Filtration grade 5 µm      Filtration grade 40 µm  
 MSB6N-1/2

Primary pressure p1 = 147 psi



# Pre-configured Combination Unit 1 – Inch Series

Dimensional Drawings, Ordering Data – Pre-configured Products



B1	B2	B3	B4	B5	B6	D1	L1	L2
9.76	2.44	4.88	0.18	2.13	3.94	1/2 NPT	11.22	5.30

L3 Bowl drain		L4	L5	L6	L7	L8	L9	L10
manual	fully automatic							
0.62	0.73	2.68	2.60	2.80	5.59	6.22	0.26	5.12

1) Dimensions are in inches, unless otherwise noted.

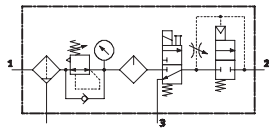
Ordering Data									
Pressure regulation range 15 ... 176 psi									
Bowl drain	Connection	Filtration grade 5 µm				Filtration grade 40 µm			
		Part No.	Type	LT	Part No.	Type	LT		
Plastic bowl guard									
Manual	1/2 NPT	543585	MSB6N-1/2:C3J3F3M1-WP	Q	543573	MSB6N-1/2:C3J1F3M1-WP	Q		
Fully automatic	1/2 NPT	543591	MSB6N-1/2:C3J4F3M1-WP	Q	543579	MSB6N-1/2: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

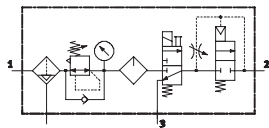
# Pre-configured Combination Unit 2 – Inch Series

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		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 MS...-EE-10V24)
	[psi]	59 ... 176 (with on-off valve MS...-EE-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 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	

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

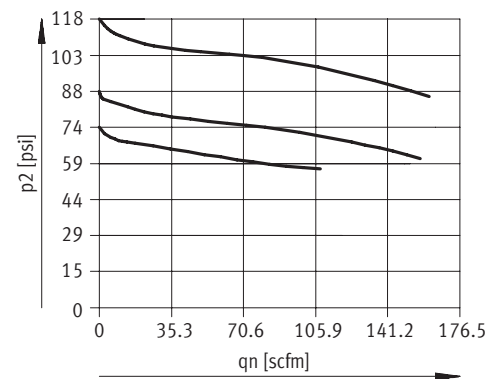
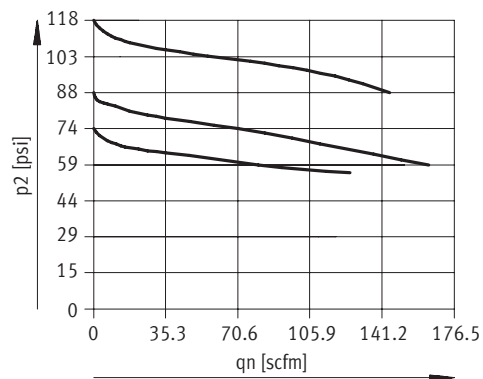
Weights [lb]	
Service unit combination	6.00
Mounting bracket	0.15

- For spare parts go to: [www.festo.com/en/spare\\_parts\\_service](http://www.festo.com/en/spare_parts_service)

## Standard Flow Rate $q_n$ as a Function of Output Pressure $p_2$

Pressure regulation range 59 ... 132 psi / 59 ... 176 psi  
 MSB6N-1/2

Primary pressure  $p_1 = 147$  psi



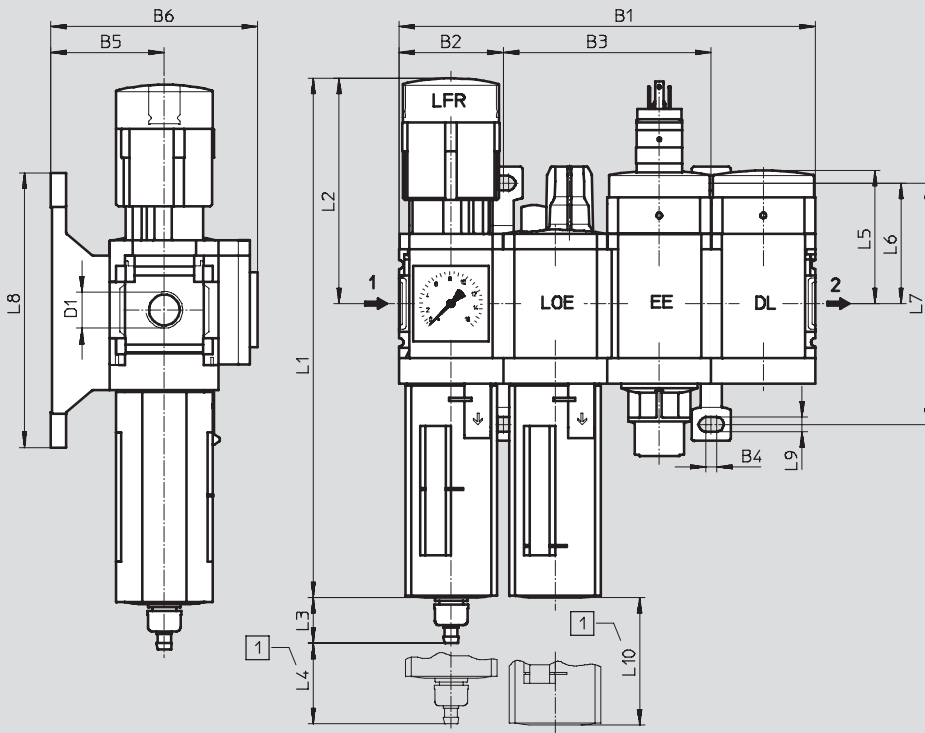
# Pre-configured Combination Unit 2 – Inch Series

Dimensional Drawings

**Dimensions<sup>1)</sup>**

Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

With pressure gauge, display unit [psi]



1 Installation dimensions

→ Flow direction

B1	B2	B3	B4	B5	B6	D1	L1	L2
9.76	2.44	4.88	0.18	2.13	3.94	½ NPT	11.22	5.30

L3 Bowl drain		L4	L5	L6	L7	L8	L9	L10
manual	fully automatic							
0.62	0.73	2.68	2.80	2.80	5.59	6.22	0.26	5.12

1) Dimensions are in inches, unless otherwise noted.

## Pre-configured Combination Unit 2 – Inch Series

FESTO

Ordering Data – Pre-configured Products

Ordering Data									
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	1/2 NPT	550512	MSB6N-1/2:J3M1D7A1-WP	Q	550508	MSB6N-1/2:J1M1D7A1-WP	Q		
Fully automatic	1/2 NPT	550514	MSB6N-1/2:J4M1D7A1-WP	Q	550510	MSB6N-1/2:J2M1D7A1-WP	Q		

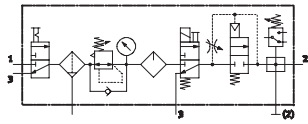
Ordering Data									
Pressure regulation range 59 ... 176 psi									
Bowl drain	Connection	Filtration grade 5 µm				Filtration grade 40 µm			
		Part No.	Type	LT	Part No.	Type	LT		
Plastic bowl guard									
Manual	1/2 NPT	541476	MSB6N-1/2:J3M1D1A1-WP	1W	541472	MSB6N-1/2:J1M1D1A1-WP	1W		
Fully automatic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

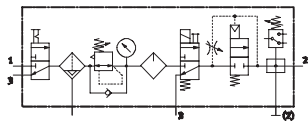
# Pre-configured Combination Unit 3 – Inch Series

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	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 MS...-EE-10V24)
	59 ... 176 (with on-off valve MS...-EE-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

# 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			

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

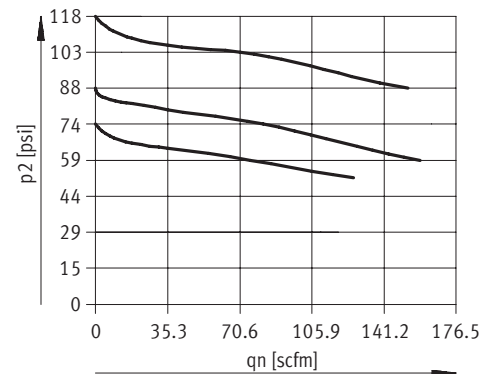
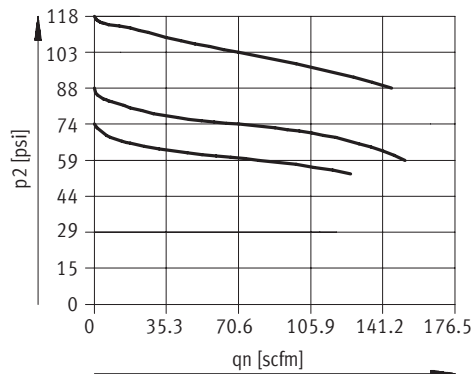
Weights [lb]	
Service unit combination	8.00
Mounting bracket	0.15

- For spare parts go to: [www.festo.com/en/spare\\_parts\\_service](http://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

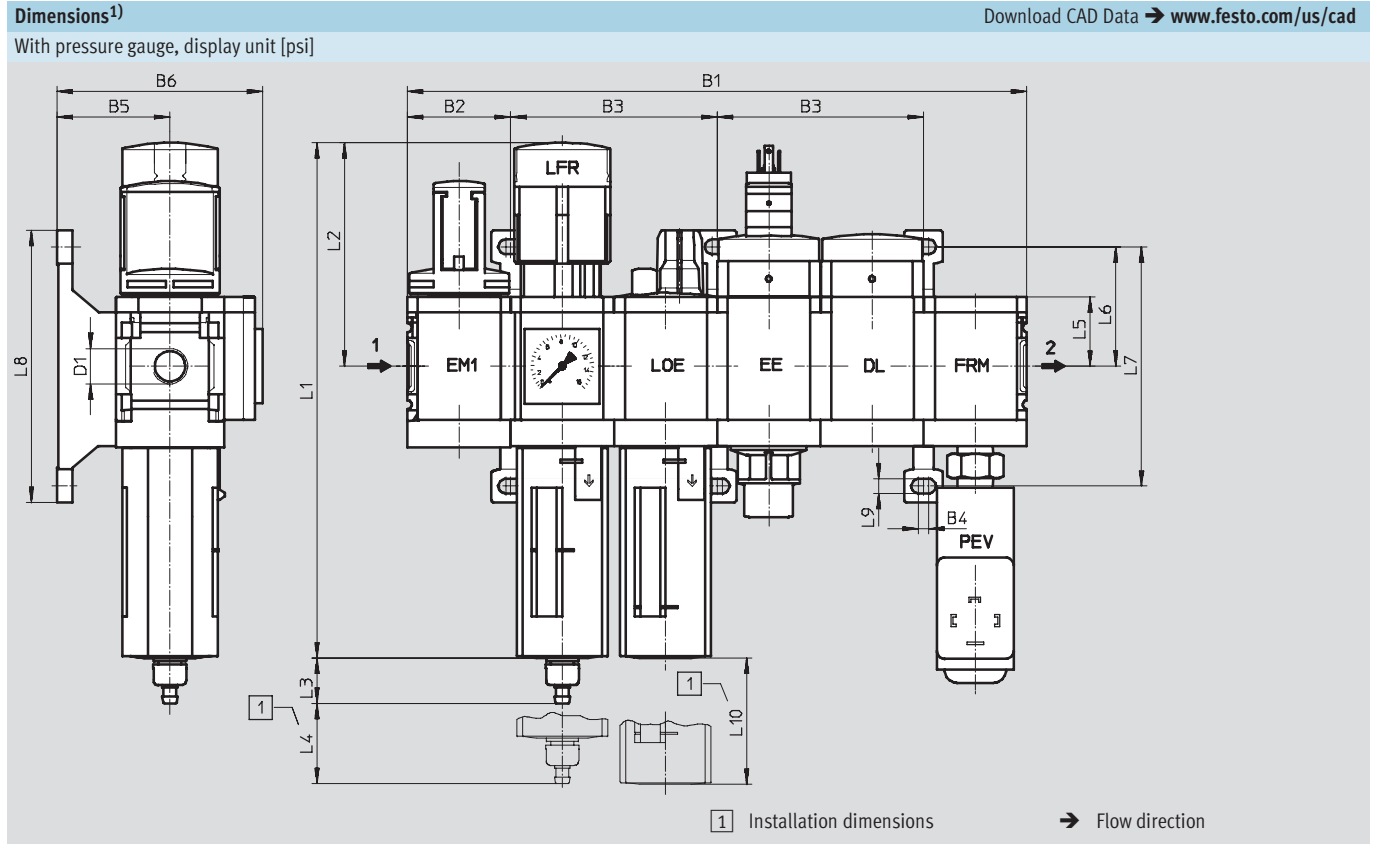
Primary pressure p1 = 147 psi





# Pre-configured Combination Unit 3 – Inch Series

Dimensional Drawings



B1	B2	B3	B4	B5	B6	D1	L1	L2
14.65	2.44	4.88	0.18	2.13	3.94	1/2 NPT	11.22	5.30

L3 Bowl drain		L4	L5	L6	L7	L8	L9	L10
manual	fully automatic							
0.62	0.73	2.68	1.54	2.80	5.59	6.22	0.26	5.12

1) Dimensions are in inches, unless otherwise noted.

## Pre-configured Combination Unit 3 – Inch Series

FESTO

Ordering Data – Pre-configured Products

Ordering Data									
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	1/2 NPT	550504	MSB6N-1/2:C3J3M1D7A1F3-WP	Q	550500	MSB6N-1/2:C3J1M1D7A1F3-WP	Q		
Fully automatic	1/2 NPT	550506	MSB6N-1/2:C3J4M1D7A1F3-WP	Q	550502	MSB6N-1/2:C3J2M1D7A1F3-WP	Q		

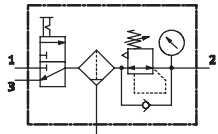
Ordering Data									
Pressure regulation range 59 ... 176 psi									
Bowl drain	Connection	Filtration grade 5 µm				Filtration grade 40 µm			
		Part No.	Type	LT	Part No.	Type	LT		
Plastic bowl guard									
Manual	1/2 NPT	543587	MSB6N-1/2:C3J3M1D1A1F3-WP	Q	543575	MSB6N-1/2:C3J1M1D1A1F3-WP	Q		
Fully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

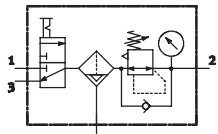
# Pre-configured Combination Unit 4 – Inch Series

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

# 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 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	

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

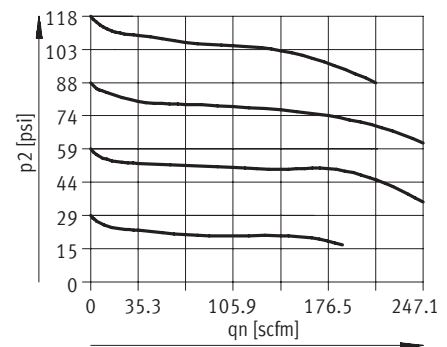
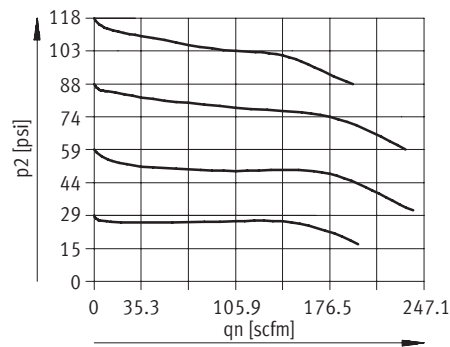
Weights [lb]	
Service unit combination	2.20
Mounting bracket	0.15

- For spare parts go to: [www.festo.com/en/spare\\_parts\\_service](http://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



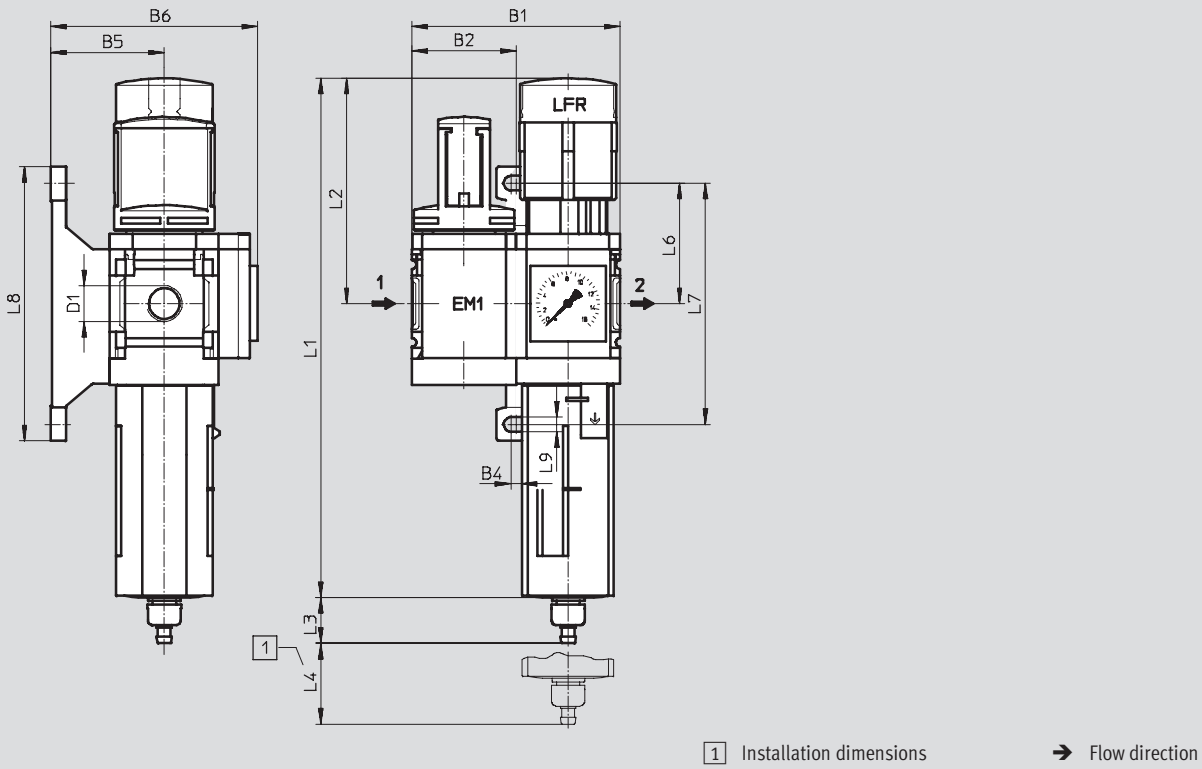
# Pre-configured Combination Unit 4 – Inch Series

Dimensional Drawings, Ordering Data – Pre-configured Products

**Dimensions<sup>1)</sup>**

Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

With pressure gauge, display unit [psi]



1 Installation dimensions → Flow direction

B1	B2	B4	B5	B6	D1	L1	L2
4.88	2.44	0.18	2.13	3.94	½ NPT	11.22	5.30

L3 Bowl drain		L4	L6	L7	L8	L9
manual	fully automatic					
0.62	0.73	2.68	2.80	5.59	6.22	0.26

1) Dimensions are in inches, unless otherwise noted.

**Ordering Data**

Pressure regulation range 7.4 ... 176 psi

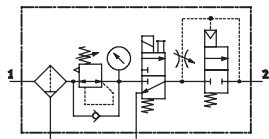
Bowl drain	Connection	Filtration grade 5 µm			Filtration grade 40 µm		
		Part No.	Type	LT	Part No.	Type	LT
Plastic bowl guard							
Manual	½ NPT	543589	MSB6N-1/2:C3J3-WP	Q	543577	MSB6N-1/2:C3J1-WP	Q
Fully automatic	½ NPT	543595	MSB6N-1/2:C3J4-WP	Q	543583	MSB6N-1/2:C3J2-WP	Q

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

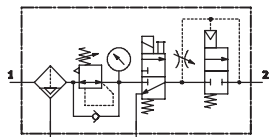
# Pre-configured Combination Unit 5 – Inch Series

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		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 MS...-EE-10V24)
	[psi]	59 ... 176 (with on-off valve MS...-EE-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 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			

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

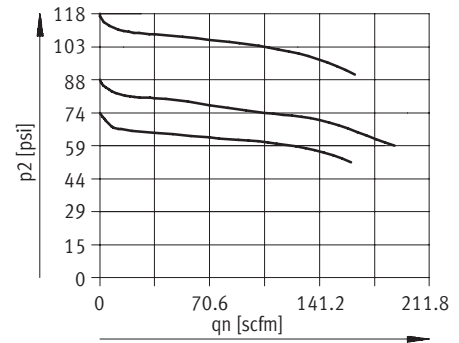
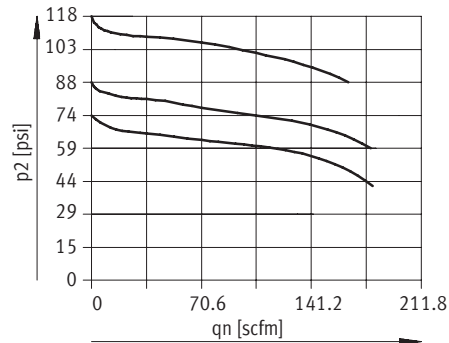
Weights [lb]	
Service unit combination	4.80
Mounting bracket	0.15

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



# Pre-configured Combination Unit 5 – Inch Series

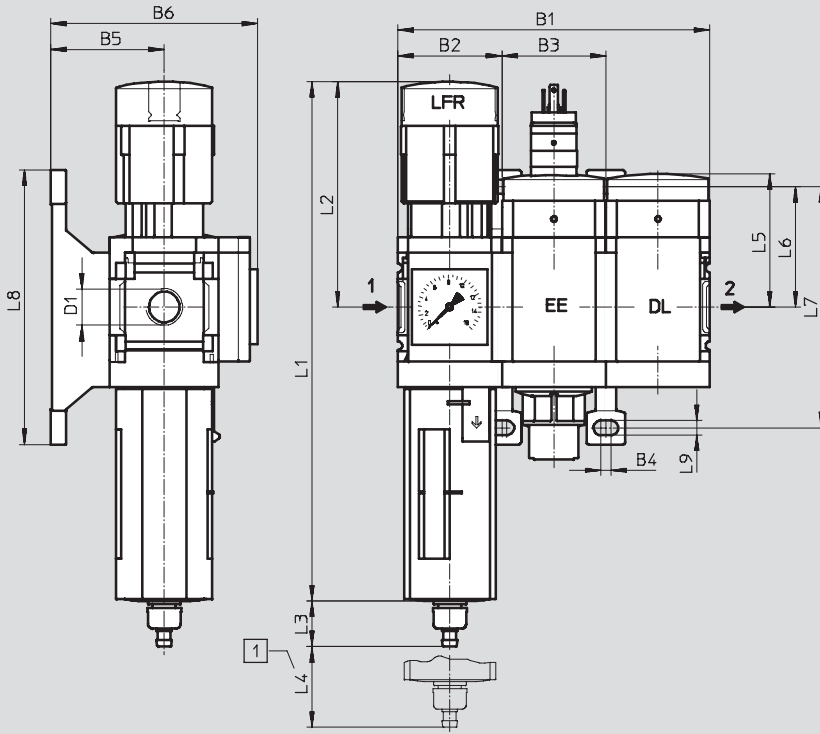
Dimensional Drawings



## Dimensions<sup>1)</sup>

Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

With pressure gauge, display unit [psi]



1 Installation dimensions

→ Flow direction

B1	B2	B3	B4	B5	B6	D1	L1	L2
7.32	2.44	2.44	0.18	2.13	3.94	½ NPT	11.22	5.30

L3 Bowl drain		L4	L5	L6	L7	L8	L9
manual	fully automatic						
0.62	0.73	2.68	2.80	2.80	5.59	6.22	0.26

1) Dimensions are in inches, unless otherwise noted.



# Pre-configured Combination Unit 5 – Inch Series



Ordering Data – Pre-configured Products

Ordering Data									
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	1/2 NPT	550511	MSB6N-1/2:J3D7A1-WP	Q	550507	MSB6N-1/2:J1D7A1-WP	Q		
Fully automatic	1/2 NPT	550513	MSB6N-1/2:J4D7A1-WP	Q	550509	MSB6N-1/2:J2D7A1-WP	Q		

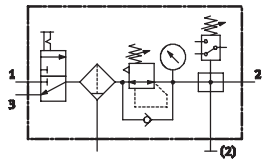
Ordering Data									
Pressure regulation range 59 ... 176 psi									
Bowl drain	Connection	Filtration grade 5 µm				Filtration grade 40 µm			
		Part No.	Type	LT	Part No.	Type	LT		
Plastic bowl guard									
Manual	1/2 NPT	541475	MSB6N-1/2:J3D1A1-WP	1W	541471	MSB6N-1/2:J1D1A1-WP	1W		
Fully automatic	1/2 NPT	541477	MSB6N-1/2:J4D1A1-WP	1W	541473	MSB6N-1/2: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

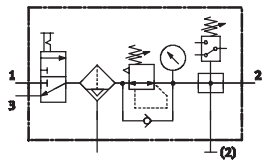
# Pre-configured Combination Unit 6 – Inch Series

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	1/2 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]	7.4 ... 176
Pressure indicator	With pressure gauge

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

# Pre-configured Combination Unit 6 – 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 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	

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

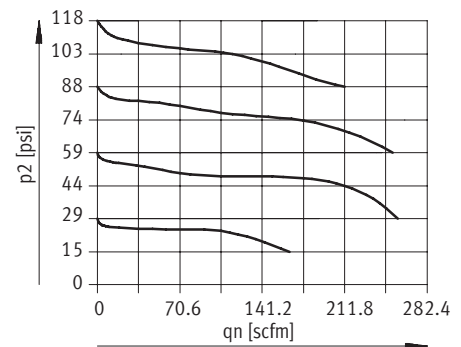
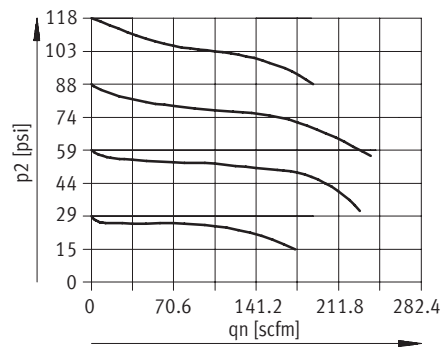
Weights [lb]	
Service unit combination	4.00
Mounting bracket	0.15

- For spare parts go to: [www.festo.com/en/spare\\_parts\\_service](http://www.festo.com/en/spare_parts_service)

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

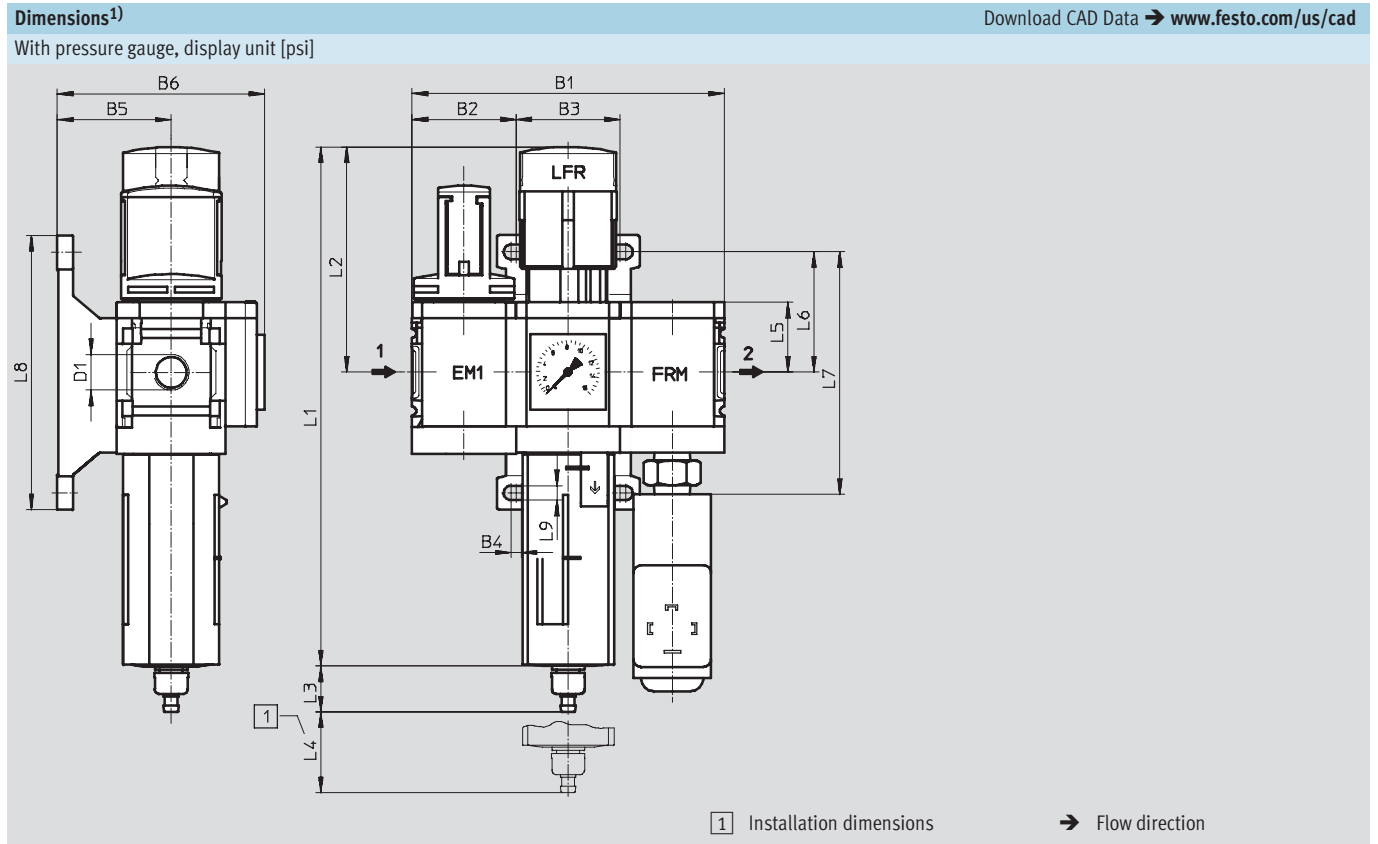
Pressure regulation range 7.4 ... 176 psi    Filtration grade 5 µm    Filtration grade 40 µm  
 MSB6N-1/2

Primary pressure p1 = 147 psi



# Pre-configured Combination Unit 6 – Inch Series

Dimensional Drawings, Ordering Data – Pre-configured Products



B1	B2	B3	B4	B5	B6	D1	L1	L2
7.32	2.44	2.44	0.18	2.13	3.94	1/2 NPT	11.22	5.30

L3 Bowl drain		L4	L5	L6	L7	L8	L9
manual	fully automatic						
0.62	0.73	2.68	1.54	2.80	5.59	6.22	0.26

1) Dimensions are in inches, unless otherwise noted.

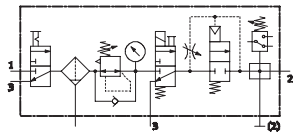
Ordering Data							
Pressure regulation range 7.4 ... 176 psi							
Bowl drain	Connection	Filtration grade 5 µm			Filtration grade 40 µm		
		Part No.	Type	LT	Part No.	Type	LT
Plastic bowl guard							
Manual	1/2 NPT	543586	MSB6N-1/2:C3J3F3-WP	Q	543574	MSB6N-1/2:C3J1F3-WP	Q
Fully automatic	1/2 NPT	543592	MSB6N-1/2:C3J4F3-WP	Q	543580	MSB6N-1/2: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

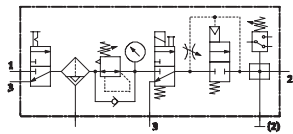
# Pre-configured Combination Unit 7 – Inch Series

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 MS...-EE-10V24)
	[psi]	59 ... 176 (with on-off valve MS...-EE-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 7 – 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	

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

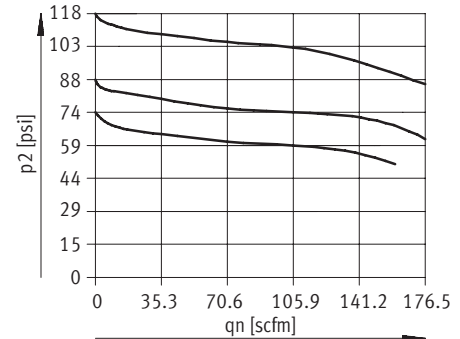
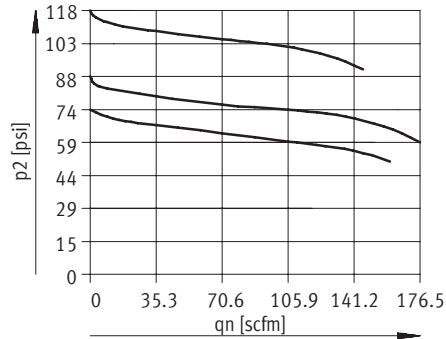
Weights [lb]	
Service unit combination	7.00
Mounting bracket	0.15

- For spare parts go to: [www.festo.com/en/spare\\_parts\\_service](http://www.festo.com/en/spare_parts_service)

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

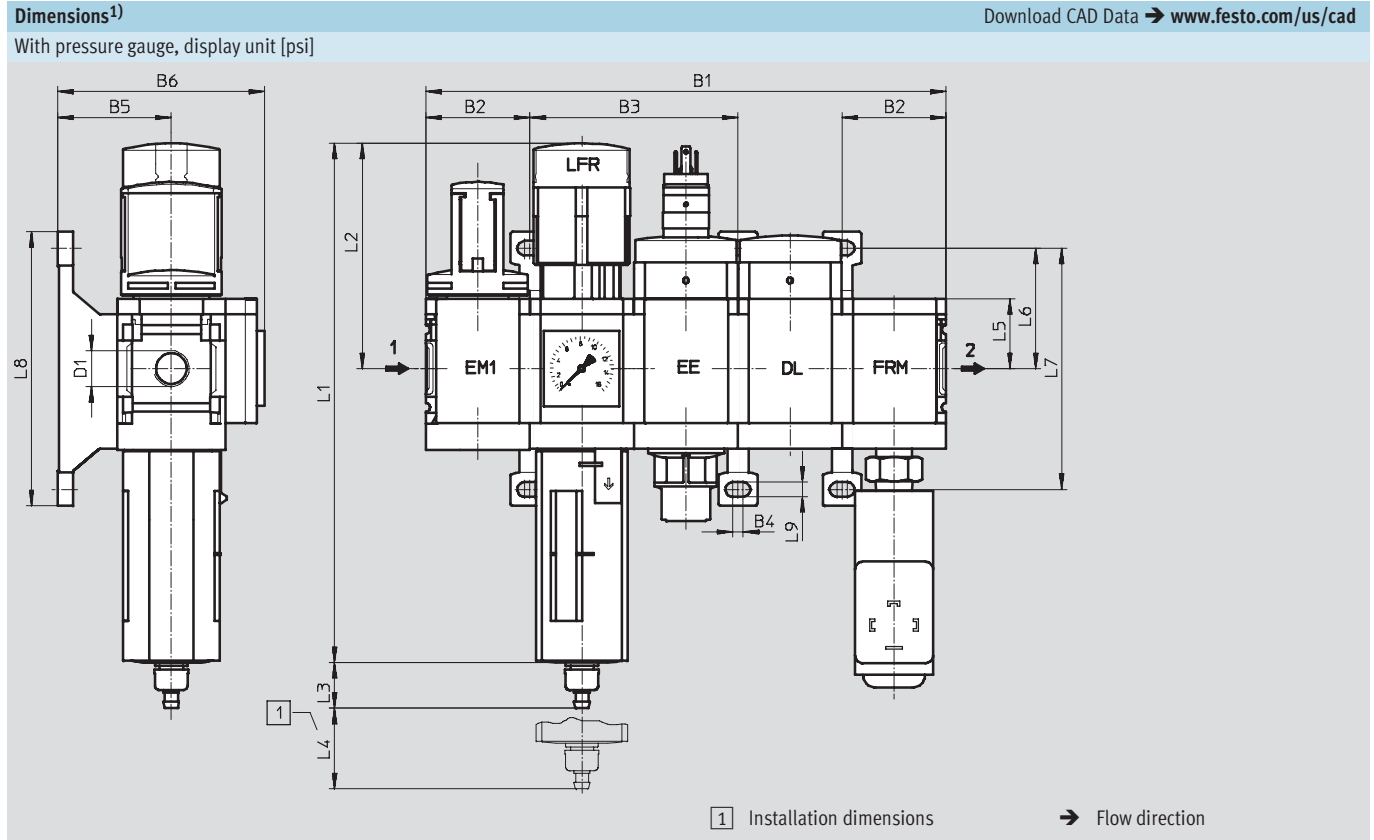
Pressure regulation range 59 ... 132 psi / 59 ... 176 psi  
 MSB6N-1/2

Primary pressure p1 = 147 psi



# Pre-configured Combination Unit 7 – Inch Series

Dimensional Drawings



B1	B2	B3	B4	B5	B6	D1	L1	L2
12.20	2.44	4.88	0.18	2.13	3.94	½ NPT	11.22	5.30

L3 Bowl drain		L4	L5	L6	L7	L8	L9
manual	fully automatic						
0.62	0.73	2.68	1.54	2.80	5.59	6.22	0.26

1) Dimensions are in inches, unless otherwise noted.

# Pre-configured Combination Unit 7 – Inch Series



Ordering Data – Pre-configured Products

Ordering Data									
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	1/2 NPT	550503	MSB6N-1/2:C3J3D7A1F3-WP	Q	550499	MSB6N-1/2:C3J1D7A1F3-WP	Q		
Fully automatic	1/2 NPT	550505	MSB6N-1/2:C3J4D7A1F3-WP	Q	550501	MSB6N-1/2:C3J2D7A1F3-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	543584	MSB6N-1/2:C3J3D1A1F3-WP	Q	543572	MSB6N-1/2:C3J1D1A1F3-WP	Q		
Fully automatic	1/2 NPT	543590	MSB6N-1/2:C3J4D1A1F3-WP	Q	543578	MSB6N-1/2:C3J2D1A1F3-WP	Q		

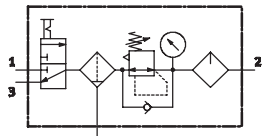
LT = Lead time      1D typically ships same day/next day      1W typically ships within 1 week      Q request a quote for lead time



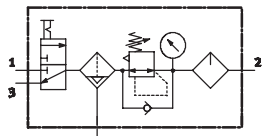
# Pre-configured Combination Unit 8 – Inch Series

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 q <sub>N</sub> [scfm]		
Filtration grade	5 µm	105.9
	40 µm	109.4

# Pre-configured Combination Unit 8 – 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, 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	

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

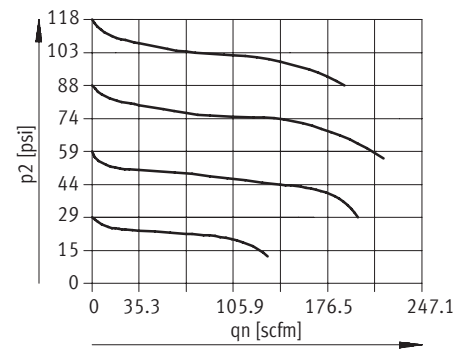
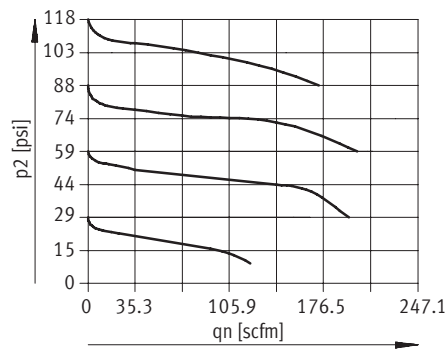
Weights [lb]	
Service unit combination	3.50
Mounting bracket	0.15

- For spare parts go to: [www.festo.com/en/spare\\_parts\\_service](http://www.festo.com/en/spare_parts_service)

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

Pressure regulation range 15 ... 176 psi      Filtration grade 5 µm      Filtration grade 40 µm  
 MSB6N-1/2

Primary pressure p1 = 147 psi



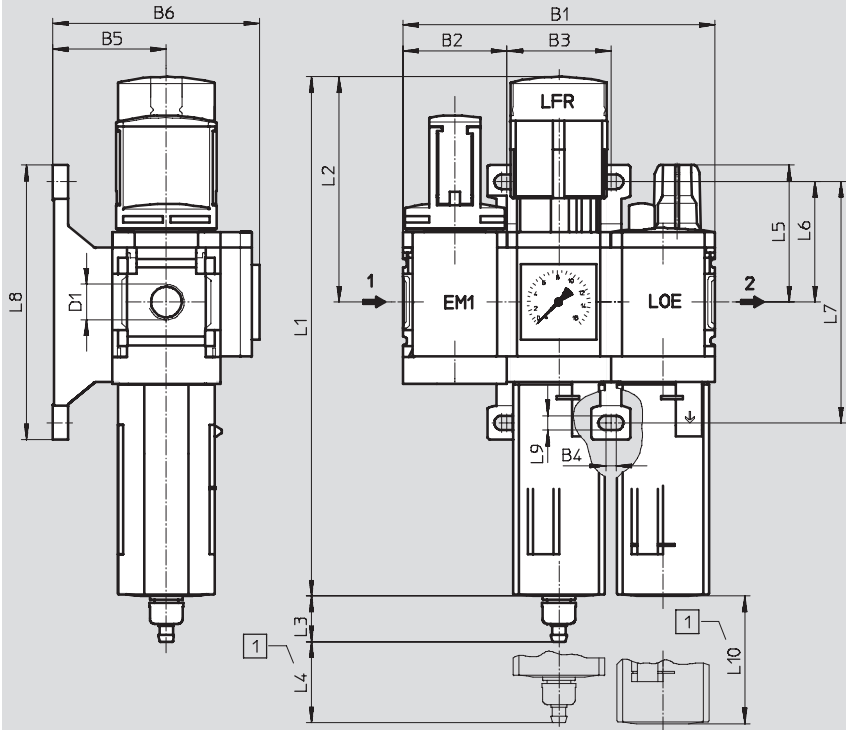
# Pre-configured Combination Unit 8 – Inch Series

Dimensional Drawings, Ordering Data – Pre-configured Products

**Dimensions<sup>1)</sup>**

Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

With pressure gauge, display unit [psi]



1 Installation dimensions

→ Flow direction

B1	B2	B3	B4	B5	B6	D1	L1	L2
7.32	2.44	2.44	0.18	2.13	3.94	1/2 NPT	11.22	5.30

L3 Bowl drain		L4	L5	L6	L7	L8	L9	L10
manual	fully automatic							
0.62	0.73	2.68	2.60	2.80	5.59	6.22	0.26	5.12

1) 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	543588	MSB6N-1/2:C3J3M1-WP	Q	543576	MSB6N-1/2:C3J1M1-WP	Q
Fully automatic	1/2 NPT	543594	MSB6N-1/2:C3J4M1-WP	Q	543582	MSB6N-1/2:C3J2M1-WP	Q

LT = Lead time

1D typically ships same day/next day

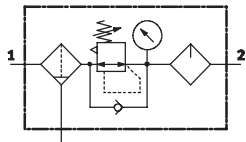
1W typically ships within 1 week

Q request a quote for lead time

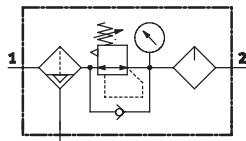
# Pre-configured Combination Unit 9 – Inch Series

Technical Data

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

# Pre-configured Combination Unit 9 – 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, 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	

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

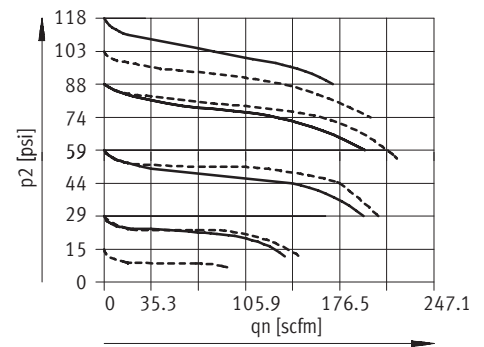
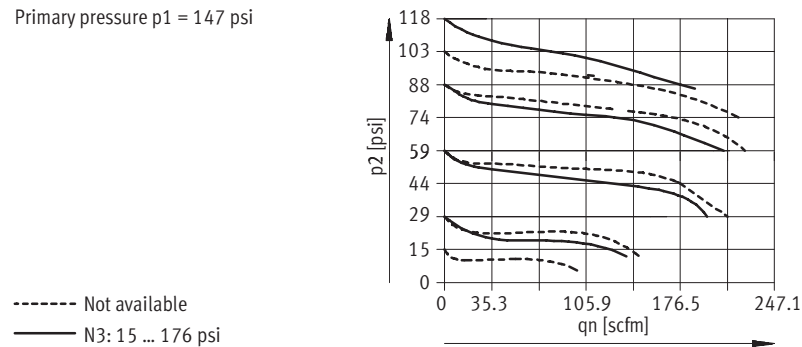
Weights [lb]	
With plastic bowl guard	4.00
Mounting bracket	0.15

- For spare parts go to: [www.festo.com/en/spare\\_parts\\_service](http://www.festo.com/en/spare_parts_service)

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

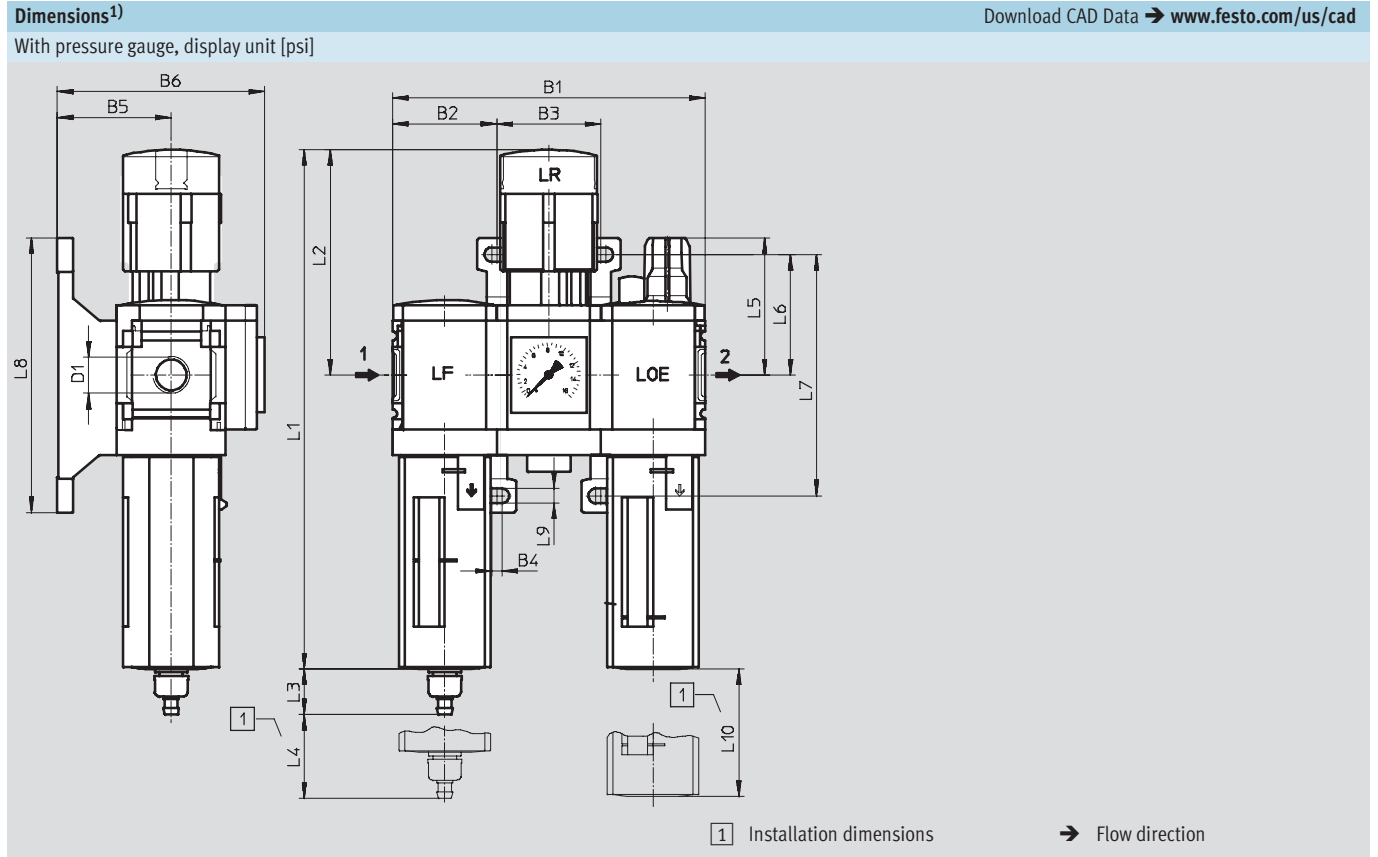
Pressure regulation range N3      Filtration grade 5 µm      Filtration grade 40 µm  
 MSB6N-1/2

Primary pressure p1 = 147 psi



# Pre-configured Combination Unit 9 – Inch Series

Dimensional Drawings, Ordering Data – Pre-configured Products



B1	B2	B3	B4	B5	B6	D1	L1	L2
7.32	2.44	2.44	0.18	2.13	3.94	½ NPT	11.22	5.30

L3 Bowl drain		L4	L5	L6	L7	L8	L9	L10
manual	fully automatic							
0.62	0.73	2.68	2.60	2.80	5.59	6.22	0.26	5.12

1) Dimensions are in inches, unless otherwise noted.

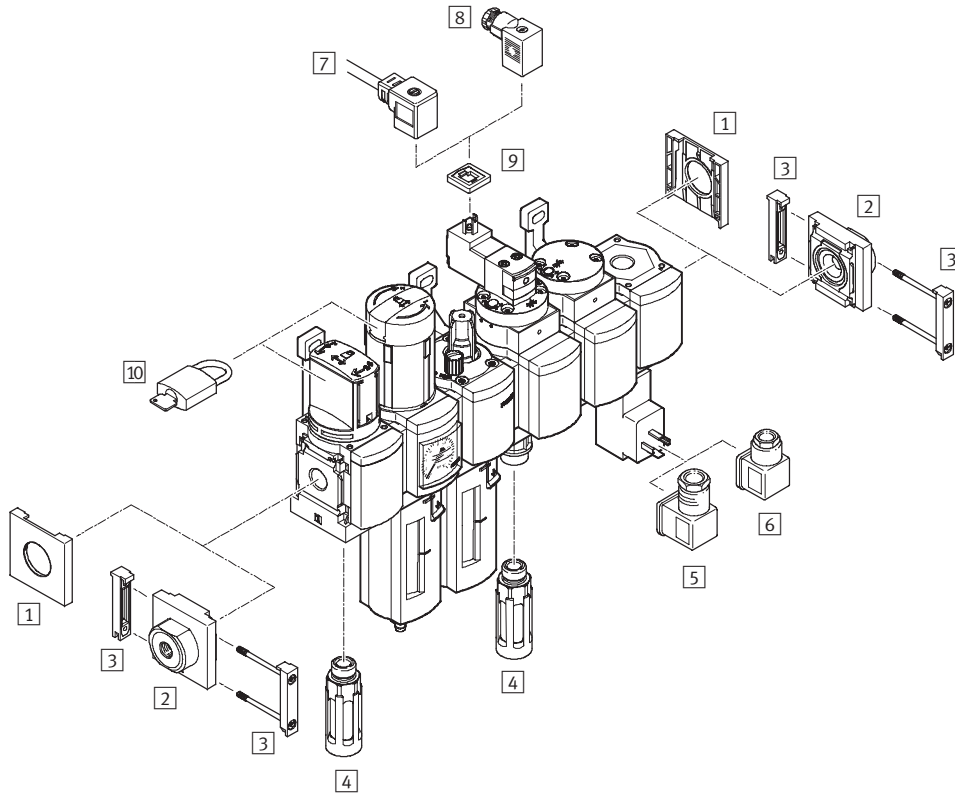
Ordering Data										
Pressure regulation range 15 ... 176 psi										
Bowl drain		Connection	Filtration grade 5 µm				Filtration grade 40 µm			
			Part No.	Type	LT	Part No.	Type	LT		
Plastic bowl guard										
Manual	½ NPT	541469	MSB6N-½:H3N3M1-WP		1W	541468	MSB6N-½:H2N3M1-WP		1W	
Fully automatic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



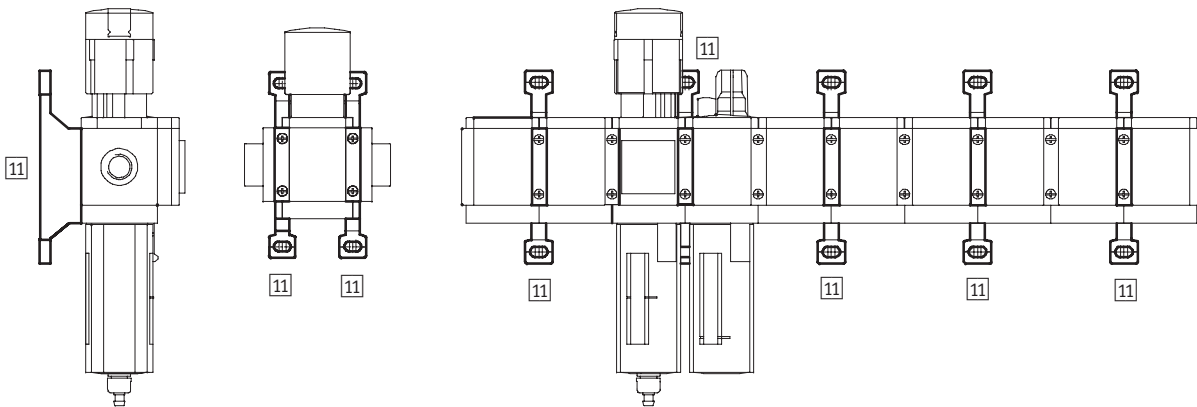
**Note**

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

FESTO

Mounting Attachments and Accessories		→ Page
1	Cover cap MS6-END	561
2	Port plate MS6N-AQ...	562
3	Body connector MS6-MV	562
4	Silencer U	567
5	Angled socket PEV-¼-WD-LED	567
6	Plug socket MSSD-C-4P	567
7	Plug socket with cable KMEB	567
8	Plug socket MSSD-EB	567
9	Illuminating seal MEB-LD	567
10	Padlock LRVS-D	567
11	Mounting bracket (for service unit MSB-FRC) MS6-WP/WPB/WPM	563



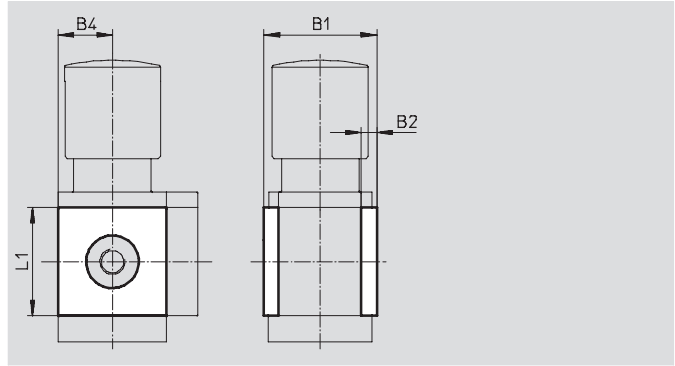
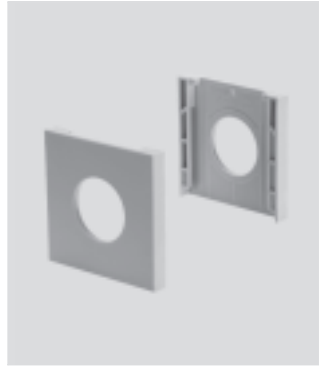
# Pre-configured Combination Units MSB6N – Inch Series

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



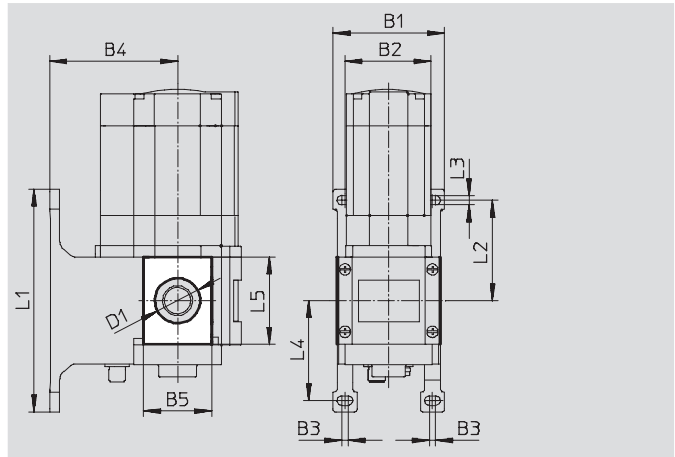
Dimensions and Ordering Data						
B1	B2	B4	L1	Part No.	Type	
2.64	0.31	1.22	2.44	538780	MS6-END	

## 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



Dimensions and ordering data															
B1	B2	B3	B4		B5	D1 ∅	L1	L2	L3	L4	L5	CRC <sup>1)</sup>	Weight [lb]	Part No.	Type
			WP	WPB											
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

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

## Pre-configured Combination Units MSB6N – Inch Series

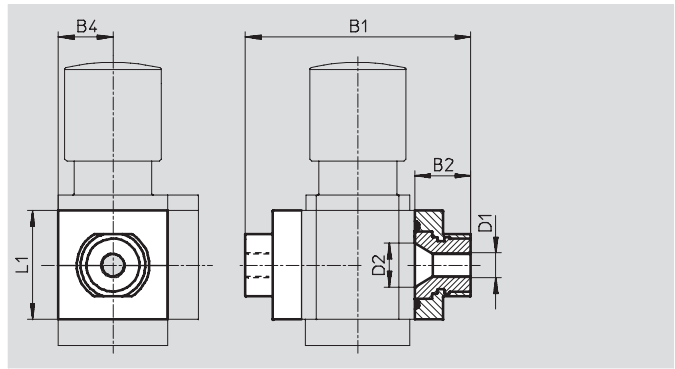
FESTO

Accessories

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

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

Material:  
Aluminum



Dimensions and Ordering Data								
B1	B2	B4	D1	D2	L1	Weight [lb]	Part No.	Type
4.53	1.04	1.22	1/4 NPT	0.94	2.44	0.60	526076	MS6N-AQN
			3/8 NPT				526077	MS6N-AQP
			1/2 NPT				526078	MS6N-AQR
			3/4 NPT				526079	MS6N-AQS

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

- For connecting modules

Material:  
Stainless steel/polyacetate



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

# Pre-configured Combination Units MSB6N – Inch Series

Accessories

## 11 Mounting Bracket MS6-WP...

Suggested placement of wall mounting brackets when mounting air preparation combinations

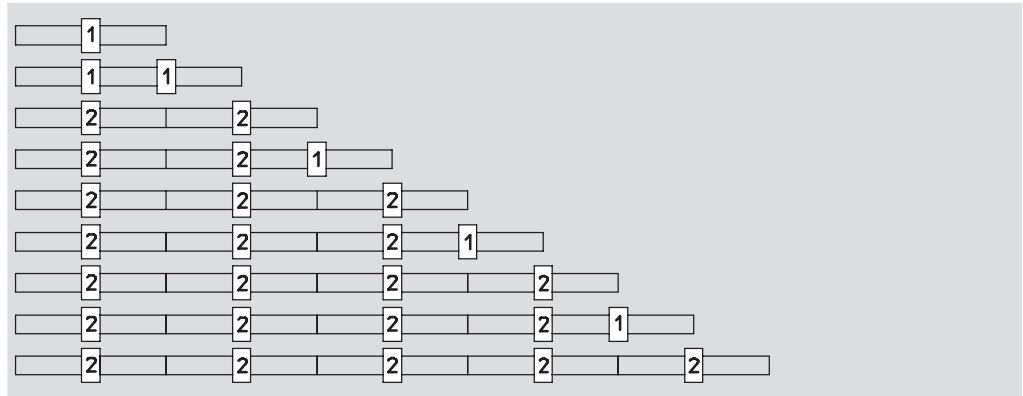
1 unit: 2.44 in with WP, WPB  
2.715 in with WPM-D

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

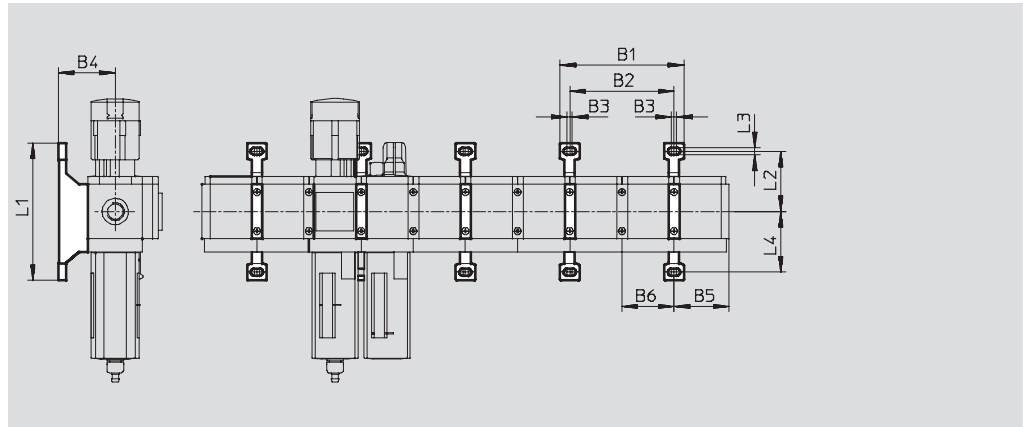
- 1 Mounting bracket WP, WPB or WPM-D
- 2 Mounting bracket WP, WPB or WPM-2D

Number of units

1 2 3 4 5 6 7 8 9 10



## Mounting dimensions



Type	B1	B2	B3	B4	B5	B6	L1	L2	L3	L4
MS6-WP	5.55	4.88	0.18	2.13	2.54	2.44	6.22	2.80	0.26	2.80
MS6-WPB				3.56						1.63
MS6-WPM-...D	6.61	5.43	0.69	2.13	2.58	2.72	3.88	1.63		1.63

# Pre-configured Combination Units MSB6N – Inch Series

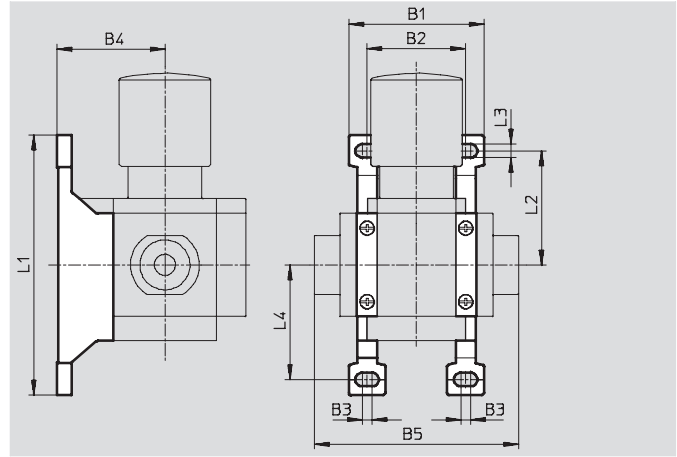


Accessories

## 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

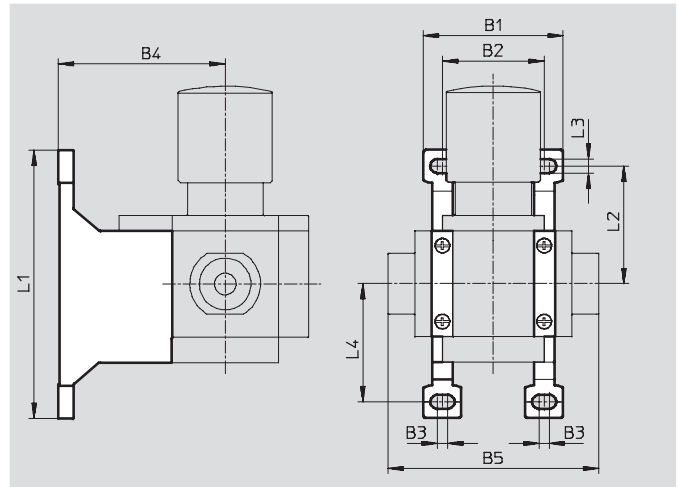


Dimensions and Ordering Data											
B1	B2	B3	B4	B5	L1	L2	L3	L4	Weight [lb]	Part No.	Type
3.11	2.44	0.18	2.13	4.53	6.22	2.80	0.26	2.80	0.15	532195	MS6-WP

## 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 and Ordering Data											
B1	B2	B3	B4	B5	L1	L2	L3	L4	Weight [lb]	Part No.	Type
3.11	2.44	0.18	3.56	4.53	6.22	2.80	0.26	2.80	0.23	526074	MS6-WPB

# Pre-configured Combination Units MSB6N – Inch Series

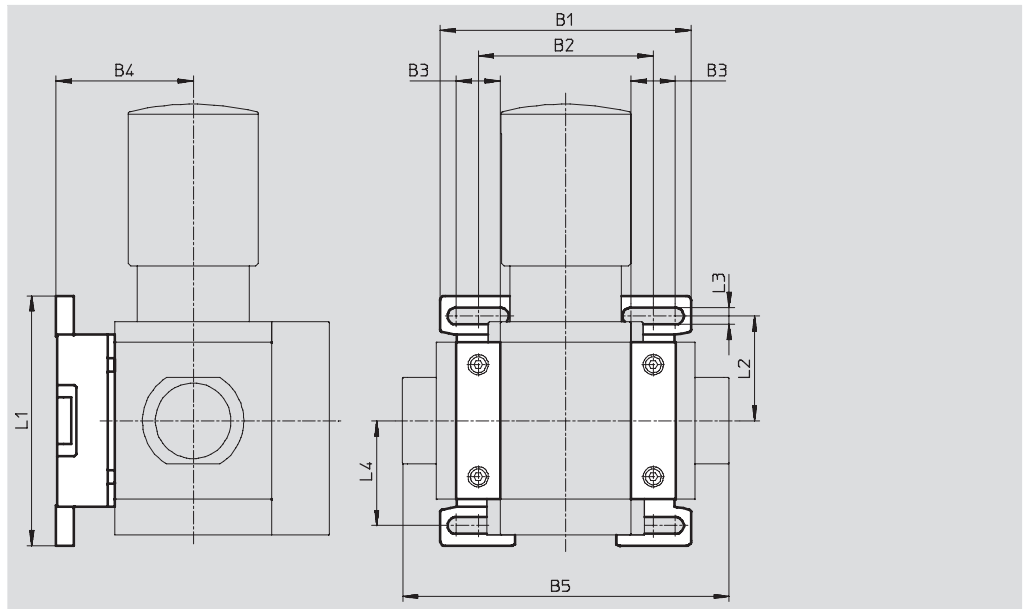
Accessories

## 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



Dimensions and Ordering Data												
B1	B2	B3	B4	B5	L1	L2	L3	L4	Clearance	Weight [lb]	Part No.	Type
3.90	2.72	0.69	2.13	5.08	3.88	1.63	0.26	1.63	2.44	0.29	526073	MS6-WPM-D
6.61	5.43			7.80					4.88			

## Body connector MS6-MVM

- For installation of modules with regulating knob pointing downwards

Material:  
Die-cast aluminum



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

## Pre-configured Combination Units MSB6N – Inch Series

FESTO

Accessories

Filter cartridge MS6-LF...



MS...-LFM



MS...-LFP




MS...-LFX


Ordering Data			
	Filtration grade [μm]	Part No.	Type
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

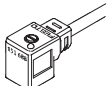
# Pre-configured Combination Units MSB6N – Inch Series





Accessories


5 Ordering Data – Angled Socket PEV					Technical data → <a href="http://www.festo.com/catalog/pev">www.festo.com/catalog/pev</a>	
	Description	Operating voltage range	Electrical connection	Switching status display	Part No.	Type
	for PEV-1/4-...-OD	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 → <a href="http://www.festo.com/catalog/mssd">www.festo.com/catalog/mssd</a>	
	Description	Operating voltage range	Electrical connection	Type of mounting cable connection	Part No.	Type
	for PEV-1/4-...-OD	≤ 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 displacement technology	192745	MSSD-EB-S-M14

7 Ordering Data – Plug Socket with Cable KMEB					Technical data → <a href="http://www.festo.com/catalog/kmeb">www.festo.com/catalog/kmeb</a>	
	Description	Operating voltage range	Switching status display	Cable length [ft]	Part No.	Type
	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 → <a href="http://www.festo.com/catalog/meb-ld">www.festo.com/catalog/meb-ld</a>	
	Description	Operating voltage range		Part No.	Type
	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 → <a href="http://www.festo.com/catalog/u">www.festo.com/catalog/u</a>	
	Description	Pneumatic connection	Part No.	Type
	for MS6N-EM1/EE	1/2 NPT	6844	U-1/2-B

10 Ordering Data – Padlock LRVS-D			
	Description	Weight [lb]	Part No. Type
	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. Type
	for lubricators	1 liter	152811 OFSW-32





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