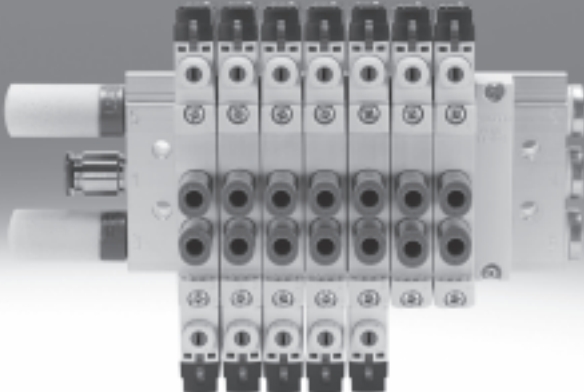


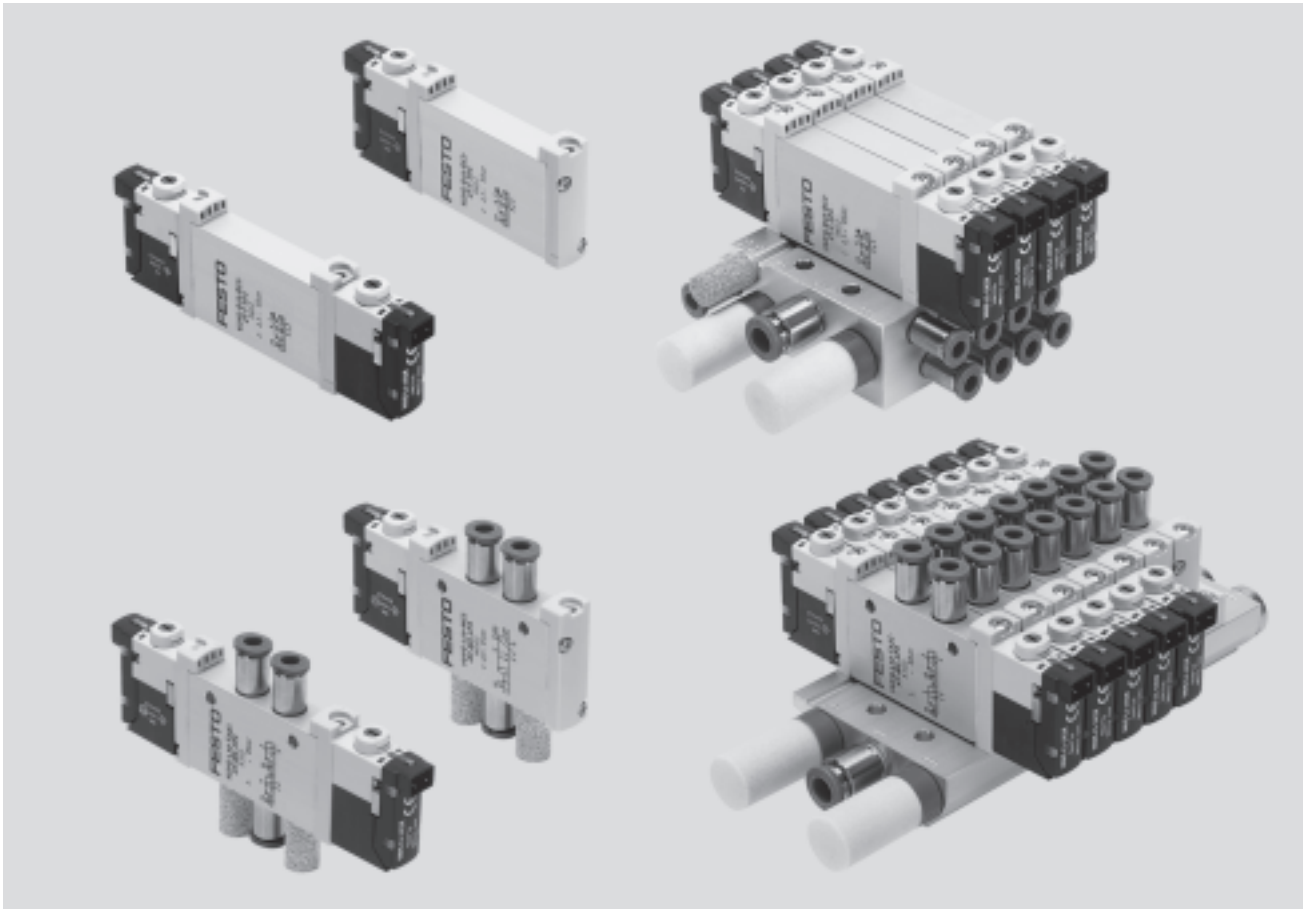
Solenoid valves VUVG



## Solenoid valves VUVG

Key features

**FESTO**



### Innovative

- Internal or external pilot air supply can be set for valve manifolds with sub-base valves
- Connection technology can be easily changed via electric sub-base (electronics box)

### Versatile

- Wide range of valve functions
- Choice of quick push-in connectors
- In-line valves can be used as individual valves or manifold valves
- M5 and M7 in-line valves can be combined on one manifold rail
- Identical sub-base valves for M5 or M7 manifold rail
- Valve manifolds with pressure zones

### Reliable

- Sturdy and durable metal components
  - valves,
  - manifold rails
- Fast troubleshooting thanks to LEDs
- Reliability of service thanks to valves that can be replaced easily and quickly
- Choice of non-detenting, detenting or covered manual override
- LED integrated in the valve

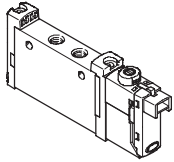
### Easy to mount

- Secure mounting on wall or H-rail
- Easy mounting thanks to captive screws and seal
- Connection technology can be easily changed via electric sub-base

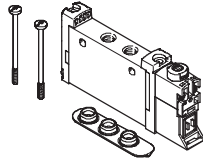
# Solenoid valves VUVG

Key features

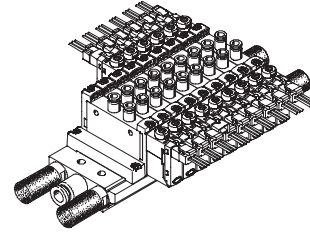
## Individual valves and valve manifolds



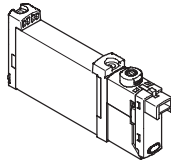
VUVG-L in-line valve as individual valve



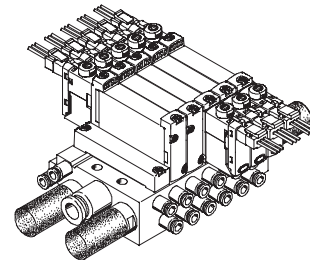
VUVG-S in-line valve for manifold assembly



VUVG-S valve manifold consisting of in-line valves

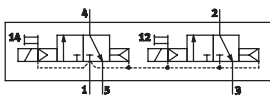


VUVG-B sub-base valve for manifold assembly

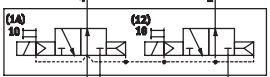


VUVG-B valve manifold consisting of sub-base valves

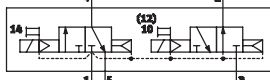
### Functions – In-line valve



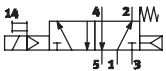
T32C: 2x3/2-way valve with internal pilot air supply, 2x normally closed



T32U: 2x3/2-way valve with internal pilot air supply, 2x normally open



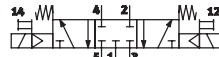
T32H: 2x3/2-way valve with internal pilot air supply, 1x normally closed, 1x normally open



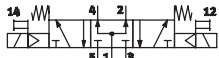
M52: 5/2-way valve, single solenoid, with internal pilot air supply



B52: 5/2-way valve, double solenoid, with internal pilot air supply



P53C: 5/3-way valve with internal pilot air supply, normally closed

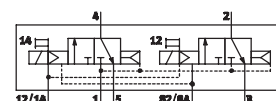


P53U: 5/3-way valve with internal pilot air supply, normally open

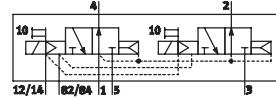


P53E: 5/3-way valve with internal pilot air supply, normally exhausted

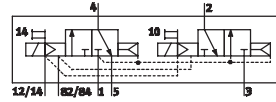
### Functions – Sub-base valve



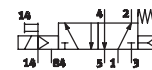
T32C: 2x3/2-way valve with external pilot air supply, 2x normally closed



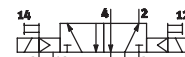
T32U: 2x3/2-way valve with external pilot air supply, 2x normally open



T32H: 2x3/2-way valve with external pilot air supply, 1x normally closed, 1x normally open



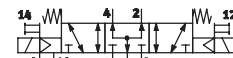
M52: 5/2-way valve, single solenoid, with external pilot air supply



B52: 5/2-way valve, double solenoid, with external pilot air supply



P53C: 5/3-way valve with external pilot air supply, normally closed



P53U: 5/3-way valve with external pilot air supply, normally open



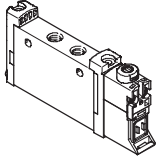
P53E: 5/3-way valve with external pilot air supply, normally exhausted

## Solenoid valves VUVG

Key features

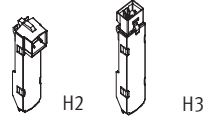
**FESTO**

### VUVG basic valves



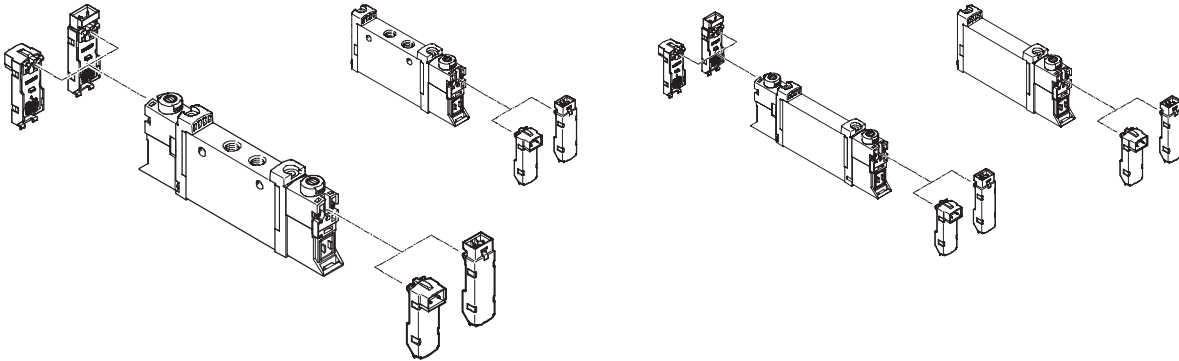
- Valve width 10 mm
- In-line valves
- Sub-base valves
- For 2x3/2-way, 5/2-way and 5/3-way valves

### Electric sub-bases

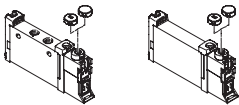


- 5, 12 and 24 V DC
- With or without holding current reduction
- LED

### Combinations of basic valve and electric sub-base

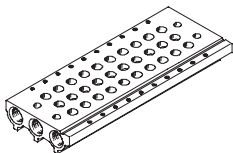


### Cover caps for manual override



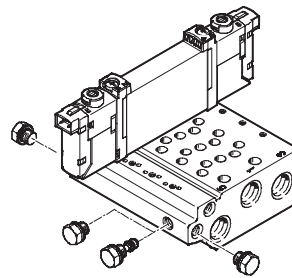
- Closed cap for covering the manual override
- Slotted cap for setting the manual override to non-detenting

### Manifold rail for in-line valves



- For M5 and M7 in-line valves, valve width 10
- For 2x3/2-way, 5/2-way and 5/3-way valves
- 2 to 10 and 12, 14, 16 valve positions

### Manifold rail for sub-base valves



- For sub-base valves, valve width 10
- Manifold rail with M5 or M7 working lines
- For 2x3/2-way, 5/2-way and 5/3-way valves
- 2 to 10, 12, 14 and 16 valve positions
- The sub-base valves are supplied externally with pilot air
- The valve manifold can be operated with either internal or external pilot air supply by using blanking plugs

### Blanking plate for vacant position



- Vacant position cover

### Supply plate



- For an additional air supply and exhausting via a valve position

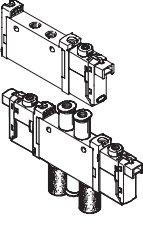
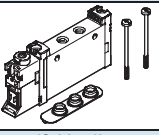
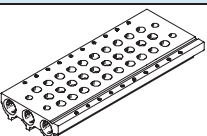
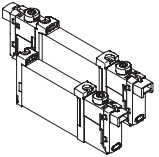
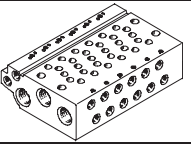
### Separator for pressure zones



- For creating multiple pressure zones on valve manifolds

# Solenoid valves VUVG

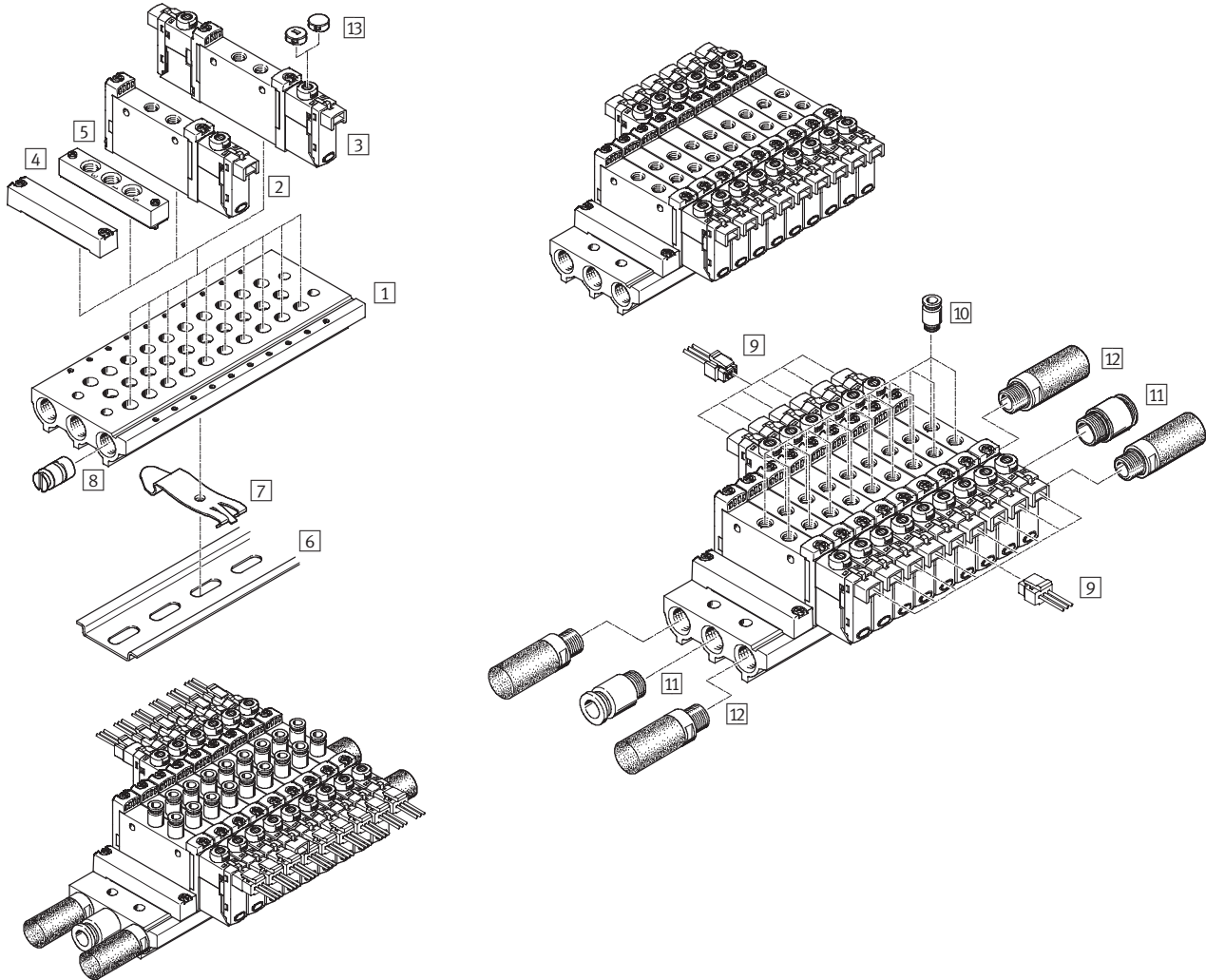
Product range overview

Design	Working line	Functions and flow rate [l/min]									→ Page/ Internet
		T32C	T32U	T32H	M52	B52	P53C	P53U	P53E		
In-line valve as individual valve 	Solenoid valve VUVG-L										
	M5	■ 150	■ 150	■ 150	■ 220	■ 220	■ 210	■ 210	■ 210	7	
	M7	■ 190	■ 190	■ 190	■ 380	■ 380	■ 320	■ 320	■ 320	9	
In-line valve for manifold assembly 	Solenoid valve VUVG-S										
	M5	■ 150	■ 150	■ 150	■ 220	■ 220	■ 210	■ 210	■ 210	7	
	M7	■ 170	■ 170	■ 170	■ 340	■ 340	■ 300	■ 300	■ 300	9	
	Manifold rail VABM- ... -S- ... 										
	-	■	■	■	■	■	■	■	■	12	
Sub-base valve for manifold assembly 	Solenoid valve VUVG-B										
	-	■ 170	■ 170	■ 170	■ 330	■ 330	■ 300	■ 300	■ 300	15	
	Manifold rail VABM- ... -W- ... (M5) and VABM- ... -HW- ... (M7) 										
	M5	■ 150	■ 150	■ 150	■ 210	■ 210	■ 200	■ 200	■ 200	18	
	M7	■ 160	■ 160	■ 160	■ 270	■ 270	■ 250	■ 250	■ 250		

## Solenoid valves VUVG-L and VUVG-S, in-line valves

System overview

### Manifold assembly



### Manifold assembly and accessories

	Type	Brief description	→ Page/Internet	
1	Manifold rail	VABM-L1-10S-G18-...	For 2 to 10, 12, 14 and 16 valve positions	12
2	Solenoid valve	VUVG- ...	In-line valve, 5/2-way single solenoid	7
3	Solenoid valve	VUVG- ...	In-line valve, 2x3/2-way, 5/2-way double solenoid and 5/3-way single solenoid	7
4	Blanking plate	VABB-L1-10-S	For covering an unused valve position	12
5	Supply plate	VABF-L1-10-P3A4- ...	For air supply 1 and outlet port 3 and 5	12
6	H-rail	NRH-35-2000	For attaching the valve manifold	21
7	H-rail mounting	VAME-T-M4	2 pieces for mounting on the manifold rail	21
8	Blanking plug	VABD-8-B	Separator for pressure zones	12
9	Plug socket with cable	NEBV-H1G2-KN-...-LE2	For electric sub-base H2 and H3	21
10	Push-in fitting	QS...	Quick push-in fitting for outlet port 2 and 4	21
11	Push-in fitting	QS...	Quick push-in fitting for air supply 1	quick star
12	Silencer	U...	For outlet port 3 and 5	21
13	Cover cap	VMPA-HB...-B	For manual override	21

## Solenoid valves VUVG-L and VUVG-S, in-line valves M5

Technical data

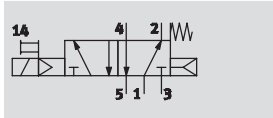
Function

2x3/2C, 2x3/2U, 2x3/2H

5/2-way single solenoid

5/2-way double solenoid

5/3C, 5/3U, 5/3E



E.g. 5/2-way valve with internal pilot air supply and combined reset with mechanical plus pneumatic spring

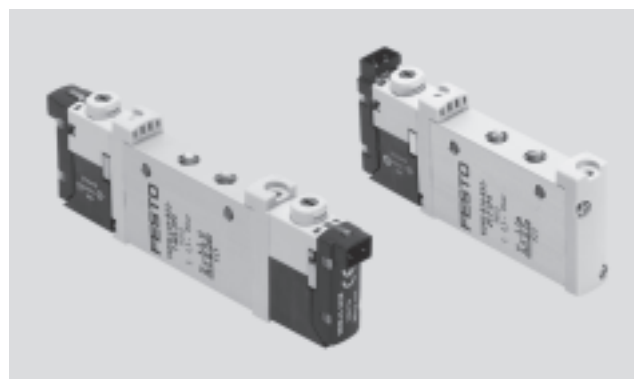
-  - Width 10 mm

Flow rate

150 ... 220 l/min

Voltage

5, 12 and 24 V DC



General technical data						
Valve function	2x3/2-way			5/2	5/3	
Normal position	C <sup>1)</sup>	U <sup>2)</sup>	H <sup>4)</sup>	–	–	C <sup>1)</sup> U <sup>2)</sup> E <sup>3)</sup>
Memory stability	Monostable				Bistable	Monostable
Pneumatic spring reset method	Yes			Yes <sup>5)</sup>	–	No
Mechanical spring reset method	No			Yes <sup>5)</sup>	–	Yes
Design	Piston spool valve					
Sealing principle	Soft					
Actuation type	Electric					
Type of control	Piloted					
Pilot air supply	Internal or external					
Exhaust function	Flow control					
Manual override	Choice of non-detenting, detenting or covered					
Type of mounting	Optionally via through-holes <sup>7)</sup> or on manifold rail					
Mounting position	Any					
Nominal size	[mm]	2.7	3.2			
Standard nominal flow rate	[l/min]	150	220	210		
Flow rate on manifold rail	[l/min]	150	220	210		
Switching time on/off	[ms]	6/16	7/19	–	10/30	
Changeover time	[ms]	–	7		16	
Width	[mm]	10				
Port	1, 2, 3, 4, 5	M5				
Product weight	[g]	55	45	55		
Corrosion resistance class	CRC	2 <sup>6)</sup>				

1) C = Normally closed.

2) U = Normally open.

3) E = Normally exhausted.

4) H = 2x3/2-way valve in one housing with 1x normally closed and 1x normally open.

5) Combined reset method.

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

Components subject to moderate corrosion stress. 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.

7) If multiple valves are to be screwed together via the through-holes to form a block, a minimum distance of 0.3 mm must be ensured by inserting spacers.

## Solenoid valves VUVG-L and VUVG-S, in-line valves M5

Technical data

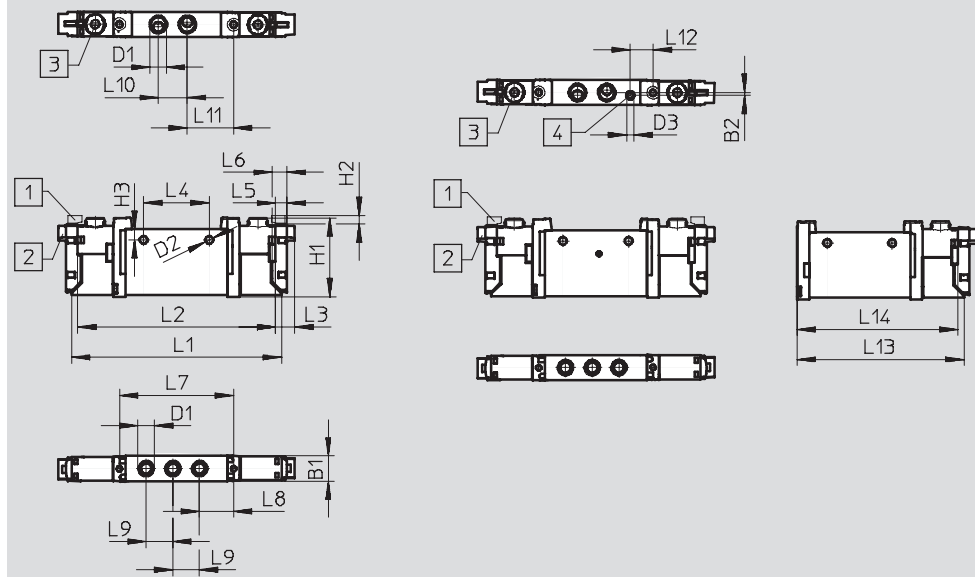
Operating and environmental conditions						
Valve function		2x3/2-way	5/2-way single solenoid	5/2-way double solenoid	5/3-way	
Operating medium		Filtered compressed air, grade of filtration 40 µm, lubricated or unlubricated				
Operating pressure	Internal pilot air supply	[bar]	1.5 ... 8	2.5 ... 8	1.5 ... 8	3 ... 8
Ambient temperature		[°C]	-5 ... +50, -5 ... +60 with holding current reduction			
Temperature of medium		[°C]	-5 ... +50, -5 ... +60 with holding current reduction			

Electrical data	
Electrical connection	Via electric sub-base
Operating voltage	[V DC] 5, 12 and 24 ±10%
Output	[W] 1, reduced to 0.35 via holding current reduction
Duty cycle	[%] 100
Protection class to EN 60529	IP40 (with plug socket)

Information on materials	
Housing	Wrought aluminium alloy
Seals	HNBR, NBR
Note on materials	RoHS-compliant

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

2x3/2-way, 5/2-way and 5/3-way valves



- 1 Vertical electrical connection    
 2 Horizontal electrical connection    
 3 Manual override    
 4 Port for external pilot air supply (not active)

Type	B1	B2	D1	D2	D3	H1	H2	H3	L1	L2	L3	L4
VUVG-L-10 ...-M5 ...	10	-	M5	3.2	-	32.5	3.6	4.4	86.5	81.5	8	27
VUVG-S-10 ...-M5 ...	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14		
	4.85	6.15	47	14	11	12	19	-	69.2	66.7		

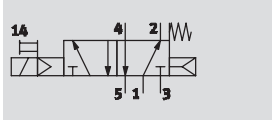
## Solenoid valves VUVG-L and VUVG-S, in-line valves M7

FESTO

Technical data

Function

2x3/2C, 2x3/2U, 2x3/2H  
5/2-way single solenoid  
5/2-way double solenoid  
5/3C, 5/3U, 5/3E

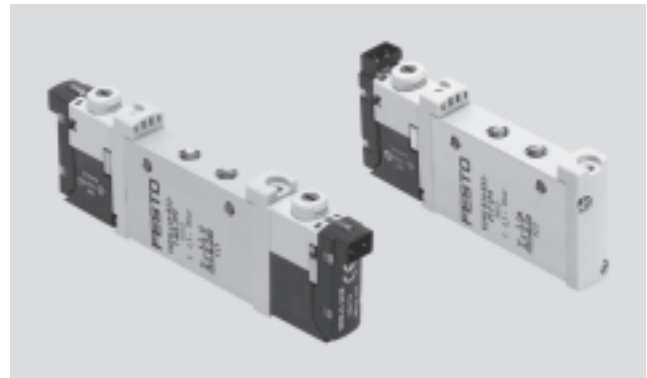


E.g. 5/2-way valve with internal pilot air supply and combined reset with mechanical plus pneumatic spring

 Width 10 mm

Flow rate  
190 ... 380 l/min

Voltage  
5, 12 and 24 V DC



General technical data						
Valve function	2x3/2-way			5/2-way		5/3-way
Normal position	C <sup>1)</sup>	U <sup>2)</sup>	H <sup>4)</sup>	–	–	C <sup>1)</sup> U <sup>2)</sup> E <sup>3)</sup>
Memory stability	Monostable				Bistable	Monostable
Pneumatic spring reset method	Yes			Yes <sup>5)</sup>	–	No
Mechanical spring reset method	No			Yes <sup>5)</sup>	–	Yes
Design	Piston spool valve					
Sealing principle	Soft					
Actuation type	Electric					
Type of control	Piloted					
Pilot air supply	Internal or external					
Exhaust function	Flow control					
Manual override	Choice of non-detenting, detenting or covered					
Type of mounting	Optionally via through-holes <sup>7)</sup> or on manifold rail					
Mounting position	Any					
Nominal size	[mm]	2.7		4.0		3.5
Standard nominal flow rate	[l/min]	190		380		320
Flow rate on manifold rail	[l/min]	170		340		300
Switching time on/off	[ms]	6/16		7/19	–	10/30
Changeover time	[ms]	–			7	16
Width	[mm]	10				
Port	1, 2, 3, 4, 5	M7				
Product weight	[g]	55		45	55	
Corrosion resistance class	CRC	2 <sup>6)</sup>				

1) C = Normally closed.

2) U = Normally open.

3) E = Normally exhausted.

4) H = 2x3/2-way valve in one housing with 1x normally closed and 1x normally open.

5) Combined reset method.

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

Components subject to moderate corrosion stress. 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.

7) If multiple valves are to be screwed together via the through-holes to form a block, a minimum distance of 0.3 mm must be ensured by inserting spacers.

## Solenoid valves VUVG-L and VUVG-S, in-line valves M7

Technical data

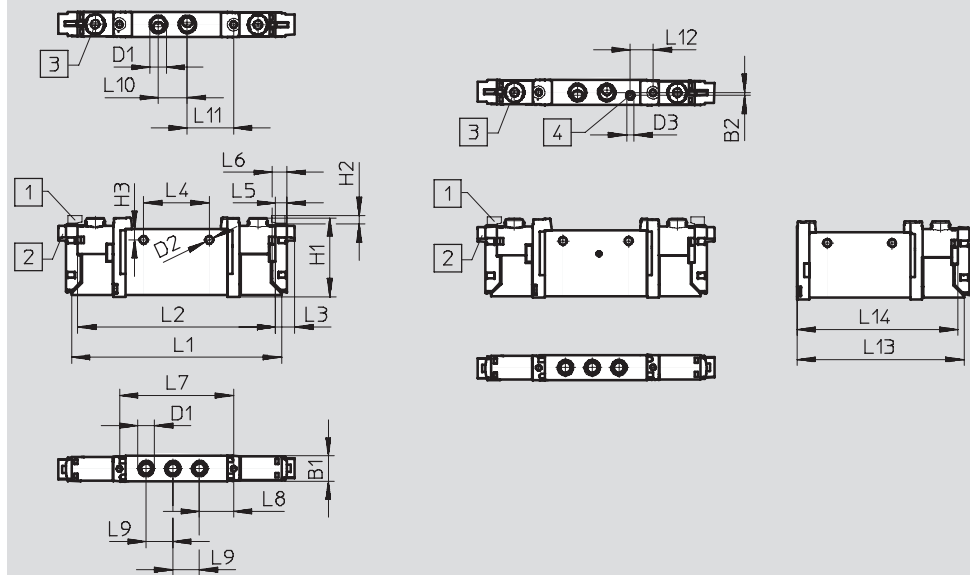
Operating and environmental conditions		2x3/2-way	5/2-way single solenoid	5/2-way double solenoid	5/3-way
Valve function					
Operating medium		Filtered compressed air, grade of filtration 40 µm, lubricated or unlubricated			
Operating pressure	Internal pilot air supply [bar]	1.5 ... 8	2.5 ... 8	1.5 ... 8	3 ... 8
Ambient temperature	[°C]	-5 ... +50, -5 ... +60 with holding current reduction			
Temperature of medium	[°C]	-5 ... +50, -5 ... +60 with holding current reduction			

Electrical data	
Electrical connection	Via electric sub-base
Operating voltage	[V DC] 5, 12, 24 ±10%
Output	[W] 1, reduced to 0.35 via holding current reduction
Duty cycle	[%] 100
Protection class to EN 60529	IP40 (with plug socket)

Information on materials	
Housing	Wrought aluminium alloy
Seals	HNBR, NBR
Note on materials	RoHS-compliant

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

2x3/2-way, 5/2-way and 5/3-way valves



- 1 Vertical electrical connection    
 2 Horizontal electrical connection    
 3 Manual override    
 4 Port for external pilot air supply (not active)

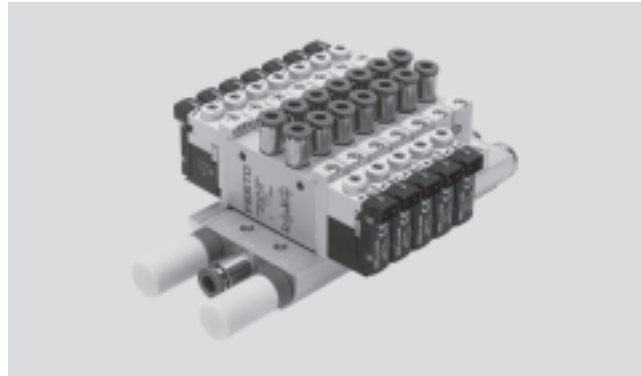
Type	B1	B2	D1	D2	D3	H1	H2	H3	L1	L2	L3	L4
VUVG-L-10 ...-M7 ...	10	-	M5	3.2	-	32.5	3.6	4.4	86.5	81.5	8	27
VUVG-S-10 ...-M7 ...	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14		
	4.85	6.15	47	14	11	12	19	-	69.2	66.7		



## Solenoid valves VUVG-S, in-line valves

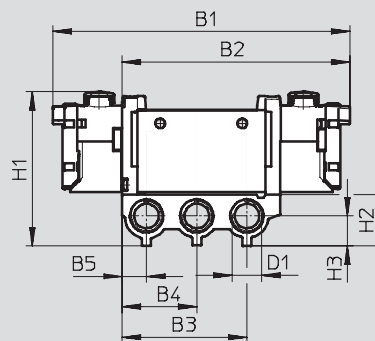
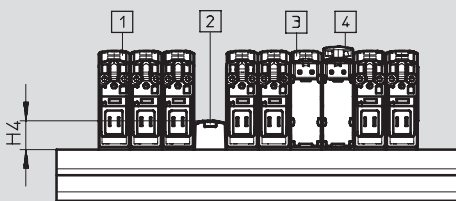
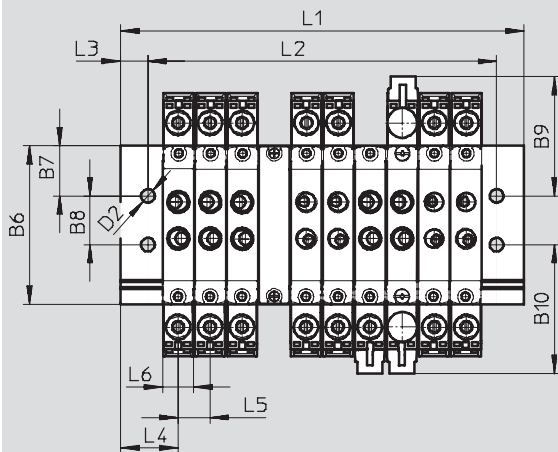
Manifold assembly

In-line valves for manifold assembly



### Dimensions

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



1 Solenoid valve, vertical electrical connection

2 Blanking plate VABB-L1-10-S

3 Solenoid valve, horizontal electrical connection

4 Cover cap for "covered" manual override

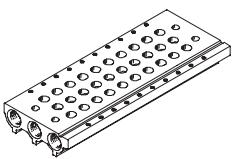
Type	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	D1	D2
VUVG-S10 -...-M5 ...	97.5	74.8	41	24.5	8	52	16.5	16	39.2	42.3	G $\frac{1}{8}$	4.5
	H1	H2	H3	L3	L4	L5	L6					
	50.6	16.8	9	9	19	10.5	10.25					

Valve positions	2	3	4	5	6	7	8	9	10	12	14	16
L1 [mm]	48.5	59	69.5	80	90.5	101	111.5	122	132.5	153.5	174.5	195.5
L2 [mm]	30.5	41	51.5	62	72.5	83	93.5	104	114.5	135.5	156.5	177.5
VABM weight [g]	66	81	96	111	126	141	156	171	186	216	246	276

## Solenoid valves VUVG-S, in-line valves

**FESTO**

Ordering data





Technical data – Manifold rails							
	Port	CRC	Material <sup>2)</sup>	Operating pressure	Max. tightening torque for assembly [Nm]		
	1, 3, 5			[bar]	Valve	H-rail	Wall
	G $\frac{1}{8}$	2 <sup>1)</sup>	Wrought aluminium alloy	-0.9 ... 10	0.45	1.5	3

- 1) Corrosion resistance class 2 according to Festo standard 940 070  
Components subject to moderate corrosion stress. 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.
- 2) Note on materials: RoHS-compliant.

### Order code – Manifold rails

<b>VABM</b>	-	<b>L1</b>	-	<b>10</b>	<b>S</b>	-	<b>G18</b>	-	
Manifold assembly components									Number of valve positions
Manifold rail		<b>VABM</b>							2 to 10, 12, 14 and 16
Valve series									Ports 1, 3 and 5
VUVG		<b>L1</b>					<b>G18</b>	G $\frac{1}{8}$	
Valve width									
10 mm				<b>10</b>					
Manifold rail with ports 1, 3, 5									
For M5 and M7 in-line valves					<b>S</b>				

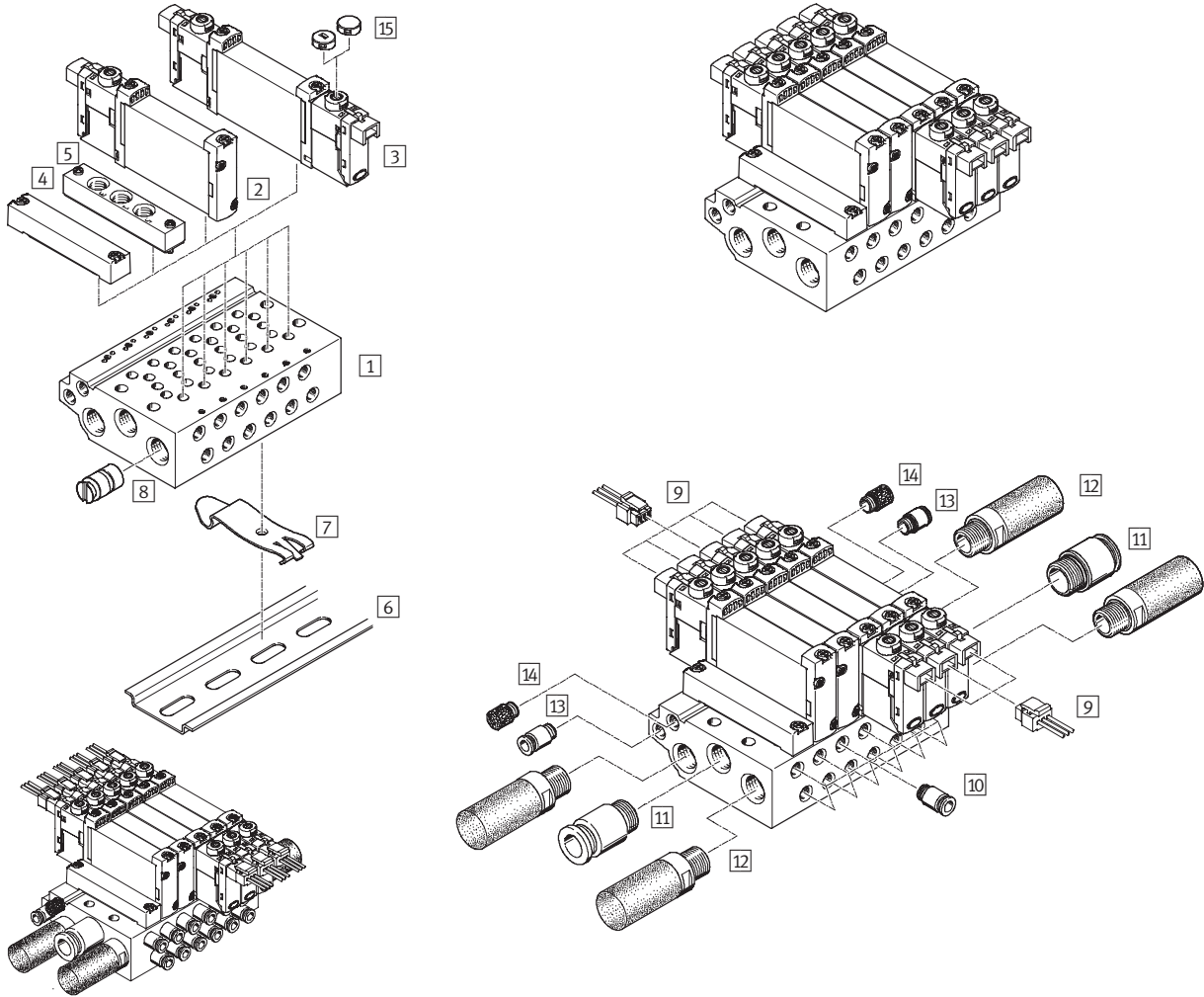
### Ordering data – Accessories

			Type
Blanking plate <span style="float: right;">Technical data → Internet: vabb</span>			
	For manifold rail M5/M7, in-line valves	Incl. screws and seal	<b>VABB-L1-10-S</b>
Blanking plug <span style="float: right;">Technical data → Internet: vabd</span>			
	For manifold rail M5/M7, in-line valves	Separator for pressure zones	<b>VABD-8-B</b>
Supply plate <span style="float: right;">Technical data → Internet: vabf</span>			
	For manifold rail M5, in-line valves	Incl. screws and seal	<b>VABF-L1-10-P3A4-M5</b>
	For manifold rail M7, in-line valves		<b>VABF-L1-10-P3A4-M7</b>
Seals for in-line valves <span style="float: right;">Technical data → Internet: vabd</span>			
	M5	10 seals and 20 screws	<b>VABD-L1-10X-S-M5</b>
	M7		<b>VABD-L1-10X-S-M7</b>

## Solenoid valves VUVG-B, sub-base valves

System overview

### Manifold assembly



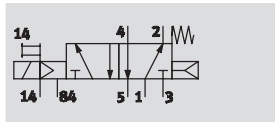
Manifold assembly and accessories				
	Type	Brief description	→ Page/Internet	
1	Manifold rail	VABM-L1-10 ...-G18- ...	For 2 to 10, 12, 14 and 16 valve positions	18
2	Solenoid valve	VUVG- ...	Sub-base valve, 5/2-way single solenoid	15
3	Solenoid valve	VUVG- ...	Sub-base valve, 2x3/2-way, 5/2-way double solenoid and 5/3-way single solenoid	15
4	Blanking plate	VABB-L1-10-S	For covering an unused valve position	18
5	Supply plate	VABF-L1-10-P3A4- ...	For air supply 1 and outlet port 3 and 5	18
6	H-rail	NRH-35-2000	For attaching the valve manifold	21
7	H-rail mounting	VAME-T-M4	2 pieces for mounting on the manifold rail	21
8	Blanking plug	VABD- ...	Separator for pressure zones	18
9	Plug socket with cable	NEBV-H1G2-KN-...-LE2	For electric sub-base H2 and H3	21
10	Push-in fitting	QS...	Quick push-in fitting for outlet port 2 and 4	quick star
11	Push-in fitting	QS...	Quick push-in fitting for air supply 1	quick star
12	Silencer	U...	For outlet port 3 and 5	21
13	Push-in fitting	QS...	Quick push-in fitting for pilot air supply 12/14	quick star
14	Silencer	U...	Silencer for pilot air exhaust 82/84	quick star
15	Cover cap	VMPA-HB...-B	For manual override	21

## Solenoid valves VUVG-B, sub-base valves

Technical data

Function

2x3/2C, 2x3/2U, 2x3/2H  
5/2-way single solenoid  
5/2-way double solenoid  
5/3C, 5/3U, 5/3E

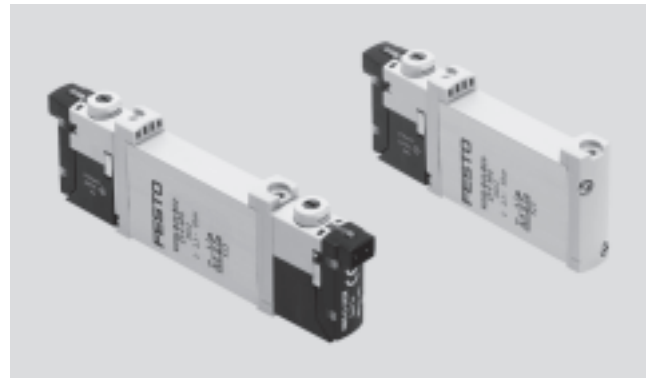


E.g. 5/2-way valve with internal pilot air supply and combined reset with mechanical plus pneumatic spring

-  - Width 10 mm

Flow rate  
160 ... 270 l/min

Voltage  
5, 12 and 24 V DC



General technical data							
Valve function	2x3/2-way			5/2-way		5/3-way	
Normal position	C <sup>1)</sup>	U <sup>2)</sup>	H <sup>4)</sup>	-	-	C <sup>1)</sup>	U <sup>2)</sup> E <sup>3)</sup>
Memory stability	Monostable				Bistable		Monostable
Pneumatic spring reset method	Yes			Yes <sup>5)</sup>	-	No	
Mechanical spring reset method	No			Yes <sup>5)</sup>	-	Yes	
Design	Piston spool valve						
Sealing principle	Soft						
Actuation type	Electric						
Type of control	Piloted						
Pilot air supply	Internal or external						
Exhaust function	Flow control						
Manual override	Choice of non-detenting, detenting or covered						
Type of mounting	On manifold rail						
Mounting position	Any						
Nominal size	[mm]	2.7			3.2		
Standard nominal flow rate	[l/min]	160			270		250
Flow rate on manifold rail M5	[l/min]	150			210		200
Flow rate on manifold rail M7	[l/min]	160			270		250
Switching time on/off	[ms]	6/16			7/19	-	10/30
Changeover time	[ms]	-			7		16
Width	[mm]	10					
Port	1, 3, 5	G1/8 in manifold rail					
	2, 4	M5 or M7 in manifold rail					
	12/14, 82/84	M5 in manifold rail					
Product weight	[g]	55			45	55	
Corrosion resistance class	CRC	2 <sup>6)</sup>					

1) C = Normally closed.

2) U = Normally open.

3) E = Normally exhausted.

4) H = 2x3/2-way valve in one housing with 1x normally closed and 1x normally open.

5) Combined reset method.

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

Components subject to moderate corrosion stress. 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.

## Solenoid valves VUVG-B, sub-base valves

Technical data

Operating and environmental conditions		2x3/2-way	5/2-way single solenoid	5/2-way double solenoid	5/3-way
Valve function					
Operating medium		Filtered compressed air, grade of filtration 40 µm, lubricated or unlubricated			
Operating pressure	Internal pilot air supply [bar]	1.5 ... 8	2.5 ... 8	1.5 ... 8	3 ... 8
	External pilot air supply [bar]	0.9 ... 10			
Pilot pressure [bar]		1.5 ... 8	2.5 ... 8	1.5 ... 8	3 ... 8
Ambient temperature [°C]		-5 ... +50, -5 ... +60 with holding current reduction			
Temperature of medium [°C]		-5 ... +50, -5 ... +60 with holding current reduction			

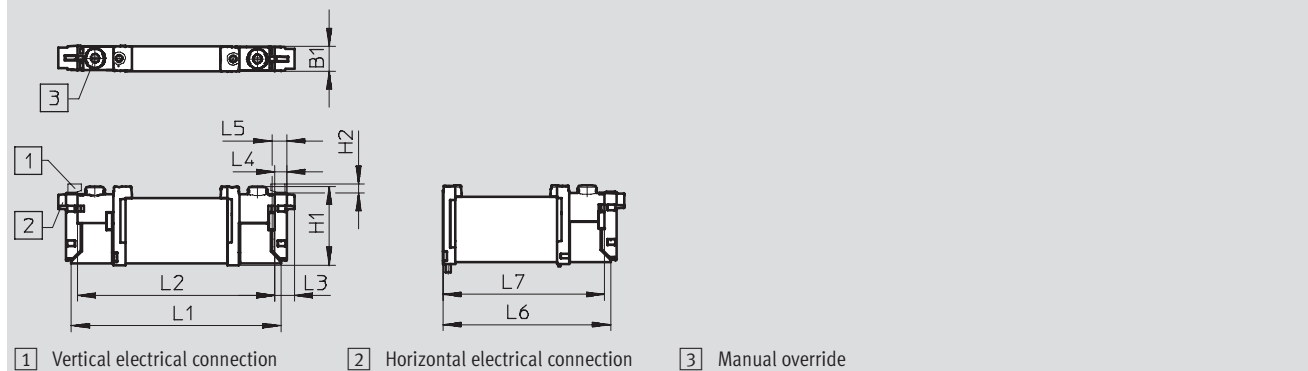
1) Minimum pilot pressure 50% of the operating pressure.

Electrical data	
Electrical connection	Via electric sub-base
Operating voltage [V DC]	5, 12 and 24 ±10%
Output [W]	1, reduced to 0.35 via holding current reduction
Duty cycle [%]	100
Protection class to EN 60529	IP40 (with plug socket)

Information on materials	
Housing	Wrought aluminium alloy
Seals	HNBR, NBR
Note on materials	RoHS-compliant

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

2x3/2-way, 5/2-way and 5/3-way valves



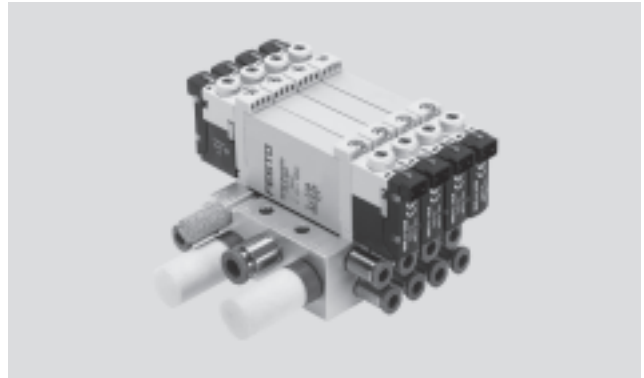
Type	B1	H1	H2	L1	L2	L3	L4	L5	L6	L7
VUVG-B10 -...-F ...	10	32.5	3.6	86.5	81.5	8	4.85	6.15	69.2	66.7



## Solenoid valves VUVG-B, sub-base valves

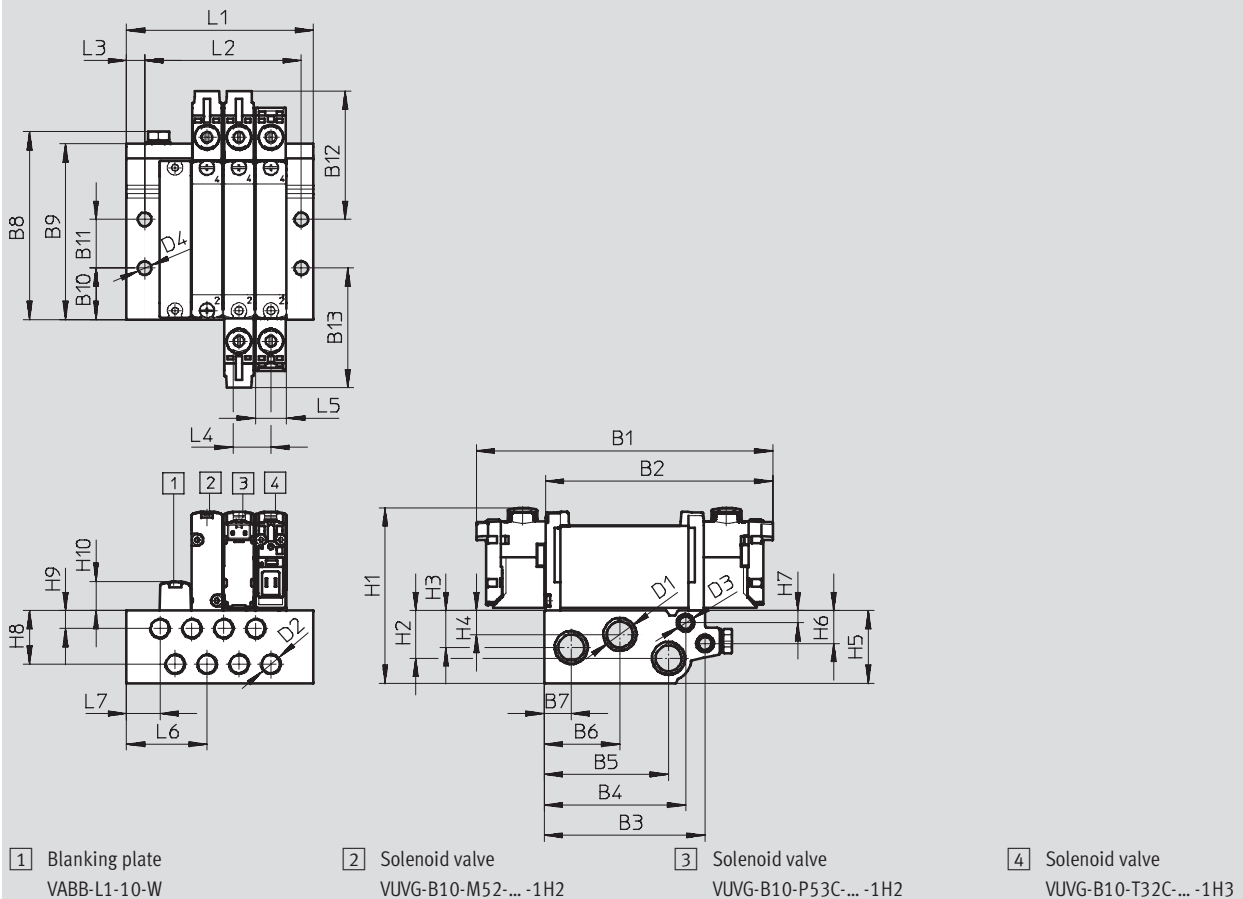
Manifold assembly

Sub-base valve  
for manifold assembly



### Dimensions

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



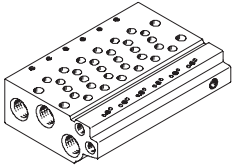
Type	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
VUVG-B10 -...-F ...	97.5	74.8	52.9	46.5	40.9	24.9	8.9	62	57.7	16.9	16	42.2
	B13	D1	D2	D3	D4	H1	H2	H3	H4	H5	H6	H7
	39.3	G $\frac{1}{8}$	M5/M7	M5	4.5	56.4	15.7	12.17	7.87	23.9	10.8	4
	H8	H9	H10	L3	L4	L5	L6	L7				
	17.6	5.9	10	4	10.5	10.25	16	11				

Valve positions	2	3	4	5	6	7	8	9	10	12	14	16
L1 [mm]	40.5	51	61.5	72	82.5	93	103.5	114	122.5	145.5	166.5	187.5
L2 [mm]	30.5	41	51.5	62	72.5	83	93.5	104	114.5	135.5	156.5	177.5
VABM weight [g]	107	135	163	191	219	247	275	303	331	387	415	471

# Solenoid valves VUVG-B, sub-base valves

Ordering data






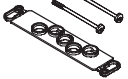
Technical data – Manifold rails									
	Port			CRC	Material <sup>2)</sup>	Operating pressure [bar]	Max. tightening torque for assembly [Nm]		
	2, 4	1, 3, 5	12/14, 82/84				Valve	H-rail	Wall
	M5 or M7	G1/8	M5	2 <sup>1)</sup>	Wrought aluminium alloy	-0.9 ... 10	0.45	1.5	3

- 1) Corrosion resistance class 2 according to Festo standard 940 070  
Components subject to moderate corrosion stress. 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.
- 2) Note on materials: RoHS-compliant.

## Order code – Manifold rails M5 and M7



<b>VABM</b>	-	<b>L1</b>	-	<b>10</b>	-	<b>G18</b>	-	
Manifold assembly components						Number of valve positions		
Manifold rail		<b>VABM</b>				2 to 10, 12, 14 and 16		
Valve series						Ports 1, 3 and 5		
VUVG		<b>L1</b>				<b>G18</b> G1/8		
Valve width								
10 mm								<b>10</b>
Rail with ports 1, 2, 3, 4, 5, 12/14, 82/84								
Port 2 and 4 in M5								<b>W</b>
Port 2 and 4 in M7								<b>HW</b>

## Ordering data – Accessories

			Type
Blanking plate			Technical data → Internet: vabb
	For manifold rail M5/M7, sub-base valves	Incl. screws and seal	<b>VABB-L1-10-W</b>
Blanking plug			Technical data → Internet: vabd
	For manifold rail M5 and M7, sub-base valves	Separator for pressure zones	<b>VABD-6-B</b>
Supply plate			Technical data → Internet: vabf
	For manifold rail M5	Incl. screws and seal	<b>VABF-L1-10-P3A4-M5</b>
	For manifold rail M7		<b>VABF-L1-10-P3A4-M7</b>
Seals for sub-base valves			Technical data → Internet: vabd
	M5 and M7	10 seals and 20 screws	<b>VABD-L1-10B-S-M5</b>

## Solenoid valves VUVG


Ordering data – Electric sub-bases




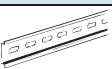


Ordering data – Electric sub-base									
Design	Plug	Additional functions	Ambient temperature [°C]	Code	Output		Voltage		Type
					[W]	[VA]	[V DC]	[V AC]	
	NEBV-H1 ...	LED, spark arresting, bipolar	-5 ... +50	H2	1	-	-	24	<b>VAVE-L1-1VH2-LP</b>
		LED, spark arresting, holding current reduction	-5 ... +60	H2R	1/0.35	-	-	24	<b>VAVE-L1-1H2-LR</b>
	NEBV-H1 ...	LED, spark arresting, bipolar	-5 ... +50	H3	1	-	-	24	<b>VAVE-L1-1VH3-LP</b>
		LED, spark arresting, holding current reduction	-5 ... +60	H3R	1/0.35	-	-	24	<b>VAVE-L1-1H3-LR</b>

# Solenoid valves VUVG

Accessories



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
Ordering data			
	Voltage	Cable length [m]	Type
Plug socket with cable, not sheathed, open end			Technical data → Internet: nebv
	5, 12 and 24 V DC	0.5	NEBV-H1G2-KN-0.5-LE2
		1	NEBV-H1G2-KN-1-LE2
		2.5	NEBV-H1G2-KN-2.5-LE2
		5	NEBV-H1G2-KN-5-LE2

Ordering data			
	Description		Type
Blanking plug			Technical data → Internet: b
	For manifold rail		B-M5
			B-M7
			B-1/8
Fittings			Technical data → Internet: qsm
	For tubing Ø 3 mm	10 pieces	QSM-M5-3-I
	For tubing Ø 4 mm		QSM-M5-4-I
	For tubing Ø 6 mm		QSM-M5-6-I
	For tubing Ø 4 mm		QSM-M7-4-I
	For tubing Ø 6 mm	QSM-M7-6-I	
	For tubing Ø 3 mm	100 pieces	QSM-M5-3-I-R100
	For tubing Ø 4 mm		QSM-M5-4-I-R100
	For tubing Ø 6 mm		QSM-M5-6-I-R100
For tubing Ø 6 mm	QSM-M7-6-I-R100		
Silencer			Technical data → Internet: uc
	For thread M5		U-M5
	For thread M7		UC-M7
	For thread G1/8		UC-1/8
H-rail			Technical data → Internet: nrh
	–	2 m	NRH-35-2000
H-rail mounting			Technical data → Internet: vame
	–	2 pieces	VAME-T-M4
Covers for manual override			Technical data → Internet: vmpa
	Covered		VMPA-HBV-B
	Non-detenting		VMPA-HBT-B

## Solenoid valves VUVG

Ordering Data – Push-in Fittings

Ordering Data – Push-in Fittings QS/QSM for Metric Tubing					Technical Data → <a href="http://www.festo.com/catalog/QS">www.festo.com/catalog/QS</a>	
	For tubing	M5 <sup>1)</sup>		M7 <sup>1)</sup>		R1/8 <sup>1)</sup>
	O.D. [mm]	Part No.	Type	Part No.	Type	Part No. Type
<b>With external hex</b>						
	3	153302	QSM-M5-3	–	–	–
	4	153304	QSM-M5-4	–	–	153001 QS-1/8-4
	6	153306	QSM-M5-6	–	–	153002 QS-1/8-6
	8	–	–	–	–	153004 QS-1/8-8
	10	–	–	–	–	190643 QS-1/8-10
<b>With internal hex</b>						
	3	153313	QSM-M5-3-I	–	–	–
	4	153315	QSM-M5-4-I	153319	QSM-M7-4-I	153012 QS-1/8-4-I
	6	153317	QSM-M5-6-I	153321	QSM-M7-6-I	153013 QS-1/8-6-I
	8	–	–	–	–	153015 QS-1/8-8-I
	10	–	–	–	–	190647 QS-1/8-10-I

Ordering Data – Push-in Fittings QS/QSM for Inch-sized Tubing					Technical Data → <a href="http://www.festo.com/catalog/QS">www.festo.com/catalog/QS</a>	
	For tubing	M5		M7		R1/8
	O.D. [in]	Part No.	Type	Part No.	Type	Part No. Type
<b>With external hex</b>						
	1/8	533209	QS-H-M5-1/8-U-M <sup>1)</sup>	–	–	533213 QS-H-1/8-1/8-U-M
	5/32	533210	QS-H-M5-5/32-U-M	–	–	533214 QS-H-1/8-5/32-U-M
	3/16	533211	QS-H-M5-3/16-U-M	–	–	533215 QS-H-1/8-3/16-U-M
	1/4	533212	QS-H-M5-1/4-U-M	–	–	533216 QS-H-1/8-1/4-U-M
	5/16	533217	QS-H-1/8-5/16-U-M	–	–	533217 QS-H-1/8-5/16-U-M
<b>With internal hex</b>						
	1/8	183749	QSM-M5-1/8-I-U-M	183738	QSM-M7-1/8-I-U-M	–
	5/32	130593	QSM-M5-5/32-I-U-M	–	–	–
	3/16	183750	QSM-M5-3/16-I-U-M	183739	QSM-M7-3/16-I-U-M	–
	1/4	130591	QSM-M5-1/4-I-U-M	183740	QSM-M7-1/4-I-U-M	183741 QS-1/8-1/4-I-U-M
	5/16	–	–	–	–	183742 QS-1/8-5/16-I-U-M

1) Scope of delivery 10 pieces

# Product Range and Company Overview

## A Complete Suite of Automation Services

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



**Custom Automation Components**  
Complete custom engineered solutions



**Custom Control Cabinets**  
Comprehensive engineering support and on-site services



**Complete Systems**  
Shipment, stocking and storage services

## The Broadest Range of Automation Components

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



**Electromechanical**  
Electromechanical actuators, motors, controllers & drives



**Pneumatics**  
Pneumatic linear and rotary actuators, valves, and air supply



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

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

Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 12,000 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

## Quality Assurance, ISO 9001 and ISO 14001 Certifications

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

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.



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Printed on recycled paper at New Horizon Graphic, Inc., FSC certified as an environmentally friendly printing plant.

# Festo North America

## United States

### Customer Resource Center

502 Earth City Expy., Suite 125  
Earth City, MO 63045

For ordering assistance, or to find  
your nearest Festo Distributor,

**Call:** 1.800.99.FESTO

**Fax:** 1.800.96.FESTO

**Email:** customer.service@us.festo.com

For technical support,

**Call:** 1.866.G0.FESTO

**Fax:** 1.800.96.FESTO

**Email:** product.support@us.festo.com

### Headquarters

Festo Corporation  
395 Moreland Road  
P.O. Box 18023  
Hauppauge, NY 11788  
[www.festo.com/us](http://www.festo.com/us)

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## Sales Offices

### Appleton

N. 922 Tower View Drive, Suite N  
Greenville, WI 54942

### Boston

120 Presidential Way, Suite 330  
Woburn, MA 01801

### Chicago

1441 East Business Center Drive  
Mt. Prospect, IL 60056

### Dallas

1825 Lakeway Drive, Suite 600  
Lewisville, TX 75057

### Detroit - Automotive Engineering Center

2601 Cambridge Court, Suite 320  
Auburn Hills, MI 48326

### New York

395 Moreland Road  
Hauppauge, NY 11788

### Silicon Valley

4935 Southfront Road, Suite F  
Livermore, CA 94550

## Design and Manufacturing Operations



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**West:** 4935 Southfront Road, Suite F, Livermore, CA 94550

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## Festo Worldwide

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vakia Slovenia South Africa South Korea Spain Sweden Switzerland Taiwan Thailand Turkey Ukraine United States Venezuela

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