Pneumatic valve VUWG

FESTO

Characteristics

At a glance

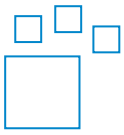
Innovative:
- Various connection sizes (M3, M5, M7, G1/8, G1/4)
- 10 bar maximum pressure
- 2x3/2-way valve in one valve housing

Flexible:
- Versatile valve functions
- In-line valves can be used as individual valves or manifold valves
- M5/ M7 in-line valves can be mixed on one manifold rail
- Identical sub-base valves for M5 or M7 manifold rail
- Manifolds with pressure zones
- Selectable quick connectors

Operationally safe:
- Sturdy and durable metal components
- Service reliability thanks to valves that are quick and easy to replace

Easy to assemble:
- Solid wall mounting or H-rail mounting
- Easy to mount thanks to captive screws and seal

Ordering data - modular system



Configurable product
This product and all its product options can be ordered online via the configurator.

Valve function

[P53U] 5/3-way valve, mid-position pressurised

If there is no switching signal, the valve with 3 switching positions assumes the mid-position. In the exhausted mid-position, ports 2 and 4 are connected to ports 3 and 5. This means that the air flows from the working ports (2 and 4) to the exhaust ports (3 and 5).

[P53C] 5/3-way valve, mid-position closed

If there is no switching signal, the valve with 3 switching positions assumes the mid-position. With the mid-position closed, ports 2 and 4 are sealed and no air flows through the valve.

[P53E] 5/3-way valve, mid-position exhausted|

If there is no switching signal, the valve with 3 switching positions assumes the mid-position. In the exhausted mid-position, ports 2 and 4 are connected to ports 3 and 5. This means that the air flows from the working ports (2 and 4) to the exhaust ports (3 and 5).

Directional control valve type

[B] Sub-base valve

In the case of sub-base valves, the supply ports and working ports (2, 4) are pneumatically linked to the valve via (e.g. sub-base).

[S] Semi-inline valve

In the case of semi in-line valves, the supply ports are connected to the valve via pneumatic links (e.g. sub-base). The working connections (2, 4) are located on the valve.

[L] In-line valve

In-line valves are intended for use without pneumatic linkage. All pneumatic connections are on the valve and can be equipped with fittings/tubing.

Characteristics

Reset method for monostable/single solenoid valves

[_] None

[A] Pneumatic spring

If there is no switching signal, the valve is moved to its normal position by compressed air. Therefore compressed air has to be applied. The compressed air supply for the pneumatic reset is branched off from duct 1.

[E] Pneumatic spring, external

If there is no switching signal, the valve is moved to its normal position by compressed air. Therefore compressed air has to be applied. The compressed air supply for the pneumatic reset comes from duct 14 of the manifold rail.

[M] Mechanical spring

If there is no switching signal, the valve is set to its normal position by compressed air and mechanical spring force. It is not necessary for compressed air to be applied.

[R] Mixed, pneumatic/mechanical spring

If there is no switching signal, the valve is moved to its normal position by compressed air and mechanical spring force. Therefore compressed air has to be applied. The compressed air supply for the pneumatic reset is branched off from duct 1.

[X] Mixed, pneumatic/mechanical spring, external

If there is no switching signal, the valve is moved to its normal position by compressed air and mechanical spring force. Therefore compressed air has to be applied. The compressed air supply for the pneumatic reset comes from duct 14 of the manifold rail.

Pneumatic connection

Configuration of pneumatic connections. The configured product is delivered fully assembled with the selected connection type. The following types are available:

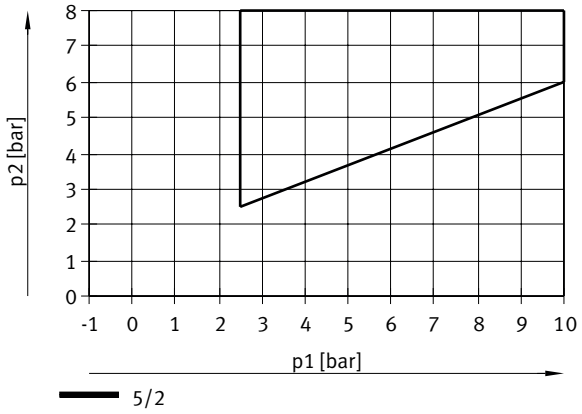
- Threaded connection (e.g. metric thread M5)
- Push-in connector for OD tubing (e.g. for tubing with O.D. 6 mm)

Exhaust

Configuration of pneumatic connections 3 and 5. The configured product is delivered fully assembled with the selected connection type. The following types are available:

- without fitting (threaded connection with metric thread)
- with fitting (push-in connector for O.D. tubing)
- Silencer

Operating pressure [bar]



This graph applies to the 2x3/2-way valves and 5/2-way monostable valves with pneumatic spring: T32CA, T32UA, T32A; M52A, M52R

Note: The compressed air for the pneumatic springs is supplied from port 1 (operating pressure). To ensure the valve switches reliably, the minimum pressure as per the graph must always be adhered to for the pilot pressure.

Type code

001	Series	
VUWG	Pneumatic valve	

002	Directional control valve type	
L	In-line valve	
S	Semi-inline valve	
B	Sub-base valve	

003	Size	
10A	Size 10, deviating flow	
10	Size 10	
14	Size 14	
18	Size 18	

004	Valve function	
B52	5/2-way valve, double solenoid/bistable	
M52	5/2-way valve, single solenoid/monostable	
P53C	5/3-way valve, mid-position closed	
P53E	5/3-way valve, mid-position exhausted	
P53U	5/3-way valve, mid-position pressurised	
T32C	2x3/2-way valve, normally closed	
T32H	2x3/2-way valve, 1x normally closed, 1x normally open	
T32U	2x3/2-way valve, normally open	

005	Reset method for monostable/single solenoid valves	
	None	
A	Pneumatic spring	
E	Pneumatic spring, external	
M	Mechanical spring	
R	Mixed, pneumatic/mechanical spring	
X	Mixed, pneumatic/mechanical spring, external	

006	Pneumatic connection	
F	Flange/sub-base	
G18	G1/8	
G14	G1/4	
M3	M3	
M5	M5	
M7	M7	
Q3	Push-in connector, 3 mm	
Q4	Push-in connector 4 mm	
Q4H	Push-in connector 4 mm, with connecting thread M7	
Q6	Push-in connector 6 mm	
Q6H	Push-in connector 6 mm, with connecting thread M7	
Q8	Push-in connector 8 mm	
Q10	Push-in connector 10 mm	
T316	Push-in connector 3/16“	
T316H	Push-in connector for 3/16“, M7	
T38	Push-in connector 3/8“	
T18	Push-in connector 1/8“	
T14	Push-in connector 1/4“	
T14H	Push-in connector for 1/4“, M7	
T532	Push-in connector 5/32“	
T516	Push-in connector 5/16“	

007	Exhaust	
	No fitting	
QN	With fitting	
U	Silencer	

Datasheet

VUWG-L10A, in-line valves M3, general technical data					
Valve function	5/2-way, monostable		5/3-way, pressurised	5/3 exhausted	5/3 closed
Type of reset [1]	Mechanical spring	Mechanical spring, Pneumatic spring	Mechanical spring		
Suitability for vacuum	yes	no	yes		
Design	Piston gate valve				
lap	Overlap		Indefinite overlap		Overlap
Sealing principle	Soft				
Type of actuation	Pneumatic				
Type of piloting	Direct				
Flow direction	Reversible	Reversible with restrictions	Reversible		
Exhaust-air function	With flow control option				
Type of mounting [2]	Either:, On PR rail, With through-hole				
Mounting position	optional				
Standard nominal flow rate (standardised to DIN 1343)	80 l/min	100 l/min	90 l/min		
Switching time on	5 ms		7 ms		
Switching time off	16 ms	11 ms	19 ms		
Switching time reversal	–		9 ms		
Pilot air port 12	M5				
Pilot air port 14	M5				
Product weight	34 g	37 g	40 g		
Corrosion resistance class CRC [3]	2 - Moderate corrosion stress				

1) Reset method combined

2) If several 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.

3) More information www.festo.com/x/topic/crc

VUWG-L10A, in-line valves M3, operating and environmental conditions					
Valve function	5/2 bistable	5/2-way, monostable	5/3-way, pressurised	5/3 exhausted	5/3 closed
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]				
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)				
Operating pressure	-0.9 ... 10 bar				
Pilot pressure	1.5 ... 10 bar	2.5 ... 10 bar	3 ... 10 bar		
Ambient temperature	-5 ... 60°C				
Media temperature	-5 ... 50°C				
Cleanroom class	Class 5 according to ISO 14644-1				

VUWG-L10A, in-line valves M3, materials	
Material housing	Aluminium, Anodised
Material seals	HNBR, NBR
Note on materials	RoHS-compliant

Datasheet

VUWG-L10 and VUWG-S10, in-line valves M5, general technical data

Valve function	2x3/2-way, monostable, closed		2x3/2-way, open, monostable		2x3/2-way, open/closed, monostable		5/2-way, monostable		5/3-way, pressurised	5/3 exhausted	5/3 closed
Type of reset [1]	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring, Pneumatic spring	Mechanical spring			
Suitability for vacuum	yes	no	yes	no	yes	no		yes			
Design	Piston gate valve										
lap	Overlap								Indefinite overlap		Overlap
Sealing principle	Soft										
Type of actuation	Pneumatic										
Type of piloting	Direct										
Flow direction	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions		Reversible			
Exhaust-air function	With flow control option										
Type of mounting [2]	Either:, On PR rail, With through-hole										
Mounting position	optional										
Standard nominal flow rate (standardised to DIN 1343)	135 l/min	150 l/min	125 l/min	150 l/min	125 l/min	150 l/min	220 l/min	190 l/min	200 l/min		
Switching time on	6 ms	4 ms	6 ms	4 ms	6 ms	4 ms	6 ms	7 ms	8 ms		
Switching time off	7 ms	9 ms	7 ms	9 ms	7 ms	9 ms	12 ms	16 ms	25 ms		
Switching time reversal	–								11 ms		
Pilot air port 12	M5										
Pilot air port 14	M5										
Product weight	51 g	48 g	51 g	48 g	51 g	48 g	45 g	41 g	48 g		
Corrosion resistance class CRC [3]	2 - Moderate corrosion stress										

1) Reset method combined

2) If several 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.

3) More information www.festo.com/x/topic/crc

VUWG-L10 and VUWG-S10, M5 in-line valves, operating and environmental conditions

Valve function	2x3/2-way, monostable, closed	2x3/2-way, open, monostable	2x3/2-way, open/closed, monostable	5/2 bistable	5/2-way, monostable	5/3-way, pressurised	5/3 exhausted	5/3 closed
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]							
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)							
Operating pressure	-0.9 ... 10 bar							
Pilot pressure	1.5 ... 10 bar				2.5 ... 10 bar	3 ... 10 bar		
Ambient temperature	-5 ... 60°C							
Media temperature	-5 ... 50°C							
Cleanroom class	Class 5 according to ISO 14644-1							

VUWG-L10 and VUWG-S10, in-line valves M5, materials

Material housing	Aluminium, Anodised
Material seals	HNBR, NBR
Note on materials	RoHS-compliant

Datasheet

VUWG-L10 and VUWG-S10, in-line valves M7, general technical data

Valve function	2x3/2-way, monostable, closed		2x3/2-way, open, monostable		2x3/2-way, open/closed, monostable		5/2-way, monostable		5/3-way, pressurised	5/3 exhausted	5/3 closed
Type of reset [1]	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	Mechanical spring, Pneumatic spring	Mechanical spring		
Suitability for vacuum	yes	no	yes	no	yes	no	yes	no	yes		
Design	Piston gate valve										
lap	Overlap								Indefinite overlap		Overlap
Sealing principle	Soft										
Type of actuation	Pneumatic										
Type of piloting	Direct										
Flow direction	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible		
Exhaust-air function	With flow control option										
Type of mounting [2]	Either:, On PR rail, With through-hole										
Mounting position	optional										
Standard nominal flow rate (standardised to DIN 1343)	150 l/min	190 l/min	140 l/min	190 l/min	140 l/min	190 l/min	320 l/min	380 l/min	320 l/min		
Switching time on	6 ms	4 ms	6 ms	4 ms	6 ms	4 ms	7 ms	6 ms	8 ms		
Switching time off	7 ms	9 ms	7 ms	9 ms	7 ms	9 ms	16 ms	12 ms	25 ms		
Switching time reversal	–								11 ms		
Pilot air port 12	M5										
Pilot air port 14	M5										
Product weight	51 g	48 g	51 g	48 g	51 g	48 g	41 g	45 g	48 g		
Corrosion resistance class CRC [3]	2 - Moderate corrosion stress										

1) Reset method combined

2) If several 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.

3) More information www.festo.com/x/topic/crc

VUWG-L10 and VUWG-S10, M7 in-line valves, operating and environmental conditions

Valve function	2x3/2-way, monostable, closed	2x3/2-way, open, monostable	2x3/2-way, open/closed, monostable	5/2 bistable	5/2-way, monostable	5/3-way, pressurised	5/3 exhausted	5/3 closed
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]							
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)							
Operating pressure	-0.9 ... 10 bar							
Pilot pressure	1.5 ... 10 bar				2.5 ... 10 bar	3 ... 10 bar		
Ambient temperature	-5 ... 60°C							
Media temperature	-5 ... 50°C							
Cleanroom class	Class 5 according to ISO 14644-1							

VUWG-L10 and VUWG-S10, in-line valves M7, materials

Material housing	Aluminium, Anodised
Material seals	HNBR, NBR
Note on materials	RoHS-compliant

Datasheet

VUWG-L14 and VUWG-S14, in-line valves G1/8, general technical data

Valve function	2x3/2-way, monostable, closed		2x3/2-way, open, monostable		2x3/2-way, open/closed, monostable		5/2-way, monostable		5/3-way, pressurised	5/3 exhausted	5/3 closed
Type of reset	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring		
Suitability for vacuum	yes	no	yes	no	yes	no	yes	no	yes		
Design	Piston gate valve										
lap	Overlap										
Sealing principle	Soft										
Type of actuation	Pneumatic										
Type of piloting	Direct										
Flow direction	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible		
Exhaust-air function	With flow control option										
Type of mounting [1]	Either:, On PR rail, With through-hole										
Mounting position	optional										
Standard nominal flow rate (standardised to DIN 1343)	430 l/min	650 l/min	410 l/min	600 l/min	410 l/min	650 l/min	780 l/min		600 l/min		650 l/min
Switching time on	9 ms	6 ms	9 ms	6 ms	9 ms	6 ms	12 ms		8 ms		
Switching time off	13 ms	19 ms	13 ms	19 ms	13 ms	19 ms	32 ms	22 ms	30 ms		
Switching time reversal	–								16 ms		
Pilot air port 12	M5										
Pilot air port 14	M5										
Product weight	77 g	81 g	77 g	81 g	77 g	81 g	67 g	75 g	81 g		
Corrosion resistance class CRC [2]	2 - Moderate corrosion stress										

1) If several 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.

2) More information www.festo.com/x/topic/crc

VUWG-L14 and VUWG-S14, in-line valves G1/8, operating and environmental conditions

Valve function	2x3/2-way, monostable, closed	2x3/2-way, open, monostable	2x3/2-way, open/closed, monostable	5/2 bistable	5/2-way, monostable	5/3-way, pressurised	5/3 exhausted	5/3 closed
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]							
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)							
Operating pressure	-0.9 ... 10 bar							
Pilot pressure	1.5 ... 10 bar				2.5 ... 10 bar	3 ... 10 bar		
Ambient temperature	-5 ... 60°C							
Media temperature	-5 ... 50°C							
Cleanroom class	Class 5 according to ISO 14644-1							

VUWG-L14 and VUWG-S14, in-line valves G1/8, materials

Material housing	Aluminium, Anodised
Material seals	HNBR, NBR
Note on materials	RoHS-compliant

Datasheet

VUWG-L18 and S18, in-line valves G1/4, general technical data											
Valve function	2x3/2-way, monostable, closed		2x3/2-way, open, monostable		2x3/2-way, open/closed, monostable		5/2-way, monostable		5/3-way, pressurised	5/3 exhausted	5/3 closed
Type of reset [1]	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	Mechanical spring, Pneumatic spring	Mechanical spring		
Suitability for vacuum	yes	no	yes	no	yes	no	yes	no	yes		
Design	Piston gate valve										
lap	Overlap						Indefinite overlap				Overlap
Sealing principle	Soft										
Type of actuation	Pneumatic										
Type of piloting	Direct										
Flow direction	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible		
Exhaust-air function	With flow control option										
Type of mounting [2]	Either:, On PR rail, With through-hole										
Mounting position	optional										
Standard nominal flow rate (standardised to DIN 1343)	1,000 l/min						1,300 l/min		1,000 l/min		1,200 l/min
Switching time on	17 ms	12 ms	17 ms	12 ms	17 ms	12 ms		16 ms	17 ms		
Switching time off	25 ms	36 ms	25 ms	36 ms	25 ms	36 ms	59 ms	40 ms	69 ms		
Switching time reversal	–								34 ms		
Pilot air port 12	M5										
Pilot air port 14	M5										
Product weight	160 g						152 g				
Corrosion resistance class CRC [3]	2 - Moderate corrosion stress										

1) Reset method combined

2) If several 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.

3) More information www.festo.com/x/topic/crc

VUWG-L18 and S18, in-line valves G1/4, operating and environmental conditions								
Valve function	2x3/2-way, monostable, closed	2x3/2-way, open, monostable	2x3/2-way, open/closed, monostable	5/2 bistable	5/2-way, monostable	5/3-way, pressurised	5/3 exhausted	5/3 closed
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]							
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)							
Operating pressure	-0.9 ... 10 bar							
Pilot pressure	1.5 ... 10 bar				2.5 ... 10 bar	3 ... 10 bar		
Ambient temperature	-5 ... 60°C							
Media temperature	-5 ... 50°C							
Cleanroom class	Class 5 according to ISO 14644-1							

VUWG-L18 and S18, in-line valves G1/4, materials	
Material housing	Aluminium, Anodised
Material seals	HNBR, NBR
Note on materials	RoHS-compliant

Datasheet

VUWG-B10A, sub-base valves, general technical data					
Valve function	5/2-way, monostable		5/3-way, pressurised	5/3 exhausted	5/3 closed
Type of reset [1]	Mechanical spring	Mechanical spring, Pneumatic spring	Mechanical spring		
Suitability for vacuum	yes	no	yes		
Design	Piston gate valve				
lap	Overlap		Indefinite overlap		Overlap
Sealing principle	Soft				
Type of actuation	Pneumatic				
Type of piloting	Direct				
Flow direction	Reversible	Reversible with restrictions	Reversible		
Exhaust-air function	With flow control option				
Type of mounting	Either:, On PR rail, With through-hole				
Mounting position	optional				
Standard nominal flow rate (standardised to DIN 1343)	80 l/min	100 l/min	90 l/min		
Switching time on	5 ms		7 ms		
Switching time off	16 ms	11 ms	19 ms		
Switching time reversal	–		9 ms		
Pilot air port 12	M5				
Pilot air port 14	M5				
Product weight	34 g	37 g	40 g		
Corrosion resistance class CRC [2]	2 - Moderate corrosion stress				

1) Reset method combined

2) More information www.festo.com/x/topic/crc

VUWG-B10A, Sub-base valves, operating and environmental conditions					
Valve function	5/2 bistable	5/2-way, monostable	5/3-way, pressurised	5/3 exhausted	5/3 closed
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]				
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)				
Operating pressure	-0.9 ... 10 bar				
Pilot pressure	1.5 ... 10 bar	2.5 ... 10 bar	3 ... 10 bar		
Ambient temperature	-5 ... 60°C				
Media temperature	-5 ... 50°C				
Cleanroom class	Class 5 according to ISO 14644-1				

VUWG-B10A, sub-base valves, materials	
Material housing	Aluminium, Anodised
Material seals	HNBR, NBR
Note on materials	RoHS-compliant

Datasheet

VUWG-B10, Sub-base valves, general technical data											
Valve function	2x3/2-way, monostable, closed		2x3/2-way, open, monostable		2x3/2-way, open/closed, monostable		5/2-way, monostable		5/3-way, pressurised	5/3 exhausted	5/3 closed
Type of reset [1]	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	Mechanical spring, Pneumatic spring	Mechanical spring		
Design	Piston gate valve										
lap	Overlap								Indefinite overlap		Overlap
Sealing principle	Soft										
Type of actuation	Pneumatic										
Type of piloting	Direct										
Flow direction	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible		
Exhaust-air function	With flow control option										
Type of mounting	Either:, On PR rail, With through-hole										
Mounting position	optional										
Standard nominal flow rate (standardised to DIN 1343)	135 ... 150 l/min	150 ... 190 l/min	125 ... 140 l/min	150 ... 190 l/min	125 ... 140 l/min	150 ... 190 l/min	190 ... 320 l/min	220 ... 380 l/min	200 ... 320 l/min		
Switching time on	6 ms	4 ms	6 ms	4 ms	6 ms	4 ms	7 ms	6 ms	8 ms		
Switching time off	7 ms	9 ms	7 ms	9 ms	7 ms	9 ms	16 ms	12 ms	25 ms		
Switching time reversal	–								11 ms		
Pilot air port 12	M5										
Pilot air port 14	M5										
Product weight	51 g	48 g	51 g	48 g	51 g	48 g	41 g	45 g	48 g		
Corrosion resistance class CRC [2]	2 - Moderate corrosion stress										

1) Reset method combined

2) More information www.festo.com/x/topic/crc

VUWG-B10, sub-base valves, operating and environmental conditions								
Valve function	2x3/2-way, monostable, closed	2x3/2-way, open, monostable	2x3/2-way, open/closed, monostable	5/2 bistable	5/2-way, monostable	5/3-way, pressurised	5/3 exhausted	5/3 closed
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]							
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)							
Operating pressure	-0.9 ... 10 bar							
Pilot pressure	1.5 ... 10 bar				2.5 ... 10 bar	3 ... 10 bar		
Ambient temperature	-5 ... 60°C							
Media temperature	-5 ... 50°C							
Cleanroom class	Class 5 according to ISO 14644-1							

VUWG-B10, sub-base valves, materials	
Material housing	Aluminium, Anodised
Material seals	HNBR, NBR
Note on materials	RoHS-compliant

Datasheet

VUWG-B14, Sub-base valves, general technical data

Valve function	2x3/2-way, monostable, closed		2x3/2-way, open, monostable		2x3/2-way, open/closed, monostable		5/2-way, monostable		5/3-way, pressurised	5/3 exhausted	5/3 closed
Type of reset	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring		
Suitability for vacuum	yes	no	yes	no	yes	no	yes	no	yes		
Design	Piston gate valve										
lap	Overlap										
Sealing principle	Soft										
Type of actuation	Pneumatic										
Type of piloting	Direct										
Flow direction	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible		
Exhaust-air function	With flow control option										
Type of mounting	Either:, On PR rail, With through-hole										
Mounting position	optional										
Standard nominal flow rate (standardised to DIN 1343)	430 l/min	650 l/min	410 l/min	600 l/min	410 l/min	650 l/min	780 l/min		600 l/min		650 l/min
Switching time on	9 ms	6 ms	9 ms	6 ms	9 ms	6 ms	12 ms		8 ms		
Switching time off	13 ms	19 ms	13 ms	19 ms	13 ms	19 ms	32 ms	22 ms	30 ms		
Switching time reversal	–								16 ms		
Pilot air port 12	M5										
Pilot air port 14	M5										
Product weight	77 g	81 g	77 g	81 g	77 g	81 g	67 g	75 g	81 g		
Corrosion resistance class CRC [1]	2 - Moderate corrosion stress										

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

VUWG-B14, sub-base valves, operating and environmental conditions

Valve function	2x3/2-way, monostable, closed	2x3/2-way, open, monostable	2x3/2-way, open/closed, monostable	5/2 bistable	5/2-way, monostable	5/3-way, pressurised	5/3 exhausted	5/3 closed
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]							
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)							
Operating pressure	-0.9 ... 10 bar							
Pilot pressure	1.5 ... 10 bar				2.5 ... 10 bar	3 ... 10 bar		
Ambient temperature	-5 ... 60°C							
Media temperature	-5 ... 50°C							
Cleanroom class	Class 5 according to ISO 14644-1							

VUWG-B14, sub-base valves, materials

Material housing	Aluminium, Anodised
Material seals	HNBR, NBR
Note on materials	RoHS-compliant

Datasheet

VUWG-B18, Sub-base valves, general technical data											
Valve function	2x3/2-way, monostable, closed		2x3/2-way, open, monostable		2x3/2-way, open/closed, monostable		5/2-way, monostable		5/3-way, pressurised	5/3 exhausted	5/3 closed
Type of reset [1]	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	Mechanical spring, Pneumatic spring	Mechanical spring		
Suitability for vacuum	yes	no	yes	no	yes	no	yes	no	yes		
Design	Piston gate valve										
lap	Overlap						Indefinite overlap				Overlap
Sealing principle	Soft										
Type of actuation	Pneumatic										
Type of piloting	Direct										
Flow direction	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible	Reversible with restrictions	Reversible		
Exhaust-air function	With flow control option										
Type of mounting	Either:, On PR rail, With through-hole										
Mounting position	optional										
Standard nominal flow rate (standardised to DIN 1343)	1,000 l/min						1,300 l/min		1,000 l/min		1,200 l/min
Switching time on	17 ms	12 ms	17 ms	12 ms	17 ms	12 ms		16 ms	17 ms		
Switching time off	25 ms	36 ms	25 ms	36 ms	25 ms	36 ms	59 ms	40 ms	69 ms		
Switching time reversal	–								34 ms		
Pilot air port 12	M5										
Pilot air port 14	M5										
Product weight	160 g						152 g				
Corrosion resistance class CRC [2]	2 - Moderate corrosion stress										

1) Reset method combined

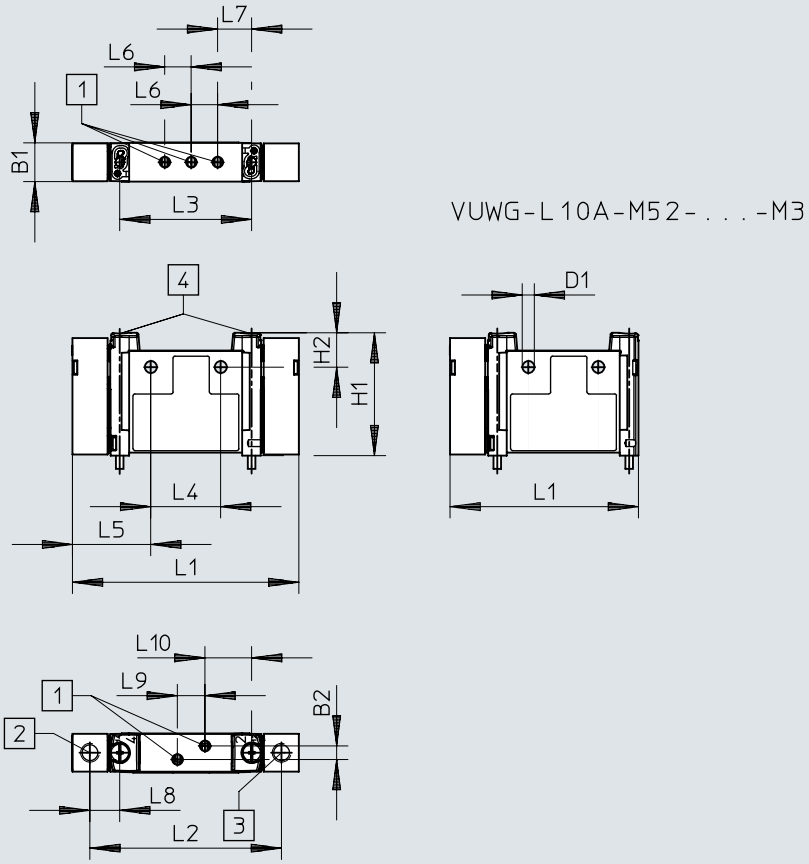
2) More information www.festo.com/x/topic/crc

VUWG-B18, sub-base valves, operating and environmental conditions								
Valve function	2x3/2-way, monostable, closed	2x3/2-way, open, monostable	2x3/2-way, open/closed, monostable	5/2 bistable	5/2-way, monostable	5/3-way, pressurised	5/3 exhausted	5/3 closed
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]							
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)							
Operating pressure	-0.9 ... 10 bar							
Pilot pressure	1.5 ... 10 bar				2.5 ... 10 bar	3 ... 10 bar		
Ambient temperature	-5 ... 60°C							
Media temperature	-5 ... 50°C							
Cleanroom class	Class 5 according to ISO 14644-1							

VUWG-B18, sub-base valves, materials	
Material housing	Aluminium, Anodised
Material seals	HNBR, NBR
Note on materials	RoHS-compliant

Dimensions

Dimensions – VUWG-L10A, in-line valves M3, 5/2- and 5/3-way valve Download CAD data www.festo.com

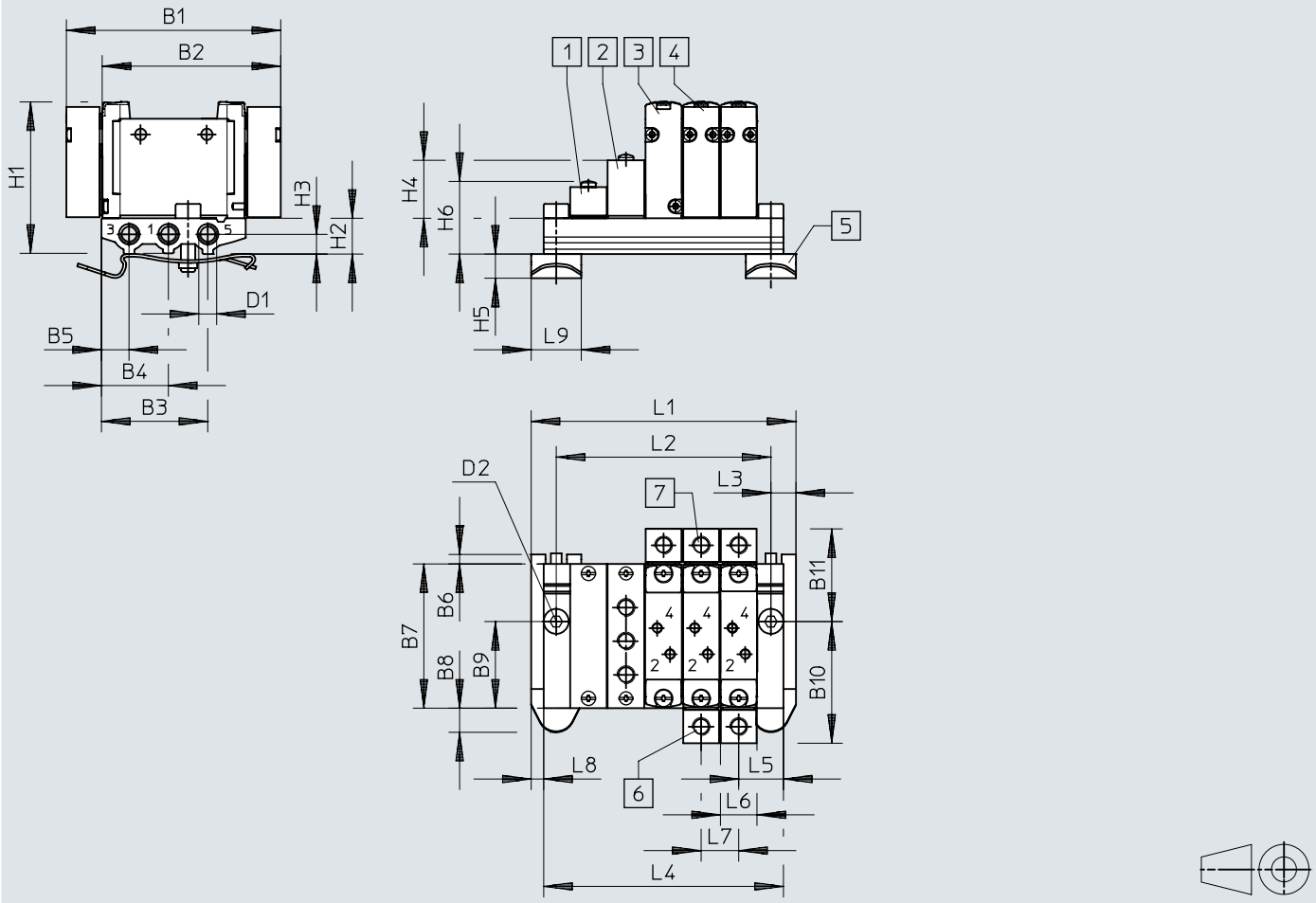


[1] Ports 1, 2, 3, 4, 5: M3
[2] Port 14: M5
[3] Port 12: M5
[4] Retaining screw M2.5

	B1	B2	D1 ø	H1	H2	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
VUWG-L10A-...	10,3	3,6	3,2	32,5	9,1	59,9	50,7	34,9	18,5	20,7	7	9	7,9	7,3	12,4
VUWG-L10A-M52-...						49,9									

Dimensions

Dimensions – VUWG-S10A, in-line valve M3 for battery assembly Download CAD data www.festo.com



[1] Cover plate VABB-L1-10A-S
[2] Supply plate VABF-L1-10A-P3A4-M5
[3] Pneumatic valve, monostable
[4] Pneumatic valve, bistable
[5] H-rail mounting (two M4x15 screws to DIN 912 are required for mounting)

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	D1
VABM-L1-10AS-M5	59,9	49,9	29,7	18,7	7,7	2,95	40,3	6,75	24,2	34	25,9	M5

	D2	H1	H2	H3	H4	H5	H6	L3	L5	L6	L7	L8	L9
VABM-L1-10AS-M5	⌀ 4,5	42,5	10	5,5	16,2	6,8	20,3	7	12,5	10,3	10,5	3,5	14

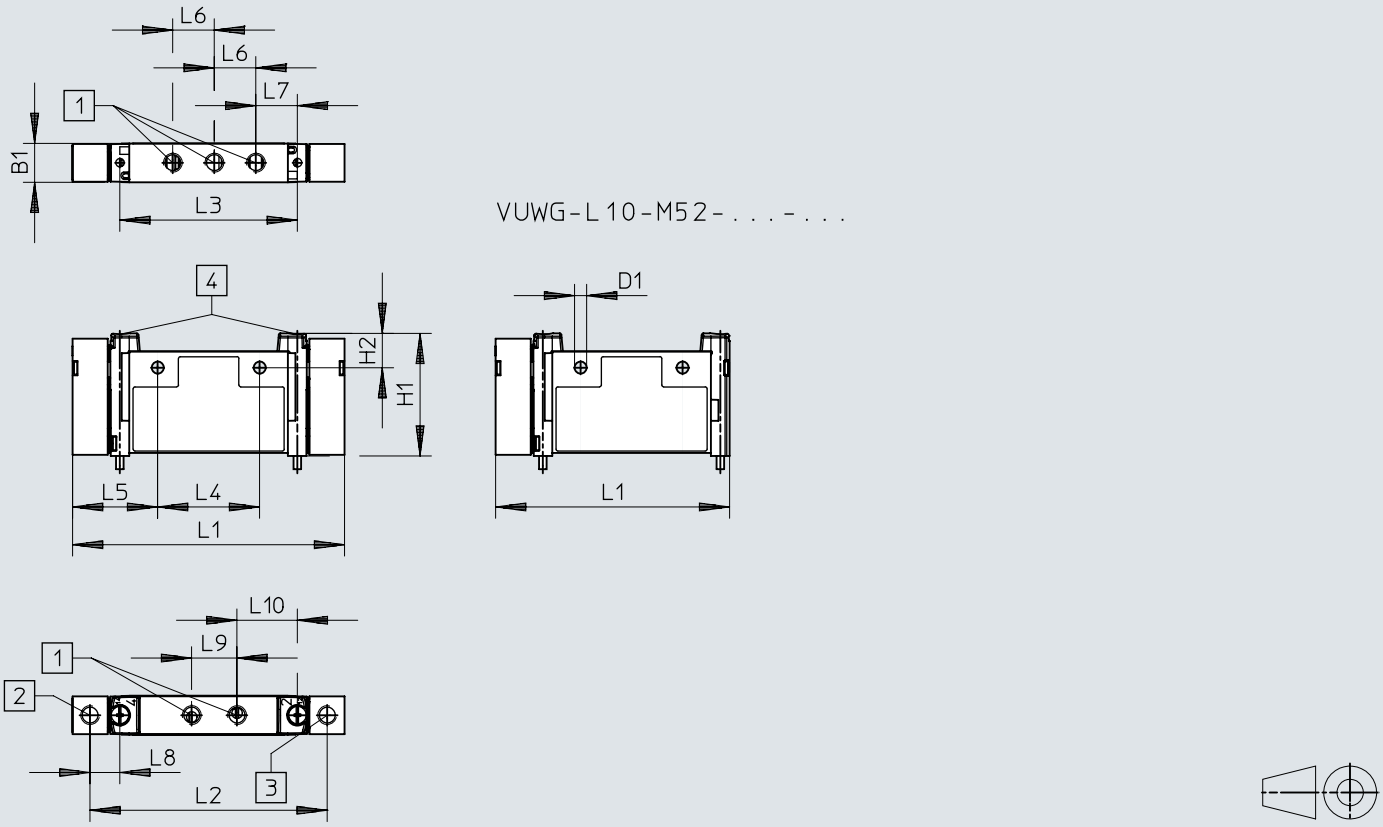
1)	2	3	4	5	6	7	8	9	10	12	14	16
L1	42,5	53	63,5	74	84,5	95	105,5	116	126,5	147,5	168,5	189,5
L2	28,5	39	49,5	60	70,5	81	91,5	102	112,5	133,5	154,5	175,5
L4	35,5	46	56,5	67	77,5	88	98,5	109	119,5	140,5	161,5	182,5

1) Valve positions

Dimensions

Dimensions – VUWG-L10 and VUWG-S10, 2x3/2-, in-line valves M5, 5/2- and 5/3-way valve

Download CAD data www.festo.com



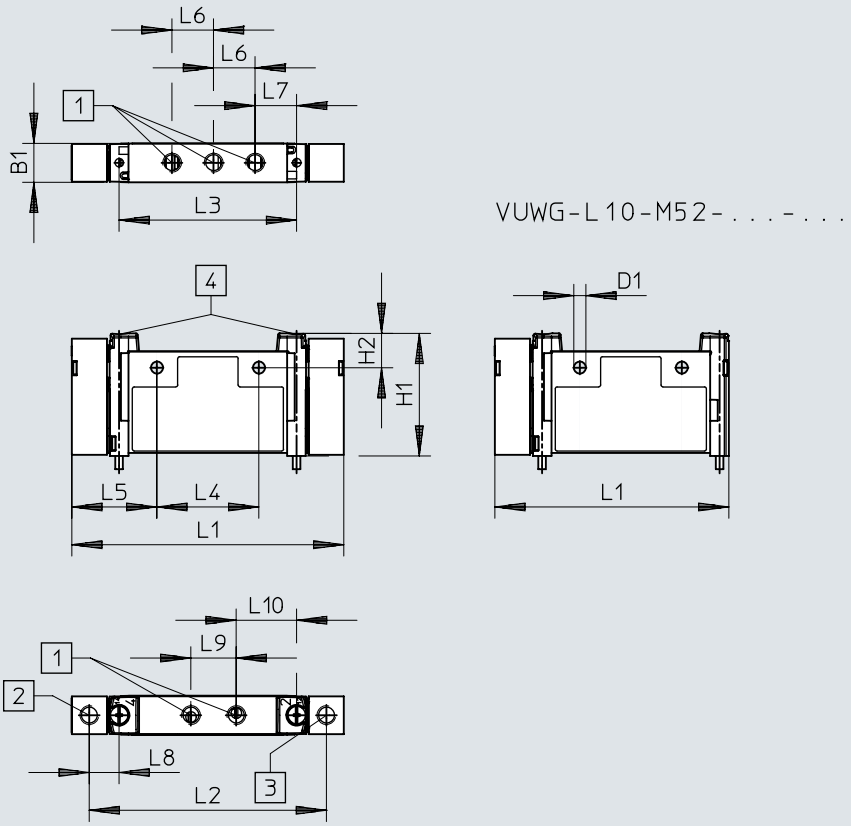
[1] Ports 1, 2, 3, 4, 5: M5
[2] Port 14: M5
[3] Port 12: M5
[4] Retaining screw M2.5

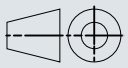
	B1	D1 ø	H1	H2	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
VUWG-L10-...	10,2	3,2	32,5	9,1	72	62,8	47	27	22,5	11	11	7,9	12	16
VUWG-L10-M52-...					62									

Dimensions

Dimensions – VUWG-L10 and VUWG-S10, in-line valves M7 2x3/2, 5/2 and 5/3-way valve

Download CAD data www.festo.com



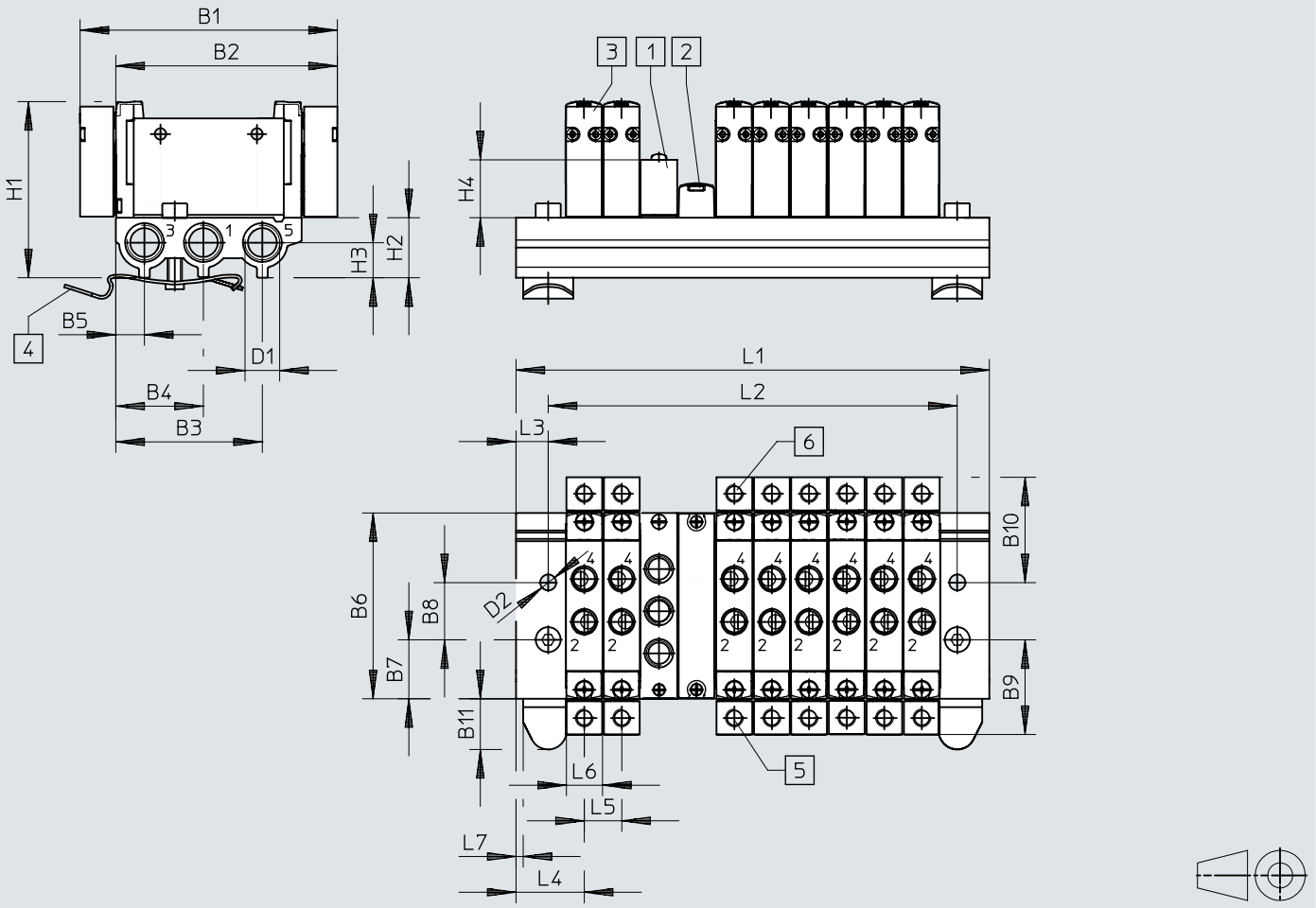


[1] Ports 1, 2, 3, 4, 5: M7
[2] Port 14: M5
[3] Port 12: M5
[4] Retaining screw M2.5

	B1	D1 ø	H1	H2	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
VUWG-L10-...	10,2	3,2	32,5	9,1	72	62,8	47	27	22,5	11	11	7,9	12	16
VUWG-L10-M52-...					62									

Dimensions

Dimensions – VUWG-S10, in-line valves M5/M7 for manifold assembly Download CAD data www.festo.com



[1] Pneumatic valve
[2] Supply plate M5 or M7 for 1, 3, 5
[3] Cover plate VABB-L1-10-S
[4] H-rail mounting (two M4x20 screws to DIN 912 are required)

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11
VABM-L1-10S-G18	72	62	41	24,5	8	52	16,5	16	26,5	29,5	14,45

	D1	D2	H1	H2	H3	H4	H4	L3	L4	L5	L6	L7
VABM-L1-10S-G18	G1/8	4,5	49,3	16,8	7	16,2	16,2	9	19	10,5	10,3	2

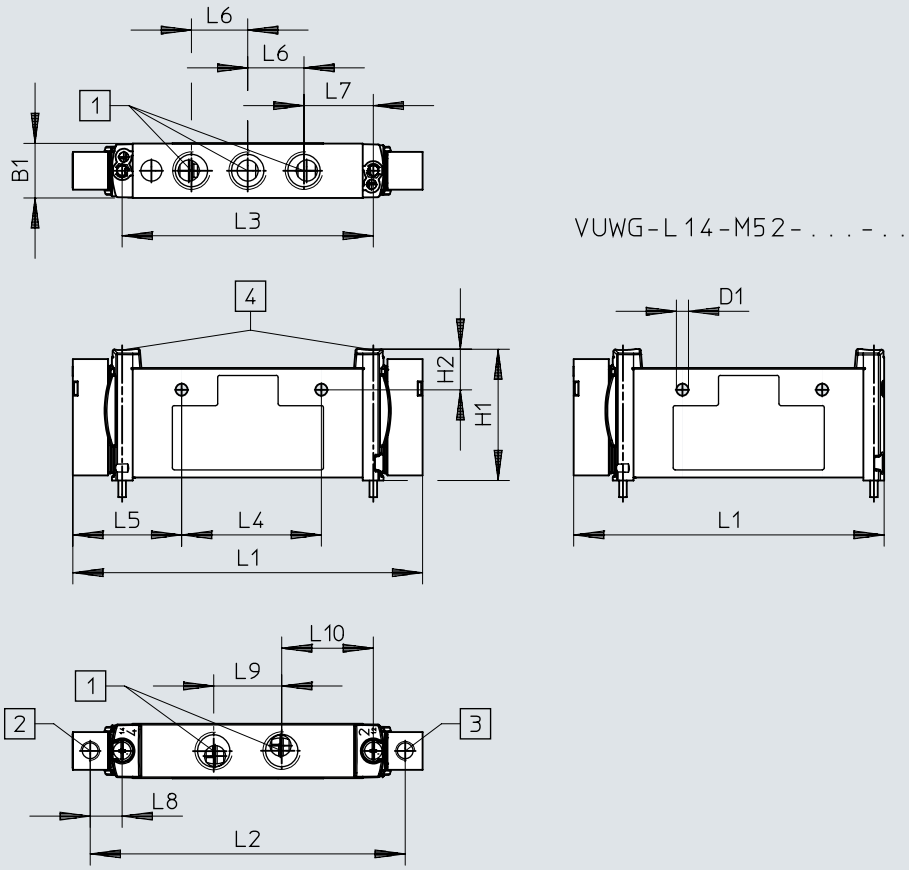
1)	2	3	4	5	6	7	8	9	10	12	14	16	22
L1	48,5	59	69,5	80	90,5	101	111,5	122	132,5	153,5	174,5	195,5	258,5
L2	30,5	41	51,5	62	72,5	83	93,5	104	114,5	135,5	156,5	177,5	240,5

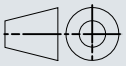
1) Valve positions

Dimensions

Dimensions – VUWG-L14 and S14, in-line valves G1/8, 2x3/2, 5/2 and 5/3-way valves

Download CAD data www.festo.com



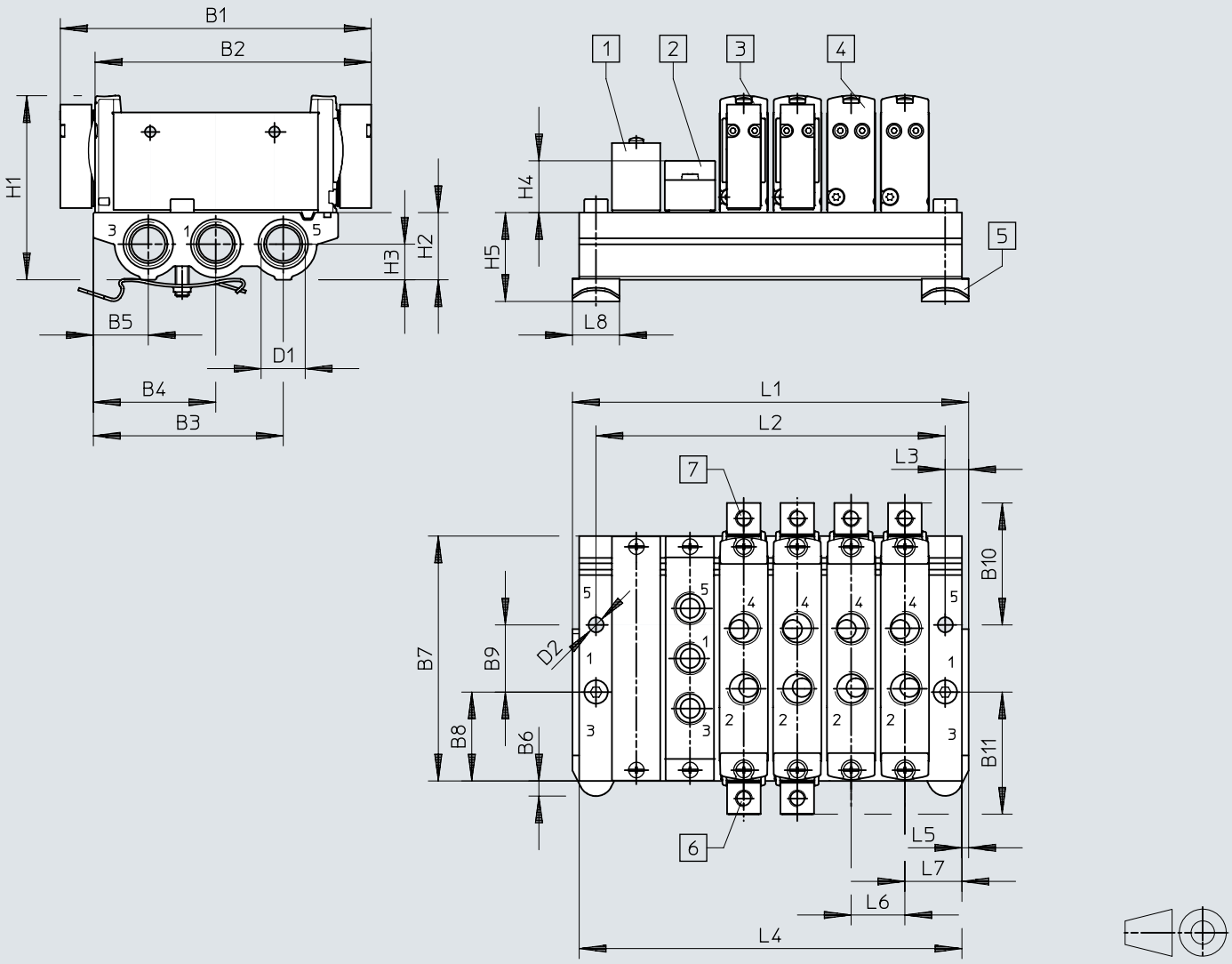


[1] Ports 1, 2, 3, 4, 5: G1/8
[2] Port 14: M5
[3] Port 12: M5
[4] Retaining screw M2.5

	B1	D1 ø	H1	H2	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
VUWG-L14-...	14,4	3,2	34,8	10,8	92,6	83,4	66,5	37	28,8	14,9	18,35	8,45	18	24,25
VUWG-L14-M52-...					82,25									

Dimensions

Dimensions – VUWG-S14, in-line valve G1/8 for manifold assembly Download CAD data www.festo.com



[1] Cover plate VABB-L1-14
[2] Supply plate VABF-L1-14-P3A4-G18
[3] Pneumatic valve, bistable
[4] Pneumatic valve, monostable
[5] H-rail mounting (2 M4x25 screws to DIN 912 are required for mounting)

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	D1
VABM-L1-14S-G14	92,6	82,3	56,6	36,5	16,4	4,5	72,9	26,45	20	36,3	36,3	G1/4

	D2	H1	H2	H3	H4	H5	L3	L5	L6	L7
VABM-L1-14S-G14	ø 4,5	54,8	20	10,6	15,4	26,4	7	2	16	17

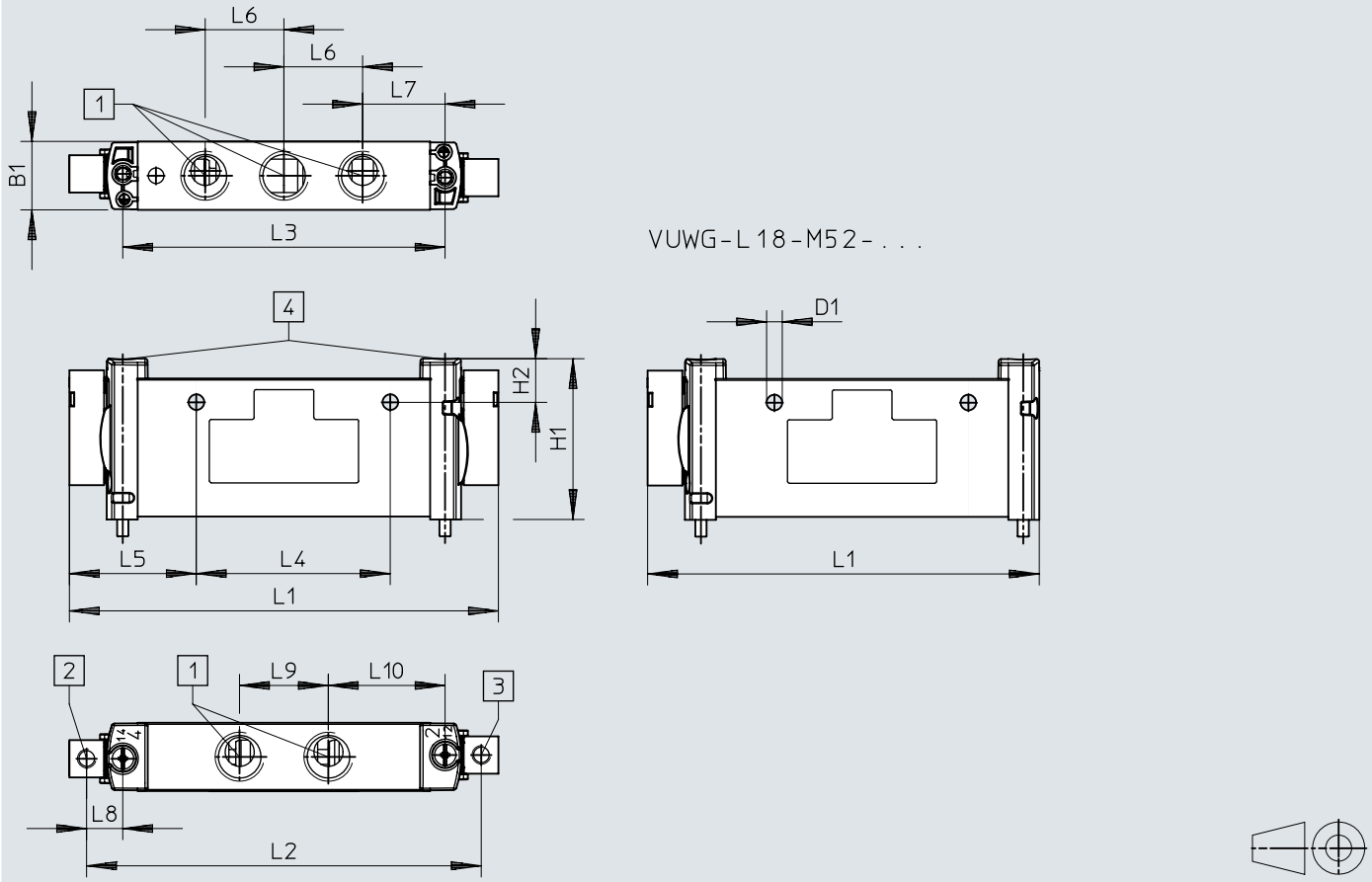
1)	2	3	4	5	6	7	8	9	10	12	14	16
L1	54	70	86	98	118	134	150	166	182	214	246	278
L2	40	56	72	88	104	120	136	152	168	200	232	264
L4	50	66	82	98	114	130	146	162	178	210	242	274

1) Valve positions

Dimensions

Dimensions – VUWG-L18 and VUWG-S18, in-line valves G1/4, 2x3/2, 5/2 and 5/3-way valves

Download CAD data www.festo.com

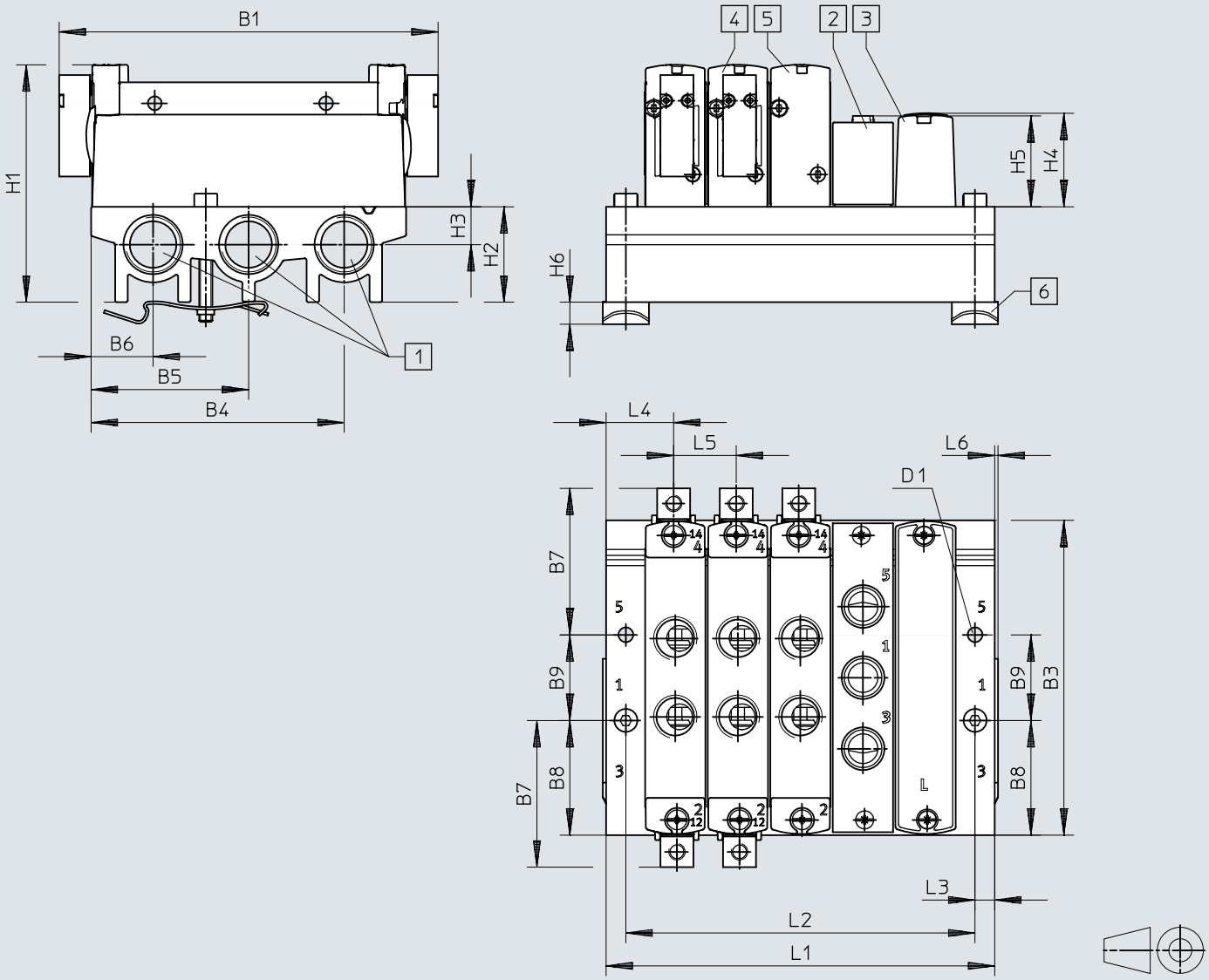


[1] Ports 1, 2, 3, 4, 5: G1/4
[2] Port 14: M5
[3] Port 12: M5
[4] Retaining screw M3

	B1	D1 ø	H1	H2	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
VUWG-L18-...	18,3	4,2	43,1	6,4	115	96,1	86,4	52	34	21,1	22,1	9,7	23,8	31,3
VUWG-L18-M52-...					105									

Dimensions

Dimensions – VUWG-S18, in-line valve G1/4 for manifold assembly Download CAD data www.festo.com



[1] Ports 1, 3 and 5: G3/8
[2] Supply plate VABF-L1-18-P3A4-G14
[3] Pneumatic valve, bistable
[4] Pneumatic valve, monostable
[5] H-rail mounting (two M4x35 screws to DIN 912 are required)

	B1	B3	B4	B5	B6	B7	B8	B9	D1	H1	H2
VABM-L1-18S-G38	115	95,6	76,8	47,8	18,8	44,5	34,8	26	4,5	72,1	29

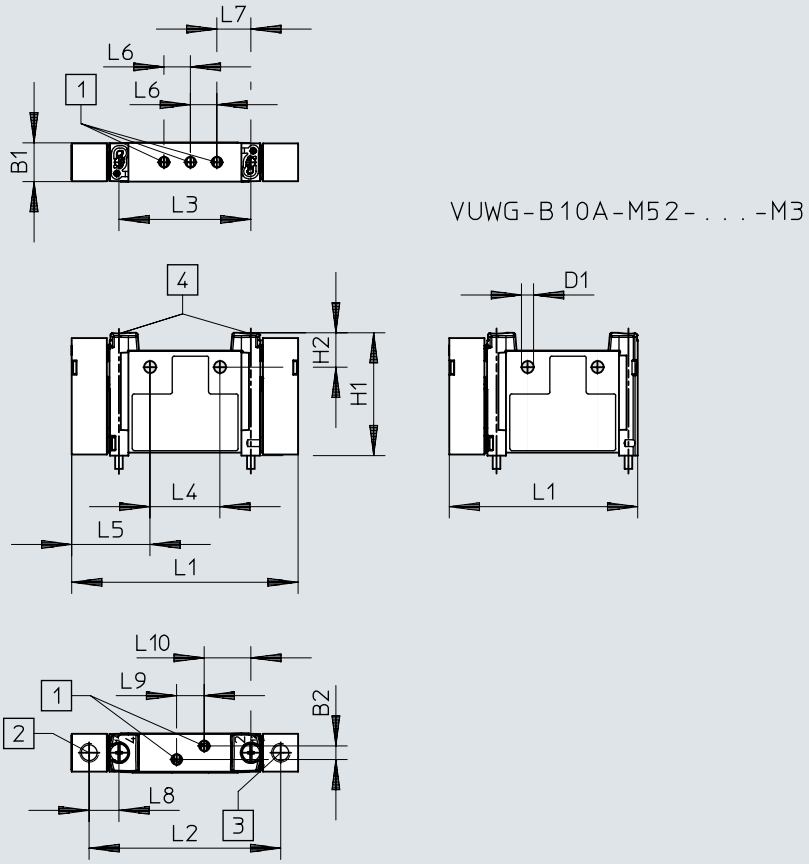
	H3	H4	H5	H6	L3	L4	L5	L6
VABM-L1-18S-G38	11,5	28,4	27,6	6,5	6	20,5	19	1

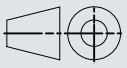
1)	2	3	4	5	6	7	8	9	10	12	14	16
L1	61	80	99	118	137	156	175	194	213	251	289	327
L2	49	68	87	106	125	144	163	182	201	239	277	315

1) Valve positions

Dimensions

Dimensions – VUWG-B10, sub-base valves, 5/2- and 5/3-way valves Download CAD data www.festo.com





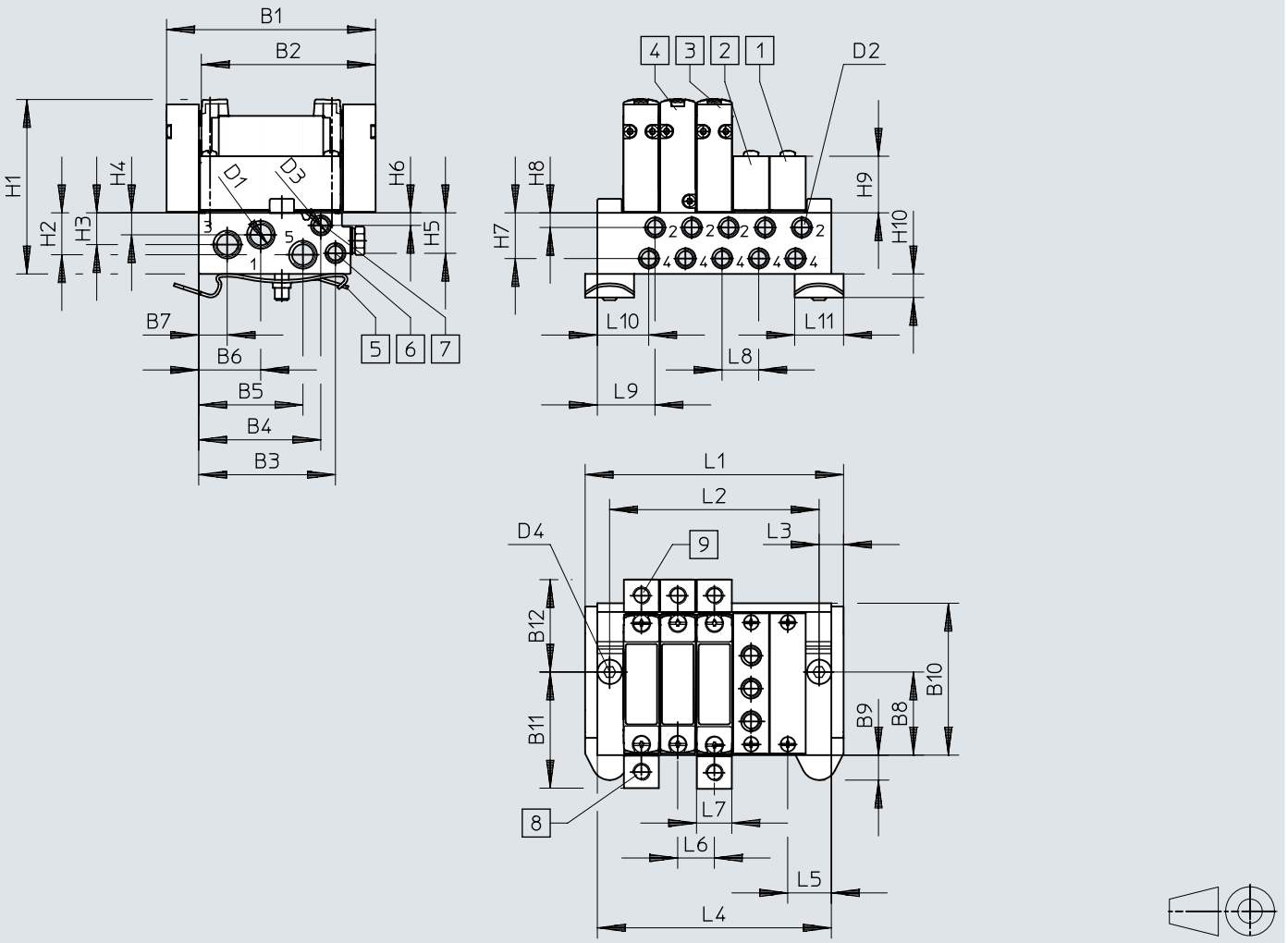
[1] Ports 1, 2, 3, 4, 5: M3
[2] Port 14: M5
[3] Port 12: M5
[4] Retaining screw M2.5

	B1	H1	L1	L2	L3	L8
VUWG-B10A-...	10,3	32,5	59,9	50,7	34,9	7,9
VUWG-B10A-M52-...			49,9			

Dimensions

Dimensions – VUWG-B10A, sub-base valves for battery assembly, M5 connection

Download CAD data www.festo.com



[1] Cover plate VABB-L1-10A
[2] Supply plate VABF-L1-10A-P3A4-M5
[3] Pneumatic valve, bistable
[4] Pneumatic valve, monostable
[5] H-rail mounting (2 M4x25 screws to DIN 912 are required for mounting)

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
VABM-L1-10AW-M7	59,9	49,9	39,1	35	29,8	17,8	8,2	24	7,15	43,5	33,45	26,45

	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	D1	D2
VABM-L1-10AW-M7	50	12	9,1	6,3	11,6	3,6	13,1	4,2	16,2	6,8	M7	M5

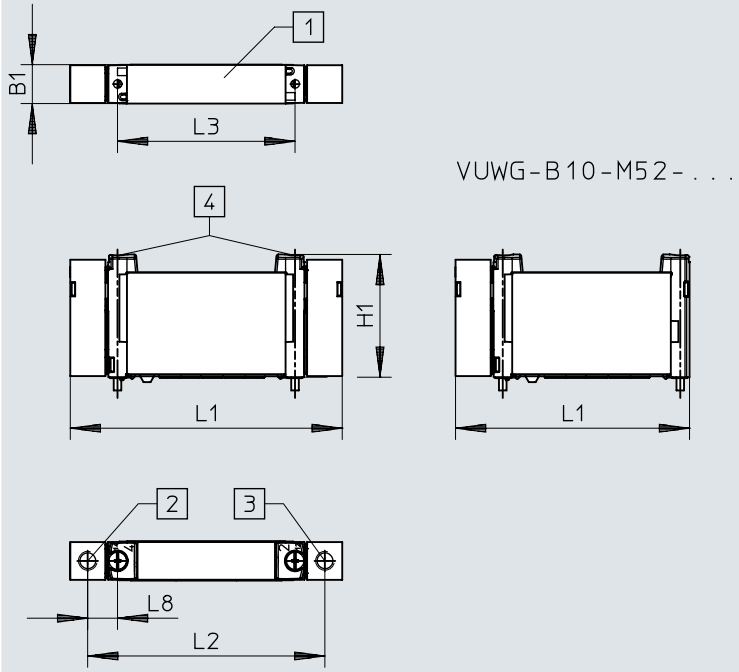
	D3	D4	L3	L5	L6	L7	L8	L9	L10	L11
VABM-L1-10AW-M7	M5	⌀ 4,5	7	12,5	10,5	10,2	10,5	16,5	14,7	11

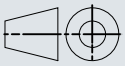
1)	2	3	4	5	6	7	8	9	10	12	14	16
L1	42,5	53	63,5	74	84,5	96	106,5	116	126,5	147,5	168,5	189,5
L2	28,5	39	49,5	60	70,5	81	91,5	102	112,5	133,5	154,5	175,5
L4	35,5	46	56,5	67	77,5	89	99,5	109	119,5	140,5	161,5	182,5

1) Valve positions

Dimensions

Dimensions – VUWG-B10, sub-base valves 2x3/2, 5/2 and 5/3-way valve Download CAD data www.festo.com





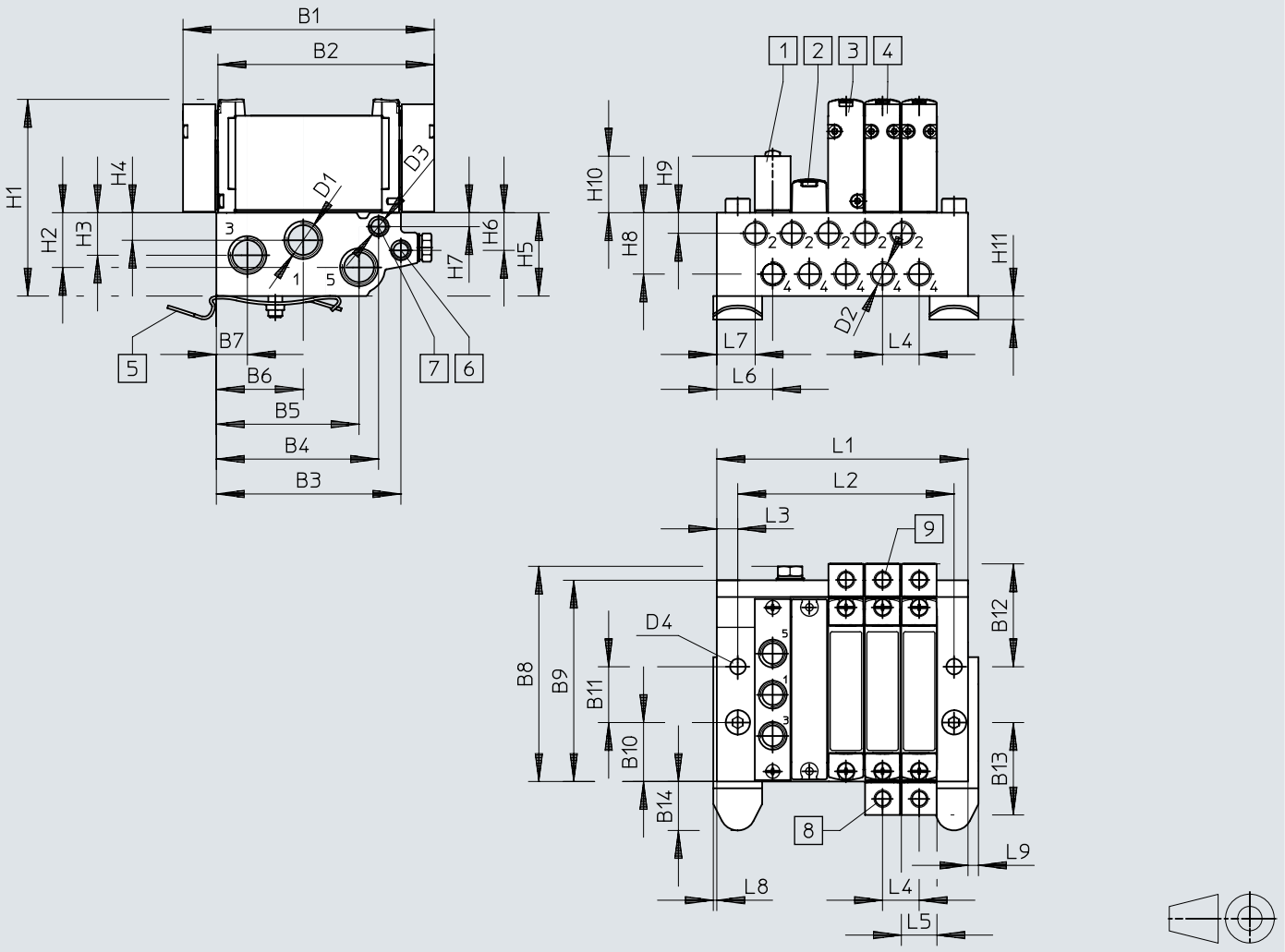
[1] Ports 1, 2, 3, 4, 5
[2] Port 14: M5
[3] Port 12: M5
[4] Retaining screw M2.5

	B1	H1	L1	L2	L3	L8
VUWG-B10-...	10,3	32,5	72	62,8	47	7,9
VUWG-B10-M52-...			62			

Dimensions

Dimensions – VUWG-B10, sub-base valves for manifold assembly, connection M5/M7

Download CAD data www.festo.com



[1] Supply plate VABF-L1-10-P3A4-M5
[2] VABB-L1-10-W
[3] Pneumatic valve, monostable, VUWG-B10-M52
[4] Pneumatic valve, bistable, VUWG-B10
[5] H-rail mounting (2 M4x30 screws to DIN 912 are required)

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
VABM-L1-...G18	72	62	52,9	46,5	40,9	24,9	8,9	62	57,7	16,9	16	29,5

	B13	B14	D1	D2	D3	D4	H1	H2	H3	H4	H5	H6
VABM-L1-...G18	26,5	14,1	G1/8	M5	M5	4,5	56,4	15,7	12,2	7,9	23,9	10,8

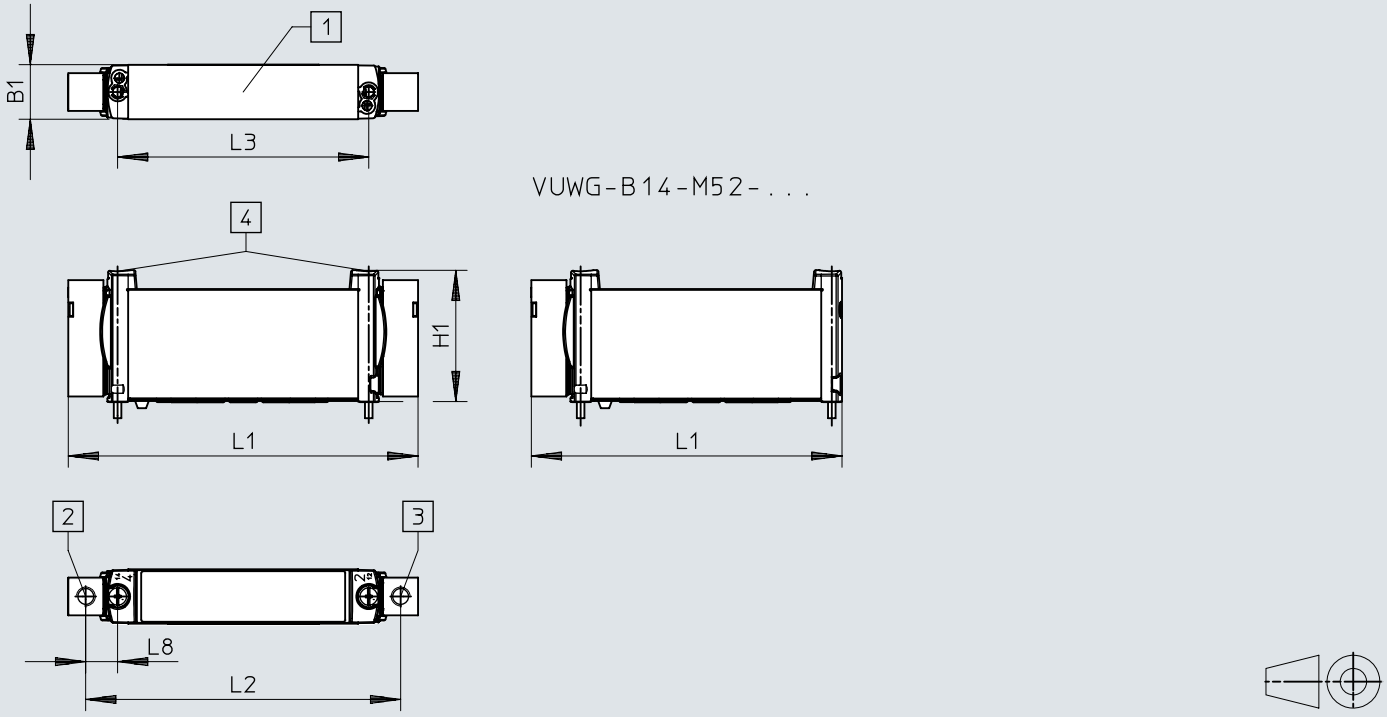
	H7	H8	H9	H10	H11	L3	L4	L5	L6	L7	L8	L9	L15
VABM-L1-...G18	4	17,6	5,9	16,2	6,8	4	10,5	10,3	16	11	1	3	10

1)	2	3	4	5	6	7	8	9	10	12	14	16	22
L1	48,5	59	69,5	80	90,5	101	111,5	122	132,5	153,5	174,5	195,5	258,5
L2	30,5	41	51,5	62	72,5	83	93,5	104	114,5	135,5	156,5	177,5	240,5

1) Valve positions

Dimensions

Dimensions – VUWG-B14, sub-base valves 2x3/2, 5/2 and 5/3-way valve Download CAD data www.festo.com



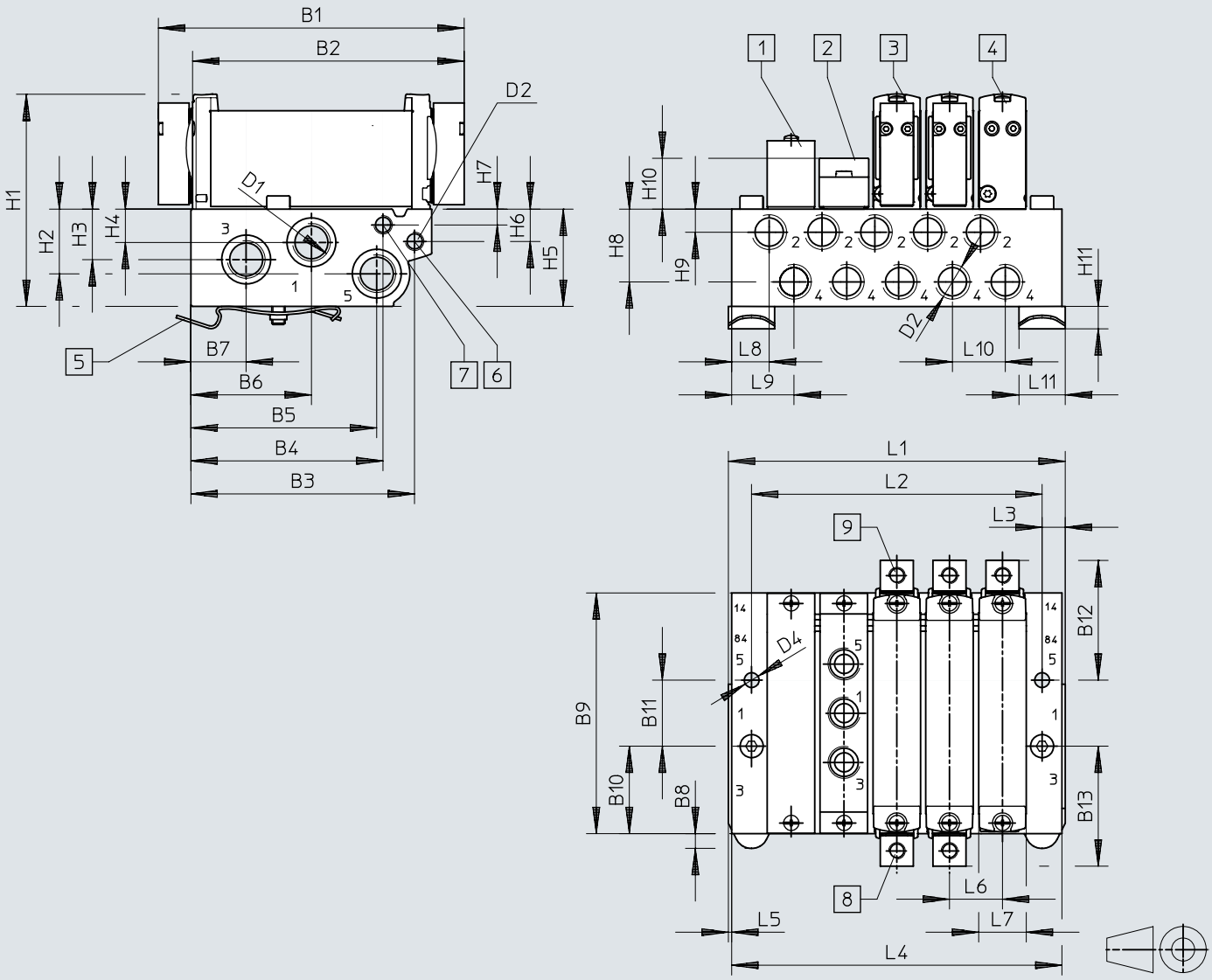
[1] Ports 1, 2, 3, 4, 5
[2] Port 14: M5
[3] Port 12: M5
[4] Retaining screw M2.5

	B1	H1	L1	L2	L3	L8
VUWG-B14-...	14,4	34,8	92,6	83,4	66,5	8,5
VUWG-B14-M52-...			82,3			

Dimensions

Dimensions – VUWG-B14, sub-base valves for manifold assembly, connection G1/8

Download CAD data www.festo.com



[1] Cover plate VABB-L1-14
[2] Supply plate VABF-L1-14-P3A4-G18
[3] Pneumatic valve, bistable
[4] Pneumatic valve, monostable
[5] H-rail mounting (two M4x25 screws to DIN 912 are required)

Dimensions

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
VUWG-B14 -...-F- ...	92,6	82,3	67,7	58,2	56,3	36,6	16,7	4,5	72,9	26,5	20	36,3

	B13	D1	D2	D3	D4	H1	H2	H3	H4	H5	H6	H7
VUWG-B14 -...-F- ...	36,3	G1/4	G1/8	M5	⌀ 4,5	64,3	19,6	15,3	10,1	29,5	9,8	4,8

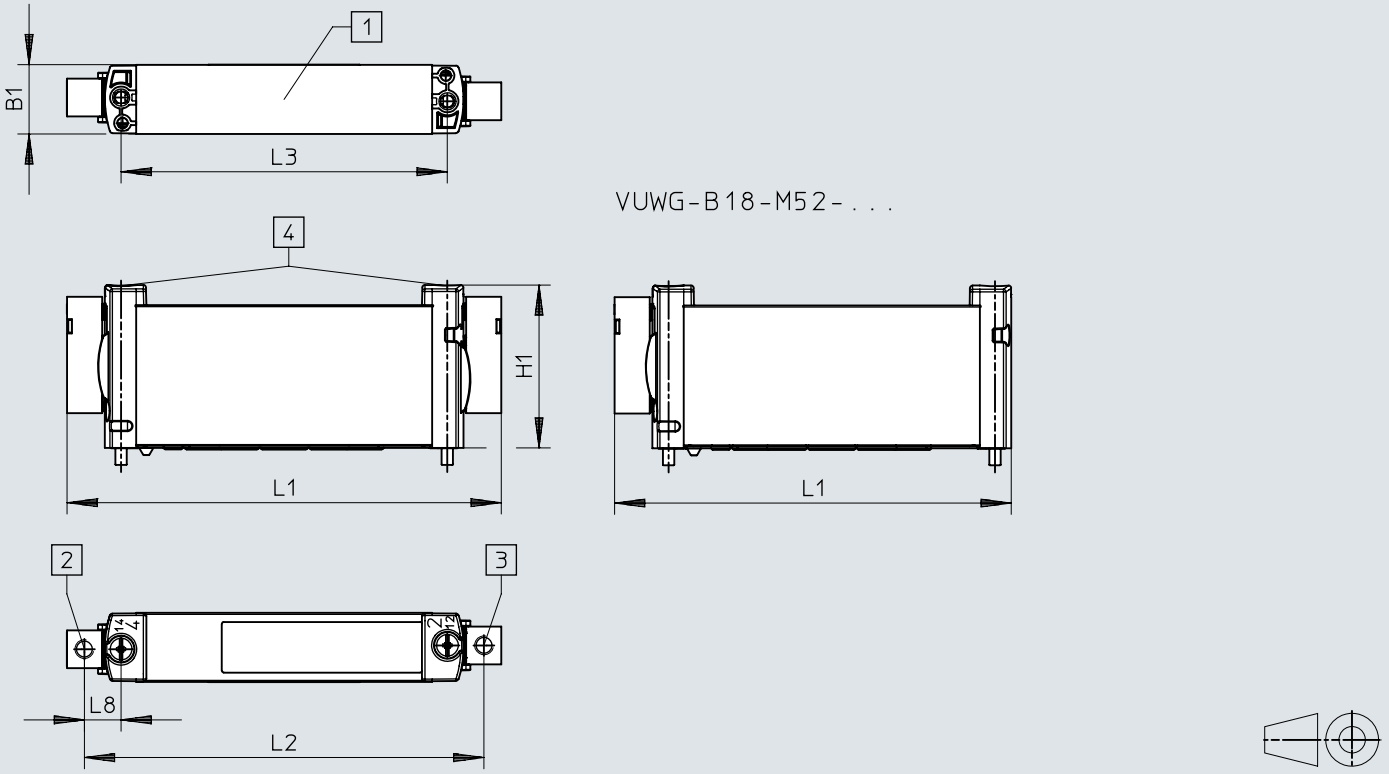
	H8	H9	H10	H11	L3	L5	L6	L7	L8	L9	L10	L11
VUWG-B14 -...-F- ...	22,1	7	15,4	6,8	6	1	16	14,4	11,3	18,5	16	14

1)	2	3	4	5	6	7	8	9	10	12	14	16
L1	56,3	72,3	88,3	104,3	120,3	136,3	152,3	168,3	184,3	216,3	248,3	280,3
L2	40	56	72	88	104	120	136	152	168	200	232	264
L4	54,3	70,3	86,3	102,3	118,3	134,3	150,3	166,3	182,3	214,3	246,6	278,3

1) Valve positions

Dimensions

Dimensions – VUWG-B18, sub-base valves 2x3/2, 5/2 and 5/3-way valve Download CAD data www.festo.com



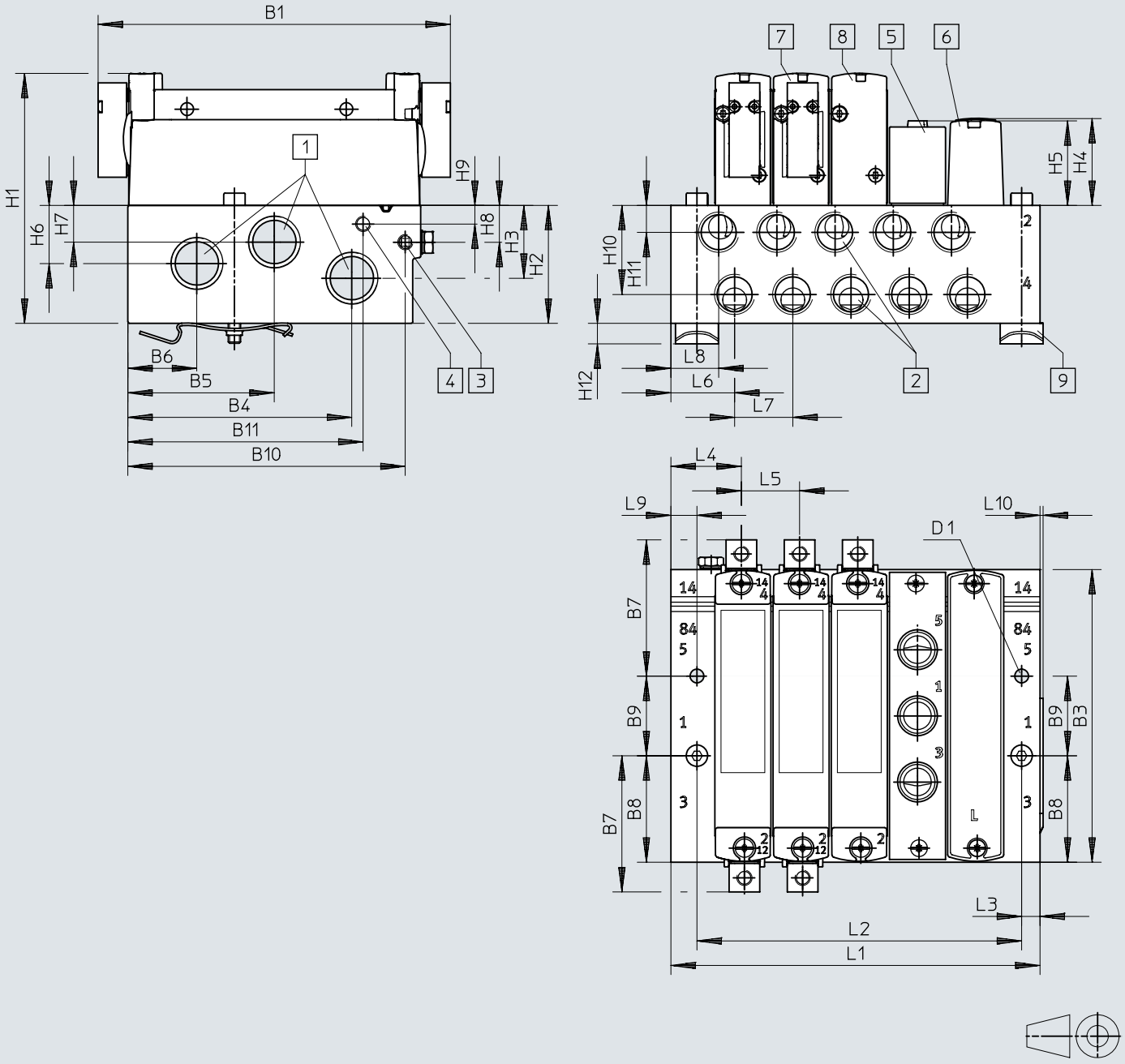
[1] Ports 1, 2, 3, 4, 5
[2] Port 14: M5
[3] Port 12: M5
[4] Retaining screw M3

	B1	H1	L1	L2	L3	L8
VUWG-B18-...	18,3	43,1	115	96,1	86,4	9,7
VUWG-B18-M52-...			105			

Dimensions

Dimensions – VUWG-B18, sub-base valves for manifold assembly, connection G1/8

Download CAD data www.festo.com



[1] Ports 1, 3 and 5: G3/8 (at both ends)
[2] Ports 2 and 4: G1/4
[3] Port 1 2/14 for external pilot air: M5
[4] Port 8 2/84 for external pilot air: M5
[5] Supply plate VABF-L1-18-P3A4-G14
[6] Cover plate VABB-L1-18
[7] Pneumatic valve, bistable
[8] Pneumatic valve, monostable
[9] H-rail mounting (2 M4x40 screws to DIN 912 are required for mounting)

Dimensions

	B1	B3	B4	B5	B6	B7	B8	B9	B10	B11	D1
VUWG-B14 -...-F- ...	115	95,6	73,1	47,8	22,5	51,7	34,8	26	90,6	76,8	4,5

	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10
VUWG-B14 -...-F- ...	81,6	38,5	23,8	28,4	27,6	19	12	12,1	6,1	29,1

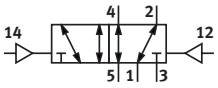
	H11	H12	L3	L4	L5	L6	L7	L8	L9	L10
VUWG-B14 -...-F- ...	8,8	6,5	6	23	19	20,8	19	15,6	8,5	1

1)	2	3	4	5	6	7	8	9	10	12	14	16
L1	63,5	82,5	101,5	120,5	139,5	158,5	177,5	196,5	215,5	253,5	291,5	329,5
L2	49	68	87	106	125	144	163	182	201	239	277	315

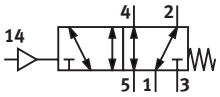
1) Valve positions

Ordering data

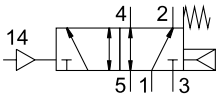
VUWG-L10A, in-line valve M3

	Valve function	Type of reset	Part no.	Type
	5/2 bistable		**573796**	**VUWG-L10A-B52-M3**

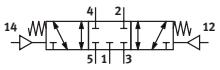
VUWG-L10A, in-line valve M3

	Valve function	Type of reset	Part no.	Type
	5/2-way, monostable	Mechanical spring	**574250**	**VUWG-L10A-M52-M-M3**

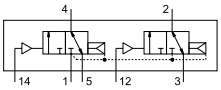
VUWG-L10A, in-line valve M3

	Valve function	Type of reset	Part no.	Type
	5/2-way, monostable	Mechanical spring, Pneumatic spring	**573795**	**VUWG-L10A-M52-R-M3**

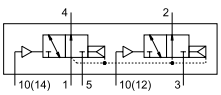
VUWG-L10A, in-line valve M3

	Valve function	Type of reset	Part no.	Type
	5/3 closed	Mechanical spring	**573797**	**VUWG-L10A-P53C-M3**

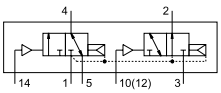
VUWG-L10 and VUWG-S10, in-line M5

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, monostable, closed	Pneumatic spring	**573805**	**VUWG-L10-T32C-A-M5**

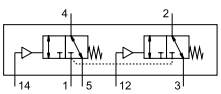
VUWG-L10 and VUWG-S10, in-line M5

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open, monostable	Pneumatic spring	**573806**	**VUWG-L10-T32U-A-M5**

VUWG-L10 and VUWG-S10, in-line M5

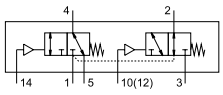
	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open/closed, monostable	Pneumatic spring	**573807**	**VUWG-L10-T32H-A-M5**

VUWG-L10 and VUWG-S10, in-line M5

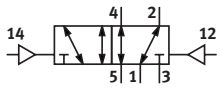
	Valve function	Type of reset	Part no.	Type
	2x3/2-way, monostable, closed	Mechanical spring	**574251**	**VUWG-L10-T32C-M-M5**

Ordering data

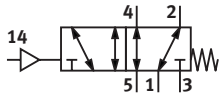
VUWG-L10 and VUWG-S10, in-line M5

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open/closed, monostable	Mechanical spring	**574253**	**VUWG-L10-T32H-M-M5**

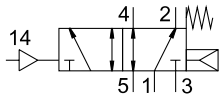
VUWG-L10 and VUWG-S10, in-line M5

	Valve function	Type of reset	Part no.	Type
	5/2 bistable		**573809**	**VUWG-L10-B52-M5**

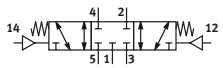
VUWG-L10 and VUWG-S10, in-line M5

	Valve function	Type of reset	Part no.	Type
	5/2-way, monostable	Mechanical spring	**574254**	**VUWG-L10-M52-M-M5**

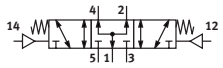
VUWG-L10 and VUWG-S10, in-line M5

	Valve function	Type of reset	Part no.	Type
	5/2-way, monostable	Mechanical spring, Pneumatic spring	**573808**	**VUWG-L10-M52-R-M5**

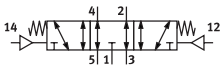
VUWG-L10 and VUWG-S10, in-line M5

	Valve function	Type of reset	Part no.	Type
	5/3 closed	Mechanical spring	**573810**	**VUWG-L10-P53C-M5**

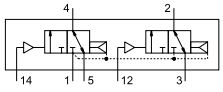
VUWG-L10 and VUWG-S10, in-line M5

	Valve function	Type of reset	Part no.	Type
	5/3-way, pressurised	Mechanical spring	**573812**	**VUWG-L10-P53U-M5**

VUWG-L10 and VUWG-S10, in-line M5

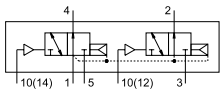
	Valve function	Type of reset	Part no.	Type
	5/3 exhausted	Mechanical spring	**573811**	**VUWG-L10-P53E-M5**

VUWG-L10 and VUWG-S10, in-line M7

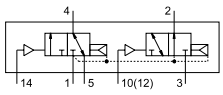
	Valve function	Type of reset	Part no.	Type
	2x3/2-way, monostable, closed	Pneumatic spring	**573821**	**VUWG-L10-T32C-A-M7**

Ordering data

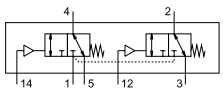
VUWG-L10 and VUWG-S10, in-line M7

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open, monostable	Pneumatic spring	**573822**	**VUWG-L10-T32U-A-M7**

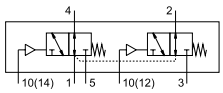
VUWG-L10 and VUWG-S10, in-line M7

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open/closed, monostable	Pneumatic spring	**573823**	**VUWG-L10-T32H-A-M7**

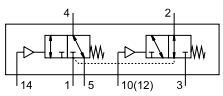
VUWG-L10 and VUWG-S10, in-line M7

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, monostable, closed	Mechanical spring	**574255**	**VUWG-L10-T32C-M-M7**

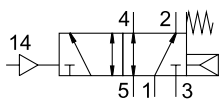
VUWG-L10 and VUWG-S10, in-line M7

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open, monostable	Mechanical spring	**574256**	**VUWG-L10-T32U-M-M7**

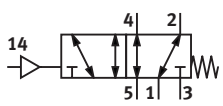
VUWG-L10 and VUWG-S10, in-line M7

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open/closed, monostable	Mechanical spring	**574257**	**VUWG-L10-T32H-M-M7**

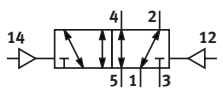
VUWG-L10 and VUWG-S10, in-line M7

	Valve function	Type of reset	Part no.	Type
	5/2-way, monostable	Mechanical spring, Pneumatic spring	**573824**	**VUWG-L10-M52-R-M7**

VUWG-L10 and VUWG-S10, in-line M7

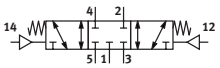
	Valve function	Type of reset	Part no.	Type
	5/2-way, monostable	Mechanical spring	**574258**	**VUWG-L10-M52-M-M7**

VUWG-L10 and VUWG-S10, in-line M7

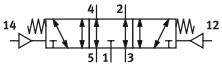
	Valve function	Type of reset	Part no.	Type
	5/2 bistable		**573825**	**VUWG-L10-B52-M7**

Ordering data

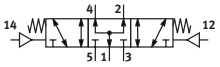
VUWG-L10 and VUWG-S10, in-line M7

	Valve function	Type of reset	Part no.	Type
	5/3 closed	Mechanical spring	**573826**	**VUWG-L10-P53C-M7**

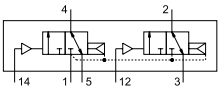
VUWG-L10 and VUWG-S10, in-line M7

	Valve function	Type of reset	Part no.	Type
	5/3 exhausted	Mechanical spring	**573827**	**VUWG-L10-P53E-M7**

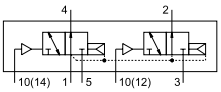
VUWG-L10 and VUWG-S10, in-line M7

	Valve function	Type of reset	Part no.	Type
	5/3-way, pressurised	Mechanical spring	**573828**	**VUWG-L10-P53U-M7**

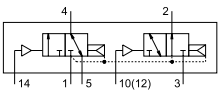
VUWG-L14 and VUWG-S14, in-line valves G1/8

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, monostable, closed	Pneumatic spring	**573829**	**VUWG-L14-T32C-A-G18**

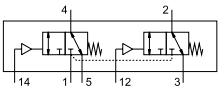
VUWG-L14 and VUWG-S14, in-line valves G1/8

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open, monostable	Pneumatic spring	**573830**	**VUWG-L14-T32U-A-G18**

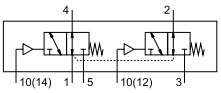
VUWG-L14 and VUWG-S14, in-line valves G1/8

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open/closed, monostable	Pneumatic spring	**573831**	**VUWG-L14-T32H-A-G18**

VUWG-L14 and VUWG-S14, in-line valves G1/8

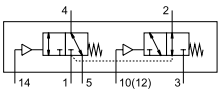
	Valve function	Type of reset	Part no.	Type
	2x3/2-way, monostable, closed	Mechanical spring	**574259**	**VUWG-L14-T32C-M-G18**

VUWG-L14 and VUWG-S14, in-line valves G1/8

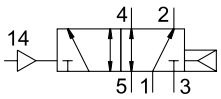
	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open, monostable	Mechanical spring	**574260**	**VUWG-L14-T32U-M-G18**

Ordering data

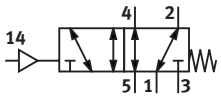
VUWG-L14 and VUWG-S14, in-line valves G1/8

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open/closed, monostable	Mechanical spring	**574261**	**VUWG-L14-T32H-M-G18**

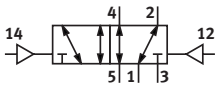
VUWG-L14 and VUWG-S14, in-line valves G1/8

	Valve function	Type of reset	Part no.	Type
	5/2-way, monostable	Pneumatic spring	**573832**	**VUWG-L14-M52-A-G18**

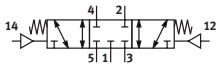
VUWG-L14 and VUWG-S14, in-line valves G1/8

	Valve function	Type of reset	Part no.	Type
	5/2-way, monostable	Mechanical spring	**574262**	**VUWG-L14-M52-M-G18**

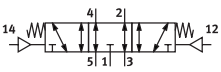
VUWG-L14 and VUWG-S14, in-line valves G1/8

	Valve function	Type of reset	Part no.	Type
	5/2 bistable		**573833**	**VUWG-L14-B52-G18**

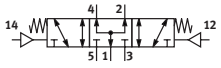
VUWG-L14 and VUWG-S14, in-line valves G1/8

	Valve function	Type of reset	Part no.	Type
	5/3 closed	Mechanical spring	**573834**	**VUWG-L14-P53C-G18**

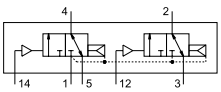
VUWG-L14 and VUWG-S14, in-line valves G1/8

	Valve function	Type of reset	Part no.	Type
	5/3 exhausted	Mechanical spring	**573835**	**VUWG-L14-P53E-G18**

VUWG-L14 and VUWG-S14, in-line valves G1/8

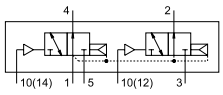
	Valve function	Type of reset	Part no.	Type
	5/3-way, pressurised	Mechanical spring	**573836**	**VUWG-L14-P53U-G18**

VUWG-L18 and VUWG-S18, in-line valves G1/4

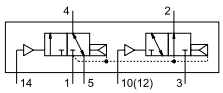
	Valve function	Type of reset	Part no.	Type
	2x3/2-way, monostable, closed	Pneumatic spring	**574263**	**VUWG-L18-T32C-A-G14**

Ordering data

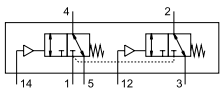
VUWG-L18 and VUWG-S18, in-line valves G1/4

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open, monostable	Pneumatic spring	**574264**	**VUWG-L18-T32U-A-G14**

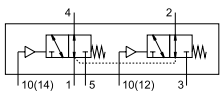
VUWG-L18 and VUWG-S18, in-line valves G1/4

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open/closed, monostable	Pneumatic spring	**574265**	**VUWG-L18-T32H-A-G14**

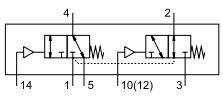
VUWG-L18 and VUWG-S18, in-line valves G1/4

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, monostable, closed	Mechanical spring	**574266**	**VUWG-L18-T32C-M-G14**

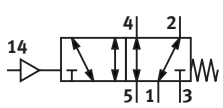
VUWG-L18 and VUWG-S18, in-line valves G1/4

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open, monostable	Mechanical spring	**574267**	**VUWG-L18-T32U-M-G14**

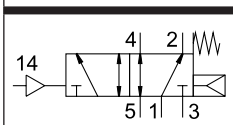
VUWG-L18 and VUWG-S18, in-line valves G1/4

	Valve function	Type of reset	Part no.	Type
	2x3/2-way, open/closed, monostable	Mechanical spring	**574268**	**VUWG-L18-T32H-M-G14**

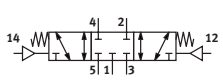
VUWG-L18 and VUWG-S18, in-line valves G1/4

	Valve function	Type of reset	Part no.	Type
	5/2-way, monostable	Mechanical spring	**574270**	**VUWG-L18-M52-M-G14**

VUWG-L18 and VUWG-S18, in-line valves G1/4

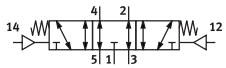
	Valve function	Type of reset	Part no.	Type
	5/2-way, monostable	Mechanical spring, Pneumatic spring	**574269**	**VUWG-L18-M52-R-G14**

VUWG-L18 and VUWG-S18, in-line valves G1/4

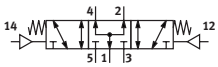
	Valve function	Type of reset	Part no.	Type
	5/3 closed	Mechanical spring	**574272**	**VUWG-L18-P53C-G14**

Ordering data

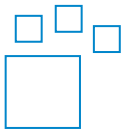
VUWG-L18 and VUWG-S18, in-line valves G1/4

	Valve function	Type of reset	Part no.	Type
	5/3 exhausted	Mechanical spring	**574273**	**VUWG-L18-P53E-G14**

VUWG-L18 and VUWG-S18, in-line valves G1/4

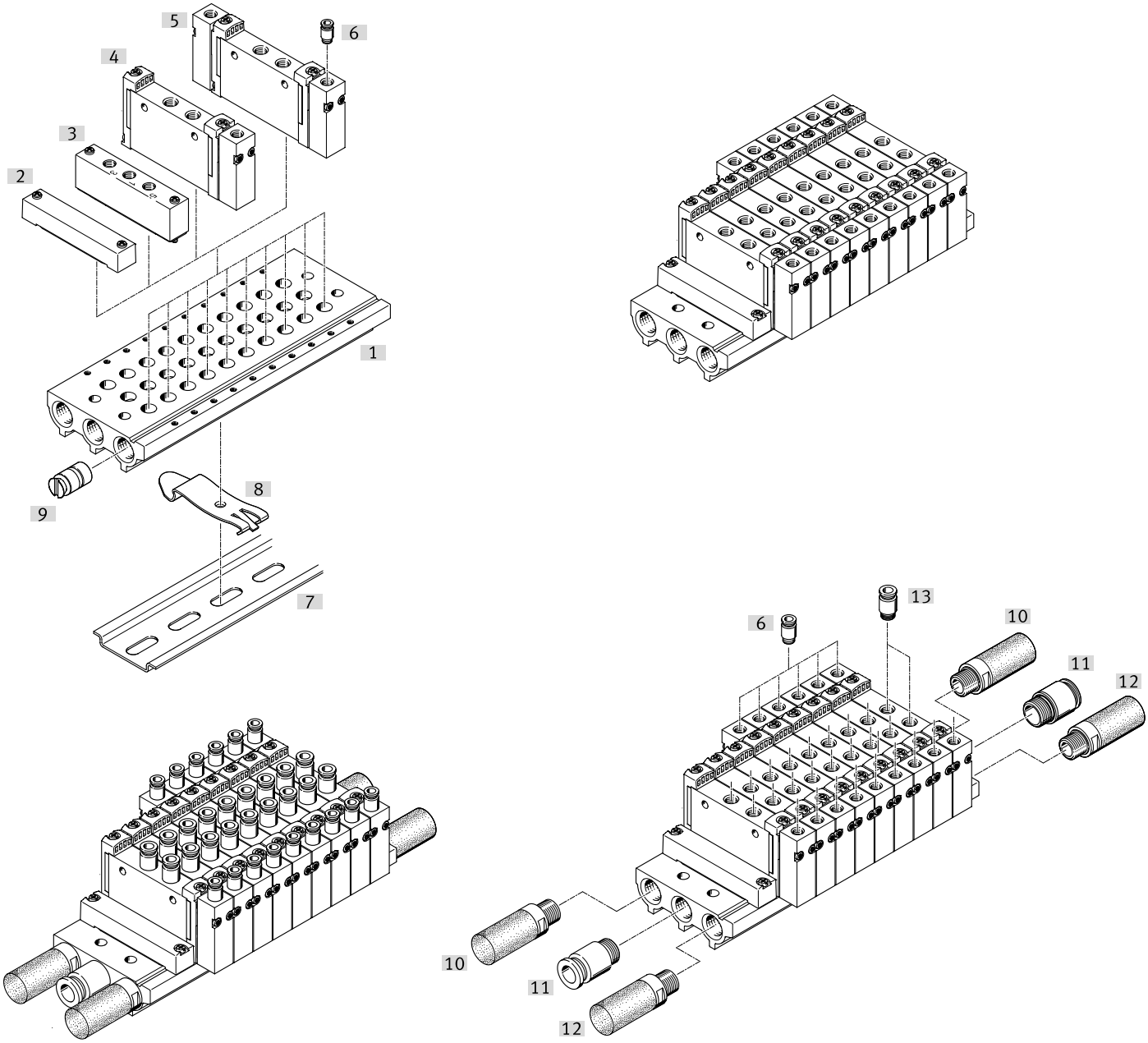
	Valve function	Type of reset	Part no.	Type
	5/3-way, pressurised	Mechanical spring	**574274**	**VUWG-L18-P53U-G14**

Modular product system

	Valve function	Valve size	Part no.	Type
	2x3/2-way, monostable, closed, 2x3/2-way, open, monostable, 2x3/2-way, open/closed, monostable, 5/2 bistable, 5/2-way, monostable, 5/3-way, pressurised, 5/3 exhausted, 5/3 closed	10 mm, 14 mm, 18 mm	**571755**	**VUWG**

Peripherals

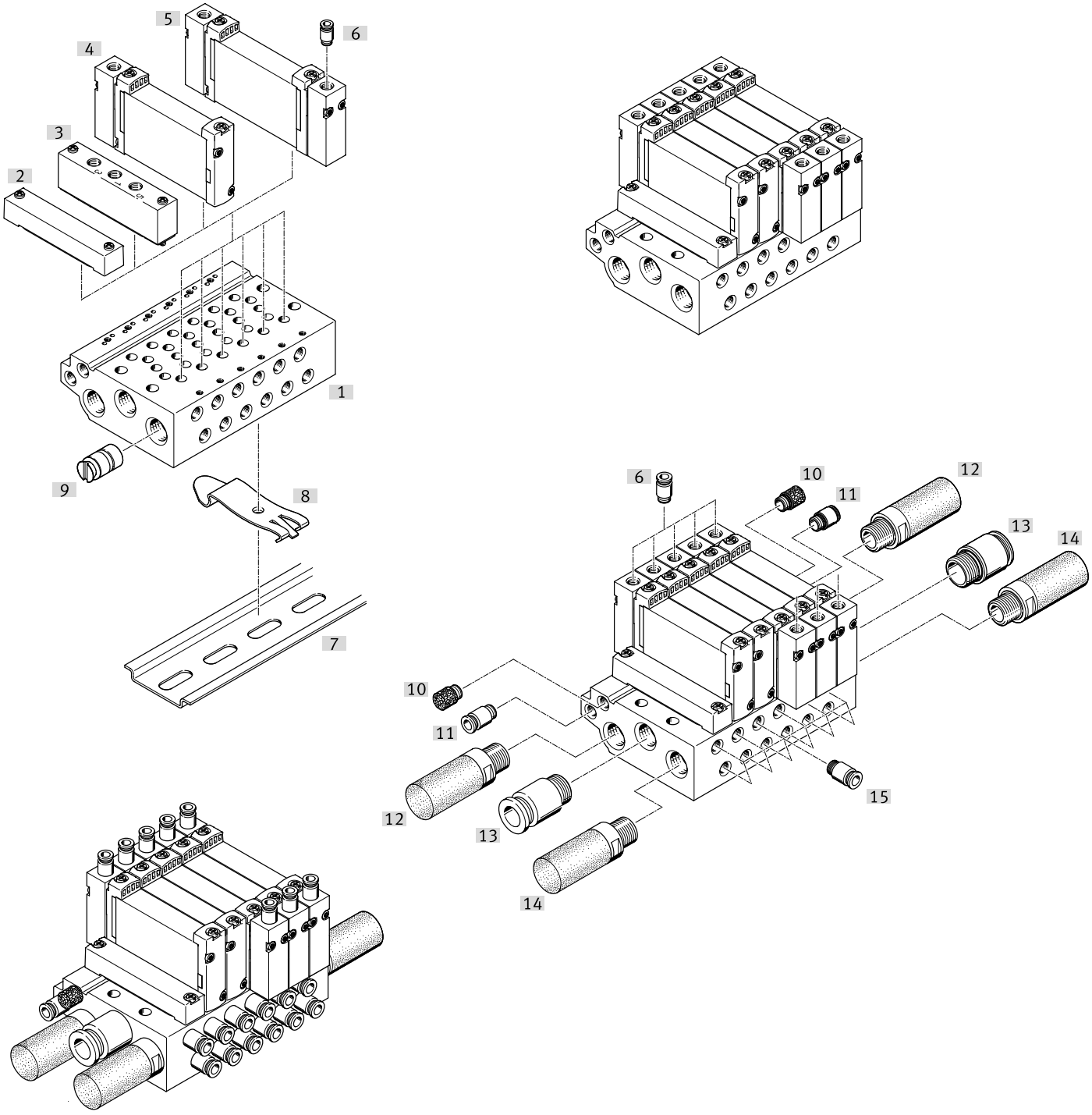
Sample system overview – VUWG-L10 and VUWG-S10, in-line valves M5/M7, manifold assembly



Accessories			→ Link
	Type/order code	Description	
[1]	Manifold rail VABM-L1-10S-G18	For 2 to 10, 12, 14 and 16 valve positions	43
[2]	Cover plate VABB-L1-10-S	To cover a vacant position	44
[3]	Supply plate VABF-L1-10-P3A4	For air supply port 1 and port 3 and 5	47
[4]	Pneumatic valve VUWG	Pneumatic valve, monostable	vuwg
[5]	Pneumatic valve VUWG	Pneumatic valve, bistable	vuwg
[6]	Push-in fitting QS	For adapter plate connection 12 or 14	qs
[7]	H-rail NRH-35-2000	For mounting the valve manifold assembly	49
[8]	H-rail mounting VAME-T-M4	2 pieces for attaching the valve manifold to the H-rail	49
[9]	Separator VABD-8-B	For creating pressure zones	44
[10]	Silencer U	For port 3	48
[11]	Push-in fitting QS	For port 1	qs
[12]	Silencer U	For port 5	48
[13]	Push-in fitting QS	For ports 2 and 4	qs

Peripherals

Sample system overview – VUWG-B10, sub-base valves, manifold assembly



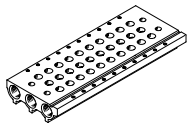
Accessories			→ Link
	Type/order code	Description	
[1]	Manifold rail VABM-L1-10W-G18	For 2 to 10, 12, 14 and 16 valve positions	43
[2]	Cover plate VABB-L1-10-W	To cover a vacant position	47
[3]	Supply plate VABF-L1-10-P3A4-M5	For air supply port 1 and port 3 and 5	46
[4]	Pneumatic valve VUWG	Pneumatic valve, monostable	vuwg
[5]	Pneumatic valve VUWG	Pneumatic valve, bistable	vuwg
[6]	Push-in fitting QS	For adapter plate connection 12 or 14	qs
[7]	H-rail NRH-35-2000	For mounting the valve manifold assembly	49
[8]	H-rail mounting VAME-T-M4	2 pieces for attaching the valve manifold to the H-rail	49
[9]	Separator VABD-6-B	For creating pressure zones	48
[10]	Silencer U	For port 84	48

Peripherals

Accessories			→ Link
	Type/order code	Description	
[11]	Push-in fitting QS	For port 14	qs
[12]	Silencer U	For port 5	48
[13]	Push-in fitting QS	For port 1	qs
[14]	Silencer U	For port 3	48
[15]	Push-in fitting QS	For ports 2 and 4	qs

Accessories

Manifold rail for in-line valve (manifold assembly), for valve size M3

	Operating pressure	Max. tightening torque H-rail mounting	Max. tightening torque for valve mounting	Max. tightening torque wall mounting	Part no.	Type
	-0.09 ... 1 MPa	1.5 Nm	0.45 Nm	3 Nm	**566527**	**VABM-L1-10AS-M5-7**
					566532	**VABM-L1-10AS-M5-14**
					566533	**VABM-L1-10AS-M5-16**
					566530	**VABM-L1-10AS-M5-10**
					566524	**VABM-L1-10AS-M5-4**
					566531	**VABM-L1-10AS-M5-12**
					566529	**VABM-L1-10AS-M5-9**
					566522	**VABM-L1-10AS-M5-2**
					566523	**VABM-L1-10AS-M5-3**
					566525	**VABM-L1-10AS-M5-5**
					566528	**VABM-L1-10AS-M5-8**
					566526	**VABM-L1-10AS-M5-6**

Cover plate, for manifold rail M3 in-line valves, incl. screws and gasket

	Product weight	Part no.	Type
	9.4 g	**569986**	**VABB-L1-10A**

Separator, for manifold M3 in-line valves, separator for pressure zones

	Product weight	Part no.	Type
	6 g	**570872**	**VABD-4.2-B**

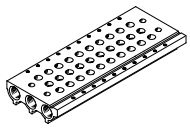
Supply plate, for manifold rail M3 in-line valves, incl. screws and seal

	Product weight	Part no.	Type
	16.5 g	**569990**	**VABF-L1-10A-P3A4-M5**

Seals for in-line valves, M3, delivery unit: 10 sets (2 screws and 1 seal each)

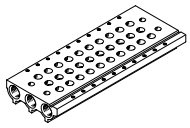
	Material seals	Part no.	Type
	NBR	**566670**	**VABD-L1-10AX-S-M3**

Manifold rail for in-line valves (battery assembly), for valve size M5/M7

	Operating pressure	Max. tightening torque for valve mounting	Max. tightening torque H-rail mounting	Max. tightening torque wall mounting	Part no.	Type
	-0.09 ... 1 MPa	0.45 Nm	1.5 Nm	3 Nm	**566559**	**VABM-L1-10S-G18-3**
					566560	**VABM-L1-10S-G18-4**
					566561	**VABM-L1-10S-G18-5**
					566569	**VABM-L1-10S-G18-16**
					566563	**VABM-L1-10S-G18-7**
					566566	**VABM-L1-10S-G18-10**
					566568	**VABM-L1-10S-G18-14**
					566558	**VABM-L1-10S-G18-2**
					566564	**VABM-L1-10S-G18-8**

Accessories

Manifold rail for in-line valves (battery assembly), for valve size M5/M7

	Operating pressure	Max. tightening torque for valve mounting	Max. tightening torque H-rail mounting	Max. tightening torque wall mounting	Part no.	Type
	-0.09 ... 1 MPa	0.45 Nm	1.5 Nm	3 Nm	**566562**	**VABM-L1-10S-G18-6**
					566567	**VABM-L1-10S-G18-12**
					566565	**VABM-L1-10S-G18-9**

Cover plate, for manifold rail M5/M7 in-line valves, incl. screws and gasket

	Product weight	Part no.	Type
	10 g	**566462**	**VABB-L1-10-S**

Separator, for terminal strip M5/M7 in-line valves

	Product weight	Part no.	Type
	8 g	**569995**	**VABD-8-B**

Supply plate, for manifold rail M5 in-line valves

	Product weight	Part no.	Type
	21.4 g	**569991**	**VABF-L1-10-P3A4-M5**

Supply plate, for manifold rail M7 in-line valves

	Product weight	Part no.	Type
	19 g	**569992**	**VABF-L1-10-P3A4-M7**

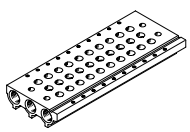
Seals for in-line valves, M5, delivery unit: 10 sets (2 screws and 1 seal each)

	Material seals	Part no.	Type
	NBR	**566672**	**VABD-L1-10X-S-M5**

Seals for in-line valves, M7, delivery unit: 10 sets (2 screws and 1 seal each)

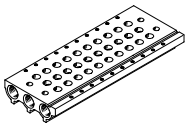
	Material seals	Part no.	Type
	NBR	**566673**	**VABD-L1-10X-S-M7**

Manifold rail for in-line valves (manifold assembly), for valve size G1/8

	Operating pressure	Max. tightening torque for valve mounting	Max. tightening torque H-rail mounting	Max. tightening torque wall mounting	Part no.	Type
	-0.09 ... 1 MPa	0.65 Nm	1.5 Nm	3 Nm	**566623**	**VABM-L1-14S-G14-7**

Accessories

Manifold rail for in-line valves (manifold assembly), for valve size G1/8

	Operating pressure	Max. tightening torque for valve mounting	Max. tightening torque H-rail mounting	Max. tightening torque wall mounting	Part no.	Type
	-0.09 ... 1 MPa	0.65 Nm	1.5 Nm	3 Nm	**566627**	**VABM-L1-14S-G14-12**
					566620	**VABM-L1-14S-G14-4**
					566626	**VABM-L1-14S-G14-10**
					566629	**VABM-L1-14S-G14-16**
					566624	**VABM-L1-14S-G14-8**
					566625	**VABM-L1-14S-G14-9**
					566621	**VABM-L1-14S-G14-5**
					566618	**VABM-L1-14S-G14-2**
					566622	**VABM-L1-14S-G14-6**
					566628	**VABM-L1-14S-G14-14**
					566619	**VABM-L1-14S-G14-3**

Cover plate, for manifold rail G1/8 in-line valves, incl. screws and seal

	Product weight	Part no.	Type
	23.9 g	**569989**	**VABB-L1-14**

Separator, for manifold G1/8 in-line valves

	Product weight	Part no.	Type
	10 g	**569996**	**VABD-10-B**

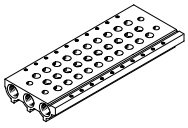
Supply plate, for manifold rail G1/8 in-line valves

	Product weight	Part no.	Type
	25 g	**569993**	**VABF-L1-14-P3A4-G18**

Seals for in-line valves, G1/8, delivery quantity: 10 sets (2 screws and 1 seal each)

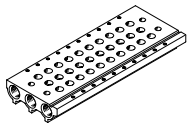
	Material seals	Part no.	Type
	NBR	**566675**	**VABD-L1-14X-S-G18**

Manifold rail for in-line valves (manifold assembly), for valve size G1/4

	Operating pressure	Max. tightening torque for valve mounting	Max. tightening torque H-rail mounting	Max. tightening torque wall mounting	Part no.	Type
	-0.09 ... 1 MPa	1.18 Nm	1.5 Nm	3 Nm	**574465**	**VABM-L1-18S-G38-14**
					574456	**VABM-L1-18S-G38-3**
					574461	**VABM-L1-18S-G38-8**
					574459	**VABM-L1-18S-G38-6**
					574457	**VABM-L1-18S-G38-4**
					574460	**VABM-L1-18S-G38-7**
					574458	**VABM-L1-18S-G38-5**
					574463	**VABM-L1-18S-G38-10**
					574462	**VABM-L1-18S-G38-9**
					574466	**VABM-L1-18S-G38-16**
					574455	**VABM-L1-18S-G38-2**

Accessories

Manifold rail for in-line valves (manifold assembly), for valve size G1/4

	Operating pressure	Max. tightening torque for valve mounting	Max. tightening torque H-rail mounting	Max. tightening torque wall mounting	Part no.	Type
	-0.09 ... 1 MPa	1.18 Nm	1.5 Nm	3 Nm	**574464**	**VABM-L1-18S-G38-12**

Cover plate, for manifold rail G1/4 in-line valves, incl. screws and seal

	Product weight	Part no.	Type
	50 g	**574482**	**VABB-L1-18**

Separator, for manifold G1/4 in-line valves

	Product weight	Part no.	Type
	16 g	**574483**	**VABD-14-B**

Supply plate, for manifold rail G1/4 in-line valves

	Material supply plate	Part no.	Type
	Wrought aluminium alloy	**574481**	**VABF-L1-18-P3A4-G14**

Seals for in-line valves, G1/4, delivery quantity: 10 sets (2 screws and 1 seal each)

	Material seals	Part no.	Type
	NBR	**574479**	**VABD-L1-18X-S-G14**

Cover plate, for manifold rail 10AW, incl. screws and seal

	Product weight	Part no.	Type
	9.4 g	**569986**	**VABB-L1-10A**

Separator, for manifold rail 10AW, separator for pressure zones

	Product weight	Part no.	Type
	6 g	**570872**	**VABD-4.2-B**

Supply plate, for manifold rail 10AW, incl. screws and seal

	Product weight	Part no.	Type
	16.5 g	**569990**	**VABF-L1-10A-P3A4-M5**

Accessories

Seals, for sub-base valves B10A, delivery unit: 10 sets (2 screws and 1 seal each)

	Material seals	Part no.	Type
	NBR	**566671**	**VABD-L1-10AB-S-M3**

Cover plate, for manifold rail 10W/10HW, incl. screws and seal

	Product weight	Part no.	Type
	24 g	**566495**	**VABB-L1-10-W**

Separator, for manifold rail 10W/10HW, separator for pressure zones

	Product weight	Part no.	Type
	7 g	**569994**	**VABD-6-B**

Supply plate, for manifold rail 10W, incl. screws and seal

	Product weight	Part no.	Type
	21.4 g	**569991**	**VABF-L1-10-P3A4-M5**

Supply plate, for manifold rail 10HW, incl. screws and seal

	Product weight	Part no.	Type
	19 g	**569992**	**VABF-L1-10-P3A4-M7**

Seals, for sub-base valves B10, delivery unit: 10 sets (2 screws and 1 seal each)

	Material seals	Part no.	Type
	NBR	**566674**	**VABD-L1-10B-S-M7**

Cover plate, for manifold rail 14W, sub-base valves, incl. screws and gasket

	Product weight	Part no.	Type
	23.9 g	**569989**	**VABB-L1-14**

Separator, for manifold rail 14W, subplate valves, separator for pressure zones

	Product weight	Part no.	Type
	10 g	**569996**	**VABD-10-B**

Supply plate, for manifold rail 14W, incl. screws and seal

	Product weight	Part no.	Type
	25 g	**569993**	**VABF-L1-14-P3A4-G18**

Accessories

Seals, for sub-base valves B14, delivery unit: 10 sets (2 screws and 1 seal each)

	Material seals	Part no.	Type
	NBR	566676	VABD-L1-14B-S-G18

Cover plate, for manifold rail 18W, sub-base valves, incl. screws and gasket

	Product weight	Part no.	Type
	50 g	574482	VABB-L1-18

Separator, for manifold rail 18W, subplate valves, separator for pressure zones

	Product weight	Part no.	Type
	16 g	574483	VABD-14-B

Supply plate, for manifold rail 18W, incl. screws and seal

	Material supply plate	Part no.	Type
	Wrought aluminium alloy	574481	VABF-L1-18-P3A4-G14

Seals, for sub-base valves B18, delivery unit: 10 sets (2 screws and 1 seal each)

	Material seals	Part no.	Type
	NBR	574480	VABD-L1-18B-S-G14

Silencer

	Pneumatic connection	Size of pack	Part no.	Type
	M5	1	165003	UC-M5
	M7		161418	UC-M7
	G1/8		161419	UC-1/8
		50	534222	U-1/8-50
	G1/4	20	534220	UC-1/4-20
			534223	U-1/4-20

Fittings

	Pneumatic connection, port 2	Size of pack	Part no.	Type
	For tubing outer diameter of 3 mm	10	153331	QSML-M5-3
			133003	QSM-M5-3-I-R
			130838	QSMLL-M5-3
			153313	QSM-M5-3-I
	For tubing outside diameter of 4 mm		186352	QSML-M7-4
			153339	QSMLL-M5-4
			153333	QSML-M5-4
			133004	QSM-M5-4-I-R
			186354	QSMLL-M7-4
			153319	QSM-M7-4-I
			186106	QS-G1/8-4-I
			153315	QSM-M5-4-I
	For tubing outside diameter of 6 mm		133005	QSM-M5-6-I-R
			186107	QS-G1/8-6-I
			186117	QSL-G1/8-6

Accessories

Fittings

	Pneumatic connection, port 2	Size of pack	Part no.	Type
	For tubing outside diameter of 6 mm	10	**133007**	**QSM-M7-6-I-R**
			186128	**QSLL-G1/8-6**
	For tubing outside diameter of 8 mm		**186109**	**QS-G1/8-8-I**
			186130	**QSLL-G1/8-8**
			186119	**QSL-G1/8-8**

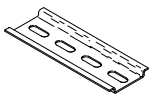
Blanking plug

	Pneumatic connection, port 1	Size of pack	Part no.	Type
	Male thread M5	10	**174308**	**B-M5-B**
	Male thread M7		**174309**	**B-M7**
			133007	**QSM-M7-6-I-R**
	Male thread G1/8		**3568**	**B-1/8**
	Male thread G1/4		**3569**	**B-1/4**

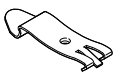
Compact blanking plug, for valve, for shutting off a connection (valve requires blanking plug with small screw-in depth)

	Pneumatic connection, port 1	Size of pack	Part no.	Type
	Male thread G1/8	10	**578406**	**NPQH-BK-G18-P10**
	Male thread G1/4		**578407**	**NPQH-BK-G14-P10**

H-rail to EN 60715

	LABS (PWIS) conformity	Part no.	Type
	VDMA24364-B2-L	**35430**	**NRH-35-2000**

H-rail mounting, 2 pieces

	LABS (PWIS) conformity	Part no.	Type
	VDMA24364-B2-L	**569998**	**VAME-T-M4**

Restrictor, for M5 valves to adjust the flow when pressurising and exhausting (10 pieces)

	Standard nominal flow rate in flow control direction	b value	C value	Part no.	Type
	9.6 l/min	0.5	0.04 l/sbar	**8025709**	**VFFG-T-M5-5**
	14.6 l/min		0.05 l/sbar	**8025710**	**VFFG-T-M5-6**
	19.1 l/min		0.07 l/sbar	**8025711**	**VFFG-T-M5-7**
	26.1 l/min		0.1 l/sbar	**8025712**	**VFFG-T-M5-8**
	40.8 l/min		0.14 l/sbar	**8025713**	**VFFG-T-M5-10**
	45.4 l/min		0.16 l/sbar	**8025714**	**VFFG-T-M5-12**
	67.4 l/min		0.25 l/sbar	**8025715**	**VFFG-T-M5-15**