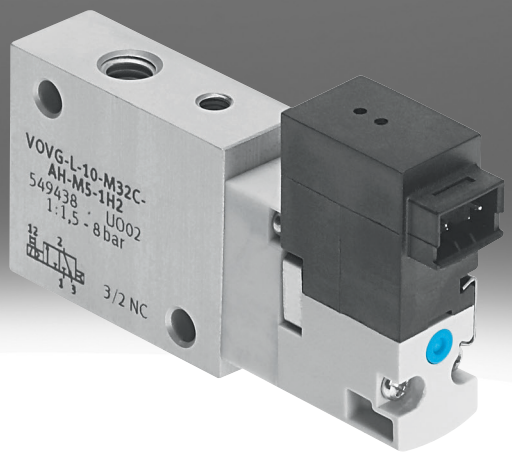
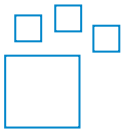
Solenoid valve VOVG



Characteristics

Ordering data - modular system



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

Type code

001	Series	
VOVG	Solenoid valve	

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

003	Size	
10	Size 10	
12	Size 12	

004	Valve function	
M32C	3/2-way valve, normally closed	
M32U	3/2-way valve, normally open	
M52Q	5/2-way valve, single solenoid/monostable, 2 valve positions	

005	Reset method for monostable/single solenoid valves	
A	Pneumatic spring	

006	Pilot air	
	Internal	
Z	External	

007	Manual override	
D	Non-detenting, detenting	
H	Non-detenting	

008	Pneumatic connection	
F	Flange/sub-base	
M5	M5	
Q3	Push-in connector, 3 mm	
Q4	Push-in connector 4 mm	
Q6	Push-in connector 6 mm	

009	Exhaust	
	No fitting	
U	Silencer	

010	Nominal operating voltage	
1	24 V DC	
4	5 V DC	
5	12 V DC	

011	Electrical connection	
H2	Connection pattern H, horizontal plug	
H3	Connection pattern H, vertical plug	

012	Display	
	None	
L	LED	

013	Electrical valve accessories	
	None	
W1	Connecting cable, flying leads, 0.5 m	
W2	Connecting cable, flying leads, 1 m	
W3	Connecting cable, flying leads, 2.5 m	
W4	Connecting cable, flying leads, 5 m	

Datasheet

General technical data					
Valve function	3/2-way, closed, monostable		3/2 open, monostable		5/2-way, monostable
Construction width	10 mm	12 mm	10 mm	12 mm	25 mm
Design	Piston gate valve				
lap	Overlap				
Sealing principle	Soft				
Type of actuation	Electric				
Type of reset	Pneumatic spring				
Type of piloting	Pilot actuated				
Flow direction	Non-reversible				
Exhaust-air function	With flow control option				
Manual override	Non-detenting				
Mounting position	optional				
Nominal size	2.1 mm				
Standard nominal flow rate (standardised to DIN 1343)	200 l/min	180 l/min	200 l/min	180 l/min	180 ... 200 l/min
Switching time on	12 ms				15 ms
Switching time off	10 ms				18 ms
Pneumatic connection, port 1	M5	Sub-base	M5	Sub-base	Sub-base; M7

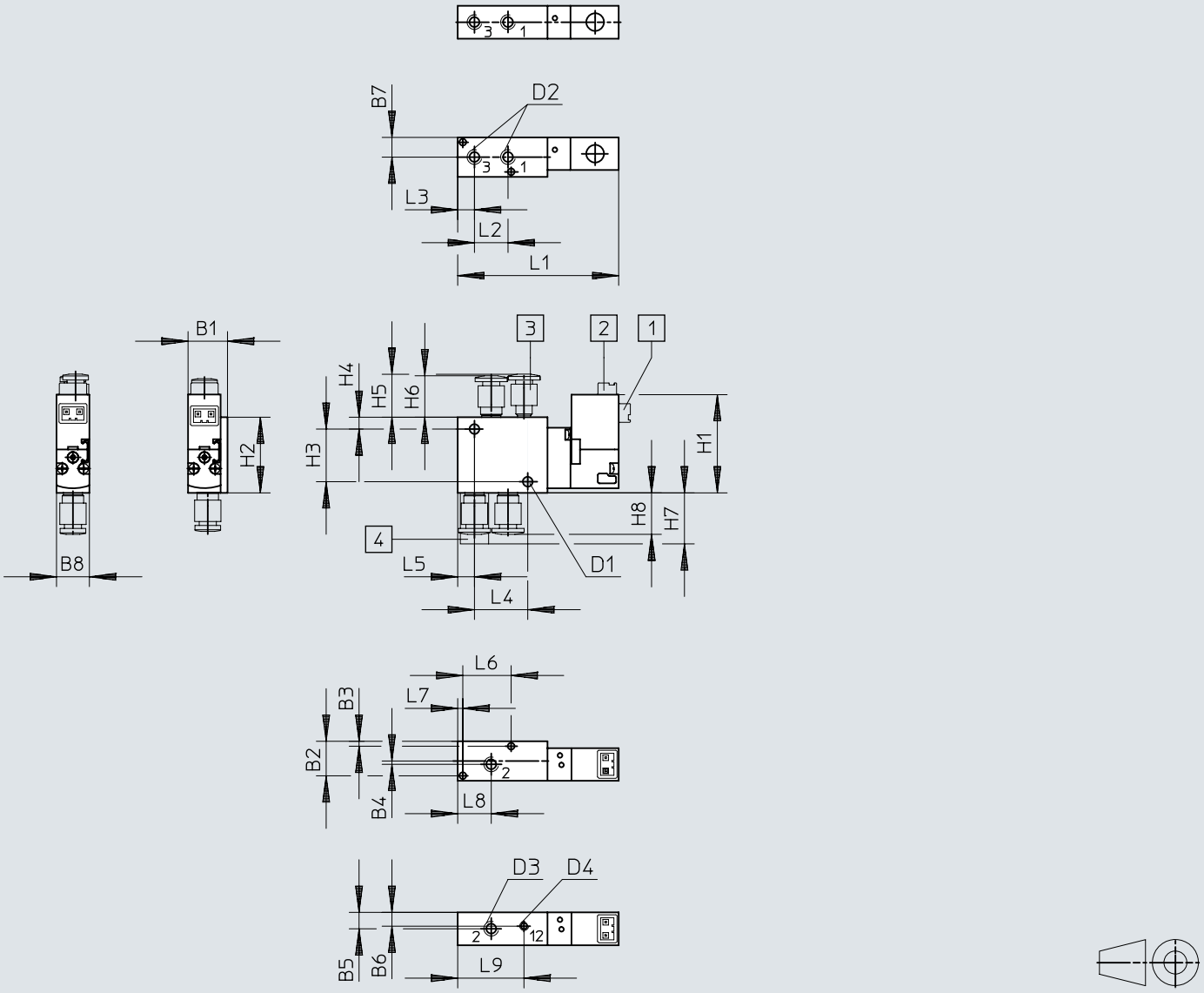
Operating and environmental conditions	
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Operating pressure	0.2 ... 0.8 MPa
Operating pressure	2 ... 8 bar
Operating pressure	29 ... 116 psi
Media temperature	-5 ... 50°C
Ambient temperature	-5 ... 50°C

Electrical data	
Operating voltage	24V DC
Electrical connection	2-pin, Plugs

Materials	
Material housing	Wrought aluminium alloy
Material seals	FPM; HNBR; NBR
Note on materials	RoHS-compliant

Dimensions

Dimensions – 3/2-way in-line valve Download CAD data www.festo.com



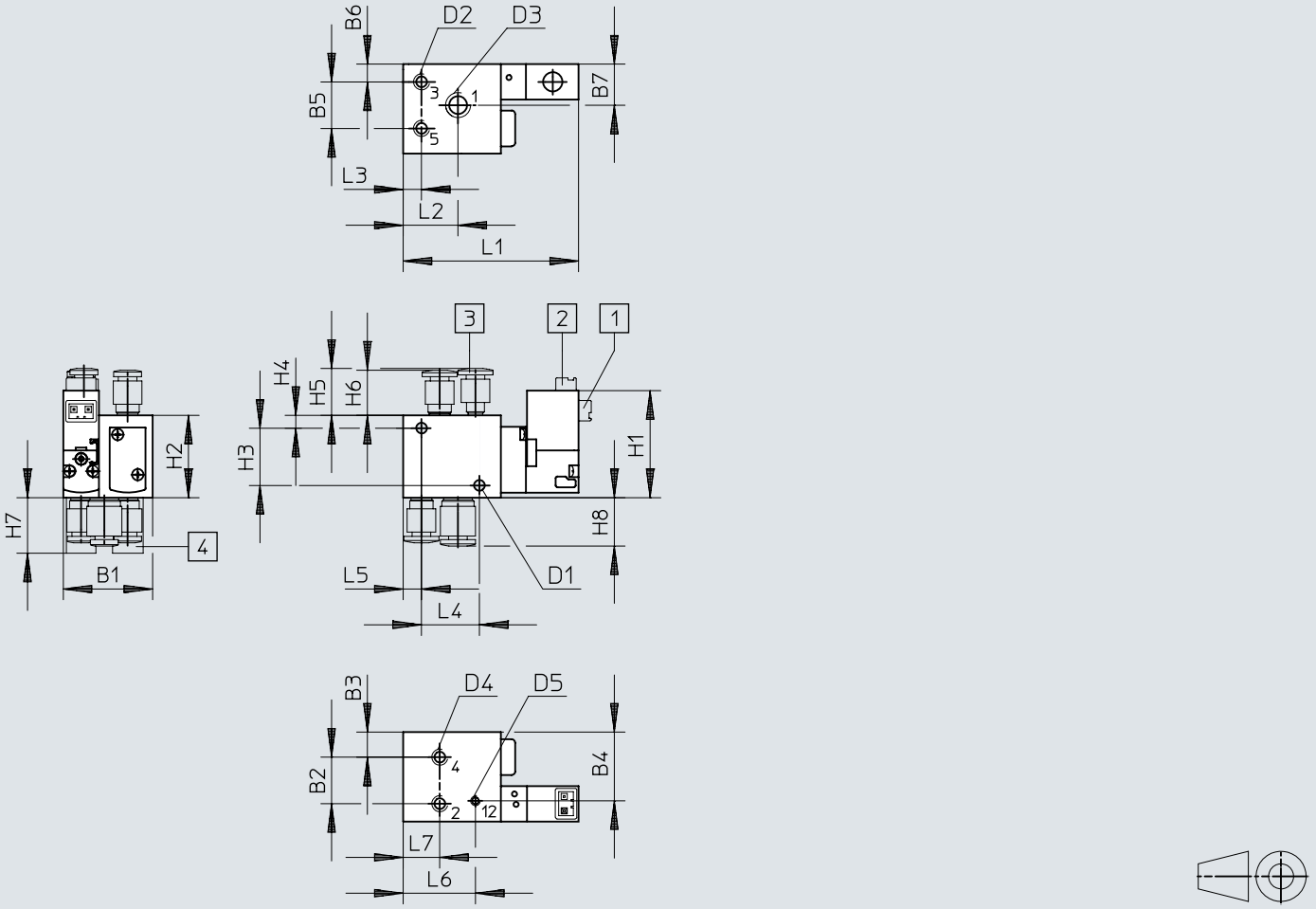
[1] Electrical connection at rear
[2] Electrical connection at top
[3] Pilot air supply
[4] Silencer

	B1	B2	B3	B4	B5	B6	B7	B8	D1 ø	D2	D3	D4	H1	H2	H3
VOVG-...	12	10,5	1,5	1	5	4,2	6	10	3	M5	M5	M3	29,9	23	16

	H4	H5	H6	H7	H8	L1	L2	L3	L4	L5	L6	L7	L8	L9
VOVG-...	3,6	13,1	12,6	15,5	12,6	49	10,2	5,1	16,2	5,1	14,7	~1,6	10,2	20,2

Dimensions

Dimensions – 5/2-way in-line valve Download CAD data www.festo.com



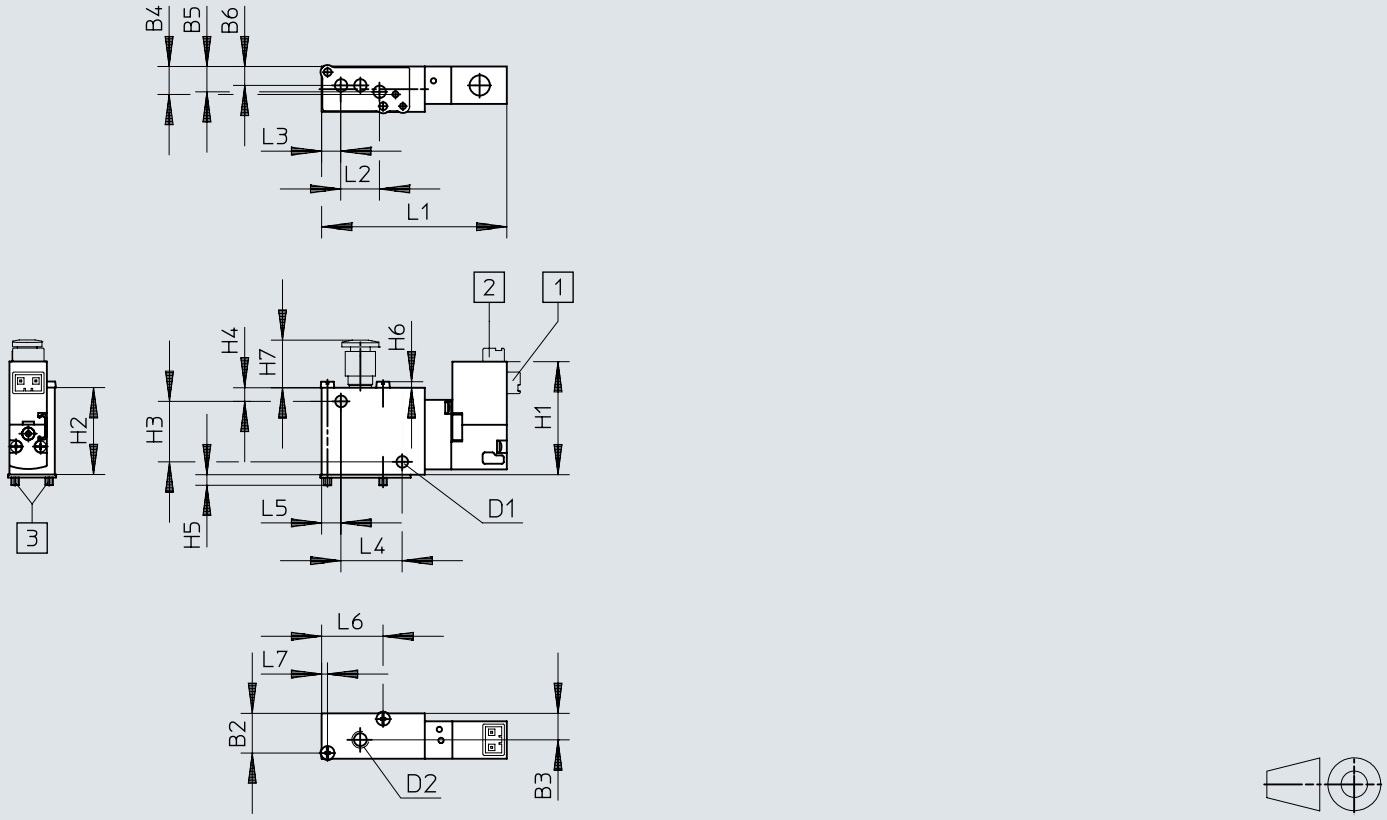
[1] Electrical connection at rear
[2] Electrical connection at top
[3] Pilot air supply
[4] Silencer

	B1	B2	B3	B4	B5	B6	B7	D1 ø	D2	D3	D4	D5	H1	H2
VOVG-...	25	13	7	19,2	13	5	11,5	3	M5	M7	M5	M3	29,9	23

	H3	H4	H5	H6	H7	H8	L1	L2	L3	L4	L5	L6	L7
VOVG-...	16	3,6	13,1	12,6	15,5	13,5	49	15,3	5,1	16,2	5,1	20,2	10,2

Dimensions

Dimensions – 3/2-way semi in-line valve Download CAD data www.festo.com



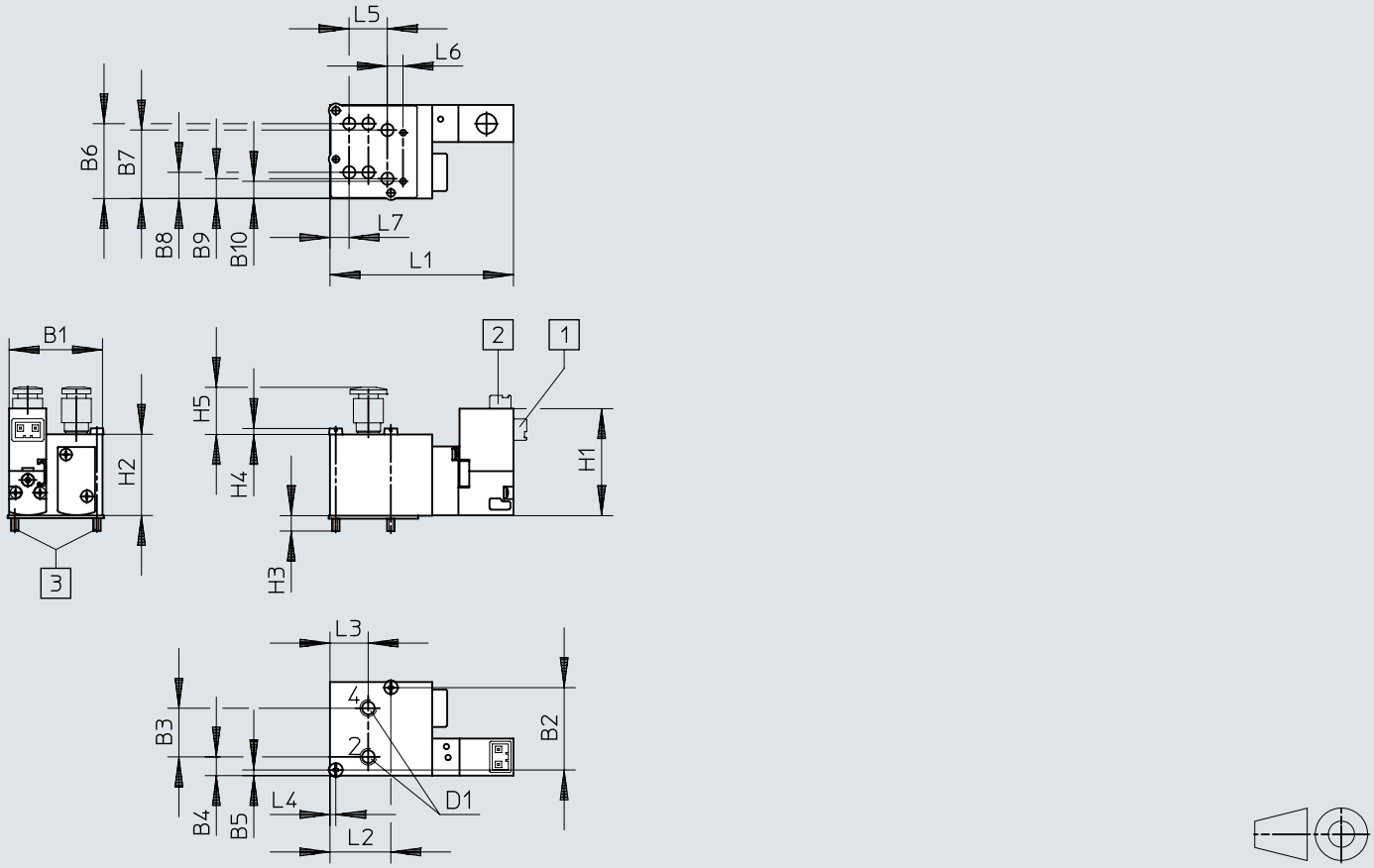
[1] Electrical connection at rear
[2] Electrical connection at top
[3] Retaining screws M2x25

	B2	B3	B4	B5	B6	D1 ø	D2	H1	H2	H3
VOVG-...	10,5	7	7,4	6,7	5	3,1	M5	29,9	23	16

	H4	H5	H6	H7	L1	L2	L3	L4	L5	L6	L7
VOVG-...	3,6	2,8	1,6	12,6	49	10,2	5,1	16,2	5,1	~16,3	~1,6

Dimensions

Dimensions – 5/2-way semi in-line valve Download CAD data www.festo.com



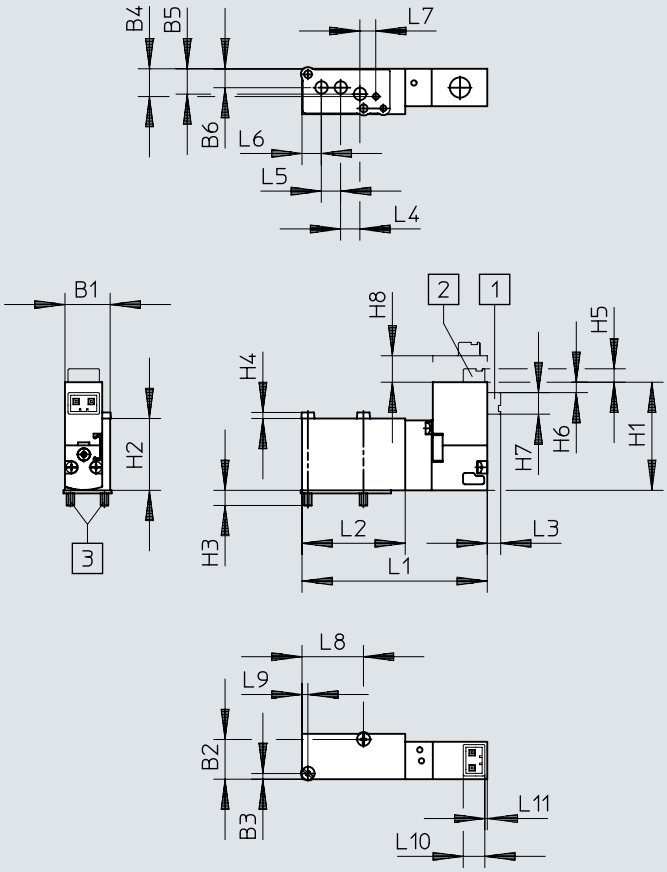
[1] Electrical connection at rear
[2] Electrical connection at top
[3] Retaining screws M2x25

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	D1
VOVG-...	25	22	13	5	1,5	20	18,3	7	5,3	4,6	M5

	H1	H2	H3	H4	H5	L1	L2	L3	L4	L5	L6	L7
VOVG-...	28,6	21,7	4,1	1,6	12,6	49	~16,3	10,2	~1,6	10,2	4,2	5,1

Dimensions

Dimensions – 3/2-way sub-base valve Download CAD data www.festo.com



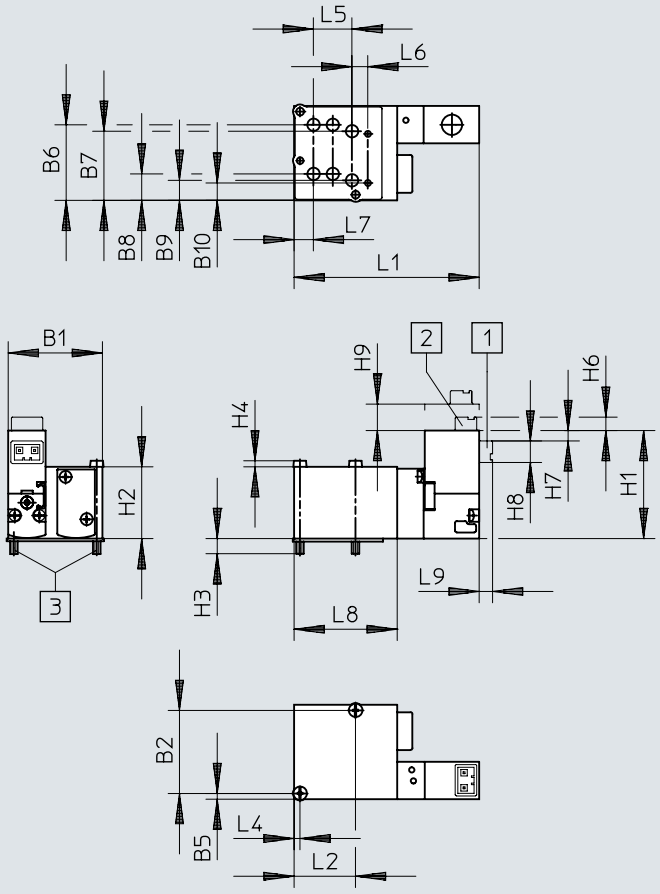
[1] Electrical connection at rear
[2] Electrical connection at top
[3] Retaining screws M2x23

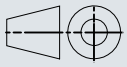
	B1	B2	B3	B4	B5	B6	H1	H2	H3	H4	H5	H6
VOVG-...	12	10,5	1,5	7,4	6,7	5	28,6	19	1,6	4	~3,6	~2,8

	H7	H8	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11
VOVG-...	5,7	7	49	27,3	~3,6	5,1	5,1	5,1	4,2	~16,3	~1,6	5,7	~0,7

Dimensions

Dimensions – 5/2-way sub-base valve Download CAD data www.festo.com





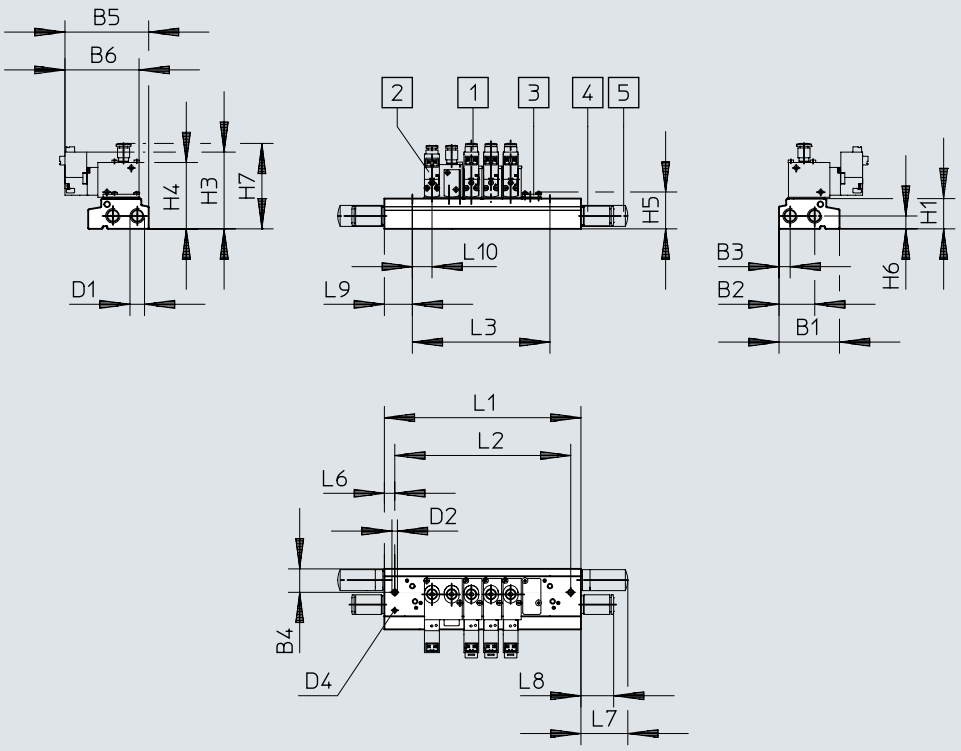
[1] Electrical connection at rear
[2] Electrical connection at top
[3] Retaining screws M2x23

	B1	B2	B5	B6	B7	B8	B9	B10	H1	H2	H3	H4
VOVG-...	25	22	1,5	20	18,3	7	5,3	4,6	28,6	19	4	1,6

	H6	H7	H8	H9	L1	L2	L4	L5	L6	L7	L8	L9
VOVG-...	~3,6	~2,8	5,7	~3,6	49	~16,3	~1,6	10,2	4,2	5,1	27,3	~3,6

Dimensions

Dimensions – Manifold mounting semi in-line valve Download CAD data www.festo.com



[1] 3/2-way semi in-line valve
[2] 5/2-way semi-inline valve occupies 2 valve positions
[3] Cover plate VABB-C7-12-W
[4] Push-in fitting
[5] Silencer

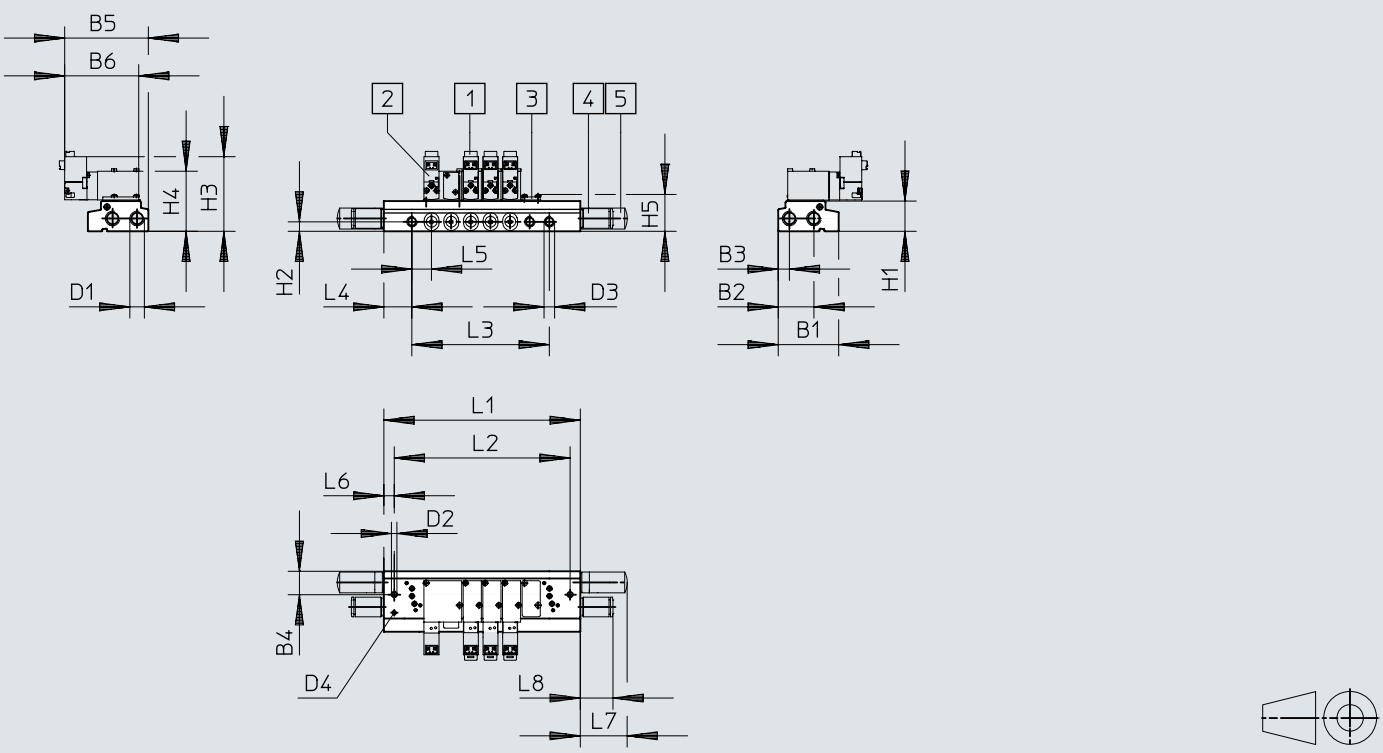
	B1	B2	B3	B4	B5	B6	D1	D2 ø	D4	H1	H3	H4	H5	H6	H7
VABM-C7-12P-G18-...	40	23,6	7,4	15,5	55,3	49	G1/8	3,6	M3	20	50,7	43,8	24,3	8,5	56,4

	n	L1	L2	L3	L6	L7	L8	L9	L10
VABM-C7-12P-G18-...	2	52	38,4	13	6,8	31	21,6	18,5	13
	3	65	51,4	26					
	4	78	64,4	39					
	5	91	77,4	52					
	6	104	90,4	65					
	7	117	103,4	78					
	8	130	116,4	91					
	9	143	129,4	104					
	10	156	142,4	117					

1) n = number of valve positions

Dimensions

Dimensions – Manifold assembly sub-base valve Download CAD data www.festo.com



[1] 3/2-way sub-base valve
[2] 5/2-way sub-base valve occupies 2 valve positions
[3] Cover plate VABB-C7-12-W
[4] Push-in fitting
[5] Silencer

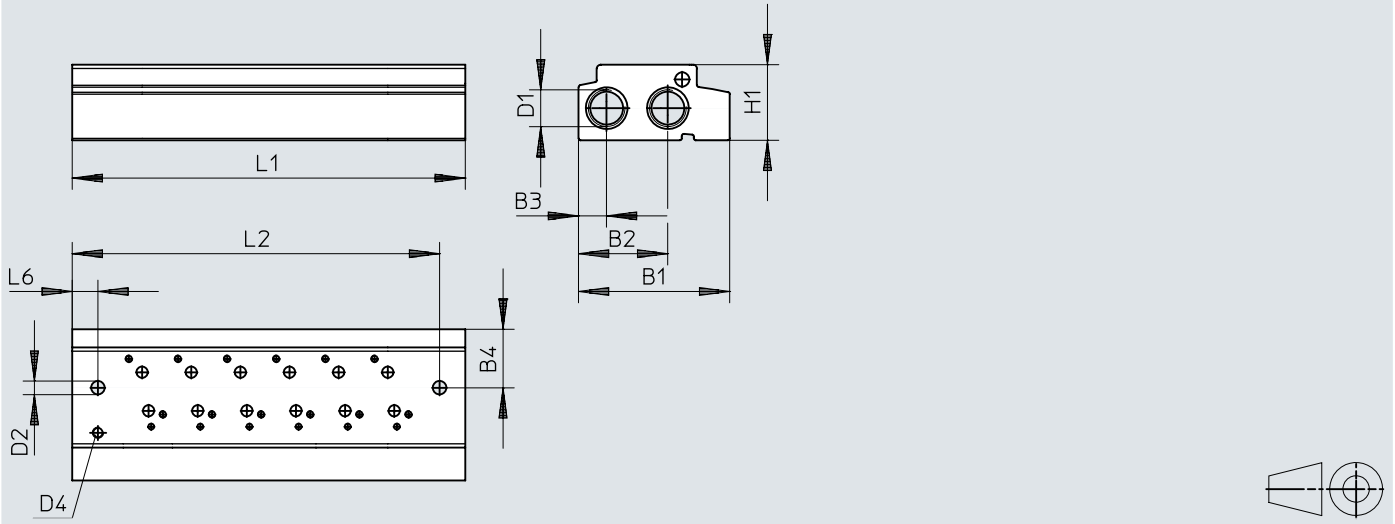
	B1	B2	B3	B4	B5	B6	D1	D2 ø	D3	D4	H1	H2	H3	H4	H5
VABM-C7-12W-G18-...	40	23,6	7,4	15,5	55,3	49	G1/8	3,6	M7	M3	20	6,3	49,4	39,8	24,3

	n	L1	L2	L3	L4	L5	L6	L7	L8
VABM-C7-12W-G18-...	2	52	38,4	13	18,5	13	6,8	31	21,6
	3	65	51,4	26					
	4	78	64,4	39					
	5	91	77,4	52					
	6	104	90,4	65					
	7	117	103,4	78					
	8	130	116,4	91					
	9	143	129,4	104					
	10	156	142,4	117					

1) n = number of valve positions

Dimensions

Dimensions – Manifold rail VABM-C7 for semi-inline valves Download CAD data www.festo.com



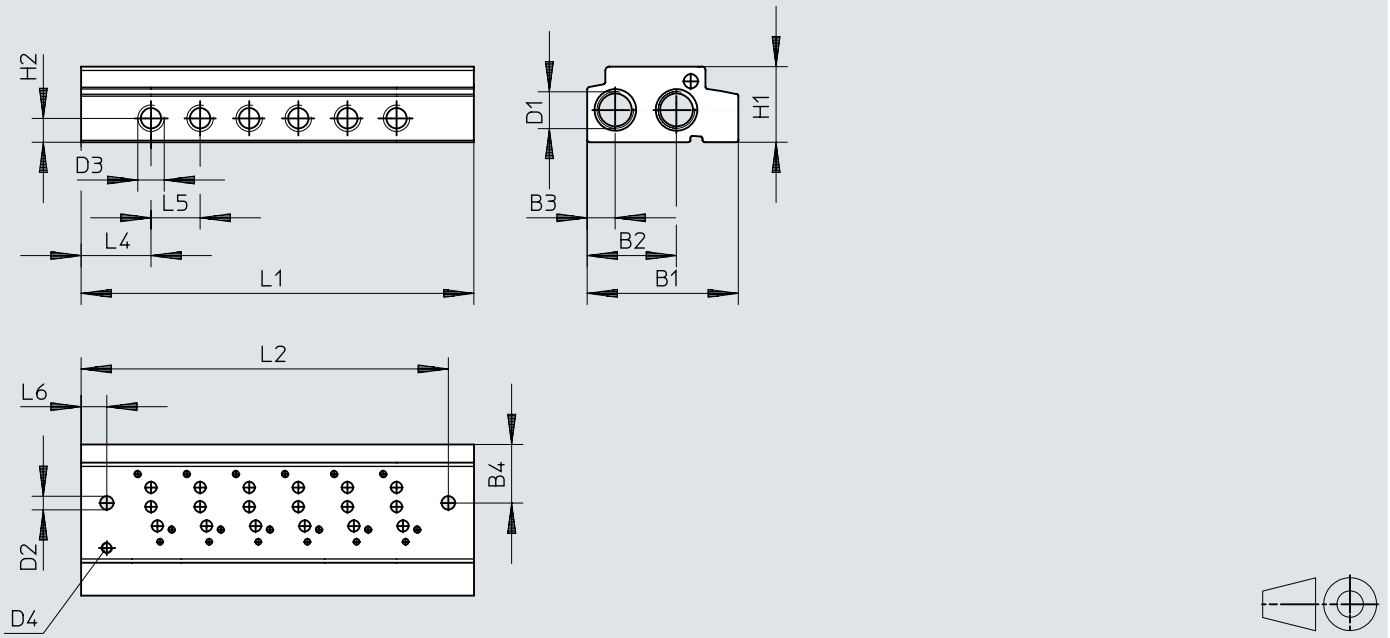
	B1	B2	B3	B4	D1
VABM-C7-12P-G18-...	40	23,6	7,4	15,5	G1/8

	D2 Ø	D4	H1	L1	L2	L6
VABM-C7-12P-G18-...	3,6	M3	20	26+(nx13)	19,2+(nx13)	6,8

1) n = number of valve positions

Dimensions

Dimensions – Manifold rail VABM-C7 for sub-base valves Download CAD data www.festo.com



	B1	B2	B3	B4	D1	D2 ø	D3	D4
VABM-C7-12W-G18-...	40	23,6	7,4	15,5	G1/8	3,6	M7	M3

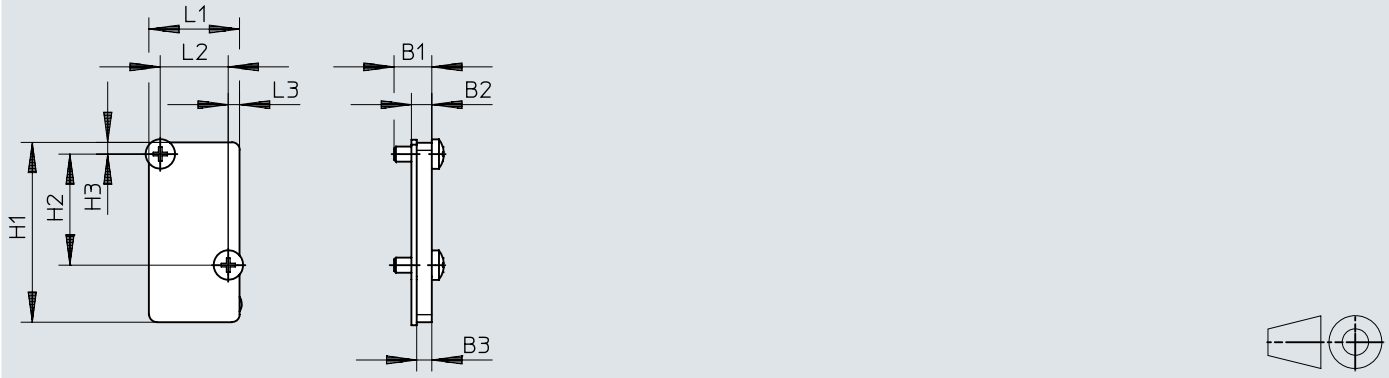
	H1	H2	L1	L2	L4	L5	L6
VABM-C7-12W-G18-...	20	6,3	26+(nx13)	19,2+(nx13)	18,5	13	6,8

1) n = number of valve positions

Dimensions

Dimensions – Cover plate VABB-C7

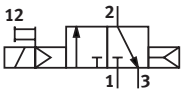
Download CAD data www.festo.com



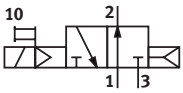
	B1	B2	B3	H1	H2	H3	L1	L2	L3
VABB-C7-12-W	5	2,7	2	23,8	14,7	~1,6	12	9	1,5

Ordering data

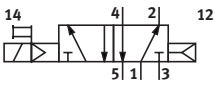
Ordering data, in-line valve

	Valve function	Standard nominal flow rate (standardised to DIN 1343)	Construction width	Characteristic coil data	Part no.	Type
	3/2-way, closed, monostable	200 l/min	10 mm	24 V DC: 1.0 W	**560698**	**VOVG-L10-M32C-AH-M5-1H3**
					560697	**VOVG-L10-M32C-AH-M5-1H2**

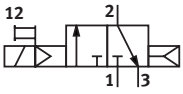
Ordering data, in-line valve

	Valve function	Standard nominal flow rate (standardised to DIN 1343)	Construction width	Characteristic coil data	Part no.	Type
	3/2 open, monostable	200 l/min	10 mm	24 V DC: 1.0 W	**560699**	**VOVG-L10-M32U-AH-M5-1H2**
					560700	**VOVG-L10-M32U-AH-M5-1H3**

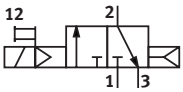
Ordering data, in-line valve

	Valve function	Standard nominal flow rate (standardised to DIN 1343)	Construction width	Characteristic coil data	Part no.	Type
	5/2-way, monostable	200 l/min	25 mm	24 V DC: 1.0 W	**560701**	**VOVG-L12-M52Q-AH-M5-1H2**
					560702	**VOVG-L12-M52Q-AH-M5-1H3**

Ordering data, semi in-line valve

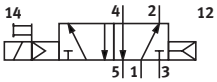
	Valve function	Standard nominal flow rate (standardised to DIN 1343)	Construction width	Characteristic coil data	Part no.	Type
	3/2-way, closed, monostable	180 l/min	12 mm	24 V DC: 1.0 W	**560703**	**VOVG-S12-M32C-AH-M5-1H2**
					560704	**VOVG-S12-M32C-AH-M5-1H3**

Ordering data, semi in-line valve

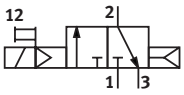
	Valve function	Standard nominal flow rate (standardised to DIN 1343)	Construction width	Characteristic coil data	Part no.	Type
	3/2 open, monostable	180 l/min	12 mm	24 V DC: 1.0 W	**560706**	**VOVG-S12-M32U-AH-M5-1H3**
					560705	**VOVG-S12-M32U-AH-M5-1H2**

Ordering data

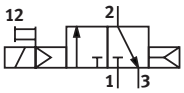
Ordering data, semi in-line valve

	Valve function	Standard nominal flow rate (standardised to DIN 1343)	Construction width	Characteristic coil data	Part no.	Type
	5/2-way, monostable	180 l/min	25 mm	24 V DC: 1.0 W	**560708**	**VOVG-S12-M52Q-AH-M5-1H3**
					560707	**VOVG-S12-M52Q-AH-M5-1H2**

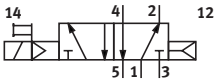
Ordering data, sub-base valve

	Valve function	Standard nominal flow rate (standardised to DIN 1343)	Construction width	Characteristic coil data	Part no.	Type
	3/2-way, closed, monostable	180 l/min	12 mm	24 V DC: 1.0 W	**560710**	**VOVG-B12-M32C-AH-F-1H3**
					560709	**VOVG-B12-M32C-AH-F-1H2**

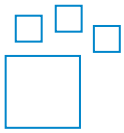
Ordering data, sub-base valve

	Valve function	Standard nominal flow rate (standardised to DIN 1343)	Construction width	Characteristic coil data	Part no.	Type
	3/2 open, monostable	180 l/min	12 mm	24 V DC: 1.0 W	**560712**	**VOVG-B12-M32U-AH-F-1H3**
					560711	**VOVG-B12-M32U-AH-F-1H2**

Ordering data, sub-base valve

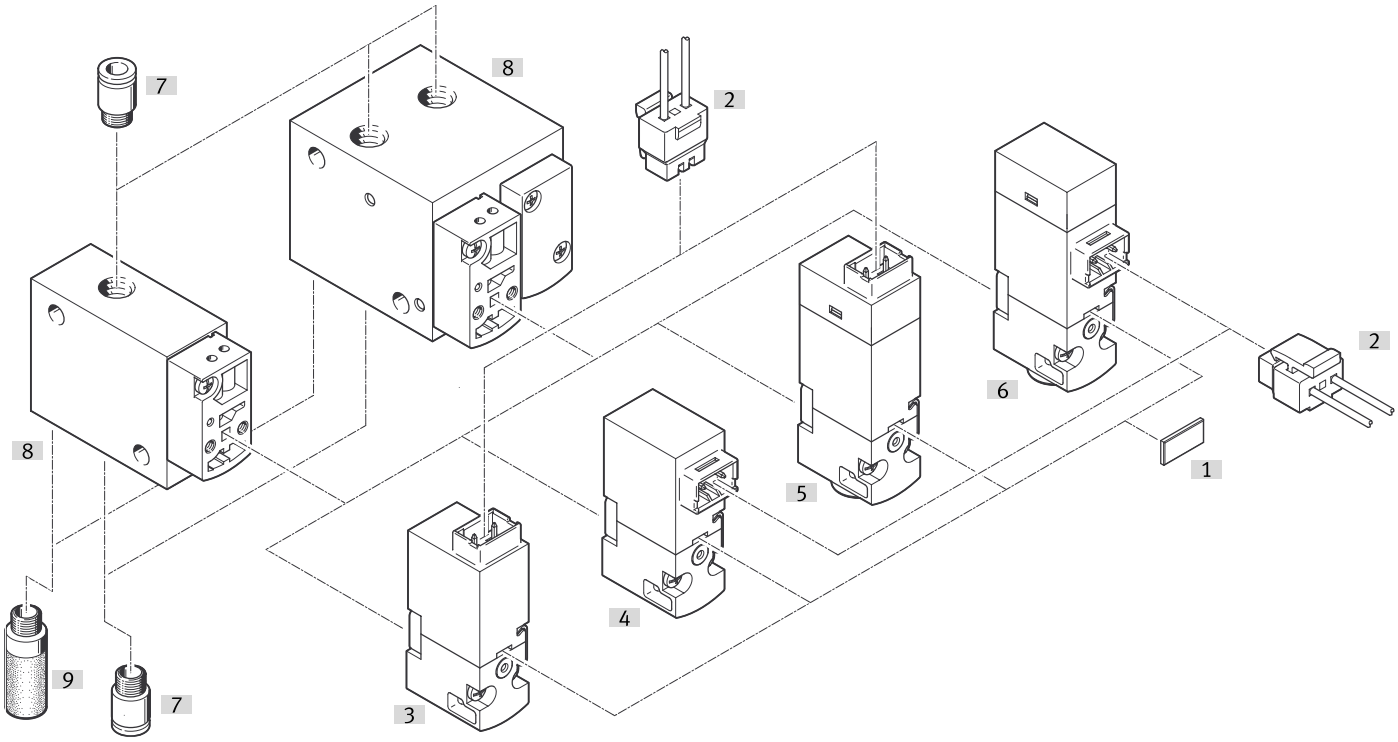
	Valve function	Standard nominal flow rate (standardised to DIN 1343)	Construction width	Characteristic coil data	Part no.	Type
	5/2-way, monostable	180 l/min	25 mm	24 V DC: 1.0 W	**560714**	**VOVG-B12-M52Q-AH-F-1H3**
					560713	**VOVG-B12-M52Q-AH-F-1H2**

Ordering data – Modular product system

	Valve function	Standard nominal flow rate (standardised to DIN 1343)	Part no.	Type
	3/2-way, closed, monostable, 3/2 open, monostable, 5/2-way, monostable	180 ... 200 l/min	**549438**	**VOVG**

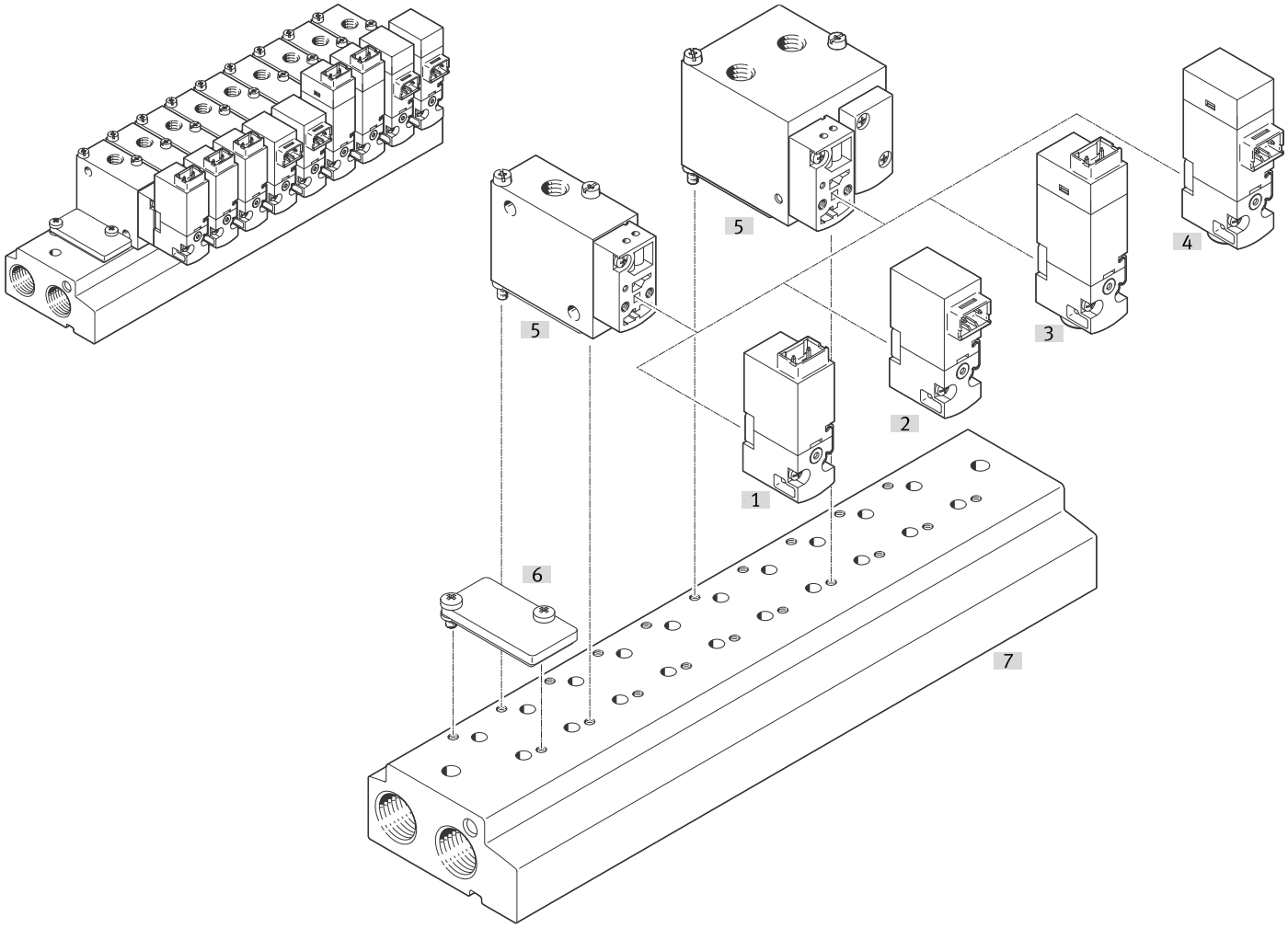
Peripherals

In-line valve



Accessories			→ Link
	Type/order code	Description	
[1]	Inscription label MH-BZ-80X	Modules of the solenoid valves VOVG	24
[2]	Plug socket with cable NEBV	For solenoid coils	25
[3]	Pilot valve	Modules of the solenoid valves VOVG	vovg
[4]	Pilot valve	With horizontal plug connection	vovg
[5]	Pilot valve	With vertical plug connection and LED	vovg
[6]	Pilot valve	With horizontal plug connection and LED	vovg
[7]	Push-in fitting QS/QSM	With horizontal plug connection and LED	24
[8]	Basic valves	Modules of the solenoid valves VOVG	vovg
[9]	Silencer U	Modules of the solenoid valves VOVG	24

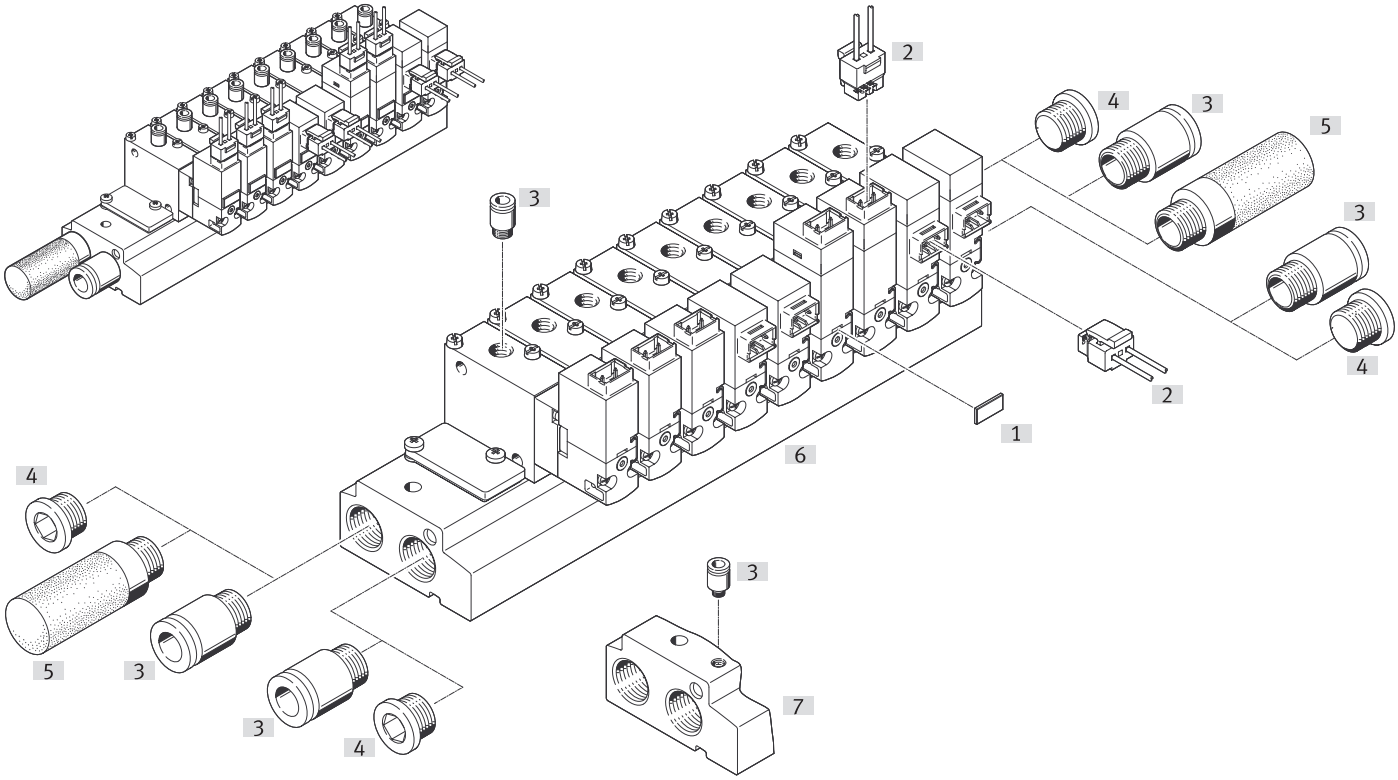
Peripherals



Accessories			→ Link
	Type/order code	Description	
[1]	Pilot valve	With vertical plug connection	vovg
[2]	Pilot valve	With horizontal plug connection	vovg
[3]	Pilot valve with LED	With vertical plug connection and LED	vovg
[4]	Pilot valve with LED	With horizontal plug connection and LED	vovg
[5]	Basic valves	Modules of the solenoid valves VOVG	vovg
[6]	Cover plate VABB-C7-12-W	For vacant positions	23
[7]	Manifold rail VABM-C7-...	For semi in-line valves	23

Peripherals

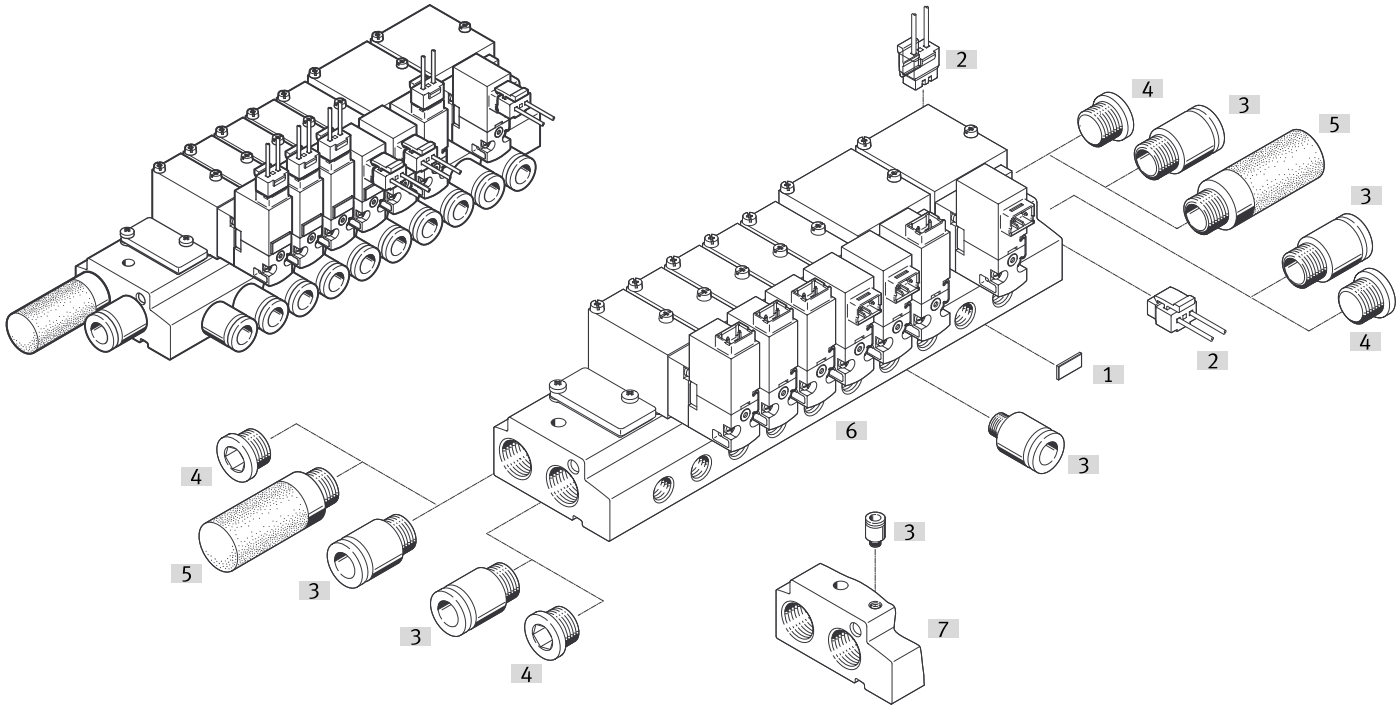
Semi in-line valves with accessories



Accessories			→ Link
	Type/order code	Description	
[1]	Inscription label MH-BZ-80X	For identifying the solenoid valves	24
[2]	Plug socket with cable NEBV	For solenoid coils	25
[3]	Push-in fitting QS/QSM	For standard O.D. tubing	24
[4]	Blanking plug B	For sealing ports that are not required	24
[5]	Silencer U	For fitting in exhaust ports	24
[6]	Manifold rail VABM-...-P...	Without port for external pilot air for valves with internal pilot air supply	23
[7]	Manifold rail VABM-...-G...	With port for external pilot air	23

Peripherals

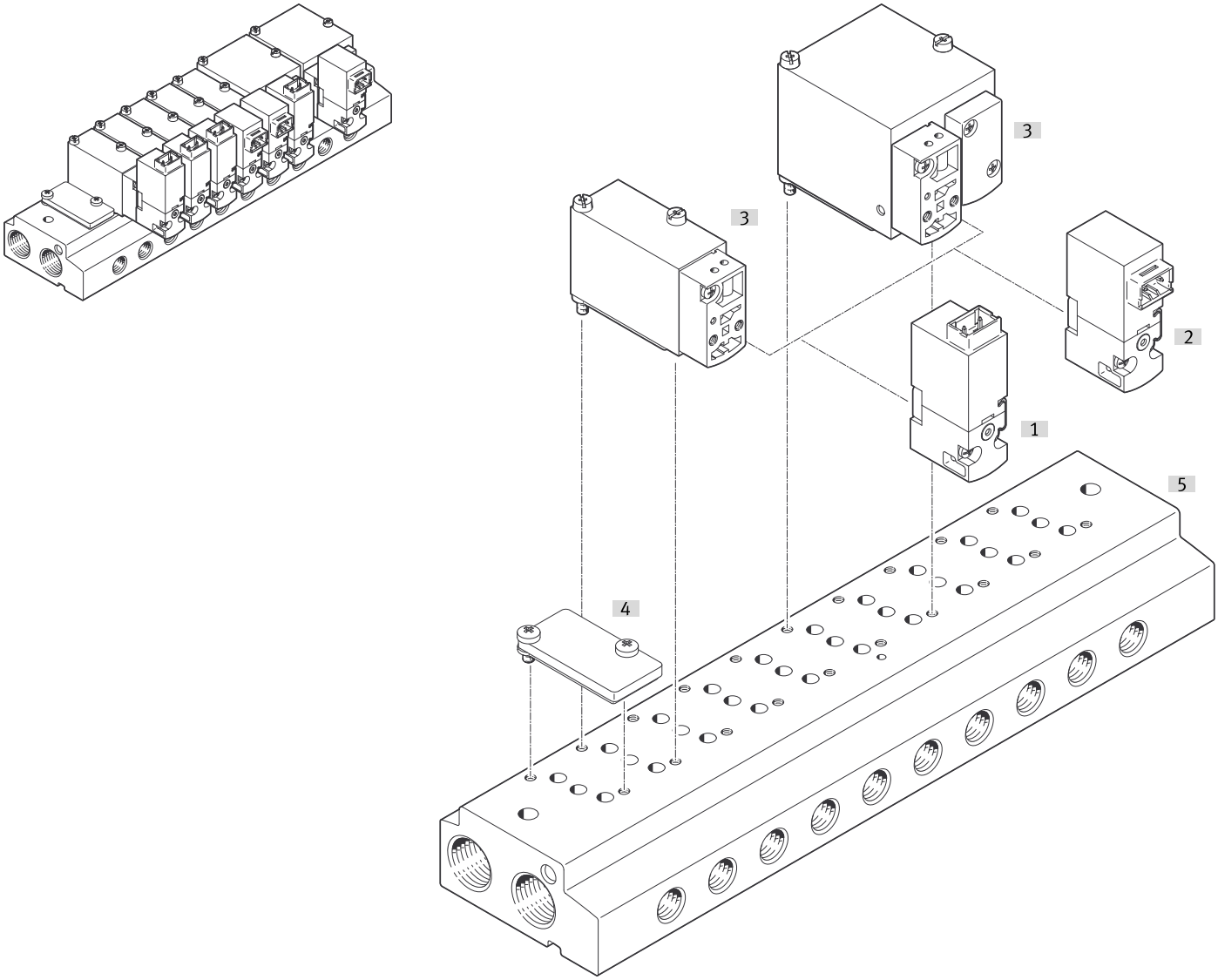
Sub-base valves



Accessories			→ Link
	Type/order code	Description	
[1]	Pilot valve	With vertical plug connection	vovg
[2]	Pilot valve	With vertical plug connection	vovg
[3]	Basic valves	Modules of the solenoid valves VOVG	vovg
[4]	Cover plate VABB-C7-12-W	Modules of the solenoid valves VOVG	23
[5]	Manifold rail VABM-C7-...	For sub-base valves	23

Peripherals

Sub-base valves with accessories



Accessories			→ Link
	Type/order code	Description	
[1]	Inscription label MH-BZ-BOX	For identifying the solenoid valves	24
[2]	Plug socket with cable NEBV	For solenoid coils	25
[3]	Push-in fitting QS/QSM	For standard O.D. tubing	24
[4]	Blanking plug B	For sealing ports that are not required	24
[5]	Silencer U	For fitting in exhaust ports	24
[6]	Manifold rail VABM-...-M...	Without port for external pilot air for valves with internal pilot air supply	23
[7]	Manifold rail VABM-...-W...	With port for external pilot air	23

Accessories

Manifold rails for semi in-line valves, for valves with internal pilot air — Link vovg

Max. number of valve positions	Product weight	Corrosion resistance class CRC [1]	Part no.	Type
10	252 g	2 - Moderate corrosion stress	552660	VABM-C7-12P-G18-10
2	84 g		552652	VABM-C7-12P-G18-2
3	105 g		552653	VABM-C7-12P-G18-3
4	126 g		552654	VABM-C7-12P-G18-4
5	147 g		552655	VABM-C7-12P-G18-5
6	168 g		552656	VABM-C7-12P-G18-6
7	189 g		552657	VABM-C7-12P-G18-7
8	210 g		552658	VABM-C7-12P-G18-8
9	231 g		552659	VABM-C7-12P-G18-9

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

Manifold rails for semi in-line valves, for valves with external pilot air — Link vovg

Max. number of valve positions	Product weight	Corrosion resistance class CRC [1]	Part no.	Type
10	252 g	2 - Moderate corrosion stress	552669	VABM-C7-12G-G18-10
2	84 g		552661	VABM-C7-12G-G18-2
3	105 g		552662	VABM-C7-12G-G18-3
4	126 g		552663	VABM-C7-12G-G18-4
5	147 g		552664	VABM-C7-12G-G18-5
6	168 g		552665	VABM-C7-12G-G18-6
7	189 g		552666	VABM-C7-12G-G18-7
8	210 g		552667	VABM-C7-12G-G18-8
9	231 g		552668	VABM-C7-12G-G18-9

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

Manifold rails for sub-base valves, for valves with internal pilot air — Link vovg

Max. number of valve positions	Product weight	Corrosion resistance class CRC [1]	Part no.	Type
10	242 g	2 - Moderate corrosion stress	549647	VABM-C7-12M-G18-10
2	82 g		549639	VABM-C7-12M-G18-2
3	102 g		549640	VABM-C7-12M-G18-3
4	122 g		549641	VABM-C7-12M-G18-4
5	142 g		549642	VABM-C7-12M-G18-5
6	162 g		549643	VABM-C7-12M-G18-6
7	182 g		549644	VABM-C7-12M-G18-7
8	202 g		549645	VABM-C7-12M-G18-8
9	222 g		549646	VABM-C7-12M-G18-9

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

Manifold rails for sub-base valves, for valves with external pilot air — Link vovg

Max. number of valve positions	Product weight	Corrosion resistance class CRC [1]	Part no.	Type
10	242 g	2 - Moderate corrosion stress	549656	VABM-C7-12W-G18-10
2	82 g		549648	VABM-C7-12W-G18-2
3	102 g		549649	VABM-C7-12W-G18-3
4	122 g		549650	VABM-C7-12W-G18-4
5	142 g		549651	VABM-C7-12W-G18-5
6	162 g		549652	VABM-C7-12W-G18-6
7	182 g		549653	VABM-C7-12W-G18-7
8	202 g		549654	VABM-C7-12W-G18-8
9	222 g		549655	VABM-C7-12W-G18-9

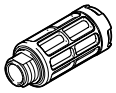
1) More information www.festo.com/x/topic/kbk

Cover plate — Link vovg

	Material cover plate	Part no.	Type
	Steel	552651	VABB-C7-12-W

Accessories

Silencer Link vovg

	Pneumatic connection	Material shock absorber insert	Part no.	Type
	G1/8	PE	**2307**	**U-1/8**
			6841	**U-1/8-B**

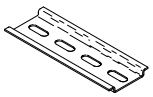
Blanking plug Link vovg

	Pneumatic connection, port 1	Size of pack	Part no.	Type
	Male thread G1/8	10	**3568**	**B-1/8**

Push-in fitting Link vovg

	Pneumatic connection, port 1	Pneumatic connection, port 2	Size of pack	Part no.	Type
	Male thread M3	For tubing outer diameter of 3 mm	10	**153312**	**QSM-M3-3-I**
	Male thread M5			**153313**	**QSM-M5-3-I**
		For tubing outside diameter of 4 mm		**153315**	**QSM-M5-4-I**
		For tubing outside diameter of 6 mm		**153317**	**QSM-M5-6-I**
	Male thread M7	For tubing outside diameter of 4 mm		**153319**	**QSM-M7-4-I**
		For tubing outside diameter of 6 mm		**153321**	**QSM-M7-6-I**
	Male thread R1/8			**153002**	**QS-1/8-6**
		For tubing outside diameter of 8 mm		**153004**	**QS-1/8-8**

DIN rail Link vovg

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

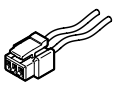
Mounting for DIN rail Link vovg

	LABS (PWIS) conformity	Part no.	Type
	VDMA24364-B2-L	**527392**	**CPASC1-BG-NRH**

Inscription label for identifying the valve positions, 80 pieces Link vovg

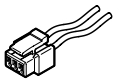
	LABS (PWIS) conformity	Part no.	Type
	VDMA24364-B1/B2-L	**197259**	**MH-BZ-80X**

Plug socket with cable Link vovg

	Electrical connection 1, connection type	Electrical connection 2, connection type	Cable length	Part no.	Type
	Socket	2x single wires	0.5 m	**566654**	**NEBV-H1G2-KN-0.5-N-LE2**

Accessories

Plug socket with cable **Link vovg**

	Electrical connection 1, connection type	Electrical connection 2, connection type	Cable length	Part no.	Type
	Socket	2x single wires	1 m	**566655**	**NEBV-H1G2-KN-1-N-LE2**
			5 m	**566657**	**NEBV-H1G2-KN-5-N-LE2**