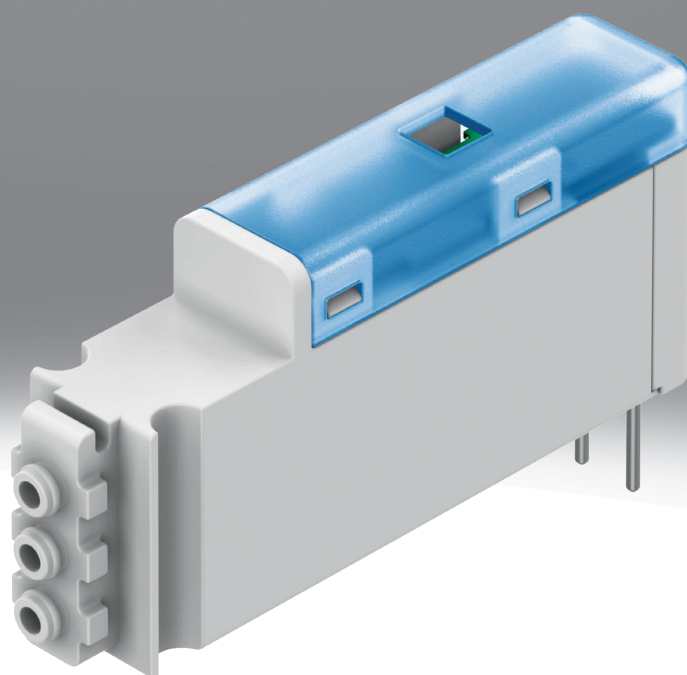


Solenoid valve VOVK

FESTO



Characteristics

At a glance

- Miniature switching valve 3/2 NC
- Optimized for very small installation spaces, with a width of only 5.9 mm
- large pressure range of -0.9 7 bar, therefore also vacuum-compatible
- can be easily connected in series
- very low power consumption of 0.5 W
- with LED and overvoltage protection circuit
- different variants 12, 24 V DC, with plug+cable (H5Z), or with pins (T1)

Pneumatic connection

There are three versions for the various applications:

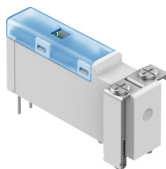
- [B3F], [B3.2F] as individual valve with barbed connectors
- [FB] with flanged connection at the bottom for mounting valves on a manifold duct plate
- [FF] up to 20 valves that can be directly connected in series as a valve block, with barbed connector

[B3] Barb fitting 3 mm



- Individual valve, direct, with barbed connectors

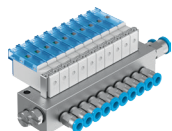
[F] Flange/subbase



- Individual valves with flanged connection

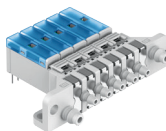
Connection orientation

[B] Bottom



- VOVK-...-FB with flanged connection underneath
- Manifold block for an individual valve or for ten valves

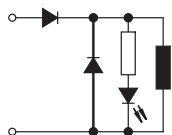
[F] Front



- VOVK-...-FF with flanged connection on the front
- For easy side-by-side installation of 2 ... 20 valves
- Working port with barbed connector for 3 mm or 4 mm O.D. tubing
- Common supply and exhaust with barbed connectors for 6 mm O.D. tubing

Circuitry

[P] Protective circuit



Type code

001	Series	
VOVK	Solenoid valve	
002	Directional control valve type	
B	Subbase valve	
003	Design principle	
T	Poppet valve	
004	Size	
6	Size 6	
005	Valve function	
M32C	3/2-way valve, normally closed	
006	Reset method for monostable pneumatic valves	
M	Mechanical spring	
007	Pilot air	
N	None	

008	Nominal operating voltage	
1	24 V DC	
5	12 V DC	
009	Electrical connection	
H5Z	Connection diagram H5Z	
T1	Pin	
010	Circuitry	
P	Protective circuit	
011	Pneumatic connection	
F	Flange/subbase	
B3	Barb fitting 3 mm	
B3.2	Barbed fitting 3.2 mm	
012	Connection orientation	
F	Front	
B	Bottom	

Datasheet

General technical data

Valve function	3/2, closed, monostable
Structural design	Connection direction downwards; Connection direction to the front; Poppet valve with return spring
Sealing principle	Soft
Actuation type	Electrical
Reset method	Mechanical spring
Type of control	Electrical
Flow direction	Reversible
Exhaust air function	With flow control option
Manual override	None
Type of mounting	With through-hole
Mounting position	Any
Nominal width	0.36 mm
Standard nominal flow rate	5.5 l/min
Width	5.9 mm
On switching time ¹⁾	≤13 ms
Note on switching time on	≤ 6 ms at 0 < p < 6 bar, ≤ 13 ms at -1 < p < 0 bar
Switching time off	≤6 ms
Note on switching time off	At -1 < p < 6 bar

1) 13 ms with vacuum -0.9 bar at connection 1

Operating and environmental conditions

Operating medium	Compressed air to ISO 8573-1:2010 [6:4:1]
Information on operating and pilot media	Operation with oil lubrication not possible
Operating pressure	-0.1 ... 0.7 MPa
Operating pressure	-1 ... 7 bar
Operating pressure	-14.5 ... 100 psi
Ambient temperature	5 ... 50°C
Temperature of medium	5 ... 50°C

Electrical data

Nominal operating voltage DC	12 V, 24 V
Electrical connection	2-pin, Cable
Electrical power consumption	0.5 W
Duty cycle	100% within 500 h

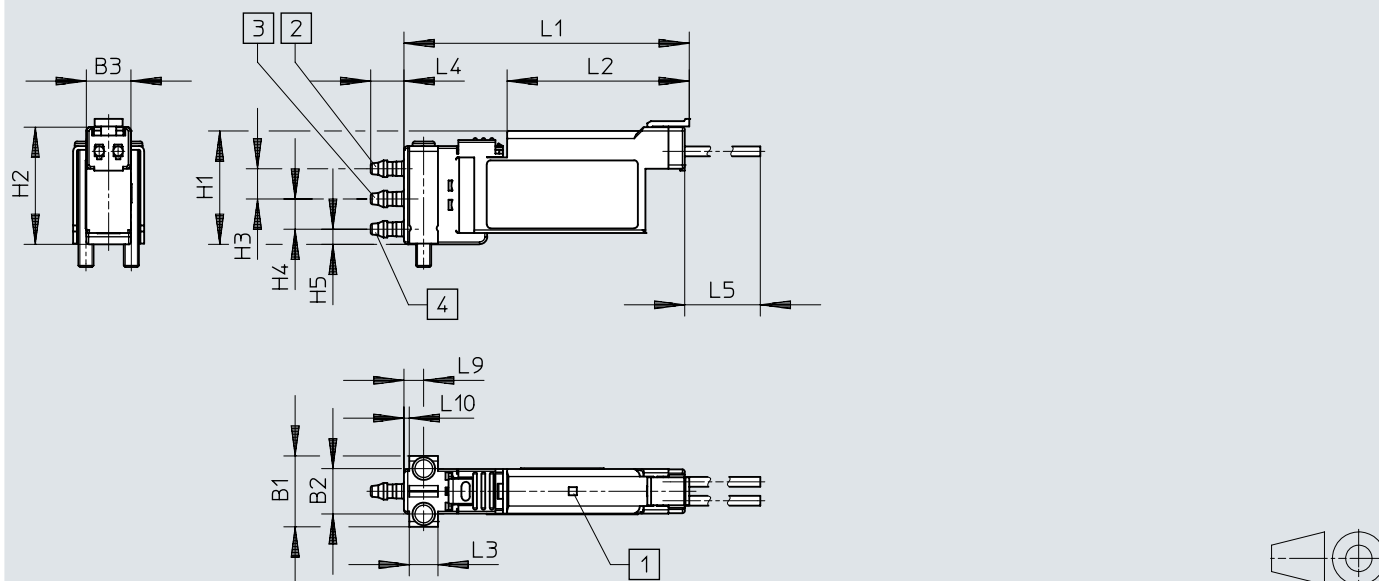
Materials

Housing material	PBT
Material of spring	High-alloy stainless steel
Note on materials	Contains paint-wetting impairment substances; RoHS-compliant

Dimensions

Dimensions – Individual valve with barbed connectors, connection H5

Download CAD data → www.festo.com



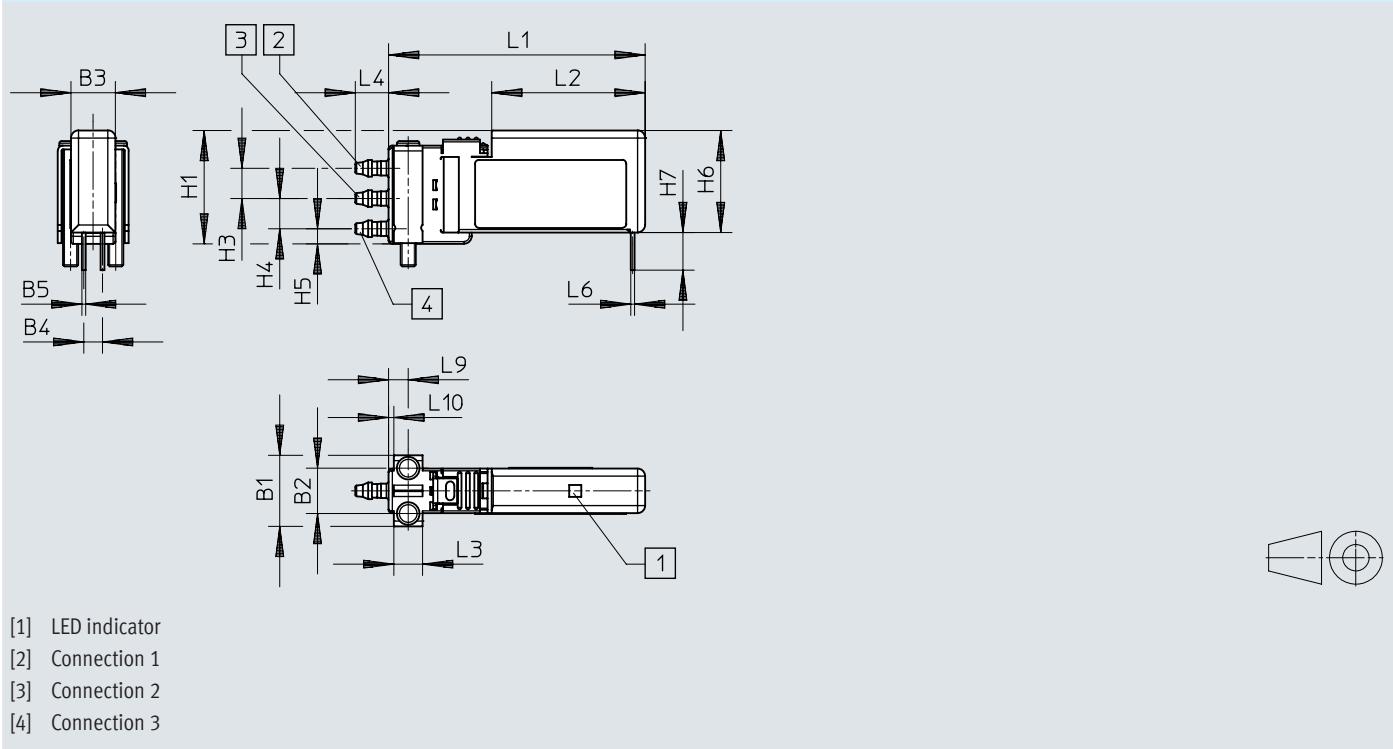
- [1] LED indicator
- [2] Connection 1
- [3] Connection 2
- [4] Connection 3

	B1	B2	B3	H1	H2	H3	H4	H5
VOVK-...-1H5ZP-B3F	9,4	6	5,9	15	15,5	4	4	2
VOVK-...-5H5ZP-B3F								
VOVK-...-1H5ZP-B3.2F								
VOVK-...-5H5ZP-B3.2F								

	L1	L2	L3	L4	L5	L9	L10
VOVK-...-1H5ZP-B3F	37,8	24,1	3,8	5	300	2,6	0,7
VOVK-...-5H5ZP-B3F							
VOVK-...-1H5ZP-B3.2F							
VOVK-...-5H5ZP-B3.2F							

Dimensions

Dimensions – Individual valve with barbed connectors, connection pins Download CAD data → www.festo.com



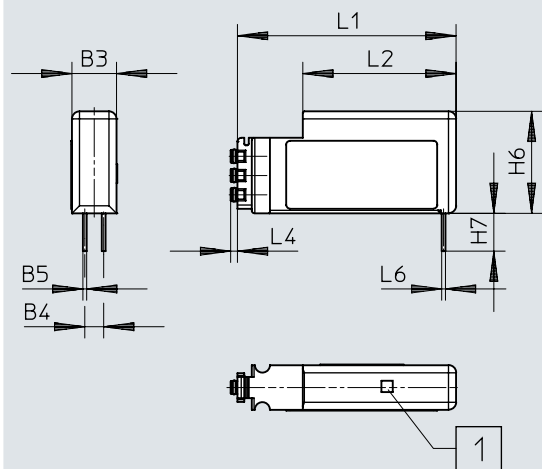
	B1	B2	B3	B4	B5	H1	H3	H4	H5
VOVK-...-1T1P-B3F	9,4	6	5,9	2,5	0,5	15	4	4	2
VOVK-...-5T1P-B3F									
VOVK-...-1T1P-B3.2F									
VOVK-...-5T1P-B3.2F									

	H6	H7	L1	L2	L3	L4	L6	L9	L10
VOVK-...-1T1P-B3F	13,5	5	34	20,3	3,8	5	0,5	2,6	0,7
VOVK-...-5T1P-B3F									
VOVK-...-1T1P-B3.2F									
VOVK-...-5T1P-B3.2F									

Dimensions

Dimensions – Individual valve flange front side, connection pins

Download CAD data → www.festo.com

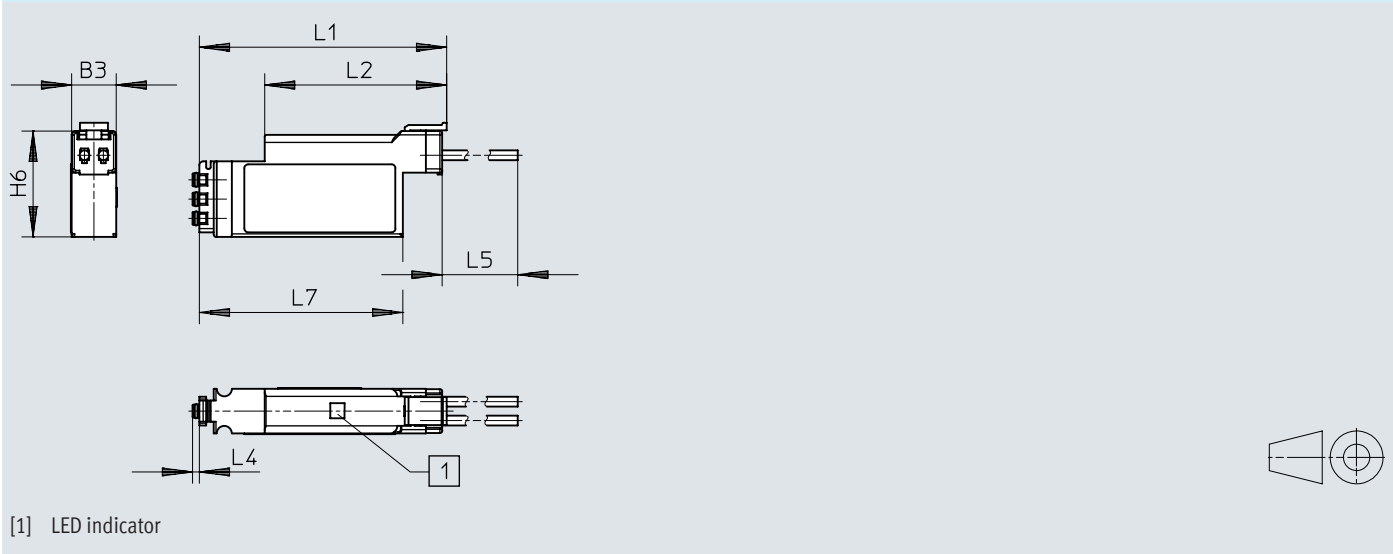


[1] LED indicator

	B3	B4	B5	H6	H7	L1	L2	L4	L6
VOVK-...-1T1P-FF	5,9	2,5	0,5	13,5	5	29	20,3	0,9	0,5
VOVK-...-5T1P-FF									

Dimensions

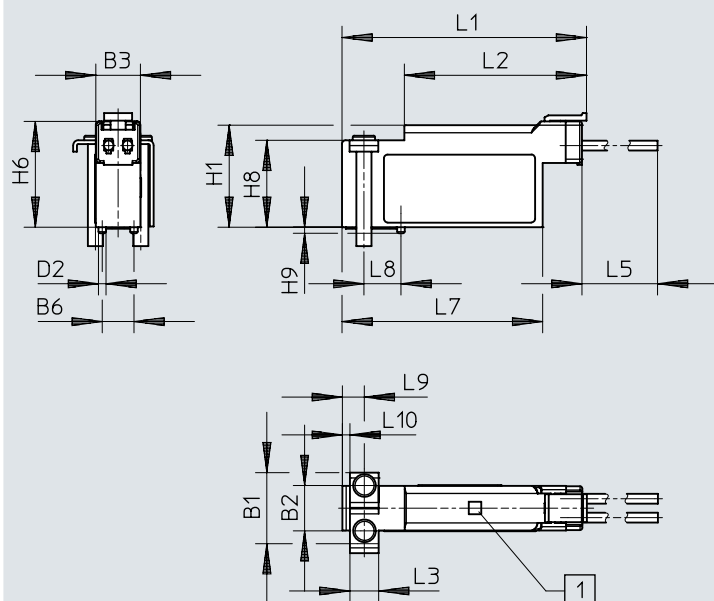
Dimensions – Individual valve flange front side, connection H5 Download CAD data → www.festo.com



	B3	H6	L1	L2	L4	L5	L7
VOVK-...-1H5ZP-FF	5,9	14	32,8	24,1	0,9	300	27
VOVK-...-5H5ZP-FF							

Dimensions

Dimensions – Individual valve flange underneath, connection H5

[Download CAD data → www.festo.com](http://www.festo.com)


[4] LED indicator

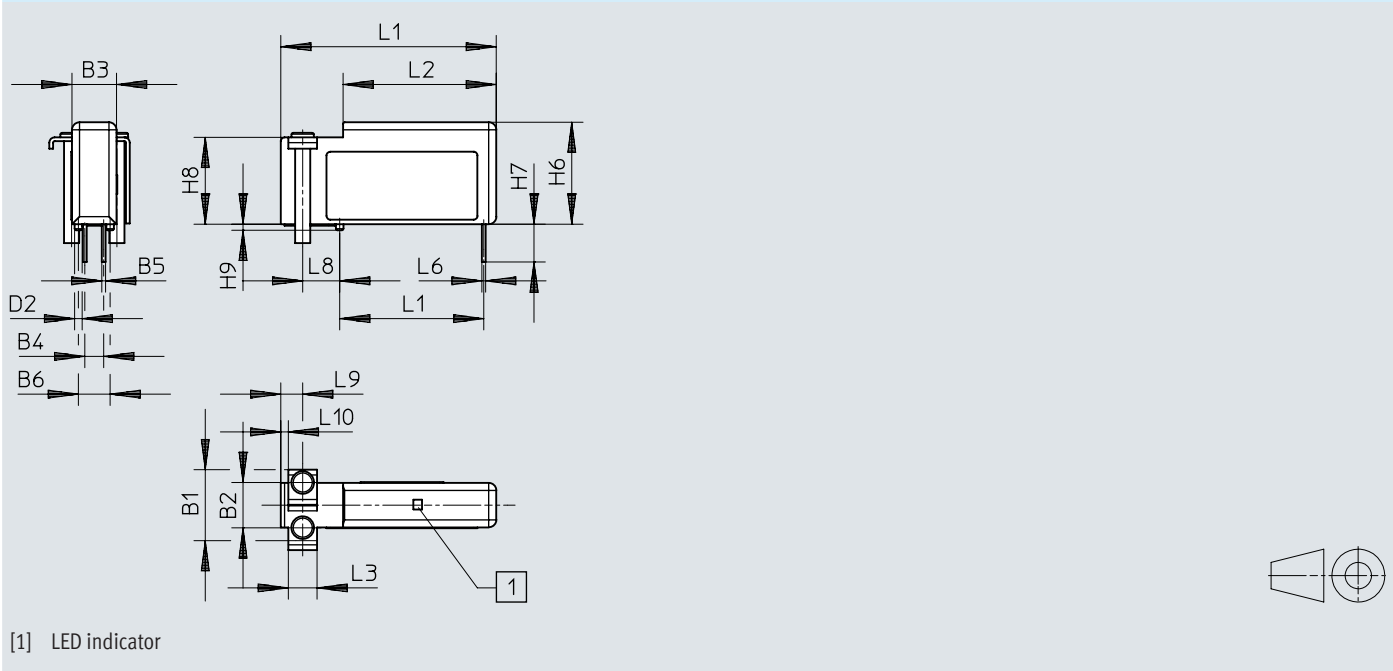


	B1	B2	B3	B6	D2 Ø	H1	H6	H8	H9
VOVK-...-1H5ZP-FB	9,4	6	5,9	4,2	1	13,5	14	11,5	0,8
VOVK-...-5H5ZP-FB									

	L1	L2	L3	L5	L7	L8	L9	L10
VOVK-...-1H5ZP-FB	32,4	24,1	3,8	300	26,6	4,9	2,9	1
VOVK-...-5H5ZP-FB								

Dimensions

Dimensions – Individual valve flange underneath, connection pins Download CAD data → www.festo.com

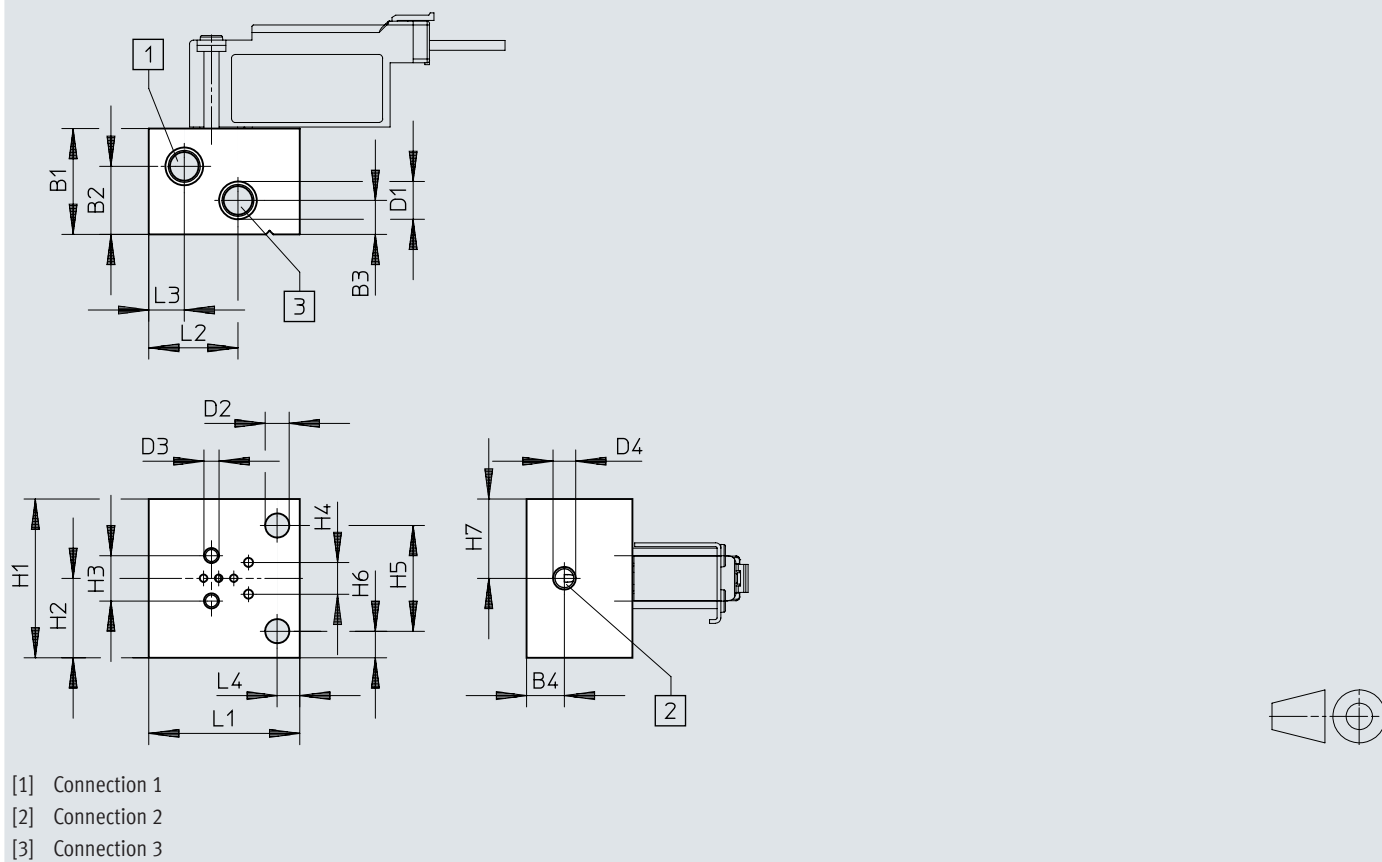


	B1	B2	B3	B4	B5	B6	D2 Ø	H6	H7
VOVK-...-1T1P-FB	9,4	6	5,9	2,5	0,5	4,2	1	13,5	5
VOVK-...-5T1P-FB									

	H8	H9	L1	L2	L3	L6	L8	L9	L10	L11
VOVK-...-1T1P-FB	11,5	0,8	28,6	20,3	3,8	0,5	4,9	2,9	1	19,1
VOVK-...-5T1P-FB										

Dimensions

Dimensions – Manifold block individual valve

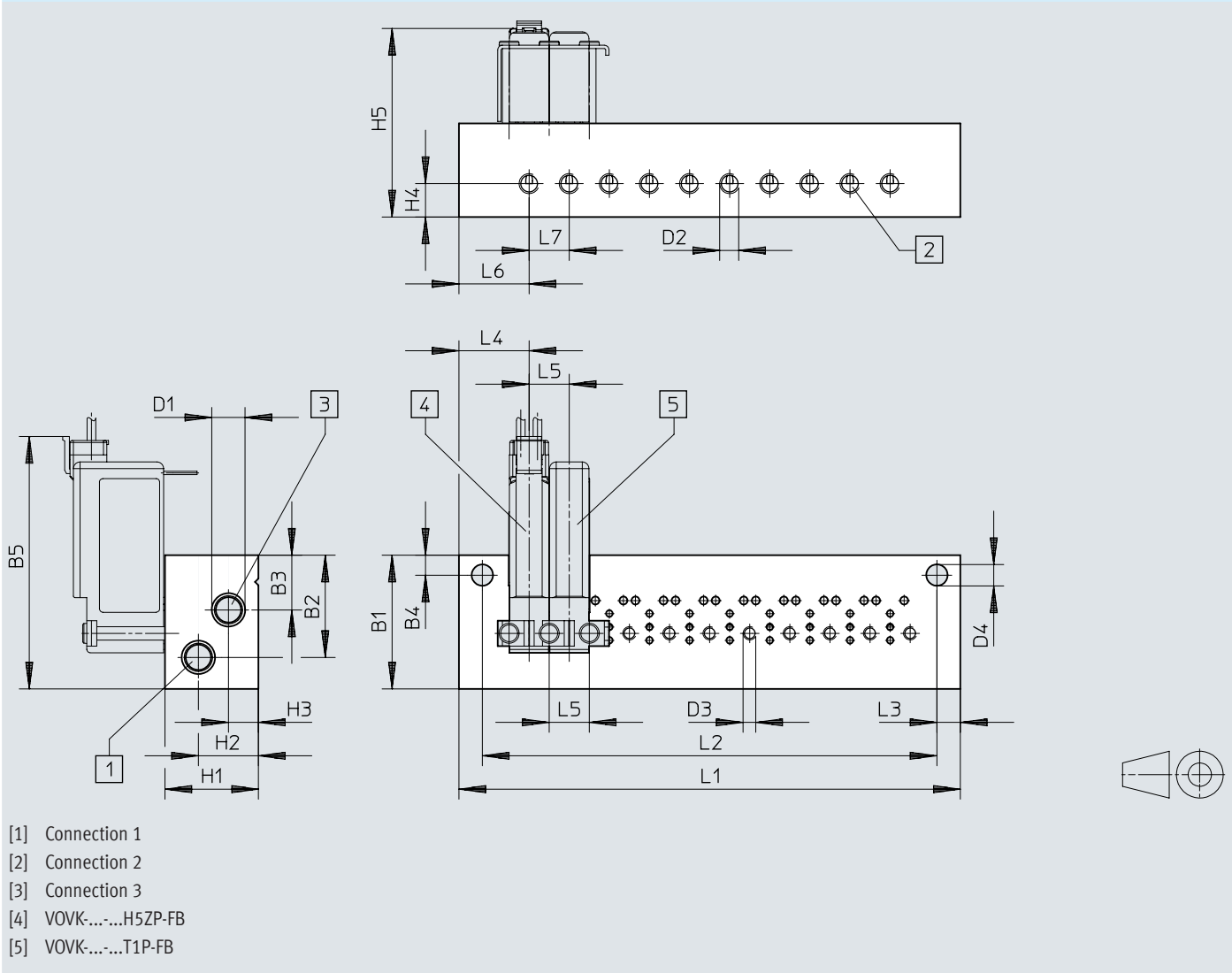
[Download CAD data → www.festo.com](http://www.festo.com)


	B1	B2	B3	B4	D1	D2 Ø	D3	D4	H1
VOVK-...-H5ZP-FB	14	9	4,5	5	M5x0,8	3,2	M2x0,4	M3x0,5	21
VABS-C12-6-B-M3									

	H2	H3	H4	H5	H6	H7	L1	L2	L3	L4
VOVK-...-H5ZP-FB	10,5	6	4,2	14	3,5	10,5	20	11,8	4,7	3
VABS-C12-6-B-M3										

Dimensions

Dimensions – Manifold block 10 valves Download CAD data → www.festo.com

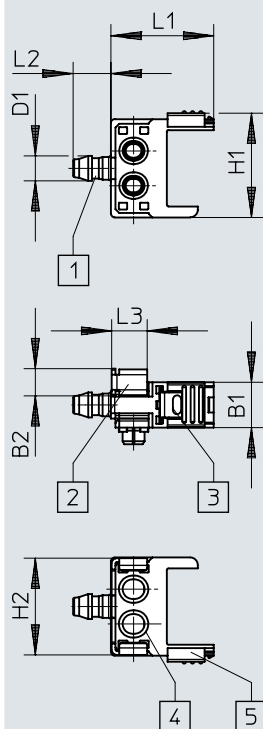


	B1	B2	B3	B4	B5	D1	D2	D3	D4 ø	H1
VABM-C12-...	20	15,3	8,2	3	37,8	M5x0,8	M3x0,5	M2x1,4	3,2	14

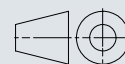
	H2	H3	H4	H5	L1	L2	L3	L4	L5	L6	L7
VABM-C12-...	9	4,5	5	28,2	68	61	3,5	10,5	6	10,5	6

Dimensions

Dimensions – Sub-base

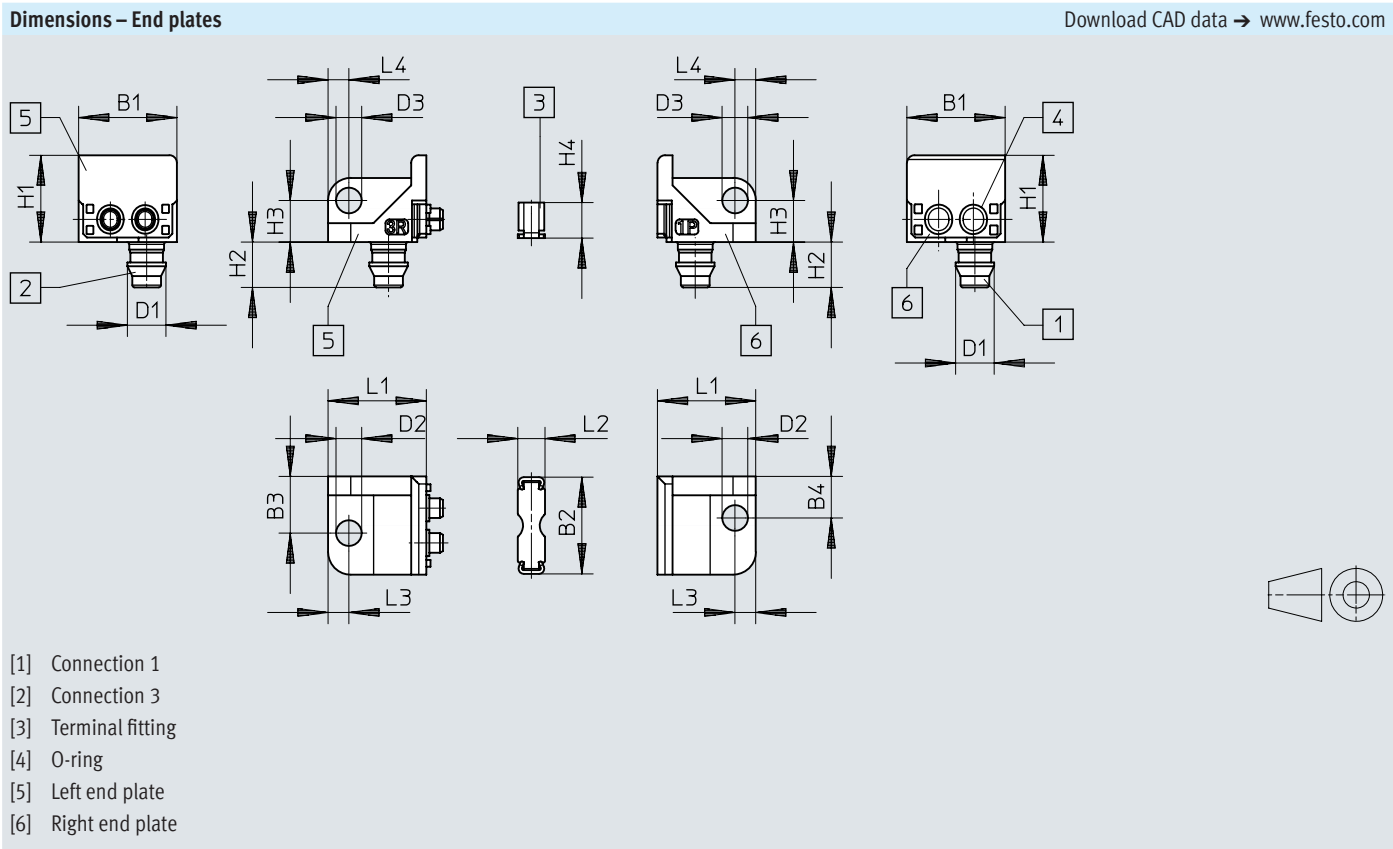
[Download CAD data → www.festo.com](http://www.festo.com)


- [1] Connection 2
- [2] Terminal fitting
- [3] Mounting bracket connection
- [4] O-ring
- [5] Covering



	B1	B2	D1 Ø	H1	H2	L1	L2	L3
VABS-C12-6-S-B3	6	3,6	2,6	13,9	12,8	13,6	5	4,7
VABS-C12-6-S-B4	6	3,6	3,3	13,9	12,8	13,6	5	4,7

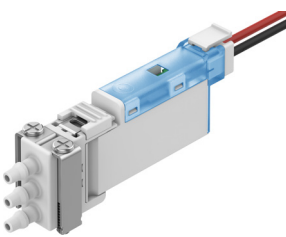
Dimensions

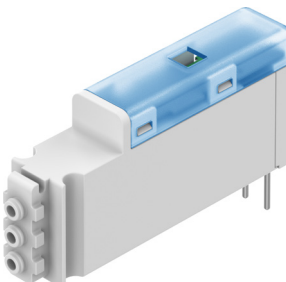


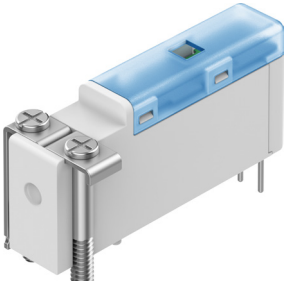
	B1	B2	B3	B4	D1 Ø	D2 Ø	D3 Ø	H1
VABS-C12-6-S	13	12,8	7,5	5,5	5,1	3,4	3,4	11,5

	H2	H3	H4	L1	L2	L3	L4
VABS-C12-6-S	6	5,5	4,7	13	3,6	2,8	2,8

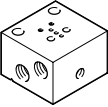
Ordering data

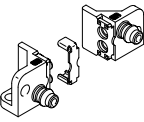
Individual valve with barbed connectors				
	Nominal operating voltage	Electrical connection	Part no.	Type
	24 V DC	Connection diagram H5Z	8122783	VOVK-BT6-M32C-MN-1H5ZP-B3.2F
			8122782	VOVK-BT6-M32C-MN-1H5ZP-B3F
		Pin	8122785	VOVK-BT6-M32C-MN-1T1P-B3.2F
			8122784	VOVK-BT6-M32C-MN-1T1P-B3F
	12 V DC	Connection diagram H5Z	8122787	VOVK-BT6-M32C-MN-5H5ZP-B3.2F
			8122786	VOVK-BT6-M32C-MN-5H5ZP-B3F
		Pin	8122789	VOVK-BT6-M32C-MN-5T1P-B3.2F
			8122788	VOVK-BT6-M32C-MN-5T1P-B3F

Individual valve with flanged connection front side				
	Nominal operating voltage	Electrical connection	Part no.	Type
	24 V DC	Connection diagram H5Z	8122779	VOVK-BT6-M32C-MN-1H5ZP-FF
		Pin	8122778	VOVK-BT6-M32C-MN-1T1P-FF
	12 V DC	Connection diagram H5Z	8122781	VOVK-BT6-M32C-MN-5H5ZP-FF
		Pin	8122780	VOVK-BT6-M32C-MN-5T1P-FF

Individual valve with flanged connection underneath				
	Nominal operating voltage	Electrical connection	Part no.	Type
	24 V DC	Connection diagram H5Z	8122775	VOVK-BT6-M32C-MN-1H5ZP-FB
		Pin	8122774	VOVK-BT6-M32C-MN-1T1P-FB
	12 V DC	Connection diagram H5Z	8122777	VOVK-BT6-M32C-MN-5H5ZP-FB
		Pin	8122776	VOVK-BT6-M32C-MN-5T1P-FB

Accessories

Manifold block			
	Description	Part no.	Type
	Individual connection block	8122793	VABS-C12-6-B-M3
	For 10 valves	8122794	VABM-C12-6M-M5-M3-10

Manifold block set				
	Connection orientation	Description	Part no.	Type
	Lateral	Connection block for tubing outside diameter 4 mm	8122791	VABS-C12-6-S-B4
		Connection block for tubing outside diameter 3 mm	8122792	VABS-C12-6-S-B3
		End plate set for tubing outside diameter 6 mm	8122790	VABS-C12-6-S