Solenoid valves VUVG/valve terminals VTUG





★/☆

Festo core product range

Covers 80% of your automation tasks

Worldwide:

Always in stock

Superb: Easy: Festo quality at an attractive price
Simplified procurement and warehousing

★ Generally ready for dispatch from the factory within 24 hours In stock at 13 Service Centres worldwide More than 2200 products

☆ Generally ready for dispatch from the factory within 5 days Assembled for you at 4 Service Centres worldwide Up to 6 × 10¹² variants per product family for the star!

Key features











Innovative

- Can be set to internal or external pilot air supply for manifold assemblies with sub-base valves
- Maximum pressure 10 bar
- Design principle:
 - Piston spool with sealing ring (VUVG-LK, VUVG-BK)
 - Piston spool with sealing cartridge (VUVG-L, VUVG-B)

Flexible

- Wide range of valve functions
- Choice of quick push-in connectors
- In-line valves
- Semi in-line valves for manifold assembly
- M5 and M7 in-line valves can be combined on one manifold rail
- Valve manifold assembly with pressure zones
- IP40, IP65
- Connection technology via:
 - E-box

Reliable

- Sturdy and durable metal components
 - Valves
 - Manifold rails
- Fast troubleshooting thanks to 360° LED display
- Reliable servicing thanks to valves that can be replaced quickly and easily
- Choice of manual override: non-detenting, covered, non-detenting/detenting or detenting (without accessories)

Easy to install

- Secure mounting on wall or H-rail
- Easy mounting, captive screws and seal
- Connection technology easy to change via the E-box
- Identification holder for labelling the valves

Valve terminal configurator

A valve terminal configurator is available to help you select a suitable valve terminal VTUG. This makes it much easier to order the right product.

Valve terminals VTUG are ordered via an ident. code. All valve terminals are supplied fully assembled and individually tested. This reduces assembly and installation time to a minimum.

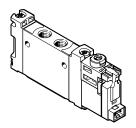
Download CAD data → www.festo.com

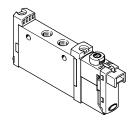
Ordering system for valve terminal VTUG

→ Internet: vtug

Individual valves and valve manifold assemblies

In-line valves as individual valve



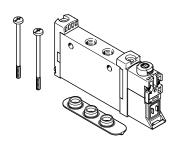


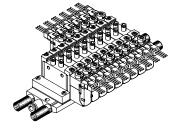
In-line valves are designed to be used without pneumatic links, as all connections to the fittings/tubing are on the valve. The electrical connection is provided by different E-boxes.

If a special seal set is used, in-line valves VUVG can also be mounted on a manifold rail (pneumatic linking) as semi in-line valves.

In-line valve VUVG-LK/VUVG-L

Semi in-line valves for manifold assembly





in-line valves are connected to the valve by common pneumatic links (e.g. sub-base).

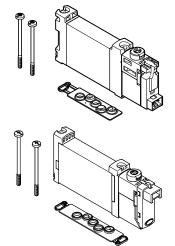
The supply ports (1, 3 and 5) for semi

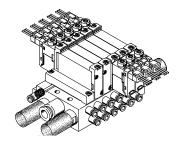
The working ports (2, 4) are on the valve. The electrical connection is provided by different E-boxes.

Semi in-line valve VUVG-S

Valve manifold assembly VTUG comprising semi in-line valves VUVG-S

Sub-base valves for manifold assembly





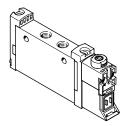
Valve manifold assembly VTUG comprising sub-base valves VUVG-BK/VUVG-B

The supply ports (1, 3 and 5) and the working ports (2, 4) of sub-base valves are connected through the sub-base or manifold

to the valve. The electrical connection is provided by different E-boxes.

Sub-base valve VUVG-BK/VUVG-B

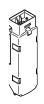
Basic valves VUVG



- Size 10, 14 and 18 mm
- In-line valves and semi in-line valves
- Sub-base valves
- 2x 3/2-, 5/2- and 5/3-way valves

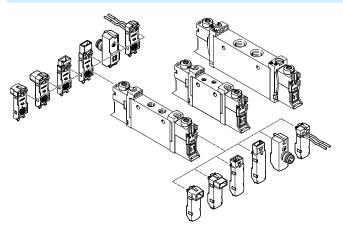
E-boxes





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

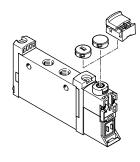
Combinations of basic valve and E-boxes





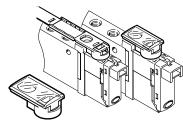
More E-boxes → page 100

Cover caps for manual override



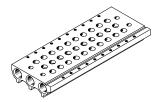
- Closed cover cap, covered manual override
- Slotted cover cap, non-detenting manual override
- Cover, detenting manual override

Identification holder



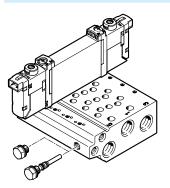
- The identification holder is mounted in the same way as a cover cap for manual override
- The hinged identification holder covers the retaining screw and the manual override

Manifold rail for in-line valves



- For in-line valves M3, M5, M7, G1/8 and G1/4
- For 2x 3/2-way, 5/2-way and 5/3-way valves
- 2 to 10 and 12, 14, 16 valve positions

Manifold rail for sub-base valves



- For sub-base valves 10A, 10, 14 and 18
- Manifold rail with M5, M7, G1/8 and G1/4 working ports
- For 2x 3/2-way, 5/2-way and 5/3way valves
- 2 to 10, 12, 14 and 16 valve positions
- The sub-base valves always have external pilot air. The pilot air is set via the manifold rail. A short and a long blanking plug are included in the scope of delivery of the manifold rail for this purpose.



Pressurisation and exhaust at both ends is recommended for an optimised flow rate in cases where multiple valves switch simultaneously.

Cover plate for vacant position



Vacant position cover

Supply plate



For additional air supply and exhaust via a valve position

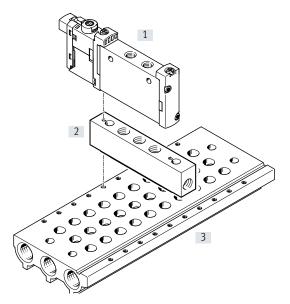
Separator for pressure zones



For creating multiple pressure zones in a valve manifold assembly

Vertical pressure supply plate

For in-line valves M5/M7 and G1/8

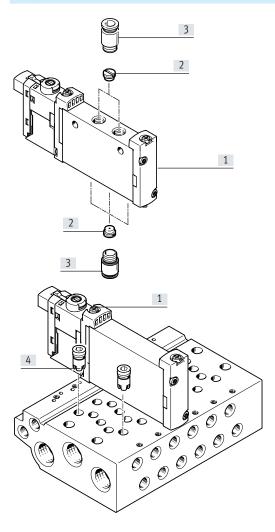


- [1] In-line valves VUVG
- [2] Vertical pressure supply plate
- [3] Manifold rail

The vertical pressure supply plate allows for separate pressurisation and exhausting of the valve mounted on it. If two vertical pressure supply plates are mounted one on top of the other, the valve can be supplied with compressed air and exhausted completely independently of the valve terminal (terminal code CS).

Code		Туре	For in-line valves M5/M7 G1/8		Description
ZU	5 1 3	VABF-L1-P3A	•	•	Plate with port 1 for supplying an individual operating pressure or separate exhausting (reverse operation) for a valve position.
ZV	5 1 3	VABF-L1-P7A	•	•	Plate with ports 3 and 5 for exhausting the valve or supplying an individual operating pressure (reverse operation) for a valve position.

Exhaust functions



- [1] Valves VUVG with individual electrical connection
- [2] Flow restrictor for M5 thread
- [3] Fitting
- [4] Fixed flow restrictor, self-tapping/check valve

Flow restrictor for M5 thread

In-line valve, individual electrical connection: flow restrictor can be fitted in port 1, 3, 5 and/or in port 2, 4.

Sub-base valve, individual electrical connection: flow restrictor can be fitted in port 2, 4.

Fixed flow restrictor, self-tapping

The fixed flow restrictor can be used to permanently set the exhaust flow rate in ducts 3 and 5.

The fixed flow restrictors are screwed into ducts 3 and 5 in the manifold rail.

Please see the relevant assembly instructions:

→ www.festo.com/sp

Check valve

Check valves block the flow towards the valves if back pressure develops in ducts 3 and 5 in the case of a high exhaust capacity, thereby preventing actuators from switching unexpectedly. The check valves are screwed into ducts 3 and 5 in the manifold rail. Please see the relevant assembly instructions:

→ www.festo.com/sp

- Note

- It is not possible to use a check valve and a fixed flow restrictor (in the same duct) at the same time.
- When screwing in again, use the threads already present.

Creating pressure zones and separating exhaust air

Compressed air is supplied and exhausted via the manifold rail and via supply plates.

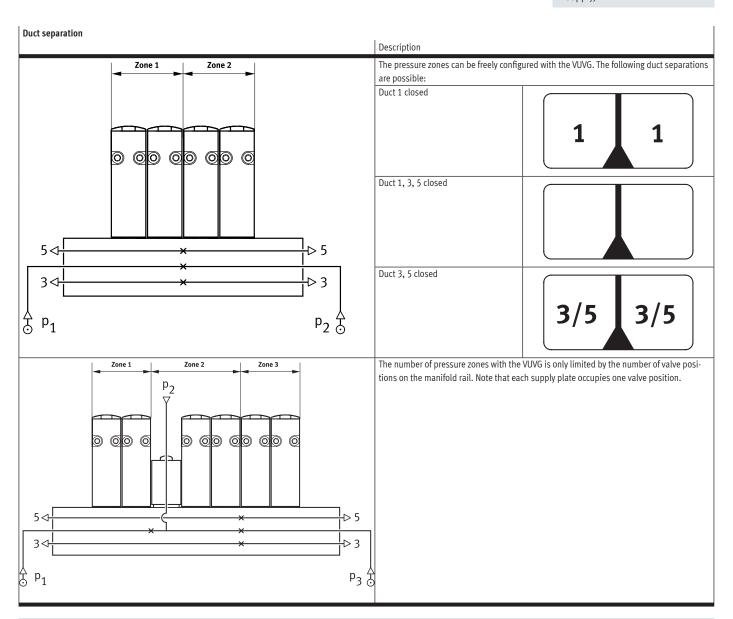
The position of the supply plates and channel separations can be freely selected with the VUVG.

Pressure zones are created by isolating the internal supply ducts between the manifold sub-bases by appropriate duct separation. Pressure zone separation can be used for the following ducts:

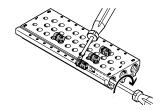
- Duct 1
- Duct 3
- Duct 5



- Use a separator if the exhaust air pressures are high
- Use at least one supply plate/air supply for each pressure zone
- Pressure zone separation is not possible in duct 12/14 (pilot air supply)



Separator VABD



- N

As the separators are fitted from only one side using a slotted screwdriver, several pressure zones can be created in one profile.

Pilot air supply

Internal pilot air supply

Internal pilot air supply can be chosen with an operating pressure between 1.5 ... 8 bar, 2.5 ... 8 bar, or 3 ... 8 bar (depending on the valve used).

The pilot air supply is branched from duct 1 (compressed air supply) using an internal connection.

External pilot air supply

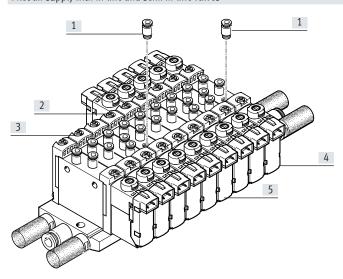
External pilot air supply is required for vacuum operation.

The port for external pilot air supply (port 12/14) is located on the valve in the case of in-line valves and on the manifold rail in the case of sub-base valves.

Pilot exhaust air

With in-line valves, the pilot exhaust air escapes via exhaust holes.
With sub-base valves, the pilot exhaust air is discharged via duct 82/84 of the manifold rail.

Pilot air supply with in-line and semi in-line valves



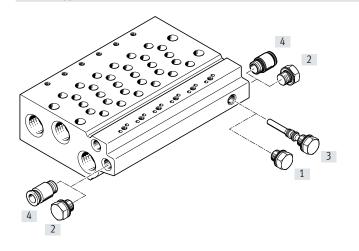
- [1] Push-in fitting for external pilot air supply at port 12/14
- [2] Single solenoid valve with external pilot air supply
- [3] Single solenoid valve with internal pilot air supply
- [4] Double solenoid valve with external pilot air supply
- [5] Double solenoid valve with internal pilot air supply

The internal pilot air is branched from port 1 in the valve body. The external pilot air (port 12/14) is supplied individually at each valve housing.

· 📗 - Note

Semi in-line valves cannot be supplied centrally with pilot air via the manifold rail.

Pilot air supply with sub-base valves



- [1] Blanking plug, short, with internal pilot air
- [2] Blanking plug for duct 12/14 with internal pilot air
- [3] Blanking plug, long, with external pilot air
- [4] Push-in fitting in duct 12/14 with external pilot air

The manifold rails for sub-base valves have an internal connection between duct 12/14 and duct 1.

By inserting a blanking plug into this connection, it is possible to switch between internal and external pilot air.

Operation with different pressures

Vacuum operation

Points to note with 3/2-way valves

The 3/2-way valves are available in a design with two valves in one valve body and with pneumatic spring return. With these valves, the force for the return movement is obtained from port 1.

Vacuum operation is therefore only possible at port 3 and 5, not at port 1.

With external pilot air supply, vacuum can be connected at port 1, 3, 5 of the 5/2-way and 5/3-way valves.

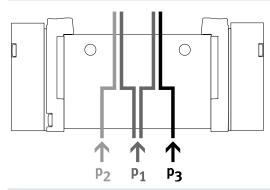
Reverse operation

The 3/2-way valves with pneumatic spring are not suitable for reverse operation, since at least the minimum pilot pressure must be present in duct 1.



Pressure must be present at port 1.

Pressure deflector (internal pilot air)



- If two different pressures are required.
- Different pressures can be supplied at duct 1, 3 and 5.

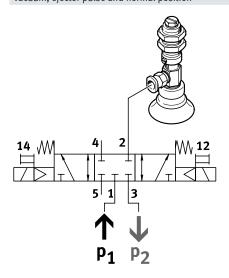


- With internal pilot air supply, the minimum pilot pressure must be adhered to in duct 1
- With 2x 3/2-way valves without spring return, the minimum pilot pressure must always be adhered to in duct 1

Advantages

Any pressure or vacuum can be connected at ducts 3 and 5 both with external and internal pilot air.

Vacuum, ejector pulse and normal position



Vacuum, ejector pulse and normal position can be achieved as follows:

- · Internal pilot air supply
- Vacuum in duct 3
- Pressure for the ejector pulse in duct 1

Product range overview

Design	Working	Size	Function	ns and flo	ow rate [l	/min]									→ Page/
	port		T32C	T32U	T32H	T32C/M	T32U/M	T32H/M	M52	M52/M	B52	P53C	P53U	P53E	Internet
n-line valve as indi	idual valve. sol	enoid valv	e VUVG-L	К	_					<u>'</u>					
	M5	10	180	-	_	-	-	-	195	_	195	-	-	-	27
	M7	10	280	-	-	-	-	-	340	-	340	-	-	-	31
	G1/8	14	■ 570	-	-	-	-	-	660	-	660	-	-	-	46
n-line valve as indi	idual valvo, sol	onoid valv	o VIIVG-I												
i-tille valve as illul	M3	10A	-	_	-	-	_	_	100	80	100	90	90	90	21
	M5	10	150	150	150	1 35	125	125	220	190	220	210	210	210	35
	M7	10	150	130	130	155 •	125	125	220	190	220	210	210	210	39
-			190	190	190	150	140	140	380	320	380	320	320	320	
	G1/8	14	■ 650	600	650	■ 550	500	500	780	■ 780	780	650	600	600	50
	G1/4	18	1000	1000	1000	1000	1000	1000	1300	1300	1380	1200	1000	1000	58
emi in-line valve fo	r manifold asse	mbly, sole	noid valv	e VUVG-	S										
	M3	10A	-	-	-	_	_	_	100	80	100	90	90	90	21
	M5	10	150	150	150	135	125	125	220	190	220	210	210	210	35
	M7	10	■ 170	170	170	140	130	130	340	2 90	340	300	300	300	39
	G1/8	14	•	•	•	•	•	•	•	•	•	•		•	50
			620	580	580	520	480	480	730	730	730	620	580	580	
	G1/4	18	1000	1000	1000	1000	1000	1000	1300	1300	1380	1200	1000	1000	58
esign	Working port	Size			low rate [<u>'</u>								→ Page
			T32C	T32U	T32H	T32C/M	T32U/M	T32H/M	M52	M52/M	B52	P53C	P53U	P53E	Internet
sub-base valve, sole	M5	G-BK		_	_	_			•			-	_	_	72
	M7	10	160	-	-	_			160	-	160	-	_	-	72
	G1/8	14	160	-	-	_	_	_	160	_	160	_	_	-	82
			350						380		380				
ub-base valve, sole															
	M3	10A	-	-	-	_	_	-	100	80	100	90	90	90	66
	M5	10	150	150	150	130	120	120	210	180	210	200	200	200	75
	M7	10	160	160	160	140	130	130	270	230	270	250	250	250	75
	G1/8	14	540	510	540	430	410	410	580	580	580	540	510	510	82
	G1/4	18	-	•	•	•	•	•	•	•	•	•	-	•	91
	1	1	800	800	800	800	800	800	1000	1000	1000	950	950	950	I

Solenoid valves VUVG

Product range overview

Design	Size	Description	→ Page/ Internet
Manifold rail VABMS	, for in-line v	lves (manifold assembly)	
	10AS	Size M3	26, 44,
	10S	Size M5, M7	56, 64
	14S	Size G1/8	
	18S	Size G1/4	
Manifold rail VABM, for sub	o-base valves (r	anifold assembly)	
12	10AW	Size M3	70, 81,
	10W	Size M5	89, 96
/*///00 0 00 0/-	10HW	Size M7	
000000000	14W	Size G1/8	
000	18W	Size G1/4	

Valve	Valve	Description	VUVG-LK, VUVG-BK		VUVG-L, VL	JVG-B			
	code		Size		Size				
			M5/M7	G1/8	M3	M5/M7	G1/8	G1/4	
2x 3/2-way valve, normally closed, pneumatic spi	ing			•					
4 2	T32C-A	In-line valve, pilot air supply	•		-		•	•	
14 12		Internal							
1 5 3									
4 2	1	In-line valve, pilot air supply	+ -	 -	-	-		_	
14 12		External				_	-		
14/12 1 5 3									
4 2		Sub-base valve, external pilot air supply	-	-	-	-		•	
14 12									
Name of the state									
14/12 82/84 3									
2x 3/2-way valve, normally open, pneumatic sprii	ng								
4 2	T32U-A	In-line valve, pilot air supply	_	_	_			•	
10(14) 10(12)		Internal							
10(14) 10(12)									
\ <u>\</u>									
1 5 3	-								
4 2		In-line valve, pilot air supply	-	_	_	-	•	-	
10(14) 10(12)		External							
10 1 5 3									
4 2	+	Sub-base valve, external pilot air supply	+ -	+ -	_	-		-	
10(14) 10(12)		Sub-base valve, external prior an supply				-		•	
10(14) 10(12)									
10(14) 1 5 3									
2x 3/2-way valve, 1x normally open, 1x normally			1	1					
4 2	T32H-A	In-line valve, pilot air supply	_	_	_	•	-		
14 10(12)		Internal							
1 5 3									
4 2		In-line valve, pilot air supply	-	-	-	•	•	-	
14 10(12)		External							
14/10 1 5 3	Sub-base valve, external pilot air supply					+ -	 _	+ -	
4 2 10(12)		Sup-pase valve, external pilot air supply	_	_	-	•	•		
14 10(12)									
14/10 82/84									
82/84									

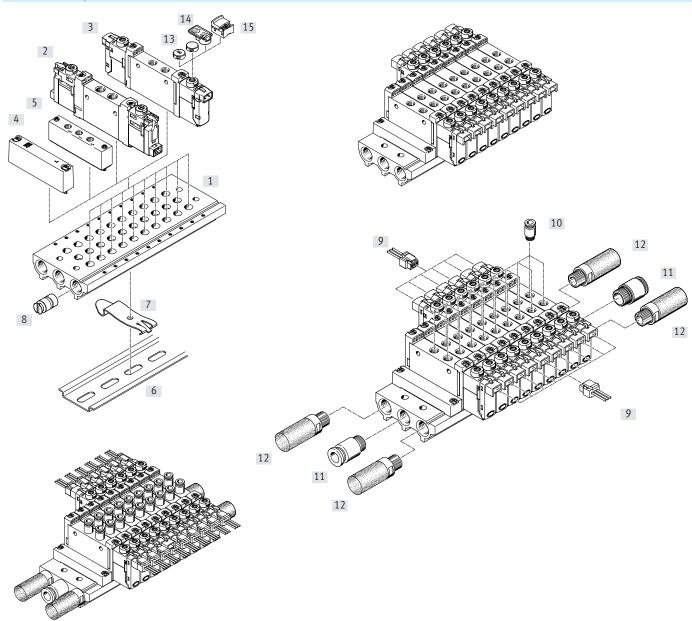
Valve	Valve	Description	VUVG-LK, VUVG-BK		VUVG-L, VL	JVG-B		
	code		Size M5/M7	G1/8	Size M3	M5/M7	G1/8	G1/4
2x 3/2-way valve, normally closed, mechanical spri	ng.		INI)/ INI /	01/0	INIO	IVI 5/ IVI /	01/0	01/4
4 2 14 12 1 1 5 3	T32C-M	In-line valve, pilot air supply Internal	_	-	_	•	•	•
14 12 12 12/14 1 1 5 3		In-line valve, pilot air supply External	-	-	-	•	•	•
12/14 82/84 1 5 3		Sub-base valve, external pilot air supply	-	-	-	•	•	•
2x 3/2-way valve, normally open, mechanical spring	g							
4 2 10(14) 10(12) 1 5 3	T32U-M	In-line valve, pilot air supply Internal	_	-	-	•	•	•
10(14) 10(12) 10(12) 10 1 5 3		In-line valve, pilot air supply External	-	-	-	•	•	•
10(14) 10(12) 10(14) 10		Sub-base valve, external pilot air supply	-	-	-	•	•	•
2x 3/2-way valve, 1x normally open, 1x normally clo	osed, mecha	nical spring						
4 2 14 10(12) 1 5 3	T32H-M	In-line valve, pilot air supply Internal	-	-	-	•	•	•
10/14 1 5 3		In-line valve, pilot air supply External	-	-	-	•	•	•
10/14 82/84 1 5 3		Sub-base valve, external pilot air supply	-	-	-	•	•	•

Valve	Valve code	Description	VUVG-LK, VUVG-BK		VUVG-L, VL	JVG-B		
	code		M5/M7	G1/8	Size M3	M5/M7	G1/8	G1/4
5/2-way double solenoid valve		<u> </u>						
14 4 2 12 5 1 3	B52	In-line valve, pilot air supply Internal	•	•	•	•	•	-
14 4 2 12 12 12 12/14 5 1 3		In-line valve, pilot air supply External	-	-	•	•	•	•
14 4 2 12 12 14 84 5 1 3		Sub-base valve, external pilot air supply	-	-	•	•	•	•
5/2-way valve, single solenoid, pneumatic spring			,	,				
14 4 2 5 5 1 3	M52-A	In-line valve, pilot air supply Internal	•	•	-	-	•	-
14 4 2 14 5 1 3		In-line valve, pilot air supply External	-	-	-	-	-	-
14 4 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Sub-base valve, external pilot air supply	-	-	-	-	-	-
5/2-way single solenoid valve, mechanical spring	5							
14 4 2	M52-M	In-line valve, pilot air supply Internal	-	-	•	•	•	-
14 4 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		In-line valve, pilot air supply External	-	-	•	•	•	-
14 4 2 14 84 5 1 3		Sub-base valve, external pilot air supply	-	-	•	•	-	•
5/2-way valve, single solenoid, pneumatic/mech	anical spring	3						
14 4 2 W	M52-R	In-line valve, pilot air supply Internal	_	_	•	•	-	•
14 4 2 W 14 5 1 3		In-line valve, pilot air supply External	-	-	•	•	-	-
14 4 2 W		Sub-base valve, external pilot air supply	-	-	•	•	-	•

Valve	Valve	· · · · · · · · · · · · · · · · · · ·		/UVG-BK	VUVG-L, VU	VG-B		
	code		Size	1 .	Size	1 .	1 .	1 .
			M5/M7	G1/8	M3	M5/M7	G1/8	G1/4
5/3-way valve, mid-position closed		T	_					
14 M 4 2 M 12 5 1 1 3	P53C	In-line valve, pilot air supply Internal	_	-	•	•	•	•
14 W 4 2 W 12 12/14 5 1 1 3		In-line valve, pilot air supply External	-	-	•	•	•	•
14 W 4 2 W 12 14 84 5 1 3		Sub-base valve, external pilot air supply	-	-	•	•	•	•
5/3-way valve, mid-position pressurised								
14 W 4 2 W 12 5 1 1 3	P53U	In-line valve, pilot air supply Internal	-	-	•	•	•	•
14 W 4 2 W 12 12/14 5 1 3		In-line valve, pilot air supply External	-	-	•	•	•	•
14 W 4 2 W 12 14 84 5 1 3		Sub-base valve, external pilot air supply	-	-	•	•	•	•
5/3-way valve, mid-position exhausted								
14 M 4 2 M 12 5 11 3	P53E	In-line valve, pilot air supply Internal	-	-	•	•	•	•
14 W 4 2 W 12 12/14 5 1 3		In-line valve, pilot air supply External	-	-	•	•	•	•
14 W 4 2 W 12 14 84 5 1 3		Sub-base valve, external pilot air supply	-	-	•	•	•	•

Peripherals overview example – In-line valves

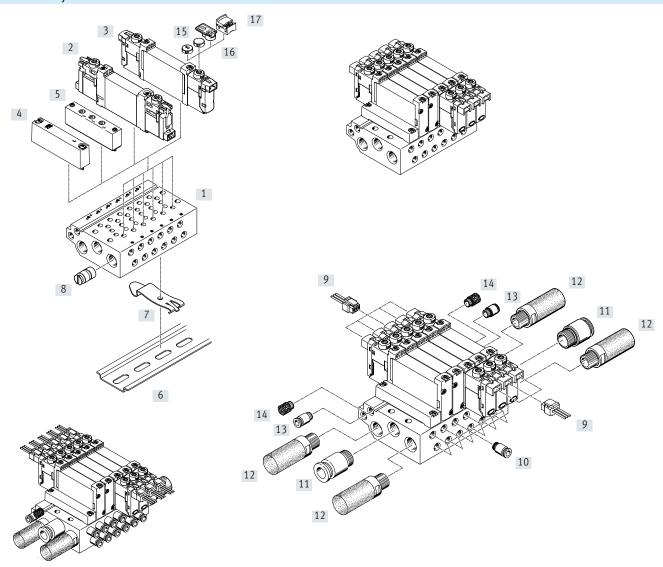
Manifold assembly



Mani	fold assembly and accessories			
		Туре	Description	→ Page/Internet
[1]	Manifold rail	VABM-L1	For 2 to 10, 12, 14 and 16 valve positions	11
[2]	Solenoid valve	VUVG-LK	In-line valve 2x 3/2-way, 5/2-way and 5/3-way	27
[3]	Solenoid valve	VUVG-L	In-line valve 2x 3/2-way, 5/2-way and 5/3-way	27
[4]	Cover plate	VABB-L1	For covering a vacant position	26
[5]	Supply plate	VABF-L1	For air supply at duct 1 and duct 3 and 5	26
[6]	H-rail	NRH-35-2000	For mounting the valve manifold assembly	105
[7]	H-rail mounting	VAME-T-M4	2 pieces for fitting the valve manifold assembly on an H-rail	105
[8]	Separator	VABD	For creating pressure zones	26
[9]	Plug socket with cable	NEBV-H1G2LE2	For E-box H2 and H3	103
[10]	Push-in fitting	QS	Push-in fitting for duct 2 and 4	104
[11]	Push-in fitting	QS	Push-in fitting for air supply at duct 1	104
[12]	Silencer	U	For duct 3 and 5	105
[13]	Cover cap	VMPA-HBB	For manual override	105
[14]	Identification holder	ASLR-D	For labelling the valves, covering the retaining screw and the manual over-	105
			ride	
[15]	Cover	VAMC	For manual override	105

Peripherals overview example – Sub-base valves

Manifold assembly



Mani	fold assembly and accessories			
		Туре	Description	→ Page/Internet
[1]	Manifold rail	VABM-L1	For 2 to 10, 12, 14 and 16 valve positions	80
[2]	Solenoid valve	VUVG-BK	Sub-base valve 2x 3/2-way, 5/2-way and 5/3-way	72
[3]	Solenoid valve	VUVG-B	Sub-base valve 2x 3/2-way, 5/2-way and 5/3-way	72
[4]	Cover plate	VABB-L1	For covering a vacant position	81
[5]	Supply plate	VABF-L1	For air supply at duct 1 and duct 3 and 5	81
[6]	H-rail	NRH-35-2000	For mounting the valve manifold assembly	105
[7]	H-rail mounting	VAME-T-M4	2 pieces for fitting the valve manifold assembly on an H-rail	105
[8]	Separator	VABD	For creating pressure zones	81
[9]	Plug socket with cable	NEBV-H1G2-KNLE2	For E-box H2 and H3	103
[10]	Push-in fitting	QS	Push-in fitting for duct 2 and 4	104
[11]	Push-in fitting	QS	Push-in fitting for air supply at duct 1	104
[12]	Silencer	U	For duct 3 and 5	105
[13]	Push-in fitting	QS	Push-in fitting for pilot air supply at duct 12/14	104
[14]	Silencer	U	Silencer for pilot air exhaust at duct 82/84	105
[15]	Cover cap	VMPA-HBB	For manual override	105
[16]	Identification holder	ASLR-D	For labelling the valves, covering the retaining screw and the manual over-	105
			ride	
[17]	Cover	VAMC	For manual override	105

Type codes

Series	
Solenoid valve	
Directional control valve type	
In-line valve	
Semi-inline valve	
Sub-base valve	
	Solenoid valve Directional control valve type In-line valve Semi-inline valve

003	Design principle	
	Piston spool	
K	Piston spool with sealing ring	

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

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

006	Reset method for monostable/single solenoid valves	
	None	
Α	Pneumatic spring	
M	Mechanical spring	
R	Mixed, pneumatic/mechanical spring	

007	Pilot air	
	Internal	
Z	External	

008	Manual override	
	None	
Н	Non-detenting	
T	Non-detenting, detenting with accessories	
Υ	Detenting	
S	Covered	

009	Pneumatic connection	
F	Flange/sub-base	
M3	M3	
M5	M5	
M7	M7	
G18	G1/8	
G14	G1/4	
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	
T18	Push-in connector 1/8"	
T532	Push-in connector 5/32"	
T316	Push-in connector 3/16"	
T316H	Push-in connector for 3/16", M7	
T14	Push-in connector 1/4"	
T14H	Push-in connector for 1/4", M7	
T38	Push-in connector 3/8"	
T516	Push-in connector 5/16"	
T516H	Push-in connector 5/16", M7	

010	Exhaust	
	No fitting	
QN	With fitting	
U	Silencer	

0	11	Nominal operating voltage	
		None	
1		24 V DC	
4		5 V DC	
5		12 V DC	

012	Electrical connection	
Р3	Without electrical sub-base	
H2	Connection pattern H, horizontal plug	
Н3	Connection pattern H, vertical plug	
R1	Individual connector M8, 4-pin	
R8	Individual connector M8, 3-pin	
S2	Connection pattern S, horizontal plug	
S 3	Connection pattern S, vertical connector	
L1	Leads 0.5 m	
L2	Leads 1 m	
L3	Leads 2.5 m	
L4	Leads 5 m	
К6	Cable 0.5 m	
К7	Cable 1 m	
К8	Cable 2.5 m	
К9	Cable 5 m	

013	Display	
	None	
L	LED	

014	Circuitry	
	None	
R	Holding current reduction with integrated protective circuit	

Solenoid valves VUVG

Type codes

015	Electrical valve accessories	
	None	
C1	Connecting cable, 0.5 m	
C2	Connecting cable 1 m	
C3	Connecting cable 2.5 m	
C4	Connecting cable, 5 m	
N1	Connecting cable 2.5 m, straight plug socket M8, 3-pin	
N2	Connecting cable 5 m, straight plug socket M8, 3-pin	
N3	Connecting cable 2.5 m, angled plug socket M8, 3-pin	
N4	Connecting cable 5 m, angled plug socket M8, 3-pin	
N5	Connecting cable 2.5 m, straight plug socket M8, 4-pin	
N6	Connecting cable 5 m, straight plug socket M8, 4-pin	
N7	Connecting cable 2.5 m, angled plug socket M8, 4-pin	
N8	Connecting cable 5 m, angled plug socket M8, 4-pin	
S1	Connecting cable, 0.5 m, S-connector	
S2	Connecting cable 1 m, S-connector	
S 3	Connecting cable 2.5 m, S-connector	
S4	Connecting cable, 5 m, S-plug	
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	
WS1	Connecting cable, S-plug with flying leads, 0.5 m	
WS2	Connecting cable, S-plug with flying leads, 1 m	
WS3	Connecting cable, S-plug with flying leads, 2.5 m	
WS4	Connecting cable, S-plug with flying leads, 5 m	

016	Version	
	Expanded properties	٦
S	Focused properties	٦

Function 5/2-way, single solenoid 5/2-way, double solenoid valve 5/3C, 5/3U, 5/3E

Circuit symbols → page 13

- **Size** 10 mm

- N - Flow rate 90 ... 100 l/min

Voltage 5, 12 and 24 V DC



General technical data VUVG-L										
Valve function		M52-R	B52	M52-M	P53					
Normal position		_	-	_	C ¹⁾	U ²⁾	E ³⁾			
Stable position		Monostable	Bistable	Monostable	Monostable	'				
Pneumatic spring reset		Yes ⁴⁾	-	No	-					
Mechanical spring reset		Yes ⁴⁾	-	Yes	Yes					
Vacuum operation at port 1		Only with external	l pilot air supply							
Design		Piston spool								
Sealing principle		Soft								
Type of actuation		Electrical			,					
Type of control		Piloted								
Pilot air supply		Internal or externa	al							
Exhaust function		Can be throttled								
Manual override		Choice of non-detenting, covered, non-detenting/detenting or detenting								
Type of mounting		Optionally via through-holes ⁵⁾ or on manifold rail								
Mounting position		Any								
Nominal width	[mm]	2		1.4	2					
Standard nominal flow rate	[l/min]	100		80	90					
Flow rate on manifold rail	[l/min]	100		80	90					
Switching time on/off	[ms]	7/15	_	7/21	8/25					
Switching time changeover	[ms]	-	5	-	14					
Size	[mm]	10								
Connection 1, 2, 3, 4, 5, 12/14		M3								
Product weight	[g]	38	49	37						
Certification		c UL us - Recogniz	ed (OL)							
		c CSA us (OL)								
				RCM compliance mark						
CE marking (see declaration of conformity) ⁶⁾		To EU EMC Directive								
Corrosion resistance class CRC ⁷⁾		2								

- 1) C=Normally closed/mid-position closed
- 2) U=Normally open/mid-position pressurised
- 3) E=Mid-position exhausted
- 4) Combined reset method
- 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 placing spacer discs between them.
- 6) For information about the area of use, see the EC declaration of conformity at: www.festo.com/sp → Certificates. If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.
- 7) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

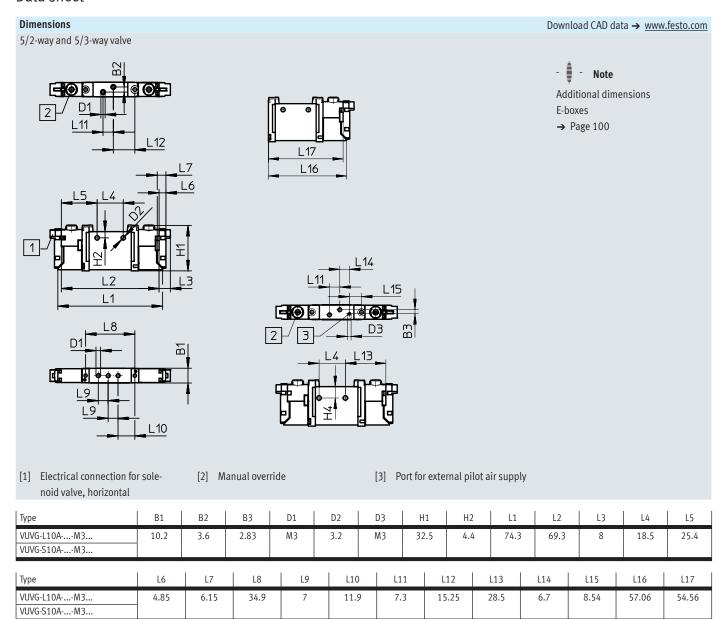
Operating and environmental conditions							
Valve function			M52-R ¹⁾	B52	M52-M ²⁾	P53	
Operating medium			Compressed air to IS	SO 8573-2010 [7:4:4]			
Operating pressure	Internal	[bar]	2.5 8	1.5 8	38	38	
	External	[bar]	-0.9 10	•		-0.9 8	
Pilot pressure		[bar]	2.5 8	1.5 8	3 8		
Ambient temperature		[°C]	-5 +50, with holding current reduction -5 +60				
Temperature of medium		[°C]	-5 +50, with holding current reduction -5 +60				

¹⁾ Mixed, pneumatic/mechanical spring

²⁾ Mechanical spring

Electrical data		
Electrical connection		Via E-box → page 98
Operating voltage	[V DC]	5, 12 and 24 ±10%
Power	[W]	1, reduced to 0.35 with holding current reduction
Duty cycle	[%]	100
Degree of protection to EN 60529		IP40 (with plug socket), IP65 (with M8)

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



Ordering data

Ordering data									
	Description		Part no.	Туре					
n-line valve M3, witho	ut E-box								
	5/2-way single solenoid valve								
	Internal pilot air supply	Pneumatic/mechanical spring reset	566437	VUVG-L10A-M52-RT-M3-1P3					
		Mechanical spring reset	574345	VUVG-L10A-M52-MT-M3-1P3					
	External pilot air supply	Pneumatic/mechanical spring reset	566443	VUVG-L10A-M52-RZT-M3-1P3					
		Mechanical spring reset	574346	VUVG-L10A-M52-MZT-M3-1P3					
	5/2-way double solenoid valve								
	Internal pilot air supply		566438	VUVG-L10A-B52-T-M3-1P3					
	External pilot air supply		566444	VUVG-L10A-B52-ZT-M3-1P3					
	5/3-way valve								
	Internal pilot air supply	Mid-position closed, mechanical spring reset	566439	VUVG-L10A-P53C-T-M3-1P3					
		Mid-position exhausted, mechanical spring reset	566440	VUVG-L10A-P53E-T-M3-1P3					
		Mid-position pressurised, mechanical spring reset	566441	VUVG-L10A-P53U-T-M3-1P3					
	External pilot air supply	Mid-position closed, mechanical spring reset	566445	VUVG-L10A-P53C-ZT-M3-1P3					
		Mid-position exhausted, mechanical spring reset	566446	VUVG-L10A-P53E-ZT-M3-1P3					
		Mid-position pressurised, mechanical spring reset	566447	VUVG-L10A-P53U-ZT-M3-1P3					

Manifold assembly

In-line valves for manifold assembly



Dimensions L2 B8 B3 В1 L5 В2 5 6 B5 ВЗ

Download CAD data → www.festo.com

- 🖣 Note
- Additional dimensions E-boxes
- → Page 100

- [1] Ports 1, 3 and 5: M5 (at both
- [2] Ports 2 and 4: M3
- [5] Electrical connection for E-boxes
- and accessories
- [6] H-rail mounting (two M4x16 screws are required for mounting)
- [7] Cover plate
- [8] Supply plate, ports 1, 3 and 5:
- [9] Valves/cover plate mounting on manifold rail: M2 thread

Туре		B1	B2	B3	B4	B5	B6	B7	B8	В9	B10	B11	D1
VABM-L1-10AS-M5		85.3	62.6	29.7	18.7	7.7	3	40.3	6.8	24.2	46.7	38.6	M5
Туре		D2	H1	H2	Н3	H4	H5 I	H6 L3	B L5	L6	L7	L8	L9
VABM-L1-10AS-M5		Ø 4.5	43.8	10	5.5	16.2	6.8 2	0.3 7	12.5	10.3	10.5	3.5	14
Valve positions		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
VABM weight	[g]	26	34	42	50	58	66	74	82	90	106	122	138

Ordering data

Technical data – Manifold rails							
	Connection	CRC	Material ²⁾	Operating pressure	Max. tightening torque	e for assembly [Nm]	
	1, 3, 5			[bar]	Valve	H-rail	Wall
	M5	21)	Wrought aluminium alloy	-0.9 10	0.45	1.5	3

¹⁾ Corrosion resistance class CRC 2 to Festo standard FN 940070

²⁾ Note on materials: RoHS-compliant.

Ordering data – Manifold rail				
	Description		Part no.	Туре
Manifold rail for in-line valves (mani	fold assembly)			
	For size M3	2 valve positions	566522	VABM-L1-10AS-M5-2
		3 valve positions	566523	VABM-L1-10AS-M5-3
		4 valve positions	566524	VABM-L1-10AS-M5-4
		5 valve positions	566525	VABM-L1-10AS-M5-5
		6 valve positions	566526	VABM-L1-10AS-M5-6
		7 valve positions	566527	VABM-L1-10AS-M5-7
		8 valve positions	566528	VABM-L1-10AS-M5-8
		9 valve positions	566529	VABM-L1-10AS-M5-9
		10 valve positions	566530	VABM-L1-10AS-M5-10
		12 valve positions	566531	VABM-L1-10AS-M5-12
		14 valve positions	566532	VABM-L1-10AS-M5-14
		16 valve positions	566533	VABM-L1-10AS-M5-16
Cover plate				Data ah sata a Jutawa ta sahi
Cover plate	For valve position on manifold ra	th to dividing account and and	569986	Data sheets → Internet: vabb
Separator				Data sheets → Internet: vabd
	For creating pressure zones		570872	VABD-4.2-B
Supply plate				Data sheets → Internet: vabi
	For valve position on manifold ra	ail including scrows and soal	569990	VABF-L1-10A-P3A4-M5
	Tot valve position on mainful to	ni, incuunig sciews and seat	307770	VADI-LL*10AT JA4-NIJ
Seals for in-line valves				Data sheets → Internet: vabo
	For in-line valves M3	Delivery quantity: 10 sets (each with screws and 1 seal)	2 566670	VABD-L1-10AX-S-M3

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Function

2x 3/2C

5/2-way, single solenoid

5/2-way, double solenoid valve

Circuit symbols → page 13

- **[]** - Size 10 mm

- N - Flow rate 180 ... 195 l/min

Voltage 24 V DC



General technical data VUVG-LK				
Valve function		T32-A	M52-A	B52
Normal position		C ¹⁾	-	-
Stable position		Monostable		Bistable
Pneumatic spring reset		Yes	Yes	-
Design		Piston spool		
Sealing principle		Soft		
Type of actuation		Electrical		
Type of control		Piloted		
Pilot air supply		Internal		
Exhaust function		Can be throttled		
Manual override		Detenting, non-detenting		
Type of mounting		Optionally via through-holes ²⁾ or on ma	anifold rail	
Mounting position		Any		
Standard nominal flow rate	[l/min]	180	195	195
	[ms]	12/14	14/17	-
Switching time changeover	[ms]	_		7
Size	[mm]	10		
Connection 2, 4		M5		
Product weight	[g]	55	45	57
Corrosion resistance class CRC ³⁾		2		

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Safety data		
Max. positive test pulse with 0 signal	[µs]	1600
Max. negative test pulse with 1 signal	[µs]	3000
Shock resistance		Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27
Vibration resistance		Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6

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 placing spacer discs between them.

³⁾ Corrosion resistance class CRC 2 to Festo standard FN 940070

Operating and environmental conditions						
Valve function		T32-A ¹⁾	M52-A ¹⁾	B52		
Operating medium		Compressed air to ISO 8573-2010 [7:4	4:4]			
Note on the operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)				
Operating pressure	[bar]	1.5 7	2.5 7	1.5 7		
Ambient temperature	[°C]	-5 +50				
Temperature of medium	[°C]	-5 +50				

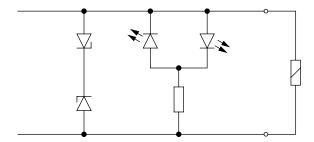
¹⁾ Pneumatic spring

Electrical data		
Electrical connection		Via E-box → page 100
Operating voltage	[V DC]	24 ±10%
Power	[W]	0.7
Duty cycle	[%]	100
Degree of protection to EN 60529		IP40 (with plug socket), IP65 (with M8)
Signal status display		LED
Maximum switching frequency	[Hz]	2

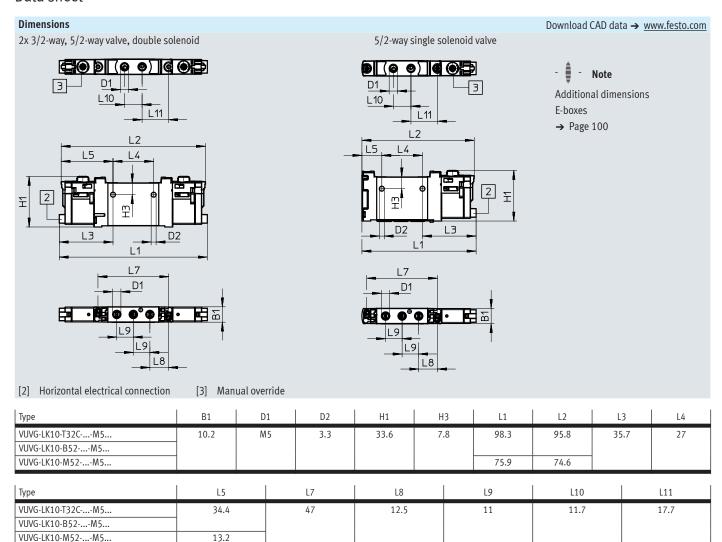
Information on materials	
Housing	Wrought aluminium alloy
Seals	HNBR, NBR
Note on materials	RoHS-compliant
	Contains paint-wetting impairment substances

Pin allocation for E-box			
	Pin		Description
Rectangular plug, connection pattern H			
	1	+ 0r -	Protective circuit without holding current reduction
2-++-1	2	+ or -	
Round plug, M8, 3-pin			
4	1	Not used	Protective circuit without holding current reduction
+ + 3	3	+ Or -	
	4	+ 0 r -	

Protective circuit without holding current reduction



The solenoid coils have a protective circuit to arrest sparks and protect against polarity reversal.



Ordering data

★ Core product range

Ordering data				
	Description		Part no.	Туре
In-line valve M5, with E-	box R8			
	2x 3/2-way valve			
	Internal pilot air supply	Normally closed, pneumatic spring reset	★ 8042542	VUVG-LK10-T32C-AT-M5-1R8L-S
	5/2-way single solenoid valve			
	Internal pilot air supply	Pneumatic spring reset	* 8042543	VUVG-LK10-M52-AT-M5-1R8L-S
	5/2-way double solenoid valve			
	Internal pilot air supply		★ 8042544	VUVG-LK10-B52-T-M5-1R8L-S
In-line valve M5, with E-	box H2			
	2x 3/2-way valve			
	Internal pilot air supply	Normally closed, pneumatic spring reset	★ 8042538	VUVG-LK10-T32C-AT-M5-1H2L-S
	5/2-way single solenoid valve			
	Internal pilot air supply	Pneumatic spring reset	* 8042539	VUVG-LK10-M52-AT-M5-1H2L-S
	5/2-way double solenoid valve			
	Internal pilot air supply		★ 8042540	VUVG-LK10-B52-T-M5-1H2L-S

Function

2x 3/2C

5/2-way, single solenoid

5/2-way, double solenoid valve

Circuit symbols → page 13

- **[]** - Size 10 mm

- N - Flow rate

280 ... 340 l/min

- 🖣 - Voltage 24 V DC



General technical data VUVG-LK	General technical data VUVG-LK						
Valve function		T32-A	M52-A	B52			
Normal position		C ¹⁾	-	_			
Stable position		Monostable		Bistable			
Pneumatic spring reset		Yes	Yes	-			
Design		Piston spool					
Sealing principle		Soft					
Type of actuation		Electrical					
Type of control		Piloted					
Pilot air supply		Internal					
Exhaust function		Can be throttled					
Manual override		Detenting, non-detenting					
Type of mounting		Optionally via through-holes ²⁾ or on n	oles ²⁾ or on manifold rail				
Mounting position		Any					
Standard nominal flow rate	[l/min]	280	340	340			
Switching time on/off	[ms]	12/14	14/17	_			
Switching time changeover	[ms]	-		7			
Size	[mm]	10					
Connection 2, 4		M7	_	_			
Product weight	[g]	55	45	57			
Corrosion resistance class CRC ³⁾		2					

C=Normally closed

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Safety data		
Max. positive test pulse with 0 signal	[µs]	1600
Max. negative test pulse with 1 signal	[µs]	3000
Shock resistance		Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27
Vibration resistance		Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6

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 placing spacer discs between them.

³⁾ Corrosion resistance class CRC 2 to Festo standard FN 940070

Operating and environmental conditions									
Valve function		T32-A ¹⁾	M52-A ¹⁾	B52					
Operating medium		Compressed air to ISO 8573-2010 [7:4	4:4]						
Note on the operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)							
Operating pressure	[bar]	1.5 7	2.5 7	1.5 7					
Ambient temperature	[°C]	-5 +50							
Temperature of medium	[°C]	-5 +50							

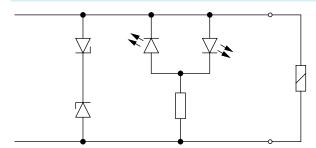
¹⁾ Pneumatic spring

Electrical data		
Electrical connection		Via E-box → page 98
Operating voltage	[V DC]	24 ±10%
Power	[W]	0.7
Duty cycle	[%]	100
Degree of protection to EN 60529		IP40 (with plug socket), IP65 (with M8)
Signal status display		LED
Maximum switching frequency	[Hz]	2

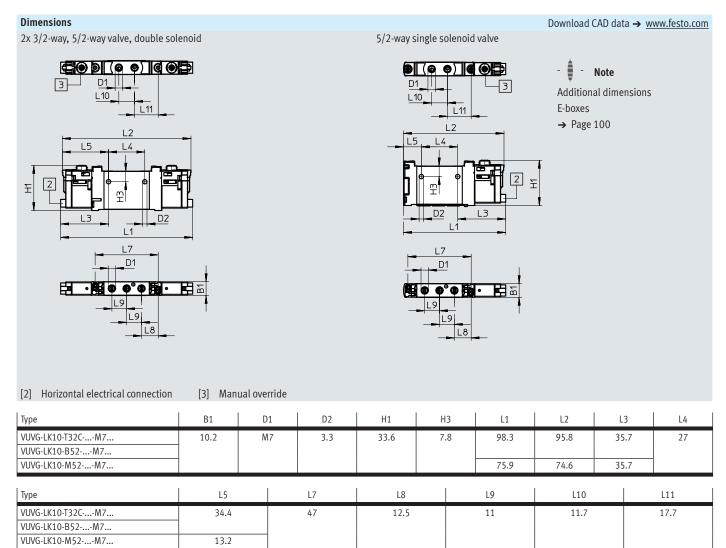
Information on materials	
Housing	Wrought aluminium alloy
Seals	HNBR, NBR
Note on materials	RoHS-compliant
	Contains paint-wetting impairment substances

Pin allocation for E-box			
	Pin		Description
Rectangular plug, connection pattern H			
	1	+ or –	Protective circuit without holding current reduction
2-++-1	2	+ 07 -	
Round plug, M8, 3-pin			
4	1	Not used	Protective circuit without holding current reduction
+	3	+ or -	
(+ +)3			
	4	+ or -	

Protective circuit without holding current reduction



The solenoid coils have a protective circuit to arrest sparks and protect against polarity reversal.



Ordering data

★ Core product range

Ordering data				
	Description		Part no.	Туре
In-line valve M7, with E-	box R8			
	2x 3/2-way valve			
	Internal pilot air supply	Normally closed, pneumatic spring reset	★ 8042550	VUVG-LK10-T32C-AT-M7-1R8L-S
	5/2-way single solenoid valve			
	Internal pilot air supply	Pneumatic spring reset	* 8042551	VUVG-LK10-M52-AT-M7-1R8L-S
	5/2-way double solenoid valve			
	Internal pilot air supply		★ 8042552	VUVG-LK10-B52-T-M7-1R8L-S
In-line valve M7, with E-	hov H2			
	2x 3/2-way valve			
	Internal pilot air supply	Normally closed, pneumatic spring reset	★ 8042546	VUVG-LK10-T32C-AT-M7-1H2L-S
	5/2-way single solenoid valve			
	Internal pilot air supply	Pneumatic spring reset	* 8042547	VUVG-LK10-M52-AT-M7-1H2L-S
	5/2-way double solenoid valve			
	Internal pilot air supply		★ 8042548	VUVG-LK10-B52-T-M7-1H2L-S

Function 2x 3/2C, 2x 3/2U, 2x 3/2H 5/2-way, single solenoid 5/2-way, double solenoid valve 5/3C, 5/3U, 5/3E

Circuit symbols → page 13

- **[]** - Size 10 mm

- N - Flow rate 125 ... 220 l/min

- **** - Voltage

5, 12 and 24 V DC



General technical data VUVG-L N	Λ5												
Valve function			T32-	A		T32-M		M52-R	B52	M52-M	P53		
Normal position			C1)	U ²⁾	H ⁴⁾	C ¹⁾	U ²⁾	H ⁴⁾	-	-	-	C ¹⁾ U ²	²⁾ E ³⁾
Stable position			Mon	ostabl	е		'			Bistable	Monostable	Monosta	ble
Pneumatic spring reset			Yes			No			Yes ⁵⁾	-	No	-	
Mechanical spring reset			No			Yes			Yes ⁵⁾	-	Yes	Yes	
Vacuum operation at port 1						Only with	external pilo	t air supply		•			
Design				on spoo	ol								
Sealing principle								,					
Type of actuation				trical									
Type of control			Pilot	ed									
Pilot air supply			Inte	rnal or	externa	ıl							
Exhaust function				be thro	ttled								
Manual override				Choice of non-detenting, covered, non-detenting/detenting or detenting									
Type of mounting				Optionally via through-holes ⁶⁾ or on manifold rail									
Mounting position				Any									
Nominal width		[mm]	2.7			1.9	1.8		3.2		2.2	3.2	
Standard nominal flow rate		[l/min]	150			135	125	125	220		190	210	
Flow rate on manifold rail		[l/min]	150			135	125	125	220		190	210	
Switching time on/off		[ms]	6/16	ó		8/11			7/19	-	8/24	10/30	
Switching time changeover		[ms]	-							7	-	15	
Size		[mm]	10										
Connection	1, 2, 3, 4, 5		M5										
	12/14		M3										
Product weight		[g]	55	55 54 45			45	55	44	55			
Certification					cognize	ed (OL)							
			c CSA us (OL)										
			RCM compliance mark										
CE marking (see declaration of co	nformity) ⁷⁾		To E	U EMC	Directiv	re e							
Corrosion resistance class CRC ⁸⁾	·		2	2									

- $1) \quad \hbox{C=Normally closed/mid-position closed} \\$
- ${\it 2)} \quad {\it U=Normally\ open/mid-position\ pressurised}$
- 3) E=Mid-position exhausted
- 4) H=2x 3/2-way valve in one housing with 1x normally closed and 1x normally open
- 5) Combined reset method
- 6) 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 placing spacer discs between them.
- 7) For information about the area of use, see the EC declaration of conformity at: www.festo.com/sp → Certificates.

 If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.
- 8) Corrosion resistance class CRC 2 to Festo standard FN 940070

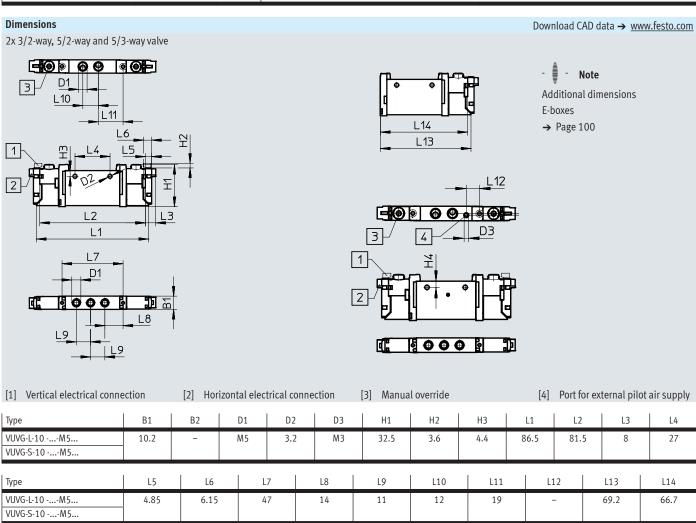
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Operating and environment	al conditions								
Valve function			T32-A ¹⁾	T32-M ³⁾	M52-R ²⁾	B52	M52-M ³⁾	P53	
Operating medium	Compressed air t	Compressed air to ISO 8573-2010 [7:4:4]							
Operating pressure	Internal	[bar]	1.5 8	2.5 8	2.5 8	1.5 8	3 8	3 8	
	External	[bar]	1.5 10	-0.9 10			-0.98	-0.9 10	
Pilot pressure		[bar]	1.5 8	2 8	2.5 8	1.5 8	3 8		
Ambient temperature		[°C]	-5 +50, with holding current reduction -5 +60						
Temperature of medium	·	[°C]	-5 +50, with h	-5 +50, with holding current reduction -5 +60					

- 1) Pneumatic spring
- 2) Mixed, pneumatic/mechanical spring
- 3) Mechanical spring

Electrical data		
Electrical connection		Via E-box → page 98
Operating voltage	[V DC]	5, 12 and 24 ±10%
Power	[W]	1, reduced to 0.35 with holding current reduction
Duty cycle	[%]	100
Degree of protection to EN 60529		IP40 (with plug socket), IP65 (with M8)

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



★ Core product range

Ordering data	• •										
oracinis data	Description		Part no.	Туре							
In-line valve M5, with	E-box R8										
	5/3-way valve										
	Internal pilot air supply Mid-position closed, mechanical spring reset		★ 577346	VUVG-L10-P53C-T-M5-1R8L							
Ordering data	Description		Part no.	Туре							
In-line valve M5, with	'			778-							
The valve my, wall	2x 3/2-way valve										
The state of the s	Internal pilot air supply	Normally closed, pneumatic spring reset	566454	VUVG-L10-T32C-AT-M5-1P3							
0		Normally open, pneumatic spring reset	566455	VUVG-L10-T32U-AT-M5-1P3							
		1x normally open, 1x normally closed, pneumatic spring reset	566456	VUVG-L10-T32H-AT-M5-1P3							
		Normally closed, mechanical spring reset	574348	VUVG-L10-T32C-MT-M5-1P3							
		Normally open, mechanical spring reset	574349	VUVG-L10-T32U-MT-M5-1P3							
		1x normally open, 1x normally closed, mechanical spring reset	574350	VUVG-L10-T32H-MT-M5-1P3							
	External pilot air supply	Normally closed, pneumatic spring reset	566463	VUVG-L10-T32C-AZT-M5-1P3							
		Normally open, pneumatic spring reset	566464	VUVG-L10-T32U-AZT-M5-1P3							
		1x normally open, 1x normally closed, pneumatic spring reset	566465	VUVG-L10-T32H-AZT-M5-1P3							
		Normally closed, mechanical spring reset	574352	VUVG-L10-T32C-MZT-M5-1P3							
		Normally open, mechanical spring reset	574353	VUVG-L10-T32U-MZT-M5-1P3							
		1x normally open, 1x normally closed, mechanical spring reset	574354	VUVG-L10-T32H-MZT-M5-1P3							
	5/2-way single solenoid valve										
	Internal pilot air supply	Pneumatic/mechanical spring reset	566457	VUVG-L10-M52-RT-M5-1P3							
		Mechanical spring reset	574351	VUVG-L10-M52-MT-M5-1P3							
	External pilot air supply	Pneumatic/mechanical spring reset	566466	VUVG-L10-M52-RZT-M5-1P3							
		Mechanical spring reset	574355	VUVG-L10-M52-MZT-M5-1P3							

Description		D 4 -							
		Part no.	Туре						
ut E-box									
5/2-way double solenoid valve									
Internal pilot air supply		566458	VUVG-L10-B52-T-M5-1P3						
External pilot air supply		566467	VUVG-L10-B52-ZT-M5-1P3						
5/3-way valve									
Internal pilot air supply	Mid-position closed, mechanical spring reset	566459	VUVG-L10-P53C-T-M5-1P3						
	Mid-position exhausted, mechanical spring reset	566460	VUVG-L10-P53E-T-M5-1P3						
	Mid-position pressurised, mechanical spring reset	566461	VUVG-L10-P53U-T-M5-1P3						
External pilot air supply	Mid-position closed, mechanical spring reset	566468	VUVG-L10-P53C-ZT-M5-1P3						
	Mid-position exhausted, mechanical spring reset	566469	VUVG-L10-P53E-ZT-M5-1P3						
	Mid-position pressurised, mechanical spring reset	566470	VUVG-L10-P53U-ZT-M5-1P3						
E-box R8									
2x 3/2-way valve									
Internal pilot air supply	Normally closed, pneumatic spring reset	577347	VUVG-L10-T32C-AT-M5-1R8L						
	Normally open, pneumatic spring reset	8031466	VUVG-L10-T32U-AT-M5-1R8L						
	1x normally open, 1x normally closed, pneumatic spring	8031467	VUVG-L10-T32H-AT-M5-1R8L						
	reset								
	Normally closed, mechanical spring reset	8031468	VUVG-L10-T32C-MT-M5-1R8L						
	Normally open, mechanical spring reset	8031469	VUVG-L10-T32U-MT-M5-1R8L						
	1x normally open, 1x normally closed, mechanical	8031470	VUVG-L10-T32H-MT-M5-1R8L						
	spring reset								
5/2-way single solenoid valve									
Internal pilot air supply	Pneumatic/mechanical spring reset	572634	VUVG-L10-M52-RT-M5-1R8L						
	Mechanical spring reset	8031472	VUVG-L10-M52-MT-M5-1R8L						
Internal pilot air supply		576664	VUVG-L10-B52-T-M5-1R8L						
5/3-way valve									
Internal pilot air supply	Mid-position exhausted, mechanical spring reset	8031475	VUVG-L10-P53E-T-M5-1R8L						
	Mid-position pressurised, mechanical spring reset	8031476	VUVG-L10-P53U-T-M5-1R8L						
E-box H2									
5/2-way single solenoid valve									
Internal pilot air supply	Pneumatic/mechanical spring reset	577316	VUVG-L10-M52-RT-M5-1H2L-W1						
	Mechanical spring reset	578162	VUVG-L10-M52-MT-M5-1H2L-W1						
5/2-way double solenoid valve									
Internal pilot air supply		577317	VUVG-L10-B52-T-M5-1H2L-W1						
with E-box H2									
5/2-way single solenoid valve									
Internal pilot air supply	Pneumatic/mechanical spring reset	577324	VUVG-S10-M52-RT-M5-1H2L-W1						
-									
	5/2-way double solenoid valve Internal pilot air supply 5/3-way valve Internal pilot air supply External pilot air supply External pilot air supply External pilot air supply External pilot air supply 5-box R8 2x 3/2-way valve Internal pilot air supply 5/2-way single solenoid valve Internal pilot air supply 5/3-way valve Internal pilot air supply 5/3-way valve Internal pilot air supply 5/2-way single solenoid valve Internal pilot air supply 5/2-way single solenoid valve Internal pilot air supply 5/2-way double solenoid valve Internal pilot air supply 5/2-way double solenoid valve Internal pilot air supply 5/2-way double solenoid valve Internal pilot air supply with E-box H2 5/2-way single solenoid valve	S/2-way double solenoid valve	S/2-way double solenoid valve Internal pilot air supply S66458						

Function 2x 3/2C, 2x 3/2U, 2x 3/2H 5/2-way, single solenoid 5/2-way, double solenoid valve 5/3C, 5/3U, 5/3E

Circuit symbols → page 13

- **[]** - Size 10 mm

- N - Flow rate 170 ... 340 l/min

- **** - Voltage

5, 12 and 24 V DC



General technical data VUVG-L M	17													
Valve function			T32-A	١		T32-M			M52-R	B52	M52-M	P53		
Normal position			C ¹⁾	U ²⁾	H ⁴⁾	C ¹⁾	U ²⁾	H ⁴⁾	-	_	-	C1)	U ²⁾	E3)
Stable position			Mono	stable		,		,		Bistable	Monostable	Monos	table	
Pneumatic spring reset			Yes			No			Yes ⁵⁾	-	No	-		
Mechanical spring reset						Yes			Yes ⁵⁾	-	Yes	Yes		
Vacuum operation at port 1			No			Only w	ith extern	al pilot a	ir supply					
Design			Pistor	1 spool										
Sealing principle			Soft											
Type of actuation			Electr	ical										
Type of control			Pilote	ed .										
Pilot air supply			Interr	nal or ex	ternal									
Exhaust function			Can be throttled											
Manual override				Choice of non-detenting, covered, non-detenting/detenting or detenting										
Type of mounting			Optionally via through-holes ⁶⁾ or on manifold rail											
Mounting position			Any											
Nominal width		[mm]	2.7			2.0	1.9	1.9	4.0		2.8	3.5		
Standard nominal flow rate		[l/min]	190			150	140	140	330	380	220	320		
Flow rate on manifold rail		[l/min]	170			140	130	130	330	340	220	300		
Switching time on/off		[ms]	6/16			8/11			7/19	-	8/24	10/30		
Switching time changeover		[ms]	-							7		15		
Size		[mm]	10											
Connection	1, 2, 3, 4, 5		M7											
	12/14		M3											
Product weight		[g]	55			54			45	55	44	55		
Certification					gnized ((OL)								
				c CSA us (OL)										
				RCM compliance mark										
CE marking (see declaration of co	nformity) ⁷⁾		To EU EMC Directive											
Corrosion resistance class CRC ⁸⁾			2											

- $1) \quad \hbox{C=Normally closed/mid-position closed} \\$
- ${\it 2)} \quad {\it U=Normally\ open/mid-position\ pressurised}$
- 3) E=Mid-position exhausted
- 4) H=2x 3/2-way valve in one housing with 1x normally closed and 1x normally open
- 5) Combined reset method
- 6) 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 placing spacer discs between them.

 7) For information about the area of use, see the EC declaration of conformity at: www.festo.com/sp → Certificates.
- If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.
- 8) Corrosion resistance class CRC 2 to Festo standard FN 940070

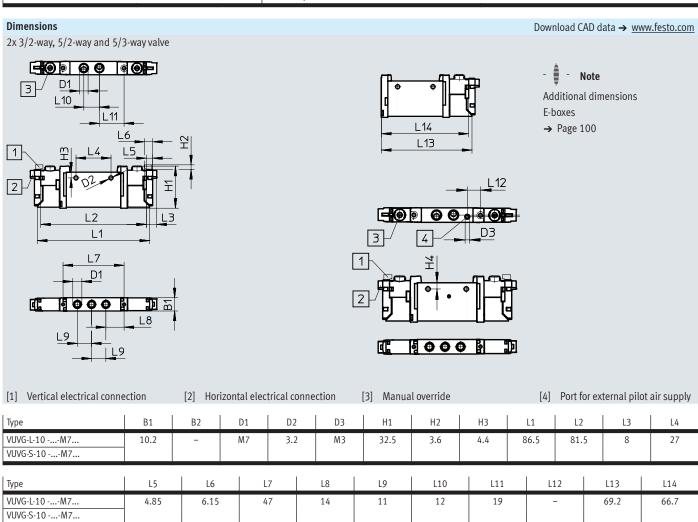
 Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Operating and environment	tal conditions									
Valve function			T32-A ¹⁾	T32-M ³⁾	M52-R ²⁾	B52	M52-M ³⁾	P53		
Operating medium			Compressed a	Compressed air to ISO 8573-2010 [7:4:4]						
Operating pressure	Internal	[bar]	1.5 8	2.5 8	2.5 8	1.5 8	3 8			
	External	[bar]	1.5 10	-0.9 10	•		-0.9 8	-0.9 10		
Pilot pressure		[bar]	1.5 8	28	2.5 8	1.5 8	38	3 8		
Ambient temperature	ent temperature $[^{\circ}C]$ $-5+50$, with holding current reduction $-5+60$									
Temperature of medium		[°C]	-5 +50, wit	h holding current re	duction -5 +60					

- 1) Pneumatic spring
- 2) Mixed, pneumatic/mechanical spring
- 3) Mechanical spring

Electrical data		
Electrical connection		Via E-box → page 98
Operating voltage	[V DC]	5, 12, 24 ±10%
Power	[W]	1, reduced to 0.35 with holding current reduction
Duty cycle	[%]	100
Degree of protection to EN 60529		IP40 (with plug socket), IP65 (with M8)

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



★ Core product range

Ordering data				
	Description		Part no.	Туре
In-line valve M7, with I	E-box R8			
	5/3-way valve			
	Internal pilot air supply	Mid-position closed, mechanical spring reset	★ 574223	VUVG-L10-P53C-T-M7-1R8L
Ordering data	Description		Part no.	Туре
In-line valve M7, witho				
	2x 3/2-way valve			
0 6	Internal pilot air supply	Normally closed, pneumatic spring reset	566471	VUVG-L10-T32C-AT-M7-1P3
		Normally open, pneumatic spring reset	566472	VUVG-L10-T32U-AT-M7-1P3
		1x normally open, 1x normally closed, pneumatic spring reset	566473	VUVG-L10-T32H-AT-M7-1P3
		Normally closed, mechanical spring reset	574356	VUVG-L10-T32C-MT-M7-1P3
		Normally open, mechanical spring reset	574357	VUVG-L10-T32U-MT-M7-1P3
		1x normally open, 1x normally closed, mechanical spring reset	574358	VUVG-L10-T32H-MT-M7-1P3
	External pilot air supply	Normally closed, pneumatic spring reset	566479	VUVG-L10-T32C-AZT-M7-1P3
		Normally open, pneumatic spring reset	566480	VUVG-L10-T32U-AZT-M7-1P3
		1x normally open, 1x normally closed, pneumatic spring reset	566481	VUVG-L10-T32H-AZT-M7-1P3
		Normally closed, mechanical spring reset	574360	VUVG-L10-T32C-MZT-M7-1P3
		Normally open, mechanical spring reset	574361	VUVG-L10-T32U-MZT-M7-1P3
		Normally closed, mechanical spring reset	574362	VUVG-L10-T32H-MZT-M7-1P3

Ordering data				
	Description		Part no.	Туре
In-line valve M7, with	out E-box			
	5/2-way single solenoid valve			
	Internal pilot air supply	Mechanical spring reset	574359	VUVG-L10-M52-MT-M7-1P3
		Pneumatic/mechanical spring reset	566474	VUVG-L10-M52-RT-M7-1P3
	External pilot air supply	Mechanical spring reset	574363	VUVG-L10-M52-MZT-M7-1P3
		Pneumatic/mechanical spring reset	566482	VUVG-L10-M52-RZT-M7-1P3
	5/2-way double solenoid valve			
	Internal pilot air supply		566475	VUVG-L10-B52-T-M7-1P3
	External pilot air supply		566483	VUVG-L10-B52-ZT-M7-1P3
	5/3-way valve			
	Internal pilot air supply	Mid-position closed, mechanical spring reset	566476	VUVG-L10-P53C-T-M7-1P3
		Mid-position exhausted, mechanical spring reset	566477	VUVG-L10-P53E-T-M7-1P3
		Mid-position pressurised, mechanical spring reset	566478	VUVG-L10-P53U-T-M7-1P3
	External pilot air supply	Mid-position closed, mechanical spring reset	566484	VUVG-L10-P53C-ZT-M7-1P3
		Mid-position exhausted, mechanical spring reset	566485	VUVG-L10-P53E-ZT-M7-1P3
		Mid-position pressurised, mechanical spring reset	566486	VUVG-L10-P53U-ZT-M7-1P3
- li M7ish				
n-line valve M7, with				
	2x 3/2-way valve	Mayorally, alasad manageria and an area	F7/240	VIII/C 140 T22C AT M7 4 DOI
0 0	Internal pilot air supply	Normally closed, pneumatic spring reset	574218	VUVG-L10-T32C-AT-M7-1R8L
0170		Normally open, pneumatic spring reset	574219	VUVG-L10-T32U-AT-M7-1R8L
		1x normally open, 1x normally closed, pneumatic spring reset	574220	VUVG-L10-T32H-AT-M7-1R8L
	>	Normally closed, mechanical spring reset	8031480	VUVG-L10-T32C-MT-M7-1R8L
		Normally open, mechanical spring reset	8031481	VUVG-L10-T32U-MT-M7-1R8L
		1x normally open, 1x normally closed, mechanical		VUVG-L10-T32U-M1-M7-1R8L VUVG-L10-T32H-MT-M7-1R8L
			8031482	VUVG-L10-132H-M1-M/-1K6L
	5/2-way single solenoid valve	spring reset		
	Internal pilot air supply	Pneumatic/mechanical spring reset	574221	VUVG-L10-M52-RT-M7-1R8L
	internal pilot all supply		8031485	VUVG-L10-M52-R1-M7-1R8L
	5/2 was dauble calcust durby	Mechanical spring reset	8031483	VUVG-L10-M32-M1-M7-1R8L
	5/2-way double solenoid valve	<u> </u>	574222	VUVG-L10-B52-T-M7-1R8L
	Internal pilot air supply		5/4222	VUVG-L1U-B32-I-W/-1K8L
	5/3-way valve	Mid a sitis and a sale and a sale and a sale and a sale	F7/22F	WING 140 DESET M7 4DOL
	Internal pilot air supply	Mid-position exhausted, mechanical spring reset	574225	VUVG-L10-P53E-T-M7-1R8L
		Mid-position pressurised, mechanical spring reset	574224	VUVG-L10-P53U-T-M7-1R8L
n-line valve M7, with	ı E-box H2			
•>	5/2-way single solenoid valve			
	Internal pilot air supply	Pneumatic/mechanical spring reset	577333	VUVG-L10-M52-RT-M7-1H2L-W1
		Mechanical spring reset	578163	VUVG-L10-M52-MT-M7-1H2L-W1
	5/2-way double solenoid valve	. •		
J (4) J	Internal pilot air supply		577332	VUVG-L10-B52-T-M7-1H2L-W1

Manifold assembly

In-line valves for manifold assembly



Dimensions Download CAD data → www.festo.com - Note Additional dimensions 2 7 8 9 E-boxes → Page 100 В1 D1 10 11 6 В2 [6] H-rail mounting (two M4x20 [1] Ports 1, 3 and 5: G1/8 [8] Supply plate [10] Vertical pressure supply plate screws are required for mount-[9] Valves/cover plate mounting on [11] Vertical pressure exhaust plate [2] Ports 1, 2, 3, 4 and 5 on the valve: M7 or M5 manifold rail: M2 thread ing) [5] Electrical connection for E-boxes [7] Cover plate and accessories В1 В2 В3 В4 В5 В6 В7 В8 В9 B10 B11 B12 Туре VABML-L1-10S-G18 94.3 52.1 41 24.5 8 16.5 16 33.7 44.6 40.7 36.7 14.4 D1 D2 D5 Н1 Н2 Н3 Н4 Н5 Н6 Н7 Н8 L3 L4 L5 L6 L7 Туре

VABML-L1-10S-G18

G1/8

80.6

16.8

9.8

64.9

49.3

17.8

Valve positions	2	3	4	5	6	7	8	9	10	12	14	16	22
L1	40.5	51	61.5	72	82.5	93	103.5	114	124.5	145.5	166.5	187.5	250.5
L2	30.5	41	51.5	62	72.5	83	93.5	104	114.5	135.5	156.5	177.5	240.5
VABM weight [g]	63	78	93	108	123	138	153	168	183	213	243	273	363

Technical data – Manifold rails									
	Connection	CRC	Material ²⁾	Operating pressure	Max. tightening torque	e for assembly [Nm]			
	1, 3, 5			[bar]	Valve	H-rail	Wall		
	G1/8	21)	Wrought aluminium alloy	-0.9 10	0.45	1.5	3		

¹⁾ Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

²⁾ Note on materials: RoHS-compliant.

Ordering data – Manifold rail										
	Description		Part no.	Туре						
Manifold rail for in-line valve (manifo	Manifold rail for in-line valve (manifold assembly)									
	For size M5/M7	2 valve positions	★ 566558	VABM-L1-10S-G18-2						
		3 valve positions	★ 566559	VABM-L1-10S-G18-3						
		4 valve positions	★ 566560	VABM-L1-10S-G18-4						
		5 valve positions	566561	VABM-L1-10S-G18-5						
		6 valve positions	★ 566562	VABM-L1-10S-G18-6						
		7 valve positions	566563	VABM-L1-10S-G18-7						
		8 valve positions	★ 566564	VABM-L1-10S-G18-8						
		9 valve positions	566565	VABM-L1-10S-G18-9						
		10 valve positions	★ 566566	VABM-L1-10S-G18-10						
		12 valve positions	566567	VABM-L1-10S-G18-12						
		14 valve positions	566568	VABM-L1-10S-G18-14						
		16 valve positions	566569	VABM-L1-10S-G18-16						

Ordering data – Accessories				
	Description		Part no.	Туре
Cover plate				Data sheets → Internet: vabb
	For valve position on manifold rail, incl	uding screws and seal	★ 566462	VABB-L1-10-S
Separator				Data sheets → Internet: vabd
	For creating pressure zones		569995	VABD-8-B
Supply plate	1			Data sheets → Internet: vabf
(6)	For valve position (in-line valves M5) or	n manifold rail, including screws and seal	569991	VABF-L1-10-P3A4-M5
	For valve position (in-line valves M7) or	n manifold rail, including screws and seal	569992	VABF-L1-10-P3A4-M7
	·			
Seals				Data sheets → Internet: vabd
	In-line valves VUVG-LK			
	For in-line valves M5	Delivery quantity: 10 sets (each with	★ 8043718	VABD-L1-10XK-S-M5-S
Year of the second of the seco	For in-line valves M7	2 screws and 1 seal)	★ 8043719	VABD-L1-10XK-S-M7-S
	In-line valves VUVG-L			
	For in-line valves M5	Delivery quantity: 10 sets (each with	★ 566672	VABD-L1-10X-S-M5
	For in-line valves M7	2 screws and 1 seal)	★ 566673	VABD-L1-10X-S-M7
Vertical pressure supply plate				
^	Pneumatic connection 1: M7	Terminal code CP	574592	VABF-L1-P3A3-M7
<u> </u>				
Vertical pressure exhaust plate				
(a)	Pneumatic connection 3, 5: M7	Terminal code CR	574594	VABF-L1-P7A13-M7
3 0 0 0				
()				

Function 2x 3/2C

5/2-way, single solenoid 5/2-way, double solenoid valve

valve - 1 - Flow rate 570 ... 660 l/min

Circuit symbols → page 13

- **-** Voltage 24 V DC

- **Size** 14 mm



General technical data VUVG-LK						
'alve function T		T32-A	M52-A	B52		
Normal position		C ¹⁾	-	-		
Stable position		Monostable		Bistable		
Pneumatic spring reset		Yes	Yes	_		
Design		Piston spool				
Sealing principle		Soft				
Type of actuation		Electrical				
Type of control		Piloted				
Pilot air supply		Internal				
Exhaust function		Can be throttled				
Manual override		Non-detenting, detenting				
Type of mounting		Optionally via through-holes ²⁾ or on manifold rail				
Mounting position		Any				
Standard nominal flow rate	[l/min]	570	660	660		
Switching time on/off	[ms]	13/20	14/24	_		
Switching time changeover	[ms]	_		8		
Size	[mm]	14				
Connection 2, 4		G1/8	_			
Product weight	[g]	75	65	85		
Corrosion resistance class CRC ³⁾		2				

¹⁾ C=Normally closed

³⁾ Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Safety data			
Max. positive test pulse with 0 signal	[µs]	1600	
Max. negative test pulse with 1 signal	[µs]	3000	
Shock resistance		Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27	
Vibration resistance		Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6	

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 placing spacer discs between them.

Operating and environmental conditions								
Valve function		T32-A ¹⁾	M52-A ¹⁾	B52				
Operating medium		Compressed air to ISO 8573-2010 [7:4:4]						
Note on the operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)						
Operating pressure	[bar]	1.5 7	2.5 7	1.5 7				
Ambient temperature	[°C]	-5 +50						
Temperature of medium	[°C]	-5 +50						

Pneumatic spring

Electrical data

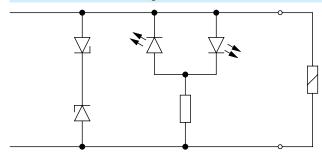
Electrical connection		Via E-box → page 98
Operating voltage	[V DC]	24 ±10%
Power	[W]	0.7
Duty cycle	[%]	100
Degree of protection to EN 60529		IP40 (with plug socket), IP65 (with M8)
Signal status display	·	LED
Maximum switching frequency	[Hz]	2

Infor	matin	n on	mate	ariale	•

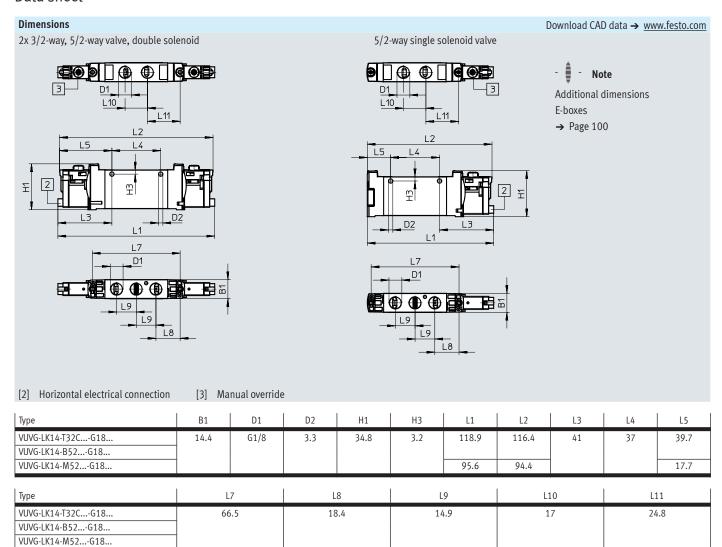
Housing	Wrought aluminium alloy			
Seals	HNBR, NBR			
Note on materials	RoHS-compliant			
	Contains paint-wetting impairment substances			

Pin allocation for E-box			
	Pin		Description
Rectangular plug, connection pattern H			
2 - 1	1	+ or -	Protective circuit without holding current reduction
2 + + j 1	2	+ Or -	
Round plug, M8, 3-pin			
4	1	Not used	Protective circuit without holding current reduction
+++3	3	+ or –	
	4	+ 0r -	

Protective circuit without holding current reduction



The solenoid coils have a protective circuit to arrest sparks and protect against polarity reversal.



★ Core product range

Description		Part no.	Туре					
E-box R8								
2x 3/2-way valve								
Internal pilot air supply	Normally closed, pneumatic spring reset	* 8042566	VUVG-LK14-T32C-AT-G18-1R8L-S					
5/2-way single solenoid valve								
Internal pilot air supply	Pneumatic spring reset	★ 8042567	VUVG-LK14-M52-AT-G18-1R8L-S					
5/2-way double solenoid valve								
Internal pilot air supply		★ 8042568	VUVG-LK14-B52-T-G18-1R8L-S					
E-box H2								
2x 3/2-way valve								
Internal pilot air supply	Normally closed, pneumatic spring reset	★ 8042562	VUVG-LK14-T32C-AT-G18-1H2L-S					
5/2-way single solenoid valve								
Internal pilot air supply	Pneumatic spring reset	★ 8042563	VUVG-LK14-M52-AT-G18-1H2L-S					
5/2-way double solenoid valve		•						
Internal pilot air supply		★ 8042564	VUVG-LK14-B52-T-G18-1H2L-S					
	E-box R8 2x 3/2-way valve Internal pilot air supply 5/2-way single solenoid valve Internal pilot air supply 5/2-way double solenoid valve Internal pilot air supply E-box H2 2x 3/2-way valve Internal pilot air supply 5/2-way single solenoid valve Internal pilot air supply 5/2-way double solenoid valve	E-box R8 2x 3/2-way valve Internal pilot air supply E-box H2 2x 3/2-way valve Internal pilot air supply Internal pilot	E-box R8 2x 3/2-way valve Internal pilot air supply Normally closed, pneumatic spring reset ** 8042566 5/2-way single solenoid valve Internal pilot air supply Pneumatic spring reset ** 8042567 5/2-way double solenoid valve Internal pilot air supply ** 8042568 E-box H2 2x 3/2-way valve Internal pilot air supply Normally closed, pneumatic spring reset ** 8042562 5/2-way single solenoid valve Internal pilot air supply Pneumatic spring reset ** 8042563 5/2-way double solenoid valve					

Function 2x 3/2C, 2x 3/2U, 2x 3/2H 5/2-way, single solenoid 5/2-way, double solenoid valve 5/3C, 5/3U, 5/3E

Circuit symbols → page 13

- **[]** - Size 14 mm

Flow rate 480 ... 780 l/min

- **** - Voltage 5, 12 and 24 V DC



General technical data VUVG-L														
Valve function			T32-A	T32-A		T32-M		M52-A	B52	M52-M	P53			
Normal position			C ¹⁾	U ²⁾	H ⁴⁾	C ¹⁾	U ²⁾	H ⁴⁾	-	-	-	C ¹⁾	U ²⁾	E ³⁾
Stable position			Monos	table			'			Bistable	Monostab	le		
Pneumatic spring reset			Yes			No			Yes	-	No	-		
Mechanical spring reset			No			Yes			No	-	Yes	Yes		
Vacuum operation at port 1			No			Only w	ith exter	nal pilot	air supply					
Size		[mm]	14											
Design			Piston	spool										
Sealing principle			Soft											
Type of actuation	Type of actuation			Electrical										
Type of control			Piloteo	i										
Pilot air supply			Interna	al or exte	rnal									
Exhaust function			Can be	throttle	d									
Manual override									detenting or	detenting				
Type of mounting			Option	ıally via t	hrough-h	noles ⁵⁾ or	on mani	fold rail						
Mounting position			Any											
Nominal width		[mm]	4.6			4.3			5.6	5.6	5.6	5.6		
Standard nominal flow rate		[l/min]	560	600	590	550	500	500	780	780	780	650	560	
Flow rate on manifold rail		[l/min]	560	580		520	480	480	680	700	700	620	560	
Switching time	On/off	[ms]	8/23			15/11			14/22	-	13/40	12/40		
	Changeover	[ms]	-							8	-	20		
Pneumatic connection	1, 2, 3, 4, 5		G1/8											
	12/14		M5											

¹⁾ C=Normally closed/mid-position closed

²⁾ U=Normally open/mid-position pressurised

³⁾ E=Mid-position exhausted

H=2x 3/2-way valve in one housing with 1x normally closed and 1x normally open

⁵⁾ 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 placing spacer discs between them.

General technical data V	UVG-L								
Valve function		T32-A	T32-M	M52-A	B52	M52-M	P53		
Product weight	[g]	89	80	78	89	70	89		
Certification		c UL us - Recognized (OL)	: UL us - Recognized (OL)						
		c CSA us (0L)							
		RCM compliance mark							
CE marking (see declarati	on of con-	To EU EMC Directive							
formity) ¹⁾									
Corrosion resistance class	s CRC ²⁾	2							

For information about the area of use, see the EC declaration of conformity at: www.festo.com/sp → Certificates.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Operating and environmen	tal conditions								
Valve function			T32-A ¹⁾	T32-M ²⁾	M52-A ¹⁾	B52	M52-M ²⁾	P53	
Operating medium			Compressed a	Compressed air to ISO 8573-2010 [7:4:4]					
Operating pressure	Internal	[bar]	1.5 8	3 8	2.5 8	1.5 8	3 8	3 8	
	External	[bar]	1.5 10	-0.9 10			-0.9 8	-0.9 10	
Pilot pressure		[bar]	1.5 8	3.5 8	2.5 8	1.5 8	3 8	38	
Ambient temperature		[°C]	−5 +50, with holding current reduction −5 +60						
Temperature of medium		[°C]	−5 +50, with holding current reduction −5 +60						

¹⁾ Pneumatic spring

2) Mechanical spring

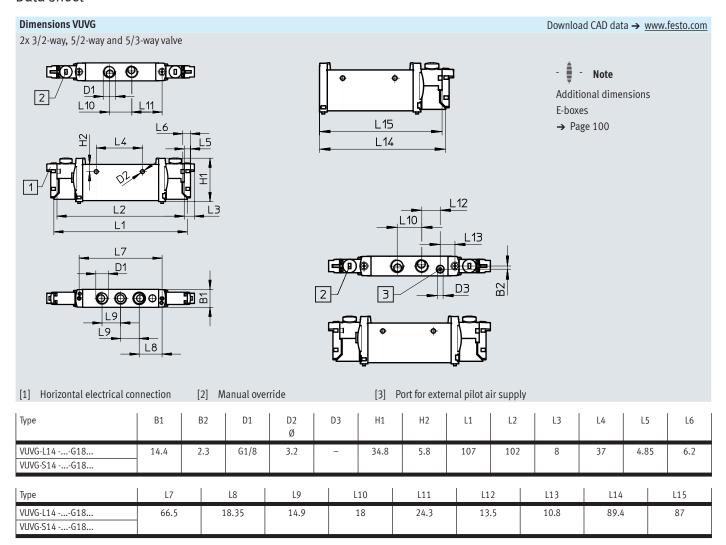
Electrical data

Electrical connection		Via E-box → page 98
Operating voltage	[V DC]	5, 12 and 24 ±10%
Power	[W]	1, reduced to 0.35 with holding current reduction
Duty cycle	[%]	100
Degree of protection to EN 60529		IP40 (with plug socket), IP65 (with M8)

Safety data			
Max. positive test pulse with 0 signal	[µs]	700	
Max. negative test pulse with 1 signal	[µs]	900	
Shock resistance		Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27	
Vibration resistance		Transport application test with severity level 2 to FN 942017-4 and FN 60068-2-6	

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

²⁾ Corrosion resistance class CRC 2 to Festo standard FN 940070



★ Core product range

Ordering data	la cere		ln .	l -							
	Description		Part no.	Туре							
In-line valve G1/8, v	vith E-box R8										
	5/3-way valve										
	Internal pilot air supply	Mid-position closed, mechanical spring reset	★ 574231	VUVG-L14-P53C-T-G18-1R8L							
Ordering data			1								
	Description		Part no.	Туре							
In-line valve G1/8, v											
	2x 3/2-way valve										
	Internal pilot air supply	Normally closed, pneumatic spring reset	566496	VUVG-L14-T32-AT-G18-P3							
		Normally open, pneumatic spring reset	566497	VUVG-L14-32U-AT-G18-1P3							
		1x normally open, 1x normally closed, pneumatic	566498	VUVG-L14-T32H-AT-G18-1P3							
	,	spring reset									
	'	Normally closed, mechanical spring reset	574368	VUVG-L14-T32C-MT-G18-1P3							
		Normally open, mechanical spring reset	574369	VUVG-L14-T32U-MT-G18-1P3							
		1x normally open, 1x normally closed, mechanical spring reset	574370	VUVG-L14-T32H-MT-G18-1P3							
	External pilot air supply	Normally closed, pneumatic spring reset	566505	VUVG-L14-T32C-AZT-G18-1P3							
		Normally open, pneumatic spring reset	566506	VUVG-L14-T32U-AZT-G18-1P3							
		1x normally open, 1x normally closed, pneumatic spring reset	566507	VUVG-L14-T32H-AZT-G18-1P3							
		Normally closed, mechanical spring reset	574372	VUVG-L14-T32C-MZT-G18-1P3							
		Normally open, mechanical spring reset	574373	VUVG-L14-T32U-MZT-G18-1P3							
		Normally closed, mechanical spring reset	574374	VUVG-L14-T32H-MZT-G18-1P3							
	5/2-way single solenoid valve		<u>'</u>								
	Internal pilot air supply	Pneumatic spring reset	566499	VUVG-L14-M52-AT-G18-1P3							
		Mechanical spring reset	574371	VUVG-L14-M52-MT-G18-1P3							
	External pilot air supply	Pneumatic spring return	566508	VUVG-L14-M52-AZT-G18-1P3							
		Mechanical spring reset	574375	VUVG-L14-M52-MZT-G18-1P3							
	5/2-way double solenoid valve		•								
	Internal pilot air supply		566500	VUVG-L14-B52-T-G18-1P3							
	External pilot air supply		566509	VUVG-L14-B52-ZT-G18-1P3							

Ordering data				
	Description		Part no.	Туре
n-line valve G1/8, wit	hout E-box			
	5/3-way valve			
	Internal pilot air supply	Mid-position closed, mechanical spring reset	566501	VUVG-L14-P53C-T-G18-1P3
		Mid-position exhausted, mechanical spring reset	566502	VUVG-L14-P53E-T-G18-1P3
		Mid-position pressurised, mechanical spring reset	566503	VUVG-L14-P53U-T-G18-1P3
	External pilot air supply	Mid-position closed, mechanical spring reset	566510	VUVG-L14-P53C-ZT-G18-1P3
		Mid-position exhausted, mechanical spring reset	566511	VUVG-L14-P53E-ZT-G18-1P3
		Mid-position pressurised, mechanical spring reset	566512	VUVG-L14-P53U-ZT-G18-1P3
ı-line valve G1/8, witl	h E-box R8			
780	2x 3/2-way valve			
H	Internal pilot air supply	Normally closed, pneumatic spring reset	574226	VUVG-L14-T32C-AT-G18-1R8L
		Normally open, pneumatic spring reset	574227	VUVG-L14-T32U-AT-G18-1R8L
		1x normally open, 1x normally closed, pneumatic	574228	VUVG-L14-T32H-AT-G18-1R8L
		spring reset		
		Normally closed, mechanical spring reset	8031504	VUVG-L14-T32C-MT-G18-1R8L
		Normally open, mechanical spring reset	8031505	VUVG-L14-T32U-MT-G18-1R8L
		1x normally open, 1x normally closed, mechanical	8031506	VUVG-L14-T32H-MT-G18-1R8L
		spring reset		
	5/2-way single solenoid valve			
	Internal pilot air supply	Pneumatic spring reset	574229	VUVG-L14-M52-AT-G18-1R8L
		Mechanical spring reset	8031508	VUVG-L14-M52-MT-G18-1R8L
	5/2-way double solenoid valve			
	Internal pilot air supply		574230	VUVG-L14-B52-T-G18-1R8L
	5/3-way valve			
	Internal pilot air supply	Mid-position exhausted, mechanical spring reset	574233	VUVG-L14-P53E-T-G18-1R8L
		Mid-position pressurised, mechanical spring reset	574232	VUVG-L14-P53U-T-G18-1R8L
-line valve G1/8, wit	h E-box H2			
<u> </u>	2x 3/2-way valve			
0	Internal pilot air supply	Normally closed, pneumatic spring reset	577321	VUVG-L14-T32C-AT-G18-1H2L-W1
	5/2-way single solenoid valve			
	Internal pilot air supply	Pneumatic spring reset	576256	VUVG-L14-M52-AT-G18-1H2L-W1
a well	7	Mechanical spring reset	578164	VUVG-L14-M52-MT-G18-1H2L-W1
	5/2-way double solenoid valve			
	Internal pilot air supply		577319	VUVG-L14-B52-T-G18-1H2L-W1
emi in-line valve G1/8	R with F-hox H2			
/2-way single solenoi	·			
a	Internal pilot air supply	Pneumatic spring reset	577325	VUVG-S14-M52-AT-G18-1H2L-W1
0			3.7323	112011111111111111111111111111111111111
The man	9			

Manifold assembly

In-line valves for manifold assembly



Dimensions

10 11

B1 B1 B1 B1 B1 B3 B2

- [1] Ports 1, 3 and 5: G1/4 (at both
- [2] Ports 1, 2, 3, 4 and 5 on the valve: G1/8
- [5] Electrical connection for E-boxes and accessories
- [6] H-rail mounting (two M4x25 screws are required for mounting)

¥

- [7] Cover plate
- [8] Supply plate, ports 1, 3 and 5:

Download CAD data → www.festo.com

[10] Vertical pressure supply plate



Additional dimensions E-boxes

→ Page 100

G1/8 [11] Vertical pressure exhaust plate
[9] Valves/cover plate mounting on
manifold rail: M2.5 thread

Туре	B1	B2	В3	B4	B5	B6	В7	B8	8 B	9 B10	B11	B12	D1	D2
VABM-L1-14S-G14	116.6	56.6	36.5	16.4	72.9	26.5	20	43	.5 53	.1 48.3	3 43.5	4.5	G1/4	4.5
Туре	H1	H2	H3	H4	H5	H6		H <i>7</i>	Н8	L3	L4	L5	L6	L7
VABM-L1-14S-G14	95.3	20	10.6	74.9	54.8	23.	9 :	15.4	6.5	5	17	16	14.5	2
Valve positions	2	3	4	5	6	7		8	9	10	12	14	16	22
L1	50	66	82	98	114	130)	146	162	178	210	242	274	306
L2	40	56	72	88	104	120)	136	152	168	200	232	264	296
VABM weight [g]	118	159	200	241	282	32	3	364	405	446	528	610	692	938

Technical data – Manifold rails									
	Connection	CRC	Material ²⁾	Operating pressure	Max. tightening torque	e for assembly [Nm]			
	1, 3, 5			[bar]	Valve	H-rail	Wall		
	G1/4	21)	Wrought aluminium alloy	-0.9 10	0.65	1.5	3		

¹⁾ Corrosion resistance class CRC 2 to Festo standard FN 940070 Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

²⁾ Note on materials: RoHS-compliant.

Ordering data – Manifold rail	Ordering data – Manifold rail									
	Description		Part no.	Туре						
Manifold rail for in-line valves (manifold assembly)										
	For size G1/8	2 valve positions	★ 566618	VABM-L1-14S-G14-2						
		3 valve positions	★ 566619	VABM-L1-14S-G14-3						
		4 valve positions	★ 566620	VABM-L1-14S-G14-4						
		5 valve positions	566621	VABM-L1-14S-G14-5						
		6 valve positions	★ 566622	VABM-L1-14S-G14-6						
		7 valve positions	566623	VABM-L1-14S-G14-7						
		8 valve positions	★ 566624	VABM-L1-14S-G14-8						
		9 valve positions	566625	VABM-L1-14S-G14-9						
		10 valve positions	★ 566626	VABM-L1-14S-G14-10						
		12 valve positions	566627	VABM-L1-14S-G14-12						
		14 valve positions	566628	VABM-L1-14S-G14-14						
		16 valve positions	566629	VABM-L1-14S-G14-16						

Ordering data – Accessories				
	Description		Part no.	Туре
Cover plate				Data sheets → Internet: vabb
6	For valve position on manifold rail, including	screws and seal	★ 569989	VABB-L1-14
Separator				Data sheets → Internet: vabd
	For creating pressure zones		569996	VABD-10-B
Supply plate				Data sheets → Internet: vabf
	For valve position on manifold rail, including	screws and seal	569993	VABF-L1-14-P3A4-G18
Seals for in-line valves				Data sheets → Internet: vabd
	In-line valves VUVG-LK			_
	For G1/8 in-line valves	Delivery quantity: 10 sets (each with 2 screws and 1 seal)	★ 8043720	VABD-L1-14XK-S-G18-S
	In-line valves VUVG-L			
	For G1/8 in-line valves	Delivery quantity: 10 sets (each with 2 screws and 1 seal)	★ 566675	VABD-L1-14X-S-G18
Vertical pressure supply plate				
	Pneumatic connection 1: G1/8	Terminal code CP	574593	VABF-L1-P3A3-G18
Vertical pressure exhaust plate				
	Pneumatic connection 3, 5: G1/8	Terminal code CR	574595	VABF-L1-P7A13-G18

Function 2x 3/2C, 2x 3/2U, 2x 3/2H 5/2-way, single solenoid 5/2-way, double solenoid valve 5/3C, 5/3U, 5/3E

Circuit symbols → page 13

- [] - Size 18 mm

- 🚺 - Flow rate

1000 ... 1380 l/min

- **** - Voltage 5, 12 and 24 V DC



General technical da	ita VUVG-L													
Valve function			T32-A			T32-M			M52-R	B52	M52-M	P53		
Normal position			C ¹⁾	U ²⁾	H ⁴⁾	C1)	U ²⁾	H ⁴⁾	-	-	-	C ¹⁾	U ²⁾	E ³⁾
Stable position			Monosta	ble						Bistable	Monosta	ble		
Pneumatic spring res	et		Yes			No			Yes ⁵⁾	-	No	No -		
Mechanical spring re	set		No			Yes			Yes ⁵⁾	-	Yes	Yes		
Vacuum operation at	port 1		No			Only wit	h external	pilot air sup	ply					
Size		[mm]	18			,				•	,			
Design			Piston sp	ool										
Sealing principle			Soft											
Type of actuation			Electrical	l										
Type of control			Piloted											
Pilot air supply			Internal/	external										
Exhaust function			Can be th	rottled										
Manual override						ed, non-det		enting or de	etenting	-				
Type of mounting			Optional	nally via through-holes ⁶⁾ or on manifold rail										
Mounting position			Any											
Nominal width		[mm]	5.7						6.9	7.3	6.9	6.5	6.3	
Standard nominal flo	w rate	[l/min]	880	970	950	870	990	920	1300	1380	1300	1200	1000	910
Flow rate on manifold	d rail		780	980	820	780	960	820	1300	1370	1300	1180	1220	1050
Switching time	On/off	[ms]	13/25			15/22			15/31	-	10/45	15/48		
	Changeover	[ms]	-			-			-	11	-	29		
Pneumatic connec-	1, 2, 3, 4, 5		G1/4											
tion	12/14		M5											
Product weight		[g]	164			164			154	164	154 160			
Certification				Recognized	I (OL)									
			c CSA us	(OL)										
			RCM compliance mark											
CE marking (see decl		ity) ⁷⁾	To EU EM	To EU EMC Directive										
Corrosion resistance	class CRC ⁸⁾		2											

- $1) \quad \hbox{C=Normally closed/mid-position closed} \\$
- 2) U=Normally open/mid-position pressurised
- 3) E=Mid-position exhausted
- 4) H=2x 3/2-way valve in one housing with 1x normally closed and 1x normally open
- 5) Combined reset method
- 6) 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 placing spacer discs between them.
- 7) For information about the area of use, see the EC declaration of conformity at: www.festo.com/sp → Certificates.

 If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.
- 8) Corrosion resistance class CRC 2 to Festo standard FN 940070

 Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

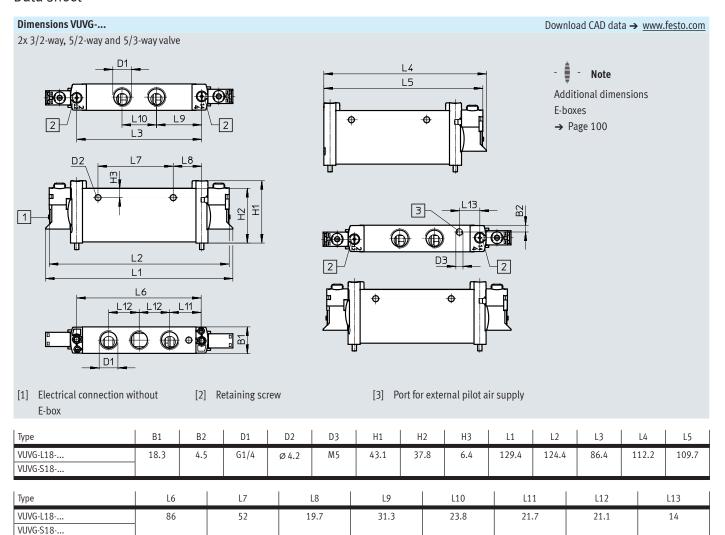
Operating and environment	al conditions									
Valve function			T32-A ¹⁾	T32-M ³⁾	M52-R ²⁾	B52	M52-M ³⁾	P53		
Operating medium	Compressed ai	Compressed air to ISO 8573-2010 [7:4:4]								
Note on the operating/pilot medium			Lubricated ope	Lubricated operation possible (in which case lubricated operation will always be required)						
Operating pressure	Internal	[bar]	1.5 8	3 8	2.5 8	1.5 8	3 8			
	External	[bar]	1.5 10	-0.9 10						
Pilot pressure		[bar]	1.5 8	2 8	2.5 8	1.5 8	3 8			
Ambient temperature	VUVG	[°C]	−5 +50, with holding current reduction −5 +60							
Temperature of medium	VUVG	[°C]	-5 +50, with holding current reduction -5 +60							

- 1) Pneumatic spring
- 2) Mixed, pneumatic/mechanical spring3) Mechanical spring

Electrical data		
Electrical connection		Via E-box → page 98
Operating voltage	[V DC]	5, 12 and 24 ±10%
Power	[W]	1, reduced to 0.35 with holding current reduction
Duty cycle	[%]	100
Degree of protection to EN 60529		IP40 (with plug socket), IP65 (with M8)

Safety data		
Max. positive test pulse with 0 signal	[µs]	700
Max. negative test pulse with 1 signal	[µs]	900
Shock resistance		Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27
Vibration resistance		Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6

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



★ Core product range

Ordering data										
	Description		Part no.	Туре						
In-line valve G1/4, wi	th E-box R8									
rest.	2x 3/2-way valve									
	Internal pilot air supply	Normally closed, pneumatic spring reset	* 8031525	VUVG-L18-T32C-AT-G14-1R8L						
	5/2-way single solenoid valve	5/2-way single solenoid valve								
	Internal pilot air supply	Pneumatic/mechanical spring reset	* 8031531	VUVG-L18-M52-RT-G14-1R8L						
		Mechanical spring reset	* 8031532	VUVG-L18-M52-MT-G14-1R8L						
	5/3-way valve									
~	Internal pilot air supply	Mid-position closed, mechanical spring reset	★ 8031534	VUVG-L18-P53C-T-G14-1R8L						
	·									
Ordering data										
	Description		Part no.	Туре						
In-line valve G1/4, wi	thout E-box		:							
	2x 3/2-way valve									
	Internal pilot air supply	Normally closed, pneumatic spring reset	574422	VUVG-L18-T32C-AT-G14-1P3						
0		Normally open, pneumatic spring reset	574423	VUVG-L18-T32U-AT-G14-1P3						
0120		1x normally open, 1x normally closed, pneumatic spring	574424	VUVG-L18-T32H-AT-G14-1P3						
		reset								
		Normally closed, mechanical spring reset	574425	VUVG-L18-T32C-MT-G14-1P3						
		Normally open, mechanical spring reset	574426	VUVG-L18-T32U-MT-G14-1P3						
		1x normally open, 1x normally closed, mechanical	574427	VUVG-L18-T32H-MT-G14-1P3						
		spring reset								
	External pilot air supply	Normally closed, mechanical spring reset	574434	VUVG-L18-T32C-MZT-G14-1P3						
		Normally open, mechanical spring reset	574435	VUVG-L18-T32U-MZT-G14-1P3						
		1x normally open, 1x normally closed, mechanical	574436	VUVG-L18-T32H-MZT-G14-1P3						
		spring reset								
	5/2-way single solenoid valve									
	Internal pilot air supply	Pneumatic/mechanical spring reset	574428	VUVG-L18-M52-RT-G14-1P3						
		Mechanical spring reset	574429	VUVG-L18-M52-MT-G14-1P3						
	External pilot air supply	Mechanical spring reset	574438	VUVG-L18-M52-MZT-G14-1P3						
		Pneumatic/mechanical spring reset	574437	VUVG-L18-M52-RZT-G14-1P3						
	5/2-way double solenoid valve	· · ·								
	Internal pilot air supply		574430	VUVG-L18-B52-T-G14-1P3						
	External pilot air supply		574439	VUVG-L18-B52-ZT-G14-1P3						

Ordering data									
	Description		Part no.	Туре					
In-line valve G1/4, wit	hout E-box								
	5/3-way valve								
0 0 0	Internal pilot air supply	Mid-position closed, mechanical spring reset	574431	VUVG-L18-P53C-T-G14-1P3					
		Mid-position exhausted, mechanical spring reset	574432	VUVG-L18-P53E-T-G14-1P3					
		Mid-position pressurised, mechanical spring reset	574433	VUVG-L18-P53U-T-G14-1P3					
	External pilot air supply	Mid-position closed, mechanical spring reset	574440	VUVG-L18-P53C-ZT-G14-1P3					
		Mid-position exhausted, mechanical spring reset	574441	VUVG-L18-P53E-ZT-G14-1P3					
		Mid-position pressurised, mechanical spring reset	574442	VUVG-L18-P53U-ZT-G14-1P3					
n-line valve G1/4, wit	h E-box R8								
	2x 3/2-way valve								
	Internal pilot air supply	Normally open, pneumatic spring reset	8031526	VUVG-L18-T32U-AT-G14-1R8L					
		1x normally open, 1x normally closed, pneumatic spring	8031527	VUVG-L18-T32H-AT-G14-1R8L					
		reset							
		Normally closed, mechanical spring reset	8031528	VUVG-L18-T32C-MT-G14-1R8L					
	'	Normally open, mechanical spring reset	8031529	VUVG-L18-T32U-MT-G14-1R8L					
_		1x normally open, 1x normally closed, mechanical	8031530	VUVG-L18-T32H-MT-G14-1R8L					
		spring reset							
	5/2-way double solenoid valve	ouble solenoid valve							
	Internal pilot air supply		8031533	VUVG-L18-B52-T-G14-1R8L					
	5/3-way valve								
	Internal pilot air supply	Mid-position exhausted, mechanical spring reset	8031535	VUVG-L18-P53E-T-G14-1R8L					
		Mid-position pressurised, mechanical spring reset	8031536	VUVG-L18-P53U-T-G14-1R8L					
n-line valve G1/4, wit	h E-box H2								
	5/2-way single solenoid valve								
0	Internal pilot air supply	Pneumatic/mechanical spring reset	578823	VUVG-L18-M52-RT-G14-1H2L-W1					
TA TA	₽								

Manifold assembly

In-line valves for manifold assembly



Download CAD data → www.festo.com

- 🖣 Note
- Additional dimensions E-boxes
- → Page 100

- [1] Ports 1, 3 and 5: G3/8 (at both
- [2] Ports 2 and 4: G1/4
- [5] Electrical connection for E-boxes and accessories
- [6] H-rail mounting (two M4x35 screws are required for mounting)
- [7] Cover plate
- [8] Supply plate, ports 1, 3 and 5: G1/4
- [9] Valves/cover plate mounting on manifold rail: M3 thread

Туре		B1	B2	E	33	B4	B5	В6	B7	E	8	В9	D1
VABM-L1-18S-G38		129.4	124.4	4 9	5.6	76.8	47.8	18.8	51.7	34	4.8	26	4.5
Туре		H1	H2	+	13	H4	H5	Н6	L3	[.4	L5	L6
VABM-L1-18S-G38		72.1	29	1:	1.5	28.4	27.6	6.5	6	20).5	19	1
Valve positions		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
VABM weight	[g]	118	159	200	241	282	323	364	405	446	528	610	692

Technical data – Manifold rails								
	Connection	CRC	Material ²⁾	Operating pressure	Max. tightening torque	Max. tightening torque for assembly [Nm]		
	1, 3, 5			[bar]	Valve	H-rail	Wall	
	G3/8	21)	Wrought aluminium alloy	-0.9 10	1.18	1.5	3	

¹⁾ Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

²⁾ Note on materials: RoHS-compliant.

Ordering data – Manifold rail									
	Description		Part no.	Туре					
Manifold rail for in-line valve									
	For size G1/4	2 valve positions	★ 574455	VABM-L1-18S-G38-2					
		3 valve positions	★ 574456	VABM-L1-18S-G38-3					
		4 valve positions	★ 574457	VABM-L1-18S-G38-4					
		5 valve positions	574458	VABM-L1-18S-G38-5					
		6 valve positions	★ 574459	VABM-L1-18S-G38-6					
		7 valve positions	574460	VABM-L1-18S-G38-7					
		8 valve positions	★ 574461	VABM-L1-18S-G38-8					
		9 valve positions	574462	VABM-L1-18S-G38-9					
		10 valve positions	★ 574463	VABM-L1-18S-G38-10					
		12 valve positions	574464	VABM-L1-18S-G38-12					
		14 valve positions	574465	VABM-L1-18S-G38-14					
		16 valve positions	574466	VABM-L1-18S-G38-16					

Ordering data – Accessories				
	Description		Part no.	Туре
Cover plate				Data sheets → Internet: vabb
	For valve position on manifold rail, includ	ing screws and seal	★ 574482	VABB-L1-18
Separator				Data sheets → Internet: vabd
	For creating pressure zones		574483	VABD-14-B
Supply plate				Data sheets → Internet: vabf
	For valve position on manifold rail, includ	574481	VABF-L1-18-P3A4-G14	
Seals for in-line valves				Data sheets → Internet: vabd
	For G1/4 in-line valves	Delivery quantity: 10 sets (each with 2 screws and 1 seal)	★ 574479	VABD-L1-18X-S-G14



Note

Connect supply plate at port 1 with compressed air. Reverse operation (pressure at port 3, 5) is not permissible.

Function 5/2-way, single solenoid 5/2-way, double solenoid valve 5/3C, 5/3U, 5/3E

Circuit symbols → page 13

- **[]** - Size 10 mm

Flow rate 90 ... 100 l/min

- Voltage 5, 12 and 24 V DC



General technical data VUVG-B									
Valve function			M52-R	B52	M52-M	P53			
Normal position			_	-	_	C ¹⁾	U ²⁾	E ³⁾	
Stable position			Monostable	Bistable	Monostable	Monostable			
Pneumatic spring reset			Yes ⁴⁾	-	No	_			
Mechanical spring reset			Yes ⁴⁾	-	Yes	Yes			
Vacuum operation at port 1			Only with extern	al pilot air supply					
Design			Piston spool						
Sealing principle			Soft						
Type of actuation			Electrical						
Type of control			Piloted						
Pilot air supply			External, interna	al; can be selected	l via sub-base				
Exhaust function			Can be throttled	I					
Manual override	Choice of non-detenting, covered, non-detenting/detenting or detenting								
Type of mounting			On manifold rail						
Mounting position			Any						
Nominal width		[mm]	2		1.4	2			
Standard nominal flow rate		[l/min]	100		80	90			
Flow rate on manifold rail M3		[l/min]	100		80	90			
Switching time on/off		[ms]	7/15	-	7/21	8/25			
Switching time changeover		[ms]	_	5	-	14			
Size		[mm]	10						
Connection	1, 3, 5		M7 in manifold	rail					
	2, 4		M5 in manifold						
	12/14, 82/84		M5 in manifold	rail					
Product weight		[g]	38	49	37	49			
Certification			c UL us - Recogn	ized (OL)					
			c CSA us (OL)						
			RCM compliance mark						
CE marking (see declaration of co	nformity) ⁵⁾		To EU EMC Directive						
Corrosion resistance class CRC ⁶⁾			2						

¹⁾ C=Normally closed/mid-position closed

 $^{{\}it 2)} \quad {\it U=Normally\ open/mid-position\ pressurised}$

³⁾ E=Mid-position exhausted

⁴⁾ Combined reset method

⁵⁾ For information about the area of use, see the EC declaration of conformity at: www.festo.com/sp \rightarrow Certificates.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

⁶⁾ Corrosion resistance class CRC 2 to Festo standard FN 940070

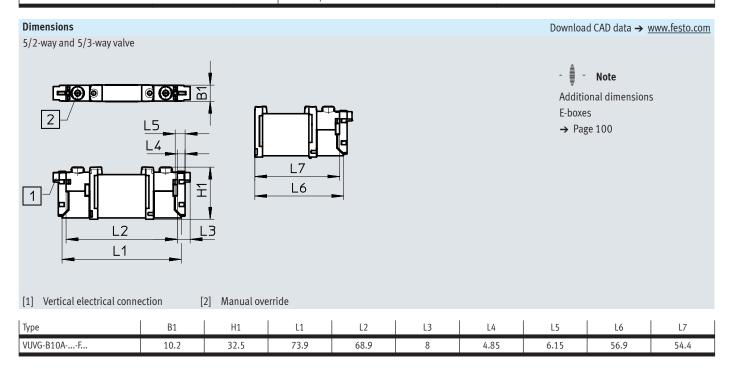
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Operating and environmental conditions								
Valve function			M52-R ¹⁾	B52	M52-M ²⁾	P53		
Operating medium			Compressed air to ISO 8573	Compressed air to ISO 8573-2010 [7:4:4]				
Operating pressure	Internal	[bar]	2.5 8	1.5 8	38			
	External	[bar]	-0.9 10		-0.98	-0.9 10		
Pilot pressure		[bar]	2.5 8	1.5 8	2 8	3 8		
Ambient temperature		[°C]	−5 +50, with holding current reduction −5 +60					
Temperature of medium		[°C]	-5 +50, with holding curr	-5 +50, with holding current reduction -5 +60				

- 1) Mixed, pneumatic/mechanical spring
- 2) Mechanical spring

Electrical data		
Electrical connection		Via E-box → page 98
Operating voltage	[V DC]	5, 12 and 24 ±10%
Power	[W]	1, reduced to 0.35 with holding current reduction
Duty cycle	[%]	100
Degree of protection to EN 60529		IP40 (with plug socket), IP65 (with M8)

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



. Туре								
Sub-base valve M3, without E-box								
·								
448 VUVG-B10A-M52-RZT-F	-1P3							
347 VUVG-B10A-M52-MZT-F	F-1P3							
5/2-way double solenoid valve								
VUVG-B10A-B52-ZT-F-1	P3							
450 VUVG-B10A-P53C-ZT-F-	1P3							
451 VUVG-B10A-P53E-ZT-F-	1P3							
452 VUVG-B10A-P53U-ZT-F-	1P3							
3	VUVG-B10A-M52-MZT- 449 VUVG-B10A-B52-ZT-F-1 450 VUVG-B10A-P53C-ZT-F- 451 VUVG-B10A-P53E-ZT-F-							

Manifold assembly

Sub-base valve for manifold assembly Connection M5



Dimensions Download CAD data → www.festo.com - Note <u>L3</u> Additional dimensions E-boxes → Page 100 B11 В2 5 Ξ ⊕₄⊕₄⊕₄⊕ 1 B5 В4 ВЗ [1] Ports 1, 3 and 5: M7 (at both [5] Electrical connection for E-boxes [6] H-rail mounting (two M4x25 [7] Cover plate screws are required for mount-Supply plate, ports 1, 3 and 5: ends) and accessories Ports 2, 4: M5 [2] ing) Ports 12, 14: M5 [9] Valves/cover plate mounting on manifold rail: M2 thread Ports 82, 84: M5 Туре В1 B2 В3 В4 В5 В6 В7 В8 В9 B10 B11 B12 VABM-L1-10AW-M7 84.9 29.8 62.4 39.1 35 17.8 8.2 24 7.2 43.5 45.8 39.2 D1 D2 D3 D4 D5 Н1 Н2 Н3 Н4 Н5 Н6 Туре VABM-L1-10AW-M7 Ø4 М7 M5 M5 Ø 4.5 53.1 12 9.1 6.3 11.6 3.6

VABM-L1-10AW-M7

Н7

13.1

Н8

4.2

16.2

H10

6.8

1.9

L5

12.5

7.5

L6

10.5

10.2

10.5

L11

14

15.2

Valve positions	2	3	4	5	6	7	8	9	10	12	14	16
L1	43.5	54	64.5	75	85.5	97	107.5	117	127.5	148.5	169.5	190.5
L2	28.5	39	49.5	60	70.5	81	91.5	102	112.5	133.5	154.5	175.5
L4	36.5	47	57.5	68	78.5	89	99.5	110	120.5	141.5	162.5	183.5
VABM weight [g]	60	78	96	114	132	150	168	186	204	240	276	312

Technical data – Manifold rails ¹⁾									
	Connection			CRC Material ³⁾	Operating pres-	Max. tightening torque for assembly [Nm]			
	2, 4	1, 3, 5	12/14,			sure [bar]	Valve	H-rail	Wall
	2,4	1, 5, 5	82/84			[Dai]	valve	H-Idil	wall
	M5	M7	M5	2 ²⁾	Wrought alumini- um alloy	-0.9 10	0.45	1.5	1.5

- 1) Blanking plugs are included with the manifold rail.
- 2) Corrosion resistance class CRC 2 to Festo standard FN 940070

 Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.
- 3) Note on materials: RoHS-compliant.

Ordering data – Manifold rails							
	Description		Part no.	Туре			
Manifold rail for sub-base valve M3							
	For size B10A (M3)	2 valve positions	566546	VABM-L1-10AW-M7-2			
		3 valve positions	566547	VABM-L1-10AW-M7-3			
		4 valve positions	566548	VABM-L1-10AW-M7-4			
		5 valve positions	566549	VABM-L1-10AW-M7-5			
		6 valve positions	566550	VABM-L1-10AW-M7-6			
		7 valve positions	566551	VABM-L1-10AW-M7-7			
		8 valve positions	566552	VABM-L1-10AW-M7-8			
		9 valve positions	566553	VABM-L1-10AW-M7-9			
		10 valve positions	566554	VABM-L1-10AW-M7-10			
		12 valve positions	566555	VABM-L1-10AW-M7-12			
		14 valve positions	566556	VABM-L1-10AW-M7-14			
		16 valve positions	566557	VABM-L1-10AW-M7-16			

Ordering data – Accessories				
	Description		Part no.	Туре
Cover plate				Data sheets → Internet: vabb
	For valve position on manifold rail, includi	569986	VABB-L1-10A	
Separator				Data sheets → Internet: vabd
	For creating pressure zones	570872	VABD-4.2-B	
Supply plate				Data sheets → Internet: vabf
	For valve position on manifold rail, includi	ng screws and seal	569990	VABF-L1-10A-P3A4-M5
Seals				Data sheets → Internet: vabd
	For sub-base valve M3	Delivery quantity: 10 sets (each with 2 screws and 1 seal)	566671	VABD-L1-10AB-S-M3

Function 2x 3/2C

5/2-way, single solenoid

5/2-way, double solenoid valve

Circuit symbols → page 13

- **[]** - Size 10 mm

Flow rate 160 l/min

Voltage 24 V DC



General technical data VUVG-BK						
Valve function		T32-A	M52-A	B52		
Normal position		C ¹⁾	-	-		
Stable position		Monostable		Bistable		
Pneumatic spring reset		Yes	Yes	-		
Design		Piston spool				
Sealing principle		Soft				
Type of actuation		Electrical				
Type of control		Piloted				
Pilot air supply		Internal				
Exhaust function		Can be throttled				
Manual override		Non-detenting, detenting				
Type of mounting		On manifold rail				
Mounting position		Any	_			
Standard nominal flow rate	[l/min]	160	160	160		
Switching time on/off	[ms]	12/14	14/17	-		
Switching time changeover	[ms]	_		7		
Size	[mm]	10				
Connection 2, 4		M5/M7 in manifold rail				
Product weight	[g]	55	45	57		
Corrosion resistance class CRC ²⁾		2				

¹⁾ C=Normally closed

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Safety data						
Max. positive test pulse with 0 signal [μs]		1600				
Max. negative test pulse with 1 signal [μs]		3000				
Shock resistance		Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27				
Vibration resistance		Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6				

²⁾ Corrosion resistance class CRC 2 to Festo standard FN 940070

Operating and environmental conditions							
Valve function		T32-A ¹⁾	M52-A ¹⁾	B52			
Operating medium	•	Compressed air to ISO 8573-2010 [7:4:4]					
Note on the operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)					
Operating pressure	[bar]	1.5 7	2.5 7	1.5 7			
Ambient temperature	[°C]	-5 +50					
Temperature of medium	[°C]	-5 +50					

Pneumatic spring

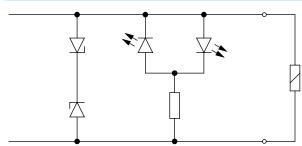
Electrical data

Electrical connection		Via E-box → page 98
Operating voltage	[V DC]	24 ±10%
Nominal operating voltage	[V DC]	22
Power	[W]	0.7
Duty cycle	[%]	100
Degree of protection to EN 60529		IP40 (with plug socket), IP65 (with M8)
Signal status display		LED
Maximum switching frequency	[Hz]	2

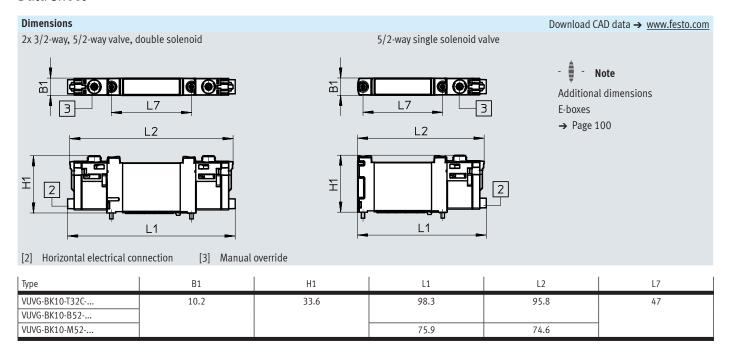
Information on materials	
Housing	Wrought aluminium alloy
Seals	HNBR, NBR
Note on materials	RoHS-compliant
	Contains paint-wetting impairment substances

Pin allocation for E-box			
	Pin		Description
Rectangular plug, connection pattern H			
2 - 1	1	+ Or -	Protective circuit without holding current reduction
2-++1	2	+ OT -	
Round plug, M8, 3-pin			
4	1	Not used	Protective circuit without holding current reduction
(+ +)3	3	+ or –	
	4	+ or –	

Protective circuit without holding current reduction



The solenoid coils have a protective circuit to arrest sparks and protect against polarity reversal.



Ordering data

★ Core product range

Ordering data						
	Description		Part no.	Туре		
Sub-base valve M5/M7,	with E-box R8					
	2x 3/2-way valve					
15	Internal pilot air supply	Normally closed, pneumatic spring reset	★ 8042558	VUVG-BK10-T32C-AT-F-1R8L-S		
	5/2-way single solenoid valve					
	Internal pilot air supply	Pneumatic spring reset	★ 8042559	VUVG-BK10-M52-AT-F-1R8L-S		
	5/2-way double solenoid valve					
	Internal pilot air supply		★ 8042560 VUVG-BK10-B52-T-F-1R8L-S			
Sub-base valve M5/M7,	with E-box H2					
Sub-base valve Ni 5/Ni 7,	2x 3/2-way valve					
	Internal pilot air supply	Normally closed, pneumatic spring reset	★ 8042554	VUVG-BK10-T32C-AT-F-1H2L-S		
	5/2-way single solenoid valve	Mormany crosed, priedinane spring reser	X 0042334	V0V0-BR10-1920-Al-1-11120-3		
	Internal pilot air supply	Draumatic caring reset	→ 9042FFF	VUVG-BK10-M52-AT-F-1H2L-S		
	1 11 /	Pneumatic spring reset	★ 8042555	VUVG-DK1U-M52-AI-F-1H2L-5		
	5/2-way double solenoid valve					
	Internal pilot air supply		★ 8042556	VUVG-BK10-B52-T-F-1H2L-S		

Function 2x 3/2C, 2x 3/2U, 2x 3/2H 5/2-way, single solenoid 5/2-way, double solenoid valve 5/3C, 5/3U, 5/3E

Circuit symbols → page 13

- **[]** - Size 10 mm

- N - Flow rate 120 ... 270 l/min

- **** - Voltage

5, 12 and 24 V DC



General technical data VUVG-B														
Valve function			T32-A		T3	32-M			M52-R	B52	M52-M	P53		
Normal position			C ¹⁾	U ²⁾ H ⁴	() C	<u></u>	U ²⁾	H ⁴⁾	-	-	-	C1)	U ²⁾	E ³⁾
Stable position			Monos	stable						Bistable	Monostable	Mono	stable	
Pneumatic spring reset			Yes		N	No			Yes ⁵⁾	-	No	-		
Mechanical spring reset			No		Ye	′es			Yes ⁵⁾	-	Yes	Yes		
Vacuum operation at port 1		,	No		0	Only wi	th exter	nal pilot	air supply					
Design			Piston	spool										
Sealing principle			Soft											
Type of actuation			Electri	cal										
Type of control			Pilote	d										
Pilot air supply			Extern	al, internal; c	an be s	selecte	d via su	b-base						
Exhaust function			Can be	e throttled										
Manual override			Choice	of non-deter	nting, co	overed	l, non-de	etenting/	detenting o	r detenting				
Type of mounting			On manifold rail											
Mounting position			Any											
Nominal width		[mm]	2.7		1.	1.8	1.7		4		2.3	3.5		
Standard nominal flow rate		[l/min]	170		1	150	140	140	330		285	300		
Flow rate on manifold rail M5		[l/min]	150		1	130	120	120	210		180	200		
Flow rate on manifold rail M7		[l/min]	160		1	140	130	130	270		230	250		
Switching time on/off		[ms]	6/16		8,	3/11			7/19	-	8/24	11/30)	
Switching time changeover		[ms]	-							7		14		
Size		[mm]	10											
Connection	1, 3, 5		G1/8 in manifold rail											
	2, 4			M7 in manifo										
	12/14, 82/84			manifold rail										
Product weight		[g]	55			54			45	55	44	55		
Certification				s - Recognized	d (OL)									
				us (OL)										
			RCM compliance mark											
CE marking (see declaration of co	nformity) ⁶⁾		To EU	EMC Directive)									
Corrosion resistance class CRC ⁷⁾			2											

- 1) C=Normally closed/mid-position closed
- 2) U=Normally open/mid-position pressurised
- 3) E=Mid-position exhausted
- 4) H=2x 3/2-way valve in one housing with 1x normally closed and 1x normally open
- 5) Combined reset method
- 6) For information about the area of use, see the EC declaration of conformity at: www.festo.com/sp → Certificates.

 If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.
- 7) Corrosion resistance class CRC 2 to Festo standard FN 940070 $\,$

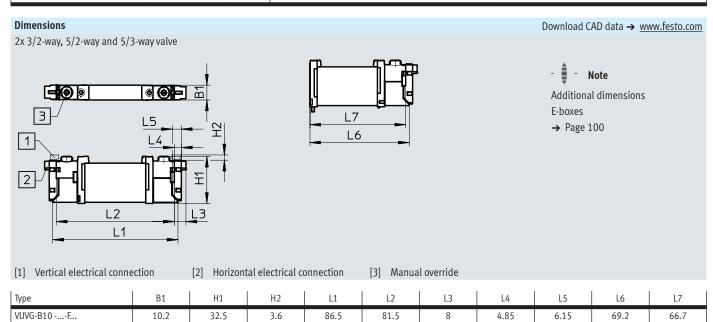
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Operating and environmen	tal conditions							
Valve function			T32-A ¹⁾	T32-M ³⁾	M52-R ²⁾	B52	M52-M ³⁾	P53
Operating medium			Compressed ai	r to ISO 8573-2010	[7:4:4]		-	
Operating pressure	Internal	[bar]	1.5 8	3 8	3 8 2.5 8 1.5 8		3 8	
	External	[bar]	1.5 10	-0.9 10	-0.9 8	-0.9 10		
Pilot pressure		[bar]	1.5 8	2 8	2.5 8	1.5 8	3 8	
Ambient temperature		[°C]	-5 +50, with	n holding current re	duction -5 +60			
Temperature of medium		[°C]	-5 +50, with	n holding current re	duction -5 +60			

- 1) Pneumatic spring
- 2) Mixed, pneumatic/mechanical spring
- 3) Mechanical spring

Electrical data								
Electrical connection		Via E-box → page 98						
Operating voltage	[V DC]	5, 12 and 24 ±10%						
Power	[W]	1, reduced to 0.35 with holding current reduction						
Duty cycle	[%]	100						
Degree of protection to EN 60529		IP40 (with plug socket), IP65 (with M8)						

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



Description		Part no.	Туре									
, without E-box												
2x 3/2-way valve												
External pilot air supply	Normally closed, pneumatic spring reset	566487	VUVG-B10-T32C-AZT-F-1P3									
	Normally open, pneumatic spring reset	566488	VUVG-B10-T32U-AZT-F-1P3									
	1x normally open, 1x normally closed, pneumatic spring	566489	VUVG-B10-T32H-AZT-F-1P3									
	reset											
	Normally closed, mechanical spring reset	574364	VUVG-B10-T32C-MZT-F-1P3									
	Normally open, mechanical spring reset	574365	VUVG-B10-T32U-MZT-F-1P3									
	1x normally open, 1x normally closed, mechanical spring	574366	VUVG-B10-T32H-MZT-F-1P3									
	reset											
5/2-way single solenoid valve	5/2-way single solenoid valve											
External pilot air supply	Pneumatic/mechanical spring reset	566490	VUVG-B10-M52-RZT-F-1P3									
	Mechanical spring reset	574367	VUVG-B10-M52-MZT-F-1P3									
5/2-way double solenoid valve												
External pilot air supply		566491	VUVG-B10-B52-ZT-F-1P3									
5/3-way valve												
External pilot air supply	Mid-position closed, mechanical spring reset	566492	VUVG-B10-P53C-ZT-F-1P3									
	Mid-position exhausted, mechanical spring reset	566493	VUVG-B10-P53E-ZT-F-1P3									
	Mid-position pressurised, mechanical spring reset	566494	VUVG-B10-P53U-ZT-F-1P3									
	without E-box 2x 3/2-way valve External pilot air supply 5/2-way single solenoid valve External pilot air supply 5/2-way double solenoid valve External pilot air supply 5/3-way valve	Normally closed, pneumatic spring reset	Normally closed, pneumatic spring reset 566487									

Ordering data	1			I										
	Description		Part no.	Туре										
ub-base valve M5/M7	7, with E-box R8													
a	2x 3/2-way valve													
	External pilot air supply	Normally closed, pneumatic spring reset	574234	VUVG-B10-T32C-AZT-F-1R8L										
		Normally open, pneumatic spring reset	574235	VUVG-B10-T32U-AZT-F-1R8L										
		1x normally open, 1x normally closed, pneumatic spring	574236	VUVG-B10-T32H-AZT-F-1R8L										
		reset												
	9	Normally closed, mechanical spring reset	8031492	VUVG-B10-T32C-MZT-F-1R8L										
_		Normally open, mechanical spring reset	8031493	VUVG-B10-T32U-MZT-F-1R8L										
		1x normally open, 1x normally closed, mechanical spring	8031494	VUVG-B10-T32H-MZT-F-1R8L										
		reset												
	5/2-way single solenoid valve	5/2-way single solenoid valve												
	External pilot air supply	Pneumatic/mechanical spring reset	574237	VUVG-B10-M52-RZT-F-1R8L										
		Mechanical spring reset	578157	VUVG-B10-M52-MZT-F-1R8L										
	5/2-way double solenoid valve	•												
	External pilot air supply		574238	VUVG-B10-B52-ZT-F-1R8L										
	5/3-way valve													
	External pilot air supply	Mid-position closed, mechanical spring reset	574239	VUVG-B10-P53C-ZT-F-1R8L										
		Mid-position exhausted, mechanical spring reset	574241	VUVG-B10-P53E-ZT-F-1R8L										
		Mid-position pressurised, mechanical spring reset	574240	VUVG-B10-P53U-ZT-F-1R8L										

Sub-base valve for manifold assembly M5 or M7 connection



Dimensions Download CAD data → www.festo.com - Note Additional dimensions 9 E-boxes → Page 100 B8 B9 Ф Φ B14 8 L8 L5 В2 5 Ξ $\bigoplus_2 \bigoplus_2 \bigoplus_2 \bigoplus_2$ $\bigoplus_{i \in \mathcal{A}_i} \bigoplus_{i \in \mathcal{A}_i} \bigoplus_{i$ В7 3 6 B5 В4 ВЗ [1] Ports 1, 3 and 5: G1/8 (at both [9] Valves/cover plate mounting on [5] Electrical connection for E-boxes [7] Cover plate manifold rail: M2 thread ends) and accessories Supply plate, [2] Ports 2, 4: [6] H-rail mounting (two M4x30 ports 1, 3 and 5: M7 or M5 screws are required for mounteither M5 or M7 [3] Ports 12, 14: M5 Туре В1 В2 В3 В4 В5 В6 В7 В8 В9 B10 B11 B12 VABM-L1 10-...-G18 97.5 74.8 52.9 46.5 40.9 24.9 8.9 61.7 57.7 16.9 16 42.2 B13 B14 D1 D2 D3 D4 D5 Н1 Н2 Н3 Н4 Туре VABM-L1 10-...-G18 39.3 14.1 G1/8 M5/M7 М5 4.5 Ø6 56.4 15.7 12.2 7.9 H10

5.9

18

17.6

VABM-L1 10-...-G18

23.9

10.8

6.8

10.5

10.3

16

11.9

Valve positions		2	3	4	5	6	7	8	9	10	12	14	16	22
L1		40.5	51	61.5	72	82.5	93	103.5	114	124.5	145.5	166.5	187.5	250.5
L2		30.5	41	51.5	62	72.5	83	93.5	104	114.5	135.5	156.5	177.5	240.5
VABM weight	[g]	107	135	163	191	219	247	275	303	331	387	415	471	499

Technical data – Manifold rails ¹⁾											
	Connection					Operating pres- sure	Max. tightening torque for assembly [Nm]				
	2, 4	1, 3, 5	12/14 , 82/84			[bar]	Valve	H-rail	Wall		
	M5 or M7	G1/8	M5	2 ²⁾	Wrought alumini- um alloy	-0.9 10	0.45	1.5	3		

- $1) \quad \text{Blanking plugs are included with the manifold rail.} \\$
- 2) Corrosion resistance class CRC 2 to Festo standard FN 940070 Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.
- 3) Note on materials: RoHS-compliant.

Ordering data – Manifold rails											
	Description		Part no.	Туре							
Manifold rail for sub-base valve M5/I	Manifold rail for sub-base valve M5/M7										
	For size B10 (M5)	2 valve positions	★ 566582	VABM-L1-10W-G18-2							
		3 valve positions	★ 566583	VABM-L1-10W-G18-3							
		4 valve positions	★ 566584	VABM-L1-10W-G18-4							
		5 valve positions	566585	VABM-L1-10W-G18-5							
		6 valve positions	★ 566586	VABM-L1-10W-G18-6							
		7 valve positions	566587	VABM-L1-10W-G18-7							
		8 valve positions	★ 566588	VABM-L1-10W-G18-8							
		9 valve positions	566589	VABM-L1-10W-G18-9							
		10 valve positions	★ 566590	VABM-L1-10W-G18-10							
		12 valve positions	566591	VABM-L1-10W-G18-12							
		14 valve positions	566592	VABM-L1-10W-G18-14							
		16 valve positions	566593	VABM-L1-10W-G18-16							

Ordering data – Accessories				
	Description		Part no.	Туре
Manifold rail for sub-base valve M5/	M7			
()	For size B10 (M7)	2 valve positions	★ 566606	VABM-L1-10HW-G18-2
		3 valve positions	★ 566607	VABM-L1-10HW-G18-3
		4 valve positions	★ 566608	VABM-L1-10HW-G18-4
		5 valve positions	566609	VABM-L1-10HW-G18-5
		6 valve positions	★ 566610	VABM-L1-10HW-G18-6
		7 valve positions	566611	VABM-L1-10HW-G18-7
		8 valve positions	★ 566612	VABM-L1-10HW-G18-8
		9 valve positions	566613	VABM-L1-10HW-G18-9
		10 valve positions	★ 566614	VABM-L1-10HW-G18-10
		12 valve positions	566615	VABM-L1-10HW-G18-12
		14 valve positions	566616	VABM-L1-10HW-G18-14
		16 valve positions	566617	VABM-L1-10HW-G18-16
Cover plate				
Cover place	For valve position on manifold rail, in	- du din - anno and and	★ 566495	Data sheets → Internet: vabb
Separator				Data sheets → Internet: vabd
	For creating pressure zones		569994	VABD-6-B
Supply plate				Data sheets → Internet: vabf
	For valve position (sub-base valves M	M5) on manifold rail, including screws and seal	569991	VABF-L1-10-P3A4-M5
	For valve position (sub-base valves M	M7) on manifold rail, including screws and seal	569992	VABF-L1-10-P3A4-M7
Seals				Data sheets → Internet: vabd
0000	For sub-base valves M5/M7	Delivery quantity: 10 sets (each with 2 screws and 1 seal)	566674	VABD-L1-10B-S-M7

Function 2x 3/2C

5/2-way, single solenoid

5/2-way, double solenoid valve

Circuit symbols → page 13

- **[]** - Size 14 mm

Flow rate 350 ... 380 l/min

Voltage 24 V DC



General technical data VUVG-BK							
Valve function		T32-A	M52-A	B52			
Normal position		C ¹⁾	-	-			
Stable position		Monostable		Bistable			
Pneumatic spring reset		Yes	Yes	-			
Design		Piston spool					
Sealing principle		Soft					
Type of actuation		Electrical					
Type of control		Piloted					
Pilot air supply		Internal					
Exhaust function		Can be throttled					
Manual override		Non-detenting, detenting					
Type of mounting		On manifold rail					
Mounting position		Any					
Standard nominal flow rate	[l/min]	350	380	380			
Switching time on/off	[ms]	13/20	14/24	_			
Switching time changeover	[ms]	_		8			
Size	[mm]	14					
Connection 2, 4		G1/8 in manifold rail					
Product weight	[g]	75	65	85			
Corrosion resistance class CRC ²⁾		2					

¹⁾ C=Normally closed

Corrosion resistance class CRC 2 to Festo standard FN 940070 Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Safety data		
Max. positive test pulse with 0 signal	[µs]	1600
Max. negative test pulse with 1 signal	[µs]	3000
Shock resistance	·	Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27
Vibration resistance		Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6

Operating and environmental conditions									
Valve function		T32-A ¹⁾	M52-A ¹⁾	B52					
Operating medium		Compressed air to ISO 8573-2010 [7:4:4]							
Note on the operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)							
Operating pressure	[bar]	1.5 7	2.5 7	1.5 7					
Ambient temperature	[°C]	-5 +50							
Temperature of medium	[°C]	-5 +50							

Pneumatic spring

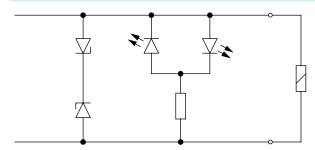
Electrical data

Liectificat data		
Electrical connection		Via E-box → page 98
Operating voltage	[V DC]	24 ±10%
Nominal operating voltage	[V DC]	22
Power	[W]	0.7
Duty cycle	[%]	100
Degree of protection to EN 60529		IP40 (with plug socket), IP65 (with M8)
Signal status display		LED
Maximum switching frequency	[Hz]	2

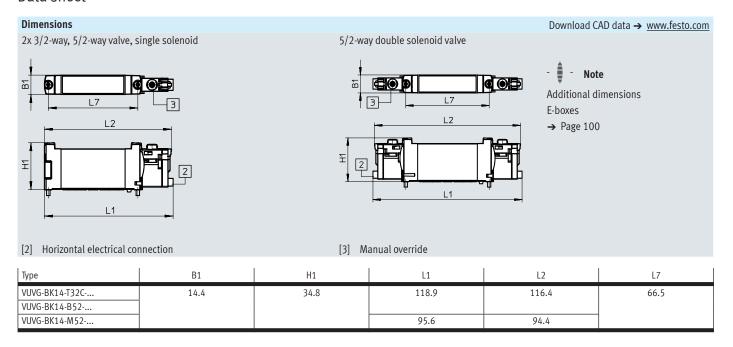
Information on materials	
Housing	Wrought aluminium alloy
Seals	HNBR, NBR
Note on materials	RoHS-compliant
	Contains paint-wetting impairment substances

Pin allocation for E-box			
	Pin		Description
Rectangular plug, connection pattern H			
2 - 1 1	1	+ or –	Protective circuit without holding current reduction
2-1-+-1-1	2	+ or -	
Round plug, M8, 3-pin			
4	1	Not used	Protective circuit without holding current reduction
+ + 3	3	+ 0	
	4	+ 0r -	

Protective circuit without holding current reduction



The solenoid coils have a protective circuit to arrest sparks and protect against polarity reversal.



Ordering data

★ Core product range

Ordering data						
	Description		Part no.	Туре		
Sub-base valve G1/8, w	ith E-box R8					
	2x 3/2-way valve					
15	Internal pilot air supply	Normally closed, pneumatic spring reset	* 8042574	VUVG-BK14-T32C-AT-F-1R8L-S		
	5/2-way single solenoid valve					
	Internal pilot air supply	Pneumatic spring reset	★ 8042575	VUVG-BK14-M52-AT-F-1R8L-S		
	5/2-way double solenoid valve					
	Internal pilot air supply		★ 8042576	VUVG-BK14-B52-T-F-1R8L-S		
Sub-base valve G1/8, w	ith F-hov H2					
Sub-base valve 01/0, w	2x 3/2-way valve					
	Internal pilot air supply	Normally closed, pneumatic spring reset	★ 8042570	VUVG-BK14-T32C-AT-F-1H2L-S		
	5/2-way single solenoid valve					
	Internal pilot air supply	Pneumatic spring reset	* 8042571	VUVG-BK14-M52-AT-F-1H2L-S		
	5/2-way double solenoid valve					
	Internal pilot air supply		★ 8042572	VUVG-BK14-B52-T-F-1H2L-S		

Function 2x 3/2C, 2x 3/2U, 2x 3/2H 5/2-way, single solenoid 5/2-way, double solenoid valve 5/3C, 5/3U, 5/3E

Circuit symbols → page 13

- **[]** - Size 14 mm

- N - Flow rate 410 ... 700 l/min

- 🖣 - Voltage

5, 12 and 24 V DC



General technical data VUVG-B															
Valve function			T32-A			T32-M			M52-A	B52	M52-M	P53			
Normal position			C1)	U ²⁾	H ⁴⁾	C ¹⁾	U ²⁾	H ⁴⁾	-	-		C1)	U ²⁾	E3)	
Stable position			Monos	stable						Bistable	Monostable	Monos	table		
Pneumatic spring reset			Yes			No			Yes	-	No	-			
Mechanical spring reset			No			Yes			No	-	Yes	Yes			
Vacuum operation at port 1			No			Only w	ith exteri	nal pilot	air supply						
Size		[mm]	14												
Design			Piston	spool											
Sealing principle			Soft												
Type of actuation			Electri	cal											
Type of control			Piloted	t											
Pilot air supply			Externa	al, interna	al; can b	e select	ed via su	ıb-base							
Exhaust function				Can be throttled											
Manual override			Choice of non-detenting, covered, non-detenting/detenting or detenting												
Type of mounting			On ma	n manifold rail											
Mounting position			Any												
Nominal width		[mm]	4.6			4.3			5.6						
Standard nominal flow rate		[l/min]	600	580		470	450		630	680		600	580	580	
Flow rate on manifold rail G1/8		[l/min]	510			430	410		520	570		520	500	460	
Switching time	On/off	[ms]	8/23			15/11			14/22	-	13/40	12/40			
	Changeover	[ms]	-							8		20			
Pneumatic connection	1, 3, 5		G1/4 in manifold rail												
	2, 4		/ -	n manifol					_						
	12/14, 82/84		M5 in i	manifold	rail										
Product weight		[g]	89			80			78	89	70	89			
Certification			c UL us - Recognized (OL)												
			c CSA us (OL)												
			RCM compliance mark												
CE marking (see declaration of co	nformity) ⁵⁾		To EU EMC Directive												
			to EU Low Voltage Directive												
Corrosion resistance class CRC ⁶⁾			2												

- 1) C=Normally closed/mid-position closed
- 2) U=Normally open/mid-position pressurised
- 3) E=Mid-position exhausted
- 4) H=2x 3/2-way valve in one housing with 1x normally closed and 1x normally open
- 5) For information about the area of use, see the EC declaration of conformity at: www.festo.com/sp → Certificates.
- If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.
- 6) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

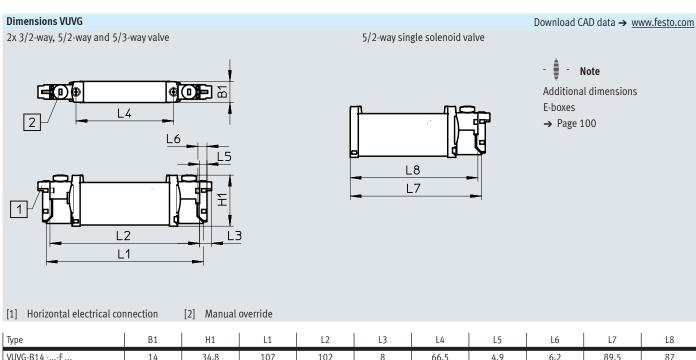
Operating and environmer	ital conditions									
Valve function			T32-A ¹⁾	T32-M ²⁾	M52-A ¹⁾	B52	M52-M ²⁾	P53		
Operating medium	Compressed air	Compressed air to ISO 8573-2010 [7:4:4]								
Note on the operating/pilot medium			Lubricated ope	Lubricated operation possible (in which case lubricated operation will always be required)						
Operating pressure	Internal	[bar]	1.5 8	38	2.5 8	1.5 8	38			
	External	[bar]	1.5 10	-0.9 10			-0.9 8	-0.9 10		
Pilot pressure		[bar]	1.5 8	3 8	2.5 8	1.5 8	3 8			
Ambient temperature		[°C]	−5 +50, with	−5 +50, with holding current reduction −5 +60						
Temperature of medium		[°C]	-5 +50, with	−5 +50, with holding current reduction −5 +60						

¹⁾ Pneumatic spring

Electrical data

Electrical connection		Via E-box → page 98
Operating voltage	[V DC]	5, 12 and 24 ±10%
Power	[W]	1, reduced to 0.35 with holding current reduction
Duty cycle	[%]	100
Degree of protection to EN 60529		IP40 (with plug socket), IP65 (with M8)

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



Mechanical spring

	Description		Part no.	Туре										
e valve G1/8	B, without E-box													
	2x 3/2-way valve													
	External pilot air supply	Normally closed, pneumatic spring reset	566513	VUVG-B14-T32C-AZT-F-1P3										
		Normally open, pneumatic spring reset	566514	VUVG-B14-T32U-AZT-F-1P3										
		1x normally open, 1x normally closed, pneumatic spring	566515	VUVG-B14-T32H-AZT-F-1P3										
		reset												
		Normally closed, mechanical spring reset	574376	VUVG-B14-T32C-MZT-F-1P3										
	3	Normally open, mechanical spring reset	574377	VUVG-B14-T32U-MZT-F-1P3										
-		1x normally open, 1x normally closed, mechanical spring	574378	VUVG-B14-T32H-MZT-F-1P3										
		reset												
	5/2-way single solenoid valve													
	External pilot air supply	Pneumatic spring reset	566516	VUVG-B14-M52-AZT-F-1P3										
		Mechanical spring reset	574379	VUVG-B14-M52-MZT-F-1P3										
	5/2-way double solenoid valve													
	External pilot air supply		566517	VUVG-B14-B52-ZT-F-1P3										
	5/3-way valve													
	External pilot air supply	Mid-position closed, mechanical spring reset	566518	VUVG-B14-P53C-ZT-F-1P3										
		Mid-position exhausted, mechanical spring reset	566519	VUVG-B14-P53E-ZT-F-1P3										
		Mid-position pressurised, mechanical spring reset	566520	VUVG-B14-P53U-ZT-F-1P3										
a valva G1/Q	with E-hov DQ													
e valve G1/8	B, with E-box R8													
e valve G1/8	2x 3/2-way valve	Normally closed pneumatic spring reset	57//2//2	WING_R16_T32C_A7T_E_1R8I										
e valve G1/8	· ·	Normally closed, pneumatic spring reset	574242	VUVG-B14-T32C-AZT-F-1R8L										
e valve G1/8	2x 3/2-way valve	Normally open, pneumatic spring reset	574243	VUVG-B14-T32U-AZT-F-1R8L										
e valve G1/8	2x 3/2-way valve	Normally open, pneumatic spring reset 1x normally open, 1x normally closed, pneumatic spring		<u> </u>										
e valve G1/8	2x 3/2-way valve	Normally open, pneumatic spring reset 1x normally open, 1x normally closed, pneumatic spring reset	574243 574244	VUVG-B14-T32U-AZT-F-1R8L VUVG-B14-T32H-AZT-F-1R8L										
e valve G1/8	2x 3/2-way valve	Normally open, pneumatic spring reset 1x normally open, 1x normally closed, pneumatic spring reset Normally closed, mechanical spring reset	574243 574244 578248	VUVG-B14-T32U-AZT-F-1R8L VUVG-B14-T32H-AZT-F-1R8L VUVG-B14-T32C-MZT-F-1R8L										
e valve G1/8	2x 3/2-way valve	Normally open, pneumatic spring reset 1x normally open, 1x normally closed, pneumatic spring reset Normally closed, mechanical spring reset Normally open, mechanical spring reset	574243 574244 578248 8031517	VUVG-B14-T32U-AZT-F-1R8L VUVG-B14-T32H-AZT-F-1R8L VUVG-B14-T32C-MZT-F-1R8L VUVG-B14-T32U-MZT-F-1R8L										
e valve G1/8	2x 3/2-way valve	Normally open, pneumatic spring reset 1x normally open, 1x normally closed, pneumatic spring reset Normally closed, mechanical spring reset	574243 574244 578248	VUVG-B14-T32U-AZT-F-1R8L VUVG-B14-T32H-AZT-F-1R8L VUVG-B14-T32C-MZT-F-1R8L										
e valve G1/8	External pilot air supply	Normally open, pneumatic spring reset 1x normally open, 1x normally closed, pneumatic spring reset Normally closed, mechanical spring reset Normally open, mechanical spring reset 1x normally open, 1x normally closed, mechanical spring	574243 574244 578248 8031517	VUVG-B14-T32U-AZT-F-1R8L VUVG-B14-T32H-AZT-F-1R8L VUVG-B14-T32C-MZT-F-1R8L VUVG-B14-T32U-MZT-F-1R8L										
e valve 61/8	External pilot air supply 5/2-way single solenoid valve	Normally open, pneumatic spring reset 1x normally open, 1x normally closed, pneumatic spring reset Normally closed, mechanical spring reset Normally open, mechanical spring reset 1x normally open, 1x normally closed, mechanical spring reset	574243 574244 578248 8031517 8031518	VUVG-B14-T32U-AZT-F-1R8L VUVG-B14-T32H-AZT-F-1R8L VUVG-B14-T32C-MZT-F-1R8L VUVG-B14-T32U-MZT-F-1R8L VUVG-B14-T32H-MZT-F-1R8L										
e valve 61/8	External pilot air supply	Normally open, pneumatic spring reset 1x normally open, 1x normally closed, pneumatic spring reset Normally closed, mechanical spring reset Normally open, mechanical spring reset 1x normally open, 1x normally closed, mechanical spring reset Pneumatic spring reset	574243 574244 578248 8031517 8031518	VUVG-B14-T32U-AZT-F-1R8L VUVG-B14-T32H-AZT-F-1R8L VUVG-B14-T32C-MZT-F-1R8L VUVG-B14-T32U-MZT-F-1R8L VUVG-B14-T32H-MZT-F-1R8L										
e valve 61/8	External pilot air supply 5/2-way single solenoid valve External pilot air supply	Normally open, pneumatic spring reset 1x normally open, 1x normally closed, pneumatic spring reset Normally closed, mechanical spring reset Normally open, mechanical spring reset 1x normally open, 1x normally closed, mechanical spring reset Pneumatic spring reset Mechanical spring reset	574243 574244 578248 8031517 8031518	VUVG-B14-T32U-AZT-F-1R8L VUVG-B14-T32H-AZT-F-1R8L VUVG-B14-T32C-MZT-F-1R8L VUVG-B14-T32U-MZT-F-1R8L VUVG-B14-T32H-MZT-F-1R8L										
e valve 61/8	External pilot air supply 5/2-way single solenoid valve External pilot air supply 5/2-way double solenoid valve	Normally open, pneumatic spring reset 1x normally open, 1x normally closed, pneumatic spring reset Normally closed, mechanical spring reset Normally open, mechanical spring reset 1x normally open, 1x normally closed, mechanical spring reset Pneumatic spring reset Mechanical spring reset	574243 574244 578248 8031517 8031518 574245 578158	VUVG-B14-T32U-AZT-F-1R8L VUVG-B14-T32H-AZT-F-1R8L VUVG-B14-T32C-MZT-F-1R8L VUVG-B14-T32U-MZT-F-1R8L VUVG-B14-T32H-MZT-F-1R8L VUVG-B14-M52-AZT-F-1R8L VUVG-B14-M52-MZT-F-1R8L										
e valve 61/8	External pilot air supply 5/2-way single solenoid valve External pilot air supply 5/2-way double solenoid valve External pilot air supply	Normally open, pneumatic spring reset 1x normally open, 1x normally closed, pneumatic spring reset Normally closed, mechanical spring reset Normally open, mechanical spring reset 1x normally open, 1x normally closed, mechanical spring reset Pneumatic spring reset Mechanical spring reset	574243 574244 578248 8031517 8031518	VUVG-B14-T32U-AZT-F-1R8L VUVG-B14-T32H-AZT-F-1R8L VUVG-B14-T32C-MZT-F-1R8L VUVG-B14-T32U-MZT-F-1R8L VUVG-B14-T32H-MZT-F-1R8L										
e valve 61/8	2x 3/2-way valve External pilot air supply 5/2-way single solenoid valve External pilot air supply 5/2-way double solenoid valve External pilot air supply 5/3-way valve	Normally open, pneumatic spring reset 1x normally open, 1x normally closed, pneumatic spring reset Normally closed, mechanical spring reset Normally open, mechanical spring reset 1x normally open, 1x normally closed, mechanical spring reset Pneumatic spring reset Mechanical spring reset	574243 574244 578248 8031517 8031518 574245 578158	VUVG-B14-T32U-AZT-F-1R8L VUVG-B14-T32H-AZT-F-1R8L VUVG-B14-T32C-MZT-F-1R8L VUVG-B14-T32U-MZT-F-1R8L VUVG-B14-T32H-MZT-F-1R8L VUVG-B14-M52-AZT-F-1R8L VUVG-B14-M52-MZT-F-1R8L										
e valve 61/8	External pilot air supply 5/2-way single solenoid valve External pilot air supply 5/2-way double solenoid valve External pilot air supply	Normally open, pneumatic spring reset 1x normally open, 1x normally closed, pneumatic spring reset Normally closed, mechanical spring reset Normally open, mechanical spring reset 1x normally open, 1x normally closed, mechanical spring reset Pneumatic spring reset Mechanical spring reset Mid-position closed, mechanical spring reset	574243 574244 578248 8031517 8031518 574245 578158 574246	VUVG-B14-T32U-AZT-F-1R8L VUVG-B14-T32H-AZT-F-1R8L VUVG-B14-T32C-MZT-F-1R8L VUVG-B14-T32U-MZT-F-1R8L VUVG-B14-T32H-MZT-F-1R8L VUVG-B14-M52-AZT-F-1R8L VUVG-B14-M52-MZT-F-1R8L VUVG-B14-B52-ZT-F-1R8L										
e valve 61/8	2x 3/2-way valve External pilot air supply 5/2-way single solenoid valve External pilot air supply 5/2-way double solenoid valve External pilot air supply 5/3-way valve	Normally open, pneumatic spring reset 1x normally open, 1x normally closed, pneumatic spring reset Normally closed, mechanical spring reset Normally open, mechanical spring reset 1x normally open, 1x normally closed, mechanical spring reset Pneumatic spring reset Mechanical spring reset	574243 574244 578248 8031517 8031518 574245 578158	VUVG-B14-T32U-AZT-F-1R8L VUVG-B14-T32H-AZT-F-1R8L VUVG-B14-T32C-MZT-F-1R8L VUVG-B14-T32U-MZT-F-1R8L VUVG-B14-T32H-MZT-F-1R8L VUVG-B14-M52-AZT-F-1R8L VUVG-B14-M52-MZT-F-1R8L										

Sub-base valve for manifold assembly Connection G1/8



Download CAD data → www.festo.com

- Note
- Additional dimensions E-boxes
- → Page 100

- [1] Ports 1, 3 and 5: G1/4 (at both ends)
- [2] Ports 2, 4: G1/8
- [3] Ports 12, 14: M5
- [4] Ports 82, 84: M5
- [5] Electrical connection for E-boxes and accessories
- [6] H-rail mounting (two M4x35 screws are required for mounting)
- [7] Cover plate
- [8] Supply plate: ports 1, 3 and 5: G1/8
- [9] Valves/cover plate mounting on manifold rail: M2.5 thread

Туре	B1	B2	2	В3	B4	B5	B6		В7	В8	В9	B1	0 1	311	B12
VABM-L1-14W-G14	118.3	95.	.1	67.7	58.2	56.3	36.	6	16.7	4.5	72.9	26.	5	20	49.1
Туре	B13		D1	D2		D3	D4		H1	H2		Н3	H4		Н5
VABM-L1-14W-G14	49.1		G1/4	G1/	8	M5	Ø 4.5		64.3	19.6		15.3	10.1		29.5
Туре	Н6	H7	Н8	Н9	H10	H11	H12	L3	L5	L6	L7	L8	L9	L10	L11
VABM-L1-14W-G14	9.8	4.8	22.1	7	15.4	6.8	23.9	6	1	16	14.4	11.3	18.5	16	14

Valve positions		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
VABM weight	[g]	232	306	380	454	528	602	676	750	824	972	1120	1268

Technical data – Manifold rails ¹⁾										
	Connection				Operating pressure	Max. tightening torque for assembly [Nm]				
	2, 4	1, 3, 5	12/14 , 82/84			[bar]	Valve	H-rail	Wall	
	G1/8	G1/4	M5	2 ²⁾	Wrought alumini- um alloy	-0.9 10	0.65	1.5	3	

- 1) Blanking plugs are included with the manifold rail.
- 2) Corrosion resistance class CRC 2 to Festo standard FN 940070

 Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.
- 3) Note on materials: RoHS-compliant.

Ordering data – Manifold rail										
	Description		Part no.	Туре						
Manifold rail for sub-base valve G1/8										
()	For size B14 (G1/8)	2 valve positions	★ 566642	VABM-L1-14W-G14-2						
		3 valve positions	★ 566643	VABM-L1-14W-G14-3						
		4 valve positions	★ 566644	VABM-L1-14W-G14-4						
		5 valve positions	566645	VABM-L1-14W-G14-5						
		6 valve positions	★ 566646	VABM-L1-14W-G14-6						
		7 valve positions	566647	VABM-L1-14W-G14-7						
		8 valve positions	★ 566648	VABM-L1-14W-G14-8						
, and the second		9 valve positions	566649	VABM-L1-14W-G14-9						
		10 valve positions	★ 566650	VABM-L1-14W-G14-10						
		12 valve positions	566651	VABM-L1-14W-G14-12						
		14 valve positions	566652	VABM-L1-14W-G14-14						
		16 valve positions	566653	VABM-L1-14W-G14-16						

Ordering data – Accessories				
_	Description		Part no.	Туре
Cover plate			•	Data sheets → Internet: vabb
	For valve position on manifold rail, includi	ing screws and seal	★ 569989	VABB-L1-14
Separator				Data sheets → Internet: vabd
	For creating pressure zones	569996	VABD-10-B	
Supply plate				Data sheets → Internet: vabf
	For valve position on manifold rail, includi	ing screws and seal	569993	VABF-L1-14-P3A4-G18
Seals				Data sheets → Internet: vabd
2000	For sub-base valves G1/8	Delivery quantity: 10 sets (each with 2 screws and 1 seal)	566676	VABD-L1-14B-S-G18

Function 2x 3/2C, 2x 3/2U, 2x 3/2H 5/2-way, single solenoid 5/2-way, double solenoid valve 5/3C, 5/3U, 5/3E

Circuit symbols → page 13

- [] - Size 18 mm

- N - Flow rate 800 ... 1080 l/min

- **\ -** Voltage 5, 12 and 24 V DC



General technical data VUVG-I	3													
Valve function			T32-A			T32-M			M52-R	B52	M52-M	P53		
Normal position			C ¹⁾	U ²⁾	H ⁴⁾	C ¹⁾	U ²⁾	H ⁴⁾	-	-	-	C ¹⁾	U ²⁾	E ³⁾
Stable position			Monostable							Bistable	Monostable			
Pneumatic spring reset	· -					No			Yes ⁵⁾	-	No	-	-	
Mechanical spring reset			No			Yes			Yes ⁵⁾	- Yes Ye				
Vacuum operation at port 1			No			Only w	ith exter	nal pilot	air supply	•				
Design			Piston	spool		•								
Sealing principle			Soft								,			
Type of actuation			Electri	cal										
Type of control			Pilote	t										
Pilot air supply			Extern	al, interr	nal; can b	e selecte	ed via su	b-base						
Exhaust function				e throttle										
Manual override						, covered	d, non-de	etenting/	detenting o	r detenting				
Type of mounting			On manifold rail											
Mounting position			Any											
Nominal width		[mm]	5.7						6.9	7.3	6.9	6.5		
Standard nominal flow rate		[l/min]	900						1150			1080		
Flow rate on manifold rail			800						1000			950		
Switching time on/off		[ms]	13/27			15/22			15/31	-	10/45	15/48	3	
Switching time changeover		[ms]	-							11		29		
Size		[mm]	18											
Connection	1, 3, 5		-1-	n manifo										
	2, 4			n manifo										
	12/14, 82/84		M5 in	manifolo	l rail									
Product weight		[g]	164						154	160	154	160		
Certification					nized (OL	.)								
				us (OL)										
					RCM compliance mark									
	E marking (see declaration of conformity) ⁶⁾				To EU EMC Directive									
Corrosion resistance class CRC	7)		2											

- 1) C=Normally closed/mid-position closed
- 2) U=Normally open/mid-position pressurised
- 3) E=Mid-position exhausted
- 4) H=2x 3/2-way valve in one housing with 1x normally closed and 1x normally open
- 5) Combined reset method
- 6) For information about the area of use, see the EC declaration of conformity at: www.festo.com/sp → Certificates.

 If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.
- 7) Corrosion resistance class CRC 2 to Festo standard FN 940070

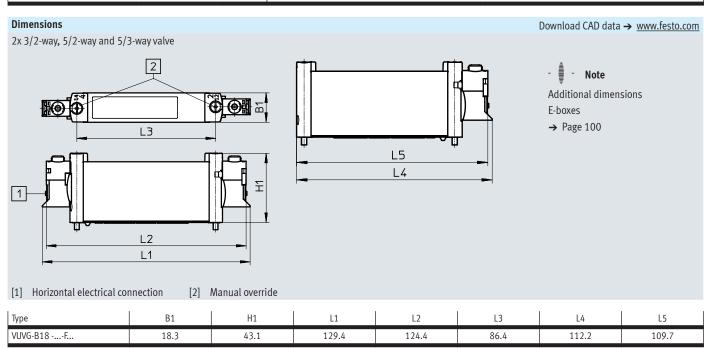
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Operating and environment	al conditions										
Valve function			T32-A ¹⁾	T32-M ³⁾	M52-R ²⁾	B52	M52-M ³⁾	P53			
Operating medium			Compressed air	Compressed air to ISO 8573-2010 [7:4:4]							
Operating pressure	Internal	[bar]	1.5 8	3.5 8	2.5 8	1.5 8	38				
	External	[bar]	1.5 10	-0.9 10			-0.9 8	-0.9 10			
Pilot pressure		[bar]	1.5 8	3 8	2.5 8	1.5 8	3 8				
Ambient temperature		[°C]	−5 +50, with holding current reduction −5 +60								
Temperature of medium		[°C]	-5 +50, with	holding current red	uction -5 +60	·		·			

- 1) Pneumatic spring
- 2) Mixed, pneumatic/mechanical spring
- 3) Mechanical spring

Electrical data		
Electrical connection		Via E-box → page 98
Operating voltage	[V DC]	5, 12 and 24 ±10%
Power	[W]	1, reduced to 0.35 with holding current reduction
Duty cycle	[%]	100
Degree of protection to EN 60529		IP40 (with plug socket), IP65 (with M8)

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



Ordering data												
	Description		Part no.	Туре								
Sub-base valve G1/4, w	vithout E-box											
	2x 3/2-way valve											
T ROBERT	External pilot air supply	Normally closed, pneumatic spring reset	574443	VUVG-B18-T32C-AZT-F-1P3								
		Normally open, pneumatic spring reset	574444	VUVG-B18-T32U-AZT-F-1P3								
		1x normally open, 1x normally closed, pneumatic spring	574445	VUVG-B18-T32H-AZT-F-1P3								
		reset										
		Normally closed, mechanical spring reset	574446	VUVG-B18-T32C-MZT-F-1P3								
		Normally open, mechanical spring reset	574447	VUVG-B18-T32U-MZT-F-1P3								
		1x normally open, 1x normally closed, mechanical spring	574448	VUVG-B18-T32H-MZT-F-1P3								
		reset										
	5/2-way single solenoid valve											
	External pilot air supply	Pneumatic/mechanical spring reset	574449	VUVG-B18-M52-RZT-F-1P3								
		Mechanical spring reset	574450	VUVG-B18-M52-MZT-F-1P3								
	5/2-way double solenoid valve											
	External pilot air supply		574451	VUVG-B18-B52-ZT-F-1P3								
	5/3-way valve											
	External pilot air supply	Mid-position closed, mechanical spring reset	574452	VUVG-B18-P53C-ZT-F-1P3								
		Mid-position exhausted, mechanical spring reset	574453	VUVG-B18-P53E-ZT-F-1P3								
		Mid-position pressurised, mechanical spring reset	574454	VUVG-B18-P53U-ZT-F-1P3								

	Description		Part no.	Туре							
b-base valve G1	/4, with E-box R8										
<u> </u>	2x 3/2-way valve	2x 3/2-way valve									
	External pilot air supply	Normally closed, pneumatic spring reset	8031537	VUVG-B18-T32C-AZT-F-1R8L							
		Normally open, pneumatic spring reset	8031538	VUVG-B18-T32U-AZT-F-1R8L							
		1x normally open, 1x normally closed, pneumatic spring	8031539	VUVG-B18-T32H-AZT-F-1R8L							
		reset									
		Normally closed, mechanical spring reset	8031540	VUVG-B18-T32C-MZT-F-1R8L							
		Normally open, mechanical spring reset	8031541	VUVG-B18-T32U-MZT-F-1R8L							
		1x normally open, 1x normally closed, mechanical spring	8031542	VUVG-B18-T32H-MZT-F-1R8L							
		reset									
	5/2-way single solenoid valve	5/2-way single solenoid valve									
	External pilot air supply	Pneumatic/mechanical spring reset	8031543	VUVG-B18-M52-RZT-F-1R8L							
		Mechanical spring reset	8031544	VUVG-B18-M52-MZT-F-1R8L							
	5/2-way double solenoid valve	•									
	External pilot air supply		8031545	VUVG-B18-B52-ZT-F-1R8L							
	5/3-way valve										
	External pilot air supply	Mid-position closed, mechanical spring reset	8031546	VUVG-B18-P53C-ZT-F-1R8L							
		Mid-position exhausted, mechanical spring reset	8031547	VUVG-B18-P53E-ZT-F-1R8L							
		Mid-position pressurised, mechanical spring reset	8031548	VUVG-B18-P53U-ZT-F-1R8L							

Sub-base valve for manifold assembly Connection G1/4



Download CAD data → www.festo.com

- 🖣 Note
- Additional dimensions E-boxes
- → Page 100

- [1] Ports 1, 3 and 5: G3/8 (at both ends)
- [2] Ports 2, 4: G1/4
- [3] Ports 12, 14: M5
- [4] Ports 82, 84: M5
- [5] Electrical connection for E-boxes and accessories
- [6] H-rail mounting (two M4x40 screws are required for mounting)
- [7] Cover plate
- [8] Supply plate, ports 1, 3 and 5: G1/4
- [9] Valve/cover plate/supply plate mounting on manifold rail: M3 thread

Туре	B1	B2	В3	B4	B5	B6	B7	B8	B9	B10	B11	D1
VABM-L1-18W-G38	129.4	124.4	95.6	73.1	47.8	22.5	51.7	34.8	26	90.6	76.8	4.5
Туре	H1	H2	Н3	H4	H5	H6	H7	Н8	Н9	H10	H11	H12
VABM-L1-18W-G38	81.6	38.5	11.5	28.4	27.6	19	12	12.1	6.1	29.1	8.8	6.5
Туре	L3		L4	L5		L6	L7		L8	L9		L10
VABM-L1-18W-G38	6		23	19		20.8	19		15.6	8.5		1

Valve positions		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
VABM weight	[g]	232	306	380	454	528	602	676	750	824	972	1120	1268

Technical data – Manifold rails ¹⁾										
	Connection		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Operating pres- sure	Max. tightening torque for assembly [Nm]					
	2, 4	1, 3, 5	12/14 , 82/84			[bar]	Valve	H-rail	Wall	
	G1/4	G3/8	M5	2 ²⁾	Wrought alumini- um alloy	-0.9 10	1.18	1.5	3	

- 1) Blanking plugs are included with the manifold rail.
- 2) Corrosion resistance class CRC 2 to Festo standard FN 940070 Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.
- 3) Note on materials: RoHS-compliant.

Ordering data – Manifold rails				
	Description		Part no.	Туре
Manifold rail for sub-base valve G1/4	4			
**/0000000	For size B18 (G1/4)	2 valve positions	574467	VABM-L1-18W-G38-2
		3 valve positions	574468	VABM-L1-18W-G38-3
		4 valve positions	574469	VABM-L1-18W-G38-4
		5 valve positions	574470	VABM-L1-18W-G38-5
		6 valve positions	574471	VABM-L1-18W-G38-6
		7 valve positions	574472	VABM-L1-18W-G38-7
		8 valve positions	574473	VABM-L1-18W-G38-8
		9 valve positions	574474	VABM-L1-18W-G38-9
		10 valve positions	574475	VABM-L1-18W-G38-10
		12 valve positions	574476	VABM-L1-18W-G38-12
		14 valve positions	574477	VABM-L1-18W-G38-14
		16 valve positions	574478	VABM-L1-18W-G38-16

Ordering data – Accessories									
	Description		Part no.	Туре					
Cover plate				Data sheets → Internet: vabb					
	For valve position on manifold rail, includi	ng screws and seal	★ 574482	VABB-L1-18					
Separator Data sheets → Internet: vabd									
	For creating pressure zones		574483	VABD-14-B					
Supply plate				Data sheets → Internet: vabf					
	For valve position on manifold rail, includi	ng screws and seal	574481	VABF-L1-18-P3A4-G14					
Seals				Data sheets → Internet: vabd					
Today.	For sub-base valves G1/4	Delivery quantity: 10 sets (each with 2 screws and 1 seal)	574480	VABD-L1-18B-S-G14					

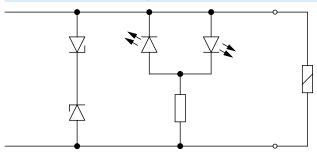


Note

Connect supply plate at port 1 with compressed air. Reverse operation (pressure at port 3, 5) is not permissible.

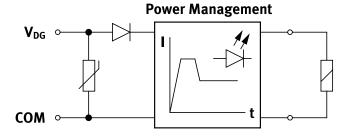
General technical data							
Variants	H2	Н3	S2	S3	L-	R1	R8
Mounting position	Any						
Electrical connection	2-pin, so	2-pin, socket Flying				Individual plug M8,	Individual plug M8,
					4-pin	3-pin	
Degree of protection	IP40				IP65		
Signal status display	LED						
Type of mounting	Clip					Self-tapping screw	
Note on materials	RoHS-co	mpliant					
Housing colour	Black						
Information on housing materials	PA						
Certification	RCM com	pliance mar	k				

Protective circuit without holding current reduction



The solenoid coils (P type) of the 5, 12 and 24 V designs have a protective circuit to arrest sparks and protect against polarity reversal.

Protective circuit with holding current reduction

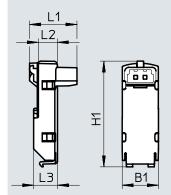


The 24 V DC design (R type) additionally features holding current reduction. This reduces the power from 1 W to 0.35 W.

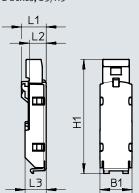
Pin allocation for E-box								
Till attocation for E-box	Pin		Description					
Rectangular plug, connection pattern H								
	VAVE-I	.1-1VH2-LP, VAVE-L1-1VH3-LP						
	1	+ or -	Without holding current reduction					
2-++ ++-1	2	+ or -						
	VAVE-I	VAVE-L1-1H2-LR, VAVE-L1-1H3-LR						
	1	+	With holding current reduction					
	2	-						
Rectangular plug, connection pattern S								
		.1-1VS2-LP, VAVE-L1-1VS3-LP						
2_ピ+ + ユー1	1	+ or -	Without holding current reduction					
	2	+ or -						
	VAVE-L1-1S2-LR, VAVE-L1-1S3-LR							
	1	-	With holding current reduction					
	2	+						
Flying leads, 2-pin								
	VAVE-I	.1-1VL14- LP						
	1	+ or -	Without holding current reduction					
h(a) (a)d a	2	+ or -						
1 + 2	VAVE-L	1-1L14-LR						
	1	-	With holding current reduction					
	2	+						

Pin allocation for E-box								
	Pin		Description					
Round plug, M8, 3-pin								
4	VAVE-L1-1VR8-LP							
+	1	Not used	Without holding current reduction					
(+ +)3	3	+ or -						
(' ')	4	+ Or -						
	VAVE-	VAVE-L1-1R8-LR						
	1	Not used	With holding current reduction					
	3	+ Or -						
	4	+ Or -						
Round plug, M8, 4-pin								
3 1	VAVE-L1-1VR1-LP							
	1	Not used	Without holding current reduction					
	2	Not used						
++///	3	+ or –						
	4	+ or -						
4 2	VAVE-	VAVE-L1-1R1-LR						
	1	Not used	With holding current reduction					
	2	Not used						
	3	+ or -						
	4	+ or –						
Open cable end								
open capic ena	VAVF-	L1-1VK						
ВК	BK	+ or -	Without holding current reduction					
ВК	BK	+ or -						
		L1-1K						
	BK	+ or -	With holding current reduction					
	BK	+ or -						









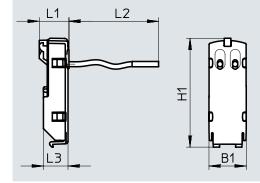
Download CAD data → www.festo.com

Туре	B1	H1 ±0.5	L1	L2	L3
VAVE-L1-1VS2-LP	9.8	28.8	12.9	5.2	6.5
VAVE-L1-1S2-LR					
VAVE-L1-1VH2-LP			10.8		
VAVE-L1-H2-LR					

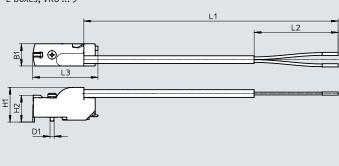
Туре	B1	H1 ±0.5	L1	L2	L3
VAVE-L1-1VS3-LP	9.8	35	7.6	5.2	6.5
VAVE-L1-1S3-LR					
VAVE-L1-1VH3-LP		33.6	7.5		
VAVE-L1-1H3-LR					

Dimensions

E-boxes, VL11 ...1 4

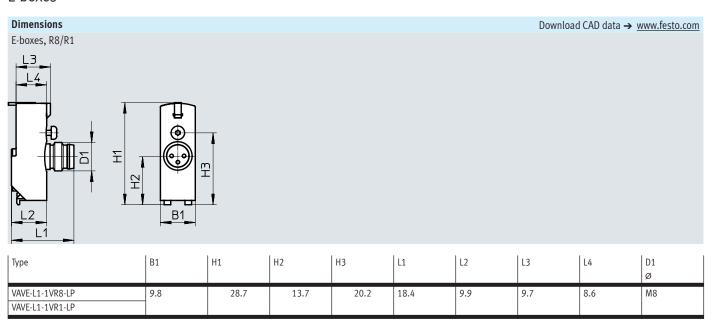






Туре	B1	H1 ±0.5	L1	L2	L3
VAVE-L1-1VL1-LP	9.8	28.8	7.9	0.5	6.5
VAVE-L1-1L1-LR					
VAVE-L1-1VL2-LP				1	
VAVE-L1-1L2-LR					
VAVE-L1-1VL3-LP				2.5	
VAVE-L1-1L3-LR	1				
VAVE-L1-1VL4-LP	7			5	
VAVE-L1-1L4-LR					

Туре	B1	H1	H2	L1	L2	L3	D1
			±0.3		±5	±0.5	Ø
VAVE-L1-1VK6-LP	9.8	15.3	11.8	0.5	50	28.7	1.8
VAVE-L1-1VK7-LP				1.0			
VAVE-L1-1VK8-LP				2.5			
VAVE-L1-1VK9-LP				5.0			
VAVE-L1-1K6-LR				0.5			
VAVE-L1-1K7-LR				1.0			
VAVE-L1-1K8-LR				2.5			
VAVE-L1-1K9-LR				5.0			



	Plugs	Additional functions	Ambient temperature [°C]	Code	Power [W]	Voltage [V DC]	Part no.	Туре
	NEBV-H1	Spark arresting, bipolar, IP40	-5 +50	H2	1	12/24	★ 566714	VAVE-L1-1VH2-LP
		Spark arresting, holding current reduction, IP40	-5 +60	H2R	0.35	24	★ 566716	VAVE-L1-1H2-LR
	NEBV-H1	Spark arresting, bipolar, IP40	-5 +50	Н3	1	12/24	566715	VAVE-L1-1VH3-LP
		Spark arresting, holding current reduction, IP40	-5 +60	H3R	0.35	24	566717	VAVE-L1-1H3-LR
	NEBV-HS	Spark arresting, bipolar, IP40	-5 +50	S2	1	12/24	566718	VAVE-L1-1VS2-LP
		Spark arresting, holding current reduction, IP40	-5 +60	S2R	0.35	24	566720	VAVE-L1-1S2-LR
	NEBV-HS	Spark arresting, bipolar, IP40	-5 +50	S3	1	12/24	566719	VAVE-L1-1VS3-LP
		Spark arresting, holding current reduction, IP40	-5 +60	S3R	0.35	24	566721	VAVE-L1-1S3-LR
~	Open	Spark arresting, bipolar, IP40	-5 +50	L1	1	12/24	566722	VAVE-L1-1VL1-LP
	cable end			L2			566723	VAVE-L1-1VL2-LP
				L3			566724	VAVE-L1-1VL3-LP
				L4			566725	VAVE-L1-1VL4-LP
		Spark arresting, holding current reduction,	-5 +60	L1R	0.35	24	566726	VAVE-L1-1L1-LR
		IP40		L2R	_		566727	VAVE-L1-1L2-LR
				L3R L4R	_		566728 566729	VAVE-L1-1L3-LR VAVE-L1-1L4-LR

Solenoid valves VUVG

E-boxes

Ordering	data – E-boxes								
Design	n Plugs /	Additional functions	Ambient	Code	Power	Voltage	Cable length	Part no.	Туре
			temperature [°C]		[W]	[V DC]	[m]		
<u>~~~</u>	Open cable	Spark arresting, bipolar, IP65	-5 +60	K6	1	12/24	0.5	573941	VAVE-L1-1VK6-LP
	end			K7	1		1	★ 573942	VAVE-L1-1VK7-LP
				K8	1		2.5	573943	VAVE-L1-1VK8-LP
Y				K9			5	573944	VAVE-L1-1VK9-LP
•		Spark arresting, bipolar, holding	-5 +60	K6R	0.35	24	0.5	573945	VAVE-L1-1K6-LR
	current reduction, IP65		K7R	٦		1	573946	VAVE-L1-1K7-LR	
				K8R	1		2.5	573947	VAVE-L1-1K8-LR
				K9R			5	573948	VAVE-L1-1K9-LR
<i>E</i>	NEBU-M8	Spark arresting, bipolar, IP65	-5 +60	R8	1	12/24	-	★ 573919	VAVE-L1-1VR8-LP
	Spark arresting, bipolar, holding current reduction, IP65		R8R	0.35	24	_	573920	VAVE-L1-1R8-LR	
		Spark arresting, bipolar, IP65		R1	1	12/24	-	573921	VAVE-L1-1VR1-LP
		Spark arresting, bipolar, holding current reduction, IP65		R1R	0.35	24	-	573922	VAVE-L1-1R1-LR

Accessories

Ordering data				
	Description	Cable length [m]	Part no.	Туре
Plug socket with o	able, not sheathed, open end			Data sheets → Internet: nebv
20	For E-box code H2, H2R or H3, H3R,	0.5	★ 566654	NEBV-H1G2-KN-0.5-N-LE2
	2-pin socket	1	★ 566655	NEBV-H1G2-KN-1-N-LE2
		2.5	★ 566656	NEBV-H1G2-KN-2.5-N-LE2
		5	566657	NEBV-H1G2-KN-5-N-LE2
Plug socket with o	cable, sheathed, open end			Data sheets → Internet: nebv
~	For E-box code H2, H2R or H3, H3R,	0.5	★ 566658	NEBV-H1G2-P-0.5-N-LE2
	2-pin socket	1	★ 566659	NEBV-H1G2-P-1-N-LE2
	<u> </u>	2.5	★ 566660	NEBV-H1G2-P-2.5-N-LE2
		5	566661	NEBV-H1G2-P-5-N-LE2
Plug socket with o	cable, not sheathed, open end			Data sheets → Internet: nebv
- C	For E-box code S2, S2R or S3, S3R,	0.5	566662	NEBV-HSG2-KN-0.5-N-LE2
	2-pin socket	1	566663	NEBV-HSG2-KN-1-N-LE2
	2 5 555.000	2.5	566664	NEBV-HSG2-KN-2.5-N-LE2
		5	566665	NEBV-HSG2-KN-5-N-LE2
		3	300003	NEDV 11502 KK 7 K EE2
Plug socket with o	cable, sheathed, open end			Data sheets → Internet: nebv
	For E-box code S2, S2R or S3, S3R,	0.5	566666	NEBV-HSG2-P-0.5-N-LE2
	2-pin socket	1	566667	NEBV-HSG2-P-1-N-LE2
		2.5	566668	NEBV-HSG2-P-2.5-N-LE2
		5	566669	NEBV-HSG2-P-5-N-LE2
Connecting cable,	open end			
,	For pilot valve VSCS to ISO 15218,	2.5	8032623	NEBV-C1SW2L-P-K-2.5-N-LE2-S9
	narrow socket, type C to EN 175301-803	5	8032626	NEBV-C1SW2L-P-K-5-N-LE2-S9
		10	8032627	NEBV-C1SW2L-P-K-10-N-LE2-S9
		2.5	8032628	NEBV-C1SW3-K-2.5-N-LE3-S9
		5	8032629	NEBV-C1SW3-K-5-N-LE3-S9
Connecting cable,	onen end			Data sheets → Internet: nebu
connecting capie,	For E-box code R8	2.5	★ 541333	NEBU-M8G3-K-2.5-LE3
	3-pin, straight socket, M8x1	5	★ 541334	NEBU-M8G3-K-5-LE3
	For E-box code R1	2.5	541342	NEBU-M8G4-K-2.5-LE4
	4-pin, straight socket, M8x1	5	541343	NEBU-M8G4-K-5-LE4
		3	541545	-
Connecting cable,		I		Data sheets → Internet: nebu
	For E-box code R8	2.5	★ 541338	NEBU-M8W3-K-2.5-LE3
	3-pin, angled socket, M8x1	5	★ 541341	NEBU-M8W3-K-5-LE3
Call of	For E-box code R1	2.5	541344	NEBU-M8W4-K-2.5-LE4
40	4-pin, angled socket, M8x1	5	541345	NEBU-M8W4-K-5-LE4
Connecting cable				Data sheets → Internet: nebu
	For E-box code R8,	0.5	★ 541346	NEBU-M8G3-K-0.5-M8G3
	3-pin, straight socket, M8x1	1	★ 541347	NEBU-M8G3-K-1-M8G3
STATE OF THE PARTY		2.5	★ 541348	NEBU-M8G3-K-2.5-M8G3
O TOTAL DE LA CONTRACTOR DE LA CONTRACTO		5	★ 541349	NEBU-M8G3-K-5-M8G3
		10	569844	NEBU-M8G3-K-10-M8G3
	For E-box code R1,	2.5	554035	NEBU-M8G4-K-2.5-M8G4
	4-pin, straight socket, M8x1			

Festo core product range

Generally ready for dispatch from the factory within 24 hours

Generally ready for dispatch from the factory within 5 days

Accessories

Ordering data						
	Description			Part no.	Туре	PU ¹⁾
Connecting cable,	, open end					
	For pilot valve VSCS to ISO 15218, straight socket, M12x1, A-coded to	EN 61076-2-101	2.5 m long	541363	NEBU-M12G5-K-2.5-LE3	
			5 m long	541364	NEBU-M12G5-K-5-LE3	
	For pilot valve VSCS to ISO 15218, angled socket, M12x1, A-coded to EN 61076-2-101		2.5 m long	541367	NEBU-M12W5-K-2.5-LE3	
% /			5 m long	541370	NEBU-M12W5-K-5-LE3	
Blanking plug					Data sheets -	→ Internet:
	For manifold rail and valve M5 thread			★ 3843	B-M5	10
		M7 thread		★ 174309	B-M7	10
	For manifold rail	G1/8 thread		★ 3568	B-1/8	10
		G1/4 thread		★ 3569	B-1/4	10
		G3/8 thread		★ 3570	B-3/8	10
	For valve	G1/8 thread		578406	NPQH-BK-G18-P10	10
		G1/4 thread		578407	NPQH-BK-G14-P10	10
Reducing nipple		·				
	M7 male thread	M5 female thread		161359	D-M5I-M7A-ISK	10
ittings		1			Data sheets →	
	M3 thread	For tubing Ø 3 mm	Round releasing ring	133001	QSM-M3-3-I-R	10
		For tubing Ø 4 mm	Round releasing ring	133002	QSM-M3-4-I-R	10
	M5 thread	For tubing Ø 3 mm	Round releasing ring	133003	QSM-M5-3-I-R	10
•			Oval releasing ring	153313	QSM-M5-3-I	10
		For tubing Ø 4 mm	Round releasing ring	133004	QSM-M5-4-I-R	10
			Oval releasing ring	★ 153315	QSM-M5-4-I	10
		For tubing Ø 6 mm	Round releasing ring	133005	QSM-M5-6-I-R	10
			Oval releasing ring	★ 153317	QSM-M5-6-I	10
	M7 thread	For tubing Ø 4 mm	Oval releasing ring	★ 153319	QSM-M7-4-I	10
		For tubing Ø 6 mm	Round releasing ring	133007	QSM-M7-6-I-R	10
			Oval releasing ring	★ 153321	QSM-M7-6-I	10
	G1/8 thread	For tubing Ø 4 mm	Oval releasing ring	★ 186106	QS-G1/8-4-I	10
		For tubing Ø 6 mm	Oval releasing ring	★ 186107	QS-G1/8-6-I	10
		For tubing Ø 8 mm	Oval releasing ring	★ 186109	QS-G1/8-8-I	10
	1		Oval releasing ring	★ 132999	QS-G1/8-10-I	10
		For tubing Ø 10 mm				10
	G1/4 thread	For tubing Ø 10 mm For tubing Ø 6 mm	Oval releasing ring	★ 186108	QS-G1/4-6-I	10
	G1/4 thread		Oval releasing ring	130677	QS-G1/4-6-I QS-1/4-6-100	100
	G1/4 thread		Oval releasing ring Oval releasing ring			
	G1/4 thread	For tubing Ø 6 mm		130677	QS-1/4-6-100 QS-G1/4-8-I QS-1/4-8-I	100
	G1/4 thread	For tubing Ø 6 mm		130677 ★ 186110	QS-1/4-6-100 QS-G1/4-8-I	100 10
		For tubing Ø 6 mm For tubing Ø 8 mm	Oval releasing ring	130677 ★ 186110 ★ 153016	QS-1/4-6-100 QS-G1/4-8-I QS-1/4-8-I	100 10 10
	G1/4 thread	For tubing Ø 6 mm For tubing Ø 8 mm	Oval releasing ring	130677 ★ 186110 ★ 153016 ★ 186112	QS-1/4-6-100 QS-61/4-8-I QS-1/4-8-I QS-61/4-10-I	100 10 10 10
		For tubing Ø 6 mm For tubing Ø 8 mm For tubing Ø 10 mm	Oval releasing ring Oval releasing ring	130677 ★ 186110 ★ 153016 ★ 186112 ★ 153018	QS-1/4-6-100 QS-61/4-8-I QS-1/4-8-I QS-61/4-10-I QS-1/4-10-I	100 10 10 10 10
		For tubing Ø 6 mm For tubing Ø 8 mm For tubing Ø 10 mm For tubing Ø 8 mm	Oval releasing ring Oval releasing ring Oval releasing ring	130677 ★ 186110 ★ 153016 ★ 186112 ★ 153018 130681	QS-1/4-6-100 QS-G1/4-8-I QS-1/4-8-I QS-G1/4-10-I QS-1/4-10-I QS-3/8-8-50	100 10 10 10 10 10 50

¹⁾ Packaging unit.

Festo core product range

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Generally ready for dispatch from the factory within 24 hours

Generally ready for dispatch from the factory within 5 days

Accessories

Ordering data					
	Description		Part no.	Туре	PU ¹⁾
Silencer				Data sheets → Inter	net: amte
	For M3 thread		1231120	AMTE-M-LH-M3	20
	For M5 thread		★ 1205858	AMTE-M-LH-M5	20
	For M7 thread		161418	UC-M7	1
	For G1/8 thread	High flow rate	★ 2307	U-1/8	1
)	Lower flow rate	161419	UC-1/8	1
	For G1/4 thread	High flow rate	* 2316	U-1/4	1
		Lower flow rate	165004	UC-1/4	1
	For G3/8 thread	High flow rate	★ 2309	U-3/8	1
		Lower flow rate	1707427	UC-3/8	1
		Metal housing	★ 6843	U-3/8-B	1
	I .		X 55 15		-
H-rail				Data sheets → Int	ernet: nrh
	To EN 60715, 35 x 7.5 (WxH)	2 m long	35430	NRH-35-2000	1
H-rail mounting				Data sheets → Inter	_
	-		★ 569998	VAME-T-M4	2
Cover cap for manua	al override				
	Covered		540898	VMPA-HBV-B	10
	Non-detenting		540897	VMPA-НВТ-В	10
	Detenting (without accessories)			VAMC-L1-CD	10
Identification holde	r			Data sheets → Into	ernet: aslı
	Holder for an inscription label and cover	for the retaining screw and manual override	570818	ASLR-D-L1	10

¹⁾ Packaging unit.

Solenoid valves VUVG

Accessories

Ordering data						
	Description			Part no.	Туре	PU ¹⁾
Check valve						
	For manifold rails VABM-L1-10	For blocking the flow in the event of b	ack pressure in duct 3 and 5	8047364	VABF-L1-10H-H2	10
	For manifold rails VABM-L1-14			8047365	VABF-L1-14-H2	10
Flow restrictor					<u>.</u>	
Tiow restrictor	For manifold rails	For setting the flow rate during pres-	Nominal size: 0.5 mm	8025709	VFFG-T-M5-5	10
	VABM-L1-10	surisation and exhausting (for M5	Nominal size: 0.6 mm	8025710	VFFG-T-M5-6	10
		threaded connection)	Nominal size: 0.7 mm	8025711	VFFG-T-M5-7	10
\bigcirc			Nominal size: 0.85 mm	8025712	VFFG-T-M5-8	10
			Nominal size: 1.05 mm	8025713	VFFG-T-M5-10	10
			Nominal size: 1.2 mm	8025714	VFFG-T-M5-12	10
			Nominal size: 1.55 mm	8025715	VFFG-T-M5-15	10
		For setting the flow rate for pressuri-	Nominal size: 0.5 mm	8047346	VFFG-T-F4-5	10
(\bigcirc)		sation and exhausting (for Ø 4 mm)	Nominal size: 0.6 mm	8047347	VFFG-T-F4-6	10
		sation and ownershing (ion 2) miny	Nominal size: 0.7 mm	8047348	VFFG-T-F4-7	10
			Nominal size: 0.85 mm	8047349	VFFG-T-F4-8	10
			Nominal size: 1.05 mm	8047350	VFFG-T-F4-10	10
			Nominal size: 1.2 mm	8047351	VFFG-T-F4-12	10
			Nominal size: 1.55 mm	8047352	VFFG-T-F4-15	10
	For manifold rails	For setting the flow rate for pressuri-	Nominal size: 0.7 mm	8047353	VFFG-T-F6-7	10
	VABM-L1-14	sation and exhausting (for Ø	Nominal size: 0.85 mm	8047354	VFFG-T-F6-8	10
		5.8 mm)	Nominal size: 1.05 mm	8047355	VFFG-T-F6-10	10
		3.5,	Nominal size: 1.15 mm	8047356	VFFG-T-F6-11	10
			Nominal size: 1.4 mm	8047357	VFFG-T-F6-14	10
			Nominal size: 1.6 mm	8047358	VFFG-T-F6-16	10
			Nominal size: 1.8 mm	8047359	VFFG-T-F6-18	10
			Nominat Size: 1.0 mm	0047555	VII 0 1 1 0 1 0	10
Flow control set						
	For manifold rails VABM-L1-10	Two of each size, for M5 threaded cor	nection	8025716	VFFG-T-M5-A-V1	14
		Two of each size, for Ø 4 mm		8062200	VFFG-T-F4-A-V1	14
	For manifold rails VABM-L1-14	Two of each size, for Ø 5.8 mm		8062201	VFFG-T-F6-A-V1	14

¹⁾ Packaging unit.

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