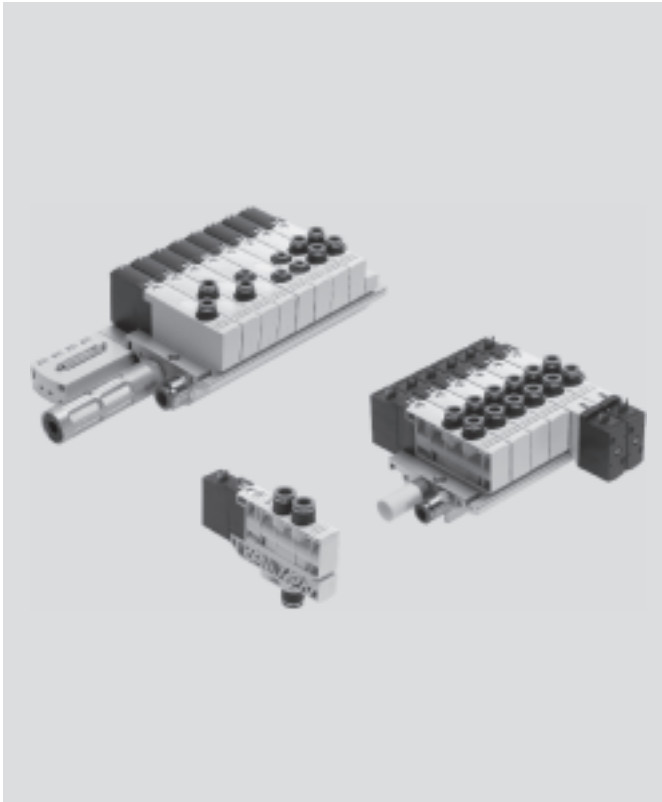


Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

FESTO



This extremely economical valve series offers a durable and robust valve system for universal applications and an outstanding price/performance ratio, guaranteeing high performance in all areas of automation technology.

- Width 20 mm, flow rate up to 1,000 l/min
- Sturdy polymer valves on a stable aluminum manifold rail
- Individual or manifold mounting
- Suitable for vacuum
- Valve manifold with pressure zone separation and additional power supply
- Straightforward installation, fast valve replacement
- Electrical connection: individual or multi-pin plug
- Choice of operating voltage between 12 V DC or 230 V AC

Features

Innovative

- Valve terminal for a wide range of pneumatic applications
- Universal from the individual valve up to the multi-pin plug
- Enormous flexibility during planning, assembly and operational use
- Selectable valve functions; 3/2- and 4/2-way function also suitable for vacuum applications
- Wide selection of optimally tailored accessories for flow rates from 200 to 1,000 l/min

Flexible

- Room for expansion with 2 ... 12 valve positions on one valve terminal
- Use of individual valves in combination with an individual sub-base
- The flexibility of the pneumatic working ports provides a practical solution to different requirements
- Two pressure zones (others on request)
- High pressure range –0.9 ... 8 bar
- Extensive operating voltage range from 12 V DC to 230 V AC

Reliable

- Manual override facility
- Durable thanks to the use of tried-and-tested piston spool valves
- Sturdy thanks to the polymer housing and metal manifold rail
- Fast troubleshooting thanks to an LED signal status display in the plug socket with cable or on the valve in the case of the design with multi-pin plug

Easy to mount

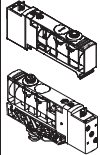
- Ready-to-install unit, already assembled and tested
- Minimised expenditure with regard to ordering, installation and commissioning
- Secure wall mounting or H-rail mounting

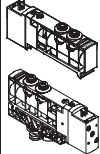
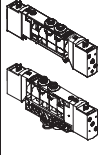
Contents

Individual and Manifold Valves VUVB	
– Product Overview	→ 2
– Key Features	→ 3
– Order Code	→ 7
– Technical Data	→ 8
– Dimensional Drawings	→ 10
– Ordering Data	→ 14
– Accessories	→ 36
Terminal Valves VTUB	
– Product Overview	→ 20
– Key Features	→ 21
– Order Code	→ 27
– Technical Data	→ 28
– Dimensional Drawings	→ 30
– Ordering Data	→ 32
– Accessories	→ 40
→ www.festo.com/catalog/vuvb	
→ www.festo.com/catalog/vtub	

Product Range Overview – Individual and Manifold Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

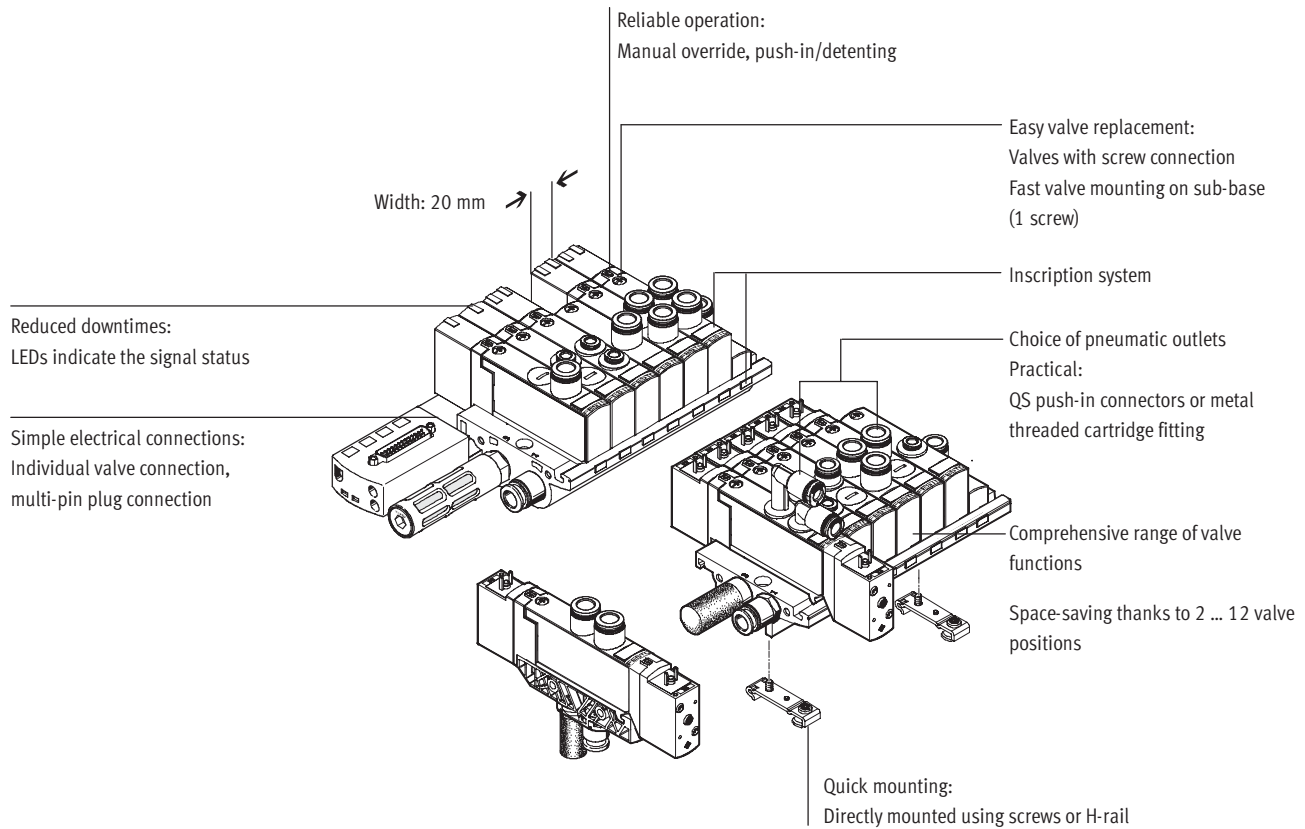
Function	Version	Type	Nominal Flow Rate [l/min]	Pneumatic connection	Operating Voltage [V]	Semi In-line Valve	In-line Valve	Pilot Air Supply		→ Page
								Internal	External	
3/2-way Valves	Single solenoid valve for individual connection and valve manifold									
		VUVB-...-M32-...	200	QS-4	24 DC 110 AC 230 AC 12 DC/24 AC	■	-	-	■	8
			500	QS-6		■	■	■	■	
			800	QS-8		■	■	■	■	
			1,000	QS-10		■	-	-	■	

Function	Version	Type	Nominal Flow Rate [l/min]	Pneumatic Connection	Operating Voltage [V]	Semi In-line Valve	In-line Valve	Pilot Air Supply		→ Page
								Internal	External	
4/2-way Valves	Single solenoid valve for individual connection and valve manifold									
		VUVB-...-M42-...	200	QS-4	24 DC 110 AC 230 AC 12 DC/24 AC	■	-	-	■	8
			500	QS-6		■	■	■	■	
			800	QS-8		■	■	■	■	
			1,000	QS-10		■	-	-	■	
			1,000	QX ¹⁾		■	-	-	■	
	Double solenoid valve for individual connection and valve manifold									
		VUVB-...-B42-...	200	QS-4	24 DC 110 AC 230 AC 12 DC/24 AC	■	-	-	■	8
			500	QS-6		■	■	■	■	
			800	QS-8		■	■	■	■	
			1,000	QS-10		■	-	-	■	
1,000			QX ¹⁾	■		-	-	■		

1) Cartridge not included

Key Features – Individual and Manifold Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series



Equipment Options

Valve functions

- 3/2-way valve, normally open
- 3/2-way valve, normally closed
- 4/2-way valve, single solenoid
- 4/2-way valve, double solenoid

Electrical connection options

Individual connection/individual valve connection

- 2 ... 12 valve positions with manifold rail
- Via plug socket with cable with either LED or illuminating seal

Multi-pin plug

- 4 ... 12 valve positions/
max. 24 solenoid coils
- Sub-D

Key Features – Individual and Manifold Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Valve Terminal Configurator

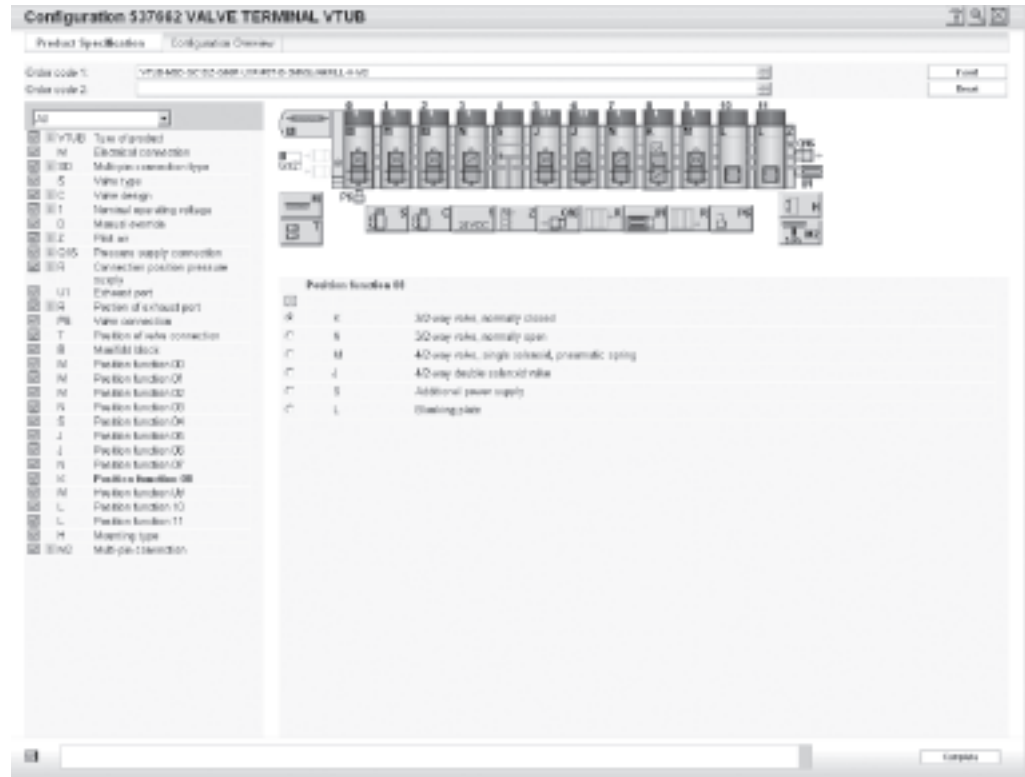
Online via: → www.festo.com/en/engineering

A valve terminal configurator is available to help you select a suitable valve terminal VTUB. This makes it much easier for you to find the right product. Valve terminals type 24 VTUB are ordered via an ident. code.

All valve terminals are supplied fully assembled and individually tested. This reduces the amount of assembly and installation required to a minimum.

Ordering system for valve terminal type 24 VTUB

- Individual electrical connection → Page 17
- Electrical multi-pin connection → Page 33



The illustration above provides an example of a valve terminal configuration. The following steps explain how you arrive at the order code:

Once you have called up the Festo home page, select the online version of the digital product catalog from the “Products” submenu: this will bring you directly to the home page for the Pneumatic Catalog. Activate the “Direct Search” menu.

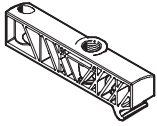
Here you can specify a “Part No.” (e.g. 537662), the “Type” (e.g. VTUB) or “Article name” (e.g. valve terminal) to find your “Search result”. Click on the blue shopping basket to complete the selected product according to your specifications (this does not initiate an order). You will then be prompted to configure the product.

Select “Configurator”. You can then configure the valve terminal step by step (from the top down) according to your requirements. Confirm your configuration with “Finish” to continue on with the ordering process.

Key Features – Individual and Manifold Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

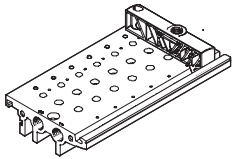
Pilot Air Supply Module



The pilot air supply module is included in the scope of delivery of the manifold rail.

The pilot air supply module for internal or external pilot air supply ensures even greater flexibility.

Manifold Rail

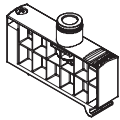


The manifold rail features a groove into which the semi in-line valves are latched and secured with just one screw.

The valve functions 4/2-way single solenoid, 4/2-way double solenoid, 3/2-way normally closed and 3/2-way normally open are available. All semi in-line valves can be supplied with cartridges QSP for tubing

diameters 4, 6, 8 and 10. 4/2-way valves are also supplied without cartridges, allowing the user to fit cartridges of their choice or blanking plugs.

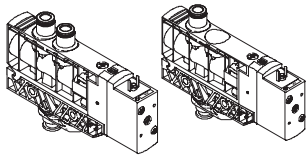
Pressure Zone Supply Module



The pressure zone supply module occupies one valve position and can be

used as an additional supply or for supplying a pressure zone.

Individual Valve



The individual valve can be ordered as an in-line valve (comprising semi in-line valve and sub-base ready assembled) in all functions. Tubing diameters 6 and 8

can be selected here. The in-line valve, however, can also be assembled from the individual parts sub-base and semi in-line valve.

All tubing diameters and the variant without cartridge are available in this case.

Blanking Plate

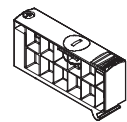
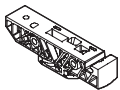


Plate without valve function for reserving valve positions on a valve terminal.

Valves and blanking plates are attached to the manifold rail using a screw.

Sub-base



Individual sub-bases can be equipped with any valve.

Electrical connection is by means of a standardised connector plug, square design to EN 175301-803, type C.

Prefabricated plug sockets with cable or plugs for self-assembly are offered for this.

Key Features – Individual and Manifold Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Pneumatic Connection

Supply and exhaust

The valves are supplied pneumatically via manifold rails or individual sub-bases.

The manifold rails contain common lines for compressed air supply, exhaust and pilot exhaust for all valves.

The common lines can be connected

- at the left (code L)
- at the right (code R) or
- at both ends (no code)

Pilot air

In-line valves are offered with internal and external pilot air. In the case of semi in-line valves, the installation position of the insert in the sub-base determines whether the valves will be actuated internally or externally.

Internal pilot air

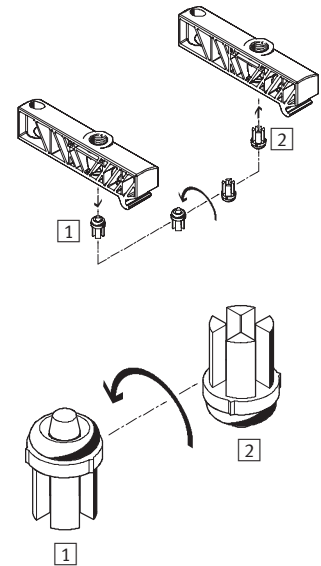
An internal pilot air supply can be selected if the supply pressure is between 2 and 8 bar. The pilot air is branched from channel 1 in the pressure zone supply module in this case.

If the selector is installed as shown in position **1**, it means that the pilot air supply will be branched internally from channel 1.

External pilot air

An external pilot air supply must be used if the supply pressure is between -0.9 and $+2$ bar. The pilot air is supplied via port 12/14 of the pressure zone supply module in this case.

If the selector is turned 180° and installed as shown in position **2**, it means that the valve manifold is set to external pilot air supply.



Order Code – Individual and Manifold Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

VUVB - L - M32C - A Z D - Q6 - 1 C1

Valve Family	
VUVB	Solenoid valve

Constructional Design	
L	In-line valve
S	Semi in-line valve

Valve Function	
M32C	3/2-way valve, normally closed
M32U	3/2-way valve, normally open
M42	4/2-way valve, single solenoid
B42	4/2-way valve, double solenoid

Type of Reset	
	None (double solenoid)
A	Pneumatic reset

Pilot Air Supply	
	Internal
Z	External

Manual Override Facility	
D	Pushing/detenting

Pneumatic Connection	
Q4	For tubing O.D. 4 mm 1
Q6	For tubing O.D. 6 mm
Q8	For tubing O.D. 8 mm
Q10	For tubing O.D. 10 mm 1
QX	Without push-in connector 2

Operating Voltage	
1	24 V DC
2A	110 V AC
3A	230 V AC
5W	12 V DC/24 V AC

Electrical Connection	
C1	Plug socket connection pattern to EN 175301-803, type C

- 1 Only with semi in-line valves S.
- 2 Only with semi in-line valves S-M42 and S-B42.

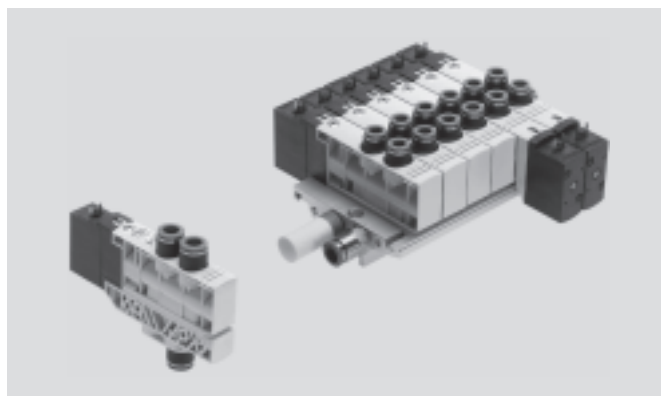
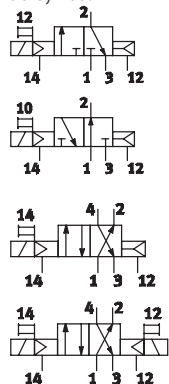
Ordering example:
VUVB-L-M42-AD-Q6-1C1

Technical Data – Individual and Manifold Valves



Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

ISO Symbol



General Technical Data				
Valve function		3/2, single solenoid	4/2, single solenoid	4/2, double solenoid
Constructional design		Piston spool valve		
Sealing principle		Soft		
Type of actuation		Electrical		
Type of reset		Pneumatic spring		–
Type of control		Piloted		
Pilot air supply		Internal or external		
Direction of flow		Non-reversible		
Exhaust function		No flow control		
Manual override facility		Non-detenting, detenting		
Type of mounting		Via through-holes		
Installation position		Any		
Nominal size		[mm]	7	
Standard nominal flow rate		qnN	[l/min] 200 (QS-4), 500 (QS-6), 800 (QS-8), 1,000 (QS-10)	
Width		[mm]	20	
Product weight		In-line valve	[g]	170
		Semi in-line valve	[g]	150
			170	240
			150	220

Operating and Environmental Conditions				
Operating medium		Dried and filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm, vacuum		
Operating pressure range		Internal pilot air supply	[bar]	2 ... 8
		External pilot air supply	[bar]	–0.9 ... +8
Pilot pressure range		[bar]	2 ... 8	
Ambient temperature		[°C]	–5 ... +50	
Temperature of medium		[°C]	–5 ... +50	
Corrosion resistance class CRC		1 ¹⁾		

1) Corrosion resistance class 1 to Festo standard 940 070
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

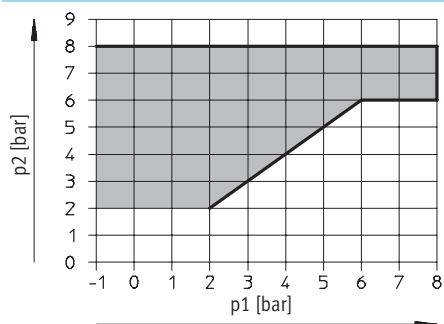
Technical Data – Individual and Manifold Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Electrical Data			
Electrical connection		Plug, square design to EN 175301-803, type C	
Nominal operating voltage	DC	[V]	12, 24
	AC	[V]	24, 110, 230
Permissible voltage fluctuations		±10%	
Electrical power consumption	12 V DC	[W]	1.4
	24 V DC	[W]	1.5
	24 V AC	[VA]	Pull: 3.1, hold: 2.2
	110 V AC	[VA]	Pull: 3.1, hold: 2.2
	230 V AC	[VA]	Pull: 3.1, hold: 2.2
Protection class to EN 60529		IP65 (in combination with plug socket)	

Valve Response Times [ms]			
Valve function	3/2, single solenoid	4/2, single solenoid	4/2, double solenoid
On	20	20	–
Off	20	20	–
Changeover	–	–	15

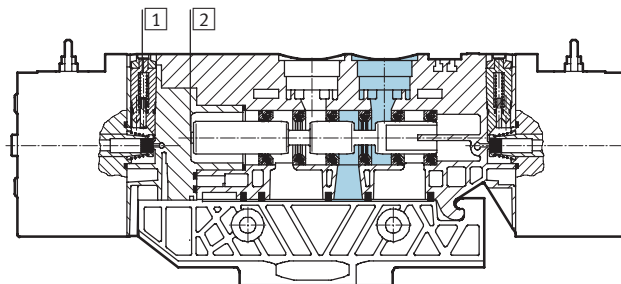
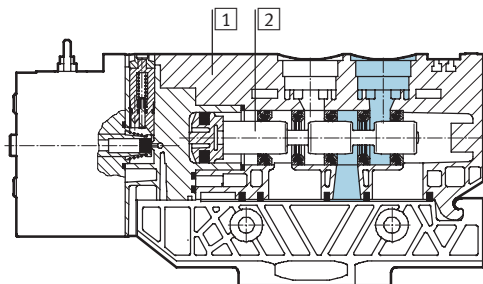
Pilot Pressure p2 as a Function of Operating Pressure p1



Materials

Sectional view – Single solenoid valve

Sectional view – Double solenoid valve



1	Housing	Reinforced polyamide
2	Piston spool	Wrought aluminum alloy
–	Seals	Nitrile rubber, hydrogenated nitrile rubber, fluorocarbon rubber

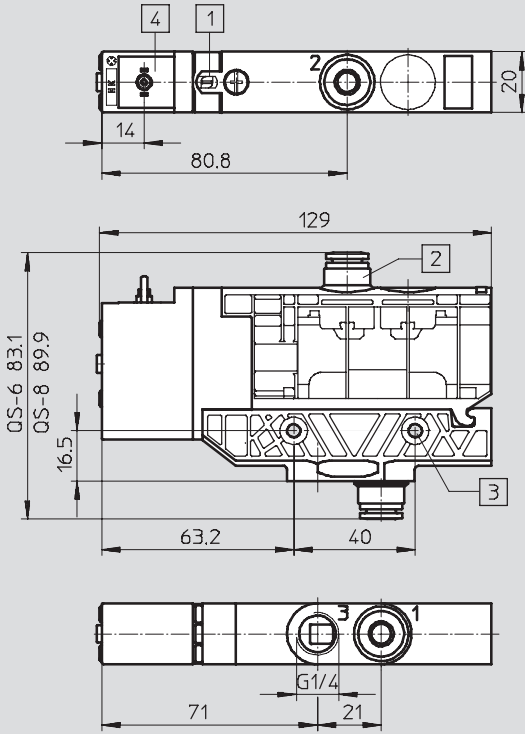
Dimensional Drawings – Individual and Manifold Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Dimensions – 3/2-way and 4/2-way Valve, Single Solenoid

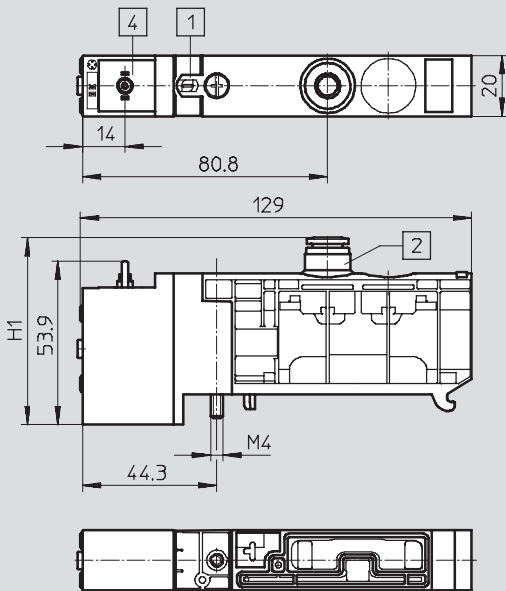
Download CAD data → www.festo.com/en/engineering

In-line valve



- 1 Manual override tool
- 2 Fitting QS-6 or QS-8
- 3 Through-hole for screw M4
- 4 Plug socket connection pattern to EN 175301-803, type C

Semi in-line valve



- 1 Manual override tool
- 2 Fitting QS
- 4 Plug socket connection pattern to EN 175301-803, type C

Pneumatic connection	H1
QS-4	57
QS-6	60

Pneumatic connection	H1
QS-8	63
QS-10	65

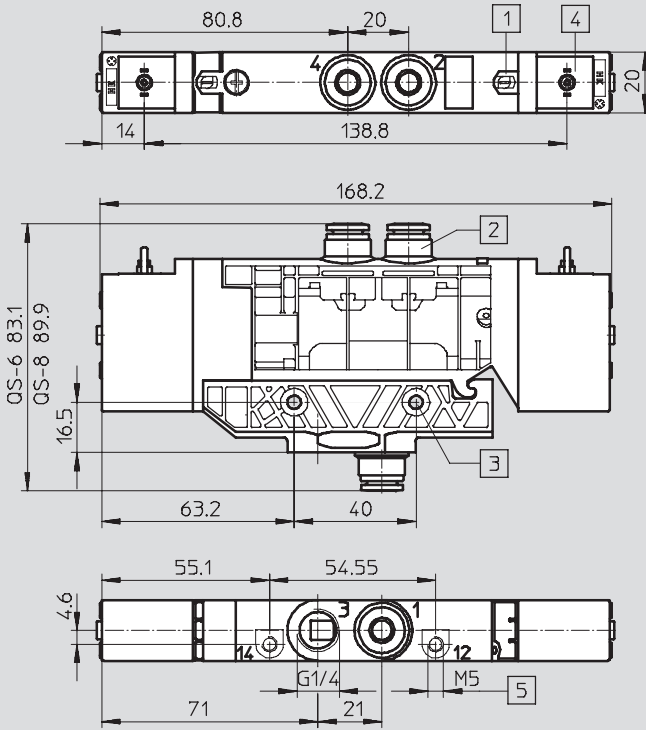
Dimensional Drawings – Individual and Manifold Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Dimensions – 4/2-way Valve, Double Solenoid

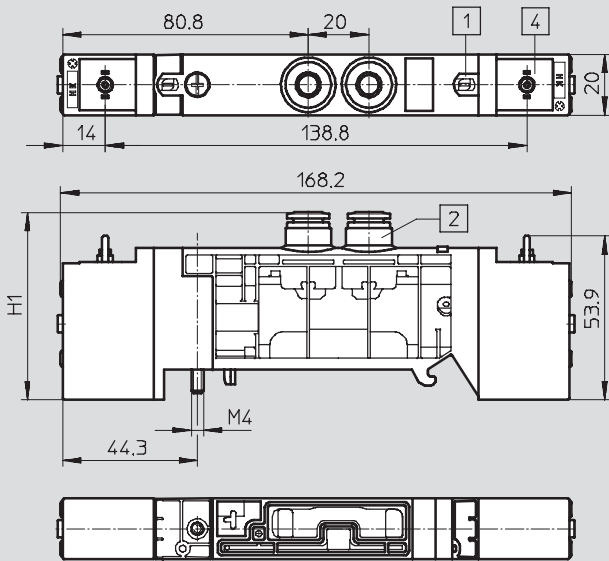
Download CAD data → www.festo.com/en/engineering

In-line valve



- 1 Manual override tool
- 2 Fitting QS-6 or QS-8
- 3 Through-hole for screw M4
- 4 Plug socket connection pattern to EN 175301-803, type C
- 5 Port for external pilot air

Semi in-line valve



- 1 Manual override tool
- 2 Fitting QS
- 4 Plug socket connection pattern to EN 175301-803, type C

Pneumatic connection	H1
QS-4	57
QS-6	60

Pneumatic connection	H1
QS-8	63
QS-10	65

Dimensional Drawings – Individual and Manifold Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Dimensions – Manifold Assembly Download CAD data → www.festo.com/en/engineering

Manifold rail G1/4

The drawings show a manifold assembly with the following dimensions and callouts:

- Front View:** Shows a manifold with four valve positions. Dimensions include L1 (total length), L2 (length to the center of the first valve), 24.1 (width of the valve block), 6.5 (width of the manifold rail), 45 (height of the valve block), 5.5^{H13} and 10^{H13} (thread dimensions), and 13 (width of the mounting rail attachment).
- Side View:** Shows the profile of the manifold. Dimensions include L3 (total length), 70.5 (width of the valve block), 50 (width of the manifold rail), 40 (width of the mounting rail attachment), 128.3 (height of the valve block), 166.8 (total height), 94.7 (height of the manifold rail), 23 (height of the mounting rail attachment), 10 (width of the mounting rail attachment), and 30.5 (width of the manifold rail).
- Top View:** Shows the top of the manifold. Dimensions include 21 and 20 (widths of the valve positions), 16.4 (height of the valve positions), 85.4 (total height), 50.5 (height of the manifold rail), and 8 (height of the mounting rail attachment).

Legend:

- 1 Attachment for mounting rail NRH-35-2000 (optional)
- 2 Push-in fittings (optional)
- 3 Cartridge fitting (optional, only with pressure zone supply module)
- 4 Push-in fitting (optional, only with S types)
- 5 Inscription label (optional)

Valve positions	L1	L2
2	85	72
3	106	93
4	127	114
5	148	135
6	169	156
7	190	177
8	211	198
9	232	219
10	253	240
11	274	261
12	295	282

Pneumatic connection	L3
QS-4	64.4
QS-6	64.4
QS-8	72
QS-10	75.4

Dimensional Drawings – Individual and Manifold Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Dimensions – Manifold Assembly Download CAD data → www.festo.com/en/engineering

Manifold rail G1/2

The drawings show a manifold assembly with four valve positions. Key dimensions include:

- L1**: Total length of the manifold.
- L2**: Distance between the centerlines of the valve positions.
- L3**: Total length of the manifold including the pneumatic connection.
- 27.35**: Distance from the end of the manifold to the centerline of the first valve position.
- 6.5**: Distance between the centerlines of the first and second valve positions.
- 45**: Height of the manifold body.
- 5.5 H13** and **10 H13**: Spacing dimensions for the valve positions.
- 74** and **50**: Dimensions for the pneumatic connection area.
- 129.05** and **166.8**: Vertical dimensions for the pneumatic connection.
- 30**: Distance from the centerline of the valve to the pneumatic connection.
- G1/2**: Thread specification for the pneumatic connection.
- 19.7** and **34.5**: Additional vertical dimensions for the pneumatic connection.
- 21** and **20**: Spacing dimensions for the valve positions.
- 16.4** and **89.4**: Vertical dimensions for the valve positions.
- 54.5** and **8**: Vertical dimensions for the manifold base.
- 13**: Distance from the end of the manifold to the centerline of the first valve position.

Legend:

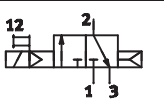
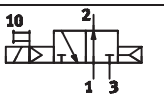
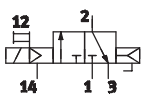
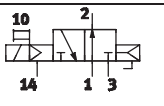
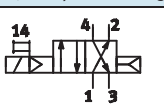
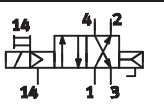
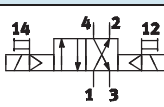
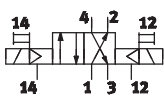
- 1 Attachment for mounting rail NRH-35-2000 (optional)
- 2 Push-in fittings (optional)
- 3 Cartridge fitting (optional, only with pressure zone supply module)
- 4 Push-in fitting (optional, only with S types)
- 5 Inscription label (optional)

Valve positions	L1	L2
2	85	72
3	106	93
4	127	114
5	148	135
6	169	156
7	190	177
8	211	198
9	232	219
10	253	240
11	274	261
12	295	282

Pneumatic connection	L3
QS-4	78.5
QS-6	78.5
QS-8	86
QS-10	89.4

Ordering Data – Individual and Manifold Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Ordering Data – In-line Valves						
Circuit symbol	Code	Description	Voltage	Pneumatic connection	Part No.	Type
3/2-way valves						
	–	Normally closed Internal pilot air supply Pneumatic reset	24 V DC	QS-6	537468	VUVB-L-M32C-AD-Q6-1C1
				QS-8	537469	VUVB-L-M32C-AD-Q8-1C1
			110 V AC	QS-6	537538	VUVB-L-M32C-AD-Q6-2AC1
				QS-8	537539	VUVB-L-M32C-AD-Q8-2AC1
				230 V AC	QS-6	537546
QS-8	537547	VUVB-L-M32C-AD-Q8-3AC1				
	–	Normally open Internal pilot air supply Pneumatic reset	24 V DC	QS-6	537470	VUVB-L-M32U-AD-Q6-1C1
				QS-8	537471	VUVB-L-M32U-AD-Q8-1C1
			110 V AC	QS-6	537540	VUVB-L-M32U-AD-Q6-2AC1
				QS-8	537541	VUVB-L-M32U-AD-Q8-2AC1
				230 V AC	QS-6	537548
QS-8	537549	VUVB-L-M32U-AD-Q8-3AC1				
	–	Normally closed External pilot air supply Pneumatic reset	24 V DC	QS-6	537476	VUVB-L-M32C-AZD-Q6-1C1
				QS-8	537477	VUVB-L-M32C-AZD-Q8-1C1
			110 V AC	QS-6	537554	VUVB-L-M32C-AZD-Q6-2AC1
				QS-8	537555	VUVB-L-M32C-AZD-Q8-2AC1
				230 V AC	QS-6	537562
QS-8	537563	VUVB-L-M32C-AZD-Q8-3AC1				
	–	Normally open External pilot air supply Pneumatic reset	24 V DC	QS-6	537478	VUVB-L-M32U-AZD-Q6-1C1
				QS-8	537479	VUVB-L-M32U-AZD-Q8-1C1
			110 V AC	QS-6	537556	VUVB-L-M32U-AZD-Q6-2AC1
				QS-8	537557	VUVB-L-M32U-AZD-Q8-2AC1
				230 V AC	QS-6	537564
QS-8	537565	VUVB-L-M32U-AZD-Q8-3AC1				
4/2-way valves, single solenoid						
	–	Internal pilot air supply Pneumatic reset	24 V DC	QS-6	537472	VUVB-L-M42-AD-Q6-1C1
				QS-8	537473	VUVB-L-M42-AD-Q8-1C1
			110 V AC	QS-6	537542	VUVB-L-M42-AD-Q6-2AC1
				QS-8	537543	VUVB-L-M42-AD-Q8-2AC1
				230 V AC	QS-6	537550
QS-8	537551	VUVB-L-M42-AD-Q8-3AC1				
	–	External pilot air supply Pneumatic reset	24 V DC	QS-6	537480	VUVB-L-M42-AZD-Q6-1C1
				QS-8	537481	VUVB-L-M42-AZD-Q8-1C1
			110 V AC	QS-6	537558	VUVB-L-M42-AZD-Q6-2AC1
				QS-8	537559	VUVB-L-M42-AZD-Q8-2AC1
				230 V AC	QS-6	537566
QS-8	537567	VUVB-L-M42-AZD-Q8-3AC1				
4/2-way valves, double solenoid						
	–	Internal pilot air supply	24 V DC	QS-6	537474	VUVB-L-B42-D-Q6-1C1
				QS-8	537475	VUVB-L-B42-D-Q8-1C1
			110 V AC	QS-6	537544	VUVB-L-B42-D-Q6-2AC1
				QS-8	537545	VUVB-L-B42-D-Q8-2AC1
				230 V AC	QS-6	537552
QS-8	537553	VUVB-L-B42-D-Q8-3AC1				
	–	External pilot air supply	24 V DC	QS-6	537482	VUVB-L-B42-ZD-Q6-1C1
				QS-8	537483	VUVB-L-B42-ZD-Q8-1C1
			110 V AC	QS-6	537560	VUVB-L-B42-ZD-Q6-2AC1
				QS-8	537561	VUVB-L-B42-ZD-Q8-2AC1
				230 V AC	QS-6	537568
QS-8	537569	VUVB-L-B42-ZD-Q8-3AC1				

Ordering Data – Individual and Manifold Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Ordering Data – Semi In-line Valves for Sub-base or Manifold Rail						
Circuit symbol	Code	Description	Voltage	Pneumatic connection	Part No.	Type
3/2-way valves						
	K	Normally closed Pilot air supply ¹⁾ Pneumatic reset	24 V DC	QS-4	537484	VUVB-S-M32C-AZD-Q4-1C1
				QS-6	537485	VUVB-S-M32C-AZD-Q6-1C1
				QS-8	537486	VUVB-S-M32C-AZD-Q8-1C1
				QS-10	537487	VUVB-S-M32C-AZD-Q10-1C1
			110 V AC	QS-4	537570	VUVB-S-M32C-AZD-Q4-2AC1
				QS-6	537571	VUVB-S-M32C-AZD-Q6-2AC1
				QS-8	537572	VUVB-S-M32C-AZD-Q8-2AC1
				QS-10	537573	VUVB-S-M32C-AZD-Q10-2AC1
			230 V AC	QS-4	537586	VUVB-S-M32C-AZD-Q4-3AC1
				QS-6	537587	VUVB-S-M32C-AZD-Q6-3AC1
				QS-8	537588	VUVB-S-M32C-AZD-Q8-3AC1
				QS-10	537589	VUVB-S-M32C-AZD-Q10-3AC1
	N	Normally open Pilot air supply ¹⁾ Pneumatic reset	24 V DC	QS-4	537488	VUVB-S-M32U-AZD-Q4-1C1
				QS-6	537489	VUVB-S-M32U-AZD-Q6-1C1
				QS-8	537490	VUVB-S-M32U-AZD-Q8-1C1
				QS-10	537491	VUVB-S-M32U-AZD-Q10-1C1
			110 V AC	QS-4	537574	VUVB-S-M32U-AZD-Q4-2AC1
				QS-6	537575	VUVB-S-M32U-AZD-Q6-2AC1
				QS-8	537576	VUVB-S-M32U-AZD-Q8-2AC1
				QS-10	537577	VUVB-S-M32U-AZD-Q10-2AC1
			230 V AC	QS-4	537590	VUVB-S-M32U-AZD-Q4-3AC1
				QS-6	537591	VUVB-S-M32U-AZD-Q6-3AC1
				QS-8	537592	VUVB-S-M32U-AZD-Q8-3AC1
				QS-10	537593	VUVB-S-M32U-AZD-Q10-3AC1

1) Internal/external depending on the individual sub-base or the installation position of the selector in the pressure zone supply module.

Ordering Data – Individual and Manifold Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Ordering Data – Semi In-line Valves for Sub-base or Manifold Rail						
Circuit symbol	Code	Description	Voltage	Pneumatic connection	Part No.	Type
4/2-way valves, single solenoid						
	M	Pilot air supply ¹⁾ Pneumatic reset	24 V DC	QS-4	537492	VUVB-S-M42-AZD-Q4-1C1
				QS-6	537493	VUVB-S-M42-AZD-Q6-1C1
				QS-8	537494	VUVB-S-M42-AZD-Q8-1C1
				QS-10	537495	VUVB-S-M42-AZD-Q10-1C1
				without push-in connector	537534	VUVB-S-M42-AZD-QX-1C1
			110 V AC	QS-4	537578	VUVB-S-M42-AZD-Q4-2AC1
				QS-6	537579	VUVB-S-M42-AZD-Q6-2AC1
				QS-8	537580	VUVB-S-M42-AZD-Q8-2AC1
				QS-10	537581	VUVB-S-M42-AZD-Q10-2AC1
				without push-in connector	537632	VUVB-S-M42-AZD-QX-2AC1
			230 V AC	QS-4	537594	VUVB-S-M42-AZD-Q4-3AC1
				QS-6	537595	VUVB-S-M42-AZD-Q6-3AC1
				QS-8	537596	VUVB-S-M42-AZD-Q8-3AC1
				QS-10	537597	VUVB-S-M42-AZD-Q10-3AC1
				without push-in connector	537636	VUVB-S-M42-AZD-QX-3AC1
			12 V DC / 24 V AC	without push-in connector	545376	VUVB-S-M42-AZD-QX-5WC1
			4/2-way valves, double solenoid			
	J	Pilot air supply ¹⁾	24 V DC	QS-4	537496	VUVB-S-B42-ZD-Q4-1C1
				QS-6	537497	VUVB-S-B42-ZD-Q6-1C1
				QS-8	537498	VUVB-S-B42-ZD-Q8-1C1
				QS-10	537499	VUVB-S-B42-ZD-Q10-1C1
				without push-in connector	537535	VUVB-S-B42-ZD-QX-1C1
			110 V AC	QS-4	537582	VUVB-S-B42-ZD-Q4-2AC1
				QS-6	537583	VUVB-S-B42-ZD-Q6-2AC1
				QS-8	537584	VUVB-S-B42-ZD-Q8-2AC1
				QS-10	537585	VUVB-S-B42-ZD-Q10-2AC1
				without push-in connector	537633	VUVB-S-B42-ZD-QX-2AC1
			230 V AC	QS-4	537598	VUVB-S-B42-ZD-Q4-3AC1
				QS-6	537599	VUVB-S-B42-ZD-Q6-3AC1
				QS-8	537600	VUVB-S-B42-ZD-Q8-3AC1
				QS-10	537601	VUVB-S-B42-ZD-Q10-3AC1
				without push-in connector	537637	VUVB-S-B42-ZD-QX-3AC1
			12 V DC / 24 V AC	without push-in connector	545377	VUVB-S-B42-ZD-QX-5WC1

1) Internal/external depending on the individual sub-base or the installation position of the selector in the pressure zone supply module.

Ordering Data – Configurable Products

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series



M Mandatory Data				O Options		M		O	→
Module No.	Product type	Electrical connection	Individual connection type	Valve type	Valve design	Nominal operating voltage	Manual override facility	Pilot air supply	
537662	VTUB	S	ET	S	- C	1 2A 3A 5W	D	- Z	
Ordering example									
537662	VTUB	- S	ET	- S		2A	D		
1	2	3	4	5	6	7	8	9	

Ordering Table			Conditions	Code	Enter code
M 1	Module No.	537662			
2	Product type	Valve terminal		VTUB	VTUB
3	Electrical connection	Individual connection		-S	-S
4	Individual connection type	Blade connectors		ET	ET
5	Valve type	Semi in-line valve		-S	-S
O 6	Valve design	Without cover plate			
		With cover plate		C	
M 7	Nominal operating voltage	24 V DC		1	
		110 V AC		2A	
		230 V AC		3A	
		12 V DC/ 24 V AC		5W	
8	Manual override facility	Detenting		D	D
O 9	Pilot air supply	Internal			
↓		External		Z	

Transfer order code

537662	VTUB	- S	ET	- S			D	
1	2	3	4	5	6	7	8	9

Ordering Data – Configurable Products



Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Mandatory Data	Options	Mandatory Data	Options	Mandatory Data	Options	Mandatory Data
Pressure supply connection	Pressure supply connection position	Exhaust connection	Exhaust connection position	Valve connection	Valve connection position	Manifold rail
G14 G12 Q10 Q12 Q16	– L R	D U1	– L R	P4 P6 P8 P10	T TB TA TC	A B
G12		U1		P10	T	B
10	11	12	13	14	15	16

Ordering Table			Conditions	Code	Enter code	
M	10	Pressure supply connection	Thread G $\frac{1}{4}$		-G14	
			Thread G $\frac{1}{2}$		-G12	
			Push-in connector 10 mm		-Q10	
			Push-in connector 12 mm		-Q12	
			Push-in connector 16 mm		-Q16	
O	11	Pressure supply connection position	At both ends			
			Left-hand end		L	
			Right-hand end		R	
M	12	Exhaust connection	Ducted (corresponds to the pressure supply connection)		-D	
			Silencer		-U1	
O	13	Exhaust connection position	At both ends			
			Left-hand end	1	L	
			Right-hand end	1	R	
M	14	Valve connection	Push-in connector 4 mm		-P4	
			Push-in connector 6 mm		-P6	
			Push-in connector 8 mm		-P8	
			Push-in connector 10 mm		-P10	
	15	Valve connection position	On top, straight		T	
On top, angled outlet to the front/rear			2	TB		
On top, angled outlet to the front			2	TA		
On top, angled outlet to the rear			2	TC		
↓	16	Manifold rail	Size 1 (G $\frac{1}{4}$)	3	-A	
			Size 2 (G $\frac{1}{2}$)	4	-B	

- 1 L, R Only with pressure supply connection position (11) L, R
 2 TB, TA, TC Not with valve connection (14) P10 (push-in connector 10 mm)

- 3 A Not with pressure supply connection (10) G12, Q16
 4 B Not with pressure supply connection (10) G14

Transfer order code

– – – – –

10 11 12 13 14 15 16

Ordering Data – Configurable Products

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series



<p>M Mandatory Data</p> <p>Valve position 0 ... 11</p> <p>17 Position function 0 ... 11: K, N, M, J, S, L</p> <p>O Options</p> <p>18 Duct separation 0 ... 10: TP, TS, TR</p> <p>Valve position</p> <table style="width: 100%; text-align: center;"> <tr> <td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td> </tr> <tr> <td>J</td><td>K</td><td>N TR</td><td>J</td><td>S</td><td>K</td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table> <p>17 + 18</p>	0	1	2	3	4	5	6	7	8	9	10	11	J	K	N TR	J	S	K							<p>O Options</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Assembly accessories</td> <td style="width: 50%; text-align: center;">Electrical accessories</td> </tr> <tr> <td style="text-align: center;">H</td> <td style="text-align: center;">C C1 C2</td> </tr> </table> <p>H - C2</p> <p>19 - 20</p>	Assembly accessories	Electrical accessories	H	C C1 C2
0	1	2	3	4	5	6	7	8	9	10	11																		
J	K	N TR	J	S	K																								
Assembly accessories	Electrical accessories																												
H	C C1 C2																												

Ordering Table			Conditions	Code	Enter code
	Valve position 0 ... 11		5	-	-
M 17	Position function 0 ... 11	3/2-way valve, normally closed		K	Enter the equipment selected in the ordering code
		3/2-way valve, normally open		N	
		4/2-way valve, single solenoid, pneumatic spring		M	
		4/2-way valve, double solenoid		J	
		Additional power supply		S	
		Blanking plate		L	
O 18	Duct separation 0 ... 10	Separator 1	6	TP	
		Separator 1, 3	6	TS	
		Separator 3	6	TR	
O 19	Assembly accessories	Type of mounting		-H	
O 20	Electrical accessories	Valve connection		-C	
		Plug socket		-C1	
		Connecting cable 2.5 m		-C2	
	Connecting cable 5 m				

5 Permissible number of valves: 2, 3, 4, ... 12

6 TP, TS, TR Only with pressure supply connection position (11) "At both ends" and exhaust connection position (13) "At both ends". Possible only once per valve terminal.

Transfer order code

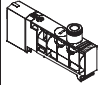
Valve position

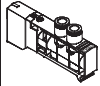
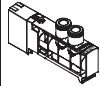
0	1	2	3	4	5	6	7	8	9	10	11

17 + 18 - 19 - 20

Product Range Overview – Terminal Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Function	Version	Type	Nominal Flow Rate [l/min]	Pneumatic Connection	Operating Voltage [V]	Semi In-line Valve	Pilot Air Supply External	→ Page
3/2-way Valves	Single solenoid valve for valve terminal with electrical multi-pin plug connection							
		VUVB-...-M32-...	200	QS-4	24 DC	■	■	28
			500	QS-6		■	■	
			800	QS-8		■	■	
			1,000	QS-10		■	■	

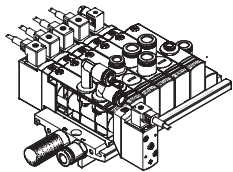
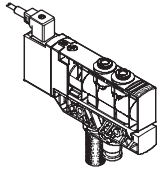
Function	Version	Type	Nominal Flow Rate [l/min]	Pneumatic Connection	Operating Voltage [V]	Semi In-line Valve	Pilot Air Supply External	→ Page
4/2-way Valves	Single solenoid valve for valve terminal with electrical multi-pin plug connection							
		VUVB-...-M42-...	200	QS-4	24 DC	■	■	28
			500	QS-6		■	■	
			800	QS-8		■	■	
			1,000	QS-10		■	■	
			1,000	QX ¹⁾		■	■	
	Double solenoid valve for valve terminal with electrical multi-pin plug connection							
		VUVB-...-B42-...	200	QS-4	24 DC	■	■	28
			500	QS-6		■	■	
			800	QS-8		■	■	
			1,000	QS-10		■	■	
1,000			QX ¹⁾	■		■		

1) Cartridge not included

Key Features – Terminal Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Individual Connection



Connection is independent of the control technology used.

There are two different valve types, in-line valves and semi in-line valves for manifold rails or individual sub-bases.

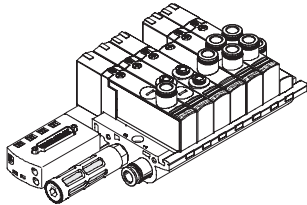
Between 2 ... 24 solenoid coils (divided between 2 ... 12 valve positions) can be selected with individual connection.

Valves can be used on individual sub-bases for actuators further away from the valve terminal.

With an individual electrical connection, the plug is connected directly to the valve. A number of plug sockets/plug sockets with cable can be selected for the valve terminal and for the individual sub-base:

- KMEB-1-...-LED with signal status display
- KMEB-1-230AC-... can be used up to 230 V AC
- MSSD-EB for self-assembly
- KMEB-2-24-... with signal status display
- Illuminating seal MEB-LD for signal status display

Multi-pin Plug Connection



Control signals from the controller to the valve terminal are transmitted via a pre-assembled multi-wire cable, which substantially reduces installation time.

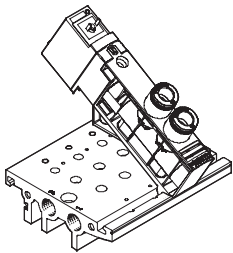
This valve terminal can be fitted with 4 ... 12 valves.

Variants

- Sub-D connection

Double solenoid drive with multi-pin plug connection. The valve is equipped with an LED for displaying the signal status.

Wide Range of Pneumatic Components



- The use of the same basic valves for both the individual valves and the valve manifold permits fast and flexible conversion and multiple use of parts.

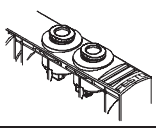
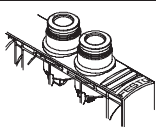

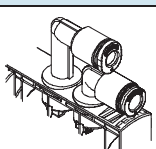
- Flexible construction thanks to assembled and tested units or individual components as modules for individual configurations.

- Flow rates from 200 ... 1,000 l/min depending on the respective application through the selection of appropriate QS connections.

Key Features – Terminal Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

FESTO

Connection on the Valve		
	Code	Description
Code for valve connection position: T		
	P4	Push-in connector 4 mm Connection position on top, straight
	P6	Push-in connector 6 mm Connection position on top, straight
	P8	Push-in connector 8 mm Connection position on top, straight
	P10	Push-in connector 10 mm Connection position on top, straight
Code for valve connection position: TB, TA, TC		
	P4	Push-in connector 4 mm Connection position on top, angled outlet to the front/rear, front, rear
	P6	Push-in connector 6 mm Connection position on top, angled outlet to the front/rear, front, rear
	P8	Push-in connector 8 mm Connection position on top, angled outlet to the front/rear, front, rear

Key Features – Terminal Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

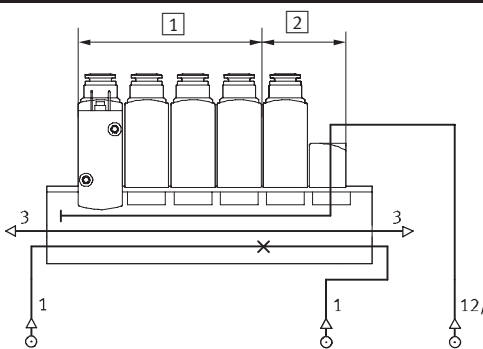
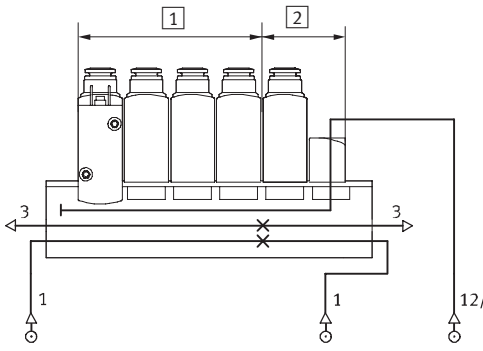
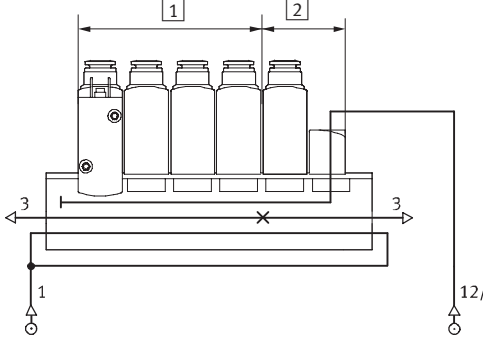
Instructions for Using Pressure Zones

The VTUB valve terminal can be operated with 2 pressure zones, supplied either from the left or from the right.

Pressure zones are created by means of separators that can be used in the following ducts:

- Supply duct 1 (code TP) or
- Supply duct 1 and exhaust duct 3 (code TS) or

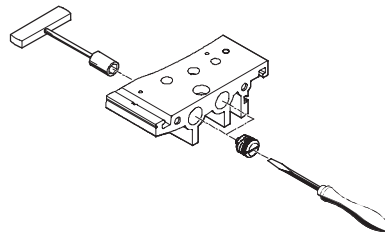
- Exhaust duct 3 (code TR)

Duct Separation		Code	Description
 <p>1 Pressure zone 1 2 Pressure zone 2</p>	TP	Duct 1 closed	
 <p>1 Pressure zone 1 2 Pressure zone 2</p>	TS	Duct 1/3 closed	
 <p>1 Pressure zone 1 2 Pressure zone 2</p>	TR	Duct 3 closed	

Separator VABD-B6

Note

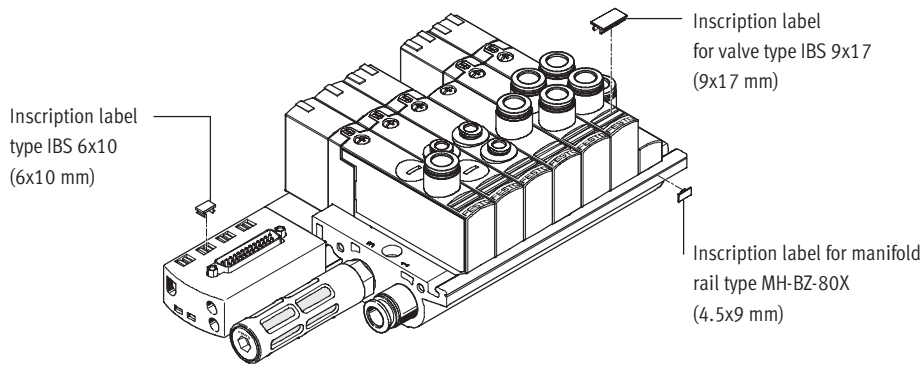
The separator can also be fitted subsequently using a screwdriver/socket spanner.



Key Features – Terminal Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Inscription System



Inscription labels can be applied to the valves and manifold rails to identify them.

- Inscription labels for valve type IBS-9x17 Part No. 161 937
- Inscription labels for manifold rail type MH-BZ-80X Part No. 197 259

Display and Operation

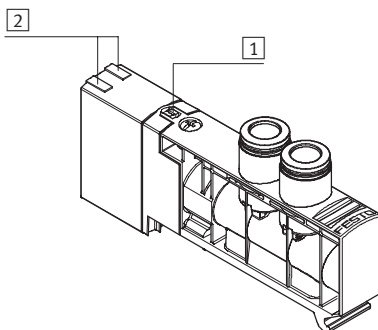
Each valve solenoid coil can be allocated an LED which indicates its signal status. Suitable plug sockets with cable can be found on page 53. The multi-pin variant has the LED integrated in the valve.

The manual override (MO) allows the valve to be activated without electronic control or power supply.

The valve is activated by pushing the manual override. The set switching status can be secured by rotating the manual override.

Note

A manually activated valve (manual override) cannot be reset electrically. Conversely, an electrically activated valve cannot be reset using the mechanical manual override.



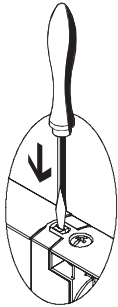
- 1 Optional manual override (pushing and detenting via turning using a screwdriver)
- 2 LED signal status display per solenoid coil

Key Features – Terminal Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

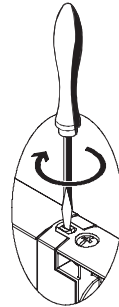
Manual Override (MO)

MO with automatic return (non-detenting)



Press in the stem of the MO with a pin or screwdriver.
 → Valve is in switching position
 Remove the pin or screwdriver.
 Spring force pushes the stem of the MO back.
 → Valve returns to normal position.

MO with detent (turning with detent)¹⁾



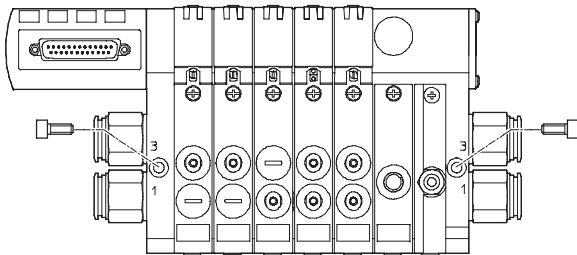
Press in the stem of the MO using a pin or screwdriver until the valve switches and then turn the stem clockwise by 90° until the stop is reached.
 → Valve remains in switching position
 Turn the stem anti-clockwise by 90° until the stop is reached and then remove the pin or screwdriver.
 Spring force pushes the stem of the MO back.
 → Valve returns to normal position.

1) Not with double solenoid valve code J for electrical multi-pin plug connection (double solenoid valve)

Mounting – Valve Terminal

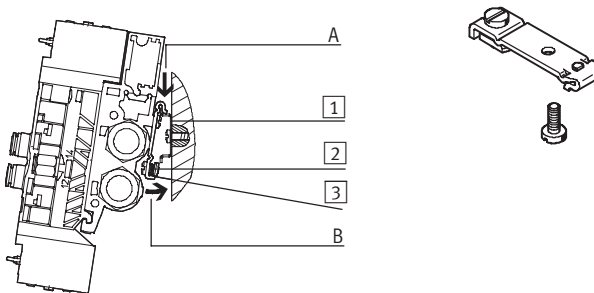
- Sturdy terminal assembly thanks to:
- Two through-holes for wall mounting
 - Integrated attachment for H-rail mounting

Wall mounting



The VTUB valve terminal is screwed onto the mounting surface using two M5 screws.

H-rail mounting



The VTUB valve terminal is hooked onto the H-rail (see arrow A).
 The valve terminal VTUB is then swivelled on the H-rail and secured in place with the clamping component (see arrow B).

- 1 H-rail
- 2 Self-tapping M4x8 screw of the H-rail clamping unit
- 3 Clamping component of the H-rail clamping unit

For H-rail mounting of the valve terminal you will need the VAME-B6-T mounting kit. This permits mounting of the valve terminal on a H-rail to EN 60715.

Key Features – Terminal Valves



Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Pin Allocation – Sub-D Plug						
	Connecting cable, 25-wire			Connecting cable, 15-wire		
	Pin	Address/coil	Core colour ¹⁾	Pin	Address/coil	Core colour ¹⁾
	1	0	WH	1	0	WH
	2	1	BN	2	1	BN
	3	2	GN	3	2	GN
	4	3	YE	4	3	YE
	5	4	GY	5	4	GY
	6	5	PK	6	5	PK
	7	6	BU	7	6	BU
	8	7	RD	8	7	RD
	9	8	BK	9	8	BK
	10	9	VT	10	9	VT
	11	10	GY PK	11	10	GY PK
	12	11	RD BU	12	11	RD BU
	13	12	GN WH	13	–	–
	14	13	BN GN	14	–	–
	15	14	YE WH	15	–	–
	16	15	BN YE	16	–	–
	17	16	GY WH	17	–	–
	18	17	BN GY	18	–	–
	19	18	WH PK	19	–	–
	20	19	BN PK	20	–	–
	21	20	BU WH	21	–	–
	22	21	BN BU	22	–	–
	23	22	RD WH	23	–	RD WH
	24	23	BN RD	24	–	BN RD
	25	0 V	BK WH	25	0 V	BK WH

Note
The drawing shows the view onto the pins of the Sub-D plug.

1) To IEC 757

Equipment

Operate your equipment with unlubricated compressed air if possible. Festo valves and cylinders are designed for operation under normal use without any additional lubrication, yet still have a long service life. The quality of compressed air downstream from the compressor must correspond to that of unlubricated compressed air. If possible, do not operate all of your equipment with lubricated compressed air. The lubricators should, where possible, always be installed directly upstream of the actuator used.

Incorrect additional oil and too high an oil content in the compressed air reduce the service life of the valve terminal. Use Festo special oil OFSW-32 or the alternatives listed in the Festo catalog (as specified in DIN 51524 HLP32; basic oil viscosity 32 CST at 40 °C).

Bio-oils
When using bio-oils (oils which are based upon synthetic or native ester, e.g. rapeseed oil methyl ester), the maximum residual oil content of 0.1 mg/m³ must not be exceeded (see ISO 8573-1 Class 2).

Mineral oils
When using mineral oils (e.g. HLP oils to DIN 51524, parts 1 through 3) or similar oils based on poly-alpha-olefins (PAO), the maximum residual oil content of 5 mg/m³ must not be exceeded (see ISO 8573-1 Class 4). A higher residual oil content irrespective of the compressor oil cannot be permitted, as the basic lubricant would be flushed out over time.

Order Code – Terminal Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

VUVB - [] - [] - [] - [] - [] - [] - [] - [] - [] - []	
Valve Family	
VUVB	Solenoid valve
Constructional Design	
S	Semi in-line valve
Valve Function	
M32C	3/2-way valve, normally closed
M32U	3/2-way valve, normally open
M42	4/2-way valve, single solenoid
B42	4/2-way valve, double solenoid
Type of Reset	
	None (double solenoid)
A	Pneumatic reset
Pilot Air Supply	
	Internal
Z	External
Manual Override Facility	
D	Pushing/detenting
Pneumatic Connection	
Q4	For tubing O.D. 4 mm 1
Q6	For tubing O.D. 6 mm
Q8	For tubing O.D. 8 mm
Q10	For tubing O.D. 10 mm 1
QX	Without push-in connector 2
Operating Voltage	
1	24 V DC
Electrical Connection	
T1	Plug-in, connection for multi-pin plug
Signal Status Display	
L	LED

1 Only with semi in-line valves S.

2 Only with semi in-line valves S-M42 and S-B42.

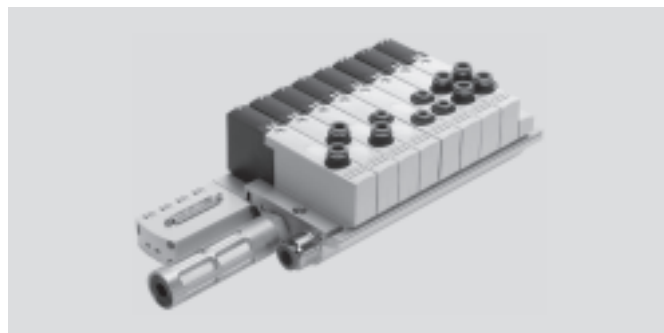
Ordering example:

VUVB-S-M42-AD-Q6-1T1

Technical Data – Terminal Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

FESTO



General Technical Data				
Valve function		3/2, single solenoid	4/2, single solenoid	4/2, double solenoid
Constructional design		Piston spool valve		
Sealing principle		Soft		
Type of actuation		Electrical		
Type of reset		Pneumatic spring		–
Type of control		Piloted		
Pilot air supply		Internal or external		
Direction of flow		Non-reversible		
Exhaust function		No flow control		
Manual override facility		Non-detenting, detenting		Non-detenting
Type of mounting		Via through-holes		
Installation position		Any		
Width	[mm]	20		
Nominal size	[mm]	7		
Pneumatic connections				
Supply connection	1	G1/2 (sub-base)		
Exhaust connection	3	G1/2 (sub-base)		
Working lines	2/4	QS-4, QS-6, QS-8, QS-10		
External pilot air connection	12/14	M5 (sub-base)		
Standard nominal flow rate	qnN	[l/min]	200 (QS-4), 500 (QS-6), 800 (QS-8), 1,000 (QS-10)	

Operating and Environmental Conditions				
Operating medium		Dried and filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm, vacuum		
Operating pressure	Internal pilot air	[bar]	2 ... +8	
	External pilot air	[bar]	–0.9 ... +8	
Pilot pressure range		[bar]	2 ... 8	
Ambient temperature		[°C]	–5 ... +50	
Temperature of medium		[°C]	–5 ... +50	
Storage temperature ¹⁾		[°C]	–20 ... +40	

1) Long-term storage

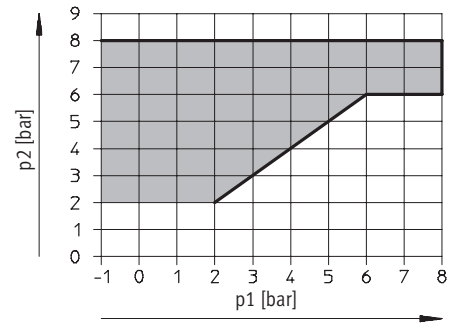
Electrical Data				
Electrical connection		Socket for multi-pin plug		
Nominal operating voltage		[V DC]	24	
Permissible voltage fluctuations			±10%	
Electrical power consumption	Single solenoid	[W]	1.5	
	Double solenoid	[W]	2.4, following a current reduction: 0.1	
Protection class to EN 60529			IP65	

Technical Data – Terminal Valves

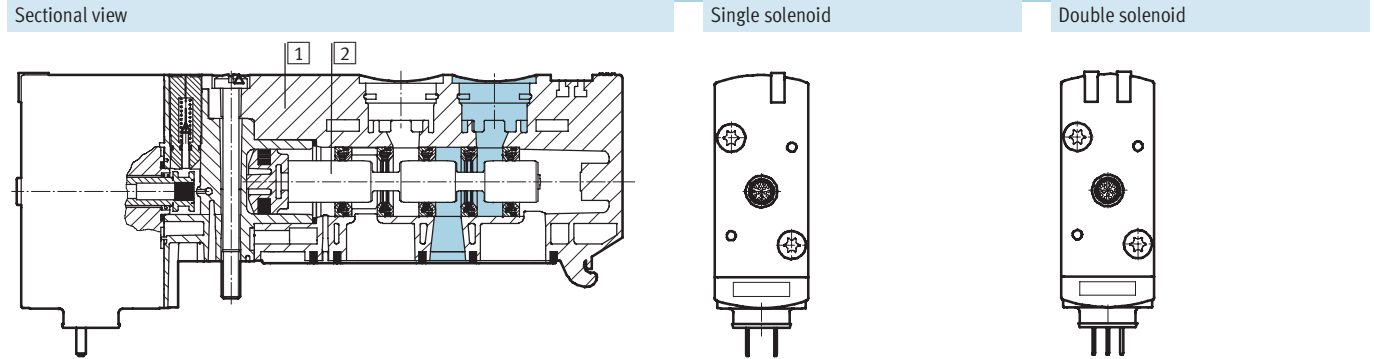
Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Valve Response Times [ms]			
Valve function	3/2, single solenoid	4/2, single solenoid	4/2, double solenoid
On	20	20	–
Off	20	20	–
Changeover	–	–	20

Pilot Pressure p2 as a Function of Operating Pressure p1



Materials – Valves



1	Housing	Reinforced polyamide
2	Piston spool	Wrought aluminum alloy
–	Seals	Nitrile rubber, hydrogenated nitrile rubber, fluorocarbon rubber

Product Weight

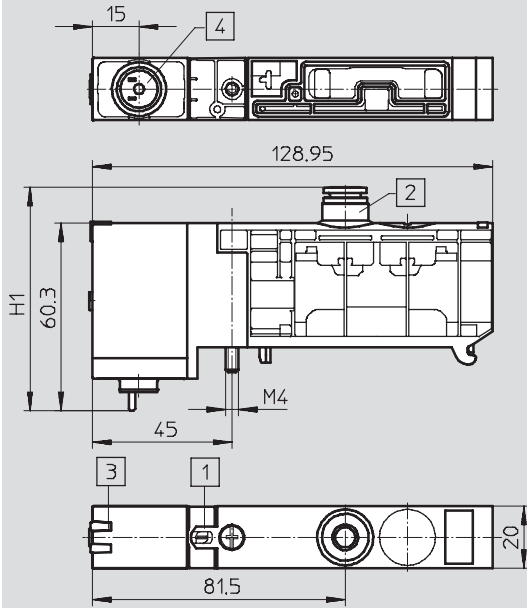
Approx. weights	[g]
Manifold rail with multi-pin plug	
• 4 valve positions	690
• 6 valve positions	915
• 8 valve positions	1,150
• 10 valve positions	1,380
• 12 valve positions	1,620
Pressure zone supply module	30
Valves	
• Single solenoid (code K, N, M)	150
• Double solenoid (code J)	220
Blanking plate for vacant position	25

Dimensional Drawings – Terminal Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Dimensions – 3/2-way and 4/2-way Valve, Single Solenoid

Download CAD data → www.festo.com/en/engineering



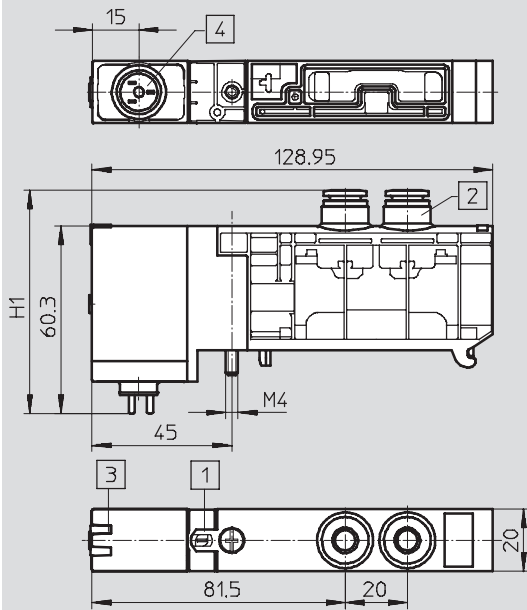
- 1 Manual override facility
- 2 Fitting QS
- 3 LED display
- 4 Plug for electrical linking

Pneumatic connection	H1
QS-4	57
QS-6	60

Pneumatic connection	H1
QS-8	63
QS-10	65

Dimensions – 4/2-way Valve, Double Solenoid

Download CAD data → www.festo.com/en/engineering



- 1 Manual override facility
- 2 Fitting QS
- 3 LED display
- 4 Plug for electrical linking

Pneumatic connection	H1
QS-4	57
QS-6	60

Pneumatic connection	H1
QS-8	63
QS-10	65

Dimensional Drawings – Terminal Valves

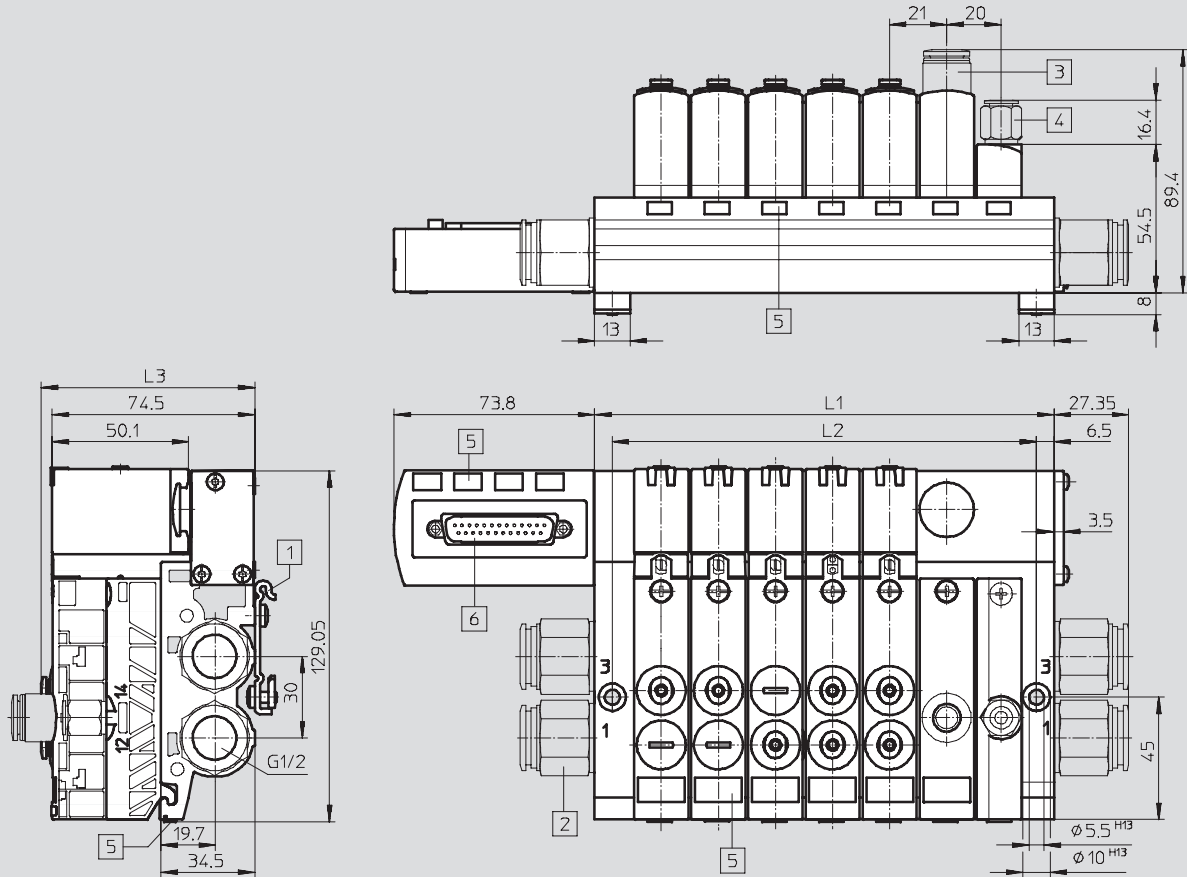
Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series



Dimensions – Valve Terminal

Download CAD data → www.festo.com/en/engineering

With electrical multi-pin plug



- 1 Attachment VAME-B6-T (optional) for mounting rail
- 2 Push-in fittings (optional)
- 3 Push-in fittings (optional, only with pressure zone supply module; cover plate only with blanking plug)
- 4 Push-in fitting (optional, only with S types)
- 5 Inscription label (optional)
- 6 Sub-D plug

Valve positions	L1	L2
4	127	114
6	169	156
8	211	198
10	253	240
12	295	282

Pneumatic connection	L3
QS-4	78.5
QS-6	78.5
QS-8	86
QS-10	89.4

Ordering Data – Terminal Valves

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Ordering Data – Valves for Valve Terminals						
Circuit symbol	Code	Description	Voltage	Pneumatic connection	Part No.	Type
3/2-way valves						
	K	Normally closed Pilot air supply ¹⁾ Pneumatic reset	24 V DC	QS-4	537602	VUVB-S-M32C-AZD-Q4-1T1L
				QS-6	537603	VUVB-S-M32C-AZD-Q6-1T1L
				QS-8	537604	VUVB-S-M32C-AZD-Q8-1T1L
				QS-10	537605	VUVB-S-M32C-AZD-Q10-1T1L
	N	Normally open Pilot air supply ¹⁾ Pneumatic reset	24 V DC	QS-4	537606	VUVB-S-M32U-AZD-Q4-1T1L
				QS-6	537607	VUVB-S-M32U-AZD-Q6-1T1L
				QS-8	537608	VUVB-S-M32U-AZD-Q8-1T1L
				QS-10	537609	VUVB-S-M32U-AZD-Q10-1T1L
4/2-way valves, single solenoid						
	M	Pilot air supply ¹⁾ Pneumatic reset	24 V DC	QS-4	537610	VUVB-S-M42-AZD-Q4-1T1L
				QS-6	537611	VUVB-S-M42-AZD-Q6-1T1L
				QS-8	537612	VUVB-S-M42-AZD-Q8-1T1L
				QS-10	537613	VUVB-S-M42-AZD-Q10-1T1L
				without push-in connector	537640	VUVB-S-M42-AZD-QX-1T1L
4/2-way valves, double solenoid						
	J	Pilot air supply ¹⁾	24 V DC	QS-4	537614	VUVB-S-B42-ZD-Q4-1T1L
				QS-6	537615	VUVB-S-B42-ZD-Q6-1T1L
				QS-8	537616	VUVB-S-B42-ZD-Q8-1T1L
				QS-10	537617	VUVB-S-B42-ZD-Q10-1T1L
				without push-in connector	537641	VUVB-S-B42-ZD-QX-1T1L

1) Internal/external depending on the installation position of the selector in the pressure zone supply module.

Ordering Data – Configurable Products

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series



[M] Mandatory Data				[O] Options		[M]	[O]	→
Module No.	Product type	Electrical connection	Multi-pin plug connection type	Valve type	Valve design	Nominal operating voltage	Manual override facility	Pilot air supply
537662	VTUB	M	SD	S	- C	1	D	- Z
Ordering example								
537662	VTUB	- M	SD	- S	C	1	D	Z
1	2	3	4	5	6	7	8	9

Ordering Table			Conditions	Code	Enter code
[M] 1	Module No.	537662			
2	Product type	Valve terminal		VTUB	VTUB
3	Electrical connection	Multi-pin plug connection		-M	-M
4	Multi-pin plug connection type	Sub-D plug		SD	SD
5	Valve type	Semi in-line valve		-S	-S
[O] 6	Valve design	Without cover plate			
		With cover plate		C	
[M] 7	Nominal operating voltage	24 V DC		1	1
8	Manual override facility	Detenting		D	D
[O] 9	Pilot air supply	Internal			
↓		External		Z	

Transfer order code

537662	VTUB	- M	SD	- S		1	D	
1	2	3	4	5	6	7	8	9

Ordering Data – Configurable Products



Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Mandatory Data	Options	Mandatory Data	Options	Mandatory Data	Options	Mandatory Data
Pressure supply connection	Pressure supply connection position	Exhaust connection	Exhaust connection position	Valve connection	Valve connection position	Manifold rail
G12 Q10 Q12 Q16	– L R	D U1	– L R	P4 P6 P8 P10	T TB TA TC	B
G12	R	D	R	P6	T	B
10	11	12	13	14	15	16

Ordering Table			Conditions	Code	Enter code	
M	10	Pressure supply connection	Thread G½		-G12	
			Push-in connector 10 mm		-Q10	
			Push-in connector 12 mm		-Q12	
			Push-in connector 16 mm		-Q16	
O	11	Pressure supply connection position	At both ends			
			Left-hand end		L	
			Right-hand end		R	
M	12	Exhaust connection	Ducted (corresponds to the pressure supply connection)		-D	
			Silencer		-U1	
O	13	Exhaust connection position	At both ends			
			Left-hand end	1	L	
			Right-hand end	1	R	
M	14	Valve connection	Push-in connector 4 mm		-P4	
			Push-in connector 6 mm		-P6	
			Push-in connector 8 mm		-P8	
			Push-in connector 10 mm		-P10	
M	15	Valve connection position	On top, straight		T	
			On top, angled outlet to the front/rear	2	TB	
			On top, angled outlet to the front	2	TA	
			On top, angled outlet to the rear	2	TC	
↓	16	Manifold rail	Size 2 (G½)		-B	-B

1 L, R Only with pressure supply connection position (11) L, R

2 TB, TA, TC Not with valve connection (14) P10 (push-in connector 10 mm)

Transfer order code

– – – – – –

10 11 12 13 14 15 16

Ordering Data – Configurable Products



Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

<p>M Mandatory Data</p> <p>Valve position 0 ... 11</p> <p>17 Position function 0 ... 11: K, N, M, J, S, L</p> <p>O Options</p> <p>18 Duct separation 0 ... 10: TP, TS, TR</p> <p>Valve position</p> <table style="width: 100%; text-align: center;"> <tr> <td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td> </tr> <tr> <td>M</td><td>J</td><td>N</td><td>S</td><td>M</td><td>L</td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table> <p>17 + 18</p>	0	1	2	3	4	5	6	7	8	9	10	11	M	J	N	S	M	L							<p>O Options</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Assembly accessories</td> <td style="width: 50%; text-align: center;">Electrical accessories</td> </tr> <tr> <td style="text-align: center;">H</td> <td style="text-align: center;">M1 M2 M3</td> </tr> </table> <p>H</p> <p>19</p> <p>M3</p> <p>20</p>	Assembly accessories	Electrical accessories	H	M1 M2 M3
0	1	2	3	4	5	6	7	8	9	10	11																		
M	J	N	S	M	L																								
Assembly accessories	Electrical accessories																												
H	M1 M2 M3																												

Ordering Table			Conditions	Code	Enter code
	Valve position 0 ... 11		3	-	-
M 17	Position function 0 ... 11	3/2-way valve, normally closed		K	Enter the equipment selected in the ordering code
		3/2-way valve, normally open		N	
		4/2-way valve, single solenoid, pneumatic spring		M	
		4/2-way valve, double solenoid		J	
		Additional power supply		S	
		Blanking plate		L	
O 18	Duct separation 0 ... 10	Separator 1	4	TP	
		Separator 1, 3	4	TS	
		Separator 3	4	TR	
O 19	Assembly accessories				
	Type of mounting	H-rail mounting		-H	
O 20	Electrical accessories				
	Multi-pin plug connection	Connecting cable for multi-pin plug, 2.5 m		-M1	
		Connecting cable for multi-pin plug, 5 m		-M2	
Connecting cable for multi-pin plug, 10 m			-M3		

3 Permissible number of valves: 4, 6, 8, 10, 12

4 TP, TS, TR Only with pressure supply connection position (1) "At both ends" and exhaust connection position (13) "At both ends". Possible only once per valve terminal.

Transfer order code

Valve position

0	1	2	3	4	5	6	7	8	9	10	11

17 + 18

19 20

Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Overview – Solenoid Valve VUVB

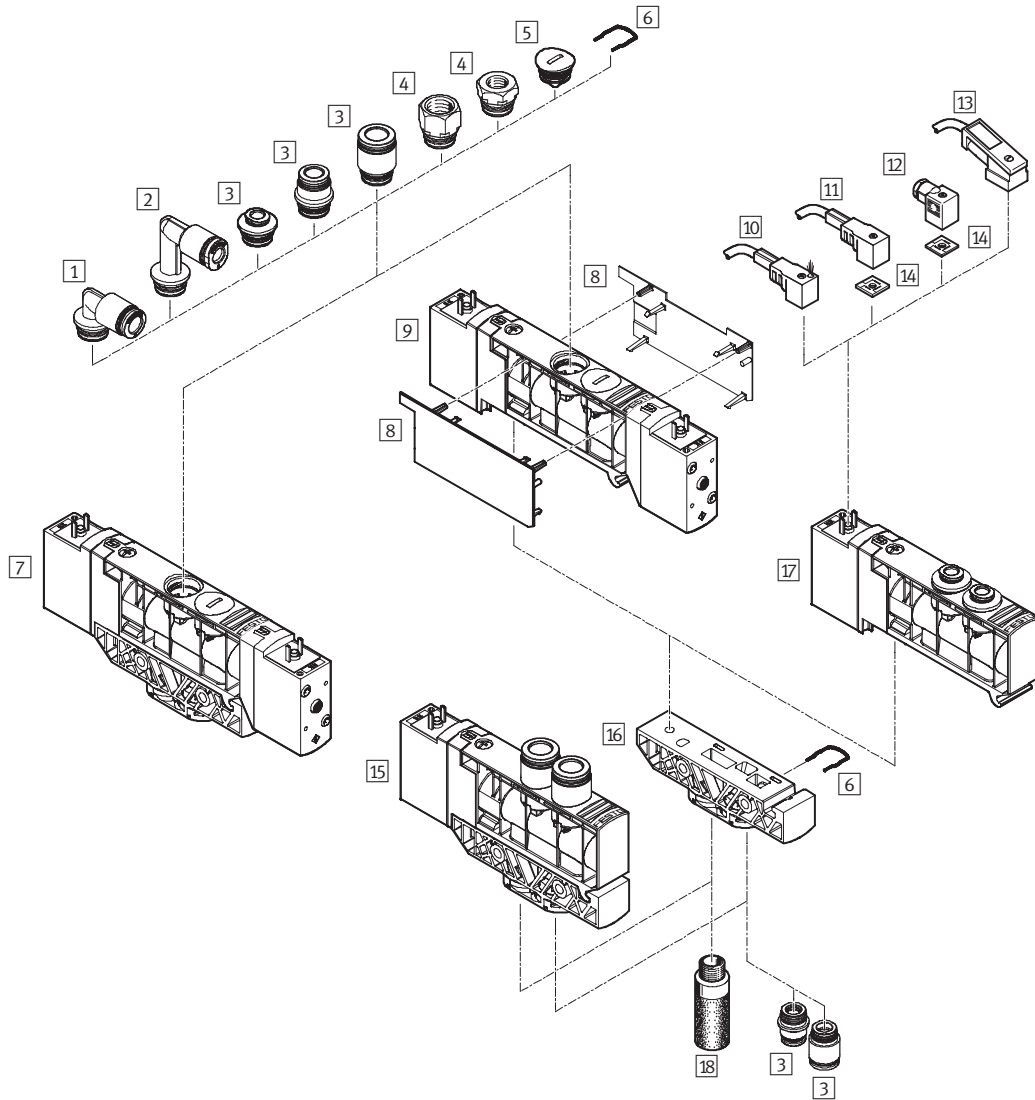
Individual position with individual electrical connection

These peripherals are ordered via individual parts/accessories.

The individual valve can be ordered as an in-line valve or as a fully assembled semi in-line valve on a sub-base.

The in-line valve is available with 6 or 8 mm plug connectors. The semi in-line valve on sub-base is available with 4, 6,

8 or 10 mm plug connectors or as a variant without cartridge fitting.



Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Accessories			
	Brief description	→ Page	
1	Cartridge fitting QSPL	For connecting compressed air tubing with standard external diameters	50
2	Cartridge fitting QSPLL	For connecting compressed air tubing with standard external diameters	50
3	Cartridge fitting QSP	For connecting compressed air tubing with standard external diameters	50
4	Adapter NPFA	–	52
5	Blanking plug QSPC18	For sealing the pneumatic connections on the valve	52
6	Retaining clip	For fitting cartridges and blanking plugs (included in the scope of delivery of the cartridge QSP... and the blanking plug QSPC18)	–
7	Double solenoid valve VUVB-L-...-B-...	In-line valve	8
8	Cover plate for valve housing VAMC	–	48
9	Double solenoid valve VUVB-S-...-B-...	Semi in-line valve	8
10	Plug socket with cable with LED KMEB-1-...-LED	For indicating the signal status	53
11	Plug socket with cable KMEB-1-230AC-...	Can be used up to 230 V	53
12	Plug socket MSSD-EB	–	53
13	Plug socket with cable with LED KMEB-2-24-...	For indicating the signal status	53
14	Illuminating seal MEB-LD	For indicating the signal status	53
15	Single solenoid valve VUVB-L-...-M-...	In-line valve	8
16	Sub-base VABS-B6-PB-...	For individual valve	49
17	Single solenoid valve VUVB-S-...-M-...	Semi in-line valve	8
18	Silencer U, UC	For fitting in exhaust ports	52

Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

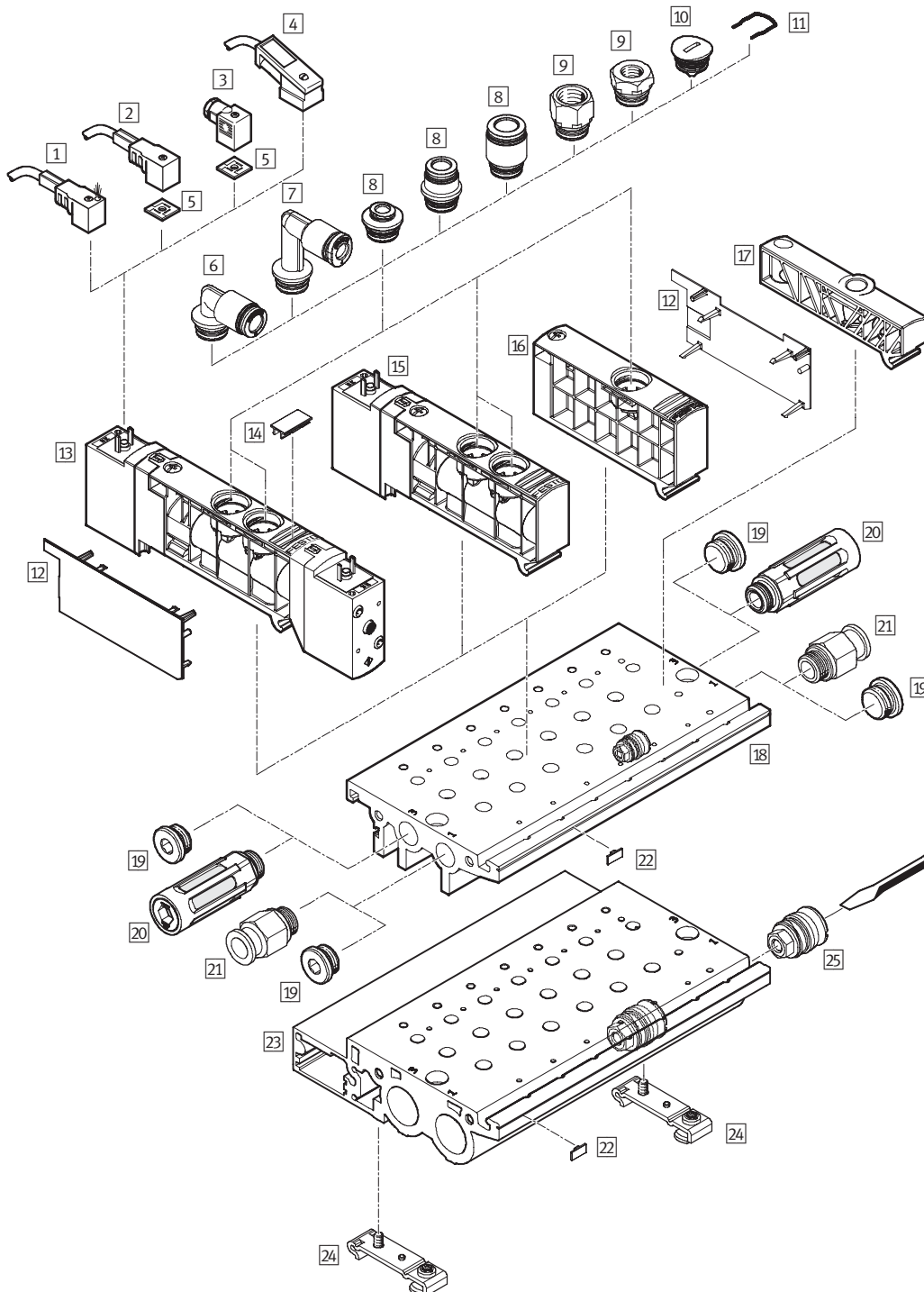
Overview – Solenoid Valve VUVB

Manifold assembly/valve terminal with individual electrical connections

- “Individual connection type” code: ET Valve terminals with individual electrical connections are available in gradations from 2 to max. 12 valve positions.

Valve positions can either be fitted with a valve or a blanking plate for future expansions.

This gives a total maximum number of 24 controllable valve solenoid coils.



Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Accessories			
	Brief description	→ Page	
1	Plug socket with cable with LED KMEB-1-...-LED	For indicating the signal status	53
2	Plug socket with cable KMEB-1-230AC-...	Can be used up to 230 V	53
3	Plug socket MSSD-EB	–	53
4	Plug socket with cable with LED KMEB-2-24-...	For indicating the signal status	53
5	Illuminating seal MEB-LD	For indicating the signal status	53
6	Cartridge fitting QSPL-...	For connecting compressed air tubing with standard external diameters	50
7	Cartridge fitting QSPL-...	For connecting compressed air tubing with standard external diameters	50
8	Cartridge fitting QSP-...	For connecting compressed air tubing with standard external diameters	50
9	Adapter NPFA-...	–	52
10	Blanking plug QSPC18	For sealing the pneumatic connections on the valve	52
11	Retaining clip	For fitting cartridges and blanking plugs (included in the scope of delivery of the cartridge QSP... and the blanking plug QSPC18)	–
12	Cover plate for valve housing VAMC	–	48
13	Double solenoid valve VUVB-...-B	–	8
14	Inscription label IBS-9x17	For identifying the valves	52
15	Single solenoid valve VUVB-...-M	–	8
16	Blanking plate/pressure zone supply module VABB/VABF	Blanking plate VABB: for vacant position, with blanking plug Pressure zone supply module VABF: with cartridge fitting	48
17	Pilot air supply module	For pilot air supply (included in the scope of delivery of the manifold rail VABM)	–
18	Manifold rail VABM-B6-E-G14-...	Pneumatic connection G $\frac{1}{4}$, for connecting max. 12 valves	49
19	Blanking plug B	–	52
20	Silencer U, UC	For fitting in exhaust ports	52
21	Push-in fitting QS	For connecting compressed air tubing with standard external diameters	50
22	Inscription label MH-BZ-80X	For identifying the manifold rail	52
23	Manifold rail VABM-B6-E-G12-...	Pneumatic connection G $\frac{1}{2}$, for connecting max. 12 valves	49
24	H-rail mounting kit VAME	For mounting on the H-rail NRH-35-2000	52
25	Separator for pressure zones VABD	For fitting in the manifold rail	47

Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Overview – Valve Terminal Type 24 VTUB

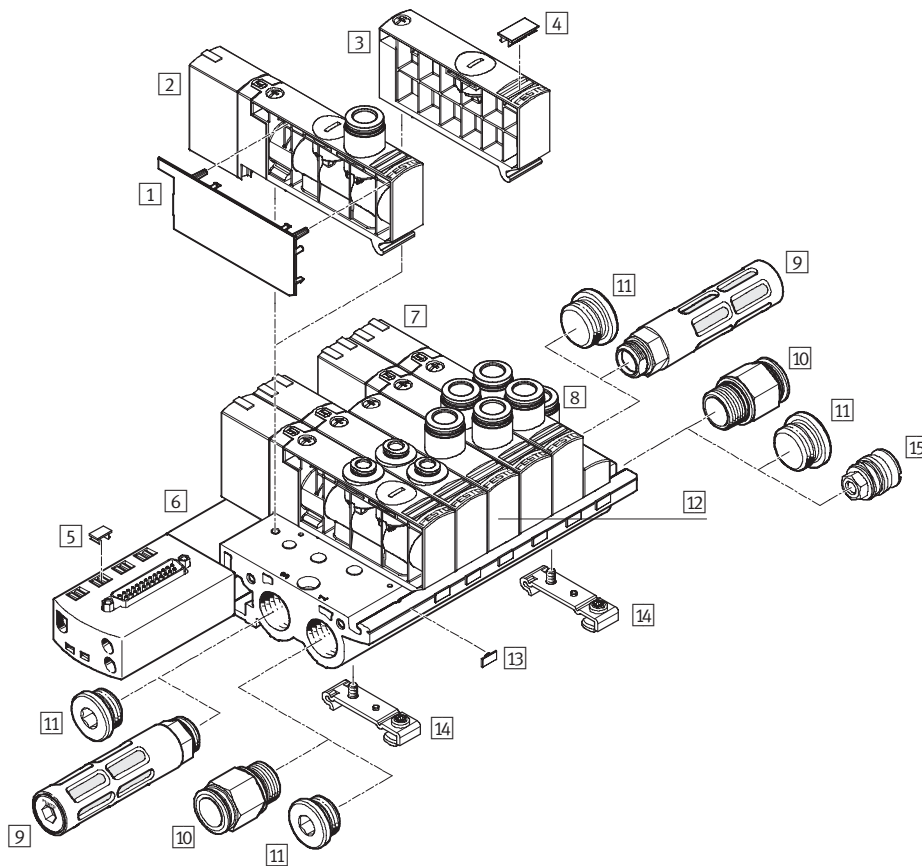
Valve terminal with electrical multi-pin plug connection

- 25-pin Sub-D multi-pin plug connection
Code: SD

Valve terminals with electrical multi-pin plug connection are available in gradations from 2 to max. 12 valve positions.

Each valve position can either be equipped with a valve or a blanking plate.

A maximum of 24 valve solenoid coils can be actuated via the electrical multi-pin plug connection.



Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Accessories			
	Brief description	→ Page	
1	Cover plate for valve housing VAMC	–	48
2	Single solenoid valve VUVB-...-M	–	28
3	Blanking plate VABB	Blanking plate VABB: for vacant position, with blanking plug	48
4	Inscription label IBS-9x17	For identifying the valves	52
5	Inscription label IBS-6x10	–	52
6	Manifold rail VABM-B6-E-G...-6-M1	With multi-pin plug connection, for connecting max. 12 valves	49
7	Double solenoid valve VUVB-...-B	–	28
8	Pilot air supply module	For pilot air supply (included in the scope of delivery of the manifold rail VABM)	–
9	Silencer U, UC	For fitting in exhaust ports	52
10	Push-in fitting QS	For connecting compressed air tubing with standard external diameters	50
11	Blanking plug B	–	52
12	Pressure zone supply module VABF	Pressure zone supply module VABF: with cartridge	48
13	Inscription label MH-BZ-80X	For identifying the manifold rail	52
14	H-rail mounting kit VAME	For mounting on the H-rail NRH-35-2000	52
15	Separator for pressure zones VABD	For mounting in the manifold rail	47

Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

FESTO

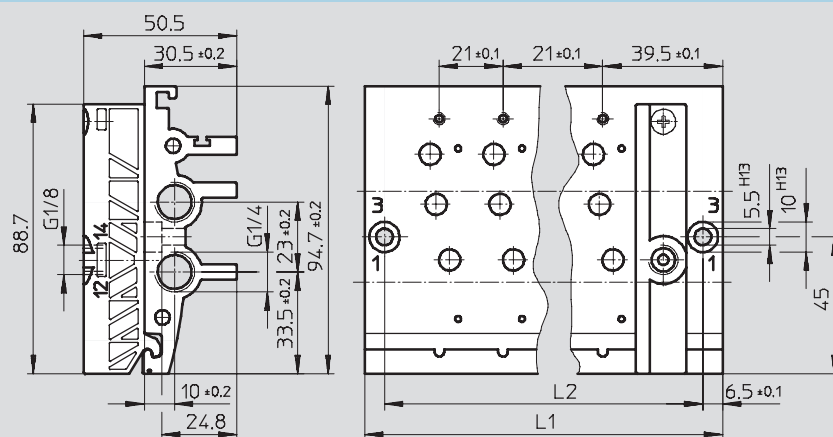
Manifold rail G $\frac{1}{4}$ VABM

Material:
Wrought aluminum alloy



Dimensions

Download CAD data → www.festo.com/en/engineering



Dimensions and Ordering Data

Valve positions	L1	L2	Weight [g]	CRC	Part No.	Type
2	85	72	270	2 ¹⁾	537500	VABM-B6-E-G14-2
3	106	93	340	2 ¹⁾	545815	VABM-B6-E-G14-3
4	127	114	400	2 ¹⁾	537501	VABM-B6-E-G14-4
5	148	134	470	2 ¹⁾	545816	VABM-B6-E-G14-5
6	169	156	530	2 ¹⁾	537502	VABM-B6-E-G14-6
7	190	177	600	2 ¹⁾	545817	VABM-B6-E-G14-7
8	211	198	670	2 ¹⁾	537503	VABM-B6-E-G14-8
9	232	219	740	2 ¹⁾	545818	VABM-B6-E-G14-9
10	253	240	800	2 ¹⁾	537504	VABM-B6-E-G14-10
11	274	261	870	2 ¹⁾	545819	VABM-B6-E-G14-11
12	295	282	940	2 ¹⁾	537505	VABM-B6-E-G14-12

1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

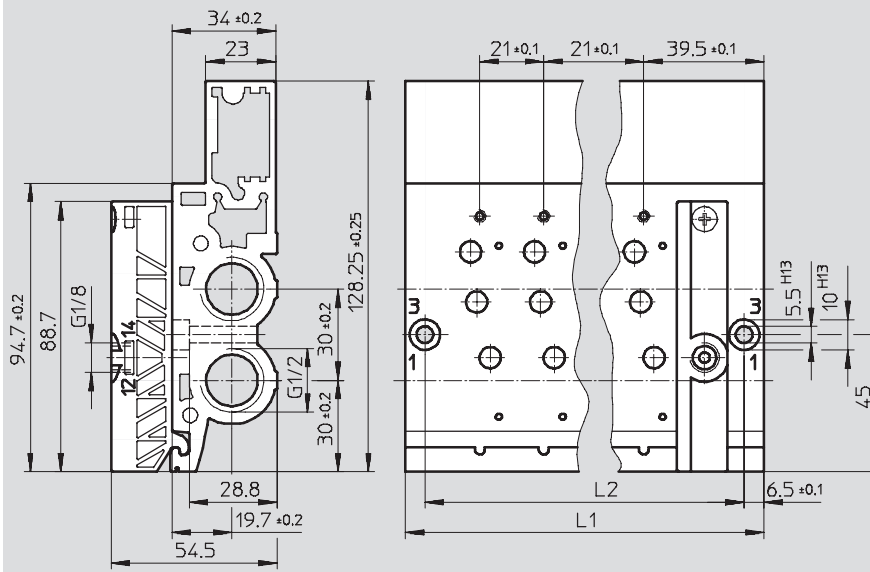
Manifold rail G1/2 VABM

Material:
Wrought aluminum alloy



Dimensions

Download CAD data → www.festo.com/en/engineering



Dimensions and Ordering Data

Valve positions	L1	L2	Weight [g]	CRC	Part No.	Type
2	85	72	460	2 ¹⁾	537506	VABM-B6-E-G12-2
3	106	93	580	2 ¹⁾	545820	VABM-B6-E-G12-3
4	127	114	690	2 ¹⁾	537507	VABM-B6-E-G12-4
5	148	135	820	2 ¹⁾	545821	VABM-B6-E-G12-5
6	169	156	915	2 ¹⁾	537508	VABM-B6-E-G12-6
7	190	177	1,030	2 ¹⁾	545822	VABM-B6-E-G12-7
8	211	198	1,150	2 ¹⁾	537509	VABM-B6-E-G12-8
9	232	219	1,270	2 ¹⁾	545823	VABM-B6-E-G12-9
10	253	240	1,380	2 ¹⁾	537510	VABM-B6-E-G12-10
11	274	261	1,500	2 ¹⁾	545824	VABM-B6-E-G12-11
12	295	282	1,620	2 ¹⁾	537511	VABM-B6-E-G12-12

1) Corrosion resistance class 2 to Festo standard 940 070

Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

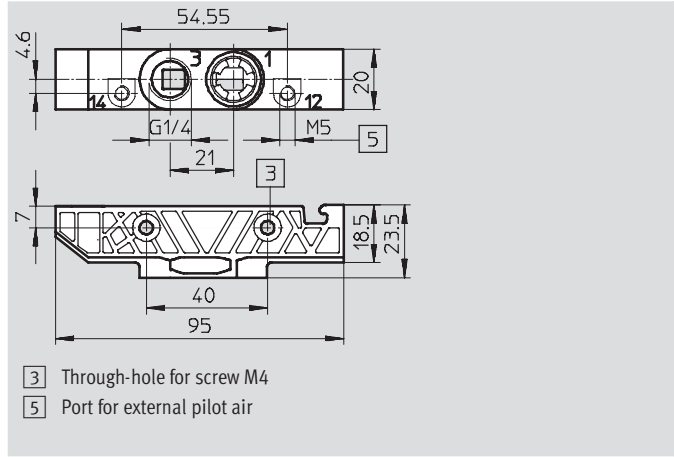
Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series



Sub-base VABS

Material:
Reinforced polyamide



Ordering Data						
Valve positions	Description	Pressure supply connection	Weight [g]	CRC	Part No.	Type
1	Internal pilot air	G $\frac{1}{4}$	22	2 ¹⁾	537518	VABS-B6-PB-Q-B
1	External pilot air	G $\frac{1}{4}$	22	2 ¹⁾	537519	VABS-B6-PB-Q

1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Accessories

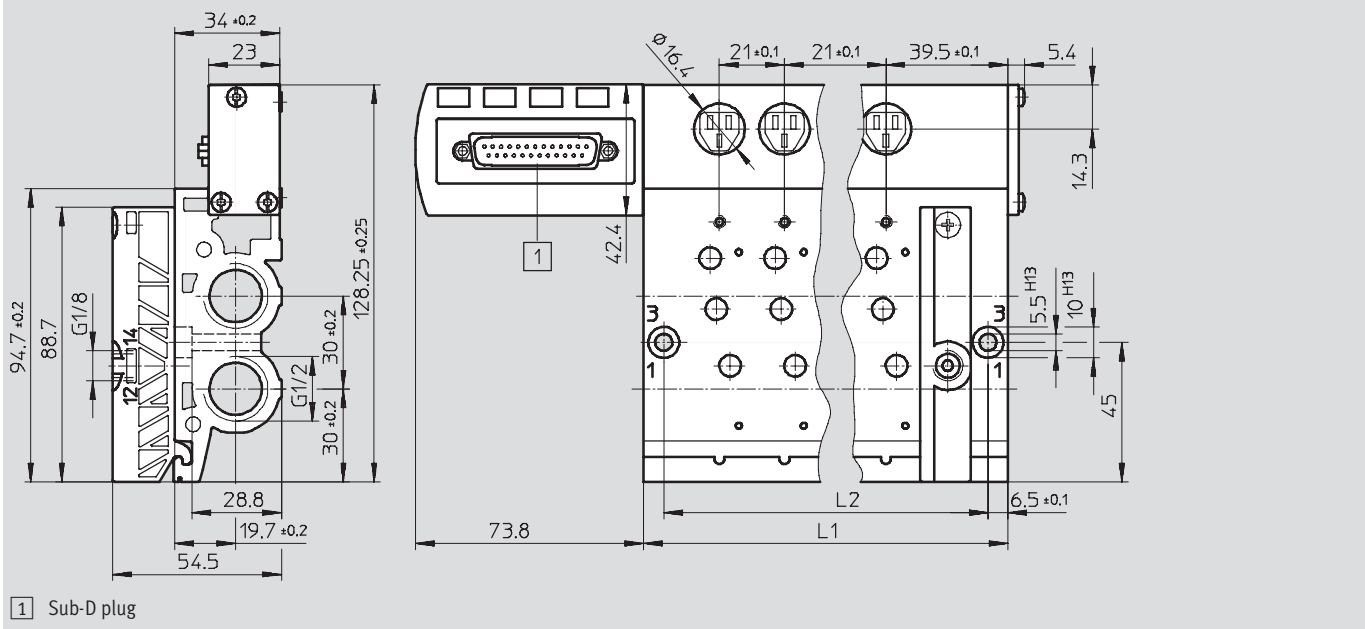
Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Manifold rail with electrical multi-pin plug VABM-...-M1

Material:
Wrought aluminum alloy



Dimensions Download CAD data → www.festo.com/en/engineering



Dimensions and Ordering Data						
Valve positions	L1	L2	Weight [g]	CRC	Part No.	Type
4	127	114	690	2 ¹⁾	537618	VABM-B6-E-G12-4-M1
6	169	156	915	2 ¹⁾	537619	VABM-B6-E-G12-6-M1
8	211	198	1,150	2 ¹⁾	537620	VABM-B6-E-G12-8-M1
10	253	240	1,380	2 ¹⁾	537621	VABM-B6-E-G12-10-M1
12	295	282	1,620	2 ¹⁾	537622	VABM-B6-E-G12-12-M1

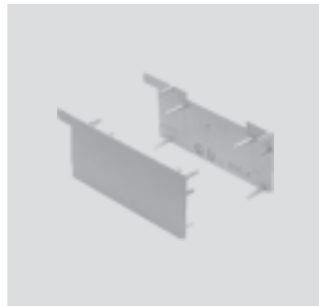
1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Cover plate for valve housing VAMC

Material:
Polyamide

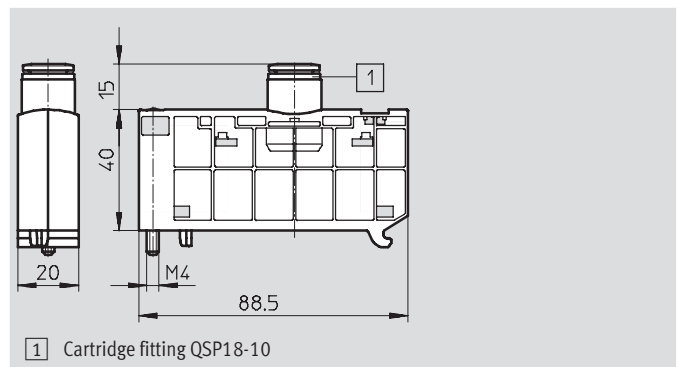


Ordering Data			
CRC	Part No.	Type	
2 ¹⁾	537512	VAMC-B6-C	

- 1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Pressure zone supply module VABF

Material:
Reinforced polyamide



Ordering Data			
		CRC	Part No. Type
For individual electrical connection	With cartridge fitting QSP18-10	2 ¹⁾	537517 VABF-B6-P1A5-Q10
For multi-pin plug connection	With cartridge fitting QSP18-10 and cover cap for multi-pin plug connection	2 ¹⁾	537624 VABF-B6-P1A9-Q10

- 1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

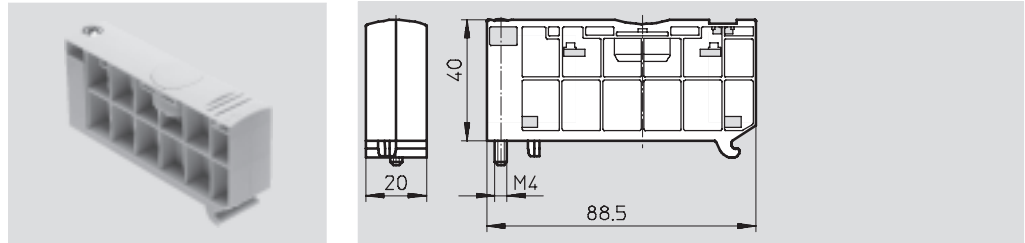
Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

FESTO

Blanking plate VABB

Material:
Reinforced polyamide

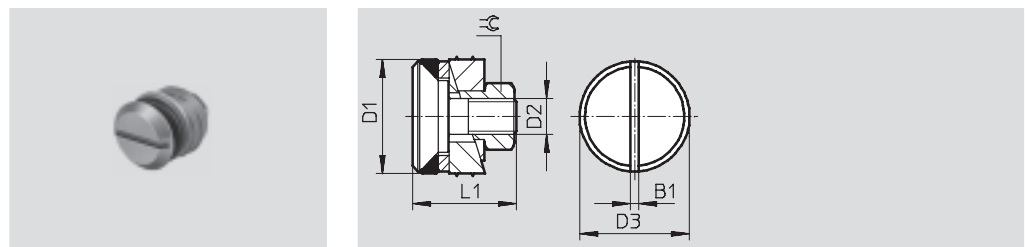


Ordering Data				
		CRC	Part No.	Type
For individual electrical connection	–	2 ¹⁾	537513	VABB-B6-E
For multi-pin plug connection	With cover plate for multi-pin plug connection	2 ¹⁾	537623	VABB-B6-ET

- 1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Separator for pressure zones VABD

Material:
Steel

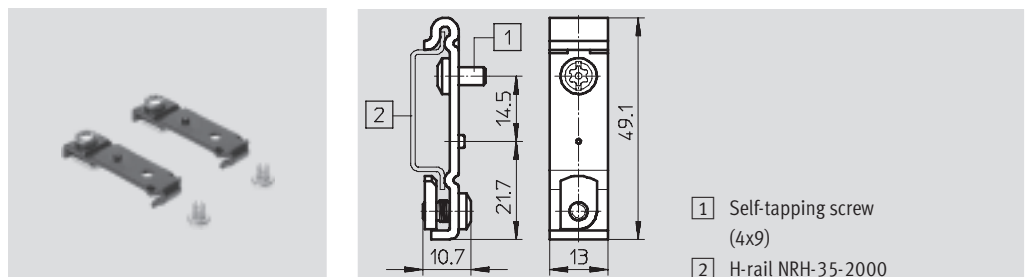


Dimensions and Ordering Data									
Manifold rail	B1	D1 ∅	D2 ∅	D3 ∅	L1	⌀	CRC	Part No.	Type
G ¹ / ₄	1.6	11.7	M4	11.3	13.9	7	2 ¹⁾	537515	VABD-B6-14-P-C
G ¹ / ₂	1.4	19	M6	18.3	17.3	10	2 ¹⁾	537516	VABD-B6-12-P-C

- 1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

H-rail mounting kit VAME

Material:
Steel




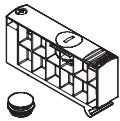
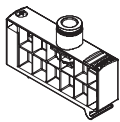
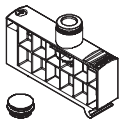
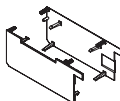
- 1 Self-tapping screw
(4x9)
2 H-rail NRH-35-2000

Ordering Data		
CRC	Part No.	Type
2 ¹⁾	537514	VAME-B6-T

- 1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Accessories

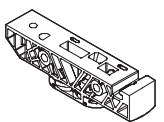
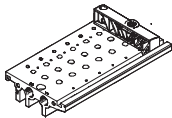
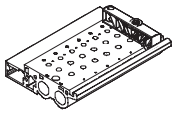
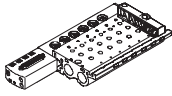

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

Ordering Data						
	Code	Valve function	Voltage	Pneumatic connection	Part No.	Type
Blanking plates for vacant position						
	L	For individual electrical connection	–	–	537513	VABB-B6-E
	L	For multi-pin plug connection with cover cap for electrical multi-pin plug connection	–	–	537623	VABB-B6-ET
Pressure zone supply modules						
	S	Additional supply for individual electrical connection	–	QS-10	537517	VABF-B6-P1A5-Q10
	S	Additional supply for multi-pin plug connection with cover cap	–	QS-10	537624	VABF-B6-P1A9-Q10
	–	Variable plate from which either a sub-base is produced through combination with a blanking plug or a pressure zone supply module is produced through combination with a cartridge	–	–	537532	VABF-B6-P1A5-Q
Cover plates for valve housing						
	C	Valve design with cover	–	–	537512	VAMC-B6-C

Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series


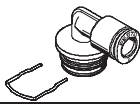
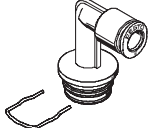

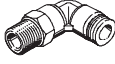
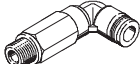


Ordering Data						
	Code	Description	Valve positions	Pressure supply connection	Part No.	Type
Sub-bases for individual valves						
	–	Internal pilot air	1	G $\frac{1}{4}$	537518	VABS-B6-PB-Q-B
	–	External pilot air	1	G $\frac{1}{4}$	537519	VABS-B6-PB-Q
Manifold rails for individual electrical connection						
	–		2	G $\frac{1}{4}$	537500	VABM-B6-E-G14-2
			3		545815	VABM-B6-E-G14-3
			4		537501	VABM-B6-E-G14-4
			5		545816	VABM-B6-E-G14-5
			6		537502	VABM-B6-E-G14-6
			7		545817	VABM-B6-E-G14-7
			8		537503	VABM-B6-E-G14-8
			9		545818	VABM-B6-E-G14-9
			10		537504	VABM-B6-E-G14-10
			11		545819	VABM-B6-E-G14-11
			12		537505	VABM-B6-E-G14-12
		–			2	G $\frac{1}{2}$
			3	545820	VABM-B6-E-G12-3	
			4	537507	VABM-B6-E-G12-4	
			5	545821	VABM-B6-E-G12-5	
			6	537508	VABM-B6-E-G12-6	
			7	545822	VABM-B6-E-G12-7	
			8	537509	VABM-B6-E-G12-8	
			9	545823	VABM-B6-E-G12-9	
			10	537510	VABM-B6-E-G12-10	
			11	545824	VABM-B6-E-G12-11	
			12	537511	VABM-B6-E-G12-12	
Manifold rails for valve terminal with multi-pin plug connection						
	–		4	G $\frac{1}{2}$	537618	VABM-B6-E-G12-4-M1
			6		537619	VABM-B6-E-G12-6-M1
			8		537620	VABM-B6-E-G12-8-M1
			10		537621	VABM-B6-E-G12-10-M1
			12		537622	VABM-B6-E-G12-12-M1
Separators						
	TP, TS, TR	For duct separation		G $\frac{1}{4}$	537515	VABD-B6-14-P-C
				G $\frac{1}{2}$	537516	VABD-B6-12-P-C

Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

FESTO

Ordering Data – Push-in Fittings QS – Metric Sizes						
	Code	Description	Tubing O.D.	Packaging unit	Part No.	Type
Cartridge fitting with push-in connector					Technical data → www.festo.com/catalog/qsp	
	-	Straight	4 mm	10 pieces	130839	QSP18-4
	-	Connection Ø 18 mm	6 mm	10 pieces	130840	QSP18-6
	-		8 mm	10 pieces	130841	QSP18-8
	-		10 mm	10 pieces	130842	QSP18-10
	-	L-shape	4 mm	10 pieces	130843	QSPL18-4
	-	Connection Ø 18 mm	6 mm	10 pieces	130844	QSPL18-6
	-		8 mm	10 pieces	13045	QSPL18-8
	-	L-shape, long	4 mm	10 pieces	130846	QSPLL18-4
	-	Connection Ø 18 mm	6 mm	10 pieces	130847	QSPLL18-6
	-		8 mm	10 pieces	130848	QSPLL18-8
Push-in fitting					Technical data → www.festo.com/catalog/qs	
	-	With sealing ring	6 mm	10 pieces	186096	QS-G ¹ / ₈ -6
	-	Connection G ¹ / ₈	8 mm	10 pieces	186098	QS-G ¹ / ₈ -8
	-		6 mm	10 pieces	186097	QS-G ¹ / ₄ -6
	-	Connection G ¹ / ₄	8 mm	10 pieces	186099	QS-G ¹ / ₄ -8
	-		10 mm	10 pieces	186101	QS-G ¹ / ₄ -10
	-		12 mm	10 pieces	186350	QS-G ¹ / ₄ -12
	-	With sealing ring	12 mm	1 piece	186104	QS-G ¹ / ₂ -12
	-		Connection G ¹ / ₂	16 mm	1 piece	186105
	-	Connection R ¹ / ₄		6 mm	10 pieces	153003
	-		8 mm	10 pieces	153005	QS- ¹ / ₄ -8
	-		10 mm	10 pieces	153007	QS- ¹ / ₄ -10
	-		12 mm	10 pieces	164980	QS- ¹ / ₄ -12
	-	Connection R ¹ / ₂	10 mm	1 piece	190646	QS- ¹ / ₂ -10
	-		12 mm	1 piece	153010	QS- ¹ / ₂ -12
	-		16 mm	1 piece	153011	QS- ¹ / ₂ -16
Push-in L-fitting					Technical data → www.festo.com/catalog/qsll	
	-	With sealing ring	6 mm	10 pieces	186117	QSL-G ¹ / ₈ -6
	-	Connection G ¹ / ₈	8 mm	10 pieces	186119	QSL-G ¹ / ₈ -8
	-		6 mm	10 pieces	186118	QSL-G ¹ / ₄ -6
	-	Connection G ¹ / ₄	8 mm	10 pieces	186120	QSL-G ¹ / ₄ -8
	-		10 mm	10 pieces	186122	QSL-G ¹ / ₄ -10
	-		12 mm	10 pieces	186351	QSL-G ¹ / ₄ -12
	-	With sealing ring	12 mm	1 piece	186125	QSL-G ¹ / ₂ -12
	-		Connection G ¹ / ₂	16 mm	1 piece	186126
Push-in L-fitting, long					Technical data → www.festo.com/catalog/qsll	
	-	With sealing ring	6 mm	10 pieces	186129	QSLL-G ¹ / ₄ -6
	-	Connection G ¹ / ₄	8 mm	10 pieces	186131	QSLL-G ¹ / ₄ -8
	-		10 mm	10 pieces	186133	QSLL-G ¹ / ₄ -10
	-		12 mm	1 piece	186136	QSLL-G ¹ / ₂ -12
	-	Connection G ¹ / ₂	16 mm	1 piece	190665	QSLL-G ¹ / ₂ -16



Note


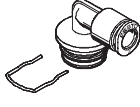
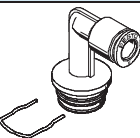
Push-in fittings QS and cartridge fittings with push-in connector QSP for inch-size tubings → 51.

Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

FESTO








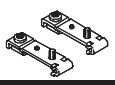
Ordering Data – Push-in Fittings QS – Inch Sizes						Technical Data → www.festo.com/catalog/QS	
	For tubing O.D. [in]	R $\frac{1}{8}$		R $\frac{1}{4}$		R $\frac{1}{2}$	
		Part No.	Type	Part No.	Type	Part No.	Type
With external hex							
	1/8	533213	QS-H-1/8-1/8-U-M	–	–	–	–
	5/32	533214	QS-H-1/8-5/32-U-M	–	–	–	–
	3/16	533215	QS-H-1/8-3/16-U-M	533218	QS-H-1/4-3/16-U-M	–	–
	1/4	533216	QS-H-1/8-1/4-U-M	533219	QS-H-1/4-1/4-U-M	–	–
	5/16	533217	QS-H-1/8-5/16-U-M	533220	QS-H-1/4-5/16-U-M	–	–
	3/8	–	–	533221	QS-H-1/4-3/8-U-M	533226	QS-H-1/2-3/8-U-M
	1/2	–	–	–	–	533227	QS-H-1/2-1/2-U-M
With internal hex							
	1/4	183741	QS-1/8-1/4-I-U-M	192809	QS-1/4-1/4-I-U-M	–	–
	5/16	183742	QS-1/8-5/16-I-U-M	183743	QS-1/4-5/16-I-U-M	–	–
	3/8	–	–	183744	QS-1/4-3/8-I-U-M	183747	QS-1/2-3/8-I-U-M
	1/2	–	–	–	–	183748	QS-1/2-1/2-I-U-M

Ordering Data – Cartridge Fittings with Push-in Connector QSP – Inch Sizes				Technical Data → www.festo.com/catalog/QSP	
	For tubing O.D. [in]	Part No. Type			
		Straight			
	5/32	132171	QSP18-5/32-U		
	1/4	132172	QSP18-1/4-U		
	5/16	132173	QSP18-5/16-U		
	3/8	132174	QSP18-3/8-U		
L-shape					
	5/32	132175	QSPL18-5/32-U		
	1/4	132176	QSPL18-1/4-U		
	5/16	132177	QSPL18-5/16-U		
L-shape, long					
	5/32	132178	QSPLL18-5/32-U		
	1/4	132179	QSPLL18-1/4-U		
	5/16	132180	QSPLL18-5/16-U		

Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series



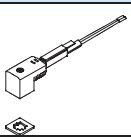

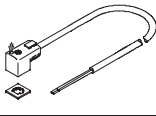
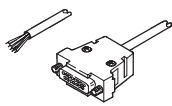
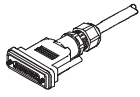

FESTO

Ordering Data		Technical data → <a href="http://www.festo.com/catalog/<type> or <order code>">www.festo.com/catalog/<type> or <order code>			
	Code	Description	Packaging unit	Part No.	Type
Blanking plugs					
	–	Connection Ø 18 mm	10 pieces	537533	QSPC18
	–	For thread G1/4	10 pieces	3569	B-1/4
	–	For thread G1/2	10 pieces	3571	B-1/2
Adapters					
	–	For thread G1/8	10 pieces	545921	NPFA-A-P18-G18-F
	–	For thread G1/4	10 pieces	545922	NPFA-A-P18-G14-F
Silencers					
	–	For thread G1/4	1 piece	165004	UC-1/4
	–	For thread G1/4	1 piece	2316	U-1/4
	–	For thread G1/2	1 piece	6842	U-1/4-B
	–	For thread G1/4	1 piece	6844	U-1/2-B
	–	For thread G1/2	1 piece	6844	U-1/2-B
Inscription label					
	–	Scope of delivery 24 labels in frame		161937	IBS-9x17
	–	Scope of delivery 80 labels in frame		197259	MH-BZ-80X
	–	Scope of delivery 64 labels in frame		18576	IBS-6x10
H-rail mounting kit					
	H	Attachment of the manifold rails to H-rails to EN 60715-TH35	–	1 piece	537514 VAME-B6-T

Accessories

Solenoid Valves VUVB / Valve Terminals Type 24 VTUB – Metric Series

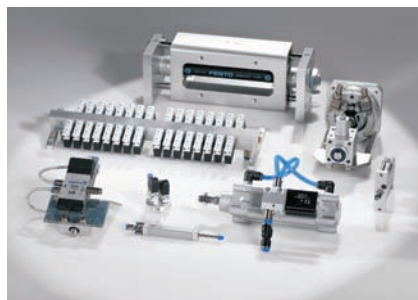
FESTO

Ordering Data						
	Code	Description	Voltage [V]	Cable length [m]	Part No.	Type
Plug socket					Technical data → www.festo.com/catalog/MSSD	
	–	With screw terminals, for self-assembly	Up to 240 AC	–	151687	MSSD-EB
	C		Up to 240 AC	–	539712	MSSD-EB-M12
	–	With insulation displacement technology, for self-assembly	Up to 240 AC	–	192745	MSSD-EB-S-M14
Plug socket with cable for individual electrical connection					Technical data → www.festo.com/catalog/KMEB	
	–	Switching status display with LED Polyvinyl chloride	24 DC	2.5	151688	KMEB-1-24-2,5-LED
			24 DC	5	151689	KMEB-1-24-5-LED
		Polyvinyl chloride	Up to 240 AC	2.5	151690	KMEB-1-230AC-2,5
			Up to 240 AC	5	151691	KMEB-1-230AC-5
	C1	Switching status display with LED Polyurethane	24 DC	2.5	174844	KMEB-2-24-2,5-LED
	C2	Switching status display with LED Polyurethane	24 DC	5	174845	KMEB-2-24-5-LED
	C1	Polyurethane	Up to 230 AC	2.5	174846	KMEB-2-230AC-2,5
	C2		Up to 230 AC	5	174847	KMEB-2-230AC-5
	–	Switching status display with LED Polyvinyl chloride	24 DC	2.5	547268	KMEB-3-24-2,5-LED
			24 DC	5	547269	KMEB-3-24-5-LED
		Polyvinyl chloride	24 DC	2.5	547270	KMEB-3-24-2,5
			24 DC	5	547271	KMEB-3-24-5
Connecting cable for multi-pin plug to IP40					Technical data → www.festo.com/catalog/KMP6	
	–	Sub-D, 25-pin, up to 20 coils Polyurethane	24 DC	2.5	530046	KMP6-25P-20-2,5
	–		24 DC	5	530047	KMP6-25P-20-5
	–		24 DC	10	530048	KMP6-25P-20-10
	–	Sub-D, 25-pin, up to 12 coils Polyurethane	24 DC	2.5	530049	KMP6-25P-12-2,5
	–		24 DC	5	530050	KMP6-25P-12-5
	–		24 DC	10	530051	KMP6-25P-12-10
Connecting cable for multi-pin plug to IP65					Technical data → www.festo.com/catalog/NEBV	
	M1	Sub-D, 25-pin, up to 12 coils	24 DC	2.5	538222	NEBV-S1G25-K-2,5-N-LE15
	M2		24 DC	5	538223	NEBV-S1G25-K-5-N-LE15
	M3		24 DC	10	538224	NEBV-S1G25-K-10-N-LE15
	M1	Sub-D, 25-pin, up to 24 coils	24 DC	2.5	538225	NEBV-S1G25-K-2,5-N-LE25
	M2		24 DC	5	538226	NEBV-S1G25-K-5-N-LE25
	M3		24 DC	10	538227	NEBV-S1G25-K-10-N-LE25
Illuminating seal					Technical data → www.festo.com/catalog/MEB	
	–	For indicating the signal status	12 ... 24 DC	–	151717	MEB-LD-12-24DC
	–		Up to 230 AC	–	151718	MEB-LD-230AC

Product Range and Company Overview

A Complete Suite of Automation Services

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



Custom Automation Components
Complete custom engineered solutions



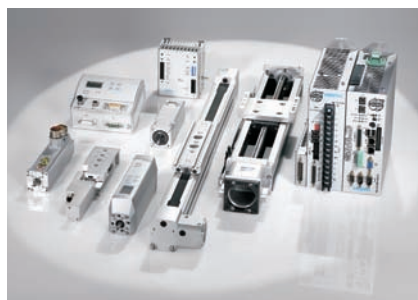
Custom Control Cabinets
Comprehensive engineering support
and on-site services



Complete Systems
Shipment, stocking and storage services

The Broadest Range of Automation Components

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



Electromechanical
Electromechanical actuators, motors,
controllers & drives



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



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

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

Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 11,500 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

Quality Assurance, ISO 9001 Certification

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

All Festo locations within the United States are registered to ISO 9001.



Festo North America

United States

Customer Resource Center

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

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

Call: 1.800.99.FESTO

Fax: 1.800.96.FESTO

Email: customer.service@us.festo.com

For technical support,

Call: 1.866.GO.FESTO

Fax: 1.800.96.FESTO

Email: product.support@us.festo.com

Headquarters

Festo Corporation
395 Moreland Road
P.O. Box 18023
Hauppauge, NY 11788
www.festo.com/us

Sales Offices

Appleton

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

Boston

120 Presidential Way, Suite 330
Woburn, MA 01801

Chicago

1441 East Business Center Drive
Mt. Prospect, IL 60056

Dallas

1825 Lakeway Drive, Suite 600
Lewisville, TX 75057

Detroit - Automotive Engineering Center

2601 Cambridge Court, Suite 320
Auburn Hills, MI 48326

New York

395 Moreland Road
Hauppauge, NY 11788

Silicon Valley

2800 Collier Canyon Road
Livermore, CA 94550

Design and Manufacturing Operations



East: 395 Moreland Road, Hauppauge, NY 11788



Central: 1441 East Business Center Drive, Mt. Prospect, IL 60056



West: 2800 Collier Canyon Road, Livermore, CA 94550

Mexico

Headquarters

Festo Pneumatic, S.A.
Av. Ceylán 3, Col. Tequesquahuac
54020 Tlalnepantla, Edo. de México
Call: 011 52 [55] 53 21 66 00
Fax: 011 52 [55] 53 21 66 65
Email: festo.mexico@mx.festo.com
www.festo.com/mx



Canada

Headquarters

Festo Inc.
5300 Explorer Drive
Mississauga, Ontario L4W 5G4
Call: 1.905.624.9000
Fax: 1.905.624.9001
Email: info.ca@ca.festo.com
www.festo.com/ca



Festo Worldwide

Argentina Australia Austria Belarus Belgium Brazil Bulgaria Canada Chile China Colombia Croatia Czech Republic Denmark
Estonia Finland France Germany Great Britain Greece Hong Kong Hungary India Indonesia Iran Ireland Israel Italy Japan
Latvia Lithuania Malaysia Mexico Netherlands New Zealand Norway Peru Philippines Poland Romania Russia Serbia Singapore
Slovakia Slovenia South Africa South Korea Spain Sweden Switzerland Taiwan Thailand Turkey Ukraine United States Venezuela

www.festo.com