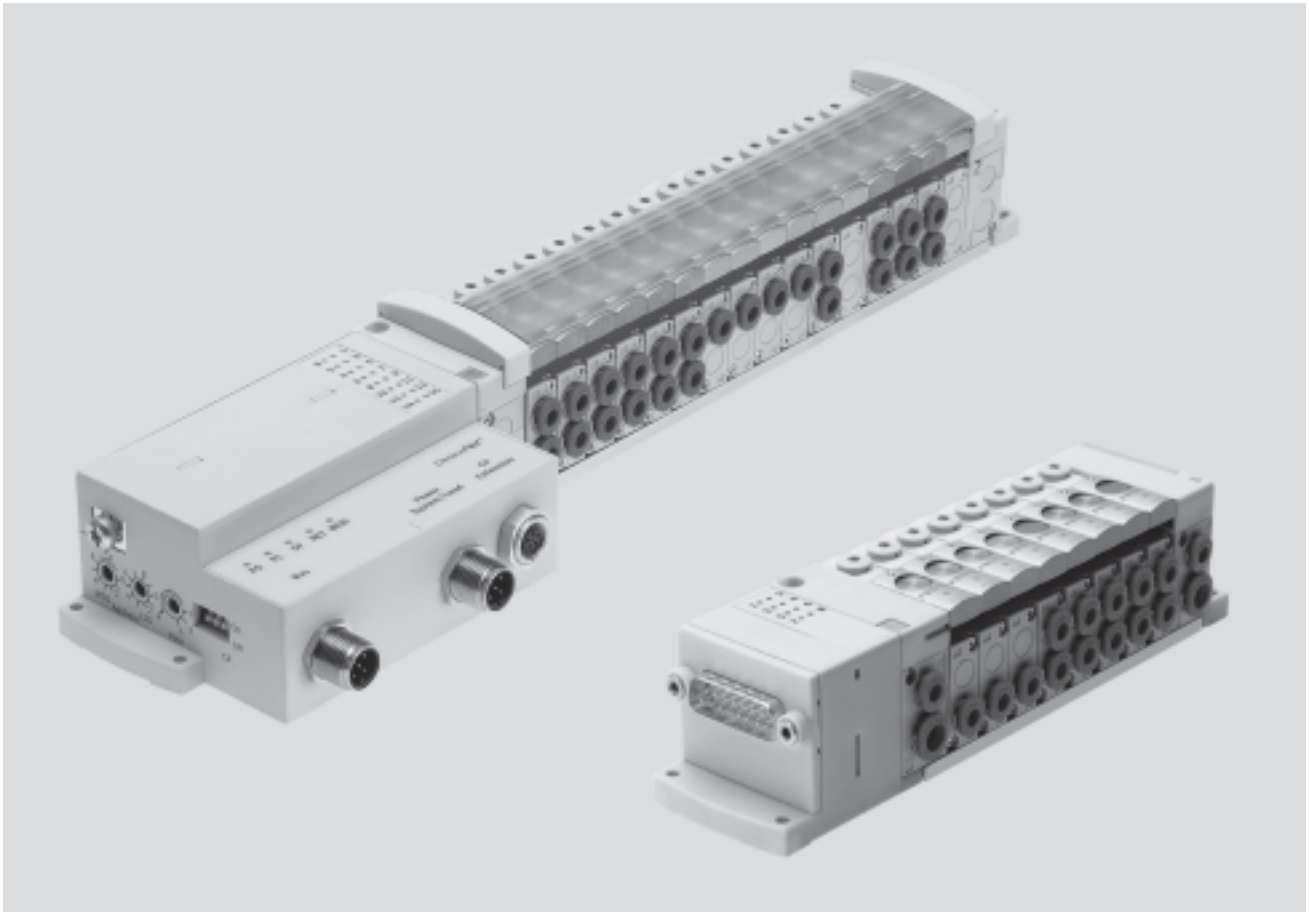
Valve terminals type 80 CPV-SC, Smart Cubic

FESTO

- Small, compact valve terminal for a wide range of applications
- Space-saving thanks to small valve dimensions
- Manual override and LED operating status display
- Flow rates of up to 170 l/min
- Wide range of pneumatic and electrical connection options

Valve terminals type 80 CPV-SC, Smart Cubic

Key features



Innovative

- Small, compact valve terminal for a wide range of pneumatic applications
- Enormous flexibility during planning, assembly and operational use
- Multi-pin plug connection and fieldbus interface
- Wide range of selectable valve functions; 5/2-way, 3/2-way and 2/2-way functions
- With flow rates of up to 170 l/min, CPV-SC offers outstanding pneumatic performance for a wide range of applications
- Low weight

Versatile

- Provides 2 ... 16 valve positions on one terminal
- Ideally suited for operating small pneumatic drives in tight spaces
- The flexibility of the pneumatic working ports provides a practical solution to different requirements
- Round silencers, integrated flat plate silencers or screw/plug connection for ducted exhaust air
- Suitable for vacuum
- Enables multiple pressure zones on a single valve terminal

Reliable

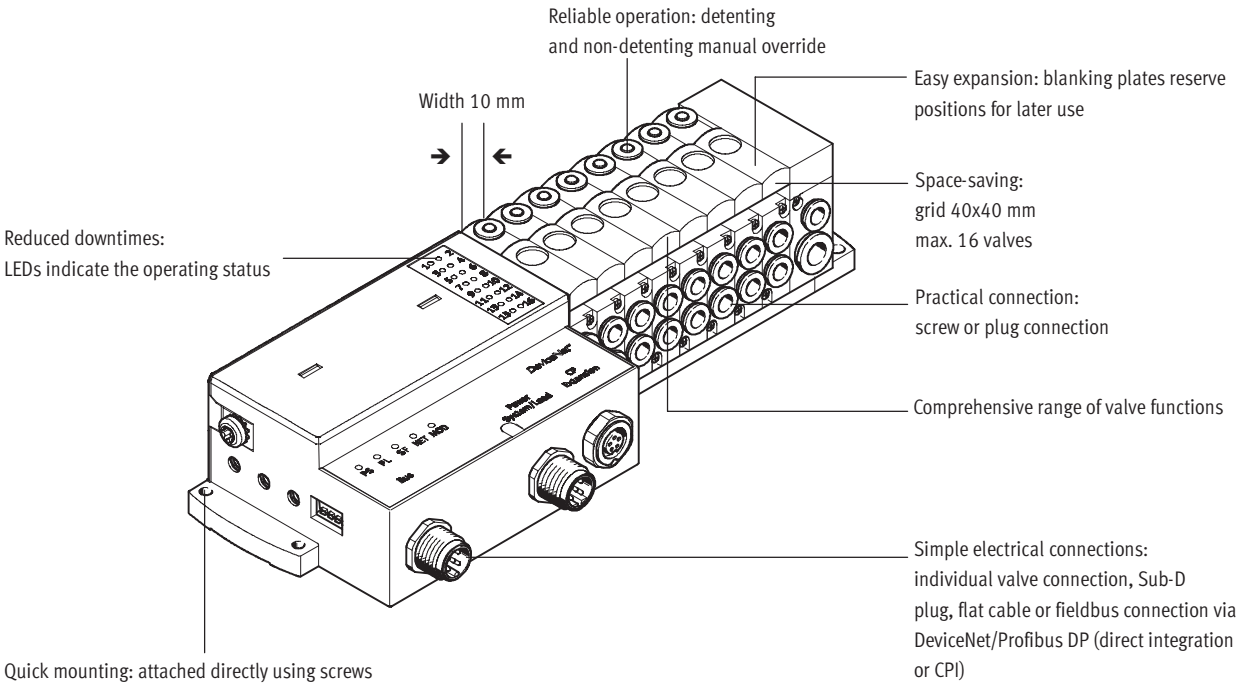
- Manual override
- Durable thanks to the use of tried and tested piston spool valves
- Sturdy thanks to metal housing and connecting thread
- Fast troubleshooting thanks to an LED on each valve and diagnostics via fieldbus

Easy to mount

- Fully assembled and tested valve terminal
- Less complicated when ordering, installing and commissioning
- Suitable for direct mounting even on moving system components

Valve terminals type 80 CPV-SC, Smart Cubic

Key features



Equipment options

Valve functions

- 5/2-way valve, single solenoid
- 5/2-way valve, double solenoid
- 3/2-way valve, normally open
- 3/2-way valve, normally closed
- 2/2-way valve, normally closed

Separator plate with additional compressed air supply

- Compressed air channel (1) closed
- Compressed air channel (1) and exhaust duct (3/5) closed

Blanking plate

- Plate without valve function for reserving a valve position

Electrical connection options

Individual connection

- 2 ... 16 valve positions/ max. 16 solenoid coils
- Individual connection, horizontal (H)
- Individual connection, vertical (T)

Multi-pin plug

- 4 ... 16 valve positions/ max. 16 solenoid coils
- Sub-D
- Flat cable

Fieldbus Direct

- 4 ... 16 valve positions/ max. 16 solenoid coils
- Profibus
- DeviceNet

CP string extension

- Further valve terminals from the CPV/CPA range
- Electrical I/O modules

CPI interface

- 4 ... 16 valve positions/ max. 16 solenoid coils

Valve terminals type 80 CPV-SC, Smart Cubic

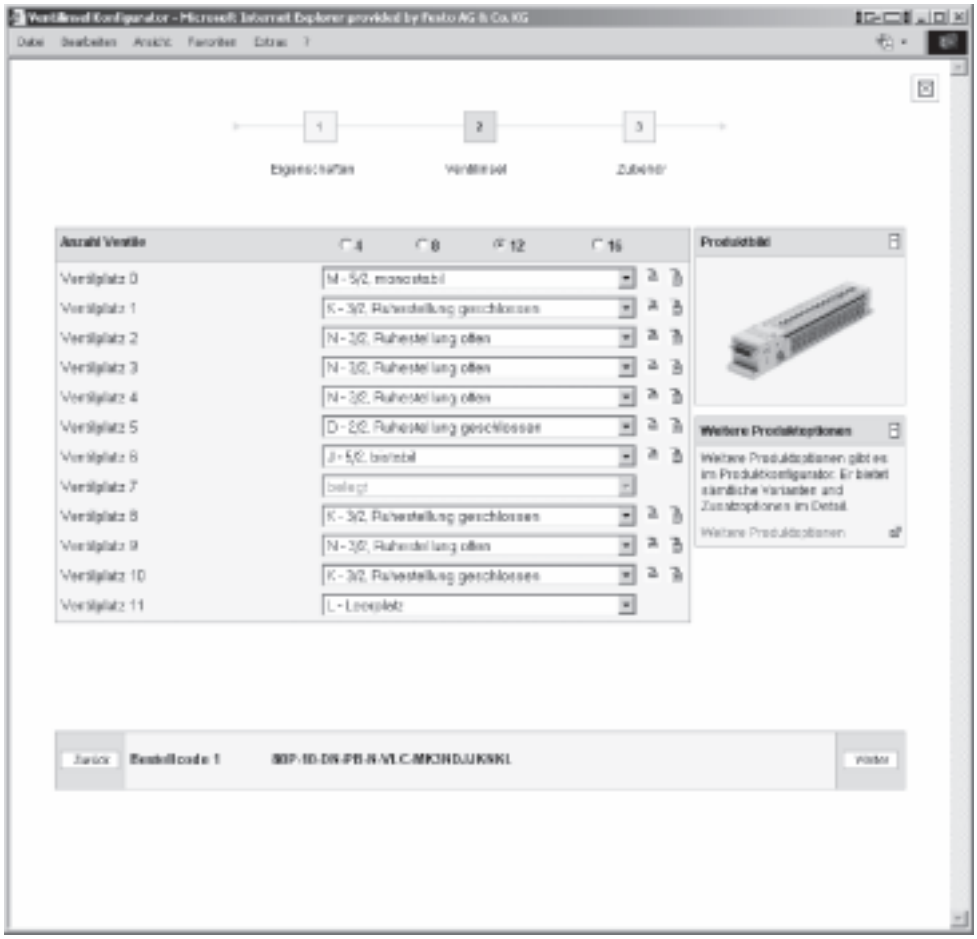
Key features

Valve terminal configurator

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

Selecting a CPV-SC valve terminal using the online catalogue is quick and easy thanks to the convenient valve terminal configurator provided. This makes it much easier to order the right product. The valve terminals are assembled according to your order specifications and are individually tested. This reduces the assembly and installation time to a minimum. The valve terminal type 80 is ordered using the order code.

Ordering system for type 80
➔ 4 / 3.1-34



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 (www.festo.com), click on “Automation” and select the “Catalogue” from the “Products” submenu; this will take you directly to the home page of the catalogue. Then select “Valve terminals” and “Universal valve terminals”.

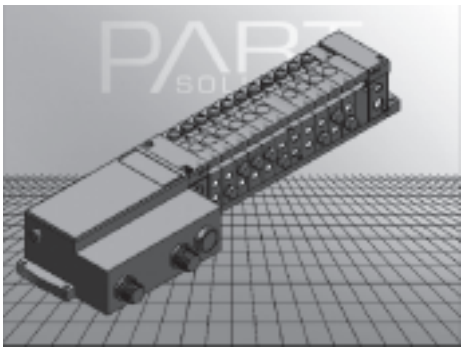
Choose the valve terminal you want (CPV-SC in this case) and click on the link “Configure common options”. You can then configure the valve terminal step by step (from left to right) according to your requirements. Click on the shopping basket to save the selected configuration (this does not create an order).

You can switch to expert mode at any time by clicking on the “Further options” link. This provides you with extended options for configuring your valve terminal.

2D/3D CAD data

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

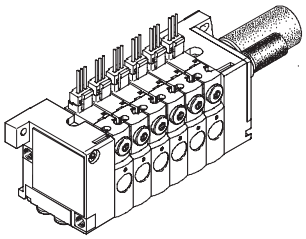
You can request the CAD data for a valve terminal you have configured. To do so, perform the product search as described above. Go to the shopping basket and click on the CAD icon (compass). On the next page you can generate a 3D preview or request another data format of your choice by e-mail.



Valve terminals type 80 CPV-SC, Smart Cubic

Key features

Individual connection

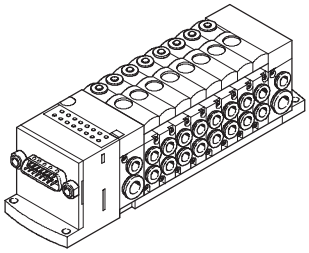


Connection is independent of the control technology used and is flexible thanks to ready to install cables. This ensures correct polarity during installation.

Valves with integrated LED (CPVSC1-M1LH- ...) are available as an option for switching status display. Individual connection permits the selection of 2 to 16 solenoid coils (divided between 2 to 16 valve positions).

Variants
- Individual connection, horizontal
- Individual connection, vertical
- 2 to 16 solenoid coils

Multi-pin plug connection

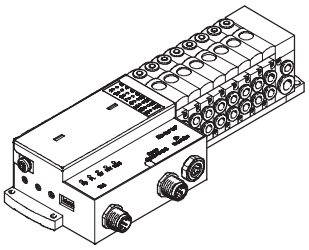


Control signals to the valve terminal are transmitted via a pre-assembled multi-core cable, which substantially reduces installation time.

The multi-pin plug connection enables the selection of 4 to 16 solenoid coils (divided between 2 to 16 valve positions).

Variants
- Sub-D connection
- Flat cable connection
- 4 to 16 solenoid coils

Fieldbus Direct

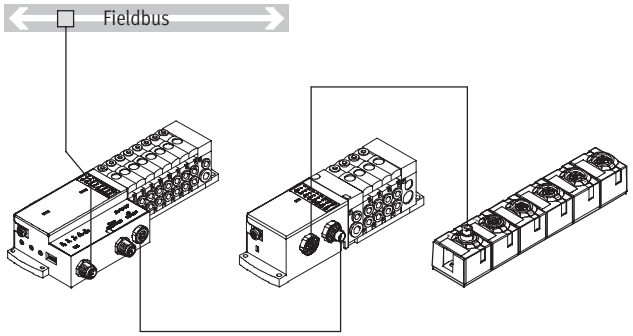


An integrated fieldbus node manages the communication connection to a higher-order PLC. This enables a space-saving pneumatic and electronic solution.

The fieldbus connection enables the selection of 4 to 16 solenoid coils (divided between 4 to 16 valve positions).

Variants
- DeviceNet connection (CP functionality)
- Profibus connection (CPI functionality)
- 4 to 16 solenoid coils

Fieldbus Direct with CP string extension



The optional string extension enables additional valve terminals and I/O modules to be connected to the fieldbus node of the CPV-SC. A CP string of the CPI installation system is integrated in the fieldbus node as an extension. Different input and output modules as well as CPV, MPA, CPV-SC, CPA valve terminals can be connected. The maximum length of the CP string extension is 10 metres, which means that the extension modules can be mounted directly on-site. All of the required electrical signals are transmitted via the CP cable, which in turn means that no further installation is needed on the extension module.

The CP string interface offers:
- Logic and sensor supply for the input modules
- Load voltage supply for the valve terminals
- Logic supply for the output modules

With CP functionality:
- 16 input signals
- 16 output signals for output modules 24 V DC or solenoid coils

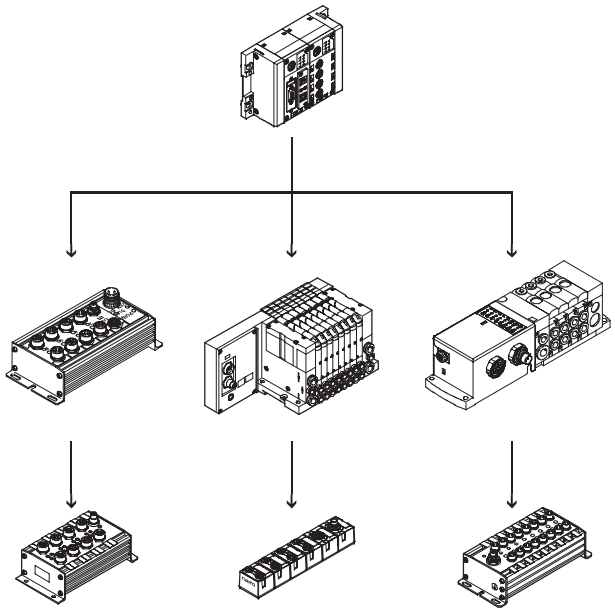
With CPI functionality:
- 32 input signals
- 32 output signals for output modules 24 V DC or solenoid coils

➔ 4 / 4.7-2

Valve terminals type 80 CPV-SC, Smart Cubic

Key features

CPI installation system



Valve terminal for CPI installation system:
Valve terminals with CP connection are intended for connection to higher-order fieldbus nodes or to control blocks. A fieldbus node or control block also enables the connection of decentralised input/output units. The following fieldbus protocols are supported:

- Festo fieldbus, ABB CS31, Moeller Suconet K
- Interbus
- Allen Bradley (1771 RIO)
- DeviceNet
- Profibus DP, 12 MBd
- CC-Link
- Modbus/TCP
- Ethernet

Four strings with up to 32 inputs and outputs can be connected to a field-bus node or control block. The connecting cables transmit the power supply for the input modules and the load voltage for the valves as well as control signals.

Further information
➔ 4 / 4.6-2

Valve terminals type 80 CPV-SC, Smart Cubic

Peripherals overview

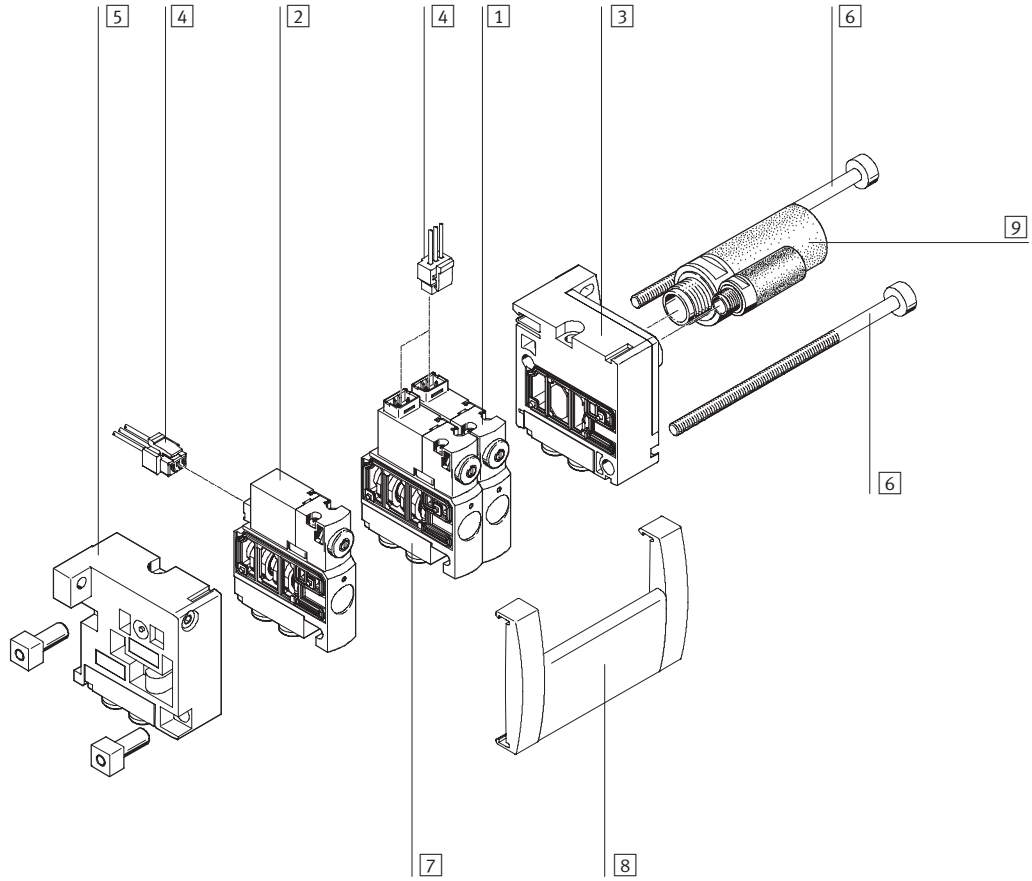
Overview – CPV-SC valve terminal

Valve terminal with individual electrical connections

- Vertical individual connection
  Code: T
- Horizontal individual connection
  Code: H

Valve terminals with individual electrical connection can be equipped with 2 to max. 16 valve positions.

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



1 Valve with vertical individual connection
2 Valve with horizontal individual connection
3 Right-hand end plate for unducted exhaust air
4 Plug socket with cable for individual electrical connection of valves
5 Left-hand end plate for compressed air supply 1 or 12/14
6 Tie rod
7 Sub-base for working ports (push-in fitting or threaded)
8 Inscription label holder
9 Silencer

Valve terminals type 80 CPV-SC, Smart Cubic

Peripherals overview

FESTO

Valve terminal with electrical multi-pin plug connection

- 15- and 26-pin Sub-D multi-pin plug connection
  Code: MS, MH

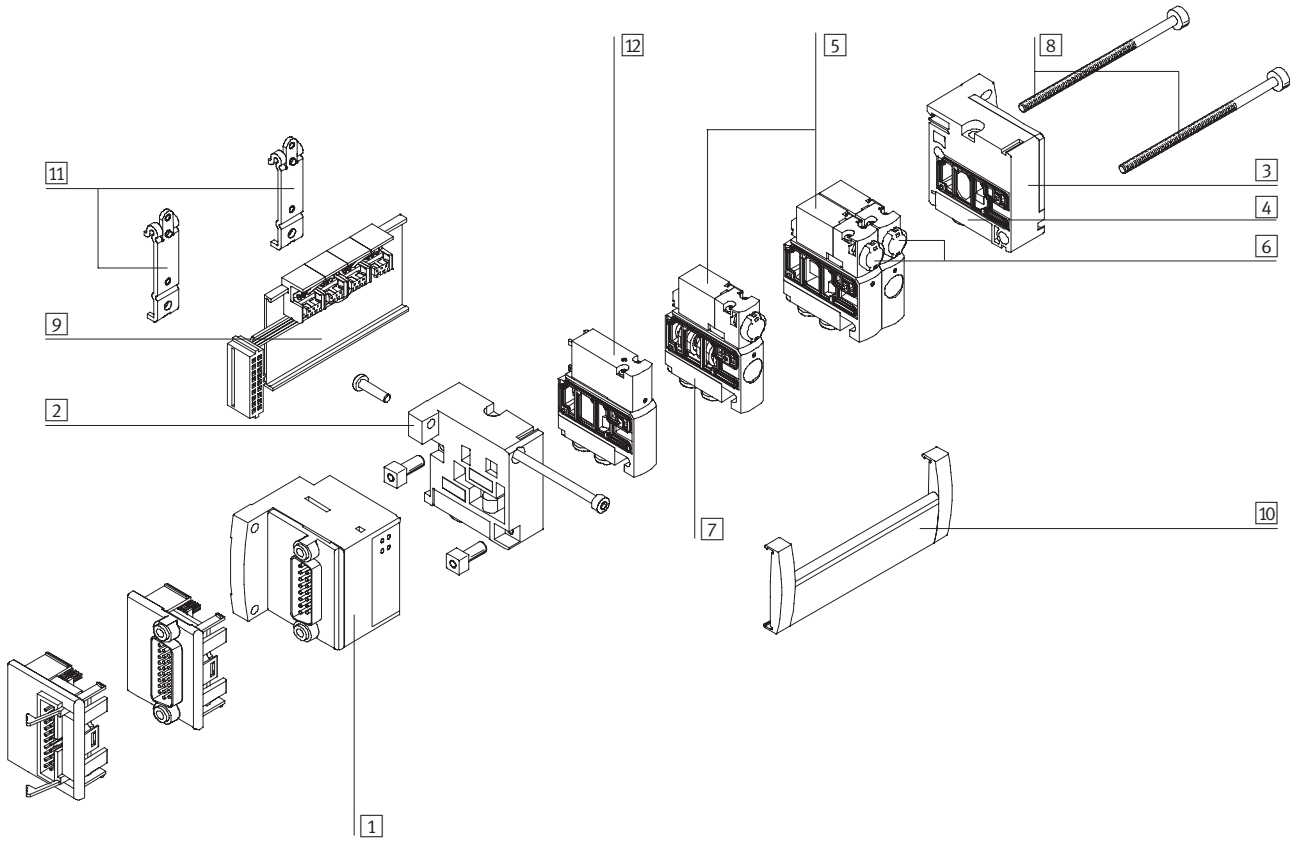
or

- 20-pin multi-pin plug connection with connector for flat cable
  Code: MF

Valves and end plates are the basic pneumatic components of the valve terminal.
The valve terminals are connected to the end plates using tie rods.

Valve terminals with electrical multi-pin plug connection can be equipped with 4 to max. 16 valve positions. Each valve position can either be equipped with a valve or a blanking plate.

The electrical connection is located on the left-hand side, thereby allowing flush mounting of the system.



1 Electrical control unit (with LED switching status displays) for Sub-D plug or flat cable
2 Left-hand end plate for compressed air supply 1 or 12/14
3 Right-hand end plate for ducted exhaust air or silencer (3/5 or 82/84)
4 Sub-base for ducted exhaust air (push-in fitting or threaded)
5 Valve
6 Cover for manual override (optional)
7 Sub-base for working ports (push-in fitting or threaded)
8 Tie rod
9 Electrical valve linking module
10 Inscription label holder
11 H-rail mounting
12 Blanking plate for vacant position

Valve terminals type 80 CPV-SC, Smart Cubic

Peripherals overview

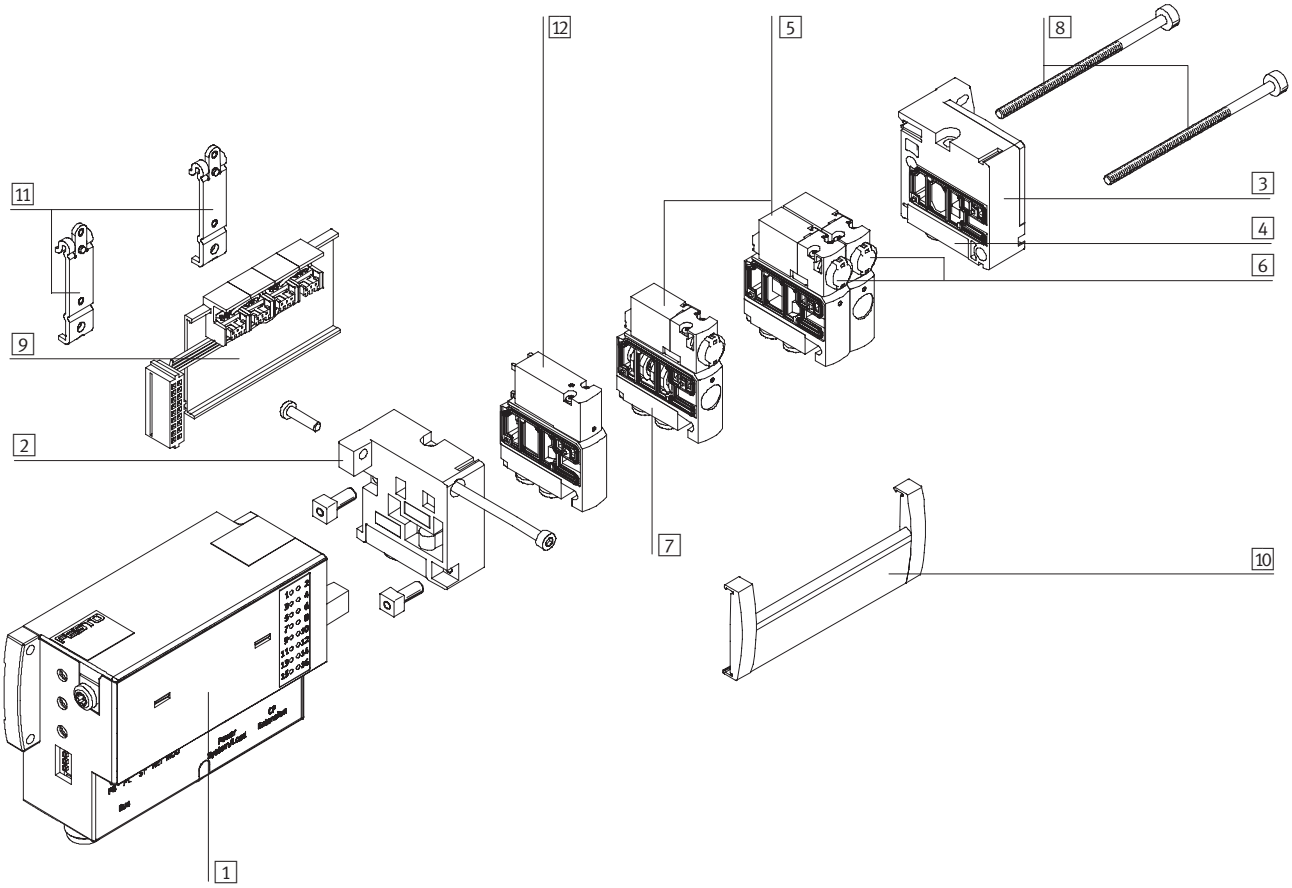
Valve terminal with Fieldbus Direct

- M12 A-coded DeviceNet connection
  Code: DN
  or
- 9-pin Sub-D connection for Profibus
  Code: DP

Valves and end plates are the basic pneumatic components of the valve terminal.
The valve terminals are connected to the end plates using tie rods.

Valve terminals with Fieldbus Direct DeviceNet/Profibus DP can be equipped with 4 to max. 16 valve positions. Each valve position can either be equipped with a valve or a blanking plate.

The electrical connection is in the same direction as the tubing in order to save space.



1 Fieldbus Direct
2 Left-hand end plate for compressed air supply 1 or 12/14
3 Right-hand end plate for ducted exhaust air or silencer (3/5 or 82/84)
4 Sub-base for ducted exhaust air (push-in fitting or threaded)
5 Valve
6 Cover for manual override (optional)
7 Sub-base for working ports (push-in fitting or threaded)
8 Tie rod
9 Electrical valve linking module
10 Inscription label holder
11 H-rail mounting
12 Blanking plate for vacant position

Valve terminals type 80 CPV-SC, Smart Cubic

Peripherals overview

FESTO

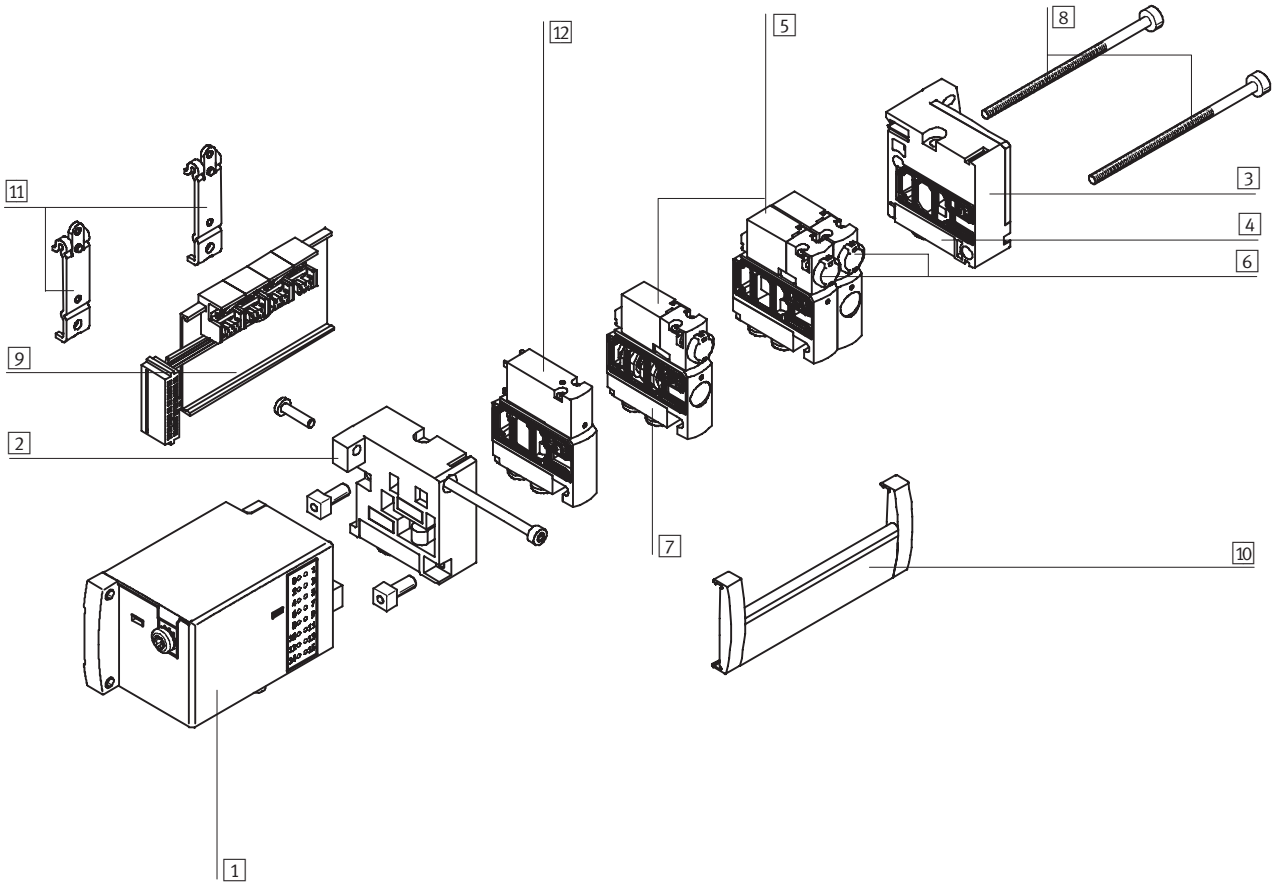
Valve terminal with CPI connection

CP interface M9, 5-pin
Code: CP

Valves and end plates are the basic pneumatic components of the valve terminal.
The valve terminals are connected to the end plates using tie rods.

Valve terminals with CPI interface can be equipped with 4 to max. 16 valve positions. Each valve position can either be equipped with a valve or a blanking plate.

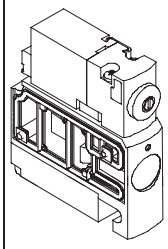
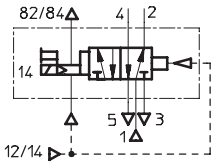
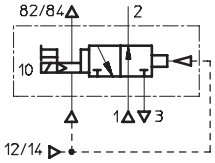
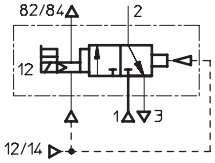
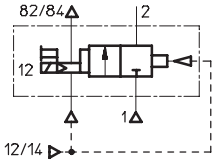
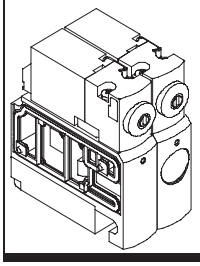
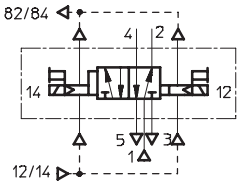
The electrical connection is in the same direction as the tubing in order to save space.



1 CPI connection
2 Left-hand end plate for compressed air supply 1 or 12/14
3 Right-hand end plate for ducted exhaust air or silencer (3/5 or 82/84)
4 Sub-base for ducted exhaust air (push-in fitting or threaded)
5 Valve
6 Cover for manual override (optional)
7 Sub-base for working ports (push-in fitting or threaded)
8 Tie rod
9 Electrical valve linking module
10 Inscription label holder
11 H-rail mounting
12 Blanking plate for vacant position

Valves

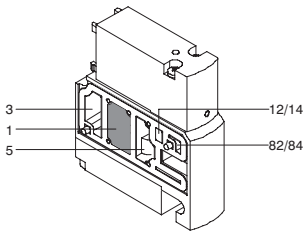
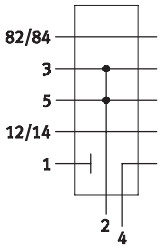
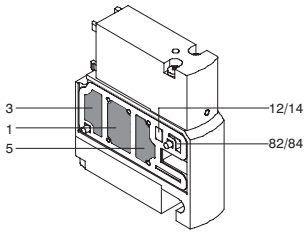
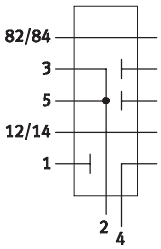
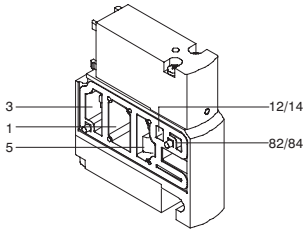
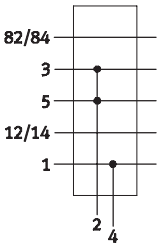
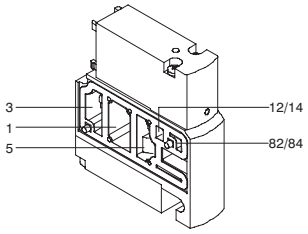
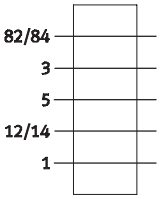
CPVSC1 valves are valves with integrated sub-base, i.e. in addition to the valve function they contain all of the ducts for supply, exhaust and the working ports. The supply ducts are a central component of the valve slices and enable a direct flow of air. This helps achieve maximum flow rates. All valves have a pneumatic pilot control for optimising performance. The valve function is based on a piston spool system with a patented sealing principle that guarantees its suitability for a wide range of applications as well as a long service life.

Valve functions	Code	Circuit symbol	Width 10 mm	Description
	M		■	5/2-way single solenoid valve • Pneumatic spring return
	N		■	3/2-way single solenoid valve • Normally open • Pneumatic spring return
	K		■	3/2-way single solenoid valve • Normally closed • Pneumatic spring return
	D		■	2/2-way single solenoid valve • Normally closed • Pneumatic spring return
	J		■	5/2-way double solenoid valve This valve consists of two valve housing units and therefore occupies two valve positions. The pilot control with coil 12 is located on the left and labelled “J12”. If both coils are actuated, the signal at port “14” dominates in switching position.

Valve terminals type 80 CPV-SC, Smart Cubic

Key features – Pneumatic components

FESTO

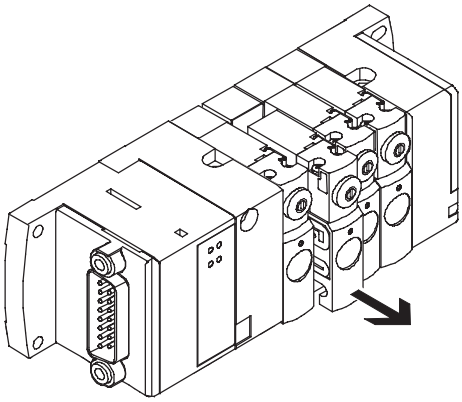
Valves				
Valve functions	Code	Circuit symbol	Width 10 mm	Description
Pneumatic supply plate with duct separation				
	T		■	Compressed air channel (1) closed For separating pressure zones with a common exhaust. (Using pressure zones ➔ 4 / 3.1-14) Pneumatic connection: QS-4, M5
	S		■	Compressed air channel (1) and exhaust duct (3/5) closed For separating pressure zones with a separate exhaust. (Using pressure zones ➔ 4 / 3.1-14) Pneumatic connection: QS-4, M5
Pneumatic supply plate without duct separation				
	U		■	Additional compressed air supply (1) and additional exhaust (3/5). Pneumatic connection: QS-4, M5
Blanking plate				
	L		■	Plate without valve function for reserving a valve position. No pneumatic connection

In the case of compressed air supply configuration code S or T (exhausting via flat plate silencer), a plug-in silencer UC-QS-4H is included with supply plates.

Valve terminals type 80 CPV-SC, Smart Cubic

Key features – Pneumatic components

Constructional design



Valve replacement

Valves can be replaced quickly and easily in just a few movements. Separating seals between the valves are based on a metal support and are secured in place.

Extension

Valves can be ordered as accessories and are available with fully assembled sub-bases with QS or threaded connections. The functionality of the valve terminal can therefore be extended by equipping vacant positions.
For ordering purposes, valves have the valve code printed on the front and the product type on the back.

Materials

The valve housing and thread in the sub-bases are metallic, while other housing sections are made from robust plastic materials.

- - Note

The valve with the working sub-base has been tested by Festo for leak tightness.

Pilot air supply

The port for the main pneumatic supply is located on the left-hand end plate.
The ports differ for the following types of pilot air supply:
- Internal
- External

Internal pilot air
An internal pilot air supply can be selected if the terminal is working in an operating pressure range between 3 and 7[1)] bar.
The pilot air supply in the left-hand end plate is then branched from the compressed air supply 1 using an internal connection. The port 12/14 is closed using a blanking plug.

External pilot air
If the terminal is working in an operating pressure range from –0.9 to 3 bar, you must operate your CPV-SC valve terminal using an external pilot air supply. The pilot air supply is also supplied via port 12/14 on the left-hand end plate in this case.

1) 8 bar upon request

Creation of pressure zones and separation of exhaust air

The CPV-SC valve terminal can be operated with multiple pressure zones. After two zones, a supply with duct separation is required for each subsequent pressure zone. It always occupies one valve position. An isolating disc T separates the compressed air supply of a valve group on the left from the compressed air supply of a valve group on the right. The right-hand pressure zone is supplied at port 4 of the supply plate. Port 2 also allows the left-hand pressure zone to be exhausted. All of the exhaust ducts of the valve are interconnected and are exhausted through the right-hand end plate. An isolating disc S also separates exhaust ducts 3 and 5 in addition to pressure duct 1.

- - Note

Larger or simultaneously operating cylinders generate a back pressure in the exhaust duct of the valve terminal, the level of which depends on the exhaust capacity of the silencer.

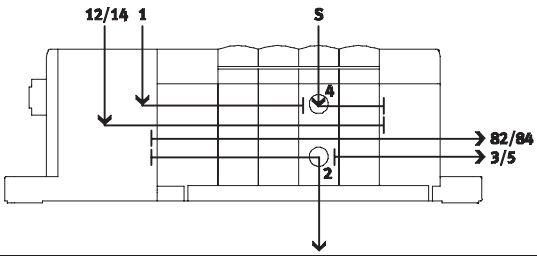
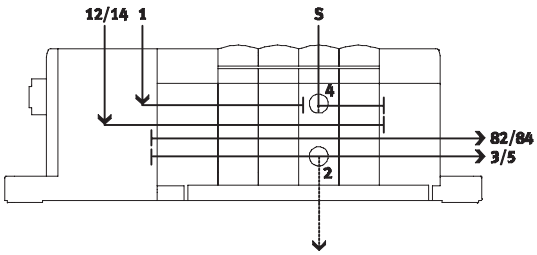
In order to prevent interaction with adjacent valves, valves can be separated by means of duct separation using isolating disc S. The pressure zone located to the left of an isolating disc S is exhausted using the supplied plug-in silencer. Where there are more than two valves in such a pressure zone, an additional supply with additional exhaust may be required.

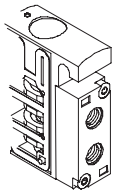
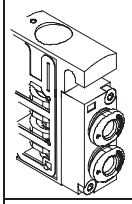
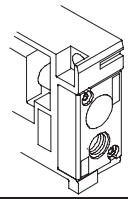
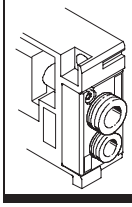
It is therefore useful to meet the higher exhaust requirements in the pressure zone that is exhausted by the right-hand end plate.

Valve terminals type 80 CPV-SC, Smart Cubic

Key features – Pneumatic components

FESTO

Creating pressure zones		
	Code	Description
	S	Duct 1 and 3/5 separated
	T	Duct 1 separated

Pneumatic working ports		
	Code	Description
Working port		
	B	M5 threaded connection
	E	QS-3 push-in connector
	F	QS-4 push-in connector
Supply port, left-hand end plate		
	C	Threaded connection • M7 (internal pilot air) • M5 and M7 (external pilot air)
	G	Push-in connection • QS-6 (internal pilot air) • QS-4 and QS-6 (external pilot air)

Ports for supply and exhaust

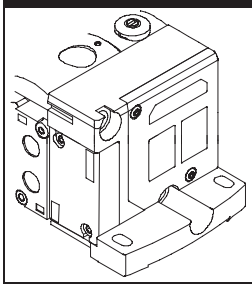
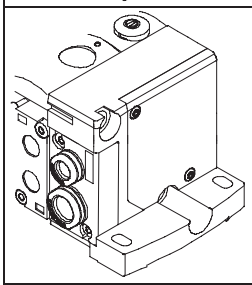
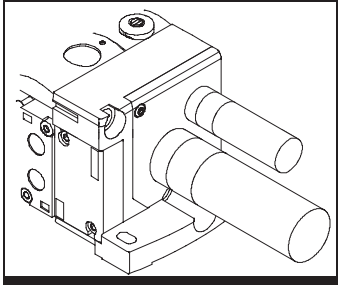
Supply and exhaust

A basic feature of a CPV-SC valve terminal are the two end plates.

The left-hand end plate is used to supply compressed air, while the right-hand end plate is used to exhaust the valve terminal.

Exhaust air escapes either via an integrated flat plate silencer, round silencer or via a push-in or threaded connection.

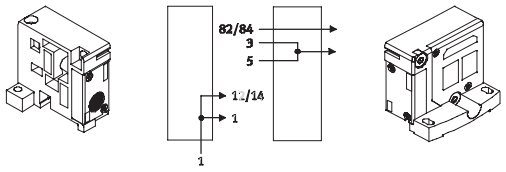
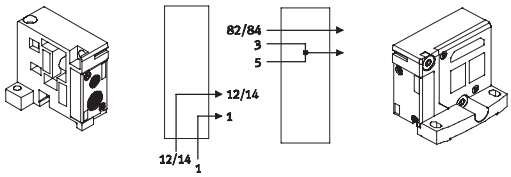
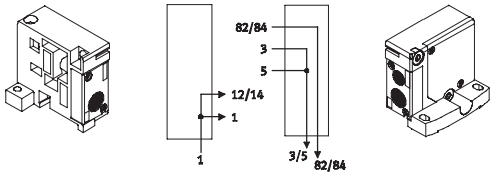
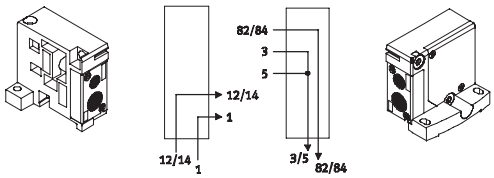
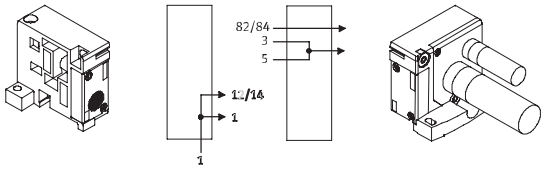
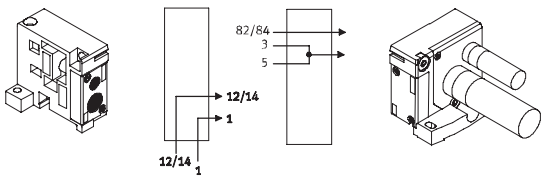
Ports for exhaust

	Code	Description
	S	• Internal pilot air • Exhaust from duct 3/5 as well as 82/84 is via a flat plate silencer • Replacement part (insert) for flat plate silencer: Type CPVSC1-UA
	T	• External pilot air • Exhaust from duct 3/5 as well as 82/84 is via a flat plate silencer • Replacement part (insert) for flat plate silencer: Type CPVSC1-UA
	V	• Internal pilot air • Exhaust from duct 3/5 as well as 82/84 is via ducted exhaust air
	X	• External pilot air • Exhaust from duct 3/5 as well as 82/84 is via ducted exhaust air
	Y	• Internal pilot air • Exhaust from duct 3/5 as well as 82/84 is via a round silencer
	Z	• External pilot air • Exhaust from duct 3/5 as well as 82/84 is via a round silencer

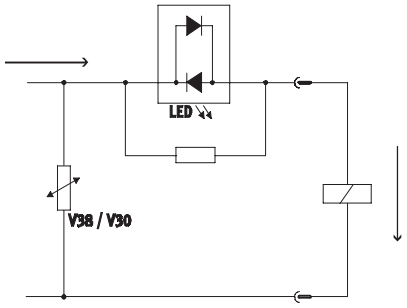
Valve terminals type 80 CPV-SC, Smart Cubic

Key features – Pneumatic components

FESTO

Pneumatic supply		
End plate combination	Code	Description
	S	Internal pilot air, flat plate silencer For operating pressure in the range 3 ... 7 bar
	T	External pilot air, flat plate silencer For operating pressure in the range –0.9 ... +7 bar
	V	Internal pilot air, ducted exhaust air For operating pressure in the range 3 ...7 bar
	X	External pilot air, ducted exhaust air For operating pressure in the range –0.9 ... +7 bar
	Y	Internal pilot air, round silencer For operating pressure in the range 3 ... 7 bar
	Z	External pilot air, round silencer For operating pressure in the range –0.9 ... +7 bar

Protective circuit



Each valve solenoid coil is protected with a spark arresting protection circuit as well as against polarity reversal.

Electrical multi-pin plug connection

The following multi-pin plug connection types are offered for the valve terminal CPV-SC:

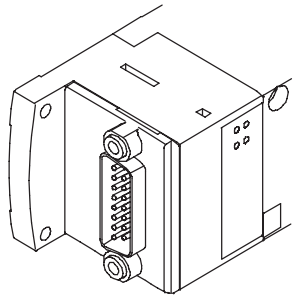
- Sub-D multi-pin plug connection (15- and 26-pin) or
- Multi-pin plug connection with connector for flat cable (20-pin)

CPV-SC is connected via a multi-pin plug connection with Sub-D or flat cable. Each pin of the multi-pin plug is assigned a maximum of one valve position and therefore one coil or one address.

Double solenoid valves "J" occupy two valve positions. The left-hand valve position with pilot control 12 is actuated by the less significant of the two addresses.

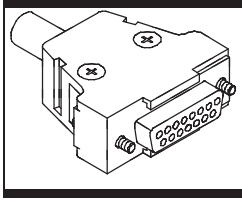
Electrical multi-pin plug connection – Sub-D

Code MS, MH

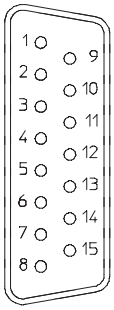


With this electrical connection variant, all valves are centrally actuated via the 15 and 26-pin connector plug. The electrical connection is located on the left-hand side.

Ordering data – Connecting cable Sub-D

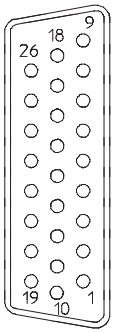
	Code	Description		Type	Part No.
	CP	15-pin for 12 coils (code MS)	2.5 m long	**KMP6-15P-12-2,5**	**527 543**
	CQ	Material: PVC	5 m long	**KMP6-15P-12-5**	**527 544**
	CR	Suitable for chain link trunking	10 m long	**KMP6-15P-12-10**	**527 545**
	CP	26-pin for 16 coils (code MH)	2.5 m long	**KMP6-26P-16-2,5**	**527 546**
	CQ	Material: PVC	5 m long	**KMP6-26P-16-5**	**527 547**
	CR	Suitable for chain link trunking	10 m long	**KMP6-26P-16-10**	**527 548**

Pin allocation for 15-pin Sub-D (code MS)

KMP6-15P-12-...	Description	Pin	Core colour	Address/coil
	Plug socket with cable for the CPV-SC valve terminal with up to 12 valve positions	1	White	Coil 0
		2	Brown	Coil 1
		3	Green	Coil 2
		4	Yellow	Coil 3
		5	Grey	Coil 4
		6	Pink	Coil 5
		7	Blue	Coil 6
		8	Red	Coil 7
		9	Black	Coil 8
	- - Note The drawing shows a plan view of the Sub-D socket on the multi-pin cable KMP6-15P-12-....	10	Purple	Coil 9
		11	Grey-pink	Coil 10
		12	Red-blue	Coil 11
		13	White-green	n.c.
		14	Brown-green	0 V[1)]
		15	White-yellow	0 V[1)]

1) Pin 14 to pin 15 are bridged in the valve terminal.
0 V for positive switching control signals; 24 V can be connected for negative switching control signals.

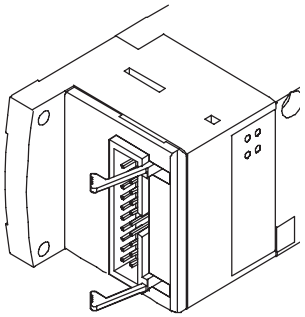
Pin allocation for 26-pin Sub-D (code MH)

KMP6-26P-16-...	Description	Pin	Core colour	Allocation
	Plug socket with cable for the CPV-SC valve terminal with 16 valve positions	1	White	Coil 0
		2	Brown	Coil 1
		3	Green	Coil 2
		4	Yellow	Coil 3
		5	Grey	Coil 4
		6	Pink	Coil 5
		7	Blue	Coil 6
		8	Red	Coil 7
		9	Black	Coil 8
		10	Purple	Coil 9
		11	Grey-pink	Coil 10
		12	Red-blue	Coil 11
		13	White-green	Coil 12
		14	Brown-green	Coil 13
		15	White-yellow	Coil 14
		16		Coil 15
		17		Coil 16
		18		n.c.
		19		n.c.
		20		0 V[1)]
	- - Note The drawing shows a plan view of the Sub-D socket on the multi-pin cable KMP6-26P-12-....	21		0 V[1)]
		22		0 V[1)]
		23	White-grey	0 V[1)]
		24	Grey-brown	0 V[1)]
		25	White-pink	0 V[1)]
		26	Pink-brown	0 V[1)]

1) Pin 17 to pin 22 are bridged in the valve terminal.
0 V for positive switching control signals; 24 V can be connected for negative switching control signals.

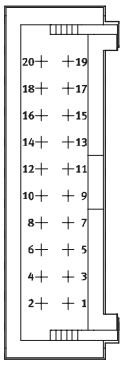
Electrical multi-pin plug connection – Connector for flat cable

Code MF



With this electrical connection variant, all valves are centrally actuated via the 20-pin connector plug.
The electrical connection is located on the left-hand side.

Pin allocation – Connector for flat cable (code MF)



CPV-SC valve terminal with up to 16 valve positions and 20-pin multi-pin socket for flat cables to DIN 41561-1, -2 or IEC 60603-13-C020FD-7C1E-2G

Contact surface gold
Flat cable grid 1.27 mm
Conductor cross section 0.13 mm²

Pin	Allocation
1	Coil 0
2	Coil 1
3	Coil 2
4	Coil 3
5	Coil 4
6	Coil 5
7	Coil 6
8	Coil 7
9	Coil 8
10	Coil 9
11	Coil 10
12	Coil 11
13	Coil 12
14	Coil 13
15	Coil 14
16	Coil 15
17	0 V[1)]
18	0 V[1)]
19	0 V[1)]
20	0 V[1)]

1) Pin 17 to pin 20 are bridged in the valve terminal.

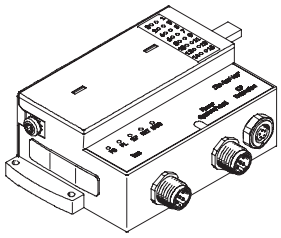
Valve terminals type 80 CPV-SC, Smart Cubic

Key features – Electrical components

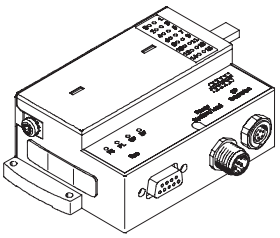
FESTO

Fieldbus Direct

DeviceNet



Profibus DP

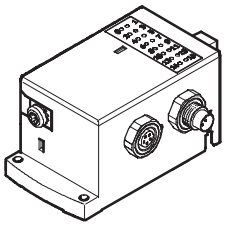


Properties

Fieldbus Direct is a system for the compact connection of a valve terminal of various sizes to different fieldbus standards.
The CP string extension option allows the functions and components of the CPI installation system to be used.

The I/O modules and cables for the CP string extension are ordered using the order code for the CPI installation system.
➔ 4 / 4.6-2

Fieldbus connection CP

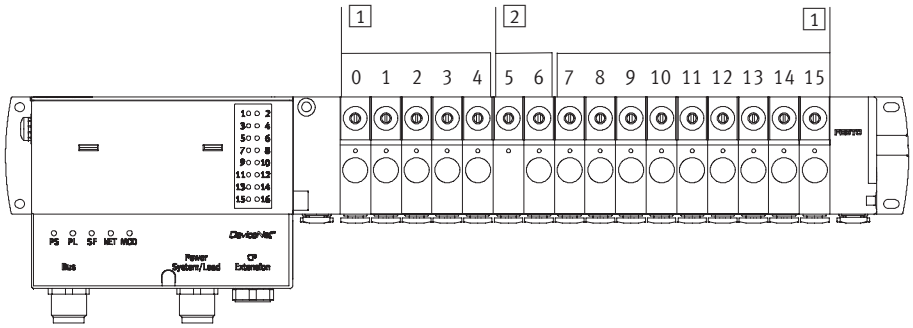


All CP valve terminals and CP modules are connected using a ready to install CP cable, and are attached to the CP interface. Four modules, for example one CPV-SC valve terminal and one to three CP input modules, make up an installation string that ends at the CP interface. The installation system supports a maximum of 4 installation strings, which can be connected to a CP fieldbus node.
The CP interface of CPV-SC is represented in the CP/CPI system by a module with 16 outputs.

- Note

Further information can be found in
➔ CPI installation system
4 / 4.6-2

Address allocation – Solenoid coils



Example:
Valve terminal where valve positions 5 and 6 are prepared for double solenoid valves.

1 Single solenoid valves occupy one valve position

2 Double solenoid valves occupy two valve positions

The addresses of the valve positions on the CPV-SC-DN/CPV-SC-DP are assigned from left to right. Each valve position has an address, regardless of whether or not a valve is mounted there.

Double solenoid valves "J" occupy two valve positions. The left-hand valve position with pilot control 12 is actuated by the less significant of the two addresses.

Display and operation

The switching status of every solenoid coil is displayed on the control unit LED. Inscription labels (type MH-BZ-80x) can be applied to each valve for labelling purposes.

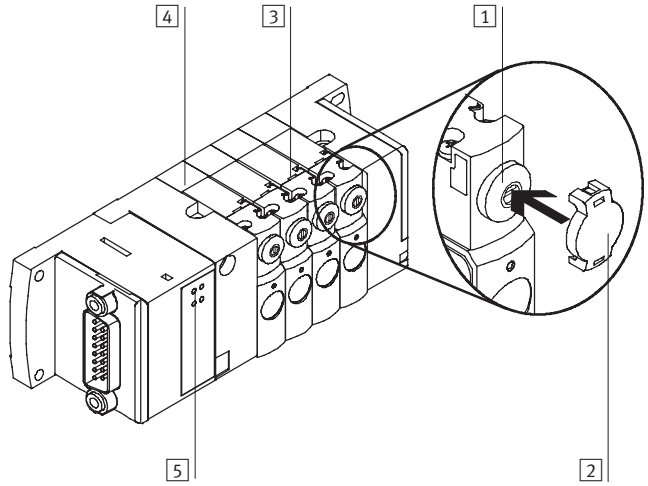
The manual override (MO) allows the valve to be activated without electronic control or power supply. The valve is activated by pushing the manual override. The set switching status can also be secured by rotating the manual override.

A cover can be fitted over the manual override to prevent it from being activated accidentally (code V).

- Note

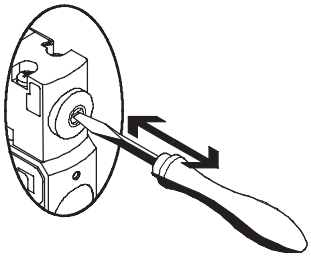
A manually activated valve (manual override) cannot be reset electrically. Conversely, an electrically activated valve cannot be reset using the manual override facility.

Manual override (MO)



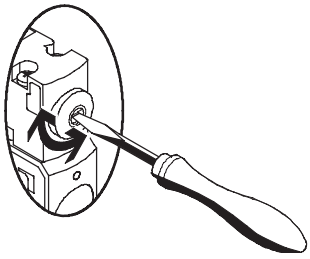
1 Manual override (non-detenting or detenting via turning using a screwdriver)
2 Cover for manual override (code V)
3 Location for valve position inscription label (type MH-BZ-80x)
4 Numbering of valve positions
5 LED signal status display per valve position

Manual override with automatic return (non-detenting)



Manual override is actuated by pushing it with a pointed object or screwdriver and reset by spring force.

Manual override set via turning (detenting)



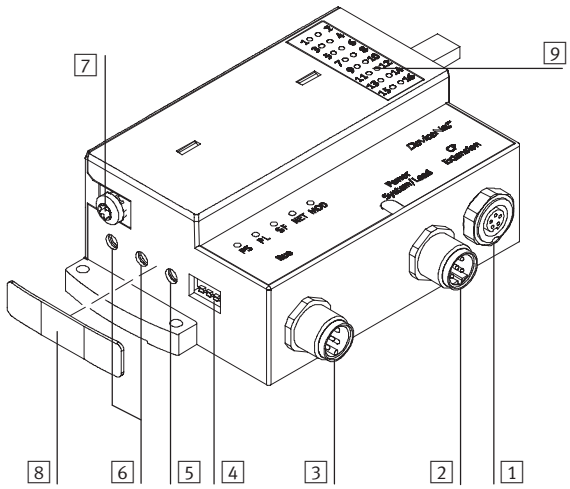
Manual override remains active until it is reset with a screwdriver.

Valve terminals type 80 CPV-SC, Smart Cubic

Key features – Display and operation

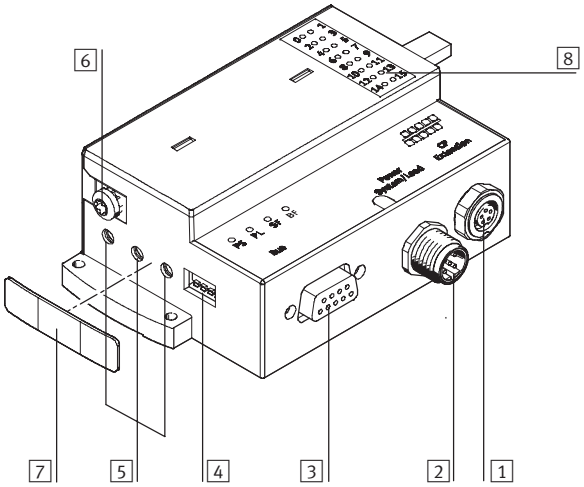
Display and operation

Fieldbus Direct – DeviceNet



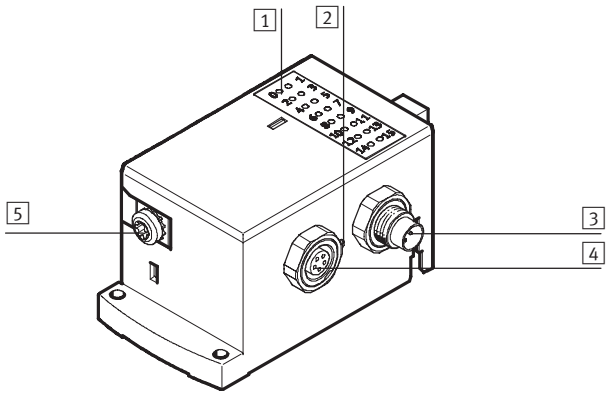
1 Connection for CP extension (with CP functionality)
2 Connection for power supply
3 Connection for fieldbus
4 DIL switch for CP extension
5 Rotary switch for baud rate
6 Rotary switch for station number
7 Earth terminal
8 Cover (for IP40 protection)
9 Switching status display per valve

Fieldbus Direct – Profibus DP



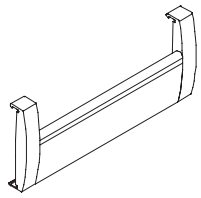
1 Connection for CP extension (with CPI functionality)
2 Connection for power supply
3 Connection for fieldbus
4 DIL switch for CP extension
5 Rotary switch for station number
6 Earth terminal
7 Cover (for IP40 protection)
8 Switching status display per valve

CP interface



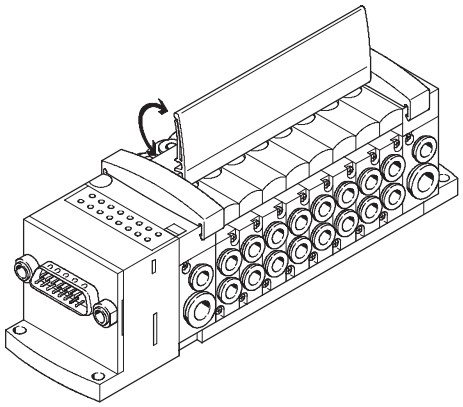
1 Status LEDs for valves
2 Status LED for CP communication
3 CP connection, incoming
4 CP connection, outgoing
5 Earth terminal

Inscription label holder



The transparent inscription label holder provides sufficient space for individually created labels on paper or foil.

Labelling templates are available on the Festo home page:
➔ www.festo.com
under Automation, in the “literature and software download” area.



Valve terminals type 80 CPV-SC, Smart Cubic

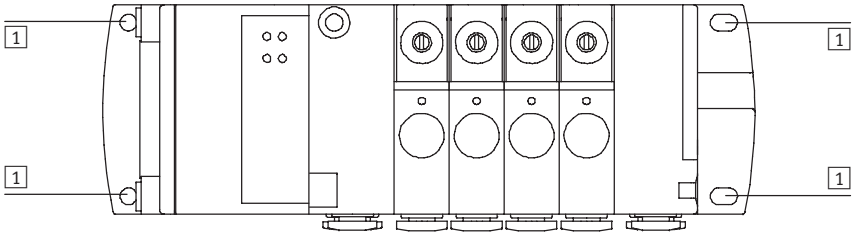
Key features – Mounting types

Mounting – Valve terminal

Sturdy terminal mounting thanks to:

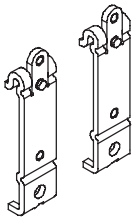
- Four through-holes for wall mounting
- H-rail mounting

Wall mounting

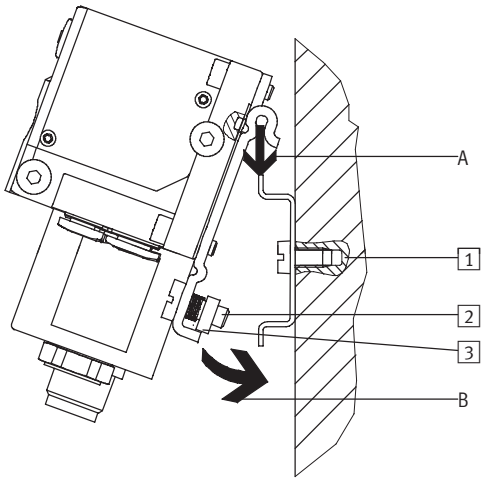


1 Mounting holes for screws M3

H-rail mounting



The mounting CPVSC1-HS35 facilitates mounting on a H-rail to EN 60715.



The CPV-SC valve terminal is attached to the H-rail (see arrow A).
The valve terminal is then swivelled on the H-rail and secured in place with the clamping component (see arrow B).

1 Holes for wall mounting
2 Self-tapping M4x10 screw of the H-rail clamping unit
3 Clamping component of the H-rail clamping unit

Valve terminals type 80 CPV-SC, Smart Cubic

Technical data

FESTO

- Flow rate
  170 l/min

- Valve width
  10 mm

- Voltage
  5, 12, 24 V DC

General technical data						
Valve		5/2-way valve		3/2-way valve		2/2-way valve
		Single solenoid	Double solenoid	Normally open	Normally closed	Normally closed
Valve function order code		M	J	N	K	D
Constructional design		Electromagnetically actuated piston spool valve				
Width	[mm]	10		10		10
Nominal diameter	[mm]	2.5		2.5		2.5
Standard nominal flow rate	[l/min]	170		170		150
Lubrication		Life-time lubrication				
Type of mounting		Wall mounting				
Mounting position		Any				
Manual override		Non-detenting/detenting/blocked				
Pneumatic connections						
Supply	1	M7, QS-6				
Exhaust port	3/5	M7, QS-6, round silencer or integrated flat plate silencer				
Working ports	2/4	Depending on the connection type selected • M5 • QS-3 • QS-4				
Pilot air port	12/14	M5, QS-4				
Pilot exhaust air port	82/84	M5, QS-4, round silencer or integrated flat plate silencer				

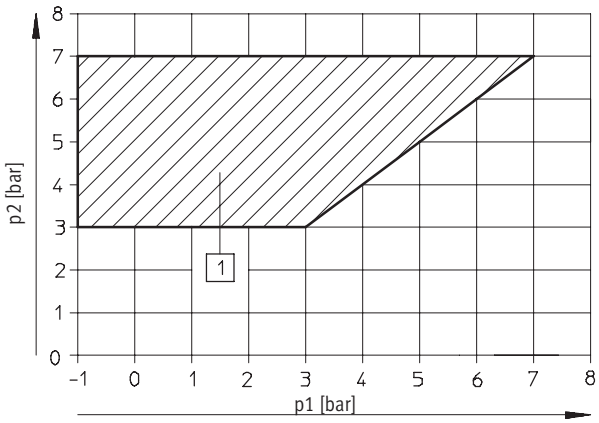
Valve terminals type 80 CPV-SC, Smart Cubic

Technical data

FESTO

Operating pressure [bar]						
Valve function order code	M	J	N	K	D	
Internal pilot air supply	3 ... 7					
External pilot air supply	–0.9 ... +7					
Pilot pressure	3 ... 7					

Pilot pressure p2 as a function of operating pressure p1



1 Operating range for valves with external pilot air

Valve response times [ms]						
Valve function order code		M	J	N	K	D
Response times	on	10	10	10	10	10
	off	10	–	10	10	10
	change-over	–	8	–	–	–

Operating and environmental conditions						
Valve function order code		M	J	N	K	D
Operating medium		Filtered compressed air, lubricated or unlubricated, inert gases permissible → 4 / 3.1-28				
Grade of filtration	[µm]	40				
Paint-wetting impairment substances criterion		Yes (free of paint-wetting impairment substances)				
CE certification		Yes, with control unit to EMC regulations				
Certification		cULus recognized (OL)				
Ambient temperature	[°C]	–5 ... +50				
Temperature of medium	[°C]	–5 ... +50				
Storage temperature	[°C]	–20 ... +40				
Corrosion resistance class CRC[1)]		1				

1) Corrosion resistance class 1 according 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.

Valve terminals type 80 CPV-SC, Smart Cubic

Technical data

FESTO

Electrical data									
Valve function order code			M	J	N	K	D		
Electromagnetic compatibility of the CPV-SC valve terminal with Sub-D or flat cable connection			Interference emission tested to DIN EN 61000-6-4, industry						
			Interference immunity[1] tested to DIN EN 61000-6-2, industry						
Protection against electric shock (protection against direct and indirect contact to EN 60204-1/IEC 204)			By means of PELV power supply unit						
Nominal operating voltage of valve terminal	Multi-pin plug connection	[V DC]	24						
	Individual sub-base	[V]	5 , 12, 22, 24						
Permissible voltage fluctuations		[%]	±10						
Coil characteristics	Nominal voltage	[V DC]	5 , 12, 22, 24						
	Electrical power consumption	[W]	1						
Duty cycle			100% at 40°C ambient temperature						
Protection class to EN 60529			IP40 (in assembled state and with detenting plug)						
Relative air humidity		[%]	90 at 40 °C, non-condensing						

1) The maximum signal line length is 10 m

Materials						
Valve function order code	M	J	N	K	D	
Electrical interface	Polymer					
End plate, electrical sub-base	Polymer					
Seals	Elastomer					
Valve slice	Die-cast aluminium					
Sub-base for working ports	Polyamide					

Product weight [g]						
Valve function order code	M	J	N	K	D	
5/2-way, 3/2-way valve	30.5					
5/2-way double solenoid valve	56.5					
Blanking plate	22.5					
Right-hand end plate	42.5					
Left-hand end plate	28					
Actuator housing	43					
Tie rod, 16-fold	29.6					
Electrical manifold module, 16-fold	64					
Control unit (fieldbus)	200					
Electrical interface CPI	150					

Equipment

Operate your equipment with unlubricated compressed air if possible.
Festo valves and cylinders are designed so that, if used as designated, they will not require additional lubrication and will still achieve 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 cylinders used.

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

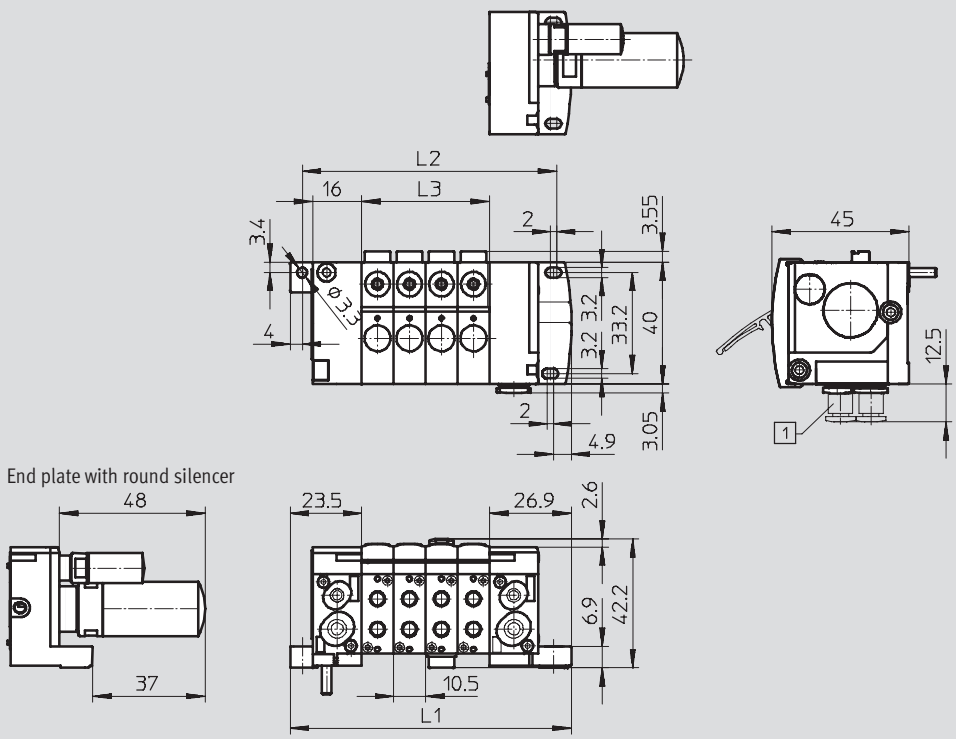
Bio-oils
When using bio-oils (oils which are based upon synthetic or native ester, e.g. rapeseed oil methyl ester), the maximum residual oil content of 0.1 mg/m^3 must not be exceeded (see ISO 8573-1 Class 2).

Mineral oils
When using mineral oils (e.g. HLP oils to DIN 51524, Parts 1 to 3) or similar oils based on poly-alpha-olefins (PAO), the maximum residual oil content of 5 mg/m^3 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.

Dimensions Download CAD data ➔ **www.festo.com/en/engineering**

With individual connection

End plate with round silencer



1 QS push-in fitting

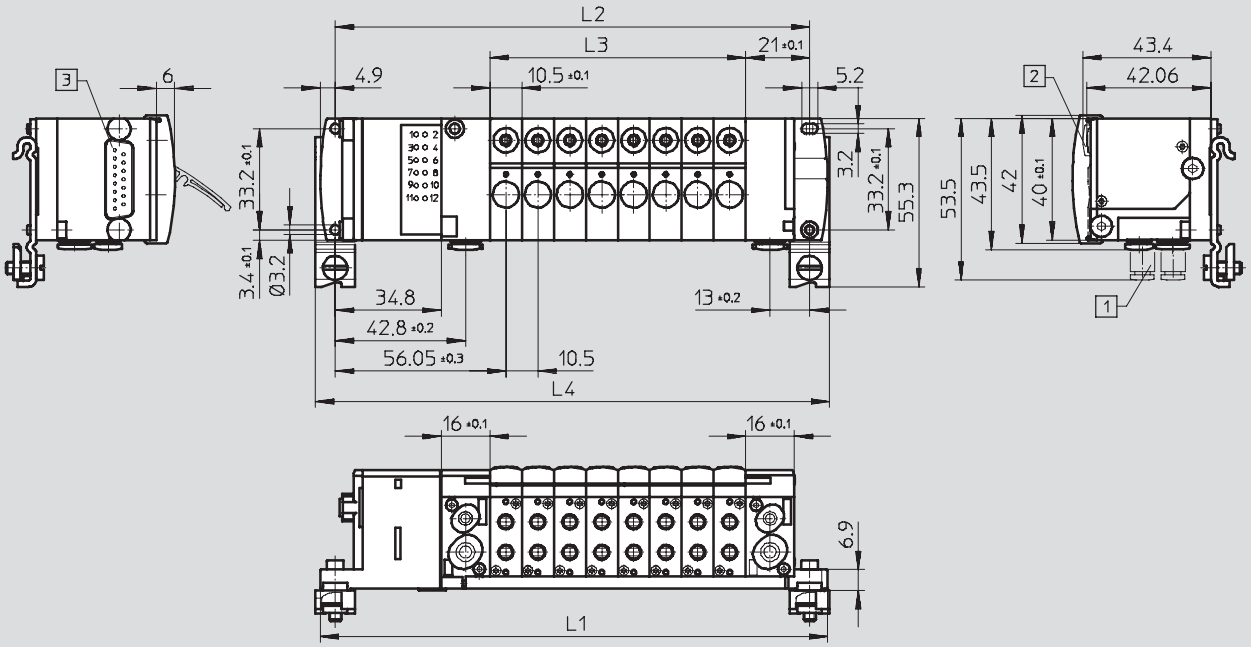
Valve positions n	L1	L2	L3
2	71.4	62.5	21
3	81.9	73	31.5
4	92.4	83.5	42
5	102.9	94	52.5
6	113.4	104.5	63
7	123.9	115	73.5
8	134	125.1	84
9	144.9	136	94.5
10	155.4	146.5	105
11	165.9	157	115.5
12	176.4	167.5	126
13	186.9	178	136.5
14	197.4	188.5	147
15	207.9	199	157.5
16	218.4	209.5	168

Valve terminals type 80 CPV-SC, Smart Cubic

Technical data

Dimensions Download CAD data ➔ **www.festo.com/en/engineering**

With multi-pin plug connection



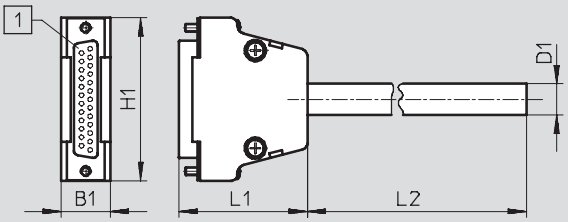
1 QS push-in fitting

2 Cover cap

3 Multi-pin plug connection with 20-pin flat cable or 15/26-pin Sub-D multi-pin plug connection

Valve positions n	L1	L2	L3
2	104	93	21
3	114.5	103.5	31.5
4	125	114	42
5	135.5	124.5	52.5
6	146	135	63
7	146.5	145.5	73.5
8	167	156	84
9	177.5	166.5	94.5
10	188	177	105
11	198.5	187.5	115.5
12	209	198	126
13	219.5	208.5	136.5
14	230	219	147
15	240.5	229.5	157.5
16	251	240	168

Dimensions – Sub-D plug with cable Download CAD data ➔ **www.festo.com/en/engineering**



1 15-/26-pin plug

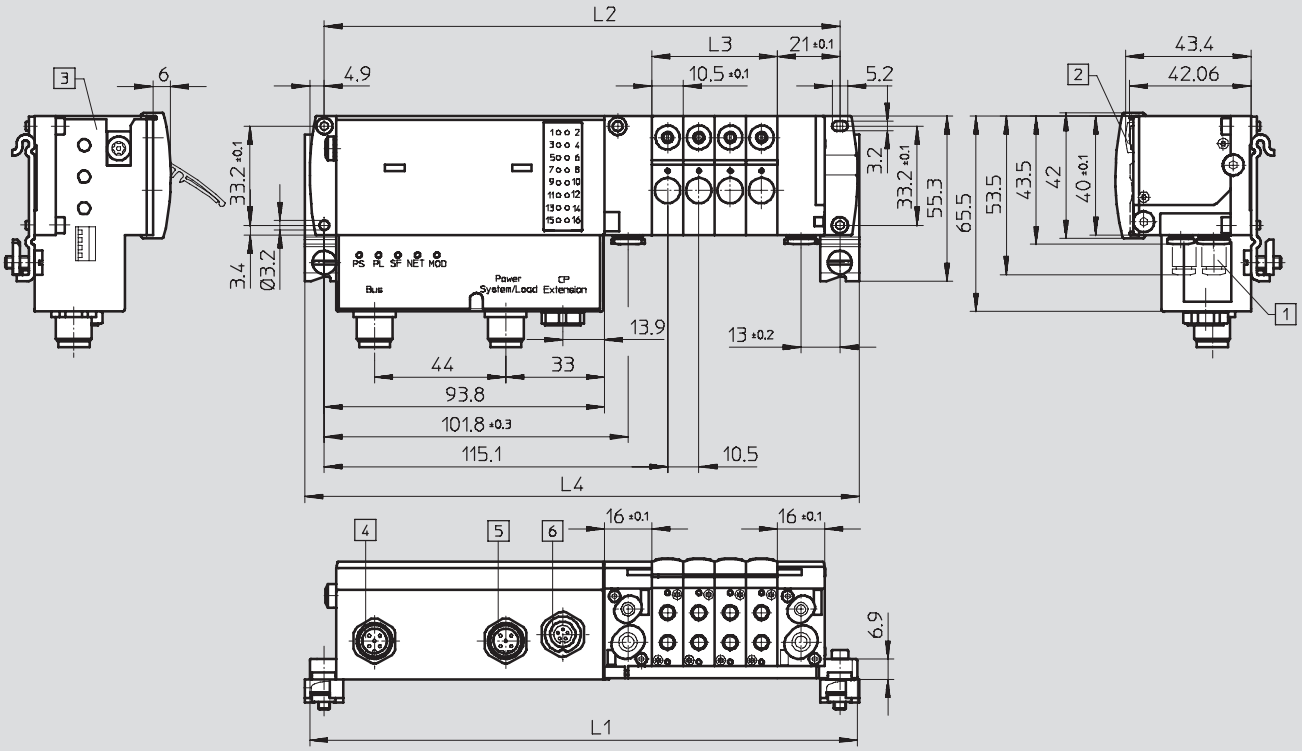
Type	B1	D1	H1	L1	L2			Number of pins
KMP6-15P-12-...	16	8.5	40	34.5	2,500	5,000	10,000	15
KMP6-26P-16-...	16	8.6	40	34.5	2,500	5,000	10,000	26

Valve terminals type 80 CPV-SC, Smart Cubic

Technical data

Dimensions – Valve terminal Download CAD data ➔ **www.festo.com/en/engineering**

With fieldbus connection

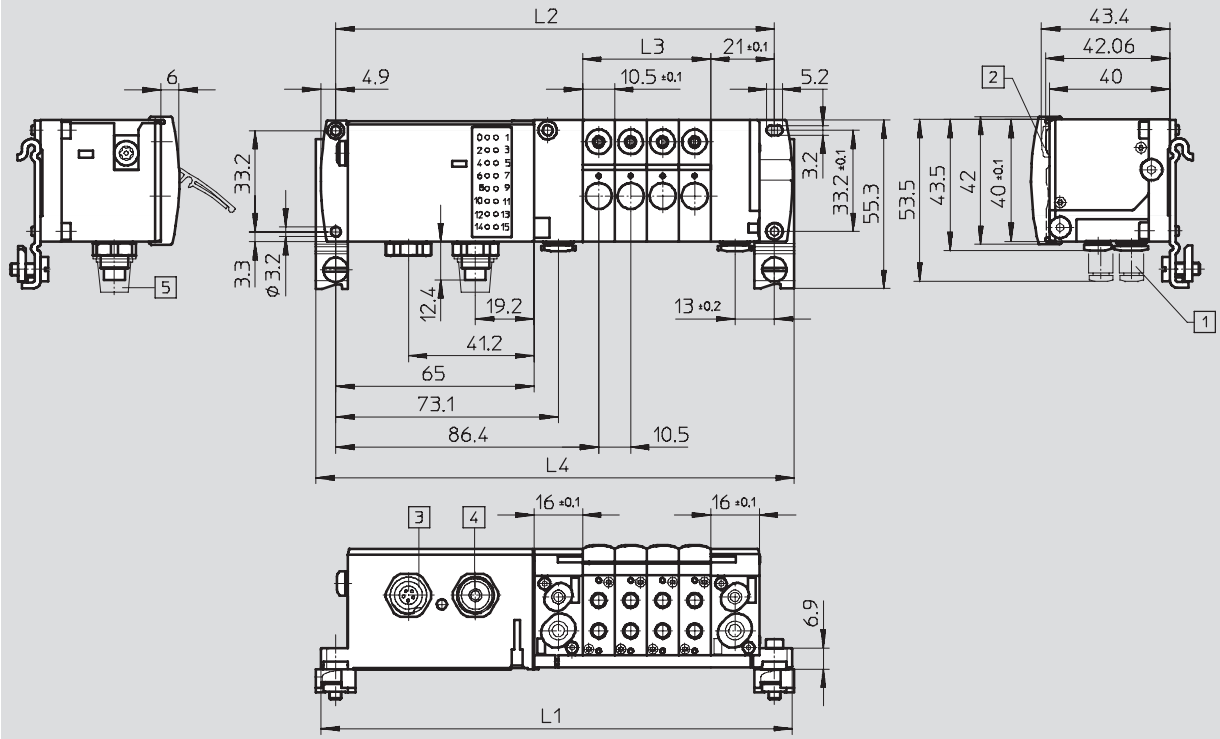


1 QS push-in fitting
2 Cover cap
3 DeviceNet fieldbus connection (dimensions for Profibus DP are identical with the exception of the bus connection)
4 Bus connection M12
5 Power supply M12
6 CP connection M9

Valve positions n	L1	L2	L3	L4
2	162.6	151.8	21	164.4
3	173.1	162.3	31.5	174.9
4	183.6	172.8	42	185.4
5	194.1	183.3	52.5	195.9
6	204.6	193.8	63	206.4
7	215.1	204.3	73.5	216.9
8	225.6	214.8	84	227.4
9	236.1	225.3	94.5	237.9
10	246.6	235.8	105	248.4
11	257.1	246.3	115.5	258.9
12	267.6	256.8	126	269.4
13	278.1	267.3	136.5	279.9
14	288.6	277.8	147	290.4
15	299.1	288.3	157.5	300.9
16	309.6	298.8	168	311.4

Dimensions – Valve terminal Download CAD data ➔ **www.festo.com/en/engineering**

With CPI interface



1 QS push-in fitting
2 Cover cap for manual override
3 CP connection M9, outgoing
4 CP connection M9, incoming
5 Cover cap for CP connection

Valve positions n	L1	L2	L3	L4
2	162.6	151.8	21	164.4
3	173.1	162.3	31.5	174.9
4	183.6	172.8	42	185.4
5	194.1	183.3	52.5	195.9
6	204.6	193.8	63	206.4
7	215.1	204.3	73.5	216.9
8	225.6	214.8	84	227.4
9	236.1	225.3	94.5	237.9
10	246.6	235.8	105	248.4
11	257.1	246.3	115.5	258.9
12	267.6	256.8	126	269.4
13	278.1	267.3	136.5	279.9
14	288.6	277.8	147	290.4
15	299.1	288.3	157.5	300.9
16	309.6	298.8	168	311.4

Valve terminals type 80 CPV-SC, Smart Cubic – Individual connection

Ordering data – Modular products

FESTO

M Mandatory data				O Options	M Mandatory data							
Module No.	Valve terminal	Size	Voltage	Display	Electrical connection	Electrical outgoing direction	Position of the working ports	Pneumatic working ports	Manual override	Compressed air supply
525 675	80P	10	1 4 5	– L	I	H T	P	B E F I J	N K V	S T V X Y Z
Ordering example										
525 675	80P	– 10	– 1	L	I	H	– P	B	– N	– S
1	2	3	4	5	6	7	8	9	10	11

Ordering table

Size			10	Conditions	Code		Enter code
M	1	Module No.	**525 675**				
	2	Valve terminal	Valve terminal type 80, Smart Cubic, CPV-SC		**80P**		80P
	3	Size [mm]	10		**-10**		-10
	4	Voltage [V]	Power supply 24 DC		**-1**		
			Power supply 5 DC		**-4**		
			Power supply 12 DC		**-5**		
O	5	Display	Without LED				
			With LED	1	**L**		
M	6	Electrical connection	Individual electrical connection		**I**		I
	7	Electrical outgoing direction	Individual connection, horizontal		**H**		
			Individual connection, top		**T**		
	8	Position of the working ports	On the valve		**-P**		-P
	9	Pneumatic working ports, per valve position	Threaded connections M5	2	**B**		
			Push-in connectors QS-3	2	**E**		
			Push-in connectors QS-4	2	**F**		
			Push-in connectors QS-1/8"	2	**I**		
			Push-in connectors QS-5/32"	2	**J**		
	10	Manual override	Non-detenting/detenting		**-N**		
			Non-detenting	3	**-K**		
			Blocked		**-V**		
	11	Compressed air supply	Internal pilot air supply, flat plate silencer		**-S**		
			External pilot air supply, flat plate silencer		**-T**		
			Internal pilot air supply, ducted exhaust air		**-V**		
			External pilot air supply, ducted exhaust air		**-X**		
			Internal pilot air, silencer		**-Y**		
↓			External pilot air, silencer		**-Z**		

1 **L** Only with voltage 1 (24 V DC)

2 **B, E, F, I, J, C, G, N**
Valve terminal must be configured as either metric or imperial

3 **K** Not with voltage 4 (5 V DC) or 5 (12 V DC)

Transfer order example

525 675	80P	– 10	–			I		– P		–		–
1	2	3	4	5		6	7	8	9	10		11

Valve terminals type 80 CPV-SC, Smart Cubic – Individual connection

Ordering data – Modular products

FESTO

➔ M Mandatory data | O Options

Supply side	Pneumatic supply connection		Equipment at valve position 0 ... 15		User documentation		Accessories
L	C, G, N		**14 Valves:** M, N, K, J, D, L, T, S, U		D, E, F, I, S, V		H,...CH, ...CI, ...CJ, ...CK, T
			Valve position 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15				
L	**C**	–	**M N K M J J M**	–	**D**	+	
12	**13**		**14**		**15**		**16**

Ordering table

Size			10	Conditions	Code		Enter code
➔	12	Supply side	Pneumatic supply from left		L		L
M	13	Pneumatic supply connection	Threaded connection M7	3	C		
			Push-in connectors QS-6	3	G		
			Push-in connectors QS-¼"	3	N		
	14	Equipment at valve position 0 ... 15		4	-		-
		Valves	5/2-way single solenoid valve		M		Enter equipment selection for valve positions in order code
			3/2-way valve, normally open		N		
			3/2-way valve, normally closed		K		
			5/2-way double solenoid valve	5	J		
			2/2-way valve, normally closed		D		
			Blanking plate for vacant valve position		L		
			Pneumatic supply plate, duct 1 separated	6	T		
			Pneumatic supply plate, duct 1/3/5 separated	6	S		
			Pneumatic supply plate		U		
	15	User documentation	German		-D		
			English		-E		
			French		-F		
			Italian		-I		
			Spanish		-S		
			Swedish		-V		
O	16	Accessories			+		+
		H-rail mounting	1		H		
		HC connecting cable, 1 coil, 0.5 m	1 ... 99		...CH		
		HC connecting cable, 1 coil, 1 m	1 ... 99		...CI		
		HC connecting cable, 1 coil, 2.5 m	1 ... 99		...CJ		
		HC connecting cable, 1 coil, 5 m	1 ... 99		...CK		
		Inscription label holder	1		T		

3 **B, E, F, I, J, C, G, N**
Valve terminal must be configured as either metric or imperial

4 **Equipment at valve position 0 ... 15**
The valve positions must be equipped throughout from left to right without exception

5 **J** Double solenoid valve occupies 2 valve positions.
Cannot be mounted on the last valve position

6 **T, S** Can be mounted in any way, however ensure adequate compressed air supply and exhausting (for more than 2 successive valves)

Transfer order code

			0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15			
L		–		–		+	
12	13		14		15		16

Valve terminal type 80 CPV-SC, Smart Cubic – Multi-pin plug connection

Ordering data – Modular products

FESTO

M **Mandatory data** →

Module No.	Valve terminal	Size	Voltage	Electrical connection	Position of the working ports	Pneumatic working ports	Manual override	Compressed air supply	Supply side	Pneumatic supply connection
525 675	80P	10	1	MS MF MH	P	B E F I J	N V	S T V X Y Z	L	C G N
Ordering example										
525 675	**80P**	**10**	**1**	**MS**	**P**	**E**	**V**	**T**	**L**	**G**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**

Ordering table

Size			10	Conditions	Code	Enter code
M	1	Module No.	**525 675**			
	2	Valve terminal	Valve terminal type 80, Smart Cubic, CPV-SC		**80P**	80P
	3	Size [mm]	10		**-10**	-10
	4	Voltage [V]	Power supply 24 DC		**-1**	-1
	5	Electrical connection	Connection for multi-pin cable Sub-D, 15-pin	1	**MS**	
			Connection for flat cable, 20-pin		**MF**	
			Connection for multi-pin cable Sub-D, 26-pin		**MH**	
	6	Position of the working ports	On the valve		**-P**	-P
	7	Pneumatic working ports, per valve position	Threaded connections M5	2	**B**	
			Push-in connectors QS-3	2	**E**	
			Push-in connectors QS-4	2	**F**	
			Push-in connectors QS-1/8"	2	**I**	
			Push-in connectors QS-5/32"	2	**J**	
	8	Manual override	Non-detenting/detenting		**-N**	
			Blocked		**-V**	
	9	Compressed air supply	Internal pilot air supply, flat plate silencer		**-S**	
			External pilot air supply, flat plate silencer		**-T**	
			Internal pilot air supply, ducted exhaust air		**-V**	
			External pilot air supply, ducted exhaust air		**-X**	
			Internal pilot air, silencer		**-Y**	
			External pilot air, silencer		**-Z**	
	10	Supply side	Pneumatic supply from left		**L**	L
	11	Pneumatic supply connection	Threaded connection M7	2	**C**	
			Push-in connectors QS-6	2	**G**	
↓			Push-in connectors QS-1/4"	2	**N**	

1 **MS** Max. 12 valve positions possible

2 **B, E, F, I, J, C, G, N**
Valve terminal must be configured as either metric or imperial

Transfer order code

525 675	80P	–	10	–	1		–	P		–		–		L	
1	2		3		4	5		6	7		8		9	10	11

Valve terminal type 80 CPV-SC, Smart Cubic – Multi-pin plug connection

Ordering data – Modular products

FESTO

➔ M Mandatory data			O Options
Equipment at valve position 0 ... 15		User documentation	Accessories
12 **Valves:** M, N, K, J, D, L, T, S, U		D, E, F, I, S, V	CP, CQ, CR, H, T
Valve position			
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15			
– M J J D L M T N	–	E	+ CP H T
12		13	14

Ordering table

Size			10	Conditions	Code		Enter code
➔	12	Equipment at valve position 0 ... 15		3	-		-
M		Valves	5/2-way single solenoid valve		M		Enter equipment selection for valve positions in order code
			3/2-way valve, normally open		N		
			3/2-way valve, normally closed		K		
			5/2-way double solenoid valve	4	J		
			2/2-way valve, normally closed		D		
			Blanking plate for vacant valve position		L		
			Pneumatic supply plate, duct 1 separated	5	T		
			Pneumatic supply plate, duct 1/3/5 separated	5	S		
			Pneumatic supply plate		U		
	13	User documentation	German		-D		
			English		-E		
			French		-F		
			Italian		-I		
			Spanish		-S		
			Swedish		-V		
O	14	Accessories			+		+
		Connecting cable	Connecting cable, Sub-D, 2.5 m	6	CP		
			Connecting cable, Sub-D, 5 m	6	CQ		
			Connecting cable, Sub-D, 10 m	6	CR		
		H-rail mounting	1		H		
		Inscription label holder	1		T		

3 **Equipment at valve position 0 ... 15**
The valve positions must be equipped throughout from left to right without exception

4 **J** Double solenoid valve occupies 2 valve positions.
Cannot be mounted on the last valve position

5 **T, S** Can be mounted in any way, however ensure adequate compressed air supply and exhausting (for more than 2 successive valves)

6 **CP, CQ, CR**
Not with electrical connection MF

Transfer order code

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15			
–		–	+
12		13	14

Valve terminals type 80 CPV-SC, Smart Cubic – Fieldbus

Ordering data – Modular products

FESTO

M **Mandatory data** →

Module No.	Valve terminal	Size	Electrical connection	Position of the working ports	Pneumatic working ports	Manual override	Compressed air supply	Supply side	Pneumatic connection supply and exhaust
538 510	80P	10	DN DP	P	B E F I J	N V	S T V X Y Z	L	C G N
Ordering example									
538 510	**80P**	**10**	**DN**	**P**	**F**	**N**	**X**	**L**	**G**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

Ordering table

Size			10	Conditions	Code	Enter code
M	1	Module No.	**538 510**			
	2	Valve terminal	Valve terminal type 80, Smart Cubic, CPV-SC		**80P**	80P
	3	Size [mm]	10		**-10**	-10
	4	Electrical connection	DeviceNet		**-DN**	
			Profibus		**-DP**	
			CP node		**-CPI**	
	5	Position of the working ports	On the valve		**-P**	-P
	6	Pneumatic working ports, per valve position	Threaded connections M5	1	**B**	
			Push-in connectors QS-3	1	**E**	
			Push-in connectors QS-4	1	**F**	
			Push-in connectors QS-1/8"	1	**I**	
			Push-in connectors QS-5/32"	1	**J**	
	7	Manual override	Non-detenting/detenting		**-N**	
			Blocked		**-V**	
	8	Compressed air supply	Internal pilot air supply, flat plate silencer		**-S**	
			External pilot air supply, flat plate silencer		**-T**	
			Internal pilot air supply, ducted exhaust air		**-V**	
			External pilot air supply, ducted exhaust air		**-X**	
			Internal pilot air, silencer		**-Y**	
			External pilot air, silencer		**-Z**	
	9	Supply side	Pneumatic supply from left		**L**	L
	10	Pneumatic connection supply and exhaust	Threaded connection M7	1	**C**	
			Push-in connectors QS-6	1	**G**	
↓			Push-in connectors QS-1/4"	1	**N**	

1 **B, E, F, I, J, C, G, N**
Valve terminal must be configured as either metric or imperial

Transfer order code

538 510	80P	–	10	–		–	P		–		–		L	
1	2		3		4		5	6		7		8	9	10

Valve terminals type 80 CPV-SC, Smart Cubic – Fieldbus

Ordering data – Modular products

FESTO

➔ M Mandatory data			O Options	
Equipment at valve position 0 ... 15			User documentation	Accessories
11 **Valves:** M, N, K, J, D, L, T, S, U			D, E, F, I, S, V	...D, ...N, H, T
Valve position	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15			
–	M J J T M K J J	–	D	+ H
	11		12	13

Ordering table

Size			10	Conditions	Code		Enter code
➔	11	Equipment at valve position 0 ... 15		2	-		-
M		Valves	5/2-way single solenoid valve		**M**		Enter equipment selection for valve positions in order code
			3/2-way valve, normally open		**N**		
			3/2-way valve, normally closed		**K**		
			5/2-way double solenoid valve	3	**J**		
			2/2-way valve, normally closed		**D**		
			Blanking plate for vacant valve position		**L**		
			Pneumatic supply plate, duct 1 separated	4	**T**		
			Pneumatic supply plate, duct 1/3/5 separated	4	**S**		
			Pneumatic supply plate		**U**		
O	12	User documentation	German		**-D**		
			English		**-E**		
			French		**-F**		
			Italian		**-I**		
			Spanish		**-S**		
			Swedish		**-V**		
	13	Accessories			**+**		+
		Straight connection socket for DeviceNet	1 ... 99	5	**...D**		
		Straight power supply socket, A-coded, for Profibus	1 ... 99	6	**...N**		
		H-rail mounting	1		**H**		
		Inscription label holder	1		**T**		

2 **Equipment at valve position 0 ... 15**
Number of valve positions: 4, 8, 12, 16.
The valve positions must be equipped throughout from left to right without exception

3 **J** Double solenoid valve occupies 2 valve positions.
Cannot be mounted on the last valve position

4 **T, S** Can be mounted in any way, however ensure adequate compressed air supply and exhausting (for more than 2 successive valves)

5 **D** Only with electrical connection DN

6 **N** Only with electrical connection DP

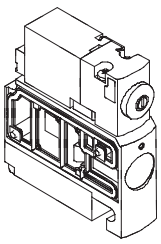
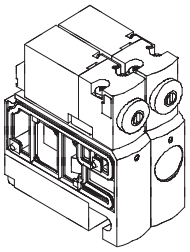
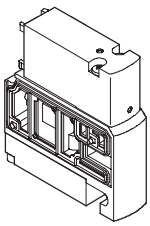
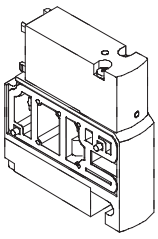
Transfer order code

	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15				
–		–		+	
	11		12		13

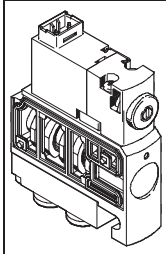
Valve terminals type 80 CPV-SC, Smart Cubic

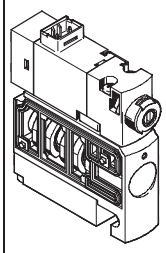
Accessories

FESTO

Ordering data – Valves with electrical plug-in connection			
	Designation	Type	Part No.
	Solenoid valve with M5 connections		
	5/2-way single solenoid valve	**CPVSC1-M1H-M-P-M5**	**527 550**
	5/2-way double solenoid valve	**CPVSC1-M1H-J-P-M5**	**527 553**
	3/2-way valve, normally open	**CPVSC1-M1H-N-P-M5O**	**527 551**
	3/2-way valve, normally closed	**CPVSC1-M1H-K-P-M5C**	**527 552**
	2/2-way valve, normally closed	**CPVSC1-M1H-D-P-M5C**	**527 554**
	Solenoid valve with QS-3 push-in connectors		
	5/2-way single solenoid valve	**CPVSC1-M1H-M-P-Q3**	**527 555**
	5/2-way double solenoid valve	**CPVSC1-M1H-J-P-Q3**	**527 558**
	3/2-way valve, normally open	**CPVSC1-M1H-N-P-Q3O**	**527 556**
	3/2-way valve, normally closed	**CPVSC1-M1H-K-P-Q3C**	**527 557**
	2/2-way valve, normally closed	**CPVSC1-M1H-D-P-Q3C**	**527 559**
	Solenoid valve with QS-4 push-in connectors		
	5/2-way single solenoid valve	**CPVSC1-M1H-M-P-Q4**	**527 560**
	5/2-way double solenoid valve	**CPVSC1-M1H-J-P-Q4**	**527 563**
	3/2-way valve, normally open	**CPVSC1-M1H-N-P-Q4O**	**527 561**
	3/2-way valve, normally closed	**CPVSC1-M1H-K-P-Q4C**	**527 562**
	2/2-way valve, normally closed	**CPVSC1-M1H-D-P-Q4C**	**527 564**
	Blanking plates with integrated connections		
	Vacant position, with blanking plate	**CPVSC1-RP-B**	**527 527**
	Supply plate M5		
	Duct 1 separated	**CPVSC1-SP-P-M5**	**527 528**
	Duct 1/3/5 separated	**CPVSC1-SP-PRS-M5**	**527 530**
	Without duct separation	**CPVSC1-SP-M5**	**527 532**
	Supply plate, QS-4 push-in connector		
	Duct 1 separated	**CPVSC1-SP-P-Q4**	**527 529**
	Duct 1/3/5 separated	**CPVSC1-SP-PRS-Q4**	**527 531**
	Without duct separation	**CPVSC1-SP-Q4**	**527 533**
	Cover for manual override		
	Non-detenting, 10 pieces	**VMPA-HBV-B**	**540 898**

Ordering data – Valves with individual electrical connection, detenting manual override, vertical plug, 24 V DC

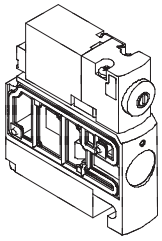


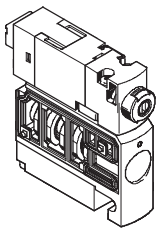


Designation	Type	Part No.
Solenoid valve with M5 connections		
5/2-way single solenoid valve	CPVSC1-M1H-M-T-M5	547 276
5/2-way double solenoid valve	CPVSC1-M1H-J-T-M5	547 277
3/2-way valve, normally open	CPVSC1-M1H-N-T-M5O	547 275
3/2-way valve, normally closed	CPVSC1-M1H-K-T-M5C	547 274
2/2-way valve, normally closed	CPVSC1-M1H-D-T-M5C	547 273
Solenoid valve with M5 connections and LED		
5/2-way single solenoid valve	CPVSC1-M1LH-M-T-M5	547 306
5/2-way double solenoid valve	CPVSC1-M1LH-J-T-M5	547 307
3/2-way valve, normally open	CPVSC1-M1LH-N-T-M5O	547 305
3/2-way valve, normally closed	CPVSC1-M1LH-K-T-M5C	547 304
2/2-way valve, normally closed	CPVSC1-M1LH-D-T-M5C	547 303
Solenoid valve with QS-3 push-in connectors		
5/2-way single solenoid valve	CPVSC1-M1H-M-T-Q3	547 281
5/2-way double solenoid valve	CPVSC1-M1H-J-T-Q3	547 282
3/2-way valve, normally open	CPVSC1-M1H-N-T-Q3O	547 280
3/2-way valve, normally closed	CPVSC1-M1H-K-T-Q3C	547 279
2/2-way valve, normally closed	CPVSC1-M1H-D-T-Q3C	547 278
Solenoid valve with QS-3 push-in connectors and LED		
5/2-way single solenoid valve	CPVSC1-M1LH-M-T-Q3	547 311
5/2-way double solenoid valve	CPVSC1-M1LH-J-T-Q3	547 312
3/2-way valve, normally open	CPVSC1-M1LH-N-T-Q3O	547 310
3/2-way valve, normally closed	CPVSC1-M1LH-K-T-Q3C	547 309
2/2-way valve, normally closed	CPVSC1-M1LH-D-T-Q3C	547 308
Solenoid valve with QS-4 push-in connectors		
5/2-way single solenoid valve	CPVSC1-M1H-M-T-Q4	547 286
5/2-way double solenoid valve	CPVSC1-M1H-J-T-Q4	547 287
3/2-way valve, normally open	CPVSC1-M1H-N-T-Q4O	547 285
3/2-way valve, normally closed	CPVSC1-M1H-K-T-Q4C	547 284
2/2-way valve, normally closed	CPVSC1-M1H-D-T-Q4C	547 283
Solenoid valve with QS-4 push-in connectors and LED		
5/2-way single solenoid valve	CPVSC1-M1LH-M-T-Q4	547 316
5/2-way double solenoid valve	CPVSC1-M1LH-J-T-Q4	547 317
3/2-way valve, normally open	CPVSC1-M1LH-N-T-Q4O	547 315
3/2-way valve, normally closed	CPVSC1-M1LH-K-T-Q4C	547 314
2/2-way valve, normally closed	CPVSC1-M1LH-D-T-Q4C	547 313

Valve terminals type 80 CPV-SC, Smart Cubic

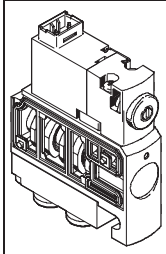
Accessories





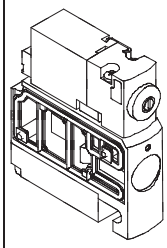
Ordering data – Valves with individual electrical connection, detenting manual override, horizontal plug, 24 V DC		
Designation	Type	Part No.
Solenoid valve with M5 connections		
5/2-way single solenoid valve	**CPVSC1-M1H-M-H-M5**	**547 291**
5/2-way double solenoid valve	**CPVSC1-M1H-J-H-M5**	**547 292**
3/2-way valve, normally open	**CPVSC1-M1H-N-H-M5O**	**547 290**
3/2-way valve, normally closed	**CPVSC1-M1H-K-H-M5C**	**547 289**
2/2-way valve, normally closed	**CPVSC1-M1H-D-H-M5C**	**547 288**
Solenoid valve with M5 connections and LED		
5/2-way single solenoid valve	**CPVSC1-M1LH-M-H-M5**	**547 322**
5/2-way double solenoid valve	**CPVSC1-M1LH-J-H-M5**	**547 323**
3/2-way valve, normally open	**CPVSC1-M1LH-N-H-M5O**	**547 321**
3/2-way valve, normally closed	**CPVSC1-M1LH-K-H-M5C**	**547 320**
2/2-way valve, normally closed	**CPVSC1-M1LH-D-H-M5C**	**547 318**
Solenoid valve with QS-3 push-in connectors		
5/2-way single solenoid valve	**CPVSC1-M1H-M-H-Q3**	**547 296**
5/2-way double solenoid valve	**CPVSC1-M1H-J-H-Q3**	**547 297**
3/2-way valve, normally open	**CPVSC1-M1H-N-H-Q3O**	**547 295**
3/2-way valve, normally closed	**CPVSC1-M1H-K-H-Q3C**	**547 294**
2/2-way valve, normally closed	**CPVSC1-M1H-D-H-Q3C**	**547 293**
Solenoid valve with QS-3 push-in connectors and LED		
5/2-way single solenoid valve	**CPVSC1-M1LH-M-H-Q3**	**547 327**
5/2-way double solenoid valve	**CPVSC1-M1LH-J-H-Q3**	**547 328**
3/2-way valve, normally open	**CPVSC1-M1LH-N-H-Q3O**	**547 326**
3/2-way valve, normally closed	**CPVSC1-M1LH-K-H-Q3C**	**547 325**
2/2-way valve, normally closed	**CPVSC1-M1LH-D-H-Q3C**	**547 324**
Solenoid valve with QS-4 push-in connectors		
5/2-way single solenoid valve	**CPVSC1-M1H-M-H-Q4**	**547 301**
5/2-way double solenoid valve	**CPVSC1-M1H-J-H-Q4**	**547 302**
3/2-way valve, normally open	**CPVSC1-M1H-N-H-Q4O**	**547 300**
3/2-way valve, normally closed	**CPVSC1-M1H-K-H-Q4C**	**547 299**
2/2-way valve, normally closed	**CPVSC1-M1H-D-H-Q4C**	**547 298**
Solenoid valve with QS-4 push-in connectors and LED		
5/2-way single solenoid valve	**CPVSC1-M1LH-M-H-Q4**	**547 332**
5/2-way double solenoid valve	**CPVSC1-M1LH-J-H-Q4**	**547 333**
3/2-way valve, normally open	**CPVSC1-M1LH-N-H-Q4O**	**547 331**
3/2-way valve, normally closed	**CPVSC1-M1LH-K-H-Q4C**	**547 330**
2/2-way valve, normally closed	**CPVSC1-M1LH-D-H-Q4C**	**547 329**

Ordering data – Valves with individual electrical connection, pushing manual override, vertical plug, 24 V DC



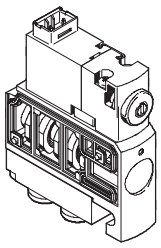
Designation	Type	Part No.
Solenoid valve with M5 connections		
5/2-way single solenoid valve	CPVSC1-M1HT-M-T-M5	548 037
5/2-way double solenoid valve	CPVSC1-M1HT-J-T-M5	548 038
3/2-way valve, normally open	CPVSC1-M1HT-N-T-M5O	548 036
3/2-way valve, normally closed	CPVSC1-M1HT-K-T-M5C	548 035
2/2-way valve, normally closed	CPVSC1-M1HT-D-T-M5C	548 034
Solenoid valve with QS-3 push-in connectors		
5/2-way single solenoid valve	CPVSC1-M1HT-M-T-Q3	548 043
5/2-way double solenoid valve	CPVSC1-M1HT-J-T-Q3	548 044
3/2-way valve, normally open	CPVSC1-M1HT-N-T-Q3O	548 042
3/2-way valve, normally closed	CPVSC1-M1HT-K-T-Q3C	548 041
2/2-way valve, normally closed	CPVSC1-M1HT-D-T-Q3C	548 040
Solenoid valve with QS-4 push-in connectors		
5/2-way single solenoid valve	CPVSC1-M1HT-M-T-Q4	548 048
5/2-way double solenoid valve	CPVSC1-M1HT-J-T-Q4	548 049
3/2-way valve, normally open	CPVSC1-M1HT-N-T-Q4O	548 047
3/2-way valve, normally closed	CPVSC1-M1HT-K-T-Q4C	548 046
2/2-way valve, normally closed	CPVSC1-M1HT-D-T-Q4C	548 045

Ordering data – Valves with individual electrical connection, pushing manual override, horizontal plug, 24 V DC



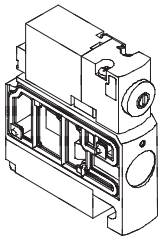
Designation	Type	Part No.
Solenoid valve with M5 connections		
5/2-way single solenoid valve	CPVSC1-M1HT-M-H-M5	548 053
5/2-way double solenoid valve	CPVSC1-M1HT-J-H-M5	548 054
3/2-way valve, normally open	CPVSC1-M1HT-N-H-M5O	548 052
3/2-way valve, normally closed	CPVSC1-M1HT-K-H-M5C	548 051
2/2-way valve, normally closed	CPVSC1-M1HT-D-H-M5C	548 050
Solenoid valve with QS-3 push-in connectors		
5/2-way single solenoid valve	CPVSC1-M1HT-M-H-Q3	548 058
5/2-way double solenoid valve	CPVSC1-M1HT-J-H-Q3	548 059
3/2-way valve, normally open	CPVSC1-M1HT-N-H-Q3O	548 057
3/2-way valve, normally closed	CPVSC1-M1HT-K-H-Q3C	548 056
2/2-way valve, normally closed	CPVSC1-M1HT-D-H-Q3C	548 055
Solenoid valve with QS-4 push-in connectors		
5/2-way single solenoid valve	CPVSC1-M1HT-M-H-Q4	548 063
5/2-way double solenoid valve	CPVSC1-M1HT-J-H-Q4	548 064
3/2-way valve, normally open	CPVSC1-M1HT-N-H-Q4O	548 062
3/2-way valve, normally closed	CPVSC1-M1HT-K-H-Q4C	548 061
2/2-way valve, normally closed	CPVSC1-M1HT-D-H-Q4C	548 060

Ordering data – Valves with individual electrical connection, detenting manual override, vertical plug, 12 V DC



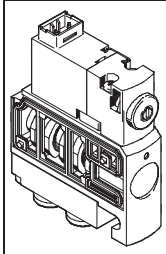
Designation	Type	Part No.
Solenoid valve with M5 connections		
5/2-way single solenoid valve	CPVSC1-M5H-M-T-M5	547 367
5/2-way double solenoid valve	CPVSC1-M5H-J-T-M5	547 368
3/2-way valve, normally open	CPVSC1-M5H-N-T-M5O	547 366
3/2-way valve, normally closed	CPVSC1-M5H-K-T-M5C	547 365
2/2-way valve, normally closed	CPVSC1-M5H-D-T-M5C	547 364
Solenoid valve with QS-3 push-in connectors		
5/2-way single solenoid valve	CPVSC1-M5H-M-T-Q3	547 372
5/2-way double solenoid valve	CPVSC1-M5H-J-T-Q3	547 373
3/2-way valve, normally open	CPVSC1-M5H-N-T-Q3O	547 371
3/2-way valve, normally closed	CPVSC1-M5H-K-T-Q3C	547 370
2/2-way valve, normally closed	CPVSC1-M5H-D-T-Q3C	547 369
Solenoid valve with QS-4 push-in connectors		
5/2-way single solenoid valve	CPVSC1-M5H-M-T-Q4	547 377
5/2-way double solenoid valve	CPVSC1-M5H-J-T-Q4	547 378
3/2-way valve, normally open	CPVSC1-M5H-N-T-Q4O	547 376
3/2-way valve, normally closed	CPVSC1-M5H-K-T-Q4C	547 375
2/2-way valve, normally closed	CPVSC1-M5H-D-T-Q4C	547 374

Ordering data – Valves with individual electrical connection, pushing manual override, horizontal plug, 12 V DC



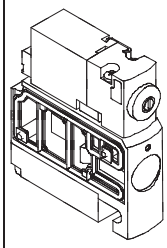
Designation	Type	Part No.
Solenoid valve with M5 connections		
5/2-way single solenoid valve	CPVSC1-M5H-M-H-M5	547 382
5/2-way double solenoid valve	CPVSC1-M5H-J-H-M5	547 383
3/2-way valve, normally open	CPVSC1-M5H-N-H-M5O	547 381
3/2-way valve, normally closed	CPVSC1-M5H-K-H-M5C	547 380
2/2-way valve, normally closed	CPVSC1-M5H-D-H-M5C	547 379
Solenoid valve with QS-3 push-in connectors		
5/2-way single solenoid valve	CPVSC1-M5H-M-H-Q3	547 387
5/2-way double solenoid valve	CPVSC1-M5H-J-H-Q3	547 388
3/2-way valve, normally open	CPVSC1-M5H-N-H-Q3O	547 386
3/2-way valve, normally closed	CPVSC1-M5H-K-H-Q3C	547 385
2/2-way valve, normally closed	CPVSC1-M5H-D-H-Q3C	547 384
Solenoid valve with QS-4 push-in connectors		
5/2-way single solenoid valve	CPVSC1-M5H-M-H-Q4	547 392
5/2-way double solenoid valve	CPVSC1-M5H-J-H-Q4	547 393
3/2-way valve, normally open	CPVSC1-M5H-N-H-Q4O	547 391
3/2-way valve, normally closed	CPVSC1-M5H-K-H-Q4C	547 390
2/2-way valve, normally closed	CPVSC1-M5H-D-H-Q4C	547 389

Ordering data – Valves with individual electrical connection, detenting manual override, vertical plug, 5 V DC

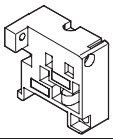
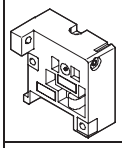
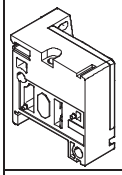
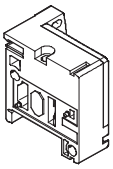
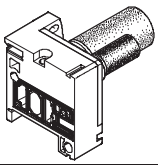


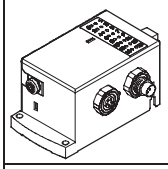
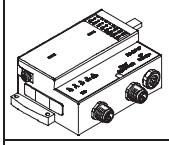
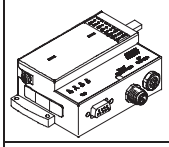
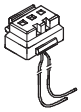
Designation	Type	Part No.
Solenoid valve with M5 connections		
5/2-way single solenoid valve	CPVSC1-M4H-M-T-M5	547 337
5/2-way double solenoid valve	CPVSC1-M4H-J-T-M5	547 338
3/2-way valve, normally open	CPVSC1-M4H-N-T-M5O	547 336
3/2-way valve, normally closed	CPVSC1-M4H-K-T-M5C	547 335
2/2-way valve, normally closed	CPVSC1-M4H-D-T-M5C	547 334
Solenoid valve with QS-3 push-in connectors		
5/2-way single solenoid valve	CPVSC1-M4H-M-T-Q3	547 342
5/2-way double solenoid valve	CPVSC1-M4H-J-T-Q3	547 343
3/2-way valve, normally open	CPVSC1-M4H-N-T-Q3O	547 341
3/2-way valve, normally closed	CPVSC1-M4H-K-T-Q3C	547 340
2/2-way valve, normally closed	CPVSC1-M4H-D-T-Q3C	547 339
Solenoid valve with QS-4 push-in connectors		
5/2-way single solenoid valve	CPVSC1-M4H-M-T-Q4	547 347
5/2-way double solenoid valve	CPVSC1-M4H-J-T-Q4	547 348
3/2-way valve, normally open	CPVSC1-M4H-N-T-Q4O	547 346
3/2-way valve, normally closed	CPVSC1-M4H-K-T-Q4C	547 345
2/2-way valve, normally closed	CPVSC1-M4H-D-T-Q4C	547 344

Ordering data – Valves with individual electrical connection, pushing manual override, horizontal plug, 5 V DC

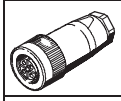
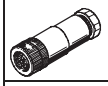
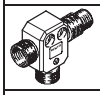
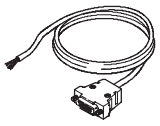


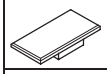
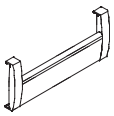
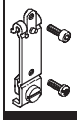
Designation	Type	Part No.
Solenoid valve with M5 connections		
5/2-way single solenoid valve	CPVSC1-M4H-M-H-M5	547 352
5/2-way double solenoid valve	CPVSC1-M4H-J-H-M5	547 353
3/2-way valve, normally open	CPVSC1-M4H-N-H-M5O	547 351
3/2-way valve, normally closed	CPVSC1-M4H-K-H-M5C	547 350
2/2-way valve, normally closed	CPVSC1-M4H-D-H-M5C	547 349
Solenoid valve with QS-3 push-in connectors		
5/2-way single solenoid valve	CPVSC1-M4H-M-H-Q3	547 357
5/2-way double solenoid valve	CPVSC1-M4H-J-H-Q3	547 358
3/2-way valve, normally open	CPVSC1-M4H-N-H-Q3O	547 356
3/2-way valve, normally closed	CPVSC1-M4H-K-H-Q3C	547 355
2/2-way valve, normally closed	CPVSC1-M4H-D-H-Q3C	547 354
Solenoid valve with QS-4 push-in connectors		
5/2-way single solenoid valve	CPVSC1-M4H-M-H-Q4	547 362
5/2-way double solenoid valve	CPVSC1-M4H-J-H-Q4	547 363
3/2-way valve, normally open	CPVSC1-M4H-N-H-Q4O	547 361
3/2-way valve, normally closed	CPVSC1-M4H-K-H-Q4C	547 360
2/2-way valve, normally closed	CPVSC1-M4H-D-H-Q4C	547 359

Ordering data – End plates			
Designation		Type	Part No.
Left-hand end plates			
	With external pilot air	**CPVSC1-EPL-E**	**527 585**
	With internal pilot air	**CPVSC1-EPL-I**	**527 583**
Right-hand end plates			
	With ducted exhaust air	**CPVSC1-EPR-G**	**527 587**
	With unducted exhaust air and flat plate silencer	**CPVSC1-EPR-U**	**527 589**
	With unducted exhaust air and round silencer	**CPVSC1-EPR-UC**	**536 060**

Ordering data – Accessories				
Designation			Type	Part No.
CPI interface				
	Electrical connection		**CPVSC1-AE16-CPI**	**541 975**
Control unit				
	Fieldbus Direct – DeviceNet		**CPVSC1-AE16-DN**	**538 654**
	Fieldbus Direct – Profibus DP		**CPVSC1-AE16-DP**	**541 919**
Individual electrical connection				
	Plug socket with cable, IP40	0.5 m	**KMH-0,5**	**197 263**
		1 m	**KMH-1**	**197 264**
		2.5 m	**KMH-2,5**	**527 400**
		5 m	**KMH-5**	**527 401**

Ordering data – Accessories

Designation			Type	Part No.
Power supply				
	Micro Style M12, 5-pin socket (B-coded) for DeviceNet	for 0.75 mm²	**NTSD-GD-9-M12-5POL-RK**	**538 999**
	M12, 5-pin socket (A-coded) for Profibus DP	for 0.75 mm²	**FBSD-GD-9-5POL**	**18 324**
Fieldbus connection				
	Fieldbus socket for Micro Style connection, M12, socket (A-coded)		**FBSD-GD-9-5POL**	**18 324**
	Straight plug, 5-pin, screw terminal		**FBS-M12-5GS-PG9**	**175 380**
	T-adapter, 5-pin, for DH-485/DeviceNet		**FB-TA-M12-5POL**	**171 175**
Connecting cable, IP40, for multi-pin plug connection				
	Sub-D, 15-pin, up to 12 valve positions for code MS Material: PVC Suitable for chain link trunking	2.5 m	**KMP6-15P-12-2,5**	**527 543**
		5 m	**KMP6-15P-12-5**	**527 544**
		10 m	**KMP6-15P-12-10**	**527 545**
	Sub-D, 26-pin, up to 16 valve positions for code MH Material: PVC Suitable for chain link trunking	2.5 m	**KMP6-26P-16-2,5**	**527 546**
		5 m	**KMP6-26P-16-5**	**527 547**
		10 m	**KMP6-26P-16-10**	**527 548**
Valve terminal connection				
	Angled plug-angled socket	0.25 m	**KVI-CP-3-WS-WD-0,25**	**540 327**
	Angled plug-angled socket	0.5 m	**KVI-CP-3-WS-WD-0,5**	**540 328**
	Angled plug-angled socket	2 m	**KVI-CP-3-WS-WD-2**	**540 329**
	Angled plug-angled socket	5 m	**KVI-CP-3-WS-WD-5**	**540 330**
	Angled plug-angled socket	8 m	**KVI-CP-3-WS-WD-8**	**540 331**
	GS-GD, straight plug-straight socket	2 m	**KVI-CP-3-GS-GD-2**	**540 332**
	Straight plug-straight socket	5 m	**KVI-CP-3-GS-GD-5**	**540 333**
	Straight plug-straight socket	8 m	**KVI-CP-3-GS-GD-8**	**540 334**

Ordering data – Accessories				
Designation			Type	Part No.
Inscription labels for valve identification				
	80 pieces, 9x4.5 mm		**MH-BZ-80x**	**197 259**
Inscription label holder				
	1 piece	for 2 valve positions	**CPVSC1-ST-2**	**547 395**
		for 3 valve positions	**CPVSC1-ST-3**	**547 396**
		for 4 valve positions	**CPVSC1-ST-4**	**527 631**
		for 5 valve positions	**CPVSC1-ST-5**	**547 397**
		for 6 valve positions	**CPVSC1-ST-6**	**547 398**
		for 7 valve positions	**CPVSC1-ST-7**	**547 399**
		for 8 valve positions	**CPVSC1-ST-8**	**527 633**
		for 9 valve positions	**CPVSC1-ST-9**	**547 400**
		for 10 valve positions	**CPVSC1-ST-10**	**547 401**
		for 11 valve positions	**CPVSC1-ST-11**	**547 402**
		for 12 valve positions	**CPVSC1-ST-12**	**527 635**
		for 13 valve positions	**CPVSC1-ST-13**	**547 403**
		for 14 valve positions	**CPVSC1-ST-14**	**547 404**
		for 15 valve positions	**CPVSC1-ST-15**	**547 405**
		for 16 valve positions	**CPVSC1-ST-16**	**527 637**
Tie rod				
	1 piece	for 2 valve positions	**CPVSC1-ZA-2**	**547 416**
		for 3 valve positions	**CPVSC1-ZA-3**	**547 417**
		for 4 valve positions	**CPVSC1-ZA-4**	**532 807**
		for 5 valve positions	**CPVSC1-ZA-5**	**547 418**
		for 6 valve positions	**CPVSC1-ZA-6**	**547 419**
		for 7 valve positions	**CPVSC1-ZA-7**	**547 420**
		for 8 valve positions	**CPVSC1-ZA-8**	**532 808**
		for 9 valve positions	**CPVSC1-ZA-9**	**547 421**
		for 10 valve positions	**CPVSC1-ZA-10**	**547 422**
		for 11 valve positions	**CPVSC1-ZA-11**	**547 423**
		for 12 valve positions	**CPVSC1-ZA-12**	**532 809**
		for 13 valve positions	**CPVSC1-ZA-13**	**547 424**
		for 14 valve positions	**CPVSC1-ZA-14**	**547 425**
		for 15 valve positions	**CPVSC1-ZA-15**	**547 426**
		for 16 valve positions	**CPVSC1-ZA-16**	**532 810**
Mounting				
	Screw for additional terminal mounting		**M3x45**	**527 643**
	Mounting		**CPVSC-HS35**	**527 639**

Ordering data – Accessories

Designation			Type	Part No.
User documentation				
	User documentation – Pneumatics, valve terminal CPV-SC	German	**P.BE-CPVSC-DE**	**530 925**
		English	**P.BE-CPVSC-EN**	**530 926**
		French	**P.BE-CPVSC-FR**	**530 927**
		Spanish	**P.BE-CPVSC-ES**	**530 928**
		Italian	**P.BE-CPVSC-IT**	**530 929**
		Swedish	**P.BE-CPVSC-SV**	**530 930**
	User documentation – DeviceNet fieldbus	German	**P.BE-CPASC-CPVSC-DN-DE**	**539 008**
		English	**P.BE-CPASC-CPVSC-DN-EN**	**539 009**
		French	**P.BE-CPASC-CPVSC-DN-FR**	**539 010**
		Spanish	**P.BE-CPASC-CPVSC-DN-ES**	**539 011**
		Italian	**P.BE-CPASC-CPVSC-DN-IT**	**539 012**
		Swedish	**P.BE-CPASC-CPVSC-DN-SV**	**539 013**
	User documentation – Profibus DP fieldbus	German	**P.BE-CPASC-CPVSC-DP-DE**	**548 725**
		English	**P.BE-CPASC-CPVSC-DP-EN**	**548 726**
		French	**P.BE-CPASC-CPVSC-DP-FR**	**548 728**
		Spanish	**P.BE-CPASC-CPVSC-DP-ES**	**548 727**
		Italian	**P.BE-CPASC-CPVSC-DP-IT**	**548 729**
		Swedish	**P.BE-CPASC-CPVSC-DP-SV**	**548 730**