



CPV10-VI-IP-8 CPV14-VI-IP-8

- 8 valve discs with max. 16 valve coils
- Current reducer
- Galvanic isolation between U_B (U_S) and U_L (U_P)
- In the complex mode: monitoring of the valve voltage
- Fieldbus connection via IP-link interface
- Distance between two modules: up to 5 m
- Protection degree IP65

The new CPV valve terminals from Festo are equipped with an IP-link interface (CPV fieldbus node) and can thus be integrated into the *piconet*® fieldbus system as an extension module. The valve terminals are bus capable and suited for fieldbus systems such as PROFIBUS-DP, CANopen und DeviceNet™. Further bus systems are in preparation.

The CPV fieldbus node is used for communication between the CPV valve terminal and the *piconet*® coupler module. It is suited for connection to a CPV valve terminal with 8 valve discs and 16 valve coils whose switching status is indicated via an LED. The CPV valves are controlled via an automatic current reducer, thus decreasing the power requirements and the thermal power dissipation.

The CPV valve terminals are available in two housing versions featuring identical performance characteristics.

- CPV10
- CPV14

Bus connection

Like with all *piconet*® extension modules, the bus connection is established via the IP-link fibre optic system.

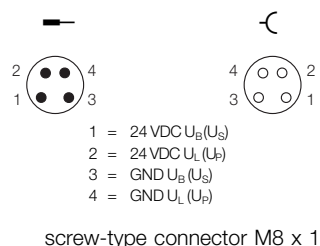
Voltage supply

The devices are powered via a 4-pole M8 connector (female). The internal logic of the supply and the valve coils are galvanically isolated. It is possible to power further CPV IP-link valve terminals and IP-link modules via the second M8 connector (male).

Ordering

The CPV valve terminals are exclusively distributed via the company Festo AG & Co. The *piconet*® fieldbus modules can be ordered with Hans Turck GmbH & Co. KG.

Voltage supply



Voltage supply

Operating voltage U_B (U_S)	24 VDC (– 15 %/+ 20 %)
Load voltage U_L (U_P)	24 VDC (– 15 %/+ 20 %)
Potential isolation	$U_B - U_L$: yes

Internal current consumption

Operating current	50 mA
CPV10	30 mA* per coil
CPV14	40 mA* per coil
*during the high current phase, after approx. 30 ms reduction of approx. 50 %	

General data

Number of channels	max. 16 valves on max. 8 valve discs
Housing type CPV10	10 mm per valve disc
Housing type CPV14	14 mm per valve disc
IP-link connection	2 x IP-link female connectors
Power supply connection	1 x M8 male connector, 4-pole, reverse-polarity protection, 1 x M8 female connector, feed-through
EMC	according to EN 50082-2/EN 50081-2
Degree of protection	IP65
Max. distance between two modules	5 m

LED indications

Run	bus active: green
Err	communication disturbed: red
U_B (U_S)	24 V electronics OK: green
U_L (U_P)	24 V valve electronics OK: green

I/O process data mapping

2 bytes output (compact)
3 bytes input and output (complex)

Valve type	Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
monostable	out n		V414		V314		V214		V114
	out n + 1		V814		V714		V614		V514
bistable	out n	V412	V414	V312	V314	V212	V214	V112	V114
	out n + 1	V812	V814	V712	V714	V612	V614	V512	V514

V = valve
14 = control magnet 14
12 = control magnet 12

For example:
V314
valve 3 control magnet 14

Further information:

CPV valve terminals can be ordered with the company Festo AG & Co.; further information on ***piconet*® fieldbus components** can be obtained from the company Hans Turck GmbH & Co.KG



D300544 0403