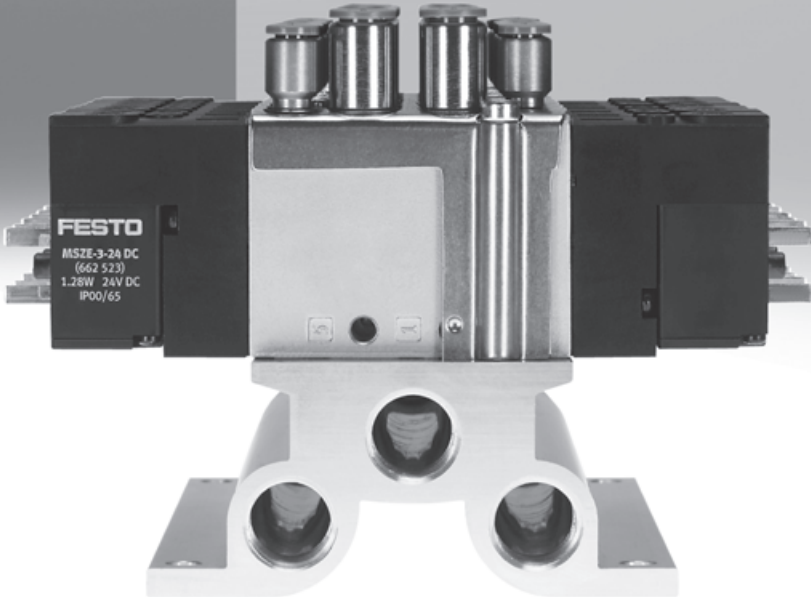
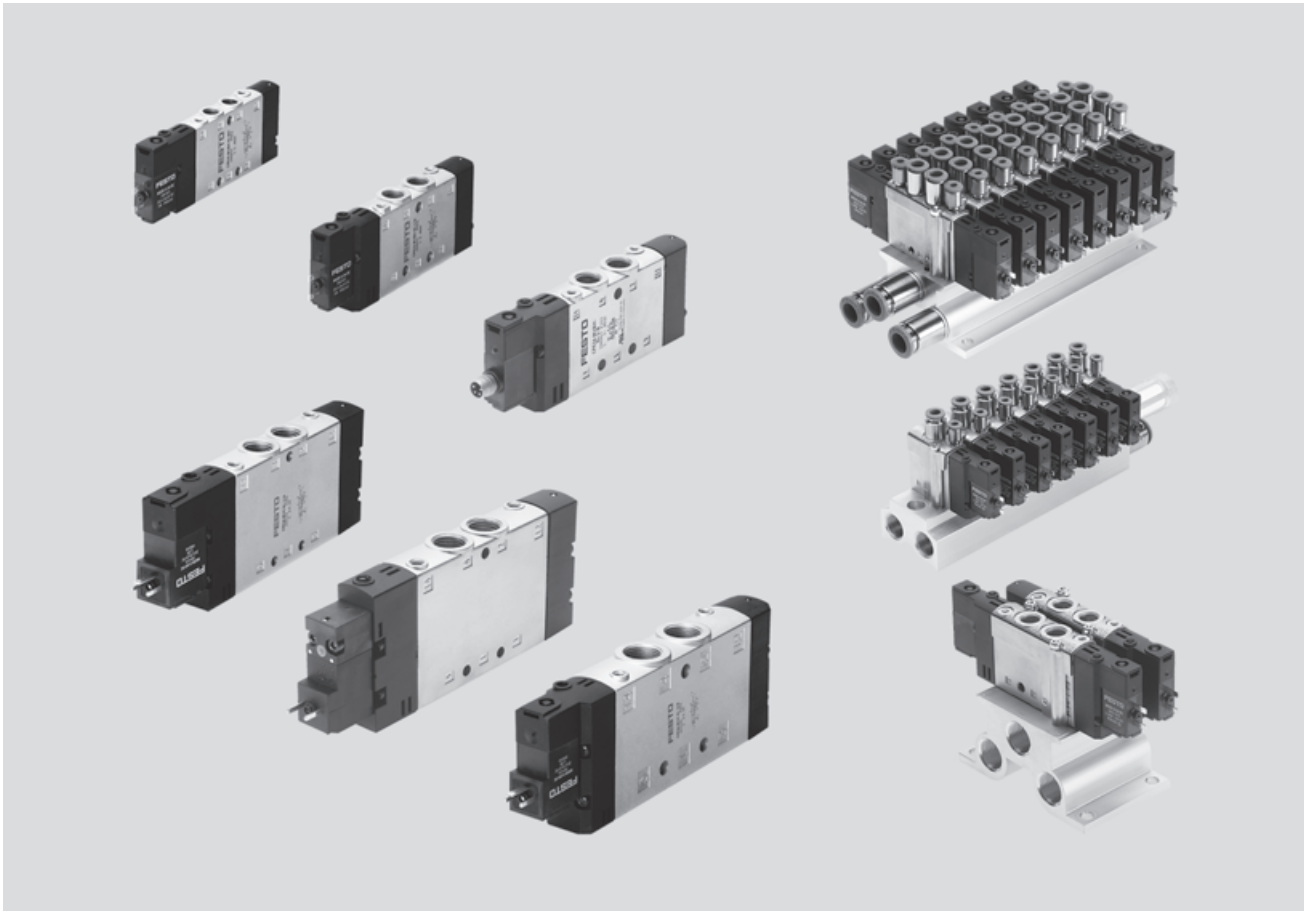


Universal valve CPE



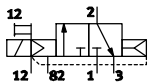
Solenoid valves CPE, Compact Performance

Key features

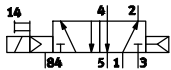


Variants

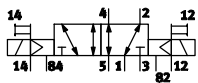
Functions (selection)



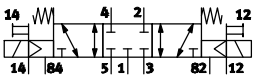
3/2-way valve with external pilot air supply, normally closed



5/2-way single solenoid valve with internal pilot air supply





5/2-way double solenoid valve with external pilot air supply



5/3-way valve with external pilot air supply, normally closed

Parameters

-  - Width
10 mm
14 mm
18 mm
24 mm
-  - Flow rate
180 ... 3200 l/min

-  - Note

The 5/3-way solenoid valve remains in the previous switching position if both solenoid coils are energised simultaneously.
If neither solenoid coil is energised, the spring force moves the valve to its mid-position.

Advantages

Performance-optimised sizes:
The solenoid valves CPE, Compact Performance are distinguished by their minimal width and low power consumption at high flow rates.

They can be mounted directly on site:
- On the cylinder
- On moving system components
- Flexible installation through individual mounting

Short tubing lengths requiring minimal air volume:

- Short switching times
 - Short response times
- Optimised installations:
- Shorter machine cycles
 - Larger quantities
 - Lower power consumption

Convenient manual override.

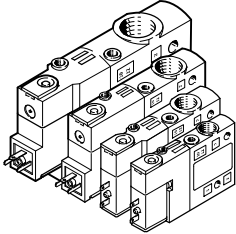
CPE10, CPE14 and CPE18:
Simple manifold structure consisting of fixed-grid manifold blocks made from stable aluminium with 2 to 10 valve positions or modular manifold blocks made from durable plastic.

The connecting cables NEBV for sizes CPE10 and CPE14 feature integrated current reduction.
All CPE valves therefore have a duty cycle of 100%.

Solenoid valves CPE, Compact Performance

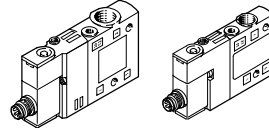
Key features

Solenoid valves with plug pins



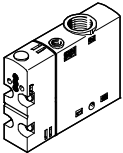
- Width 10 mm, 14 mm, 18 mm and 24 mm
- 3/2-, 5/2- and 5/3-way valves
- Internal or external pilot air supply available
- 24 V DC for all widths
- 110 or 220 V AC for widths 18 and 24
- Manual override, non-detenting and detenting via tool
- Width 10 mm available with M5 insert
- All widths available with QS fittings in 2 sizes

Solenoid valves with round plug



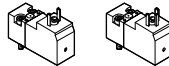
- Width 10 mm and 14 mm
- 3/2-, 5/2- and 5/3-way valves
- Internal or external pilot air supply available
- 24 V DC
- Manual override, non-detenting and detenting via tool
- Round plug, M8x1, 4-pin

CPE18 basic valve with interface to ISO 15218



- Width 18 mm
- 3/2-, 5/2- and 5/3-way valves
- Internal or external pilot air supply available

Pilot valve with interface to ISO 15218



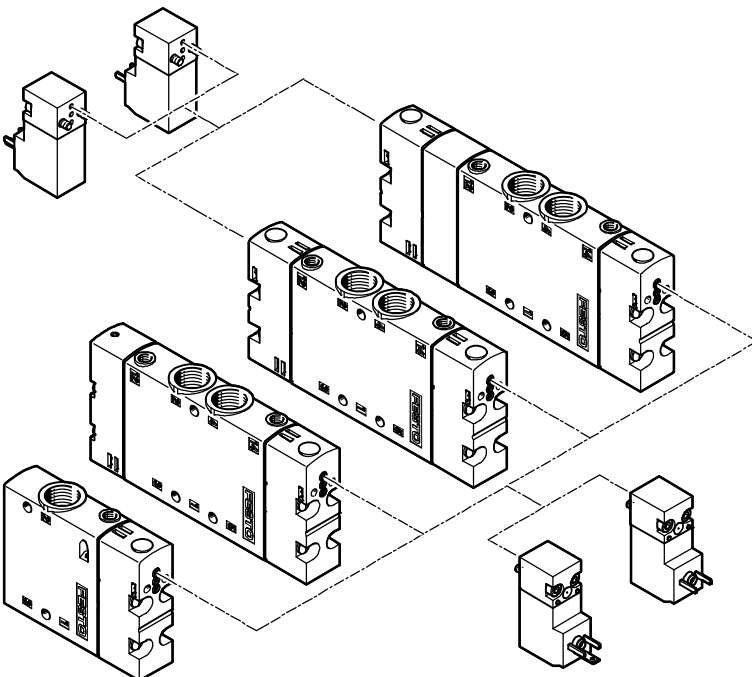
- For 12, 24 V DC and 24 V AC without PE conductor
- For 110 and 220 V AC with PE conductor
- 3/2-way valve
- Manual override, non-detenting

Adapter VAVE



Fits plug pins with connection pattern ZC for CPE10/CPE14

Combination of basic valve CPE18 with pilot valve

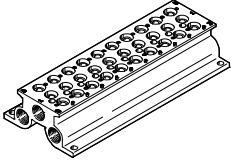


Solenoid valves CPE, Compact Performance

Key features

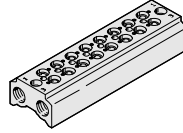
FESTO

Manifold block for fixed-grid manifold



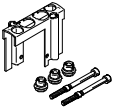
- For valve widths 10, 14 and 18 mm
- For 5/2- and 5/3-way valves
- 2 to 10 valve positions

Manifold block for fixed-grid manifold



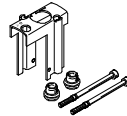
- For valve widths 10, 14 and 18 mm
- For 3/2-way valves
- 2 to 10 valve positions

Retainer set



- Retainer for 5/2- or 5/3-way valve

Retainer set



- Retainer for 3/2-way valve

Blanking plate for unused valve position



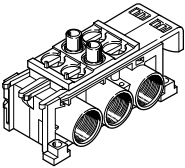
- Vacant position cover for 5/2- or 5/3-way valve

Blanking plate for unused valve position



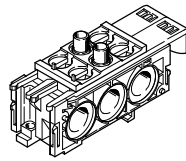
- Vacant position cover for 3/2-way valve

Manifold block with air supply



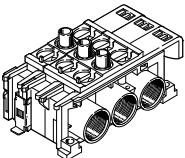
- 2 valve positions
- For CPE10, CPE14 or CPE18
- For 5/2- and 5/3-way valves
- Ducts 1, 3 and 5 can have closed or open ends
- Ducts closed when the manifold is full or when pressure zones are being used

Manifold block for expansion



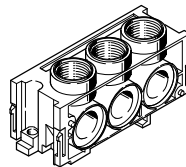
- 2 valve positions
- For CPE10, CPE14 or CPE18
- For 5/2- and 5/3-way valves
- Ducts 1, 3 and 5 can have closed or open ends

Manifold block with air supply



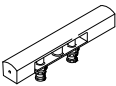
- 3 valve positions
- For CPE10, CPE14 or CPE18
- For 5/2- and 5/3-way valves
- Ducts 1, 3 and 5 can have closed or open ends
- Ducts closed when the manifold is full or when pressure zones are being used

End plate for additional air supply



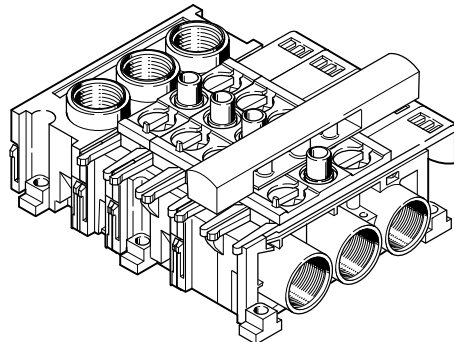
- For CPE10, CPE14 or CPE18
- Required for manifolds with more than 6 valves or separate pressure zones
- Ports 1, 3 and 5 at rear and on top

Blanking plate for unused valve position



- Versions
- Vacant position cover for 5/2- or 5/3-way valve

Modular manifold with blanking plate

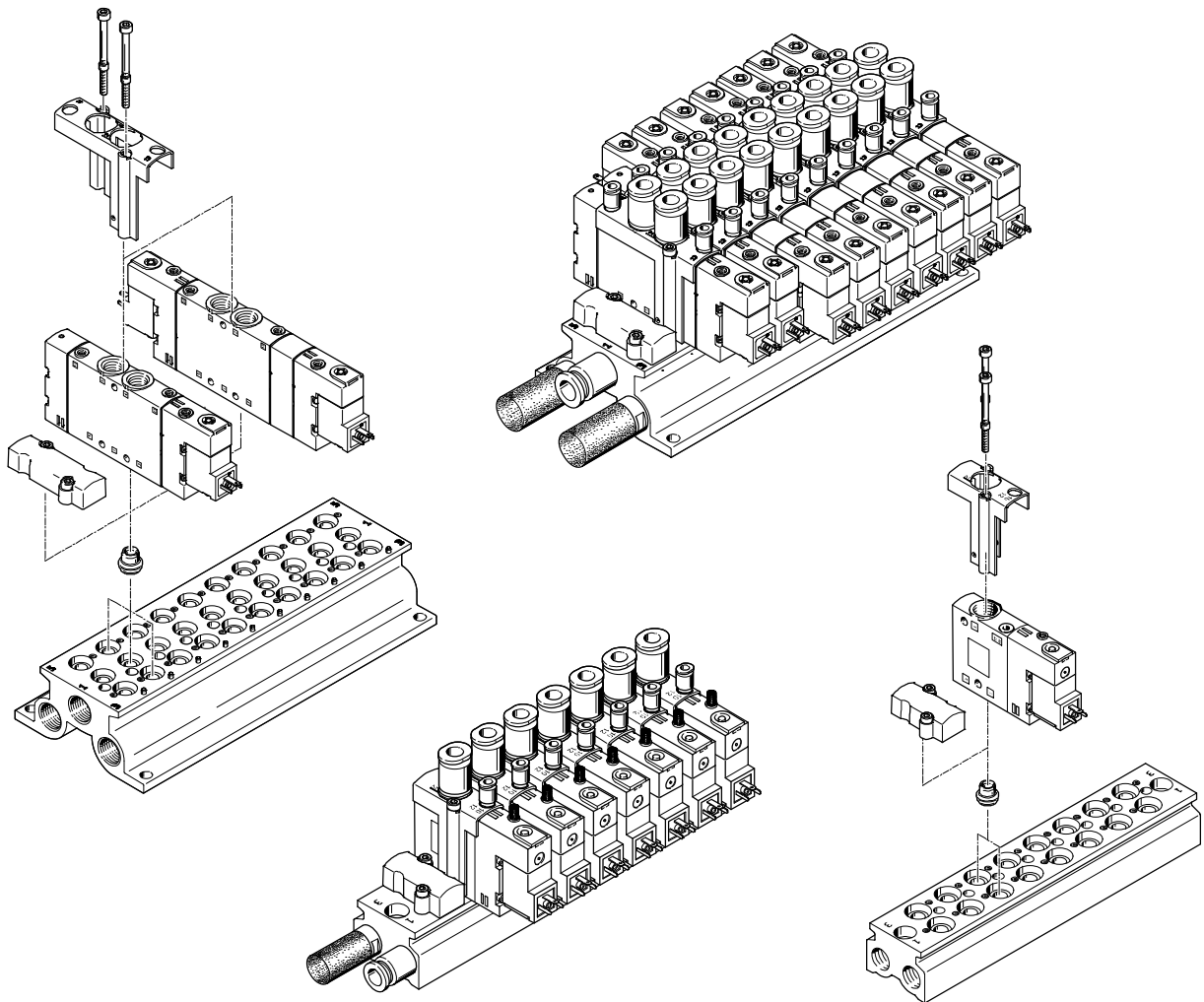


Solenoid valves CPE, Compact Performance

Key features

Mounting on fixed-grid manifold block for CPE10, CPE14 and CPE18

- Simple structure comprising compact valve manifolds with in-line valves
- Mounting with stable retainer and special moulded seal guarantee leak-free assembly
- 2 to 10 valve positions
- Aluminium mounting rail provides high stability
- High flow rates with air supply on both sides for duct 1
- High exhaust capacity with output on both sides for ducts 3 and 5
- Different pressure and exhaust zones can be created using separators, which are clamped at the separation points in ducts 1, 3 and 5



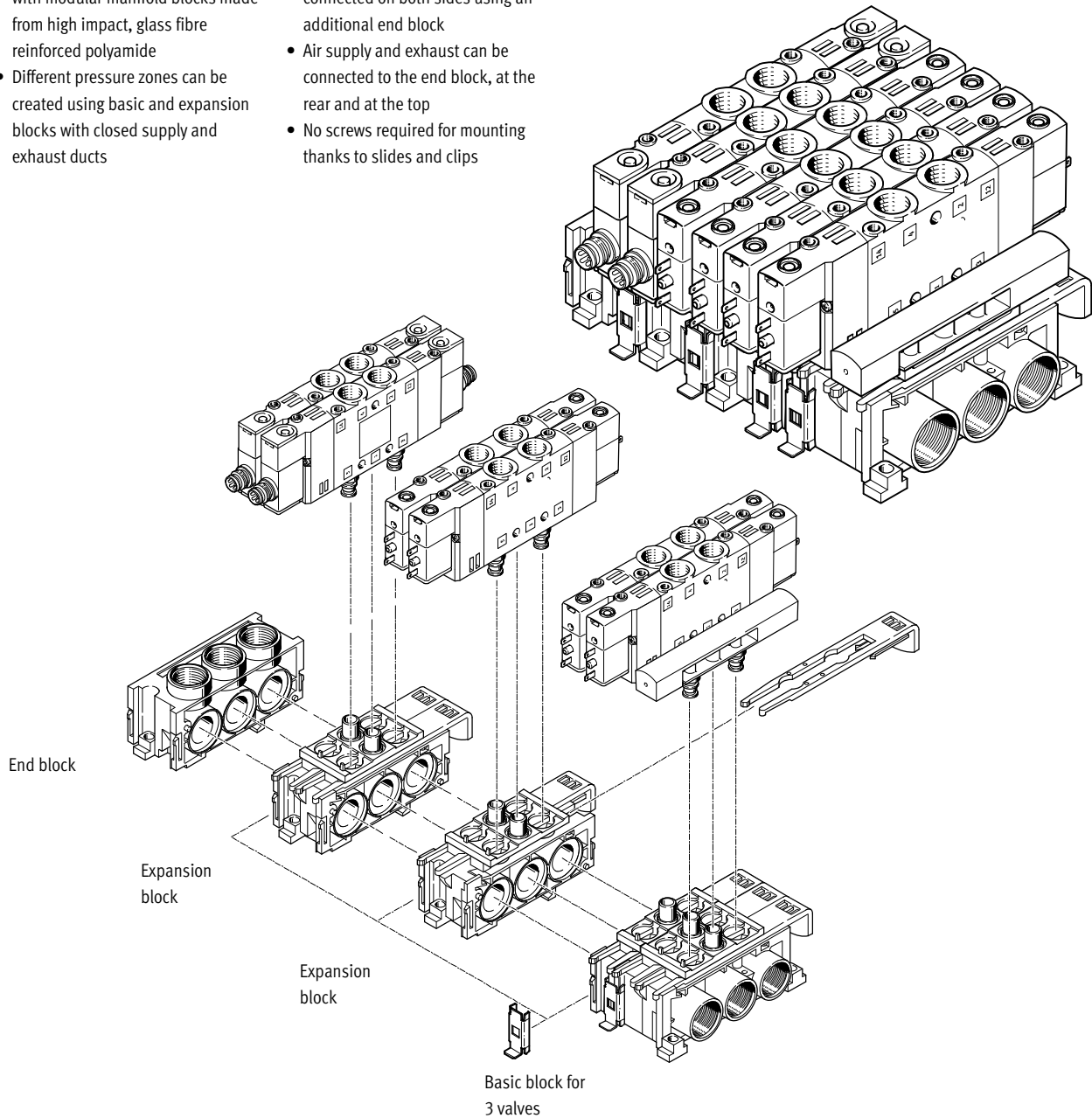
Solenoid valves CPE, Compact Performance

Key features

FESTO















Mounting on fixed-grid manifold block for CPE10, CPE14 and CPE18

- Construction of a valve manifold with modular manifold blocks made from high impact, glass fibre reinforced polyamide
- Different pressure zones can be created using basic and expansion blocks with closed supply and exhaust ducts
- Air supply and exhaust can be connected on both sides using an additional end block
- Air supply and exhaust can be connected to the end block, at the rear and at the top
- No screws required for mounting thanks to slides and clips



Solenoid valves CPE, Compact Performance

Product range overview – Widths 10 mm and 14 mm

| Width | Circuit symbol | Type | Electrical connection | | Operating voltage [V DC] | Working port | | | | | | → Page/ Internet |
|---|---|--------------------|-----------------------|------|-----------------------------|--------------|----|------|-----|-----|-----|---------------------|
| | | | Connection pattern ZC | M8x1 | | M5 | M7 | G1/8 | QS4 | QS6 | QS8 | |
| 10 mm | 3/2-way single solenoid valve, normally closed | | | | | | | | | | | |
| |  | CPE10-M1BH-3GL... | ■ | – | 24 | ■ | ■ | – | ■ | ■ | – | 25 |
| | | CPE10-M1CH-3GL... | – | ■ | 24 | – | ■ | – | – | – | – | |
| | 3/2-way single solenoid valve, normally open | | | | | | | | | | | |
| |  | CPE10-M1BH-3OL... | ■ | – | 24 | ■ | ■ | – | ■ | ■ | – | 25 |
| | | CPE10-M1CH-3OL... | – | ■ | 24 | – | ■ | – | – | – | – | |
| | 5/2-way single solenoid valve | | | | | | | | | | | |
| |  | CPE10-M1BH-5L... | ■ | – | 24 | ■ | ■ | – | ■ | ■ | – | 25 |
| | | CPE10-M1CH-5L... | – | ■ | 24 | – | ■ | – | – | – | – | |
| | 5/2-way double solenoid valve | | | | | | | | | | | |
| |  | CPE10-M1BH-5J... | ■ | – | 24 | ■ | ■ | – | ■ | ■ | – | 25 |
| | | CPE10-M1CH-5J... | – | ■ | 24 | – | ■ | – | – | – | – | |
| | 5/3-way solenoid valve, normally closed, mid-position valve | | | | | | | | | | | |
| |  | CPE10-M1BH-5/3G... | ■ | – | 24 | ■ | ■ | – | ■ | ■ | – | 26 |
| | CPE10-M1CH-5/3G... | – | ■ | 24 | – | ■ | – | – | – | – | | |
| 5/3-way solenoid valve, normally open, mid-position valve | | | | | | | | | | | | |
|  | CPE10-M1BH-5/3B... | ■ | – | 24 | ■ | ■ | – | ■ | ■ | – | 26 | |
| | CPE10-M1CH-5/3B... | – | ■ | 24 | – | ■ | – | – | – | – | | |
| 5/3-way solenoid valve, normally exhausted, mid-position valve | | | | | | | | | | | | |
|  | CPE10-M1BH-5/3E... | ■ | – | 24 | ■ | ■ | – | ■ | ■ | – | 26 | |
| | CPE10-M1CH-5/3E... | – | ■ | 24 | – | ■ | – | – | – | – | | |
| 14 mm | 3/2-way single solenoid valve, normally closed | | | | | | | | | | | |
| |  | CPE14-M1BH-3GL... | ■ | – | 24 | – | – | ■ | – | ■ | ■ | 42 |
| | | CPE14-M1CH-3GL... | – | ■ | 24 | – | – | ■ | – | – | – | |
| | 3/2-way single solenoid valve, normally open | | | | | | | | | | | |
| |  | CPE14-M1BH-3OL... | ■ | – | 24 | – | – | ■ | – | ■ | ■ | 42 |
| | | CPE14-M1CH-3OL... | – | ■ | 24 | – | – | ■ | – | – | – | |
| | 5/2-way single solenoid valve | | | | | | | | | | | |
| |  | CPE14-M1BH-5L... | ■ | – | 24 | – | – | ■ | – | ■ | ■ | 42 |
| | | CPE14-M1CH-5L... | – | ■ | 24 | – | – | ■ | – | – | – | |
| | 5/2-way double solenoid valve | | | | | | | | | | | |
| |  | CPE14-M1BH-5J... | ■ | – | 24 | – | – | ■ | – | ■ | ■ | 42 |
| | | CPE14-M1CH-5J... | – | ■ | 24 | – | – | ■ | – | – | – | |
| | 5/3-way solenoid valve, normally closed, mid-position valve | | | | | | | | | | | |
| |  | CPE14-M1BH-5/3G... | ■ | – | 24 | – | – | ■ | – | ■ | ■ | 43 |
| | CPE14-M1CH-5/3G... | – | ■ | 24 | – | – | ■ | – | – | – | | |
| 5/3-way solenoid valve, normally open, mid-position valve | | | | | | | | | | | | |
|  | CPE14-M1BH-5/3B... | ■ | – | 24 | – | – | ■ | – | ■ | ■ | 43 | |
| | CPE14-M1CH-5/3B... | – | ■ | 24 | – | – | ■ | – | – | – | | |
| 5/3-way solenoid valve, normally exhausted, mid-position valve | | | | | | | | | | | | |
|  | CPE14-M1BH-5/3E... | ■ | – | 24 | – | – | ■ | – | ■ | ■ | 43 | |
| | CPE14-M1CH-5/3E... | – | ■ | 24 | – | – | ■ | – | – | – | | |

Solenoid valves CPE, Compact Performance

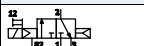
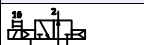
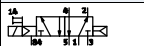
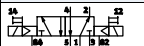
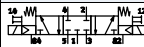
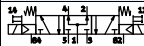
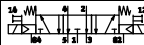
Product range overview – Width 18 mm

| Width | Circuit symbol | Type | Operating voltage | | Working port | | | → Page/ Internet | |
|-------|----------------|---|---------------------|------------------|-------------------|-----|------|---------------------|----|
| | | | [V DC] | [V AC] | G1/4 | QS8 | QS10 | | |
| 18 mm | | 3/2-way single solenoid valve, normally closed | | | | | | 57 | |
| | | CPE18-M1H-3GL... | 24 | – | ■ | ■ | ■ | | |
| | | CPE18-M2H-3GL... | – | 110 | ■ | ■ | ■ | | |
| | | CPE18-M3H-3GL... | – | 220 | ■ | ■ | ■ | | |
| | | | CPE18-P1-3GL...1/4 | 12 ¹⁾ | 110 ¹⁾ | ■ | – | – | 64 |
| | | | | 24 ¹⁾ | 230 ¹⁾ | ■ | – | – | |
| | | 3/2-way single solenoid valve, normally open | | | | | | 57 | |
| | | CPE18-M1H-3OL... | 24 | – | ■ | ■ | ■ | | |
| | | CPE18-M2H-3OL... | – | 110 | ■ | ■ | ■ | | |
| | | CPE18-M3H-3OL... | – | 220 | ■ | ■ | ■ | | |
| | | | CPE18-P1-3OL...1/4 | 12 ¹⁾ | 110 ¹⁾ | ■ | – | – | 64 |
| | | | | 24 ¹⁾ | 230 ¹⁾ | ■ | – | – | |
| | | 5/2-way single solenoid valve | | | | | | 58 | |
| | | CPE18-M1H-5L... | 24 | – | ■ | ■ | ■ | | |
| | | CPE18-M2H-5L... | – | 110 | ■ | ■ | ■ | | |
| | | CPE18-M3H-5L... | – | 220 | ■ | ■ | ■ | | |
| | | | CPE18-P1-5L...1/4 | 12 ¹⁾ | 110 ¹⁾ | ■ | – | – | 64 |
| | | | | 24 ¹⁾ | 230 ¹⁾ | ■ | – | – | |
| | | 5/2-way double solenoid valve | | | | | | 58 | |
| | | CPE18-M1H-5J... | 24 | – | ■ | ■ | ■ | | |
| | | CPE18-M2H-5J... | – | 110 | ■ | ■ | ■ | | |
| | | CPE18-M3H-5J... | – | 220 | ■ | ■ | ■ | | |
| | | | CPE18-P1-5J...1/4 | 12 ¹⁾ | 110 ¹⁾ | ■ | – | – | 64 |
| | | | | 24 ¹⁾ | 230 ¹⁾ | ■ | – | – | |
| | | 5/3-way solenoid valve, normally closed, mid-position valve | | | | | | 59 | |
| | | CPE18-M1H-5/3G... | 24 | – | ■ | ■ | ■ | | |
| | | CPE18-M2H-5/3G... | – | 110 | ■ | ■ | ■ | | |
| | | CPE18-M3H-5/3G... | – | 220 | ■ | ■ | ■ | | |
| | | | CPE18-P1-5/3G...1/4 | 12 ¹⁾ | 110 ¹⁾ | ■ | – | – | 64 |
| | | | | 24 ¹⁾ | 230 ¹⁾ | ■ | – | – | |
| | | 5/3-way solenoid valve, normally open, mid-position valve | | | | | | 59 | |
| | | CPE18-M1H-5/3B... | 24 | – | ■ | ■ | ■ | | |
| | | CPE18-M2H-5/3B... | – | 110 | ■ | ■ | ■ | | |
| | | CPE18-M3H-5/3B... | – | 220 | ■ | ■ | ■ | | |
| | | | CPE18-P1-5/3B...1/4 | 12 ¹⁾ | 110 ¹⁾ | ■ | – | – | 64 |
| | | | | 24 ¹⁾ | 230 ¹⁾ | ■ | – | – | |
| | | 5/3-way solenoid valve, normally exhausted, mid-position valve | | | | | | 59 | |
| | | CPE18-M1H-5/3E... | 24 | – | ■ | ■ | ■ | | |
| | | CPE18-M2H-5/3E... | – | 110 | ■ | ■ | ■ | | |
| | | CPE18-M3H-5/3E... | – | 220 | ■ | ■ | ■ | | |
| | | | CPE18-P1-5/3E...1/4 | 12 ¹⁾ | 110 ¹⁾ | ■ | – | – | 64 |
| | | | | 24 ¹⁾ | 230 ¹⁾ | ■ | – | – | |

1) Operating voltage dependent on pilot valve to be ordered separately

Solenoid valves CPE, Compact Performance

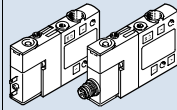
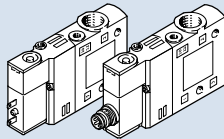
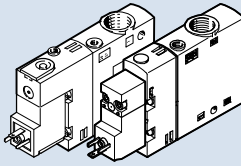
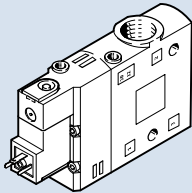
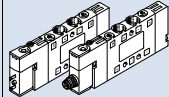
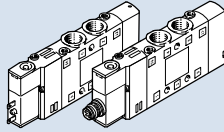
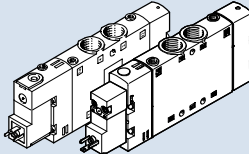
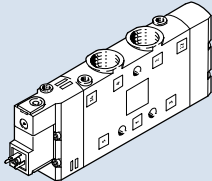
Product range overview – Width 24 mm

| Width | Circuit symbol | Type | Operating voltage | | Working port | | | → Page/ Internet |
|---|---|-------------------|-------------------|--------|--------------|------|------|---------------------|
| | | | [V DC] | [V AC] | G3/8 | QS10 | QS12 | |
| 24 mm | 3/2-way single solenoid valve, normally closed | | | | | | | |
| |  | CPE24-M1H-3GL... | 24 | - | ■ | ■ | ■ | 78 |
| | | CPE24-M2H-3GL... | - | 110 | ■ | ■ | ■ | |
| | | CPE24-M3H-3GL... | - | 220 | ■ | ■ | ■ | |
| | 3/2-way single solenoid valve, normally open | | | | | | | |
| |  | CPE24-M1H-3OL... | 24 | - | ■ | ■ | ■ | 78 |
| | | CPE24-M2H-3OL... | - | 110 | ■ | ■ | ■ | |
| | | CPE24-M3H-3OL... | - | 220 | ■ | ■ | ■ | |
| | 5/2-way single solenoid valve | | | | | | | |
| |  | CPE24-M1H-5L... | 24 | - | ■ | ■ | ■ | 79 |
| | | CPE24-M2H-5L... | - | 110 | ■ | ■ | ■ | |
| | | CPE24-M3H-5L... | - | 220 | ■ | ■ | ■ | |
| | 5/2-way double solenoid valve | | | | | | | |
| |  | CPE24-M1H-5J... | 24 | - | ■ | ■ | ■ | 79 |
| | | CPE24-M2H-5J... | - | 110 | ■ | ■ | ■ | |
| | | CPE24-M3H-5J... | - | 220 | ■ | ■ | ■ | |
| | 5/3-way solenoid valve, normally closed, mid-position valve | | | | | | | |
| |  | CPE24-M1H-5/3G... | 24 | - | ■ | ■ | ■ | 80 |
| | | CPE24-M2H-5/3G... | - | 110 | ■ | ■ | ■ | |
| | | CPE24-M3H-5/3G... | - | 220 | ■ | ■ | ■ | |
| | 5/3-way solenoid valve, normally open, mid-position valve | | | | | | | |
| |  | CPE24-M1H-5/3B... | 24 | - | ■ | ■ | ■ | 80 |
| | | CPE24-M2H-5/3B... | - | 110 | ■ | ■ | ■ | |
| | | CPE24-M3H-5/3B... | - | 220 | ■ | ■ | ■ | |
| 5/3-way solenoid valve, normally exhausted, mid-position valve | | | | | | | | |
|  | CPE24-M1H-5/3E... | 24 | - | ■ | ■ | ■ | 80 | |
| | CPE24-M2H-5/3E... | - | 110 | ■ | ■ | ■ | | |
| | CPE24-M3H-5/3E... | - | 220 | ■ | ■ | ■ | | |

Solenoid valves CPE, Compact Performance



Product range overview – Functions

| 3/2-way valves | |  |  |  |  |
|---|-------|--|--|---|--|
| Type | | CPE10 | CPE14 | CPE18 | CPE24 |
| Width | | 10 mm | 14 mm | 18 mm | 24 mm |
| Standard nominal flow rate [l/min] | | | | | |
| Thread | M5 | 190 | - | - | - |
| | M7 | 400 | - | - | - |
| | G1/8 | - | 900 | - | - |
| | G1/4 | - | - | 1300 | - |
| | G3/8 | - | - | - | 2500 |
| Push-in connector | QS-4 | 190 | - | - | - |
| | QS-6 | 300 | 510 | - | - |
| | QS-8 | - | 810 | 850 | - |
| | QS-10 | - | - | 1000 | 1250 |
| QS-12 | - | - | - | 1650 | |
| 5/2-way valves, single solenoid | | | | | |
| | |  |  |  |  |
| Type | | CPE10 | CPE14 | CPE18 | CPE24 |
| Width | | 10 mm | 14 mm | 18 mm | 24 mm |
| Standard nominal flow rate [l/min] | | | | | |
| Thread | M5 | 180 | - | - | - |
| | M7 | 350 | - | - | - |
| | G1/8 | - | 800 | - | - |
| | G1/4 | - | - | 1300 | - |
| | G3/8 | - | - | - | 2900 |
| Push-in connector | QS-4 | 180 | - | - | - |
| | QS-6 | 320 | 400 | - | - |
| | QS-8 | - | 680 | 850 | - |
| | QS-10 | - | - | 1000 | 1250 |
| | QS-12 | - | - | - | 1650 |
| Operating voltage | | | | | |
| 12 V DC | | - | - | ■ | - |
| 24 V DC/AC | | ■/- | ■/- | ■/■ | ■/- |
| 110 V AC | | - | - | ■ | ■ |
| 230 V AC | | - | - | ■ | ■ |
| Technical data → page | | 19 | 34 | 51 | 72 |

Solenoid valves CPE, Compact Performance

Product range overview – Functions

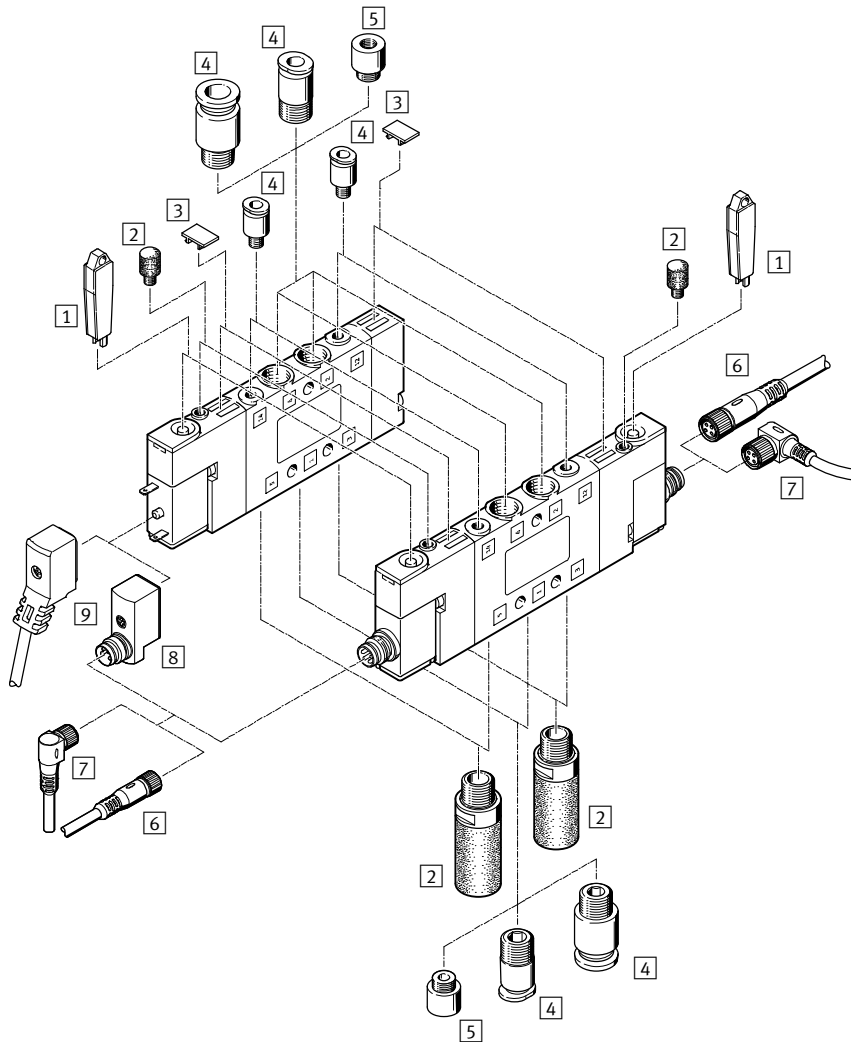
| 5/2-way valves, double solenoid | | | | | |
|------------------------------------|-------|-------------|-------------|---------------|---------------|
| | | | | | |
| Type | CPE10 | CPE14 | CPE18 | CPE24 | |
| Width | 10 mm | 14 mm | 18 mm | 24 mm | |
| Standard nominal flow rate [l/min] | | | | | |
| Thread | M5 | 180 | - | - | |
| | M7 | 350 | - | - | |
| | G1/8 | - | 800 | - | |
| | G1/4 | - | - | 1300 | |
| | G3/8 | - | - | - | 3200 |
| Push-in connector | QS-4 | 180 | - | - | |
| | QS-6 | 320 | 400 | - | |
| | QS-8 | - | 680 | 850 | - |
| | QS-10 | - | - | 1000 | 1250 |
| | QS-12 | - | - | - | 1650 |
| 5/3-way valves | | | | | |
| | | | | | |
| Type | CPE10 | CPE14 | CPE18 | CPE24 | |
| Width | 10 mm | 14 mm | 18 mm | 24 mm | |
| Standard nominal flow rate [l/min] | | | | | |
| Thread | M5 | 180 | - | - | |
| | M7 | 250 ... 350 | - | - | |
| | G1/8 | - | 700 ... 750 | - | |
| | G1/4 | - | - | 1200 ... 1450 | |
| | G3/8 | - | - | - | 2600 ... 3000 |
| Push-in connector | QS-4 | 180 | - | - | |
| | QS-6 | 250 ... 300 | 370 ... 410 | - | |
| | QS-8 | - | 570 ... 720 | 780 ... 850 | - |
| | QS-10 | - | - | 1000 ... 1050 | 1250 |
| | QS-12 | - | - | - | 1600 ... 1650 |
| Operating voltage | | | | | |
| 12 V DC | - | - | ■ | - | |
| 24 V DC/AC | ■/- | ■/- | ■/■ | ■/- | |
| 110 V AC | - | - | ■ | ■ | |
| 230 V AC | - | - | ■ | ■ | |
| Technical data → page | 19 | 34 | 51 | 72 | |

Solenoid valves CPE, Compact Performance

Peripherals overview

FESTO

Individual valve – CPE10 and CPE14



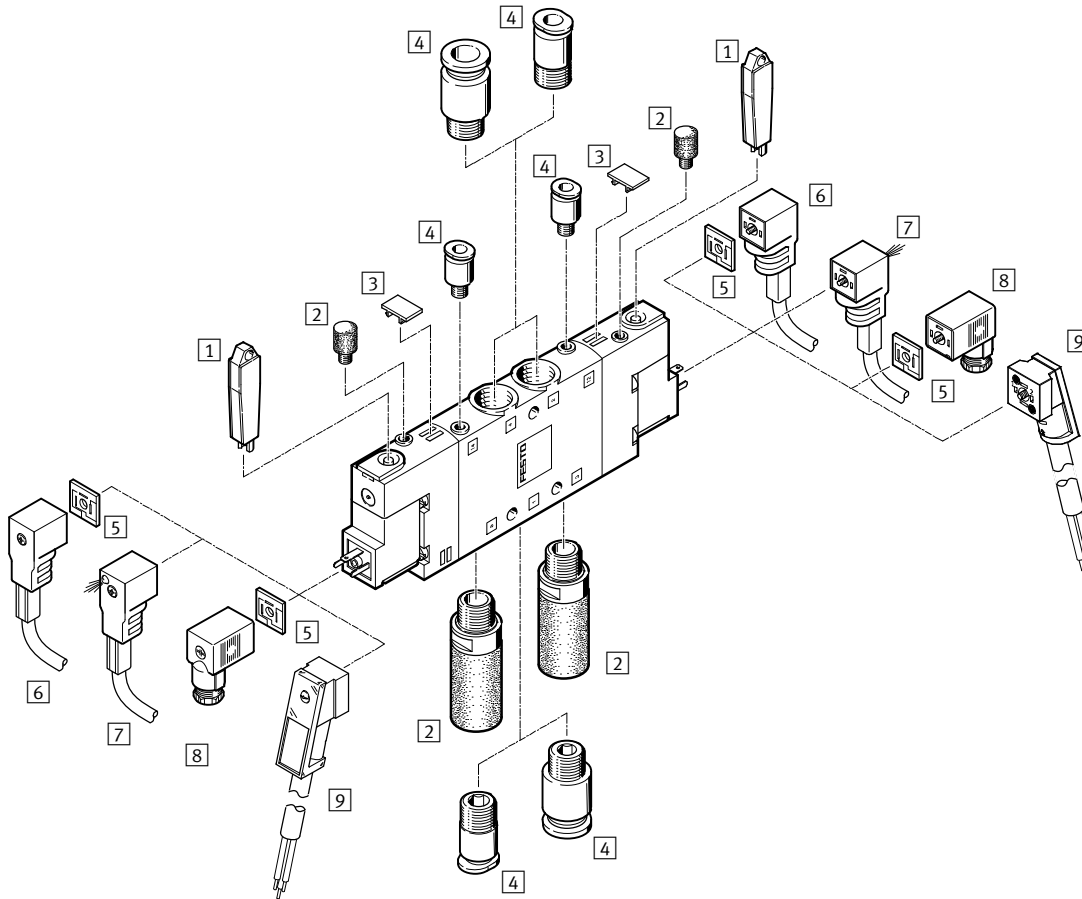
Accessories – Individual valve

| | Type | Description | CPE10 | CPE14 | → Page/Internet |
|---|----------------------|---------------|-------|-------|-----------------|
| 1 | Manual override tool | AHB... | ■ | ■ | 83 |
| 2 | Silencer | U... or UC... | ■ | ■ | 83 |
| 3 | Inscription label | IBS-6x10 | ■ | ■ | 83 |
| 4 | Push-in fittings | QS... | ■ | ■ | qs |
| 5 | M7 to M5 reducer | – | ■ | – | – |
| 6 | Connecting cable | NEBU-M8G... | ■ | ■ | 82 |
| 7 | Connecting cable | NEBU-M8W... | ■ | ■ | 82 |
| 8 | Adapter | VAVE-C8... | ■ | ■ | 82 |
| 9 | Connecting cable | NEBV-Z4... | ■ | ■ | 82 |
| – | 2 to 1 distributor | NEDY... | ■ | ■ | 82 |

Solenoid valves CPE, Compact Performance

Peripherals overview

Individual valve – CPE18 and CPE24



Accessories – Individual valve

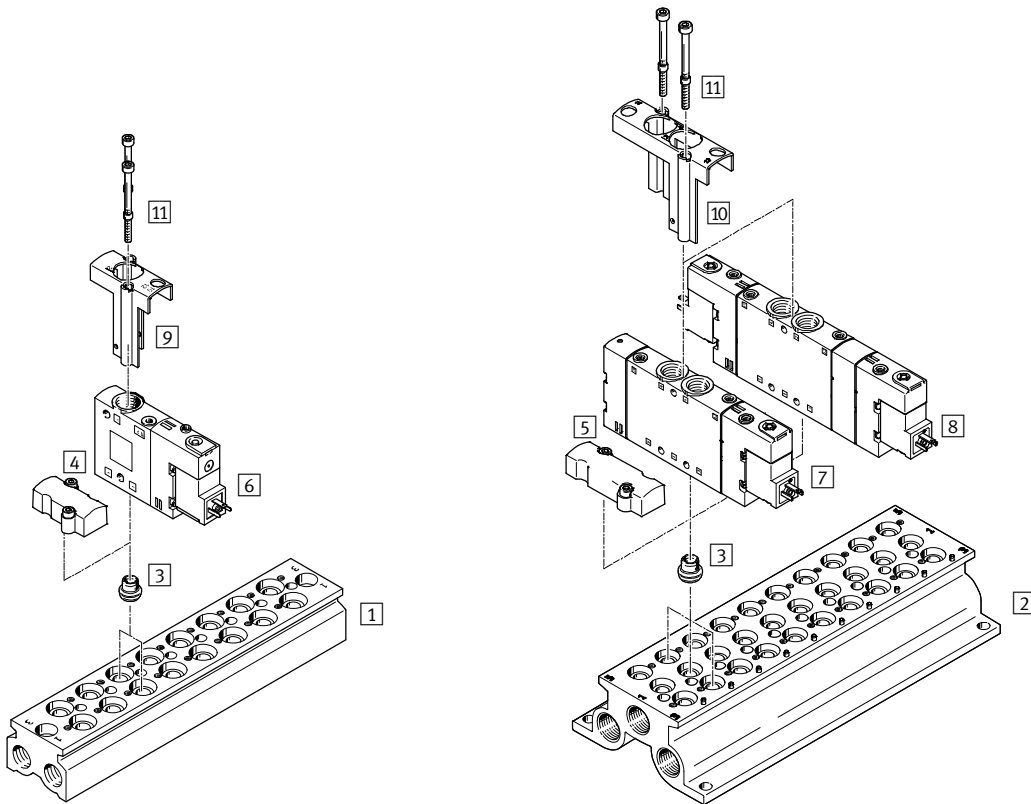
| | Type | Description | CPE18 | CPE24 | → Page/Internet |
|---|------------------------|---------------|-------|-------|-----------------|
| 1 | Manual override tool | AHB... | ■ | ■ | 83 |
| 2 | Silencer | U... or UC... | ■ | ■ | 83 |
| 3 | Inscription label | IBS-6x10 | ■ | ■ | 83 |
| 4 | Push-in fittings | QS... | ■ | ■ | qs |
| 5 | Illuminating seal | MEB...LD | ■ | ■ | 83 |
| 6 | Plug socket with cable | KMEB-1... | ■ | ■ | 83 |
| 7 | Plug socket with cable | KMEB-1... | ■ | ■ | 83 |
| 8 | Plug socket | MSSD-EB... | ■ | ■ | 83 |
| 9 | Plug socket with cable | KMEB-2... | ■ | ■ | 83 |

Solenoid valves CPE, Compact Performance

System overview

FESTO

Fixed-grid manifold assembly



Example of manifold assembly – CPE18

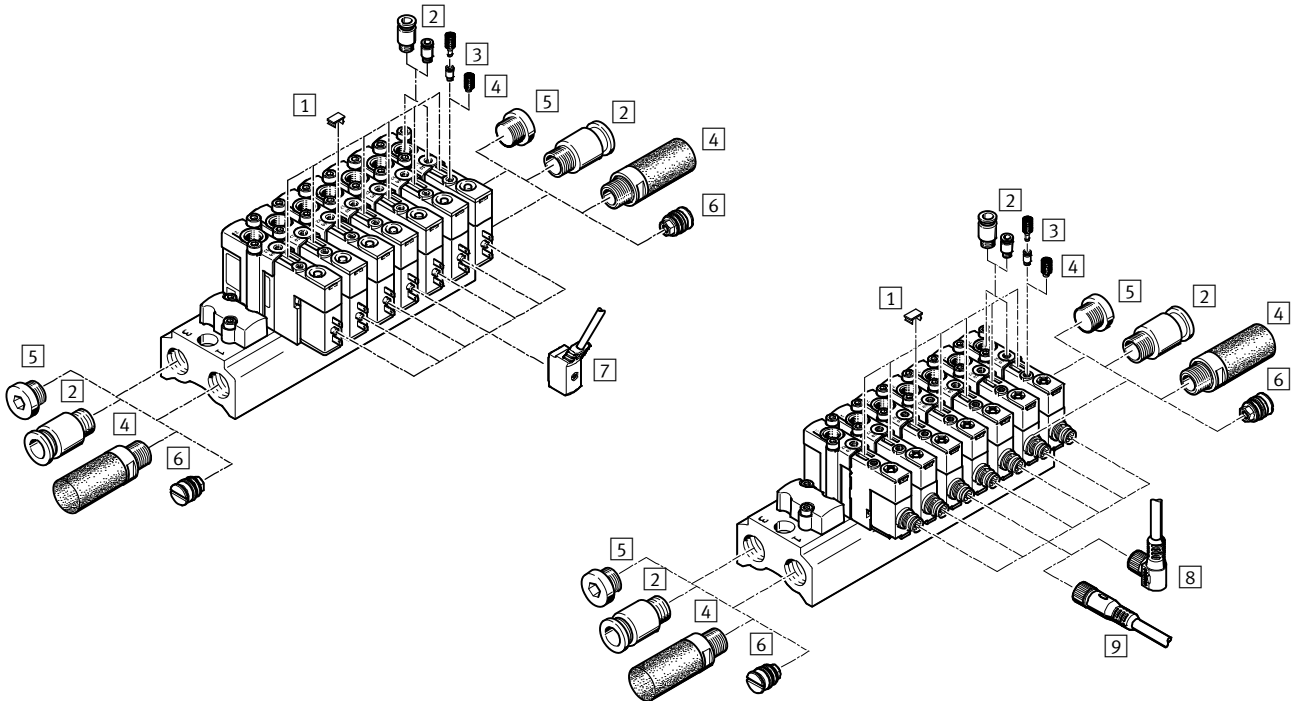
| | Type | Description | → Page/Internet | | |
|----|----------------|--|-----------------|-------|-------|
| | | | CPE10 | CPE14 | CPE18 |
| 1 | Manifold block | CPE18-3/2-PRS... For 3/2-way valves | 30 | 47 | 68 |
| 2 | Manifold block | CPE18-PRS... For 5/2- and 5/3-way valves | 28 | 45 | 66 |
| 3 | Seal | CPV18-VI-P.1/4-150 – | 28 | 45 | 68 |
| 4 | Cover plate | CPE18-RP3 For fitting on unused 3/2-way valve positions | 30 | 47 | 68 |
| 5 | Cover plate | CPE18-RP For fitting on unused 5/2- and 5/3-way valve positions | 28 | 45 | 66 |
| 6 | 3/2-way valve | CPE18... – | 25 | 42 | 57 |
| 7 | 5/2-way valve | CPE18... – | 25 | 42 | 58 |
| 8 | 5/3-way valve | CPE18... – | 26 | 43 | 59 |
| 9 | Retainer | CPE18-H3-50 Retainer for 3/2-way valve | 30 | 47 | 68 |
| 10 | Retainer | CPE18-H5-50 Retainer for 5/2- and 5/3-way valve | 28 | 45 | 66 |
| 11 | Screw | M4X65-8.8-VS-100 – | 28 | 45 | 68 |

Solenoid valves CPE, Compact Performance

Peripherals overview

FESTO

Accessories – Fixed-grid manifold assembly CPE10 and CPE14



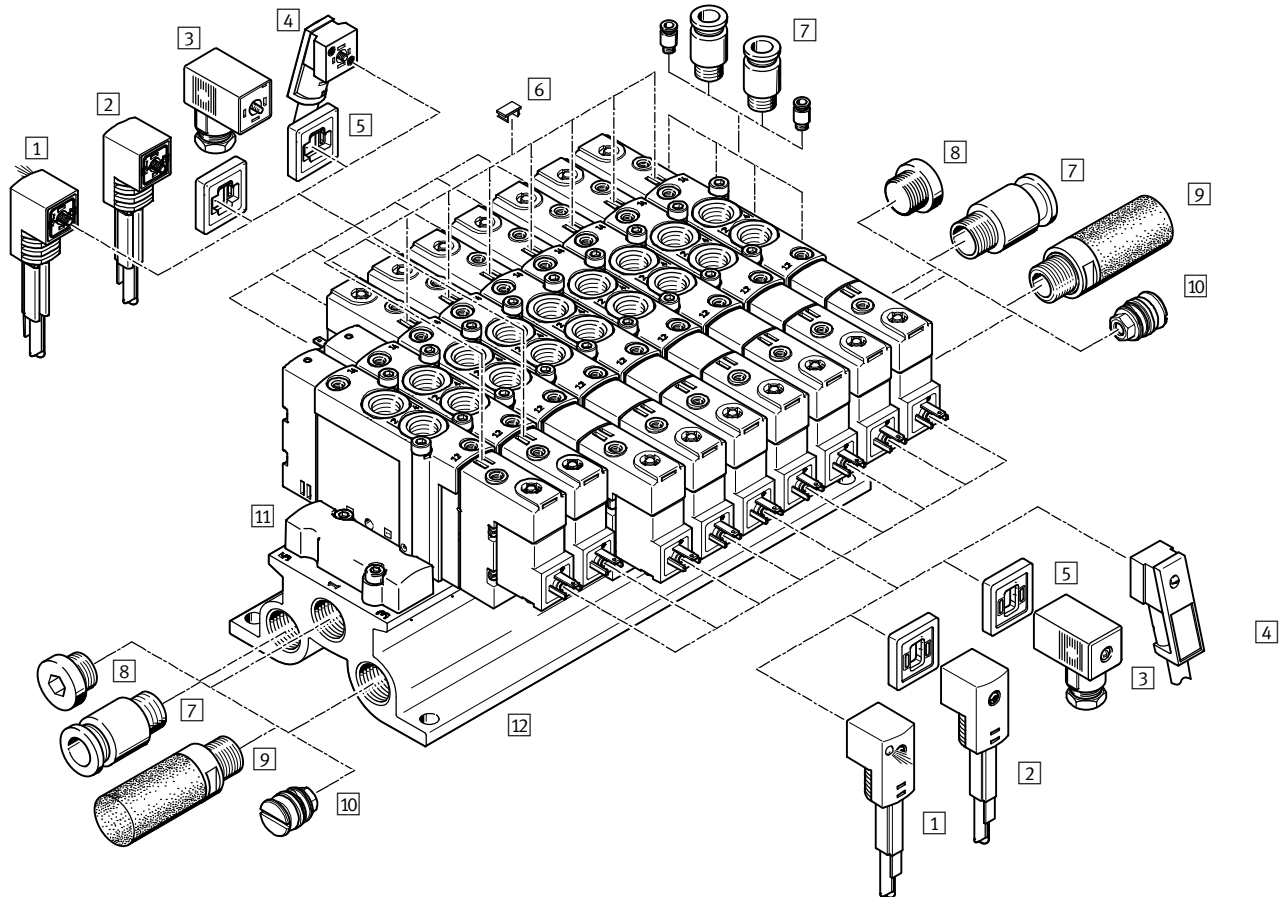
| Accessories | | Type | Description | CPE10 | CPE14 | → Page/Internet |
|-------------|--------------------|------------------|--|-------|-------|-----------------|
| 1 | Inscription label | IBS-6x10 | – | ■ | ■ | 83 |
| 2 | Push-in fittings | QS... | For tubing | ■ | ■ | qs |
| 3 | M7 to M5 reducer | – | Included in the scope of delivery | ■ | – | – |
| 4 | Silencer | U... or UC... | For port 3, 5, 82 or 84 | ■ | ■ | 83 |
| 5 | Blanking plug | B... | – | ■ | ■ | 83 |
| 6 | Separator | VABD..., PRSV... | For fitting on the manifold block | ■ | ■ | 83 |
| 7 | Connecting cable | NEBV-Z4... | Connection pattern ZC holding current reduction, protective circuit, signal status display | ■ | ■ | 82 |
| 8 | Connecting cable | NEBU-M8W... | Socket M8x1, angled | ■ | ■ | 82 |
| 9 | Connecting cable | NEBU-M8G... | Socket M8x1, straight | ■ | ■ | 82 |
| – | 2 to 1 distributor | NEDY... | 2x socket connection pattern ZC on 1x plug, M8x1 or M12x1 | ■ | ■ | 82 |

Solenoid valves CPE, Compact Performance

Peripherals overview

FESTO

Accessories – Fixed-grid manifold assembly CPE18



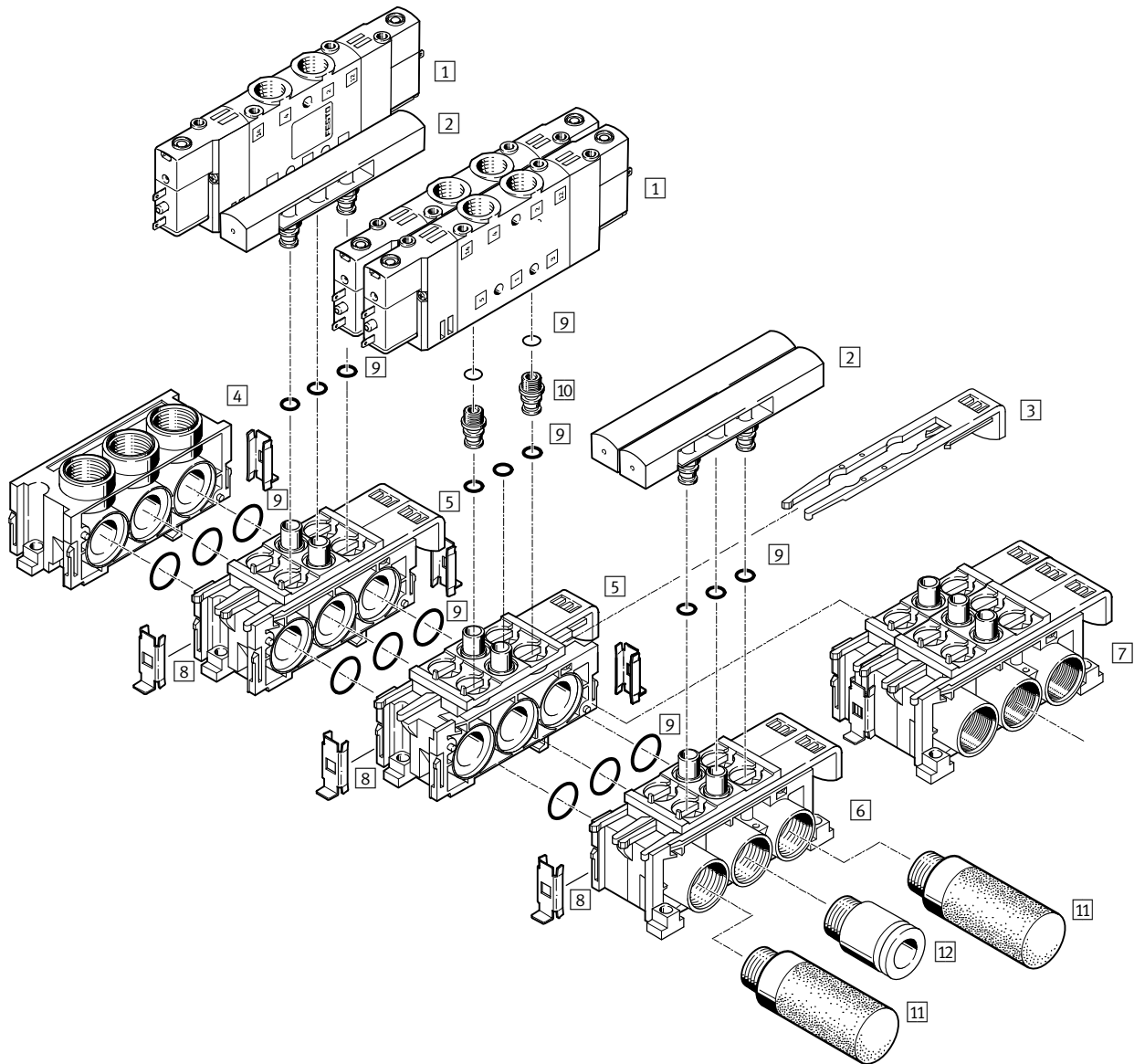
Accessories – Mounting on manifold block

| | Type | Description | → Page/Internet |
|----|------------------------------|--|-----------------|
| 1 | Plug socket with cable | KMEB-1... Cable sheath PVC, 24 V DC, with signal status display | 83 |
| 2 | Plug socket with cable | KMEB-1... Cable sheath PVC, to 240 V, without signal status display | 83 |
| 3 | Plug socket | MSSD-EB... Without signal status display | 83 |
| 4 | Plug socket with cable | KMEB-2... Cable sheath PUR | 83 |
| 5 | Illuminating seal | MEB-LD... For 12 ... 24 V DC and 0 ... 230 V AC | 83 |
| 6 | Inscription label | IBS-6x10 | 83 |
| 7 | Push-in fittings | QS... For tubing | qs |
| 8 | Blanking plug | B... | 83 |
| 9 | Silencer | U... or UC... | 83 |
| 10 | Separator for pressure zones | VABD..., PRSV... | 83 |
| 11 | Cover plate | CPE18-RP For fitting on unused valve 5/2- and 5/3-way positions | 66 |
| | | CPE18-RP3 For fitting on unused 5/2- and 5/3-way valve positions | 68 |
| 12 | Manifold block | CPE18-PRS... For 5/2- and 5/3-way valves | 66 |
| | | CPE18-3/2-PRS... For 3/2-way valves | 68 |

Solenoid valves CPE, Compact Performance

System overview

Manifold assembly with modular manifold blocks



Accessories – Manifold assembly

| | Type | Description | → Page/Internet |
|----|------------------|---------------|-----------------------------------|
| 1 | Solenoid valve | CPE... | – |
| 2 | Cover plate | CPE...-RP | For sealing vacant positions |
| 3 | Slide | – | For mounting the valve |
| 4 | End plate | CPE...-PRS-EP | – |
| 5 | Expansion block | CPE...-PRSE-2 | For 2 valves |
| 6 | Manifold block | CPE...-PRSG-2 | For 2 valves |
| 7 | Manifold block | CPE...-PRSG-3 | For 3 valves |
| 8 | Connecting piece | – | For connecting the blocks |
| 9 | Seal | – | Included in the scope of delivery |
| 10 | Fitting | – | Included in the scope of delivery |
| 11 | Silencer | U or UC | – |
| 12 | Push-in fitting | QS... | For tubing |

Solenoid valves CPE, Compact Performance

Order codes

| | | | | | | | | | | |
|--|---|---|---|---|--|--|--|---|--|--|
| CPE | | - | M | - | | | | - | | |
| Type | | | | | | | | | | |
| CPE | Solenoid valve, Compact Performance | | | | | | | | | |
| Width | | | | | | | | | | |
| 10 | 10 mm | | | | | | | | | |
| 14 | 14 mm | | | | | | | | | |
| 18 | 18 mm | | | | | | | | | |
| 24 | 24 mm | | | | | | | | | |
| Operating voltage | | | | | | | | | | |
| Electrical connection: plug pins, connection pattern ZC | | | | | | | | | | |
| M1BH | 24 V DC for CPE10 and CPE14 | | | | | | | | | |
| M1H | 24 V DC for CPE18 and CPE24 | | | | | | | | | |
| M2H | 110 V AC for CPE18 and CPE24 | | | | | | | | | |
| M3H | 230 V AC for CPE18 and CPE24 | | | | | | | | | |
| Electrical connection: plug M8x1 | | | | | | | | | | |
| M1CH | 24 V DC for CPE10 and CPE14 | | | | | | | | | |
| Valve function | | | | | | | | | | |
| 3 | 3/2-way | | | | | | | | | |
| 5L | 5/2-way, single solenoid, pneumatic reset | | | | | | | | | |
| 5J | 5/2-way, double solenoid | | | | | | | | | |
| 5/3 | 5/3-way | | | | | | | | | |
| Normal position | | | | | | | | | | |
| GL | Closed, pneumatic reset for 3/2 | | | | | | | | | |
| OL | Open, pneumatic reset | | | | | | | | | |
| B | Open | | | | | | | | | |
| E | Exhausted | | | | | | | | | |
| G | Closed | | | | | | | | | |
| Pilot air supply | | | | | | | | | | |
| - | Internal | | | | | | | | | |
| S | External | | | | | | | | | |
| Pneumatic connection | | | | | | | | | | |
| Female thread | | | | | | | | | | |
| M5 | M5 for CPE10, not with round plug | | | | | | | | | |
| M7 | M7 for CPE10 | | | | | | | | | |
| 1/8 | G1/8 for CPE14 | | | | | | | | | |
| 1/4 | G1/4 for CPE18 | | | | | | | | | |
| 3/8 | G3/8 for CPE24 | | | | | | | | | |
| Plug connector for standard O.D. tubing, not with round plug CPE10 and CPE14 | | | | | | | | | | |
| QS-4 | Tubing O.D. 4 mm for CPE10 | | | | | | | | | |
| QS-6 | Tubing O.D. 6 mm for CPE10 and CPE14 | | | | | | | | | |
| QS-8 | Tubing O.D. 8 mm for CPE14 and CPE18 | | | | | | | | | |
| QS-10 | Tubing O.D. 10 mm for CPE18 and CPE24 | | | | | | | | | |
| QS-12 | Tubing O.D. 12 mm for CPE24 | | | | | | | | | |
| Generation | | | | | | | | | | |
| B | B series for CPE10 5/3-way valve | | | | | | | | | |

Solenoid valves CPE10

Technical data

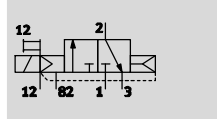
Function

3/2G, 3/2O

5/2-way, single solenoid,


5/2-way, double solenoid valve

5/3G, 5/3B, 5/3E

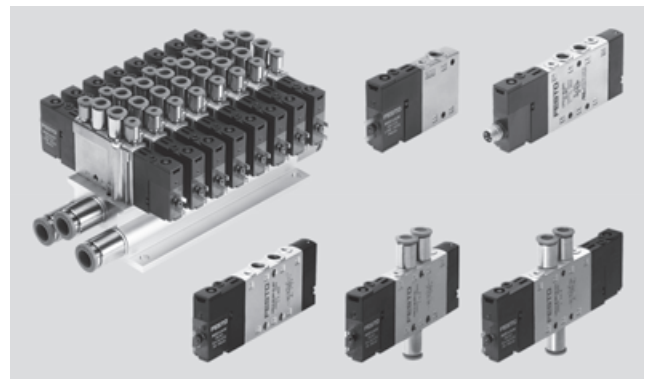


e.g. 3/2-way valve with external pilot air supply, normally closed

 Width 10 mm

 Flow rate
180 ... 400 l/min

 Voltage
24 V DC



| General technical data | | 3/2 | | 5/2 | | 5/3 | | |
|--|------------|---|-----------------|---|-----|-----------------|-----------------|-----------------|
| Valve function | | G ¹⁾ | O ²⁾ | - | - | G ¹⁾ | B ²⁾ | E ³⁾ |
| Normal position | | Monostable | | Bistable | | Monostable | | |
| Stable position | | Monostable | | Bistable | | Monostable | | |
| Reset method: pneumatic spring | | Yes | | - | | No | | |
| Reset method: mechanical spring | | No | | - | | Yes | | |
| Design | | Piston spool | | | | | | |
| Sealing principle | | Soft | | | | | | |
| Type of actuation | | Electrical | | | | | | |
| Type of control | | Pilot | | | | | | |
| Pilot air supply | | Internal or external | | | | | | |
| Flow direction | | - | | Reversible with external pilot air supply | | | | |
| Exhaust air function | | - | | With flow control | | | | |
| Manual override | | Non-detenting, detenting via accessory | | | | | | |
| Type of mounting | | Via through-holes | | | | | | |
| Mounting position | | Any | | | | | | |
| Pneumatic connection | 1, 2, 4 | Threaded connection: M5, M7; QS connection: Ø 4 or Ø 6 mm | | | | | | |
| | 3, 5 | Threaded connection: M7 | | | | | | |
| | 12, 14 | Threaded connection: M3; QS connection: Ø 3 mm | | | | | | |
| | 82, 84 | Threaded connection: M3 | | | | | | |
| Nominal width | [mm] | 4 | | | | | | |
| Standard nominal flow rate | M5 | [l/min] | 190 | 180 | | | | |
| | M7 | [l/min] | 400 | 350 | | 300 | 250 | |
| | QS4 | [l/min] | 190 | 180 | | | | |
| | QS6 | [l/min] | 300 | 350 | 320 | 300 | 250 | |
| Switching time | On/off | [ms] | 14/14 | 16/20 | | - | | |
| | Changeover | [ms] | - | - | | 8 | | |
| Duty cycle | [%] | 100 | | | | | | |
| Width | [mm] | 10 | | | | | | |
| Corrosion resistance class CRC ⁴⁾ | | 2 | | | | | | |

1) G = normally closed

2) O, B = normally open

3) E = normally exhausted

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

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Solenoid valves CPE10

Technical data

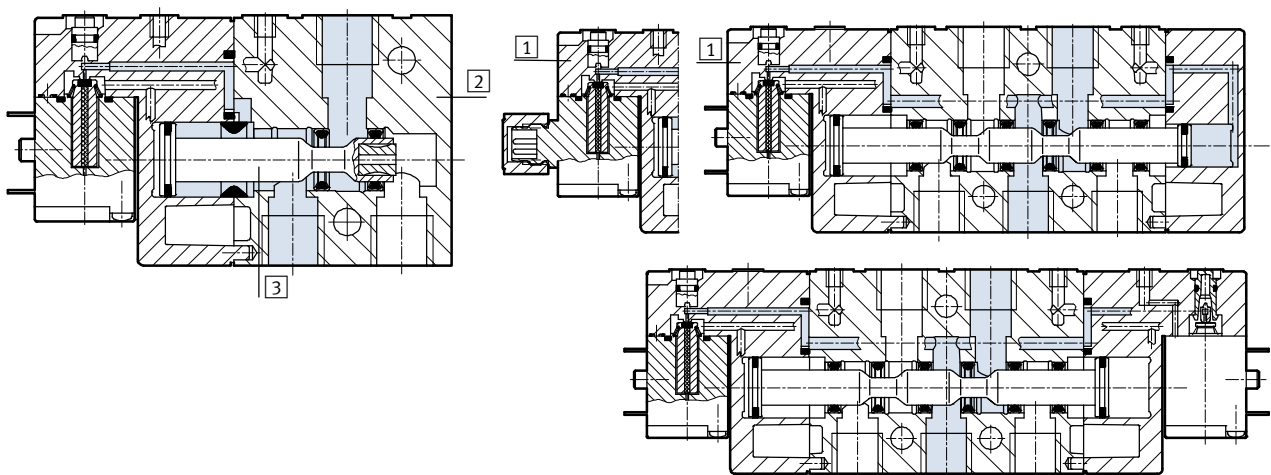
| Operating and environmental conditions | | | | | |
|--|--|-------|--------------------------|--------------------------|-----|
| Valve function | | 3/2 | 5/2-way, single solenoid | 5/2-way, double solenoid | 5/3 |
| Operating medium | Compressed air to ISO 8573-1:2010 [7:4:4] | | | | |
| Pilot medium | Compressed air to ISO 8573-1:2010 [7:4:4] | | | | |
| Note on operating/pilot medium | Lubricated operation possible (in which case lubricated operation will always be required) | | | | |
| Operating pressure | Internal pilot air supply | [bar] | 2.5 ... 8 | 3 ... 8 | |
| | External pilot air supply | [bar] | -0.9 ... +10 | | |
| Pilot pressure | | [bar] | 2.5 ... 8 | 3 ... 8 | |
| Ambient temperature | | [°C] | -5 ... +50 | | |
| Temperature of medium | | [°C] | -5 ... +50 | | |
| Certification for solenoid valves | c UL us - Recognized (OL) (not with M1CH-...) | | | | |
| Maritime classification ¹⁾ | See certificate | | | | |

1) Additional information www.festo.com/sp → Certificates.

| Electrical data | | | | |
|--|------------|--------|---|--|
| Operating voltage | M1BH, M1CH | [V DC] | 24 +10/-15% | |
| Power consumption | M1BH, M1CH | [W] | 1.28 | |
| Degree of protection with plug socket | | | IP65 to IEC 60529 M1CH: IP65/IP67 to IEC 60529 | |
| Max. tightening torque of plug socket M8x1 | M1CH | [Nm] | 0.4 | |

Materials

Sectional view



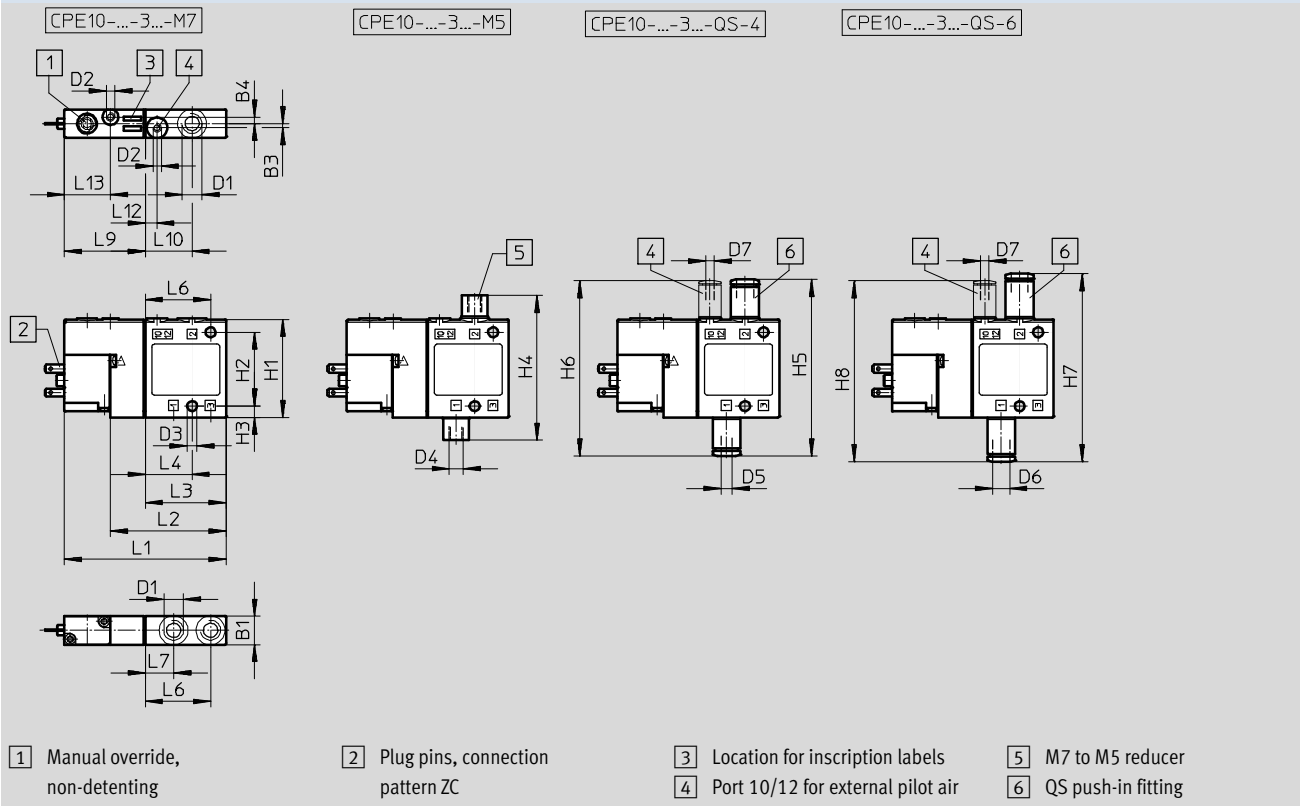
| | | |
|---|-------------------|--------------------|
| 1 | Cap | PA |
| 2 | Housing | Die-cast aluminium |
| 3 | Piston spool | Steel |
| - | Seals | NBR |
| | Note on materials | RoHS compliant |

Solenoid valves CPE10

Technical data

Dimensions – 3/2-way valve

Download CAD data → www.festo.com



| Type | B1 | B3 | B4 | D1 | D2 | D3 ∅ | D4 | D5 ∅ | D6 ∅ | D7 ∅ | H1 | H2 | H3 | H4 | H5 | H6 | H7 | H8 |
|-----------------|----|-----|-----|----|----|---------|----|---------|---------|---------|----|----|----|----|------|------|------|------|
| CPE10-M1BH-3... | 10 | 1.5 | 2.3 | M7 | M3 | 3.5 | M5 | 4 | 6 | 3 | 35 | 26 | 4 | 51 | 62.2 | 61.7 | 66.2 | 63.7 |

| Type | L1 | L2 | L3 | L4 | L6 | L7 | L9 | L10 | L12 | L13 |
|-----------------|----|------|------|------|----|----|------|------|-----|------|
| CPE10-M1BH-3... | 57 | 40.8 | 28.5 | 16.5 | 23 | 10 | 28.5 | 16.5 | 4.2 | 16.3 |

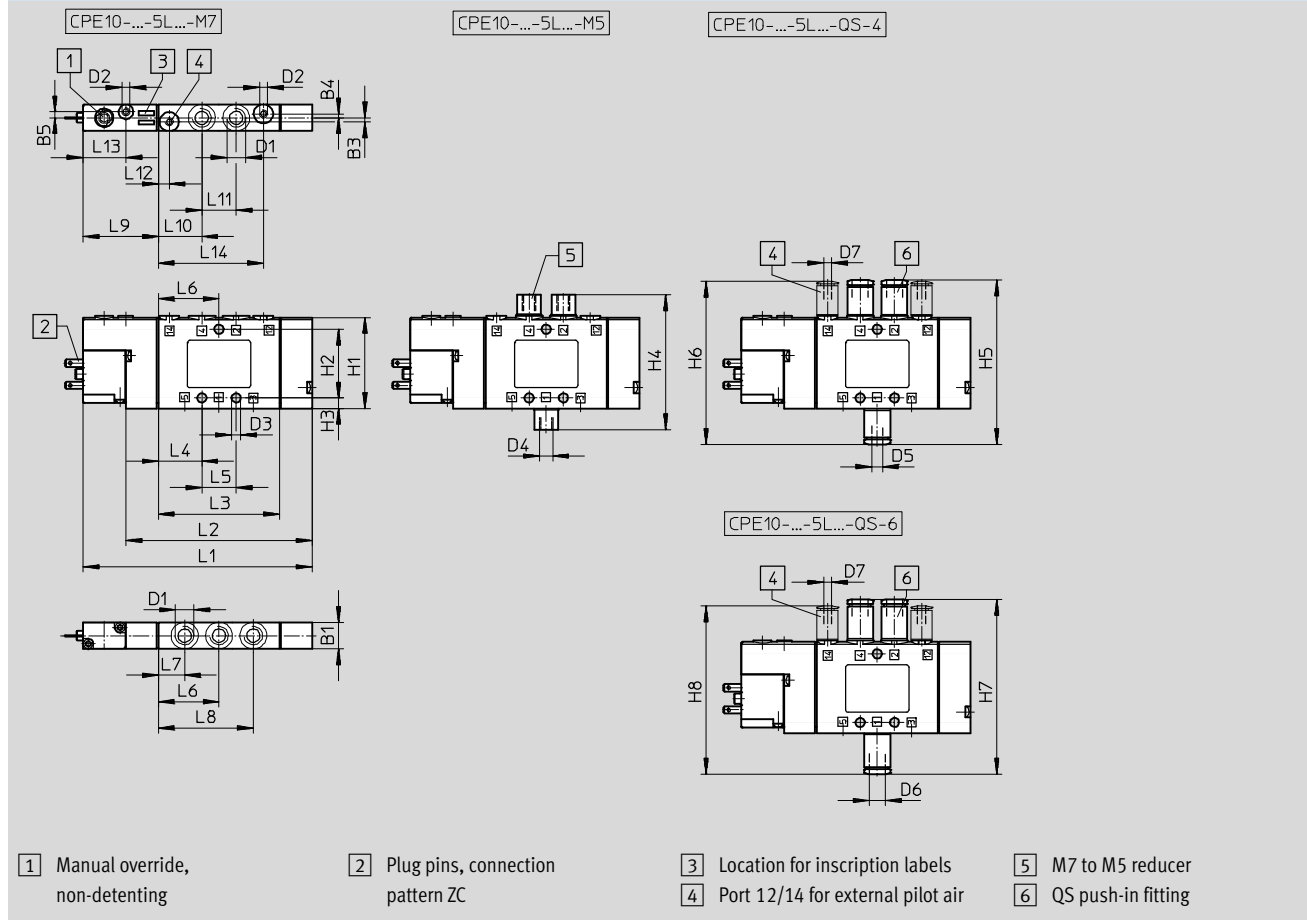
Solenoid valves CPE10

Technical data

FESTO

Dimensions – 5/2-way single solenoid valve

Download CAD data → www.festo.com



| Type | B1 | B3 | B4 | B5 | D1 | D2 | D3 | D4 | D5 | D6 | D7 | H1 | H2 | H3 | H4 | H5 | H6 | H7 | H8 |
|------------------|----|-----|-----|-----|----|----|-----|----|----|----|----|----|----|----|----|------|------|------|------|
| CPE10-M1BH-5L... | 10 | 1.5 | 1.5 | 2.3 | M7 | M3 | 3.5 | M5 | 4 | 6 | 3 | 35 | 26 | 4 | 51 | 62.2 | 61.7 | 66.2 | 63.7 |

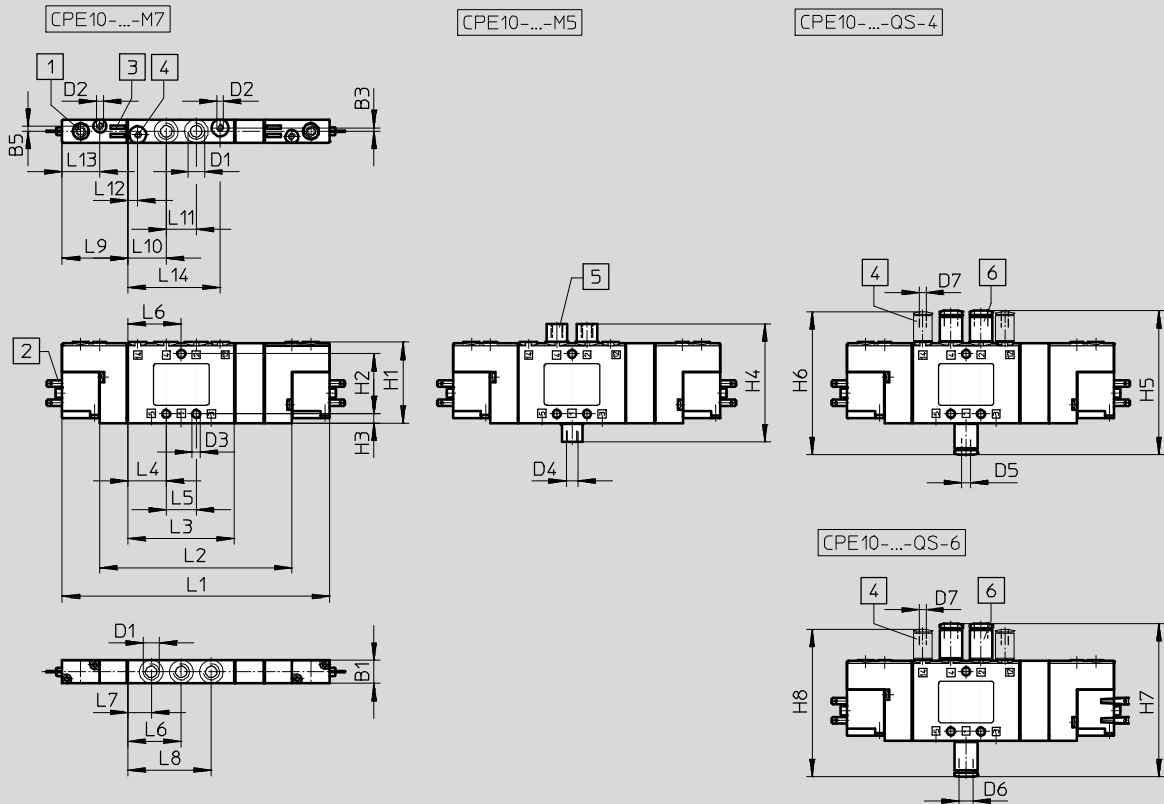
| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 | L14 |
|------------------|------|------|----|------|----|----|----|----|------|------|-----|-----|------|------|
| CPE10-M1BH-5L... | 86.8 | 70.6 | 46 | 16.5 | 13 | 23 | 10 | 36 | 28.5 | 16.5 | 13 | 4.2 | 16.3 | 39.8 |

Solenoid valves CPE10

Technical data

Dimensions – 5/2-way double solenoid valve and 5/3-way valve

Download CAD data → www.festo.com



- 1 Manual override, non-detenting
- 2 Plug pins, connection pattern ZC
- 3 Location for inscription labels
- 4 Port 12/14 for external pilot air
- 5 M7 to M5 reducer
- 6 QS push-in fitting

| Type | B1 | B3 | B5 | D1 | D2 | D3 ∅ | D4 | D5 ∅ | D6 ∅ | D7 ∅ | H1 | H2 | H3 | H4 | H5 | H6 | H7 | H8 |
|----------------|----|-----|-----|----|----|---------|----|---------|---------|---------|----|----|----|----|------|------|------|------|
| CPE-10-...-5] | 10 | 1.5 | 2.3 | M7 | M3 | 3.5 | M5 | 4 | 6 | 3 | 35 | 26 | 4 | 51 | 62.2 | 61.7 | 66.2 | 63.7 |
| CPE-10-...-5/3 | | | | | | | | | | | | | | | | | | |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 | L14 |
|----------------|-------|------|----|------|----|----|----|----|------|------|-----|-----|------|------|
| CPE-10-...-5] | 103 | 70.6 | 46 | 16.5 | 13 | 23 | 10 | 36 | 28.5 | 16.5 | 13 | 4.2 | 16.3 | 39.8 |
| CPE-10-...-5/3 | 115.6 | 83.2 | | | | | | | | | | | | |

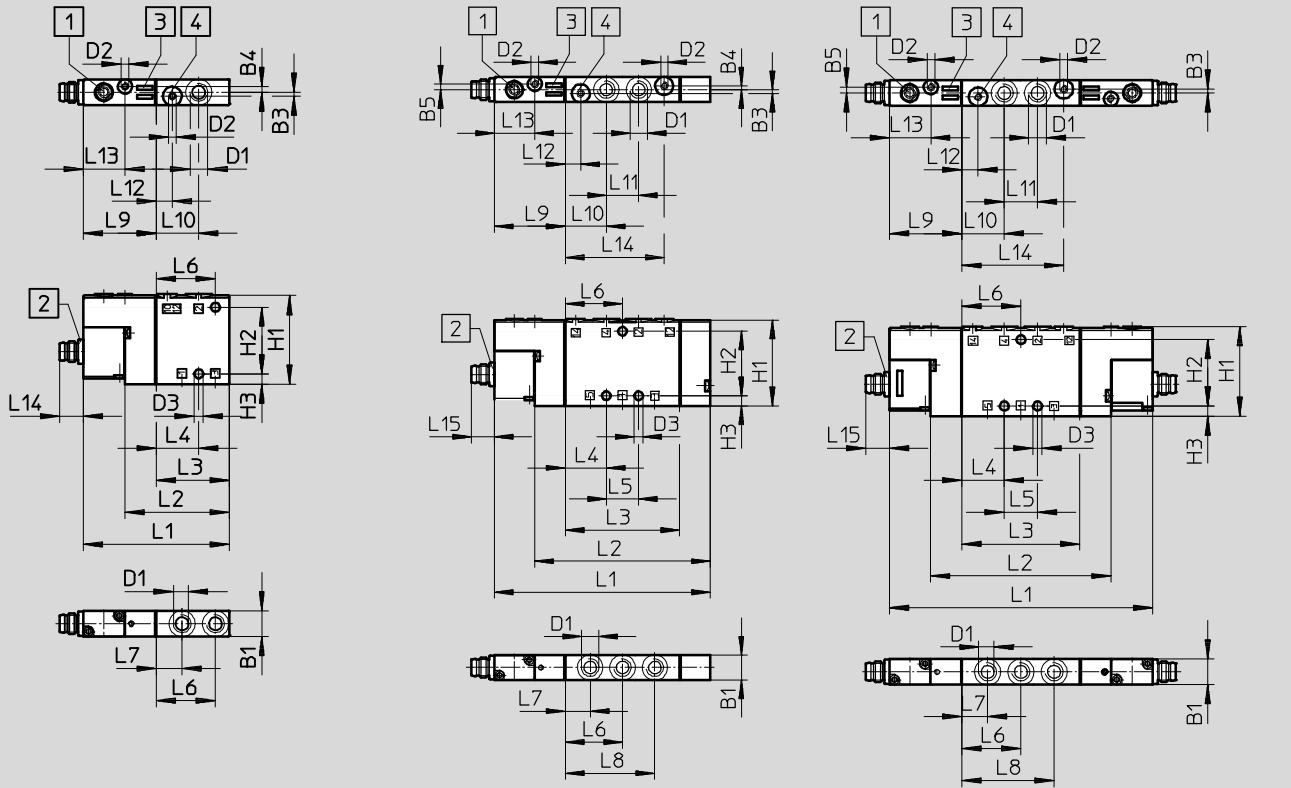
Solenoid valves CPE10

Technical data

FESTO

Dimensions – Solenoid valves with round plug M8x1

Download CAD data → www.festo.com



1 Manual override, non-detenting

2 Plug M8x1

3 Location for inscription labels

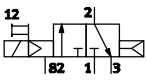
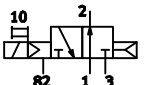
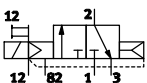
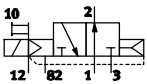
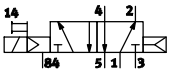
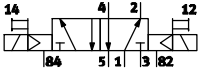
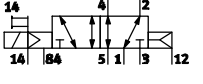
4 Port 12/14 for external pilot air

| Type | B1 | B3 | B4 | B5 | D1 | D2 | D3 Ø | H1 | H2 | H3 |
|-------------------|----|-----|-----|-----|----|----|---------|----|----|----|
| CPE-10-M1CH-3... | 10 | 1.5 | 2.3 | - | M7 | M3 | 3.5 | 35 | 26 | 4 |
| CPE-10-M1CH-5L... | | | 1.5 | 2.3 | | | | | | |
| CPE-10-M1CH-5J... | | | - | - | | | | | | |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 | L14 | L15 |
|-------------------|------|------|------|------|----|----|----|----|------|------|-----|-----|------|-------|-----|
| CPE-10-M1CH-3... | 57 | 40.8 | 28.5 | 16.5 | - | 23 | 10 | - | 28.5 | 16.5 | - | 6.2 | 16.3 | 9.2 | - |
| CPE-10-M1CH-5L... | 86.8 | 70.6 | 46 | | 13 | | | 36 | | | 13 | | | 39.82 | 9.2 |
| CPE-10-M1CH-5J... | 103 | | | | | | | | | | | | | | |

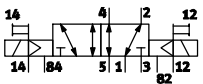
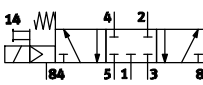
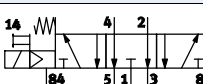
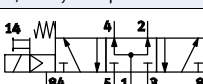
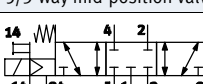
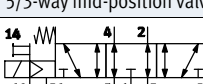
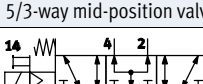
Solenoid valves CPE10

Ordering data

| Ordering data | | | | | | |
|---|------------------|----------------------------------|-------------------|----------------------|------------|------------------------------------|
| Circuit symbol | Pilot air supply | Electrical connection | Operating voltage | Pneumatic connection | Weight [g] | Part No. Type |
| 3/2-way valve, normally closed | | | | | | |
|  | Internal | Plug pins, connection pattern ZC | 24 V DC | M5 | – | 196845 CPE10-M1BH-3GL-M5 |
| | | | | M7 | 40 | 196915 CPE10-M1BH-3GL-M7 |
| | | | | QS-4 | – | 196846 CPE10-M1BH-3GL-QS-4 |
| | | | | QS-6 | – | 196847 CPE10-M1BH-3GL-QS-6 |
| | | Plug connector M8x1 | | M7 | 40 | 550233 CPE10-M1CH-3GL-M7 |
| 3/2-way valve, normally open | | | | | | |
|  | Internal | Plug pins, connection pattern ZC | 24 V DC | M5 | – | 196851 CPE10-M1BH-30L-M5 |
| | | | | M7 | 40 | 196917 CPE10-M1BH-30L-M7 |
| | | | | QS-4 | – | 196852 CPE10-M1BH-30L-QS-4 |
| | | | | QS-6 | – | 196853 CPE10-M1BH-30L-QS-6 |
| | | Plug connector M8x1 | | M7 | 40 | 550235 CPE10-M1CH-30L-M7 |
| 3/2-way valve, normally closed | | | | | | |
|  | External | Plug pins, connection pattern ZC | 24 V DC | M5 | – | 196848 CPE10-M1BH-3GLS-M5 |
| | | | | M7 | 40 | 196916 CPE10-M1BH-3GLS-M7 |
| | | | | QS-4 | – | 196849 CPE10-M1BH-3GLS-QS-4 |
| | | | | QS-6 | – | 196850 CPE10-M1BH-3GLS-QS-6 |
| | | Plug connector M8x1 | | M7 | 40 | 550234 CPE10-M1CH-3GLS-M7 |
| 3/2-way valve, normally open | | | | | | |
|  | External | Plug pins, connection pattern ZC | 24 V DC | M5 | – | 196854 CPE10-M1BH-30LS-M5 |
| | | | | M7 | 40 | 196918 CPE10-M1BH-30LS-M7 |
| | | | | QS-4 | – | 196855 CPE10-M1BH-30LS-QS-4 |
| | | | | QS-6 | – | 196856 CPE10-M1BH-30LS-QS-6 |
| | | Plug connector M8x1 | | M7 | 40 | 550236 CPE10-M1CH-30LS-M7 |
| 5/2 way valve, single solenoid | | | | | | |
|  | Internal | Plug pins, connection pattern ZC | 24 V DC | M5 | – | 196881 CPE10-M1BH-5L-M5 |
| | | | | M7 | 56 | 196927 CPE10-M1BH-5L-M7 |
| | | | | QS-4 | – | 196882 CPE10-M1BH-5L-QS-4 |
| | | | | QS-6 | – | 196883 CPE10-M1BH-5L-QS-6 |
| | | Plug connector M8x1 | | M7 | 56 | 550223 CPE10-M1CH-5L-M7 |
| 5/2-way valve, double solenoid | | | | | | |
|  | Internal | Plug pins, connection pattern ZC | 24 V DC | M5 | – | 196875 CPE10-M1BH-5J-M5 |
| | | | | M7 | 68 | 196925 CPE10-M1BH-5J-M7 |
| | | | | QS-4 | – | 196876 CPE10-M1BH-5J-QS-4 |
| | | | | QS-6 | – | 196877 CPE10-M1BH-5J-QS-6 |
| | | Plug connector M8x1 | | M7 | 68 | 550225 CPE10-M1CH-5J-M7 |
| 5/2 way valve, single solenoid | | | | | | |
|  | External | Plug pins, connection pattern ZC | 24 V DC | M5 | – | 196884 CPE10-M1BH-5LS-M5 |
| | | | | M7 | 56 | 196928 CPE10-M1BH-5LS-M7 |
| | | | | QS-4 | – | 196885 CPE10-M1BH-5LS-QS-4 |
| | | | | QS-6 | – | 196886 CPE10-M1BH-5LS-QS-6 |
| | | Plug connector M8x1 | | M7 | 56 | 550224 CPE10-M1CH-5LS-M7 |

Solenoid valves CPE10

Ordering data

| Ordering data | | | | | | | |
|---|------------------|----------------------------------|-------------------|----------------------|------------|---------------------|-------------------------|
| Circuit symbol | Pilot air supply | Electrical connection | Operating voltage | Pneumatic connection | Weight [g] | Part No. | Type |
| 5/2-way valve, double solenoid | | | | | | | |
|  | External | Plug pins, connection pattern ZC | 24 V DC | M5 | – | 196878 | CPE10-M1BH-5JS-M5 |
| | | | | M7 | 68 | 196926 | CPE10-M1BH-5JS-M7 |
| | | | | QS-4 | – | 196879 | CPE10-M1BH-5JS-QS-4 |
| | | | | QS-6 | – | 196880 | CPE10-M1BH-5JS-QS-6 |
| | | Plug connector M8x1 | M7 | 68 | 550226 | CPE10-M1CH-5JS-M7 | |
| 5/3-way mid-position valve, normally closed | | | | | | | |
|  | Internal | Plug pins, connection pattern ZC | 24 V DC | M5 | – | 533159 | CPE10-M1BH-5/3G-M5-B |
| | | | | M7 | 68 | 533141 | CPE10-M1BH-5/3G-M7-B |
| | | | | QS-4 | – | 533147 | CPE10-M1BH-5/3G-QS-4-B |
| | | | | QS-6 | – | 533153 | CPE10-M1BH-5/3G-QS-6-B |
| | | Plug connector M8x1 | M7 | 68 | 550227 | CPE10-M1CH-5/3G-M7 | |
| 5/3-way mid-position valve, normally exhausted | | | | | | | |
|  | Internal | Plug pins, connection pattern ZC | 24 V DC | M5 | – | 533161 | CPE10-M1BH-5/3E-M5-B |
| | | | | M7 | 68 | 533143 | CPE10-M1BH-5/3E-M7-B |
| | | | | QS-4 | – | 533149 | CPE10-M1BH-5/3E-QS-4-B |
| | | | | QS-6 | – | 533155 | CPE10-M1BH-5/3E-QS-6-B |
| | | Plug connector M8x1 | M7 | 68 | 550229 | CPE10-M1CH-5/3E-M7 | |
| 5/3-way mid-position valve, normally open | | | | | | | |
|  | Internal | Plug pins, connection pattern ZC | 24 V DC | M5 | – | 533163 | CPE10-M1BH-5/3B-M5-B |
| | | | | M7 | 68 | 533145 | CPE10-M1BH-5/3B-M7-B |
| | | | | QS-4 | – | 533151 | CPE10-M1BH-5/3B-QS-4-B |
| | | | | QS-6 | – | 533157 | CPE10-M1BH-5/3B-QS-6-B |
| | | Plug connector M8x1 | M7 | 68 | 550231 | CPE10-M1CH-5/3B-M7 | |
| 5/3-way mid-position valve, normally closed | | | | | | | |
|  | External | Plug pins, connection pattern ZC | 24 V DC | M5 | – | 533160 | CPE10-M1BH-5/3GS-M5-B |
| | | | | M7 | 68 | 533142 | CPE10-M1BH-5/3GS-M7-B |
| | | | | QS-4 | – | 533148 | CPE10-M1BH-5/3GS-QS-4-B |
| | | | | QS-6 | – | 533154 | CPE10-M1BH-5/3GS-QS-6-B |
| | | Plug connector M8x1 | M7 | 68 | 550228 | CPE10-M1CH-5/3GS-M7 | |
| 5/3-way mid-position valve, normally exhausted | | | | | | | |
|  | External | Plug pins, connection pattern ZC | 24 V DC | M5 | – | 533162 | CPE10-M1BH-5/3ES-M5-B |
| | | | | M7 | 68 | 533144 | CPE10-M1BH-5/3ES-M7-B |
| | | | | QS-4 | – | 533150 | CPE10-M1BH-5/3ES-QS-4-B |
| | | | | QS-6 | – | 533156 | CPE10-M1BH-5/3ES-QS-6-B |
| | | Plug connector M8x1 | M7 | 68 | 550230 | CPE10-M1CH-5/3ES-M7 | |
| 5/3-way mid-position valve, normally open | | | | | | | |
|  | External | Plug pins, connection pattern ZC | 24 V DC | M5 | – | 533164 | CPE10-M1BH-5/3BS-M5-B |
| | | | | M7 | 68 | 533146 | CPE10-M1BH-5/3BS-M7-B |
| | | | | QS-4 | – | 533152 | CPE10-M1BH-5/3BS-QS-4-B |
| | | | | QS-6 | – | 533158 | CPE10-M1BH-5/3BS-QS-6-B |
| | | Plug connector M8x1 | M7 | 68 | 550232 | CPE10-M1CH-5/3BS-M7 | |

Manifold blocks CPE10

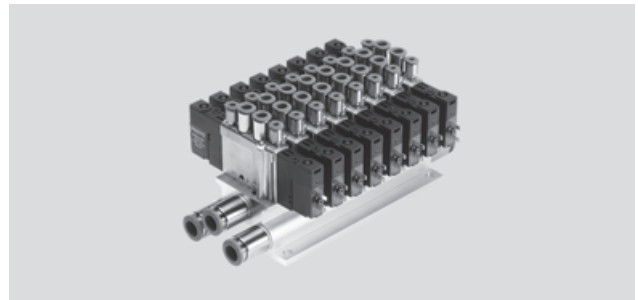
Technical data – Manifold block



Manifold block CPE...-PRS

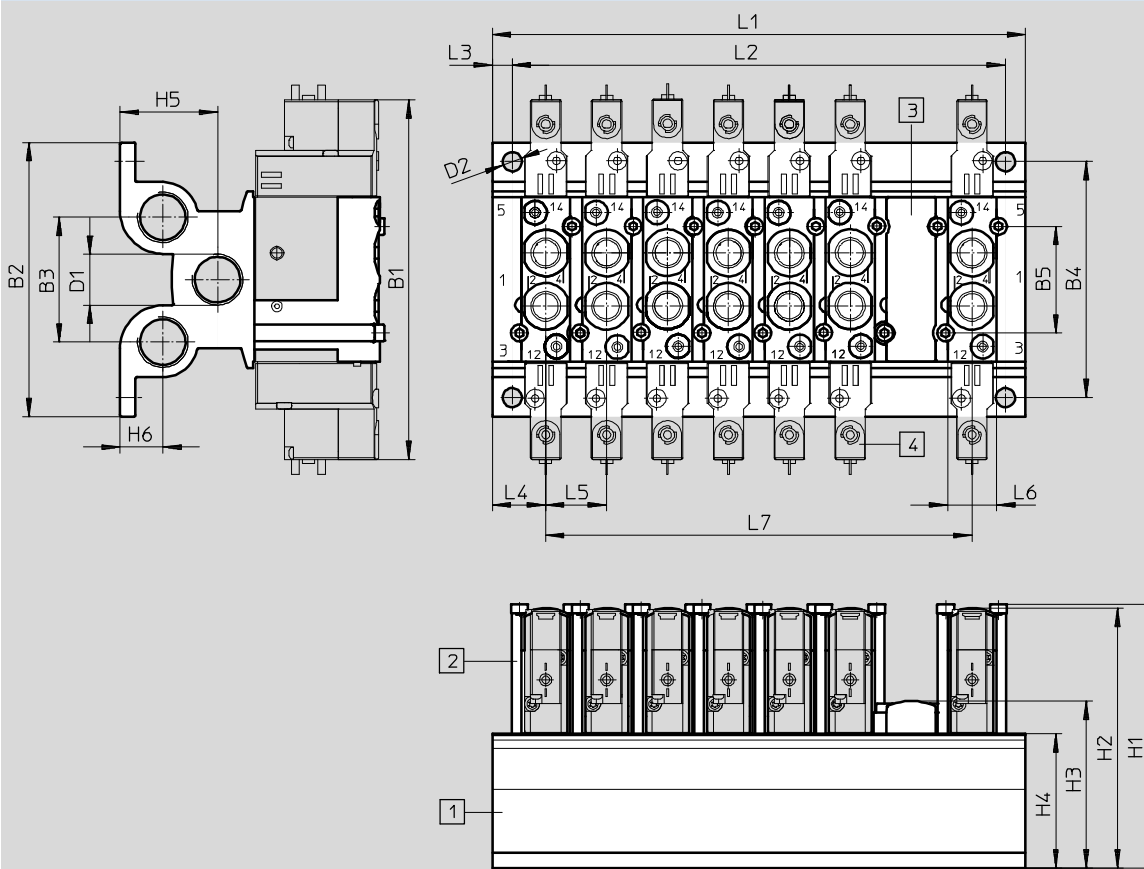
Materials:

Wrought aluminium alloy



Dimensions – Fixed-grid manifold 5/2 and 5/3

Download CAD data → www.festo.com



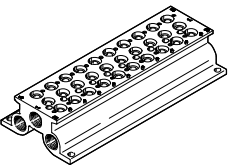
- 1 Manifold block
- 2 Retainer
- 3 Cover plate
- 4 Valves

| Type | B1 | B2 | B3 | B4 | B5 | D1 | D2 | H1 | H2 | H3 | H4 | H5 | H6 |
|--------------|-----|----|----|------|----|------|-----|----|------|------|----|------|----|
| CPE10-PRS... | 103 | 79 | 35 | 67.5 | 26 | G1/4 | 5.3 | 72 | 69.5 | 44.8 | 34 | 23.5 | 11 |


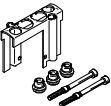
| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 |
|--------------|------------------------|-------------------|-----|----|----|------|-------------------|
| CPE10-PRS... | $28 + (n-1) \times 16$ | $L1 - 11 \pm 0.1$ | 5.5 | 14 | 16 | 13.4 | $(n-1) \times 16$ |




Manifold blocks CPE10

Ordering data – Fixed-grid manifold block

| Ordering data | | | | | | |
|---|-----------------|-------------------|-----------------------------|------------|----------|------------------|
| | Valve positions | CRC ¹⁾ | Max. tightening torque [Nm] | Weight [g] | Part No. | Type |
| Manifold block for 5/2- and 5/3-way valves | | | | | | |
|  | 2 | 2 | 1.2 | 131 | 543821 | CPE10-PRS-1/4-2 |
| | 3 | | | 179 | 543822 | CPE10-PRS-1/4-3 |
| | 4 | | | 227 | 543823 | CPE10-PRS-1/4-4 |
| | 5 | | | 275 | 543824 | CPE10-PRS-1/4-5 |
| | 6 | | | 323 | 543825 | CPE10-PRS-1/4-6 |
| | 7 | | | 371 | 543826 | CPE10-PRS-1/4-7 |
| | 8 | | | 419 | 543827 | CPE10-PRS-1/4-8 |
| | 9 | | | 467 | 543828 | CPE10-PRS-1/4-9 |
| | 10 | | | 515 | 543829 | CPE10-PRS-1/4-10 |

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

| Ordering data | | | |
|---|--|----------|--------------|
| | Material | Part No. | Type |
| Blanking plate for unused valve position | | | |
|  | PA | 544479 | CPE10-RP |
| Retainer set | | | |
|  | Retainer: High-alloy stainless steel Screws: Galvanised steel Seals: NBR | 544394 | CPE10-H5-SET |

| Ordering data | | | |
|---|--|----------|-------------------|
| | Material | Part No. | Type |
| Retainer | | | |
|  | Retainer: High-alloy stainless steel (packaging unit 50 pieces) | 547045 | CPE10-H5-50 |
| Screws | | | |
|  | Galvanised steel (packaging unit 100 pieces) | 547048 | M3X40-8.8-VS-100 |
| Seals | | | |
|  | NBR (packaging unit 150 pieces) | 547051 | CPV10-VI-P.M7-150 |

Manifold blocks CPE10

Technical data – Fixed-grid manifold block



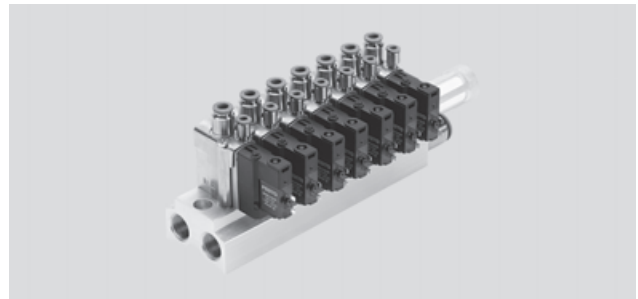
Manifold block

For CPE10 3/2

Materials:

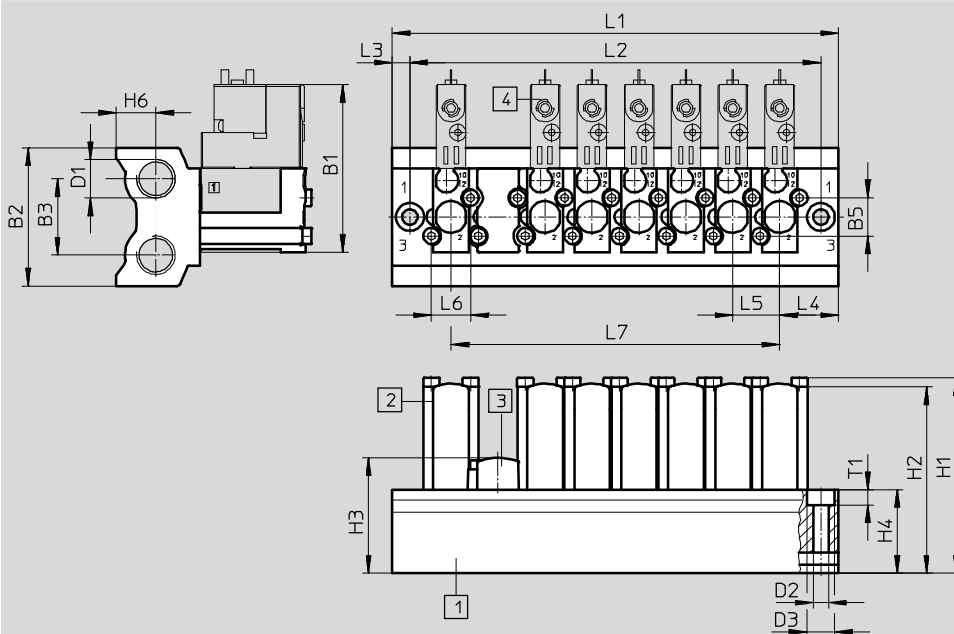
Wrought aluminium alloy

RoHS compliant



Dimensions – Fixed-grid manifold 3/2

Download CAD data → www.festo.com



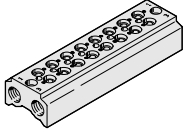
1 Manifold block 2 Retainer 3 Cover plate 4 Valves

| Type | B1 | B2 | B3 | B5 | D1 | D2 | D3 | H1 | H2 | H3 | H4 | H6 |
|------------------|----|----|----|----|------|-----|-----|------|------|------|------|------|
| CPE10-3/2-PRS... | 57 | 47 | 26 | 13 | G1/4 | 5.3 | 9.5 | 66.5 | 63.5 | 39.3 | 28.5 | 13.5 |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | T1 |
|------------------|------------------------|------------------------|----|----|----|------|-------------------|-----|
| CPE10-3/2-PRS... | $40 + (n-1) \times 16$ | $28 + (n-1) \times 16$ | 6 | 20 | 16 | 13.4 | $(n-1) \times 16$ | 5.3 |


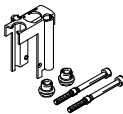
Manifold blocks CPE10




Ordering data – Fixed-grid manifold block

| Ordering data | | | | | | |
|---|-----------------|-------------------|--|------------|----------|----------------------|
| | Valve positions | CRC ¹⁾ | Max. tightening torque for valve mounting [Nm] | Weight [g] | Part No. | Type |
| Manifold block for 3/2-way valves | | | | | | |
|  | 2 | 2 | 1.2 | 128 | 550550 | CPE10-3/2-PRS-1/4-2 |
| | 3 | | | 164 | 550551 | CPE10-3/2-PRS-1/4-3 |
| | 4 | | | 201 | 550552 | CPE10-3/2-PRS-1/4-4 |
| | 5 | | | 237 | 550553 | CPE10-3/2-PRS-1/4-5 |
| | 6 | | | 274 | 550554 | CPE10-3/2-PRS-1/4-6 |
| | 7 | | | 310 | 550555 | CPE10-3/2-PRS-1/4-7 |
| | 8 | | | 347 | 550556 | CPE10-3/2-PRS-1/4-8 |
| | 9 | | | 383 | 550557 | CPE10-3/2-PRS-1/4-9 |
| | 10 | | | 420 | 550558 | CPE10-3/2-PRS-1/4-10 |

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

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

| Ordering data | | | |
|---|--|----------|--------------|
| | Material | Part No. | Type |
| Cover plate | | | |
|  | PA RoHS compliant | 550580 | CPE10-RP3 |
| Retainer set | | | |
|  | Retainer: High-alloy stainless steel Screws: Galvanised steel Seals: NBR RoHS compliant | 550577 | CPE10-H3-SET |

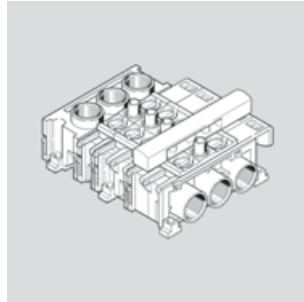
| Ordering data | | | |
|---|--|----------|-------------------|
| | Material | Part No. | Type |
| Retainer | | | |
|  | Retainer: High-alloy stainless steel (packaging unit 50 pieces) | 551490 | CPE10-H3-50 |
| Screws | | | |
|  | Galvanised steel (packaging unit 100 pieces) | 547048 | M3X40-8.8-VS-100 |
| Seals | | | |
|  | NBR (packaging unit 150 pieces) | 547051 | CPV10-VI-P.M7-150 |

Manifold blocks CPE10

Technical data – Modular manifold

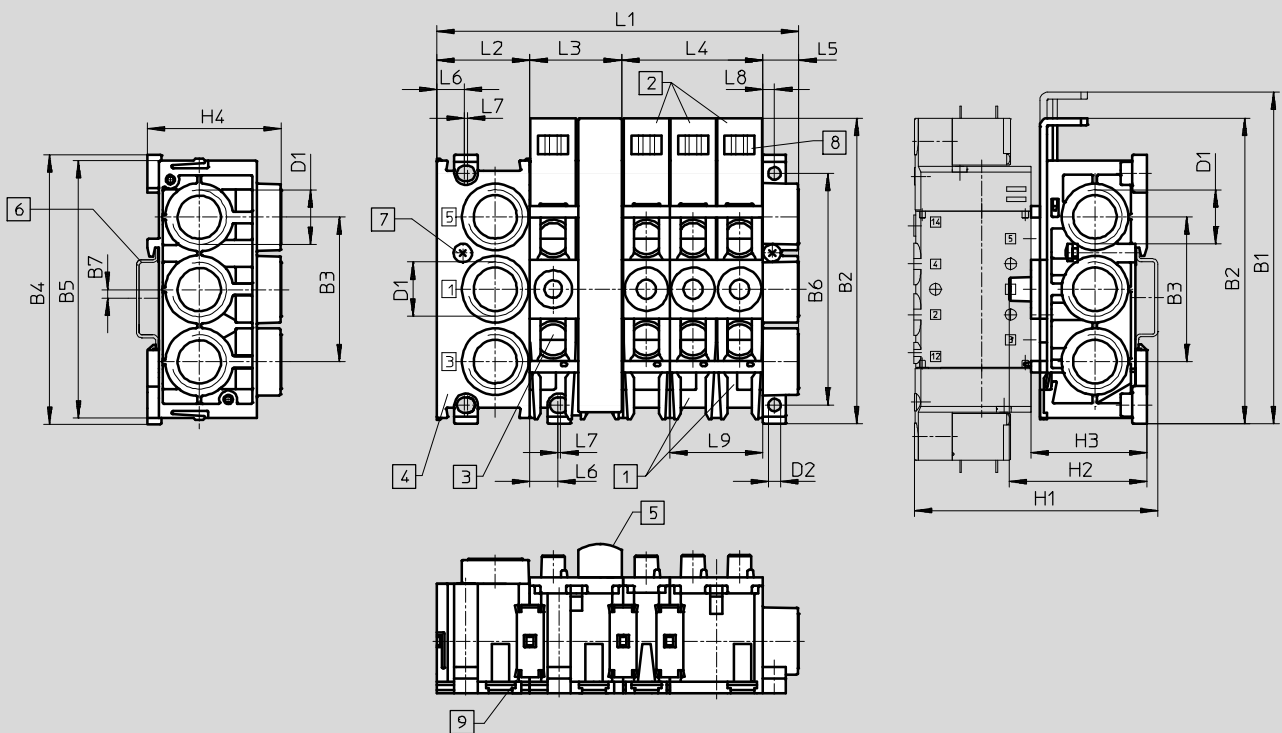
Modular manifold block
For CPE18 5/2 and 5/3

Materials:
PA, reinforced



Dimensions – Modular manifold block

Download CAD data → www.festo.com



- | | | | |
|--|---|------------------------------------|---|
| 1) Manifold block CPE...-PRSG...-2 for 2 valves | 3) Expansion block CPE...-PRSE...-2 for 2 valves | 6) H-rail to EN 50002 for mounting | 8) Location for inscription labels type IBS 6 x 10 |
| 2) Manifold block CPE...-PRSG...-3 for 3 valves | 4) End block CPE...-PRS-EP | 7) Clamping screw for H-rail | 9) Connector |
| | 5) Blanking plate CPE...-PRSB | | |

| Size | B1 | B2 | B3 | B4 | B5 | B6 | B7 | D1 | D2 | H1 | H2 | H3 | H4 |
|-------|------|----|----|----|----|----|----|------|-----|-----|-----|-----|----|
| CPE10 | 93.5 | 87 | 37 | 73 | 71 | 60 | 7 | G1/4 | 3.3 | ~72 | ~40 | ~34 | 37 |

| Size | L1 ¹⁾ | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 |
|-------|------------------|----|----|----|------|-----|----|-----|----|
| CPE10 | 24+(nx12)+11.4 | 24 | 24 | 36 | 11.4 | 9.6 | - | 3.2 | 24 |


1) n = number of valve positions

Manifold blocks CPE10

Technical data – Modular manifold

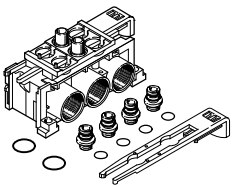
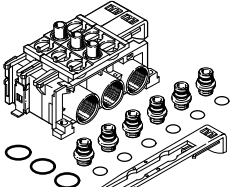
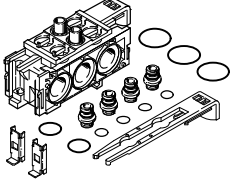
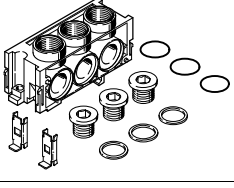
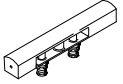


| Possible combinations | | | |
|---------------------------|---|---|--|
| Number of valve positions | One pressure zone | Two pressure zones | |
| | | Variant 1 | Variant 2 |
| 2 | 1x CPE...-PRSG-2 | – | – |
| 3 | 1x CPE...-PRSG-3 | – | – |
| 4 | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 | 1x CPE...-PRSG-2 1x CPE...-PRSEO-2 1x CPE...-PRS-EP | – |
| 5 | 1x CPE...-PRSGO-3 1x CPE...-PRSE-2 | 1x CPE...-PRSG-3 1x CPE...-PRSEO-2 1x CPE...-PRS-EP | – |
| 6 | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 1x CPE...-PRSE-2 | 1x CPE...-PRSG-2 2x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 1x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 7 | 1x CPE...-PRSGO-3 2x CPE...-PRSE-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-3 2x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-3 1x CPE...-PRSE-2 1x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 8 | 1x CPE...-PRSGO-2 3x CPE...-PRSE-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-2 3x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 2x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 9 | 1x CPE...-PRSGO-3 3x CPE...-PRSE-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-3 3x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-3 1x CPE...-PRSE-2 2x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 10 | 1x CPE...-PRSGO-2 4x CPE...-PRSE-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-2 4x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 3x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 11 | 1x CPE...-PRSGO-3 4x CPE...-PRSE-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-3 4x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-3 1x CPE...-PRSE-2 3x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 12 | 1x CPE...-PRSGO-2 5x CPE...-PRSE-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-2 5x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 4x CPE...-PRSEO-2 1x CPE...-PRS-EP |

 Note
 A maximum of 6 valve positions are possible per air supply.
 Use valve manifold blocks only in combination with 5/2- and 5/3-way valves.

Manifold blocks CPE10




Ordering data – Modular manifold

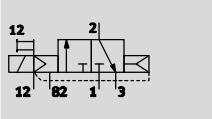
| Ordering data | | | | | |
|---|--------------|-----------|------------|---------------|----------------------|
| | Port 1, 3, 5 | PRS ducts | Weight [g] | Part No. | Type |
| Manifold block PRSG for 2 valves | | | | | |
|  | G1/4 | Closed | 50 | 164960 | CPE10-PRSG-2 |
| | G1/4 | Open | 50 | 187827 | CPE10-PRSGO-2 |
| Manifold block PRSG for 3 valves | | | | | |
|  | G1/4 | Closed | 70 | 187823 | CPE10-PRSG-3 |
| | G1/4 | Open | 70 | 187819 | CPE10-PRSGO-3 |
| Manifold block PRSE for 2 valves | | | | | |
|  | - | Closed | 40 | 164962 | CPE10-PRSE-2 |
| | - | Open | 40 | 187828 | CPE10-PRSEO-2 |
| End plate for manifold | | | | | |
|  | G1/4 | - | 70 | 164964 | CPE10-PRS-EP |
| Blanking plate for unused valve position | | | | | |
|  | - | - | 10 | 164963 | CPE10-PRSB |

Solenoid valves CPE14

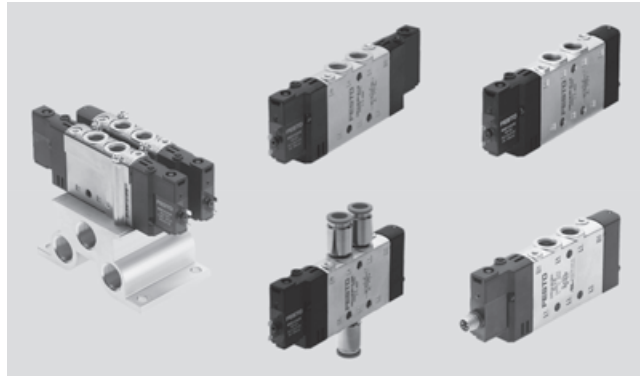
Technical data

Function
 3/2G, 3/2O,
 5/2-way, single solenoid,
 5/2-way, double solenoid valve
 5/3G, 5/3B, 5/3E

-  - Width 14 mm
-  - Flow rate
370 ... 900 l/min
-  - Voltage
24 V DC



e.g. 3/2-way valve with external pilot air supply, normally closed



| General technical data | | | | | | | |
|--|--|--|---|----------|-----------------|-----------------|-----------------|
| Valve function | 3/2 | | 5/2 | | 5/3 | | |
| Normal position | G ¹⁾ | O ²⁾ | - | | G ¹⁾ | B ²⁾ | E ³⁾ |
| Stable position | Monostable | | | Bistable | | Monostable | |
| Reset method: pneumatic spring | Yes | | | - | | No | |
| Reset method: mechanical spring | No | | | - | | Yes | |
| Design | Piston spool | | | | | | |
| Sealing principle | Soft | | | | | | |
| Type of actuation | Electrical | | | | | | |
| Type of control | Pilot | | | | | | |
| Pilot air supply | Internal or external | | | | | | |
| Flow direction | - | | Reversible with external pilot air supply | | | | |
| Exhaust air function | - | | With flow control | | | | |
| Manual override | Non-detenting, detenting via accessory | | | | | | |
| Type of mounting | Via through-holes | | | | | | |
| Mounting position | Any | | | | | | |
| Pneumatic connection | 1, 2, 4 | Threaded connection: G1/8 QS connection: Ø 6 or Ø 8 mm | | | | | |
| | 3, 5 | Threaded connection: G1/8 | | | | | |
| | 12, 14 | Threaded connection: M3; QS connection: Ø 3 mm | | | | | |
| | 82, 84 | Threaded connection: M3 | | | | | |
| Nominal width | [mm] | 6 | | | | | |
| Standard nominal flow rate | G1/8 | [l/min] | 900 | 800 | 750 | | 700 |
| Standard nominal flow rate | QS6 | [l/min] | 510 | 400 | 410 | 370 | |
| Standard nominal flow rate | QS8 | [l/min] | 810 | 680 | 720 | 650 | 570 |
| Switching time on/off | [ms] | 16/27 | | 24/32 | - | | 20/42 |
| Changeover time | [ms] | - | | 12 | | - | |
| Duty cycle | [%] | 100 | | | | | |
| Width | [mm] | 14 | | | | | |
| Corrosion resistance class CRC ⁴⁾ | | 2 | | | | | |

1) G = normally closed

2) O, B = normally open

3) E = normally exhausted

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

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Solenoid valves CPE14

Technical data

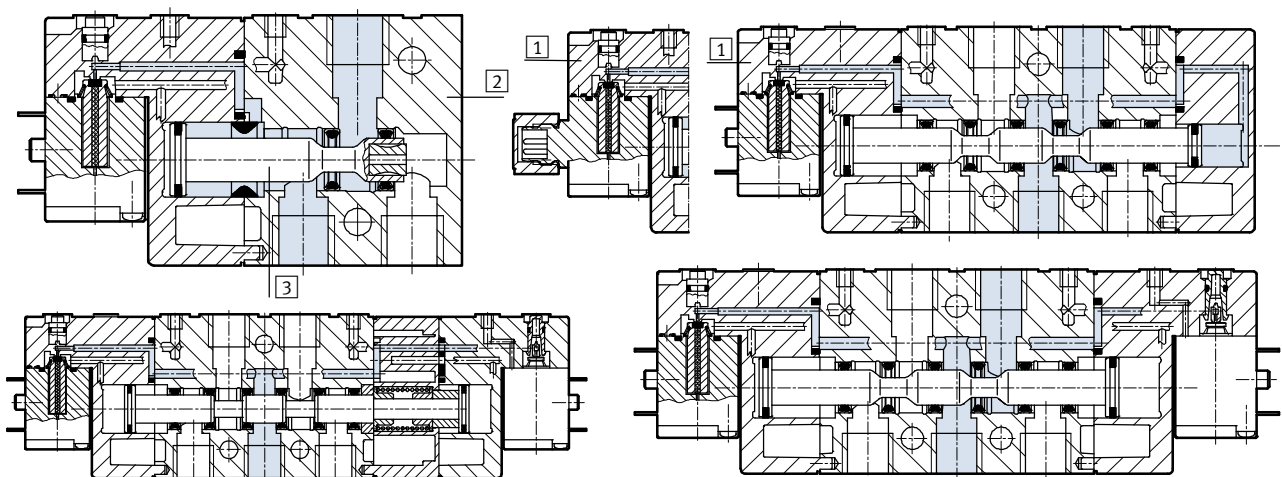
| Operating and environmental conditions | | | | | | |
|--|---------------------------|--|--------------------------|--------------------------|---------|---------|
| Valve function | | 3/2 | 5/2-way, single solenoid | 5/2-way, double solenoid | 5/3 | |
| Operating medium | | Compressed air to ISO 8573-1:2010 [7:4:4] | | | | |
| Pilot medium | | Compressed air to ISO 8573-1:2010 [7:4:4] | | | | |
| Note on operating/pilot medium | | Lubricated operation possible (in which case lubricated operation will always be required) | | | | |
| Operating pressure | Internal pilot air supply | [bar] | 2.5 ... 8 | 3 ... 8 | 2 ... 8 | 3 ... 8 |
| | External pilot air supply | [bar] | -0.9 ... +10 | | | |
| Pilot pressure | | [bar] | 2.5 ... 8 | 3 ... 8 | 2 ... 8 | 3 ... 8 |
| Ambient temperature | | [°C] | -5 ... +50 | | | |
| Temperature of medium | | [°C] | -5 ... +50 | | | |
| Certification for solenoid valves | | c UL us - Recognized (OL) (not with M1CH-...) | | | | |
| Maritime classification ¹⁾ | | See certificate | | | | |

1) Additional information www.festo.com/sp → Certificates.

| Electrical data | | | |
|--|------------|---|-------------|
| Operating voltage | M1BH, M1CH | [V DC] | 24 +10/-15% |
| Power consumption | M1BH, M1CH | [W] | 1.28 |
| Degree of protection with plug socket | | IP65 to IEC 60529 M1CH: IP65/IP67 to IEC 60529 | |
| Max. tightening torque of plug socket M8x1 | M1CH | [Nm] | 0.4 |

Materials

Sectional view



| | | |
|-------------------|--------------|--------------------|
| 1 | Cap | PA |
| 2 | Housing | Die-cast aluminium |
| 3 | Piston spool | Steel |
| - | Seals | NBR |
| Note on materials | | RoHS compliant |

Solenoid valves CPE14

Technical data

FESTO

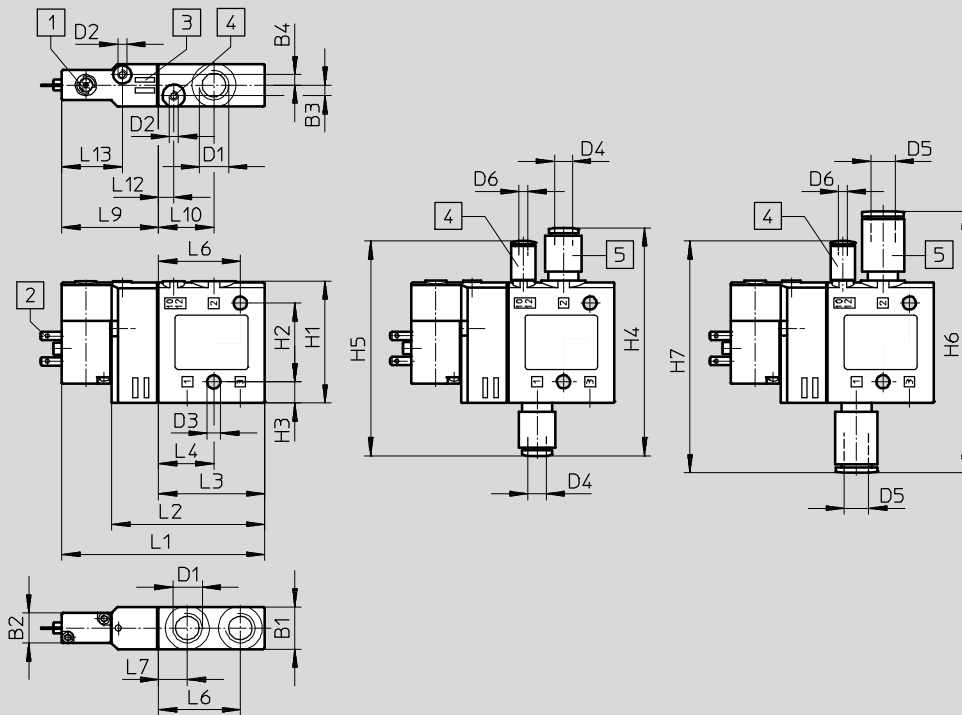
Dimensions – 3/2-way valve

Download CAD data → www.festo.com

CPE14-...-1/8

CPE14-...-QS-6

CPE14-...-QS-8



- 1 Manual override
- 2 Plug pins, connection pattern ZC
- 3 Location for inscription labels
- 4 Port 10/12 for external pilot air supply
- 5 QS push-in fitting

| Type | B1 | B2 | B3 | B4 | D1 | D2 | D3 | D4 | D5 | D6 | H1 | H2 | H3 | H4 | H5 | H6 | H7 |
|-----------------|----|----|-----|-----|------|----|-----|----|----|----|------|----|----|------|------|------|------|
| CPE14-M1BH-3... | 14 | 10 | 3.5 | 3.5 | G1/8 | M3 | 4.4 | 6 | 8 | 3 | 40.3 | 26 | 7 | 75.3 | 70.9 | 86.3 | 76.4 |

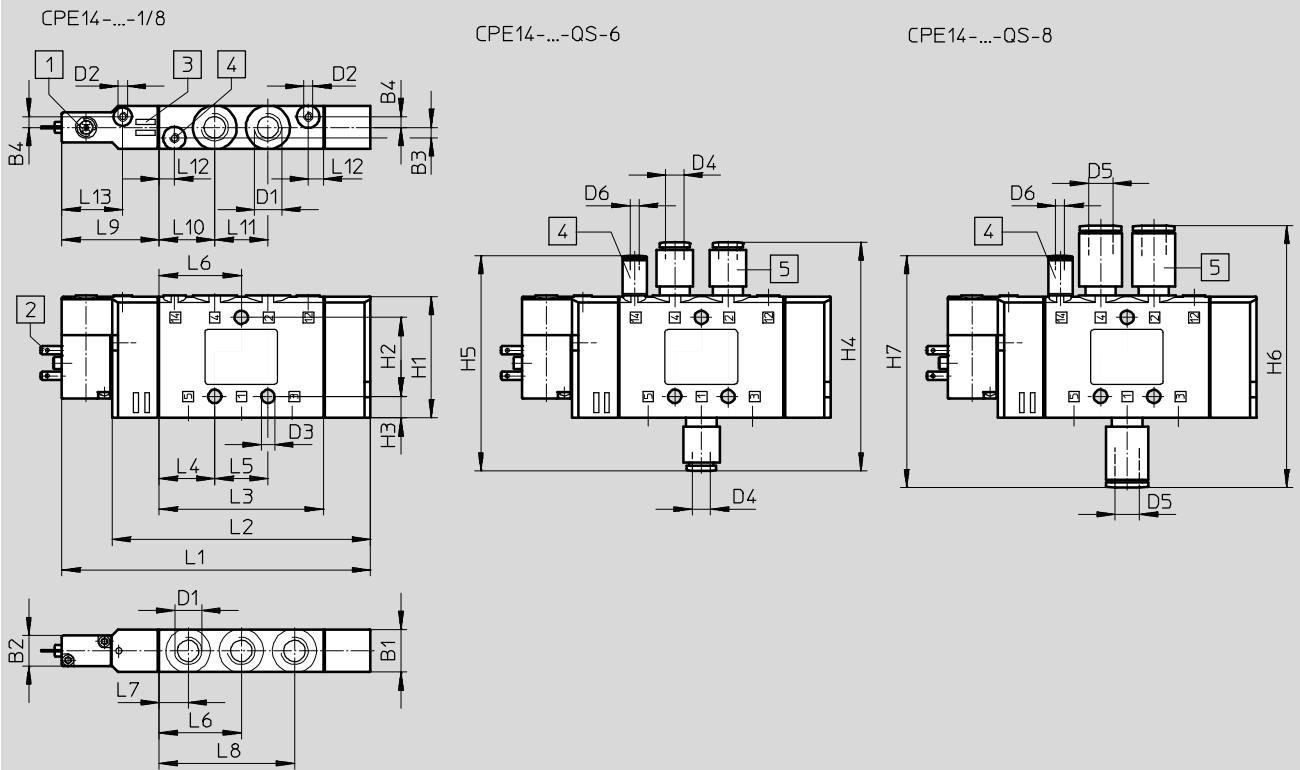
| Type | L1 | L2 | L3 | L4 | L6 | L7 | L9 | L10 | L12 | L13 |
|-----------------|----|------|----|------|----|-----|----|-----|-----|-----|
| CPE14-M1BH-3... | 67 | 50.5 | 35 | 18.3 | 27 | 9.5 | 32 | 18 | 5 | 20 |

Solenoid valves CPE14

Technical data

Dimensions – 5/2-way single solenoid valve

Download CAD data → www.festo.com



- 1 Manual override
- 2 Plug pins, connection pattern ZC
- 3 Location for inscription labels
- 4 Port 12/14 for external pilot air supply
- 5 QS push-in fitting

| Type | B1 | B2 | B3 | B4 | D1 | D2 | D3 | D4 | D5 | D6 | H1 | H2 | H3 | H4 | H5 | H6 | H7 |
|------------------|----|----|-----|-----|------|----|-----|----|----|----|-----|----|----|------|------|------|------|
| CPE14-M1BH-5L... | 14 | 10 | 3.5 | 3.5 | G1/8 | M3 | 4.4 | 6 | 8 | 3 | 403 | 26 | 7 | 75.3 | 70.9 | 86.3 | 76.4 |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 |
|------------------|-------|----|----|------|------|----|-----|------|----|------|------|-----|-----|
| CPE14-M1BH-5L... | 101.5 | 85 | 54 | 18.3 | 17.5 | 27 | 9.5 | 44.5 | 32 | 18.3 | 17.5 | 5 | 20 |

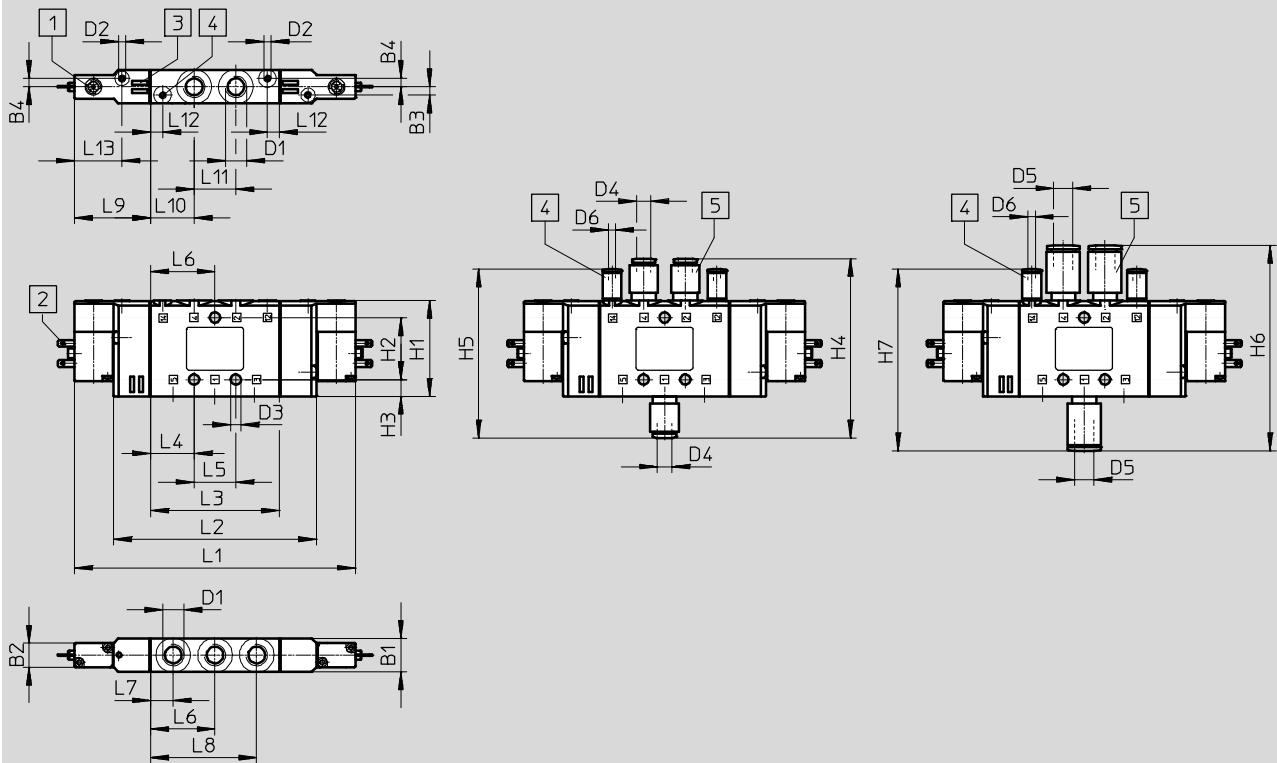
Solenoid valves CPE14

Technical data

FESTO

Dimensions – 5/2-way double solenoid valve

Download CAD data → www.festo.com



- 1 Manual override, non-detenting
- 2 Plug pins, connection pattern ZC
- 3 Location for inscription labels
- 4 Port 12/14 for external pilot air supply
- 5 QS push-in fitting

| Type | B1 | B2 | B3 | B4 | D1 | D2 | D3 | D4 | D5 | D6 | H1 | H2 | H3 | H4 | H5 | H6 | H7 |
|------------------|----|----|-----|-----|------|----|-----|----|----|----|------|----|----|------|------|------|------|
| CPE14-...-5J-1/8 | 14 | 10 | 3.5 | 3.5 | G1/8 | M3 | 4.4 | 6 | 8 | 3 | 40.3 | 26 | 7 | 75.3 | 70.9 | 86.3 | 76.4 |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 |
|------------------|-----|----|----|------|------|----|-----|------|----|------|------|-----|-----|
| CPE14-...-5J-1/8 | 118 | 85 | 54 | 18.3 | 17.5 | 27 | 9.5 | 44.5 | 32 | 18.3 | 17.5 | 5 | 20 |

Solenoid valves CPE14

Technical data

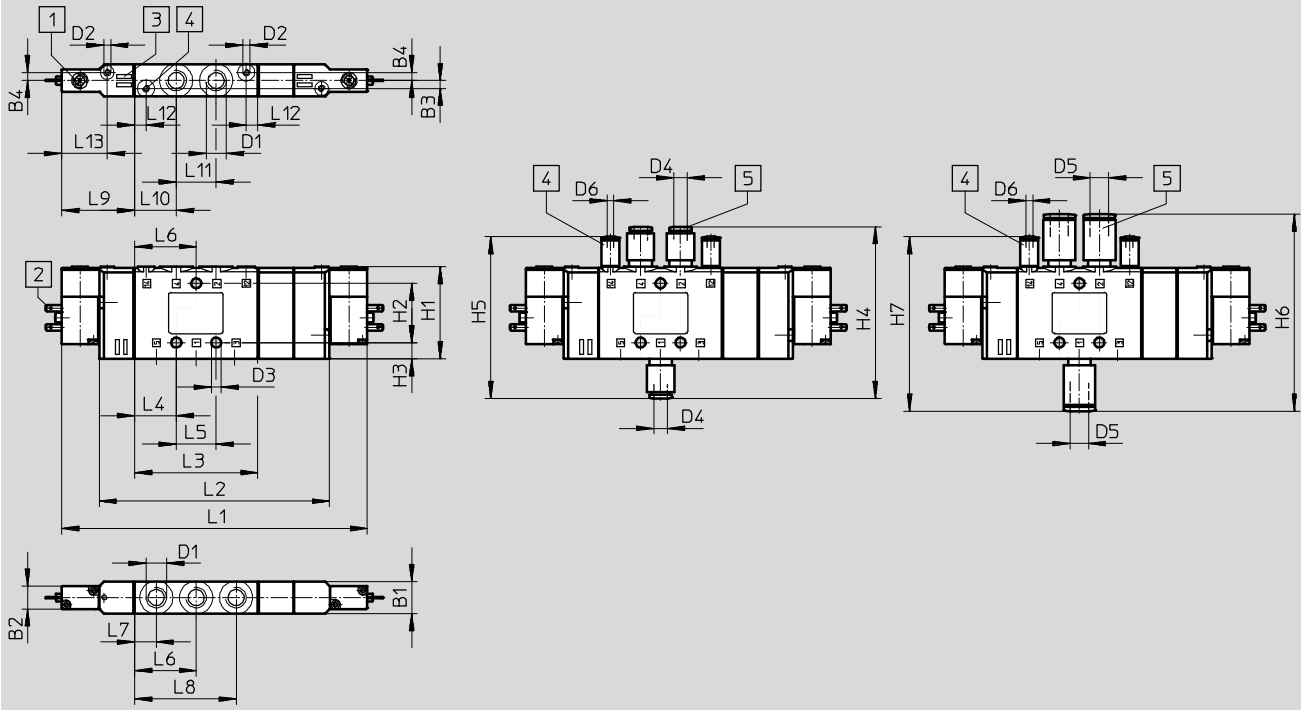
Dimensions – 5/3-way valve

Download CAD data → www.festo.com

CPE14-...-1/8

CPE14-...-QS-6

CPE14-...-QS-8



- 1 Manual override
- 2 Plug pins, connection pattern ZC
- 3 Location for inscription labels
- 4 Port 12/14 for external pilot air supply
- 5 QS push-in fitting

| Type | B1 | B2 | B3 | B4 | D1 | D2 | D3 | D4 | D5 | D6 | H1 | H2 | H3 | H4 | H5 | H6 | H7 |
|-------------------|----|----|-----|-----|------|----|-----|----|----|----|-----|----|----|------|------|------|------|
| CPE14-M1BH...-5J | 14 | 10 | 3.5 | 3.5 | G1/8 | M3 | 4.4 | 6 | 8 | 3 | 403 | 26 | 7 | 75.3 | 70.9 | 86.3 | 76.4 |
| CPE14-M1BH...-5/3 | | | | | | | | | | | | | | | | | |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 |
|-------------------|-----|-----|----|------|------|----|-----|------|----|------|------|-----|-----|
| CPE14-M1BH...-5J | 118 | 85 | 46 | 18.3 | 17.5 | 27 | 9.5 | 44.5 | 32 | 18.3 | 17.5 | 5 | 20 |
| CPE14-M1BH...-5/3 | 134 | 101 | | | | | | | | | | | |

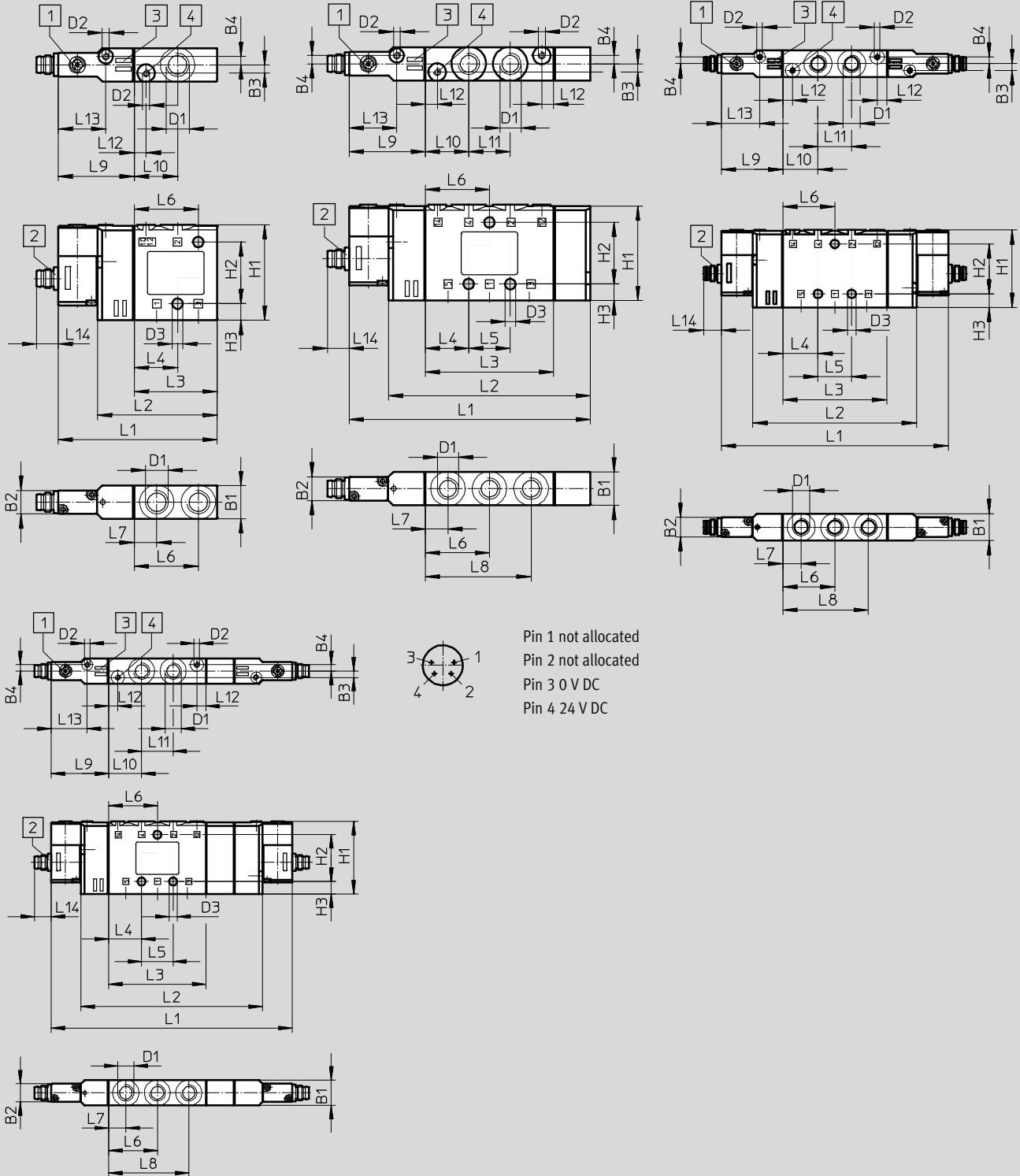
Solenoid valves CPE14

Technical data

FESTO

Dimensions – Solenoid valves with round plug M8x1

Download CAD data → www.festo.com



Pin 1 not allocated
 Pin 2 not allocated
 Pin 3 0 V DC
 Pin 4 24 V DC

- 1 Manual override
- 2 Plug M8x1
- 3 Location for inscription labels
- 4 Port 12/14 for external pilot air supply

Solenoid valves CPE14

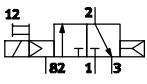
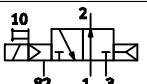
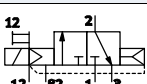
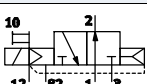
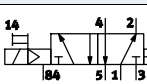
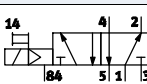
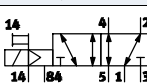
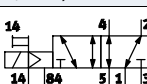
Technical data

| Type | B1 | B2 | B3 | B4 | D1 | D2 | D3 ∅ | H1 | H2 | H3 |
|------------------|----|----|-----|-----|------|----|---------|------|----|----|
| CPE14-M1CH-3... | 14 | 10 | 3.5 | 3.5 | G1/8 | M3 | 4.4 | 40.3 | 26 | 7 |
| CPE14-M1CH-5L... | | | | | | | | 40.4 | | |
| CPE14-M1CH-5J... | | | | | | | | 40.3 | | |
| CPE14-M1BH-5J | | | | | | | | 40.3 | | |
| CPE14-M1BH-5/3 | | | | | | | | | | |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 | L14 |
|-------------------|-------|------|----|------|------|----|-----|------|----|------|------|-----|-----|-----|
| CPE14-M1CH-3... | 67 | 50.5 | 35 | 18.3 | - | 27 | 9.5 | - | 32 | 18.3 | - | 5 | 20 | 9.2 |
| CPE14-M1CH-5L... | 101.5 | 85 | 54 | | 17.5 | | | 44.5 | | | 17.5 | | | |
| CPE14-M1CH-5J... | 118 | | | 17.5 | | | | | | | | | | |
| CPE14-M1BH-5J... | 134 | | | 101 | | | | | | | | | | |
| CPE14-M1BH-5/3... | | | | | | | | | | | | | | |

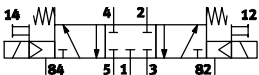
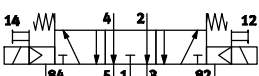
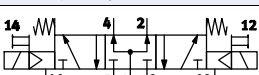
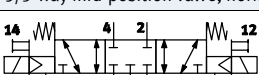
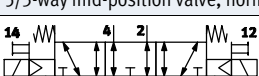
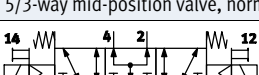
Solenoid valves CPE14

Ordering data

| Ordering data | | | | | | | |
|---|------------------|----------------------------------|-------------------|----------------------|------------|----------------------|----------------------|
| Circuit symbol | Pilot air supply | Electrical connection | Operating voltage | Pneumatic connection | Weight [g] | Part No. | Type |
| 3/2-way valve, normally closed | | | | | | | |
|  | Internal | Plug pins, connection pattern ZC | 24 V DC | G1/8 | 60 | 196929 | CPE14-M1BH-3GL-1/8 |
| | | | | QS-6 | – | 196887 | CPE14-M1BH-3GL-QS-6 |
| | | QS-8 | | – | 196888 | CPE14-M1BH-3GL-QS-8 | |
| | | Plug connector M8x1 | | G1/8 | 60 | 550247 | CPE14-M1CH-3GL-1/8 |
| 3/2-way valve, normally open | | | | | | | |
|  | Internal | Plug pins, connection pattern ZC | 24 V DC | G1/8 | 60 | 196931 | CPE14-M1BH-3OL-1/8 |
| | | | | QS-6 | – | 196891 | CPE14-M1BH-3OL-QS-6 |
| | | QS-8 | | – | 196892 | CPE14-M1BH-3OL-QS-8 | |
| | | Plug connector M8x1 | | G1/8 | 60 | 550249 | CPE14-M1CH-3OL-1/8 |
| 3/2-way valve, normally closed | | | | | | | |
|  | External | Plug pins, connection pattern ZC | 24 V DC | G1/8 | 60 | 196930 | CPE14-M1BH-3GLS-1/8 |
| | | | | QS-6 | – | 196889 | CPE14-M1BH-3GLS-QS-6 |
| | | QS-8 | | – | 196890 | CPE14-M1BH-3GLS-QS-8 | |
| | | Plug connector M8x1 | | G1/8 | 60 | 550248 | CPE14-M1CH-3GLS-1/8 |
| 3/2-way valve, normally open | | | | | | | |
|  | External | Plug pins, connection pattern ZC | 24 V DC | G1/8 | 60 | 196932 | CPE14-M1BH-3OLS-1/8 |
| | | | | QS-6 | – | 196893 | CPE14-M1BH-3OLS-QS-6 |
| | | QS-8 | | – | 196894 | CPE14-M1BH-3OLS-QS-8 | |
| | | Plug connector M8x1 | | G1/8 | 60 | 550250 | CPE14-M1CH-3OLS-1/8 |
| 5/2 way valve, single solenoid | | | | | | | |
|  | Internal | Plug pins, connection pattern ZC | 24 V DC | G1/8 | 95 | 196941 | CPE14-M1BH-5L-1/8 |
| | | | | QS-6 | – | 196911 | CPE14-M1BH-5L-QS-6 |
| | | QS-8 | | – | 196912 | CPE14-M1BH-5L-QS-8 | |
| | | Plug connector M8x1 | | G1/8 | 95 | 550237 | CPE14-M1CH-5L-1/8 |
| 5/2-way valve, double solenoid | | | | | | | |
|  | Internal | Plug pins, connection pattern ZC | 24 V DC | G1/8 | 115 | 196939 | CPE14-M1BH-5J-1/8 |
| | | | | QS-6 | – | 196907 | CPE14-M1BH-5J-QS-6 |
| | | QS-8 | | – | 196908 | CPE14-M1BH-5J-QS-8 | |
| | | Plug connector M8x1 | | G1/8 | 115 | 550239 | CPE14-M1CH-5J-1/8 |
| 5/2 way valve, single solenoid | | | | | | | |
|  | External | Plug pins, connection pattern ZC | 24 V DC | G1/8 | 95 | 196942 | CPE14-M1BH-5LS-1/8 |
| | | | | QS-6 | – | 196913 | CPE14-M1BH-5LS-QS-6 |
| | | QS-8 | | – | 196914 | CPE14-M1BH-5LS-QS-8 | |
| | | Plug connector M8x1 | | G1/8 | 95 | 550238 | CPE14-M1CH-5LS-1/8 |
| 5/2-way valve, double solenoid | | | | | | | |
|  | External | Plug pins, connection pattern ZC | 24 V DC | G1/8 | 115 | 196940 | CPE14-M1BH-5JS-1/8 |
| | | | | QS-6 | – | 196909 | CPE14-M1BH-5JS-QS-6 |
| | | QS-8 | | – | 196910 | CPE14-M1BH-5JS-QS-8 | |
| | | Plug connector M8x1 | | G1/8 | 115 | 550240 | CPE14-M1CH-5JS-1/8 |

Solenoid valves CPE14

Ordering data

| Ordering data | | | | | | | |
|---|------------------|----------------------------------|-------------------|----------------------|------------|-----------------------|-----------------------|
| Circuit symbol | Pilot air supply | Electrical connection | Operating voltage | Pneumatic connection | Weight [g] | Part No. | Type |
| 5/3-way mid-position valve, normally closed | | | | | | | |
|  | Internal | Plug pins, connection pattern ZC | 24 V DC | G1/8 | 120 | 196937 | CPE14-M1BH-5/3G-1/8 |
| | | | | QS-6 | - | 196903 | CPE14-M1BH-5/3G-QS-6 |
| | | QS-8 | | - | 196904 | CPE14-M1BH-5/3G-QS-8 | |
| | | Plug connector M8x1 | | G1/8 | 120 | 550241 | CPE14-M1CH-5/3G-1/8 |
| 5/3-way mid-position valve, normally exhausted | | | | | | | |
|  | Internal | Plug pins, connection pattern ZC | 24 V DC | G1/8 | 120 | 196935 | CPE14-M1BH-5/3E-1/8 |
| | | | | QS-6 | - | 196899 | CPE14-M1BH-5/3E-QS-6 |
| | | QS-8 | | - | 196900 | CPE14-M1BH-5/3E-QS-8 | |
| | | Plug connector M8x1 | | G1/8 | 120 | 550243 | CPE14-M1CH-5/3E-1/8 |
| 5/3-way mid-position valve, normally open | | | | | | | |
|  | Internal | Plug pins, connection pattern ZC | 24 V DC | G1/8 | 120 | 196933 | CPE14-M1BH-5/3B-1/8 |
| | | | | QS-6 | - | 196895 | CPE14-M1BH-5/3B-QS-6 |
| | | QS-8 | | - | 196896 | CPE14-M1BH-5/3B-QS-8 | |
| | | Plug connector M8x1 | | G1/8 | 120 | 550245 | CPE14-M1CH-5/3B-1/8 |
| 5/3-way mid-position valve, normally closed | | | | | | | |
|  | External | Plug pins, connection pattern ZC | 24 V DC | G1/8 | 120 | 196938 | CPE14-M1BH-5/3GS-1/8 |
| | | | | QS-6 | - | 196905 | CPE14-M1BH-5/3GS-QS-6 |
| | | QS-8 | | - | 196906 | CPE14-M1BH-5/3GS-QS-8 | |
| | | Plug connector M8x1 | | G1/8 | 120 | 550242 | CPE14-M1CH-5/3GS-1/8 |
| 5/3-way mid-position valve, normally exhausted | | | | | | | |
|  | External | Plug pins, connection pattern ZC | 24 V DC | G1/8 | 120 | 196936 | CPE14-M1BH-5/3ES-1/8 |
| | | | | QS-6 | - | 196901 | CPE14-M1BH-5/3ES-QS-6 |
| | | QS-8 | | - | 196902 | CPE14-M1BH-5/3ES-QS-8 | |
| | | Plug connector M8x1 | | G1/8 | 120 | 550244 | CPE14-M1CH-5/3ES-1/8 |
| 5/3-way mid-position valve, normally open | | | | | | | |
|  | External | Plug pins, connection pattern ZC | 24 V DC | G1/8 | 120 | 196934 | CPE14-M1BH-5/3BS-1/8 |
| | | | | QS-6 | - | 196897 | CPE14-M1BH-5/3BS-QS-6 |
| | | QS-8 | | - | 196898 | CPE14-M1BH-5/3BS-QS-8 | |
| | | Plug connector M8x1 | | G1/8 | 120 | 550246 | CPE14-M1CH-5/3BS-1/8 |

Manifold blocks CPE14

Technical data – Manifold block



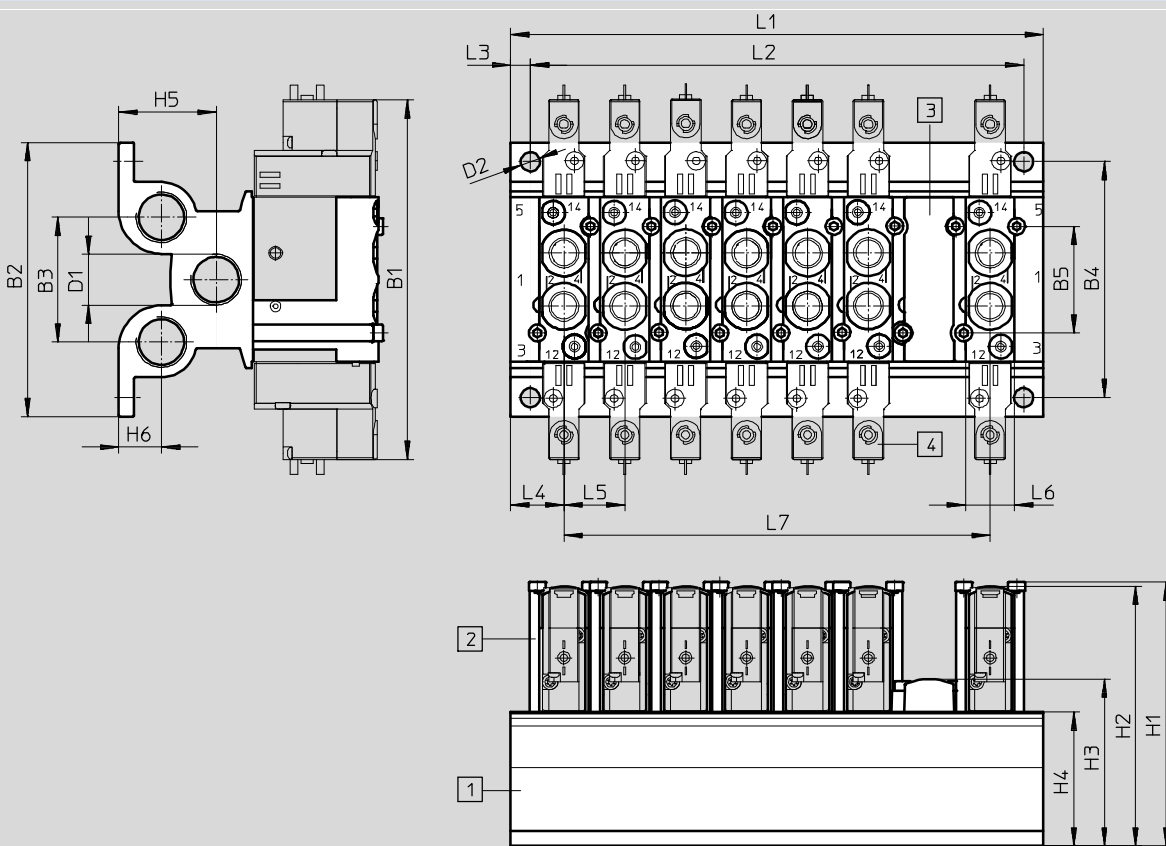
Manifold block CPE...-PRS

Materials:
Wrought aluminium alloy
RoHS compliant



Dimensions – Fixed-grid manifold 5/2 and 5/3

Download CAD data → www.festo.com



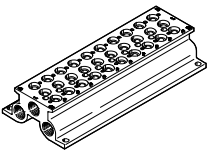
- 1 Manifold block
Grid dimension 16 mm
- 2 Retainer
- 3 Cover plate
- 4 Valves

| Type | B1 | B2 | B3 | B4 | B5 | D1 | D2 | H1 | H2 | H3 | H4 | H5 | H6 |
|--------------|-----|----|----|------|----|------|-----|------|------|------|----|----|----|
| CPE14-PRS... | 118 | 90 | 41 | 77.5 | 35 | G3/8 | 6.3 | 86.7 | 84.8 | 54.8 | 44 | 32 | 14 |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 |
|--------------|------------------------|-------------------|-----|------|----|------|-------------------|
| CPE14-PRS... | $35 + (n-1) \times 20$ | $L1 - 13 \pm 0.1$ | 6.5 | 17.5 | 20 | 17.4 | $(n-1) \times 20$ |


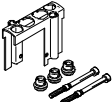
Manifold blocks CPE14




Ordering data – Fixed-grid manifold block

| Ordering data | | | | | | |
|---|-----------------|-------------------|-----------------------------|------------|----------|------------------|
| | Valve positions | CRC ¹⁾ | Max. tightening torque [Nm] | Weight [g] | Part No. | Type |
| Manifold block for 5/2- and 5/3-way valves | | | | | | |
|  | 2 | 2 | 1.2 | 239 | 543830 | CPE14-PRS-3/8-2 |
| | 3 | | | 326 | 543831 | CPE14-PRS-3/8-3 |
| | 4 | | | 412 | 543832 | CPE14-PRS-3/8-4 |
| | 5 | | | 498 | 543833 | CPE14-PRS-3/8-5 |
| | 6 | | | 584 | 543834 | CPE14-PRS-3/8-6 |
| | 7 | | | 671 | 543835 | CPE14-PRS-3/8-7 |
| | 8 | | | 757 | 543836 | CPE14-PRS-3/8-8 |
| | 9 | | | 843 | 543837 | CPE14-PRS-3/8-9 |
| | 10 | | | 930 | 543838 | CPE14-PRS-3/8-10 |

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

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

| Ordering data | | | |
|---|--|----------|--------------|
| | Material | Part No. | Type |
| Blanking plate for unused valve position | | | |
|  | PA | 544480 | CPE14-RP |
| Retainer set | | | |
|  | Retainer: High-alloy stainless steel Screws: Galvanised steel Seals: NBR | 544395 | CPE14-H5-SET |

| Ordering data | | | |
|---|--|----------|--------------------|
| | Material | Part No. | Type |
| Retainer | | | |
|  | Retainer: High-alloy stainless steel (packaging unit 50 pieces) | 547046 | CPE14-H5-50 |
| Screws | | | |
|  | Galvanised steel (packaging unit 100 pieces) | 547049 | M3X45-8.8-VS-100 |
| Seals | | | |
|  | NBR (packaging unit 150 pieces) | 547052 | CPV14-VI-P.1/8-150 |

Manifold blocks CPE14

Technical data – Fixed-grid manifold block



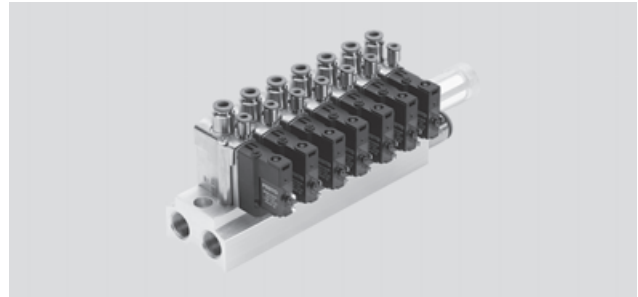
Manifold block

For CPE14 3/2

Materials:

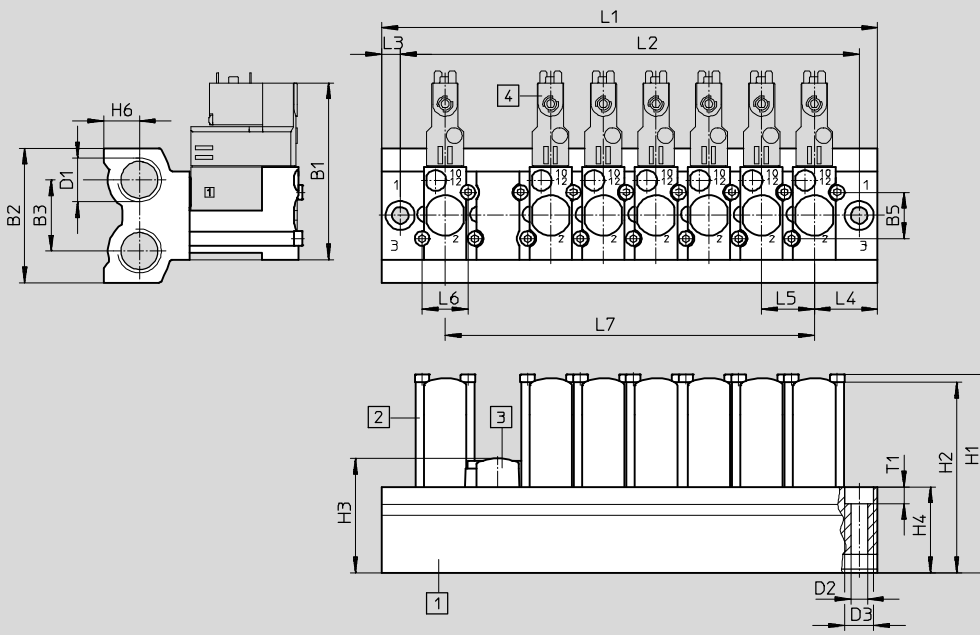
Wrought aluminium alloy

RoHS compliant



Dimensions – Fixed-grid manifold 3/2

Download CAD data → www.festo.com



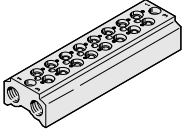
- 1 Manifold block
– Grid dimension 20 mm
- 2 Retainer
- 3 Cover plate
- 4 Valves

| Type | B1 | B2 | B3 | B5 | D1 | D2 | D3 | H1 | H2 | H3 | H4 | H6 |
|------------------|----|----|----|------|------|-----|----|------|------|------|------|------|
| CPE14-3/2-PRS... | 67 | 51 | 27 | 17.5 | G3/8 | 6.3 | 11 | 75.2 | 72.2 | 43.3 | 32.5 | 13.5 |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | T1 |
|------------------|------------------------|------------------------|----|----|----|------|-------------------|-----|
| CPE14-3/2-PRS... | $48 + (n-1) \times 20$ | $34 + (n-1) \times 20$ | 7 | 24 | 20 | 17.4 | $(n-1) \times 20$ | 6.3 |


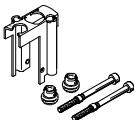
Manifold blocks CPE14




Ordering data – Fixed-grid manifold block

| Ordering data | | | | | | |
|---|-----------------|-------------------|--|------------|----------|----------------------|
| | Valve positions | CRC ¹⁾ | Max. tightening torque for valve mounting [Nm] | Weight [g] | Part No. | Type |
| Manifold block for 3/2-way valves | | | | | | |
|  | 2 | 2 | 1.2 | 176 | 550559 | CPE14-3/2-PRS-3/8-2 |
| | 3 | | | 228 | 550560 | CPE14-3/2-PRS-3/8-3 |
| | 4 | | | 280 | 550561 | CPE14-3/2-PRS-3/8-4 |
| | 5 | | | 332 | 550562 | CPE14-3/2-PRS-3/8-5 |
| | 6 | | | 384 | 550563 | CPE14-3/2-PRS-3/8-6 |
| | 7 | | | 436 | 550564 | CPE14-3/2-PRS-3/8-7 |
| | 8 | | | 488 | 550565 | CPE14-3/2-PRS-3/8-8 |
| | 9 | | | 540 | 550566 | CPE14-3/2-PRS-3/8-9 |
| | 10 | | | 592 | 550567 | CPE14-3/2-PRS-3/8-10 |

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

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

| Ordering data | | | |
|---|--|----------|--------------|
| | Material | Part No. | Type |
| Cover plate | | | |
|  | PA | 550581 | CPE14-RP3 |
| Retainer set | | | |
|  | Retainer: High-alloy stainless steel Screws: Galvanised steel Seals: NBR | 550578 | CPE14-H3-SET |

| Ordering data | | | |
|---|--|----------|--------------------|
| | Material | Part No. | Type |
| Retainer | | | |
|  | Retainer: High-alloy stainless steel (packaging unit 50 pieces) | 551491 | CPE14-H3-50 |
| Screws | | | |
|  | Galvanised steel (packaging unit 100 pieces) | 547049 | M3X45-8.8-VS-100 |
| Seals | | | |
|  | NBR (packaging unit 150 pieces) | 547052 | CPV14-VI-P.1/8-150 |

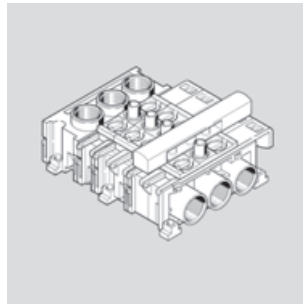
Manifold blocks CPE14

Technical data – Modular manifold



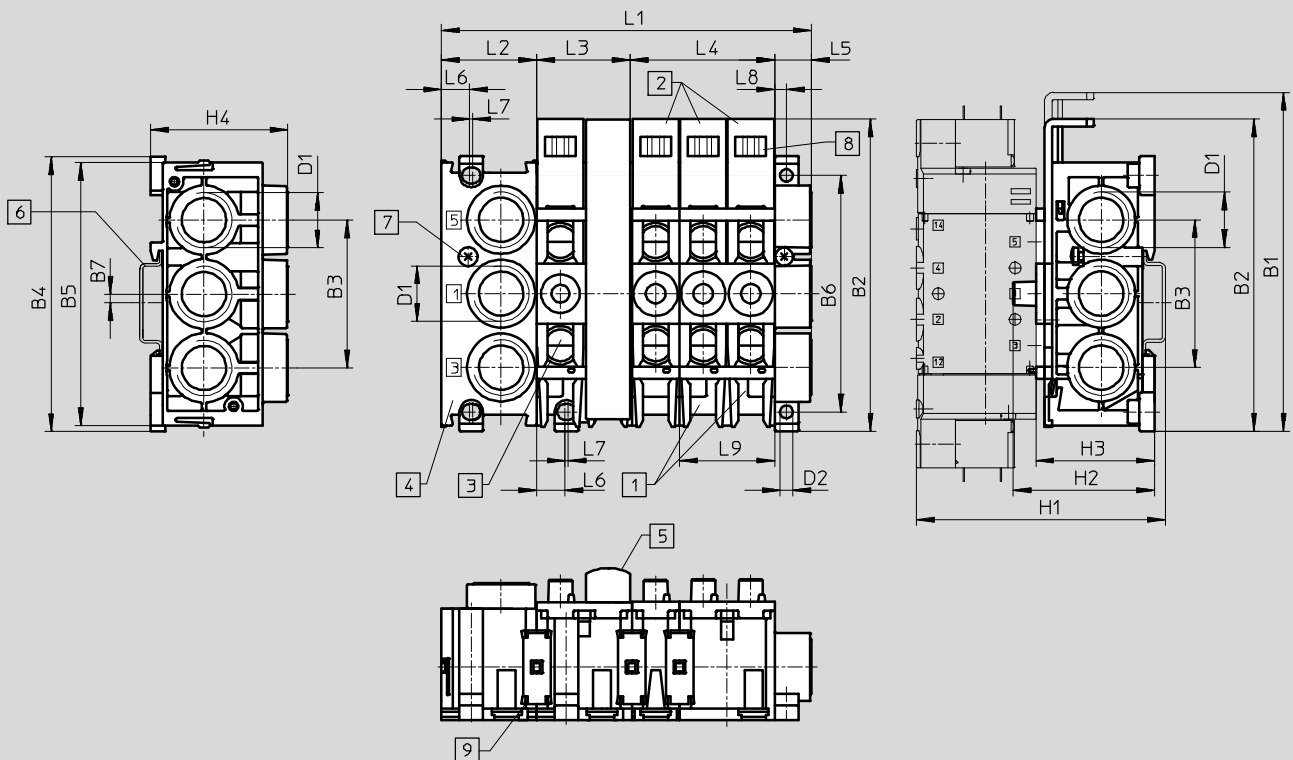
Modular manifold block
For CPE14 5/2 and 5/3

Materials:
PA, reinforced



Dimensions – Modular manifold block

Download CAD data → www.festo.com



- | | | | |
|--|---|-------------------------------------|---|
| 1) Manifold block CPE...-PRSG...-2 for 2 valves | 3) Expansion block CPE...-PRSE...-2 for 2 valves | 6) H-rail to EN 50 002 for mounting | 8) Location for inscription labels type IBS 6 x 10 |
| 2) Manifold block CPE...-PRSG...-3 for 3 valves | 4) End block CPE...-PRSE-EP | 7) Clamping screw for H-rail | 9) Connector |
| | 5) Blanking plate CPE...-PRSB | | |

| Size | B1 | B2 | B3 | B4 | B5 | B6 | B7 | D1 | D2 | H1 | H2 | H3 | H4 |
|-------|-------|-------|----|----|----|----|----|------|-----|-----|-----|-----|------|
| CPE14 | 114.6 | 105.6 | 50 | 93 | 89 | 80 | 3 | G3/8 | 4.3 | ~84 | ~48 | ~40 | 46.4 |


| Size | L1 ¹⁾ | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 |
|-------|------------------|----|----|----|------|------|----|----|----|
| CPE14 | 32+(nx16)+12.4 | 32 | 32 | 48 | 12.4 | 10.1 | - | 4 | 32 |

1) n = number of valve positions

Manifold blocks CPE14

Technical data – Modular manifold

| Possible combinations | | | |
|---------------------------|--|---|--|
| Number of valve positions | One pressure zone | Two pressure zones | |
| | | Variant 1 | Variant 2 |
| 2 | 1x CPE...-PRSG-2 | – | – |
| 3 | 1x CPE...-PRSG-3 | – | – |
| 4 | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 | 1x CPE...-PRSG-2 1x CPE...-PRSEO-2 1x CPE...-PRS-EP | – |
| 5 | 1x CPE...-PRSGO-3 1x CPE...-PRSE-2 | 1x CPE...-PRSG-3 1x CPE...-PRSEO-2 1x CPE...-PRS-EP | – |
| 6 | 1x CPE...-PRSGO-2 1x CPE...-PRSEO-2 1x CPE...-PRSE-2 | 1x CPE...-PRSG-2 2x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 1x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 7 | 1x CPE...-PRSGO-3 2x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-3 2x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-3 1x CPE...-PRSE-2 1x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 8 | 1x CPE...-PRSGO-2 3x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-2 3x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 2x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 9 | 1x CPE...-PRSGO-3 3x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-3 3x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-3 1x CPE...-PRSE-2 2x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 10 | 1x CPE...-PRSGO-2 4x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-2 4x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 3x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 11 | 1x CPE...-PRSGO-3 4x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-3 4x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-3 1x CPE...-PRSE-2 3x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 12 | 1x CPE...-PRSGO-2 5x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-2 5x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 4x CPE...-PRSEO-2 1x CPE...-PRS-EP |

 Note

A maximum of 6 valve positions are possible per air supply.
Use valve manifold blocks only in combination with 5/2- and 5/3-way valves.

Manifold blocks CPE14

Ordering data – Modular manifold



| Ordering data | | | | | |
|---|--------------|-----------|------------|---------------|----------------------|
| | Port 1, 3, 5 | PRS ducts | Weight [g] | Part No. | Type |
| Manifold block PRSG for 2 valves | | | | | |
| | G3/8 | Closed | 95 | 164965 | CPE14-PRSG-2 |
| | G3/8 | Open | 95 | 187829 | CPE14-PRSGO-2 |
| Manifold block PRSG for 3 valves | | | | | |
| | G3/8 | Closed | 130 | 187824 | CPE14-PRSG-3 |
| | G3/8 | Open | 130 | 187820 | CPE14-PRSGO-3 |
| Manifold block PRSE for 2 valves | | | | | |
| | - | Closed | 85 | 164967 | CPE14-PRSE-2 |
| | - | Open | 85 | 187830 | CPE14-PRSEO-2 |
| End plate for manifold | | | | | |
| | G3/8 | - | 80 | 164969 | CPE14-PRS-EP |
| Blanking plate for unused valve position | | | | | |
| | - | - | 15 | 164968 | CPE14-PRSB |

Solenoid valves CPE18

Technical data

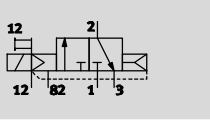
Functions:

3/2G, 3/2O




5/2-way, single solenoid,

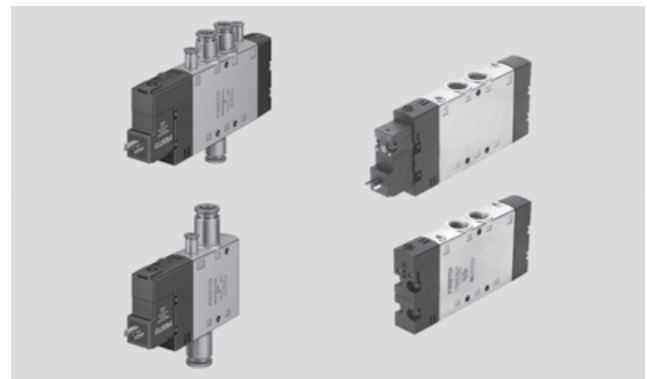
5/2-way, double solenoid valve

5/3G, 5/3B, 5/3E



3/2G with external pilot air supply, normally closed

-  - Width 18 mm
-  - Flow rate
850 ... 1500 l/min
-  - Voltage
24 V DC, 110, 230 V AC
Basic valves
12, 24 V DC, 24, 110,
230 V AC



| General technical data | | | | | | |
|--|--|---|---|----------------------------|----------------------|---------------------------------|
| Valve function | 3/2 | | 5/2 | | 5/3 | |
| Normal position | G ¹⁾ | O ²⁾ | - | | G ¹⁾ | B ²⁾ E ³⁾ |
| Stable position | Monostable | | | Bistable | Monostable | |
| Reset method: pneumatic spring | Yes | | | - | No | |
| Reset method: mechanical spring | No | | | - | Yes | |
| Design | Piston spool | | | | | |
| Sealing principle | Soft | | | | | |
| Type of actuation | Electrical | | | | | |
| Type of control | Piloted | | | | | |
| Pilot interface | To ISO 15218 or none in the case of integrated pilot valve | | | | | |
| Pilot air supply | Internal or external | | | | | |
| Flow direction | - | | Reversible with external pilot air supply | | | |
| Exhaust air function | - | | With flow control | | | |
| Manual override | Non-detenting, detenting via accessory | | | | | |
| Type of mounting | Via through-holes | | | | | |
| Mounting position | Any | | | | | |
| Pneumatic connection | 1, 2, 4 | Threaded connection: G1/4 QS connection: Ø 8 or Ø 10 mm | | | | |
| | 3, 5 | Threaded connection: G1/4 | | | | |
| | 12, 14 | Threaded connection: M5; QS connection: Ø 4 mm | | | | |
| | 82, 84 | Threaded connection: M5 | | | | |
| Nominal width | [mm] | 8 | | | | |
| Standard nominal flow rate | G ¹⁾ | [l/min] | 1300 | 1300 | 1450 | 1200 1300 |
| | QS8 | [l/min] | 850 | | | 780 |
| | QS10 | [l/min] | 1000 | | | 1050 1000 |
| Switching time | On/off | [ms] | 28/18, 36/30 ⁵⁾ | 26/20, 32/30 ⁵⁾ | - | 20/38, 20/34 ⁵⁾ |
| | Changeover | [ms] | - | | 13, 15 ⁵⁾ | - |
| Duty cycle | [%] | 100 | | | | |
| Width | [mm] | 18 | | | | |
| Conforms to standard | ISO 15218 in the case of interface with pilot valve | | | | | |
| Corrosion resistance class CRC ⁴⁾ | 2 | | | | | |

1) G = normally closed

2) O, B = normally open

3) E = normally exhausted

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

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

5) Switching time for basic valve

Solenoid valves CPE18

Technical data

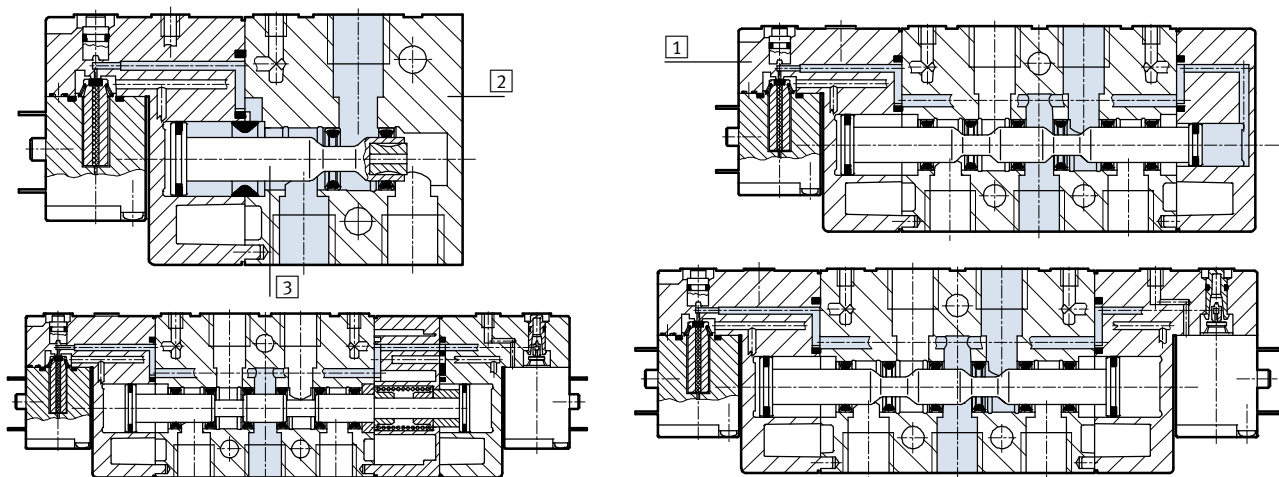
| Operating and environmental conditions | | | | | |
|--|--|-------|--------------------------|--------------------------|------------|
| Valve function | | 3/2 | 5/2-way, single solenoid | 5/2-way, double solenoid | 5/3 |
| Operating medium | Compressed air to ISO 8573-1:2010 [7:4:4] | | | | |
| Pilot medium | Compressed air to ISO 8573-1:2010 [7:4:4] | | | | |
| Note on operating/pilot medium | Lubricated operation possible (in which case lubricated operation will always be required) | | | | |
| Operating pressure | Internal pilot air supply | [bar] | 2.5 ... 10 | 2 ... 10 | 2.5 ... 10 |
| | External pilot air supply | [bar] | -0.9 ... +10 | | |
| Pilot pressure | | [bar] | 2.5 ... 10 | 2 ... 10 | 2.5 ... 10 |
| Ambient temperature | | [°C] | -5 ... +50 | | |
| Temperature of medium | | [°C] | -5 ... +50 | | |
| Certification for solenoid valves | c UL us - Recognized (OL) (not with CPE18-P1-...) | | | | |
| Maritime classification ¹⁾ | See certificate | | | | |

1) Additional information www.festo.com/sp → Certificates.

| Electrical data | | | | |
|---------------------------------------|-------------------|--------|--------------------------|--|
| Operating voltage | M1H | [V DC] | 24 +10/-15% | |
| | M2H | [V AC] | 110 ±10% at 50 ... 60 Hz | |
| | M3H | [V AC] | 230 ±10% at 50 ... 60 Hz | |
| Power consumption | M1H | [W] | 1.5 | |
| | M2H, M3H | [VA] | Pull: 3, hold: 2.4 | |
| Degree of protection with plug socket | IP65 to IEC 60529 | | | |

Materials

Sectional view



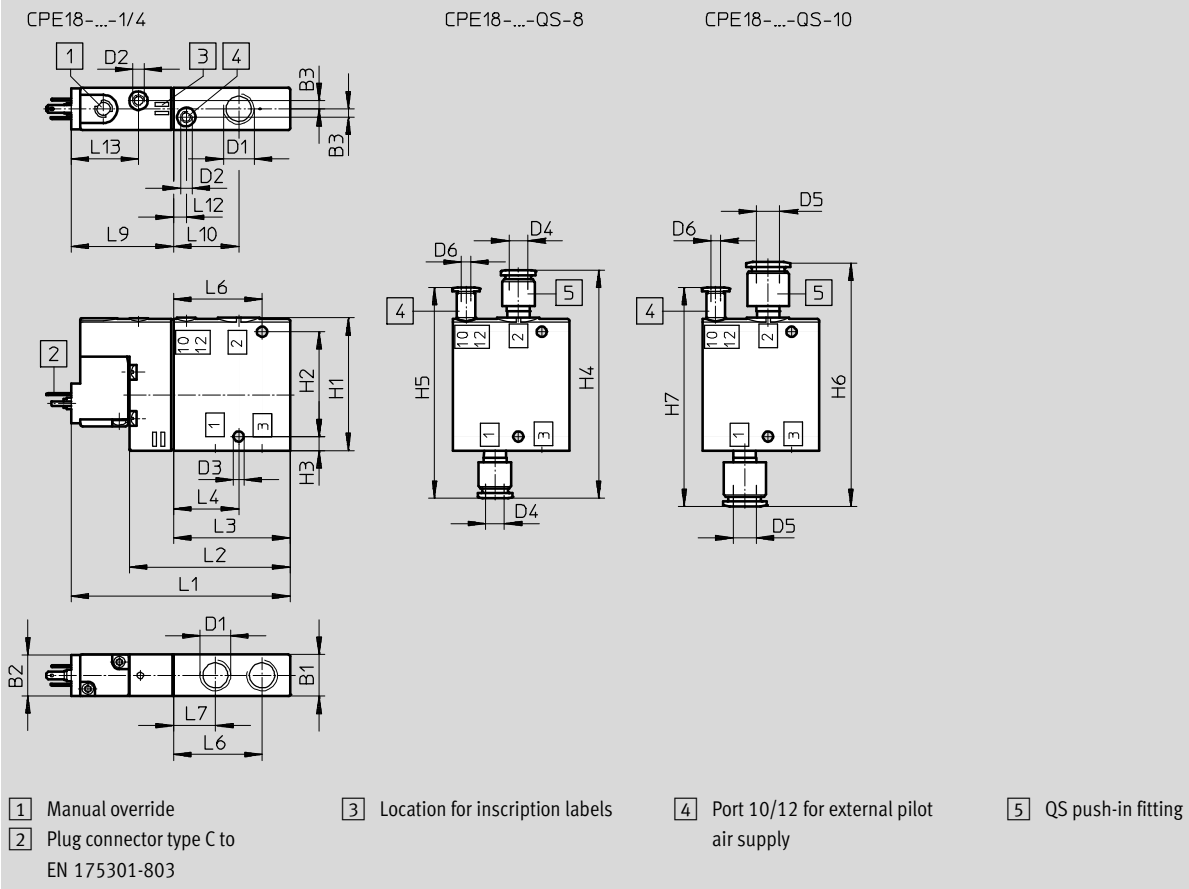
| | | |
|-------------------|--------------|--------------------|
| 1 | Cap | PA |
| 2 | Housing | Die-cast aluminium |
| 3 | Piston spool | Steel |
| - | Seals | NBR |
| Note on materials | | RoHS compliant |

Solenoid valves CPE18

Technical data

Dimensions – 3/2-way valve

Download CAD data → www.festo.com



| Type | B1 | B2 | B3 | D1 | D2 | D3 ∅ | D4 ∅ | D5 ∅ | D6 ∅ | H1 | H2 | H3 | H4 | H5 | H6 | H7 |
|----------------|----|------|-----|------|----|---------|---------|---------|---------|----|----|----|----|------|-----|----|
| CPE18-M1H-3... | 18 | 17.5 | 3.5 | G1/4 | M5 | 4.4 | 8 | 10 | 4 | 57 | 45 | 6 | 98 | 90.5 | 105 | 94 |

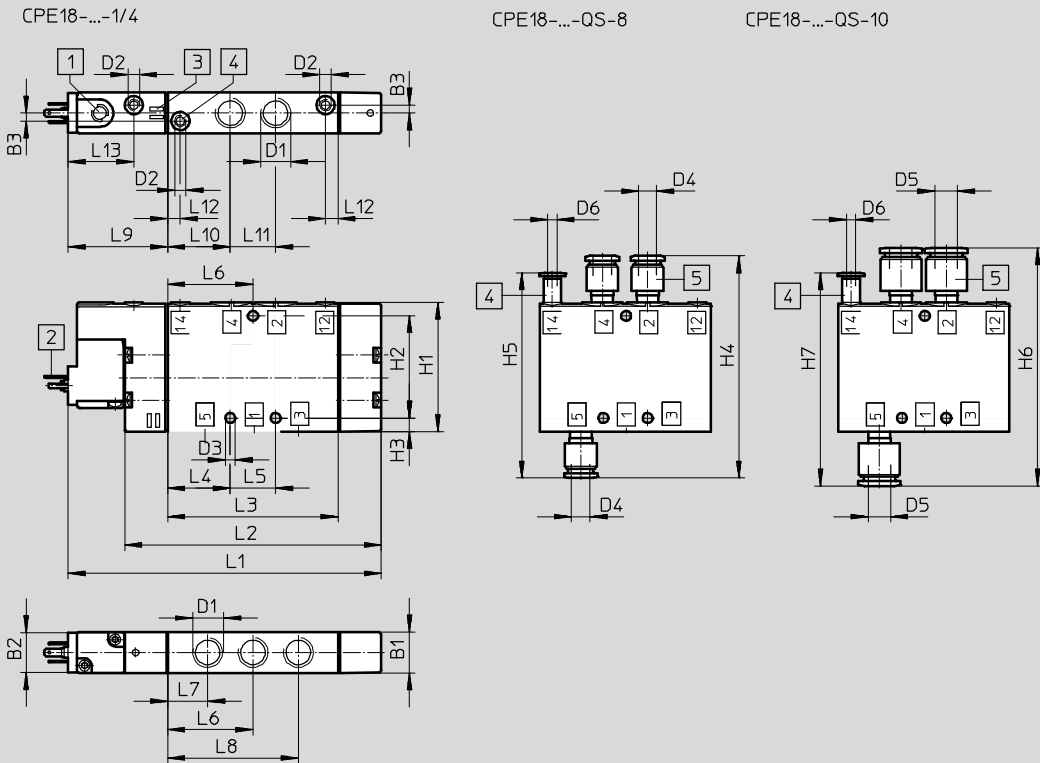
| Type | L1 | L2 | L3 | L4 | L6 | L7 | L9 | L10 | L12 | L13 |
|----------------|----|----|----|----|----|----|----|-----|-----|-----|
| CPE18-M1H-3... | 94 | 69 | 50 | 28 | 38 | 18 | 44 | 28 | 5.5 | 29 |

Solenoid valves CPE18

Technical data

Dimensions – 5/2-way single solenoid valve

Download CAD data → www.festo.com



- 1 Manual override
- 2 Plug connector type C to EN 175301-803
- 3 Location for inscription labels
- 4 Port 12/14 for external pilot air supply
- 5 QS push-in fitting

| Type | B1 | B2 | B3 | D1 | D2 | D3 ∅ | D4 ∅ | D5 ∅ | D6 ∅ | H1 | H2 | H3 | H4 | H5 | H6 | H7 |
|----------------|----|------|-----|------|----|---------|---------|---------|---------|----|----|----|----|------|-----|----|
| CPE18-M1H-5... | 18 | 17.5 | 3.5 | G1/4 | M5 | 4.4 | 8 | 10 | 4 | 57 | 45 | 6 | 98 | 90.5 | 105 | 94 |

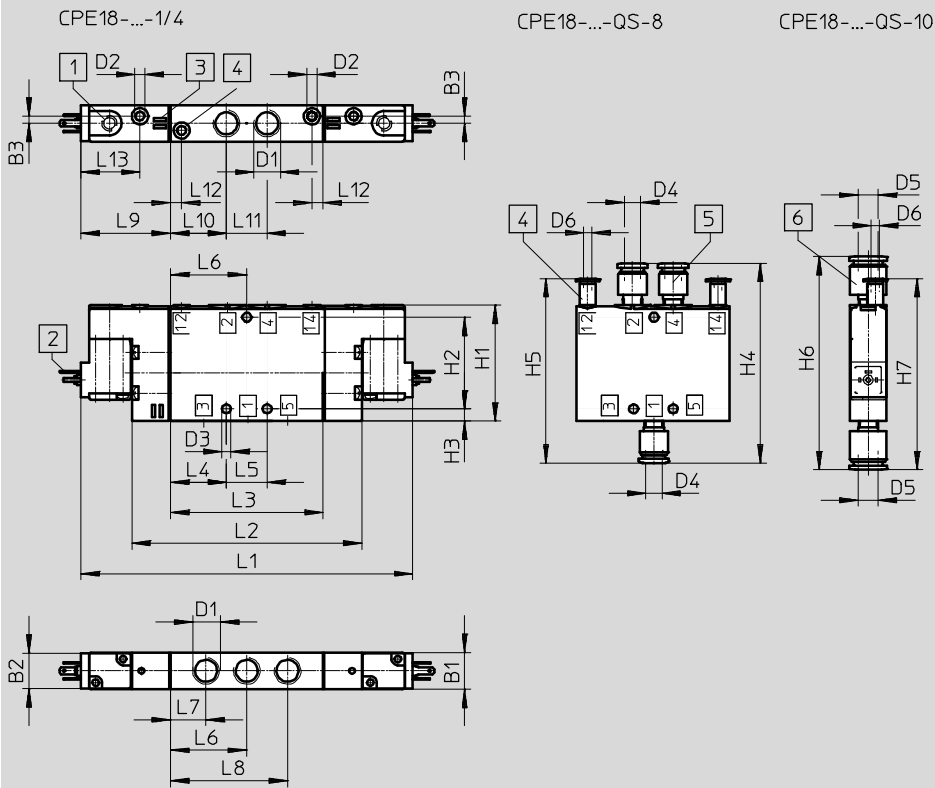
| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 |
|----------------|-----|-----|----|------|----|------|------|------|----|------|-----|-----|-----|
| CPE18-M1H-5... | 138 | 113 | 75 | 27.5 | 20 | 37.5 | 17.5 | 57.5 | 44 | 27.5 | 20 | 5.5 | 29 |

Solenoid valves CPE18

Technical data

Dimensions – 5/2-way double solenoid valve

Download CAD data → www.festo.com



- 1 Manual override
- 2 Plug connector type C to EN 175301-803
- 3 Location for inscription labels
- 4 Port 12/14 for external pilot air supply
- 5/6 QS push-in fitting

| Type | B1 | B2 | B3 | D1 | D2 | D3 | D4 | D5 | D6 | H1 | H2 | H3 | H4 | H5 | H6 | H7 |
|------------------|----|------|-----|------|----|-----|----|----|----|----|----|----|----|------|-----|----|
| CPE18-...-5J-1/4 | 18 | 17.5 | 3.5 | G1/4 | M5 | 4.4 | 8 | 10 | 4 | 57 | 45 | 6 | 98 | 90.5 | 105 | 94 |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 |
|------------------|-----|-----|----|------|----|------|------|------|----|------|-----|-----|-----|
| CPE18-...-5J-1/4 | 163 | 113 | 75 | 27.5 | 20 | 37.5 | 17.5 | 57.5 | 44 | 27.5 | 20 | 5.5 | 29 |

Solenoid valves CPE18

Technical data



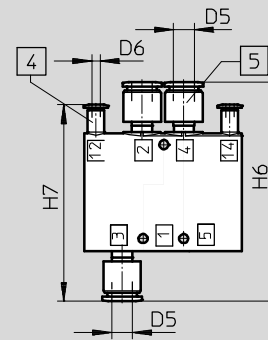
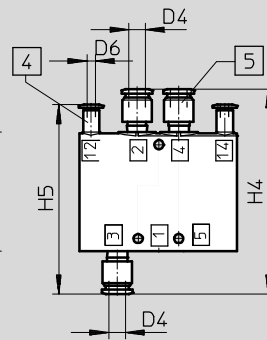
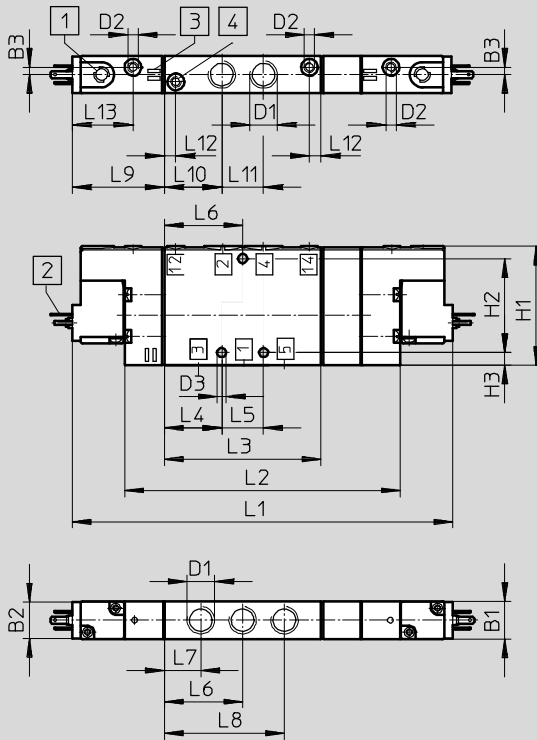
Dimensions – 5/3-way valve

Download CAD data → www.festo.com

CPE18-...-1/4

CPE18-...-QS-8

CPE18-...-QS-10



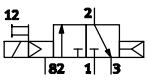
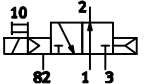
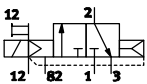
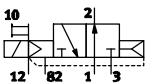
- 1 Manual override
- 2 Plug connector type C to EN 175301-803
- 3 Location for inscription labels
- 4 Port 12/14 for external pilot air supply
- 5 QS push-in fitting

| Type | B1 | B2 | B3 | D1 | D2 | D3 ∅ | D4 ∅ | D5 ∅ | D6 ∅ | H1 | H2 | H3 | H4 | H5 | H6 | H7 |
|------------------|----|------|-----|------|----|---------|---------|---------|---------|----|----|----|----|------|-----|----|
| CPE18-M1H...-5L | 18 | 17.5 | 3.5 | G1/4 | M5 | 4.4 | 8 | 10 | 4 | 57 | 45 | 6 | 98 | 90.5 | 105 | 94 |
| CPE18-M1H...-5/3 | | | | | | | | | | | | | | | | |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 |
|------------------|-----|-----|----|------|----|------|------|------|----|------|-----|-----|-----|
| CPE18-M1H...-5J | 163 | 113 | 75 | 27.5 | 20 | 37.5 | 17.5 | 57.5 | 44 | 27.5 | 20 | 5.5 | 29 |
| CPE18-M1H...-5/3 | 182 | 132 | | | | | | | | | | | |

Solenoid valves CPE18

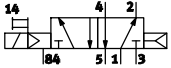
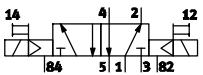
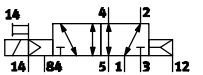
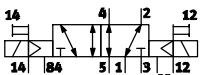
Ordering data

| Ordering data – 3/2-way valve | | | | | | |
|---|------------------|----------|----------------------|------------|----------|----------------------|
| Circuit symbol | Pilot air supply | Voltage | Pneumatic connection | Weight [g] | Part No. | Type |
| Normally closed | | | | | | |
|  | Internal | 24 V DC | G1/4 | 150 | 163141 | CPE18-M1H-3GL-1/4 |
| | | | QS-8 | – | 163149 | CPE18-M1H-3GL-QS-8 |
| | | | QS-10 | – | 163157 | CPE18-M1H-3GL-QS-10 |
| | | 110 V AC | G1/4 | 150 | 163761 | CPE18-M2H-3GL-1/4 |
| | | | QS-8 | – | 163769 | CPE18-M2H-3GL-QS-8 |
| | | | QS-10 | – | 163777 | CPE18-M2H-3GL-QS-10 |
| | | 230 V AC | G1/4 | 150 | 163785 | CPE18-M3H-3GL-1/4 |
| | | | QS-8 | – | 163793 | CPE18-M3H-3GL-QS-8 |
| | | | QS-10 | – | 163801 | CPE18-M3H-3GL-QS-10 |
| Normally open | | | | | | |
|  | Internal | 24 V DC | G1/4 | 150 | 163140 | CPE18-M1H-30L-1/4 |
| | | | QS-8 | – | 163148 | CPE18-M1H-30L-QS-8 |
| | | | QS-10 | – | 163156 | CPE18-M1H-30L-QS-10 |
| | | 110 V AC | G1/4 | 150 | 163760 | CPE18-M2H-30L-1/4 |
| | | | QS-8 | – | 163768 | CPE18-M2H-30L-QS-8 |
| | | | QS-10 | – | 163776 | CPE18-M2H-30L-QS-10 |
| | | 230 V AC | G1/4 | 150 | 163784 | CPE18-M3H-30L-1/4 |
| | | | QS-8 | – | 163792 | CPE18-M3H-30L-QS-8 |
| | | | QS-10 | – | 163800 | CPE18-M3H-30L-QS-10 |
| Normally closed | | | | | | |
|  | External | 24 V DC | G1/4 | 150 | 163145 | CPE18-M1H-3GLS-1/4 |
| | | | QS-8 | – | 163153 | CPE18-M1H-3GLS-QS-8 |
| | | | QS-10 | – | 163161 | CPE18-M1H-3GLS-QS-10 |
| | | 110 V AC | G1/4 | 150 | 163765 | CPE18-M2H-3GLS-1/4 |
| | | | QS-8 | – | 163773 | CPE18-M2H-3GLS-QS-8 |
| | | | QS-10 | – | 163781 | CPE18-M2H-3GLS-QS-10 |
| | | 230 V AC | G1/4 | 150 | 163789 | CPE18-M3H-3GLS-1/4 |
| | | | QS-8 | – | 163797 | CPE18-M3H-3GLS-QS-8 |
| | | | QS-10 | – | 163805 | CPE18-M3H-3GLS-QS-10 |
| Normally open | | | | | | |
|  | External | 24 V DC | G1/4 | 150 | 163144 | CPE18-M1H-30LS-1/4 |
| | | | QS-8 | – | 163152 | CPE18-M1H-30LS-QS-8 |
| | | | QS-10 | – | 163160 | CPE18-M1H-30LS-QS-10 |
| | | 110 V AC | G1/4 | 150 | 163764 | CPE18-M2H-30LS-1/4 |
| | | | QS-8 | – | 163772 | CPE18-M2H-30LS-QS-8 |
| | | | QS-10 | – | 163780 | CPE18-M2H-30LS-QS-10 |
| | | 230 V AC | G1/4 | 150 | 163788 | CPE18-M3H-30LS-1/4 |
| | | | QS-8 | – | 163796 | CPE18-M3H-30LS-QS-8 |
| | | | QS-10 | – | 163804 | CPE18-M3H-30LS-QS-10 |

Solenoid valves CPE18

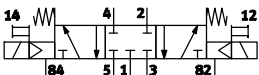
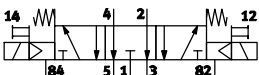
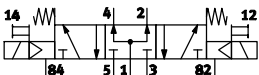
FESTO

Ordering data

| Ordering data – 5/2-way valve | | | | | | | |
|---|------------------|----------|----------------------|------------|----------|---------------------|---------------------|
| Circuit symbol | Pilot air supply | Voltage | Pneumatic connection | Weight [g] | Part No. | Type | |
| 5/2 way valve, single solenoid | | | | | | | |
|  | Internal | 24 V DC | G1/4 | 220 | 163142 | CPE18-M1H-5L-1/4 | |
| | | | QS-8 | – | 163150 | CPE18-M1H-5L-QS-8 | |
| | | | QS-10 | – | 163158 | CPE18-M1H-5L-QS-10 | |
| | | 110 V AC | 220 | G1/4 | 220 | 163762 | CPE18-M2H-5L-1/4 |
| | | | | QS-8 | – | 163770 | CPE18-M2H-5L-QS-8 |
| | | | | QS-10 | – | 163778 | CPE18-M2H-5L-QS-10 |
| | | 230 V AC | 220 | G1/4 | 220 | 163786 | CPE18-M3H-5L-1/4 |
| | | | | QS-8 | – | 163794 | CPE18-M3H-5L-QS-8 |
| | | | | QS-10 | – | 163802 | CPE18-M3H-5L-QS-10 |
| 5/2-way valve, double solenoid | | | | | | | |
|  | Internal | 24 V DC | G1/4 | 270 | 163143 | CPE18-M1H-5J-1/4 | |
| | | | QS-8 | – | 163151 | CPE18-M1H-5J-QS-8 | |
| | | | QS-10 | – | 163159 | CPE18-M1H-5J-QS-10 | |
| | | 110 V AC | 270 | G1/4 | 270 | 163763 | CPE18-M2H-5J-1/4 |
| | | | | QS-8 | – | 163771 | CPE18-M2H-5J-QS-8 |
| | | | | QS-10 | – | 163779 | CPE18-M2H-5J-QS-10 |
| | | 230 V AC | 270 | G1/4 | 270 | 163787 | CPE18-M3H-5J-1/4 |
| | | | | QS-8 | – | 163795 | CPE18-M3H-5J-QS-8 |
| | | | | QS-10 | – | 163803 | CPE18-M3H-5J-QS-10 |
| 5/2 way valve, single solenoid | | | | | | | |
|  | External | 24 V DC | G1/4 | 220 | 163146 | CPE18-M1H-5LS-1/4 | |
| | | | QS-8 | – | 163154 | CPE18-M1H-5LS-QS-8 | |
| | | | QS-10 | – | 163162 | CPE18-M1H-5LS-QS-10 | |
| | | 110 V AC | 220 | G1/4 | 220 | 163766 | CPE18-M2H-5LS-1/4 |
| | | | | QS-8 | – | 163774 | CPE18-M2H-5LS-QS-8 |
| | | | | QS-10 | – | 163782 | CPE18-M2H-5LS-QS-10 |
| | | 230 V AC | 220 | G1/4 | 220 | 163790 | CPE18-M3H-5LS-1/4 |
| | | | | QS-8 | – | 163798 | CPE18-M3H-5LS-QS-8 |
| | | | | QS-10 | – | 163806 | CPE18-M3H-5LS-QS-10 |
| 5/2-way valve, double solenoid | | | | | | | |
|  | External | 24 V DC | G1/4 | 270 | 163147 | CPE18-M1H-5JS-1/4 | |
| | | | QS-8 | – | 163155 | CPE18-M1H-5JS-QS-8 | |
| | | | QS-10 | – | 163163 | CPE18-M1H-5JS-QS-10 | |
| | | 110 V AC | 270 | G1/4 | 270 | 163767 | CPE18-M2H-5JS-1/4 |
| | | | | QS-8 | – | 163775 | CPE18-M2H-5JS-QS-8 |
| | | | | QS-10 | – | 163783 | CPE18-M2H-5JS-QS-10 |
| | | 230 V AC | 270 | G1/4 | 270 | 163791 | CPE18-M3H-5JS-1/4 |
| | | | | QS-8 | – | 163799 | CPE18-M3H-5JS-QS-8 |
| | | | | QS-10 | – | 163807 | CPE18-M3H-5JS-QS-10 |

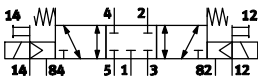
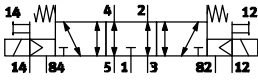
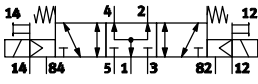
Solenoid valves CPE18

Ordering data

| Ordering data – 5/3-way valve | | | | | | | | |
|---|------------------|----------|----------------------|------------|----------|----------------------|--------|----------------------|
| Circuit symbol | Pilot air supply | Voltage | Pneumatic connection | Weight [g] | Part No. | Type | | |
| 5/3-way mid-position valve, normally closed | | | | | | | | |
|  | Internal | 24 V DC | G1/4 | 280 | 170247 | CPE18-M1H-5/3G-1/4 | | |
| | | | QS-8 | – | 170253 | CPE18-M1H-5/3G-QS-8 | | |
| | | | QS-10 | – | 170259 | CPE18-M1H-5/3G-QS-10 | | |
| | | 110 V AC | Internal | 24 V DC | G1/4 | 280 | 170283 | CPE18-M2H-5/3G-1/4 |
| | | | | | QS-8 | – | 170289 | CPE18-M2H-5/3G-QS-8 |
| | | | | | QS-10 | – | 170295 | CPE18-M2H-5/3G-QS-10 |
| | | 230 V AC | Internal | 24 V DC | G1/4 | 280 | 170319 | CPE18-M3H-5/3G-1/4 |
| | | | | | QS-8 | – | 170325 | CPE18-M3H-5/3G-QS-8 |
| | | | | | QS-10 | – | 170331 | CPE18-M3H-5/3G-QS-10 |
| 5/3-way mid-position valve, normally exhausted | | | | | | | | |
|  | Internal | 24 V DC | G1/4 | 280 | 170249 | CPE18-M1H-5/3E-1/4 | | |
| | | | QS-8 | – | 170255 | CPE18-M1H-5/3E-QS-8 | | |
| | | | QS-10 | – | 170261 | CPE18-M1H-5/3E-QS-10 | | |
| | | 110 V AC | Internal | 24 V DC | G1/4 | 280 | 170285 | CPE18-M2H-5/3E-1/4 |
| | | | | | QS-8 | – | 170291 | CPE18-M2H-5/3E-QS-8 |
| | | | | | QS-10 | – | 170297 | CPE18-M2H-5/3E-QS-10 |
| | | 230 V AC | Internal | 24 V DC | G1/4 | 280 | 170321 | CPE18-M3H-5/3E-1/4 |
| | | | | | QS-8 | – | 170327 | CPE18-M3H-5/3E-QS-8 |
| | | | | | QS-10 | – | 170333 | CPE18-M3H-5/3E-QS-10 |
| 5/3-way mid-position valve, normally open | | | | | | | | |
|  | Internal | 24 V DC | G1/4 | 280 | 170251 | CPE18-M1H-5/3B-1/4 | | |
| | | | QS-8 | – | 170257 | CPE18-M1H-5/3B-QS-8 | | |
| | | | QS-10 | – | 170263 | CPE18-M1H-5/3B-QS10 | | |
| | | 110 V AC | Internal | 24 V DC | G1/4 | 280 | 170287 | CPE18-M2H-5/3B-1/4 |
| | | | | | QS-8 | – | 170293 | CPE18-M2H-5/3B-QS-8 |
| | | | | | QS-10 | – | 170299 | CPE18-M2H-5/3B-QS-10 |
| | | 230 V AC | Internal | 24 V DC | G1/4 | 280 | 170323 | CPE18-M3H-5/3B-1/4 |
| | | | | | QS-8 | – | 170329 | CPE18-M3H-5/3B-QS-8 |
| | | | | | QS-10 | – | 170335 | CPE18-M3H-5/3B-QS-10 |

Solenoid valves CPE18

Ordering data

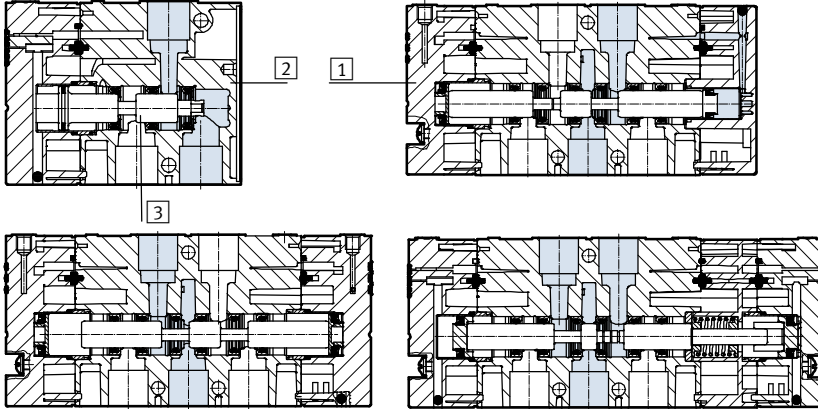
| Ordering data – 5/3-way valve | | | | | | | | |
|---|------------------|----------|----------------------|------------|----------|-----------------------|--------|-----------------------|
| Circuit symbol | Pilot air supply | Voltage | Pneumatic connection | Weight [g] | Part No. | Type | | |
| 5/3-way mid-position valve, normally closed | | | | | | | | |
|  | External | 24 V DC | G1/4 | 280 | 170248 | CPE18-M1H-5/3GS-1/4 | | |
| | | | QS-8 | – | 170254 | CPE18-M1H-5/3GS-QS-8 | | |
| | | | QS-10 | – | 170260 | CPE18-M1H-5/3GS-QS-10 | | |
| | | 110 V AC | External | 24 V DC | G1/4 | 280 | 170284 | CPE18-M2H-5/3GS-1/4 |
| | | | | | QS-8 | – | 170290 | CPE18-M2H-5/3GS-QS-8 |
| | | | | | QS-10 | – | 170296 | CPE18-M2H-5/3GS-QS10 |
| | | 230 V AC | External | 24 V DC | G1/4 | 280 | 170320 | CPE18-M3H-5/3GS-1/4 |
| | | | | | QS-8 | – | 170326 | CPE18-M3H-5/3GS-QS-8 |
| | | | | | QS-10 | – | 170332 | CPE18-M3H-5/3GS-QS10 |
| 5/3-way mid-position valve, normally exhausted | | | | | | | | |
|  | External | 24 V DC | G1/4 | 280 | 170250 | CPE18-M1H-5/3ES-1/4 | | |
| | | | QS-8 | – | 170256 | CPE18-M1H-5/3ES-QS-8 | | |
| | | | QS-10 | – | 170262 | CPE18-M1H-5/3ES-QS-10 | | |
| | | 110 V AC | External | 24 V DC | G1/4 | 280 | 170286 | CPE18-M2H-5/3ES-1/4 |
| | | | | | QS-8 | – | 170292 | CPE18-M2H-5/3ES-QS-8 |
| | | | | | QS-10 | – | 170298 | CPE18-M2H-5/3ES-QS10 |
| | | 230 V AC | External | 24 V DC | G1/4 | 280 | 170322 | CPE18-M3H-5/3ES-1/4 |
| | | | | | QS-8 | – | 170328 | CPE18-M3H-5/3ES-QS-8 |
| | | | | | QS-10 | – | 170334 | CPE18-M3H-5/3ES-QS10 |
| 5/3-way mid-position valve, normally open | | | | | | | | |
|  | External | 24 V DC | G1/4 | 280 | 170252 | CPE18-M1H-5/3BS-1/4 | | |
| | | | QS-8 | – | 170258 | CPE18-M1H-5/3BS-QS-8 | | |
| | | | QS-10 | – | 170264 | CPE18-M1H-5/3BS-QS-10 | | |
| | | 110 V AC | External | 24 V DC | G1/4 | 280 | 170288 | CPE18-M2H-5/3BS-1/4 |
| | | | | | QS-8 | – | 170294 | CPE18-M2H-5/3BS-QS-8 |
| | | | | | QS-10 | – | 170300 | CPE18-M2H-5/3BS-QS-10 |
| | | 230 V AC | External | 24 V DC | G1/4 | 280 | 170324 | CPE18-M3H-5/3BS-1/4 |
| | | | | | QS-8 | – | 170330 | CPE18-M3H-5/3BS-QS-8 |
| | | | | | QS-10 | – | 170336 | CPE18-M3H-5/3BS-QS-10 |

Basic valves CPE18

Technical data – Directional control valves without pilot valve

Materials

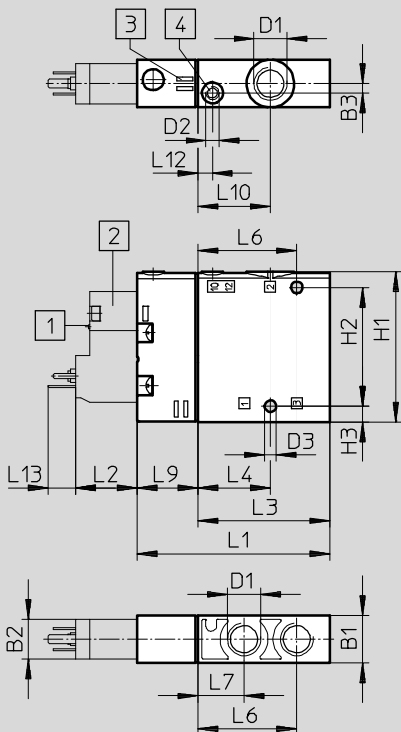
Sectional view



| | | |
|-------------------|--------------|--------------------|
| 1 | Cap | PA |
| 2 | Housing | Die-cast aluminium |
| 3 | Piston spool | Steel |
| - | Seals | NBR |
| Note on materials | | RoHS compliant |

Dimensions – 3/2-way valve

Download CAD data → www.festo.com



- 1 Manual override
- 2 Pilot valve, type C
- 3 Location for inscription label
- 4 Port 10/12 for external pilot air

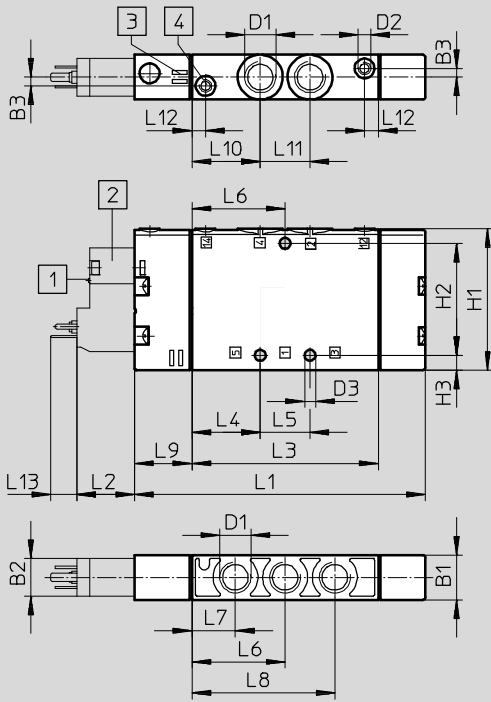
| Type | B1 | B2 | B3 | D1 | D2 | D3 ∅ | H1 | H2 | H3 | L1 | L2 | L3 | L4 | L6 | L7 | L9 | L10 | L12 | L13 |
|------------|----|------|-----|------|----|---------|----|----|----|----|------|----|------|------|------|----|------|-----|------|
| CPE18-P1-3 | 18 | 15.2 | 3.5 | G1/4 | M5 | 4.4 | 57 | 45 | 6 | 73 | 23.3 | 50 | 27.5 | 37.5 | 17.5 | 23 | 27.5 | 5.5 | 10.5 |

Basic valves CPE18

Technical data – Directional control valves without pilot valve

Dimensions – 5/2-way valve

Download CAD data → www.festo.com

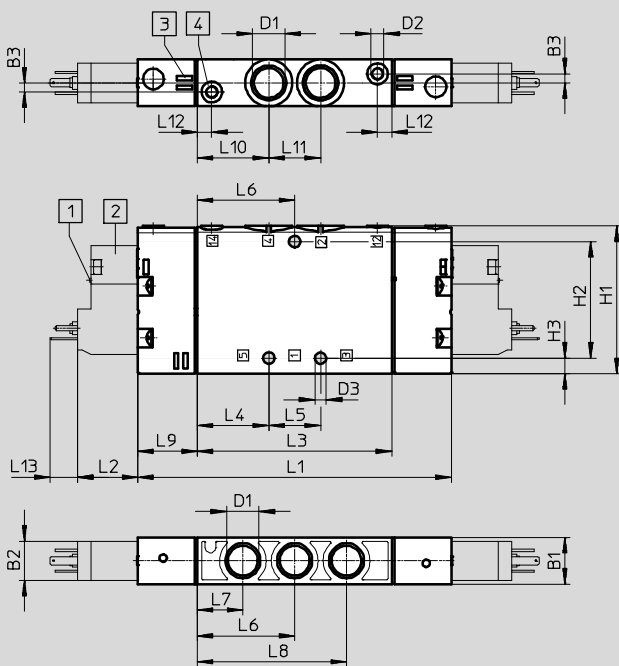


- 1 Manual override
- 2 Pilot valve, plug connector type C to EN 175301-803
- 3 Location for inscription label
- 4 Port 12/14 for external pilot air supply

| Type | B1 | B2 | B3 | D1 | D2 | D3 Ø | H1 | H2 | H3 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 |
|-------------|----|------|-----|------|----|---------|----|----|----|-----|------|----|------|----|------|------|------|----|------|-----|-----|------|
| CPE18-P1-5L | 18 | 15.2 | 3.5 | G1/4 | M5 | 4.4 | 57 | 45 | 6 | 117 | 23.3 | 75 | 27.5 | 20 | 37.5 | 17.5 | 57.5 | 23 | 27.5 | 20 | 5.5 | 10.5 |

Dimensions – 5/2-way double solenoid valve

Download CAD data → www.festo.com



- 1 Manual override
- 2 Pilot valve, plug connector type C to EN 175301-803
- 3 Location for inscription label
- 4 Port 12/14 for external pilot air supply

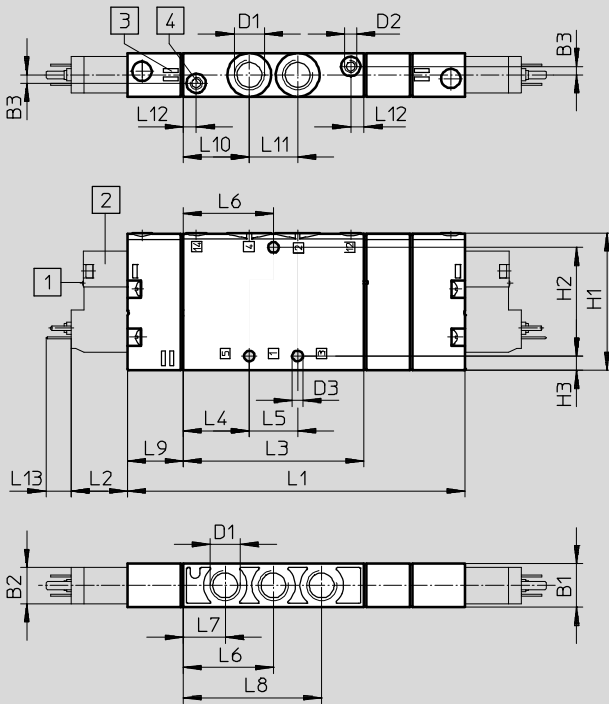
| Type | B1 | B2 | B3 | D1 | D2 | D3 Ø | H1 | H2 | H3 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 |
|-------------|----|------|-----|------|----|---------|----|----|----|-----|------|----|------|----|------|------|------|----|------|-----|-----|------|
| CPE18-P1-5J | 18 | 15.2 | 3.5 | G1/4 | M5 | 4.4 | 57 | 45 | 6 | 121 | 23.3 | 75 | 27.5 | 20 | 37.5 | 17.5 | 57.5 | 23 | 27.5 | 20 | 5.5 | 10.5 |

Basic valves CPE18

Technical data – Directional control valves without pilot valve

Dimensions – 5/3-way valve

Download CAD data → www.festo.com




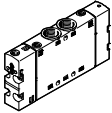
- 1 Manual override
- 2 Pilot valve, plug connector type C to EN 175301-803
- 3 Location for inscription label
- 4 Port 12/14 for external pilot air supply

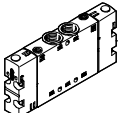
| Type | B1 | B2 | B3 | D1 | D2 | D3 Ø | H1 | H2 | H3 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 |
|--------------|----|------|-----|------|----|---------|----|----|----|-----|------|----|------|----|------|------|------|----|------|-----|-----|------|
| CPE18-P1-5J | 18 | 15.2 | 3.5 | G1/4 | M5 | 4.4 | 57 | 45 | 6 | 121 | 23.3 | 75 | 27.5 | 20 | 37.5 | 17.5 | 57.5 | 23 | 27.5 | 20 | 5.5 | 10.5 |
| CPE18-P1-5/3 | | | | | | | | | | 140 | | | | | | | | | | | | |

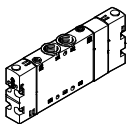
Basic valves CPE18




Ordering data

| Ordering data – 3/2-way valve without pilot valve | | | | | |
|---|-----------------|------------------|------------|----------|-------------------|
| Design | Normal position | Pilot air supply | Weight [g] | Part No. | Type |
|  | Closed | Internal | 110 | 550163 | CPE18-P1-3GL-1/4 |
| | Open | | | 550165 | CPE18-P1-3OL-1/4 |
| | Closed | External | | 550164 | CPE18-P1-3GLS-1/4 |
| | Open | | | 550166 | CPE18-P1-3OLS-1/4 |

| Ordering data – 5/2-way single solenoid valve without pilot valve | | | | | |
|---|---|------------------|------------|----------|------------------|
| Design | | Pilot air supply | Weight [g] | Part No. | Type |
|  | – | Internal | 180 | 550153 | CPE18-P1-5L-1/4 |
| | | External | | 550154 | CPE18-P1-5LS-1/4 |

| Ordering data – 5/2-way double solenoid valve without pilot valve | | | | | |
|---|---|------------------|------------|----------|------------------|
| Design | | Pilot air supply | Weight [g] | Part No. | Type |
|  | – | Internal | 190 | 550155 | CPE18-P1-5J-1/4 |
| | | External | | 550156 | CPE18-P1-5JS-1/4 |

| Ordering data – 5/3-way mid-position valve without pilot valve | | | | | |
|---|-----------------|------------------|------------|----------|--------------------|
| Design | Normal position | Pilot air supply | Weight [g] | Part No. | Type |
|  | Closed | Internal | 200 | 550157 | CPE18-P1-5/3G-1/4 |
| | Open | | | 550159 | CPE18-P1-5/3E-1/4 |
| | Exhausted | | | 550161 | CPE18-P1-5/3B-1/4 |
| | Closed | External | | 550158 | CPE18-P1-5/3GS-1/4 |
| | Open | | | 550160 | CPE18-P1-5/3ES-1/4 |
| | Exhausted | | | 550162 | CPE18-P1-5/3BS-1/4 |

| Ordering data – Pilot valve to ISO 15218 | | | | | | | | |
|---|-------------------------|--------------|-------|------|---------|--------|----------|-----------------------|
| Design | Plug, square design | PE conductor | Power | | Voltage | | Part No. | Type |
| | | | [W] | [VA] | [V DC] | [V AC] | | |
|  | Type C to EN 175301-803 | No | 1.8 | – | 24 | – | 546256 | VSCS-B-M32-MH-WA-1C1 |
| | | | | | 12 | – | 546257 | VSCS-B-M32-MH-WA-5C1 |
|  | Type C to EN 175301-803 | Yes | – | 2.1 | – | 230 | 546260 | VSCS-B-M32-MH-WA-3AC1 |
| | | Yes | – | 2.1 | – | 110 | 546259 | VSCS-B-M32-MH-WA-2AC1 |
|  | Type C to EN 175301-803 | No | – | 2.3 | – | 24 | 546258 | VSCS-B-M32-MH-WA-1AC1 |

Manifold blocks CPE18

Technical data – Fixed-grid manifold block



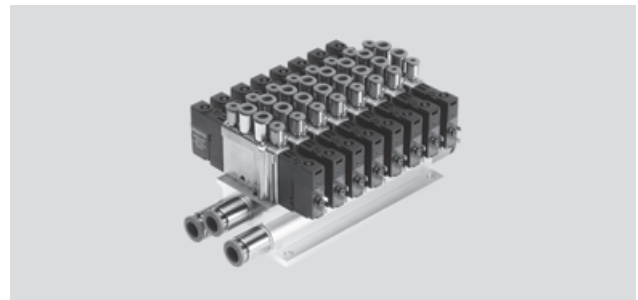
Manifold block

For CPE18 5/2 and 5/3

Materials:

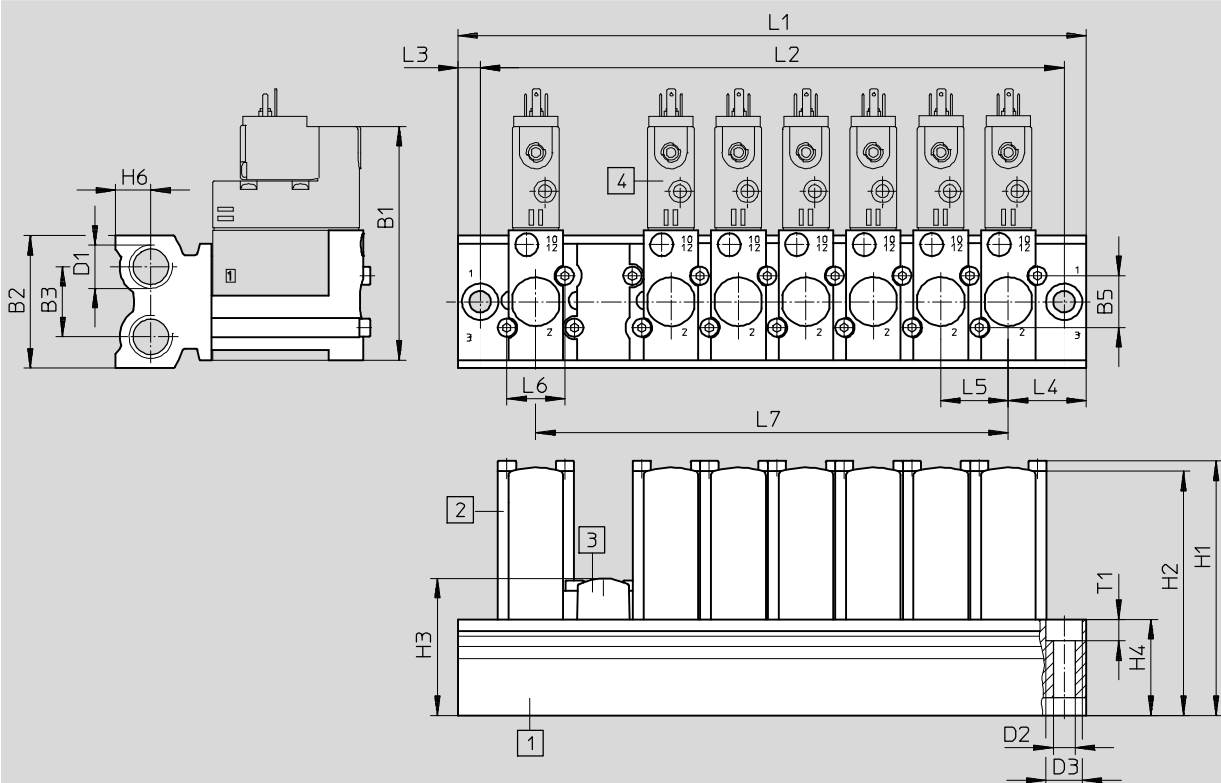
Wrought aluminium alloy

RoHS compliant



Dimensions – Fixed-grid manifold 5/2 and 5/3

Download CAD data → www.festo.com



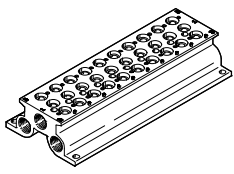
- 1 Manifold block
Grid dimension 26 mm
- 2 Retainer
- 3 Cover plate
- 4 Valves

| Type | B1 | B2 | B3 | B4 | B5 | D1 | D2 | H1 | H2 | H3 | H4 | H5 | H6 |
|--------------|-----|-----|----|------|----|------|-----|-----|--------|------|----|------|----|
| CPE18-PRS... | 155 | 102 | 46 | 86.5 | 40 | G3/8 | 8.3 | 105 | 101.45 | 59.8 | 44 | 30.5 | 14 |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 |
|--------------|------------------------|-------------------|-----|------|----|------|-------------------|
| CPE18-PRS... | $45 + (n-1) \times 26$ | $L1 - 17 \pm 0.1$ | 8.5 | 22.5 | 26 | 22.4 | $(n-1) \times 26$ |



Manifold blocks CPE18




Ordering data – Fixed-grid manifold block

| Ordering data | | | | | | |
|---|-----------------|-------------------|--|------------|----------|------------------|
| | Valve positions | CRC ¹⁾ | Max. tightening torque for valve mounting [Nm] | Weight [g] | Part No. | Type |
| Manifold block for 5/2- and 5/3-way valves | | | | | | |
|  | 2 | 2 | 2 | 353 | 543839 | CPE18-PRS-3/8-2 |
| | 3 | | | 482 | 543840 | CPE18-PRS-3/8-3 |
| | 4 | | | 611 | 543841 | CPE18-PRS-3/8-4 |
| | 5 | | | 740 | 543842 | CPE18-PRS-3/8-5 |
| | 6 | | | 870 | 543843 | CPE18-PRS-3/8-6 |
| | 7 | | | 999 | 543844 | CPE18-PRS-3/8-7 |
| | 8 | | | 1128 | 543845 | CPE18-PRS-3/8-8 |
| | 9 | | | 1257 | 543846 | CPE18-PRS-3/8-9 |
| | 10 | | | 1386 | 543847 | CPE18-PRS-3/8-10 |

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

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

| Ordering data | | | |
|---|--|----------|--------------|
| | Material | Part No. | Type |
| Blanking plate for unused valve position | | | |
|  | PA | 544481 | CPE18-RP |
| Retainer set | | | |
|  | Retainer: High-alloy stainless steel Screws: Galvanised steel Seals: NBR | 544396 | CPE18-H5-SET |

| Ordering data | | | |
|---|--|----------|--------------------|
| | Material | Part No. | Type |
| Retainer | | | |
|  | Retainer: High-alloy stainless steel (packaging unit 50 pieces) | 547047 | CPE18-H5-50 |
| Screws | | | |
|  | Galvanised steel (packaging unit 100 pieces) | 547050 | M4X65-8.8-VS-100 |
| Seals | | | |
|  | NBR (packaging unit 150 pieces) | 547053 | CPV18-VI-P.1/4-150 |

Manifold blocks CPE18

Technical data – Fixed-grid manifold block

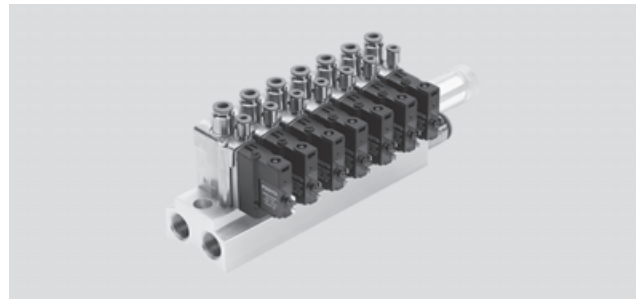


Manifold block

For CPE18 3/2

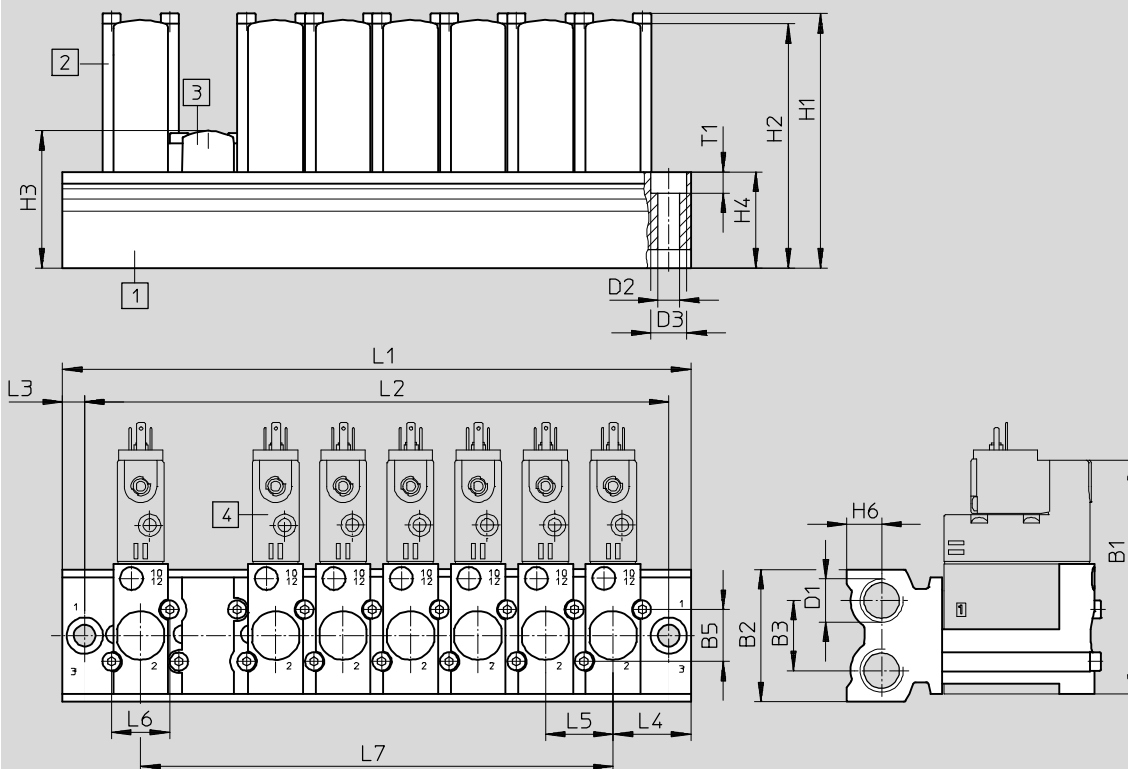
Materials:

Wrought aluminium alloy



Dimensions – Fixed-grid manifold 3/2

Download CAD data → www.festo.com



- 1 Manifold block
Grid dimension 26 mm
- 2 Retainer
- 3 Cover plate
- 4 Valves

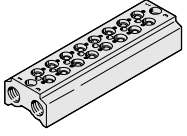
| Type | B1 | B2 | B3 | B5 | D1 | D2 | H1 | H2 | H3 | H4 | H6 |
|------------------|----|----|----|-----|------|-----|----|----|------|----|------|
| CPE18-3/2-PRS... | 90 | 51 | 27 | 200 | G3/8 | 8.3 | 98 | 94 | 52.8 | 37 | 13.5 |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | T1 |
|------------------|------------------------|------------------------|-----|----|----|------|-------------------|-----|
| CPE18-3/2-PRS... | $60 + (n-1) \times 26$ | $43 + (n-1) \times 26$ | 8.5 | 24 | 26 | 22.4 | $(n-1) \times 26$ | 8.3 |

Manifold blocks CPE18


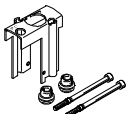
Ordering data – Fixed-grid manifold block




FESTO

| Ordering data | | | | | | |
|---|-----------------|-------------------|--|------------|----------|----------------------|
| | Valve positions | CRC ¹⁾ | Max. tightening torque for valve mounting [Nm] | Weight [g] | Part No. | Type |
| Manifold block for 3/2-way valves | | | | | | |
|  | 2 | 2 | 2 | 266 | 550568 | CPE18-3/2-PRS-3/8-2 |
| | 3 | | | 346 | 550569 | CPE18-3/2-PRS-3/8-3 |
| | 4 | | | 426 | 550570 | CPE18-3/2-PRS-3/8-4 |
| | 5 | | | 507 | 550571 | CPE18-3/2-PRS-3/8-5 |
| | 6 | | | 587 | 550572 | CPE18-3/2-PRS-3/8-6 |
| | 7 | | | 667 | 550573 | CPE18-3/2-PRS-3/8-7 |
| | 8 | | | 748 | 550574 | CPE18-3/2-PRS-3/8-8 |
| | 9 | | | 828 | 550575 | CPE18-3/2-PRS-3/8-9 |
| | 10 | | | 908 | 550576 | CPE18-3/2-PRS-3/8-10 |

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

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

| Ordering data | | | |
|---|--|----------|--------------|
| | Material | Part No. | Type |
| Cover plate | | | |
|  | PA | 550582 | CPE18-RP3 |
| Retainer set | | | |
|  | Retainer: High-alloy stainless steel Screws: Galvanised steel Seals: NBR | 550579 | CPE18-H3-SET |

| Ordering data | | | |
|---|--|----------|------------------|
| | Material | Part No. | Type |
| Retainer | | | |
|  | Retainer: High-alloy stainless steel (packaging unit 50 pieces) | 551492 | CPE18-H3-50 |
| Screws | | | |
|  | Galvanised steel (packaging unit 100 pieces) | 547050 | M4X65-8.8-VS-100 |
| Seals | | | |
|  | NBR (packaging unit 150 pieces) | 547053 | CPV18-VI-P.¼-150 |

Manifold blocks CPE18

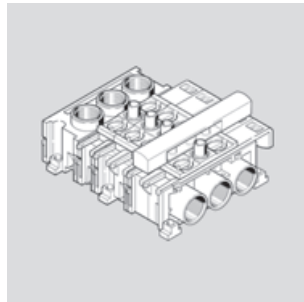
Technical data – Modular manifold

Modular manifold block

For CPE18 5/2 and 5/3

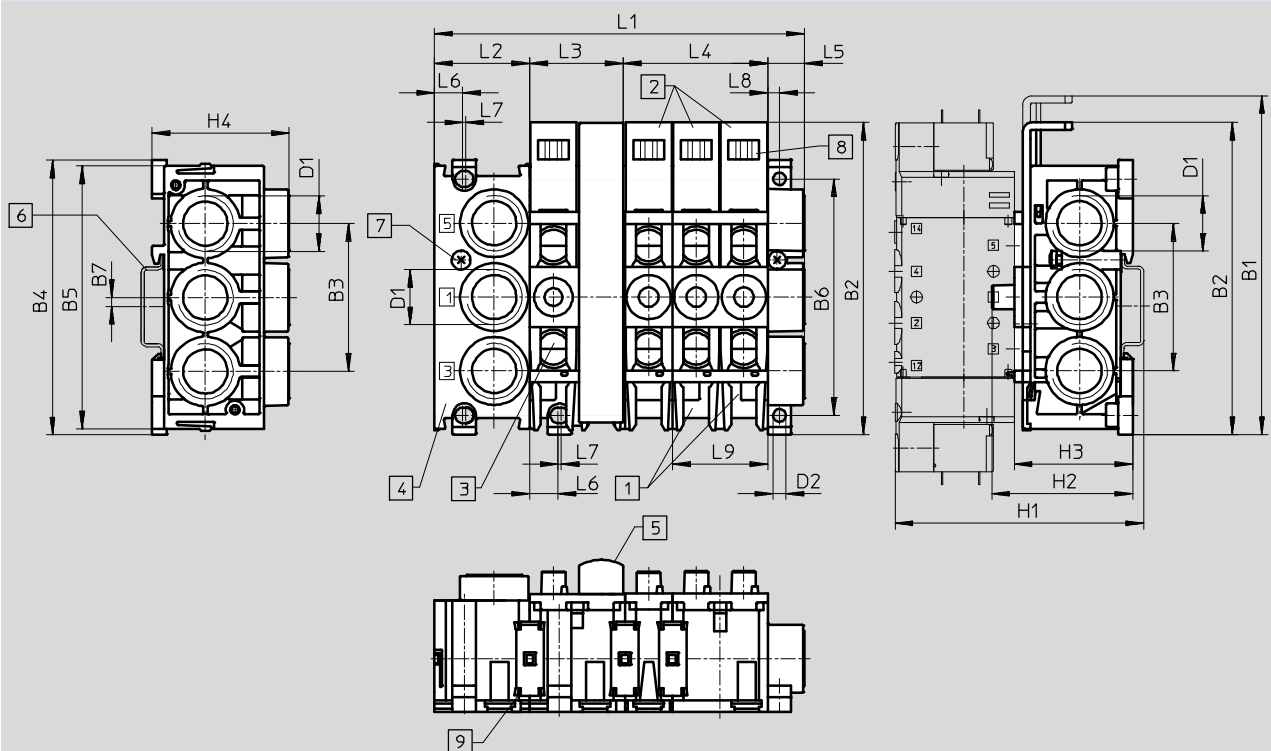
Materials:

PA, reinforced



Dimensions – Modular manifold block

Download CAD data → www.festo.com



- | | | | |
|--|---|------------------------------------|---|
| 1) Manifold block CPE...-PRSG...-2 for 2 valves | 3) Expansion block CPE...-PRSE...-2 for 2 valves | 6) H-rail to EN 50002 for mounting | 8) Location for inscription labels type IBS 6 x 10 |
| 2) Manifold block CPE...-PRSG...-3 for 3 valves | 4) End block CPE...-PRS-EP | 7) Clamping screw for H-rail | 9) Connector |
| 5) Blanking plate CPE...-PRSB | | | |

| Size | B1 | B2 | B3 | B4 | B5 | B6 | B7 | D1 | D2 ∅ | H1 | H2 | H3 | H4 |
|-------|-------|-------|----|-----|----|-----|------|------|---------|------|-----|-----|------|
| CPE18 | 151.6 | 136.5 | 59 | 113 | - | 100 | 2.75 | G1/2 | 5.3 | ~106 | ~58 | ~46 | 51,4 |


| Size | L1 ¹⁾ | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 |
|-------|------------------|----|----|----|------|------|----|-----|----|
| CPE18 | 40+(nx20)+16.4 | 40 | 40 | 60 | 16.4 | 12.6 | 1 | 5.2 | 40 |

1) n = number of valve positions

Manifold blocks CPE18

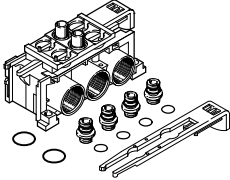
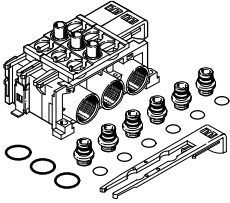
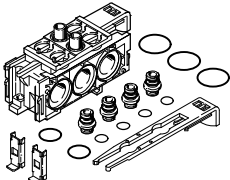
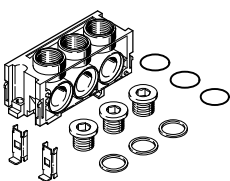
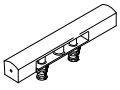
Technical data – Modular manifold

| Possible combinations | | | |
|---------------------------|--|---|--|
| Number of valve positions | One pressure zone | Two pressure zones | |
| | | Variant 1 | Variant 2 |
| 2 | 1x CPE...-PRSG-2 | – | – |
| 3 | 1x CPE...-PRSG-3 | – | – |
| 4 | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 | 1x CPE...-PRSG-2 1x CPE...-PRSEO-2 1x CPE...-PRS-EP | – |
| 5 | 1x CPE...-PRSGO-3 1x CPE...-PRSE-2 | 1x CPE...-PRSG-3 1x CPE...-PRSEO-2 1x CPE...-PRS-EP | – |
| 6 | 1x CPE...-PRSGO-2 1x CPE...-PRSEO-2 1x CPE...-PRSE-2 | 1x CPE...-PRSG-2 2x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 1x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 7 | 1x CPE...-PRSGO-3 2x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-3 2x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-3 1x CPE...-PRSE-2 1x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 8 | 1x CPE...-PRSGO-2 3x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-2 3x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 2x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 9 | 1x CPE...-PRSGO-3 3x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-3 3x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-3 1x CPE...-PRSE-2 2x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 10 | 1x CPE...-PRSGO-2 4x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-2 4x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 3x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 11 | 1x CPE...-PRSGO-3 4x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-3 4x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-3 1x CPE...-PRSE-2 3x CPE...-PRSEO-2 1x CPE...-PRS-EP |
| 12 | 1x CPE...-PRSGO-2 5x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSG-2 5x CPE...-PRSEO-2 1x CPE...-PRS-EP | 1x CPE...-PRSGO-2 1x CPE...-PRSE-2 4x CPE...-PRSEO-2 1x CPE...-PRS-EP |

 Note
 A maximum of 6 valve positions are possible per air supply.
 Use valve manifold blocks only in combination with 5/2- and 5/3-way valves.

Manifold blocks CPE18

Ordering data – Modular manifold

| Ordering data | | | | | |
|---|--------------|-----------|------------|---------------|----------------------|
| | Port 1, 3, 5 | PRS ducts | Weight [g] | Part No. | Type |
| Manifold block PRSG for 2 valves | | | | | |
|  | G1/2 | Closed | 170 | 164970 | CPE18-PRSG-2 |
| | G1/2 | Open | 170 | 187831 | CPE18-PRSGO-2 |
| Manifold block PRSG for 3 valves | | | | | |
|  | G1/2 | Closed | 225 | 187825 | CPE18-PRSG-3 |
| | G1/2 | Open | 225 | 187821 | CPE18-PRSGO-3 |
| Manifold block PRSE for 2 valves | | | | | |
|  | - | Closed | 145 | 164972 | CPE18-PRSE-2 |
| | - | Open | 145 | 187832 | CPE18-PRSEO-2 |
| End plate for manifold | | | | | |
|  | G1/2 | - | 125 | 164973 | CPE18-PRS-EP |
| Blanking plate for unused valve position | | | | | |
|  | - | - | 28 | 164974 | CPE18-PRSB |

Solenoid valves CPE24

Technical data

FESTO

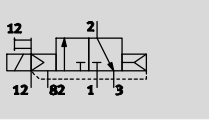
Functions:

3/2G, 3/2O




5/2-way, single solenoid,

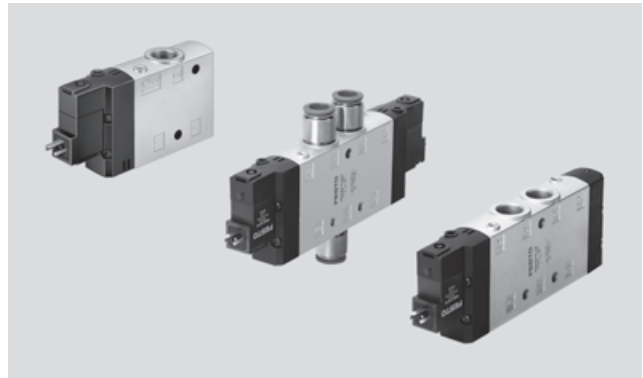
5/2-way valve, double solenoid

5/3G, 5/3B, 5/3E



3/2G with external pilot air supply, normally closed

-  - Width 24 mm
-  - Flow rate
1250 ... 3200 l/min
-  - Voltage
24 V DC, 110, 230 V AC
Basic valve
12, 24 V DC, 24, 110,
230 V AC



| General technical data | | | | | | | |
|--|--|---|---|----------|-----------------|-----------------|-----------------|
| Valve function | 3/2 | | 5/2 | | 5/3 | | |
| Normal position | G ¹⁾ | O ²⁾ | - | | G ¹⁾ | B ²⁾ | E ³⁾ |
| Stable position | Monostable | | | Bistable | | Monostable | |
| Reset method: pneumatic spring | Yes | | | - | | No | |
| Reset method: mechanical spring | No | | | - | | Yes | |
| Design | Piston spool | | | | | | |
| Sealing principle | Soft | | | | | | |
| Type of actuation | Electrical | | | | | | |
| Type of control | Pilot | | | | | | |
| Pilot air supply | Internal or external | | | | | | |
| Flow direction | - | | Reversible with external pilot air supply | | | | |
| Exhaust function | | | With flow control | | | | |
| Manual override | Non-detenting, detenting via accessory | | | | | | |
| Type of mounting | Via through-holes | | | | | | |
| Mounting position | Any | | | | | | |
| Pneumatic connection | 1, 2, 4 | Threaded connection: G3/8; QS connection: Ø 10 or Ø 12 mm | | | | | |
| | 3, 5 | Threaded connection: G3/8 | | | | | |
| | 12, 14 | Threaded connection: M5; QS connection: Ø 6 mm | | | | | |
| | 82, 84 | Threaded connection: M5 | | | | | |
| Nominal width | [mm] | 11 | | | | | |
| Standard nominal flow rate | G3/8 | [l/min] | 2500 | 3200 | 3000 | 2600 | 2650 |
| | QS10 | [l/min] | 1250 | | | | |
| | QS12 | [l/min] | 1650 | | | | |
| Switching time | On/off | [ms] | 50/33 | 40/50 | - | 25/55 | |
| | Changeover | [ms] | - | | 25 | - | |
| Duty cycle | [%] | 100 | | | | | |
| Width | [mm] | 24 | | | | | |
| Corrosion resistance class CRC ⁴⁾ | 2 | | | | | | |

1) G = normally closed

2) O, B = normally open

3) E = normally exhausted

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

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Solenoid valves CPE24

Technical data

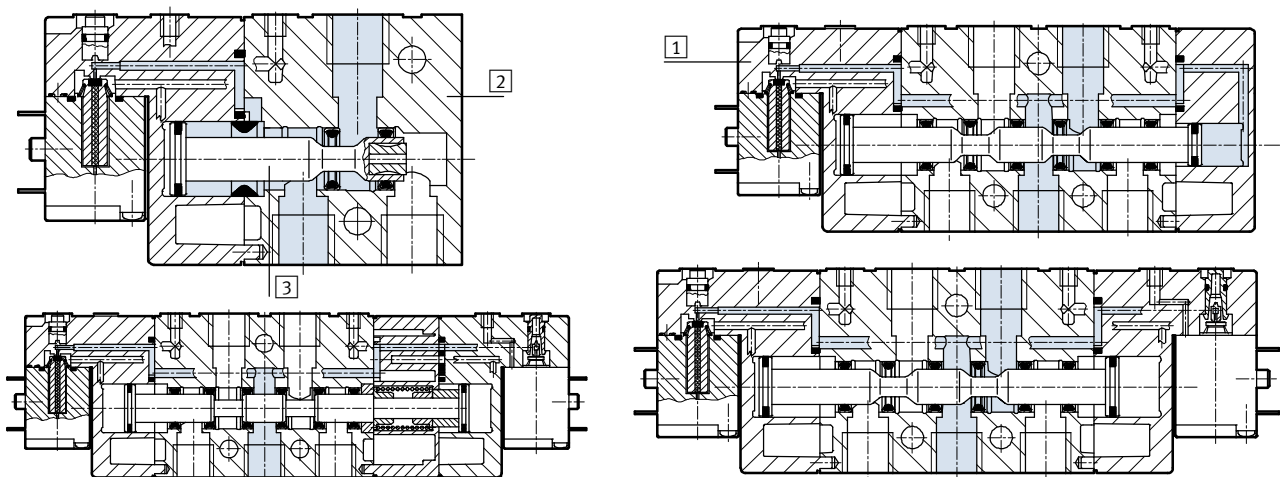
| Operating and environmental conditions | | | | | |
|--|--|-------|--------------------------|--------------------------|------------|
| Valve function | | 3/2 | 5/2-way, single solenoid | 5/2-way, double solenoid | 5/3 |
| Operating medium | Compressed air to ISO 8573-1:2010 [7:4:4] | | | | |
| Pilot medium | Compressed air to ISO 8573-1:2010 [7:4:4] | | | | |
| Note on operating/pilot medium | Lubricated operation possible (in which case lubricated operation will always be required) | | | | |
| Operating pressure | Internal pilot air supply | [bar] | 2.5 ... 10 | 2 ... 10 | 2.5 ... 10 |
| | External pilot air supply | [bar] | -0.9 ... +10 | | |
| Pilot pressure | | [bar] | 2.5 ... 10 | 2 ... 10 | 2.5 ... 10 |
| Ambient temperature | | [°C] | -5 ... +50 | | |
| Temperature of medium | | [°C] | -5 ... +50 | | |
| Approval certificate | c UL us - Recognized (OL) | | | | |
| Maritime classification ¹⁾ | See certificate | | | | |

1) Additional information www.festo.com/sp → Certificates.

| Electrical data | | | |
|---------------------------------------|-------------------|--------|--------------------------|
| Operating voltage | M1H | [V DC] | 24 +10/-15% |
| | M2H | [V AC] | 110 ±10% at 50 ... 60 Hz |
| | M3H | [V AC] | 230 ±10% at 50 ... 60 Hz |
| Power consumption | M1H | [W] | 1.5 |
| | M2H, M3H | [VA] | Pull: 3, hold: 2.4 |
| Degree of protection with plug socket | IP65 to IEC 60529 | | |

Materials

Sectional view



| | | |
|-------------------|--------------|--------------------|
| 1 | Cap | PA |
| 2 | Housing | Die-cast aluminium |
| 3 | Piston spool | Steel |
| - | Seals | NBR |
| Note on materials | | RoHS compliant |

Solenoid valves CPE24

Technical data

FESTO

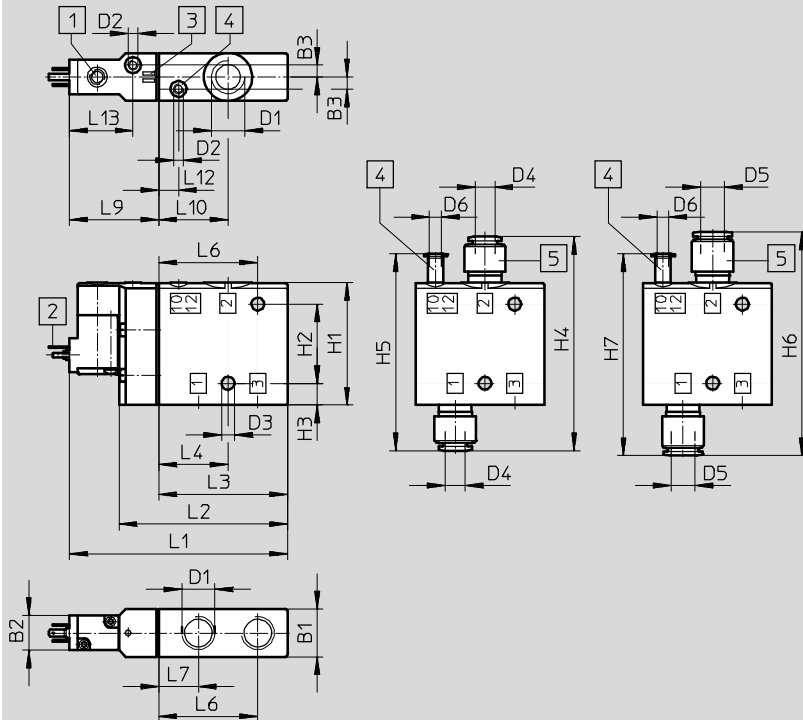
Dimensions – 3/2-way valve

Download CAD data → www.festo.com

CPE24-...-3/8

CPE24-...-QS-10

CPE24-...-QS-12



- 1 Manual override
- 2 Plug connector type C to EN 175301-803
- 3 Space for inscription labels
- 4 Port 10/12 for external pilot air supply
- 5 QS push-in fitting

| Type | B1 ±0.1 | B2 -0.5 | B3 | D1 | D2 | D3 ∅ | D4 ∅ | D5 ∅ | D6 ∅ | H1 ±0.25 | H2 | H3 ±0.1 | H4 | H5 | H6 | H7 |
|----------------|------------|------------|----|------|----|---------|---------|---------|---------|-------------|----|------------|-----|------|-----|-----|
| CPE24-M1H-3... | 24 | 17.5 | 6 | G3/8 | M5 | 6.5 | 10 | 12 | 6 | 62 | 40 | 11 | 108 | 99.5 | 113 | 102 |

| Type | L1 | L2 | L3 ±0.2 | L4 ±0.12 | L6 ±0.15 | L7 ±0.12 | L9 | L10 | L12 ±0.12 | L13 |
|-----------------|-----|----|------------|-------------|-------------|-------------|----|-----|--------------|-----|
| CPE124-M1H-3... | 110 | 85 | 65 | 35 | 50 | 20 | 45 | 35 | 10 | 32 |

Solenoid valves CPE24

Technical data

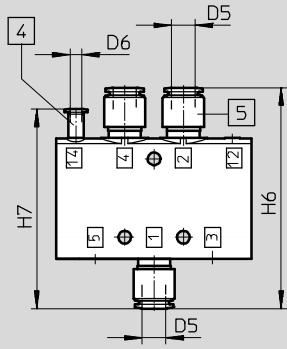
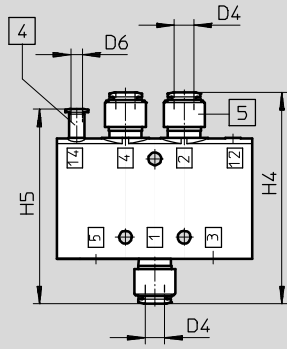
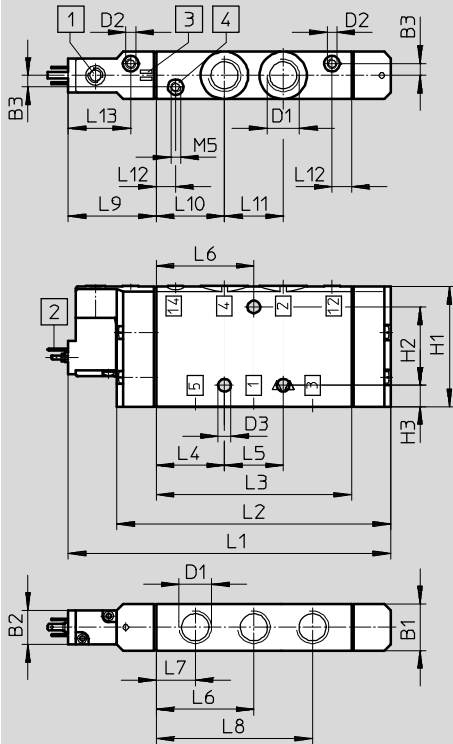
Dimensions – 5/2-way single solenoid valve

Download CAD data → www.festo.com

CPE24-...-3/8

CPE24-...-QS-10

CPE24-...-QS-12



- 1 Manual override
- 2 Plug connector type C to EN 175301-803
- 3 Space for inscription labels
- 4 Port 12/14 for external pilot air
- 5 QS push-in fitting supply

| Type | B1 | B2 | B3 | D1 | D2 | D3 ∅ | D4 ∅ | D5 ∅ | D6 ∅ | H1 | H2 | H3 | H4 | H5 | H6 | H7 |
|-----------------|----|------|----|------|----|---------|---------|---------|---------|----|----|----|-----|------|-----|-----|
| CPE24-M1H-5L... | 24 | 17.5 | 6 | G3/8 | M5 | 6.5 | 10 | 12 | 6 | 62 | 40 | 11 | 108 | 99.5 | 113 | 102 |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 |
|-----------------|-----|-----|-----|----|----|----|----|----|----|-----|-----|-----|-----|
| CPE24-M1H-5L... | 165 | 140 | 100 | 35 | 30 | 50 | 20 | 80 | 45 | 35 | 30 | 10 | 32 |

Solenoid valves CPE24

Technical data

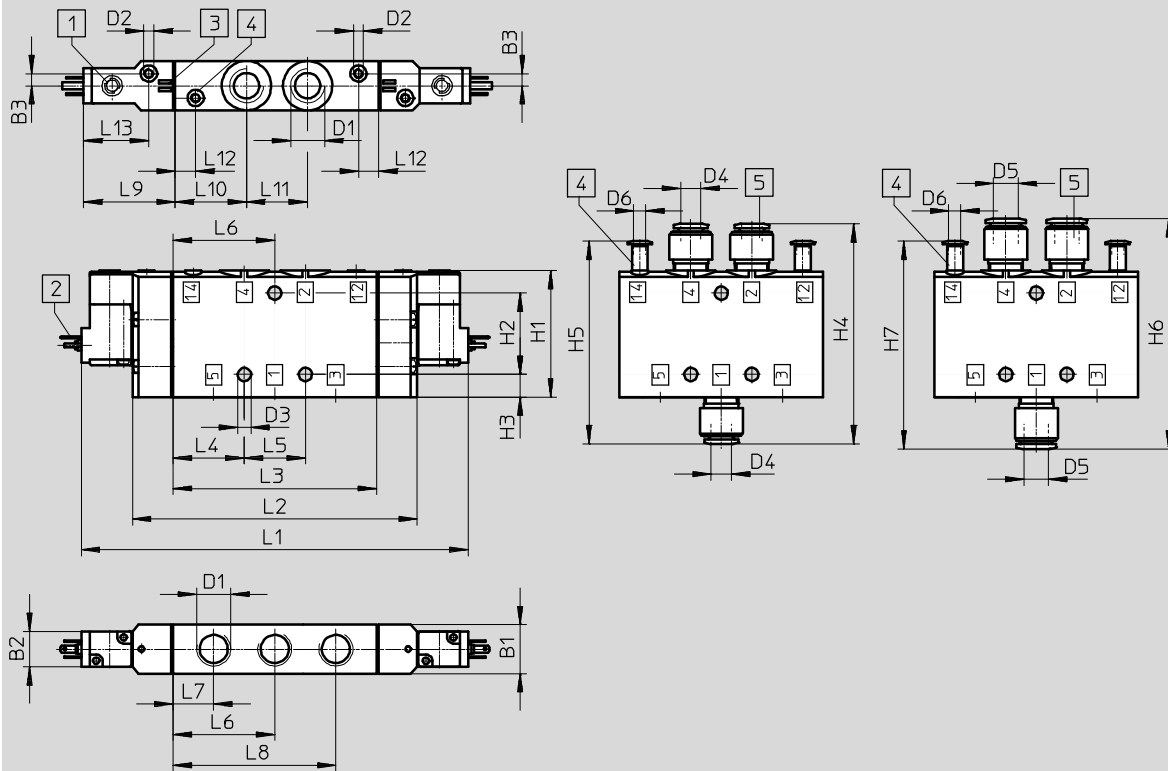
FESTO

Dimensions – 5/2-way double solenoid valve

Download CAD data → www.festo.com

Threaded connection

Push-in connector



- 1 Manual override
- 2 Plug connector type C to EN 175301-803
- 3 Space for inscription labels
- 4 Port 12/14 for external pilot air supply
- 5 QS push-in fitting

| Type | B1 | B2 | B3 | D1 | D2 | D3 ∅ | D4 ∅ | D5 ∅ | D6 ∅ | H1 | H2 | H3 | H4 | H5 | H6 | H7 |
|------------------|----|------|----|------|----|---------|---------|---------|---------|----|----|----|-----|------|-----|-----|
| CPE24-...-5J-3/8 | 24 | 17.5 | 6 | G3/8 | M5 | 6.5 | 10 | 12 | 6 | 62 | 40 | 11 | 108 | 99.5 | 113 | 102 |

| Type | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 |
|------------------|-----|-----|-----|----|----|----|----|----|----|-----|-----|-----|-----|
| CPE24-...-5J-3/8 | 190 | 140 | 100 | 35 | 30 | 50 | 20 | 80 | 45 | 35 | 30 | 10 | 32 |

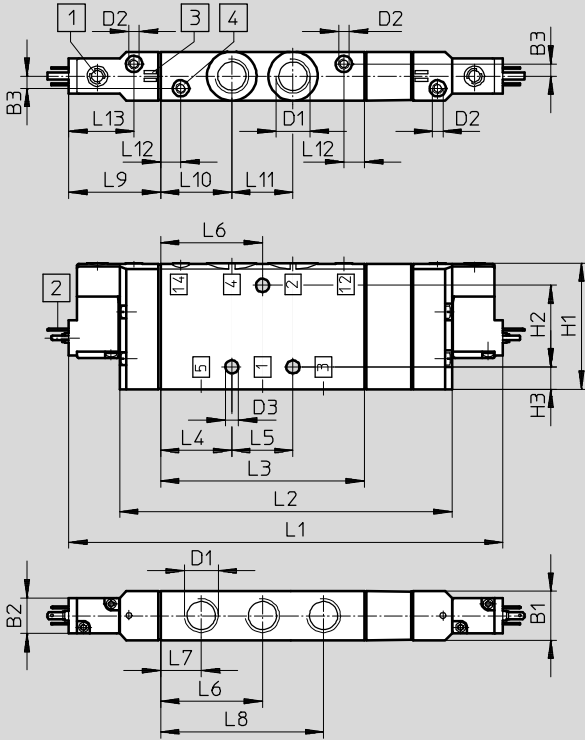
Solenoid valves CPE24

Technical data

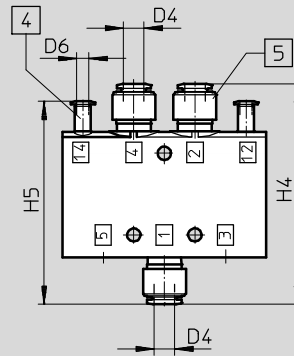
Dimensions – 5/3-way valve

Download CAD data → www.festo.com

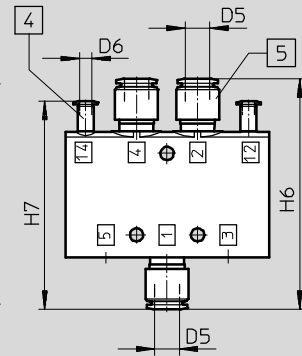
CPE24-...-3/8



CPE24-...-QS-10



CPE24-...-QS-12



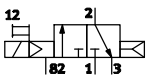
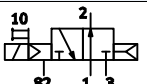
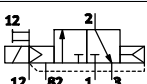
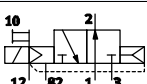
- 1 Manual override
- 2 Plug connector type C to EN 175301-803
- 3 Space for inscription labels
- 4 Port 12/14 for external pilot air supply
- 5 QS push-in fitting

| Type | B1 ±0.1 | B2 -0.5 | B3 | D1 | D2 | D3 ∅ | D4 ∅ | D5 ∅ | D6 ∅ | H1 ±0.25 | H2 | H3 ±0.1 | H4 | H5 | H6 | H7 |
|------------------|------------|------------|----|------|----|---------|---------|---------|---------|-------------|----|------------|-----|------|-----|-----|
| CPE24-M1H...-5 | 24 | 17.5 | 6 | G3/8 | M5 | 6.5 | 10 | 12 | 6 | 62 | 40 | 11 | 108 | 99.5 | 113 | 102 |
| CPE24-M1H...-5/3 | | | | | | | | | | | | | | | | |

| Type | L1 | L2 | L3 ±0.2 | L4 ±0.2 | L5 | L6 | L7 ±0.12 | L8 ±0.2 | L9 | L10 ±0.12 | L11 | L12 ±0.12 | L13 |
|------------------|-----|-----|------------|------------|----|----|-------------|------------|----|--------------|-----|--------------|-----|
| CPE24-M1H...-5] | 190 | 140 | 100 | 35 | 30 | 50 | 20 | 80 | 45 | 35 | 30 | 10 | 32 |
| CPE24-M1H...-5/3 | 213 | 163 | | | | | | | | | | | |

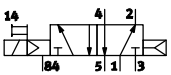
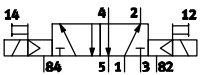
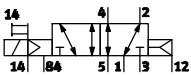
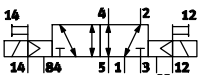
Solenoid valves CPE24

Ordering data – 3/2-way valve

| Ordering data | | | | | | |
|---|------------------|----------|----------------------|------------|----------|----------------------|
| Circuit symbol | Pilot air supply | Voltage | Pneumatic connection | Weight [g] | Part No. | Type |
| Normally closed | | | | | | |
|  | Internal | 24 V DC | G3/8 | 220 | 163165 | CPE24-M1H-3GL-3/8 |
| | | | QS-10 | - | 163173 | CPE24-M1H-3GL-QS-10 |
| | | | QS-12 | - | 163181 | CPE24-M1H-3GL-QS-12 |
| | | 110 V AC | G3/8 | 220 | 163809 | CPE24-M2H-3GL-3/8 |
| | | | QS-10 | - | 163817 | CPE24-M2H-3GL-QS-10 |
| | | | QS-12 | - | 163825 | CPE24-M2H-3GL-QS-12 |
| | | 230 V AC | G3/8 | 220 | 163833 | CPE24-M3H-3GL-3/8 |
| | | | QS-10 | - | 163841 | CPE24-M3H-3GL-QS-10 |
| | | | QS-12 | - | 163849 | CPE24-M3H-3GL-QS-12 |
| Normally open | | | | | | |
|  | Internal | 24 V DC | G3/8 | 220 | 163164 | CPE24-M1H-3OL-3/8 |
| | | | QS-10 | - | 163172 | CPE24-M1H-3OL-QS-10 |
| | | | QS-12 | - | 163180 | CPE24-M1H-3OL-QS-12 |
| | | 110 V AC | G3/8 | 220 | 163808 | CPE24-M2H-3OL-3/8 |
| | | | QS-10 | - | 163816 | CPE24-M2H-3OL-QS-10 |
| | | | QS-12 | - | 163824 | CPE24-M2H-3OL-QS-12 |
| | | 230 V AC | G3/8 | 220 | 163832 | CPE24-M3H-3OL-3/8 |
| | | | QS-10 | - | 163840 | CPE24-M3H-3OL-QS-10 |
| | | | QS-12 | - | 163848 | CPE24-M3H-3OL-QS-12 |
| Normally closed | | | | | | |
|  | External | 24 V DC | G3/8 | 220 | 163169 | CPE24-M1H-3GLS-3/8 |
| | | | QS-10 | - | 163177 | CPE24-M1H-3GLS-QS-10 |
| | | | QS-12 | - | 163185 | CPE24-M1H-3GLS-QS-12 |
| | | 110 V AC | G3/8 | 220 | 163813 | CPE24-M2H-3GLS-3/8 |
| | | | QS-10 | - | 163821 | CPE24-M2H-3GLS-QS-10 |
| | | | QS-12 | - | 163829 | CPE24-M2H-3GLS-QS-12 |
| | | 230 V AC | G3/8 | 220 | 163837 | CPE24-M3H-3GLS-3/8 |
| | | | QS-10 | - | 163845 | CPE24-M3H-3GLS-QS-10 |
| | | | QS-12 | - | 163853 | CPE24-M3H-3GLS-QS-12 |
| Normally open | | | | | | |
|  | External | 24 V DC | G3/8 | 220 | 163168 | CPE24-M1H-3OLS-3/8 |
| | | | QS-10 | - | 163176 | CPE24-M1H-3OLS-QS-10 |
| | | | QS-12 | - | 163184 | CPE24-M1H-3OLS-QS-12 |
| | | 110 V AC | G3/8 | 220 | 163812 | CPE24-M2H-3OLS-3/8 |
| | | | QS-10 | - | 163820 | CPE24-M2H-3OLS-QS-10 |
| | | | QS-12 | - | 163828 | CPE24-M2H-3OLS-QS-12 |
| | | 230 V AC | G3/8 | 220 | 163836 | CPE24-M3H-3OLS-3/8 |
| | | | QS-10 | - | 163844 | CPE24-M3H-3OLS-QS-10 |
| | | | QS-12 | - | 163852 | CPE24-M3H-3OLS-QS-12 |

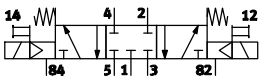
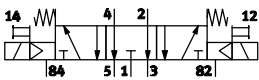
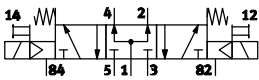
Solenoid valves CPE24

Ordering data – 5/2-way valve

| Ordering data | | | | | | | |
|---|------------------|----------|----------------------|------------|----------|---------------------|---------------------|
| Circuit symbol | Pilot air supply | Voltage | Pneumatic connection | Weight [g] | Part No. | Type | |
| 5/2 way valve, single solenoid | | | | | | | |
|  | Internal | 24 V DC | G3/8 | 360 | 163166 | CPE24-M1H-5L-3/8 | |
| | | | QS-10 | – | 163174 | CPE24-M1H-5L-QS-10 | |
| | | | QS-12 | – | 163182 | CPE24-M1H-5L-QS-12 | |
| | | 110 V AC | | G3/8 | 360 | 163810 | CPE24-M2H-5L-3/8 |
| | | | | QS-10 | – | 163818 | CPE24-M2H-5L-QS-10 |
| | | | | QS-12 | – | 163826 | CPE24-M2H-5L-QS-12 |
| | | 230 V AC | | G3/8 | 360 | 163834 | CPE24-M3H-5L-3/8 |
| | | | | QS-10 | – | 163842 | CPE24-M3H-5L-QS-10 |
| | | | | QS-12 | – | 163850 | CPE24-M3H-5L-QS-12 |
| 5/2-way valve, double solenoid | | | | | | | |
|  | Internal | 24 V DC | G3/8 | 390 | 163167 | CPE24-M1H-5J-3/8 | |
| | | | QS-10 | – | 163175 | CPE24-M1H-5J-QS-10 | |
| | | | QS-12 | – | 163183 | CPE24-M1H-5J-QS-12 | |
| | | 110 V AC | | G3/8 | 390 | 163811 | CPE24-M2H-5J-3/8 |
| | | | | QS-10 | – | 163819 | CPE24-M2H-5J-QS-10 |
| | | | | QS-12 | – | 163827 | CPE24-M2H-5J-QS-12 |
| | | 230 V AC | | G3/8 | 390 | 163835 | CPE24-M3H-5J-3/8 |
| | | | | QS-10 | – | 163843 | CPE24-M3H-5J-QS-10 |
| | | | | QS-12 | – | 163851 | CPE24-M3H-5J-QS-12 |
| 5/2 way valve, single solenoid | | | | | | | |
|  | External | 24 V DC | G3/8 | 360 | 163170 | CPE24-M1H-5LS-3/8 | |
| | | | QS-10 | – | 163178 | CPE24-M1H-5LS-QS-10 | |
| | | | QS-12 | – | 163186 | CPE24-M1H-5LS-QS-12 | |
| | | 110 V AC | | G3/8 | 360 | 163814 | CPE24-M2H-5LS-3/8 |
| | | | | QS-10 | – | 163822 | CPE24-M2H-5LS-QS-10 |
| | | | | QS-12 | – | 163830 | CPE24-M2H-5LS-QS-12 |
| | | 230 V AC | | G3/8 | 360 | 163838 | CPE24-M3H-5LS-3/8 |
| | | | | QS-10 | – | 163846 | CPE24-M3H-5LS-QS-10 |
| | | | | QS-12 | – | 163854 | CPE24-M3H-5LS-QS-12 |
| 5/2-way valve, double solenoid | | | | | | | |
|  | External | 24 V DC | G3/8 | 390 | 163171 | CPE24-M1H-5JS-3/8 | |
| | | | QS-10 | – | 163179 | CPE24-M1H-5JS-QS-10 | |
| | | | QS-12 | – | 163187 | CPE24-M1H-5JS-QS-12 | |
| | | 110 V AC | | G3/8 | 390 | 163815 | CPE24-M2H-5JS-3/8 |
| | | | | QS-10 | – | 163823 | CPE24-M2H-5JS-QS-10 |
| | | | | QS-12 | – | 163831 | CPE24-M2H-5JS-QS-12 |
| | | 230 V AC | | G3/8 | 390 | 163839 | CPE24-M3H-5JS-3/8 |
| | | | | QS-10 | – | 163847 | CPE24-M3H-5JS-QS-10 |
| | | | | QS-12 | – | 163855 | CPE24-M3H-5JS-QS-12 |

Solenoid valves CPE24

Ordering data – 5/3-way valve

| Ordering data | | | | | | | | |
|---|------------------|----------|----------------------|------------|----------|----------------------|--------|----------------------|
| Circuit symbol | Pilot air supply | Voltage | Pneumatic connection | Weight [g] | Part No. | Type | | |
| 5/3-way mid-position valve, normally closed | | | | | | | | |
|  | Internal | 24 V DC | G3/8 | 430 | 170265 | CPE24-M1H-5/3G-3/8 | | |
| | | | QS-10 | – | 170271 | CPE24-M1H-5/3G-QS-10 | | |
| | | | QS-12 | – | 170277 | CPE24-M1H-5/3G-QS-12 | | |
| | | 110 V AC | Internal | 24 V DC | G3/8 | 430 | 170301 | CPE24-M2H-5/3G-3/8 |
| | | | | | QS-10 | – | 170307 | CPE24-M2H-5/3G-QS-10 |
| | | | | | QS-12 | – | 170313 | CPE24-M2H-5/3G-QS-12 |
| | | 230 V AC | Internal | 24 V DC | G3/8 | 430 | 170337 | CPE24-M3H-5/3G-3/8 |
| | | | | | QS-10 | – | 170343 | CPE24-M3H-5/3G-QS-10 |
| | | | | | QS-12 | – | 170349 | CPE24-M3H-5/3G-QS-12 |
| 5/3-way mid-position valve, normally exhausted | | | | | | | | |
|  | Internal | 24 V DC | G3/8 | 430 | 170267 | CPE24-M1H-5/3E-3/8 | | |
| | | | QS-10 | – | 170273 | CPE24-M1H-5/3E-QS-10 | | |
| | | | QS-12 | – | 170279 | CPE24-M1H-5/3E-QS-12 | | |
| | | 110 V AC | Internal | 24 V DC | G3/8 | 430 | 170303 | CPE24-M2H-5/3E-3/8 |
| | | | | | QS-10 | – | 170309 | CPE24-M2H-5/3E-QS-10 |
| | | | | | QS-12 | – | 170315 | CPE24-M2H-5/3E-QS-12 |
| | | 230 V AC | Internal | 24 V DC | G3/8 | 430 | 170339 | CPE24-M3H-5/3E-3/8 |
| | | | | | QS-10 | – | 170345 | CPE24-M3H-5/3E-QS-10 |
| | | | | | QS-12 | – | 170351 | CPE24-M3H-5/3E-QS-12 |
| 5/3-way mid-position valve, normally open | | | | | | | | |
|  | Internal | 24 V DC | G3/8 | 430 | 170269 | CPE24-M1H-5/3B-3/8 | | |
| | | | QS-10 | – | 170275 | CPE24-M1H-5/3B-QS-10 | | |
| | | | QS-12 | – | 170281 | CPE24-M1H-5/3B-QS-12 | | |
| | | 110 V AC | Internal | 24 V DC | G3/8 | 430 | 170305 | CPE24-M2H-5/3B-3/8 |
| | | | | | QS-10 | – | 170311 | CPE24-M2H-5/3B-QS-10 |
| | | | | | QS-12 | – | 170317 | CPE24-M2H-5/3B-QS-12 |
| | | 230 V AC | Internal | 24 V DC | G3/8 | 430 | 170341 | CPE24-M3H-5/3B-3/8 |
| | | | | | QS-10 | – | 170347 | CPE24-M3H-5/3B-QS-10 |
| | | | | | QS-12 | – | 170353 | CPE24-M3H-5/3B-QS-12 |

Solenoid valves CPE24

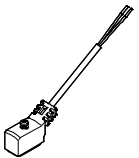
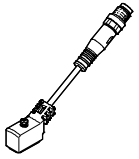
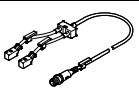

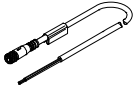
Ordering data – 5/3-way valves

| Ordering data – 5/3-way valve | | | | | | |
|---|------------------|----------|----------------------|------------|----------|-----------------------|
| Circuit symbol | Pilot air supply | Voltage | Pneumatic connection | Weight [g] | Part No. | Type |
| 5/3-way mid-position valve, normally closed | | | | | | |
| | External | 24 V DC | G3/8 | 430 | 170266 | CPE24-M1H-5/3GS-3/8 |
| | | | QS-10 | – | 170272 | CPE24-M1H-5/3GS-QS-10 |
| | | | QS-12 | – | 170278 | CPE24-M1H-5/3GS-QS-12 |
| | | 110 V AC | G3/8 | 430 | 170302 | CPE24-M2H-5/3GS-3/8 |
| | | | | – | 170308 | CPE24-M2H-5/3GS-QS-10 |
| | | | | – | 170314 | CPE24-M2H-5/3GS-QS-12 |
| | | 230 V AC | G3/8 | 430 | 170338 | CPE24-M3H-5/3GS-3/8 |
| | | | | – | 170344 | CPE24-M3H-5/3GS-QS-10 |
| | | | | – | 170350 | CPE24-M3H-5/3GS-QS-12 |
| 5/3-way mid-position valve, normally exhausted | | | | | | |
| | External | 24 V DC | G3/8 | 430 | 170268 | CPE24-M1H-5/3ES-3/8 |
| | | | QS-10 | – | 170274 | CPE24-M1H-5/3ES-QS-10 |
| | | | QS-12 | – | 170280 | CPE24-M1H-5/3ES-QS-12 |
| | | 110 V AC | G3/8 | 430 | 170304 | CPE24-M2H-5/3ES-3/8 |
| | | | | – | 170310 | CPE24-M2H-5/3ES-QS-10 |
| | | | | – | 170316 | CPE24-M2H-5/3ES-QS-12 |
| | | 230 V AC | G3/8 | 430 | 170340 | CPE24-M3H-5/3ES-3/8 |
| | | | | – | 170346 | CPE24-M3H-5/3ES-QS-10 |
| | | | | – | 170352 | CPE24-M3H-5/3ES-QS-12 |
| 5/3-way mid-position valve, normally open | | | | | | |
| | External | 24 V DC | G3/8 | 430 | 170270 | CPE24-M1H-5/3BS-3/8 |
| | | | QS-10 | – | 170276 | CPE24-M1H-5/3BS-QS-10 |
| | | | QS-12 | – | 170282 | CPE24-M1H-5/3BS-QS-12 |
| | | 110 V AC | G3/8 | 430 | 170306 | CPE24-M2H-5/3BS-3/8 |
| | | | | – | 170312 | CPE24-M2H-5/3BS-QS-10 |
| | | | | – | 170318 | CPE24-M2H-5/3BS-QS-12 |
| | | 230 V AC | G3/8 | 430 | 170342 | CPE24-M3H-5/3BS-3/8 |
| | | | | – | 170348 | CPE24-M3H-5/3BS-QS-10 |
| | | | | – | 170354 | CPE24-M3H-5/3BS-QS-12 |

Solenoid valves CPE, Compact Performance

Accessories

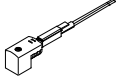



FESTO






| Ordering data – Accessories for CPE10 and CPE14 | | | | | Part No. | Type |
|---|---|---|---|---------------------|-------------------------------------|--|
| Connecting cable, socket, connection pattern ZC | | | | | Technical data → Internet: nebv | |
|  | Open cable end 2-wire | PUR cable, degree of protection IP65 | Holding current reduction, protective circuit, signal status display with LED | Length: 2.5 m | 8047679 | NEBV-Z4WA2L-R-E-2.5-N-LE2-S1 |
| | | | | Length: 5 m | 8047680 | NEBV-Z4WA2L-R-E-5-N-LE2-S1 |
| | | | | Length: 10 m | 8047678 | NEBV-Z4WA2L-R-E-10-N-LE2-S1 |
| | PVC cable, degree of protection IP50 | Without signal status display | Length: 0.5 m | 193690 | KMYZ-4-24-0,5-B | |
| | | | Length: 2.5 m | 193691 | KMYZ-4-24-2,5-B | |
|  | Plug M8x1, 3-pin | PUR cable, degree of protection IP65 | Holding current reduction, protective circuit, signal status display with LED | Length: 0.5 m | 8047683 | NEBV-Z4WA2L-R-E-0.5-N-M8G3-S1 |
| | | | | Length: 2.5 m | 8047684 | NEBV-Z4WA2L-R-E-2.5-N-M8G3-S1 |
| 2 to 1 distributor | | | | | Technical data → Internet: neby | |
|  | 2x plug socket, connection pattern ZC | Holding current reduction, protective circuit, signal status display with LED | 1x plug connector, straight, M8x1 | Length: 2.8 m | 8035789 | NEDY-L2R1-V1-Z4W2Z-U-Q3L-M8G4-2.5R |
| | | | | Length: 5.3 m | 8035790 | NEDY-L2R1-V1-Z4W2Z-U-Q3L-M8G4-5R |
| | | | 1x plug connector, straight, M12x1 | Length: 2.8 m | 8035787 | NEDY-L2R1-V1-Z4W2Z-U-Q3L-M12G4-2.5R |
| | | | | Length: 5.3 m | 8035788 | NEDY-L2R1-V1-Z4W2Z-U-Q3L-M12G4-5R |
| | Modular system for any 2 to 1 distributor | | | Length 0.3 ... 30 m | 8032867 | NEDY-... → Internet: neby |
| Adapter | | | | | | |
|  | Plug socket, connection pattern ZC | Signal status display with LED | Plug M8, 3 pin | 571686 | VAVE-C8-1R8 | |
| | | | Plug M8, 4-pin | 573194 | VAVE-C8-1R1 | |
| Connecting cable, socket M8x1 | | | | | Technical data → Internet: nebu | |
|  | Socket M8x1, 3-pin | Straight | Open cable end 3-wire | Length: 2.5 m | 541333 | NEBU-M8G3-K-2.5-LE3 |
| | | | | Length: 5 m | 541334 | NEBU-M8G3-K-5-LE3 |
| | | | | Length: 10 m | 569844 | NEBU-M8G3-K-10-M8G3 |
| | | Plug M8x1, 3-pin | Length: 2.5 m | 541348 | NEBU-M8G3-K-2.5-M8G3 | |
| | | | Length: 5 m | 541349 | NEBU-M8G3-K-5-M8G3 | |
| | | | Length: 10 m | 541349 | NEBU-M8G3-K-10-M8G3 | |
| | Socket M8x1, 4-pin | Straight | Open cable end 4-wire | Length: 2.5 m | 541342 | NEBU-M8G4-K-2.5-LE4 |
| | | | | Length: 5 m | 541343 | NEBU-M8G4-K-5-LE4 |
| | | Angled | Open cable end 4-wire | Length: 5 m | 541345 | NEBU-M8W4-K-5-LE4 |
| | | | | Length: 2.5 m | 541344 | NEBU-M8W4-K-2.5-LE4 |
| Modular system for all types of connecting cable | | | Length 0.1 ... 30 m | 539052 | NEBU-... → Internet: nebu | |

Solenoid valves CPE, Compact Performance

Accessories

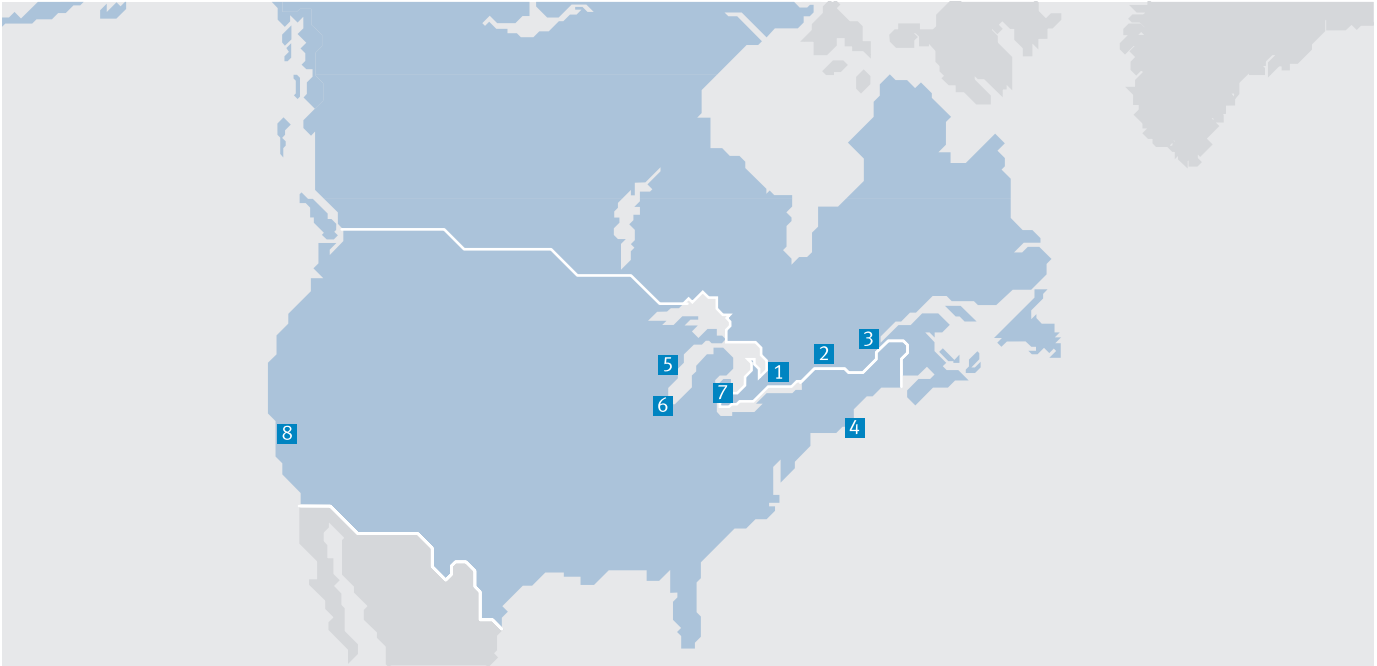
FESTO

| Ordering data – Accessories for CPE18 and CPE24 | | | | | | Part No. | Type |
|--|---------------------------------------|-----------------------------------|----------------|---------------|---------------|-----------------------------------|------|
| Plug socket with cable, socket type C to EN 175301-803 | | | | | | Technical data → Internet: kmeb | |
|  | Cable sheath PVC | Signal status display with LED | 24 V DC | Length: 2.5 m | 151688 | KMEB-1-24-2,5-LED | |
| | | | 24 V DC | Length: 5 m | 151689 | KMEB-1-24-5-LED | |
| | | | 24 V DC | Length: 10 m | 193457 | KMEB-1-24-10-LED | |
| | Cable sheath PUR | Signal status display with LED | Up to 240 V | Length: 2.5 m | 151690 | KMEB-1-230-2,5 | |
| | | | Up to 240 V | Length: 5 m | 151691 | KMEB-1-230-5 | |
| | | | Up to 240 V | Length: 5 m | 174844 | KMEB-2-24-2,5-LED | |
|  | Cable sheath PUR | Signal status display with LED | 24 V DC | Length: 2.5 m | 174845 | KMEB-2-24-5-LED | |
| | | | 24 V DC | Length: 5 m | 174846 | KMEB-2-230-2,5 | |
| | | | Up to 240 V | Length: 5 m | 174847 | KMEB-2-230-5 | |
| Plug socket | | | | | | Technical data → Internet: mssd | |
|  | Socket 3-pin, type C to EN 175301-803 | Screw terminal | Up to 240 V | | 151687 | MSSD-EB | |
| | | | Up to 240 V | | 539712 | MSSD-EB-M12 | |
| | | Insulation displacement connector | Up to 240 V | | 192745 | MSSD-EB-S-M14 | |
| Illuminating seal | | | | | | Technical data → Internet: meb-ld | |
|  | Type C to EN 175301-803 | | 12 ... 24 V DC | | 151717 | MEB-LD-12-24DC | |
| | | | 230 V AC | | 151718 | MEB-LD-230AC | |

| Ordering data – General accessories | | | | | | Part No. | Type | PU ¹⁾ |
|---|---|--|-------------|--|----------------|---------------------------------|-----------|------------------|
| Blanking plug | | | | | | Technical data → Internet: b | | |
|  | For manifold block CPE10 | | G1/4 thread | | 3569 | B-1/4 | 10 | |
| | For manifold block CPE14, CPE18 | | G3/8 thread | | 3570 | B-3/8 | 10 | |
| Separator for pressure zones | | | | | | Technical data → Internet: vabd | | |
|  | For manifold block CPE10 | | | | 537515 | VABD-B6-14-P-C | 1 | |
| | For manifold block CPE14, CPE18 | | | | 160997 | PRSV-1/8 | 1 | |
| Silencer | | | | | | Technical data → Internet: uc | | |
|  | Thread | | M3 | | 1231120 | AMTE-M-LH-M3 | 20 | |
| | | | M5 | | 165003 | UC-M5 | 1 | |
| | | | M7 | | 161418 | UC-M7 | 1 | |
| | | | G1/8 | | 161419 | UC-1/8 | 1 | |
| | | | G1/4 | | 165004 | UC-1/4 | 1 | |
| Manual override | | | | | | Technical data → Internet: ahh | | |
|  | For CPE10 and CPE14 with plug connection pattern ZC | | | | 157600 | AHB-MZB | 1 | |
| | For CPE18 and CPE24 with plug type C | | | | 157601 | AHB-MEB | 1 | |
| Inscription labels | | | | | | Technical data → Internet: ibs | | |
|  | Inscription label, 6x10mm | | | | 18576 | IBS-6x10 | 64 | |

1) Packaging unit.

Festo North America



**1 Festo Canada
Headquarters
Festo Inc.**
5300 Explorer Drive
Mississauga, ON
L4W 5G4

2 Montréal
5600, Trans-Canada
Pointe-Claire, QC
H9R 1B6

3 Québec City
2930, rue Watt#117
Québec, QC
G1X 4G3



**4 Festo United States
Headquarters
Festo Corporation**
395 Moreland Road
Hauppauge, NY
11788

5 Appleton
North 922 Tower View Drive, Suite N
Greenville, WI
54942

7 Detroit
1441 West Long Lake Road
Troy, MI
48098

6 Chicago
85 W Algonquin - Suite 340
Arlington Heights, IL
60005

8 Silicon Valley
4935 Southfront Road, Suite F
Livermore, CA
94550

Festo Regional Contact Center

Canadian Customers

Commercial Support:
Tel: 1 877 GO FESTO (1 877 463 3786)
Fax: 1 877 FX FESTO (1 877 393 3786)
Email: festo.canada@ca.festo.com

Technical Support:
Tel: 1 866 GO FESTO (1 866 463 3786)
Fax: 1 877 FX FESTO (1 877 393 3786)
Email: technical.support@ca.festo.com

USA Customers

Commercial Support:
Tel: 1 800 99 FESTO (1 800 993 3786)
Fax: 1 800 96 FESTO (1 800 963 3786)
Email: customer.service@us.festo.com

Technical Support:
Tel: 1 866 GO FESTO (1 866 463 3786)
Fax: 1 800 96 FESTO (1 800 963 3786)
Email: product.support@us.festo.com