



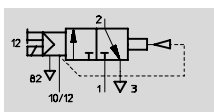
- Electrically actuated valves
- Performance optimised sizes
- Minimal width
- High flow rates
- Low power consumption

Solenoid valves CPE, Compact Performance

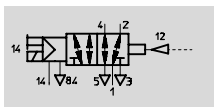
Features



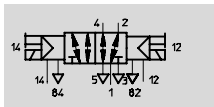
Function¹⁾



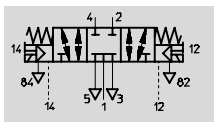
1) 3/2-way, e.g. with external pilot air, normally closed



1) 5/2-way, single solenoid, e.g. with external pilot air



1) 5/2-way, double solenoid, e.g. with external pilot air



1) 5/3-way, e.g. with external pilot air, normally closed

- - Width
10 ... 24 mm

- - Flow rate
180 ... 3,200 l/min

- - Voltage
24 V DC
110 V AC
230 V AC

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

Can be mounted on site:
– on cylinders,
– on moving system components.
– Choice of installation either individual, top-hat rail or wall mounted.

Micro CPE10, Mini CPE14 and Midi CPE18:
Simple structure comprising compact valve manifolds through modular manifold blocks.
Possible combinations → 2 / 2.1-58

Shorter tubing lengths with minimal air volumes:

- fast switching times
 - quick reaction times
- Optimised installations:
- shorter machine cycles
 - larger quantities
 - low power consumption
- Convenient manual override

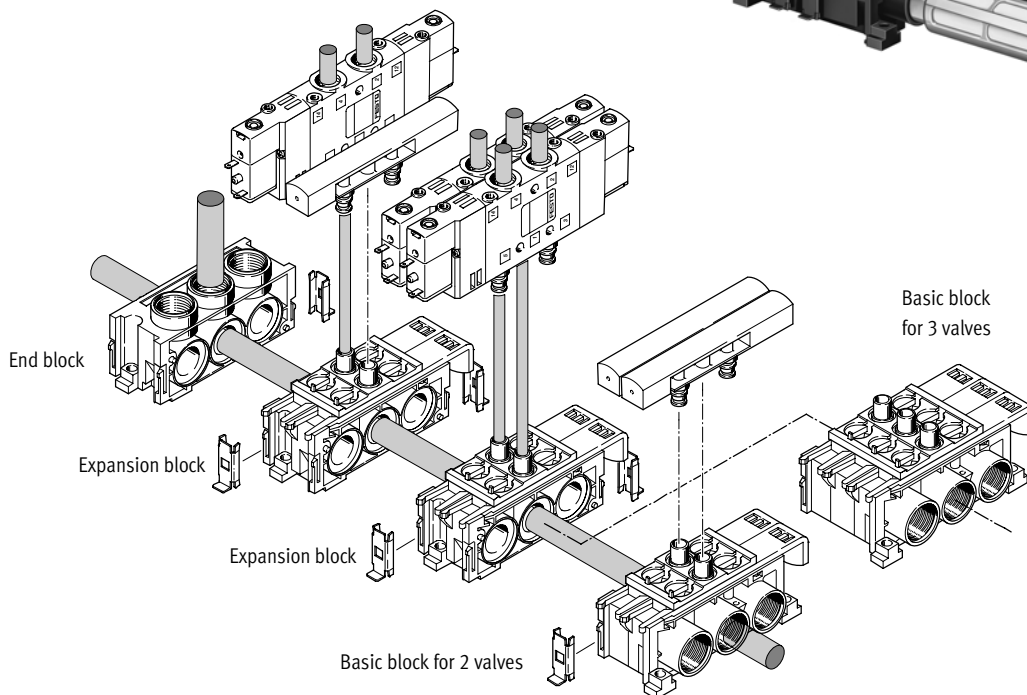
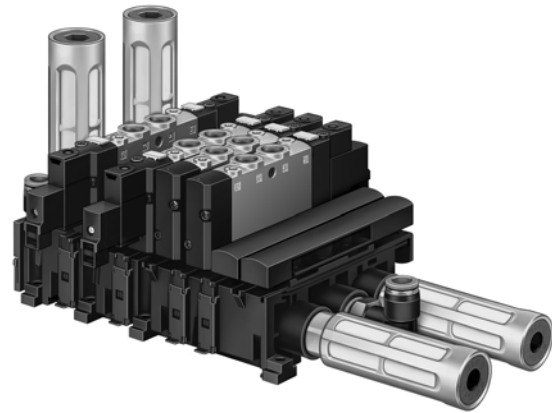
A current reduction function has been integrated in the KMYZ-9 plug socket for sizes Micro CPE10 and Mini CPE14.

Solenoid valves CPE, Compact Performance

Features

Manifold assembly for Micro CPE10, Mini CPE14 and Midi CPE18

- From individual valves through to compact valve manifolds thanks to modular sub-base systems made from high impact, fibre glass reinforced polyamide.
- Different pressure zones can be implemented with closed PRS channels in basic and expansion blocks.
- Supply and exhaust air can be connected at both ends with connections on basic and end blocks.
- Supply and exhaust air can be connected at the end block, both from the side and from the top.
- No screws required for mounting thanks to quick connecting clips.
- Possible combinations
→ 2 / 2.1-58



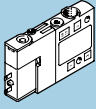
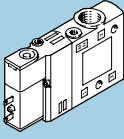
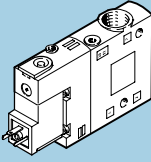
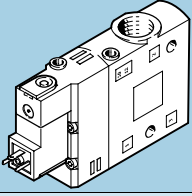
Solenoid valves CPE, Compact Performance

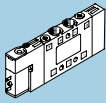
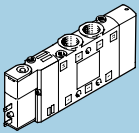
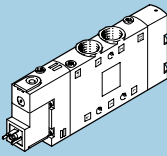
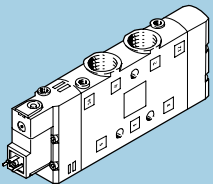
Product range overview

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Directional control valves for standard applications
Compact Performance

2.1

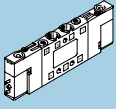
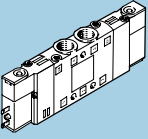
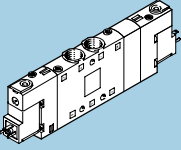
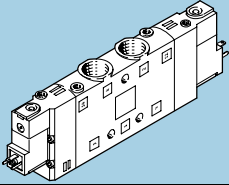
3/2-way valves					
					
Type	Micro CPE10	Mini CPE14	Midi CPE18	Maxi CPE24	
Grid dimension	10 mm	14 mm	18 mm	24 mm	
Nominal flow rate [l/min]					
Threaded	M5	190	–	–	
	M7	400	–	–	
	G1/8	–	900	–	
	G1/4	–	–	1,300	
	G3/8	–	–	–	2,500
Push-in connector	QS-4	190	–	–	
	QS-6	300	510	–	
	QS-8	–	810	850	–
	QS-10	–	–	1,000	1,250
	QS-12	–	–	–	1,650
Operating voltage					
24 V DC	■	■	■	■	
110 V AC	–	–	■	■	
230 V AC	–	–	■	■	
Technical data →	2 / 2.1-12	2 / 2.1-13	2 / 2.1-14	2 / 2.1-15	

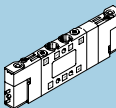
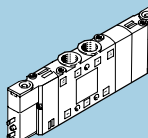
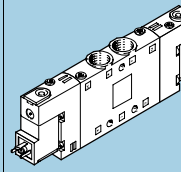
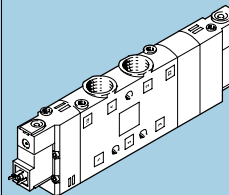
5/2-way valves					
					
Type	Micro CPE10	Mini CPE14	Midi CPE18	Maxi CPE24	
Grid dimension	10 mm	14 mm	18 mm	24 mm	
Nominal flow rate [l/min]					
Threaded	M5	180	–	–	
	M7	350	–	–	
	G1/8	–	800	–	
	G1/4	–	–	1,500	
	G3/8	–	–	–	2,900
Push-in connector	QS-4	180	–	–	
	QS-6	320	400	–	
	QS-8	–	680	850	–
	QS-10	–	–	1,000	1,250
	QS-12	–	–	–	1,650
Operating voltage					
24 V DC	■	■	■	■	
110 V AC	–	–	■	■	
230 V AC	–	–	■	■	
Technical data →	2 / 2.1-22	2 / 2.1-23	2 / 2.1-24	2 / 2.1-25	

Solenoid valves CPE, Compact Performance

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Product range overview

5/2-way valves, Double solenoid valves					
Type		Micro CPE10	Mini CPE14	Midi CPE18	Maxi CPE24
Grid dimension		10 mm	14 mm	18 mm	24 mm
Nominal flow rate [l/min]					
Threaded	M5	180	–	–	–
	M7	350	–	–	–
	G $\frac{1}{8}$	–	800	–	–
	G $\frac{1}{4}$	–	–	1,500	–
	G $\frac{3}{8}$	–	–	–	3,200
Push-in connector	QS-4	180	–	–	–
	QS-6	320	400	–	–
	QS-8	–	680	850	–
	QS-10	–	–	1,000	1,250
	QS-12	–	–	–	1,650
Operating voltage					
24 V DC		■	■	■	■
110 V AC		–	–	■	■
230 V AC		–	–	■	■
Technical data →		2 / 2.1-32	2 / 2.1-33	2 / 2.1-34	2 / 2.1-35

5/3-way valves					
Type		Micro CPE10	Mini CPE14	Midi CPE18	Maxi CPE24
Grid dimension		10 mm	14 mm	18 mm	24 mm
Nominal flow rate [l/min]					
Threaded	M5	180	–	–	–
	M7	250 ... 350	–	–	–
	G $\frac{1}{8}$	–	700 ... 750	–	–
	G $\frac{1}{4}$	–	–	1,200 ... 1,450	–
	G $\frac{3}{8}$	–	–	–	2,600 ... 3,000
Push-in connector	QS-4	180	–	–	–
	QS-6	250 ... 300	370 ... 410	–	–
	QS-8	–	570 ... 720	780 ... 850	–
	QS-10	–	–	1,000 ... 1,050	1,250
	QS-12	–	–	–	1,600 ... 1,650
Operating voltage					
24 V DC		■	■	■	■
110 V AC		–	–	■	■
230 V AC		–	–	■	■
Technical data →		2 / 2.1-41	2 / 2.1-42	2 / 2.1-43	2 / 2.1-44

Directional control valves for standard applications
Compact Performance

2.1

Solenoid valves CPE, Compact Performance

Product range overview



Accessories				
Type	Micro CPE10	Mini CPE14	Midi CPE18	Maxi CPE24
Grid dimension	10 mm	14 mm	18 mm	24 mm
Basic block for 2 valves with PRS channels				
closed	■	■	■	-
open	■	■	■	-
Basic block for 3 valves with PRS channels				
closed	■	■	■	-
open	■	■	■	-
Expansion block for 2 valves with PRS channels				
closed	■	■	■	-
open	■	■	■	-
End block	■	■	■	-
Blanking plate	■	■	■	-
Silencer for port				
3 or 5	■	■	■	-
82 or 84	■	■	■	-
Blanking plugs	■	■	■	-
Manual override tool	■	■	■	■
Inscription labels	■	■	■	■
Plug sockets				
with PUR cable	■	■	■	■
without cable	-	-	■	■
Luminescent seal	-	-	■	■
Technical data starting on → 2 / 2.1-54				

Solenoid valves CPE, Compact Performance

Type codes

CPE 10 - M1BH - 5/3 B S - QS-6 - B

Type	
CPE	Solenoid valve, Compact Performance

Width	
10	10 mm Micro
14	14 mm Mini
18	18 mm Midi
24	24 mm Maxi

Operating voltage	
M1BH	24 V DC with plug pattern for KMYZ-9
M1H	24 V DC
M2H	110 V AC
M3H	230 V AC

Valve function	
3	3/2-way
5	5/2-way, single solenoid
5L	5/2-way, single solenoid, with pneumatic spring return
5J	5/2-way, double solenoid
5/3	5/3-way, single solenoid

Normal position	
GL	Normally closed, with pneumatic spring return
OL	Normally open, with pneumatic spring return
B	Pressurised
E	Exhausted
G	Closed

Pilot air supply	
	With internal pilot air
S	With external pilot air

Pneumatic connection	
Female thread	
M5	M5
M7	M7
G1/8	G1/8
G1/4	G1/4
G3/8	G3/8
Push-in connector for standard tubing	
QS-4	For tubing 4 mm O.D.
QS-6	For tubing 6 mm O.D.
QS-8	For tubing 8 mm O.D.
QS-10	For tubing 10 mm O.D.
QS-12	For tubing 12 mm O.D.

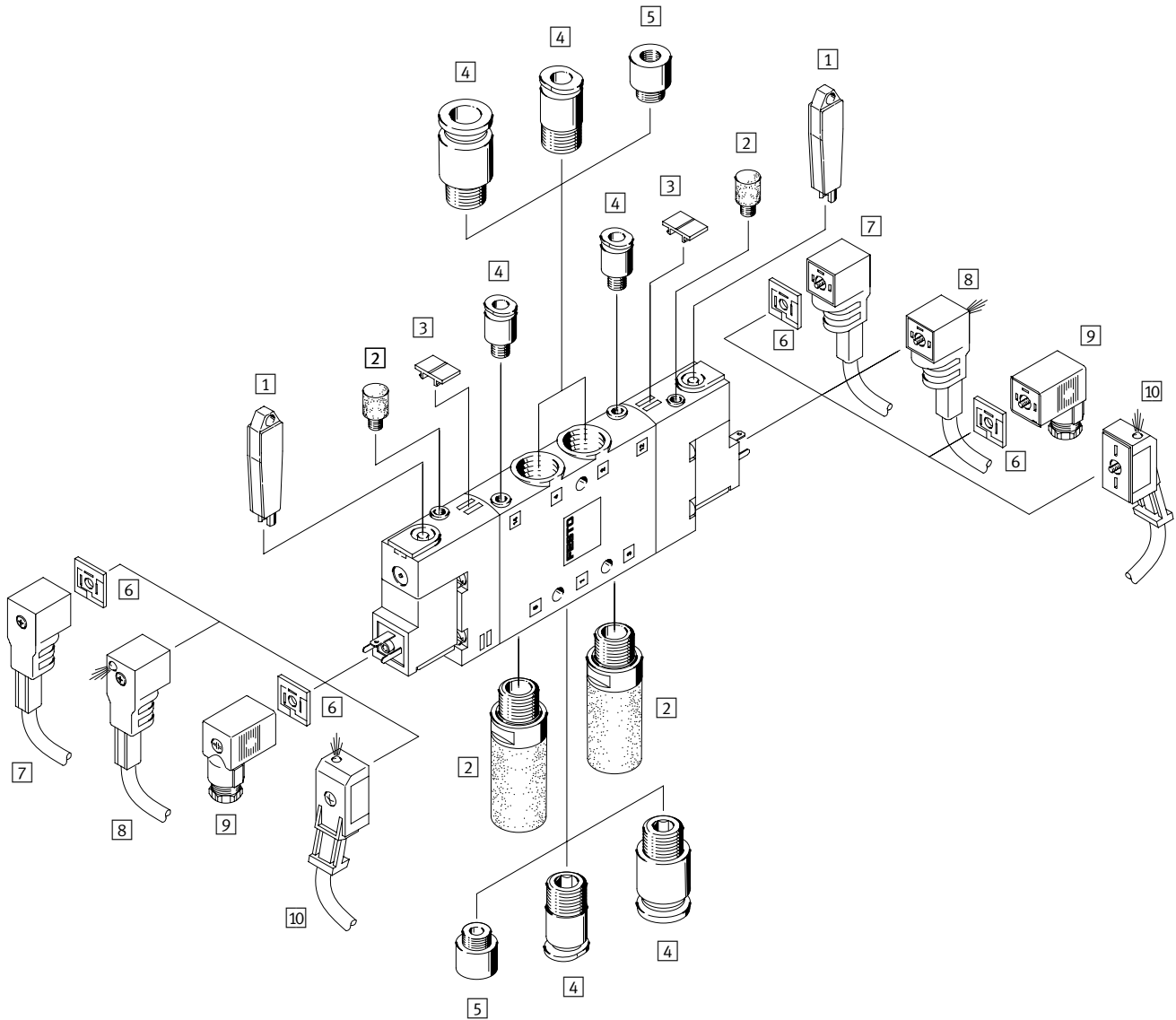
Generation	
B	B series

Solenoid valves CPE, Compact Performance

Peripherals overview

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Individual valve



Directional control valves for standard applications
Compact Performance

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Solenoid valves CPE, Compact Performance

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Peripherals overview

Accessories – Individual valve						
	Brief description	CPE10	CPE14	CPE18	CPE24	→ Page
1	Manual override tool AHB	■	■	■	■	2 / 2.1-60
2	Silencers U or UC	■	■	■	■	2 / 2.1-60 www.festo.com
3	Inscription labels IBS-6x10	■	■	■	■	2 / 2.1-60
4	Quick Star push-in fitting QS	■	■	■	■	Volume 3 www.festo.com
5	M7 to M5 reducer	■	-	-	-	-
6	Luminescent seal MEB-LD	-	-	■	■	2 / 2.1-59
7	Plug socket with cable KMEB	-	-	■	■	2 / 2.1-59
8	Plug socket with cable KMEB	-	-	■	■	2 / 2.1-59
9	Standard plug socket MSSD-EB	-	-	■	■	2 / 2.1-59
10	Plug socket with cable KMYZ-9	■	■	-	-	2 / 2.1-59

Directional control valves for standard applications
Compact Performance

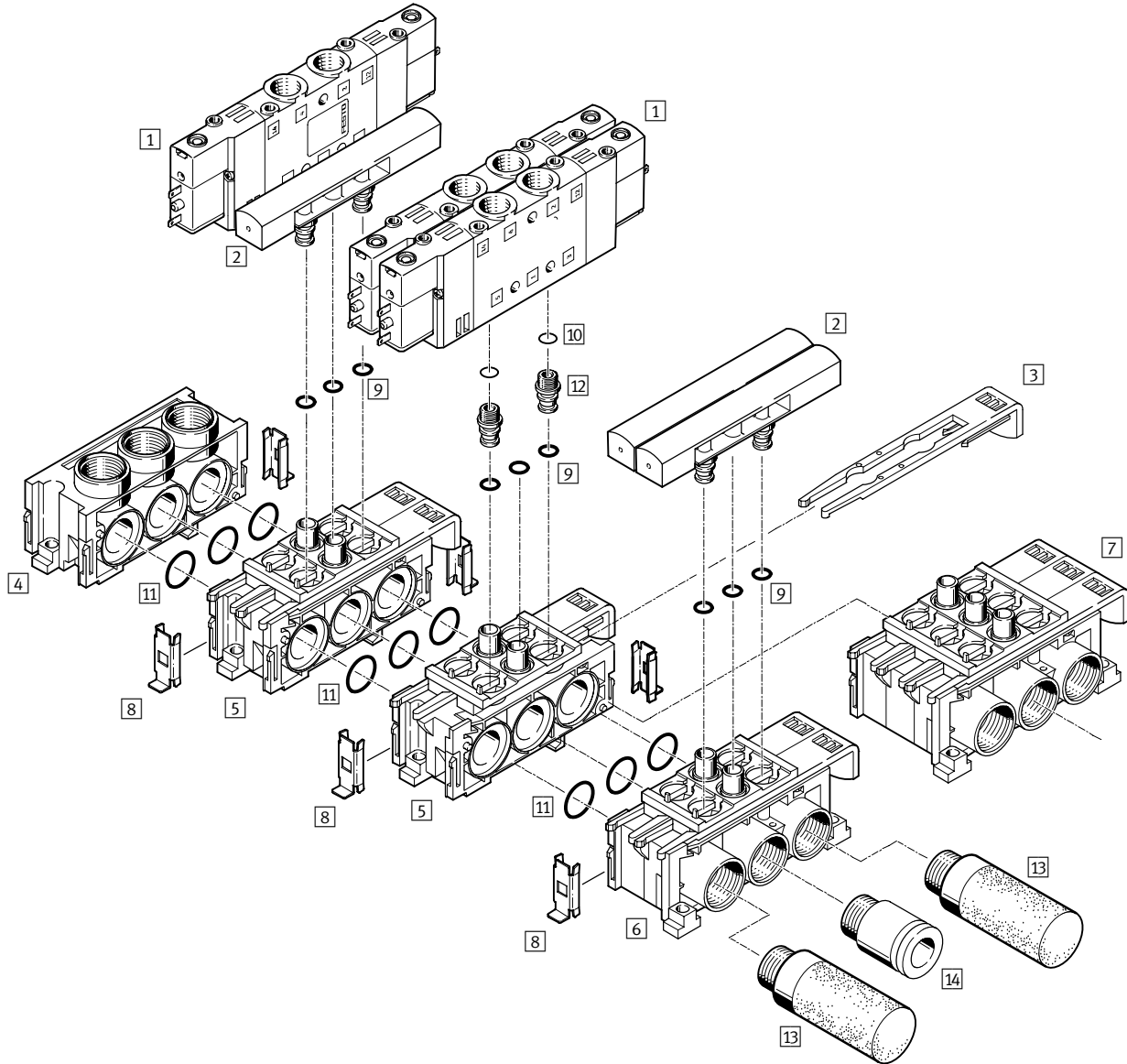
2.1

Solenoid valves CPE, Compact Performance

Peripherals overview

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Manifold



Directional control valves for standard applications
Compact Performance

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Solenoid valves CPE, Compact Performance

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Peripherals overview

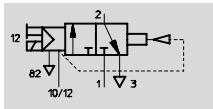
Accessories – Manifold		
	Brief description	→ Page
1	Solenoid valve CPE	2 / 2.1-4
2	Blanking plate	For blanking vacant positions 2 / 2.1-56
3	Slide clip	For attaching the valve –
4	End plate ¹⁾	– 2 / 2.1-55
5	Expansion block ¹⁾	For 2 valves 2 / 2.1-55
6	Sub-base ¹⁾	For 2 valves 2 / 2.1-54
7	Sub-base ¹⁾	For 3 valves 2 / 2.1-54
8	Connecting clip	For connecting the blocks –
9	Seal	Included in scope of delivery –
10	Seal	Included in scope of delivery –
11	Seal	Included in scope of delivery –
12	Fitting	Included in scope of delivery –
13	Silencers U or UC	For connection 3, 5, 82 or 84 2 / 2.1-60
14	Push-in fitting QS	For connection 1, 2, 4, 12 or 14, for standard tubing Volume 3 www.festo.com
–	Manual override tool AHB	– 2 / 2.1-60
–	Inscription labels IBS-6x10	– 2 / 2.1-60

1) Possible combinations → 2 / 2.1-58


Solenoid valves CPE, Compact Performance


Technical data – 3/2-way valves

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 Function¹⁾


1) e.g. with external pilot air, normally closed

-  - Flow rate
190 ... 2,500 l/min

-  - Voltage
24 V DC
110, 230 V AC



General technical data – Micro CPE10			Threaded connection	Push-in connector
Valve function			3/2, single solenoid	
Design			Piston spool	
Sealing principle			Soft	
Actuation type			Electrical	
Type of reset			Pneumatic	
Type of control			Piloted	
Pilot air supply			Internal or external	
Direction of flow			Internal pilot air supply: non-reversible	
			External pilot air supply: reversible	
Exhaust function			With flow control	
Manual override			Resetting, detenting via tool accessory	
Mounting position			Any	
Width			10 mm	
Grid dimension			12 mm	
Nominal size			4 mm	4 mm
Standard nominal flow rate			M5: 190 l/min	QS-4: 190 l/min
			M7: 400 l/min	QS-6: 300 l/min
Type of mounting			Via through-holes	
Pneumatic connection	1, 2	M5 or M7	Ø 4 or Ø 6 mm	
	3	M7	M7	
	10, 12	M3	Ø 3 mm	
	82	M3	M3	
Response time on/off			14/14 ms	
Product weight			45 g	
Materials			→ 2 / 2.1-16	

Operating and environmental conditions			Threaded connection	Push-in connector
Operating medium			Filtered compressed air, lubricated or unlubricated Vacuum	
Operating pressure range	internal pilot air	2.5 ... 8 bar		
	external pilot air	-0.9 ... +10 bar		
Pilot pressure range			2.5 ... 8 bar	
Ambient temperature			-5 ... +50 °C	
Temperature of medium			-5 ... +50 °C	

Electrical data			Threaded connection	Push-in connector
Operating voltage			24 V DC +10/-15%	
Power consumption			1.28 W	
Degree of protection with plug socket			IP65 (EN 60 529)	

Solenoid valves CPE, Compact Performance

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Technical data – 3/2-way valves

General technical data – Mini CPE14			
		Threaded connection	Push-in connector
Valve function		3/2, single solenoid	
Design		Piston spool	
Sealing principle		Soft	
Actuation type		Electrical	
Type of reset		Pneumatic	
Type of control		Piloted	
Pilot air supply		Internal or external	
Direction of flow		Internal pilot air supply: non-reversible	
		External pilot air supply: reversible	
Exhaust function		With flow control	
Manual override		Resetting, detenting via tool accessory	
Mounting position		Any	
Width		14 mm	
Grid dimension		16 mm	
Nominal size		6 mm	6 mm
Standard nominal flow rate		G $\frac{1}{8}$: 900 l/min	QS-6: 510 l/min
			QS-8: 810 l/min
Type of mounting		Via through-holes	
Pneumatic connection	1, 2	G $\frac{1}{8}$	Ø 6 or Ø 8 mm
	3	G $\frac{1}{8}$	G $\frac{1}{8}$
	10, 12	M3	Ø 3 mm
	82	M3	M3
Response time on/off		27/16 ms	
Product weight		60 g	95 g
Materials		→ 2 / 2.1-16	

Operating and environmental conditions			
		Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum	
Operating pressure range	internal pilot air	2.5 ...8 bar	
	external pilot air	-0.9 ...+10 bar	
Pilot pressure range		2.5 ...8 bar	
Ambient temperature		-5 ... +50 °C	
Temperature of medium		-5 ... +50 °C	

Electrical data			
		Threaded connection	Push-in connector
Operating voltage		24 V DC +10/-15%	
Power consumption		1.28 W	
Degree of protection with plug socket		IP65 (EN 60 529)	

Solenoid valves CPE, Compact Performance

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Technical data – 3/2-way valves

Directional control valves for standard applications
Compact Performance

2.1

General technical data – Midi CPE18			
		Threaded connection	Push-in connector
Valve function		3/2, single solenoid	
Design		Piston spool	
Sealing principle		Soft	
Actuation type		Electrical	
Type of reset		Pneumatic	
Type of control		Piloted	
Pilot air supply		Internal or external	
Direction of flow		Internal pilot air supply: non-reversible	
		External pilot air supply: reversible	
Exhaust function		With flow control	
Manual override		Resetting, detenting via tool accessory	
Mounting position		Any	
Width		18 mm	
Grid dimension		20 mm	
Nominal size		8 mm	8 mm
Standard nominal flow rate		G $\frac{1}{4}$: 1,300 l/min	
		QS-8: 850 l/min QS-10: 1,000 l/min	
Type of mounting		Via through-holes	
Pneumatic connection	1, 2	G $\frac{1}{4}$	Ø 8 or Ø 10 mm
	3	G $\frac{1}{4}$	G $\frac{1}{4}$
	10, 12	M5	Ø 4 mm
	82	M5	M5
Response time on/off		28/18 ms	
Product weight		150 g	
Materials		➔ 2 / 2.1-16	

Operating and environmental conditions			
		Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum	
Operating pressure range	internal pilot air	2.5 ...10 bar	
	external pilot air	-0.9 ...+10 bar	
Pilot pressure range		2.5 ...10 bar	
Ambient temperature		-5 ... +50 °C	
Temperature of medium		-5 ... +50 °C	

Electrical data			
		Threaded connection	Push-in connector
Operating voltage	M1H	24 V DC +10/-15%	
	M2H	110 V AC ±10% at 50 ... 60 Hz	
	M3H	230 V AC ±10% at 50 ... 60 Hz	
Power consumption	M1H	1.5 W	
	M2H, M3H	Pull: 3 VA	
		Hold: 2.4 VA	
Degree of protection with plug socket		IP65 (EN 60 529)	

Solenoid valves CPE, Compact Performance

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Technical data – 3/2-way valves

General technical data – Maxi CPE24			
		Threaded connection	Push-in connector
Valve function		3/2, single solenoid	
Design		Piston spool	
Sealing principle		Soft	
Actuation type		Electrical	
Type of reset		Pneumatic	
Type of control		Piloted	
Pilot air supply		Internal or external	
Direction of flow		Internal pilot air supply: non-reversible External pilot air supply: reversible	
Exhaust function		With flow control	
Manual override		Resetting, detenting via tool accessory	
Mounting position		Any	
Width		24 mm	
Nominal size		11 mm	11 mm
Standard nominal flow rate		G $\frac{3}{8}$: 2,500 l/min	QS-10 1,250 l/min QS-12: 1,650 l/min
Type of mounting		Via through-holes	
Pneumatic connection	1, 2	G $\frac{3}{8}$	Ø 10 or Ø 12 mm
	3	G $\frac{3}{8}$	G $\frac{3}{8}$
	10, 12	M5	Ø 6 mm
	82	M5	M5
Response time on/off		50/33 ms	
Product weight		220 g	
Materials		→ 2 / 2.1-16	

Operating and environmental conditions			
		Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum	
Operating pressure range	internal pilot air	2.5 ...10 bar	
	external pilot air	-0.9 ...+10 bar	
Pilot pressure range		2.5 ...10 bar	
Ambient temperature		-5 ... +50 °C	
Temperature of medium		-5 ... +50 °C	

Electrical data			
		Threaded connection	Push-in connector
Operating voltage	M1H	24 V DC +10/-15%	
	M2H	110 V AC ±10% at 50 ... 60 Hz	
	M3H	230 V AC ±10% at 50 ... 60 Hz	
Power consumption	M1H	1.5 W	
	M2H, M3H	Pull: 3 VA	
		Hold: 2.4 VA	
Degree of protection with plug socket		IP65 (EN 60 529)	

Solenoid valves CPE, Compact Performance

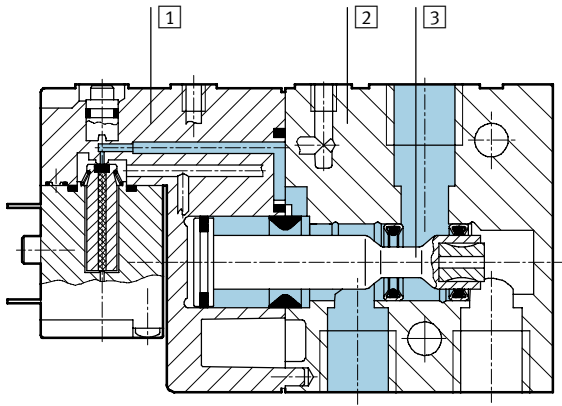
Technical data – 3/2-way valves

FESTO

Directional control valves for standard applications
Compact Performance

Materials

Sectional view



2.1

1	Plug cap	Polyamide
2	Housing	Die-cast aluminium
3	Piston spool	Steel
-	Seals	Nitrile rubber

Solenoid valves CPE, Compact Performance

Technical data – 3/2-way valves

FESTO

Dimensions – Micro CPE10

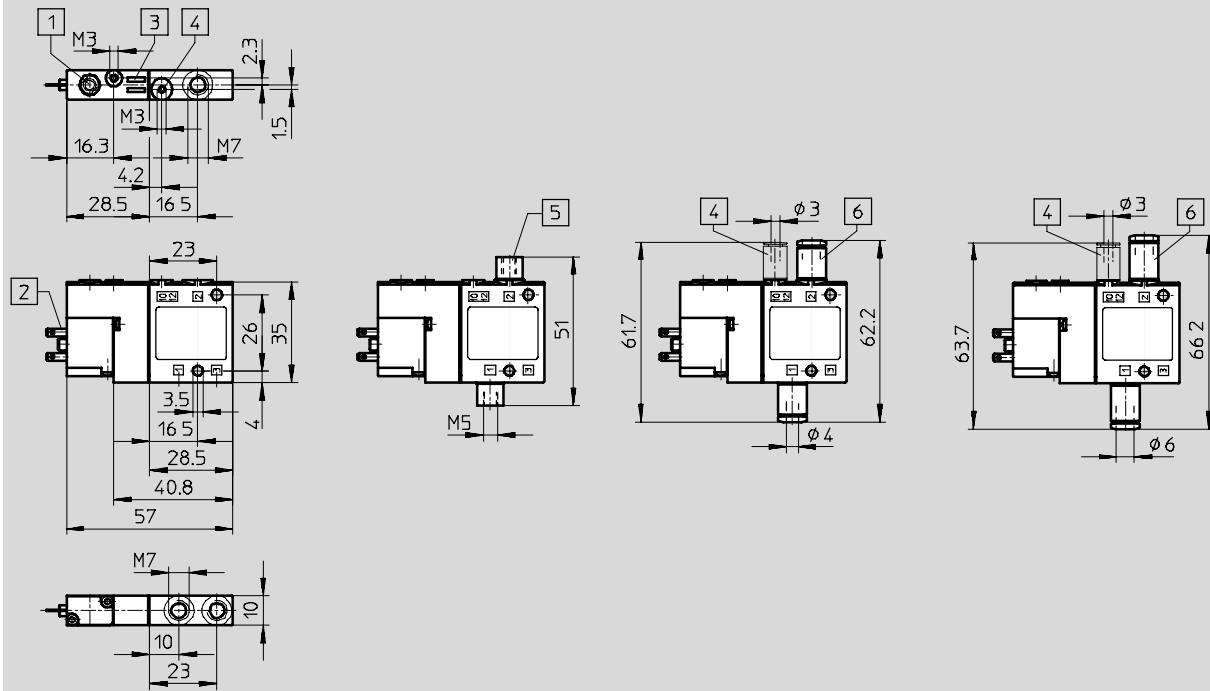
Download CAD data → www.festo.com/en/engineering

Threaded connection M7

Threaded connection M5

Push-in fitting QS-4

Push-in fitting QS-6



- 1 Manual override facility
- 2 Connection for plug socket

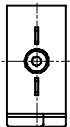
- 3 Location for inscription labels

- 4 Pilot air connection

- 5 M7 to M5 reducer
- 6 QS push-in connection

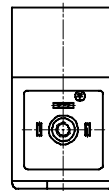
Connection diagrams

Micro CPE10, Mini CPE14



Suitable for plug socket
KMYZ-9...

Midi CPE18, Maxi CPE24



Suitable for plug sockets to
DIN 43 650, type C
KMEB-1...
KMEB-2...
MSSD-EB

Directional control valves for standard applications
Compact Performance

2.1

Solenoid valves CPE, Compact Performance

Technical data – 3/2-way valves



Directional control valves for standard applications
Compact Performance

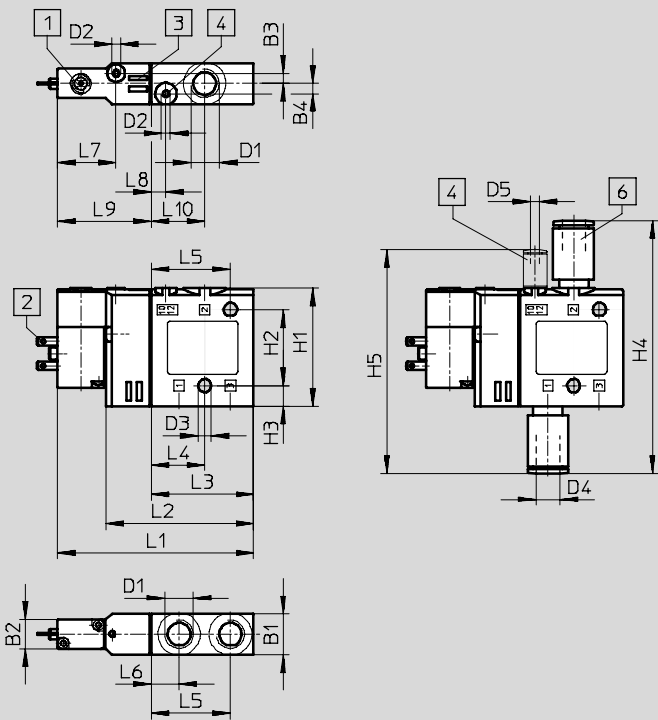
2.1

Dimensions – Mini CPE14, Midi CPE18, Maxi CPE24

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

Threaded connection

Push-in connector



- 1 Manual override facility
- 2 Connection for plug socket
- 3 Location for inscription labels
- 4 Pilot air connection
- 6 QS push-in connection

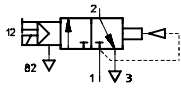
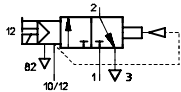
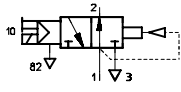
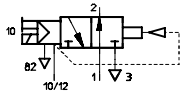
Pneumatic connection	B1	B2	B3	B4	D1	D2	D3 Ø	D4 Ø	D5 Ø	H1	H2	H3
Mini CPE14												
G1/8	14	10	3.5	3.5	G1/8	M3	4.4	–	–	40.3	26	7
QS-6								6	3			
QS-8								8				
Midi CPE18												
G1/4	18	17.5	3.5	3.5	G1/4	M5	4.4	–	–	57	45	6
QS-8								8	6			
QS-10								10				
Maxi CPE24												
G3/8	24	17.5	6	6	G3/8	M5	6.5	–	–	62	40	11
QS-10								10	6			
QS-12								12				

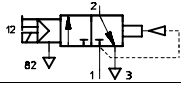
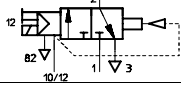
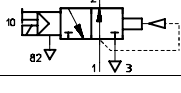
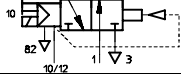
Pneumatic connection	H4	H5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
Mini CPE14												
G1/8	–	–	67	50.5	35	18.3	27	9.5	20	5	32	18.3
QS-6	75.3	70.9										
QS-8	86.3	76.4										
Midi CPE18												
G1/4	–	–	94	69	50	28	38	17.5	29	5.5	44	27.5
QS-8	98	90.5										
QS-10	105	94										
Maxi CPE24												
G3/8	–	–	110	85	65	35	50	20	33	10	45	35
QS-10	108	99.5										
QS-12	113	102										

Solenoid valves CPE, Compact Performance



Technical data – 3/2-way valves

Ordering data – Micro CPE10				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Normally closed Internal pilot air supply	M5	196 845	CPE10-M1BH-3GL-M5
		M7	196 915	CPE10-M1BH-3GL-M7
		QS-4	196 846	CPE10-M1BH-3GL-QS-4
		QS-6	196 847	CPE10-M1BH-3GL-QS-6
	Normally closed External pilot air supply	M5	196 848	CPE10-M1BH-3GLS-M5
		M7	196 916	CPE10-M1BH-3GLS-M7
		QS-4	196 849	CPE10-M1BH-3GLS-QS-4
		QS-6	196 850	CPE10-M1BH-3GLS-QS-6
	Normally open Internal pilot air supply	M5	196 851	CPE10-M1BH-3OL-M5
		M7	196 917	CPE10-M1BH-3OL-M7
		QS-4	196 852	CPE10-M1BH-3OL-QS-4
		QS-6	196 853	CPE10-M1BH-3OL-QS-6
	Normally open External pilot air supply	M5	196 854	CPE10-M1BH-3OLS-M5
		M7	196 918	CPE10-M1BH-3OLS-M7
		QS-4	196 855	CPE10-M1BH-3OLS-QS-4
		QS-6	196 856	CPE10-M1BH-3OLS-QS-6

Ordering data – Mini CPE14				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Normally closed Internal pilot air supply	G1/8	196 929	CPE14-M1BH-3GL-1/8
		QS-6	196 887	CPE14-M1BH-3GL-QS-6
		QS-8	196 888	CPE14-M1BH-3GL-QS-8
	Normally closed External pilot air supply	G1/8	196 930	CPE14-M1BH-3GLS-1/8
		QS-6	196 889	CPE14-M1BH-3GLS-QS-6
		QS-8	196 890	CPE14-M1BH-3GLS-QS-8
	Normally open Internal pilot air supply	G1/8	196 931	CPE14-M1BH-3OL-1/8
		QS-6	196 891	CPE14-M1BH-3OL-QS-6
		QS-8	196 892	CPE14-M1BH-3OL-QS-8
	Normally open External pilot air supply	G1/8	196 932	CPE14-M1BH-3OLS-1/8
		QS-6	196 893	CPE14-M1BH-3OLS-QS-6
		QS-8	196 894	CPE14-M1BH-3OLS-QS-8

Solenoid valves CPE, Compact Performance

FESTO

Technical data – 3/2-way valves

Directional control valves for standard applications
Compact Performance

2.1

Ordering data – Midi CPE18				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Normally closed Internal pilot air supply	G $\frac{1}{4}$	163 141	CPE18-M1H-3GL- $\frac{1}{4}$
		QS-8	163 149	CPE18-M1H-3GL-QS-8
		QS-10	163 157	CPE18-M1H-3GL-QS-10
	Normally closed External pilot air supply	G $\frac{1}{4}$	163 145	CPE18-M1H-3GLS- $\frac{1}{4}$
		QS-8	163 153	CPE18-M1H-3GLS-QS-8
		QS-10	163 161	CPE18-M1H-3GLS-QS-10
	Normally open Internal pilot air supply	G $\frac{1}{4}$	163 140	CPE18-M1H-3OL- $\frac{1}{4}$
		QS-8	163 148	CPE18-M1H-3OL-QS-8
		QS-10	163 156	CPE18-M1H-3OL-QS-10
	Normally open External pilot air supply	G $\frac{1}{4}$	163 144	CPE18-M1H-3OLS- $\frac{1}{4}$
		QS-8	163 152	CPE18-M1H-3OLS-QS-8
		QS-10	163 160	CPE18-M1H-3OLS-QS-10
Operating voltage 110 V AC				
	Normally closed Internal pilot air supply	G $\frac{1}{4}$	163 761	CPE18-M2H-3GL- $\frac{1}{4}$
		QS-8	163 769	CPE18-M2H-3GL-QS-8
		QS-10	163 777	CPE18-M2H-3GL-QS-10
	Normally closed External pilot air supply	G $\frac{1}{4}$	163 765	CPE18-M2H-3GLS- $\frac{1}{4}$
		QS-8	163 773	CPE18-M2H-3GLS-QS-8
		QS-10	163 781	CPE18-M2H-3GLS-QS-10
	Normally open Internal pilot air supply	G $\frac{1}{4}$	163 760	CPE18-M2H-3OL- $\frac{1}{4}$
		QS-8	163 768	CPE18-M2H-3OL-QS-8
		QS-10	163 776	CPE18-M2H-3OL-QS-10
	Normally open External pilot air supply	G $\frac{1}{4}$	163 764	CPE18-M2H-3OLS- $\frac{1}{4}$
		QS-8	163 772	CPE18-M2H-3OLS-QS-8
		QS-10	163 780	CPE18-M2H-3OLS-QS-10
Operating voltage 230 V AC				
	Normally closed Internal pilot air supply	G $\frac{1}{4}$	163 785	CPE18-M3H-3GL- $\frac{1}{4}$
		QS-8	163 793	CPE18-M3H-3GL-QS-8
		QS-10	163 801	CPE18-M3H-3GL-QS-10
	Normally closed External pilot air supply	G $\frac{1}{4}$	163 789	CPE18-M3H-3GLS- $\frac{1}{4}$
		QS-8	163 797	CPE18-M3H-3GLS-QS-8
		QS-10	163 805	CPE18-M3H-3GLS-QS-10
	Normally open Internal pilot air supply	G $\frac{1}{4}$	163 784	CPE18-M3H-3OL- $\frac{1}{4}$
		QS-8	163 792	CPE18-M3H-3OL-QS-8
		QS-10	163 800	CPE18-M3H-3OL-QS-10
	Normally open External pilot air supply	G $\frac{1}{4}$	163 788	CPE18-M3H-3OLS- $\frac{1}{4}$
		QS-8	163 796	CPE18-M3H-3OLS-QS-8
		QS-10	163 804	CPE18-M3H-3OLS-QS-10

Solenoid valves CPE, Compact Performance



Technical data – 3/2-way valves

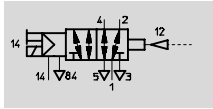
Order data – Maxi CPE24				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Normally closed Internal pilot air supply	G $\frac{3}{8}$	163 165	CPE24-M1H-3GL- $\frac{3}{8}$
		QS-10	163 173	CPE24-M1H-3GL-QS-10
		QS-12	163 181	CPE24-M1H-3GL-QS-12
	Normally closed External pilot air supply	G $\frac{3}{8}$	163 169	CPE24-M1H-3GLS- $\frac{3}{8}$
		QS-10	163 177	CPE24-M1H-3GLS-QS-10
		QS-12	163 185	CPE24-M1H-3GLS-QS-12
	Normally open Internal pilot air supply	G $\frac{3}{8}$	163 164	CPE24-M1H-3OL- $\frac{3}{8}$
		QS-10	163 172	CPE24-M1H-3OL-QS-10
		QS-12	163 180	CPE24-M1H-3OL-QS-12
	Normally open External pilot air supply	G $\frac{3}{8}$	163 168	CPE24-M1H-3OLS- $\frac{3}{8}$
		QS-10	163 176	CPE24-M1H-3OLS-QS-10
		QS-12	163 184	CPE24-M1H-3OLS-QS-12
Operating voltage 110 V AC				
	Normally closed Internal pilot air supply	G $\frac{3}{8}$	163 809	CPE24-M2H-3GL- $\frac{3}{8}$
		QS-10	163 817	CPE24-M2H-3GL-QS-10
		QS-12	163 825	CPE24-M2H-3GL-QS-12
	Normally closed External pilot air supply	G $\frac{3}{8}$	163 813	CPE24-M2H-3GLS- $\frac{3}{8}$
		QS-10	163 821	CPE24-M2H-3GLS-QS-10
		QS-12	163 829	CPE24-M2H-3GLS-QS-12
	Normally open Internal pilot air supply	G $\frac{3}{8}$	163 808	CPE24-M2H-3OL- $\frac{3}{8}$
		QS-10	163 816	CPE24-M2H-3OL-QS-10
		QS-12	163 824	CPE24-M2H-3OL-QS-12
	Normally open External pilot air supply	G $\frac{3}{8}$	163 812	CPE24-M2H-3OLS- $\frac{3}{8}$
		QS-10	163 820	CPE24-M2H-3OLS-QS-10
		QS-12	163 828	CPE24-M2H-3OLS-QS-12
Operating voltage 230 V AC				
	Normally closed Internal pilot air supply	G $\frac{3}{8}$	163 833	CPE24-M3H-3GL- $\frac{3}{8}$
		QS-10	163 841	CPE24-M3H-3GL-QS-10
		QS-12	163 849	CPE24-M3H-3GL-QS-12
	Normally closed External pilot air supply	G $\frac{3}{8}$	163 837	CPE24-M3H-3GLS- $\frac{3}{8}$
		QS-10	163 845	CPE24-M3H-3GLS-QS-10
		QS-12	163 853	CPE24-M3H-3GLS-QS-12
	Normally open Internal pilot air supply	G $\frac{3}{8}$	163 832	CPE24-M3H-3OL- $\frac{3}{8}$
		QS-10	163 840	CPE24-M3H-3OL-QS-10
		QS-12	163 848	CPE24-M3H-3OL-QS-12
	Normally open External pilot air supply	G $\frac{3}{8}$	163 836	CPE24-M3H-3OLS- $\frac{3}{8}$
		QS-10	163 844	CPE24-M3H-3OLS-QS-10
		QS-12	163 852	CPE24-M3H-3OLS-QS-12

Solenoid valves CPE, Compact Performance



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Technical data – 5/2-way valves

Function¹⁾



1) e.g. with external pilot air

-  - Flow rate
180 ... 3,200 l/min
-  - Voltage
24 V DC
110, 230 V AC



Directional control valves for standard applications
Compact Performance

2.1

General technical data – Micro CPE10			
		Threaded connection	Push-in connector
Valve function		5/2, single solenoid	
Design		Piston spool	
Sealing principle		Soft	
Actuation type		Electrical	
Type of reset		Pneumatic	
Type of control		Piloted	
Pilot air supply		Internal or external	
Direction of flow		Internal pilot air supply: non-reversible External pilot air supply: reversible	
Exhaust function		With flow control	
Manual override		Resetting, detenting via tool accessory	
Mounting position		Any	
Width		10 mm	
Grid dimension		12 mm	
Nominal size		4 mm	4 mm
Standard nominal flow rate		M5: 180 l/min M7: 350 l/min	QS-4: 180 l/min QS-6: 320 l/min
Type of mounting		Via through-holes	
Pneumatic connection	1, 2, 4	M5 or M7	∅ 4 or ∅ 6 mm
	3, 5	M7	M7
	12, 14	M3	∅ 3 mm
	84	M3	M3
Response time on/off		16/16 ms	
Product weight		56 g	100 g
Materials		→ 2 / 2.1-26	

Operating and environmental conditions			
		Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum	
Operating pressure range	internal pilot air	3 ...8 bar	
	external pilot air	-0.9 ...+10 bar	
Pilot pressure range		3 ...8 bar	
Ambient temperature		-5 ... +50 °C	
Temperature of medium		-5 ... +50 °C	

Electrical data			
		Threaded connection	Push-in connector
Operating voltage		24 V DC +10/-15%	
Power consumption		1.28 W	
Degree of protection with plug socket		IP65 (EN 60 529)	

Solenoid valves CPE, Compact Performance

FESTO

Technical data – 5/2-way valves

General technical data – Mini CPE14			
		Threaded connection	Push-in connector
Valve function		5/2, single solenoid	
Design		Piston spool	
Sealing principle		Soft	
Actuation type		Electrical	
Type of reset		Pneumatic	
Type of control		Piloted	
Pilot air supply		Internal or external	
Direction of flow		Internal pilot air supply: non-reversible	
		External pilot air supply: reversible	
Exhaust function		With flow control	
Manual override		Resetting, detenting via tool accessory	
Mounting position		Any	
Width		14 mm	
Grid dimension		16 mm	
Nominal size		6 mm	6 mm
Standard nominal flow rate		G $\frac{1}{8}$: 800 l/min	QS-6: 400 l/min
			QS-8: 680 l/min
Type of mounting		Via through-holes	
Pneumatic connection	1, 2, 4	G $\frac{1}{8}$	Ø 6 or Ø 8 mm
	3, 5	G $\frac{1}{8}$	G $\frac{1}{8}$
	12, 14	M3	Ø 3 mm
	84	M3	M3
Response time on/off		24/32 ms	
Product weight		95 g	143 g
Materials		➔ 2 / 2.1-26	

Operating and environmental conditions			
		Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum	
Operating pressure range	internal pilot air	3 ...8 bar	
	external pilot air	-0.9 ...+10 bar	
Pilot pressure range		3 ...8 bar	
Ambient temperature		-5 ... +50 °C	
Temperature of medium		-5 ... +50 °C	

Electrical data			
		Threaded connection	Push-in connector
Operating voltage		24 V DC +10/-15%	
Power consumption		1.28 W	
Degree of protection with plug socket		IP65 (EN 60 529)	

Solenoid valves CPE, Compact Performance

FESTO

Technical data – 5/2-way valves

Directional control valves for standard applications
Compact Performance

2.1

General technical data – Midi CPE18			
		Threaded connection	Push-in connector
Valve function		5/2, single solenoid	
Design		Piston spool	
Sealing principle		Soft	
Actuation type		Electrical	
Type of reset		Pneumatic	
Type of control		Piloted	
Pilot air supply		Internal or external	
Direction of flow		Internal pilot air supply: non-reversible	
		External pilot air supply: reversible	
Exhaust function		With flow control	
Manual override		Resetting, detenting via tool accessory	
Mounting position		Any	
Width		18 mm	
Grid dimension		20 mm	
Nominal size		8 mm	8 mm
Standard nominal flow rate		G $\frac{1}{4}$: 1,500 l/min	
		QS-8: 850 l/min QS-10: 1,000 l/min	
Type of mounting		Via through-holes	
Pneumatic connection	1, 2, 4	G $\frac{1}{4}$	Ø 8 or Ø 10 mm
	3, 5	G $\frac{1}{4}$	G $\frac{1}{4}$
	12, 14	M5	Ø 4 mm
	84	M5	M5
Response time on/off		26/20 ms	
Product weight		220 g	
Materials		➔ 2 / 2.1-26	

Operating and environmental conditions			
		Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum	
Operating pressure range	internal pilot air	2.5 ...10 bar	
	external pilot air	-0.9 ...+10 bar	
Pilot pressure range		2.5 ...10 bar	
Ambient temperature		-5 ... +50 °C	
Temperature of medium		-5 ... +50 °C	

Electrical data			
		Threaded connection	Push-in connector
Operating voltage	M1H	24 V DC +10/-15%	
	M2H	110 V AC ±10% at 50 ... 60 Hz	
	M3H	230 V AC ±10% at 50 ... 60 Hz	
Power consumption	M1H	1.5 W	
	M2H, M3H	Pull: 3 VA	
		Hold: 2.4 VA	
Degree of protection with plug socket		IP65 (EN 60 529)	

Solenoid valves CPE, Compact Performance

FESTO

Technical data – 5/2-way valves

General technical data – Maxi CPE24			
		Threaded connection	Push-in connector
Valve function		5/2, single solenoid	
Design		Piston spool	
Sealing principle		Soft	
Actuation type		Electrical	
Type of reset		Pneumatic	
Type of control		Piloted	
Pilot air supply		Internal or external	
Direction of flow		Internal pilot air supply: non-reversible	
		External pilot air supply: reversible	
Exhaust function		With flow control	
Manual override		Resetting, detenting via tool accessory	
Mounting position		Any	
Width		24 mm	
Nominal size		11 mm	11 mm
Standard nominal flow rate		G $\frac{3}{8}$: 2,900 l/min	QS-10: 1,250 l/min QS-12: 1,650 l/min
Type of mounting		Via through-holes	
Pneumatic connection	1, 2, 4	G $\frac{3}{8}$	Ø 10 or Ø 12 mm
	3, 5	G $\frac{3}{8}$	G $\frac{3}{8}$
	12, 14	M5	Ø 6 mm
	84	M5	M5
Response time on/off		40/50 ms	
Product weight		360 g	
Materials		→ 2 / 2.1-26	

Operating and environmental conditions			
		Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum	
Operating pressure range	internal pilot air	2.5 ...10 bar	
	external pilot air	-0.9 ...+10 bar	
Pilot pressure range		2.5 ...10 bar	
Ambient temperature		-5 ... +50 °C	
Temperature of medium		-5 ... +50 °C	

Electrical data			
		Threaded connection	Push-in connector
Operating voltage	M1H	24 V DC +10/-15%	
	M2H	110 V AC ±10% at 50 ... 60 Hz	
	M3H	230 V AC ±10% at 50 ... 60 Hz	
Power consumption	M1H	1.5 W	
	M2H, M3H	Pull: 3 VA Hold: 2.4 VA	
Degree of protection with plug socket		IP65 (EN 60 529)	

Directional control valves for standard applications
Compact Performance

2.1

Solenoid valves CPE, Compact Performance

Technical data – 5/2-way valves

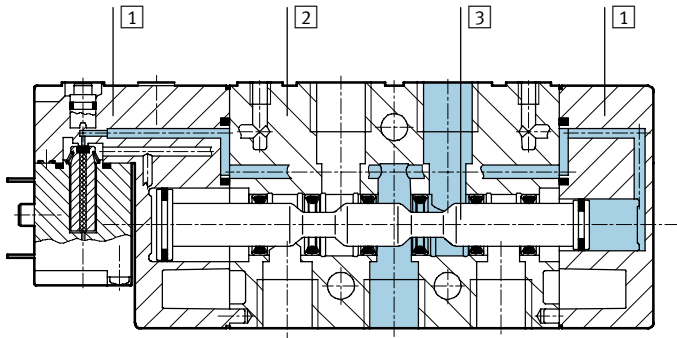
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Directional control valves for standard applications
Compact Performance

2.1

Materials

Sectional view



1	Plug cap	Polyamide
2	Housing	Die-cast aluminium
3	Piston spool	Steel
-	Seals	Nitrile rubber

Solenoid valves CPE, Compact Performance

Technical data – 5/2-way valves

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Dimensions – Micro CPE10 Download CAD data → www.festo.com/en/engineering

Threaded connection M7	Threaded connection M5	Push-in fitting QS-4

1 Manual override facility

2 Connection for plug socket

3 Location for inscription labels

4 Pilot air connection

5 M7 to M5 reducer

6 QS push-in connection

Directional control valves for standard applications
Compact Performance
2.1

Connection diagrams

Micro CPE10, Mini CPE14	Midi CPE18, Maxi CPE24
<p>Suitable for plug socket KMYZ-9...</p>	<p>Suitable for plug sockets to DIN 43 650, type C KMEB-1-... KMEB-2-... MSSD-EB</p>

Solenoid valves CPE, Compact Performance

Technical data – 5/2-way valves



Directional control valves for standard applications
Compact Performance

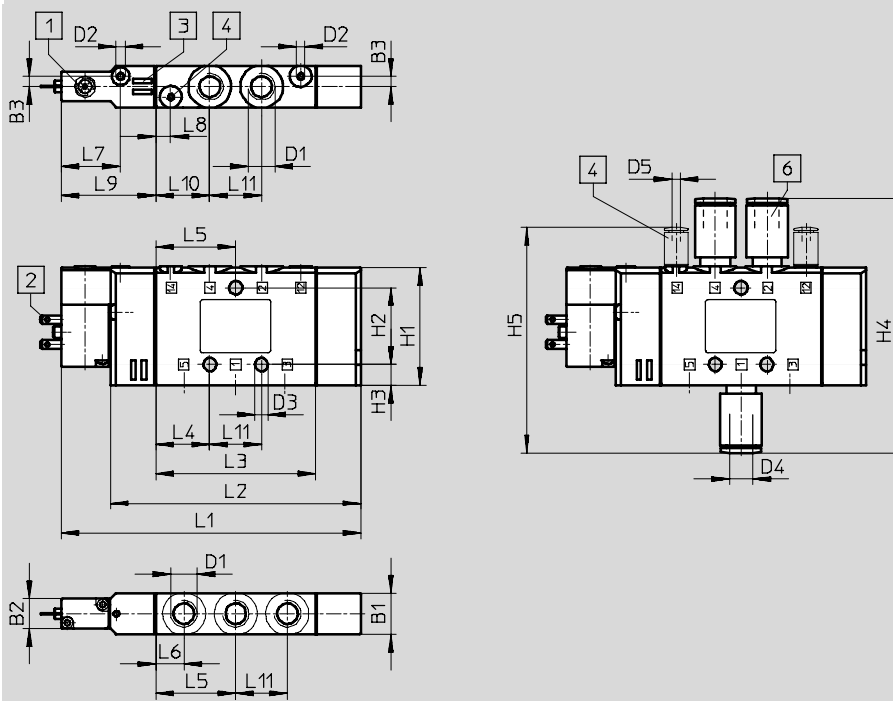
2.1

Dimensions – Mini CPE14, Midi CPE18, Maxi CPE24

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

Threaded connection

Push-in connector



- 1 Manual override facility
- 2 Connection for plug socket
- 3 Location for inscription labels
- 4 Pilot air connection
- 6 QS push-in connection

Pneumatic connection	B1	B2	B3	D1	D2	D3 Ø	D4 Ø	D5 Ø	H1	H2	H3	H4
Mini CPE14												
G $\frac{1}{8}$	14	10	3.5	G $\frac{1}{8}$	M3	4.4	–	–	40.3	26	7	–
QS-6							6	3				75.3
QS-8							8	–				86.3
Midi CPE18												
G $\frac{1}{4}$	18	17.5	3.5	G $\frac{1}{4}$	M5	4.4	–	–	57	45	6	–
QS-8							8	6				98
QS-10							10	–				105
Maxi CPE24												
G $\frac{3}{8}$	24	17.5	6	G $\frac{3}{8}$	M5	6.5	–	–	62	40	11	–
QS-10							10	6				108
QS-12							12	–				113

Pneumatic connection	H5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11
Mini CPE14												
G $\frac{1}{8}$	–	101.5	85	54	18.3	27	9.5	20	5	32	18.3	17.5
QS-6	70.9											
QS-8	76.4											
Midi CPE18												
G $\frac{1}{4}$	–	138	113	75	28	38	17.5	29	5.5	44	27.5	20
QS-8	90.5											
QS-10	94											
Maxi CPE24												
G $\frac{3}{8}$	–	165	140	100	35	50	20	33	10	45	35	30
QS-10	99.5											
QS-12	102											

Solenoid valves CPE, Compact Performance



Technical data – 5/2-way valves

Ordering data – Micro CPE10				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Internal pilot air supply	M5	196 881	CPE10-M1BH-5L-M5
		M7	196 927	CPE10-M1BH-5L-M7
		QS-4	196 882	CPE10-M1BH-5L-QS-4
		QS-6	196 883	CPE10-M1BH-5L-QS-6
	External pilot air supply	M5	196 884	CPE10-M1BH-5LS-M5
		M7	196 928	CPE10-M1BH-5LS-M7
		QS-4	196 885	CPE10-M1BH-5LS-QS-4
		QS-6	196 886	CPE10-M1BH-5LS-QS-6

Ordering data – Mini CPE14				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Internal pilot air supply	G1/8	196 941	CPE14-M1BH-5L-1/8
		QS-6	196 911	CPE14-M1BH-5L-QS-6
		QS-8	196 912	CPE14-M1BH-5L-QS-8
	External pilot air supply	G1/8	196 942	CPE14-M1BH-5LS-1/8
		QS-6	196 913	CPE14-M1BH-5LS-QS-6
		QS-8	196 914	CPE14-M1BH-5LS-QS-8

Core Range

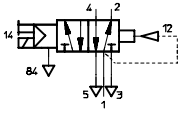
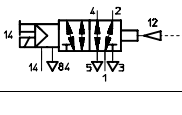
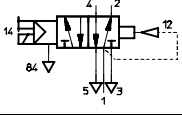
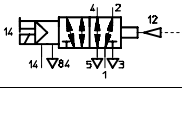
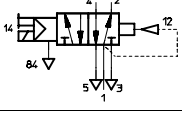
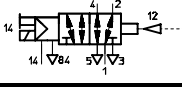
Solenoid valves CPE, Compact Performance



Technical data – 5/2-way valves

Directional control valves for standard applications
Compact Performance

2.1

Ordering data – Midi CPE18				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Internal pilot air supply	G $\frac{1}{4}$	163 142	CPE18-M1H-5L-$\frac{1}{4}$
		QS-8	163 150	CPE18-M1H-5L-QS-8
		QS-10	163 158	CPE18-M1H-5L-QS-10
	External pilot air supply	G $\frac{1}{4}$	163 146	CPE18-M1H-5LS-$\frac{1}{4}$
		QS-8	163 154	CPE18-M1H-5LS-QS-8
		QS-10	163 162	CPE18-M1H-5LS-QS-10
Operating voltage 110 V AC				
	Internal pilot air supply	G $\frac{1}{4}$	163 762	CPE18-M2H-5L-$\frac{1}{4}$
		QS-8	163 770	CPE18-M2H-5L-QS-8
		QS-10	163 778	CPE18-M2H-5L-QS-10
	External pilot air supply	G $\frac{1}{4}$	163 766	CPE18-M2H-5LS-$\frac{1}{4}$
		QS-8	163 774	CPE18-M2H-5LS-QS-8
		QS-10	163 782	CPE18-M2H-5LS-QS-10
Operating voltage 230 V AC				
	Internal pilot air supply	G $\frac{1}{4}$	163 786	CPE18-M3H-5L-$\frac{1}{4}$
		QS-8	163 794	CPE18-M3H-5L-QS-8
		QS-10	163 802	CPE18-M3H-5L-QS-10
	External pilot air supply	G $\frac{1}{4}$	163 790	CPE18-M3H-5LS-$\frac{1}{4}$
		QS-8	163 798	CPE18-M3H-5LS-QS-8
		QS-10	163 806	CPE18-M3H-5LS-QS-10

 Core Range

Solenoid valves CPE, Compact Performance

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Technical data – 5/2-way valves

Order data – Maxi CPE24				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Internal pilot air supply	G $\frac{3}{8}$	163 166	CPE24-M1H-5L-$\frac{3}{8}$
		QS-10	163 174	CPE24-M1H-5L-QS-10
		QS-12	163 182	CPE24-M1H-5L-QS-12
	External pilot air supply	G $\frac{3}{8}$	163 170	CPE24-M1H-5LS-$\frac{3}{8}$
		QS-10	163 178	CPE24-M1H-5LS-QS-10
		QS-12	163 186	CPE24-M1H-5LS-QS-12
Operating voltage 110 V AC				
	Internal pilot air supply	G $\frac{3}{8}$	163 810	CPE24-M2H-5L-$\frac{3}{8}$
		QS-10	163 818	CPE24-M2H-5L-QS-10
		QS-12	163 826	CPE24-M2H-5L-QS-12
	External pilot air supply	G $\frac{3}{8}$	163 814	CPE24-M2H-5LS-$\frac{3}{8}$
		QS-10	163 822	CPE24-M2H-5LS-QS-10
		QS-12	163 830	CPE24-M2H-5LS-QS-12
Operating voltage 230 V AC				
	Internal pilot air supply	G $\frac{3}{8}$	163 834	CPE24-M3H-5L-$\frac{3}{8}$
		QS-10	163 842	CPE24-M3H-5L-QS-10
		QS-12	163 850	CPE24-M3H-5L-QS-12
	External pilot air supply	G $\frac{3}{8}$	163 838	CPE24-M3H-5LS-$\frac{3}{8}$
		QS-10	163 846	CPE24-M3H-5LS-QS-10
		QS-12	163 854	CPE24-M3H-5LS-QS-12

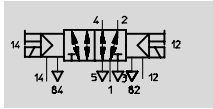
Core Range

Solenoid valves CPE, Compact Performance



Technical data – 5/2-way valves, double solenoid

FESTO

Function¹⁾



1) e.g. with external pilot air

-  - Flow rate
180 ... 3,200 l/min
-  - Voltage
24 V DC
110, 230 V AC



General technical data – Micro CPE10			
		Threaded connection	Push-in connector
Valve function		5/2-way, double pilot	
Design		Piston spool	
Sealing principle		Soft	
Actuation type		Electrical	
Type of control		Piloted	
Pilot air supply		Internal or external	
Direction of flow		Internal pilot air supply: non-reversible External pilot air supply: reversible	
Exhaust function		With flow control	
Manual override		Resetting, detenting via tool accessory	
Mounting position		Any	
Width		10 mm	
Grid dimension		12 mm	
Nominal size		4 mm	4 mm
Standard nominal flow rate		M5: 180 l/min M7: 350 l/min	QS-4: 180 l/min QS-6: 320 l/min
Type of mounting		Via through-holes	
Pneumatic connection	1, 2, 4	M5 or M7	∅ 4 or ∅ 6 mm
	3, 5	M7	M7
	12, 14	M3	∅ 3 mm
	84	M3	M3
Changeover time		8 ms	
Product weight		68 g	95 g
Materials		➔ 2 / 2.1-36	

Operating and environmental conditions			
		Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum	
Operating pressure range	internal pilot air	2.5 ...8 bar	
	external pilot air	-0.9 ...+10 bar	
Pilot pressure range		2.5 ...8 bar	
Ambient temperature		-5 ... +50 °C	
Temperature of medium		-5 ... +50 °C	

Electrical data			
		Threaded connection	Push-in connector
Operating voltage		24 V DC +10/-15%	
Power consumption		1.28 W	
Degree of protection with plug socket		IP65 (EN 60 529)	

Solenoid valves CPE, Compact Performance

FESTO

Technical data – 5/2-way valves, double solenoid

General technical data – Mini CPE14			
		Threaded connection	Push-in connector
Valve function		5/2-way, double pilot	
Design		Piston spool	
Sealing principle		Soft	
Actuation type		Electrical	
Type of control		Piloted	
Pilot air supply		Internal or external	
Direction of flow		Internal pilot air supply: non-reversible External pilot air supply: reversible	
Exhaust function		With flow control	
Manual override		Resetting, detenting via tool accessory	
Mounting position		Any	
Width		14 mm	
Grid dimension		16 mm	
Nominal size		6 mm	6 mm
Standard nominal flow rate		G $\frac{1}{8}$: 800 l/min	QS-6: 400 l/min QS-8: 680 l/min
Type of mounting		Via through-holes	
Pneumatic connection	1, 2, 4	G $\frac{1}{8}$	Ø 6 or Ø 8 mm
	3, 5	G $\frac{1}{8}$	G $\frac{1}{8}$
	12, 14	M3	Ø 3 mm
	84	M3	M3
Changeover time		12 ms	
Product weight		115 g	144 g
Materials		→ 2 / 2.1-36	

Operating and environmental conditions			
		Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum	
Operating pressure range	internal pilot air	2 ...8 bar	
	external pilot air	-0.9 ...+10 bar	
Pilot pressure range		2 ...8 bar	
Ambient temperature		-5 ... +50 °C	
Temperature of medium		-5 ... +50 °C	

Electrical data			
		Threaded connection	Push-in connector
Operating voltage		24 V DC +10/-15%	
Power consumption		1.28 W	
Degree of protection with plug socket		IP65 (EN 60 529)	

Directional control valves for standard applications
Compact Performance

2.1

Solenoid valves CPE, Compact Performance

FESTO

Technical data – 5/2-way valves, double solenoid

General technical data – Midi CPE18			
		Threaded connection	Push-in connector
Valve function		5/2-way, double pilot	
Design		Piston spool	
Sealing principle		Soft	
Actuation type		Electrical	
Type of control		Piloted	
Pilot air supply		Internal or external	
Direction of flow		Internal pilot air supply: non-reversible	
		External pilot air supply: reversible	
Exhaust function		With flow control	
Manual override		Resetting, detenting via tool accessory	
Mounting position		Any	
Width		18 mm	
Grid dimension		20 mm	
Nominal size		8 mm	8 mm
Standard nominal flow rate		G $\frac{1}{4}$: 1,500 l/min	QS-8: 850 l/min
			QS-10: 1,000 l/min
Type of mounting		Via through-holes	
Pneumatic connection	1, 2, 4	G $\frac{1}{4}$	Ø 8 or Ø 10 mm
	3, 5	G $\frac{1}{4}$	G $\frac{1}{4}$
	12, 14	M5	Ø 4 mm
	84	M5	M5
Changeover time		13 ms	
Product weight		270 g	
Materials		➔ 2 / 2.1-36	

Operating and environmental conditions			
		Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum	
Operating pressure range	internal pilot air	2 ...10 bar	
	external pilot air	-0.9 ...+10 bar	
Pilot pressure range		2 ...10 bar	
Ambient temperature		-5 ... +50 °C	
Temperature of medium		-5 ... +50 °C	

Electrical data			
		Threaded connection	Push-in connector
Operating voltage	M1H	24 V DC +10/-15%	
	M2H	110 V AC ±10% at 50 ... 60 Hz	
	M3H	230 V AC ±10% at 50 ... 60 Hz	
Power consumption	M1H	1.5 W	
	M2H, M3H	Pull: 3 VA	
		Hold: 2.4 VA	
Degree of protection with plug socket		IP65 (EN 60 529)	

Solenoid valves CPE, Compact Performance

FESTO

Technical data – 5/2-way valves, double solenoid

General technical data – Maxi CPE24			
		Threaded connection	Push-in connector
Valve function		5/2-way, double pilot	
Design		Piston spool	
Sealing principle		Soft	
Actuation type		Electrical	
Type of control		Piloted	
Pilot air supply		Internal or external	
Direction of flow		Internal pilot air supply: non-reversible External pilot air supply: reversible	
Exhaust function		With flow control	
Manual override		Resetting, detenting via tool accessory	
Mounting position		Any	
Width		24 mm	
Nominal size		11 mm	11 mm
Standard nominal flow rate		G $\frac{3}{8}$: 3 200 l/min	QS-10: 1,250 l/min QS-12: 1,650 l/min
Type of mounting		Via through-holes	
Pneumatic connection	1, 2, 4	G $\frac{3}{8}$	Ø 10 or Ø 12 mm
	3, 5	G $\frac{3}{8}$	G $\frac{3}{8}$
	12, 14	M5	Ø 6 mm
	84	M5	M5
Changeover time		25 ms	
Product weight		390 g	
Materials		→ 2 / 2.1-36	

Operating and environmental conditions			
		Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum	
Operating pressure range	internal pilot air	2 ...10 bar	
	external pilot air	-0.9 ...+10 bar	
Pilot pressure range		2 ...10 bar	
Ambient temperature		-5 ... +50 °C	
Temperature of medium		-5 ... +50 °C	

Electrical data			
		Threaded connection	Push-in connector
Operating voltage	M1H	24 V DC +10/-15%	
	M2H	110 V AC ±10% at 50 ... 60 Hz	
	M3H	230 V AC ±10% at 50 ... 60 Hz	
Power consumption	M1H	1.5 W	
	M2H, M3H	Pull: 3 VA Hold: 2.4 VA	
Degree of protection with plug socket		IP65 (EN 60 529)	

Directional control valves for standard applications
Compact Performance

2.1

Solenoid valves CPE, Compact Performance

Technical data – 5/2-way valves, double solenoid

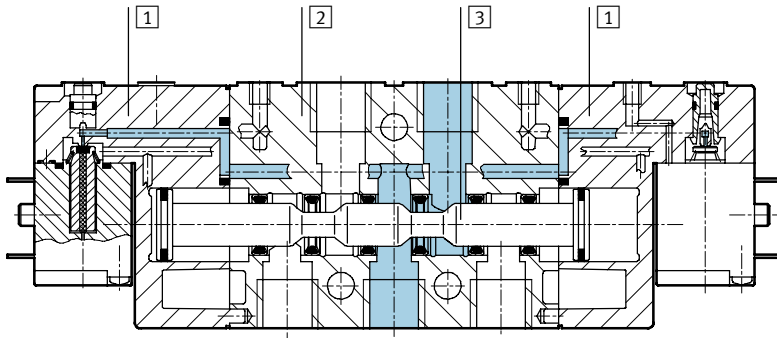
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Directional control valves for standard applications
Compact Performance

2.1

Materials

Sectional view



1	Plug cap	Polyamide
2	Housing	Die-cast aluminium
3	Piston spool	Steel
-	Seals	Nitrile rubber

Solenoid valves CPE, Compact Performance

Technical data – 5/2-way valves, double solenoid



Directional control valves for standard applications
Compact Performance

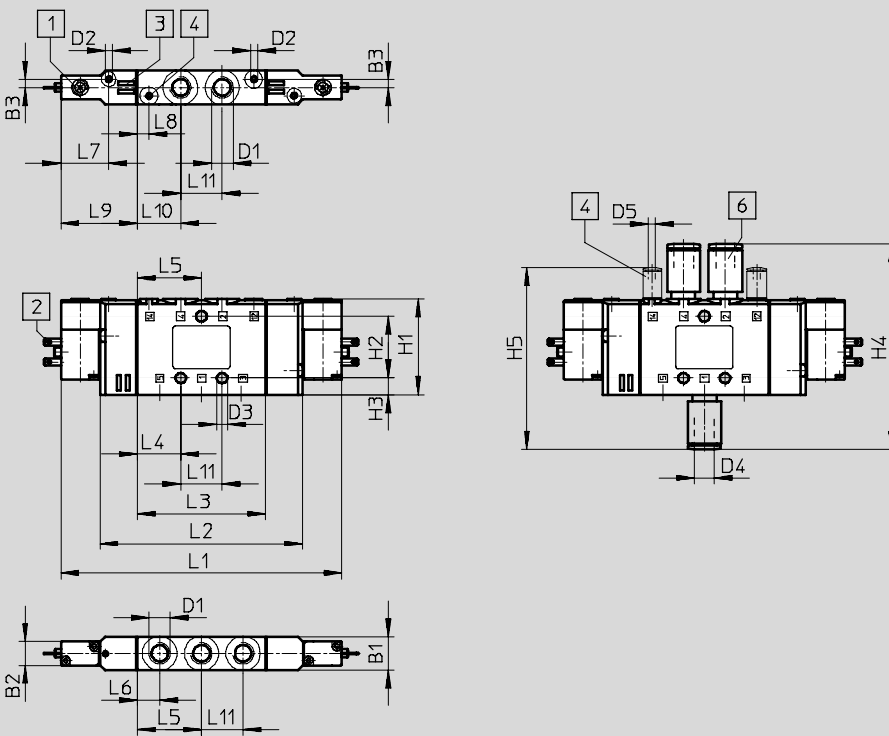
2.1

Dimensions – Mini CPE14, Midi CPE18, Maxi CPE24

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

Threaded connection

Push-in connector



- 1 Manual override facility
- 2 Connection for plug socket
- 3 Location for inscription labels
- 4 Pilot air connection
- 6 QS push-in connection

Pneumatic connection	B1	B2	B3	D1	D2	D3	D4	D5	H1	H2	H3	H4
Mini CPE14												
G $\frac{1}{8}$	14	10	3.5	G $\frac{1}{8}$	M3	4.4	–	–	40.3	26	7	–
QS-6							6	3				75.3
QS-8							8					86.3
Midi CPE18												
G $\frac{1}{4}$	18	17.5	3.5	G $\frac{1}{4}$	M5	4.4	–	–	57	45	6	–
QS-8							8	6				98
QS-10							10					105
Maxi CPE24												
G $\frac{3}{8}$	24	17.5	6	G $\frac{3}{8}$	M5	6.5	–	–	62	40	11	–
QS-10							10	6				108
QS-12							12					113

Pneumatic connection	H5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11
Mini CPE14												
G $\frac{1}{8}$	–	118	85	54	18.3	27	9.5	20	5	32	18.3	17.5
QS-6	70.9											
QS-8	76.4											
Midi CPE18												
G $\frac{1}{4}$	–	163	113	75	28	38	17.5	29	5.5	44	27.5	20
QS-8	90.5											
QS-10	94											
Maxi CPE24												
G $\frac{3}{8}$	–	190	140	100	35	50	20	33	10	45	35	30
QS-10	99.5											
QS-12	102											

Solenoid valves CPE, Compact Performance



Technical data – 5/2-way valves, double solenoid

Ordering data – Micro CPE10				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Internal pilot air supply	M5	196 875	CPE10-M1BH-5J-M5
		M7	196 925	CPE10-M1BH-5J-M7
		QS-4	196 876	CPE10-M1BH-5J-QS-4
		QS-6	196 877	CPE10-M1BH-5J-QS-6
	External pilot air supply	M5	196 878	CPE10-M1BH-5JS-M5
		M7	196 926	CPE10-M1BH-5JS-M7
		QS-4	196 879	CPE10-M1BH-5JS-QS-4
		QS-6	196 880	CPE10-M1BH-5JS-QS-6

Ordering data – Mini CPE14				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Internal pilot air supply	G1/8	196 939	CPE14-M1BH-5J-1/8
		QS-6	196 907	CPE14-M1BH-5J-QS-6
		QS-8	196 908	CPE14-M1BH-5J-QS-8
	External pilot air supply	G1/8	196 940	CPE14-M1BH-5JS-1/8
		QS-6	196 909	CPE14-M1BH-5JS-QS-6
		QS-8	196 910	CPE14-M1BH-5JS-QS-8

Ordering data – Midi CPE18				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Internal pilot air supply	G1/4	163 143	CPE18-M1H-5J-1/4
		QS-8	163 151	CPE18-M1H-5J-QS-8
		QS-10	163 159	CPE18-M1H-5J-QS-10
	External pilot air supply	G1/4	163 147	CPE18-M1H-5JS-1/4
		QS-8	163 155	CPE18-M1H-5JS-QS-8
		QS-10	163 163	CPE18-M1H-5JS-QS-10
Operating voltage 110 V AC				
	Internal pilot air supply	G1/4	163 763	CPE18-M2H-5J-1/4
		QS-8	163 771	CPE18-M2H-5J-QS-8
		QS-10	163 779	CPE18-M2H-5J-QS-10
	External pilot air supply	G1/4	163 767	CPE18-M2H-5JS-1/4
		QS-8	163 775	CPE18-M2H-5JS-QS-8
		QS-10	163 783	CPE18-M2H-5JS-QS-10
Operating voltage 230 V AC				
	Internal pilot air supply	G1/4	163 787	CPE18-M3H-5J-1/4
		QS-8	163 795	CPE18-M3H-5J-QS-8
		QS-10	163 803	CPE18-M3H-5J-QS-10
	External pilot air supply	G1/4	163 791	CPE18-M3H-5JS-1/4
		QS-8	163 799	CPE18-M3H-5JS-QS-8
		QS-10	163 807	CPE18-M3H-5JS-QS-10

Core Range

Solenoid valves CPE, Compact Performance

FESTO

Technical data – 5/2-way valves, double solenoid

Directional control valves for standard applications
Compact Performance

2.1

Order data – Maxi CPE24				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Internal pilot air supply	G $\frac{3}{8}$	163 167	CPE24-M1H-5J-$\frac{3}{8}$
		QS-10	163 175	CPE24-M1H-5J-QS-10
		QS-12	163 183	CPE24-M1H-5J-QS-12
	External pilot air supply	G $\frac{3}{8}$	163 171	CPE24-M1H-5JS-$\frac{3}{8}$
		QS-10	163 179	CPE24-M1H-5JS-QS-10
		QS-12	163 187	CPE24-M1H-5JS-QS-12
Operating voltage 110 V AC				
	Internal pilot air supply	G $\frac{3}{8}$	163 811	CPE24-M2H-5J-$\frac{3}{8}$
		QS-10	163 819	CPE24-M2H-5J-QS-10
		QS-12	163 827	CPE24-M2H-5J-QS-12
	External pilot air supply	G $\frac{3}{8}$	163 815	CPE24-M2H-5JS-$\frac{3}{8}$
		QS-10	163 823	CPE24-M2H-5JS-QS-10
		QS-12	163 831	CPE24-M2H-5JS-QS-12
Operating voltage 230 V AC				
	Internal pilot air supply	G $\frac{3}{8}$	163 835	CPE24-M3H-5J-$\frac{3}{8}$
		QS-10	163 843	CPE24-M3H-5J-QS-10
		QS-12	163 851	CPE24-M3H-5J-QS-12
	External pilot air supply	G $\frac{3}{8}$	163 839	CPE24-M3H-5JS-$\frac{3}{8}$
		QS-10	163 847	CPE24-M3H-5JS-QS-10
		QS-12	163 855	CPE24-M3H-5JS-QS-12

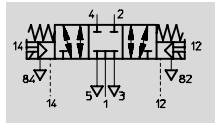
Core Range

Solenoid valves CPE, Compact Performance



Technical data – 5/3-way valves

Function¹⁾



1) e.g. with external pilot air

- - Flow rate
180 ... 3,000 l/min
- - Voltage
24 V DC
110, 230 V AC



General technical data – Micro CPE10			Threaded connection	Push-in connector
Valve function		5/3, single solenoid		
Design		Piston spool		
Sealing principle		Soft		
Actuation type		Electrical		
Type of reset		Mechanical spring		
Type of control		Piloted		
Pilot air supply		Internal or external		
Direction of flow		Internal pilot air supply: non-reversible External pilot air supply: reversible		
Exhaust function		With flow control		
Manual override		Resetting, detenting via tool accessory		
Mounting position		Any		
Width		10 mm		
Grid dimension		12 mm		
Nominal size		4 mm		4 mm
Standard nominal flow rate	closed	M5: 180 l/min M7: 350 l/min	QS-4: 180 l/min QS-6: 300 l/min	
	exhausted	M5: 180 l/min M7: 250 l/min	QS-4: 180 l/min QS-6: 250 l/min	
	pressurised	M5: 180 l/min M7: 300 l/min	QS-4: 180 l/min QS-6: 300 l/min	
Type of mounting		Via through-holes		
Pneumatic connection	1, 2, 4	M5 or M7	Ø 4 or Ø 6 mm	
	3, 5	M7	M7	
	12, 14	M3	Ø 3 mm	
	82, 84	M3	M3	
Response time on/off		16/20 ms		
Product weight		73 g		
Materials		→ 2 / 2.1-45		

Operating and environmental conditions			Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum		
Operating pressure range	internal pilot air	3 ...8 bar		
	external pilot air	-0.9 ...+10 bar		
Pilot pressure range		3 ...8 bar		
Ambient temperature		-5 ... +50 °C		
Temperature of medium		-5 ... +50 °C		

Electrical data			Threaded connection	Push-in connector
Operating voltage		24 V DC +10/-15%		
Power consumption		1.28 W		
Degree of protection with plug socket		IP65 (EN 60 529)		

Directional control valves for standard applications
Compact Performance

2.1

Solenoid valves CPE, Compact Performance

FESTO

Technical data – 5/3-way valves

Directional control valves for standard applications
Compact Performance

2.1

General technical data – Mini CPE14			Threaded connection	Push-in connector
Valve function		5/3, single solenoid		
Design		Piston spool		
Sealing principle		Soft		
Actuation type		Electrical		
Type of reset		Mechanical spring		
Type of control		Piloted		
Pilot air supply		Internal or external		
Direction of flow		Internal pilot air supply: non-reversible		
		External pilot air supply: reversible		
Exhaust function		With flow control		
Manual override		Resetting, detenting via tool accessory		
Mounting position		Any		
Width		14 mm		
Grid dimension		16 mm		
Nominal size		6 mm		6 mm
Standard nominal flow rate	closed	G1/8: 750 l/min		QS-6: 410 l/min
				QS-8: 720 l/min
	exhausted	G1/8: 700 l/min		QS-6: 370 l/min
pressurised			QS-8: 570 l/min	
	G1/8: 750 l/min		QS-6: 370 l/min	QS-8: 650 l/min
Type of mounting		Via through-holes		
Pneumatic connection	1, 2, 4	G1/8		∅ 6 or ∅ 8 mm
	3, 5	G1/8		G1/8
	12, 14	M3		∅ 3 mm
	82, 84	M3		M3
Response time on/off		20/42 ms		
Product weight		120 g		170 g
Materials		→ 2 / 2.1-45		

Operating and environmental conditions			Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum		
Operating pressure range	internal pilot air	3 ...8 bar		
	external pilot air	-0.9 ...+10 bar		
Pilot pressure range		3 ...8 bar		
Ambient temperature		-5 ... +50 °C		
Temperature of medium		-5 ... +50 °C		

Electrical data			Threaded connection	Push-in connector
Operating voltage		24 V DC +10/-15%		
Power consumption		1.28 W		
Degree of protection with plug socket		IP65 (EN 60 529)		

Solenoid valves CPE, Compact Performance

FESTO

Technical data – 5/3-way valves

General technical data – Midi CPE18			
		Threaded connection	Push-in connector
Valve function		5/3, single solenoid	
Design		Piston spool	
Sealing principle		Soft	
Actuation type		Electrical	
Type of reset		Mechanical spring	
Type of control		Piloted	
Pilot air supply		Internal or external	
Direction of flow		Internal pilot air supply: non-reversible External pilot air supply: reversible	
Exhaust function		With flow control	
Manual override		Resetting, detenting via tool accessory	
Mounting position		Any	
Width		18 mm	
Grid dimension		20 mm	
Nominal size		8 mm	8 mm
Standard nominal flow rate	closed	G $\frac{1}{4}$: 1,450 l/min	QS-8: 850 l/min QS-10: 1,050 l/min
	exhausted	G $\frac{1}{4}$: 1,200 l/min	QS-8: 780 l/min QS-10: 1,000 l/min
	pressurised	G $\frac{1}{4}$: 1,300 l/min	QS-8: 780 l/min QS-10: 1,000 l/min
Type of mounting		Via through-holes	
Pneumatic connection	1, 2, 4	G $\frac{1}{4}$	Ø 8 or Ø 10 mm
	3, 5	G $\frac{1}{4}$	G $\frac{1}{4}$
	12, 14	M5	Ø 4 mm
	82, 84	M5	M5
Response time on/off		20/38 ms	
Product weight		280 g	300 g
Materials		→ 2 / 2.1-45	

Operating and environmental conditions			
		Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum	
Operating pressure range	internal pilot air	2.5 ...10 bar	
	external pilot air	-0.9 ...+10 bar	
Pilot pressure range		2.5 ...10 bar	
Ambient temperature		-5 ... +50 °C	
Temperature of medium		-5 ... +50 °C	

Electrical data			
		Threaded connection	Push-in connector
Operating voltage	M1H	24 V DC +10/-15%	
	M2H	110 V AC ±10% at 50 ... 60 Hz	
	M3H	230 V AC ±10% at 50 ... 60 Hz	
Power consumption	M1H	1 W	
	M2H, M3H	Pull: 3 VA Hold: 2.4 VA	
Degree of protection with plug socket		IP65 (EN 60 529)	

Directional control valves for standard applications
Compact Performance

2.1

Solenoid valves CPE, Compact Performance

FESTO

Technical data – 5/3-way valves

Directional control valves for standard applications
Compact Performance

2.1

General technical data – Maxi CPE24			Threaded connection	Push-in connector
Valve function		5/3, single solenoid		
Design		Piston spool		
Sealing principle		Soft		
Actuation type		Electrical		
Type of reset		Mechanical spring		
Type of control		Piloted		
Pilot air supply		Internal or external		
Direction of flow		Internal pilot air supply: non-reversible		
		External pilot air supply: reversible		
Exhaust function		With flow control		
Manual override		Resetting, detenting via tool accessory		
Mounting position		Any		
Width		24 mm		
Nominal size		11 mm		11 mm
Standard nominal flow rate	closed	G $\frac{3}{8}$: 3,000 l/min		QS-10: 1,250 l/min QS-12: 1,650 l/min
	exhausted	G $\frac{3}{8}$: 2,650 l/min		QS-10: 1,250 l/min QS-12: 1,600 l/min
	pressurised	G $\frac{3}{8}$: 2,600 l/min		QS-10: 1,250 l/min QS-12: 1,600 l/min
Type of mounting		Via through-holes		
Pneumatic connection	1, 2, 4	G $\frac{3}{8}$		Ø 10 or Ø 12 mm
	3, 5	G $\frac{3}{8}$		G $\frac{3}{8}$
	12, 14	M5		Ø 6 mm
	82, 84	M5		M5
Response time on/off		25/55 ms		
Product weight		430 g		450 g
Materials		➔ 2 / 2.1-45		

Operating and environmental conditions			Threaded connection	Push-in connector
Operating medium		Filtered compressed air, lubricated or unlubricated Vacuum		
Operating pressure range	internal pilot air	2.5 ...10 bar		
	external pilot air	-0.9 ...+10 bar		
Pilot pressure range		2.5 ...10 bar		
Ambient temperature		-5 ... +50 °C		
Temperature of medium		-5 ... +50 °C		

Electrical data			Threaded connection	Push-in connector
Operating voltage	M1H	24 V DC +10/-15%		
	M2H	110 V AC ±10% at 50 ... 60 Hz		
	M3H	230 V AC ±10% at 50 ... 60 Hz		
Power consumption	M1H	1 W		
	M2H, M3H	Pull: 3 VA Hold: 2.4 VA		
Degree of protection with plug socket		IP65 (EN 60 529)		

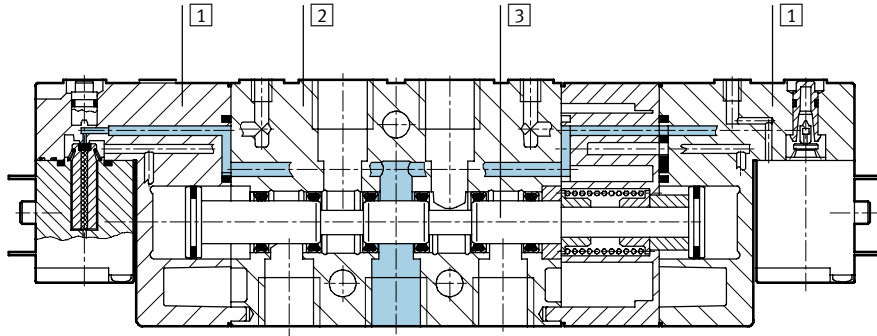
Solenoid valves CPE, Compact Performance

FESTO

Technical data – 5/3-way valves

Materials

Sectional view



1	Plug cap	Polyamide
2	Housing	Die-cast aluminium
3	Piston spool	Steel
-	Seals	Nitrile rubber

Directional control valves for standard applications
Compact Performance

2.1

Solenoid valves CPE, Compact Performance

Technical data – 5/3-way valves

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Directional control valves for standard applications
Compact Performance

2.1

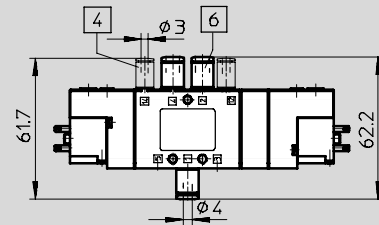
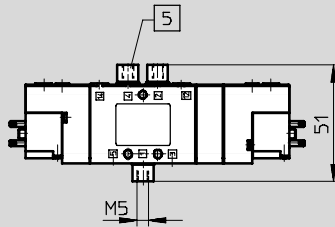
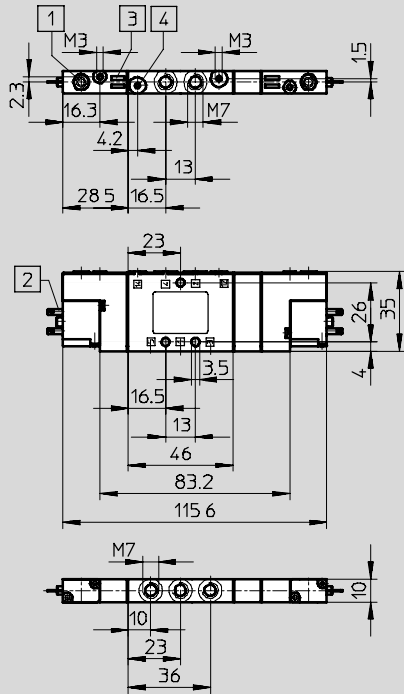
Dimensions – Micro CPE10

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

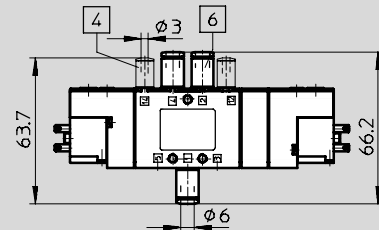
Threaded connection M7

Threaded connection M5

Push-in fitting QS-4



Push-in fitting QS-6



- 1 Manual override facility
- 2 Connection for plug socket

- 3 Location for inscription labels

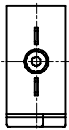
- 4 Pilot air connection

- 5 M7 to M5 reducer
- 6 QS push-in connection

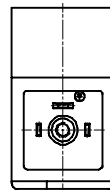
Connection diagrams

Micro CPE10, Mini CPE14

Midi CPE18, Maxi CPE24



Suitable for plug socket
KMYZ-9-...



Suitable for plug sockets to
DIN 43 650, type C
KMEB-1-...
KMEB-2-...
MSSD-EB

Solenoid valves CPE, Compact Performance

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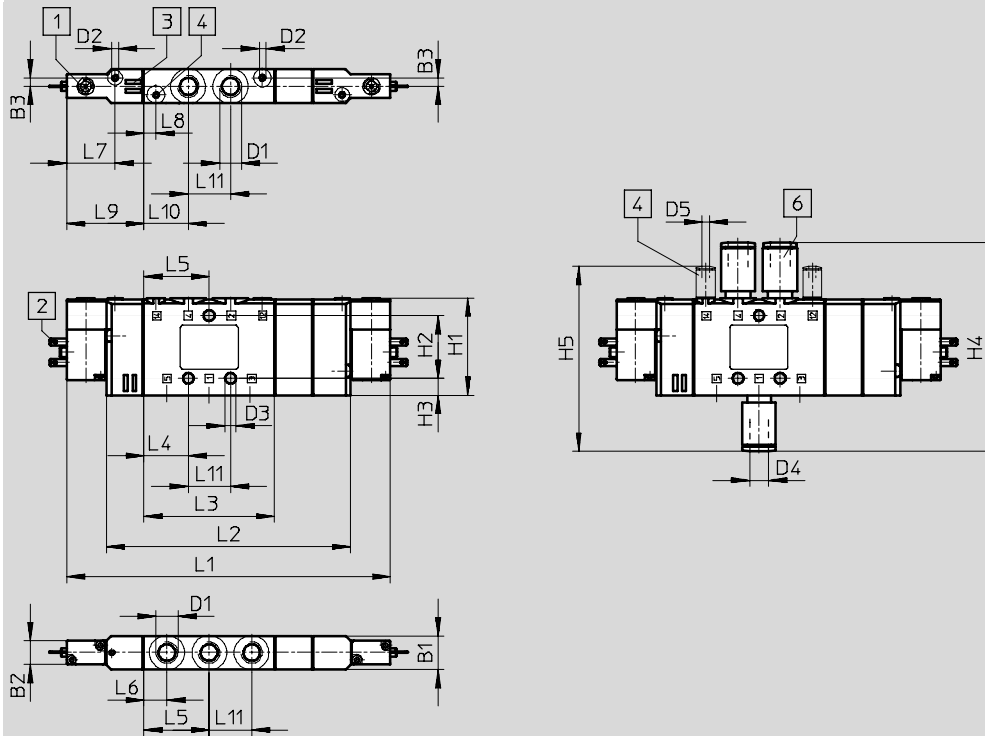
Technical data – 5/3-way valves

Dimensions – Mini CPE14, Midi CPE18, Maxi CPE24

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Threaded connection

Push-in connector



- 1 Manual override facility
- 2 Connection for plug socket
- 3 Location for inscription labels
- 4 Pilot air connection
- 6 QS push-in connection

Pneumatic connection	B1	B2	B3	D1	D2	D3 Ø	D4 Ø	D5 Ø	H1	H2	H3	H4
Mini CPE14												
G1/8	14	10	3.5	G1/8	M3	4.4	–	–	40.3	26	7	–
QS-6							6	3				75.3
QS-8							8	86.3				
Midi CPE18												
G1/4	18	17.5	3.5	G1/4	M5	4.4	–	–	57	45	6	–
QS-8							8	6				98
QS-10							10	105				
Maxi CPE24												
G3/8	24	17.5	6	G3/8	M5	6.5	–	–	62	40	11	–
QS-10							10	6				108
QS-12							12	113				

Pneumatic connection	H5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11
Mini CPE14												
G1/8	–	134	101	54	18.3	27	9.5	20	5	32	18.3	17.5
QS-6	70.9											
QS-8	76.4											
Midi CPE18												
G1/4	–	182	132	75	28	38	17.5	29	5.5	44	27.5	20
QS-8	90.5											
QS-10	94											
Maxi CPE24												
G3/8	–	213	163	100	35	50	20	33	10	45	35	30
QS-10	99.5											
QS-12	102											

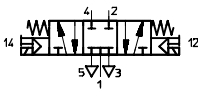
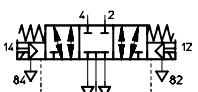
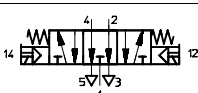
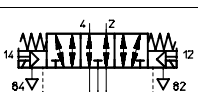
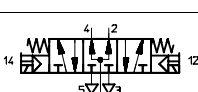
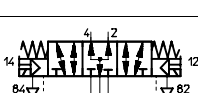
Solenoid valves CPE, Compact Performance



Technical data – 5/3-way valves

Directional control valves for standard applications
Compact Performance

2.1

Ordering data – Micro CPE10				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Normally closed Internal pilot air supply	M5	533 159	CPE10-M1BH-5/3G-M5-B
		M7	533 141	CPE10-M1BH-5/3G-M7-B
		QS-4	533 147	CPE10-M1BH-5/3G-QS-4-B
		QS-6	533 153	CPE10-M1BH-5/3G-QS-6-B
	Normally closed External pilot air supply	M5	533 160	CPE10-M1BH-5/3GS-M5-B
		M7	533 142	CPE10-M1BH-5/3GS-M7-B
		QS-4	533 148	CPE10-M1BH-5/3GS-QS-4-B
		QS-6	533 154	CPE10-M1BH-5/3GS-QS-6-B
	Normally exhausted Internal pilot air supply	M5	533 161	CPE10-M1BH-5/3E-M5-B
		M7	533 143	CPE10-M1BH-5/3E-M7-B
		QS-4	533 149	CPE10-M1BH-5/3E-QS-4-B
		QS-6	533 155	CPE10-M1BH-5/3E-QS-6-B
	Normally exhausted External pilot air supply	M5	533 162	CPE10-M1BH-5/3ES-M5-B
		M7	533 144	CPE10-M1BH-5/3ES-M7-B
		QS-4	533 150	CPE10-M1BH-5/3ES-QS-4-B
		QS-6	533 156	CPE10-M1BH-5/3ES-QS-6-B
	Normally pressurised Internal pilot air supply	M5	533 163	CPE10-M1BH-5/3B-M5-B
		M7	533 145	CPE10-M1BH-5/3B-M7-B
		QS-4	533 151	CPE10-M1BH-5/3B-QS-4-B
		QS-6	533 157	CPE10-M1BH-5/3B-QS-6-B
	Normally pressurised External pilot air supply	M5	533 164	CPE10-M1BH-5/3BS-M5-B
		M7	533 146	CPE10-M1BH-5/3BS-M7-B
		QS-4	533 152	CPE10-M1BH-5/3BS-QS-4-B
		QS-6	533 158	CPE10-M1BH-5/3BS-QS-6-B

Solenoid valves CPE, Compact Performance



Technical data – 5/3-way valves

Ordering data – Mini CPE14				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Normally closed Internal pilot air supply	G $\frac{1}{8}$	196 937	CPE14-M1BH-5/3G- $\frac{1}{8}$
		QS-6	196 903	CPE14-M1BH-5/3G-QS-6
		QS-8	196 904	CPE14-M1BH-5/3G-QS-8
	Normally closed External pilot air supply	G $\frac{1}{8}$	196 938	CPE14-M1BH-5/3GS- $\frac{1}{8}$
		QS-6	196 905	CPE14-M1BH-5/3GS-QS-6
		QS-8	196 906	CPE14-M1BH-5/3GS-QS-8
	Normally exhausted Internal pilot air supply	G $\frac{1}{8}$	196 935	CPE14-M1BH-5/3E- $\frac{1}{8}$
		QS-6	196 899	CPE14-M1BH-5/3E-QS-6
		QS-8	196 900	CPE14-M1BH-5/3E-QS-8
	Normally exhausted External pilot air supply	G $\frac{1}{8}$	196 936	CPE14-M1BH-5/3ES- $\frac{1}{8}$
		QS-6	196 901	CPE14-M1BH-5/3ES-QS-6
		QS-8	196 902	CPE14-M1BH-5/3ES-QS-8
	Normally pressurised Internal pilot air supply	G $\frac{1}{8}$	196 933	CPE14-M1BH-5/3B- $\frac{1}{8}$
		QS-6	196 895	CPE14-M1BH-5/3B-QS-6
		QS-8	196 896	CPE14-M1BH-5/3B-QS-8
	Normally pressurised External pilot air supply	G $\frac{1}{8}$	196 934	CPE14-M1BH-5/3BS- $\frac{1}{8}$
		QS-6	196 897	CPE14-M1BH-5/3BS-QS-6
		QS-8	196 898	CPE14-M1BH-5/3BS-QS-8

Directional control valves for standard applications
Compact Performance

2.1

Solenoid valves CPE, Compact Performance



Technical data – 5/3-way valves

Directional control valves for standard applications
Compact Performance

2.1

Ordering data – Midi CPE18				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Normally closed Internal pilot air supply	G $\frac{1}{4}$	170 247	CPE18-M1H-5/3G- $\frac{1}{4}$
		QS-8	170 253	CPE18-M1H-5/3G-QS-8
		QS-10	170 259	CPE18-M1H-5/3G-QS-10
	Normally closed External pilot air supply	G $\frac{1}{4}$	170 248	CPE18-M1H-5/3GS- $\frac{1}{4}$
		QS-8	170 254	CPE18-M1H-5/3GS-QS-8
		QS-10	170 260	CPE18-M1H-5/3GS-QS-10
	Normally exhausted Internal pilot air supply	G $\frac{1}{4}$	170 249	CPE18-M1H-5/3E- $\frac{1}{4}$
		QS-8	170 255	CPE18-M1H-5/3E-QS-8
		QS-10	170 261	CPE18-M1H-5/3E-QS-10
	Normally exhausted External pilot air supply	G $\frac{1}{4}$	170 250	CPE18-M1H-5/3ES- $\frac{1}{4}$
		QS-8	170 256	CPE18-M1H-5/3ES-QS-8
		QS-10	170 262	CPE18-M1H-5/3ES-QS-10
	Normally pressurised Internal pilot air supply	G $\frac{1}{4}$	170 251	CPE18-M1H-5/3B- $\frac{1}{4}$
		QS-8	170 257	CPE18-M1H-5/3B-QS-8
		QS-10	170 263	CPE18-M1H-5/3B-QS-10
	Normally pressurised External pilot air supply	G $\frac{1}{4}$	170 252	CPE18-M1H-5/3BS- $\frac{1}{4}$
		QS-8	170 258	CPE18-M1H-5/3BS-QS-8
		QS-10	170 264	CPE18-M1H-5/3BS-QS-10
Operating voltage 110 V AC				
	Normally closed Internal pilot air supply	G $\frac{1}{4}$	170 283	CPE18-M2H-5/3G- $\frac{1}{4}$
		QS-8	170 289	CPE18-M2H-5/3G-QS-8
		QS-10	170 295	CPE18-M2H-5/3G-QS-10
	Normally closed External pilot air supply	G $\frac{1}{4}$	170 284	CPE18-M2H-5/3GS- $\frac{1}{4}$
		QS-8	170 290	CPE18-M2H-5/3GS-QS-8
		QS-10	170 296	CPE18-M2H-5/3GS-QS-10
	Normally exhausted Internal pilot air supply	G $\frac{1}{4}$	170 285	CPE18-M2H-5/3E- $\frac{1}{4}$
		QS-8	170 291	CPE18-M2H-5/3E-QS-8
		QS-10	170 297	CPE18-M2H-5/3E-QS-10
	Normally exhausted External pilot air supply	G $\frac{1}{4}$	170 286	CPE18-M2H-5/3ES- $\frac{1}{4}$
		QS-8	170 292	CPE18-M2H-5/3ES-QS-8
		QS-10	170 298	CPE18-M2H-5/3ES-QS-10
	Normally pressurised Internal pilot air supply	G $\frac{1}{4}$	170 287	CPE18-M2H-5/3B- $\frac{1}{4}$
		QS-8	170 293	CPE18-M2H-5/3B-QS-8
		QS-10	170 299	CPE18-M2H-5/3B-QS-10
	Normally pressurised External pilot air supply	G $\frac{1}{4}$	170 288	CPE18-M2H-5/3BS- $\frac{1}{4}$
		QS-8	170 294	CPE18-M2H-5/3BS-QS-8
		QS-10	170 300	CPE18-M2H-5/3BS-QS-10

Solenoid valves CPE, Compact Performance



Technical data – 5/3-way valves

Ordering data – Midi CPE18				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 230 V AC				
	Normally closed Internal pilot air supply	G $\frac{1}{4}$	170 319	CPE18-M3H-5/3G- $\frac{1}{4}$
		QS-8	170 325	CPE18-M3H-5/3G-QS-8
		QS-10	170 331	CPE18-M3H-5/3G-QS-10
	Normally closed External pilot air supply	G $\frac{1}{4}$	170 320	CPE18-M3H-5/3GS- $\frac{1}{4}$
		QS-8	170 326	CPE18-M3H-5/3GS-QS-8
		QS-10	170 332	CPE18-M3H-5/3GS-QS10
	Normally exhausted Internal pilot air supply	G $\frac{1}{4}$	170 321	CPE18-M3H-5/3E- $\frac{1}{4}$
		QS-8	170 327	CPE18-M3H-5/3E-QS-8
		QS-10	170 333	CPE18-M3H-5/3E-QS-10
	Normally exhausted External pilot air supply	G $\frac{1}{4}$	170 322	CPE18-M3H-5/3ES- $\frac{1}{4}$
		QS-8	170 328	CPE18-M3H-5/3ES-QS-8
		QS-10	170 334	CPE18-M3H-5/3ES-QS10
	Normally pressurised Internal pilot air supply	G $\frac{1}{4}$	170 323	CPE18-M3H-5/3B- $\frac{1}{4}$
		QS-8	170 329	CPE18-M3H-5/3B-QS-8
		QS-10	170 335	CPE18-M3H-5/3B-QS-10
	Normally pressurised External pilot air supply	G $\frac{1}{4}$	170 324	CPE18-M3H-5/3BS- $\frac{1}{4}$
		QS-8	170 330	CPE18-M3H-5/3BS-QS-8
		QS-10	170 336	CPE18-M3H-5/3BS-QS-10

Directional control valves for standard applications
Compact Performance

2.1

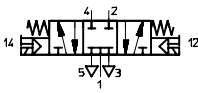
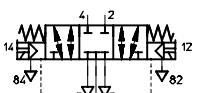
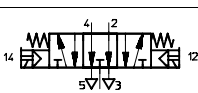
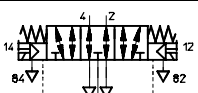
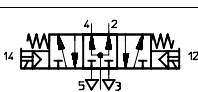

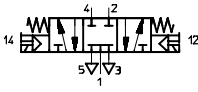
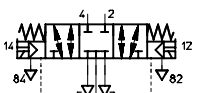
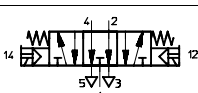
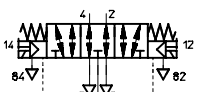
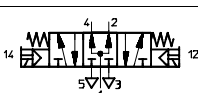
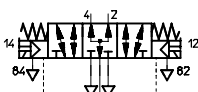
Solenoid valves CPE, Compact Performance

FESTO

Technical data – 5/3-way valves

Directional control valves for standard applications
Compact Performance

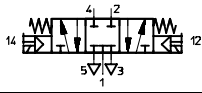
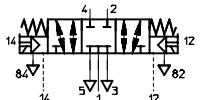
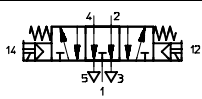
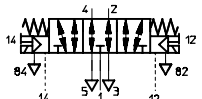
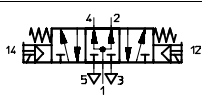
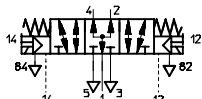
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Order data – Maxi CPE24				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 24 V DC				
	Normally closed Internal pilot air supply	G $\frac{3}{8}$	170 265	CPE24-M1H-5/3G- $\frac{3}{8}$
		QS-10	170 271	CPE24-M1H-5/3G-QS-10
		QS-12	170 277	CPE24-M1H-5/3G-QS-12
	Normally closed External pilot air supply	G $\frac{3}{8}$	170 266	CPE24-M1H-5/3GS- $\frac{3}{8}$
		QS-10	170 272	CPE24-M1H-5/3GS-QS-10
		QS-12	170 278	CPE24-M1H-5/3GS-QS-12
	Normally exhausted Internal pilot air supply	G $\frac{3}{8}$	170 267	CPE24-M1H-5/3E- $\frac{3}{8}$
		QS-10	170 273	CPE24-M1H-5/3E-QS-10
		QS-12	170 279	CPE24-M1H-5/3E-QS-12
	Normally exhausted External pilot air supply	G $\frac{3}{8}$	170 268	CPE24-M1H-5/3ES- $\frac{3}{8}$
		QS-10	170 274	CPE24-M1H-5/3ES-QS-10
		QS-12	170 280	CPE24-M1H-5/3ES-QS-12
	Normally pressurised Internal pilot air supply	G $\frac{3}{8}$	170 269	CPE24-M1H-5/3B- $\frac{3}{8}$
		QS-10	170 275	CPE24-M1H-5/3B-QS-10
		QS-12	170 281	CPE24-M1H-5/3B-QS-12
	Normally pressurised External pilot air supply	G $\frac{3}{8}$	170 270	CPE24-M1H-5/3BS- $\frac{3}{8}$
		QS-10	170 276	CPE24-M1H-5/3BS-QS-10
		QS-12	170 282	CPE24-M1H-5/3BS-QS-12
Operating voltage 110 V AC				
	Normally closed Internal pilot air supply	G $\frac{3}{8}$	170 301	CPE24-M2H-5/3G- $\frac{3}{8}$
		QS-10	170 307	CPE24-M2H-5/3G-QS-10
		QS-12	170 313	CPE24-M2H-5/3G-QS-12
	Normally closed External pilot air supply	G $\frac{3}{8}$	170 302	CPE24-M2H-5/3GS- $\frac{3}{8}$
		QS-10	170 308	CPE24-M2H-5/3GS-QS-10
		QS-12	170 314	CPE24-M2H-5/3GS-QS-12
	Normally exhausted Internal pilot air supply	G $\frac{3}{8}$	170 303	CPE24-M2H-5/3E- $\frac{3}{8}$
		QS-10	170 309	CPE24-M2H-5/3E-QS-10
		QS-12	170 315	CPE24-M2H-5/3E-QS-12
	Normally exhausted External pilot air supply	G $\frac{3}{8}$	170 304	CPE24-M2H-5/3ES- $\frac{3}{8}$
		QS-10	170 310	CPE24-M2H-5/3ES-QS-10
		QS-12	170 316	CPE24-M2H-5/3ES-QS-12
	Normally pressurised Internal pilot air supply	G $\frac{3}{8}$	170 305	CPE24-M2H-5/3B- $\frac{3}{8}$
		QS-10	170 311	CPE24-M2H-5/3B-QS-10
		QS-12	170 317	CPE24-M2H-5/3B-QS-12
	Normally pressurised External pilot air supply	G $\frac{3}{8}$	170 306	CPE24-M2H-5/3BS- $\frac{3}{8}$
		QS-10	170 312	CPE24-M2H-5/3BS-QS-10
		QS-12	170 318	CPE24-M2H-5/3BS-QS-12

Solenoid valves CPE, Compact Performance



Technical data – 5/3-way valves

Order data – Maxi CPE24				
Circuit symbol	Description	Pneumatic connection	Part No.	Type
Operating voltage 230 V AC				
	Normally closed Internal pilot air supply	G $\frac{3}{8}$	170 337	CPE24-M3H-5/3G- $\frac{3}{8}$
		QS-10	170 343	CPE24-M3H-5/3G-QS-10
		QS-12	170 349	CPE24-M3H-5/3G-QS-12
	Normally closed External pilot air supply	G $\frac{3}{8}$	170 338	CPE24-M3H-5/3GS- $\frac{3}{8}$
		QS-10	170 344	CPE24-M3H-5/3GS-QS-10
		QS-12	170 350	CPE24-M3H-5/3GS-QS-12
	Normally exhausted Internal pilot air supply	G $\frac{3}{8}$	170 339	CPE24-M3H-5/3E- $\frac{3}{8}$
		QS-10	170 345	CPE24-M3H-5/3E-QS-10
		QS-12	170 351	CPE24-M3H-5/3E-QS-12
	Normally exhausted External pilot air supply	G $\frac{3}{8}$	170 340	CPE24-M3H-5/3ES- $\frac{3}{8}$
		QS-10	170 346	CPE24-M3H-5/3ES-QS-10
		QS-12	170 352	CPE24-M3H-5/3ES-QS-12
	Normally pressurised Internal pilot air supply	G $\frac{3}{8}$	170 341	CPE24-M3H-5/3B- $\frac{3}{8}$
		QS-10	170 347	CPE24-M3H-5/3B-QS-10
		QS-12	170 353	CPE24-M3H-5/3B-QS-12
	Normally pressurised External pilot air supply	G $\frac{3}{8}$	170 342	CPE24-M3H-5/3BS- $\frac{3}{8}$
		QS-10	170 348	CPE24-M3H-5/3BS-QS-10
		QS-12	170 354	CPE24-M3H-5/3BS-QS-12

Solenoid valves CPE, Compact Performance

Data sheet – Manifold



Sub-base CPE...-PRSG...-2 for 2 valves

Material:
Polyamide, reinforced



Ordering data				
Size	Pneumatic connection 1, 3, 5	Weight [g]	Part No.	Type
with closed PRS channels				
Micro CPE10	G $\frac{1}{4}$	50	164 960	CPE10-PRSG-2
Mini CPE14	G $\frac{3}{8}$	95	164 965	CPE14-PRSG-2
Midi CPE18	G $\frac{1}{2}$	170	164 970	CPE18-PRSG-2
with open PRS channels				
Micro CPE10	G $\frac{1}{4}$	50	187 827	CPE10-PRSGO-2
Mini CPE14	G $\frac{3}{8}$	95	187 829	CPE14-PRSGO-2
Midi CPE18	G $\frac{1}{2}$	170	187 831	CPE18-PRSGO-2

Dimensions → 2 / 2.1-57

Possible combinations → 2 / 2.1-58

Sub-base CPE...-PRSG...-3 for 3 valves

Material:
Polyamide, reinforced



Ordering data				
Size	Pneumatic connection 1, 3, 5	Weight [g]	Part No.	Type
with closed PRS channels				
Micro CPE10	G $\frac{1}{4}$	70	187 823	CPE10-PRSG-3
Mini CPE14	G $\frac{3}{8}$	130	187 824	CPE14-PRSG-3
Midi CPE18	G $\frac{1}{2}$	225	187 825	CPE18-PRSG-3
with open PRS channels				
Micro CPE10	G $\frac{1}{4}$	70	187 819	CPE10-PRSGO-3
Mini CPE14	G $\frac{3}{8}$	130	187 820	CPE14-PRSGO-3
Midi CPE18	G $\frac{1}{2}$	225	187 821	CPE18-PRSGO-3

Dimensions → 2 / 2.1-57

Possible combinations → 2 / 2.1-58

Core Range

Solenoid valves CPE, Compact Performance

Data sheet – Manifold

Expansion block

CPE...-PRSE...-2

for 2 valves

Material:

Polyamide, reinforced



Ordering data				
Size	Pneumatic connection 1, 3, 5	Weight [g]	Part No.	Type
with closed PRS channels				
Micro CPE10	G1/4	40	164 962	CPE10-PRSE-2
Mini CPE14	G3/8	85	164 967	CPE14-PRSE-2
Midi CPE18	G1/2	145	164 972	CPE18-PRSE-2
with open PRS channels				
Micro CPE10	G1/4	40	187 828	CPE10-PRSEO-2
Mini CPE14	G3/8	85	187 830	CPE14-PRSEO-2
Midi CPE18	G1/2	145	187 832	CPE18-PRSEO-2

Dimensions → 2 / 2.1-57

Possible combinations → 2 / 2.1-58

End plate CPE...-PRS-EP

Material:

Polyamide, reinforced



Ordering data				
Size	Pneumatic connection 1, 3, 5	Weight [g]	Part No.	Type
Micro CPE10	G1/4	70	164 964	CPE10-PRS-EP
Mini CPE14	G3/8	80	164 969	CPE14-PRS-EP
Midi CPE18	G1/2	125	164 973	CPE18-PRS-EP

Dimensions → 2 / 2.1-57

Possible combinations → 2 / 2.1-58

Core Range

Solenoid valves CPE, Compact Performance

Data sheet – Manifold

FESTO

Blanking plate CPE...-PRSB
for vacant positions

Material:
Polyamide, reinforced



Ordering data				
Size	Pneumatic connection 1, 3, 5	Weight [g]	Part No.	Type
Micro CPE10	G $\frac{1}{4}$	10	164 963	CPE10-PRSB
Mini CPE14	G $\frac{3}{8}$	15	164 968	CPE14-PRSB
Midi CPE18	G $\frac{1}{2}$	28	164 974	CPE18-PRSB

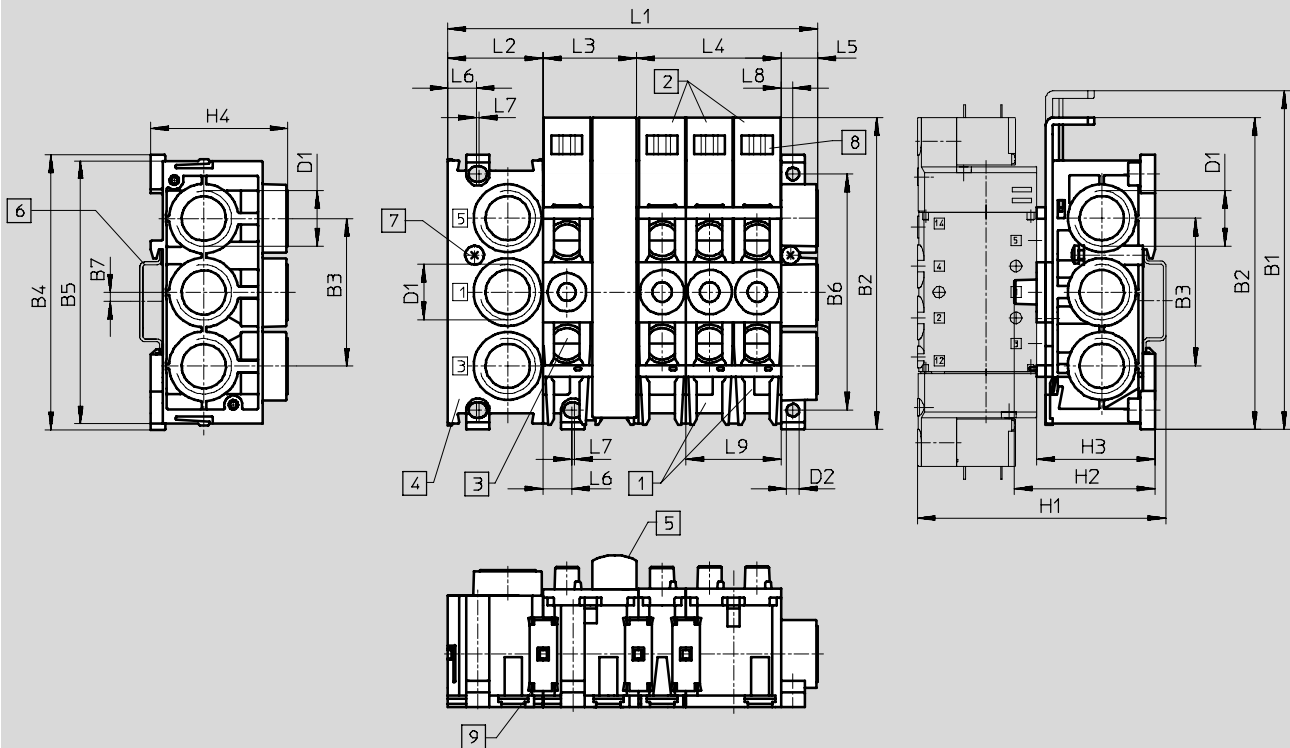
Solenoid valves CPE, Compact Performance

Data sheet – Manifold



Dimensions – Manifold

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



- 1 Basic block
CPE...-PRSG...-2 for 2 valves
- 2 Basic block
CPE...-PRSG...-3 for 3 valves
- 3 Expansion block
CPE...-PRSE...-2 for 2 valves
- 4 End block CPE...-PRS-EP
- 5 Blanking plate CPE...-PRSB
- 6 H-rail per EN 50 002 for mounting
- 7 Locking screw for H-rail
- 8 Location for inscription label
type IBS 6 x 10
- 9 Connector

Size	B1	B2	B3	B4	B5	B6	B7	D1	D2 Ø	H1	H2	H3
Micro CPE10	93.5	87	37	73	71	60	7	G¼	3.3	~72	~40	~34
Mini CPE14	114.6	105.6	50	93	89	80	3	G¾	4.3	~84	~48	~40
Midi CPE18	151.6	136.5	59	113	-	100	2.75	G½	5.3	~106	~58	~46

Size	H4	L1 ¹⁾	L2	L3	L4	L5	L6	L7	L8	L9
Micro CPE10	37	24+(nx12)+11.4	24	24	36	11.4	9.6	-	3.2	24
Mini CPE14	46.4	32+(nx16)+12.4	32	32	48	12.4	10.1	-	4	32
Midi CPE18	51.4	40+(nx20)+16.4	40	40	60	16.4	12.6	1	5.2	40

1) n = number of valve positions

Directional control valves for standard applications
Compact Performance

2.1

Solenoid valves CPE, Compact Performance

Data sheet – Manifold

Possible combinations			
Number of valve positions	1 pressure zone	2 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 1x 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



Maximum 6 valve positions per air inlet.





Use valve connection blocks in combination with 5/2 and 5/3-way valves only.


Solenoid valves CPE, Compact Performance


FESTO

Accessories

Ordering data – Plug sockets, plug sockets with cable for KMYZ solenoid coils					
	Voltage	Cable length [m]	Switching status display with LED	Part No.	Type
Plug socket with PUR cable					Technical data → NO TAG
Plug socket with PUR cable					Technical data → www.festo.com
	24 V DC	2.5	■	193 687	KMYZ-9-24-2,5-LED-PUR-B
		5	■	193 689	KMYZ-9-24-5-LED-PUR-B
		10	■	196 063	KMYZ-9-24-10-LED-PUR-B
Plug socket with PVC cable and plug M8x1					Technical data → NO TAG
Plug socket with PVC cable and plug M8x1					Technical data → www.festo.com
	24 V DC	0.5	■	196 064	KMYZ-9-24-M8-0,5-LED-B
		2.5	■	196 065	KMYZ-9-24-M8-2,5-LED-B

Ordering data – Plug sockets, plug sockets with cable for EB solenoid coils					
	Voltage	Cable length [m]	Switching status display with LED	Part No.	Type
Plug socket without cable					Technical data → NO TAG
Plug socket without cable					Technical data → www.festo.com
	–	–	–	151 687	MSSD-EB
	–	–	–	539 712	MSSD-EB-M12
Plug socket without cable with insulation displacement technology					Technical data → NO TAG
Plug socket without cable with insulation displacement technology					Technical data → www.festo.com
	–	–	–	192 745	MSSD-EB-S-M14
Plug socket with PVC cable					Technical data → NO TAG
Plug socket with PVC cable					Technical data → www.festo.com
	24 V DC	2.5	■	151 688	KMEB-1-24-2,5-LED
	24 V DC	5	■	151 689	KMEB-1-24-5-LED
	24 V DC	10	■	193 457	KMEB-1-24-10-LED
	Up to 240 V	2.5	–	151 690	KMEB-1-230-2,5
	Up to 240 V	5	–	151 691	KMEB-1-230-5
Plug socket with PUR cable					Technical data → NO TAG
Plug socket with PUR cable					Technical data → www.festo.com
	24 V DC	2.5	■	174 844	KMEB-2-24-2,5-LED
	24 V DC	5	■	174 845	KMEB-2-24-5-LED
	Up to 240 V	2.5	–	174 846	KMEB-2-230-2,5
	Up to 240 V	5	–	174 847	KMEB-2-230-5

Ordering data – Illuminating seals for EB solenoid coils					Technical data → NO TAG
Ordering data – Illuminating seals for EB solenoid coils					Technical data → www.festo.com
	Voltage [V DC]	[V AC]	Part No.	Type	
	12 ... 24	–	151 717	MEB-LD-12-24DC	
	–	230	151 718	MEB-LD-230AC	

 Core Range





Solenoid valves CPE, Compact Performance

Accessories

FESTO

Directional control valves for standard applications
Compact Performance

2.1

Ordering data – General accessories		Part No.	Type
Push-in/threaded fittings QS			
		→	Volume 3 → www.festo.com
Silencer			
	for M3 thread	163 978	U-M3
	for M5 thread	165 003	UC-M5
	for M7 thread	161 418	UC-M7
	for G1/8 thread	161 419	UC-1/8
	for G1/4 thread	165 004	UC-1/4
Manual override facility			
	for KMYZ coils	157 600	AHB-MZB
	for EB coils	157 601	AHB-MEB
Inscription labels			
		18 576	IBS-6x10

 Core Range