

- Space-saving thanks to small valve dimensions
- Straight-forward valve replacement
- Manual override and LED operating status display
- Flow rates of up to 180 l/min
- Wide range of pneumatic and electrical connection options
- Also available as a modular valve terminal

Key features



# Application-optimised directional control valves Smart Cubic

#### Innovative

- Compact valve for a wide range of pneumatic applications
- Highly versatile during the planning and assembly stages as well as in operational use
- Numerous valve functions can be selected, including functions for vacuum applications
- Comprehensive, optimally harmonised range of accessories for flow rates of up to 180 l/min

The valves are identical with the valves in the valve terminal CPASC1. This simplifies planning, ordering and warehousing.

#### Flexible

- The flexibility of the pneumatic working lines facilitate a practical solution to different requirements
- Tubing lines can be connected horizontally to the valve or vertically to the sub-base
- Wide range of electrical connections for 24 V DC operating voltage

#### Reliable

- Manual override
- Durable thanks to the use of triedand-tested piston spool valves
- Sturdy thanks to metal housing and connecting thread
- Reduced downtimes through an LED operating status display at each valve position

#### Easy to assemble

- Fully assembled, tested valve
- Lower costs for ordering, installation and commissioning
- Direct mounting
- Valves are screwed onto a metal
- sub-base for reliable servicing

#### FESTO

Key features



#### **Equipment options**

The CPASC valve can be equipped with the following valve functions and electrical connections:

#### Valve functions

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

■ 2x 3/2-way valve, normally closed

- 5/3-way valve,
- mid-position pressurised
- 5/3-way valve,
   mid-position closed
   5/3-way valve,
  - mid-position exhausted

#### 2x 2/2-way valve, normally closed, dual compressed air supply

#### Electrical connections

- Plug-in (PI)
- Horizontal connector (HC)

Key features

#### FESTO

#### Valves Sub-base valve



There are sub-base valves and semi in-line valves with one solenoid coil (single solenoid) or with two solenoid coils (double solenoid) depending on the valve function. Sub-base valves can be quickly replaced since the pipe connection remains on the sub-base. This design is also particularly flat.



Semi in-line valve (with working lines on the valve)

With semi in-line valves the pneumatic connection can be on the top. This means that elbow connectors are not needed.



#### - 📲 - Note

Semi in-line valves can also be mounted on sub-bases used with sub-base valves. In this case the corresponding working ports on the sub-base must be sealed using blanking plugs.

Peripherals overview

#### Sub-base with electrical individual plug-in (PI) connection

Code: SP, SQ

With an individual PI connection, the connector plug remains on the sub-base when the valve is being replaced.

Sub-base with sub-base valve or semi in-line valve



Application-optimised directional control valves Smart Cubic 3.3

- 1 Cover for manual override (optional)
- 2 Manual override (per solenoid coil, push-in/rotary-detenting)
- 3 Working lines (2, 4) on the sub-base or on the valve
- 4 Supply ports (1, 12/14), exhaust ports (3, 5, 82/84) and pressure compensation port (L) on the sub-base
- 5 Individual plug-in (PI) connection
- 6 Sub-base valve
- Sub-base for sub-base valve 7
- Semi in-line valve 8
- 9 Sub-base for semi in-line valve
- 10 Connectors, silencers and blanking plugs
- 11 Inscription label

Peripherals overview

#### Sub-base with electrical individual horizontal (HC) connection

Code: SH

With an individual HC connection, the electrical connection for the valve must be removed when the valve is being replaced.

#### Sub-base with sub-base valve or semi in-line valve



- 1 Cover for manual override (optional)
- 2 Manual override (per solenoid coil, push-in/rotary-detenting)
- 3 Working lines (2, 4) on the sub-base or on the valve
- 4 Supply ports (1, 12/14), exhaust ports (3, 5, 82/84) and pressure compensation port (L) on the sub-base
- 5 Individual horizontal connection (HC)

6	Sub-base valve
~	040 0400 14110

- 7 Sub-base for sub-base valve
- 8 Semi in-line valve
- 9 Sub-base for semi in-line valve
- 10 Connectors, silencers and
- blanking plugs
- 11 Inscription label

# Solenoid valves CPASC1/CPPSC1, Smart Cubic Key features – Valves

Valves			C: 40	
	Code	Circuit symbol	Size 10	Description
	M		•	5/2-way valve, single solenoid Pneumatic spring return
	J		•	5/2-way valve, double solenoid
	N		•	2x 3/2-way valve, single solenoid Normally open Pneumatic spring return
	К		•	2x 3/2-way valve, single solenoid Normally closed Pneumatic spring return
	В		•	5/3-way valve Mid-position pressurised Spring force return The piston rod of a connected cylinder advances when the valve is in the normal position due to the differential piston areas.
	G		•	5/3-way valve Mid-position closed Spring force return The piston rod side of a cylinder remains held under pressure in the normal valve position.
	E		•	5/3-way valve Mid-position exhausted Spring force return In the normal valve position, the piston rod can be moved freely.

#### FESTO

Key features – Valves

valves	Code	Circuit symbol	Size 10	Description
	1	4 2 10 12 14 12/14 5 82/84 1	•	<ul> <li>2x 2/2-way valve</li> <li>Normally closed, dual compressed air supply (e.g. for vacuum switching with ejector pulse)</li> <li>Spring force return</li> <li>The vacuum is connected at port 5</li> <li>Port 14 switches the vacuum</li> <li>Port 12 switches the ejector pulse</li> <li>An external T-connection must be established between port 2, 4 and the vacuum generator</li> </ul>

#### Constructional design

#### Valve replacement

The valves are attached to the metal sub-base using two screws. This means that they can be easily replaced. The mechanical robustness of the sub-base guarantees good longterm sealing tightness. The valve code (M, J, N, K, B, G, E, X, I) is located on the front of the valve beneath the manual override.



Key features - Valves

#### FESTO

#### **Display and operation**

Each valve solenoid coil is allocated an LED which indicates its operating status. Inscription labels (type IBS-6x10) can be applied to each valve for labelling purposes. The manual override (MO) allows the valve to be switched when in the electrically non-activated or de-energised status. The valve is switched by pushing the manual override. The set switching status can also be locked by rotating the manual override.



- Note

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

- 1 Cover for manual override (code V or accessory CPASC1-MO-V)
- 2 Optional manual override (pushing and rotating/ detenting using a screwdriver)
- 3 Space for valve inscription label type ISB-6x10
- 4 LED signal status display per valve position

#### Manual override



- Press in the stem of the manual
   provide with a pointed object as
  - override with a pointed object or screwdriver. > Valve is in switching position
- 2 Remove the pointed object or screwdriver.

Spring force pushes the stem of the manual override back. > Valve returns to initial position (not with double solenoid valve code J)

#### Manual override with lock (detenting)

A cover can be fitted over the manual

override to prevent it from being

activated accidentally (code V).



- Press in the stem of the manual override using a screwdriver until the valve switches and then turn the stem clockwise by 90° until the stop is reached.
   > Valve remains in switching position
- 2 Turn the stem anti-clockwise by 90° until the stop is reached and then remove the pin or screwdriver.

Spring force pushes the stem of the manual override back. > Valve returns to initial position (not with double solenoid valve code J) Application-optimised directional control valves
 Smart Cubic

Key features - Pneumatic connection

# Working lines - Semi in-line valves Code Description B M5 threaded connection Image: Constraint of the second second

#### Pneumatic connection Supply and exhaust

The valve is supplied with compressed air via the sub-base.

The sub-base contains ports for the compressed air supply, exhaust and pilot exhaust and in the case of sub-base valves, working lines for the valve.

#### Auxiliary pilot air

The solenoid valve CPASC1 is suitable for internal and external auxiliary pilot air. Diagrams  $\rightarrow$  2 / 3.3-15

#### Internal auxiliary pilot air

If supply pressure for the CPA-SC valve is within a range of 3 to 8 bar, it can be operated with internally distributed pilot air. The branch is located in the sub-base.

#### External auxiliary pilot air

If supply pressure for the CPA-SC valve is within a range of -0.9 ... +10 bar, it must be operated with external pilot air. The auxiliary pilot air is supplied externally via port 12/14 in this case.

# Solenoid valves CPASC1/CPPSC1, Smart Cubic Key features – Pneumatic connection



Ports for supply and exhau	st					
	Code	Port		Ports for supply and exha	aust	
					Code B	Code F
					Threaded connection	Push-in fitting QS4
					M5	
				Designation	Туре	Туре
9	Compres	sed air si	upplied via internal auxiliary pilot air, exha	austing via silencer		
	S	1	Compressed air/vacuum supply	Push-in fitting	-	QSM-M5-4-I
		3/5	Exhaust	Silencer	-	UC-M5
		12/14	Auxiliary pilot air	-	-	-
		82/84	Exhaust for auxiliary pilot air	Silencer	-	U-M3
000		L	Pressure compensation	Silencer	-	U-M3
0000					•	
00	Compres	sed air su	upplied via external auxiliary pilot air, exh	austing via silencer		
Ť	Т	1	Compressed air/vacuum supply	Push-in fitting	-	QSM-M5-4-I
		3/5	Exhaust	Silencer	-	UC-M5
		12/14	Auxiliary pilot air	Push-in fitting	-	QSM-M3-3-I
		82/84	Exhaust for auxiliary pilot air	Silencer	-	U-M3
		L	Pressure compensation	Silencer	-	U-M3
	Compres	ssed air si	upplied via internal auxiliary pilot air, duc	ted exhaust		
	V	1	Compressed air/vacuum supply	Push-in fitting	-	QSM-M5-4-I
		3/5	Exhaust	Push-in fitting	-	QSM-M5-4-I
		12/14	Auxiliary pilot air	-	-	-
		82/84	Exhaust for auxiliary pilot air	Push-in fitting	-	QSM-M3-3-1
		L	Pressure compensation	Silencer	-	U-M3
		-				
	Compres	ssed air si	upplied via external auxiliary pilot air, duc	ted exhaust		
	Х	1	Compressed air/vacuum supply	Push-in fitting	-	QSM-M5-4-I
		3/5	Exhaust	Push-in fitting	-	QSM-M5-4-I
		12/14	Auxiliary pilot air	Push-in fitting	-	QSM-M3-3-I
		82/84	Exhaust for auxiliary pilot air	Push-in fitting	-	QSM-M3-3-I
		L	Pressure compensation	Silencer	-	U-M3

#### Note -

The port L compensates the pressure between moving parts inside the valve and the surrounding environment.

A silencer protects against contamination. The port L must not be sealed using blanking plugs.

Key features - Electrical connection

#### FESTO

Electrical power as a result of current reduction

Each valve solenoid coil is protected with a spark arresting protective circuit as well as against polarity reversal. All valve types are additionally equipped with integrated current reduction.



#### **Electrical individual connection**

With an electrical individual connection, the plug is connected directly to the valve. Two types of electrical connection can be selected for the sub-base: Horizontal connection (HC) or

Plug-in (PI)

#### - Note

Connecting cables with 2- or 3-wires are available for single solenoid valves with one solenoid coil or double solenoid valves with two solenoid coils.

Horizontal connection (HC) Code SH



- With the sub-base, the electrical connection can be plugged in directly on the valve.
- The horizontal connection (HC) must be removed when replacing the valve.

#### Plug-in (Pl)



With this electrical connection variant, the connector plug is mounted on an adapter. This adapter is then attached to the sub-base. To replace the valve, all you need do is loosen two screws; the connector plug remains secured to the adapter.

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

#### Dimensions - Horizontal connection (HC)



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8.3	

Туре	Code	L1	Number of valve solenoid	Cable colour		
			coils	Pin 1	Pin 2	Pin 3
				Common	Solenoid coil 12	Solenoid coil 14
KMH-0,5	CH	500	1 coil	black	-	red
KMH-1	CI	1000	1 coil	black	-	red
KMH-2,5	CJ	2500	1 coil	black	-	red
KMH-5	СК	5000	1 coil	black	-	red
KMH-D-0,5	CD	500	2 coils	black	blue	red
KMH-D-1	CE	1000	2 coils	black	blue	red
KMH-D-2,5	CF	2500	2 coils	black	blue	red
KMH-D-5	(G	5000	2 coils	black	hlue	red

3.3

### Solenoid valves CPASC1/CPPSC1, Smart Cubic Key features – Electrical connection and mounting



Туре	Code	L1	Number of valve solenoid	Cable colour		
			coils	Pin 1	Pin 2	Pin 3
				Common	Solenoid coil 12	Solenoid coil 14
MHAP-PI	-	500	1 coil	black	-	red
MHAP-PI-1	-	1000	1 coil	black	-	red
MHAP-PI-D-0,5	-	500	2 coils	black	blue	red
MHAP-PI-D-1	-	1000	2 coils	black	blue	red

#### Mounting

The sub-base is designed for wall mounting for integration into a system or machine.

#### Wall mounting – Horizontal





1 Mounting holes

1 Mounting holes

3.3

# Solenoid valves CPASC1/CPPSC1, Smart Cubic Technical data



- **L** - Voltage 24 V DC

#### General technical dat

General technical data									
Valve		5/2-way valve		2x 3/2-way va	alve	5/3-way valv	е		2x 2/2-way
		single	double	normal positi	on	mid-position			valve
		solenoid	solenoid	open	closed	pressurised	closed	exhausted	closed
Valve function order code		М	J	Ν	К	В	G	E	I
Constructional design		Electromagnet	ically actuated	piston spool v	alve				
Width	[mm]	10	10						
Nominal size	[mm]	2.5							
Lubrication		Lubrication for	life, PWIS-free	e (free of paint-	wetting impairm	ient substances	)		
Type of mounting		Wall mounting	Wall mounting						
Mounting position		Any							
Manual override		Pushing/deten	ting-rotary						
Pneumatic connections									
Pneumatic connection		Via individual	connections or	n sub-base					
Supply port	1	M5							
Exhaust port	3/5	M5							
Working lines	2/4	Depending on	the connection	type selected					
		■ M5							
		■ QS-3							
		■ QS-4							
Pilot air port	12/14	M3							
Pilot exhaust air port	82/84	M3							
Pressure compensation port	1	M3							



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Technical data



### **Pilot pressure p2 as a function of the working pressure p1 with external auxiliary pilot air** for valve sub-bases with code M, J, B, G, E



#### for valve sub-bases with code N, K, I



#### 1 Operating range for valves with external auxiliary pilot air

1 Operating range for valves with external auxiliary pilot air

Valve response times [ms]									
Valve function order code		М	J	Ν	К	В	G	E	1
Response times	on	10	-	10	10	10	10	10	10
	off	20	-	20	20	25	25	25	20
	change-	-	10	-	-	-	-	-	-
	over								

Operating and environmenta	l conditions								
Valve function order code		М	J	Ν	К	В	G	E	1
Operating medium		Filtered compr	essed air, lubrio	ated or unlubri	cated, inert gas	ies			
Grade of filtration	[µm]	40 (average po	ore size)						
Ambient temperature	[°C]	0 +40							
Storage temperature	[°C]	-20 +40							
Corrosion resistance class CR	C <sup>1)</sup>	1							

1) Corrosion resistance class 1 according to Festo standard 940 070

Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

# Solenoid valves CPASC1/CPPSC1, Smart Cubic Technical data

Electrical data									
Valve function order code		M J N K B G E I							1
Protection against electric sho	By means of PELV power supply unit								
(protection against direct and	indirect								
contact to EN 60204-1/IEC 20	4)								
Operating voltage	[V]	24 (±10%)							
Electrical power	[W]	Pull: 1							
consumption		Hold: 0.3							
Duty cycle		100% at 40 °C a	ambient temper	ature					
Protection class to EN 60 529		IP40 (in assemb	oled state and w	ith detenting plu	lg)				
Relative air humidity		90% at 40 °C, n	on-condensing						
Vibration resistance		To DIN/IEC 68/E	N 60 068, Parts	2-6, severity lev	/el 2				
Continuous shock resistance		To DIN/IEC 68/E	N 60 068, Parts	2-27, severity l	evel 2				

1) The maximum signal line length is 10 m

Materials									
Valve function order code	М	J	Ν	К	В	G	E	1	
Sub-base	Aluminium	uminium							
Valve slice	Die-cast alum	inium, PPS,	ST, PA-GF						
Seal	NBR, HNBR, flo	BR. HNBR. flour rubber							
		ourrasser							
Product weight [g]	approx. weigh	nts							
<b>Product weight [g]</b> Valve function order code	approx. weigh	nts	N	К	В	G	E	1	
<b>Product weight [g]</b> Valve function order code Sub-base	approx. weigh	nts	N	K	В	G	E	1	

# Solenoid valves CPASC1/CPPSC1, Smart Cubic Technical data

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Standard nominal flow rate [l/min]										
	Code	Valve function	Valve	Individual sub-base						
	Sub-ba	Sub-base valve								
	Μ	5/2-way valve,	220	170						
		single solenoid								
	J	5/2-way valve,	220	170						
		double solenoid								
	Ν	2x 3/2-way valve,	220	170						
		normally open								
	К	2x 3/2-way valve,	180	150						
		normally closed								
	В	5/3-way valve,	220	150						
		mid-position pressurised								
	G	5/3-way valve,	180	150						
		mid-position closed								
	E	5/3-way valve,	180	150						
		mid-position exhausted								
	I	2x 2/2-way valve	150	140						
A Pa	Semi in-line valve with working ports M5									
	М	5/2-way valve,	200	180						
		single solenoid								
	J	5/2-way valve,	200	180						
the second		double solenoid								
	Ν	2x 3/2-way valve,	200	180						
		normally open								
	К	2x 3/2-way valve,	150	150						
		normally closed								
	В	5/3-way valve,	180	180						
		mid-position pressurised								
	G	5/3-way valve,	150	150						
		mid-position closed								
	E	5/3-way valve,	180	170						
		mid-position exhausted								
	I	2x 2/2-way valve	150	150						

3.3

Standard nominal flow rate [l/min]										
	Code	Valve function	Valve	Individual sub-base						
KP.	Semi in	-line valve with working ports QS-3								
	М	5/2-way valve,	140	140						
		single solenoid								
	J	5/2-way valve,	140	140						
		double solenoid								
V	Ν	2x 3/2-way valve,	140	140						
		normally open								
	К	2x 3/2-way valve,	130	130						
		normally closed								
	В	5/3-way valve,	140	140						
		mid-position pressurised								
	G	5/3-way valve,	130	130						
		mid-position closed								
	E	5/3-way valve,	140	140						
		mid-position exhausted								
		2x 2/2-way valve	130	130						
	Semi in-line valve with working ports QS-4									
	м	5/2-way valve,	180	170						
	-	single solenoid								
	J	5/2-way valve,	180	170						
		double solenoid								
	N	2x 3/2-way valve,	180	170						
		normally open								
	К	2x 3/2-way valve,	150	150						
		normally closed	100	470						
	В	5/3-way valve,	180	170						
	6	mid-position pressurised		450						
	G	5/3-way valve,	150	150						
			170	170						
	E	5/ 3-way Valve,	1/0	1/0						
	-		150	140						
		zx z/z-way valve	001	140						

#### FESTO

Technical data





# Dimensions - Semi in-line valve with working line QS-3/QS-4 Download CAD data > www.festo.com/en/engineering With individual plug-in (PI) connection With individual horizontal connection (HC) Image: Provide the system of the

1 Individual PI connection

1

1 Individual HC connection

1

Technical data

Application-optimised directional control valves Smart Cubic

3.3



Valve type		L3
Semi in-line valve	with working line M5	50.8
	with working line QS-3	57.2
	with working line QS-4	57.2
Sub-base valve		48.3

#### Technical data



Valve type		L3
Semi in-line valve	with working line M5	43.9
	with working line QS-3	50.3
	with working line QS-4	50.3
Sub-base valve		41.4

# Application-optimised directional control valves Smart Cubic

# Solenoid valves CPASC1/CPPSC1, Smart Cubic Ordering data – Modular products

M Mandatory	y data										<b>&gt;</b>
Module No.	Valve terminal, pneumatic part	Size	Volt- age	Electrical connec- tion	Position of working lines	Type of working lines	Manual over- ride	Com- pressed air supply	Supply side	Pneumatic connection for supply and exhaust	
529 045	82P	10	1	SP SQ SH	P A	B E F	N V	S T V X	L	B F	
Ordering example 529 045	82P	- 10	- 1	SP	– P	E	- N -	- S	L	В	] -

Or	dering table				
Size		10	Condi-	Code	Enter
			tions		code
Μ	Module No.	529 045			
	Valve terminal, pneumatic part	Compact Performance CPA type 82 Smart Cubic with individual connection		82P	82P
	Size [mm]	10		-10	-10
	Voltage [V DC]	24		-1	-1
	Electrical connection	Individual sub-base plug-in, 0.5 m cable		SP	
		Individual sub-base plug-in, 1.0 m cable		SQ	
		Individual sub-base, horizontal connection		SH	
	Position of working lines	On the valve		-P	
		On the sub-base		-A	
	Type of working lines	Thread M5		В	
		Push-in fittings QS-3		E	
		Push-in fittings QS-4		F	
	Manual override	Push-in or detenting		-N	
		Covered		-V	
	Compressed air supply	Internal pilot air, venting via silencer		-S	
		External pilot air, venting via silencer		-T	
		Internal pilot air, ducted exhaust air		-V	
		External pilot air, ducted exhaust air		-X	
	Supply side	Supply at left		L	L
	Pneumatic connection for supply and	1 Thread M5		В	
<b>1</b>	exhaust	OS push-in fitting OS-4		F	



# Solenoid valves CPASC1/CPPSC1, Smart Cubic Ordering data – Modular products



#### Ordering table

Size			10	Condi-	Code		Enter
				tions			code
						_	
¥	Equipment for valve position:	5			-		-
Μ	Valves		5/2-way valve, single solenoid		М		Enter
			5/2-way valve, double solenoid		J		equip-
			2x 3/2-way valve, normally open		N		ment
			2x 3/2-way valve, normally closed		К		selection
			5/3-way valve, mid-position pressurised		В		for valve
			5/3-way valve, mid-position closed		G		positions
			5/3-way valve, mid-position exhausted		E		in order
			2x 2/2-way valve, 1x normally open, 1x closed		I		code
0	Accessories				+		+
	HC connecting cable, 2 coils	0.5 m	1 99 (KMH-0,5)	1	CD		
		1 m	1 99 (KMH-1)	1	CE		
		2.5 m	1 99 (KMH-2,5)	1	CF		
		5 m	1 99 (KMH-5)	1	CG		
	HC connecting cable, 1 coil	0.5 m	1 99 (KMH-D-0,5)	1	CH		
		1 m	1 99 (KMH-D-1)	1	CI		
		2.5	1 99 (KMH-D-2,5)	1	CJ		
		5 m	1 99 (KMH-D-5)	1	CK		

1 CD, CE, CF, CG, CH, CI, CJ, CK

Only with electrical connection SH

#### Transfer order code

0

#### **FESTO**

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Ordering data – Valvo	es					
			Electrical p	olug-in connection	Electrical I	HC connection
	Code	Valve function	Part No.	Туре	Part No.	Туре
E .	Sub-bas	se valve				
The second secon	Μ	5/2-way valve, single solenoid	526 990	CPASC1-M1H-M-P-2,5	527 008	CPASC1-M1H-M-H-2,5
	J	5/2-way valve, double solenoid	526 992	CPASC1-M1H-J-P-2,5	527 010	CPASC1-M1H-J-H-2,5
	Ν	2x 3/2-way valve,	526 994	CPASC1-M1H-N-P-2,5	527 012	CPASC1-M1H-N-H-2,5
		normally open				
	К	2x 3/2-way valve,	526 996	CPASC1-M1H-K-P-2,5	527 014	CPASC1-M1H-K-H-2,5
R .		normally closed				
	В	5/3-way valve,	526 998	CPASC1-M1H-B-P-2,5	527 016	CPASC1-M1H-B-H-2,5
		mid-position pressurised				
	G	5/3-way valve,	527 000	CPASC1-M1H-G-P-2,5	527 018	CPASC1-M1H-G-H-2,5
		mid-position closed				
	E	5/3-way valve,	527 002	CPASC1-M1H-E-P-2,5	527 020	CPASC1-M1H-E-H-2,5
		mid-position exhausted				
	1	2x 2/2-way valve	527 006	CPASC1-M1H-I-P-2,5	527 024	CPASC1-M1H-I-H-2,5
		. ,				
<b>F</b>	Semi in-	line valve with M5 working ports				
	Μ	5/2-way valve, single solenoid	527 294	CPPSC1-M1H-M-P-M5	527 303	CPPSC1-M1H-M-H-M5
	J	5/2-way valve, double solenoid	527 295	CPPSC1-M1H-J-P-M5	527 304	CPPSC1-M1H-J-H-M5
	Ν	2x 3/2-way valve,	527 296	CPPSC1-M1H-N-P-M5	527 305	CPPSC1-M1H-N-H-M5
		normally open				
	К	2x 3/2-way valve,	527 297	CPPSC1-M1H-K-P-M5	527 306	CPPSC1-M1H-K-H-M5
RP.		normally closed				
	В	5/3-way valve,	527 298	CPPSC1-M1H-B-P-M5	527 307	CPPSC1-M1H-B-H-M5
		mid-position pressurised				
	G	5/3-way valve,	527 299	CPPSC1-M1H-G-P-M5	527 308	CPPSC1-M1H-G-H-M5
		mid-position closed				
	E	5/3-way valve,	527 300	CPPSC1-M1H-E-P-M5	527 309	CPPSC1-M1H-E-H-M5
		mid-position exhausted				
	1	2x 2/2-way valve	527 302	CPPSC1-M1H-I-P-M5	527 311	CPPSC1-M1H-I-H-M5
		-	I		1 1	
	Semi in-	line valve with QS-3 working ports				
	Μ	5/2-way valve, single solenoid	527 330	CPPSC1-M1H-M-P-Q3	527 339	CPPSC1-M1H-M-H-Q3
	J	5/2-way valve, double solenoid	527 331	CPPSC1-M1H-J-P-Q3	527 340	CPPSC1-M1H-J-H-Q3
	Ν	2x 3/2-way valve,	527 332	CPPSC1-M1H-N-P-Q3	527 341	CPPSC1-M1H-N-H-Q3
		normally open				
	К	2x 3/2-way valve,	527 333	CPPSC1-M1H-K-P-Q3	527 342	CPPSC1-M1H-K-H-Q3
		normally closed				
	В	5/3-way valve,	527 334	CPPSC1-M1H-B-P-Q3	527 343	CPPSC1-M1H-B-H-Q3
		mid-position pressurised				
	G	5/3-way valve,	527 335	CPPSC1-M1H-G-P-Q3	527 344	CPPSC1-M1H-G-H-Q3
		mid-position closed				
	E	5/3-way valve,	527 336	CPPSC1-M1H-E-P-Q3	527 345	CPPSC1-M1H-E-H-Q3
		mid-position exhausted				
		2x 2/2-way valve	527 338	CPPSC1-M1H-I-P-03	527 347	CPPSC1-M1H-I-H-O3

Products 2006 - Subject to change - 2006/03

**FESTO** 

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Ordering data – Valve	es					
			Electrical	Electrical plug-in connection		HC connection
	Code	Valve function	Part No.	Туре	Part No.	Туре
	Semi in-	line valve with QS-4 working ports				
	М	5/2-way valve, single solenoid	527 312	CPPSC1-M1H-M-P-Q4	527 321	CPPSC1-M1H-M-H-Q4
	J	5/2-way valve, double solenoid	527 313	CPPSC1-M1H-J-P-Q4	527 322	CPPSC1-M1H-J-H-Q4
	Ν	2x 3/2-way valve,	527 314	CPPSC1-M1H-N-P-Q4	527 323	CPPSC1-M1H-N-H-Q4
		normally open				
	K	2x 3/2-way valve,	527 315	CPPSC1-M1H-K-P-Q4	527 324	CPPSC1-M1H-K-H-Q4
ST C		normally closed				
	В	5/3-way valve,	527 316	CPPSC1-M1H-B-P-Q4	527 325	CPPSC1-M1H-B-H-Q4
		mid-position pressurised				
	G	5/3-way valve,	527 317	CPPSC1-M1H-G-P-Q4	527 326	CPPSC1-M1H-G-H-Q4
		mid-position closed				
	E	5/3-way valve,	527 318	CPPSC1-M1H-E-P-Q4	527 327	CPPSC1-M1H-E-H-Q4
		mid-position exhausted				
	Ι	2x 2/2-way valve	527 320	CPPSC1-M1H-I-P-Q4	527 329	CPPSC1-M1H-I-H-Q4



Ordering data – Ac	cessories			
Designation			Part No.	Туре
Inscription labels				
$\square \land \square$	6x10 in frames, 64 pieces for valve identifica	tion	18 576	IBS-6x10
	80 pieces for sub-base identification		197 259	MH-BZ-80x
~				
Plug socket with ca	able for plug-in connection			
-	For 1 coil	0.5 m	197 260	MHAP-PI
A SHE		1 m	532 182	MHAP-PI-1
A Q CHAN	For 2 coils	0.5 m	529 116	MHAP-PI-D-0,5
		1 m	527 395	MHAP-PI-D-1
Plug socket with ca	able for HC connection			
	For 1 coil, 2-wire	0.5 m	197 263	КМН-0,5
		1 m	197 264	KMH-1
		2.5 m	527 400	КМН-2,5
		5 m	527 401	KMH-5
	For 2 coils, 3-wire	0.5 m	527 396	KMH-D-0,5
		1 m	527 397	KMH-D-1
		2.5 m	527 398	KMH-D-2,5
		5 m	527 399	KMH-D-5
Cover				
	Cover for manual override		527 393	CPASC1-MO-V
Valve seal			i	
	For sub-base		527 394	CPASC1-SEAL-A

Ordering data – Acces	isories			
Designation			Part No.	Туре
Push-in fitting for wo	rking ports			
	Connecting thread M5 for tubing O.D.	3 mm	153 313	QSM-M5-3-I
		4 mm	153 315	QSM-M5-4-I
<b>P</b> 1 1 Cut ( 1				
Push-in fitting for sub	-base			
	Connecting thread M3 for tubing O.D.	3 mm	153 312	QSM-M3-3-I
6		4 mm	153 314	QSM-M3-4-I
	Connecting thread M5 for tubing O.D.	3 mm	153 313	QSM-M5-3-I
		4 mm	153 315	QSM-M5-4-I
		6 mm	153 317	QSM-M5-6-I
Silencer				
	Connecting thread	M3	163 978	U-M3
		M5	4 645	U-M5
		M5	165 003	UC-M5
	Push-in sleeve connection type	3 mm	165 005	UC-QS-3H
		4 mm	165 006	UC-QS-4H
		6 mm	165 007	UC-QS-6H
Blanking plug				
OM	Thread M5		174 308	B-M5-B
Plug				
	Blanking plug for tubing O.D.	3 mm	153 382	QSMC-3H
a de la companya de l		4 mm	153 267	QSC-4H
Ľ		6 mm	153 268	QSC-6H

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