

# Solenoid valves VSNC



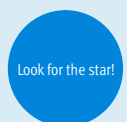
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# Solenoid valves VSNC

Key features, product range overview VSNC...



**Function**

VSNC valves are pilot valves for single- and double-acting quarter turn and linear actuators with a port pattern in accordance with VDI/VDE 3845, such as DAPS, DFPB, DLP. They can also be mounted on actuators without a NAMUR interface, e.g. diaphragm actuators


thanks to appropriate accessories such as a connection kit. They are designed for the requirements of process automation. Mechanical springs (single-solenoid valves) ensure safe switching to the initial position in the event of a power failure.


**Innovative**


- Conversion from 3/2-way to 5/2-way valve simply by turning the seal
- Enables single- or double-acting actuators to be controlled with one valve
- The valve can be ordered either with non-detenting/detenting or non-detenting manual override or without manual override. It is converted using a special cover. The part number is therefore identical. The manual override option can be changed at any time

**Cost- and application-optimised**

- Cost-optimised variant with plastic cover and brass armature and IP65 coils

-  - Voltage  
12, 24, 48 V DC  
24, 48, 120, 230 V AC

-  - Operating pressure  
2.5 ... 10 bar

-  - Temperature range  
-20 ... +60 °C

**Flexible**

- Application-optimised variant with aluminium cover, stainless steel armature tube for IP65 and Ex coils, and protective cap for armature tube exhaust
- One armature tube system for all Ex solenoid systems
- For zone 1 to IEC Ex with type of ignition protection
- Ex-ia
- Ex-mb
- For zone 2 to IEC Ex with type of ignition protection
- Ex-nA
- For Class I, Div I to NEC 505
- AEx-m



**VSNC-F8**



VSNC with IP65 solenoid

**VSNC-F ... -FN**



VSNC piston spool

VSNC with Ex-ia solenoid

VSNC with Ex-nA solenoid

**VSNC-FT ... -FN**



VSNC poppet seat

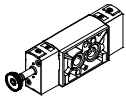
VSNC with FM solenoid

VSNC with Ex-m solenoid

# Solenoid valves VSNC

Key features, product range overview VSNC...-F8

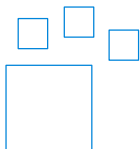
## VSNC-F8



- Valve cover cap material: Plastic/metal
- Armature material: Brass
- Pilot air (incoming air of armature), unprotected

Version	Type	Pneumatic connection 1, 3, 5	Pneumatic connection 2, 4, based on standard	Standard nominal flow rate [l/min]	→ Page
<b>5/2-way or 3/2-way valve, convertible, single solenoid</b>					
	VSNC-FC-M52-MD-G14-F8	G1/4	VDI/VDE 3845 NAMUR 1/4	1250	12
	VSNC-FC-M52-MD-N14-F8	NPT1/4			
	VSNC-FC-M52-MD-G14-F8-1A1	G1/4			
<b>5/2-way valve, double solenoid</b>					
	VSNC-F-B52-D-G14-F8	G1/4	VDI/VDE 3845 NAMUR	1350	17
	VSNC-F-B52-D-N14-F8	NPT1/4			
<b>5/3-way valve</b>					
	VSNC-F-P53C-MD-G14-F8	G1/4	VDI/VDE 3845 NAMUR	1250	20
	VSNC-F-P53U-MD-G14-F8	G1/4		950	
	VSNC-F-P53E-MD-G14-F8	G1/4		1050	
	VSNC-F-P53C-MD-N14-F8	NPT1/4		1250	
	VSNC-F-P53U-MD-N14-F8	NPT1/4		950	
	VSNC-F-P53E-MD-N14-F8	NPT1/4		1050	

## Ordering data – Product options



Configurable product  
This product and all its product options can be ordered using the configurator.

The configurator can be found under Products on the DVD or at  
→ [www.festo.com/catalogue/...](http://www.festo.com/catalogue/...)

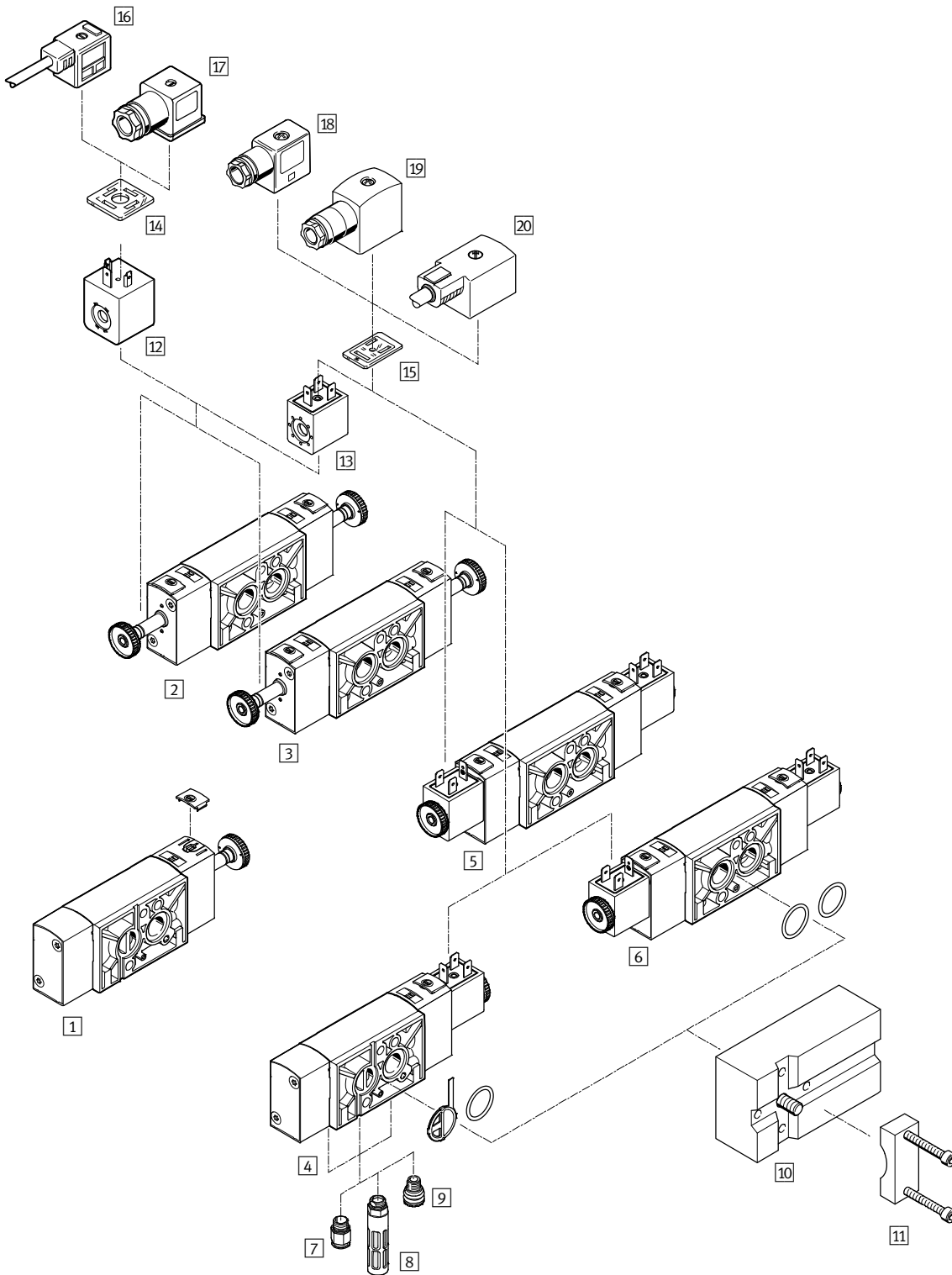
Part No. Type  
8026033 VSNC

Coils	IP65 Industrial type B							IP65 type A						
	12 V DC	24 V DC	48 V DC	24 V AC	48 V AC	120 V AC	230 V AC	12 V DC	24 V DC	48 V DC	24 V AC	48 V AC	120 V AC	230 V AC
5/2-way and 3/2-way, single solenoid	■	■ Part no.	■	■	■	■	■	■	■	■	■	■	■	■
5/2-way, double solenoid	■	■ Part no.	■	■	■	■	■	■	■	■	■	■	■	■
5/3 G	■	■	■	■	■	■	■	■	■	■	■	■	■	■
5/3 B	■	■	■	■	■	■	■	■	■	■	■	■	■	■
5/3 E	■	■	■	■	■	■	■	■	■	■	■	■	■	■

■ = Can be combined using a modular system  
Part no. = Can be ordered with part number as a fast seller

# Solenoid valves VSNC

Peripherals overview VSNC-...-F8



# Solenoid valves VSNC

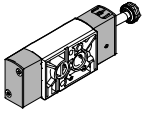
Peripherals overview VSNC-...-F8

Mounting components and accessories			
	Brief description	→ Page/Internet	
1	VSNC-...-F8 Solenoid valves	3/2-way and 5/2-way single solenoid valve with converting seal, plastic cover cap and brass armature tube, for controlling single- or double-acting actuators	12
2	VSNC-...-F8 Solenoid valves	5/2-way double solenoid valve with plastic cover cap and brass armature tube, for controlling double-acting actuators	17
3	VSNC-...-F8 Solenoid valves	5/3-way single solenoid valve, normally open, closed or exhausted, with plastic cover cap and brass armature tube, for controlling double-acting actuators	20
4	VSNC-...-F8 Solenoid valves	3/2-way and 5/2-way single solenoid valve with converting seal, plastic cover cap, brass armature tube and 24 V DC solenoid coil, for controlling single- or double-acting actuators	12
5	VSNC-...-F8 Solenoid valves	5/2-way double solenoid valve with plastic cover cap, brass armature tube and 24 V DC solenoid coil, for controlling double-acting actuators	17
6	VSNC-...-F8 Solenoid valves	5/3-way single solenoid valve, normally open, closed or exhausted, with plastic cover cap, brass armature tube and 24 V DC solenoid coil, for controlling double-acting actuators	20
7	QS Push-in fitting	For connecting tubing with standard outside diameters	47
8	U Silencer	–	47
9	VABD-D3-SN-G14 Exhaust protection	Exhaust protection to IP65. The spring chamber of the actuator is protected against the ingress of aggressive ambient air and water by the one-way flow control system	45
10	VABS-S7-S-G14 Connection kit	Mounting plate for attaching the valve to a NAMUR rib	44
11	VAME-S7-Y Mounting bracket	Alternative option (instead of screw) of attaching the valve to a NAMUR rib with the help of a mounting bracket	44
12	VACF-A Solenoid coil	Electrical connection to DIN EN 175301-803, type A	45
13	VACF-B Solenoid coil	Electrical connection to Festo standard for MSSD-F	45
14	MC-LD Illuminating seal	Illuminating seal for displaying the switching status	47
15	MF-LD Illuminating seal	Illuminating seal for displaying the switching status	47
16	KMC Connecting cable	–	46
17	MSSD-C Plug socket	Electrical connection to DIN EN 175301-803, type A	47
18	MSSD-F Plug socket	Electrical connection to Festo standard with screw terminal connection	47
19	MSSD-F-S Plug socket	Electrical connection to Festo standard with insulation displacement connection	47
20	KMF Connecting cable	–	kmf

# Solenoid valves VSNC

Key features and product range overview – VSNC-...-FN

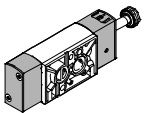
## VSNC-F ... -FN



- Design of piston spool
- Valve cover cap material: Aluminium/metal
- Armature material: Stainless steel
- Pilot air (incoming air of armature tube), protected

Version	Type	Pneumatic connection 1, 3, 5	Pneumatic connection 2, 4, based on standard	Standard nominal flow rate [l/min]	→ Page
<b>3/2-way or 5/2-way valve -...-FN, convertible, single solenoid</b>					
	VSNC-FC-M52-MD-G14-FN	G1/4	VDI/VDE 3845 NAMUR	1250	24
	VSNC-FC-M52-MD-N14-FN	NPT1/4-18			
	VSNC-FC-M52-MD-G14-FN-1A1-EX4-A	G1/4			
	VSNC-FC-M52-MD-N14-FN-1A1-EX4-A	NPT1/4-18			
	VSNC-FC-M52-MD-G14-GN-1A1+G	G1/4			
	VSNC-FC-M52-MD-G14-FN-3AA1+G	G1/4			
<b>5/2-way valve -...-FN, double solenoid</b>					
	VSNC-F-B52-D-G14-FN	G1/4	VDI/VDE 3845 NAMUR	1350	29
	VSNC-F-B52-D-N14-FN	NPT1/4-18			
	VSNC-F-B52-D-G14-FN-1A1-EX4-A	G1/4			
	VSNC-F-B52-D-N14-FN-1A1-EX4-A	NPT1/4-18			
<b>5/3-way valve -...-FN</b>					
	VSNC-F-P53C-MD-G14-FN	G1/4	VDI/VDE 3845 NAMUR	1250	33
	VSNC-F-P53U-MD-G14-FN			950	
	VSNC-F-P53E-MD-G14-FN			1050	
	VSNC-F-P53C-MD-N14-FN	NPT1/4-18		1250	
	VSNC-F-P53U-MD-N14-FN			950	
	VSNC-F-P53E-MD-N14-FN			1050	

## VSNC-FT ... -FN



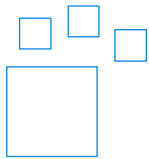
- Design of poppet seat
- Valve cover cap material: Aluminium/metal
- Armature material: Stainless steel
- Pilot air (incoming air of armature tube), protected

Version	Type	Pneumatic connection 1, 3, 5	Pneumatic connection 2, 4, based on standard	Standard nominal flow rate [l/min]	→ Page
<b>3/2-way or 5/2-way valve -...-FN, convertible, single solenoid</b>					
	VSNC-FTC-M52-MD-G14-FN	G1/4	VDI/VDE 3845 NAMUR	800	37
	VSNC-FTC-M52-MD-N14-FN	NPT1/4-18			
	VSNC-FTC-M52-MD-G14-FN-1A1	G1/4			
<b>5/2-way valve -...-FN, double solenoid</b>					
	VSNC-FT-B52-D-G14-FN	G1/4	VDI/VDE 3845 NAMUR	1000	40
	VSNC-FT-B52-D-N14-FN	NPT1/4-18			
	VSNC-FT-B52-D-G14-FN-1A1	G1/4			

# Solenoid valves VSNC

Key features and product range overview – VSNC-...-FN

## Ordering data – Product options



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Part No. Type  
8026033 VSNC

Coils	IP 65			Ex-nA			Ex-ia	Ex-mb			AEx-m		
	24 V DC	120 V AC	230 V AC	24 V DC	120 V AC	230 V AC	24 ... 32 V DC	24 V DC	120 V AC	230 V AC	24 V DC	120 V AC	230 V AC
5/2-way and 3/2-way, single solenoid	■	■	■	■	■	■	■	■	■	■	■	■	■
5/2-way, double solenoid	■	■	■	■	■	■	■	■	■	■	■	■	■
5/3 G	■	■	■	■	■	■	■	■	■	■	■	■	■
5/3 B	■	■	■	■	■	■	■	■	■	■	■	■	■
5/3 E	■	■	■	■	■	■	■	■	■	■	■	■	■

■ = Can be combined using a modular system  
Part no. = Can be ordered with part number as a fast seller

### Intrinsically safe coils VACN-...-Ex4A



- Category II 2G II 2D
- Type of ignition protection Ex-ia
- IEC Ex certification
- ATEX certification

### Non-sparking coils VACN-...-Ex2N



- Category II 3G II 3D
- Type of ignition protection nA
- ATEX certification

### Encapsulated coils VACN-...-Ex4M



- Category II 2G II 2D
- Type of ignition protection Ex-m
- IEC Ex certification
- ATEX certification

### Encapsulated coils with conduit, connection VACN-...-U4M

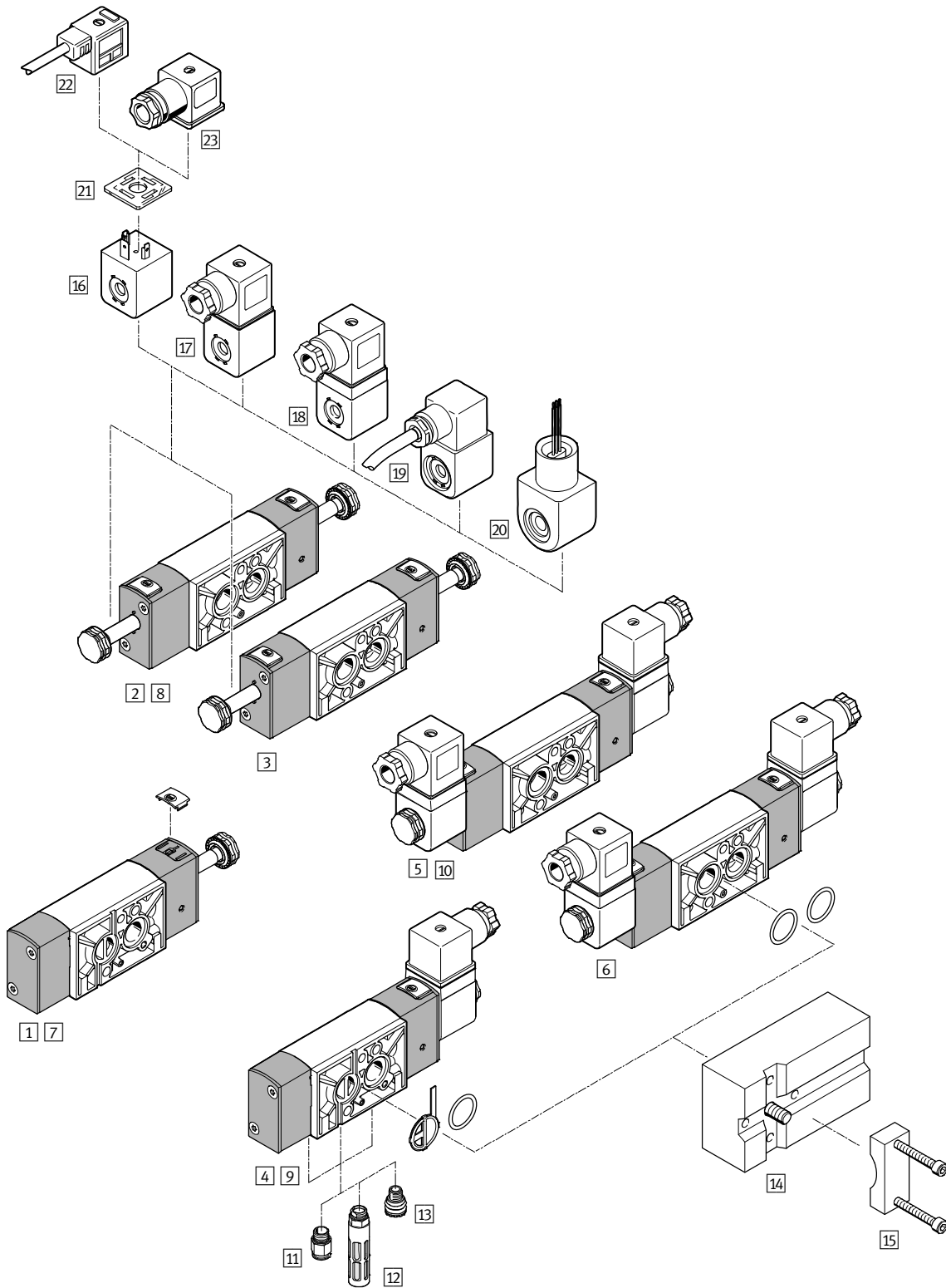


- Class I; Div I
- Type of ignition protection AEx-...-m
- FM approval

# Solenoid valves VSNC

Peripherals overview – VSNC-F...-FN

FESTO





# Solenoid valves VSNC

Peripherals overview – VSNC-F...-FN

Mounting components and accessories			
	Brief description	→ Page/Internet	
1	VSNC-F ...-FN Piston spool	3/2-way and 5/2-way single solenoid valve with converting seal, aluminium cover cap and stainless steel armature tube	24
2		5/2-way double solenoid valve with aluminium cover cap and stainless steel armature tube	29
3		5/3-way single solenoid valve, normally open, closed or exhausted, with aluminium cover cap and stainless steel armature tube	33
4		3/2-way and 5/2-way single solenoid valve with converting seal, aluminium cover cap and stainless steel armature tube and Ex ia solenoid coil	24
5		5/2-way double solenoid valve with aluminium cover cap and stainless steel armature tube and Ex ia solenoid coil	29
6		5/3-way single solenoid valve, normally open, closed or exhausted, with aluminium cover cap and stainless steel armature tube and Ex ia solenoid coil	33
7	VSNC-FT- ...-FN Poppet seat	3/2-way and 5/2-way single solenoid valve with converting seal, aluminium cover cap and stainless steel armature tube	37
8		5/2-way double solenoid valve with aluminium cover cap and stainless steel armature tube	40
9		3/2-way and 5/2-way single solenoid valve with converting seal, aluminium cover cap and stainless steel armature tube and 24 V DC solenoid coil	37
10		5/2-way double solenoid valve with aluminium cover cap, stainless steel armature tube and 24 V DC solenoid coil	40
11	QS Push-in fitting	For connecting tubing with standard outside diameter	47
12	U Silencer	–	47
13	VABD-D3-SN-G14 Exhaust protection	Exhaust protection to IP65. The spring chamber of the actuator is protected against the ingress of aggressive ambient air and water by the one-way flow control system	45
14	VABS-S7-S-G14 Connection kit	Mounting plate for attaching the valve to a NAMUR rib	44
15	VAME-S7-Y Mounting bracket	Alternative option (instead of screw) for attaching the valve to a NAMUR rib with the help of a mounting bracket	44
16	VACN-N Solenoid coil	Electrical connection to DIN EN 175301-803, type A	–
17	VACN-N- ... -Ex2-N Solenoid coil	Type of ignition protection nA = non-sparking, for use in zone 2	–
18	VACN-N- ... -Ex4-A Solenoid coil	Type of ignition protection iA = intrinsically safe, for use in zone 1	–
19	VACN-N- ... -Ex4-M Solenoid coil	Type of ignition protection m = encapsulated, for use in zone 1	–
20	VACN-N- ... -U4-M Solenoid coil	Type of ignition protection m = encapsulated, for use in Class I, Div I (American FM approval to NEC 500)	–
21	MC-LD Illuminating seal	Illuminating seal for displaying the switching status	47
22	KMC Connecting cable	–	kmc
23	MSSD-C Plug socket	Electrical connection to DIN EN 175301-803, type A	47

# Solenoid valves VSNC

Type codes

FESTO

	VSNC	-	F	-		-		-		-		-		-		-		-		
<b>Type</b>																				
VSNC	Solenoid valves																			
<b>Type of directional control valve</b>																				
F	Flanged valve																			
<b>Design principle</b>																				
	Piston spool																			
T	Poppet seat																			
<b>Additional function</b>																				
	None																			
C	Convertible valve function																			
<b>Valve function</b>																				
B52	5/2-way valve, double solenoid																			
M52	5/2-way valve, single solenoid																			
P53C	5/3-way valve, mid-position closed																			
P53E	5/3-way valve, mid-position exhausted																			
P53U	5/3-way valve, mid-position pressurised																			
<b>Reset method for single solenoid valves</b>																				
	None																			
M	Mechanical spring																			
<b>Manual override</b>																				
D	Non-detenting, detenting																			
H	Non-detenting, resetting																			
S	Covered																			
<b>Pneumatic connection</b>																				
Q6	Push-in connector 6 mm																			
Q8	Push-in connector 8 mm																			
G14	G1/4																			
N14	N1/4																			
Q10	Push-in connector 10 mm																			
T14	Push-in connector 1/4																			
T38	Push-in connector 3/8																			
T516	Push-in connector 5/16																			
<b>Venting</b>																				
	Without fitting																			
QN	With fitting																			
U1	Silencer with metal housing																			
U3	Silencer with polymer housing																			
<b>Interface to valve pilot</b>																				
F8	With armature tube 8 mm long																			
FN	With armature tube 9 mm long																			

# Solenoid valves VSNC

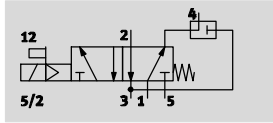
Type codes

<b>Nominal operating voltage</b>						
	None					
1A	24 V AC/50-60 Hz					
3A	230 V AC/50-60 Hz					
3W	230 V AC/240 V AC/50-60 Hz					
16B	120 V AC/60 Hz and 110 V AC/50-60 Hz					
1	24 V DC					
5	12 V DC					
<b>Electrical connection</b>						
	None					
A1	Connection pattern type A, to EN 175301					
B2	Connection pattern type B, industry standard					
C3	Cable, 3 m					
K11	Cable with insulating conduit connection					
<b>Degree of protection for electrics</b>						
	Standard					
S8	IP67					
<b>EU certification</b>						
	None					
EX2	II 3GD					
EX4	II 2GD					
<b>Approval</b>						
	None					
U4	Class 1 Div 1 to NEC 500					
<b>Type of ignition protection</b>						
	None					
A	Intrinsically safe					
M	Encapsulation					
N	Non-sparking					
<b>Electrical accessories, valve</b>						
	None					
G	Connector socket without LED					

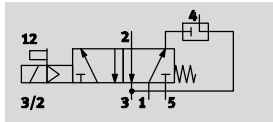
# Solenoid valves VSNC




Technical data – 3/2-way or 5/2-way valve, convertible, single solenoid

Function<sup>1)</sup>  
5/2-way valve




3/2-way valve  
with exhaust return



-  Voltage  
24 V DC
-  Operating pressure  
2.5 ... 10 bar
-  Temperature range  
-20 ... +60 °C




<sup>1)</sup> Can be changed by exchanging the seal plate

General technical data		VSNC-FC- ... -G14-F8 VSNC-FC- ... -N14-F8	VSNC-FC- ... -G14-F8-1B2	VSNC-FC- ... -G14-F8-1A1	
Valve function		3/2-way or 5/2-way, convertible			
Width	[mm]	32			
Design		Piston spool			
Sealing principle		Soft			
Type of pilot		Electrical			
Reset method		Mechanical spring			
Type of control		Piloted			
Manual override		Detenting, non-detenting			
Exhaust function		Flow control			
Vent connection		Not ducted			
Pilot air supply		Internal			
Type of mounting		With through-hole			
Mounting position		Any			
Max. tightening torque of valve mounting	[Nm]	3.5		-	
Non-overlapping		Yes			
Standard nominal flow rate	1 → 2 [l/min]	1250			
Exhaust air return flow rate	4 → 3 [l/min]	110			
b value		0.4			
C value	[l/sbar]	5.2			
Pneumatic connection	1, 3, 5 2, 4	G1/4, NPT1/4	G1/4	G1/4	
Conforms to standard		VDI/VDE 3845 NAMUR			
Certificate issuing authority		DNVGL-TAA000011J			
Product weight	[g]	335	390	335	

# Solenoid valves VSNC


Technical data – 3/2-way or 5/2-way valve, convertible, single solenoid

Operating and environmental conditions			
	VSNC-FC- ... -G14-F8 VSNC-FC- ... -N14-F8	VSNC-FC- ... -G14-F8-1B2	VSNC-FC- ... -G14-F8-1A1 
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]		
Note on operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)		
Operating pressure [bar]	2.5 ... 10		
Ambient temperature [°C]	-20 ... +60		
Temperature of medium [°C]	-20 ... +60		
Corrosion resistance class CRC <sup>1)</sup>	2		
Certification	-		c UL us - Recognized (OL)
Maritime certification <sup>2)</sup>	See certificate		-

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

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

2) Additional information [www.festo.com/sp](http://www.festo.com/sp) → Certificates.

Electrical data			
	VSNC-FC- ... -G14-F8 VSNC-FC- ... -N14-F8	VSNC-FC- ... -G14-F8-1B2	VSNC-FC- ... -G14-F8-1A1 
Electrical connection	-	3-pin push-in connector, type B to industry standard (11 mm)	To EN 175301-803 type A
Coil characteristics, 24 V DC [W]	See solenoid coil, to be ordered separately	3.3	2.6
Permissible voltage fluctuations [%]	-	±10	±10
Duty cycle [%]	-	100	100
Degree of protection	-	IP65, IP67	IP65, IP67 to IEC 60529 with socket
Switching time on [ms]	11	11	11
Switching time off [ms]	38	48	48

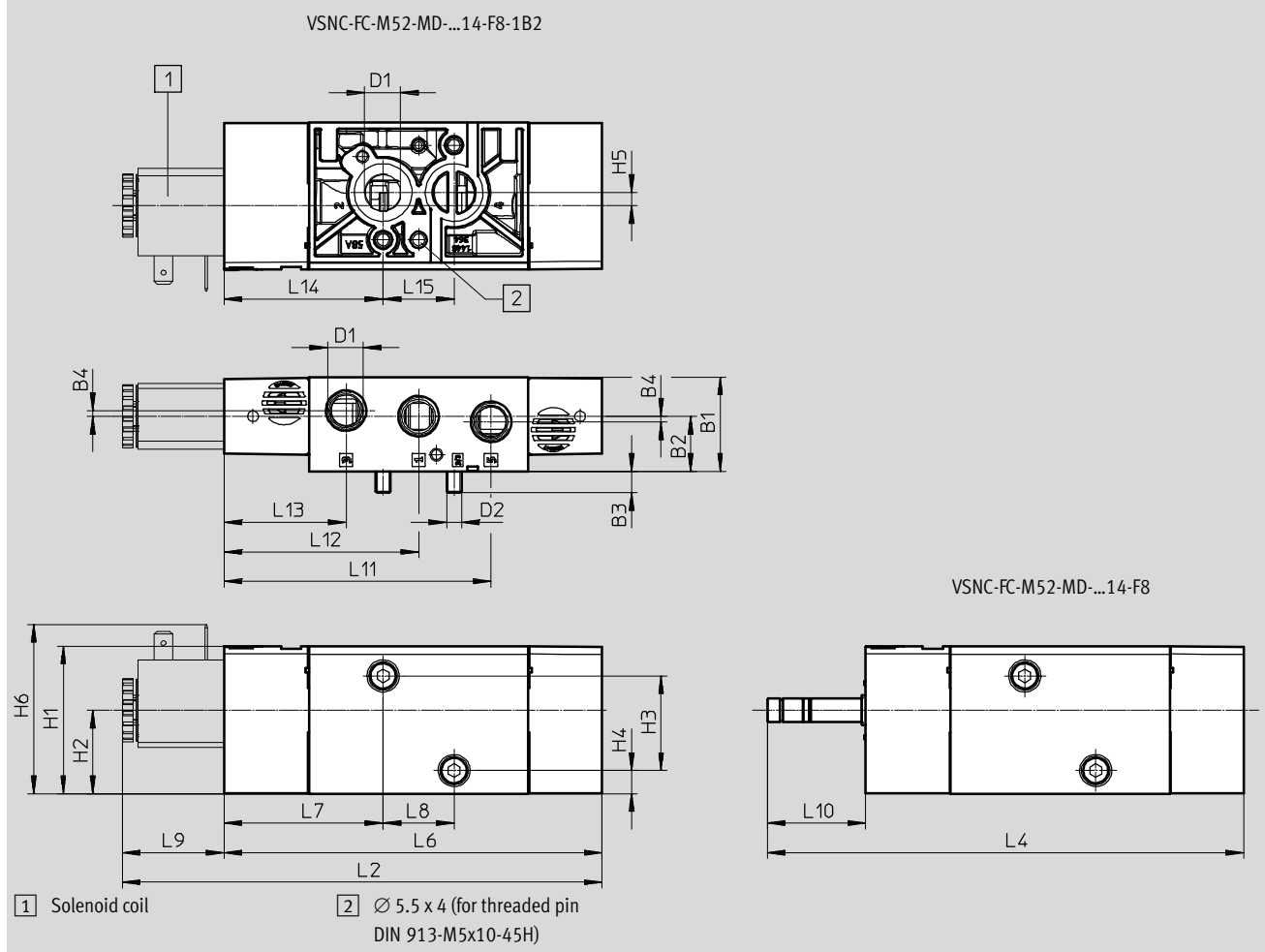
Materials	
<b>1</b> Housing	Wrought aluminium alloy
<b>2</b> Seals	NBR
-	RoHS compliant

# Solenoid valves VSNC

Technical data – 3/2-way or 5/2-way valve, convertible, single solenoid

## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)



Type	B1	B2	B3	B4	D1	D2	H1	H2	H3	H4	H5	H6
VSNC-FC-M52-MD-G14-F8	31.8	18.6	7.3	1.9	G1/4	M5	49.9	28.2	32	7.8	4.4	-
VSNC-FC-M52-MD-N14-F8					NPT1/4-18							57.2
VSNC-FC-M52-MD-G14-F8-1B2					G1/4							

Type	L2	L4	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15
VSNC-FC-M52-MD-G14-F8	162.2	161.1	127.8	53.8	24	34.4	33.3	90.3	65.8	41.3	53.8	24
VSNC-FC-M52-MD-N14-F8												
VSNC-FC-M52-MD-G14-F8-1B2												

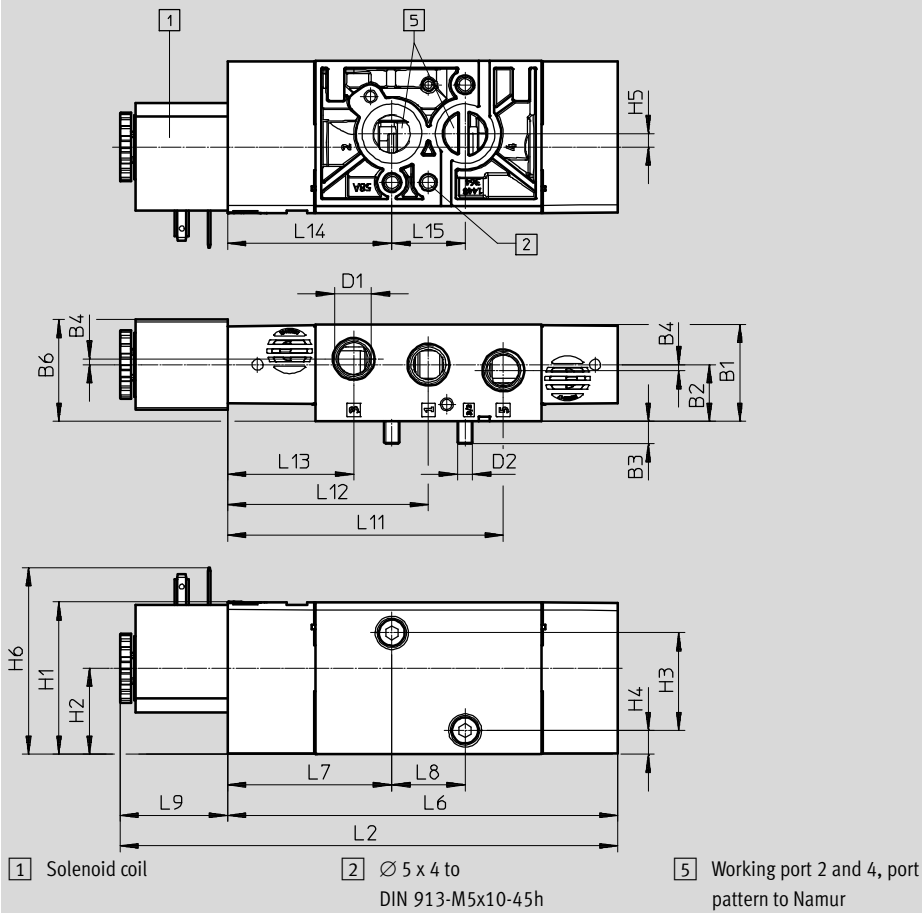
# Solenoid valves VSNC

Technical data – 3/2-way or 5/2-way valve, convertible, single solenoid

## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

VSNC-FC-M52-MD-G14-F8-1A1



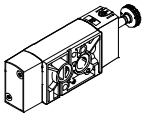
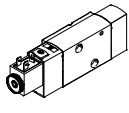
Type	B1	B2	B3	B4	B6	D1	D2	H1	H2	H3	H4	H5
VSNC-FC-M52-MD-G14-F8-1A1	31.8	18.6	7.3	1.9	33.3	G1/4	M5	49.9	28.2	32	7.8	4.4

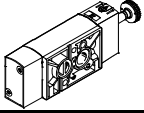
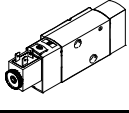

Type	H6	L2	L6	L7	L8	L9	L11	L12	L13	L14	L15
VSNC-FC-M52-MD-G14-F8-1A1	61.1	163	127.8	53.8	24	35.2	90.3	65.8	41.3	53.8	24

## Solenoid valves VSNC

Technical data – 3/2-way or 5/2-way valve, convertible, single solenoid

### ★ Core product range

Ordering data – Valves			Ordering data – Valves		
Directional control valve without solenoid coil			Directional control valve with 24 V DC solenoid coil, without socket		
	Part No.	Type		Part No.	Type
	★ 577257	VSNC-FC-M52-MD-G14-F8		★ 577295	VSNC-FC-M52-MD-G14-F8-1B2

Ordering data – Valves			Ordering data – Valves		
Directional control valve without solenoid coil			Directional control valve with 24 V DC solenoid coil, without socket		
	Part No.	Type		Part No.	Type
	577262	VSNC-FC-M52-MD-N14-F8		8074945	VSNC-FC-M52-MD-G14-F8-1A1 

Festo core product range

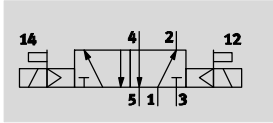
- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock



# Solenoid valves VSNC

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

Function  
5/2-way valve



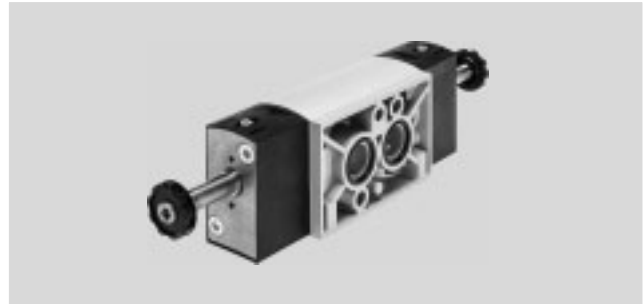
Voltage  
24 V DC



Operating pressure  
1.5 ... 10 bar



Temperature range  
-20 ... +60 °C



General technical data		VSNC-F-B52-D-G14-F8	VSNC-F-B52-D-G14-F8-1B2
		VSNC-F-B52-D-N14-F8	
Valve function		5/2-way, double solenoid	
Width	[mm]	32	
Nominal size DN	[mm]	7.2	
Design		Piston spool	
Sealing principle		Soft	
Type of actuation		Electrical	
Type of reset		-	
Type of actuation		Piloted	
Manual override		Detenting, non-detenting	
Type of mounting		With through-hole	
Mounting position		Any	
Max. tightening torque of valve mounting	[Nm]	3.2	
Non-overlapping		Yes	
Standard nominal flow rate	1 → 2 [l/min]	1200	
b value		0.4	
C value	[l/sbar]	5.6	
Pneumatic connection	1, 3, 5 2, 4	G1/4, NPT1/4-18	
Conforms to standard		Port pattern to NAMUR	
Certificate issuing authority		VDI/VDE 3845 (NAMUR)	
Product weight	[g]	345	455

# Solenoid valves VSNC

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

Operating and environmental conditions		
	VSNC-F-B52-D-G14-F8 VSNC-F-B52-D-N14-F8	VSNC-F-B52-D-G14-F8-1B2
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]	
Note on operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)	
Operating pressure [bar]	1.5 ... 10	
Ambient temperature [°C]	–20 ... +60	
Temperature of medium [°C]	–20 ... +60	
Corrosion resistance class CRC <sup>1)</sup>	2	
Maritime certification <sup>2)</sup>	See certificate	

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

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

2) Additional information [www.festo.com/sp](http://www.festo.com/sp) → Certificates.

Electrical data		
	VSNC-F-B52-D-G14-F8 VSNC-F-B52-D-N14-F8	VSNC-F-B52-D-G14-F8-1B2
Electrical connection	–	3-pin push-in connector, to industry standard (11 mm), type B
Coil characteristics, 24 V DC [W]	See solenoid coil, to be ordered separately	3.3
Permissible voltage fluctuations [%]	–	±10
Degree of protection	–	IP65, IP67
Switching time on [ms]	11	

Materials	
1) Housing	Wrought aluminium alloy
2) Seals	NBR
–	RoHS compliant

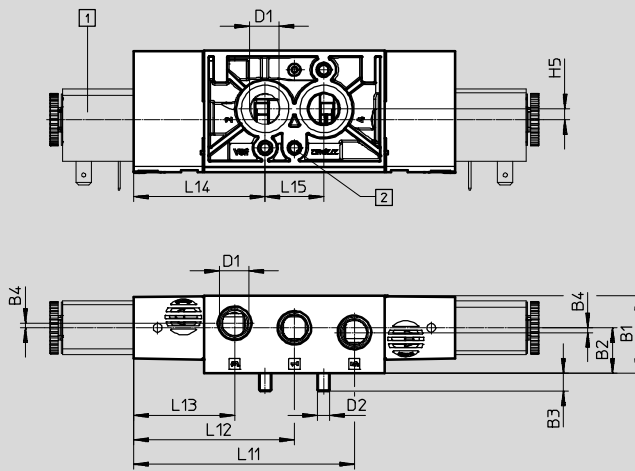
# Solenoid valves VSNC

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

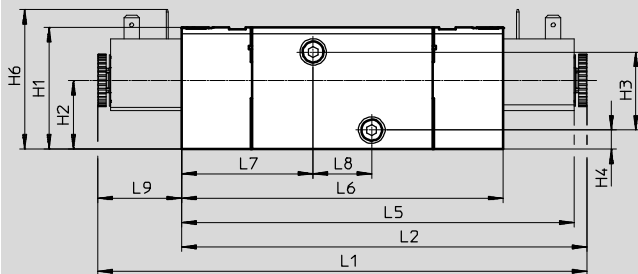
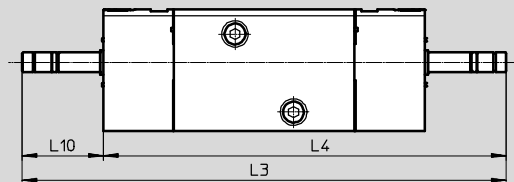
## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

VSNC-F-B52-D-...14-F8-1B2



VSNC-F-B52-D-...14-F8



- 1 Solenoid coil
- 2  $\varnothing 5.5 \times 4$  (for threaded pin DIN 913-M5x10-45H)

Type	B1	B2	B3	B4	D1	D2	H1	H2	H3	H4	H5	H6	L1	L2
VSNC-F-B52-D-G14-F8	31.8	18.6	7.3	1.9	G1/4	M5	49.9	28.2	32	7.8	4.4	-	-	-
VSNC-F-B52-D-N14-F8					NPT1/4-18									
VSNC-F-B52-D-G14-F8-1B2					G1/4									

Type	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15
VSNC-F-B52-D-G14-F8	198.2	164.9	-	131.6	53.8	24	-	33.3	90.3	65.8	41.3	53.8	24
VSNC-F-B52-D-N14-F8			160.6										
VSNC-F-B52-D-G14-F8-1B2			34.4										

## Ordering data – Valves

Directional control valve without solenoid coil

Directional control valve with solenoid coil

	Part No.	Type		Part No.	Type
	577258	VSNC-F-B52-D-G14-F8		577296	VSNC-F-B52-D-G14-F8-1B2
	577263	VSNC-F-B52-D-N14-F8			

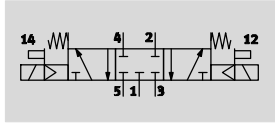
# Solenoid valves VSNC

Technical data – 5/3-way valve

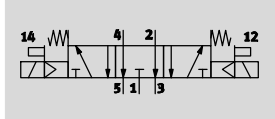
FESTO

Function

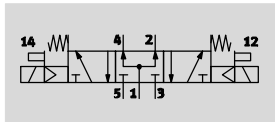
5/3-way valve, closed





5/3-way valve, exhausted



5/3-way valve, pressurised



 - Operating pressure  
3 ... 10 bar

 - Temperature range  
-20 ... +60 °C



General technical data				
		VSNC-F-P53C-MD-G14-F8 VSNC-F-P53C-MD-N14-F8	VSNC-F-P53E-MD-G14-F8 VSNC-F-P53E-MD-N14-F8	VSNC-F-P53U-MD-G14-F8 VSNC-F-P53U-MD-N14-F8
Valve function		5/3-way, closed	5/3-way, exhausted	5/3-way, pressurised
Width	[mm]	32		
Nominal width	[mm]	7.2	6	6
Design		Piston spool		
Sealing principle		Soft		
Type of actuation		Electrical		
Reset method		Mechanical spring		
Type of control		Piloted		
Manual override		Non-detenting, non-detenting		
Type of mounting		With through-hole		
Mounting position		Any		
Max. tightening torque of valve mounting	[Nm]	3.5		
Non-overlapping		Yes		
Standard nominal flow rate	1 → 2 [l/min]	1200	800	800
b value		0.4	0.4	0.5
C value	[l/sbar]	5.2	4.4	2.1
Pneumatic connection	1, 3, 5 2, 4	G1/4, NPT1/4-18		
Conforms to standard		Port pattern to NAMUR		
Certificate issuing authority		VDI/VDE 3845 (NAMUR)		
Product weight	[g]	345		

# Solenoid valves VSNC

Technical data – 5/3-way valve



Operating and environmental conditions			
	VSNC-F-P53C-MD-G14-F8 VSNC-F-P53C-MD-N14-F8	VSNC-F-P53E-MD-G14-F8 VSNC-F-P53E-MD-N14-F8	VSNC-F-P53U-MD-G14-F8 VSNC-F-P53U-MD-N14-F8
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]		
Note on operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)		
Operating pressure [bar]	3 ... 10		
Ambient temperature [°C]	-20 ... +60		
Temperature of medium [°C]	-20 ... +60		
Corrosion resistance class CRC <sup>1)</sup>	2		
Maritime certification <sup>2)</sup>	See certificate		

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

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

2) Additional information [www.festo.com/sp](http://www.festo.com/sp) → Certificates.

Electrical data			
	VSNC-F-P53C-MD-G14-F8 VSNC-F-P53C-MD-N14-F8	VSNC-F-P53E-MD-G14-F8 VSNC-F-P53E-MD-N14-F8	VSNC-F-P53U-MD-G14-F8 VSNC-F-P53U-MD-N14-F8
Coil characteristics	See solenoid coil, to be ordered separately		
Switching time on [ms]	13	14	14
Switching time off [ms]	42	48	48
Changeover time [ms]	26	25	25

Materials	
1) Housing	Wrought aluminium alloy
2) Seals	NBR
–	RoHS compliant

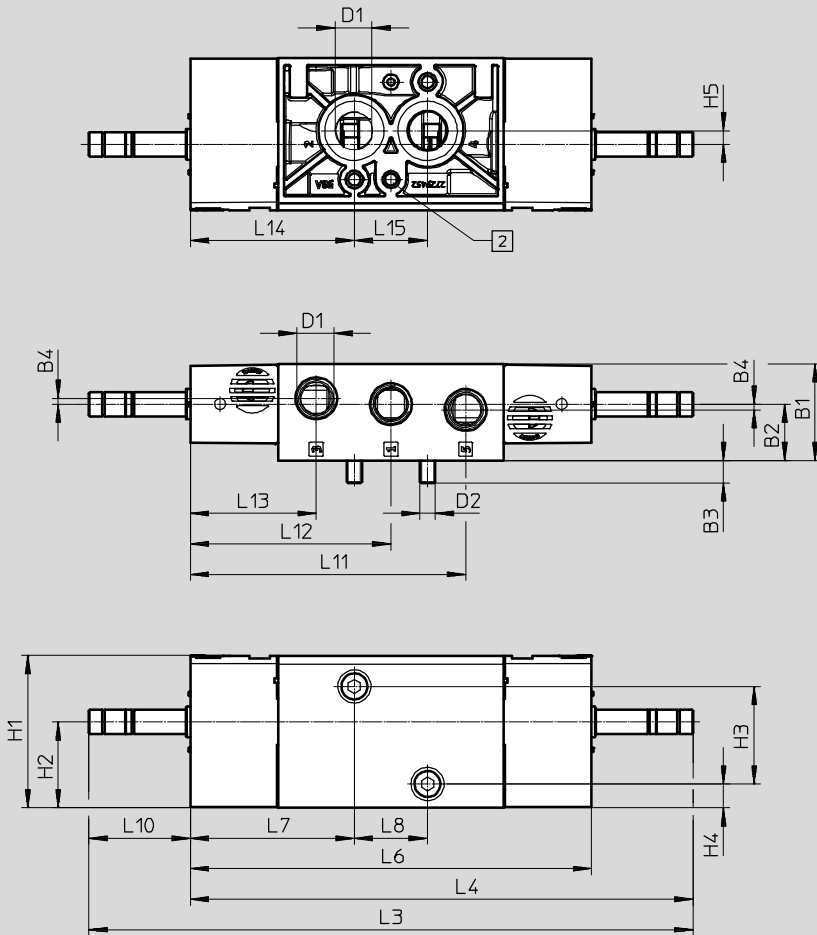
# Solenoid valves VSNC

Technical data – 5/3-way valve



## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)



2 ∅ 5.5 x 4 (for threaded pin  
DIN 913-M5x10-45H)

Type	B1	B2	B3	B4	D1	D2	H1	H2	H3	H4	H5
VSNC-F-P53C-MD-G14-F8	31.8	18.6	7.3	1.9	G1/4	M5	49.9	28.2	32	7.8	4.4
VSNC-F-P53U-MD-G14-F8											
VSNC-F-P53E-MD-G14-F8											
VSNC-F-P53C-MD-N14-F8											
VSNC-F-P53U-MD-N14-F8											
VSNC-F-P53E-MD-N14-F8											

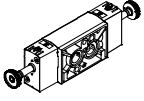
Type	L3	L4	L6	L7	L8	L10	L11	L12	L13	L14	L15
VSNC-F-P53C-MD-G14-F8	198.2	164.9	131.6	53.8	24	33.3	90.3	65.8	41.3	53.8	24
VSNC-F-P53U-MD-G14-F8											
VSNC-F-P53E-MD-G14-F8											
VSNC-F-P53C-MD-N14-F8											
VSNC-F-P53U-MD-N14-F8											
VSNC-F-P53E-MD-N14-F8											

# Solenoid valves VSNC

Technical data – 5/3-way valve

## Ordering data – Valves

Directional control valve without solenoid coil

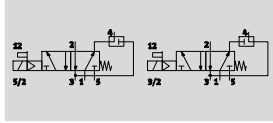
	Part No.	Type
	577259	VSNC-F-P53C-MD-G14-F8
	577260	VSNC-F-P53U-MD-G14-F8
	577261	VSNC-F-P53E-MD-G14-F8
	577264	VSNC-F-P53C-MD-N14-F8
	577265	VSNC-F-P53U-MD-N14-F8
	577266	VSNC-F-P53E-MD-N14-F8


## Solenoid valves VSNC


Technical data – 3/2-way or 5/2-way -...-FN, convertible, single solenoid

### Function


3/2-way or 5/2-way valve,  
convertible




 - Operating pressure  
2.5 ... 8 bar

 - Temperature range  
-20 ... +60 °C



General technical data		VSNC- ... -G14-FN	VSNC- ... -G14-FN-1A1-EX4-A	VSNC- ... -G14-FN-1A1+G	
		VSNC- ... -N14-FN	VSNC- ... -N14-FN-1A1-EX4-A	VSNC- ... -G14-FN-3AA1+G	
Valve function		3/2-way or 5/2-way, convertible			
Width	[mm]	32			
Design		Piston spool			
Sealing principle		Soft			
Type of actuation		Electrical			
Reset method		Mechanical spring			
Type of control		Piloted			
Pilot air supply port		Internal			
Exhaust air function		With flow control			
Manual override		Detenting, non-detenting			
Type of mounting		With through-hole			
Connection for venting hole		Not ducted			
Mounting position		Any			
Non-overlapping		Yes			
Standard nominal flow rate	1 → 2 [l/min]	1250			
	Exhaust return 4 → 3 [l/min]	110			
b value		0.4			
C value	[l/sbar]	5.2			
Pneumatic connection	1, 3, 5	G1/4, NPT1/4		G1/4	
	2, 4	Port pattern to NAMUR			
Conforms to standard		VDI/VDE 3845 (NAMUR)			
Certificate issuing authority		DNVGL-TAA000011]			
Product weight	[g]	415			

Operating and environmental conditions		VSNC- ... -G14-FN	VSNC- ... -G14-FN-1A1-EX4-A	VSNC- ... -G14-FN-1A1+G	
		VSNC- ... -N14-FN	VSNC- ... -N14-FN-1A1-EX4-A	VSNC- ... -G14-FN-3AA1+G	
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]			
Note on operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)			
Operating pressure	[bar]	2.5 ... 10		2.5 ... 8	
Ambient temperature	[°C]	-20 ... +60			
Temperature of medium	[°C]	-20 ... +60			
Corrosion resistance class CRC <sup>1)</sup>		2			
Maritime certification <sup>2)</sup>		See certificate			

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

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

2) Additional information [www.festo.com/sp](http://www.festo.com/sp) → Certificates.



## Solenoid valves VSNC

Technical data – 3/2-way or 5/2-way -...-FN, convertible, single solenoid

ATEX			
	VSNC- ... -G14-FN VSNC- ... -N14-FN	VSNC- ... -G14-FN-1A1-EX4-A VSNC- ... -N14-FN-1A1-EX4-A	VSNC- ... -G14-FN-1A1+G VSNC- ... -G14-FN-3AA1+G
ATEX category gas	–	II 2G	–
Type of ignition protection for gas	–	Ex ia IIC T6 Ga	–
ATEX category dust	–	II 2D	–
Type of ignition protection for dust	–	Ex t IIIC T80°C Db	–
Explosion protection certification outside the EU	–	EPL Db (IEC-EX)	–
	–	EPL Ga (IEC-EX)	–
Explosion-proof temperature [°C]	–	-40 °C ≤ Ta ≤ +50 °C	–
Degree of protection	–	IP65	IP65
	–	IP67	IP67
	–		To IEC 60529, with socket
CE marking (see declaration of conformity)	As per EU Explosion Protection Directive (ATEX)		–

Electrical data			
	VSNC- ... -G14-FN VSNC- ... -N14-FN	VSNC- ... -G14-FN-1A1-EX4-A VSNC- ... -N14-FN-1A1-EX4-A	VSNC- ... -G14-FN-1A1+G VSNC- ... -G14-FN-3AA1+G
Electrical connection	–	Type A, to EN 175301-803	Type A, to EN 175301-803
Coil characteristics 24 V DC [W]	See solenoid coil, to be ordered separately	–	0.7
Coil characteristics 230 V AC, 50/60 Hz			
Pick-up power rating [VA]	–	–	6.2
Holding power [VA]	–	–	3.7
Duty cycle [%]	100		
Switching time on [ms]	32	35	35
Switching time off [ms]	92		
Permissible voltage fluctuations [%]	–	± 10	± 10

Materials	
1 Housing	Wrought aluminium alloy
2 Seals	NBR
3 Screws	High-alloy stainless steel
–	RoHS compliant

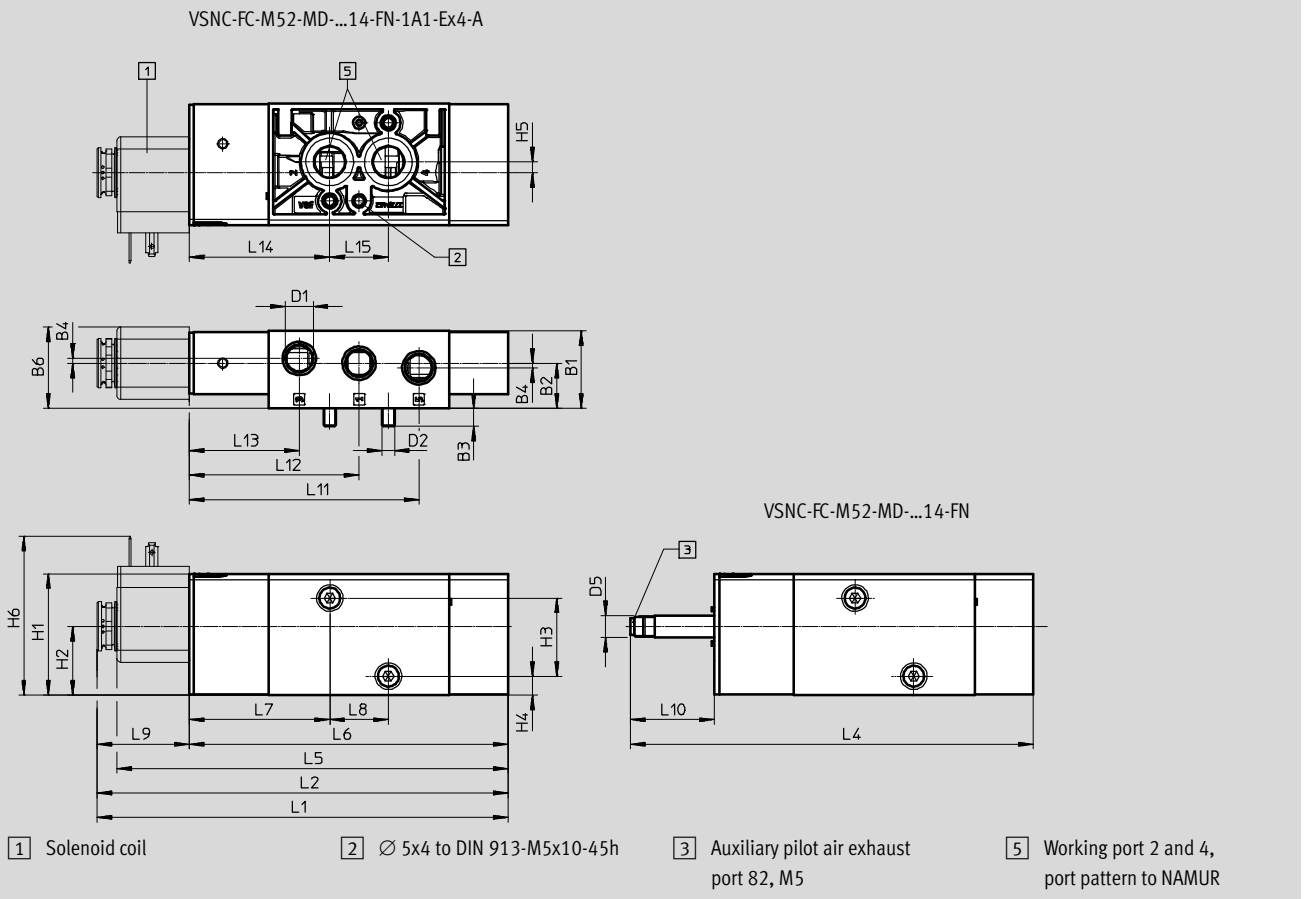
# Solenoid valves VSNC

Technical data – 3/2-way or 5/2-way -...-FN, convertible, single solenoid



## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)



Type	B1	B2	B3	B4	B6	D1	D2	D5	H1	H2	H3	H4	H5	H6
VSNC-FC-M52-MD-G14-FN	31.8	18.6	7.3	1.9	33.4	G1/4	M5	9	49.8	28.2	32	7.8	4.4	-
VSNC-FC-M52-MD-G14-FN-1A1-Ex4-A														65.1
VSNC-FC-M52-MD-N14-FN						-								
VSNC-FC-M52-MD-N14-FN-1A1-Ex4-A						65.1								

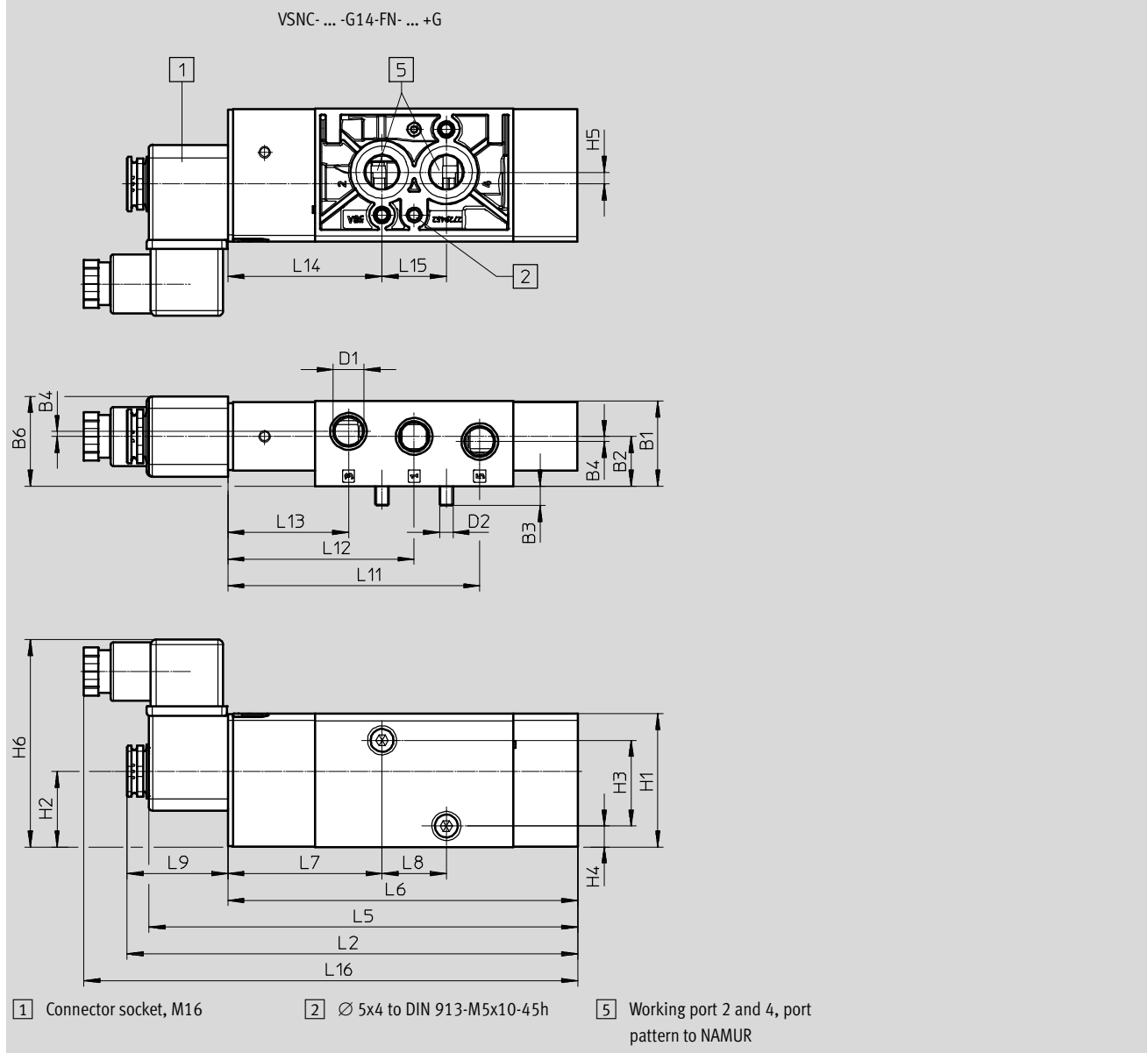
Type	L2	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15
VSNC-FC-M52-MD-G14-FN	-	165	-	130.6	57.6	24	-	34.4	94.1	69.6	45.1	57.6	24
VSNC-FC-M52-MD-G14-FN-1A1-Ex4-A	168.3		160.1				37.7						
VSNC-FC-M52-MD-N14-FN	-		-				-						
VSNC-FC-M52-MD-N14-FN-1A1-Ex4-A	168.3		160.1				37.7						

# Solenoid valves VSNC

Technical data – 3/2-way or 5/2-way -...-FN, convertible, single solenoid

## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)



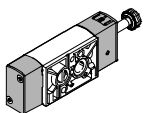
Type	B1	B2	B3	B4	B6	D1	D2	H1	H2	H3	H4	H5	H6
VSNC-FC-M52-MD-G14-FN- ... +G	31.8	18.6	7.3	1.9	33.3	G1/4	M5	49.8	28.2	32	7.8	4.4	77.5

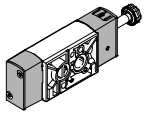
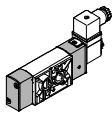


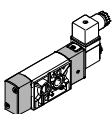
Type	L2	L5	L6	L7	L8	L9	L11	L12	L13	L14	L15	L16
VSNC-FC-M52-MD-G14-FN- ... +G	168.3	160.1	130.6	57.6	24	37.7	94.1	69.6	45.1	57.6	24	184.4

## Solenoid valves VSNC

Technical data – 3/2-way or 5/2-way -...-FN, convertible, single solenoid

### ★ Core product range

Ordering data – Valves		
Directional control valve without solenoid coil		
	Part No.	Type
	★ 577267	VSNC-FC-M52-MD-G14-FN

Ordering data – Valves		
Directional control valve without solenoid coil		
	Part No.	Type
	577272	VSNC-FC-M52-MD-N14-FN
Directional control valve with solenoid coil and socket		
	8078398	VSNC-FC-M52-MD-G14-FN-1A1+G 
	8078399	VSNC-FC-M52-MD-G14-FN-3AA1+G 
Directional control valve with Ex i solenoid coil including socket		
	577281	VSNC-FC-M52-MD-G14-FN-1A1-Ex4-A
	577286	VSNC-FC-M52-MD-N14-FN-1A1-Ex4-A

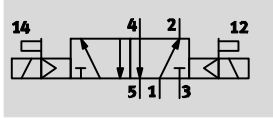
Festo core product range


- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock


# Solenoid valves VSNC

Technical data – 5/2-way -...-FN, double solenoid

Function  
5/2-way valve, double solenoid



 Operating pressure  
1.5 ... 8 bar

 Temperature range  
-20 ... +60 °C



General technical data		VSNC-F-B52-D-G14-FN VSNC-F-B52-D-N14-FN	VSNC-F-B52-D-G14-FN-1A1-EX4-A VSNC-F-B52-D-N14-FN-1A1-EX4-A
Valve function		5/2-way, double solenoid	
Width	[mm]	32	
Design		Piston spool	
Sealing principle		Soft	
Type of actuation		Electrical	
Type of control		Piloted	
Pilot air supply port		Internal	
Exhaust air function		With flow control	
Manual override		Non-detenting, detenting	
Type of mounting		With through-hole	
Connection for venting hole		Not ducted	
Mounting position		Any	
Non-overlapping		Yes	
Standard nominal flow rate	[l/min]	1350	
b value		0.4	
C value	[l/sbar]	5.6	
Pneumatic connection	1, 3, 5 2, 4	G1/4, NPT1/4-18 Port pattern to NAMUR	
Conforms to standard		VDI/VDE 3845 (NAMUR)	
Certificate issuing authority		DNVGL-TAA000011]	
Product weight	[g]	461	

Operating and environmental conditions		VSNC-F-B52-D-G14-FN VSNC-F-B52-D-N14-FN	VSNC-F-B52-D-G14-FN-1A1-EX4-A VSNC-F-B52-D-N14-FN-1A1-EX4-A
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]	
Note on operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)	
Operating pressure	[bar]	1.5 ... 8	
Ambient temperature	[°C]	-20 ... +60	
Temperature of medium	[°C]	-20 ... +60	
Corrosion resistance class CRC <sup>1)</sup>		2	
Maritime certification <sup>2)</sup>		See certificate	

- 1) Corrosion resistance class CRC 2 to Festo standard FN 940070  
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.
- 2) Additional information [www.festo.com/sp](http://www.festo.com/sp) → Certificates.

# Solenoid valves VSNC

Technical data – 5/2-way -...-FN, double solenoid



ATEX		
	VSNC-F-B52-D-G14-FN VSNC-F-B52-D-N14-FN	VSNC-F-B52-D-G14-FN-1A1-Ex4-A VSNC-F-B52-D-N14-FN-1A1-Ex4-A
ATEX category gas	–	II 2G
Type of ignition protection for gas	–	Ex ia IIC T6 Ga
ATEX category dust	–	II 2D
Type of ignition protection for dust	–	Ex t IIIIC T80°C Db
Explosion protection certification outside the EU	–	EPL Db (IEC-EX)
	–	EPL Ga (IEC-EX)
Explosion-proof temperature [°C]	–	–40 °C ≤ Ta ≤ +50 °C
Degree of protection	–	IP65
	–	IP67
CE marking (see declaration of conformity)	As per EU Explosion Protection Directive (ATEX)	

Electrical data		
	VSNC-F-B52-D-G14-FN VSNC-F-B52-D-N14-FN	VSNC-F-B52-D-G14-FN-1A1-Ex4-A VSNC-F-B52-D-N14-FN-1A1-Ex4-A
Electrical connection	–	Type A, to EN 175301-803
Coil characteristics	See solenoid coil, to be ordered separately	
Changeover time [ms]	20	
Permissible voltage fluctuations [%]	–	± 10

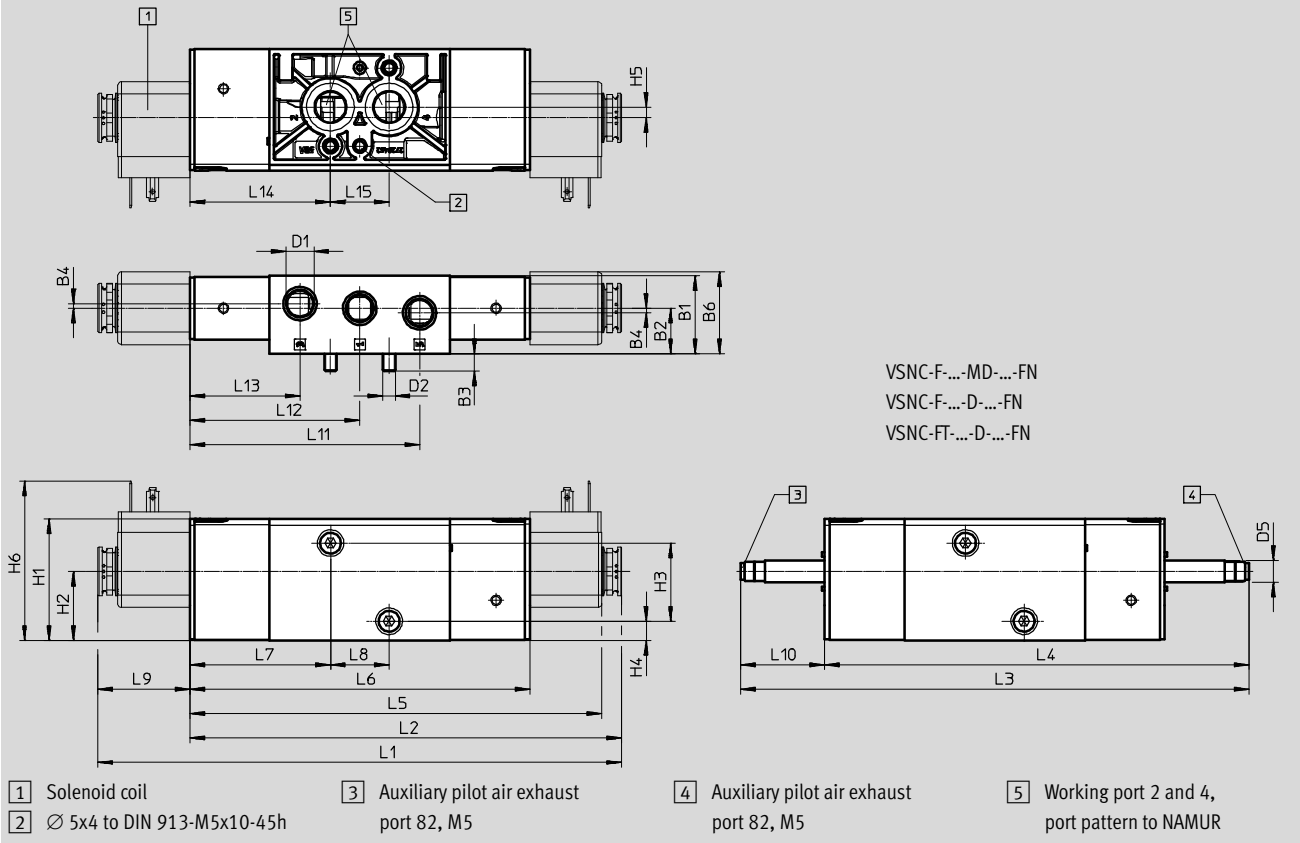
Materials	
1 Housing	Wrought aluminium alloy
2 Seals	NBR
–	RoHS compliant

# Solenoid valves VSNC

Technical data – 5/2-way -...-FN, double solenoid

## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

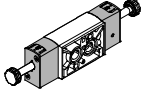
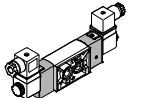


Type	B1	B2	B3	B4	B6	D1	D2	D5 - $\varnothing$	H1	H2	H3	H4	H5	H6	L1
VSNC-F-B52-D-G14-FN	31.8	18.6	7.3	1.9	33.4	G1/4	M5	9	49.8	28.2	32	7.8	4.4	-	-
VSNC-F-B52-D-G14-FN-1A1-Ex4-A						65.1								214.5	
VSNC-F-B52-D-N14-FN						-								-	
VSNC-F-B52-D-N14-FN-1A1-Ex4-A						65.1								214.5	

Type	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15
VSNC-F-B52-D-G14-FN	-	208	173.6	-	139.2	57.6	24	-	34.4	94.1	69.6	45.1	57.6	24
VSNC-F-B52-D-G14-FN-1A1-Ex4-A	176.9			168.7				37.7						
VSNC-F-B52-D-N14-FN	-			-				-						
VSNC-F-B52-D-N14-FN-1A1-Ex4-A	176.9			168.7				37.7						

# Solenoid valves VSNC

Technical data – 5/2-way -...-FN, double solenoid

Ordering data – Valves		
Directional control valve without solenoid coil		
	Part No.	Type
	577268	VSNC-F-B52-D-G14-FN
	577273	VSNC-F-B52-D-N14-FN
Directional control valve with Ex i solenoid coil including socket		
	577282	VSNC-F-B52-D-G14-FN-1A1-Ex4-A
	577287	VSNC-F-B52-D-N14-FN-1A1-Ex4-A

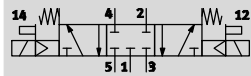


# Solenoid valves VSNC

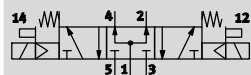
Technical data – 5/3-way -...-FN

## Function

5/3-way valve, closed





5/3-way valve, exhausted



5/3-way valve, pressurised



 Operating pressure  
3 ... 8 bar

 Temperature range  
-20 ... +60 °C



General technical data			
	VSNC-F-P53C-MD-G14-FN	VSNC-F-P53U-MD-G14-FN	VSNC-F-P53E-MD-G14-FN
	VSNC-F-P53C-MD-N14-FN	VSNC-F-P53U-MD-N14-FN	VSNC-F-P53E-MD-N14-FN
Valve function	5/3		
	Closed	Pressurised	Exhausted
Width [mm]	32		
Design	Piston spool		
Sealing principle	Soft		
Type of actuation	Electrical		
Reset method	Mechanical spring		
Type of control	Piloted		
Pilot air supply port	Internal		
Exhaust air function	With flow control		
Manual override	Non-detenting, detenting		
Type of mounting	With through-hole		
Connection for venting hole	Not ducted		
Mounting position	Any		
Non-overlapping	Yes		
Standard nominal flow rate [l/min]	1250	950	1050
b value	0.4	0.5	0.4
C value [l/sbar]	5.2	2.1	4.4
Pneumatic connection	1, 3, 5 2, 4		
	G1/4, NPT1/4-18		
Conforms to standard	Port pattern to NAMUR		
Certificate issuing authority	VDI/VDE 3845 (NAMUR)		
	DNVGL-TAA000011]		
Product weight [g]	461		

# Solenoid valves VSNC

Technical data – 5/3-way -...-FN



Operating and environmental conditions		VSNC-F-P53C-MD-G14-FN VSNC-F-P53C-MD-N14-FN	VSNC-F-P53U-MD-G14-FN VSNC-F-P53U-MD-N14-FN	VSNC-F-P53E-MD-G14-FN VSNC-F-P53E-MD-N14-FN
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]		
Note on operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)		
Operating pressure	[bar]	3 ... 8		
Ambient temperature	[°C]	-20 ... +60		
Temperature of medium	[°C]	-20 ... +60		
Corrosion resistance class CRC <sup>1)</sup>		2		
Maritime certification <sup>2)</sup>		See certificate		

- 1) Corrosion resistance class CRC 2 to Festo standard FN 940070  
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.
- 2) Additional information [www.festo.com/sp](http://www.festo.com/sp) → Certificates.

Electrical data		VSNC-F-P53C-MD-G14-FN VSNC-F-P53C-MD-N14-FN	VSNC-F-P53U-MD-G14-FN VSNC-F-P53U-MD-N14-FN	VSNC-F-P53E-MD-G14-FN VSNC-F-P53E-MD-N14-FN
Coil characteristics		See solenoid coil, to be ordered separately		
Switching time on	[ms]	23		
Switching time off	[ms]	103		
Changeover time	[ms]	55		

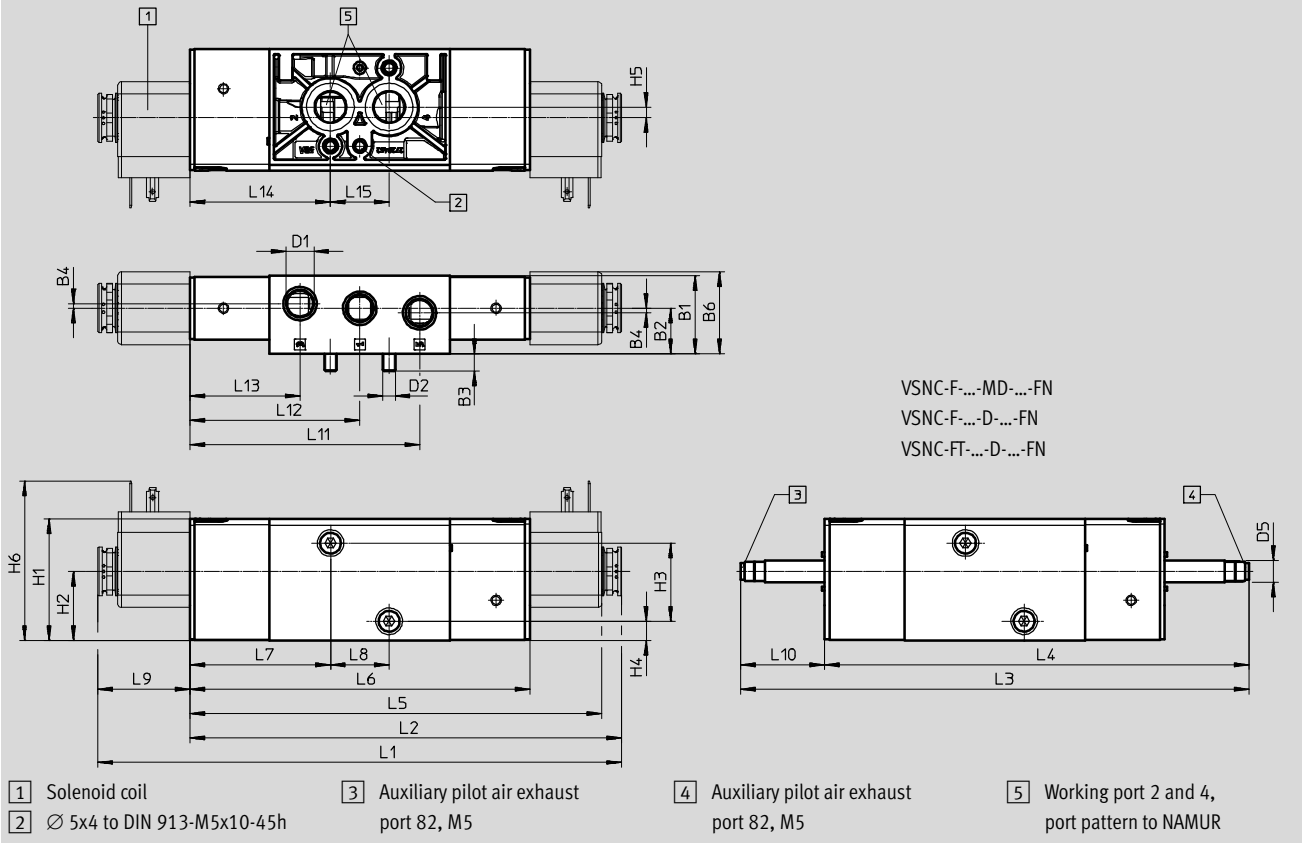
Materials		
1	Housing	Wrought aluminium alloy
2	Seals	NBR
	–	RoHS compliant

# Solenoid valves VSNC

Technical data – 5/3-way -...-FN

## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

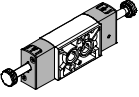
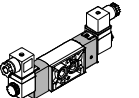


Type	B1	B2	B3	B4	B6	D1	D2	D5 Ø	H1	H2	H3	H4	H5	H6	L1
VSNC-F-P53C-MD-G14-FN	31.8	18.6	7.3	1.9	33.4	G1/4	M5	9	49.8	28.2	32	7.8	4.4	-	-
VSNC-F-P53U-MD-G14-FN															
VSNC-F-P53E-MD-G14-FN															
VSNC-F-P53C-MD-N14-FN															
VSNC-F-P53U-MD-N14-FN															
VSNC-F-P53E-MD-N14-FN															

Type	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15
VSNC-F-P53C-MD-G14-FN	-	208	173.6	-	139.2	57.6	24	-	34.4	94.1	69.6	45.1	57.6	24
VSNC-F-P53U-MD-G14-FN														
VSNC-F-P53E-MD-G14-FN														
VSNC-F-P53C-MD-N14-FN														
VSNC-F-P53U-MD-N14-FN														
VSNC-F-P53E-MD-N14-FN														

# Solenoid valves VSNC

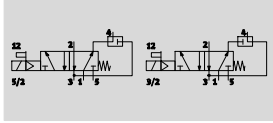
Technical data – 5/3-way -...-FN


Ordering data – Valves		
Directional control valve without solenoid coil		
	Part No.	Type
	577269	VSNC-F-P53C-MD-G14-FN
	577270	VSNC-F-P53U-MD-G14-FN
	577271	VSNC-F-P53E-MD-G14-FN
Directional control valve with 24 V DC solenoid coil		
	577274	VSNC-F-P53C-MD-N14-FN
	577275	VSNC-F-P53U-MD-N14-FN
	577276	VSNC-F-P53E-MD-N14-FN


# Solenoid valves VSNC

Technical data – 3/2-way or 5/2-way -...-FN poppet seat, convertible, single solenoid

Function  
3/2-way or 5/2-way valve,  
convertible



-  - Operating pressure  
2.5 ... 8 bar

-  - Temperature range  
-20 ... +60 °C



General technical data		VSNC-FTC-M52-MD-G14-FN VSNC-FTC-M52-MD-N14-FN	VSNC-FTC-M52-MD-G14-FN-1A1
Valve function		3/2-way or 5/2-way, convertible	
Width	[mm]	32	
Design		Poppet seat	
Sealing principle		Soft	
Type of actuation		Electrical	
Reset method		Mechanical spring	
Type of control		Piloted	
Pilot air supply port		Internal	
Exhaust air function		With flow control	
Manual override		Non-detenting, detenting	
Type of mounting		With through-hole	
Connection for venting hole		Not ducted	
Mounting position		Any	
Non-overlapping		No	
Direction of flow		Non-reversible	
Standard nominal flow rate	1 → 2 [l/min]	800	
	Exhaust return 4 → 3 [l/min]	800	
b value		0.15	
C value	[l/sbar]	3.96	
Pneumatic connection	1, 3, 5 2, 4	G1/4 Port pattern to NAMUR	
Conforms to standard		VDI/VDE 3845 (NAMUR)	
Certificate issuing authority		DNVGL-TAA000011]	
Degree of protection		-	IP65, IP67
Product weight	[g]	404	440

# Solenoid valves VSNC

Technical data – 3/2-way or 5/2-way -...-FN poppet seat, convertible, single solenoid

Operating and environmental conditions	
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Operating pressure [bar]	2.5 ... 8
Ambient temperature [°C]	-20 ... 60
Temperature of medium [°C]	-20 ... 60
Corrosion resistance class CRC <sup>1)</sup>	2
Maritime certification <sup>2)</sup>	See certificate

- 1) Corrosion resistance class CRC 2 to Festo standard FN 940070  
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.
- 2) Additional information [www.festo.com/sp](http://www.festo.com/sp) → Certificates.

Electrical data	VSNC-FTC-M52-MD-G14-FN	VSNC-FTC-M52-MD-G14-FN-1A1
	VSNC-FTC-M52-MD-N14-FN	
Electrical connection	–	Type A to EN 175301-803
Coil characteristics, 24 V DC [W]	See solenoid coil, to be ordered separately	0.7
Switching time on [ms]	16	16
Switching time off [ms]	120	120
Permissible voltage fluctuations [%]	–	±10

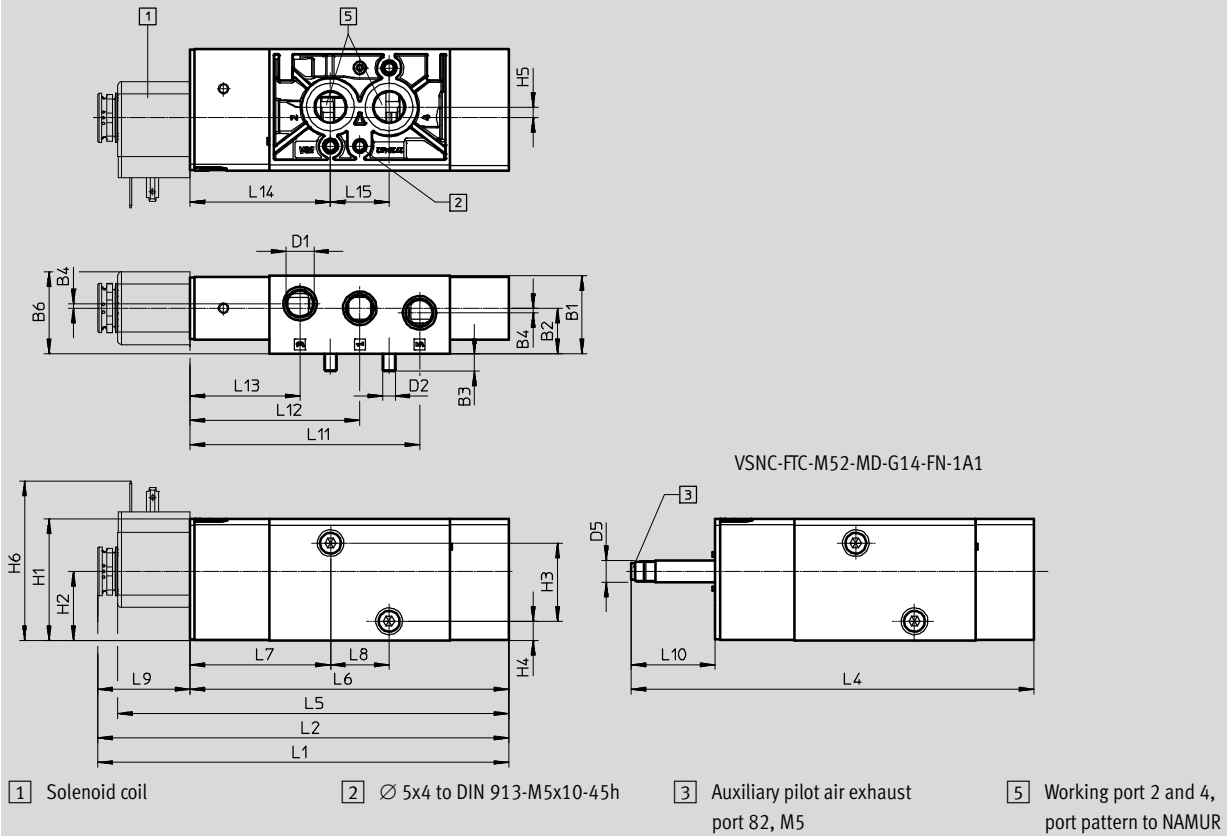
Materials	
1) Housing	Wrought aluminium alloy
2) Seals	NBR
–	RoHS compliant

# Solenoid valves VSNC

Technical data – 3/2-way or 5/2-way -...-FN poppet seat, convertible, single solenoid

## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)



Type	B1	B2	B3	B4	B6	D1	D2	D5 ∅	H1	H2	H3	H4	H5	H6
VSNC-FTC-M52-MD-G14-FN	31.8	18.6	7.3	1.9	33.4	G1/4	M5	9	49.8	28.2	32	7.8	4.4	-
VSNC-FTC-M52-MD-G14-FN-1A1														
VSNC-FTC-M52-MD-N14-FN-1A1														

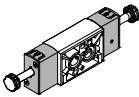
Type	L2	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15
VSNC-FTC-M52-MD-G14-FN	-	165	-	130.6	57.6	24	-	34.4	94.1	69.6	45.1	57.6	24
VSNC-FTC-M52-MD-G14-FN-1A1			-				-						
VSNC-FTC-M52-MD-N14-FN-1A1			160.1				37.7						

## Ordering data – Valves

Directional control valve without solenoid coil

	Part No.	Type
	577277	VSNC-FTC-M52-MD-G14-FN
	577279	VSNC-FTC-M52-MD-N14-FN

Directional control valve with 24 V DC solenoid coil

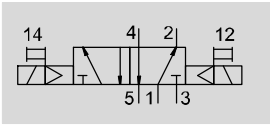
	577297	VSNC-FTC-M52-MD-G14-FN-1A1
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# Solenoid valves VSNC

Technical data – 5/2-way, double solenoid



Function  
3/2-way or 5/2-way valve,  
convertible



- Operating pressure  
1.5 ... 8 bar

- Temperature range  
-20 ... +60 °C



General technical data		VSNC-FT-B52-D-G14-FN VSNC-FT-B52-D-N14-FN	VSNC-FT-B52-D-G14-FN-1A1
Valve function		5/2-way, double solenoid	
Width	[mm]	32	
Design		Poppet seat	
Sealing principle		Soft	
Type of actuation		Electrical	
Reset method		Mechanical spring	
Type of control		Piloted	
Pilot air supply port		Internal	
Exhaust air function		With flow control	
Manual override		Non-detenting, detenting	
Type of mounting		With through-hole	
Connection for venting hole		Not ducted	
Mounting position		Any	
Non-overlapping		No	
Direction of flow		Non-reversible	
Standard nominal flow rate	[l/min]	1000	
b value		0.24	
C value	[l/sbar]	4.6	
Pneumatic connection	1, 3, 5 2, 4	G1/4 or NPT1/4-18 Port pattern to NAMUR	
Conforms to standard		VDI/VDE 3845 (NAMUR)	
Certificate issuing authority		DNVGL-TAA000011]	
Degree of protection		-	IP65, IP67
Product weight	[g]	519	670



# Solenoid valves VSNC

Technical data – 5/2-way, double solenoid

Operating and environmental conditions		
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)
Operating pressure	[bar]	1.5 ... 8
Ambient temperature	[°C]	-20 ... +60
Temperature of medium	[°C]	-20 ... +60
Corrosion resistance class CRC <sup>1)</sup>		2
Maritime certification <sup>2)</sup>		See certificate

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

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

2) Additional information [www.festo.com/sp](http://www.festo.com/sp) → Certificates.

Electrical data			
		VSNC-FT-B52-D-G14-FN VSNC-FT-B52-D-N14-FN	VSNC-FT-B52-D-G14-FN-1A1
Electrical connection		–	Type A to EN 175301-803
Coil characteristics, 24 V DC	[W]	See solenoid coil, to be ordered separately	0.7
Changeover time	[ms]	16	16
Permissible voltage fluctuations	[%]	–	±10

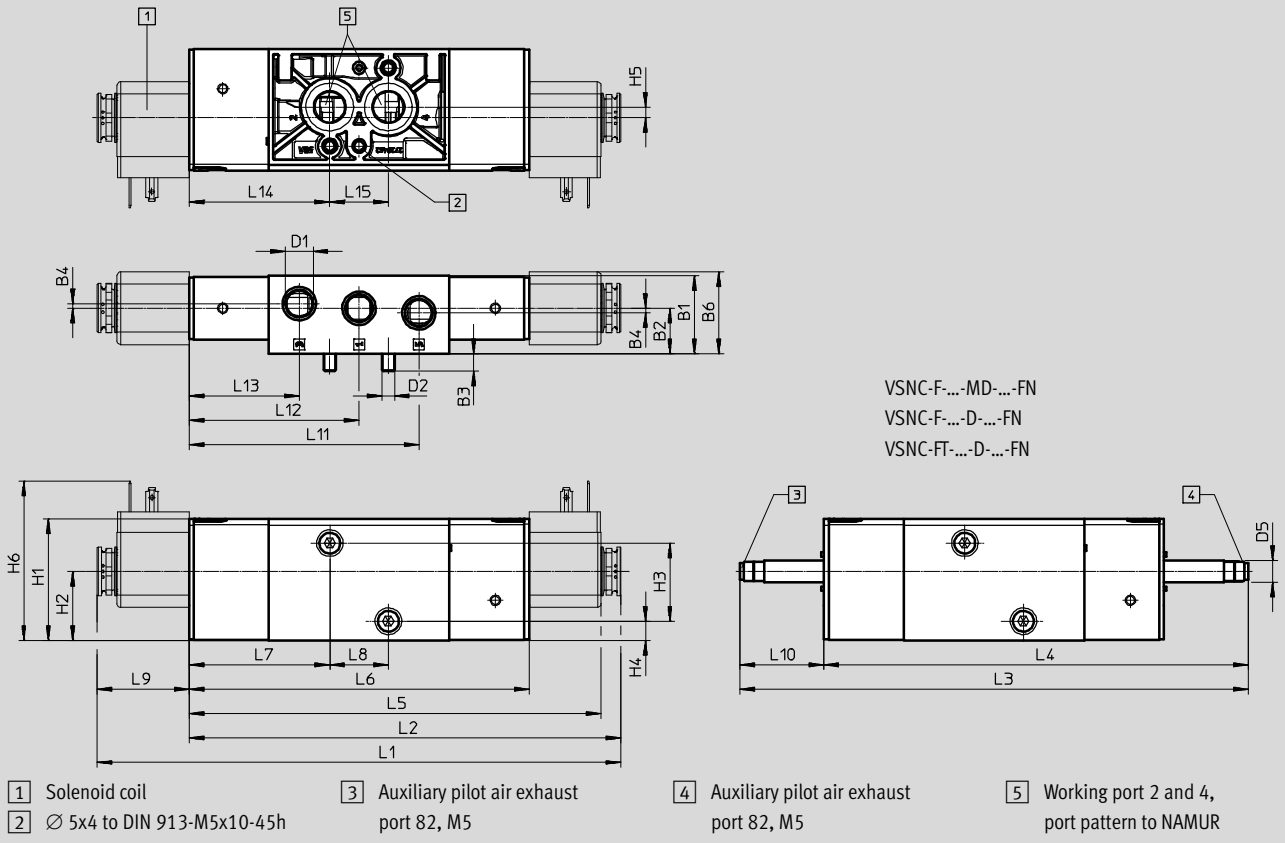
Materials		
1	Housing	Wrought aluminium alloy
2	Seals	NBR
–		RoHS compliant

# Solenoid valves VSNC

Technical data – 5/2-way, double solenoid

## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

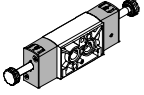
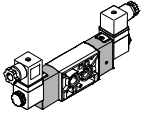


Type	B1	B2	B3	B4	B6	D1	D2	D5	H1	H2	H3	H4	H5	H6	L1
VSNC-F-P53C-MD-G14-FN	31.8	18.6	7.3	1.9	33.4	G1/4	M5	9	49.8	28.2	32	7.8	4.4	-	-
VSNC-F-P53U-MD-G14-FN															
VSNC-F-P53E-MD-G14-FN						NPT1/4									
VSNC-F-P53C-MD-N14-FN															
VSNC-F-P53U-MD-N14-FN															
VSNC-F-P53E-MD-N14-FN															

Type	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15
VSNC-F-P53C-MD-G14-FN	-	208	173.6	-	139.2	57.6	24	-	34.4	94.1	69.6	45.1	57.6	24
VSNC-F-P53U-MD-G14-FN														
VSNC-F-P53E-MD-G14-FN														
VSNC-F-P53C-MD-N14-FN														
VSNC-F-P53U-MD-N14-FN														
VSNC-F-P53E-MD-N14-FN														

# Solenoid valves VSNC

Technical data – 5/2-way, double solenoid

Ordering data – Valves		
Directional control valve without solenoid coil		
	Part No.	Type
	577278	VSNC-FT-B52-D-G14-FN
	577280	VSNC-FT-B52-D-N14-FN
Directional control valve with Ex i solenoid coil		
	577298	VSNC-FT-B52-D-G14-FN-1A1

# Solenoid valves VSNC

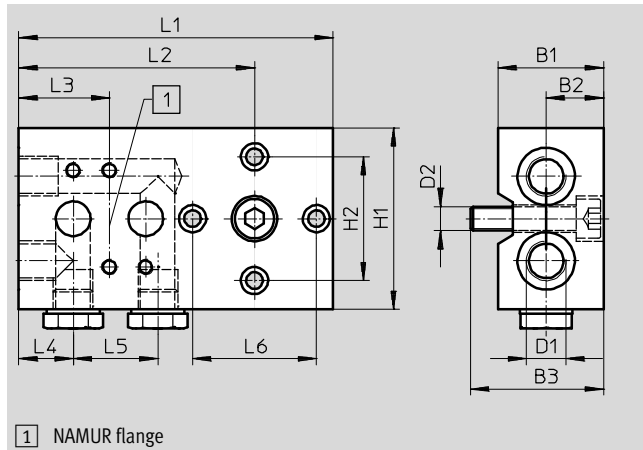
Accessories



## Connection kit

Mounting position: Any  
 Type of mounting: With through-hole  
 Operating pressure: 0 ... 10 bar  
 Operating medium: Compressed air to ISO 8573-1:2010 [7:-:-]  
 Degree of protection IP65

Materials: Wrought aluminium alloy  
 Seals: NBR  
 Contains paint-wetting impairment substances, RoHS-compliant

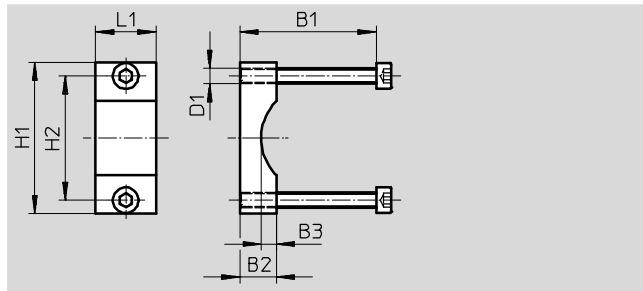
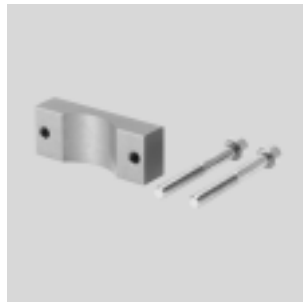


Dimensions [mm] and ordering data														Part No.	Type
B1	B2	B3	D1	D2	H1	H2	L1	L2	L3	L4	L5	L6	CRC <sup>1)</sup>		
35	19	44	G <sup>3</sup> / <sub>4</sub>	M8	60	41	104	78	30	18	28	41	4	<b>563396</b>	<b>VABS-S7-S-G14</b>

1) Corrosion resistance class CRC 4 to Festo standard FN 940070  
 Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, for instance in the chemical or food industries. These applications may need to be supported by special tests (→ also FN 940082) using appropriate media.

## Mounting bracket

Materials: Bracket:  
 Wrought aluminium alloy  
 Contains paint-wetting impairment substances, RoHS-compliant



Dimensions [mm] and ordering data								Part No.	Type
B1	B2	B3	D1	H1	H2	L1	CRC <sup>1)</sup>		
45/65	12	5	M5	50	41	20	3	<b>563403</b>	<b>VAME-S7-Y</b>

1) Corrosion resistance class CRC 3 to Festo standard FN 940070  
 High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional requirements for the surface and which are in direct contact with a normal industrial environment.

# Solenoid valves VSNC

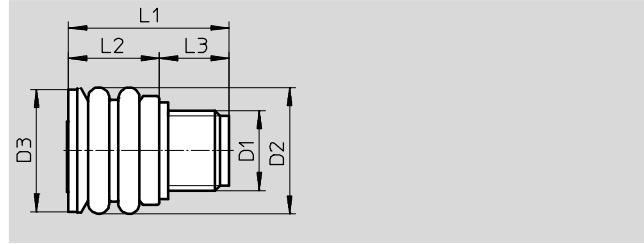
Accessories

## Exhaust protection

Materials:

EPDM, PA

Contains paint-wetting impairment substances, RoHS-compliant



Dimensions [mm] and ordering data							
D1	D2	D3	L1	L2	L3	CRC <sup>1)</sup>	Part No. Type
G1/4	21	20.5	26.5	15	11.5	3	<b>563400 VABD-D3-SN-G14</b>

1) Corrosion resistance class CRC 3 to Festo standard FN 940070

High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional requirements for the surface and which are in direct contact with a normal industrial environment.

Ordering data – Solenoid coil			
	Coil characteristics	Part No.	Type
Electrical port pattern to industrial standard type B		Technical data → Internet: vacf	
	12 V DC; 3.4 W	<b>8030801</b>	<b>VACF-B-B2-5</b>
	24 V DC; 3.3 W	<b>8030802</b>	<b>VACF-B-B2-1</b>
	48 V DC; 3.4 W	<b>8030803</b>	<b>VACF-B-B2-7</b>
	24 V AC; 50/60 Hz, pick-up power rating 3.9 VA, holding power 2.6 VA	<b>8030804</b>	<b>VACF-B-B2-1A</b>
	48 V AC; 50/60 Hz, pick-up power rating 3.9 VA, holding power 2.7 VA	<b>8030805</b>	<b>VACF-B-B2-7A</b>
	110/120 V AC; 50/60 Hz, pick-up power rating 4.4 VA, holding power 3.3 VA	<b>8030806</b>	<b>VACF-B-B2-16B</b>
	230/240 V AC; 50/60 Hz, pick-up power rating 5.8 VA, holding power 4.6 VA	<b>8030808</b>	<b>VACF-B-B2-3W</b>
Electrical port pattern to DIN EN 175301-803 type A			
	12 V DC; 2.8 W	<b>8030821</b>	<b>VACF-A-A1-5</b>
	24 V DC; 2.6 W	★ <b>8030822</b>	<b>VACF-A-A1-1</b>
	48 V DC; 2.8 W	<b>8030823</b>	<b>VACF-A-A1-7</b>
	24 V AC; 50/60 Hz, pick-up power rating 2.5 VA, holding power 1.7 VA	<b>8030824</b>	<b>VACF-A-A1-1A</b>
	48 V AC; 50/60 Hz, pick-up power rating 2.5 VA, holding power 1.7 VA	<b>8030825</b>	<b>VACF-A-A1-7A</b>
	110/120 V AC; 50/60 Hz, pick-up power rating 2.7 VA, holding power 1.9 VA	<b>8030826</b>	<b>VACF-A-A1-16B</b>
	230/240 V AC; 50/60 Hz, pick-up power rating 3.9 VA, holding power 2.8 VA	<b>8030828</b>	<b>VACF-A-A1-3W</b>

Festo core product range

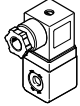
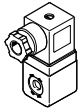

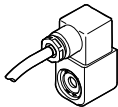
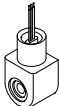
★ Ready for dispatch from the Festo factory in 24 hours

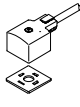
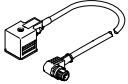
☆ Ready for dispatch in 5 days maximum from stock

# Solenoid valves VSNC

Accessories

FESTO

Ordering data – Solenoid coil					
		Coil characteristics		Part No.	Type
Type of ignition protection: intrinsically safe Ex ia <span style="float: right;">Technical data → Internet: vacn</span>					
	28V			<b>8029139</b>	<b>VACN-N-A1-1-EX-4-A</b>
Type of ignition protection: non-sparking Ex nA					
	24 V DC; 2.1 W			<b>8029136</b>	<b>VACN-N-A1-1-EX2-N</b>
	110 V AC; 50 Hz, pick-up power rating 6.9 VA, holding power 4.1 VA			<b>8029137</b>	<b>VACN-N-A1-16B-EX2-N</b>
	110 V AC; 60 Hz, pick-up power rating 5.4 VA, holding power 3.2 VA				
	230 V AC; 50 Hz, pick-up power rating 6.9 VA, holding power 4.1 VA			<b>8029138</b>	<b>VACN-N-A1-3A-EX2-N</b>
	230 V AC; 60 Hz, pick-up power rating 5.4 VA, holding power 3.3 VA				
Degree of protection IP65 with socket					
	24 V DC; 0.7 W			★ <b>8029144</b>	<b>VACN-N-A1-1</b>
	110 V AC; 50 Hz, pick-up power rating 5.2 VA, holding power 3.1 VA			<b>8029134</b>	<b>VACN-N-A1-16B</b>
	110 V AC; 60 Hz, pick-up power rating 4.2 VA, holding power 2.5 VA				
	230 V AC; 50 Hz, pick-up power rating 6.2 VA, holding power 3.7 VA			<b>8029135</b>	<b>VACN-N-A1-3A</b>
	230 V AC; 60 Hz, pick-up power rating 4.9 VA, holding power 2.9 VA				
Type of ignition protection: encapsulated Ex me					
	230 V AC; 50/60 Hz, power 2.1 VA			<b>8029141</b>	<b>VACN-N-K1-3A-EX4-M</b>
	110 V AC; 50/60 Hz, power 2.4 VA			<b>8029142</b>	<b>VACN-N-K1-16B-EX4-M</b>
	24 V DC; 2.6 W			<b>8029143</b>	<b>VACN-N-K1-1-EX4-M</b>
Type of ignition protection: encapsulated AEx m, Class 1, Div 1 to NEC 500					
	230 V AC; 50 Hz, pick-up power rating 11.5 VA, holding power 8.0 VA			<b>8029140</b>	<b>VACN-N-K11-3A-0.5-U4-M</b>
	120 V AC; 60 Hz, pick-up power rating 10.0 VA, holding power 6.8 VA			<b>8029145</b>	<b>VACN-N-K11-16B-0.5-U4-M</b>
	24 V DC; 4.6 W			<b>8029146</b>	<b>VACN-N-K11-1-0.5-U4-M</b>

Ordering data						
		Description	Nominal operating voltage [V]	Cable length [m]	Part No.	Type
Connecting cable <span style="float: right;">Technical data → Internet: kmc</span>						
	For valves with D and N1 solenoid coils	24 DC	• Signal status display	2.5	<b>30931</b>	<b>KMC-1-24 DC-2,5-LED</b>
5				<b>30933</b>	<b>KMC-1-24 DC-5-LED</b>	
230 AC		–	2.5	<b>30932</b>	<b>KMC-1-230 AC-2,5</b>	
			5	<b>30934</b>	<b>KMC-1-230 AC-5</b>	
	For valves with F solenoid coils	24 DC	• Signal status display	2.5	<b>30935</b>	<b>KMF-1-24DC-2,5-LED</b>
Connecting cable <span style="float: right;">Technical data → Internet: nebv</span>						
	For valves with D and N1 solenoid coils. Angled socket, connection diagram type A, EN 175301-803	230 AC/DC	–	0.6	<b>3579466</b>	<b>NEBV-A1W3-K-0,6-N-LE3</b>
0.3				<b>3579461</b>	<b>NEBV-A1W3-K-0,3-N-M12W3</b>	
24 AC/DC		• Signal status display • Protective circuit	0.6	<b>3579462</b>	<b>NEBV-A1W3-K-0,6-N-M12W3</b>	
			0.3	<b>3679771</b>	<b>NEBV-A1W3-P-0,3-N-M12W3</b>	
			0.6	<b>3679772</b>	<b>NEBV-A1W3-P-0,6-N-M12W3</b>	
			0.6	<b>3679776</b>	<b>NEBV-A1W3-P-K-0,6-LE3</b>	









Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

# Solenoid valves VSNC

Accessories

**FESTO**

Ordering data			
	Description	Part No.	Type
<b>Plug socket</b> <span style="float: right;">Technical data → Internet: mssd</span>			
	3-pin, angled socket, square design connection pattern type B, to industrial standard 11 mm	<b>539710</b>	<b>MSSD-F-M16</b>
	3-pin, angled socket, square design connection pattern type A, to DIN EN 175301-803, type A	<b>539709</b>	<b>MSSD-C-M16</b>
	3-pin, IP67 socket to IEC 60529, type B	<b>192746</b>	<b>MSSD-F-S-M16</b>
	4-pin, IP67 socket to IEC 60529, type A	<b>192748</b>	<b>MSSD-C-S-M16</b>
	3-pin, angled socket, square design, IP65 to DIN EN 175301-803, type A	<b>34583</b>	<b>MSSD-C</b>
<b>Push-in fittings QS</b> <span style="float: right;">Technical data → Internet: qs</span>			
	G male thread with internal hex	<b>186108</b>	<b>QS-G1/4-6-I</b>
		<b>186110</b>	<b>QS-G1/4-8-I</b>
		<b>186112</b>	<b>QS-G1/4-10-I</b>
	NPT male thread with internal hex	<b>572320</b>	<b>QB-1/4-1/4-I-U</b>
		<b>572321</b>	<b>QB-1/4-5/16-I-U</b>
		<b>572322</b>	<b>QB-1/4-3/8-I-U</b>
<b>Silencer U</b> <span style="float: right;">Technical data → Internet: u</span>			
	G male thread, polymer design	<b>534223</b>	<b>U-1/4-20</b>
		<b>2316</b>	<b>U-1/4</b>
	G male thread, die-cast metal design	<b>6842</b>	<b>U-1/4-B</b>
		NPT male thread, die-cast metal design	<b>12639</b>
<b>Illuminating seal</b> <span style="float: right;">Technical data → Internet: mc-ld</span>			
	For F solenoid coils	<b>19143</b>	<b>MF-LD-12-24 DC</b>
		<b>19144</b>	<b>MF-LD-230 AC</b>
	For valves with D and N1 solenoid coils	<b>19145</b>	<b>MC-LD-12-24 DC</b>
		<b>19146</b>	<b>MC-LD-230 AC</b>
<b>Cover cap</b>			
	For valves	<b>8028240</b>	<b>VAMC-B10-20-CH2</b>