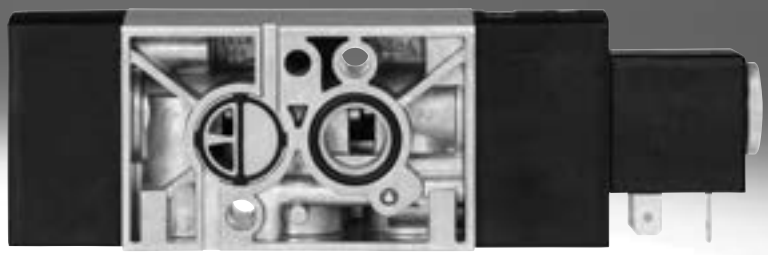
Solenoid valves VSNC

FESTO



★	Festo Core Range Solves the majority of your automation tasks	With the Festo Core Range, we have selected the most important products and functions from our broad product catalogue, and added the quickest delivery.
Worldwide:	Quickest delivery – wherever, whenever	The Core Range offers you the best value for your automation tasks.
Simply good:	Expected high Festo quality	
Fast:	Easy and fast to select	

Just look for the star!

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 set.

They are designed for the requirements of process automation. A mechanical spring (single solenoid valves) ensures safe switching to the initial position in the event of a power failure.
Working ports 2, 4 on valves VSNC-F ...-P2 are designed in accordance with VDI/VDE 3845 NAMUR.

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 cap. The part number is therefore identical. The manual override option can be changed at any time

Cost- and application-optimised

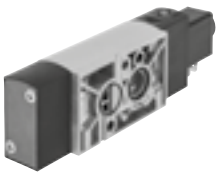
- Cost-optimised variant with plastic cover, brass armature tube and IP65 coils

- Voltage
  12, 24, 48 V DC
  24, 48, 120, 230 V AC
- Operating pressure
  1.5 ... 10 bar
- Temperature range
  –20 ... 60°C

Versatile

- 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
- Pilot air for VSNC-F ...-P2 CNOMO connection to ISO 15218
- 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

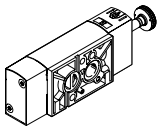
VSNC with FM solenoid

VSNC with Ex-m solenoid

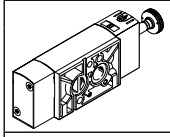
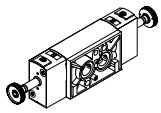
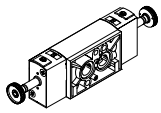
VSNC-F ... -P2

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

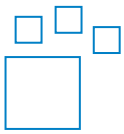
VSNC-F8



- Material of valve cap: Plastic/metal
- Material of armature: Brass
- Pilot air (armature tube incoming air), unprotected

Design	Type	Pneumatic connection 1, 3, 5	Pneumatic connection 2, 4, based on standard	Standard nominal flow rate [l/min]	→ Page
5/2-way or 3/2-way valve, convertible, single solenoid					
	VSNC-FC-M52-MD-G14-F8	G 1/4	VDI/VDE 3845 NAMUR 1/4	1250	13
	VSNC-FC-M52-MD-N14-F8	1/4 NPT			
5/2-way valve, double solenoid					
	VSNC-F-B52-D-G14-F8	G 1/4	VDI/VDE 3845 NAMUR	1350	18
	VSNC-F-B52-D-N14-F8	1/4 NPT			
5/3-way valve					
	VSNC-F-P53C-MD-G14-F8	G 1/4	VDI/VDE 3845 NAMUR	1250	21
	VSNC-F-P53U-MD-G14-F8	G 1/4		950	
	VSNC-F-P53E-MD-G14-F8	G 1/4		1050	
	VSNC-F-P53C-MD-N14-F8	1/4 NPT		1250	
	VSNC-F-P53U-MD-N14-F8	1/4 NPT		950	
	VSNC-F-P53E-MD-N14-F8	1/4 NPT		1050	

Ordering data – Product options



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

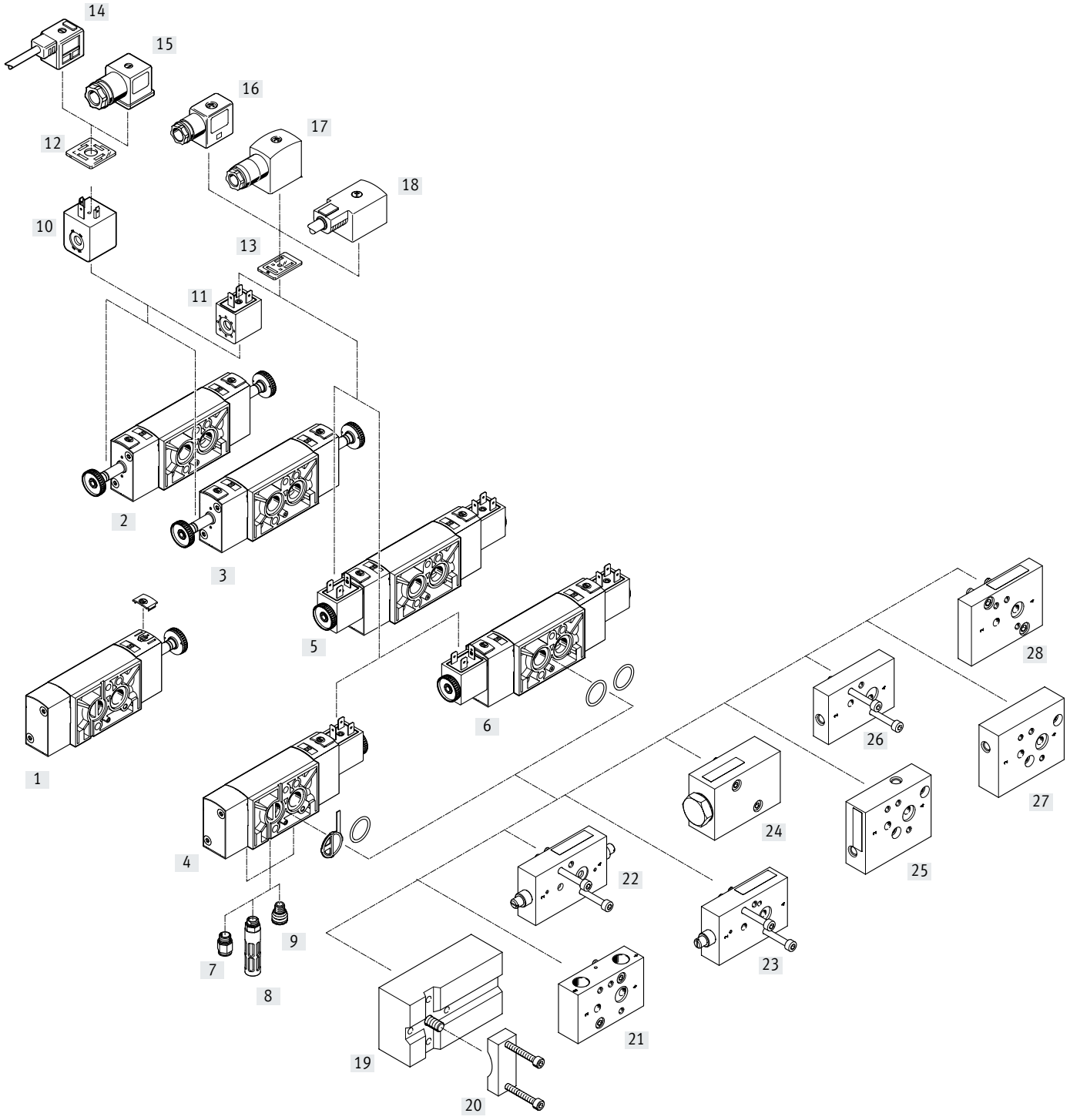
The configurator can be found under Products on the DVD or at
→ **www.festo.com/catalogue/...**

Part no.	Type
8026033	VSNC

Coils	IP65 industrial type B							IP65 type A						
Valve function	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- and 3/2-way, single solenoid	■	■ PNO	■	■	■	■	■	■	■ PNO	■	■	■	■	■
5/2-way, double solenoid	■	■ PNO	■	■	■	■	■	■	■ PNO	■	■	■	■	■
5/3-way, G	■	■	■	■	■	■	■	■	■	■	■	■	■	■
5/3-way, B	■	■	■	■	■	■	■	■	■	■	■	■	■	■
5/3-way, E	■	■	■	■	■	■	■	■	■	■	■	■	■	■

■ = Can be combined as part of a modular system
PNO = Can be ordered with part number as a fast seller

Peripherals overview – VSNC-...-F8

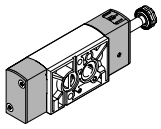


Peripherals overview – VSNC-...-F8

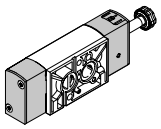
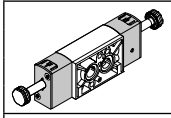
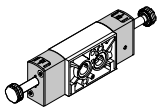
Mounting components and accessories			
		Brief description	→ Page / Internet
[1]	VSNC-...-F8 Solenoid valves	3/2-way and 5/2-way single solenoid valve with converting seal, plastic cover and brass armature tube for controlling single-acting or double-acting actuators	13
[2]	VSNC-...-F8 Solenoid valves	5/2-way double solenoid valve with plastic cover and brass armature tube for controlling double-acting actuators	18
[3]	VSNC-...-F8 Solenoid valves	5/3-way valve, normally open, closed or exhausted with plastic cover and brass armature tube for controlling double-acting actuators	21
[4]	VSNC-...-F8 Solenoid valves	3/2-way and 5/2-way single solenoid valve with converting seal, plastic cover, brass armature tube and 24 V DC solenoid coil for controlling single-acting or double-acting actuators	13
[5]	VSNC-...-F8 Solenoid valves	5/2-way double solenoid valve with plastic cover, brass armature tube and 24 V DC solenoid coil for controlling double-acting actuators	18
[6]	VSNC-...-F8 Solenoid valves	5/3-way valve, normally open, closed or exhausted with plastic cover, brass armature tube and 24 V DC solenoid coil for controlling double-acting actuators	21
[7]	QS Push-in fitting	For connecting tubing with standard O.D.	67
[8]	U Silencer	–	67
[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	65
[10]	VACF-A Solenoid coil	Electrical plug pattern to DIN EN 175301-803, type A	65
[11]	VACF-B Solenoid coil	Electrical plug pattern to Festo standard for MSSD-F	65
[12]	MC-LD Illuminating seal	Illuminating seal for indicating the switching status	68
[13]	MF-LD Illuminating seal	Illuminating seal for indicating the switching status	68
[14]	KMC Connecting cable	–	67
[15]	MSSD-C Plug socket	Electrical plug pattern to DIN EN 175301-803, type A	67
[16]	MSSD-F Plug socket	Electrical plug pattern to Festo standard with screw terminal connection	67
[17]	MSSD-F-S Plug socket	Electrical plug pattern to Festo standard with insulation displacement connection	67
[18]	KMF Connecting cable	–	kmf
[19]	VABS-S7-S-G14 Connection set	Sub-base for attaching the valve to a NAMUR rib	57
[20]	VAME-S7-Y Mounting bracket	Alternative (instead of screw) for mounting the valve on a NAMUR rib using a mounting bracket	64
[21]	VABS-B14-T-F ... 14 Connector plate	With the sub-base the NAMUR valve can be used as an inline valve with G1/4" and NPT 1/4" thread	57
[22]	VABF-B14-F1B1P2-FF14 Throttle plate (double-acting)	Flow control for double-acting quarter turn actuators	58
[23]	VABF-B14-F1B1P1-FF14 Throttle plate (single-acting)	Flow control for single-acting quarter turn actuators	58
[24]	VABF-B14-M3-...14 Exhaust plate	Exhausting a quarter turn actuator with NAMUR connection via a valve terminal or a normal inline valve G1/4 or 1/4 NPT	59
[25]	VABS-B14-90-FF14 Mounting plate	NAMUR connection can be turned 90° It is also possible to mount a 1/4" NAMUR valve on a 1/2" actuator	60
[26]	VABS-B14-180-FF14 Mounting plate	NAMUR connection can be turned 180° It is also possible to mount a 1/4" NAMUR valve on a 1/2" actuator	61
[27]	VABS-B14-270-FF14 Mounting plate	NAMUR connection can be turned 270° It is also possible to mount a 1/4" NAMUR valve on a 1/2" actuator	62
[28]	VABA-B14-FL12-FL14 Mounting plate	Mounting plate with NAMUR connection 1/2 and 1/4	63

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

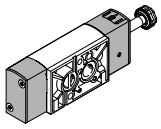
VSNC-F ... -FN



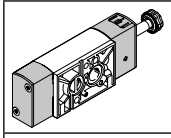
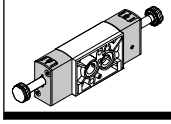
- Design: Piston spool
- Material of valve cap: Aluminium/metal
- Material of armature: Stainless steel
- Pilot air (incoming air of armature tube), protected

Design	Type	Pneumatic connection 1, 3, 5	Pneumatic connection 2, 4, based on standard	Standard nominal flow rate [l/min]	→ Page
3/2-way or 5/2-way valve ...-FN, convertible, single solenoid					
	VSNC-FC-M52-MD-G14-FN	G 1/4	VDI/VDE 3845 NAMUR	1250	25
	VSNC-FC-M52-MD-N14-FN	1/4 NPT			
	VSNC-FC-M52-MD-G14-FN-1A1-EX4-A	G 1/4			
	VSNC-FC-M52-MD-N14-FN-1A1-EX4-A	1/4 NPT			
	VSNC-FC-M52-MD-G14-GN-1A1+G	G 1/4			
	VSNC-FC-M52-MD-G14-FN-3AA1+G	G 1/4			
5/2-way valve ...-FN, double solenoid					
	VSNC-F-B52-D-G14-FN	G 1/4	VDI/VDE 3845 NAMUR	1350	30
	VSNC-F-B52-D-N14-FN	1/4 NPT			
	VSNC-F-B52-D-G14-FN-1A1-EX4-A	G 1/4			
	VSNC-F-B52-D-N14-FN-1A1-EX4-A	1/4 NPT			
5/3-way valve ...-FN					
	VSNC-F-P53C-MD-G14-FN	G 1/4	VDI/VDE 3845 NAMUR	1250	34
	VSNC-F-P53U-MD-G14-FN			950	
	VSNC-F-P53E-MD-G14-FN			1050	
	VSNC-F-P53C-MD-N14-FN	1/4 NPT		1250	
	VSNC-F-P53U-MD-N14-FN			950	
	VSNC-F-P53E-MD-N14-FN			1050	

VSNC-FT ... -FN



- Design: Poppet seat
- Material of valve cap: Aluminium/metal
- Material of armature: Stainless steel
- Pilot air (incoming air of armature tube), protected

Design	Type	Pneumatic connection 1, 3, 5	Pneumatic connection 2, 4, based on standard	Standard nominal flow rate [l/min]	→ Page
3/2-way or 5/2-way valve ...-FN, convertible, single solenoid					
	VSNC-FTC-M52-MD-G14-FN	G 1/4	VDI/VDE 3845 NAMUR	800	38
	VSNC-FTC-M52-MD-N14-FN	1/4 NPT			
	VSNC-FTC-M52-MD-G14-FN-1A1	G 1/4			
5/2-way valve ...-FN, double solenoid					
	VSNC-FT-B52-D-G14-FN	G 1/4	VDI/VDE 3845 NAMUR	1000	41
	VSNC-FT-B52-D-N14-FN	1/4 NPT			
	VSNC-FT-B52-D-G14-FN-1A1	G 1/4			

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

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/...**

Part no.	Type
8026033	VSNC

Coils	IP65			Ex-nA			Ex-ia	Ex-mb			AEx-m		
Valve function	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- and 3/2-way, single solenoid	■ PNO	■	■	■	■	■	■	■	■	■	■	■	■
5/2-way, double solenoid	■ PNO	■	■	■	■	■	■	■	■	■	■	■	■
5/3-way, G	■	■	■	■	■	■	■	■	■	■	■	■	■
5/3-way, B	■	■	■	■	■	■	■	■	■	■	■	■	■
5/3-way, E	■	■	■	■	■	■	■	■	■	■	■	■	■

■ = Can be combined as part of a modular system
PNO = Can be ordered with part number as a fast seller

Intrinsically safe coil VACN-...-Ex4A

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

Non-sparking coil VACN-...-Ex2N

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

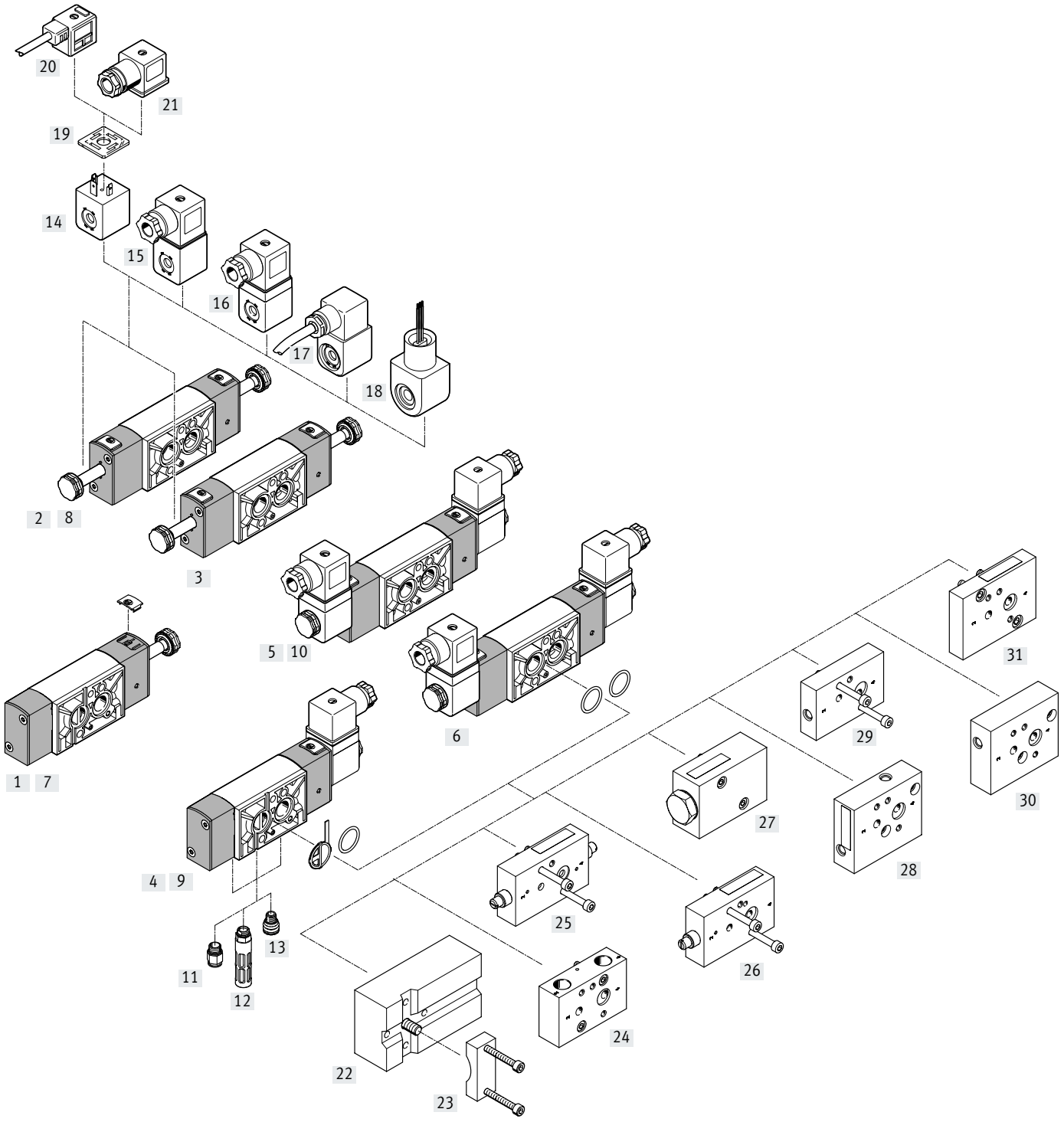
Encapsulated coil VACN-...-Ex4M

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

Encapsulated coil with conduit, connection VACN-...-U4M

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

Peripherals overview – VSNC-...-FN

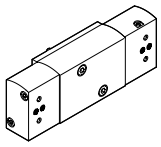


Peripherals overview – VSNC-F-...-FN

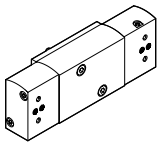
Mounting components and accessories			
		Brief description	→ Page / Internet
[1]	VSNC-F ...-FN Piston spool	3/2-way and 5/2-way single solenoid valve with converting seal, aluminium cover and stainless steel armature tube	25
[2]		5/2-way double solenoid valve with aluminium cover and stainless steel armature tube	30
[3]		5/3-way valve, normally open, closed or exhausted with aluminium cover and stainless steel armature tube	34
[4]		3/2-way and 5/2-way single solenoid valve with converting seal, aluminium cover, stainless steel armature tube and Ex-ia solenoid coil	25
[5]		5/2-way double solenoid valve with aluminium cover, stainless steel armature tube and Ex-ia solenoid coil	30
[6]		5/3-way valve, normally open, closed or exhausted with aluminium cover, stainless steel armature tube and Ex-ia solenoid coil	34
[7]	VSNC-FT- ... -FN Poppet seat	3/2-way and 5/2-way single solenoid valve with converting seal, aluminium cover and stainless steel armature tube	38
[8]		5/2-way double solenoid valve with aluminium cover and stainless steel armature tube	41
[9]		3/2-way and 5/2-way single solenoid valve with converting seal, aluminium cover, stainless steel armature tube and 24 V DC solenoid coil	38
[10]		5/2-way double solenoid valve with aluminium cover, stainless steel armature tube and 24 V DC solenoid coil	41
[11]	QS Push-in fitting	For connecting tubing with standard O.D.	67
[12]	U Silencer	–	67
[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	65
[14]	VACN-N Solenoid coil	Electrical plug pattern to DIN EN 175301-803, type A	–
[15]	VACN-N- ... -Ex2-N Solenoid coil	Type of ignition protection nA = non-sparking, for use in zone 2	–
[16]	VACN-N- ... -Ex4-A Solenoid coil	Type of ignition protection iA = intrinsically safe, for use in zone 1	–
[17]	VACN-N- ... -Ex4-M Solenoid coil	Type of ignition protection m = encapsulated, for use in zone 1	–
[18]	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)	–
[19]	MC-LD Illuminating seal	Illuminating seal for indicating the switching status	68
[20]	KMC Connecting cable	–	kmc
[21]	MSSD-C Plug socket	Electrical plug pattern to DIN°EN 175301-803, type A	67
[22]	VABS-S7-S-G14 Connection set	Sub-base for attaching the valve to a NAMUR rib	57
[23]	VAME-S7-Y Mounting bracket	Alternative (instead of screw) for mounting the valve on a NAMUR rib using a mounting bracket	64
[24]	VABS-B14-T-F ... 14 Connector plate	With the sub-base the NAMUR valve can be used as an inline valve with G1/4" and NPT 1/4" thread.	57
[25]	VABF-B14-F1B1P2-FF14 Throttle plate (double-acting)	Flow control for double-acting quarter turn actuators.	58
[26]	VABF-B14-F1B1P1-FF14 Throttle plate (single-acting)	Flow control for single-acting quarter turn actuators.	58
[27]	VABF-B14-M3-...14 Exhaust plate	Exhausting a quarter turn actuator with NAMUR connection via a valve terminal or a normal inline valve G1/4 or 1/4 NPT.	59
[28]	VABS-B14-90-FF14 Mounting plate	NAMUR connection can be turned 90°. It is also possible to mount a 1/4" NAMUR valve on a 1/2" actuator.	60
[29]	VABS-B14-180-FF14 Mounting plate	NAMUR connection can be turned 180°. It is also possible to mount a 1/4" NAMUR valve on a 1/2" actuator.	61
[30]	VABS-B14-270-FF14 Mounting plate	NAMUR connection can be turned 270°. It is also possible to mount a 1/4" NAMUR valve on a 1/2" actuator.	62
[31]	VABA-B14-FL12-FL14 Mounting plate	Mounting plate with NAMUR connection 1/2 and 1/4	63

Key features, product range overview VSNC-...-P2

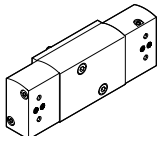
VSNC-F ... -P2



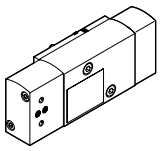
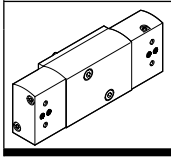
- Design: Piston spool
- Material of valve cap: Aluminium/metal
- Material of armature: Stainless steel
- Pilot air (via NAMUR connection, pilot control), protected

Design	Type	Pneumatic connection 1, 3, 5	Pneumatic connection 2, 4, based on standard	Standard nominal flow rate [l/min]	→ Page
5/3-way valve ...-P2					
	VSNC-F-P53C-M-G14-P2	G 1/4	VDI/VDE 3845 NAMUR	1250	47
	VSNC-F-P53U-M-G14-P2			950	
	VSNC-F-P53E-M-G14-P2			1050	
	VSNC-F-P53C-M-N14-P2	1/4 NPT		1250	
	VSNC-F-P53U-M-N14-P2			950	
	VSNC-F-P53E-M-N14-P2			1050	

VSNC-FT ... -P2



- Design: Poppet seat
- Material of valve cap: Aluminium/metal
- Material of armature: Stainless steel
- Pilot air (via NAMUR connection, pilot control), protected

Design	Type	Pneumatic connection 1, 3, 5	Pneumatic connection 2, 4, based on standard	Standard nominal flow rate [l/min]	→ Page
3/2-way or 5/2-way valve ...-FN, convertible, single solenoid					
	VSNC-FTC-M52-M-G14-P2	G 1/4	VDI/VDE 3845 NAMUR	800	49
	VSNC-FTC-M52-M-N14-P2	1/4 NPT			
5/2-way valve ...-FN, double solenoid					
	VSNC-FT-B52-G14-P2	G 1/4	VDI/VDE 3845 NAMUR	1000	53
	VSNC-FT-B52-N14-P2	1/4 NPT			

Key features, product range overview VSNC-...-P2

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/...**

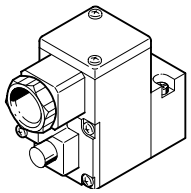
Part no.	Type
8026033	VSNC

Pilot valve	MGXDH-3/2-1.2-110AC-EX	MGXDH-3/2-1.2-230AC-EX	MGXDH-3/2-1.2-24DC-EX	MGXIAH-3/2-0.8-24DC-EX
Valve function	3/2-way, closed, single solenoid			
Actuation type	Electrical			
Type of mounting	CNOMO			
Manual override	Detenting			
Operating pressure	–0.9 ... 8 bar			
Design	On/off valve			
Reset method	Mechanical spring			
CE marking (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)			
	To EU Low Voltage Directive		–	
ATEX category gas	II 2G		II 2G	II 1G
ATEX category for dust	II 2D		II 2D	II 1D
Type of ignition protection for gas	Ex db IIC T4 Gb		Ex db IIC T5 Gb	Ex ia IIC T6...T5 Ga
Type of ignition protection for dust	Ex tb IIIC T135°C Db		Ex tb IIIC T100°C Db	Ex ia IIIB T135°C Da
Explosion-proof ambient temperature	-65°C <= Ta <= +40°C		-65°C <= Ta <= +55°C	-40°C <= Ta <= +65°C
Degree of protection	IP66		IP66	IP65
Characteristic coil data	110°V°AC: 50/60°Hz,	230°V°AC: 50/60°Hz,	24°V°DC: 3°W	24°V°DC: 1.5°W
Pick-up power	7.7 VA,	10 VA,	–	–
Holding power	3.8 VA	6 VA	–	–

Pilot valve MGXDH-...-EX

- Category II 2G II 2D
- Ignition protection type Ex
- IEC Ex certification
- ATEX certification

Pilot valve MGXIAH-...-EX



- Category II 1G II 1D
- Ignition protection type Ex
- IEC Ex certification
- ATEX certification

Type codes

001	Series	
VSNC	Solenoid valve	

002	Directional control valve type	
F	Flanged valve	

003	Design principle	
	Piston spool	
K	Piston spool with sealing ring	
T	Poppet valve	

004	Additional function	
	None	
C	Convertible valve function	
AC		

005	Valve function	
B52	5/2-way valve, double solenoid/bistable	
M52	5/2-way valve, single solenoid/monostable	
P53U	5/3-way valve, mid-position pressurised	
P53E	5/3-way valve, mid-position exhausted|	
P53C	5/3-way valve, mid-position closed	

006	Reset method for monostable/single solenoid valves	
	None	
M	Mechanical spring	
R	Mixed, pneumatic/mechanical spring	

007	Manual override	
	None	
D	Non-detenting, detenting	
H	Non-detenting	
S	Covered	

008	Pneumatic connection	
G14	G1/4	
G18	G1/8	
N14	1/4 NPT	
Q6	Push-in connector 6 mm	
Q8	Push-in connector 8 mm	
Q10	Push-in connector 10 mm	
T14	Push-in connector 1/4”	
T38	Push-in connector 3/8”	
T516	Push-in connector 5/16”	

009	Exhaust	
	No fitting	
QN	With fitting	
U1	Silencer with metallic housing	
U3	Silencer with polymer housing	

010	Valve pilot control interface	
	Standard	
F8	With armature tube 8 mm, long	
F19	Electric with armature tube for solenoid coil, 13 mm	
F19A	Electric with armature tube for solenoid coil 13 mm, intrinsically safe	
FN	With armature tube 9 mm	
P2	Interface for pilot valve size 30 mm to ISO 15218 (CNOMO)	

011	Power consumption	
	None	
11	1.1 W	
18	1.8 W	

012	Nominal operating voltage	
	None	
1	24 V DC	
1A	24 V AC/50-60 Hz	
1U	24 V DC and AC	
2U	110 V DC and AC	
3A	230 V AC/50-60 Hz	
3U	230 V DC and AC	
3W	230 V AC/240 V AC/50-60 Hz	
5	12 V DC	
7	48 V DC	
7A	48 V AC/50-60 Hz	
16B	120 V AC/60 Hz and 110V AC/50-60 Hz	
27U	60 V DC and AC	

013	Electrical connection	
	None	
A1	Connection pattern type A, to EN 175 301	
B2	Connection pattern type B, industry standard	
C1	Connection pattern type C, to EN 175 301	
C3	Cable, 3 m	
K4	Cable connector metric	
K11	Cable with insulating conduit connection	

014	Degree of protection, electrical system	
	Standard	
S8	IP67	
S11		

015	Circuitry	
	None	
F	Fuse	

016	EU certification	
	None	
EX2	II 3GD	
EX4	II 2GD	

017	Certification	
	None	
U4	Class1 Div1 to NEC 500	

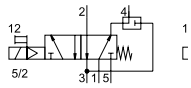
018	Type of ignition protection	
	None	
A	Intrinsically safe	
D	Flameproof encapsulation	
M	Encapsulation	
ME	Encapsulation, enhanced security	
N	Non-sparking	

019	Electrical valve accessories	
	None	
G	Connector socket, without LED	

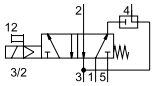
020	Version	
	Expanded properties	
S	Focused properties	

Data sheet – 3/2-way or 5/2-way valve ...-F8, convertible, single solenoid

Function[1)]
5/2-way valve



3/2-way valve
with exhaust return

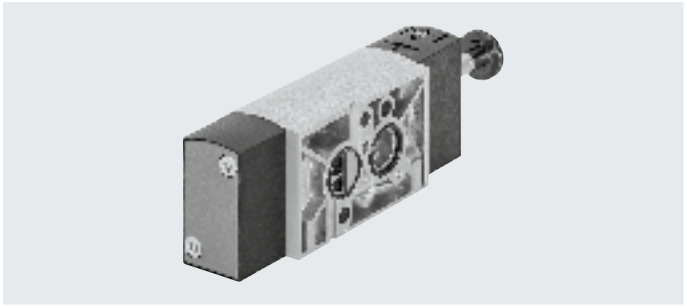


1) Can be changed by exchanging the sealing plate

Voltage
24 V DC

Operating pressure
2.5 ... 10 bar

Temperature range
–20 ... +60°C



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		
Actuation type			Electrical		
Reset method			Mechanical spring		
Type of control			Piloted		
Manual override			Detenting, non-detenting		
Exhaust air function			Can be throttled		
Port for venting hole			Not ducted		
Pilot air supply			Internal		
Type of mounting			With through-hole		
Mounting position			Any		
Max. tightening torque for valve mounting		[Nm]	3.5		–
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		G 1/4, 1/4 NPT	G 1/4	G 1/4
	2, 4		NAMUR port pattern		
Conforms to standard			VDI/VDE 3845 NAMUR		
Certificate issuing authority			DNVGL-TAA000011J		
Product weight		[g]	335	390	335

Data sheet – 3/2-way or 5/2-way valve ...-F8, 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 the 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[1)]		2		
Certification		–		c UL us - Recognized (OL)
Maritime classification[2)]		See certificate		–

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

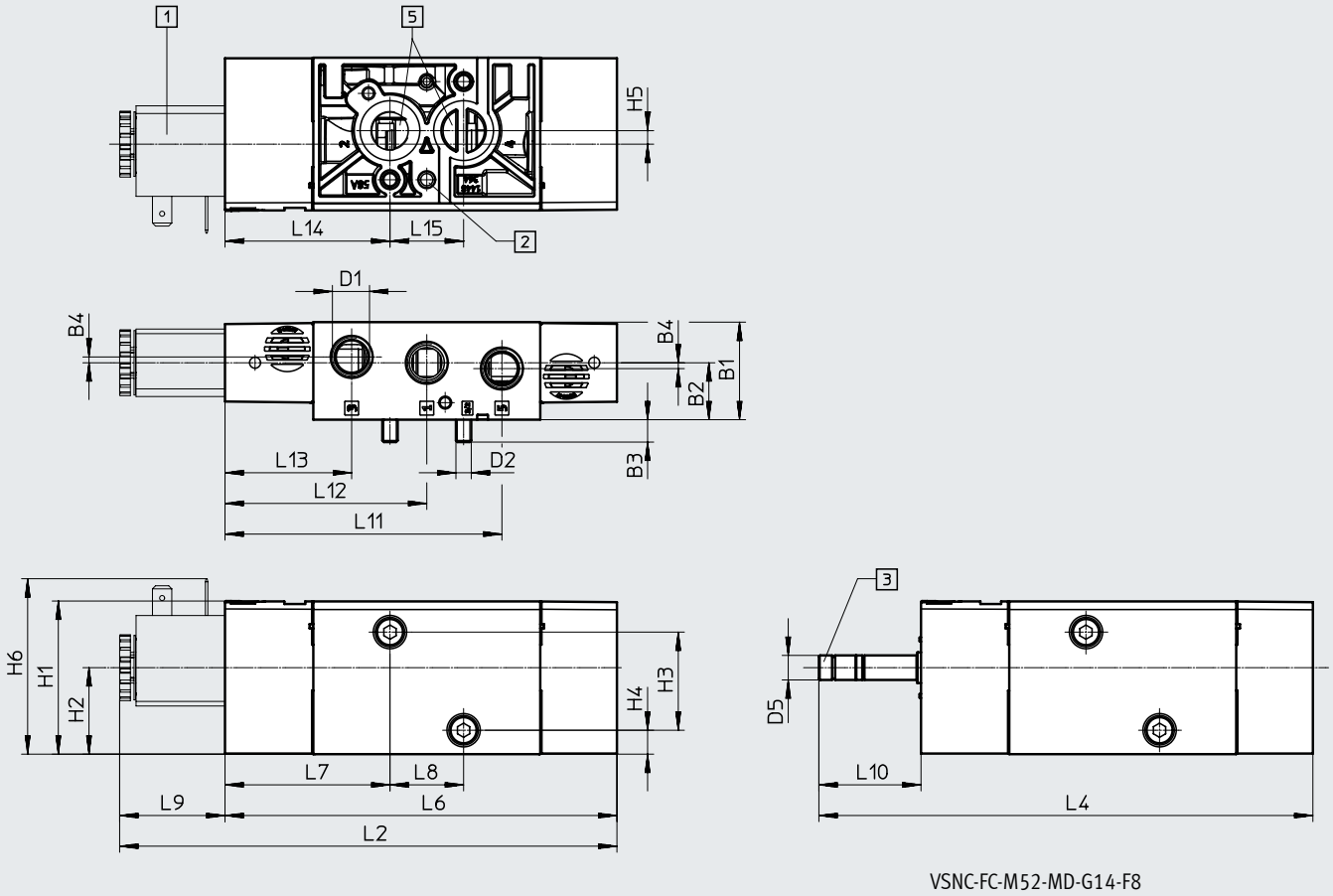
2) Additional information is available at www.festo.com/sp → Certificates.

Electrical data				
		VSNC-FC- ... -G14-F8 VSNC-FC- ... -N14-F8	VSNC-FC- ... -G14-F8-1B2	VSNC-FC- ... -G14-F8-1A1
Electrical connection		–	3-pin plug, type B to industry standard (11 mm)	To EN 175301-803, type A
Characteristic coil data, 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 plug socket
Switching time on	[ms]	11	11	11
Switching time off	[ms]	38	48	48

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

Data sheet – 3/2-way or 5/2-way valve ...-F8, convertible, single solenoid

Dimensions Download CAD data ➔ www.festo.com



VSNC-FC-M52-MD-G14-F8

[1] Solenoid coil

[2] ø 5.5x4 (for threaded pin to DIN 913-M5x10-45H)

[3] Suction of auxiliary pilot air 82, M5

[5] Working port 2 and 4, NAMUR port pattern

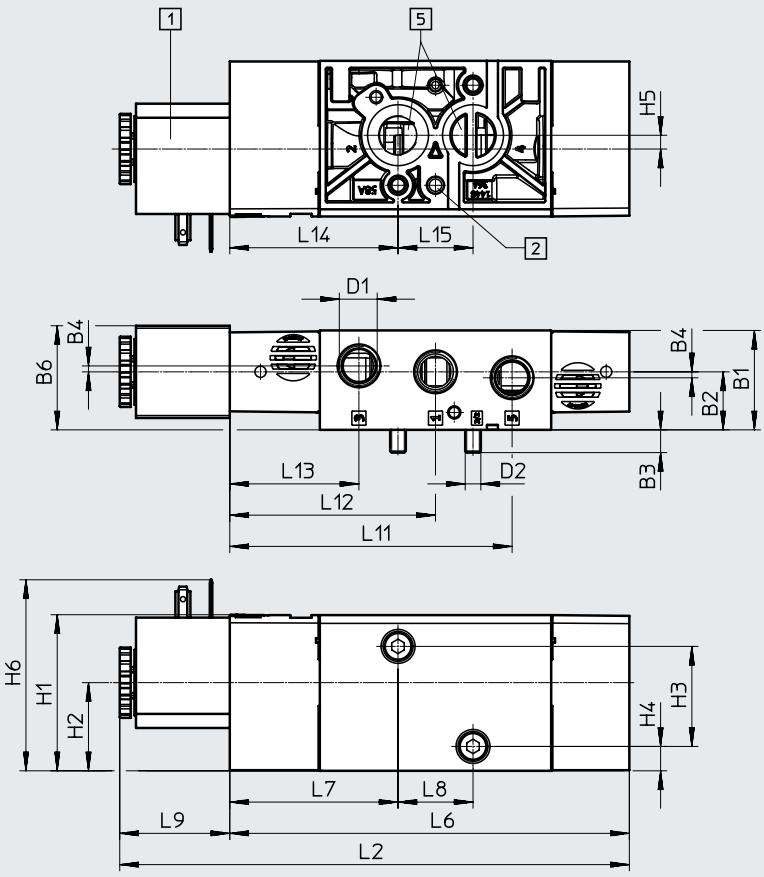
Type	B1	B2	B3	B4	D1	D2	H1	H2	H3	H4	H5	H6
VSNC-FC-M52-MD-G14-F8	31.8	18.6	7.3	1.9	G 1/4	M5	49.9	28.2	32	7.8	4.4	–
VSNC-FC-M52-MD-N14-F8					1/4 NPT							
VSNC-FC-M52-MD-G14-F8-1B2					G 1/4							57.2

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												

Data sheet – 3/2-way or 5/2-way valve ...-F8, convertible, single solenoid

Dimensions Download CAD data ➔ www.festo.com

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



[1] Solenoid coil

[2] ø 5x4 to DIN 913-M5x10-45h

[5] Working port 2 and 4, NAMUR port pattern

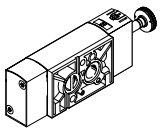
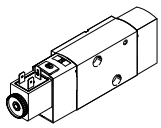
Type	B1	B2	B3	B4	B6	D1	D2	H1	H2	H3	H4	H5
VSNC-FC-M52-MD-G14-F8-1A1	31.8	18.6	7.3	1.9	33.3	G 1/4	M5	49.9	28.2	32	7.8	4.4

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

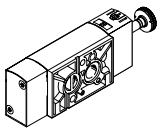
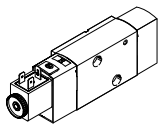
Data sheet – 3/2-way or 5/2-way valve ...-F8, convertible, single solenoid

★ Core product range

Ordering data – Valves

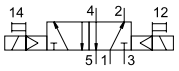
Directional control valve without solenoid coil			Directional control valve with 24 V DC solenoid coil, without socket		
	Part no.	Type		Part no.	Type
	★ 577257	VSNC-FC-M52-MD-G14-F8		★ 577295	VSNC-FC-M52-MD-G14-F8-1B2

Ordering data – Valves

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

Data sheet – 5/2-way valve ...-F8, double solenoid

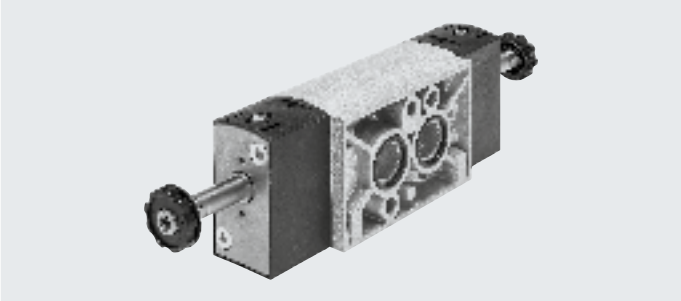
Function
5/2-way valve



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-N14-F8	VSNC-F-B52-D-G14-F8-1B2
Valve function			5/2-way, double solenoid	
Width		[mm]	32	
Nominal width DN		[mm]	7.2	
Design			Piston spool	
Sealing principle			Soft	
Actuation type			Electrical	
Reset method			–	
Type of control			Piloted	
Manual override			Detenting, non-detenting	
Type of mounting			With through-hole	
Mounting position			Any	
Max. tightening torque for 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		G 1/4, 1/4 NPT	
	2, 4		NAMUR port pattern	
Conforms to standard			VDI/VDE 3845 (NAMUR)	
Certificate issuing authority			DNVGL-TAA000011J	
Product weight		[g]	345	455

Data sheet – 5/2-way valve ...-F8, 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 the 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[1)]		2	
Maritime classification[2)]		See certificate	

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

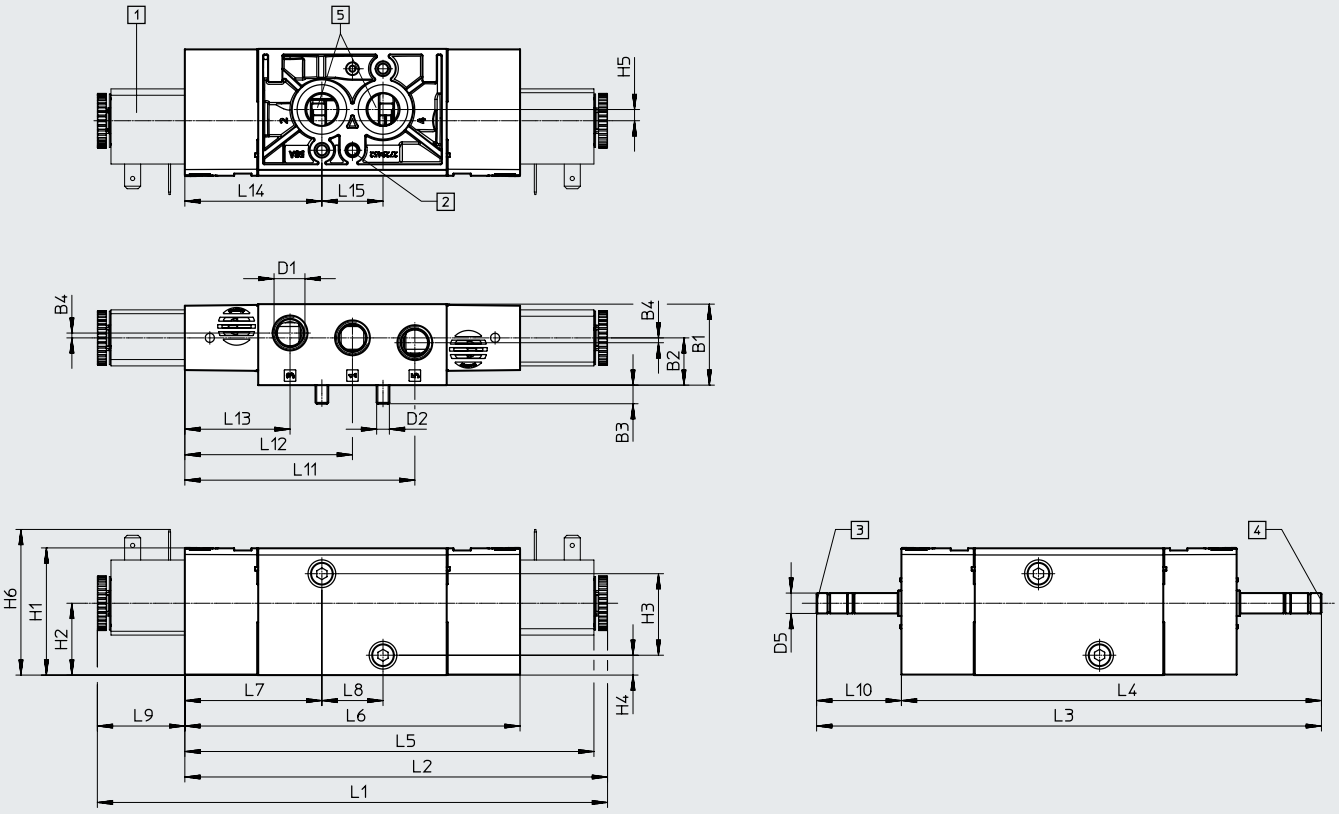
2) Additional information is available at www.festo.com/sp → Certificates.

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 plug, to industry standard (11 mm), type B
Characteristic coil data, 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

Data sheet – 5/2-way valve ...-F8, double solenoid

Dimensions Download CAD data ➔ www.festo.com



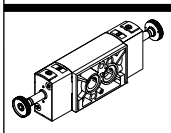
[1] Solenoid coil
[2] ø 5.5x4 (for threaded pin to DIN 913-M5x10-45H)
[3] Suction of auxiliary pilot air 82, M5
[4] Suction of auxiliary pilot air 84, M5
[5] Working port 2 and 4, NAMUR port pattern

Type	B1	B2	B3	B4	D1	D2	H1	H2	H3	H4	H5	H6	L1
VSNC-F-B52-D-G14-F8	31.8	18.6	7.3	1.9	G 1/4	M5	49.9	28.2	32	7.8	4.4	–	–
VSNC-F-B52-D-N14-F8					1/4 NPT								
VSNC-F-B52-D-G14-F8-1B2					G 1/4							57.2	200.3

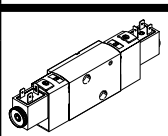
Type	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15
VSNC-F-B52-D-G14-F8	–	198.2	164.9	–	131.6	53.8	24	–	33.3	90.3	65.8	41.3	53.8	24
VSNC-F-B52-D-N14-F8														
VSNC-F-B52-D-G14-F8-1B2	166			160.6				34.4						

Ordering data – Valves

Directional control valve without solenoid coil

	Part no.	Type
	**577258**	**VSNC-F-B52-D-G14-F8**
	577263	**VSNC-F-B52-D-N14-F8**

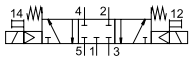
Directional control valve with solenoid coil

	Part no.	Type
	**577296**	**VSNC-F-B52-D-G14-F8-1B2**

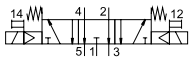
Data sheet – 5/3-way valve ...-F8

Function

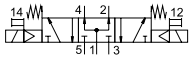
5/3-way valve, closed



5/3-way valve, exhausted

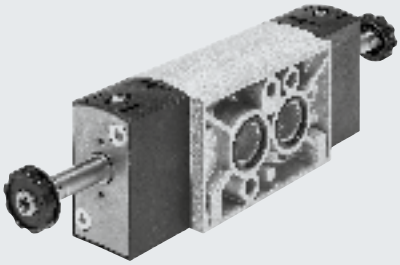


5/3-way valve, pressurised



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 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		
Actuation type			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 for 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		G 1/4, 1/4 NPT		
	2, 4		NAMUR port pattern		
Conforms to standard			VDI/VDE 3845 (NAMUR)		
Certificate issuing authority			DNVGL-TAA000011J		
Product weight		[g]	345		

Data sheet – 5/3-way valve ...-F8

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 the 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[1)]		2		
Maritime classification[2)]		See certificate		

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

2) Additional information is available at www.festo.com/sp → Certificates.

Electrical data

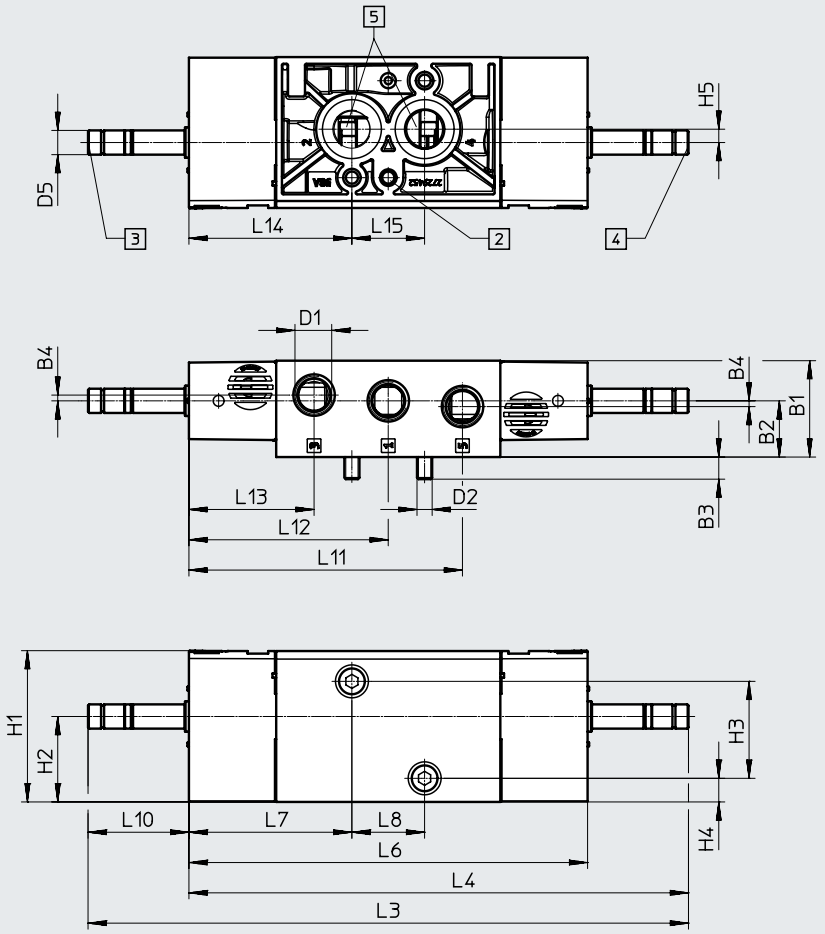
		VSNC-F-P53C-MD-G14-F8 VSNC-F-P53C-MD-N14-F8	VSNC-F-P53E-MD-G14-F8 VSNC-F-P53E-MD-N14-F8	VSNC-F-P53U-MD-G14-F8 VSNC-F-P53U-MD-N14-F8
Characteristic coil data		See solenoid coil, to be ordered separately		
Switching time on	[ms]	13	14	14
Switching time off	[ms]	42	48	48
Switching time changeover	[ms]	26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

Materials

[1]	Housing	Wrought aluminium alloy
[2]	Seals	NBR
	–	RoHS-compliant

Data sheet – 5/3-way valve ...-F8

Dimensions Download CAD data ➔ www.festo.com



[2] ø 5.5x4 (for threaded pin to DIN 913-M5x10-45H)

[3] Suction of auxiliary pilot air 82, M5

[4] Suction of auxiliary pilot air 84, M5

[5] Working port 2 and 4, NAMUR port pattern

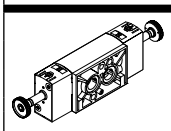
Type	B1	B2	B3	B4	D1	D2	H1	H2	H3	H4	H5
VSNC-F-P53C-MD-G14-F8	31.8	18.6	7.3	1.9	G 1/4	M5	49.9	28.2	32	7.8	4.4
VSNC-F-P53U-MD-G14-F8											
VSNC-F-P53E-MD-G14-F8											
VSNC-F-P53C-MD-N14-F8					1/4 NPT						
VSNC-F-P53U-MD-N14-F8											
VSNC-F-P53E-MD-N14-F8											

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											

Data sheet – 5/3-way valve ...-F8

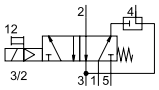
Ordering data – Valves

Directional control valve without solenoid coil

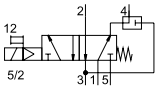
	Part no.	Type
	**577259**	**VSNC-F-P53C-MD-G14-F8**
	577260	**VSNC-F-P53U-MD-G14-F8**
	577261	**VSNC-F-P53E-MD-G14-F8**
	577264	**VSNC-F-P53C-MD-N14-F8**
	577265	**VSNC-F-P53U-MD-N14-F8**
	577266	**VSNC-F-P53E-MD-N14-F8**

Data sheet – 3/2-way or 5/2-way valve VSNC-F...-FN, convertible, single solenoid

Function convertible
3/2-way valve or



5/2-way valve



Operating pressure
2.5 ... 8 bar

Temperature range
–20 ... +60°C

General technical data					
			VSNC- ... -G14-FN VSNC- ... -MD-N14-FN	VSNC- ... -G14-FN-1A1-EX4-A VSNC- ... -N14-FN-1A1-EX4-A	VSNC- ... -G14-FN-1A1+G VSNC- ... -G14-FN-3AA1+G
Valve function			3/2-way or 5/2-way, convertible		
Width		[mm]	32		
Design			Piston spool		
Sealing principle			Soft		
Actuation type			Electrical		
Reset method			Mechanical spring		
Type of control			Piloted		
Pilot air supply			Internal		
Exhaust air function			Can be throttled		
Manual override			Detenting, non-detenting		
Type of mounting			With through-hole		
Port 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		G 1/4, 1/4 NPT		G 1/4
	2, 4		NAMUR port pattern		
Conforms to standard			VDI/VDE 3845 (NAMUR)		
Certificate issuing authority			DNVGL-TAA000011J		
Product weight		[g]	415		

Operating and environmental conditions					
			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
Operating medium			Compressed air to ISO 8573-1:2010 [7:4:4]		
Note on the 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[1]			2		
Maritime classification[2]			See certificate		

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

2) Additional information is available at www.festo.com/sp → Certificates.

Data sheet – 3/2-way or 5/2-way valve VSNC-F...-FN, convertible, single solenoid

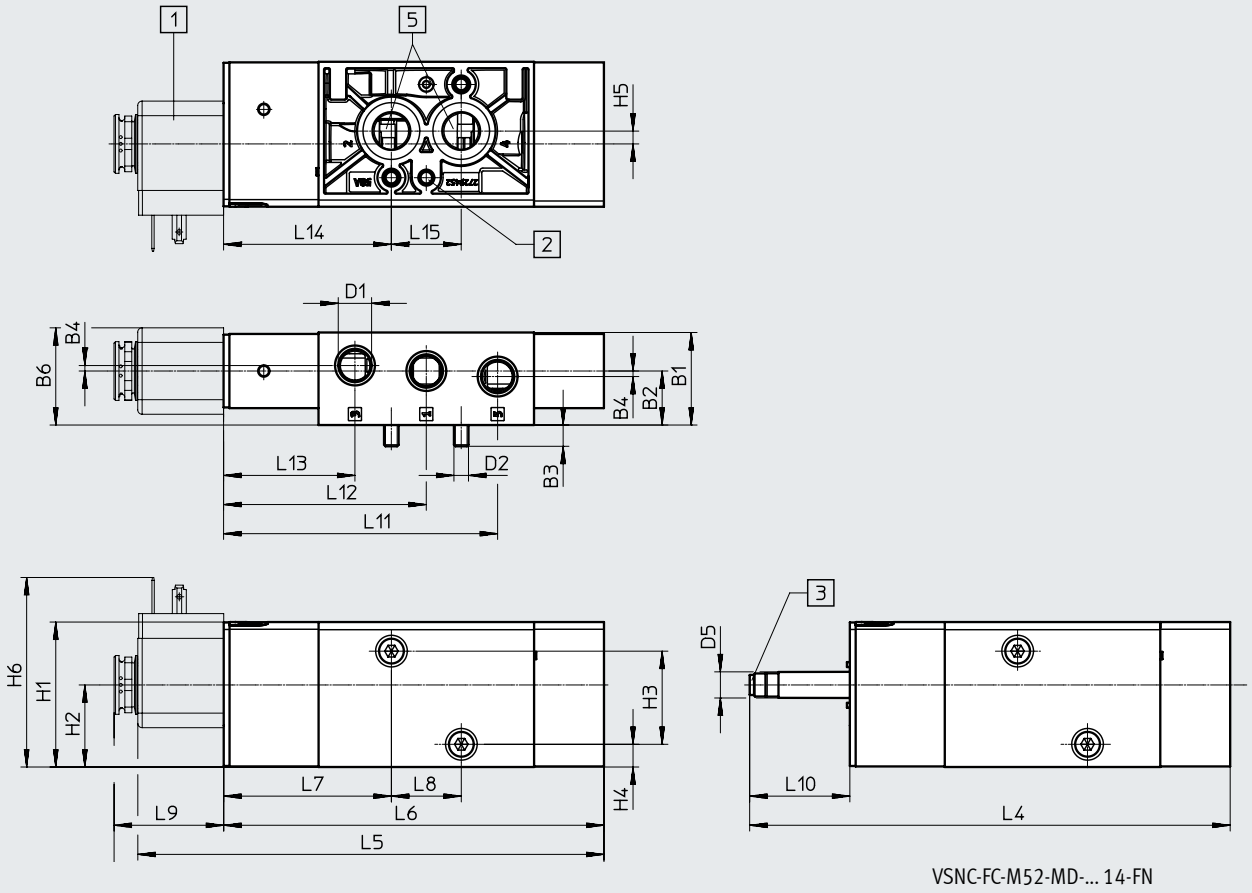
ATEX				
		VSNC- ... -G14-FN VSNC- ... -N14-FN	VSNC- ... -G14-FN-1A1-EX4-A VSNC- ... -N14-FN-1A1-EX4-A	VSNC- ... -G14-FN-1A1+G VSNC- ... -G14-FN-3AA1+G
ATEX category gas		–	II 2G	–
Type of ignition protection for gas		–	Ex ia IIC T6 Ga	–
ATEX category for dust		–	II 2D	–
Type of ignition protection for dust		–	Ex t IIIC T80°C Db	–
Explosion protection certification outside the EU		–	EPL Db (IEC Ex)	–
		–	EPL Ga (IEC Ex)	–
Explosion-proof ambient temperature	[°C]	–	-40°C <= Ta <= +50°C	–
Degree of protection		–	IP65	IP65
		–	IP67	IP67
		–	–	To IEC 60529, with plug socket
CE marking (see declaration of conformity)		To 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
Characteristic coil data, 24 V DC	[W]	See solenoid coil, to be ordered separately	–	0.7
Characteristic coil data, 230 V AC, 50/60 Hz				
Pick-up power	[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		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
[1]	Housing	Wrought aluminium alloy		
[2]	Seals	NBR		
[3]	Screws	High-alloy stainless steel		
	–	RoHS-compliant		

Data sheet – 3/2-way or 5/2-way valve VSNC-F...-FN, convertible, single solenoid

Dimensions Download CAD data ➔ www.festo.com



VSNC-FC-M52-MD-... 14-FN

[1] Solenoid coil

[2] ⌀ 5x4 to DIN 913-M5x10-45h

[3] Suction of auxiliary pilot air 82, M5

[5] Working port 2 and 4, NAMUR port pattern

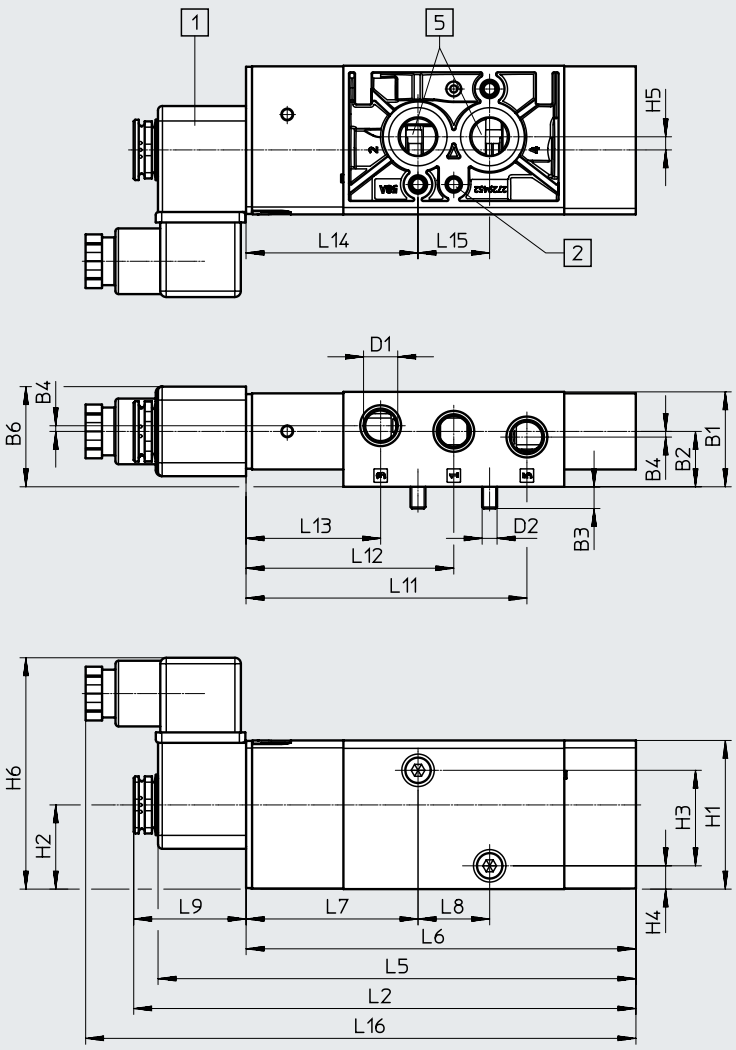
Type	B1	B2	B3	B4	B6	D1	D2	D5 ⌀	H1	H2	H3	H4	H5	H6
VSNC-FC-M52-MD-G14-FN	31.8	18.6	7.3	1.9	33.4	G 1/4	M5	9	49.8	28.2	32	7.8	4.4	–
VSNC-FC-M52-MD-G14-FN-1A1-Ex4-A														65.1
VSNC-FC-M52-MD-N14-FN						1/4 NPT								–
VSNC-FC-M52-MD-N14-FN-1A1-Ex4-A														65.1

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						

Data sheet – 3/2-way or 5/2-way valve VSNC-F...-FN, convertible, single solenoid

Dimensions Download CAD data ➔ www.festo.com

VSNC-... -G14-FN- ... +G



[1] Connector socket M16

[2] ø 5x4 to DIN 913-M5x10-45h

[5] Working port 2 and 4, NAMUR port pattern

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	G 1/4	M5	49.8	28.2	32	7.8	4.4	77.5

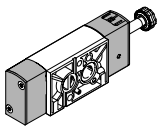
Type	L2	L5	L6	L7	L8	L9	L11	L12	L13	L14	L15	L16
VSNC-FC-M52-MD-G14-FN- ... +G	168.3	160.1	130.6	57.6	24	37.7	94.1	69.6	45.1	57.6	24	184.4

Data sheet – 3/2-way or 5/2-way valve VSNC-F...-FN, convertible, single solenoid

★ Core product range

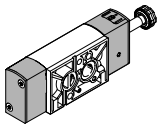
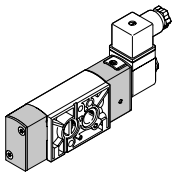
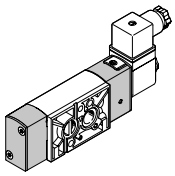
Ordering data – Valves

Directional control valve without solenoid coil

	Part no.	Type
	★ 577267	VSNC-FC-M52-MD-G14-FN

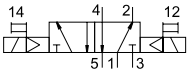
Ordering data – Valves

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

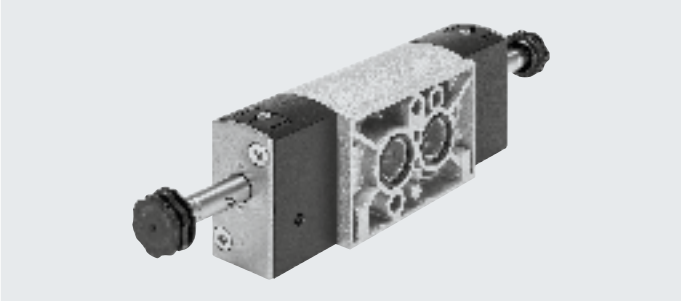
Data sheet – 5/2-way valve VSNC-F...-FN, double solenoid

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	
Actuation type			Electrical	
Type of control			Piloted	
Pilot air supply			Internal	
Exhaust air function			Can be throttled	
Manual override			Non-detenting, detenting	
Type of mounting			With through-hole	
Port 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		G 1/4, 1/4 NPT	
	2, 4		NAMUR port pattern	
Conforms to standard			VDI/VDE 3845 (NAMUR)	
Certificate issuing authority			DNVGL-TAA000011J	
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 the 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[1)]			2	
Maritime classification[2)]			See certificate	

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.
2) Additional information is available at www.festo.com/sp ➔ Certificates.

Data sheet – 5/2-way valve VSNC-F...-FN, double solenoid

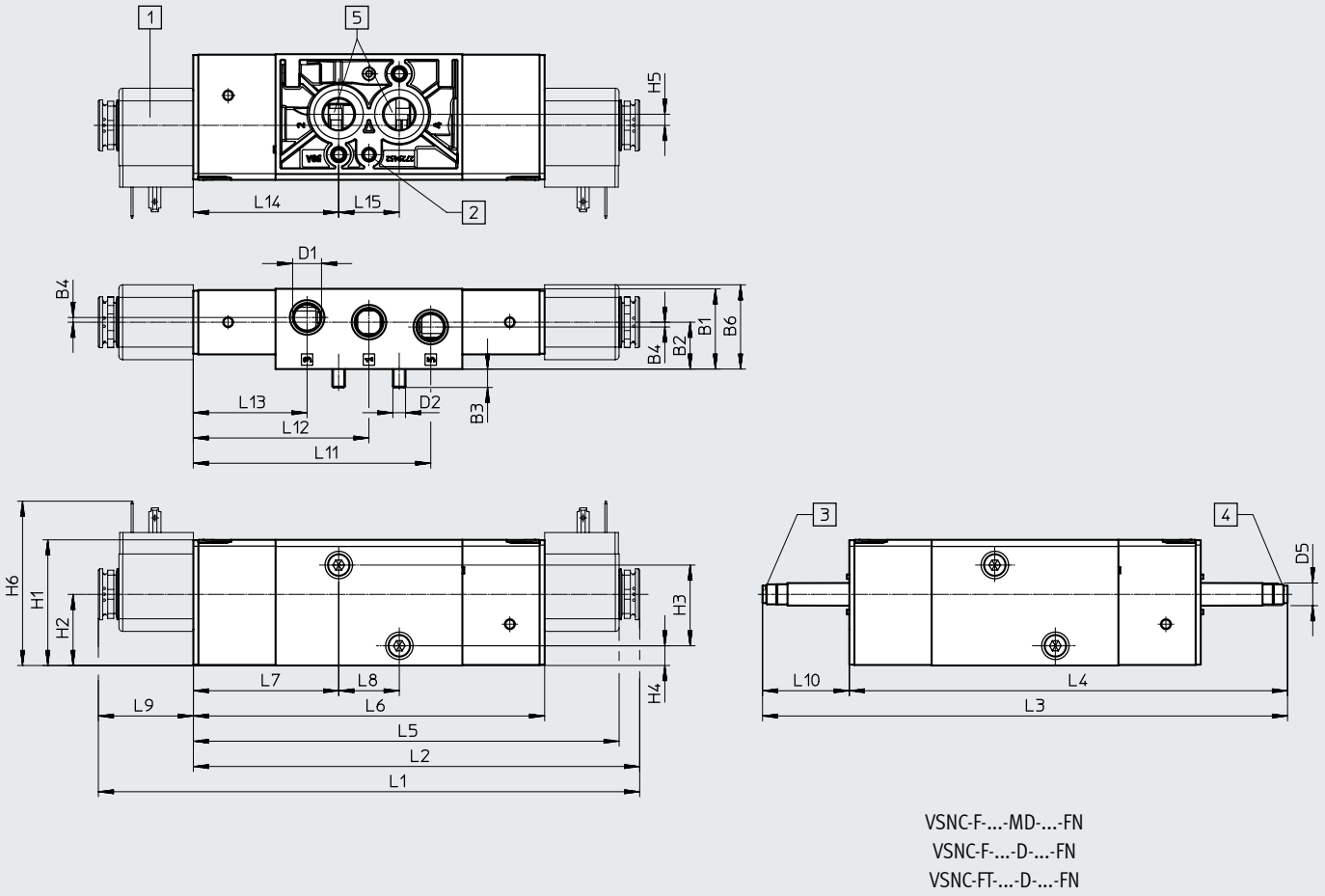
ATEX			
		VSNC-F-B52-D-G14-FN VSNC-F-B52-D-N14-FN	VSNC-F-B52-D-G14-FN-1A1-Ex4-A VSNC-F-B52-D-N14-FN-1A1-Ex4-A
ATEX category gas		–	II 2G
Type of ignition protection for gas		–	Ex ia IIC T6 Ga
ATEX category for dust		–	II 2D
Type of ignition protection for dust		–	Ex t IIIC T80°C Db
Explosion protection certification outside the EU		–	EPL Db (IEC Ex)
		–	EPL Ga (IEC Ex)
Explosion-proof ambient temperature	[°C]	–	–40°C <= Ta <= +50°C
Degree of protection		–	IP65
		–	IP67
CE marking (see declaration of conformity)		To 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
Characteristic coil data		See solenoid coil, to be ordered separately	–
Switching time changeover	[ms]	20	
Permissible voltage fluctuations	[%]	–	± 10

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

Data sheet – 5/2-way valve VSNC-F...-FN, double solenoid

Dimensions Download CAD data ➔ www.festo.com



VSNC-F-...-MD-...-FN
VSNC-F-...-D-...-FN
VSNC-FT-...-D-...-FN

[1] Solenoid coil
[2] ø 5x4 to DIN 913-M5x10-45h
[3] Suction of auxiliary pilot air 82, M5
[4] Suction of auxiliary pilot air 82, M5
[5] Working port 2 and 4, NAMUR port pattern

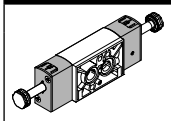
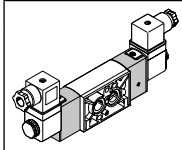
Type	B1	B2	B3	B4	B6	D1	D2	D5 ø	H1	H2	H3	H4	H5	H6	L1
VSNC-F-B52-D-G14-FN	31.8	18.6	7.3	1.9	33.4	G 1/4	M5	9	49.8	28.2	32	7.8	4.4	–	–
VSNC-F-B52-D-G14-FN-1A1-Ex4-A														65.1	214.5
VSNC-F-B52-D-N14-FN						1/4 NPT								–	–
VSNC-F-B52-D-N14-FN-1A1-Ex4-A														65.1	214.5

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						

Data sheet – 5/2-way valve VSNC-F...-FN, double solenoid

Ordering data – Valves

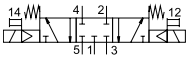
Directional control valve without solenoid coil

	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**

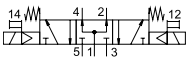
Data sheet – 5/3-way valve VSNC-F...-FN

Function

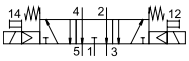
5/3-way valve, closed



5/3-way valve, exhausted

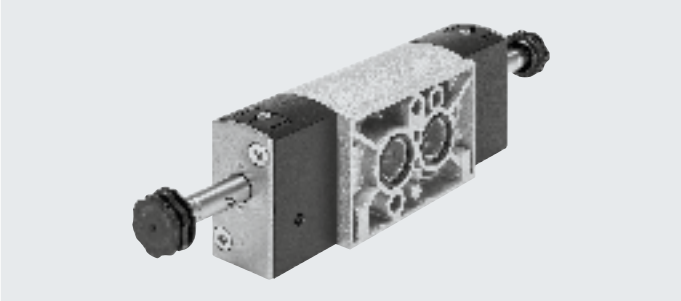


5/3-way valve, pressurised



Operating pressure
3 ... 8 bar

Temperature range
–20 ... +60°C



General technical data

			VSNC-F-P53C-MD-G14-FN VSNC-F-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
Valve function			5/3		
			Closed	Pressurised	Exhausted
Width		[mm]	32		
Design			Piston spool		
Sealing principle			Soft		
Actuation type			Electrical		
Reset method			Mechanical spring		
Type of control			Piloted		
Pilot air supply			Internal		
Exhaust air function			Can be throttled		
Manual override			Non-detenting, detenting		
Type of mounting			With through-hole		
Port 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		G 1/4, 1/4 NPT		
	2, 4		NAMUR port pattern		
Conforms to standard			VDI/VDE 3845 (NAMUR)		
Certificate issuing authority			DNVGL-TAA000011J		
Product weight		[g]	461		

Data sheet – 5/3-way valve VSNC-F...-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 the 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[1)]		2		
Maritime classification[2)]		See certificate		

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

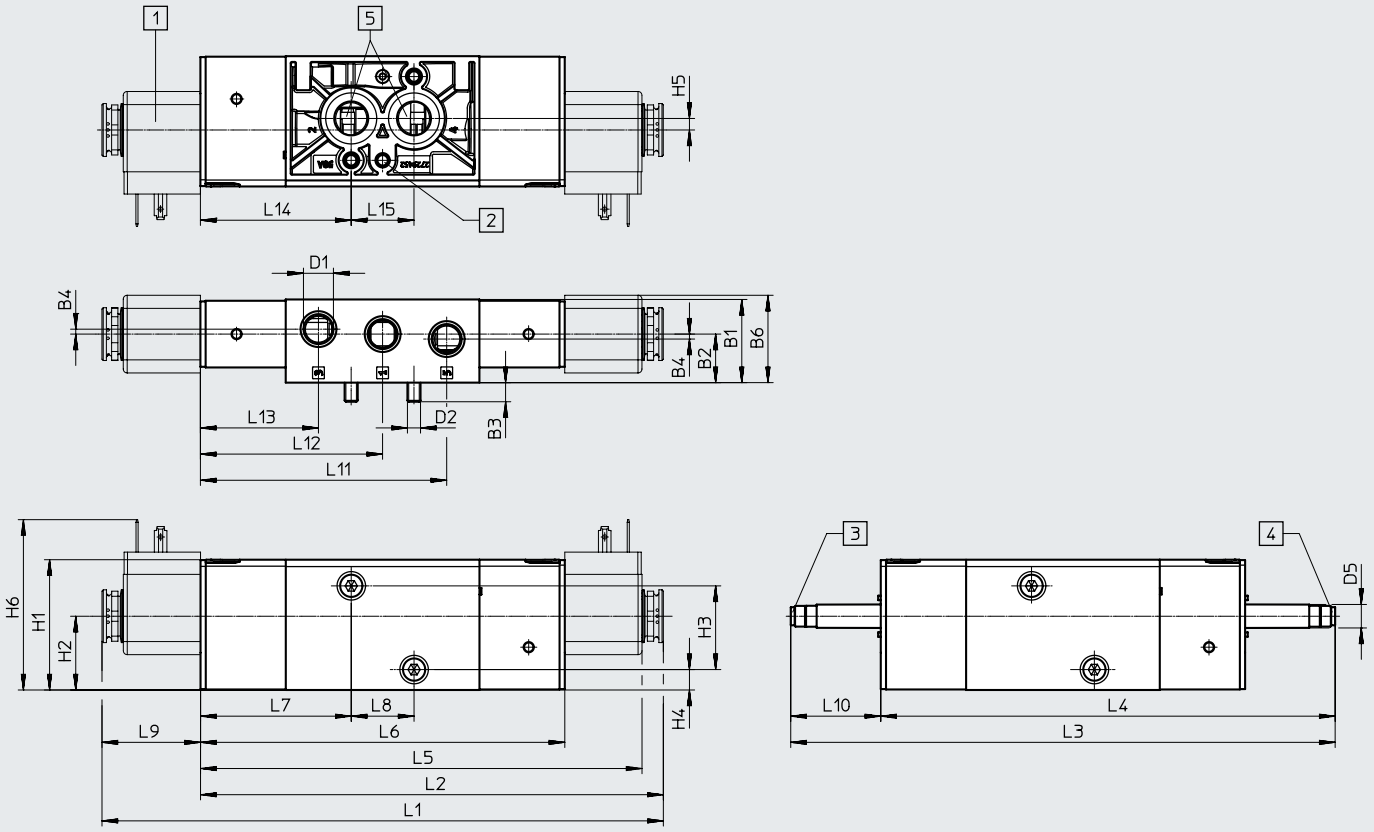
2) Additional information is available at www.festo.com/sp → Certificates.

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
Characteristic coil data		See solenoid coil, to be ordered separately		
Switching time on	[ms]	23		
Switching time off	[ms]	103		
Switching time changeover	[ms]	55		

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

Data sheet – 5/3-way valve VSNC-F...-FN

Dimensions Download CAD data ➔ www.festo.com



VSNC-F-...-MD-...-FN
VSNC-F-...-D-...-FN
VSNC-FT-...-D-...-FN

[1] Solenoid coil
[2] Ø 5x4 to DIN 913-M5x10-45h
[3] Suction of auxiliary pilot air 82, M5
[4] Suction of auxiliary pilot air 82, M5
[5] Working port 2 and 4, NAMUR port pattern

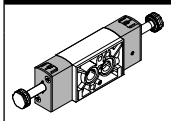
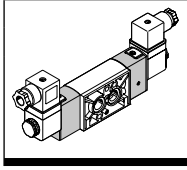
Type	B1	B2	B3	B4	B6	D1	D2	D5 Ø	H1	H2	H3	H4	H5	H6	L1
VSNC-F-P53C-MD-G14-FN	31.8	18.6	7.3	1.9	33.4	G 1/4	M5	9	49.8	28.2	32	7.8	4.4	–	–
VSNC-F-P53U-MD-G14-FN															
VSNC-F-P53E-MD-G14-FN															
VSNC-F-P53C-MD-N14-FN						1/4 NPT									
VSNC-F-P53U-MD-N14-FN															
VSNC-F-P53E-MD-N14-FN															

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														

Data sheet – 5/3-way valve VSNC-F...-FN

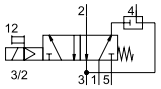
Ordering data – Valves

Directional control valve without solenoid coil

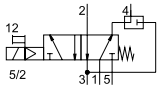
	Part no.	Type
	**577269**	**VSNC-F-P53C-MD-G14-FN**
	577270	**VSNC-F-P53U-MD-G14-FN**
	577271	**VSNC-F-P53E-MD-G14-FN**
Directional control valve with 24 V DC solenoid coil		
	**577274**	**VSNC-F-P53C-MD-N14-FN**
	577275	**VSNC-F-P53U-MD-N14-FN**
	577276	**VSNC-F-P53E-MD-N14-FN**

Data sheet – 3/2-way or 5/2-way valve VSNC-FT...-FN, convertible, single solenoid

Function convertible
3/2-way valve or



5/2-way valve



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	
Actuation type			Electrical	
Reset method			Mechanical spring	
Type of control			Piloted	
Pilot air supply			Internal	
Exhaust air function			Can be throttled	
Manual override			Non-detenting, detenting	
Type of mounting			With through-hole	
Port for venting hole			Not ducted	
Mounting position			Any	
Non-overlapping			No	
Flow direction			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		G1/4	
	2, 4		NAMUR port pattern	
Conforms to standard			VDI/VDE 3845 (NAMUR)	
Certificate issuing authority			DNVGL-TAA000011J	
Degree of protection			–	IP65, IP67
Product weight		[g]	404	440

Data sheet – 3/2-way or 5/2-way valve VSNC-FT...-FN, convertible, single solenoid

Operating and environmental conditions		
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]
Note on the 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[1)]		2
Maritime classification[2)]		See certificate

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

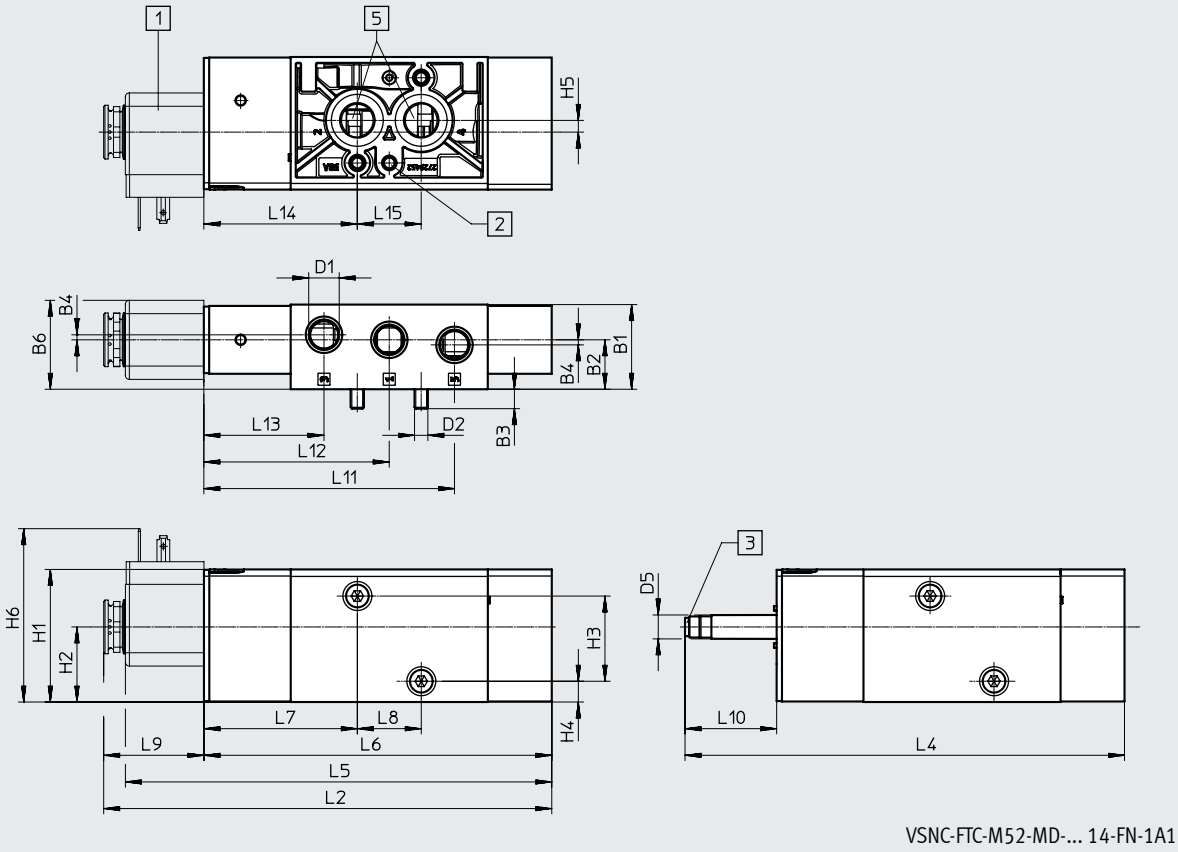
2) Additional information is available at www.festo.com/sp → Certificates.

Electrical data			
		VSNC-FTC-M52-MD-G14-FN VSNC-FTC-M52-MD-N14-FN	VSNC-FTC-M52-MD-G14-FN-1A1
Electrical connection		–	Type A to EN 175301-803
Characteristic coil data, 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

Data sheet – 3/2-way or 5/2-way valve VSNC-FT...-FN, convertible, single solenoid

Dimensions Download CAD data ➔ www.festo.com



VSNC-FTC-M52-MD-... 14-FN-1A1

[1] Solenoid coil

[2] ø 5x4 to DIN 913-M5x10-45h

[3] Suction of auxiliary pilot air 82, M5

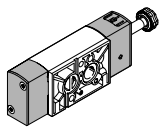
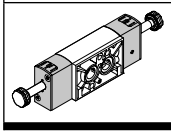
[5] Working port 2 and 4, NAMUR port pattern

Type	B1	B2	B3	B4	B6	D1	D2	D5 ø	H1	H2	H3	H4	H5	H6
VSNC-FTC-M52-MD-G14-FN	31.8	18.6	7.3	1.9	33.4	G 1/4	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						1/4 NPT								

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						

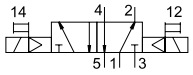
Ordering data – Valves

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**

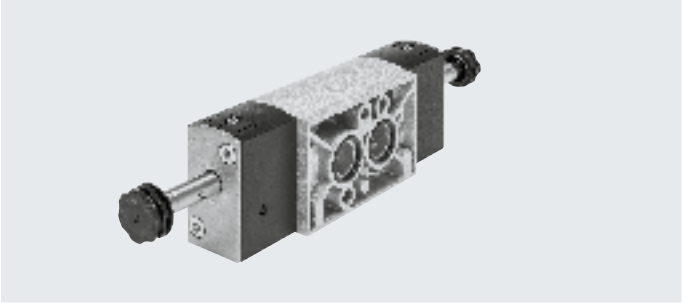
Data sheet – 5/2-way valve VSNC-FT...-FN, double solenoid

Function
5/2-way valve, double solenoid



Operating pressure
1.5 ... 8 bar

Temperature range
–20 ... +60°C



General technical data

			VSNC-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	
Actuation type			Electrical	
Reset method			Mechanical spring	
Type of control			Piloted	
Pilot air supply			Internal	
Exhaust air function			Can be throttled	
Manual override			Non-detenting, detenting	
Type of mounting			With through-hole	
Port for venting hole			Not ducted	
Mounting position			Any	
Non-overlapping			No	
Flow direction			Non-reversible	
Standard nominal flow rate		[l/min]	1000	
b value			0.24	
C value		[l/sbar]	4.6	
Pneumatic connection	1, 3, 5		G 1/4, 1/4 NPT	
	2, 4		NAMUR port pattern	
Conforms to standard			VDI/VDE 3845 (NAMUR)	
Certificate issuing authority			DNVGL-TAA000011J	
Degree of protection			–	IP65, IP67
Product weight		[g]	519	670

Data sheet – 5/2-way valve VSNC-FT...-FN, double solenoid

Operating and environmental conditions		
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]
Note on the 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[1)]		2
Maritime classification[2)]		See certificate

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

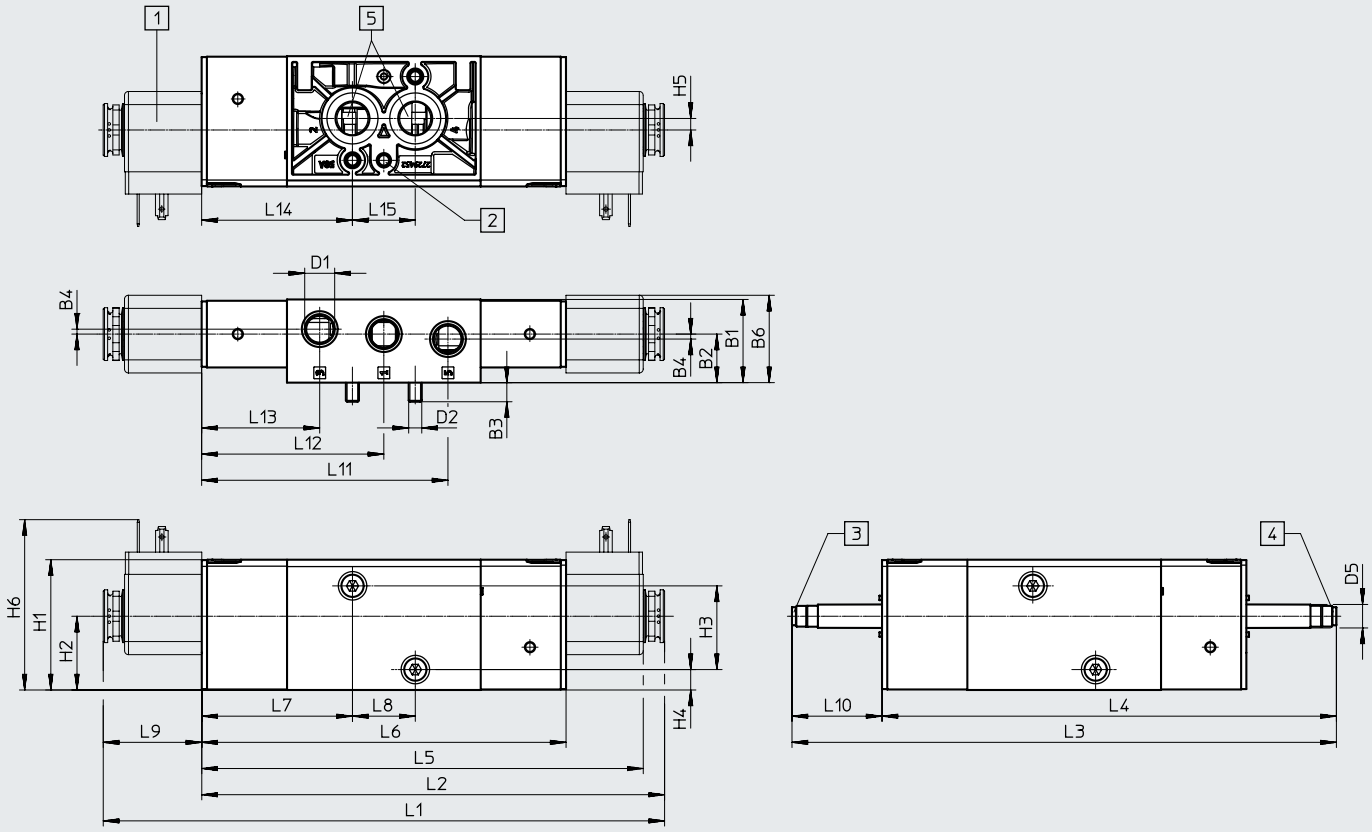
2) Additional information is available at www.festo.com/sp ➔ Certificates.

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
Characteristic coil data, 24 V DC	[W]	See solenoid coil, to be ordered separately	0.7
Switching time changeover	[ms]	16	16
Permissible voltage fluctuations	[%]	–	±10

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

Data sheet – 5/2-way valve VSNC-FT...-FN, double solenoid

Dimensions Download CAD data ➔ www.festo.com



VSNC-FT-B52-D-... 14-FN

[1] Solenoid coil
[2] ⌀ 5x4 to DIN 913-M5x10-45h
[3] Suction of auxiliary pilot air 82, M5
[4] Suction of auxiliary pilot air 82, M5
[5] Working port 2 and 4, NAMUR port pattern

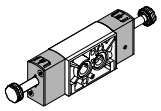
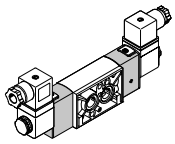
Type	B1	B2	B3	B4	B6	D1	D2	D5 ⌀	H1	H2	H3	H4	H5	H6	L1
VSNC-FT-B52-D-G14-FN	31.8	18.6	7.3	1.9	33.4	G 1/4	M5	9	49.8	28.2	32	7.8	4.4	–	–
VSNC-FT-B52-D-G14-FN-1A1															
VSNC-FT-B52-D-N14-FN						1/4 NPT									

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

Data sheet – 5/2-way valve VSNC-FT...-FN, double solenoid

Ordering data – Valves

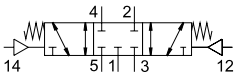
Directional control valve without solenoid coil

	Part no.	Type
	**577278**	**VSNC-FT-B52-D-G14-FN**
	577280	**VSNC-FT-B52-D-N14-FN**
Directional control valve with solenoid coil		
	**577298**	**VSNC-FT-B52-D-G14-FN-1A1**

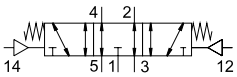
Data sheet – 5/3-way valve VSNC-F...-P2

Function

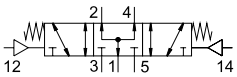
5/3-way valve, closed



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-M-G14-P2 VSNC-F-P53C-M-N14-P2	VSNC-F-P53E-M-G14-P2 VSNC-F-P53E-M-N14-P2	VSNC-F-P53U-M-G14-P2 VSNC-F-P53U-M-N14-P2
Valve function			5/3 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		
Actuation type			Electrical		
Reset method			Mechanical spring		
Type of control			Piloted		
Manual override			None		
Exhaust air function			Can be throttled		
Port for venting hole			Not ducted		
Pilot air supply			Internal		
Type of mounting			With through-hole		
Mounting position			Any		
Max. tightening torque for valve mounting		[Nm]	3.5		
Non-overlapping			Yes		
Overlap			Positive overlap		
Flow direction			Non-reversible		
Standard nominal flow rate	1 › 2	[l/min]	1200	1050	950
b value			0.4	0.4	0.5
C value		[l/sbar]	5.2	4.4	2.1
Pneumatic connection	1, 3, 5		G 1/4, 1/4 NPT		
	2, 4		NAMUR port pattern		
Conforms to standard			VDI/VDE 3845 (NAMUR)		
Certificate issuing authority			DNVGL-TAA000011J		
Product weight		[g]	428		

Data sheet – 5/3-way valve VSNC-F...-P2

Operating and environmental conditions				
		VSNC-F-P53C-M-G14-P2 VSNC-F-P53C-M-N14-P2	VSNC-F-P53E-M-G14-P2 VSNC-F-P53E-M-N14-P2	VSNC-F-P53U-M-G14-P2 VSNC-F-P53U-M-N14-P2
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]		
Note on the 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[1)]		2		

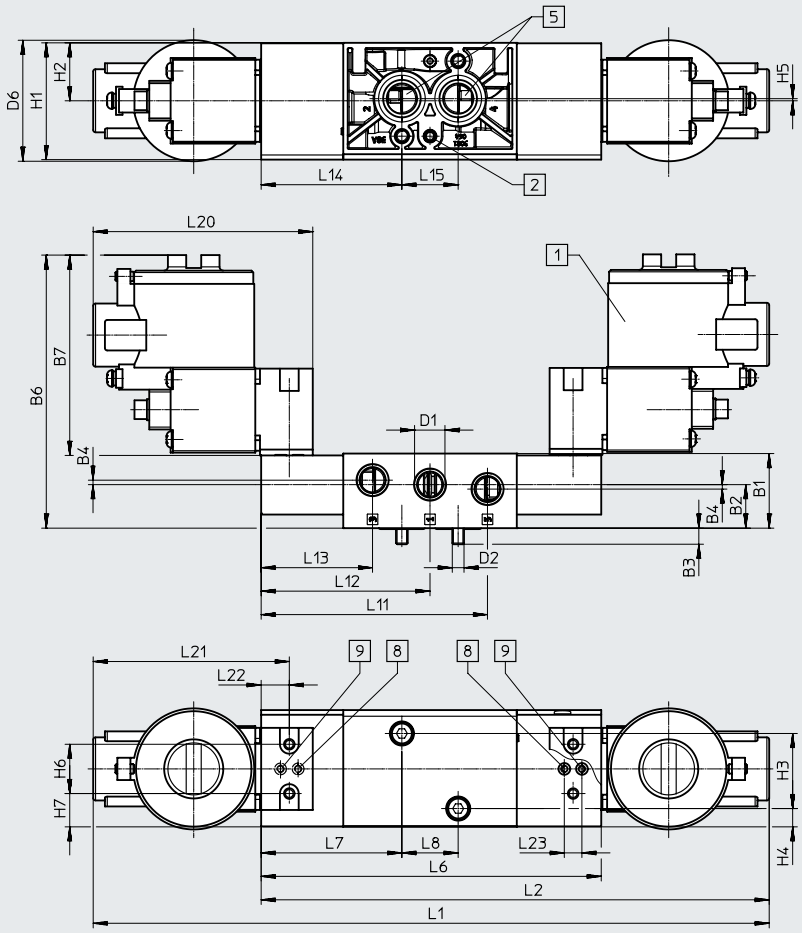
1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Electrical data				
		VSNC-F-P53C-M-G14-P2 VSNC-F-P53C-M-N14-P2	VSNC-F-P53E-M-G14-P2 VSNC-F-P53E-M-N14-P2	VSNC-F-P53U-M-G14-P2 VSNC-F-P53U-M-N14-P2
Characteristic coil data		See solenoid coil, to be ordered separately		
Duty cycle	[%]	100		
Switching time on	[ms]	5	6	6
Switching time off	[ms]	20	9	15
Switching time changeover	[ms]	9	16	7

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

Data sheet – 5/3-way valve VSNC-F...-P2

Dimensions Download CAD data ➔ www.festo.com



[1] Solenoid coil
[2] ⌀ 5.5 (for threaded pin to DIN 946-M5x10-45H)
[5] Working port 2 and 4, NAMUR port pattern
[8] Pilot air from the valve (CNOMO connection to ISO 15218)
[9] Pilot air into the valve (CNOMO connection to ISO 15218)

Type	B1	B2	B3	B4	D1	D2	H1	H2	H3	H4	H5	H6	H7
VSNC-F-P53C-M-G14-P2	31.8	~18.6	~6.9	1.9	G 1/4	M5	49.8	24.7	32	7.8	0.9	21	14.2
VSNC-F-P53U-M-G14-P2													
VSNC-F-P53E-M-G14-P2													
VSNC-F-P53C-M-N14-P2					1/4 NPT								
VSNC-F-P53U-M-N14-P2													
VSNC-F-P53E-M-N14-P2													

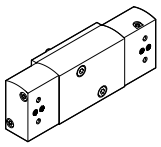
Type	L6	L7	L8	L11	L12	L13	L14	L15	L22	L23
VSNC-F-P53C-M-G14-P2	145	60	24	96.5	72	47.5	60	24	22	7.5
VSNC-F-P53U-M-G14-P2										
VSNC-F-P53E-M-G14-P2										
VSNC-F-P53C-M-N14-P2										
VSNC-F-P53U-M-N14-P2										
VSNC-F-P53E-M-N14-P2										

Type CNOMO solenoid coil	B6	B7	D6 ⌀	L1	L2	L20	L21
MGXIAH-...	101.3	70.3	–	281	213	93	80
MGXDH-...	116.4	85.4	51.6	288.2	216.6	93.6	83.6

Data sheet – 5/3-way valve VSNC-F...-P2

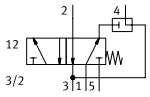
Ordering data – Valves

Directional control valve without solenoid coil

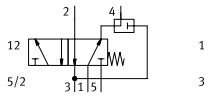
	Part no.	Type
	**8114686**	**VSNC-F-P53C-M-G14-P2**
	8114685	**VSNC-F-P53U-M-G14-P2**
	8114684	**VSNC-F-P53E-M-G14-P2**
	8114700	**VSNC-F-P53C-M-N14-P2**
	8114701	**VSNC-F-P53U-M-N14-P2**
	8114702	**VSNC-F-P53E-M-N14-P2**

Data sheet – 3/2-way or 5/2-way valve VSNC-FT...-P2, convertible, single solenoid

Function convertible
3/2-way valve or

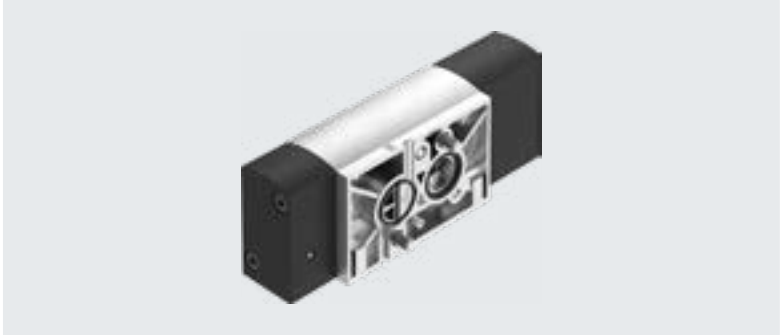


5/2-way valve



Operating pressure
2.5 ... 8 bar

Temperature range
–20 ... +60°C



General technical data			
			VSNC-FTC-M52-M-G14-P2 VSNC-FTC-M52-M-N14-P2
Valve function			3/2-way or 5/2-way, convertible
Width		[mm]	32
Design			Poppet seat
Sealing principle			Soft
Actuation type			Electrical
Reset method			Mechanical spring
Type of control			Piloted
Pilot air supply			Internal
Exhaust air function			Can be throttled
Manual override			None
Type of mounting			With through-hole
Port for venting hole			Not ducted
Mounting position			Any
Overlap			Negative overlap
Flow direction			Non-reversible
Standard nominal flow rate	1 › 2	[l/min]	800
	Exhaust return 4 › 3	[l/min]	110
b value			–
C value		[l/sbar]	–
Pneumatic connection	1, 3, 5		G 1/4, 1/4 NPT
	2, 4		NAMUR port pattern
Conforms to standard			VDI/VDE 3845 (NAMUR)
Product weight		[g]	382

Operating and environmental conditions		
		VSNC-FTC-M52-M-G14-P2 VSNC-FTC-M52-M-N14-P2
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]
Note on the 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[1)]		2

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

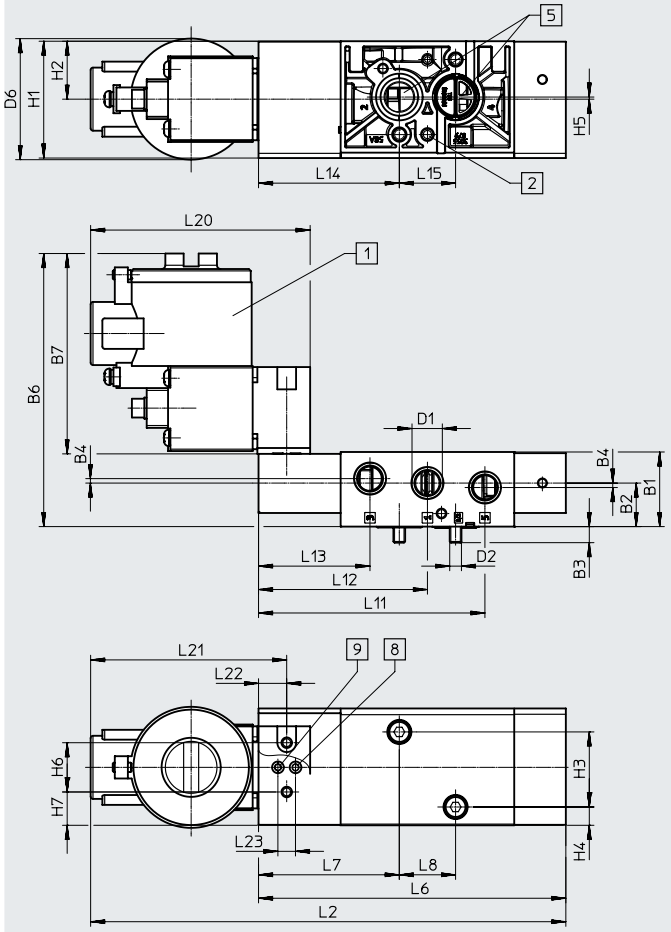
Data sheet – 3/2-way or 5/2-way valve VSNC-FT...-P2, convertible, single solenoid

Electrical data		
		VSNC-FTC-M52-M-G14-P2 VSNC-FTC-M52-M-N14-P2
Characteristic coil data		See solenoid coil, to be ordered separately
Duty cycle	[%]	100
Switching time on	[ms]	4
Switching time off	[ms]	6
Switching time changeover	[ms]	–

Materials		VSNC-FTC-M52-M-G14-P2 VSNC-FTC-M52-M-N14-P2
[1]	Housing	Wrought aluminium alloy
[2]	Seals	NBR
[3]	Screws	High-alloy stainless steel
	–	RoHS-compliant

Data sheet – 3/2-way or 5/2-way valve VSNC-FT...-P2, convertible, single solenoid

Dimensions Download CAD data ➔ www.festo.com



[1] Solenoid coil
[2] Ø 5.5 (for threaded pin to DIN 946-M5x10-45H)
[5] Working port 2 and 4, NAMUR port pattern
[8] Pilot air from the valve (CNOMO connection to ISO 15218)
[9] Pilot air into the valve (CNOMO connection to ISO 15218)

Type	B1	B2	B3	B4	D1	D2	H1	H2	H3	H4	H5	H6	H7
VSNC-FTC-M52-M-G14-P2	31.8	~18.6	~6.9	1.9	G 1/4	M5	49.8	24.7	32	7.8	0.9	21	14.2
VSNC-FTC-M52-M-N14-P2					1/4 NPT								

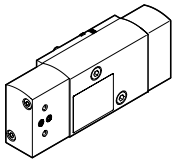
Type	L6	L7	L8	L11	L12	L13	L14	L15	L22	L23
VSNC-FTC-M52-M-G14-P2	131	60	24	96.5	72	47.5	60	24	22	7.5
VSNC-FTC-M52-M-N14-P2										

Type CNOMO solenoid coil	B6	B7	D6 Ø	L2	L20	L21
MGXIAH-...	101.3	70.3	–	199	93	80
MGXDH-...	116.4	85.4	51.6	202.6	93.6	83.6

Data sheet – 3/2-way or 5/2-way valve VSNC-FT...-P2, convertible, single solenoid

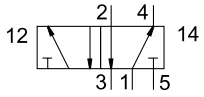
Ordering data – Valves

Directional control valve without solenoid coil

	Part no.	Type
	**8114688**	**VSNC-FTC-M52-M-G14-P2**
	8114698	**VSNC-FTC-M52-M-N14-P2**

Data sheet – 5/2-way valve VSNC-FT...-P2, double solenoid

Function
5/2-way valve, double solenoid



Operating pressure
1.5 ... 8 bar

Temperature range
–20 ... +60°C

General technical data

			VSNC-FT-B52-G14-P2 VSNC-FT-B52-N14-P2
Valve function			5/2-way, double solenoid
Width		[mm]	32
Design			Poppet seat
Sealing principle			Soft
Actuation type			Electrical
Type of control			Piloted
Pilot air supply			Internal
Exhaust air function			Can be throttled
Manual override			None
Type of mounting			With through-hole
Port for venting hole			Not ducted
Mounting position			Any
Overlap			Negative overlap
Flow direction			Non-reversible
Standard nominal flow rate		[l/min]	1000
b value			–
C value		[l/sbar]	–
Pneumatic connection	1, 3, 5		G 1/4, 1/4 NPT
	2, 4		NAMUR port pattern
Conforms to standard			VDI/VDE 3845 (NAMUR)
Product weight		[g]	422

Operating and environmental conditions

		VSNC-FT-B52-G14-P2 VSNC-FT-B52-N14-P2
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]
Note on the 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[1)]		2

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

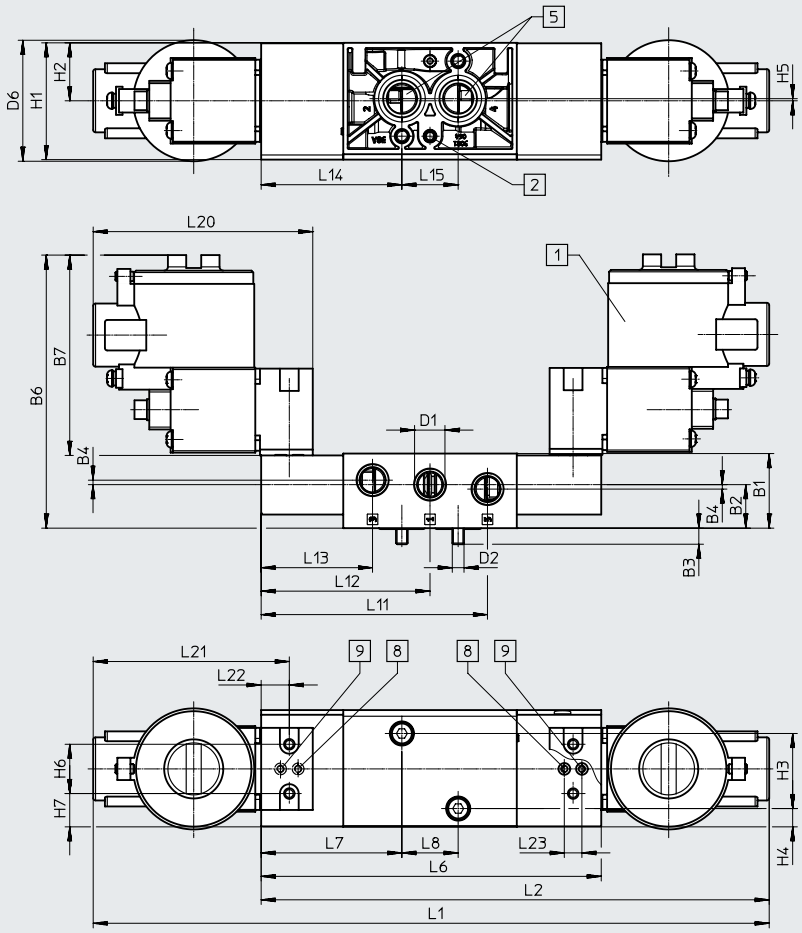
Data sheet – 5/2-way valve VSNC-FT...-P2, double solenoid

Electrical data		
		VSNC-FT-B52-G14-P2 VSNC-FT-B52-N14-P2
Electrical connection		–
Characteristic coil data		See solenoid coil, to be ordered separately
Switching time changeover	[ms]	2
Permissible voltage fluctuations	[%]	–

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

Data sheet – 5/2-way valve VSNC-FT...-P2, double solenoid

Dimensions Download CAD data ➔ www.festo.com



[1] Solenoid coil
[2] ⌀ 5.5 (for threaded pin to DIN 946-M5x10-45H)
[5] Working port 2 and 4, NAMUR port pattern
[8] Pilot air from the valve (CNOMO connection to ISO 15218)
[9] Pilot air into the valve (CNOMO connection to ISO 15218)

Type	B1	B2	B3	B4	D1	D2	H1	H2	H3	H4	H5	H6	H7
VSNC-FT-B52-G14-P2	31.8	~18.6	~6.9	1.9	G 1/4	M5	49.8	24.7	32	7.8	0.9	21	14.2
VSNC-FT-B52-N14-P2					1/4 NPT								

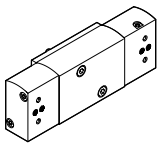
Type	L6	L7	L8	L11	L12	L13	L14	L15	L22	L23
VSNC-FT-B52-G14-P2	145	60	24	96.5	72	47.5	60	24	22	7.5
VSNC-FT-B52-N14-P2										

Type CNOMO solenoid coil	B6	B7	D6 ⌀	L1	L2	L20	L21
MGXIAH-...	101.3	70.3	–	281	213	93	80
MGXDH-...	116.4	85.4	51.6	288.2	216.6	93.6	83.6

Data sheet – 5/2-way valve VSNC-FT...-P2, double solenoid

Ordering data – Valves

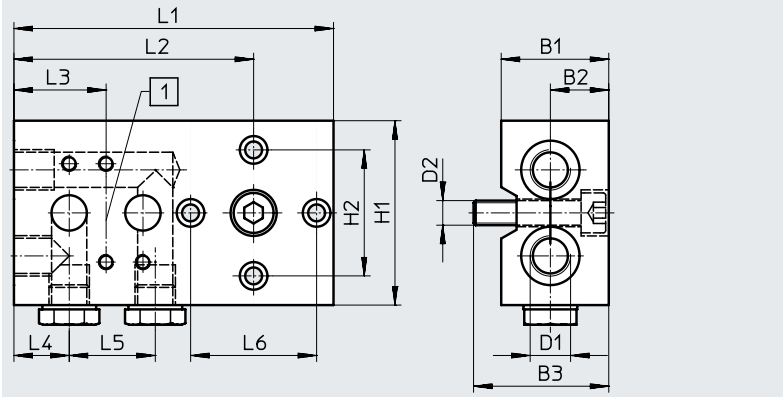
Directional control valve without solenoid coil

	Part no.	Type
	**8114687**	**VSNC-FT-B52-G14-P2**
	8114699	**VSNC-FT-B52-N14-P2**

Accessories

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

Material of sub-base:
Ematal-coated aluminium
Material of seals: NBR
Contains paint-wetting impairment substances,
RoHS-compliant



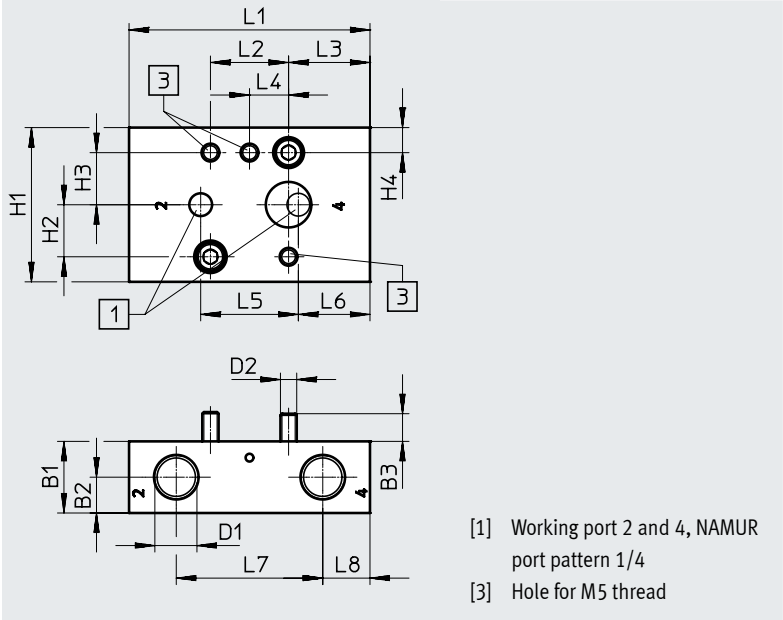
Dimensions [mm] and ordering data

B1	B2	B3	D1	D2	H1	H2	L1	L2	L3	L4	L5	L6	CRC[1]	Part no.	Type
35	19	44	G1/4	M8	60	41	104	78	30	18	28	41	4	**563396**	**VABS-S7-S-G14**

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, e.g. in the chemical or food industries. Such applications may need to be safeguarded by means of special testing (➔ also FN 940082), using appropriate media.

Connecting plate
Mounting position: Any
Type of mounting: Via through-hole
Port 2, 4: On top
Operating pressure:
1.5 ... 10 bar
Operating medium: compressed air to ISO 8573-1:2010 [7:–:–]
Temperature (ambient/medium/storage): –20 ... +60°C
Weight: 192 g

Plate material: Wrought aluminium alloy
Note on materials:
Contains paint-wetting impairment substances (not tested);
RoHS-compliant



[1] Working port 2 and 4, NAMUR port pattern 1/4
[3] Hole for M5 thread

Dimensions [mm] and ordering data

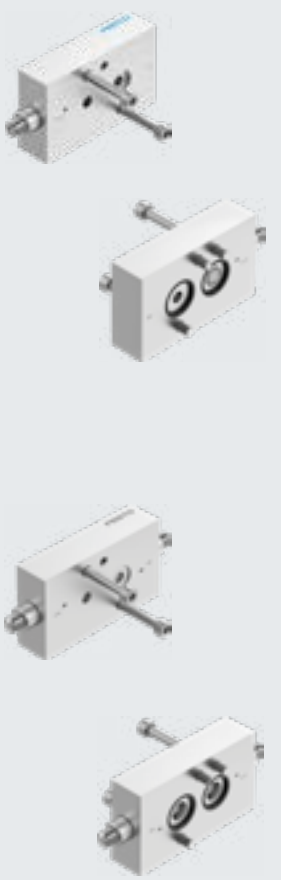
B1	B2	B3	D1	D2	H1	H2	H3	H4	L1	L2	L3	L4	L5	L6	L7	L8	CRC[1]	Part no.	Type
22	11	8.5	G1/4	M5	47.4	16	16	7.7	74	24	25	12	30	22	45	14.5	2	**8098884**	**VABS-B14-T-FG14**
			1/4 NPT															**8099628**	**VABS-B14-T- FN14**

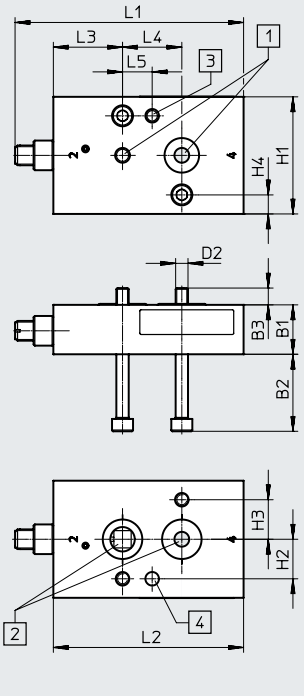
1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Accessories

Throttle plate
Mounting position: Any
Type of mounting: Via through-hole
Operating pressure: 1.5 ... 10 bar
Operating medium: compressed air to ISO 8573-1:2010 [7:–:–]
Temperature (ambient/medium/storage): –20 ... +60°C
Weight:
VABF ... P1: 215.5 g
VABF ... P2: 229 g

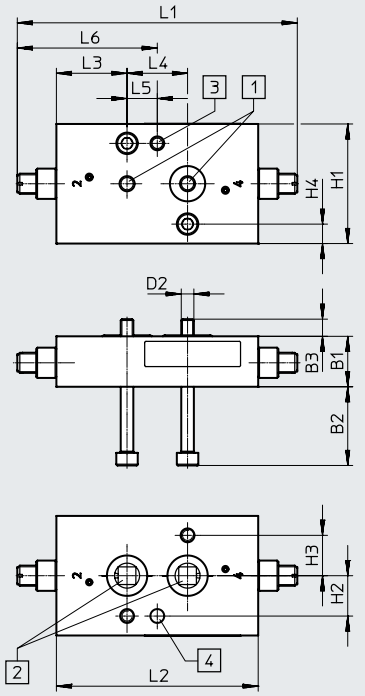
Plate material:
Wrought aluminium alloy
Note on materials:
Contains paint-wetting impairment substances (not tested);
RoHS-compliant





Single-acting VABF-...P1

[1] NAMUR port pattern 1/4
[2] NAMUR port pattern 1/4



Double-acting VABF-...P2

[3] Hole for M5 thread
[4] Hole, ø 5.5 mm (for threaded pin to DIN 913-M5x10-45H)

Dimensions [mm] and ordering data

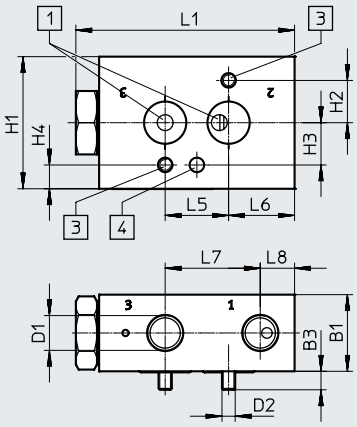
B1	B2	B3	D2	H1	H2	H3	H4	L1		L2	L3	L4	L5	L6		CRC[1]	Part no.	Type
								min.	max.					min.	max.			
20	31.2	6.8	M5	47.4	16	16	7.7	86.5	92.5	77	28	24	12	–	–	2	**8098885**	**VABF-B14-F1B1P1-FF14**
								99	110	80				49.5	55.5		**8098887**	**VABF-B14-F1B1P2-FF14**

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Accessories

Exhaust plate
Mounting position: Any
Type of mounting: Via through-hole
Operating pressure: 1.5 ... 10 bar
Operating medium:
Compressed air to ISO 8573-1:2010 [7:0:0]
Temperature (ambient/medium/storage): –20 ... +60°C
Weight: 280.5 g

Plate material:
Wrought aluminium alloy
Note on materials:
Contains paint-wetting impairment substances (not tested);
RoHS-compliant



[1] NAMUR port pattern 1/4
[3] Hole for thread
[4] Hole, ø 5.5 mm (for threaded pin to DIN 913-M5x10-45H)

Dimensions [mm] and ordering data

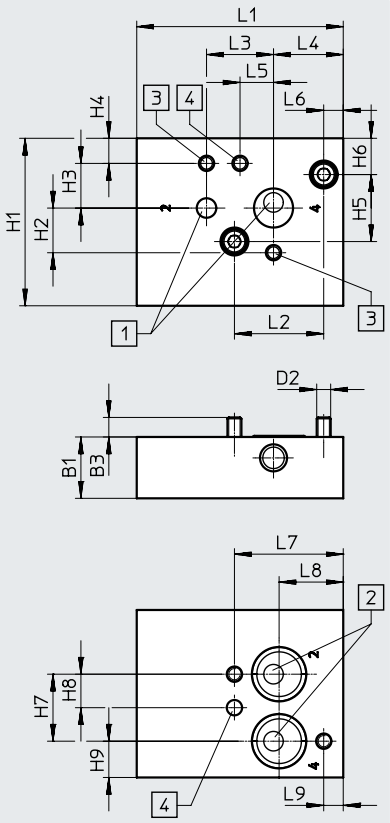
B1	B3	D1	D2	H1	H2	H3	H4	L1	L5	L6	L7	L8	CRC[1)]	Part no.	Type
29	7	G1/4	M5	50	16	16	9	82.8	24	25	36	13	2	**8099350**	**VABF-B14-M3-G14**
		1/4 NPT												**8099627**	**VABF-B14-M3-N14**

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Accessories

Mounting plate
Mounting position: Any
Type of mounting: Via through-hole
Operating pressure:
1.5 ... 10 bar
Operating medium:
Compressed air to ISO 8573-1:2010 [7:0:0]
Temperature (ambient/medium/storage): –20 ... +60°C
Weight: 255.5 g

Plate material:
Wrought aluminium alloy
Note on materials:
Contains paint-wetting impairment substances (not tested); RoHS-compliant
Purpose: The mounting plate enables the NAMUR connection to be turned 90° in tight installation spaces.
Additional benefit:
The mounting plate can be used to mount a 1/4" NAMUR valve on a 1/2" actuator.



[1] NAMUR port pattern 1/4
[2] NAMUR port pattern 1/4
[3] Hole for M5 thread
[4] Hole, ⌀ 5.5 mm, for threaded pin to DIN 913-M5x10-45H

NAMUR connection can be turned 90°

Dimensions [mm] and ordering data

B1	B3	D2	H1	H2	H3	H4	H5	H6	H7	H8	Part no.	Type
22	7	M5	60	16	16	9	24	13	24	12	**8098888**	**VABS-B14-90-FF14**

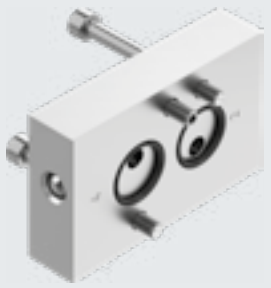
H9	L1	L2	L3	L4	L5	L6	L7	L8	L9	CRC[1)]	Part no.	Type
13	74	32	24	25	12	7	39	23	7	2	**8098888**	**VABS-B14-90-FF14**

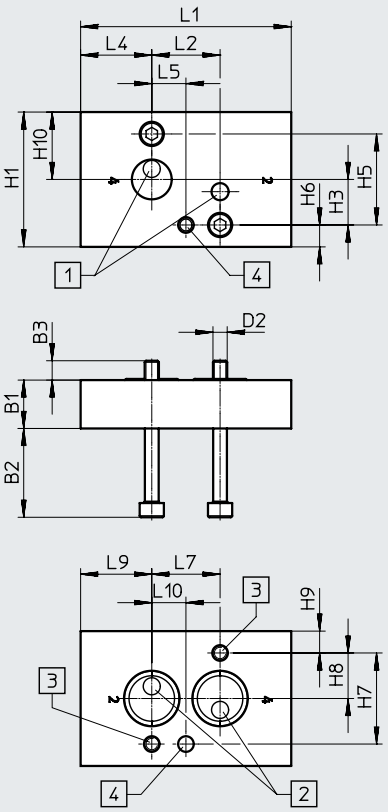
1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Accessories

Mounting plate
Mounting position: Any
Type of mounting: Via through-hole
Operating pressure:
1.5 ... 10 bar
Operating medium:
Compressed air to ISO 8573-1:2010 [7:0:0]
Temperature (ambient/medium/storage): –20 ... +60°C
Weight: 255.5 g

Plate material:
Wrought aluminium alloy
Note on materials:
Contains paint-wetting impairment substances (not tested); RoHS-compliant
Purpose: The mounting plate enables the NAMUR connection to be turned 180° in tight installation spaces.
Additional benefit:
The mounting plate can be used to mount a 1/4" NAMUR valve on a 1/2" actuator.





[1] NAMUR port pattern 1/4
[2] NAMUR port pattern 1/4
[3] Hole for M5 thread
[4] Hole, ⌀ 5.5 mm, for threaded pin to DIN 913-M5x10-45H

NAMUR connection can be turned 180°

Dimensions [mm] and ordering data

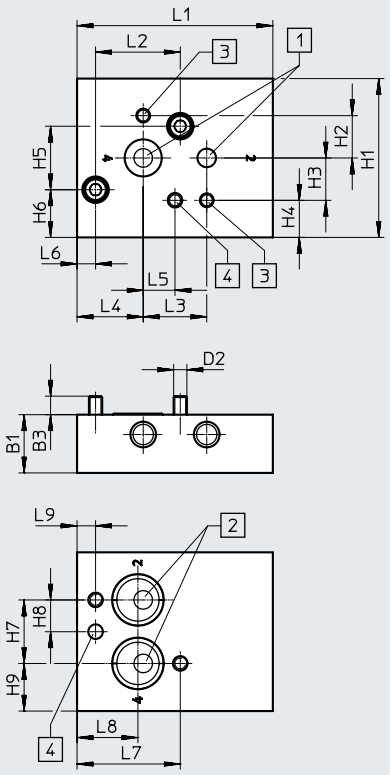
B1	B2	B3	D2	H1	H3	H5	H6	H7	H8	H9	H10	L1	L2	L4	L5	L7	L9	L10	CRC[1]	Part no.	Type
17	31.2	6.8	M5	47.4	16	32	7.7	32	16	7.7	23.7	74	24	25	12	24	25	12	2	**8099347**	**VABS-B14-180-FF14**

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Accessories

Mounting plate
Mounting position: Any
Type of mounting: Via through-hole
Operating pressure:
1.5 ... 10 bar
Operating medium:
Compressed air to ISO 8573-1:2010 [7:0:0]
Temperature (ambient/medium/storage): –20 ... +60°C
Weight: 255.5 g

Plate material:
Wrought aluminium alloy
Note on materials:
Contains paint-wetting impairment substances (not tested); RoHS-compliant
Purpose: The mounting plate enables the NAMUR connection to be turned 270° in tight installation spaces.
Additional benefit:
The mounting plate can be used to mount a 1/4" NAMUR valve on a 1/2" actuator.



[1] NAMUR port pattern 1/4
[2] NAMUR port pattern 1/4
[3] Hole for M5 thread
[4] Hole, ⌀ 5.5 mm, for threaded pin to DIN 913-M5x10-45H

NAMUR connection can be turned 270°

Dimensions [mm] and ordering data

B1	B3	D2	H1	H2	H3	H4	H5	H6	H7	H8	Part no.	Type
22	7	M5	60	16	16	14	24	18	24	12	**8098891**	**VABS-B14-270-FF14**

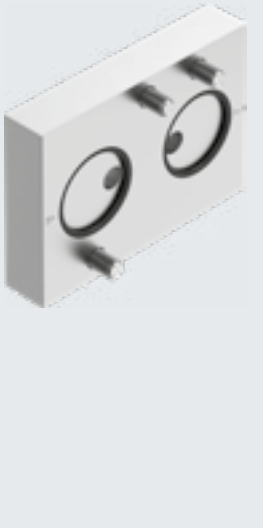
H9	L1	L2	L3	L4	L5	L6	L7	L8	L9	CRC[1)]	Part no.	Type
18	74	32	24	25	12	7	39	23	7	2	**8098891**	**VABS-B14-270-FF14**

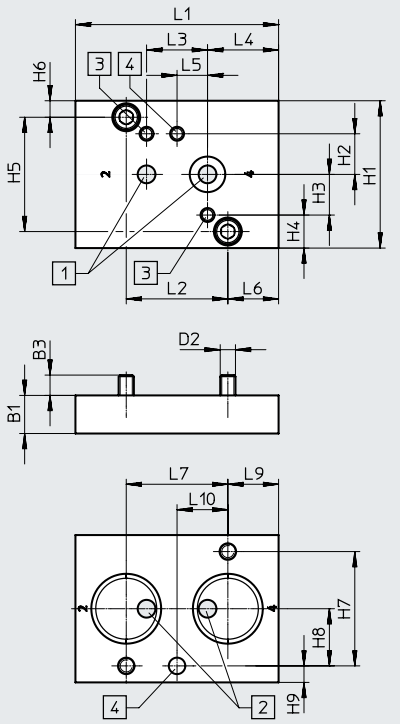
1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Accessories

Mounting plate
Mounting position: Any
Type of mounting: Via through-hole
Operating pressure:
1.5 ... 10 bar
Operating medium:
Compressed air to ISO 8573-1:2010 [7:0:0]
Temperature (ambient/medium/storage): –20 ... +60°C
Weight: 188 g

Plate material:
Wrought aluminium alloy
Note on materials:
Contains paint-wetting impairment substances (not tested); RoHS-compliant
Purpose:
Mounting plate with NAMUR connection 1/2 and 1/4





[1] NAMUR port pattern 1/4
[2] NAMUR port pattern 1/2
[3] Hole for M5 thread
[4] Hole, ⌀ 6.5 mm, for threaded pin to DIN 913-M6x10-45H

Dimensions [mm] and ordering data

B1	B3	D2	H1	H2	H3	H4	H5	H6	H7	H8	Part no.	Type
15	8	M6	58	16	16	13	45	6.5	45	22.5	**8098889**	**VABA-B14-FL12-FL14**

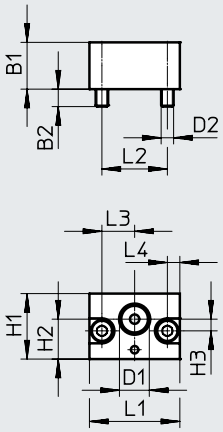
H9	L1	L2	L3	L4	L5	L6	L7	L9	L10	CRC[1)]	Part no.	Type
6.5	80	40	24	28	12	20	40	20	20	2	**8098889**	**VABA-B14-FL12-FL14**

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Accessories

Connector
Mounting position: Any
Type of mounting: Via through-hole
Operating pressure:
1.5 ... 10 bar
Operating medium:
Compressed air to ISO 8573-1:2010 [7:0:0]
Temperature (ambient/medium/storage): –20 ... +60°C
Weight: 26 g

Plate material:
Wrought aluminium alloy
Note on materials:
Contains paint-wetting impairment substances (not tested); RoHS-compliant
Purpose: Connector for pneumatic control system (CNOMO connection).

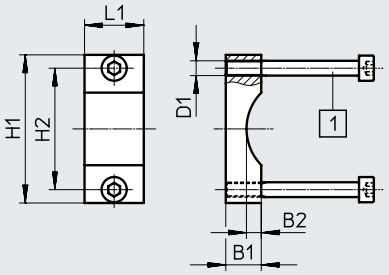


Dimensions [mm] and ordering data

B1	B2	D1	D2	H1	H2	H3	L1	L2	L3	L4	CRC[1)]	Part no.	Type
15	5.6	G1/8	M4	21	12.8	~3.8	29	21	10.5	4	2	**8099850**	**VABD-B14-P1-G18**
		1/8 NPT										**8099629**	**VABD-B14-P1-N18**

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Mounting bracket
Material of bracket: Wrought aluminium alloy
Contains paint-wetting impairment substances, RoHS-compliant



[1] NAMUR port pattern

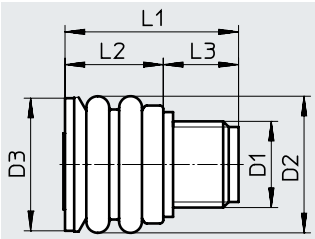
Dimensions [mm] and ordering data

B1	B2	B3	D1	H1	H2	L1	CRC[1)]	Part no.	Type
45/65	12	5	M5	50	41	20	3	**563403**	**VAME-S7-Y**

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

Accessories

Exhaust protection
Material:
EPDM, PA
Contains paint-wetting impairment substances,
RoHS-compliant

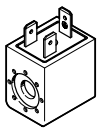
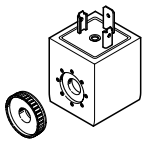


Dimensions [mm] and ordering data

D1	D2	D3	L1	L2	L3	CRC[1)]	Part no.	Type
G1/4, 1/4 NPT	21	20.5	26.5	15	11.5	3	**563400**	**VABD-D3-SN-G14**

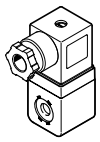
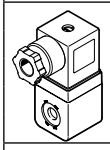
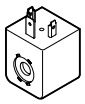
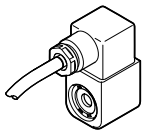
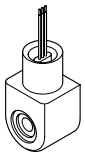
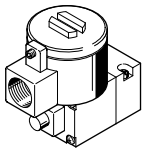
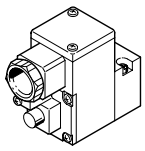
1) Corrosion resistance class CRC 3 to Festo standard FN 940070
High corrosion stress. Outdoor exposure under moderate corrosive conditions. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment.

Ordering data – Solenoid coil

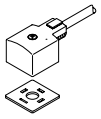
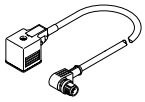
	Characteristic coil data	Part no.	Type
Electrical plug pattern to industry standard, type B			Data sheets → Internet: vacf
	12 V DC; 3.4 W	**8030801**	**VACF-B-B2-5**
	24 V DC; 3.3 W	**8030802**	**VACF-B-B2-1**
	48 V DC; 3.4 W	**8030803**	**VACF-B-B2-7**
	24 V AC; 50/60 Hz, pick-up power 3.9 VA, holding power 2.6 VA	**8030804**	**VACF-B-B2-1A**
	48 V AC; 50/60 Hz, pick-up power 3.9 VA, holding power 2.7 VA	**8030805**	**VACF-B-B2-7A**
	110/120 V AC; 50/60 Hz, pick-up power 4.4 VA, holding power 3.3 VA	**8030806**	**VACF-B-B2-16B**
	230/240 V AC; 50/60 Hz, pick-up power 5.8 VA, holding power 4.6 VA	**8030808**	**VACF-B-B2-3W**
Electrical plug pattern to DIN EN 175301-803, type A			
	12 V DC; 2.8 W	**8030821**	**VACF-A-A1-5**
	24 V DC; 2.6 W	★ **8030822**	**VACF-A-A1-1**
	48 V DC; 2.8 W	**8030823**	**VACF-A-A1-7**
	24 V AC; 50/60 Hz, pick-up power 2.5 VA, holding power 1.7 VA	**8030824**	**VACF-A-A1-1A**
	48 V AC; 50/60 Hz, pick-up power 2.5 VA, holding power 1.7 VA	**8030825**	**VACF-A-A1-7A**
	110/120 V AC; 50/60 Hz, pick-up power 2.7 VA, holding power 1.9 VA	**8030826**	**VACF-A-A1-16B**
	230/240 V AC; 50/60 Hz, pick-up power 3.9 VA, holding power 2.8 VA	**8030828**	**VACF-A-A1-3W**

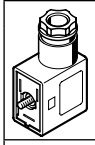
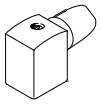
Accessories

Ordering data – Solenoid coil

	Characteristic coil data	Part no.	Type
Type of ignition protection: intrinsically safe Ex-ia			Data sheets → Internet: vacn
	28V	**8029139**	**VACN-N-A1-1-EX-4-A**
Type of ignition protection: non-sparking Ex-nA			
	24 V DC; 2.1 W	**8029136**	**VACN-N-A1-1-EX2-N**
	110 V AC; 50 Hz, pick-up power 6.9 VA, holding power 4.1 VA	**8029137**	**VACN-N-A1-16B-EX2-N**
	110 V AC; 60 Hz, pick-up power 5.4 VA, holding power 3.2 VA		
	230 V AC; 50 Hz, pick-up power 6.9 VA, holding power 4.1 VA	**8029138**	**VACN-N-A1-3A-EX2-N**
	230 V AC; 60 Hz, pick-up power 5.4 VA, holding power 3.3 VA		
Degree of protection IP65 with socket			
	24 V DC; 0.7 W	★ **8029144**	**VACN-N-A1-1**
	110 V AC; 50 Hz, pick-up power 5.2 VA, holding power 3.1 VA	**8029134**	**VACN-N-A1-16B**
	110 V AC; 60 Hz, pick-up power 4.2 VA, holding power 2.5 VA		
	230 V AC; 50 Hz, pick-up power 6.2 VA, holding power 3.7 VA	**8029135**	**VACN-N-A1-3A**
	230 V AC; 60 Hz, pick-up power 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	**8029141**	**VACN-N-K1-3A-EX4-M**
	110 V AC; 50/60 Hz, power 2.4 VA	**8029142**	**VACN-N-K1-16B-EX4-M**
	24 V DC; 2.6 W	**8029143**	**VACN-N-K1-1-EX4-M**
Type of ignition protection: encapsulated AEx-m, Class 1, Div. 1 to NEC 500			
	230 V AC; 50 Hz, pick-up power 11.5 VA, holding power 8.0 VA	**8029140**	**VACN-N-K11-3A-0.5-U4-M**
	120 V AC; 60 Hz, pick-up power 10.0 VA, holding power 6.8 VA	**8029145**	**VACN-N-K11-16B-0.5-U4-M**
	24 V DC; 4.6 W	**8029146**	**VACN-N-K11-1-0.5-U4-M**
Pilot valves with CNOMO port pattern, to ISO 15218			
	24 V DC; 3.0 W, (suitable for vacuum operation)	**535615**	**MGXDH-3/2-1.2-24DC-EX**
	110 V AC; 50/60 Hz, pick-up power 7.7 VA, holding power 3.8 VA, (suitable for vacuum operation)	**535616**	**MGXDH-3/2-1.2-110AC-EX**
	230 V AC; 50/60 Hz, pick-up power 10 VA, holding power 6 VA, (suitable for vacuum operation)	**535617**	**MGXDH-3/2-1.2-230AC-EX**
	24 V DC; 1.5 W, (suitable for vacuum operation)	**535614**	**MGXIAH-3/2-0.8-24DC-EX**
Cable connector			
	For pilot valves with CNOMO port pattern, to ISO 15218, M20x1.5	**4197362**	**NETC-P-M20-EX4**

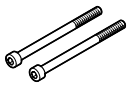
Accessories

Ordering data	Description	Nominal operating voltage [V]		Cable length [m]	Part no.	Type
Connecting cable						Data sheets → Internet: kmc
	For valves with D and N1 solenoid coils	24 DC	• Signal status indication	2.5	**30931**	**KMC-1-24 DC-2.5-LED**
				5	**30933**	**KMC-1-24 DC-5-LED**
		230 V AC	–	2.5	**30932**	**KMC-1-230 AC-2.5**
				5	**30934**	**KMC-1-230 AC-5**
	For valves with F solenoid coils	24 DC	• Signal status indication	2.5	**30935**	**KMF-1-24DC-2.5-LED**
Connecting cable						Data sheets → Internet: nebv
	For valves with D and N1 solenoid coils. Angled socket, plug pattern type A, EN 175301-803	230 AC/DC	–	0.6	**3579466**	**NEBV-A1W3-K-0.6-N-LE3**
		110 AC/DC	–	0.3	**3579461**	**NEBV-A1W3-K-0.3-N-M12W3**
				0.6	**3579462**	**NEBV-A1W3-K-0.6-N-M12W3**
		24 AC/DC	• Signal status indication • Protective circuit	0.3	**3679771**	**NEBV-A1W3-P-0.3-N-M12W3**
				0.6	**3679772**	**NEBV-A1W3-P-0.6-N-M12W3**
				0.6	**3679776**	**NEBV-A1W3-P-K-0.6-LE3**

Ordering data	Description	Part no.	Type
Plug socket			Data sheets → Internet: mssd
	3-pin, angled socket, square design, plug pattern type B to industry standard 11 mm	**539710**	**MSSD-F-M16**
	3-pin, angled socket, square design, plug pattern type A to DIN EN 175301-803	**539709**	**MSSD-C-M16**
	3-pin, IP67 socket to IEC 60529, type B	**192746**	**MSSD-F-S-M16**
	4-pin, IP67 socket to IEC 60529, type A	**192748**	**MSSD-C-S-M16**
	3-pin, angled socket, square design, IP65 to DIN EN 175301-803, type A	**34583**	**MSSD-C**
Push-in fittings QS			Data sheets → Internet: qs
	G male thread with internal hexagon	**186108**	**QS-G1/4-6-I**
		186110	**QS-G1/4-8-I**
		186112	**QS-G1/4-10-I**
	NPT male thread with internal hexagon	**572320**	**QB-1/4-1/4-I-U**
		572321	**QB-1/4-5/16-I-U**
		572322	**QB-1/4-3/8-I-U**
Silencer U			Data sheets → Internet: u
	G male thread, polymer design	**534223**	**U-1/4-20**
		2316	**U-1/4**
	G male thread, die-cast design	**6842**	**U-1/4-B**
	NPT male thread, die-cast design	**12639**	**U-1/4-B-NPT**

Accessories

Ordering data

	Description	Part no.	Type
Illuminating seal			Data sheets → Internet: mc-ld
	For F solenoid coils	**19143**	**MF-LD-12-24 DC**
		19144	**MF-LD-230 AC**
	For valves with D and N1 solenoid coils	**19145**	**MC-LD-12-24 DC**
		19146	**MC-LD-230 AC**
Cover cap			
	For valves	**8028240**	**VAMC-B10-20-CH2**
Screw set			
	Can be used for connectors and also for the mounting plate that can be turned 180° Weight per screw: 12 g, material: High-alloy steel, size: M5	**8105115**	**VAME-B14-S-M5**