

Solenoid valves VSNC

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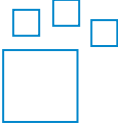
With the Festo Core Range, we have selected the most important products and functions from our broad product catalogue, and added the quickest delivery.

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Key features, product range overview VSNC-...

Function		Innovative	
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.		• 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	
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.			
Cost- and application-optimised		Flexible	
• Cost-optimised variant with plastic cover, brass armature tube and IP65 coils		• 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	
-  - Voltage 12, 24, 48 V DC 24, 48, 120, 230 VAC -  - Operating pressure 1.5 ... 10 bar -  - Temperature range -20 ... 60°C		  	

Ordering data – Product options			
	Configurable product	The configurator can be found at	Part no.
	This product and all its product options can be ordered using the configurator.	→ www.festo.com/catalogue/... Enter the part number or the type.	Type VSNC

Key features, product range overview VSNC-...

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



VSNC-F-...-F19, VSNC-F-...-F19A



VSNC poppet seat



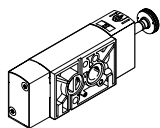
VSNC-...-F19 with Ex-me solenoid



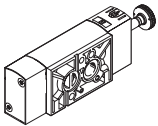
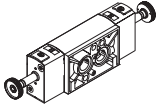
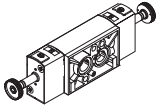
VSNC-...-F19A with Ex-ia solenoid

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

VSNC-F8



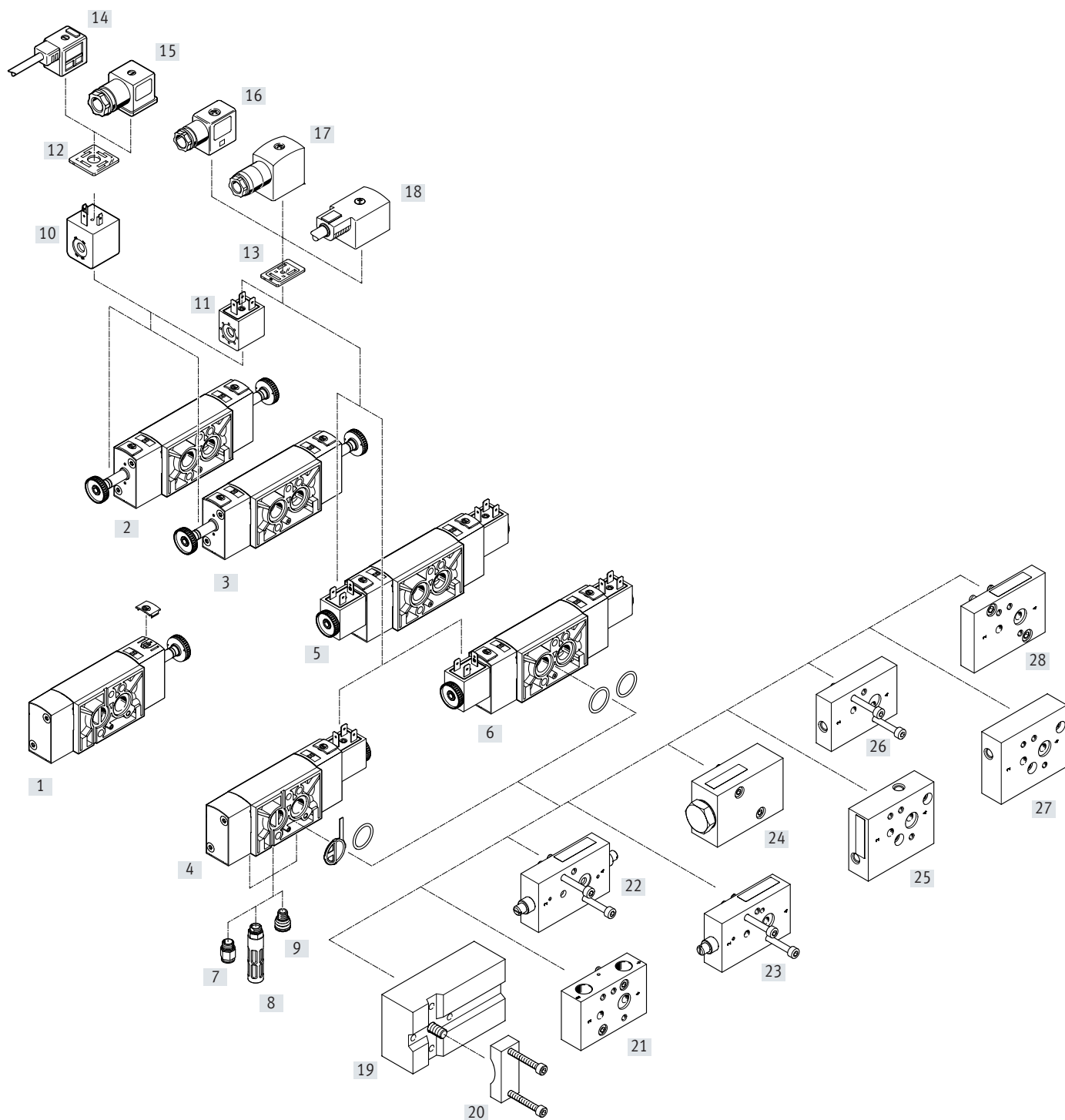
- Material of valve cap: Plastic/metal
- Material of armature: Brass
- Pilot air (armature tube incoming air), unprotected

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	21
	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	26
	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	29
	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	

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, C	■	■	■	■	■	■	■	■	■	■	■	■	■	■
5/3-way, P	■	■	■	■	■	■	■	■	■	■	■	■	■	■
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

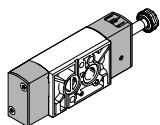


Peripherals overview – VSNC-...-F8

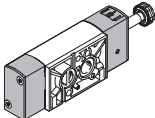
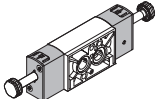
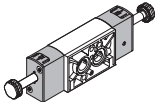
Mounting attachments and accessories		Brief description	→ Page / Internet
[1]	VSNC-...-F8 Solenoid valves	3/2-way and 5/2-way single solenoid valve with converting seal, plastic cover and brass armature tube for controlling single-acting or double-acting actuators	21
[2]	VSNC-...-F8 Solenoid valves	5/2-way double solenoid valve with plastic cover and brass armature tube for controlling double-acting actuators	26
[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	29
[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	21
[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	26
[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	29
[7]	QS Push-in fitting	For connecting compressed air tubing with standard O.D.	89
[8]	U Silencers	–	89
[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	87
[10]	VACF-A Solenoid coil	Electrical plug pattern to DIN EN 175301-803, type A	87
[11]	VACF-B Solenoid coil	Electrical plug pattern to Festo standard for MSSD-F	87
[12]	MC-LD Illuminating seal	Illuminating seal for indicating the switching status	90
[13]	MF-LD Illuminating seal	Illuminating seal for indicating the switching status	90
[14]	KMC Connecting cable	–	89
[15]	MSSD-C Plug socket	Electrical plug pattern to DIN EN 175301-803, type A	89
[16]	MSSD-F Plug socket	Electrical plug pattern to Festo standard with screw terminal connection	89
[17]	MSSD-F-S Plug socket	Electrical plug pattern to Festo standard with insulation displacement connection	89
[18]	KMF Connecting cable	–	kmf
[19]	VABS-S7-S-G14 Connection set	Sub-base for attaching the valve to a NAMUR rib	79
[20]	VAME-S7-Y Mounting bracket	Alternative (instead of screw) for mounting the valve on a NAMUR rib using a mounting bracket	86
[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.	79
[22]	VABF-B14-F1B1P2-FF14 Throttle plate (double-acting)	Flow control for double-acting quarter turn actuators	80
[23]	VABF-B14-F1B1P1-FF14 Throttle plate (single-acting)	Flow control for single-acting quarter turn actuators	80
[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	81
[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	82
[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	83
[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	84
[28]	VABA-B14-FL12-FL14 Mounting plate	Mounting plate with NAMUR connection 1/2 and 1/4	85

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

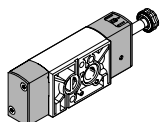
VSNC-F ... -FN



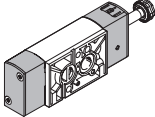
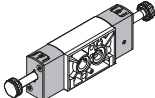
- Design: Piston spool
- Material of valve cap: Aluminium/metal
- Material of armature: Stainless steel
- Pilot air (incoming air of armature tube), protected

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	33
	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	38
	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	42
	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	46
	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	49
	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

Coils	IP65			Ex-nA			Ex-ia	Ex-mb			AEx-m		
	24 V DC	120 V AC	230 V AC	24 V DC	120 V AC	230 V AC	24 ... 32 V DC	24 V DC	120 V AC	230 V AC	24 V DC	120 V AC	230 V AC
5/2- and 3/2-way, single solenoid	■ PNO	■	■	■	■	■	■	■	■	■	■	■	■
5/2-way, double solenoid	■ PNO	■	■	■	■	■	■	■	■	■	■	■	■
5/3-way, C	■	■	■	■	■	■	■	■	■	■	■	■	■
5/3-way, P	■	■	■	■	■	■	■	■	■	■	■	■	■
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

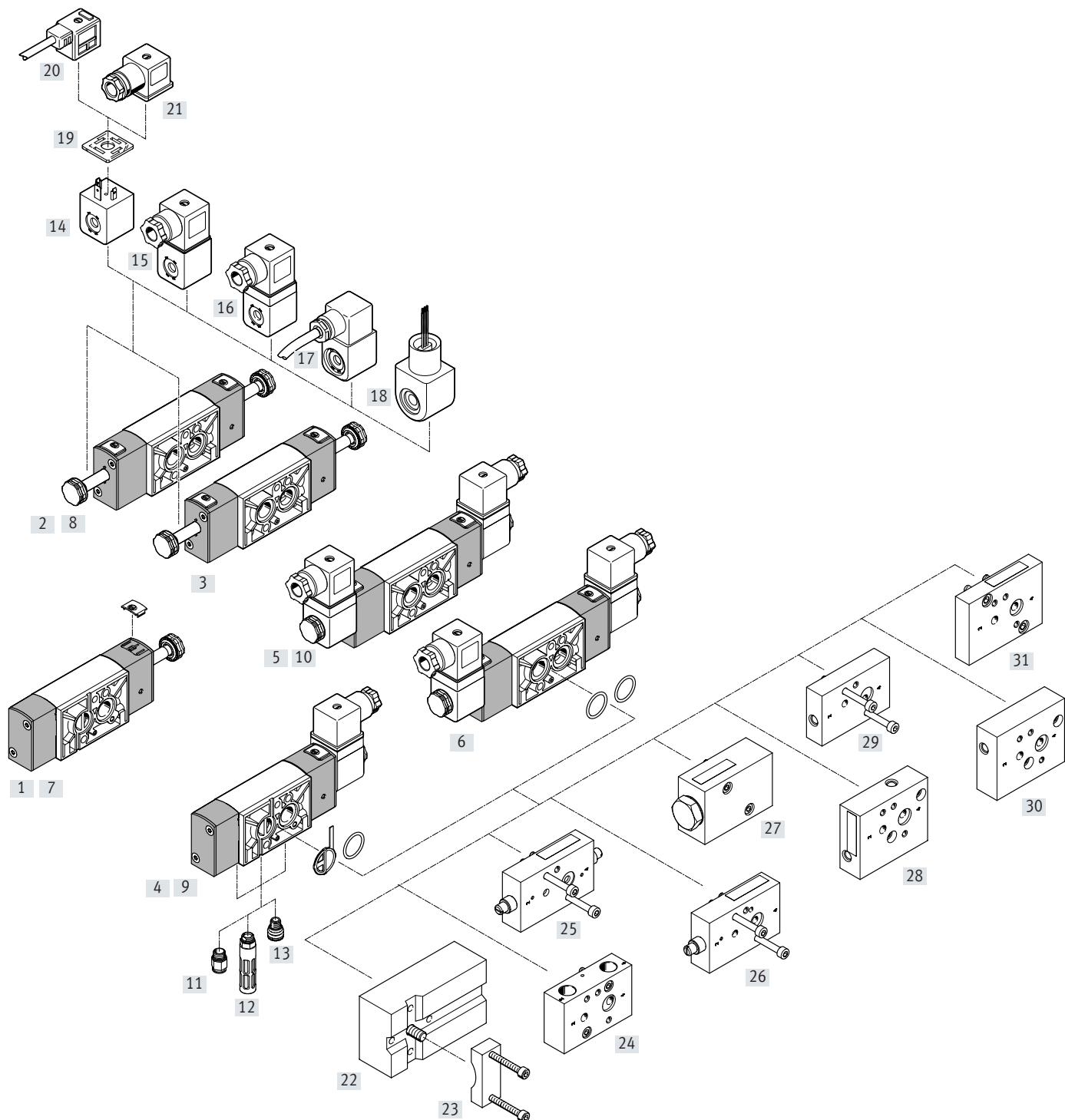
Encapsulated coil with conduit, connection VACN-...-U4M



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



Peripherals overview – VSNC-...-FN

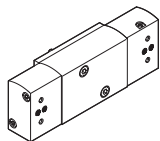


Peripherals overview – VSNC-F-...-FN

Mounting attachments and accessories			→ Page / Internet
		Brief description	
[1]	VSNC-F ...-FN	3/2-way and 5/2-way single solenoid valve with converting seal, aluminium cover and stainless steel armature tube	33
[2]	Piston spool	5/2-way double solenoid valve with aluminium cover and stainless steel armature tube	38
[3]		5/3-way valve, normally open, closed or exhausted with aluminium cover and stainless steel armature tube	42
[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	33
[5]		5/2-way double solenoid valve with aluminium cover, stainless steel armature tube and Ex-ia solenoid coil	38
[6]		5/3-way valve, normally open, closed or exhausted with aluminium cover, stainless steel armature tube and Ex-ia solenoid coil	42
[7]	VSNC-F- ... -FN	3/2-way and 5/2-way single solenoid valve with converting seal, aluminium cover and stainless steel armature tube	46
[8]	Poppet seat	5/2-way double solenoid valve with aluminium cover and stainless steel armature tube	49
[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	46
[10]		5/2-way double solenoid valve with aluminium cover, stainless steel armature tube and 24 V DC solenoid coil	49
[11]	QS Push-in fitting	For connecting compressed air tubing with standard O.D.	89
[12]	U Silencers	–	89
[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	87
[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	90
[20]	KMC Connecting cable	–	kmc
[21]	MSSD-C Plug socket	Electrical plug pattern to DIN EN 175301-803, type A	89
[22]	VABS-S7-S-G14 Connection set	Sub-base for attaching the valve to a NAMUR rib	79
[23]	VAMES7-Y Mounting bracket	Alternative (instead of screw) for mounting the valve on a NAMUR rib using a mounting bracket	86
[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.	79
[25]	VABF-B14-F1B1P2-FF14 Throttle plate (double-acting)	Flow control for double-acting quarter turn actuators.	80
[26]	VABF-B14-F1B1P1-FF14 Throttle plate (single-acting)	Flow control for single-acting quarter turn actuators.	80
[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.	81
[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.	82
[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.	83
[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.	84
[31]	VABA-B14-FL12-FL14 Mounting plate	Mounting plate with NAMUR connection 1/2 and 1/4	85

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

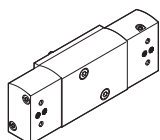
VSNC-F ... -P2



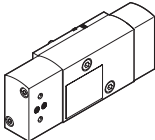
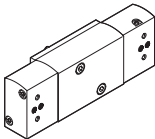
- Design: Piston spool
- Material of valve cap: Aluminium/metal
- Material of armature: Stainless steel
- Pilot air (via NAMUR connection, pilot control), protected

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	63
	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

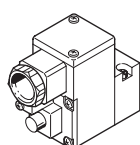
Design	Type	Pneumatic connection 1, 3, 5	Pneumatic connection 2, 4, based on standard	Standard nominal flow rate [l/min]	→ Page
3/2-way or 5/2-way valve ...-FN, convertible, single solenoid					
	VSNC-FTC-M52-M-G14-P2	G 1/4	VDI/VDE 3845 NAMUR	800	53
	VSNC-FTC-M52-M-N14-P2	1/4 NPT			
5/2-way valve ...-FN, double solenoid					
	VSNC-FT-B52-G14-P2	G 1/4	VDI/VDE 3845 NAMUR	1000	57
	VSNC-FT-B52-N14-P2	1/4 NPT			

Pilot valve MGXDH-...-EX



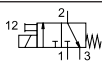
- Category II 2G II 2D
- Type of ignition protection Ex d
- IEC Ex certification
- ATEX certification

With pilot valve MGXIAH-...-EX, intrinsically safe



- Category II 1G II 1D
- Type of ignition protection Ex ia
- IEC Ex certification
- ATEX certification

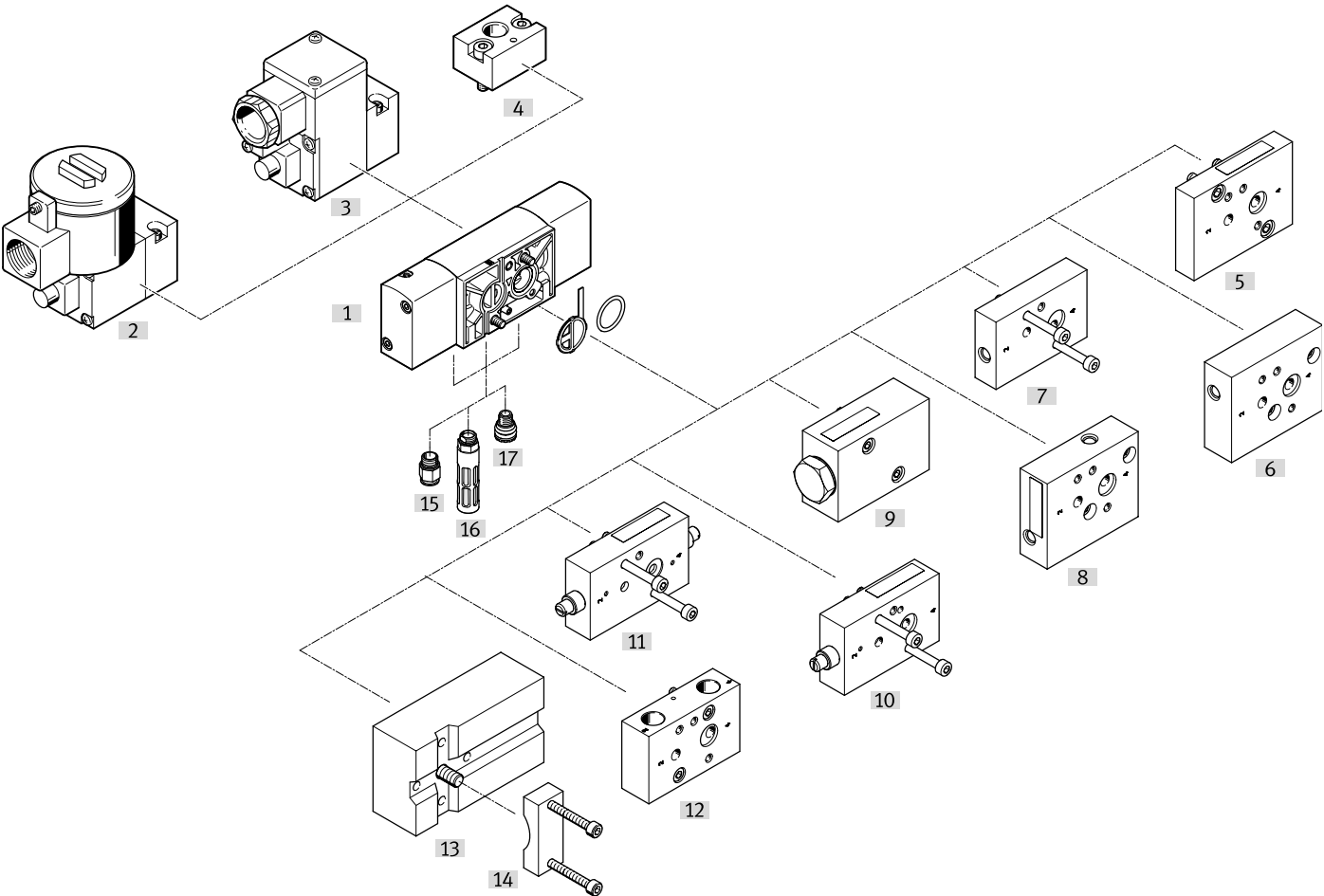
Key features, product range overview VSNC-...-P2

Pilot valve	MGXDH-3/2-1.2-110AC-EX 535616	MGXDH-3/2-1.2-230AC-EX 535617	MGXDH-3/2-1.2-24DC-EX 535615	MGXIAH-3/2-0.8-24DC-EX 535614
Valve function	3/2-way, closed, single solenoid			
Symbol				
Design	On/off valve			
Actuation type	Electrical			
Type of mounting	CNOMO			
Manual override	Detenting			
Reset method	Mechanical spring			
Direction of flow	Not reversible			
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] -0.9 ... 8 [MPa] -0.09 ... 0.8 [psi] -13.05 ... 116			
Ambient temperature	[°C] -20 ... 80			
Duty cycle	[%] 100			
Permissible frequency fluctuations	[%] ± 10			
Insulation class	H			
CE marking (see declaration of conformity)	To EU Explosion Protection Directive (ATEX) To EU Low Voltage Directive			
Max. input power Pi	- -40°C ~+50°C T6 = 2.98W - -40°C ~+65°C T135°C = 2.98W - -40°C ~+65°C T5 = 2.98W - -40°C ~+65°C T6 = 1W			
Max. input voltage Ui	[V] - 31			
Max. input current Ii	[A] - 0.67			
Effective internal inductance Li	- Negligibly low			
Effective internal capacitance Ci	- Negligibly low			
ATEX category for gas	II 2G II 1G			
Type of ignition protection for gas	ATEX: Ex db IIC T4 Gb CCC-Ex: Ex d IIC T3/T4 Gb			
ATEX category for dust	II 2D II 1D			
Type of ignition protection for dust	ATEX: Ex tb IIIC T135°C Db CCC-Ex: Ex tD A21 IP66 85°C/T200°C			
Explosion-proof ambient temperature	ATEX: -65°C ≤ Ta ≤ +40°C CCC-Ex: -20°C ≤ Ta ≤ +40°C			
Explosion protection certification outside the EU	EPL Db (IEC Ex) EPL Db (CN) EPL Gb (CN)			
Explosion protection certification outside the EU	EPL Gb (IECEx) ATEX: CML 15 ATEX 1119X CCC-Ex: 2020322307001701			
Certificate issuing authority	IEC: IECEx CML 17.0147X			
Degree of protection	IP66 IP65			
Characteristic coil data	110 V AC: 50/60 Hz, 230 V AC: 50/60 Hz, 24 V DC: 3 W Pick-up power 7.7 VA, 10 VA, - Holding power 3.8 VA, 6 VA, -			
Note on materials	RoHS-compliant Contains paint-wetting impairment substances			
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.

Peripherals overview VSNC-...-P2



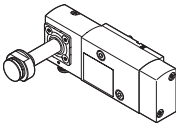
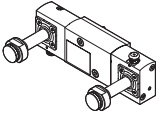
Peripherals overview VSNC-...-P2

Mounting attachments and accessories		Brief description	→ Page / Internet
[1]	VSNC-...-P2 Solenoid valves	3/2-way or 5/2-way valve -...-F19/F19A, convertible	53
[2]	MGXDH-... Pilot valves	with CNOMO port pattern, to ISO 15218	88
[3]	MGXIAH-... Pilot valves	with CNOMO port pattern, to ISO 15218	88
[4]	VABD-B14-P1-G18 Connector	with CNOMO port pattern, to ISO 15218	88
[5]	VABA-B14-FL12-FL14 Mounting plate	Mounting plate with NAMUR connection 1/2 and 1/4	85
[6]	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	84
[7]	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	83
[8]	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	82
[9]	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	81
[10]	VABF-B14-F1B1P1-FF14 Throttle plate (single-acting)	Flow control for single-acting quarter turn actuators	80
[11]	VABF-B14-F1B1P2-FF14 Throttle plate (double-acting)	Flow control for double-acting quarter turn actuators	80
[12]	VABS-B14-T-F ... 14 Connector plate	Using the sub-base, it is possible to use the NAMUR valve as an inline valve with G1/4" and NPT1/4" thread.	79
[13]	VABS-S7-S-G14 Connection set	Sub-base for attaching the valve to a NAMUR rib	79
[14]	VAME-S7-Y Mounting bracket	Alternative (instead of screw) for mounting the valve on a NAMUR rib using a mounting bracket	86
[15]	QS Push-in fitting	For connecting compressed air tubing with standard O.D.	89
[16]	U Silencers	–	89
[17]	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	87

Key features, product range overview VSNC-...-F19/F19A

VSNC-FT ... -F19

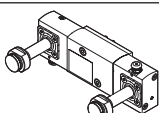
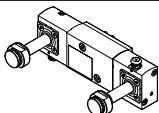
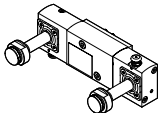
- Design: Poppet seat

Design	Type	Pneumatic connection 1, 3, 5	Pneumatic ports 2, 4	Standard nominal flow rate [l/min]	→ Page		
3/2-way or 5/2-way valve -...-F19, convertible							
	VSNC-FTC-M52-MH-G14-F19	–	G1/4	VDI/VDE 3845 NAMUR	800	65	
	VSNC-FTC-M52-MH-N14-F19		1/4 NPT				
	VSNC-FTC-M52-M-G14-F19		G1/4				
	VSNC-FTC-M52-M-N14-F19		1/4 NPT				
	VSNC-FTC-M52-MH-G14-F19A	Intrinsically safe	G1/4				
	VSNC-FTC-M52-MH-N14-F19A		1/4 NPT				
	VSNC-FTC-M52-M-G14-F19A		G1/4				
	VSNC-FTC-M52-M-N14-F19A		1/4 NPT				
5/2-way valve -...-F19, double solenoid							
	VSNC-FT-B52-H-G14-F19	–	G1/4	VDI/VDE 3845 NAMUR	1000	69	
	VSNC-FT-B52-H-N14-F19		1/4 NPT				
	VSNC-FT-B52-G14-F19		G1/4				
	VSNC-FT-B52-N14-F19		1/4 NPT				
	VSNC-FT-B52-H-G14-F19A	Intrinsically safe	G1/4				
	VSNC-FT-B52-H-N14-F19A		1/4 NPT				
	VSNC-FT-B52-G14-F19A		G1/4				
	VSNC-FT-B52-N14-F19A		1/4 NPT				

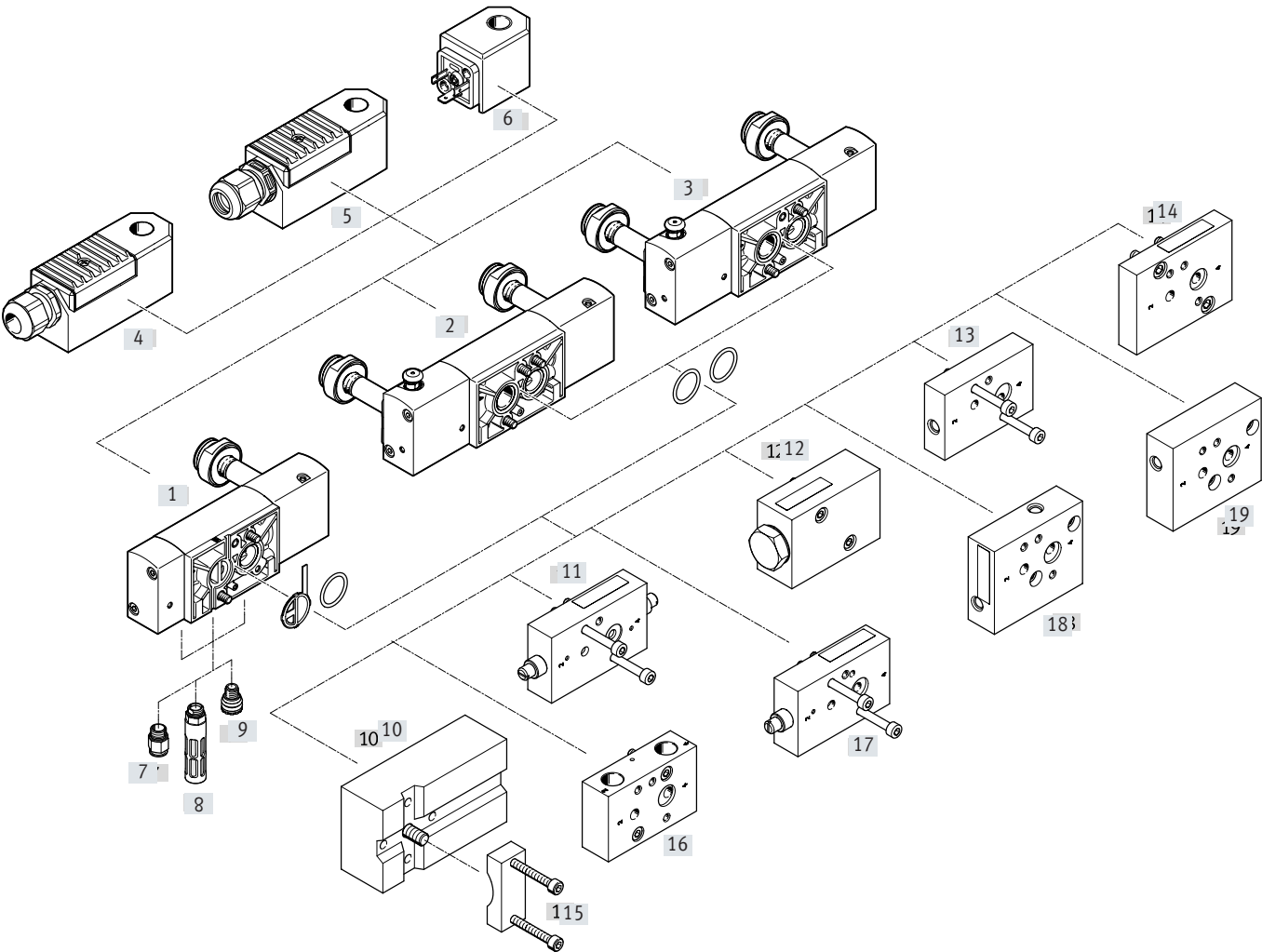
Key features, product range overview VSNC-...-F19/F19A

VSNC-F ... -F19

- Design: Piston spool

Design	Type		Pneumatic connection 1, 3, 5	Pneumatic ports 2, 4	Standard nominal flow rate [l/min]	→ Page
5/3-way valve -...-F19, closed						
	VSNC-F-P53C-MH-G14-F19	–	G1/4	VDI/VDE 3845 NAMUR	1250	74
	VSNC-F-P53C-MH-N14-F19		1/4 NPT			
	VSNC-F-P53C-M-G14-F19		G1/4			
	VSNC-F-P53C-M-N14-F19		1/4 NPT			
	VSNC-F-P53C-MH-G14-F19A	Intrinsically safe	G1/4			
	VSNC-F-P53C-MH-N14-F19A		1/4 NPT			
	VSNC-F-P53C-M-G14-F19A		G1/4			
	VSNC-F-P53C-M-N14-F19A		1/4 NPT			
5/3-way valve -...-F19, pressurised						
	VSNC-F-P53U-MH-G14-F19	–	G1/4	VDI/VDE 3845 NAMUR	950	74
	VSNC-F-P53U-MH-N14-F19		1/4 NPT			
	VSNC-F-P53U-M-G14-F19		G1/4			
	VSNC-F-P53U-M-N14-F19		1/4 NPT			
	VSNC-F-P53U-MH-G14-F19A	Intrinsically safe	G1/4			
	VSNC-F-P53U-MH-N14-F19A		1/4 NPT			
	VSNC-F-P53U-M-G14-F19A		G1/4			
	VSNC-F-P53U-M-N14-F19A		1/4 NPT			
5/3-way valve -...-F19, exhausted						
	VSNC-F-P53E-MH-G14-F19	–	G1/4	VDI/VDE 3845 NAMUR	1050	74
	VSNC-F-P53E-MH-N14-F19		1/4 NPT			
	VSNC-F-P53E-M-G14-F19		G1/4			
	VSNC-F-P53E-M-N14-F19		1/4 NPT			
	VSNC-F-P53E-MH-G14-F19A	Intrinsically safe	G1/4			
	VSNC-F-P53E-MH-N14-F19A		1/4 NPT			
	VSNC-F-P53E-M-G14-F19A		G1/4			
	VSNC-F-P53E-M-N14-F19A		1/4 NPT			

Peripherals overview VSNC-...-F19/F19A



Peripherals overview VSNC-...-F19/F19A

Mounting attachments and accessories		Brief description	→ Page / Internet
[1]	VSNC-...-F19/F19A Solenoid valves	3/2-way or 5/2-way valve -...-F19/F19A, convertible	65
[2]	VSNC-...-F19/F19A Solenoid valves	5/2-way valve -...-F19/F19A, double solenoid	69
[3]	VSNC-...-F19/F19A Solenoid valves	5/3-way valve -...-F19/F19A, closed, pressurised, exhausted	74
[4]	VACC-... Solenoid coil	Encapsulated solenoid coil with enhanced safety, Ex-me	88
[5]	VACC-... Solenoid coil	Type of ignition protection: intrinsically safe Ex-ia	88
[6]	VACN-... Solenoid coil	Degree of protection IP65 with socket	88
[7]	QS Push-in fitting	For connecting compressed air tubing with standard O.D.	89
[8]	U Silencers	–	89
[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	87
[10]	VABS-S7-S-G14 Connection set	Sub-base for attaching the valve to a NAMUR rib	79
[11]	VABF-B14-F1B1P2-FF14 Throttle plate (double-acting)	Flow control for double-acting quarter turn actuators	80
[12]	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	81
[13]	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	83
[14]	VABA-B14-FL12-FL14 Mounting plate	Mounting plate with NAMUR connection 1/2 and 1/4	85
[15]	VAME-S7-Y Mounting bracket	Alternative (instead of screw) for mounting the valve on a NAMUR rib using a mounting bracket	86
[16]	VABS-B14-T-F ... 14 Connector plate	Using the sub-base, it is possible to use the NAMUR valve as an inline valve with G1/4" and NPT1/4" thread.	79
[17]	VABF-B14-F1B1P1-FF14 Throttle plate (single-acting)	Flow control for single-acting quarter turn actuators	80
[18]	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	82
[19]	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	84

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	

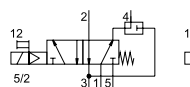
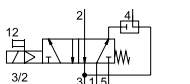
019	Electrical valve accessories	
	None	
G	Connector socket, without LED	

020	Version	
	Expanded properties	
S	Focused properties	

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

Function¹⁾

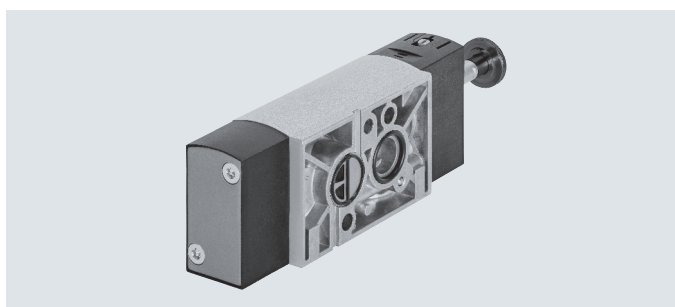
5/2-way valve

3/2-way valve
with exhaust return

-  - Voltage
24 V DC

-  - Operating pressure
2.5 ... 10 bar

-  - Temperature range
-20 ... +60°C



1) Can be changed by switching the seal plate

General technical data		VSNC-FC- ... -G14-F8 VSNC-FC- ... -N14-F8	VSNC-FC- ... -G14-F8-1B2	VSNC-FC- ... -G14-F8-1A1
Valve function		3/2-way or 5/2-way, convertible		
Width	[mm]	32		
Design		Piston spool		
Sealing principle		Soft		
Actuation type		Electrical		
Reset method		Mechanical spring		
Type of control		Piloted		
Manual override		Detenting, non-detenting		
Exhaust function		Can be throttled		
Port for venting hole		Not ducted		
Pilot air supply		Internal		
Type of mounting		Via 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 2, 4	G 1/4, 1/4 NPT Port pattern to NAMUR	G 1/4	G 1/4
Conforms to standard		VDI/VDE 3845 NAMUR		
Certificate issuing authority		DNVGL-TAA000011)		
Product weight	[g]	335	390	335

Datasheet – 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		–		
Maritime classification ²⁾		See certificate		
		c UL us - Recognized (OL)		
		–		

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.

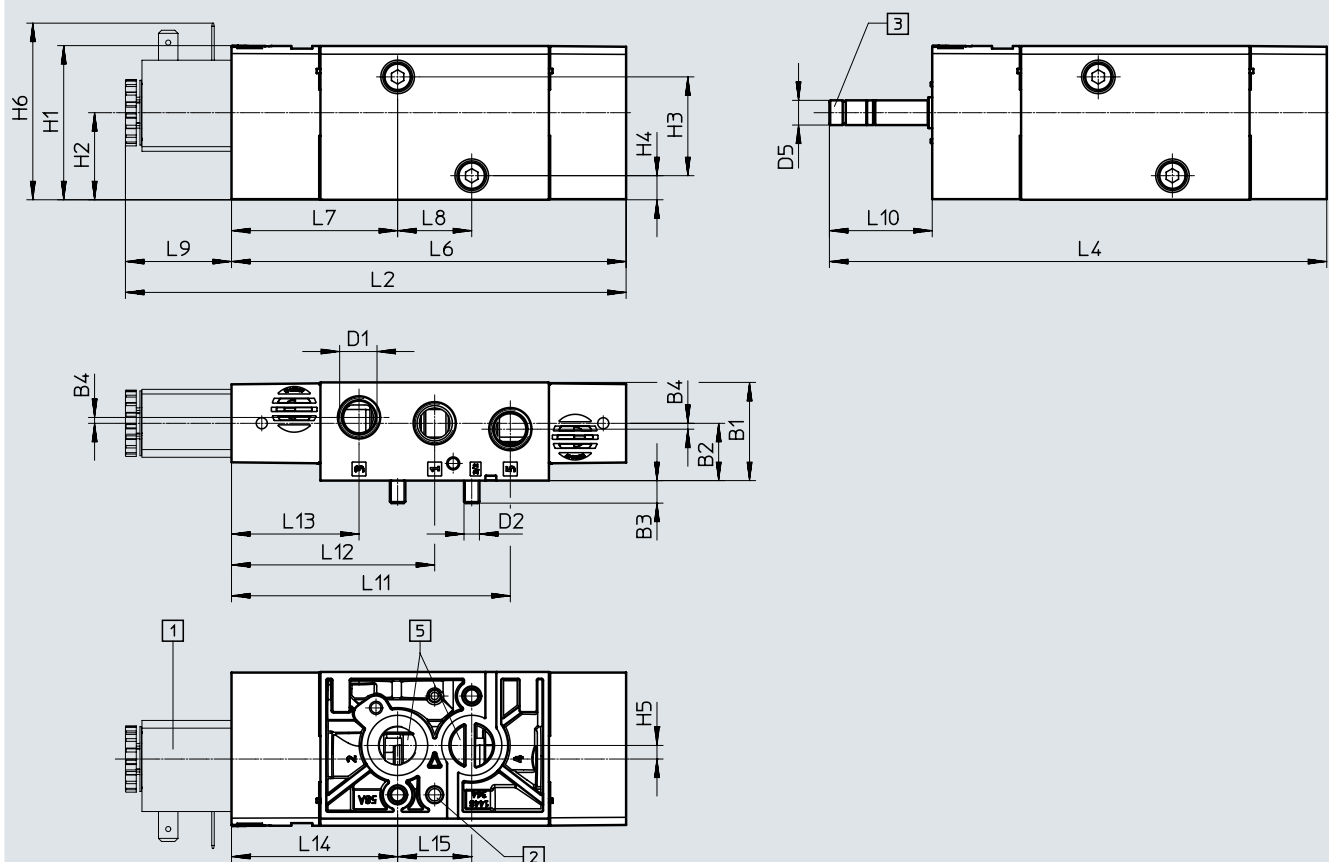
2) Additional information: www.festo.com/sp → Certificates.

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

Datasheet – 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

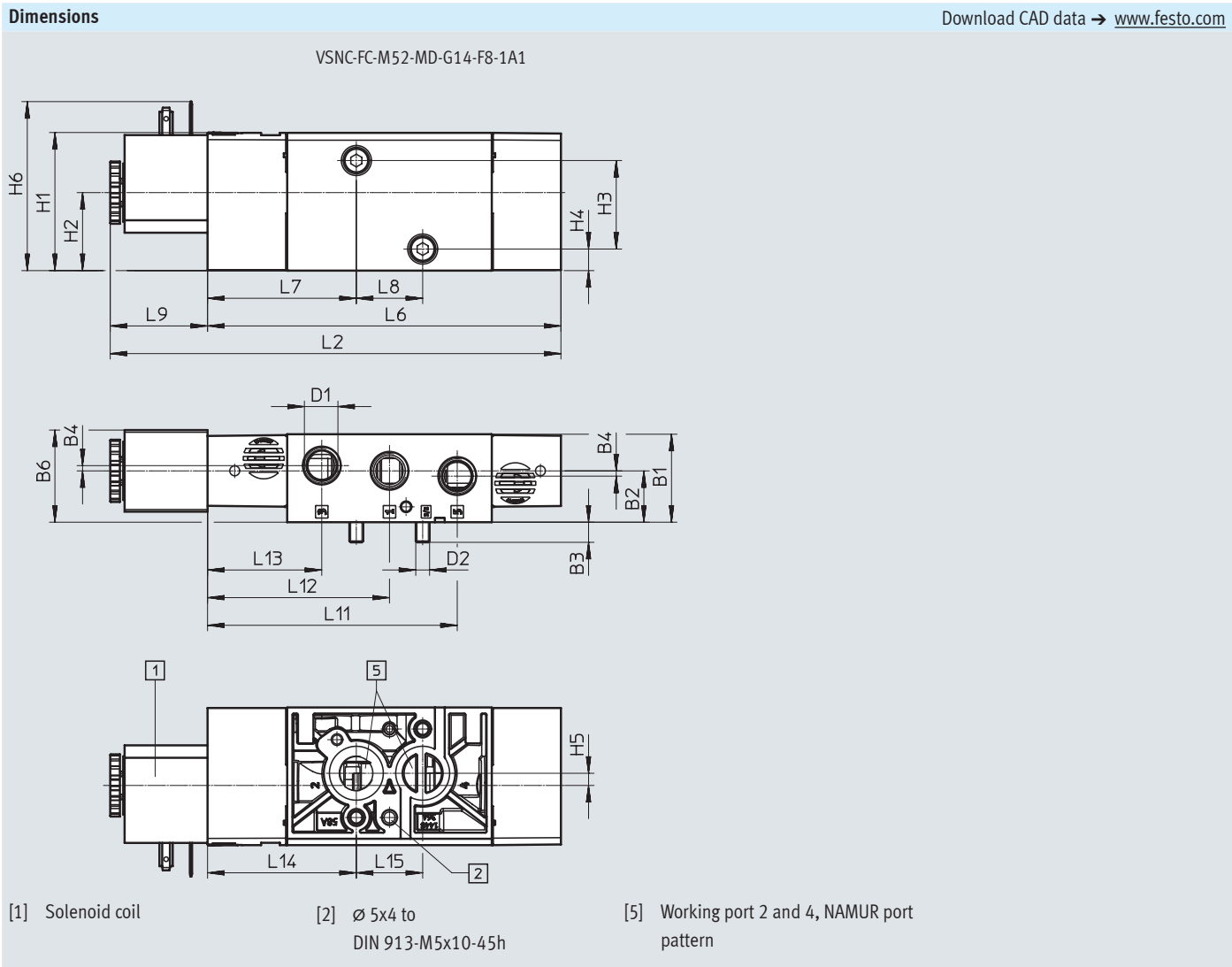
[1] Solenoid coil

[2] $\varnothing 5.5 \times 4$ (for threaded pin
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												

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



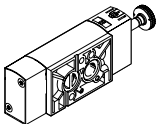
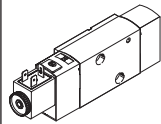
Type	B1	B2	B3	B4	B6	D1	D2	H1	H2	H3	H4	H5
VSNC-FC-M52-MD-G14-F8-1A1	31.8	18.6	7.3	1.9	33.3	G 1/4	M5	49.9	28.2	32	7.8	4.4

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

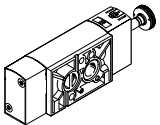
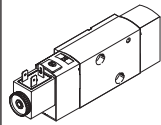
Datasheet – 3/2-way or 5/2-way valve ...-F8, convertible, single solenoid

★ Core 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

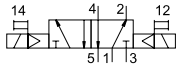
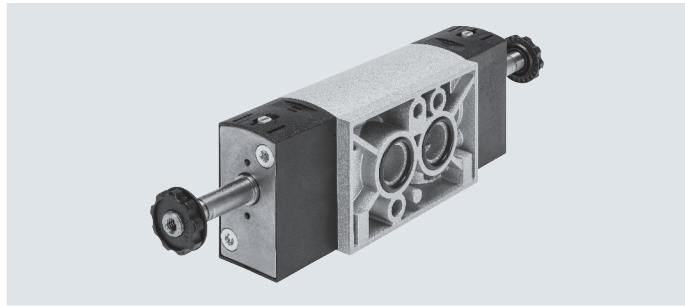
Ordering data – Valves

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

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

Function

5/2-way valve

Voltage
24 V DCOperating pressure
1.5 ... 10 barTemperature 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		Via 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 port	1, 3, 5	G 1/4, 1/4 NPT	
	2, 4	Port pattern to NAMUR	
Conforms to standard		VDI/VDE 3845 (NAMUR)	
Certificate issuing authority		DNVGL-TAA000011J	
Product weight	[g]	345	455

Datasheet – 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.

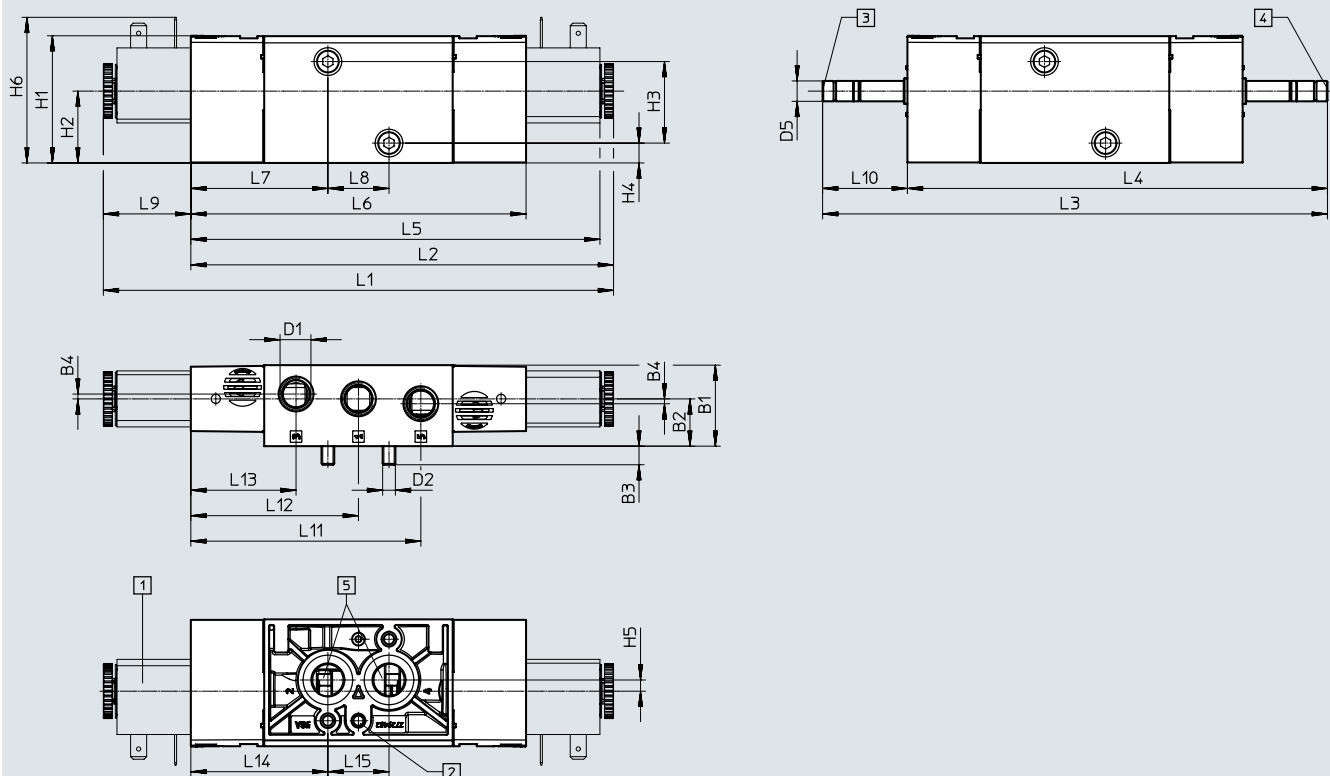
2) Additional information: www.festo.com/sp → Certificates.

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

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

Dimensions

Download CAD data → www.festo.com

- [1] Solenoid coil
 [2] $\varnothing 5.5 \times 4$ (for threaded pin 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				160.6				34.4						
VSNC-F-B52-D-G14-F8-1B2	166													

Ordering data – Valves

Directional control valve without solenoid coil

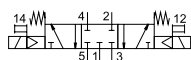
Directional control valve with solenoid coil

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

Datasheet – 5/3-way valve ...-F8

Function

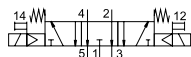
5/3-way valve, closed



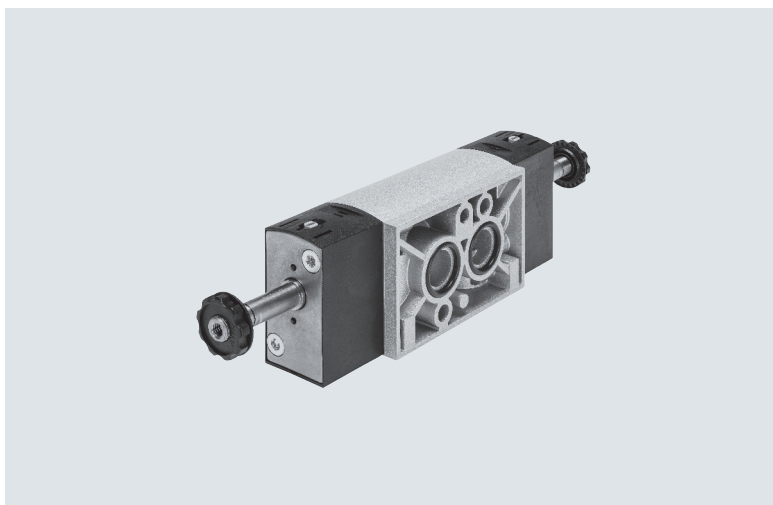
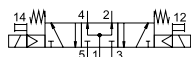
-  - Operating pressure
3 ... 10 bar

-  - Temperature range
-20 ... +60°C

5/3-way valve, exhausted



5/3-way valve, pressurised



General technical data		VSNC-F-P53C-MD-G14-F8 VSNC-F-P53C-MD-N14-F8	VSNC-F-P53E-MD-G14-F8 VSNC-F-P53E-MD-N14-F8	VSNC-F-P53U-MD-G14-F8 VSNC-F-P53U-MD-N14-F8
Valve function		5/3-way, closed	5/3-way, exhausted	5/3-way, pressurised
Width	[mm]	32		
Nominal width	[mm]	7.2	6	6
Design		Piston spool		
Sealing principle		Soft		
Actuation type		Electrical		
Reset method		Mechanical spring		
Type of control		Piloted		
Manual override		Non-detenting, non-detenting		
Type of mounting		Via 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 port	1, 3, 5	G 1/4, 1/4 NPT		
	2, 4	Port pattern to NAMUR		
Conforms to standard		VDI/VDE 3845 (NAMUR)		
Certificate issuing authority		DNVGL-TAA000011J		
Product weight	[g]	345		

Datasheet – 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.

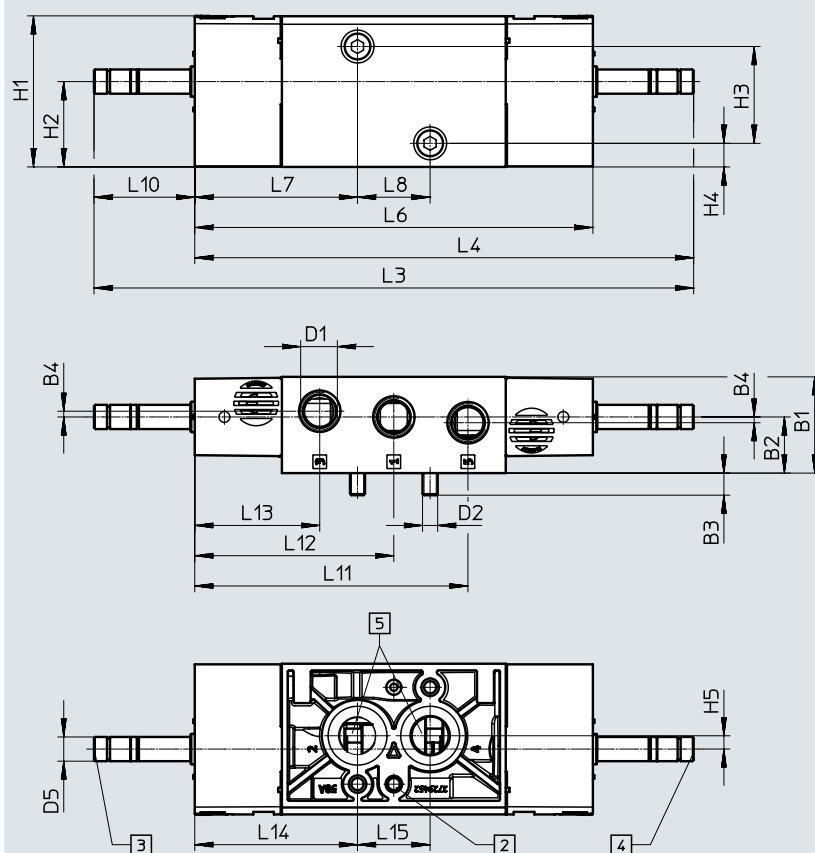
2) Additional information: www.festo.com/sp → Certificates.

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

Datasheet – 5/3-way valve ...-F8

Dimensions

Download CAD data → www.festo.com

[2] $\varnothing 5.5 \times 4$ (for threaded pin
DIN 913-M5x10-45H)

[3] Suction of auxiliary pilot air 82,
M5

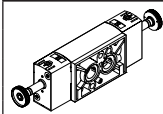
[4] Suction of auxiliary pilot air 84,
M5

[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											
VSNC-F-P53U-MD-N14-F8											
VSNC-F-P53E-MD-N14-F8											
					1/4 NPT						

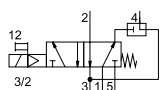
Type	L3	L4	L6	L7	L8	L10	L11	L12	L13	L14	L15
VSNC-F-P53C-MD-G14-F8	198.2	164.9	131.6	53.8	24	33.3	90.3	65.8	41.3	53.8	24
VSNC-F-P53U-MD-G14-F8											
VSNC-F-P53E-MD-G14-F8											
VSNC-F-P53C-MD-N14-F8											
VSNC-F-P53U-MD-N14-F8											
VSNC-F-P53E-MD-N14-F8											

Datasheet – 5/3-way valve ...-F8

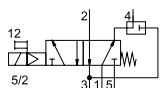
Ordering data – Valves		
Directional control valve without solenoid coil		
	Part no.	Type
	577259	VSNC-F-P53C-MD-G14-F8
	577260	VSNC-F-P53U-MD-G14-F8
	577261	VSNC-F-P53E-MD-G14-F8
	577264	VSNC-F-P53C-MD-N14-F8
	577265	VSNC-F-P53U-MD-N14-F8
	577266	VSNC-F-P53E-MD-N14-F8

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

Convertible function
3/2-way valve or

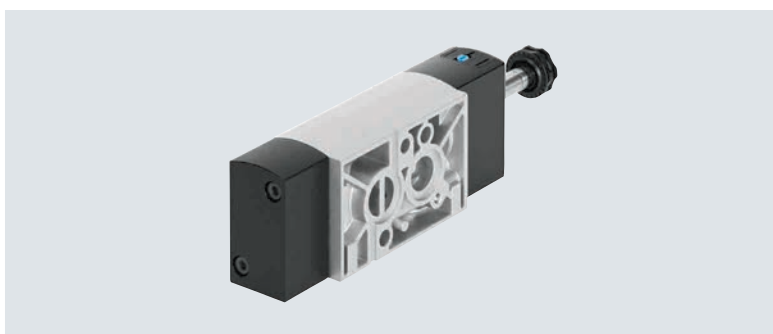


5/2-way valve



 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 function			Can be throttled		
Manual override			Detenting, non-detenting		
Type of mounting			Via 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		Port pattern to NAMUR		
Conforms to standard			VDI/VDE 3845 (NAMUR)		
Certificate issuing authority			DNVGL-TAA000011)		
Product weight [g]			415		

Operating and environmental conditions		VSNC- ... -G14-FN VSNC- ... -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: www.festo.com/sp → Certificates.

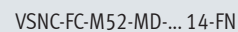
Datasheet – 3/2-way or 5/2-way valve VSNC-F...-FN, convertible, single solenoid

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 for 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		

Download CAD data → www.festo.com



- | Type | B1 | B2 | B3 | B4 | B6 | D1 | D2 | D5
Ø | 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 | | | | | | – | | | | | | | | |
| VSNC-FC-M52-MD-N14-FN-1A1-Ex4-A | | | | | | 65.1 | | | | | | | | |

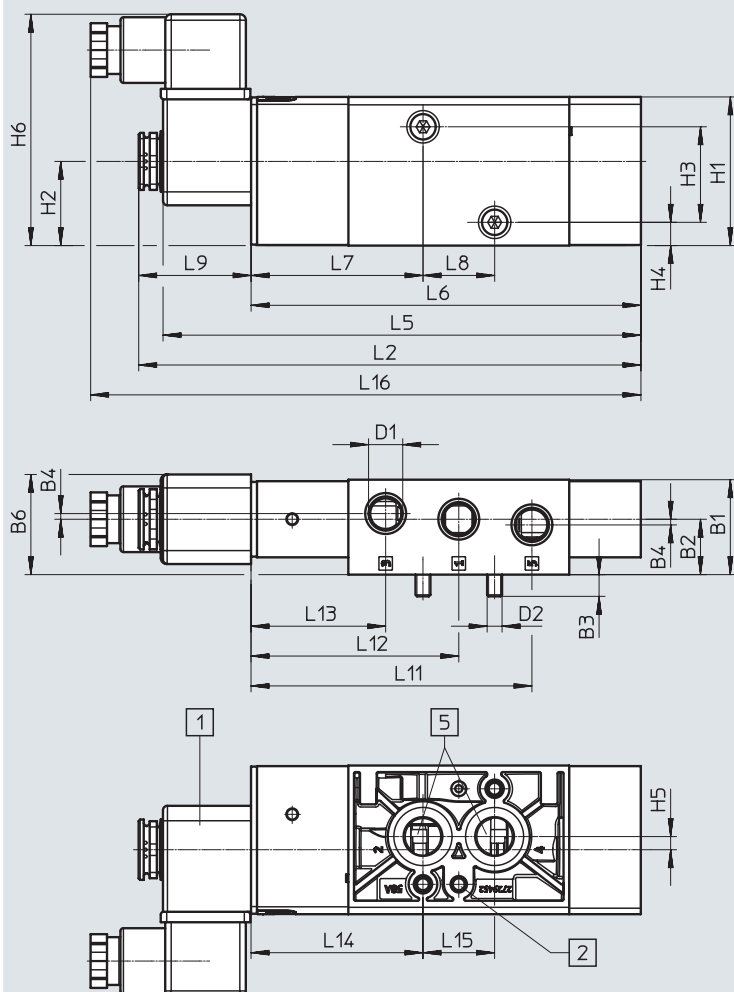
Type	L2	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15
VSNC-FC-M52-MD-G14-FN	–	165	–	130.6	57.6	24	–	34.4	94.1	69.6	45.1	57.6	24
VSNC-FC-M52-MD-G14-FN-1A1-Ex4-A	168.3		160.1				37.7						
VSNC-FC-M52-MD-N14-FN	–		–				–						
VSNC-FC-M52-MD-N14-FN-1A1-Ex4-A	168.3		160.1				37.7						

Datasheet – 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] $\varnothing 5 \times 4$ 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

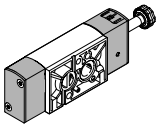
Type	L2	L5	L6	L7	L8	L9	L11	L12	L13	L14	L15	L16
VSNC-FC-M52-MD-G14-FN- ... +G	168.3	160.1	130.6	57.6	24	37.7	94.1	69.6	45.1	57.6	24	184.4

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

★ Core Range

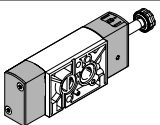
Ordering data – Valves

Directional control valve without solenoid coil

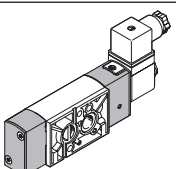
	Part no.	Type
	★ 577267	VSNC-FC-M52-MD-G14-FN

Ordering data – Valves

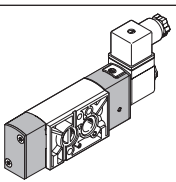
Directional control valve without solenoid coil

	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

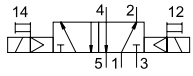
Directional control valve with Ex-i solenoid coil including socket

	577281	VSNC-FC-M52-MD-G14-FN-1A1-Ex4-A
	577286	VSNC-FC-M52-MD-N14-FN-1A1-Ex4-A

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

Function

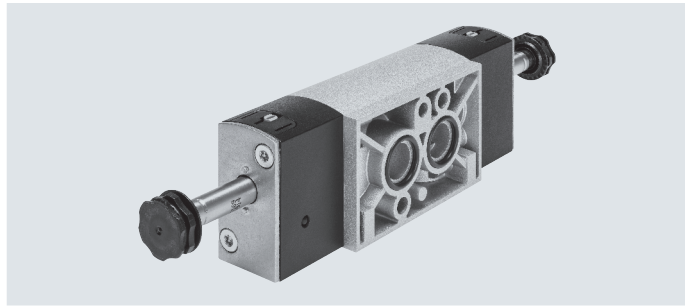
5/2-way valve, double solenoid



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 function		Can be throttled	
Manual override		Non-detenting, detenting	
Type of mounting		Via 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 port	1, 3, 5 2, 4	G 1/4, 1/4 NPT Port pattern to NAMUR	
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: www.festo.com/sp → Certificates.

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

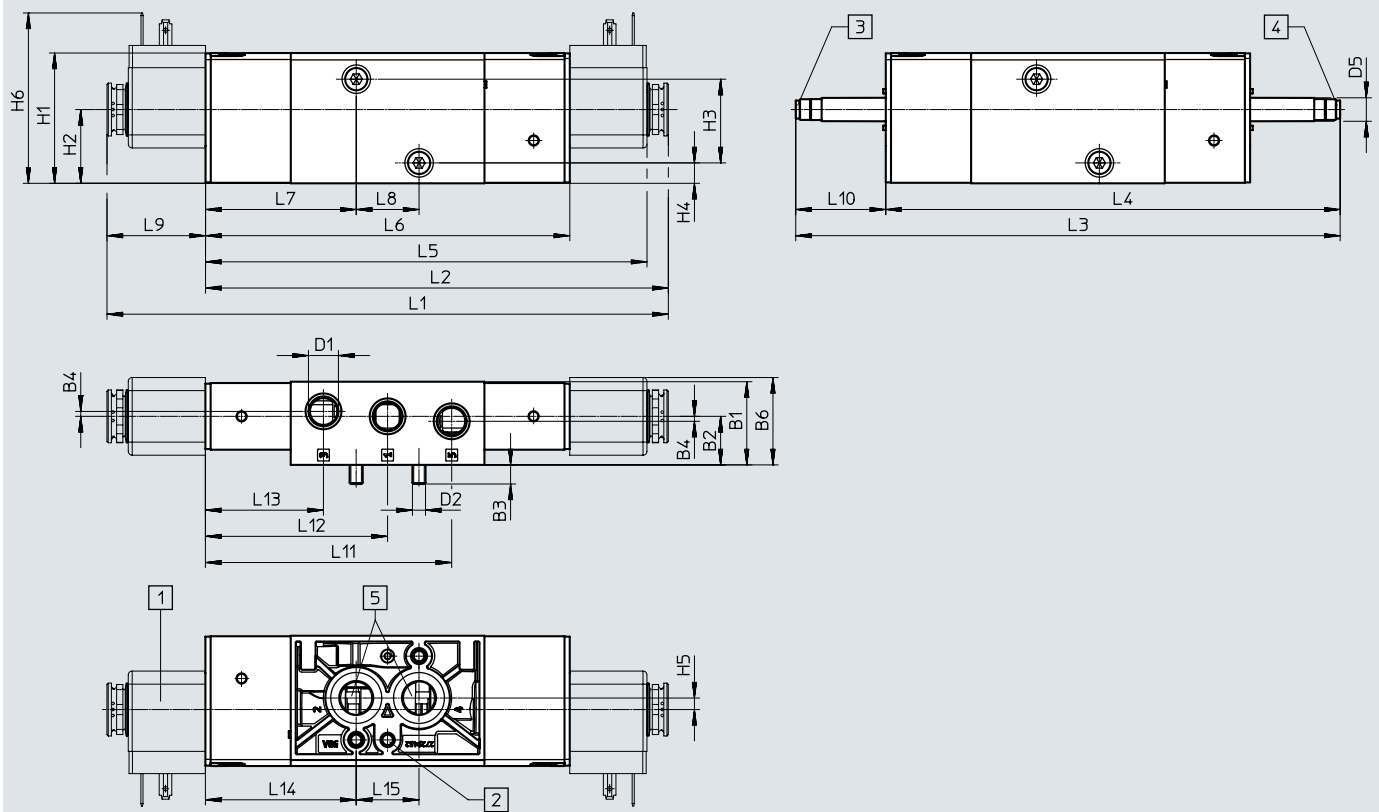
ATEX		
	VSNC-F-B52-D-G14-FN VSNC-F-B52-D-N14-FN	VSNC-F-B52-D-G14-FN-1A1-Ex4-A VSNC-F-B52-D-N14-FN-1A1-Ex4-A
ATEX category for gas	–	II 2G
Type of ignition protection for gas	–	Ex ia IIC T6 Ga
ATEX category for dust	–	II 2D
Type of ignition protection for dust	–	Ex t IIIC T80°C Db
Explosion protection 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	

Datasheet – 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

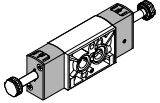
Type	B1	B2	B3	B4	B6	D1	D2	D5 Ø	H1	H2	H3	H4	H5	H6	L1							
VSNC-F-B52-D-G14-FN	31.8	18.6	7.3	1.9	33.4	G 1/4	M5	9	49.8	28.2	32	7.8	4.4	–	–							
VSNC-F-B52-D-G14-FN-1A1-Ex4-A						1/4 NPT								65.1	214.5							
VSNC-F-B52-D-N14-FN														–	–							
VSNC-F-B52-D-N14-FN-1A1-Ex4-A														65.1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

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

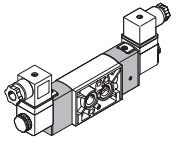
Datasheet – 5/2-way valve VSNC-F...-FN, double solenoid

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

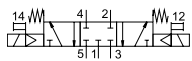
Directional control valve with Ex-i solenoid coil including socket

	577282	VSNC-F-B52-D-G14-FN-1A1-Ex4-A
	577287	VSNC-F-B52-D-N14-FN-1A1-Ex4-A

Datasheet – 5/3-way valve VSNC-F...-FN

Function

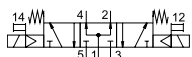
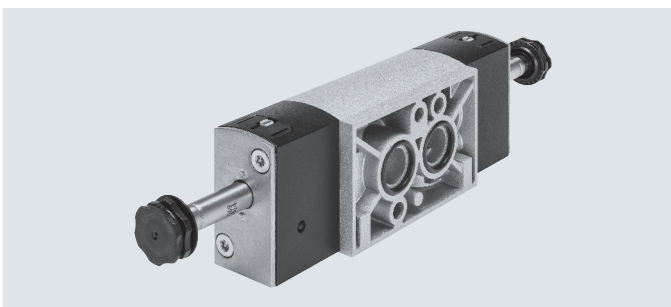
5/3-way valve, closed



5/3-way valve, exhausted



5/3-way valve, pressurised

Operating pressure
3 ... 8 barTemperature 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 function		Can be throttled		
Manual override		Non-detenting, detenting		
Type of mounting		Via 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 port	1, 3, 5	G 1/4, 1/4 NPT		
	2, 4	Port pattern to NAMUR		
Conforms to standard		VDI/VDE 3845 (NAMUR)		
Certificate issuing authority		DNVGL-TAA000011]		
Product weight	[g]	461		

Datasheet – 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.

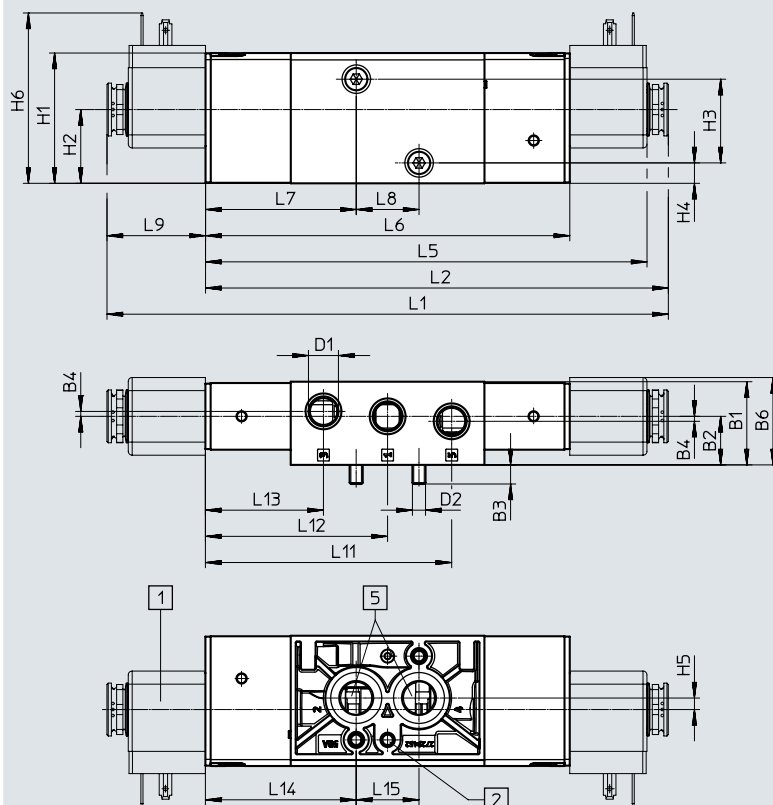
2) Additional information: www.festo.com/sp → Certificates.

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

Datasheet – 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

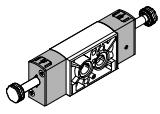
Type	B1	B2	B3	B4	B6	D1	D2	D5 Ø	H1	H2	H3	H4	H5	H6	L1
VSNC-F-P53C-MD-G14-FN	31.8	18.6	7.3	1.9	33.4	G 1/4	M5	9	49.8	28.2	32	7.8	4.4	-	-
VSNC-F-P53U-MD-G14-FN															
VSNC-F-P53E-MD-G14-FN															
VSNC-F-P53C-MD-N14-FN						1/4 NPT									
VSNC-F-P53U-MD-N14-FN															
VSNC-F-P53E-MD-N14-FN															

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														

Datasheet – 5/3-way valve VSNC-F...-FN

Ordering data – Valves

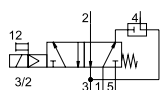
Directional control valve without solenoid coil

	Part no.	Type
	577269	VSNC-F-P53C-MD-G14-FN
	577270	VSNC-F-P53U-MD-G14-FN
	577271	VSNC-F-P53E-MD-G14-FN
	577274	VSNC-F-P53C-MD-N14-FN
	577275	VSNC-F-P53U-MD-N14-FN
	577276	VSNC-F-P53E-MD-N14-FN

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

Convertible function

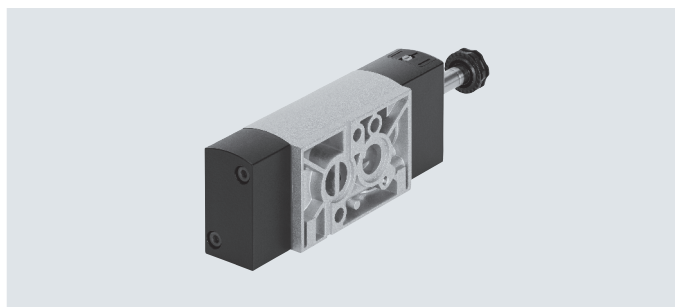
3/2-way valve or



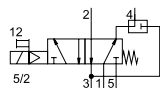
Operating pressure
2.5 ... 8 bar



Temperature range
-20 ... +60°C



5/2-way valve



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 function			Can be throttled	
Manual override			Non-detenting, detenting	
Type of mounting			Via through-hole	
Port for venting hole			Not ducted	
Mounting position			Any	
Non-overlapping			No	
Direction of flow			Not 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 port	1, 3, 5		G1/4	
	2, 4		Port pattern to NAMUR	
Conforms to standard			VDI/VDE 3845 (NAMUR)	
Certificate issuing authority			DNVGL-TAA000011J	
Degree of protection			–	IP65, IP67
Product weight		[g]	404	440

Datasheet – 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.

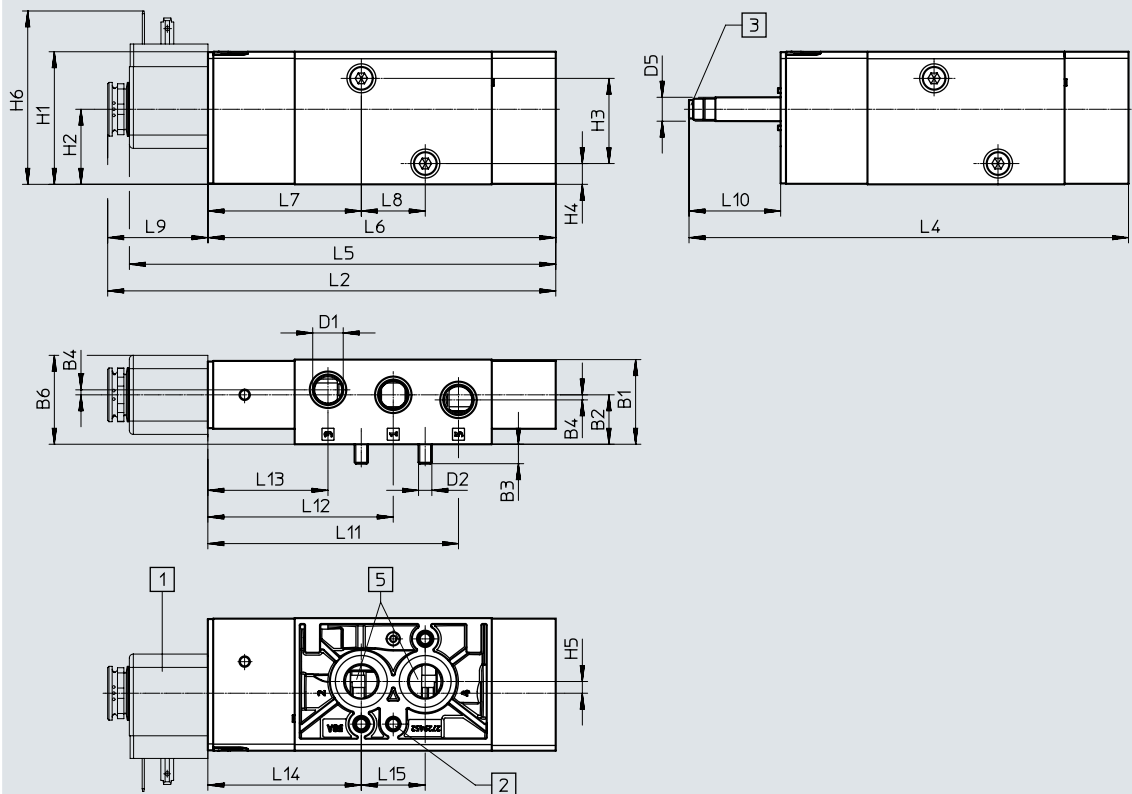
2) Additional information: www.festo.com/sp → Certificates.

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
Switching time off	[ms]	120
Permissible voltage fluctuations	[%]	±10

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

Datasheet – 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] $\varnothing 5 \times 4$ 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 $\varnothing$	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						1/4 NPT								
VSNC-FTC-M52-MD-N14-FN-1A1														

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

Ordering data – Valves

Directional control valve without solenoid coil

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

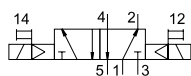
Directional control valve with 24 V DC solenoid coil

	577297	VSNC-FTC-M52-MD-G14-FN-1A1
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Datasheet – 5/2-way valve VSNC-FT...-FN, double solenoid

Function

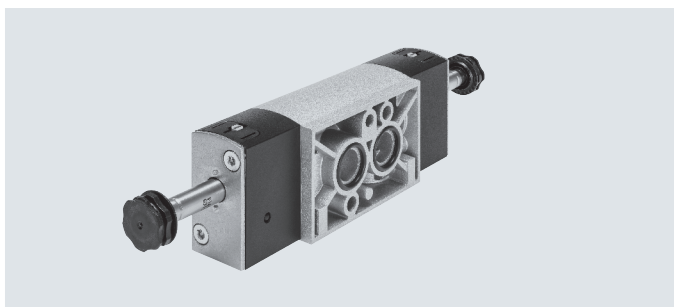
5/2-way valve, double solenoid



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 function		Can be throttled	
Manual override		Non-detenting, detenting	
Type of mounting		Via through-hole	
Port for venting hole		Not ducted	
Mounting position		Any	
Non-overlapping		No	
Direction of flow		Not reversible	
Standard nominal flow rate	[l/min]	1000	
b value		0.24	
C value	[l/sbar]	4.6	
Pneumatic port	1, 3, 5	G 1/4, 1/4 NPT	
	2, 4	Port pattern to NAMUR	
Conforms to standard		VDI/VDE 3845 (NAMUR)	
Certificate issuing authority		DNVGL-TAA000011J	
Degree of protection		–	IP65, IP67
Product weight	[g]	519	670

Datasheet – 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.

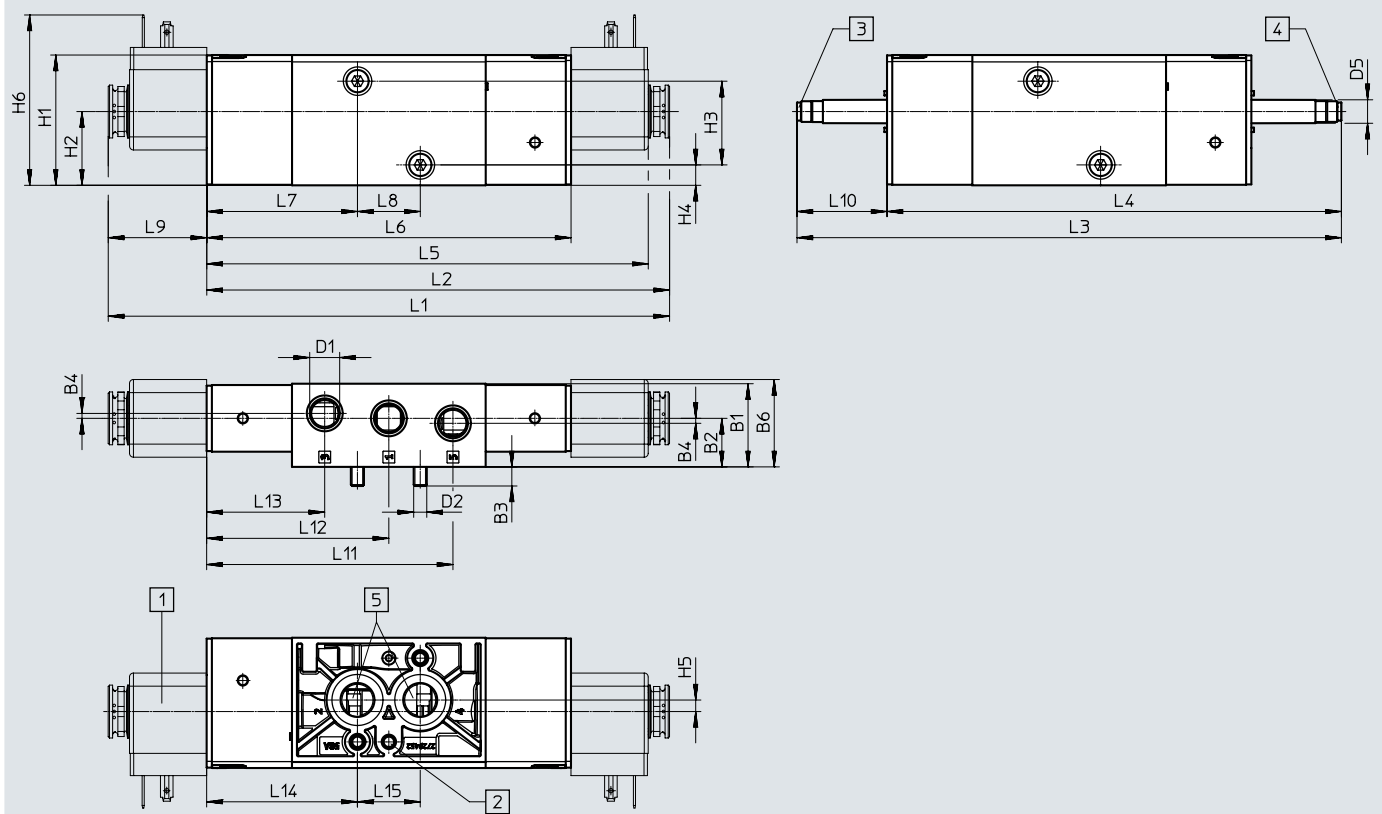
2) Additional information: www.festo.com/sp → Certificates.

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
Permissible voltage fluctuations	[%]	±10

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

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

Dimensions

Download CAD data → www.festo.com

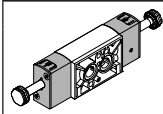
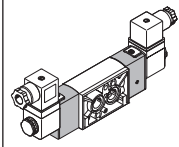
VSNC-FT-B52-D-... 14-FN

- [1] Solenoid coil
 [2] 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-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						1/4 NPT									
VSNC-FT-B52-D-N14-FN															

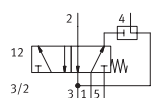
Type	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15
VSNC-FT-B52-D-G14-FN	-	208	173.6	-	139.2	57.6	24	-	34.4	94.1	69.6	45.1	57.6	24
VSNC-FT-B52-D-G14-FN-1A1														
VSNC-FT-B52-D-N14-FN														

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

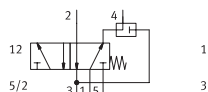
Ordering data – Valves		
Directional control valve without solenoid coil		
	Part no.	Type
	577278	VSNC-FT-B52-D-G14-FN
	577280	VSNC-FT-B52-D-N14-FN
Directional control valve with solenoid coil		
	577298	VSNC-FT-B52-D-G14-FN-1A1

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

Convertible function
3/2-way valve or

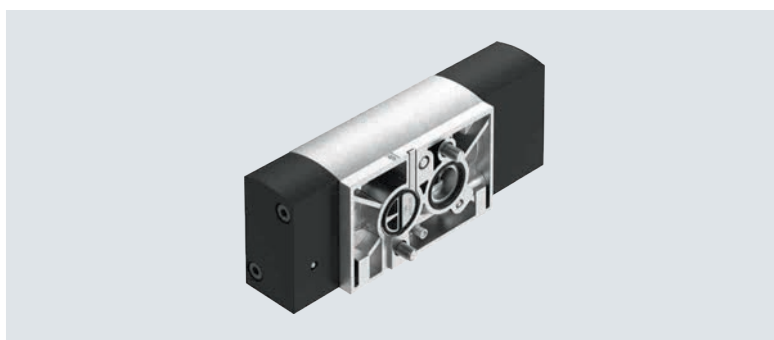


5/2-way valve



 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 function			Can be throttled
Manual override			None
Type of mounting			Via through-hole
Port for venting hole			Not ducted
Mounting position			Any
Overlap			Negative overlap
Direction of flow			Not 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		Port pattern to NAMUR
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.

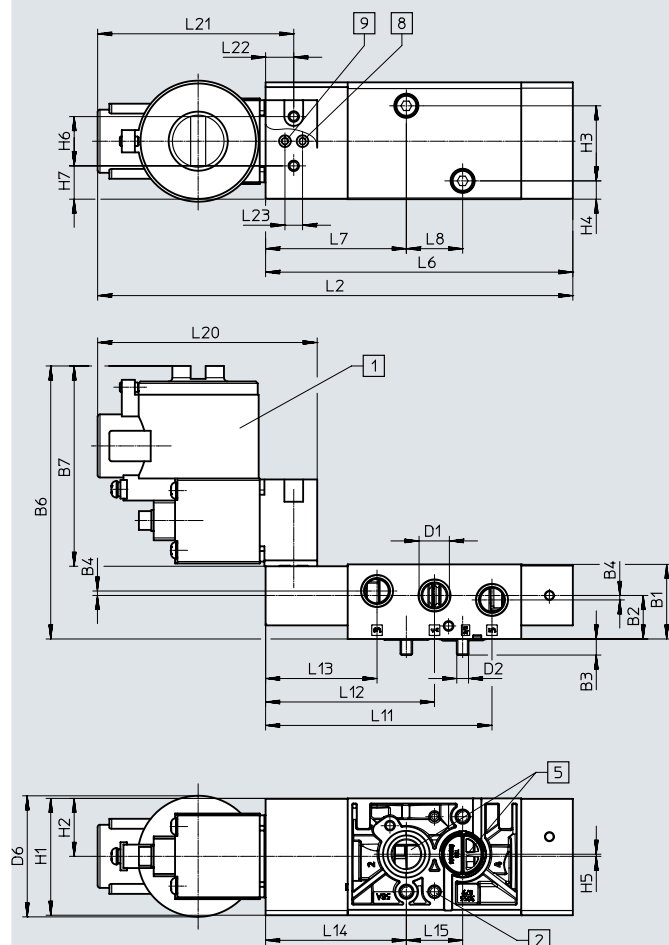
Datasheet – 3/2-way or 5/2-way valve VSNC-FT...-P2, convertible, single solenoid

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

Datasheet – 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] $\varnothing 5.5$ (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)

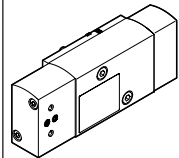
[9] Pilot air into the valve
 (CNOMO connection to ISO 15218)

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

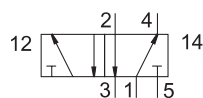
Datasheet – 3/2-way or 5/2-way valve VSNC-FT...-P2, convertible, single solenoid

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

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

Function

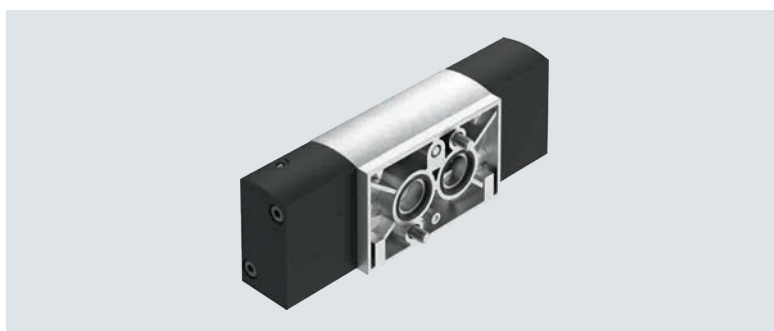
5/2-way valve, double solenoid



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 function		Can be throttled
Manual override		None
Type of mounting		Via through-hole
Port for venting hole		Not ducted
Mounting position		Any
Overlap		Negative overlap
Direction of flow		Not reversible
Standard nominal flow rate	[l/min]	1000
b value		–
C value	[l/sbar]	–
Pneumatic port	1, 3, 5 2, 4	G 1/4, 1/4 NPT Port pattern to NAMUR
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.

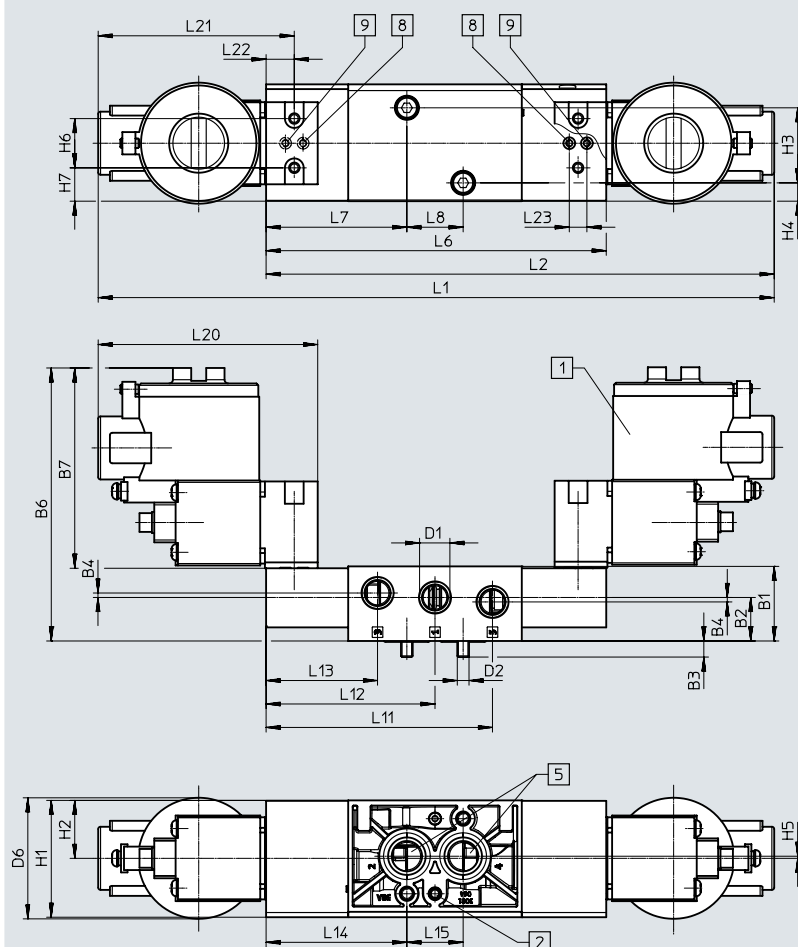
Datasheet – 5/2-way valve VSNC-FT...-P2, double solenoid

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

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

Dimensions

Download CAD data → www.festo.com

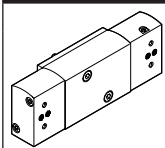
- [1] Solenoid coil
 [2] $\varnothing 5.5$ (for threaded pin to DIN 946-M5x10-45H)
 [5] Working port 2 and 4, NAMUR port pattern
 [8] Pilot air from the valve (CNOMO connection to ISO 15218)
 [9] Pilot air into the valve (CNOMO connection to ISO 15218)

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

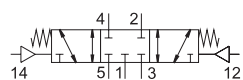
Datasheet – 5/2-way valve VSNC-FT...-P2, double solenoid

Ordering data – Valves		
Directional control valve without solenoid coil		
	Part no.	Type
	8114687	VSNC-FT-B52-G14-P2
	8114699	VSNC-FT-B52-N14-P2

Datasheet – 5/3-way valve VSNC-F...-P2

Function

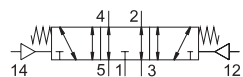
5/3-way valve, closed



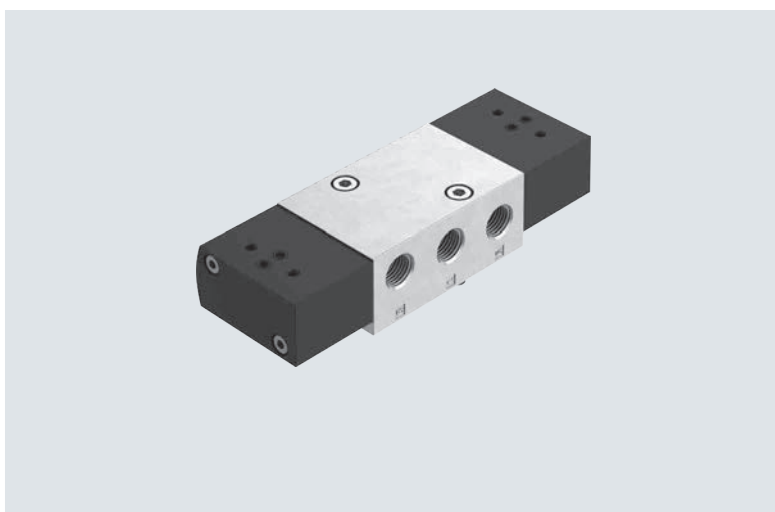
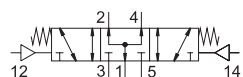
 Operating pressure
3 ... 8 bar

 Temperature range
-20 ... +60°C

5/3-way valve, exhausted



5/3-way valve, pressurised



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-way, closed	5/3-way, exhausted	5/3-way, pressurised
Width	[mm]	32		
Nominal width	[mm]	7.2	6	6
Design		Piston spool		
Sealing principle		Soft		
Actuation type		Electrical		
Reset method		Mechanical spring		
Type of control		Piloted		
Manual override		None		
Exhaust function		Can be throttled		
Port for venting hole		Not ducted		
Pilot air supply		Internal		
Type of mounting		Via through-hole		
Mounting position		Any		
Max. tightening torque for valve mounting	[Nm]	3.5		
Non-overlapping		Yes		
Overlap		Positive overlap		
Direction of flow		Not 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 port	1, 3, 5 2, 4	G 1/4, 1/4 NPT Port pattern to NAMUR		
Conforms to standard		VDI/VDE 3845 (NAMUR)		
Certificate issuing authority		DNVGL-TAA000011J		
Product weight	[g]	428		

Datasheet – 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

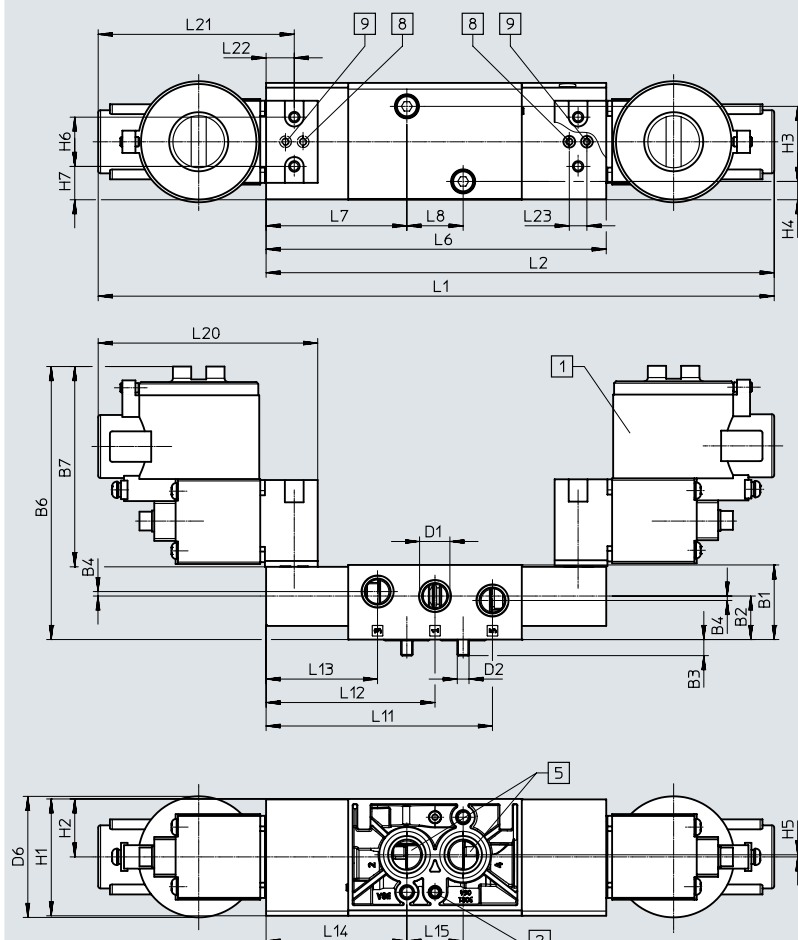
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

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

Datasheet – 5/3-way valve VSNC-F...-P2

Dimensions

Download CAD data → www.festo.com

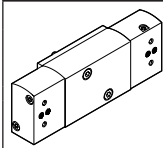
- [1] Solenoid coil
 [2] $\varnothing 5.5$ (for threaded pin to DIN 946-M5x10-45H)
 [5] Working port 2 and 4, NAMUR port
 [8] Pilot air from the valve (CNOMO connection to ISO 15218)
 [9] Pilot air into the valve (CNOMO connection to ISO 15218)

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													
VSNC-F-P53U-M-N14-P2					1/4 NPT								
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										

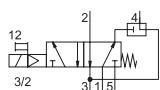
Type	B6	B7	D6 $\varnothing$	L1	L2	L20	L21
CNOMO solenoid coil							
MGXIAH-...	101.3	70.3	–	281	213	93	80
MGXDH-...	116.4	85.4	51.6	288.2	216.6	93.6	83.6

Datasheet – 5/3-way valve VSNC-F...-P2

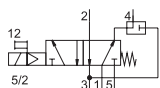
Ordering data – Valves		
Directional control valve without solenoid coil		
	Part no.	Type
	8114686	VSNC-F-P53C-M-G14-P2
	8114685	VSNC-F-P53U-M-G14-P2
	8114684	VSNC-F-P53E-M-G14-P2
	8114700	VSNC-F-P53C-M-N14-P2
	8114701	VSNC-F-P53U-M-N14-P2
	8114702	VSNC-F-P53E-M-N14-P2

Datasheet – 3/2-way or 5/2-way valve VSNC-FTC-...-F19/F19A, convertible

Convertible function
3/2-way valve or

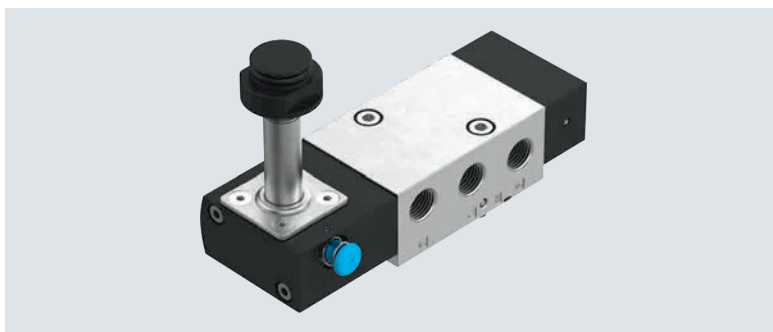


5/2-way valve



 Operating pressure
2.5 ... 8 bar

 Temperature range
–20 ... +60°C



General technical data		MH-G14-F19 MH-N14-F19	MH-G14-F19A MH-N14-F19A	M-G14-F19 M-N14-F19	M-G14-F19A, M-N14-F19A
Valve function		5/2-way or 3/2-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 function		Can be throttled			
Manual override		Non-detenting			None
Type of mounting		Via through-hole			
Port for venting hole		Not ducted			
Direction of flow		Not reversible			
Overlap		Negative overlap			
Mounting position		Any			
Standard nominal flow rate	1 > 2	800			
	Exhaust return 4 > 3	110			
Pneumatic connection	1, 3, 5	G1/4			
	2, 4	Port pattern to NAMUR			
Conforms to standard		VDI/VDE 3845 (NAMUR)			
Product weight	[g]	480			478

Operating and environmental conditions		MH-G14-F19 MH-N14-F19	MH-G14-F19A MH-N14-F19A	M-G14-F19 M-N14-F19	M-G14-F19A, M-N14-F19A
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.

Datasheet – 3/2-way or 5/2-way valve VSNC-FTC-...-F19/F19A, convertible

Electrical data		MH-G14-F19 MH-N14-F19	MH-G14-F19A MH-N14-F19A	M-G14-F19 M-N14-F19	M-G14-F19A M-N14-F19A
Switching time on	[ms]	25	435	25	435
Switching time off	[ms]	65	380	65	380
Duty cycle	[%]	100			
Characteristic coil data		See solenoid coil, to be ordered separately			

Materials		MH-G14-F19 MH-N14-F19	MH-G14-F19A MH-N14-F19A	M-G14-F19 M-N14-F19	M-G14-F19A M-N14-F19A
[1]	Housing	Wrought aluminium alloy			
[2]	Seals	NBR			
[3]	Screws	Wrought aluminium alloy			
[4]	Note on materials	RoHS-compliant			

Dimensions

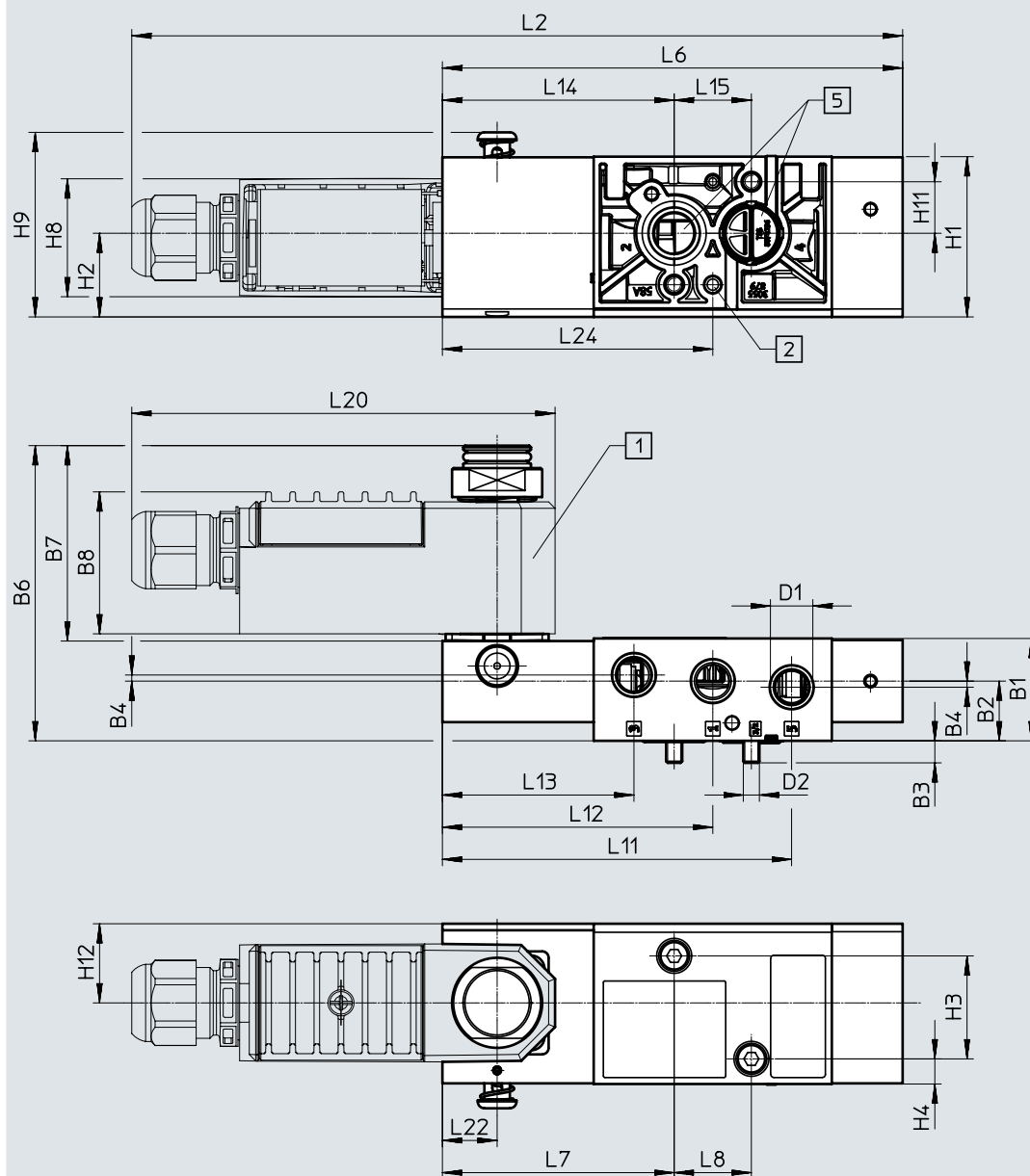
Download CAD data → www.festo.com

[1] Solenoid coil
VACC-S13-18-A1-...

Type	B8	L1	L20
VSNC-FTC-M52-MH-G14-F19	44.1	234	126
VSNC-FTC-M52-MH-N14-F19			
VSNC-FTC-M52-M-G14-F19			
VSNC-FTC-M52-M-N14-F19			

Datasheet – 3/2-way or 5/2-way valve VSNC-FTC-...-F19/F19A, convertible

Dimensions

Download CAD data → www.festo.com

[1] Solenoid coil
VACC-S13-11-K4-1-...A

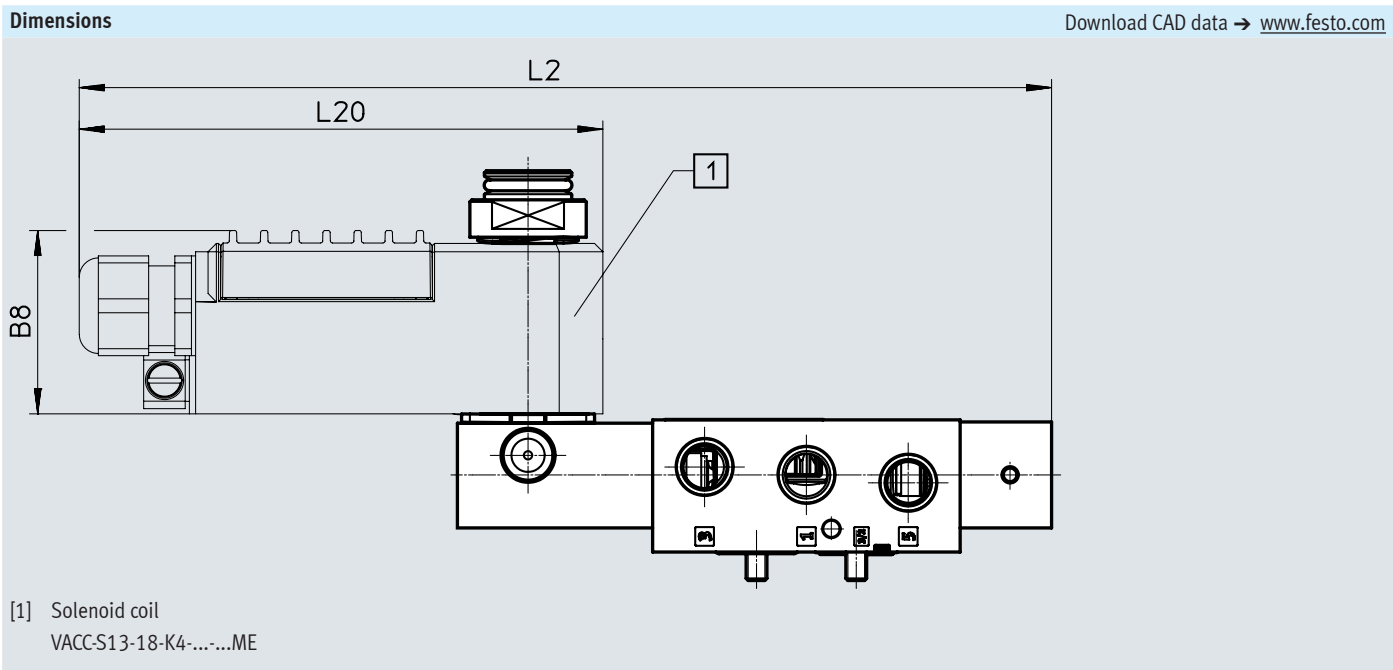
[2] $\varnothing 5.5$ for threaded pins
DIN 946-m5X10-45h

[3] Working ports 2 and 4:
NAMUR port pattern

Type	B1	B2	B3	B4	B6	B7	B8	D1	D2	H1	H2	H3	H4	H8	H9
VSNC-FTC-M52-MH-G14-F19A	31.8	18.6	6.9	1.9	91.8	60.8	44.1	G1/4	M5	49.8	26	32	7.8	36.8	57.4
VSNC-FTC-M52-MH-N14-F19A								NPT1/4							
VSNC-FTC-M52-M-G14-F19A								G1/4							
VSNC-FTC-M52-M-N14-F19A								NPT1/4							

Type	H11	H12	L2	L6	L7	L8	L11	L12	L13	L14	L15	L20	L22	L24
VSNC-FTC-M52-MH-G14-F19A	16	24.6	239.5	143	72	24	108.5	84	59.5	72	24	131.5	17	84
VSNC-FTC-M52-MH-N14-F19A														
VSNC-FTC-M52-M-G14-F19A														
VSNC-FTC-M52-M-N14-F19A														

Datasheet – 3/2-way or 5/2-way valve VSNC-FTC-...-F19/F19A, convertible



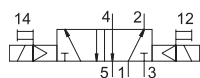
Type	B8	L1	L20
VSNC-FTC-M52-MH-G14-F19	41.2	175	67
VSNC-FTC-M52-MH-N14-F19			
VSNC-FTC-M52-M-G14-F19			
VSNC-FTC-M52-M-N14-F19			

Ordering data – Valves				
Directional control valve without solenoid coil				
	–	Manual override	Part no.	Type
		Non-detenting	8116369	VSNC-FTC-M52-MH-G14-F19
		Non-detenting	8116375	VSNC-FTC-M52-MH-N14-F19
		None	8116378	VSNC-FTC-M52-M-G14-F19
		None	8116379	VSNC-FTC-M52-M-N14-F19
	Intrinsically safe	Non-detenting	8116376	VSNC-FTC-M52-MH-G14-F19A
		Non-detenting	8116377	VSNC-FTC-M52-MH-N14-F19A
		None	8116380	VSNC-FTC-M52-M-G14-F19A
		None	8116381	VSNC-FTC-M52-M-N14-F19A

Datasheet – 5/2-way valve VSNC-FT-...-F19/F19A, double solenoid

Function

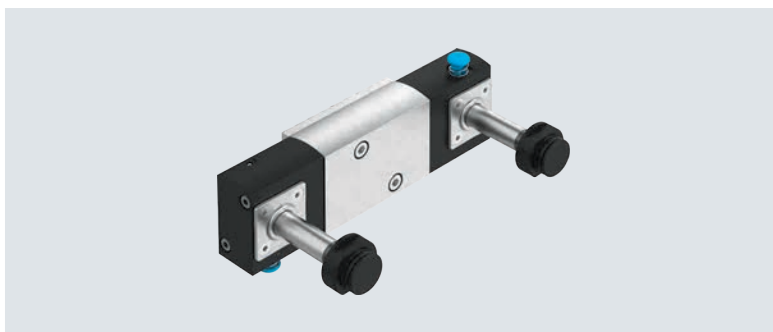
5/2-way valve, double solenoid



Operating pressure
1.5 ... 8 bar



Temperature range
-20 ... +60°C



General technical data

		H-G14-F19 H-G14-F19A	H-N14-F19 H-N14-F19A	G14-F19 G14-F19A	N14-F19 N14-F19A
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 function		Can be throttled			
Manual override		Non-detenting			None
Type of mounting		Via through-hole			
Port for venting hole		Not ducted			
Mounting position		Any			
Overlap		Negative overlap			
Direction of flow		Not reversible			
Standard nominal flow rate	[l/min]	1000			
Pneumatic port	1, 3, 5 2, 4	G1/4	1/4 NPT	G1/4	1/4 NPT
Conforms to standard		Port pattern to NAMUR VDI/VDE 3845 (NAMUR)			
Product weight	[g]	613			

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

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.

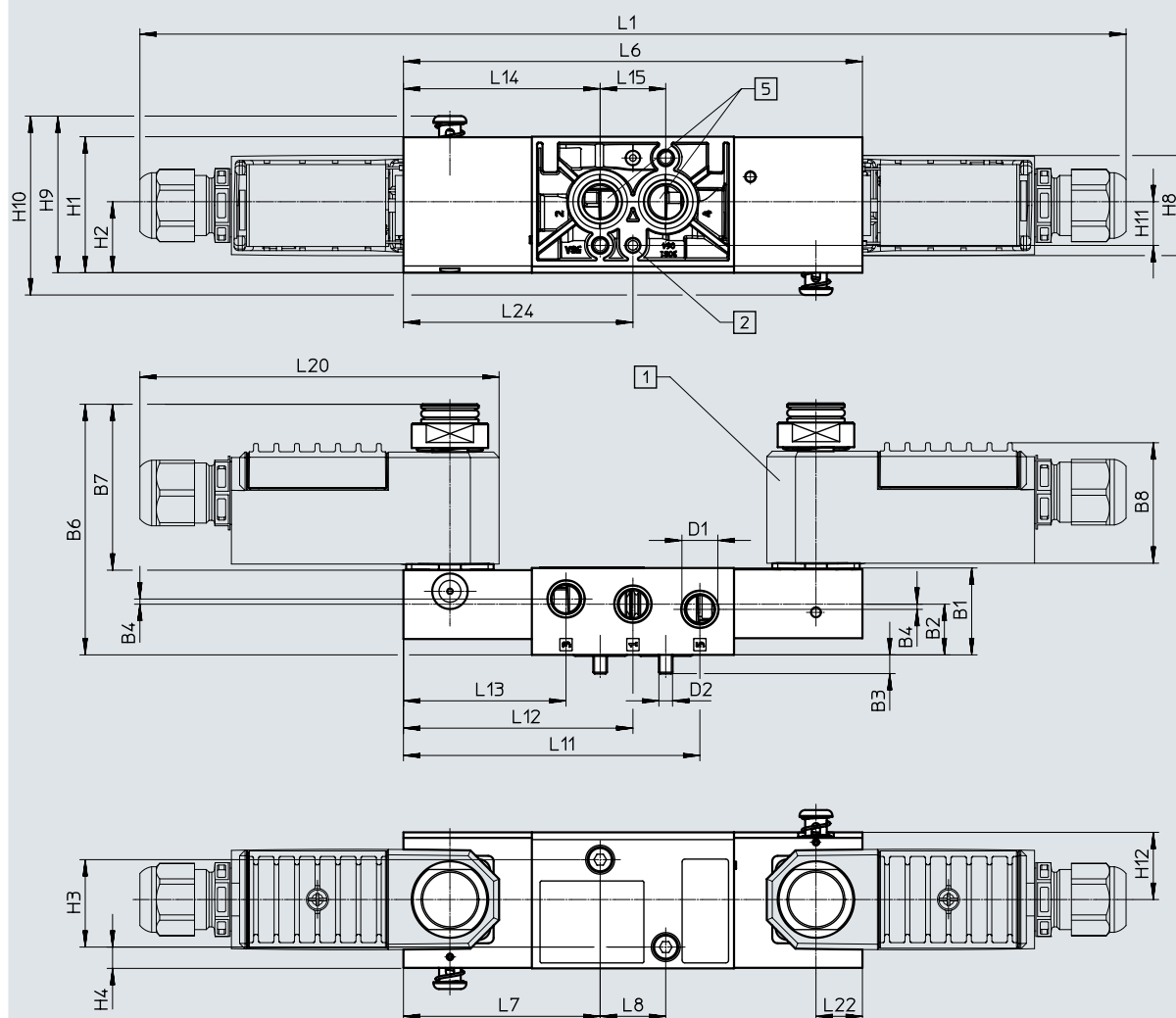
Datasheet – 5/2-way valve VSNC-FT-...-F19/F19A, double solenoid

Electrical data		H-G14-F19 H-N14-F19	H-G14-F19A H-N14-F19A	G14-F19 N14-F19	G14-F19A N14-F19A
Characteristic coil data		See solenoid coil, to be ordered separately			
Switching time changeover	[ms]	20	435	20	435
Duty cycle	[%]	100			

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

Datasheet – 5/2-way valve VSNC-FT-...-F19/F19A, double solenoid

Dimensions

Download CAD data → www.festo.com

[1] Solenoid coil
VACC-S13-11-K4-1-...A

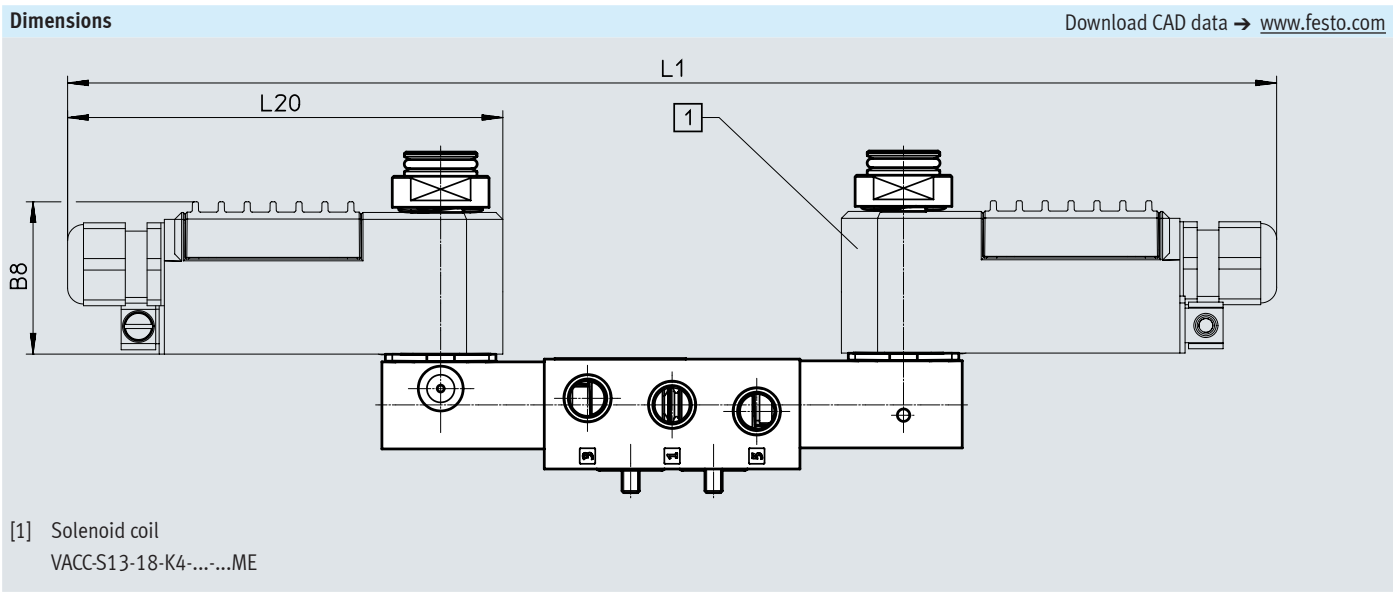
[2] Ø 5.5 for threaded pins

[3] Working ports 2 and 4:
NAMUR port pattern

Type	B1	B2	B3	B4	B6	B7	B8	D1	D2	H1	H2	H3	H4	H8	H9
VSNC-FT-B52-H-G14-F19A	31.8	18.6	6.9	1.9	91.8	60.8	44.1	G1/4	M5	49.8	26	32	7.8	36.8	57.4
VSNC-FT-B52-H-N14-F19A								NPT1/4							

Type	H10	H11	H12	L1	L6	L7	L8	L11	L12	L13	L14	L15	L20	L22	L24
VSNC-FT-B52-H-G14-F19A	65.5	16	24.6	361	168	72	24	108.5	84	59.5	72	24	131.5	17	84
VSNC-FT-B52-H-N14-F19A															

Datasheet – 5/2-way valve VSNC-FT-...-F19/F19A, double solenoid

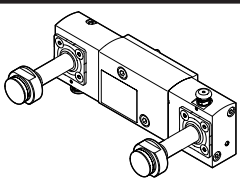


Type	B8	L1	L20
VSNC-FT-B52-H-G14-F19...	44.1	350	126
VSNC-FT-B52-H-N14-F19...			

Datasheet – 5/2-way valve VSNC-FT-...-F19/F19A, double solenoid

Ordering data – Valves

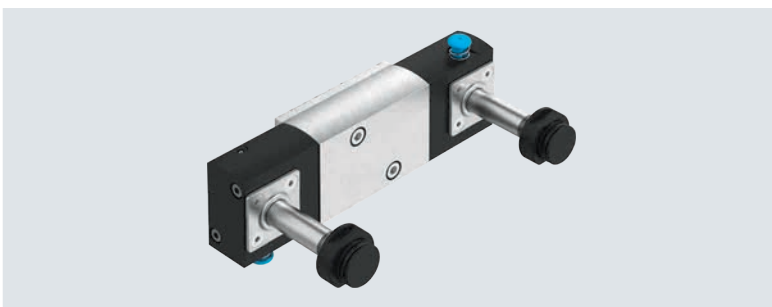
Directional control valve without solenoid coil

		Manual override	Part no.	Type
	–	Non-detenting	8116370	VSNC-FT-B52-H-G14-F19
		Non-detenting	8116382	VSNC-FT-B52-H-N14-F19
		None	8116385	VSNC-FT-B52-G14-F19
		None	8116386	VSNC-FT-B52-N14-F19
	Intrinsically safe	Non-detenting	8116383	VSNC-FT-B52-H-G14-F19A
		Non-detenting	8116384	VSNC-FT-B52-H-N14-F19A
		None	8116387	VSNC-FT-B52-G14-F19A
		None	8116388	VSNC-FT-B52-N14-F19A

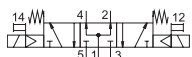
Datasheet – 5/3-way valve VSNC-F...-F19/F19A

Function

5/3-way valve, closed

Operating pressure
3 ... 8 barTemperature range
-20 ... +60°C

5/3-way valve, exhausted



5/3-way valve, pressurised



General technical data		P53C	P53U	P53E
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		
Direction of flow		Not reversible		
Exhaust function		Can be throttled		
Manual override		Non-detenting		
Type of mounting		Via through-hole		
Port for venting hole		Not ducted		
Mounting position		Any		
Overlap		Positive overlap		
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 port	1, 3, 5	G 1/4, 1/4 NPT		
	2, 4	Port pattern to NAMUR		
Conforms to standard		VDI/VDE 3845 (NAMUR)		
Product weight	[g]	619		

Datasheet – 5/3-way valve VSNC-F-...-F19/F19A

Operating and environmental conditions		P53C	P53U	P53E
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		P53C-MH-G14-F19, P53C-MH-N14-F19 P53C-M-G14-F19, P53C-M-N14-F19	P53C-MH-G14-F19A, P53C-MH-N14-F19A P53C-M-G14-F19A, P53C-M-N14-F19A
5/3-way valve, closed			
Characteristic coil data		See solenoid coil, to be ordered separately	
Switching time on	[ms]	24	435
Switching time off	[ms]	85	380
Switching time changeover	[ms]	60	435
Duty cycle	[%]	100	

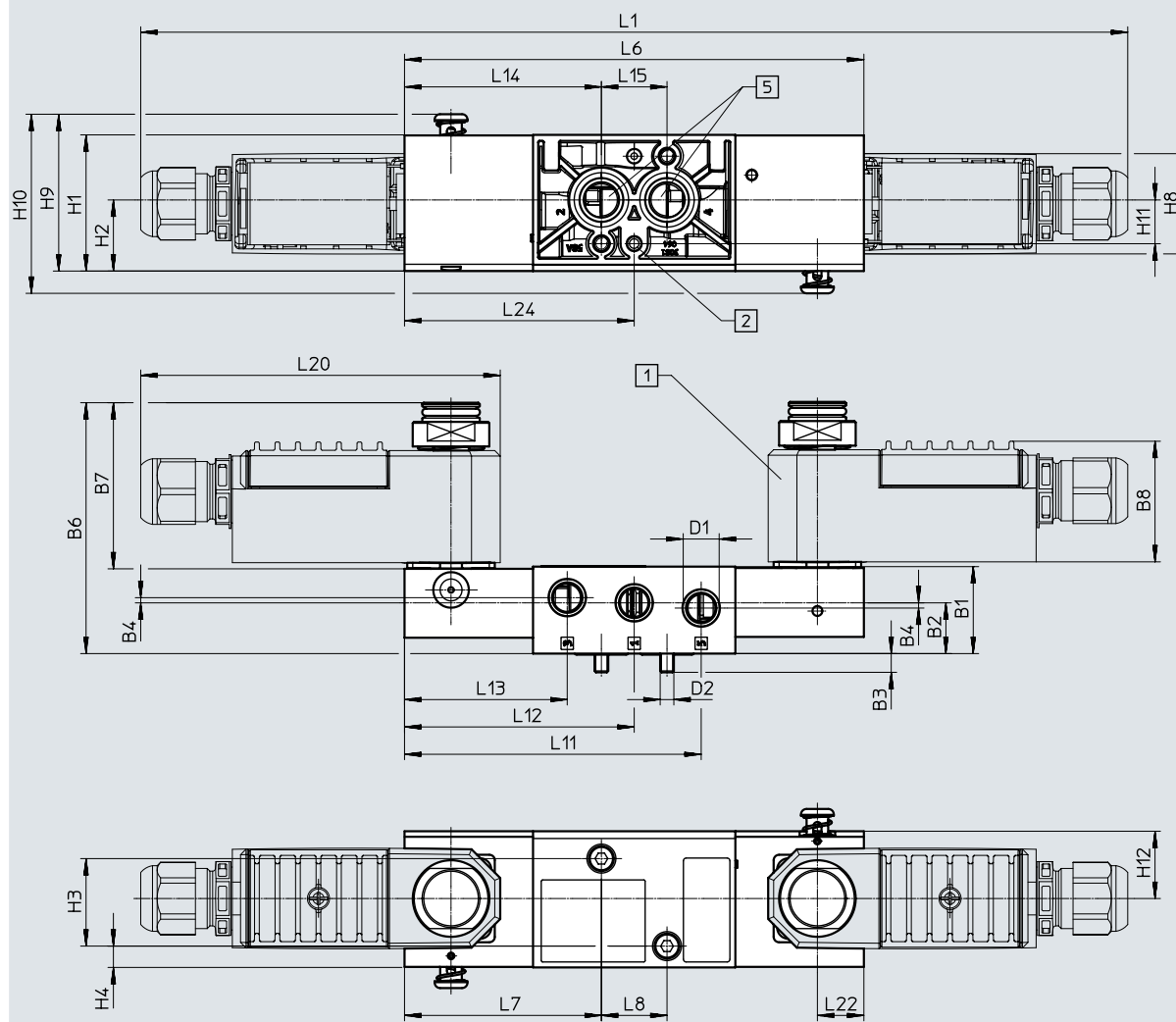
Electrical data		P53U-MH-G14-F19, P53U-MH-N14-F19 P53U-M-G14-F19, P53U-M-N14-F19	P53U-MH-G14-F19A, P53U-MH-N14-F19A P53U-M-G14-F19A, P53U-M-N14-F19A
5/3-way valve, pressurised			
Characteristic coil data		See solenoid coil, to be ordered separately	
Switching time on	[ms]	24	440
Switching time off	[ms]	85	390
Switching time changeover	[ms]	60	435
Duty cycle	[%]	100	

Electrical data		P53E-MH-G14-F19, P53E-MH-N14-F19 P53E-M-G14-F19, P53E-M-N14-F19	P53E-MH-G14-F19A, P53E-MH-N14-F19A P53E-M-G14-F19A, P53E-M-N14-F19A
5/3-way valve, exhausted			
Characteristic coil data		See solenoid coil, to be ordered separately	
Switching time on	[ms]	24	400
Switching time off	[ms]	85	440
Switching time changeover	[ms]	60	400
Duty cycle	[%]	100	

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

Datasheet – 5/3-way valve VSNC-F...-F19/F19A

Dimensions

Download CAD data → www.festo.com

[1] Solenoid coil
VACC-S13-11-K4-1-...A

[2] $\varnothing 5.5$ for threaded pins

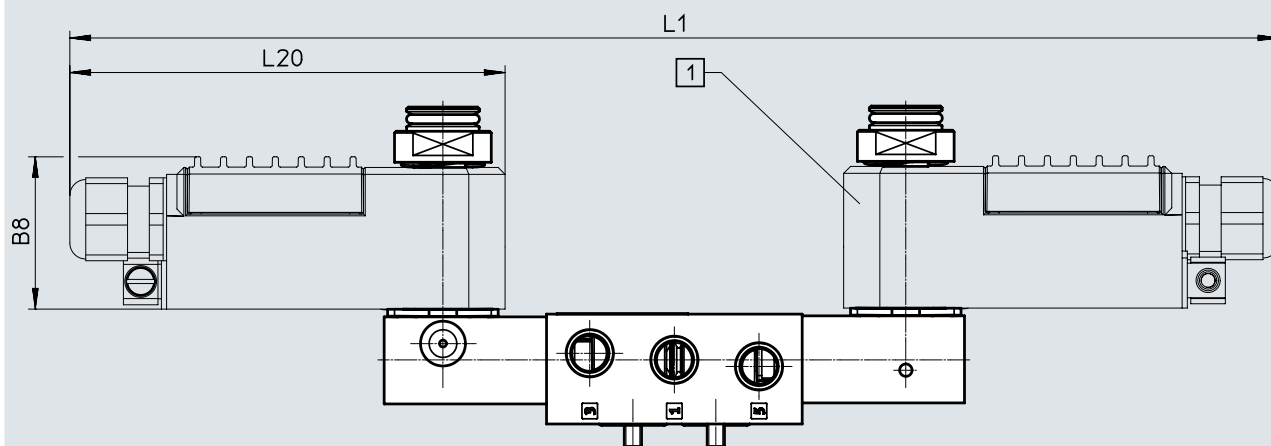
[3] Working ports 2 and 4:
NAMUR port pattern

Type	B1	B2	B3	B4	B6	B7	B8	D1	D2	H1	H2	H3	H4	H8	H9
VSNC-FT-P53...-MH-G14-F19A	31.8	18.6	6.9	1.9	91.8	60.8	44.1	G1/4	M5	49.8	26	32	7.8	36.8	57.4
VSNC-FT-P53...-MH-N14-F19A								NPT1/4							

Type	H10	H11	H12	L1	L6	L7	L8	L11	L12	L13	L14	L15	L20	L22	L24
VSNC-FT-P53...-MH-G14-F19A	65.5	16	24.6	361	168	72	24	108.5	84	59.5	72	24	131.5	17	84
VSNC-FT-P53...-MH-N14-F19A															

Datasheet – 5/3-way valve VSNC-F-...-F19/F19A

Dimensions

Download CAD data → www.festo.com

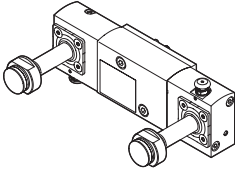
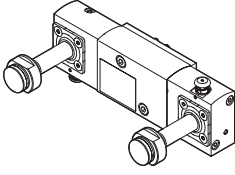
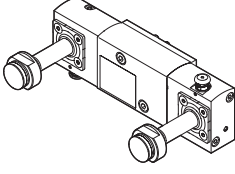
[1] Solenoid coil
VACC-S13-18-K4-...-...ME

Type	B8	L1	L20
VSNC-FT-B52-H-G14-F19...	44.1	350	126
VSNC-FT-B52-H-N14-F19...			

Datasheet – 5/3-way valve VSNC-F-...-F19/F19A

Ordering data – Valves

Directional control valve without solenoid coil

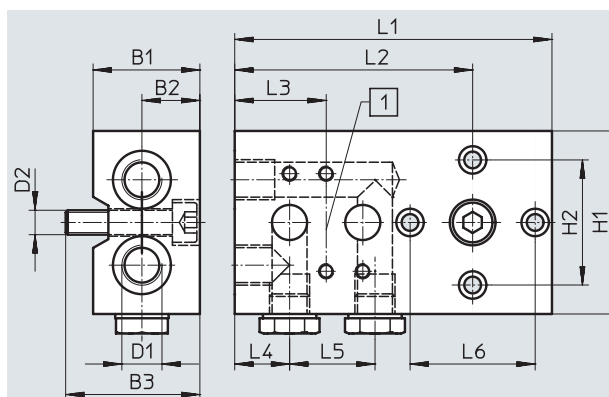
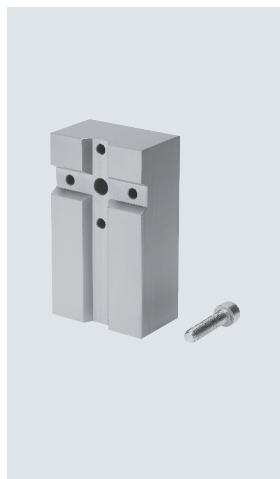
		Manual override	Part no.	Type
5/3-way valve, closed				
	–	Non-detenting	8116371	VSNC-F-P53C-MH-G14-F19
		Non-detenting	8116389	VSNC-F-P53C-MH-N14-F19
		None	8116400	VSNC-F-P53C-M-G14-F19
		None	8116401	VSNC-F-P53C-M-N14-F19
	Intrinsically safe	Non-detenting	8116390	VSNC-F-P53C-MH-G14-F19A
		Non-detenting	8116391	VSNC-F-P53C-MH-N14-F19A
		None	8116402	VSNC-F-P53C-M-G14-F19A
		None	8116403	VSNC-F-P53C-M-N14-F19A
5/3-way valve, pressurised				
	–	Non-detenting	8116392	VSNC-F-P53U-MH-G14-F19
		Non-detenting	8116393	VSNC-F-P53U-MH-N14-F19
		None	8116404	VSNC-F-P53U-M-G14-F19
		None	8116405	VSNC-F-P53U-M-N14-F19
	Intrinsically safe	Non-detenting	8116394	VSNC-F-P53U-MH-G14-F19A
		Non-detenting	8116395	VSNC-F-P53U-MH-N14-F19A
		None	8116406	VSNC-F-P53U-M-G14-F19A
		None	8116407	VSNC-F-P53U-M-N14-F19A
5/3-way valve, exhausted				
	–	Non-detenting	8116396	VSNC-F-P53E-MH-G14-F19
		Non-detenting	8116397	VSNC-F-P53E-MH-N14-F19
		None	8116408	VSNC-F-P53E-M-G14-F19
		None	8116409	VSNC-F-P53E-M-N14-F19
	Intrinsically safe	Non-detenting	8116398	VSNC-F-P53E-MH-G14-F19A
		Non-detenting	8116399	VSNC-F-P53E-MH-N14-F19A
		None	8116410	VSNC-F-P53E-M-G14-F19A
		None	8116411	VSNC-F-P53E-M-N14-F19A

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

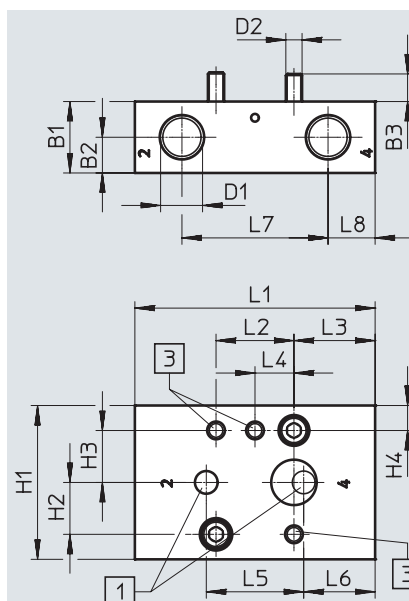
1) Corrosion resistance class CRC 4 to Festo standard FN 940070

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: 0 ... 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 impair-
 ment 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

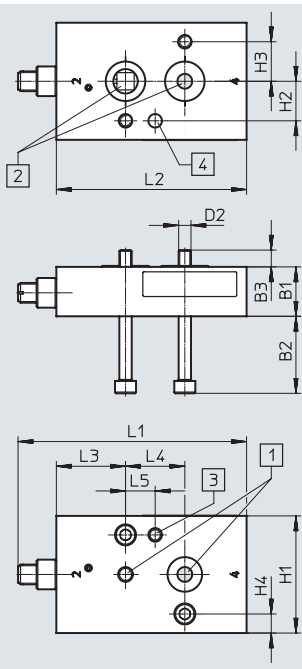
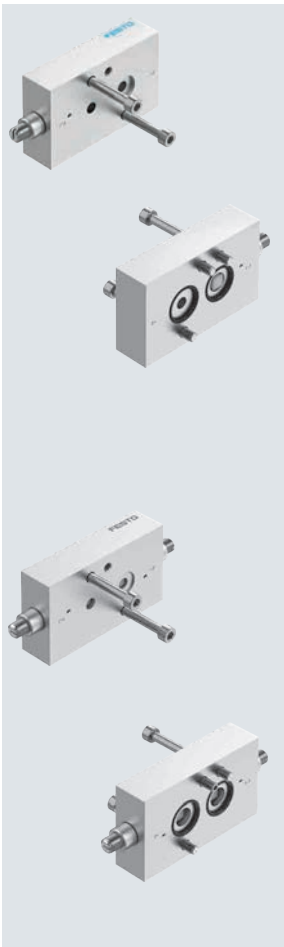
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Accessories

Throttle plate

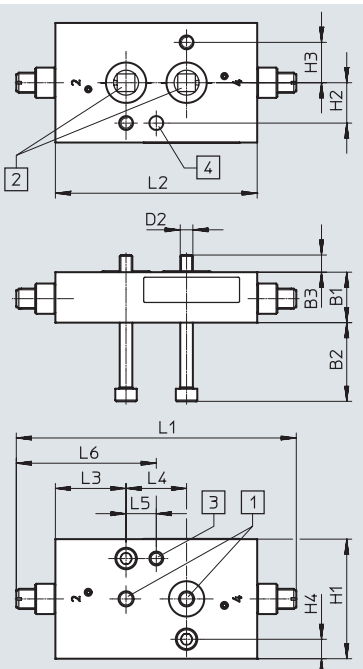
Mounting position: Any
Type of mounting: Via through-hole
Operating pressure: 0 ... 10 bar
Operating medium: compressed air to ISO 8573-1:2010 [7:-:-]
Temperature (ambient/medium/storage): -20 ... +60°C
Weight:
VABF ... P1: 215.5 g
VABF ... P2: 229 g

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, $\varnothing$ 5.5 mm (for threaded pin to DIN 913-M5x10-45H)

Dimensions [mm] and ordering data																	CRC ¹⁾	Part no.	Type
B1	B2	B3	D2	H1	H2	H3	H4	L1		L2	L3	L4	L5	L6					
								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

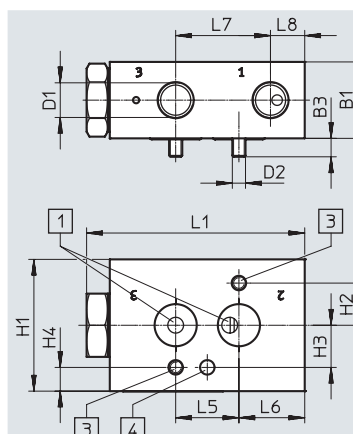
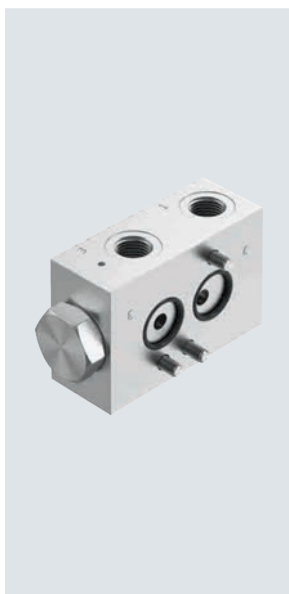
Mounting position: Any
 Type of mounting: Via through-hole
 Operating pressure: 0 ... 10 bar
 Operating medium:
 compressed air to
 ISO 8573-1:2010 [7:0:0]
 Temperature (ambient/medium/
 storage): -20 ... +60°C
 Weight: 280.5 g

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, $\varnothing$ 5.5 mm (for threaded pin to DIN 913-M5x10-45H)

Dimensions [mm] and ordering data														Part no.	Type
B1	B3	D1	D2	H1	H2	H3	H4	L1	L5	L6	L7	L8	CRC ¹⁾		
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

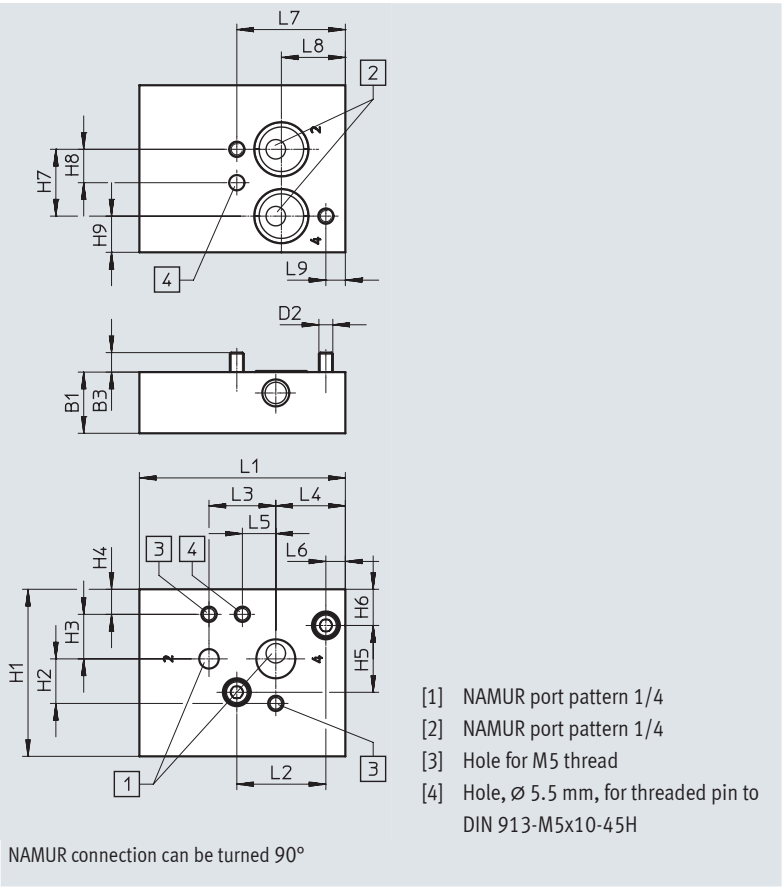
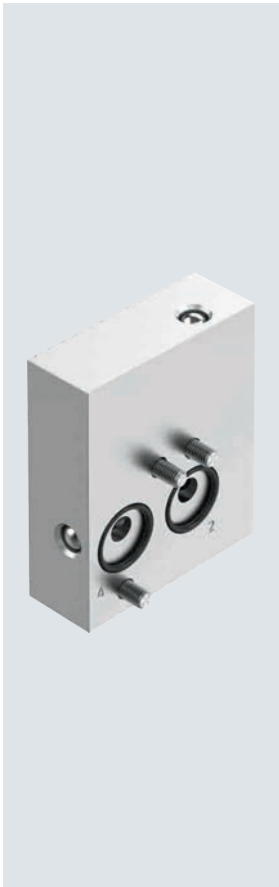
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Accessories

Mounting plate

Mounting position: Any
Type of mounting: Via through-hole
Operating pressure: 0 ... 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.



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: 0 ... 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:

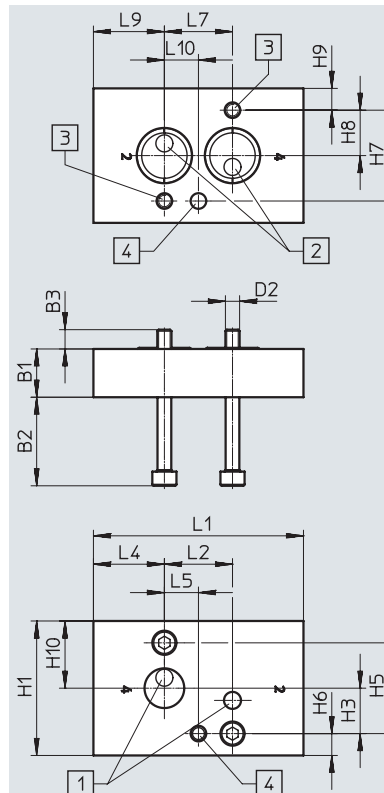
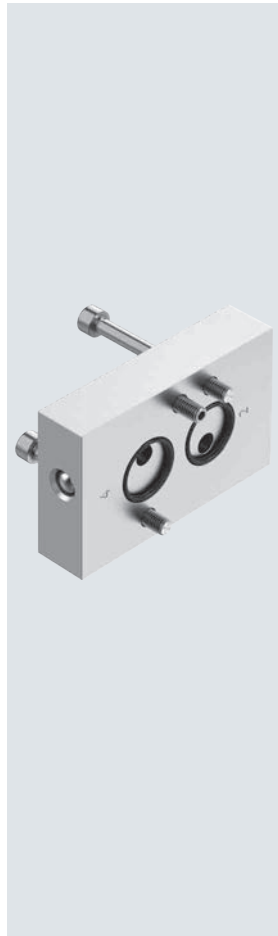
Contains paint-wetting impairment substances (not tested);

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, $\varnothing$ 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

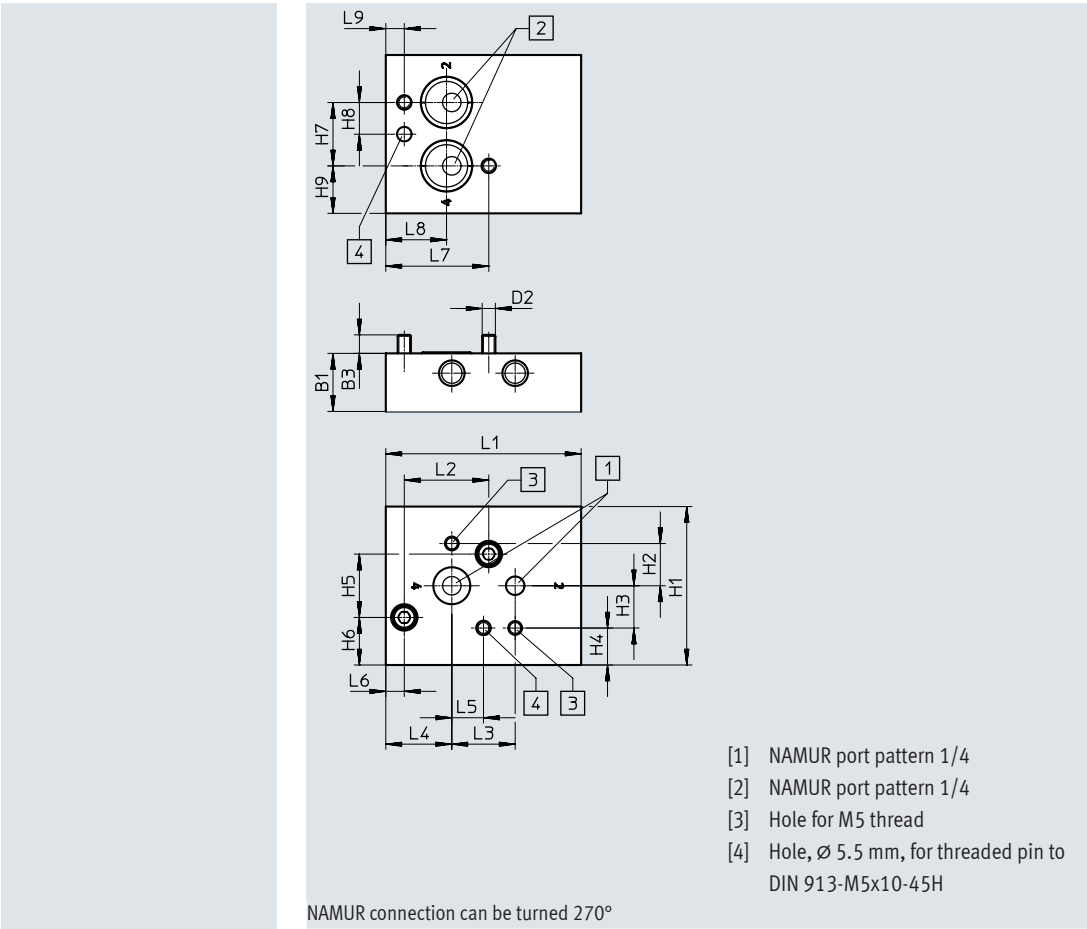
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Accessories

Mounting plate

Mounting position: Any
Type of mounting: Via through-hole
Operating pressure: 0 ... 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.



Dimensions [mm] and ordering data												Part no.	Type
B1	B3	D2	H1	H2	H3	H4	H5	H6	H7	H8			
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

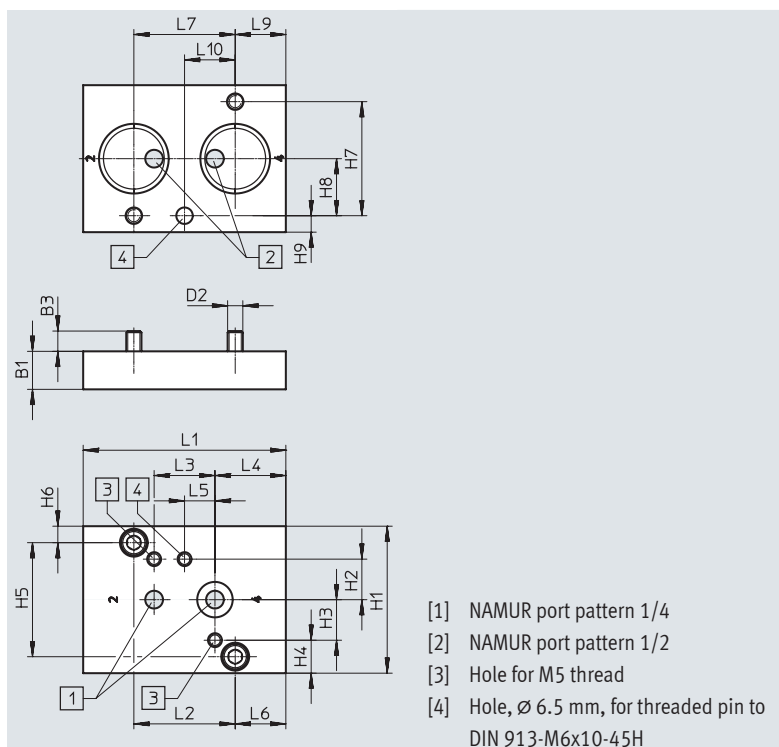
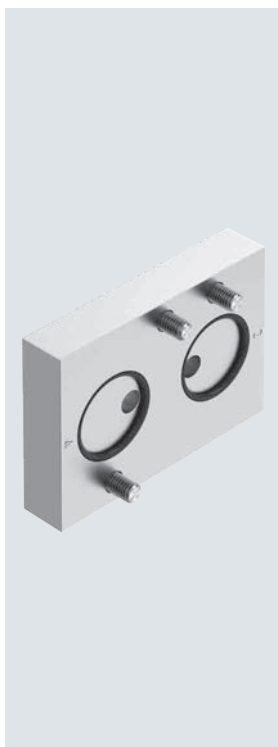
1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Accessories

Mounting plate

Mounting position: Any
 Type of mounting: Via through-hole
 Operating pressure: 0 ... 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



Dimensions [mm] and ordering data											Part no.	Type
B1	B3	D2	H1	H2	H3	H4	H5	H6	H7	H8		
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

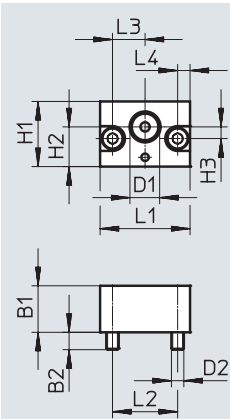
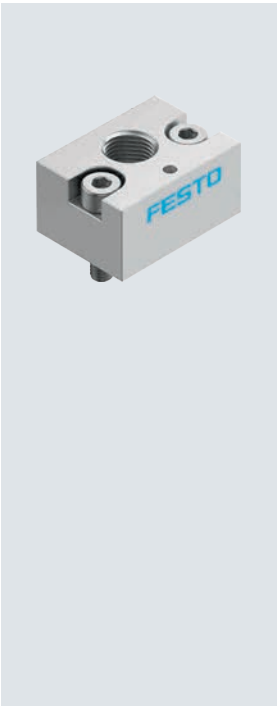
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

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).

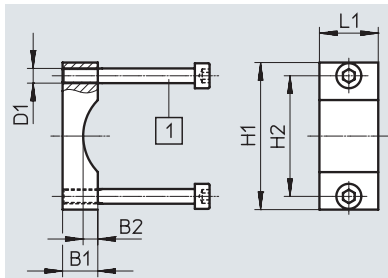


Dimensions [mm] and ordering data													Part no.	Type
B1	B2	D1	D2	H1	H2	H3	L1	L2	L3	L4	CRC ¹⁾			
15	5.6	G1/8	M4	21	12.8	~3.8	29	21	10.5	4	2		8099850	VABD-B14-P1-G18
		1/8 NPT											8099629	VABD-B14-P1-N18

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] Port pattern to NAMUR

Dimensions [mm] and ordering data										Part no.	Type
B1	B2	B3	D1	H1	H2	L1	CRC ¹⁾				
4 5/65	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

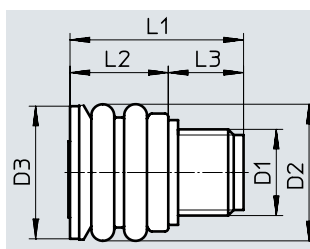
Material:

EPDM, PA

Contains paint-wetting

impairment substances,

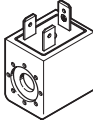
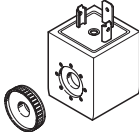
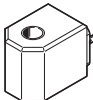
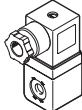
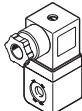
RoHS-compliant



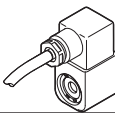
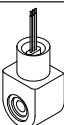
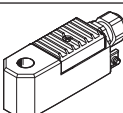
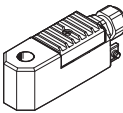
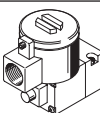
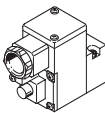
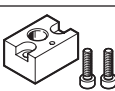
Dimensions [mm] and ordering data							Part no.	Type
D1	D2	D3	L1	L2	L3	CRC ¹⁾		
G1/4, 1/4 NPT	21	20.5	26.5	15	11.5	3	563400	VABD-D3-SN-G14

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

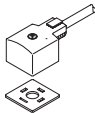
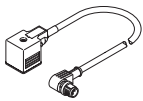
High corrosion stress. Outdoor exposure under moderate corrosive conditions. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment.

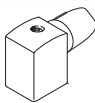
Ordering data – Solenoid coil			
Characteristic coil data		Part no.	Type
Electrical plug pattern to industry standard, type B		Datasheets → Internet: vacf	
	12 V DC; 3.4 W	8030801	VACF-B-B2-5
	24 V DC; 3.3 W	8030802	VACF-B-B2-1
	48 V DC; 3.4 W	8030803	VACF-B-B2-7
	24 V AC; 50/60 Hz, pick-up power 3.9 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
For armature system F19, connection pattern type A, to EN 175 301, 230 V DC and AC.			
	24 V DC, 1.8 W	562889	VACC-S13-18-A1-1
	24 V DC, 1.8 W	562890	VACC-S13-18-A1-1U
	24 V AC, 40/65 Hz, power 1.8 VA		
	110 V DC, 1.8 W	562891	VACC-S13-18-A1-2U
	110 V AC, 40/65 Hz, power 1.8 VA		
	230 V DC, 1.8 W	562892	VACC-S13-18-A1-3U
230 V AC, 40/65 Hz, power 1.8 VA			
Type of ignition protection: intrinsically safe Ex-ia		Datasheets → Internet: vacn	
	24 V DC, minimum switching current 27 mA	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		

Accessories

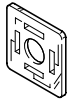
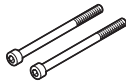
Ordering data – Solenoid coil		Part no.	Type
	Characteristic coil data		
Degree of protection IP65 with socket			
	24 V DC; 0.7 W	★ 8029144	VACN-N-A1-1
	110 V AC; 50 Hz, pick-up power 5.2 VA, holding power 3.1 VA	8029134	VACN-N-A1-16B
	110 V AC; 60 Hz, pick-up power 4.2 VA, holding power 2.5 VA		
	230 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
Encapsulated solenoid coil with enhanced safety, Ex-me		Datasheets → Internet: vacc	
	24 V DC, 1.8 W	8109396	VACC-S13-18-K4-1U-EX4ME
	24 V AC, 40/65 Hz, power 1.8 VA		
	110 V DC, 1.8 W	8109397	VACC-S13-18-K4-2U-EX4ME
	110 V AC, 40/65 Hz, power 1.8 VA		
	230 V DC, 1.8 W	8109398	VACC-S13-18-K4-3U-EX4ME
	230 V AC, 40/65 Hz, power 1.8 VA		
	24 V DC, 1.8 W	8109399	VACC-S13-18-K4-1UF-EX4ME
	24 V AC, 40/65 Hz, power 1.8 VA		
	60 V DC, 1.8 W	8109400	VACC-S13-18-K4-27U-EX4ME
	60 V AC, 40/65 Hz, power 1.8 VA		
Type of ignition protection: intrinsically safe Ex-ia			
	14-32 V DC, 0.22 - 1.1 W	8109401	VACC-S13-11-K4-1-EX4A
Pilot valves with CNOMO port pattern, to ISO 15218			
	24 V DC; 3.0 W, type of ignition protection: pressure-tight encapsulation Ex d	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, type of ignition protection: pressure-tight encapsulation Ex d	535616	MGXDH-3/2-1.2-110AC-EX
	230 V AC; 50/60 Hz, pick-up power 10 VA, holding power 6 VA, type of ignition protection: pressure-tight encapsulation Ex d	535617	MGXDH-3/2-1.2-230AC-EX
	24 V DC; 1.5 W, type of ignition protection: intrinsically safe Ex-ia	535614	MGXIAH-3/2-0.8-24DC-EX
Cable connector			
	For solenoid coil or pilot valve with connecting thread M20x1.5 / D. 7-13 mm, colour: black	568279	NETC-M-M20-KA
		446895	NETC-P-M20
		4197362	NETC-P-M20-EX4
Connector			
	For valves	8099850	VABD-B14-P1-G18

Accessories

Ordering data						
	Description	Nominal operating voltage [V]	Cable length [m]	Part no.	Type	
Connecting cable						Datasheets → 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						Datasheets → 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			
Datasheets → 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			
Datasheets → 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
Silencers U			
Datasheets → 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		Datasheets → 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

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