

# Solenoid valves VSNC

FESTO



Ex-certified  
and  
inexpensive

## The new NAMUR generation

### Highlights

- NAMUR connection pattern to VDE/VDI 3845
- Rotatable seal for 3/2-way or 5/2-way valve
- Wide choice of Ex solenoid systems
- Sturdy and powerful
- Extended temperature range
- Outstanding value for money
- All solenoid coils can be used on an armature tube
- The variant VSNC-...FN consumes less power and thus offers greater energy efficiency

The standard NAMUR valve VSNC is certified worldwide in accordance with the usual explosion-protection standards and can be used in many industry segments and applications.

**Its distinguishing features are its modern design, durable quality and fully tested technology and materials.**

**The valve also stands out thanks to its excellent value for money – this is what modern NAMUR valves should be!**

#### Single-acting or double-acting?

Whether you are using a single-acting or double-acting actuator, the standard NAMUR valve VSNC offers you the right solution with just one valve. All you have to do is turn the seal at the NAMUR interface and a 3/2-way valve becomes a 5/2-way valve.

#### Explosive environment?

##### Not a problem!

The VSNC range includes IEC Ex-certified solenoid systems for zones 1/21 and 2/22, Class I/II/III, Division 1 solenoid systems to NEC 500 as well as solenoid systems with local certification to INMETRO, CCC-Ex and Kosha.

#### Choice of actuation options

The flexible interface of the standard NAMUR valve VSNC means you can use solenoids with device plugs or terminal boxes.

If you want to connect electro-pneumatic pilot valves, use the CNOMO interface.

#### With exhaust air recirculation!

The integrated exhaust air recirculation (spring chamber protection) ensures that no atmospheric air is taken in; this protects the spring chamber and the springs of the actuator against corrosion.

# Solenoid valves VSNC

Versatile, inexpensive and safe: an overview of the valve range

## Configuration options

### F8

Piston spool valve technology, device plug to DIN EN 175-803, type A & B

### FN

Piston spool and poppet valve technology, applications in explosive atmospheres or in intrinsically safe circuits with a device plug as the connection type

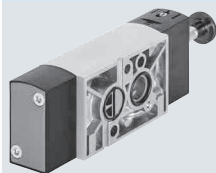
### F19/F19A

Poppet valve technology (except for 5/3-way function), applications in explosive atmospheres (F19) or in intrinsically safe circuits (F19A) with a terminal box

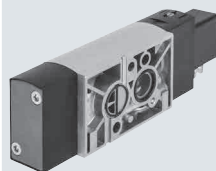
### P2

Poppet valve technology (except for 5/3-way function), CNOMO interface to ISO 15218 for pneumatic or electropneumatic valve actuation

## VSNC-F8

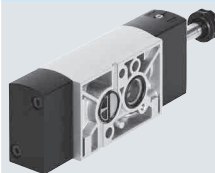


Standard valve  
**Cost efficient**

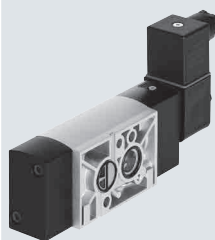


Type VACF  
Solenoid to IP65

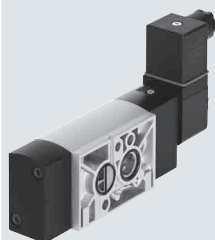
## VSNC-F... -FN



Piston spool

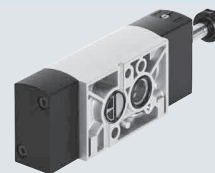


Type VACN  
Zone 1/21  
**Ex ia**  
Intrinsically safe

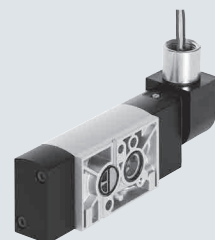


Type VACN  
Zone 2/22  
**Ex na**  
Non sparking

## VSNC-FT... -FN



Poppet



Type VACN  
Class I/II/III, Div. I  
**AEx m**  
Encapsulated

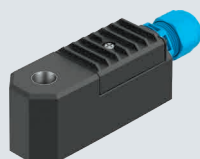


Type VACN  
Zone 1/21  
**Ex m**  
Encapsulated

## VSNC- ... -F19/... -F19A

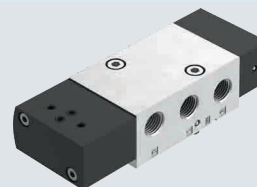


Type VACC-S13  
Zone 1/21  
**Ex me**  
Encapsulated  
with enhanced safety

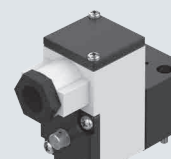


Type VACC-S13  
Zone 1/21  
**Ex ia**  
Intrinsically safe

## VSNC-F... -P2 (CNOMO to ISO 15218)



Type MGXDH  
Zone 1/21  
**Ex d**  
Flameproof enclosure



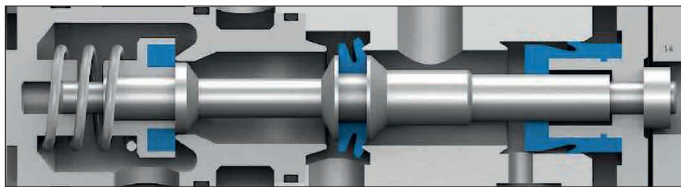
Type MGXIAH  
Zone 1/21  
**Ex ia**  
Intrinsically safe

# Solenoid valves VSNC

Feature	Version
Design	Piston spool/poppet valve
Valve function, single solenoid	5/2-way or 3/2-way, convertible
Valve function, double solenoid	5/2-way or 5/3-way pressurised, closed, exhausted
Pneumatic connection 1, 3, 5	G 1/4, NPT 1/4
Pneumatic connection 2, 4	VDI/VDE 3845 (NAMUR)
Reset method	Mechanical spring
Manual override	Detenting, non-detenting, none
Temperature range [°C]	-20 ... +60
Operating pressure [bar]	2.5 ... 10

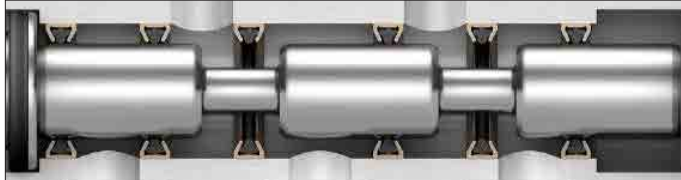


## Design



### Poppet valve

The poppet valve design (VSNC-FT...) really comes into its own when the demands on the application increase. It offers better tolerance against “contaminated pneumatic air”, less leakage and fewer dynamic seals, which can have a positive effective on the service life.



### Piston spool valve

The piston spool valve VSNC (VSNC-F...) is the first choice for all “normal” conditions. With this technology, switching is non-overlapping and the flow rate is bigger than that with a poppet valve of the same connection size.

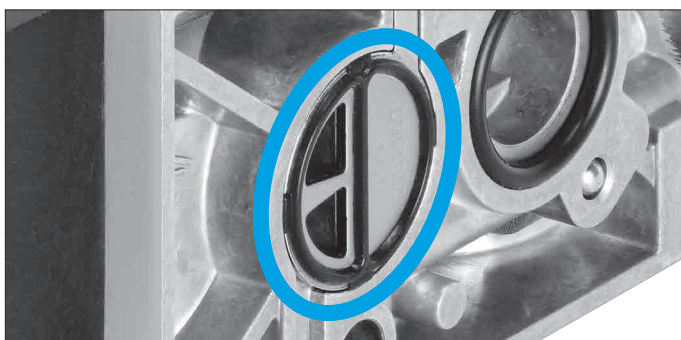
## Manual override



### Variant VSNC- ... -F19/F19A

The valve can be ordered either with a non-detenting manual override or without a manual override. When it is not actuated, the non-detenting manual override is kept in its initial position by a mechanical spring.

## Rotatable plate



### Change of function

Convert the valve from 3/2-way to 5/2-way by simply turning the metal sealing plate. This is how single-acting or double-acting actuators can be controlled with one valve.

# Solenoid valves VSNC

An extensive range of accessories for the NAMUR interface for even more variants

## Sub-base

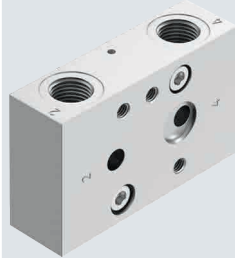
VABS-S7



Mounting on NAMUR rib

## Connector plate

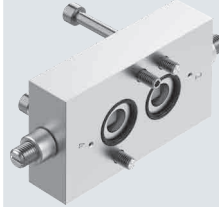
VABS-B14-T



Converter plate to inline

## Throttle plate

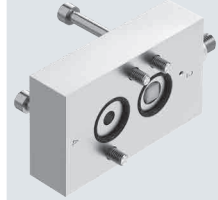
VABF-B14- ... -P2



Double-acting

## Throttle plate

VABF-B14- ... -P1



Single-acting

## Exhaust plate

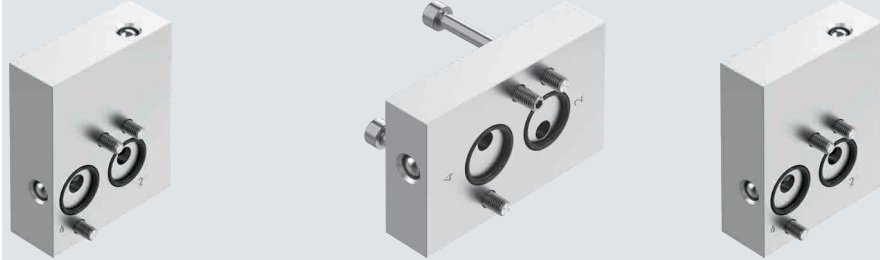
VABF-B14-M3



for single-acting drives

## Mounting plate

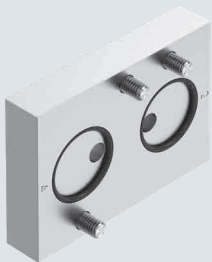
VABS-B14-90, VABS-B14-180, VABS-B14-270



NAMUR connection turned 90°, 180° or 270° for tight installation spaces

## Mounting plate

VABA-B14-FL12-FL14



NAMUR plate for reducing the connection from 1/2 to 1/4

## Connector

VABD-B14-P1



for pneumatic controller (CNOMO connection)