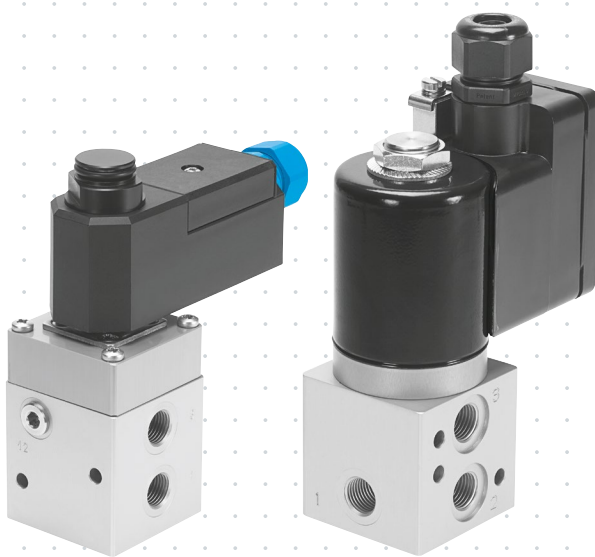




Solenoid valves VOFC/VOFD

for high safety and reliability requirements



Highlights

- Complete range of valves and accessories from a single source
- Valve housing surface coated with Ematal
- Connection according to NAMUR or direct mounting on the actuator, as well as G and NPT threaded connections
- Meets the highest requirements for SIL and explosion protection
- Suitable for outdoor use
- Top quality, top switching reliability
- Excellent plant and system availability
- Many years of valve expertise

Festo already has a formidable range. And in the future? It will be even better. Festo continuously develops and expands its valve series for process automation. The range is top quality, especially for solenoid valves and their accessories. So you can control actuators safely and reliably. You can even operate them in outdoor areas without any problem, even in safety circuits up to SIL 3 or in potentially explosive atmospheres.

First choice for control valves

The direct-acting or pilot-operated solenoid valves from Festo Chemical Valve Technology GmbH can be used everywhere and are equipped with an excellent safety concept. These control valves are popular in the production lines of leading organisations in the petrochemical and pharmaceutical sectors, as well as in the oil and gas industry and are a favourite choice for controlling single-acting or double-acting valve actuators.

The solenoid valves are also extremely reliable and safe in fail-safe functions for safely switching off valve actuators with positioners.

Solenoid valve VOFD

- 3/2-way directly actuated poppet valves
- Can be used in emergency shutdown (ESD) applications
- Suitable for use in safety-related systems up to and including SIL3 to IEC 61508
- One valve – two connection options
- The manual override function can be ordered separately, retrofitted and removed again.

Solenoid valve VOFC

- 3/2- or 5/2-way single or double solenoid
- Pilot-operated piston spool and poppet valves
- Switching between internal/external pilot air using an automatic shuttle valve
- Suitable for vacuum

Perfect for the

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Pharmaceutical industry

Additional information:

Product pages

- > www.festo.com/catalogue/vo/c
- > www.festo.com/catalogue/vo/d



First choice for control valves

Designed for the toughest demands – including extreme environments

Certificates, expert opinions and testimonials demonstrate that the solenoid valves VOFC and VOFD are suitable for the toughest demands when it comes to operational safety, availability and flexible use, including in open air and in difficult ambient conditions. The world's most important types of ignition protection are offered: Ex me, Ex ia and Ex d.

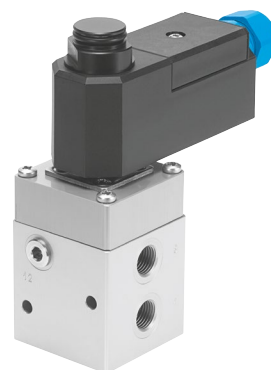
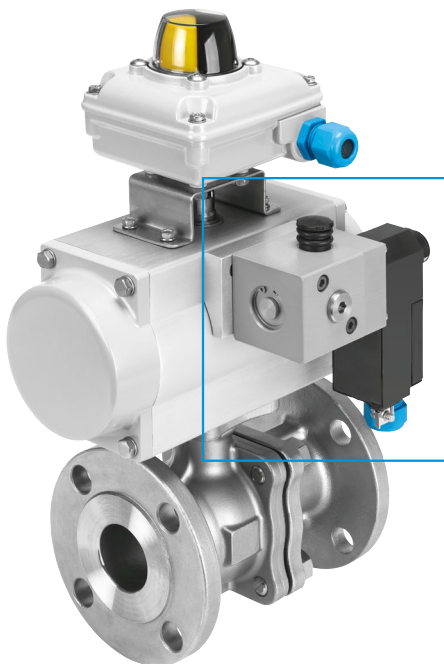
Reliable and safe – for reliable switching when needed

The high quality and resulting reliability of these solenoid valves VOFC and VOFD increase the process safety of the entire system, helping to cut costs associated with failure and maintenance. The solenoid valves can be widely used and meet the highest safety standards (up to SIL3, explosion protection). This is backed by TÜV certificates up to SIL3 in accordance with IEC 61508.

Sturdy – for use in harsh environments

The surface of the valve housings is coated with Ematal. This treatment involves converting the aluminium surface into a very hard aluminium oxide layer with titanium oxide intercalations. This treatment makes the valves very hard wearing and gives them excellent abrasion resistance, as well as first-class sliding properties. This ensures they are optimally protected against atmospheric and chemical influences.

SIL certified
according IEC 61508



Solenoid valve VOFC

- Complete valve in combination with solenoid coil VACC-S13 or as a basic valve on its own
- Can be easily combined via the configurator in the electronic catalogue



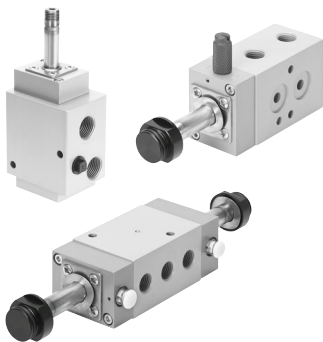
Solenoid valve VOFD

- Complete valve in combination with solenoid coil VACC-S18 or as a basic valve on its own
- Can be easily combined via the configurator in the electronic catalogue



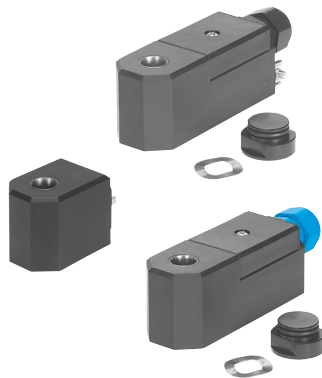
General information

- The valves from the series VOFC and VOFD are special 3/2- and 5/2-way valves for process automation, for applications in chemical and petrochemical plants. Here, they are frequently used as pilot valves for butterfly valves and actuators. Thanks to their sturdy design and high corrosion resistance, the valves are suitable for outdoor use under harsh ambient conditions.
- The NAMUR connection pattern makes the solenoid valves especially suitable for quarter-turn actuators. The integrated spring chamber pressurisation protects quarter turn actuators with spring return (single-acting cylinders and actuators) from contaminated ambient air and weather conditions such as rain.
- The solenoid coil series VACC are the appropriate solenoid coils for the basic valves VOFC and VOFD. The solenoid coils VACC-S13 are designed for the valves VOFC and cover the ignition protection types Ex-ia and Ex-me. The solenoid coils VACC-S18 fit the valves VOFD and cover the types of ignition protection Ex me and Ex d. Several local and regional certifications are available.



Basic valve VOFC

- Pilot-controlled
- 3/2-, 5/2-way valves
- Ports G1/4, NPT1/4, G1/2, NPT1/2
- NAMUR connection pattern, NAMUR connection pattern with P duct



Solenoid coils VACC-S13

- AC and DC voltage 24 V, 110 V, 230 V
- Types of ignition protection Ex emb II, Ex ia IIC
- Power consumption 9 mW, 40 mW, 1.8 W



Basic valve VOFD

- Directly actuated
- 3/2-way valves
- Ports G1/4, NPT1/4
- NAMUR connection pattern, NAMUR connection pattern with P duct



Solenoid coils VACC-S18

- AC and DC voltage 24 V, 110 V, 230 V
- Types of ignition protection: Ex emb II, Ex d IIC
- Power consumption 2.5 W, 3.5 W





Overview of solenoid valves VOFD



VOFD-L100T-...

Material: aluminium, coated with Ematal

- Ports: G1/2, NPT1/2, NAMUR
- Pressure range: 0 ... 12 bar
- Flow rate: max. 1900 l/min

VACC-S18-120...

- Power consumption: 12 W
- Electrical connection: plug type A



VACC-S18-120...ME

- Power consumption: 12 W
- Electrical connection: terminal box, cable gland M20x1.5
- Fuse: optional
- Type of ignition protection: Ex me



VACC-S18-25...D

- Power consumption: 7 W
- Electrical connection: M20x1.5, NPT1/2
- Type of ignition protection: Ex d



VOFD-L50T-...-R1

Material: stainless steel

- Ports: G1/4, NPT1/4



VOFD-L50T-...

Material: aluminium, coated with Ematal

- Function: 3/2-way
- Connections: G1/4, NPT1/4, NAMUR, NAMUR with P duct
- Pressure range: 0 ... 10 bar
- Flow rate: max. 490 l/min
- Temperature: -25 ... +60 °C
- Detenting or non-detenting manual override

VACC-S18-35...

- Power consumption: 3.5 W
- Electrical connection: plug type A



VACC-S18-35...ME

- Power consumption: 3.5 W
- Electrical connection: terminal box, cable gland M20x1.5
- Fuse: optional
- Type of ignition protection: Ex me



VACC-S18-25...D

- Power consumption: 2.5 W
- Electrical connection: M20x1.5, NPT1/2
- Type of ignition protection: Ex d



VOFD-L35T-...T6-R1...

Material: stainless steel

- Connections: G1/4, NPT1/4, NAMUR, NAMUR with P duct
- Pressure range: 0 ... 8 bar
- Flow rate: max. 330 l/min
- Ambient temperature -50 ... +60 °C
- Detenting or non-detenting manual override



VOFD-L35T-...

Material: aluminium, coated with Ematal

- Connections: G1/4, NPT1/4, NAMUR, NAMUR with P duct
- Pressure range: 0 ... 8 bar
- Flow rate: max. 330 l/min
- Detenting or non-detenting manual override

VACC-S18-120...

- Power consumption: 12 W
- Electrical connection: plug type A



VACC-S18-120...ME

- Power consumption: 12 W
- Electrical connection: terminal box, cable gland M20x1.5
- Fuse: optional
- Type of ignition protection: Ex me



VACC-S18-25...D

- Power consumption: 7 W
- Electrical connection: M20x1.5, NPT1/2
- Type of ignition protection: Ex d



VOFD-L12T-M32A...

- Not available to order via the configurator

VACC-S13

- Solenoid coils VACC-S13, see Seite 5
- Types of ignition protection: Ex ia, Ex me



Overview of solenoid valves VOFC



VOFC-L-...-SG14/SN142

- Pneumatically piloted
- Ports: G1/4, NPT1/4

VOFC-L

Material: aluminium, coated with Ematal

- Design: soft-piston slide valve
- Function: 3/2-, 5/2-way single, double solenoid
- Ports: G1/4, NAMUR
- Pressure range: 2.5 ... 8 bar
- Flow rate: max. 1038 l/min.
- Detenting or non-detenting manual override

VACC-S13-18...EX4ME

- Power consumption: 1.8 W
- Electrical connection: terminal box, cable gland M20x1.5
- Fuse: optional
- Type of ignition protection: Ex me



VACC-S13...EX4A

- Power consumption: 0.2 W
- Electrical connection: terminal box, cable gland M20x1.5
- Type of ignition protection: Ex ia



VACC-S13-18...

- Power consumption: 1.8 W
- Electrical connection: plug type A
- IP65



VOFC-LT-...-R1

Material: stainless steel

- Ports: G1/4, NPT1/4, G1/2, NPT1/2



VOFC-LT-...

Material: aluminium, coated with Ematal

- Design: poppet valve
- Function: 3/2-way
- Ports: G1/4, NPT1/4, G1/2, NPT1/2, NAMUR with P port 1/4, NAMUR 1/2
- Pressure range: (0)2 ... 8 bar
- Flow rate: max. 1400 l/min
- Temperature: -25 ... +60 °C

VACC-S13...EX4A

- Power consumption: 0.2 W
- Electrical connection: terminal box, cable gland
- Type of ignition protection: Ex ia



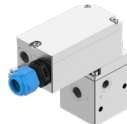
VACC-S13-18...

- Power consumption: 1.8 W
- Electrical connection: plug type A
- IP65
- Type of ignition protection: Ex me



VACC-S13-18...EX4ME

- Power consumption: 1.8 W
- Electrical connection: terminal box, cable gland M20x1.5
- Fuse: optional



VOFC-...-P2...0.12/0.4...EX4A

Material: aluminium, coated with Ematal

- Power consumption: 12/40 mW
- Suitable for control via the DCS system or via PROFIBUS PA
- Type of ignition protection: Ex ia



For safety in your processes: Solenoid valves from Festo

Festo invests in expertise

The Festo Chemical Valve Technology GmbH is the youngest member of the Festo Group. The decisive factor for Festo to get involved was the core competence of the company, formerly part of Eugen Seitz AG (Wetzikon, Switzerland), in Process Automation, and particularly in the area of pilot valves for fittings and the appropriate accessories.

Maximum safety thanks to SIL and explosion protection

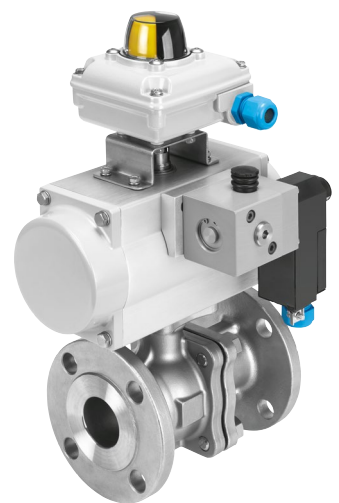
The solenoid valves from Festo Chemical Valve Technology GmbH can be used in all kinds of applications and meet the highest safety standards (up to SIL 3, explosion protection). Leading chemical, petrochemical and pharmaceutical companies use these solenoid valves as control valves all over the world.

Maximum plant availability thanks to switching reliability

60 years of valve expertise make a difference – simply by having the highest level of quality. Even for outdoor installations or difficult ambient conditions.

Maximum reliability thanks to easy replacements

Wherever your production systems are located, you can rely on our products and solutions being available in all global markets thanks to the Festo sales and service network. And it means that you can obtain everything from a single source. A positive side-effect: it will also make your purchasing and logistics easier and less demanding.



Convinced? We look forward to hearing from you!

Please contact your Festo sales engineer or

→ www.festo-cvt.com