Solenoid valves for high safety and reliability requirements

Top quality!

Festo already has a formidable range. And in future it will be even better. Festo continuously develops and expands its valve series for process automation. The range is top quality, especially in the area of solenoid valves and their accessories. So you can control actuators safely and reliably. And you can 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. They are popular control valves in the production lines of global leaders in chemical, 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 actuators.

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

Perfect for:
- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Pharmaceutical industry

Highlights of the range
- Complete range of valves and accessories from a single source
- Meets the highest requirements for SIL and explosion protection
- Suitable for outdoor use
- Top quality, top switching reliability
- High system availability
- Many years of valve expertise

Continuity is very important to Festo:
Seitz valves will still be available from Festo unchanged!
First choice for control valves

**Designed for the toughest demands – including extreme environments**

Certificates, expert opinions and testimonials demonstrate that these solenoid valves are suitable for the toughest demands when it comes to operational reliability, availability and flexibility in use. Even outdoors and in difficult environmental 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 increase the process safety of the entire system, helping to cut costs associated with breakdown and maintenance. The solenoid valves can be used in all kinds of applications 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 housing is treated with hard Ematal. This treatment involves converting the aluminium surface into a very hard aluminium oxide layer with titanium oxide intercalations. This makes the valves extremely resistant to wear and abrasion and gives them first-class sliding qualities. This provides optimum protection against atmospheric and chemical influences.

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Solenoid valve VOFC
- Complete valve in combination with VACC-S13 coil 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 the VACC-S18 coil or as a basic valve on its own
- Can be easily combined via the configurator in the electronic catalogue
The valves from the series VOFC and VOFD are special 3/2- and 5/2-way valves for process automation and for use in chemical and petrochemical plants. Here they are frequently used as pilot valves for process valves and actuators. Their sturdy design and high resistance to corrosion make these valves suitable for outdoor use under harsh ambient conditions.

The NAMUR flange pattern makes the solenoid valves especially suitable for quarter-turn actuators. The integrated spring chamber re-breather function protects quarter-turn actuators with spring return (single-acting cylinders and actuators) against contaminated ambient air and weather influences such as rain.

The solenoid coils from the series VACC are the right coils for the basic valves VOFC and VOFD. The VACC-S13 coils are designed for the VOFC valves and cover the ignition protection types Ex-ia and Ex-me. The VACC-S18 coils fit the VOFD coils and cover the ignition protection types Ex-me and Ex-d. Several local and regional certifications are available.

General

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

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

Basic valve VOFC
- Pilot-controlled
- 3/2-, 5/2-way valves
- Ports G1/4", NPT1/4", G1/2", NPT1/2"
- NAMUR port pattern, optionally with P duct

Basic valve VOFD
- Directly actuated
- 3/2-way valves
- Ports G1/4", NPT1/4"
- NAMUR port pattern, NAMUR port pattern with P duct
Overview of solenoid valves VOFD

**VOFD-L100T**
- Material: aluminium treated with Ematal
- Ports: G1/2" or NPT1/2"; Namur
- Pressure range: 0 ... 12 bar
- Flow rate: max. 1,900 l/min

**VOFD-L50T**
- Material: stainless steel
- Function: 3/2-way
- Ports: G1/4" or NPT1/4"; Namur; Namur with P port
- Pressure range: 0 ... 10 bar
- Flow rate: max. 490 l/min
- Temperature: −25 ... +60 °C
- Manual override, non-detenting or detenting

**VACC-S18-120**
- Power consumption: 12 W
- Electrical connection: plug pattern type A

**VACC-S18-120**
- Power consumption: 12 W
- Electrical connection: cable gland M20x1.5
- Fuse optional
- Type of ignition protection: Ex me

**VACC-S18-25**
- Power consumption: 7 W
- Electrical connection: M20x1.5; NPT1/2"
- Type of ignition protection: Ex d

**VACC-S18-35**
- Power consumption: 3.5 W
- Electrical connection: plug pattern type A

**VACC-S18-35**
- Power consumption: 3.5 W
- Electrical connection: cable gland M20x1.5
- Fuse optional
- Type of ignition protection: Ex me

**VACC-S18-25**
- Power consumption: 2.5 W
- Electrical connection: M20x1.5; NPT1/2"
- Type of ignition protection: Ex d

**VACC-S18-120**
- Power consumption: 12 W
- Electrical connection: plug pattern type A

**VACC-S18-120**
- Power consumption: 12 W
- Electrical connection: cable gland M20x1.5
- Fuse optional
- Type of ignition protection: Ex me

**VACC-S18-25**
- Power consumption: 7 W
- Electrical connection: M20x1.5; NPT1/2"
- Type of ignition protection: Ex d

**VACC-S18-25**
- Power consumption: 7 W
- Electrical connection: M20x1.5; NPT1/2"
- Type of ignition protection: Ex d

**VACC-S18-35**
- Power consumption: 3.5 W
- Electrical connection: plug pattern type A

**VACC-S18-35**
- Power consumption: 3.5 W
- Electrical connection: cable gland M20x1.5
- Fuse optional
- Type of ignition protection: Ex me

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

**VACC-S18-35**
- Power consumption: 3.5 W
- Electrical connection: cable gland M20x1.5
- Fuse optional
- Type of ignition protection: Ex me

**VACC-S18-25**
- Power consumption: 2.5 W
- Electrical connection: M20x1.5; NPT1/2"
- Type of ignition protection: Ex d
Overview of solenoid valves VOFC

VOFC-L-...-SG14/SN142
- Pneumatically piloted
- Ports: G1/4"; NPT1/4"

VOFC-L
Material: aluminium treated with Ematal
- Design: soft-piston slide valve
- Function: 3/2-, 5/2-way single, double solenoid
- Port: G1/4"; Namur
- Pressure range: 2.5 ... 8 bar
- Flow rate: max. 1,038 l/min
- Manual override, non-detenting or detenting

VACC-S13-18...EX4ME
- Power consumption: 1.8 W
- Electrical connection: cable gland M20x1.5
- Fuse optional
- Type of ignition protection: Ex me

VACC-S13-...EX4A
- Power consumption: 0.2 W
- Electrical connection: cable gland
- Type of ignition protection: Ex ia

VACC-S13-18...
- Power consumption: 1.8 W
- Electrical connection: plug pattern type A
- IP65

VOFC-LT-...-R1
Material: stainless steel
- Ports: G1/4"; NPT1/4"; G1/2"; NPT1/2"

VOFC-LT...
Material: aluminium treated with Ematal
- Design: poppet valve
- Function: 3/2-way
- Port: G1/4" or NPT1/4"; G1/2"; NPT1/2"; Namur with P port 1/4"; Namur 1/2"
- Pressure range: (0)2 ... 8 bar
- Flow rate: max. 1,400 l/min
- Temperature: −25 ... +60 °C

VACC-S13-EX4A
- Power consumption: 0.2 W
- Electrical connection: cable gland
- Type of ignition protection: Ex ia

VACC-S13-18...
- Power consumption: 1.8 W
- Electrical connection: plug pattern type A
- IP65
- Type of ignition protection: Ex me

VACC-S13-18...EX4ME
- Power consumption: 1.8 W
- Electrical connection: cable gland M20x1.5
- Fuse optional

VOFC-...-P3...0.09/0.4...EX4A
Material: aluminium treated with Ematal
- Low-power pilot control
- Pre-assembled pilot system
- Power consumption 9/40 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
Festo Chemical Valve Technology GmbH is the newest member of the Festo Group. It was above all the expertise of the company formerly owned by Eugen Seitz AG (Wetzikon, Switzerland) in the area of process automation which motivated Festo’s involvement, especially expertise in the field of pilot valves and their accessories.

Maximum safety when it comes to SIL and explosion protection
The solenoid valves from Festo Chemical Valve Technology GmbH can be operated 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 valves as control valves all over the world.

Maximum system availability when it comes to switching reliability
60 years of valve expertise make themselves felt: the quality is simply unbeatable. Even in outdoor installations or difficult environmental conditions.

Maximum reliability when it comes to replacement
Wherever your production systems are in the world, you can rely on Festo products and solutions being available in all global markets thanks to Festo’s sales and service network. You will have access to it all, from A to Z – not least because you can obtain everything from a single source. A positive side-effect is that your purchasing and logistics will become simpler and easier.

Convinced? We look forward to hearing from you!
Please contact your Festo sales engineer or visit
→ www.festo-cvt.com