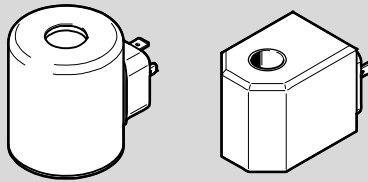


# Solenoid coil

## VACC-S13/S18-...-A1



**FESTO**

**Festo AG & Co. KG**  
 Rüter Straße 82  
 73734 Esslingen  
 Germany  
 +49 711 347-0  
 www.festo.com

Operating instructions  
 (Translation of the original instructions)

8084410  
 2017-11  
 [8084412]

For all available product documentation → [www.festo.com/pk](http://www.festo.com/pk)

### 1 Function

When switching on the voltage, the solenoid is energised and the valve is actuated.

### 2 Application

- The solenoid coil is intended to be used as an actuator for solenoid valves.

### 3 Requirements for product use



#### Warning

Danger of injury due to electrocution.  
 Switch off the power supply on prior to all work.

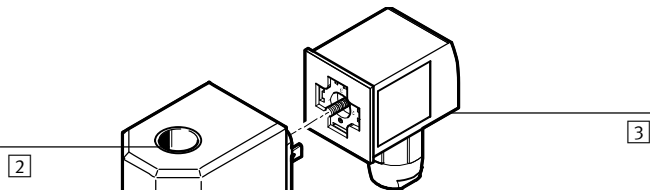
- Mounting, installation and commissioning should only be carried out by qualified electrical specialists.
- Use the device in its original status, without any unauthorised modifications.
- The protection rating IP65 is ensured only due the suitable plug with seals.

### 4 Commissioning

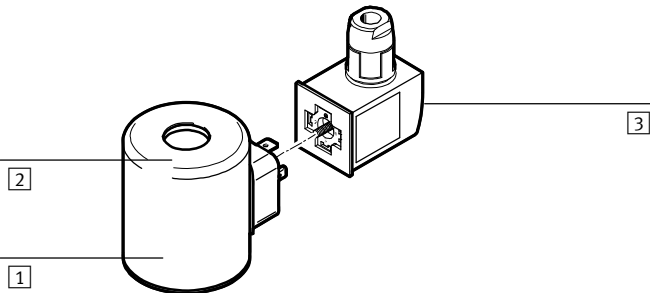
- Observe the product labelling.
- Do not commission the solenoid coil until after mounting.

### 5 Installation

- An appropriate circuit breaker in the building installation must be present, easily accessible and marked as a disconnecting device for the device.
- Use only flexible cables. Minimum section: 1 mm<sup>2</sup>
- Ensure the protection class through a suitable installation.

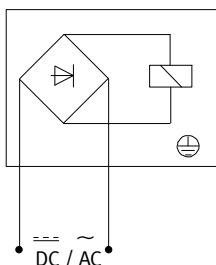


- 1 Solenoid coil VACC-S13-...-A1-...      3 Socket (not included in delivery)  
 2 Diameter: 13 mm

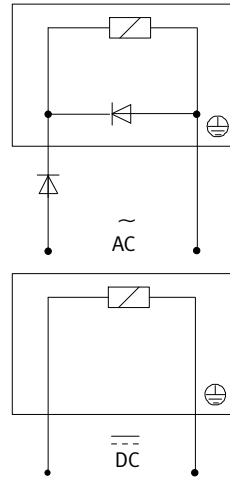


- 1 Solenoid coil VACC-S18-...-A1-...      3 Socket (not included in delivery)  
 2 Diameter: 18 mm

### Block circuit diagrams



VACC-S13-18-A1-1U  
 VACC-S13-18-A1-2U  
 VACC-S13-18-A1-3U



VACC-S18-35-A1-1A  
 VACC-S18-35-A1-2A  
 VACC-S18-35-A1-3A  
 VACC-S18-120-A1-1A  
 VACC-S18-120-A1-2A  
 VACC-S18-120-A1-3A

VACC-S13-18-A1-1  
 VACC-S18-35-A1-1  
 VACC-S18-120-A1-1

### 6 Operation

- Observe the operating conditions.
- Comply with permissible limit values → Technical data.



#### Warning

Risk of injury from hot surfaces.  
 The surfaces on the housing of the solenoid coil can get hot.

- Do not touch the housing.

### 7 Maintenance and care

- Changes or repairs to the solenoid coil are not permitted.
- The device is maintenance-free.
- Clean the solenoid coil only when the power supply is switched off. Do not use abrasive or aggressive detergents.

### 8 Technical data

Operating conditions	S13	S18
Ambient temperature	-20 ... +60 °C	
Degree of protection	IP65	
Duty cycle	100 % (continuous operation)	
Relative humidity	95 % (non-condensing)	
Connecting cables	Plugin accordance with EN 175301-803; Form A	
Materials		
Housing	PA	Steel
Solenoid coil	PA, UP	
Assembly	Individual mounting	
Installation position	Optional	
CE label (Declaration of conformity → <a href="http://www.festo.com/sp">www.festo.com/sp</a> <a href="http://www.festo.com/sp">www.festo.com/sp</a> )	according to low-voltage directive and RoHS Directive	

	S13-18-A1-1	S13-18-A1-1U	S13-18-A1-2U	S13-18-A1-3U
Type of voltage	Direct voltage	Alternating voltage (50 ... 60 Hz) Direct voltage		
Protection class	III	III	II	II
Nominal voltage U <sub>N</sub> (-15 % / +10 %)	24 DC	24 V DC/AC	110 V DC/AC	230 V DC/AC
Nominal power P <sub>20</sub>	W/VA	2,1	1,8	
Resistance R <sub>20</sub>	Ω	277	263	6660
Current consumption I <sub>20</sub>	mA	87	86	16

	S18-35-A1-1	S18-35-A1-1A	S18-35-A1-2A	S18-35-A1-3A
Type of voltage	Direct voltage	Alternating voltage (50 ... 60 Hz)		
Protection class	III	III	I	I
Nominal voltage U <sub>N</sub> (-15 % / +10 %)	24 V DC	24 V AC	110 V AC	230 AC
Nominal power P <sub>20</sub>	W/VA	3,6	5	5
Resistance R <sub>20</sub>	Ω	158	42,1	902
Current consumption I <sub>20</sub>	mA	152	277	61

	S18-120-A1-1A	S18-120-A1-2A	S18-120-A1-3A	S18-120-A1-1
Type of voltage	Alternating voltage (50 ... 60 Hz)			Direct voltage
Protection class	III	I	I	III
Nominal voltage U <sub>N</sub> (-15 % / +10 %)	24 V AC	110 V AC	230 V AC	24 DC
Nominal power P <sub>20</sub>	W/VA	15	15	12,7
Resistance R <sub>20</sub>	Ω	13,6	322	1300
Current consumption I <sub>20</sub>	mA	857	170	88