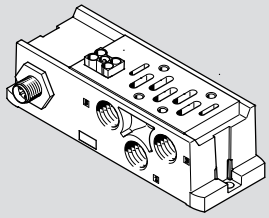
VABS-S...-...-EX1E

Sub-base



FESTO

Festo SE & Co. KG
Ruiter Straße 82
73734 Esslingen
Germany
+49 711 347-0

www.festo.com

Addendum document | Operating conditions EX

8182438
2022-08c
[8182440]

8182438

Translation of the original instructions

© 2023 all rights reserved to Festo SE & Co. KG

1 Identification EX

Identification
II 3G Ex ec IIC T3 Gc X

Tab. 1: Identification EX

2 Applicable documents

NOTICE

Technical data for the product can have different values in other documents. For operation in an explosive atmosphere, the technical data in this document always have priority.

All available documents for the product ➔ www.festo.com/sp.

3 Certified products

Type	Part no.	Type	Part no.
VABS-S4-2S-G18-R3-EX1E	8033155	VABS-S2-1S-G38-R3-EX1E	8033159
VABS-S4-2S-G18-B-R3-EX1E	8033156	VABS-S2-1S-G38-B-R3-EX1E	8033160
VABS-S4-1S-G14-R3-EX1E	8033157	VABS-S2-2S-G12-R3-EX1E	8033161
VABS-S4-1S-G14-B-R3-EX1E	8033158	VABS-S2-2S-G12-B-R3-EX1E	8033162

Tab. 2: Certified products VABS-...

Type	Part no.	Type	Part no.
VSVA-B-T32C-AZD-A2-1T1L-EX1EC	8033176	VSVA-B-T32U-AZD-A1-1T1L-EX1EC	8033139
VSVA-B-T32N-AZD-A2-1T1L-EX1EC	8033177	VSVA-B-T32F-AZD-A1-1T1L-EX1EC	8033140
VSVA-B-T32U-AZD-A2-1T1L-EX1EC	8033178	VSVA-B-T32H-AZD-A1-1T1L-EX1EC	8033141
VSVA-B-T32F-AZD-A2-1T1L-EX1EC	8033179	VSVA-B-T32W-AZD-A1-1T1L-EX1EC	8033142
VSVA-B-T32H-AZD-A2-1T1L-EX1EC	8033180	VSVA-B-B52-ZD-A1-1T1L-EX1EC	8033143
VSVA-B-T32W-AZD-A2-1T1L-EX1EC	8033181	VSVA-B-D52-ZD-A1-1T1L-EX1EC	8033144
VSVA-B-B52-ZD-A2-1T1L-EX1EC	8033182	VSVA-B-M52-AZD-A1-1T1L-EX1EC	8033145
VSVA-B-D52-ZD-A2-1T1L-EX1EC	8033183	VSVA-B-M52-MZD-A1-1T1L-EX1EC	8033146
VSVA-B-M52-AZD-A2-1T1L-EX1EC	8033184	VSVA-B-P53U-ZD-A1-1T1L-EX1EC	8033147
VSVA-B-M52-MZD-A2-1T1L-EX1EC	8033185	VSVA-B-P53E-ZD-A1-1T1L-EX1EC	8033148
VSVA-B-P53U-ZD-A2-1T1L-EX1EC	8033186	VSVA-B-P53C-ZD-A1-1T1L-EX1EC	8033149
VSVA-B-P53E-ZD-A2-1T1L-EX1EC	8033187	VSVA-B-P53ED-ZD-A1-1T1L-EX1EC	8033150
VSVA-B-P53C-ZD-A2-1T1L-EX1EC	8033188	VSVA-B-P53AD-ZD-A1-1T1L-EX1EC	8033151
VSVA-B-T22C-AZD-A2-1T1L-EX1EC	8033189	VSVA-B-T22C-AZD-A1-1T1L-EX1EC	8033152
VSVA-B-T22CV-AZD-A2-1T1L-EX1EC	8033190	VSVA-B-T22CV-AZD-A1-1T1L-EX1EC	8033153
VSVA-B-T32C-AZD-A1-1T1L-EX1EC	8033137	VSVA-B-P53EP-ZD-A1-1T1L-EX1EC	8033154
VSVA-B-T32N-AZD-A1-1T1L-EX1EC	8033138		

Tab. 3: Certified products VSVA-...-A1-.../VSVA-...-A2-...

Type	Part no.	Type	Part no.
VSVA-B-T32C-AZD-D1-1T1L-EX1EC	8033194	VSVA-B-T32C-AZD-D2-1T1L-EX1EC	8033212
VSVA-B-T32N-AZD-D1-1T1L-EX1EC	8033195	VSVA-B-T32N-AZD-D2-1T1L-EX1EC	8033213
VSVA-B-T32U-AZD-D1-1T1L-EX1EC	8033196	VSVA-B-T32U-AZD-D2-1T1L-EX1EC	8033214
VSVA-B-T32F-AZD-D1-1T1L-EX1EC	8033197	VSVA-B-T32F-AZD-D2-1T1L-EX1EC	8033215
VSVA-B-T32H-AZD-D1-1T1L-EX1EC	8033198	VSVA-B-T32H-AZD-D2-1T1L-EX1EC	8033216
VSVA-B-T32W-AZD-D1-1T1L-EX1EC	8033199	VSVA-B-T32W-AZD-D2-1T1L-EX1EC	8033217
VSVA-B-B52-ZD-D1-1T1L-EX1EC	8033200	VSVA-B-B52-ZD-D2-1T1L-EX1EC	8033218
VSVA-B-D52-ZD-D1-1T1L-EX1EC	8033201	VSVA-B-D52-ZD-D2-1T1L-EX1EC	8033219
VSVA-B-M52-AZD-D1-1T1L-EX1EC	8033202	VSVA-B-M52-AZD-D2-1T1L-EX1EC	8033220
VSVA-B-M52-MZD-D1-1T1L-EX1EC	8033203	VSVA-B-M52-MZD-D2-1T1L-EX1EC	8033221
VSVA-B-P53U-ZD-D1-1T1L-EX1EC	8033204	VSVA-B-P53U-ZD-D2-1T1L-EX1EC	8033222
VSVA-B-P53E-ZD-D1-1T1L-EX1EC	8033205	VSVA-B-P53E-ZD-D2-1T1L-EX1EC	8033223
VSVA-B-P53C-ZD-D1-1T1L-EX1EC	8033206	VSVA-B-P53C-ZD-D2-1T1L-EX1EC	8033224
VSVA-B-T22C-AZD-D1-1T1L-EX1EC	8033207	VSVA-B-T22C-AZD-D2-1T1L-EX1EC	8033225
VSVA-B-T22CV-AZD-D1-1T1L-EX1EC	8033208	VSVA-B-P53F-ZD-D2-1T1L-EX1EC	8033226
VSVA-B-P53F-ZD-D1-1T1L-EX1EC	8033209		

Tab. 4: Certified products VSVA-...-D1-.../VSVA-...-D2-...

4 Safety

4.1 Safety instructions

- The device can be used under the stated operating conditions in zone 2 of explosive gas atmospheres.
- Operate the device with compressed air that as a minimum conforms to the quality class in accordance with ISO 8573-1:2010: [7:4:4]. Information on the operating medium: oiled operation not permitted.
- Draw in of the operating medium outside the potentially explosive area.
- Intended use does not include the use of different media.
- Use the device in its original status without any unauthorised modifications.
- All work must be carried out outside of potentially explosive areas.
- Work on the product may only be carried out by qualified personnel who can evaluate the work and detect dangers.

4.2 Intended use

The connecting plates provide the compressed air supply for the valves.

4.3 Identification X: special conditions

- Do not disconnect or open when powered.
- Install the device in a housing that is minimum IP54, in accordance with EN 60079-0.
- Use additional strain reliefs for the cables in front of all plugs.
- Protect the device from all shock loading.
- Protect the device from UV radiation.
- Energise only one coil of a 5/3-way or 5/2-way valve.
- Ambient temperature –5 °C ≤ Ta ≤ +50 °C.
- The device must be operated only in an environment with a minimum of pollution degree 2, as defined in IEC 60664-1.

5 Function

The valve uses electric reversing switching to pressurise the downstream compressed air systems alternately or simultaneously.
The bistable valve is rerouted to the solenoid coils by reciprocal switching of the voltage and retains the switching position until the counter-signal even after the signal is removed.

6 Commissioning

⚠ WARNING

The discharge of electrostatically charged parts can lead to ignitable sparks.

- Prevent electrostatic charging by taking appropriate installation and cleaning measures.
- Integrate the device into the system's equipotential bonding. The surface coating of the solenoid valves is electrically non-conductive.
- Prevent processes that could generate charges.

⚠ WARNING

Electrically generated sparks can ignite a potentially explosive atmosphere and cause an explosion.

- Do not disconnect when powered.
- Prevent the disconnection of the plug M12 with a safety clip NEAU-M12-GD (not included in the scope of delivery).

NOTICE

Escaping exhaust air can swirl up dust and create an explosive dust atmosphere.

Earth all supply voltages.

7 Maintenance

To avoid leakage:

- Check that the product is functioning correctly at regular intervals.

Malfunction	Cause	Remedy
Audible leakage	– The valve is not screwed on tightly. – The valve is damaged.	– Check fittings at the ports. – Replace the valve.

Tab. 5: Fault clearance

8 Technical data

VABS-S		
Ambient temperature	[°C]	–5 ... +50
Operating medium	[V DC]	Compressed air to ISO 8573-1:2010 [7:4:4] Lubricated operation not possible
Protection class in accordance with EN 61140		III (PELV)
Degree of protection in accordance with EN 60529		IP65
Max. switching frequency	[Hz]	10
Max. pulse/pause ratio		50%
Tightening torque for M12 plug	[Nm]	0.5
Nominal operating voltage	[V DC]	24 ± 10%
Nominal power/current consumption per solenoid coil		
5/2, 5/3 valves	[W/mA]	1.6/72
3/2 valves	[W/mA]	1.3/60

Tab. 6: Operating conditions