

# Air solenoid valve VSVA-B-D52-ZH-A2-1R5L

Part number: 546780



[General operating condition](#)

## Datasheet product reliability

The information in this "Product reliability data sheet" is based on products being used as intended. This includes complying with all specifications in data sheets, catalogues, user documentation and the general operating conditions. The user alone is responsible for determining whether a product is suitable for a particular application.

Feature	Value
Relevant basic safety principles <sup>1)</sup>	Yes
Service-life value B <sub>10</sub> <sup>2)</sup>	35 Mio cycles
Service-life value B10D <sup>3)</sup>	70 Mio cycles
Relevant well-tried safety principles <sup>4)</sup>	Yes
Fault exclusion	Bursting of the valve housing: externally directed failure of the material structure with a sudden release of the medium and associated pressure drop (according to ISO 5598, 3.2.85). Spontaneous change of the initial switching position of the switching element of the main stage without a control signal. The control signal with pilot-controlled solenoid valves consists of the electrical control signal for the solenoid coil and the pneumatic signal (pilot air supply) of the pilot control. The fault exclusion applies under the following additional conditions: on the working ports, connectors that can be directly connected to the valve must be connected with a tubing length of at least 200 mm. On the exhaust ports, silencers must be mounted directly or the exhaust air must be contained in common lines. Adapters with greater nominal widths are not permitted. Components from Festo or components with a comparable flow rate must be used.
Well-tried component <sup>5)</sup>	Yes
Design characteristics	Remains in switching position on signal switch-off (bistable valve)
Lap	Overlap
Vibration resistance	Transport application test with severity level 2 in accordance with FN942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27
Max. positive test pulse with 0 signal	500 µs
Max. negative test pulse with 1 signal	500 µs
CE mark (see declaration of conformity)	To EU EMC Directive

- 1) The product-relevant basic safety principles are fulfilled according to the ISO 13849-2.
- 2) The ascertainment of characteristic service life values is based on the ISO 19973 "Pneumatic fluid power - Assessment of component reliability by testing".
- 3) B10D value determined on the basis of ISO 13849-1: e.g. B10D=2\*B10. Whether this value is suitable for a specific application must be checked by the user.
- 4) The product-relevant well-tried safety principles are fulfilled according to the ISO 13849-2.
- 5) The product is a well-tried product for a safety-related application according to ISO 13849-1. The relevant basic and well- tried safety principles according ISO 13849-2 for this product are fulfilled. The suitability of the product for a precise application must be verified by the user.