

Air solenoid valve VUVS-LT20-M52-MZD-G18-F7

Part number: 577495



[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 ¹⁾	Yes
Service-life value B ₁₀ ²⁾	25 Mio cycles
Service-life value B10D ³⁾	50 Mio cycles
Relevant well-tried safety principles ⁴⁾	Yes
Fault exclusion	Automatic change of the normal position of the switching element of the main stage without a control signal with operating pressure (\geq minimum permitted operating pressure). The control signal for pilot-controlled solenoid valves consists of the electrical control signal for the valve coil and the pneumatic signal (pilot air supply) of the pilot valve. Applies only to valves with external pilot air. 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). Failure of the underlap Standard flow rate 6 to 0 bar (2→1+2→3; 2→1; 2→3; 4→1+4→5; 4→1; 4→5) is equal to or greater than the standard nominal flow rate of the valve at exhausted operating pressure (port 1).
Well-tried component ⁵⁾	Yes
Design characteristics	Pneumatic spring return Supply air via duct 1 Pneumatical and mechanical spring are required for safe return Poppet valve
Lap	Underlap
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	1900 μs
Max. negative test pulse with 1 signal	2700 μs

- 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.