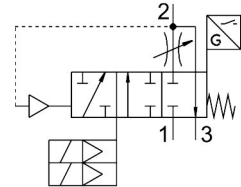


Soft start/quick exhaust valve MS6-SV-1/2-D-10V24P-2M12-SO-RG



Part number: 8165924



[PDF 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
Safety Integrity Level (SIL) ¹⁾	Exhausting / Safety Integrity Level 3 Prevention of unexpected start-up (pressurisation) / Safety Integrity Level 3
Mean number of annual operations nop (assumed) ²⁾	8760
Probability of Dangerous Failure per Hour (PFHd) ³⁾	$4.29 \cdot 10^{-8}$
Common Cause Failure (CCF) measures ⁴⁾	Observe compressed air quality Comply with maximum vibration and shock loads Comply with ambient temperature and temperature of medium Safely keep operating pressure within the limits of the technical specifications
Service-life value B ₁₀ ⁵⁾	0,9 Mio cycles
Service-life value at the maximum permissible operating pressure ⁶⁾	0,25 Mio cycles
Note on forced dynamization	Switching frequency min. 1/month
Max. switching frequency	0,5 Hz
Design characteristics	Observe valve function Pilot actuated 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	1,8 ms
Max. negative test pulse with 1 signal	0,8 ms
CE mark (see declaration of conformity)	To EU EMC Directive To EU RoHS Directive To EU Machinery Directive
Safety function ⁷⁾	Exhausting Prevention of unexpected start-up (pressurisation)
Performance Level (PL) ⁸⁾	Exhausting/Category 3, Performance Level d Prevention of unexpected start-up (pressurisation) / category 3, Performance Level d

1) Further measures can be necessary to fulfil the stated Safety Integrity Level (SIL). For these measures refer to the relevant documentation.

2) The probability of failure is based on this mean number of annual operations (nop).

- 3) For components affected by wear this value will be reached, if for the precise application the mean number of annual operations (nop) is equal or lower than the assumed annual operations of this product. The assumed mean number of annual operations is stated in this datasheet.
- 4) CCF measures have to be verified for the precise application. Therefore, the list with measures is not meant to be exhaustive.
- 5) The ascertainment of characteristic service life values is based on the ISO 19973 "Pneumatic fluid power - Assessment of component reliability by testing".
- 6) The value have been determined at maximum allowable pressure with the sample size of one.
- 7) Further measures can be necessary for realization of the mentioned safety function. For these measures refer to the relevant documentation.
- 8) Further measures can be necessary to fulfil the stated Performance Level (PL). For these measures refer to the relevant documentation.