

# Air solenoid valve

## VSVA-B-M52-MZD-A1-1T1L-APX-0.5

FESTO

Part number: 570850



General operating condition

## Data sheet

Feature	Value
Valve function	5/2-way, monostable
Actuation type	Electrical
Width	26 mm
Normal nominal flow rate (normalized to DIN 1343)	1100 l/min
Pneumatic working port	Sub-base, size 26 mm as per ISO 15407-2 G1/4
Operating voltage	24V DC
Operating pressure	-0.09 MPa ... 1 MPa
Operating pressure	-0.9 bar ... 10 bar
Structural design	Piston gate valve
Reset method	Mechanical spring
KC characters	KC-EMV
CE marking (see declaration of conformity)	As per EU EMC directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC
Degree of protection	IP65 NEMA 4
Nominal width	9 mm
Exhaust air function	Adjustable Via throttle plate Via individual sub-base
Sealing principle	Soft
Mounting position	Any
Manual override	Detenting Non-detenting Covered
Type of control	Piloted
Pilot air supply port	External Internal
Flow direction	Any
Symbol	00997391
Measuring principle	Inductive
Lap	Positive overlap
Sensor reverse polarity protection	For all electrical connections
Signal status display	LED
Switching position sensing	Normal position with sensor
Sensor switching status indication	LED
Pilot pressure MPa	0.3 MPa ... 1 MPa
Pilot pressure	3 bar ... 10 bar

Feature	Value
Flow rate of pneumatic valve	1400 l/min
Flow rate of pneumatic valve on individual sub-base	1200 l/min
Optimized flow rate of pneumatic valve, pneumatically concatenated flow	1350 l/min
Optimized flow rate of pneumatic valve pneumatically concatenated flow	1100 l/min
Switching time off	54 ms
On switching time	20 ms
Pneumatic valve - sensor ON switching time	60 ms
Pneumatic valve - sensor switching time off	11 ms
Duty cycle	100%
Max. positive test pulse with 0 signal	1200 µs
Max. negative test pulse on 1 signal	1100 µs
Nominal operating voltage DC	24 V
Switching output	PNP
Coil characteristics	24 V DC: 1.6 W
Surge resistance	2.5 kV
Contamination level	3
Permissible voltage fluctuations	+/- 10%
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
Information on operating and pilot media	Operation with oil lubrication possible (required for further use)
Vibration resistance	Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27
Corrosion resistance class (CRC)	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Temperature of medium	-5 °C ... 50 °C
Relative air humidity	0 - 90%
Noise level	85 dB(A)
Ambient temperature	-5 °C ... 50 °C
Max. tightening torque for valve mounting	1,8 Nm ... 2.2 Nm
Product weight	281 g
DC sensor operating voltage range	10 V ... 30 V
Sensor short circuit protection	Pulsed
Sensor idle current	≤10 mA
Max. output current, sensor	200 mA
Sensor max. switching frequency	5000 Hz
Sensor residual ripple	±10%
Sensor voltage drop	≤2 V
Electrical connection	4-pin Plug As per ISO 15407-2
Sensor connection	Plug Cable 4-pin M12x1 0.5 m
Type of mounting	On sub-base
Pilot air port 12/14	Sub-base, size 26 mm as per ISO 15407-2
Pilot exhaust air port 82/84	Ducted Not ducted Alternatively:
Pneumatic connection 1	Sub-base, size 26 mm as per ISO 15407-2
Pneumatic connection 2	Sub-base, size 26 mm as per ISO 15407-2
Pneumatic connection 3	Sub-base, size 26 mm as per ISO 15407-2
Pneumatic connection 4	Sub-base, size 26 mm as per ISO 15407-2
Pneumatic connection 5	Sub-base, size 26 mm as per ISO 15407-2

<b>Feature</b>	<b>Value</b>
Note on materials	RoHS compliant
Seals material	FPM NBR
Housing material	Die-cast aluminum PA
Material of screws	Galvanized steel
Switching element function	NC contact