

Solenoid valve

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

Part number: 570850

FESTO



General operating condition

Data sheet

Feature	Value
Valve function	5/2-way, single solenoid
Type of actuation	Electrical
Construction width	26 mm
Standard nominal flow rate (standardised to DIN 1343)	1100 l/min
pneumatic working port	Sub-base size 26 mm to ISO 15407-2 G1/4
Operating voltage	24 V DC
Operating pressure	-0.09 MPa ... 1 MPa
Operating pressure	-0.9 bar ... 10 bar
Design	Piston gate valve
Type of reset	Mechanical spring
KC mark	KC-EMV
CE mark (see declaration of conformity)	To EU EMC Directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC
Degree of protection	IP65 NEMA 4
Nominal size	9 mm
Exhaust-air function	Can be throttled Via throttle plate Via individual sub-base
Sealing principle	Soft
Mounting position	Any
Manual override	Detenting Non-detenting Concealed
Type of piloting	Piloted
Pilot air supply	External Internal
Flow direction	Any
Symbol	00997391
Measuring principle	Inductive
lap	Overlap
Reverse polarity protection sensor	For all electrical connections
Signal status display	LED
Switching position sensing	Normal position with sensor
Switching status display sensor	LED
Pilot pressure	0.3 MPa ... 1 MPa
Pilot pressure	3 bar ... 10 bar

Feature	Value
Flow rate of valve	1400 l/min
Flow rate of valve on individual sub-base	1200 l/min
Valve flow rate, pneumatically linked, flow optimized	1350 l/min
Flow rate of pneumatically interlinked valve	1100 l/min
Switching time off	54 ms
Switching time on	20 ms
Valve - sensor switching time on	60 ms
Valve - sensor switching time off	11 ms
Duty cycle	100%
Max. positive test pulse with 0 signal	1200 µs
Max. negative test pulse with 1 signal	1100 µs
Nominal operating voltage DC	24 V
Switching output	PNP
Characteristic coil data	24 V DC: 1.6 W
Immunity to surge	2.5 kV
Pollution degree	3
Permissible voltage fluctuations	+/-10%
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Vibration resistance	Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27
Corrosion resistance class CRC	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Media temperature	-5 °C ... 50 °C
Relative air humidity	0 - 90%
Sound pressure 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
Operating voltage range, DC sensor	10 V ... 30 V
Short-circuit strength sensor	Pulsed
Idle current sensor	≤10 mA
Max. output current sensor	200 mA
Max. switching frequency sensor	5000 Hz
Residual ripple sensor	±10%
Voltage drop sensor	≤2 V
Electrical connection	4-pin Plug To 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 to ISO 15407-2
Pilot exhaust port 82/84	Ducted Not ducted Either:
Pneumatic connection, port 1	Sub-base size 26 mm to ISO 15407-2
Pneumatic connection, port 2	Sub-base size 26 mm to ISO 15407-2
Pneumatic connection, port 3	Sub-base size 26 mm to ISO 15407-2
Pneumatic connection, port 4	Sub-base size 26 mm to ISO 15407-2
Pneumatic connection, port 5	Sub-base size 26 mm to ISO 15407-2

Feature	Value
Note on materials	RoHS compliant
Material seals	Fluoro rubber NBR
Material housing	Die-cast aluminium Process automation
Material screws	Galvanised steel
Switching element function	N/C contact