Air solenoid valve VSVA-B-M52-MZD-A2-1T1L-ANP

FESTO

Part number: 573203





Data sheet

Feature	Value
Valve function	5/2, monostable
Actuation type	Electrical
Width	18 mm
Standard nominal flow rate	550 l/min
Pneumatic working port	Sub-base, size 18 mm according to ISO 15407-2 G1/8
Operating voltage	24V DC
Operating pressure	-0.09 MPa1 MPa -0.9 bar10 bar
Structural design	Piston gate valve
Reset method	Mechanical spring
KC characters	KC EMC
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	5 mm
Exhaust air function	With flow control option Via throttle plate Via individual sub-base
Sealing principle	Soft
Mounting position	Any
Manual override	Detenting Non-detenting Covered
Type of control	Pilot-controlled
Pilot air supply port	External Internal
Flow direction	Non-reversible
Measuring principle	Inductive
Lap	Overlap
Sensor reverse polarity protection	For all electrical connections
Signal status display	LED
Switching position sensing	Normal position with sensor

Feature	Value
Sensor switching status indication	LED
Pilot pressure MPa	0.3 MPa1 MPa
Pilot pressure	3 bar10 bar
Flow rate of pneumatic valve	750 l/min
Flow rate of pneumatic valve on individual sub-base	600 l/min
Optimized flow rate of pneumatic valve, pneumatically concatenated flow	700 l/min
Optimized flow rate of pneumatic valve pneumatically concatenated flow	550 l/min
Switching time off	38 ms
On switching time	12 ms
Pneumatic valve - sensor ON switching time	32 ms
Pneumatic valve - sensor switching time off	9 ms
Duty cycle	100%
Max. positive test pulse with 0 signal	1500 μs
Max. negative test pulse on 1 signal	800 µs
Nominal operating voltage DC	24 V
Switching output	NPN
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 °C50 °C
Relative air humidity	0 - 90 %
Noise level	85 dB(A)
Ambient temperature	-5 °C50 °C
Max. tightening torque for valve mounting	0.8 Nm1.2 Nm
Product weight	140 g
DC sensor operating voltage range	10 V30 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 3-pin M8x1
Type of mounting	On sub-base
Pilot air port 12/14	Sub-base, size 18 mm as per ISO 15407-2
Pilot exhaust air port 82/84	Ducted Not ducted Optionally:
Pneumatic connection 1	Sub-base, size 18 mm as per ISO 15407-2
Pneumatic connection 2	Sub-base, size 18 mm as per ISO 15407-2
Pneumatic connection 3	Sub-base, size 18 mm as per ISO 15407-2
Pneumatic connection 3	Sub-base, size 18 mm as per ISO 15407-2

Feature	Value
Pneumatic connection 4	Sub-base, size 18 mm as per ISO 15407-2
Pneumatic connection 5	Sub-base, size 18 mm as per ISO 15407-2
Note on materials	RoHS-compliant
Seals material	FPM NBR
Housing material	Die-cast aluminum PA
Material of screws	Steel, galvanized
Switching element function	N/C contact