

Solenoid valve MHA2-MS1H-5/2-2-K

Part number: 525103

FESTO



 [General operating condition](#)

Data sheet

Feature	Value
Valve function	5/2-way, single solenoid
Type of actuation	Electrical
Construction width	10 mm
Standard nominal flow rate (standardised to DIN 1343)	90 l/min
pneumatic working port	Sub-base
Operating voltage	24 V DC
Operating pressure	-0.09 MPa ... 0.8 MPa
Operating pressure	-0.9 bar ... 8 bar
Operating pressure	-13.05 psi ... 116 psi
Design	Pressure relief poppet valve
Type of reset	Mechanical spring
Degree of protection	IP55
Approval	RCM c UL us - Recognised (Oil)
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK RoHS instructions
Nominal size	2 mm
Grid dimension	14 mm
Note on grid dimension	Minimum distance between the valves is 4 mm
Exhaust-air function	Can be throttled
Sealing principle	Soft
Mounting position	Any
Manual override	Non-detenting
Type of piloting	Direct
Flow direction	Non-reversible
Symbol	00991129
lap	Underlap
Reverse polarity protection	Bipolar
Additional functions	Protective circuit
Max. switching frequency	300 Hz
Switching time off	1.7 ms
Switching time on	1.9 ms
Tolerance switching time off	+10%/-30%
Tolerance switching time on	+10%/-30%
Switching time dispersion from 1 Hz	0.2 ms

Feature	Value
Duty cycle	100%
Characteristic coil data	24 V DC: low-current phase 1.625 W, high-current phase 6.5 W
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
Restrictions for environmental and media temperature	As a function of switching frequency (see graph)
Shock resistance	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27
Corrosion resistance class CRC	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Cleanroom suitability, measured according to ISO 14644-14	Class 6 according to ISO 14644-1
Media temperature	-5 °C ... 40 °C
Ambient temperature	-5 °C ... 40 °C
Max. tightening torque for valve mounting	0.4 Nm
Product weight	70 g
Electrical connection	Cable
Cable length	2.5 m
Type of mounting	On PR rail
Pneumatic connection, port 1	Sub-base
Pneumatic connection, port 2	Sub-base
Pneumatic connection, port 3	Sub-base
Pneumatic connection, port 4	Sub-base
Pneumatic connection, port 5	Sub-base
Note on materials	RoHS compliant
Material seals	HNBR NBR
Material housing	Die-cast zinc, coated
Material cable sheath	PUR
Material screws	Galvanised steel