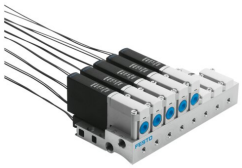
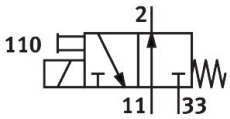
Air solenoid valve
MHA2-MS1H-3/2O-2-K

Part number: 196141





Data sheet

Feature	Value
Valve function	3/2-way, monostable, open
Actuation type	Electrical
Width	10 mm
Normal nominal flow rate (normalized to DIN 1343)	100 l/min
Pneumatic working port	Sub-base
Operating voltage	24V DC
Operating pressure	-0.09 MPa...0.8 MPa -0.9 bar...8 bar -13.05 psi...116 psi
Structural design	Pressure relief poppet valve
Reset method	Mechanical spring
Degree of protection	IP55
Certification	RCM compliance mark c UL us - recognized (OL)
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Nominal width	2 mm
Width dimension	14 mm
Note on grid dimension	Minimum distance between the valves is 4 mm
Exhaust air function	Adjustable
Sealing principle	Soft
Mounting position	Any
Manual override	Non-detenting
Type of control	directly
Flow direction	Reversible with restrictions
Lap	Negative overlap
Reverse polarity protection	Bipolar
Additional functions	Spark arresting Holding current reduction Protective circuit
Operating pressure, reversible	-0.09 MPa...0.1 MPa -0.9 bar...1 bar

Feature	Value
	-13.05 psi...14.5 psi
Max. switching frequency	330 Hz
Switching time off	2 ms
On switching time	1.7 ms
Tolerance for switching time off	+10%/-30%
Tolerance for ON switching time	+10%/-30%
Switching time variation at 1 Hz and above	0.2 ms
Duty cycle	100%
Coil characteristics	24 V DC: low-current phase 1.25 W, high-current phase 5.0 W
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
Restricted ambient and media temperature	Depending on the switching frequency (see diagram)
Shock resistance	Shock test with severity level 2 as per 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
Temperature of medium	-5 °C...40 °C
Ambient temperature	-5 °C...40 °C
Product weight	60 g
Electrical connection	Cable
Cable length	2.5 m
Type of mounting	On sub-base
Pneumatic connection 11	Sub-base
Pneumatic connection 2	Sub-base
Pneumatic connection 33	Sub-base
Note on materials	RoHS compliant
Seals material	HNBR NBR
Housing material	Die-cast zinc, coated
Material of cable sheath	PUR
Material of screws	Galvanized steel