

# Air solenoid valve MHE3-MS1H-3/20-1/8-K

Part number: 525169

FESTO



General operating condition

## Data sheet

Feature	Value
Valve function	3/2, open, monostable
Actuation type	Electrical
Width	14 mm
Normal nominal flow rate (normalized to DIN 1343)	200 l/min
Pneumatic working port	G1/8
Operating voltage	24V DC
Operating pressure	-0.09 MPa ... 0.8 MPa
Operating pressure	-0.9 bar ... 8 bar
Operating pressure	-13.05 psi ... 116 psi
Structural design	Pressure-relieved poppet valve
Reset method	Mechanical spring
Degree of protection	IP65
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 RoHS instructions
Nominal width	3 mm
Width dimension	19 mm
Note on grid dimension	Minimum distance between the valves is 5 mm
Exhaust air function	With flow control option
Sealing principle	Soft
Mounting position	Any
Manual override	Non-detenting
Type of control	Direct
Flow direction	Reversible with restrictions
Symbol	00991322
Lap	Underlap
Reverse polarity protection	Bipolar
Additional functions	Protective circuit
Operating pressure, reversible	-0.09 MPa ... 0.1 MPa
Operating pressure, reversible	-0.9 bar ... 1 bar
Operating pressure, reversible	-13.05 psi ... 14.5 psi
Max. switching frequency	280 Hz
Switching time off	2.8 ms
On switching time	2.3 ms

Feature	Value
Tolerance for switching time off	+10 %/-50 %
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 1.6 W, high-current phase 6.5 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 ... 60 °C
Ambient temperature	-5 °C ... 60 °C
Product weight	120 g
Electrical connection	Cable
Cable length	2.5 m
Type of mounting	With through-hole
Pneumatic connection 11	G1/8
Pneumatic connection 2	G1/8
Pneumatic connection 33	G1/8
Note on materials	RoHS-compliant
Seals material	HNBR NBR
Housing material	Die-cast metal, coated
Material of cable sheath	PUR
Material of screws	Steel, galvanized