

# Solenoid valve MHE3-MS1H-3/20-1/8-K

Part number: 525169

FESTO



[PDF](#) General operating condition

## Data sheet

Feature	Value
Valve function	3/2-way, single solenoid, open
Type of actuation	Electrical
Construction width	14 mm
Standard nominal flow rate (standardised to DIN 1343)	200 l/min
pneumatic working port	G1/8
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	IP65
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	3 mm
Grid dimension	19 mm
Note on grid dimension	Minimum distance between the valves is 5 mm
Exhaust-air function	Can be throttled
Sealing principle	Soft
Mounting position	Any
Manual override	Non-detenting
Type of piloting	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
Switching time on	2.3 ms

Feature	Value
Tolerance switching time off	+10 %/-50 %
Tolerance switching time on	+10%/-30%
Switching time dispersion from 1 Hz	0.2 ms
Duty cycle	100%
Characteristic coil data	24 V DC: low-current phase 1.6 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 ... 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, port 11	G1/8
Pneumatic connection, port 2	G1/8
Pneumatic port 33	G1/8
Note on materials	RoHS compliant
Material seals	HNBR NBR
Material housing	Die-cast zinc, coated
Material cable sheath	PUR
Material screws	Galvanised steel