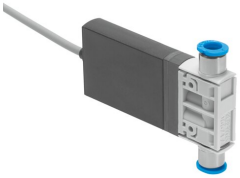
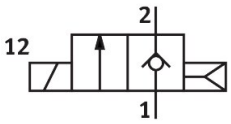
Air solenoid valve
MHJ10-S-2,5-QS-1/4-MF-U

Part number: 565517





General operating condition

Data sheet

Feature	Value
Valve function	2/2, closed, monostable
Actuation type	Electrical
Width	10 mm
Standard nominal flow rate	100 l/min
Pneumatic working port	QS-1/4
Operating voltage	24V DC
Operating pressure	0.05 MPa ... 0.6 MPa
Operating pressure	0.5 bar ... 6 bar
Operating pressure	7.25 psi ... 87 psi
Structural design	Poppet valve without return spring
Reset method	Pneumatic spring
Degree of protection	IP55
Certification	RCM compliance mark
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
Width dimension	10.5 mm
Information on operation	Power supply unit must be able to supply at least 1.7 A without voltage drop. Do not operate without flow. For block assembly with flow rate at max. ambient temperature 45 °C.
Sealing principle	Hard
Mounting position	Any
Manual override	None
Type of control	Direct
Flow direction	Non-reversible
Symbol	00992259
Reverse polarity protection	for operating voltage
Additional functions	Spark suppression Holding current reduction with energy recovery Safety shut-down
b-value	0.38
C value	0.4 l/sbar
Max. switching frequency	1000 Hz
Switching time on at 4 bar and 24 V in new condition	0.8 ms
Switching time off at 4 bar and 24 V in new condition	0.4 ms

Feature	Value
Switching time on at 0.5 bar and 24 V in new condition	0.8 ms
Switching time off at 0.5 bar and 24 V in new condition	0.5 ms
Switching time on at 6 bar and 24 V in new condition	0.9 ms
Switching time off at 6 bar and 24 V in new condition	0.4 ms
Tolerance for switching time off	+15 %/-25 %
Tolerance for ON switching time	+/-15 %
DC operating voltage range	21.6 V ... 26.4 V
Input resistance	34 kOhm
Duty cycle	100%
Coil characteristics	24 V DC: low-current phase 2.0 W, high-current phase 7.0 W
Trigger signal range DC	3 V ... 30 V
Note on input current	Linear increase 0.09-0.44 mA for a trigger signal of 3-15 V 0.44-15.44 mA for a trigger signal of 15-30 V
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 not possible
Restricted ambient and media temperature	Depending on the switching frequency (see diagram)
Corrosion resistance class (CRC)	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B2-L
Storage temperature	-20 °C ... 50 °C
Permissible solenoid surface temperature	120 °C
Temperature of medium	-5 °C ... 60 °C
Ambient temperature	-5 °C ... 60 °C
Product weight	85 g
Electrical connection	3-wire Cable
Cable length	2.5 m
Type of mounting	With through-hole
Pneumatic connection 1	QS-1/4
Pneumatic connection 2	QS-1/4
Note on materials	RoHS-compliant
Seals material	HNBR
Housing material	PPS-reinforced
Material of cable sheath	PUR
Material of screws	Steel