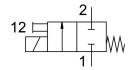
Air solenoid valve MHP1-M4H-2/2G-M3-TC Part number: 197048

FESTO





Data sheet

Lap Underlap Certificate issuing authority UL MH19482 Actuation type Electrical Width 10 mm Standard nominal flow rate 14 l/min Pneumatic working port M3 Operating ressure 0-0.9 bar 2 bar Design Poppet valve with return spring Reset method Mechanical spring Degree of protection P40 Certification Certification Out us - Recognized (OL) Nominal width 0.9 mm Width dimension 10 mm Type code MHP1 Exhaust air function Sealing principle Soft Mounting position Mounting position Any Manual override Flow direction Non-reversible Symbol Oo991398 Valve position ID Note on forced dynamization Suitching frequency at least once a week Suitching time off Switching time On switching time Universited	Feature	Value
Certificate issuing authority Actuation type Electrical Width 10 mm Standard nominal flow rate Pneumatic working port Operating voltage Operating pressure Design Reset method Mechanical spring Degree of protection Certification Certification Coult us - Recognized (OL) Nominal width Operating voltage MHP1 Exhaust air function Sealing principle Soft Any Manual override Non-detenting Type of control Flow direction Non-reversible Symbol Valve position ID Label Note on forced dynamization Suitability for vacuum Max. switching frequency Max. switching frequency Memission Operating sellous (Previous) S MBC S MBC S MBC S MBC S MBC Switching frequency at least once a week Suitability for vacuum yes Max. switching frequency Dury cycle Electrical Liby Horn Sci 1,00 W Electrical S V DC: 1.0 W Permissible voltage fluctuations Leptensissible voltage fluctuations Loperating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Valve function	2/2, closed, monostable
Actuation type Electrical Width	Lap	Underlap
Width 10 mm Standard nominal flow rate 14 //min Pneumatic working port M3 Operating pressure -0.9 bar 2 bar Design Poppet valve with return spring Reset method Mechanical spring Degree of protection CUL us - Recognized (OL) Nominal width 0.9 mm Width dimension 10 mm Type code MHP1 Exhaust air function Any Bealing principle Soft Mounting position Any Manual override Non-detenting Type of control Direct Flow direction Non-reversible Symbol 00991398 Valve position ID Label Note on forced dynamization Switching frequency Switching friequency 20 Hz Switching time off 5 ms On switching time off 5 ms On switching time off 5 ms Oriental miching sellation sellations Permissible voltage fluctuations Permissible voltage fluctuations Fermissible voltage fluctuations For Coli Characteristics 5 V DC: 1.0 W Permissible voltage fluctuations Compressed air as per ISO 8573-1:2010 [7:4:4]	Certificate issuing authority	UL MH19482
Standard nominal flow rate 14 l/min Pneumatic working port M3 Operating voltage 5V DC Operating pressure -0.9 bar 2 bar Design Posper valve with return spring Reset method Mechanical spring Degree of protection IP40 Certification CUL us - Recognized (OL) Nominal width 0.9 mm Width dimension 10 mm Type code MHP1 Exhaust air function Without flow control option Sealing principle Soft Mounting position Any Manual override Non-detenting Type of control Direct Flow direction Non-reversible Symbol 0.0991398 Valve position ID Label Note on forced dynamization Switching frequency at least once a week Suitability for vacuum yes Max. switching frequency 20 Hz Switching frequency 20 Hz Switching frequency 10 M Cell characteristics 5 V DC: 1.0 W Permissible voltage fluctuations Permissible voltage fluctuations Permissible voltage fluctuations Poperating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Actuation type	Electrical
Pneumatic working port Operating voltage Operating pressure Operating	Width	10 mm
Operating voltage	Standard nominal flow rate	14 l/min
Operating pressure -0.9 bar 2 bar Design Poppet valve with return spring Reset method Mechanical spring Degree of protection IP40 Certification c UL us - Recognized (OL) Nominal width 0.9 mm Width dimension 10 mm Type code MHP1 Exhaust air function Without flow control option Sealing principle Soft Mounting position Any Manual override Non-detenting Type of control Direct Flow direction Non-reversible Symbol 00991398 Valve position ID Label Note on forced dynamization Switching frequency at least once a week Suitability for vacuum yes Max. switching frequency 20 Hz Switching time off 5 ms On switching time 4 ms Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Pneumatic working port	M3
Design Poppet valve with return spring Reset method Mechanical spring Degree of protection IP40 Certification c UL us - Recognized (OL) Nominal width 0.9 mm Width dimension 10 mm Type code Exhaust air function Without flow control option Sealing principle Soft Mounting position Any Manual override Non-detenting Type of control Direct Flow direction Non-reversible Symbol 00991398 Valve position ID Label Note on forced dynamization Switching frequency at least once a week Suitability for vacuum yes Max. switching frequency 20 Hz Switching time off 5 ms On switching time On switching time On switching time On switching time On switching frequency consumption Light Coli characteristics 5 V DC: 1.0 W Permissible voltage fluctuations Compressed air as per ISO 8573-1:2010 [7:4:4]	Operating voltage	5V DC
Reset method Mechanical spring Degree of protection IP40 Certification c UL us - Recognized (OL) Nominal width 0.9 mm Width dimension 10 mm Type code MHP1 Exhaust air function Without flow control option Sealing principle Soft Mounting position Any Manual override Non-detenting Type of control Direct Flow direction Non-reversible Symbol 00991398 Valve position ID Label Note on forced dynamization Switching frequency at least once a week Suitability for vacuum yes Max. switching frequency 20 Hz Switching time off 0 ms witching time Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/-10 % Compressed air as per ISO 8573-1:2010 [7:4:4]	Operating pressure	-0.9 bar 2 bar
Degree of protection Certification Cull us - Recognized (OL) Nominal width O.9 mm Width dimension 10 mm Type code MHP1 Exhaust air function Sealing principle Mounting position Any Manual override Non-detenting Type of control Flow direction Non-reversible Symbol Valve position ID Label Note on forced dynamization Switching frequency Switching frequency Switching time off On switching time Duty cycle Electrical power consumption 1 W Coil characteristics Fermissible voltage fluctuations Log Ull us - Recognized (OL) Without Flow on mm Without Gould wonted Without flow control option Soft MHP1 Without flow control option Soft MhP1 Soft MhP2 Soft MhP1 Soft MhP1 Soft MhP1 Soft MhP1 Soft MhP1 Soft MhP1 Soft Mithout flow control option Soft MhP1 Soft	Design	Poppet valve with return spring
Certification c UL us - Recognized (OL) Nominal width 0.9 mm Width dimension 10 mm Type code MHP1 Exhaust air function Without flow control option Sealing principle Soft Mounting position Any Manual override Non-detenting Type of control Direct Flow direction Non-reversible Symbol 00991398 Valve position ID Label Note on forced dynamization Switching frequency at least once a week Suitability for vacuum yes Max. switching frequency 20 Hz Switching time off 5 ms On switching time off 5 ms On switching time 4 ms Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Reset method	Mechanical spring
Nominal width 0.9 mm Width dimension 10 mm Type code MHP1 Exhaust air function Without flow control option Sealing principle Soft Mounting position Any Manual override Non-detenting Type of control Direct Flow direction Non-reversible Symbol 00991398 Valve position ID Label Suitching frequency at least once a week Suitability for vacuum yes Max. switching frequency 20 Hz Switching time off 5 ms On switching time off 4 ms Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations 1-2 compressed air as per ISO 8573-1:2010 [7:4:4]	Degree of protection	IP40
Width dimension 10 mm Type code MHP1 Exhaust air function Without flow control option Sealing principle Soft Mounting position Any Manual override Non-detenting Type of control Direct Flow direction Non-reversible Symbol 00991398 Valve position ID Label Note on forced dynamization Switching frequency at least once a week Suitability for vacuum yes Max. switching frequency 20 Hz Switching time off 5 ms On switching time Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations (Smitching 1:2016) Flow direction 1 (Smitching 1:2016) Flow direction Non-reversible (Certification	c UL us - Recognized (OL)
Type code Exhaust air function Without flow control option Sealing principle Soft Mounting position Any Manual override Non-detenting Type of control Plow direction Non-reversible Symbol Oo991398 Valve position ID Label Note on forced dynamization Switching frequency Switching frequency Switching frequency Switching time off On switching time On switching time Duty cycle Electrical power consumption Coil characteristics Symbol MHP1 Without flow control option Without flow control option Soft Any	Nominal width	0.9 mm
Exhaust air function Sealing principle Soft Mounting position Any Manual override Type of control Flow direction Symbol Valve position ID Note on forced dynamization Suitability for vacuum Max. switching frequency Switching tirequency Switching tirequency Switching tirequency 20 Hz Switching tirequency Switching tire off S ms On switching time 4 ms Duty cycle Electrical power consumption Libutability of vacuum Without flow control option Soft Any Mon-detenting Non-detenting Non-detenting Non-detenting Non-detenting Switching Operating time Switching frequency 20 Hz Switching frequency at least once a week Switching frequency 20 Hz Switching time off S ms On switching time 4 ms Duty cycle 100% Electrical power consumption 1 W Coil characteristics S V DC: 1.0 W Permissible voltage fluctuations 4/-10% Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Width dimension	10 mm
Sealing principle Soft Mounting position Any Manual override Non-detenting Type of control Direct Flow direction Non-reversible Symbol O0991398 Valve position ID Label Note on forced dynamization Switching frequency at least once a week Suitability for vacuum yes Max. switching frequency 20 Hz Switching time off 5 ms On switching time 4 ms Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations Compressed air as per ISO 8573-1:2010 [7:4:4]	Type code	MHP1
Mounting position Manual override Non-detenting Type of control Flow direction Non-reversible Symbol Oo991398 Valve position ID Note on forced dynamization Switching frequency at least once a week Suitability for vacuum yes Max. switching frequency 20 Hz Switching time off 5 ms On switching time 4 ms Duty cycle Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations Any Non-detenting Non-reversible Switching frequency 20 Hz Switching frequency at least once a week Switching frequency at least once a week 100% Switching frequency 10 Hz Compressed air as per ISO 8573-1:2010 [7:4:4]	Exhaust air function	Without flow control option
Manual override Type of control Direct Flow direction Non-reversible Symbol O0991398 Valve position ID Note on forced dynamization Suitching frequency at least once a week Suitability for vacuum yes Max. switching frequency 20 Hz Switching time off 5 ms On switching time 4 ms Duty cycle Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations Operating medium Non-detenting Non-detenting Non-detenting Non-detenting Non-detenting Non-detenting Non-detenting Non-detenting Non-detenting Non-reversible Non-reversible Switching Switching frequency at least once a week Switching frequency Switching frequency at least once a week Switching frequency at least once a week Switching frequency at least once a week Switching frequency Switching frequency at least once a week Switching frequency Switch	Sealing principle	Soft
Type of control Direct Flow direction Non-reversible Symbol 00991398 Valve position ID Label Note on forced dynamization Switching frequency at least once a week Suitability for vacuum yes Max. switching frequency 20 Hz Switching time off 5 ms On switching time 4 ms Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Mounting position	Any
Flow direction Non-reversible Symbol O0991398 Valve position ID Label Note on forced dynamization Switching frequency at least once a week Suitability for vacuum yes Max. switching frequency 20 Hz Switching time off 5 ms On switching time 4 ms Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium Non-reversible Non-reversible Non-reversible Abel 1 abel 1 wes Switching frequency at least once a week 9 week 9 week 100 Hz 5 ms Conswitching time 1 w Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations	Manual override	Non-detenting
Symbol 00991398 Valve position ID Label Note on forced dynamization Switching frequency at least once a week Suitability for vacuum yes Max. switching frequency 20 Hz Switching time off 5 ms On switching time 4 ms Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Type of control	Direct
Valve position ID Note on forced dynamization Switching frequency at least once a week Suitability for vacuum yes Max. switching frequency 20 Hz Switching time off 5 ms On switching time 4 ms Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium Label Switching frequency at least once a week 9es 100 Hz 5 ms 4 ms 100% 100	Flow direction	Non-reversible
Note on forced dynamization Switching frequency at least once a week Suitability for vacuum yes Max. switching frequency Switching time off 5 ms On switching time 4 ms Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium Switching frequency at least once a week yes 10 Hz 5 ms 5 ms Compressed air as per ISO 8573-1:2010 [7:4:4]	Symbol	00991398
Suitability for vacuum Max. switching frequency Switching time off S ms On switching time 4 ms Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium yes 20 Hz 5 ms 4 ms 100% Compressed air as per ISO 8573-1:2010 [7:4:4]	Valve position ID	Label
Max. switching frequency Switching time off 5 ms On switching time 4 ms Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Note on forced dynamization	Switching frequency at least once a week
Switching time off 5 ms On switching time 4 ms Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Suitability for vacuum	yes
On switching time 4 ms Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Max. switching frequency	20 Hz
Duty cycle 100% Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Switching time off	5 ms
Electrical power consumption 1 W Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	On switching time	4 ms
Coil characteristics 5 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Duty cycle	100%
Permissible voltage fluctuations +/- 10 % Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Electrical power consumption	1 W
Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Coil characteristics	5 V DC: 1.0 W
	Permissible voltage fluctuations	+/- 10 %
Information on operating and pilot media Operation with oil lubrication possible (required for further use)	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)

Feature	Value
Vibration resistance	Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6
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
Storage temperature	-20 °C 60 °C
Temperature of medium	-5 °C 40 °C
Ambient temperature	-5 °C 40 °C
Product weight	10 g
Electrical connection	Plug
Type of mounting	On sub-base With through-hole
Pneumatic connection 1	Sub-base
Pneumatic connection 2	M3
Note on materials	Free of copper and PTFE RoHS-compliant
Seals material	FPM HNBR NBR
Housing material	PA-reinforced PPS-reinforced