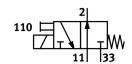
## Air solenoid valve MHP1-M5H-3/2O-M3-PI Part number: 197034







## General operating condition

## **Data sheet**

Actuation type  Electrical  Width  10 mm  Standard nominal flow rate  10 l/min  Pheumatic working port  M3  Operating pressure  Operating medium	Feature	Value
Width 10 mm  Standard nominal flow rate 10 l/min  Pneumatic working port M3  Operating yotlage 12V DC  Operating pressure 0 MPa 0.6 MPa  Operating pressure 0 Dar 6 bar Operating pressure 0 Derating pressure 0 Dar 6 bar Operating pressure 0 Derating pressure 0 Dar 6 bar Operating pressure 0 Dar 6 bar Operating pressure 0 Dar 6 Dar Operating Dar 6 Dar 6 Dar Operating Dar 6 Dar	Valve function	3/2, open, monostable
Standard nominal flow rate 10 1/min Pneumatic working port M3 Operating yoltage 12V DC Operating pressure 0 MPa 0.6 MPa Operating pressure 0 Obar 6 bar Operating pressure 0 opsi 87 psi Structural design Poppet valve with return spring Poppet valve Poppet valve Poppet valve vith return spring Poppet valve valve Poppet valve Poppet valve Poppet valve Valve Valve Poppet valve Valve Valve Poppet Valve Valve Valve Valve Valve Poppet Valve Valve Valve Valve Valve Valve Poppet Valve	Actuation type	Electrical
Preumatic working port  Operating voltage  12V DC  Operating pressure  Operating view with return spring  Operating pressure  Operating view with return spring  Operating view with return spring  Operating with return spring  Operating view with return spring  Operating view with return spring  Operating view with return spring  Operating pressure  Operating view with return spring  Operating medium  Operatin	Width	10 mm
Operating voltage     12V DC       Operating pressure     0 MPa 0.6 MPa       Operating pressure     0 bar 6 bar       Operating pressure     0 psi 87 psi       Structural design     Poppet valve with return spring       Reset method     Mechanical spring       Degree of protection     IP40       Certification     C UL us - Recognized (OL)       Certification     UL MH19482       Nominal width     0.7 mm       Width dimension     10 mm       Exhaust air function     With flow control option       Sealing principle     Soft       Mounting position     Any       Manual override     Non-detenting       Type of control     Direct       Flow direction     Non-reversible       Symbol     00991322       Valve position ID     Label       Lap     Underlap       Max. switching frequency     20 Hz       Switching frequency     20 Hz       Switching time off     4 ms       On switching time     4 ms       Duty cycle     100%       Electrical power consumption     1 W       Coil characteristics     12 V DC: 1.0 W       Permissible voltage fluctuations     4/-10 %       Operating medium     Compressed air as per ISO 8573-1:2010 [7:4:4]<	Standard nominal flow rate	10 l/min
Operating pressure Operating medium Operating pressure Operating pressure Operating medium Operating pressure Operating medium	Pneumatic working port	M3
Operating pressure Operating Mechanical spring Operating Operating Operating Operating operating Operating operating Operating Mechanical spring Operating Operati	Operating voltage	12V DC
Operating pressure Operating of protection IP40 Certification Cut us - Recognized (OL) Certification UL MH19482 Operating authority UL MH19482 Operating authority UL MH19482 Operating authority With dimension Ion m  Exhaust air function With flow control option Sealing principle Soft Mounting position Any Manual override Non-detenting Type of control Direct Flow direction Non-reversible Symbol Operating besition ID Label Underlap Note on forced dynamization Switching frequency Underlap Switching frequency Operating time On switching time On switching time On switching time On switching time Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Operating pressure	0 MPa 0.6 MPa
Structural design Poppet valve with return spring Reset method Mechanical spring Degree of protection IP40 Certification c UL us - Recognized (OL) Certification UL MH19482 Nominal width O.7 mm Width dimension 10 mm Exhaust air function With flow control option Sealing principle Soft Mounting position Any Manual override Non-detenting Type of control Flow direction Non-reversible Symbol O0991322 Valve position ID Label Lap Underlap Note on forced dynamization Switching frequency at least once a week Max. switching frequency 20 Hz Switching time off 4 ms On switching time On switching time Duty cycle Electrical power consumption Power of the switch of th	Operating pressure	0 bar 6 bar
Reset method Mechanical spring Degree of protection IP40 Certification c UL us - Recognized (OL) Certificate issuing authority UL MH19482 Nominal width 0.7 mm Width dimension 10 mm Exhaust air function Sealing principle Soft Mounting position Any Manual override Non-detenting Type of control Direct Flow direction Non-reversible Symbol 00991322 Valve position ID Label Lap Underlap Note on forced dynamization Switching frequency at least once a week Max. switching frequency 20 Hz Switching time off 0 ms witching time Duty cycle 100% Electrical power consumption 1 W Coil characteristics 12 V DC: 1.0 W Permissible voltage fluctuations 4 ms Compressed air as per ISO 8573-1:2010 [7:4:4]	Operating pressure	0 psi 87 psi
Degree of protection  Certification  Certificate issuing authority  UL MH19482  Nominal width  O.7 mm  Width dimension  Exhaust air function  Sealing principle  Soft  Mounting position  Any  Manual override  Non-detenting  Type of control  Flow direction  Non-reversible  Symbol  Valve position ID  Label  Lap  Underlap  Note on forced dynamization  Switching frequency  Switching frequency  Switching time off  On switching time  Duty cycle  Electrical power consumption  1P40  Cull us - Recognized (OL)  C	Structural design	Poppet valve with return spring
Certification cUL us - Recognized (OL) Certificate issuing authority UL MH19482 Nominal width 0.7 mm Width dimension 10 mm Exhaust air function With flow control option Sealing principle Soft Mounting position Any Manual override Non-detenting Type of control Direct Flow direction Non-reversible Symbol 00991322 Valve position ID Label Lap Underlap Note on forced dynamization Switching frequency at least once a week Max. switching friequency 20 Hz Switching time off 4 ms On switching time On switching time Duty cycle 100% Electrical power consumption 1 W Coil characteristics 12 V DC: 1.0 W Permissible voltage fluctuations 4 /- 10 % Operating medium Commends a process of the survey	Reset method	Mechanical spring
Certificate issuing authority  Nominal width  O.7 mm  Width dimension  Exhaust air function  Sealing principle  Mounting position  Manual override  Non-detenting  Type of control  Flow direction  Symbol  Valve position ID  Lap  Underlap  Note on forced dynamization  Max. switching frequency  Switching time off  On switching time  On switching time  Duty cycle  Electrical power consumption  Coil characteristics  Permissible voltage fluctuations  Hu MH19482  O.7 mm  With flow control option  Nor mm  With flow control option  Soft  Mith flow control option  Soft  Many  Non-detenting  Non-detenting  Non-detenting  Non-detenting  Non-reversible  Non-r	Degree of protection	IP40
Nominal width 0.7 mm  Width dimension 10 mm  Exhaust air function With flow control option  Sealing principle Soft  Mounting position Any  Manual override Non-detenting  Type of control Direct  Flow direction Non-reversible  Symbol 00991322  Valve position ID Label  Lap Underlap  Note on forced dynamization Switching frequency at least once a week  Max. switching frequency 20 Hz  Switching time off 4 ms  On switching time  Duty cycle 100%  Electrical power consumption 1 W  Coil characteristics 12 V DC: 1.0 W  Permissible voltage fluctuations (Compressed air as per ISO 8573-1:2010 [7:4:4])	Certification	c UL us - Recognized (OL)
Width dimension 10 mm  Exhaust air function With flow control option  Sealing principle Soft  Mounting position Any  Manual override Non-detenting  Type of control Direct  Flow direction Non-reversible  Symbol 00991322  Valve position ID Label  Lap Underlap  Note on forced dynamization Switching frequency at least once a week  Max. switching frequency 20 Hz  Switching time off 4 ms  On switching time  Duty cycle 100%  Electrical power consumption 1 W  Coil characteristics 12 V DC: 1.0 W  Permissible voltage fluctuations (With flow control option  With flow control option  With flow control option  With flow control option  Soft  Any  Any  Mon-detenting  Direct  Non-reversible  Non-reversible  Vonge1322  Valve position ID  Label  Label  Label  Underlap  Valve position option  Switching frequency at least once a week  4 ms  On switching time off 4 ms  On switching time 4 ms  Duty cycle 100%  Electrical power consumption 1 W  Coil characteristics 12 V DC: 1.0 W  Permissible voltage fluctuations +/-10 %  Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Certificate issuing authority	UL MH19482
Exhaust air function  Sealing principle  Soft  Mounting position  Any  Manual override  Non-detenting  Type of control  Flow direction  Symbol  Operating medium  With flow control option  Soft  Any  Manual override  Non-reversible  Non-reversible  Symbol  Operating medium  With flow control option  Soft  Any  With flow control option  Soft  Any  Mith flow control option  Soft  Any  Mith flow control option  Soft  Any  May  Hith flow control option  Soft  Any  Any  Non-detenting  Direct  Non-reversible  Non-reversible  Sopplia  Underlap  Underlap  Underlap  Switching frequency at least once a week  20 Hz  Switching frequency at least once a week  Max. switching frequency  20 Hz  Switching time off  4 ms  On switching time  4 ms  Duty cycle  100%  Electrical power consumption  1 W  Coil characteristics  12 V DC: 1.0 W  Permissible voltage fluctuations  4/-10%  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]	Nominal width	0.7 mm
Sealing principle  Mounting position  Any  Manual override  Non-detenting  Type of control  Direct  Flow direction  Non-reversible  Symbol  Oo991322  Valve position ID  Label  Lap  Underlap  Note on forced dynamization  Switching frequency at least once a week  Max. switching frequency  20 Hz  Switching time off  4 ms  On switching time  4 ms  Duty cycle  100%  Electrical power consumption  1 W  Coil characteristics  12 V DC: 1.0 W  Permissible voltage fluctuations  Compressed air as per ISO 8573-1:2010 [7:4:4]	Width dimension	10 mm
Mounting position  Manual override  Non-detenting Type of control  Direct Flow direction  Non-reversible  Symbol  Oo991322  Valve position ID  Label  Lap  Underlap  Note on forced dynamization  Switching frequency at least once a week  Max. switching frequency  20 Hz  Switching time off  4 ms  On switching time  4 ms  Duty cycle  Electrical power consumption  1 W  Coil characteristics  12 V DC: 1.0 W  Permissible voltage fluctuations  Any  Non-detenting  Non-detenting  Non-detenting  Non-detenting  Non-detenting  Non-detenting  Non-detenting  Non-detenting  Non-detenting  Non-reversible  Non-reversible  Oo991322  Underlap  Underlap  Switching frequency at least once a week  4 ms  On switching time off  4 ms  On switching time  1 W  Coil characteristics  12 V DC: 1.0 W  Permissible voltage fluctuations  +/- 10 %  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]	Exhaust air function	With flow control option
Manual override Type of control Direct Flow direction Non-reversible Symbol O0991322 Valve position ID Label Lap Underlap Note on forced dynamization Switching frequency Switching frequency Switching time off 4 ms On switching time 4 ms Duty cycle Electrical power consumption 1 W Coil characteristics 12 V DC: 1.0 W Permissible voltage fluctuations Vnon-reversible Non-reversible Non-reversible Non-reversible Non-reversible Switching flue Underlap Underlap Valte Switching frequency at least once a week 4 ms 00 Hz Switching time off 4 ms 00 W Switching time 1 W Coil characteristics 12 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Compressed air as per ISO 8573-1:2010 [7:4:4]	Sealing principle	Soft
Type of control  Flow direction  Non-reversible  Symbol  O0991322  Valve position ID  Label  Lap  Underlap  Note on forced dynamization  Switching frequency at least once a week  Max. switching frequency  20 Hz  Switching time off  4 ms  On switching time  4 ms  Duty cycle  100%  Electrical power consumption  1 W  Coil characteristics  12 V DC: 1.0 W  Permissible voltage fluctuations  +/- 10 %  Operating medium  Direct  Non-reversible  Non-re	Mounting position	Any
Flow direction  Non-reversible  Symbol  O0991322  Valve position ID  Label  Lap  Underlap  Note on forced dynamization  Switching frequency at least once a week  Max. switching frequency  20 Hz  Switching time off  4 ms  On switching time  4 ms  Duty cycle  100%  Electrical power consumption  1 W  Coil characteristics  12 V DC: 1.0 W  Permissible voltage fluctuations  +/- 10 %  Operating medium  Non-reversible  Non-reversible  Non-reversible  Abnon-reversible  Switching  4 ms  Label  Underlap  Switching frequency at least once a week  4 ms  10 Hz  4 ms  10 W  Coil characteristics  12 V DC: 1.0 W  Permissible voltage fluctuations	Manual override	Non-detenting
Symbol 00991322  Valve position ID Label  Lap Underlap  Note on forced dynamization Switching frequency at least once a week  Max. switching frequency 20 Hz  Switching time off 4 ms  On switching time  On switching time  100%  Electrical power consumption 1 W  Coil characteristics 12 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  Label  Lap  Underlap  Note on forced dynamization  Switching frequency at least once a week  Max. switching frequency  20 Hz  Switching time off  4 ms  On switching time  4 ms  Duty cycle  100%  Electrical power consumption  1 W  Coil characteristics  12 V DC: 1.0 W  Permissible voltage fluctuations  +/- 10 %  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]	Flow direction	Non-reversible
Underlap  Note on forced dynamization  Switching frequency at least once a week  Max. switching frequency  20 Hz  Switching time off  4 ms  On switching time  4 ms  Duty cycle  100%  Electrical power consumption  1 W  Coil characteristics  12 V DC: 1.0 W  Permissible voltage fluctuations  +/- 10 %  Operating medium  Underlap  Underlap  Underlap  Underlap  Underlap  Underlap  Underlap  Underlap  Switching frequency at least once a week  4 ms  10 W  4 ms  10 W  Compressed air as per ISO 8573-1:2010 [7:4:4]	Symbol	00991322
Note on forced dynamization  Switching frequency at least once a week  Max. switching frequency  20 Hz  Switching time off  4 ms  On switching time  4 ms  Duty cycle  100%  Electrical power consumption  1 W  Coil characteristics  12 V DC: 1.0 W  Permissible voltage fluctuations  +/- 10 %  Operating medium  Switching frequency at least once a week  4 ms  Compressed air as per ISO 8573-1:2010 [7:4:4]	Valve position ID	Label
Max. switching frequency  Switching time off  4 ms  On switching time  4 ms  Duty cycle  100%  Electrical power consumption  1 W  Coil characteristics  12 V DC: 1.0 W  Permissible voltage fluctuations  +/- 10 %  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]	Lap	Underlap
Switching time off 4 ms  On switching time 4 ms  Duty cycle 100%  Electrical power consumption 1 W  Coil characteristics 12 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
On switching time 4 ms  Duty cycle 100%  Electrical power consumption 1 W  Coil characteristics 12 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 12 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	4 ms
Electrical power consumption 1 W  Coil characteristics 12 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 12 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	12 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
LABS (PWIS) conformity	VDMA24364-B2-L
Storage temperature	-20 °C 60 °C
Temperature of medium	-5 ℃ 40 ℃
Ambient temperature	-5 ℃ 40 ℃
Product weight	10 g
Electrical connection	Plug
Type of mounting	On sub-base With through-hole
Pneumatic connection 11	Sub-base
Pneumatic connection 2	M3
Pneumatic connection 33	Sub-base
Note on materials	RoHS-compliant
Seals material	FPM HNBR NBR
Housing material	PA-reinforced PPS-reinforced