Air solenoid valve MHP1-M4H-3/2G-M3-PI Part number: 197015



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Data sheet

General operating condition

Actuation typeElectricalWidth10 mmStandard nominal flow rate10 l/minPneunatic working portM3Operating voltageSV DCOperating pressure0 MPa 0.8 MPaOperating pressure0 par 16 psiOperating pressure0 par 16 psiStructural designPoppet valve with return springReset methodMechanical springDegreting pressure0 Lu us - Recognized (01)Certificationc UL us - Recognized (01)Certificationc UL us - Recognized (01)Certificate issuing authorityUL MH19482Nominal width0.65 mmWidth flow control optionSaftSealing principleSoftMounting positionAnyManual overrideNon-detentingType of controlDiffectFlow directionOp991308Valve position IDLabelLapUnderlapNote on forced dynamizationSwitching frequency at least once a weekMax, witching frequency20 HzSwitching frequency20 HzSwitching frequency100%Duty cycle100%Electrical power consumption1 WColl characteristics5 V DC : 1.0 WPermissible voltage fluctuations4/-10 %	Feature	Value
Width10 mmStandard nominal flow rate10 l/minPneumatic working portM3Operating voltage5V DCOperating pressure0 MPa 0.8 MPaOperating pressure0 bar 8 barOperating pressure0 psi 116 psiStructural designPoppet valve with return springReset methodMechanical springDegree of protectionIP40Certificate insuing authorityUL ws - Recognized (0L)Certificate issuing authorityUL MH19482Width dimension10 mmExhaust air functionWith flow control optionStaust air functionNon-detentingType of controlDirectFlow directionDirectSymbol00991308Valve position IDLabelLapUnderlapNote on forced dynamizationSwitching frequency at least once a weekMax. switching frequency20 HzSvitching time4 msDuty cycle100%Electricitos power consumption1 WCoil characteristics5 V DC : 1.0 WPermissible voltage fluctuations4/ : 10%Corresed air as per ISO 8573-1:2010 [7:4:4]	Valve function	3/2, closed, monostable
Standard nominal flow rate10 l/minPneumatic working portM3Operating yotage5V DCOperating pressure0 MPa 0.8 MPaOperating pressure0 bar 8 barOperating pressure0 psi 116 psiOperating pressure0 psi 116 psiCertificationc UL us - Recognized (OL)Certificate issuing authorityUL MH19482Nominal width0.65 mmWidth dimension10 mmExhaust air function10 mmSalaust air functionNon-detentingMounting psitionAnyMounting positionAnyManual overrideNon-detentingType of controlDirectFlow directionNon-reversibleSymbol00991308Valve position IDLabelLapUnderlapNote on forced dynamizationSwit	Actuation type	Electrical
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Operating pressure0 bar 8 barOperating pressure0 psi 116 psiStructural designPoppet valve with return springReset methodMechanical springDegree of protectionIP40Certificationc UL us - Recognized (OL)Certificate issuing authorityUL MH19482Nominal width0.65 mmWidth dimension10 mmExhaust air functionWith flow control optionSealing principleSoftMounting positionAnyManual overrideNon-detentingType of controlDirectFlow direction00991308Valve position IDLabelLapUnderlapNote on forced dynamizationSwitching frequency at least once a weekMax. switching frequency20 HzSwitching time off4 msDuty cycle100%Electrical power consumption1 WColi characteristics5 V DC: 1.0 WPermissible voltage fluctuations4/-10%Compressed air as per 150 8573-1:2010[7:4:4]	Operating voltage	5V DC
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Structural designPoppet valve with return springReset methodMechanical springDegree of protectionIP40Certificationc UL us - Recognized (OL)Certificate issuing authorityUL MH19482Nominal width0.65 mmWidth dimension10 mmExhaust air functionWith flow control optionSealing principleSoftMounting positionAnyManual overrideNon-detentingType of controlDirectFlow direction IDLabelLapUnderlapNote on forced dynamizationSwitching frequency at least once a weekMax. switching frequency20 HzSwitching time off4 msDuty cycle100%Electrical power consumption1 WColl characteristics5 V DC: 1.0 WPermissible voltage fluctuationsK/- 10 %Operating mediumCompressed air as per ISO 8573-1:2010[7:4:4]	Operating pressure	0 bar 8 bar
Reset methodMechanical springDegree of protectionIP40Certificationc UL us - Recognized (OL)Certificate issuing authorityUL MH19482Nominal width0.65 mmWidth dimension10 mmExhaust air functionWith flow control optionSealing principleSoftMounting positionAnyManual overrideNon-detentingType of controlDirectFlow directionNon-reversibleSymbol00991308Valve position IDLabelLapUnderlapNote of forced dynamizationSwitching frequencySwitching frequency20 HzSwitching time off4 msOn switching time4 msDuty cycle100%Electrical power consumption1 WCoil characteristics5 V DC : 1.0 WPermissible voltage fluctuations+/- 10 %Coperating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]	Operating pressure	0 psi 116 psi
Degree of protectionIP40Certificationc UL us - Recognized (OL)Certificate issuing authorityUL MH19482Nominal width0.65 mmWidth dimension10 mmExhaust air functionSoftMounting positionAnyManual overrideNon-detentingType of controlDirectFlow directionNon-reversibleSymbol00991308Valve position IDLabelLapUnderlapNote on forced dynamizationSwitching frequency at least once a weekSwitching time off4 msOn switching time off4 msDuty cycle100%Electrical power consumption1 WCoil characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10 %Operating mediumCompressed air as per ISO 8573-1:2010[7:4:4]	Structural design	Poppet valve with return spring
Certificationc UL us - Recognized (OL)Certificate issuing authorityUL MH19482Nominal width0.65 mmWidth dimension10 mmExhaust air functionWith flow control optionSealing principleSoftMounting positionAnyManual overrideNon-detentingType of controlDirectFlow directionNon-reversibleSymbol00991308Valve position IDLabelLapUnderlapNote on forced dynamizationSwitching frequency at least once a weekMax. switching time off4 msOn switching time4 msDuty cycle100%Electrical power consumption1 WCoil characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10 %Operating mediumCompressed air as per ISO 8573-1:2010[7:4:4]	Reset method	Mechanical spring
Certificate issuing authorityUL MH19482Nominal width0.65 mmWidth dimension10 mmExhaust air functionWith flow control optionSealing principleSoftMounting positionAnyManual overrideNon-detentingType of controlDirectFlow directionNon-reversibleSymbol00991308Valve position IDLabelLapUnderlapNote on forced dynamizationSwitching frequency at least once a weekMax. switching time off4 msOn switching time4 msDuty cycle100%Electrical power consumption1 WCoil characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10 %Operating mediumCompressed air as per ISO 8573-1:2010[7:4:4]	Degree of protection	IP40
Nominal width0.65 mmWidth dimension10 mmExhaust air functionWith flow control optionSealing principleSoftMounting positionAnyManual overrideNon-detentingType of controlDirectFlow directionNon-reversibleSymbol00991308Valve position IDLabelLapUnderlapNote on forced dynamizationSwitching frequency at least once a weekMax. switching frequency20 HzSwitching time off4 msOn switching time100%Electrical power consumption1 WCoil characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10%Operating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]	Certification	c UL us - Recognized (OL)
Width dimension10 mmExhaust air functionWith flow control optionSealing principleSoftMounting positionAnyManual overrideNon-detentingType of controlDirectFlow directionNon-reversibleSymbol00991308Valve position IDLabelLapUnderlapNote on forced dynamizationSwitching frequency at least once a weekMax. switching frequency20 HzSwitching time off4 msOn switching time100%Electrical power consumption1 WCoil characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10 %Operating mediumCompressed air as per ISO 8573-1:2010[7:4:4]	Certificate issuing authority	UL MH19482
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Manual overrideNon-detentingType of controlDirectFlow directionNon-reversibleSymbol00991308Valve position IDLabelLapUnderlapNote on forced dynamizationSwitching frequency at least once a weekMax. switching frequency20 HzSwitching time off4 msOn switching time4 msDuty cycle100%Electrical power consumption1 WColl characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10%Operating mediumCompressed air as per ISO 8573-1:2010[7:4:4]	Sealing principle	Soft
Type of controlDirectFlow directionNon-reversibleSymbol00991308Valve position IDLabelLapUnderlapNote on forced dynamizationSwitching frequency at least once a weekMax. switching frequency20 HzSwitching time off4 msOn switching time4 msDuty cycle100%Electrical power consumption1 WCoil characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10 %Operating mediumCompressed air as per ISO 8573-1:2010[7:4:4]	Mounting position	Any
Flow directionNon-reversibleSymbol00991308Valve position IDLabelLapUnderlapNote on forced dynamizationSwitching frequency at least once a weekMax. switching frequency20 HzSwitching time off4 msOn switching time4 msDuty cycle100%Electrical power consumption1 WCoil characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10%Operating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]	Manual override	Non-detenting
Symbol00991308Valve position IDLabelLapUnderlapNote on forced dynamizationSwitching frequency at least once a weekMax. switching frequency20 HzSwitching time off4 msOn switching time4 msDuty cycle100%Electrical power consumption1 WCoil characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10 %Operating mediumCompressed air as per ISO 8573-1:2010[7:4:4]	Type of control	Direct
Valve position IDLabelLapUnderlapNote on forced dynamizationSwitching frequency at least once a weekMax. switching frequency20 HzSwitching time off4 msOn switching time4 msDuty cycle100%Electrical power consumption1 WCoil characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10 %Operating mediumCompressed air as per ISO 8573-1:2010[7:4:4]	Flow direction	Non-reversible
LapUnderlapNote on forced dynamizationSwitching frequency at least once a weekMax. switching frequency20 HzSwitching time off4 msOn switching time4 msDuty cycle100%Electrical power consumption1 WCoil characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10%Operating mediumCompressed air as per ISO 8573-1:2010[7:4:4]	Symbol	00991308
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Max. switching frequency20 HzSwitching time off4 msOn switching time4 msDuty cycle100%Electrical power consumption1 WCoil characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10 %Operating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]	Lap	Underlap
Switching time off4 msOn switching time4 msDuty cycle100%Electrical power consumption1 WCoil characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10 %Operating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]	Note on forced dynamization	Switching frequency at least once a week
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Duty cycle100%Electrical power consumption1 WCoil characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10 %Operating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]	Switching time off	4 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 characteristics5 V DC: 1.0 WPermissible voltage fluctuations+/- 10 %Operating mediumCompressed 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)

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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 °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	М3
Pneumatic connection 3	Sub-base
Note on materials	RoHS-compliant
Seals material	FPM HNBR NBR
Housing material	PA-reinforced PPS-reinforced