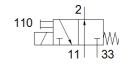
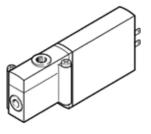
Solenoid valve MHP2-M1H-3/20-M5 Part number: 196142







Data sheet

Valve function 3/2 open, monostable Vippe of actuation electrical Width 10 mm Standard nominal flow rate 100 l/min Operating pressure MPa 0.0.9 0.8 MPa Working pressure 0.9 8 bar Design structre Protection class 1P55 Authorization club size of the size	Feature	Value
Midth 10 mm Standard nominal flow rate 100 l/min 100 l/m	Valve function	3/2 open, monostable
Standard nominal flow rate Operating pressure MPa Operating pressure, reversible Operating pressure, re	Type of actuation	electrical
Operating pressure MPa 0.9 8 MPa Working pressure 0.9 8 bar Design structure Pressure-relieved poppet valve Type of reset mechanical spring Protection class IP65 Authorization c UL us - Recognized (OL) Nominal size 2 mm Grid dimension 14 mm Note on grid dimension Minimum distance between the valves is 4 mm Eshaust-air function throtteable Sealing principle soft Assembly position Any Manual override Pushing Type of piloting direct Flow direction reversible with restrictions Lap Underlap Operating pressure, reversible -0.90.1 MPa Working pressure, reversible -1.30.5 14.5 psi Maximum switching frequency 130 Hz Switching time on 7 ms Duty cycle 100 % Characteristic coil data 24 V DC; 2.8 W Permissible voltage fluctuation Compressed air in accordance with FN 942017-5 and EN 60068-2-6	Width	10 mm
Design structure Pressure-relieved poppet valve Pressure-relieved Pressure-rel	Standard nominal flow rate	100 l/min
Design structure Pressure-relieved poppet valve Type of reset mechanical spring Protection class Protection Protection Protection Class Protection Protect	Operating pressure MPa	-0.09 0.8 MPa
Type of reset Protection class Protection class Protection class Protection class Protection class Protection class Cut us - Recognized (Ot) Rominal size Protection class Protection connection class Protection connection class Protection connection class Protection connection class Protection class Protection connection class Protection connection class Protection connection class Protection connection class Protectic connection class Protectic connection class Protection connection class Protection connection class Protection class Protection	Working pressure	-0.9 8 bar
Protection class Authorization CUL us - Recognized (OL) Nominal size 2 mm Grid dimension 14 mm Note on grid dimension Exhaust-air function Exhaust-air funct	Design structure	Pressure-relieved poppet valve
Authorization c UL us - Recognized (OL) Nominal size 2 mm Grid dimension 14 mm Note on grid dimension Minimum distance between the valves is 4 mm Exhaust-air function throttleable Sealing principle soft Assembly position Any Manual override Pushing Type of piloting direct Flow direction reversible with restrictions Lap Underlap Operating pressure, reversible -0.09 0.1 MPa Working pressure, reversible -0.99 1 bar Operating pressure, reversible -0.99 1 bar Working ime off 3.5 ms Switching time off 3.5 ms Switching time on 7 ms Duty cycle 100 % Characteristic coil data 24 V DC: 2.88 W Permissible voltage fluctuation Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Unbrated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-5 and EN 60068-2-2 Corrosion resistance classification CRC 2 Moderate corrosion stress Policy level weight 60 g Electrical connection 11 Subbase Pneumatic connection, 11 Subbase	Type of reset	mechanical spring
Nominal size Grid dimension 14 mm Note on grid dimension Minimum distance between the valves is 4 mm Exhaust-air function Exhaust-air function Sealing principle Soft Assembly position Any Manual override Pushing Type of piloting Green time testing pressure, reversible Underlap Operating pressure, reversible Operating preduction Operating and pilot medium Operating preduction Operating pred	Protection class	IP65
Grid dimension Note on grid dimension Minimum distance between the valves is 4 mm Ekhaust-siar function Sealing principle Sealing principle Sealing principle Sealing principle Assembly position Any Manual override Pushing Type of piloting Type of Pype of Type Of Pype of Pype of Type Of Pype Of Pype Of Pype of Type Of T	Authorization	c UL us - Recognized (OL)
Note on grid dimension	Nominal size	2 mm
Exhaust-air function Sealing principle Soft Assembly position Any Manual override Type of piloting Type of piloting Inwiterion Lap Underlap Operating pressure, reversible Operating treduction Operating time off Operating time off Operating time on Operating time on Operating medium Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC Operating pressure Operation Operating pressure, reversible Operating medium Compressed air in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC Operating pressure, reversible with every reversible vital every	Grid dimension	14 mm
Sealing principle Assembly position Any Manual override Type of piloting Grect Flow direction Lap Underlap Operating pressure, reversible Working pressure, reversible Operating med off Operating time on Operating time on Operating time on Operating didutuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Undiricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-5 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 2-Moderate corrosion stress PWIS conformity VDMA24364-B1/B2-L Medium temperature -5 40 °C Ambient temperature	Note on grid dimension	Minimum distance between the valves is 4 mm
Assembly position Manual override Pushing Type of piloting Grect Flow direction Inderlap Operating pressure, reversible Operations Operating pressure, reversible Operations Operating pressure, reversible Operations Operating pressure, reversible Operation Operating pressure, reversible Operation Operating pressure, reversible Operation Operating pressure, reversible Operation Operations Operating pressure, reversible Operation Operations Operations Operations Operations Operation possible (subsequently required for further operation operation) Operation possible voltage flux accordance with ISO8573-1:2010 [7:4:4] Ubricated operation possible (subsequently required for further operation operation) Operation pressure, reversible Operations Operating pressure, reversible Operations Operating press	Exhaust-air function	throttleable
Assembly position Manual override Pushing Type of piloting Grect Flow direction Inderlap Operating pressure, reversible Operations Operating pressure, reversible Operations Operating pressure, reversible Operations Operating pressure, reversible Operation Operating pressure, reversible Operation Operating pressure, reversible Operation Operating pressure, reversible Operation Operations Operating pressure, reversible Operation Operations Operations Operations Operations Operation possible (subsequently required for further operation operation) Operation possible voltage flux accordance with ISO8573-1:2010 [7:4:4] Ubricated operation possible (subsequently required for further operation operation) Operation pressure, reversible Operations Operating pressure, reversible Operations Operating press	Sealing principle	soft
Manual override Type of piloting direct Flow direction Lap Underlap Operating pressure, reversible Working pressure, reversible Operating medium Operating ities off Os. Sms Switching time off Os. Sms Switching time off Os. Sms Switching time on Operating time on Operating time on Operating time on Operating medium Operating medium Operating medium Operating medium Operating and pilot medium Unbricated operation possible (subsequently required for further operation) Operating medium Operating and pilot medium Unbricated operation possible (subsequently required for further operation) Operating and pilot medium Operating switch test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Oshock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Ocrosion resistance classification CRC Operate corrosion stress Operation Operating Operation Operating Operation Operating Operation Operation Operation Operation Operating Operation Operation Operating Operation Operating Operation Operating Operation Operating Operation Operation Operation Operation Operating Operation Oper		Any
Flow direction reversible with restrictions Lap Underlap Operating pressure, reversible -0.9 0.1 MPa Working pressure, reversible -0.9 1 bar Operating pressure, reversible -13.05 14.5 psi Maximum switching frequency 130 Hz Switching time off 3.5 ms Switching time on Duty cycle 100 % Characteristic coil data 24 V DC: 2.88 W Permissible voltage fluctuation 4/-10 % Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Unbricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 2 - Moderate corrosion stress PWIS conformity VDMA24364-B1/B2-L Medium temperature -5 40 °C Product weight 60 g Electrical connection Plug Mounting type On PR manifold Pneumatic connection, 11	Manual override	Pushing
Lap Operating pressure, reversible 13.05 14.5 psi Maximum switching frequency 130 Hz Switching time off 3.5 ms Switching time on 7 ms Oputy cycle 100 % Characteristic coil data 24 V DC: 2.88 W Permissible voltage fluctuation 4/-10 % Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Ubircated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 2 - Moderate corrosion stress WDMA24364-B1/B2-L Medium temperature 5 40 °C Product weight 60 g Electrical connection Plug Mounting type On PR manifold Pneumatic connection, 11	Type of piloting	direct
Operating pressure, reversible Operating pressure, reversible Operating pressure, reversible Operating pressure, reversible 13.0 Hz Switching frequency Switching time off Switching time on Operating pressure, reversible 13.0 Hz Switching time on T ms Switching time on Operating pressure, reversible 13.5 ms Switching time on Operating pressure, reversible 14.7 ms Operating time on Operating a pressure, reversible 100 % Characteristic coil data 24 V DC: 2.88 W Permissible voltage fluctuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-7 Corrosion resistance classification CRC 2 - Moderate corrosion stress PWIS conformity WDMA24364-B1/B2-L Medium temperature -5 40 °C Ambient temperature -5 40 °C Ambient temperature -5 40 °C Product weight Electrical connection Plug Mounting type On PR manifold Pneumatic connection, 11	Flow direction	reversible with restrictions
Working pressure, reversible Operating pressure, reversible 13.05 14.5 psi Maximum switching frequency 130 Hz Switching time off 3.5 ms Switching time on 7 ms Duty cycle 100 % Characteristic coil data 24 V DC: 2.88 W Permissible voltage fluctuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Ubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 2 Moderate corrosion stress PWIS conformity VDMA24364-B1/B2-L Medium temperature -5 40 °C Ambient temperature -5 40 °C Ambient temperature -5 40 °C Product weight Electrical connection Plug Mounting type On PR manifold Pneumatic connection, 11 Subbase	Lap	Underlap
Working pressure, reversible Operating pressure, reversible 13.05 14.5 psi Maximum switching frequency 130 Hz Switching time off 3.5 ms Switching time on 7 ms Duty cycle 100 % Characteristic coil data 24 V DC: 2.88 W Permissible voltage fluctuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Ubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 2 Moderate corrosion stress PWIS conformity VDMA24364-B1/B2-L Medium temperature -5 40 °C Ambient temperature -5 40 °C Product weight Electrical connection Plug Mounting type On PR manifold Pneumatic connection, 11	Operating pressure, reversible	-0.09 0.1 MPa
Operating pressure, reversible Aximum switching frequency 3.5 ms Switching time off 3.5 ms Duty cycle 100 % Characteristic coil data Permissible voltage fluctuation Operating medium Note on operating and pilot medium Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC PWIS conformity Medium temperature Product weight 60 g Electrical connection Pugua Mounting type On PR manifold Pneumatic connection, 11 Subbase	, -,	-0.9 1 bar
Maximum switching frequency Switching time off 3.5 ms Switching time on Duty cycle 100 % Characteristic coil data Permissible voltage fluctuation Operating medium Compressed air in accordance with IS08573-1:2010 [7:4:4] Note on operating and pilot medium Ubbricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 2 - Moderate corrosion stress PWIS conformity VDMA24364-B1/B2-L Medium temperature -5 40 °C Ambient temperature -5 40 °C Product weight 60 g Electrical connection Plug Mounting type On PR manifold Pneumatic connection, 11		
Switching time off Switching time on 7 ms Duty cycle 100 % Characteristic coil data 24 V DC: 2.88 W Permissible voltage fluctuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-77 Corrosion resistance classification CRC 2 · Moderate corrosion stress PWIS conformity VDMA24364-B1/B2-L Medium temperature -5 40 °C Ambient temperature -5 40 °C Product weight 60 g Electrical connection Plug Mounting type On PR manifold Pneumatic connection, 11		· · · · · · · · · · · · · · · · · · ·
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Duty cycle 100 % Characteristic coil data 24 V DC: 2.88 W Permissible voltage fluctuation +/- 10 % Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 2 - Moderate corrosion stress PWIS conformity VDMA24364-B1/B2-L Medium temperature -5 40 °C Ambient temperature -5 40 °C Product weight 60 g Electrical connection 2-pin Plug Mounting type On PR manifold Pneumatic connection, 11	9	
Characteristic coil data 24 V DC: 2.88 W Permissible voltage fluctuation +/- 10 % Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 2 - Moderate corrosion stress PWIS conformity VDMA24364-B1/B2-L Medium temperature -5 40 °C Ambient temperature -5 40 °C Product weight 60 g Electrical connection Plug Mounting type On PR manifold Pneumatic connection, 11		
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Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 2 - Moderate corrosion stress PWIS conformity VDMA24364-B1/B2-L Medium temperature -5 40 °C Ambient temperature -5 40 °C Product weight 60 g Electrical connection 2-pin Plug Mounting type On PR manifold Pneumatic connection, 11		
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60068-2-27 Corrosion resistance classification CRC 2 - Moderate corrosion stress PWIS conformity VDMA24364-B1/B2-L Medium temperature -5 40 °C Ambient temperature -5 40 °C Product weight 60 g Electrical connection 2-pin Plug Mounting type On PR manifold Pneumatic connection, 11 Subbase	Vibration resistance	
PWIS conformity VDMA24364-B1/B2-L Medium temperature -5 40 °C Ambient temperature -5 40 °C Product weight 60 g Electrical connection 2-pin Plug Mounting type On PR manifold Pneumatic connection, 11 Subbase	Shock resistance	1
Medium temperature -5 40 °C Ambient temperature -5 40 °C Product weight 60 g Electrical connection 2-pin Plug Mounting type On PR manifold Pneumatic connection, 11 Subbase	Corrosion resistance classification CRC	2 - Moderate corrosion stress
Ambient temperature -5 40 °C Product weight 60 g Electrical connection 2-pin Plug Mounting type On PR manifold Pneumatic connection, 11 Subbase	PWIS conformity	VDMA24364-B1/B2-L
Product weight 60 g Electrical connection 2-pin Plug Mounting type On PR manifold Pneumatic connection, 11 Subbase	Medium temperature	-5 40 °C
Electrical connection 2-pin Plug Mounting type On PR manifold Pneumatic connection, 11 Subbase	Ambient temperature	
Electrical connection 2-pin Plug Mounting type On PR manifold Pneumatic connection, 11 Subbase	Product weight	60 g
Mounting type On PR manifold Pneumatic connection, 11 Subbase	Electrical connection	2-pin
Pneumatic connection, 11 Subbase	Mounting type	
Preumatic connection, port 2 IM5	Pneumatic connection, port 2	M5



Feature	Value
Pneumatic connection, 33	Subbase
Materials note	Conforms to RoHS
Material seals	HNBR
	NBR
Material housing	Die-cast zinc, coated
Material screws	Galvanized steel