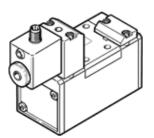
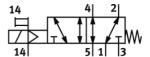
Solenoid valve MDH-5/2-D-1-S-FR-M12D-C Part number: 540811

FESTO

With M12 plug connection.





Data sheet

Flow direction reversible Lap Positive overlap Pilot pressure 3 10 bar Switching time off 42 ms Switching time on 20 ms Duty cycle 100 % Max. positive test pulse with logic 0 3,800 µs Max. negative test pulse with logic 1 4,900 µs Characteristic coil data 24 V DC: 2.7 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 Shock resistance Shock test with severity level 1 as per 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 PWIS conformity VDMA24364-B1/B2-L Medium temperature 10 50 °C Sound pressure level 85 dB(A) Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature 10 50 °C Froduct weight 420 g Electrical connection M12x1 Mounting type On subbase	Feature	Value
Meth	Valve function	5/2 monostable
Standard nominal flow rate 1,200 Jmin	Type of actuation	electrical
Working pressure	Width	42 mm
Design structure Piston slide Type of reset mechanical spring Protection class IP65 Nominal size 8 mm Grid dimension 43 mm Exhaust-air function throttleable Sealing principle soft Assembly position Any Conforms to standard ISO 5599-1 Manual override Pushing ISO code 169 Type of piloting Piloted Pilot air supply external Pilot air supply external Pilot pressure 3 10 bar Switching time of 19 Switching time of 19 Switching time of 19 Switching time of 19 Switching time of 100 % Max. negative test pulse with logic 0 3,800 µs Max. negative test pulse with logic 1 4,900 µs Max. negative test pulse with logic 1 4,900 µs Characteristic coil data 24 VDC: 2.7 W Permissible voltage fluctuation 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 Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-2 PWIS conformity VDMA24364-B1/B2-L Medium temperature 10 50 °C Sound pressure level Product weight 420 g Electrical connection M12x1 Mounting type On subbase	Standard nominal flow rate	1,200 l/min
Type of reset mechanical spring Protection class IP65 S Mm S	Working pressure	-0.9 16 bar
Protection class Nominal size 8 mm Grid dimension 43 mm Exhaust-air function Exhaust-air function Sealing principle Soft Any Conforms to standard ISO 5599-1 Manual override Pushing ISO code 169 Type of piloting Pilot air supply external Flow direction Lap Positive overlap Pilot pressure Switching time off Switching time off Switching time on Duty cycle Max. positive test pulse with logic 0 Max. positive test pulse with logic 1 Max. positive test pulse with logic 1 Max. positive test pulse with logic 1 Max. permissible voltage fluctuation Operating medium Operating medium Operating medium Operating and pilot medium Vibration resistance Shock resistance Shock resistance Shock resistance Sound Shock sets with severity level 2 in accordance with FN 942017-5 and EN 60068-2-6 Shock resistance Shock resistance Shock sets with severity level 2 in accordance with FN 942017-5 and EN 60068-2-6 Shock resistance Shock resistance Shock sets with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 PWIS conformity WDMA24364-B1/B2-L Medium temperature 1050 °C Product weight 420 g Electrical connection Muzx, 121 Mounting type On subbase	Design structure	Piston slide
Nominal size 8 mm Grid dimension 43 mm Exhaust-air function throttleable Sealing principle soft Assembly position Any Conforms to standard ISO 5599-1 Manual override ISO 500e 169 Type of piloting Piloted Plot air supply Piloted Positive overlap Pilot air supply external Flow direction reversible Lap Positive overlap Pilot pressure 3 10 bar Switching time off 42 ms Switching time of 20 ms Duty cycle 100 % Max. negative test pulse with logic 0 3,800 µs Max. negative test pulse with logic 1 4,900 µs Permissible voltage fluctuation 4/- 10 % Operating medium Compersion operation operation operation operation operation operation operation operation of programmed EN 60068-2-6 Shock resistance Transport application test with severity level 1 as per FN 942017-5 and EN 60068-2-7 FWIS Conformity WDMA2464-B1/B2-L Medium temperature -10 50 °C Sound pressure level production on the store of the sound of the	Type of reset	mechanical spring
Agriculture	Protection class	IP65
Exhaust-air function Sealing principle Sealing principle Soft Any Conforms to standard ISO 5599-1 Manual override Pushing ISO code 169 Type of piloting Piloted Plot air supply Pilot air supply Plot air supply Plot pressure 3 10 bar Switching time on Duty cycle Max. negative test pulse with logic 0 Max. negative test pulse with logic 1 Characteristic coil data 24 V DC: 2.7 W Permissible voltage fluctuation 4/- 10 % Operating medium Note on operating and pilot medium Vibration resistance Shock resistance Shock resistance Shock resistance Shock resistance Sound pressure level PWISC conformity MELEVILLE AIR SALE SALE SALE SALE SALE SALE SALE SALE	Nominal size	8 mm
Sealing principle Assembly position Any Assembly position Any Any Assembly position Any Any Anual override Pushing ISO code 169 Plioting Piloting Piloting Pilot air supply external Flow direction reversible Lap Positive overlap Pilot pressure 3 10 bar Switching time off Switching time off 20 ms Duty cycle 100 % Max. positive test pulse with logic 0 Max. positive test pulse with logic 0 Max. positive test pulse with logic 1 Ayaoo µs Characteristic coil data 24 V DC: 2.7 W Permissible voltage fluctuation April medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Lubricated operation possible (subsequently required for further operation) Vibration resistance Shock resistance Shock resistance Shock sesistance Shock sesistance Shock sesistance Shock pressure level Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Sound pressure level Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Sound pressure level Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Froduct weight 420 g Electrical connection Mil2x1 Mounting type On subbase	Grid dimension	43 mm
Assembly position Conforms to standard ISD 5599-1 Manual override Pushing ISO code 169 Type of piloting Piloted Piloted Piloted Positive overlap Pilot air supply Return of the supply Pilot pressure Pil	Exhaust-air function	throttleable
Conforms to standard Manual override Pushing Pushing Piloted 169 Type of piloting Piloted Piloted Piloted Piloted Pilot aris supply external Flow direction Ieversible Lap Positive overlap Pilot pressure 3 10 bar Switching time off 20 ms Switching time on Duty cycle 100 % Max. positive test pulse with logic 0 Max. positive test pulse with logic 1 Characteristic coil data 24 V DC: 2.7 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 with severity level 1 as per FN 942017-5 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with ISO8573-1:2010 [7:4:4] Medium temperature 10 50 °C Product weight 420 g Electrical connection M12x1 Mounting type On subbase	Sealing principle	soft
Manual override Pushing 169 169 169 179 169 169 179 169 169 179 169 179 169 179 169 179 169 179 169 179 169 179 179 169 17	Assembly position	Any
ISO code If 9 Type of piloting Pilot air supply external Flow direction Lap Positive overlap Pilot pressure 3 10 bar Switching time off Switching time of Switching time on 20 ms Duty cycle 100 % Max. positive test pulse with logic 0 Max. positive test pulse with logic 1 Ay 900 µs Characteristic coil data 24 V DC: 2.7 W Permissible voltage fluctuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Uibration resistance Transport application test with severity level 1 as per FN 942017-5 and EN 60068-2-6 Shock resistance Shock resistance Shock hest with severity level 2 in accordance with FN 942017-5 and EN 60068-2-7 PWIS conformity WDMA24364-B1/B2-L Medium temperature 10 50 °C Sound pressure level MB 420 g Electrical connection MI251 Mounting type On subbase	Conforms to standard	ISO 5599-1
Type of piloting Piloted Pilot air supply external Flow direction reversible Lap Positive overlap Pilot pressure 3 10 bar Switching time off 42 ms Switching time on 20 ms Duty cycle 100 % Max. positive test pulse with logic 0 3,800 µs Max. negative test pulse with logic 1 4,900 µs Characteristic coil data 24 V DC: 2.7 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 Lubricated operation test with severity level 1 as per FN 942017-4 and EN 60068-2-27 PWIS conformity VDMA24364-B1/B2-L Medium temperature -10 50 °C Sound pressure level Product weight Electrical connection M12x1 Mounting type On subbase	Manual override	Pushing
Pilot air supply external Flow direction reversible Lap Positive overlap Pilot pressure 3 10 bar Switching time off 42 ms Switching time on 20 ms Duty cycle 100 % Max. positive test pulse with logic 0 3,800 μs Max. negative test pulse with logic 1 4,900 μs Characteristic coil data 24 V DC: 2.7 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 Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test with severity level 1 as per 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 PWIS conformity VDMA24364-B1/B2-L Medium temperature -10 50 °C Sound pressure level 85 dB(A) Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Product weight 420 g Electrical connection	ISO code	169
Flow direction reversible Lap Positive overlap Pilot pressure 3 10 bar Switching time off 42 ms Switching time on 20 ms Duty cycle 100 % Max. positive test pulse with logic 0 3,800 µs Max. negative test pulse with logic 1 4,900 µs Characteristic coil data 24 V DC: 2.7 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 Shock resistance Shock test with severity level 1 as per 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 PWIS conformity VDMA24364-B1/B2-L Medium temperature 10 50 °C Sound pressure level 85 dB(A) Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature 10 50 °C Froduct weight 420 g Electrical connection M12x1 Mounting type On subbase	Type of piloting	Piloted
Lap Positive overlap Pilot pressure 3 10 bar Switching time off 42 ms Switching time on 20 ms Duty cycle 100 % Max. positive test pulse with logic 0 3,800 μs Max. negative test pulse with logic 1 4,900 μs Characteristic coil data 24 V DC: 2.7 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 with severity level 1 as per 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 PWIS conformity VDMA24364-B1/B2-L Medium temperature 10 50 °C Sound pressure level 85 dB(A) Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature 10 50 °C Product weight 420 g Electrical connection M12x1 Mounting type On subbase	Pilot air supply	external
Pilot pressure 3 10 bar Switching time off 42 ms Switching time on 20 ms Duty cycle 100 % Max. positive test pulse with logic 0 3,800 µs Max. negative test pulse with logic 1 4,900 µs Characteristic coil data 24 V DC: 2.7 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 Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test with severity level 1 as per 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 PWIS conformity VDMA24364-B1/B2-L Medium temperature -10 50 °C Sound pressure level 85 dB(A) Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Froduct weight 420 g Electrical connection M12x1 Mounting type On subbase	Flow direction	reversible
Switching time off42 msSwitching time on20 msDuty cycle100 %Max. positive test pulse with logic 03,800 μsMax. negative test pulse with logic 14,900 μsCharacteristic coil data24 V DC: 2.7 WPermissible voltage fluctuation+/- 10 %Operating mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (subsequently required for further operation)Vibration resistanceTransport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6Shock resistanceShock sets with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27PWIS conformityVDMA24364-B1/B2-LMedium temperature-10 50 °CSound pressure level85 dB(A)Pilot mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]Ambient temperature-10 50 °CProduct weight420 gElectrical connectionM12x1Mounting typeOn subbase	Lap	Positive overlap
Switching time on20 msDuty cycle100 %Max. positive test pulse with logic 03,800 μsMax. negative test pulse with logic 14,900 μsCharacteristic coil data24 V DC: 2.7 WPermissible voltage fluctuation4/-10 %Operating mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (subsequently required for further operation)Vibration resistanceTransport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6Shock resistanceShock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27PWIS conformityVDMA24364-B1/B2-LMedium temperature-10 50 °CSound pressure level85 dB(A)Pilot mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]Ambient temperature-10 50 °CProduct weight420 gElectrical connectionM12x1Mounting typeOn subbase	Pilot pressure	3 10 bar
Duty cycle100 %Max. positive test pulse with logic 03,800 μsMax. negative test pulse with logic 14,900 μsCharacteristic coil data24 V DC: 2.7 WPermissible voltage fluctuation+/- 10 %Operating mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (subsequently required for further operation)Vibration resistanceTransport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6Shock resistanceShock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27PWIS conformityVDMA24364-B1/B2-LMedium temperature-10 50 °CSound pressure level85 dB(A)Pilot mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]Ambient temperature-10 50 °CProduct weight420 gElectrical connectionM12x1Mounting typeOn subbase	Switching time off	42 ms
Max. positive test pulse with logic 03,800 μsMax. negative test pulse with logic 14,900 μsCharacteristic coil data24 V DC: 2.7 WPermissible voltage fluctuation+/- 10 %Operating mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (subsequently required for further operation)Vibration resistanceTransport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6Shock resistanceShock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27PWIS conformityVDMA24364-B1/B2-LMedium temperature-10 50 °CSound pressure level85 dB(A)Pilot mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]Ambient temperature-10 50 °CProduct weight420 gElectrical connectionM12x1Mounting typeOn subbase	Switching time on	20 ms
Max. negative test pulse with logic 14,900 μsCharacteristic coil data24 V DC: 2.7 WPermissible voltage fluctuation+/- 10 %Operating mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (subsequently required for further operation)Vibration resistanceTransport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6Shock resistanceShock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27PWIS conformityVDMA24364-B1/B2-LMedium temperature-10 50 °CSound pressure level85 dB(A)Pilot mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]Ambient temperature-10 50 °CProduct weight420 gElectrical connectionM12x1Mounting typeOn subbase	Duty cycle	100 %
Characteristic coil data 24 V DC: 2.7 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 with severity level 1 as per 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 PWIS conformity VDMA24364-B1/B2-L Medium temperature -10 50 °C Sound pressure level 85 dB(A) Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Product weight 420 g Electrical connection M12x1 Mounting type On subbase	Max. positive test pulse with logic 0	3,800 µs
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 with severity level 1 as per 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 PWIS conformity VDMA24364-B1/B2-L Medium temperature -10 50 °C Sound pressure level 85 dB(A) Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Product weight 420 g Electrical connection M12x1 Mounting type On subbase	Max. negative test pulse with logic 1	4,900 μs
Operating mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (subsequently required for further operation)Vibration resistanceTransport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6Shock resistanceShock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27PWIS conformityVDMA24364-B1/B2-LMedium temperature-10 50 °CSound pressure level85 dB(A)Pilot mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]Ambient temperature-10 50 °CProduct weight420 gElectrical connectionM12x1Mounting typeOn subbase	Characteristic coil data	24 V DC: 2.7 W
Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test with severity level 1 as per 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 PWIS conformity VDMA24364-B1/B2-L Medium temperature -10 50 °C Sound pressure level 85 dB(A) Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Product weight 420 g Electrical connection M12x1 Mounting type On subbase	Permissible voltage fluctuation	+/- 10 %
operation) Vibration resistance Transport application test with severity level 1 as per 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 PWIS conformity VDMA24364-B1/B2-L Medium temperature -10 50 °C Sound pressure level 85 dB(A) Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Product weight 420 g Electrical connection M12x1 Mounting type On subbase	Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]
EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 PWIS conformity VDMA24364-B1/B2-L Medium temperature -10 50 °C Sound pressure level 85 dB(A) Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Product weight 420 g Electrical connection M12x1 Mounting type On subbase	Note on operating and pilot medium	
60068-2-27 PWIS conformity VDMA24364-B1/B2-L Medium temperature -10 50 °C Sound pressure level 85 dB(A) Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Product weight 420 g Electrical connection M12x1 Mounting type On subbase	Vibration resistance	
PWIS conformity VDMA24364-B1/B2-L Medium temperature -10 50 °C Sound pressure level 85 dB(A) Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Product weight 420 g Electrical connection M12x1 Mounting type On subbase	Shock resistance	
Medium temperature -10 50 °C Sound pressure level 85 dB(A) Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Product weight 420 g Electrical connection M12x1 Mounting type On subbase	PWIS conformity	
Sound pressure level 85 dB(A) Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Product weight 420 g Electrical connection M12x1 Mounting type On subbase	,	· · · · · · · · · · · · · · · · · · ·
Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Ambient temperature -10 50 °C Product weight 420 g Electrical connection M12x1 Mounting type On subbase	'	
Ambient temperature -10 50 °C Product weight 420 g Electrical connection M12x1 Mounting type On subbase	•	· · · · · · · · · · · · · · · · · · ·
Product weight 420 g Electrical connection M12x1 Mounting type On subbase		
Electrical connection M12x1 Mounting type On subbase	•	
Mounting type On subbase		
I with through hole		with through hole



Feature	Value
Pilot air port 12	Subbase
Pilot air port 14	Subbase
Pneumatic connection, port 1	Connection plate size 1 as per ISO 5599-1
Pneumatic connection, port 2	Connection plate size 1 as per ISO 5599-1
Pneumatic connection, port 3	Connection plate size 1 as per ISO 5599-1
Pneumatic connection, port 4	Connection plate size 1 as per ISO 5599-1
Pneumatic connection, port 5	Connection plate size 1 as per ISO 5599-1
Material seals	HNBR
	NBR
Material housing	Aluminum die cast