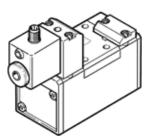
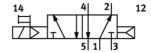
Solenoid valve MDH-5/2-D-1-M12D-C Part number: 540803

FESTO

With M12 plug connection.





Data sheet

| EN 60068-2-6 | Feature | Value |
|--|---------------------------------------|--|
| Width 42 mm Standard nominal flow rate 1,200 l/min Working pressure 2 10 bar Design structure Piston slide Type of reset Air 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 151 Type of piloting Piloted Pilot air supply Internal Iflow direction non reversible Lap Positive overlap Switching time off 36 ms Switching time of 36 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 appli | Valve function | 5/2 monostable |
| Standard nominal flow rate 1,200 l/min | Type of actuation | electrical |
| Working pressure 2 10 bar | Width | 42 mm |
| Design structure Type of reset Protection class Protectio | Standard nominal flow rate | 1,200 l/min |
| Type of reset Protection class IP65 Nominal size Rimm Grid dimension A3 mm Exhaust-air function Sealing principle Assembly position Conforms to standard ISO 5599-1 Manual override Pushing ISO code I51 Type of piloting Piloted Pilot air supply Internal Iap Positive overlap Switching time off Switching time off Switching time on Duty cycle Max. negative test pulse with logic 0 Max. negative test pulse with logic 1 Characteristic coil data Person Assembly negative test pulse with medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Vibration resistance Transport application test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 Shock resistance Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Working pressure | 2 10 bar |
| Protection class Nominal size Grid dimension Exhaust-air function Sealing principle Assembly position Conforms to standard ISO 5599-1 Manual override ISO code 151 Type of piloting Piloted Piloted Pilot air supply Internal Flow direction Inon reversible Lap Positive overlap Switching time on Duty cycle Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 Characteristic coil data 24 V DC: 2.7 W Permissible voltage fluctuation Operating medium Note on operating and pilot medium Lubricated operation test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 Shock resistance Shock resistance Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Design structure | Piston slide |
| Nominal size | Type of reset | Air spring |
| Grid dimension 43 mm Exhaust-air function throttleable Sealing principle soft Ansembly position Any Conforms to standard ISO 5599-1 Manual override Pushing ISO code 151 Type of piloting Piloted Piloted Piloted Positive overlap Flow direction non reversible Lap Positive overlap Switching time off 36 ms Switching time off 35 ms Switching time on 25 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 942017-5 and 60068-2-27 | Protection class | IP65 |
| Exhaust-air function throttleable soft Assembly position Any Conforms to standard ISO 5599-1 Manual override Pushing ISO code 151 Type of piloting Piloted Pilot air supply Internal Flow direction non reversible Lap Positive overlap Positive overlap Switching time off 36 ms Switching time on 25 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 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 resistance Shock resistance Shock sets with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Nominal size | 8 mm |
| Sealing principle Assembly position Any Conforms to standard Any Sisco 5599-1 Manual override Pushing Sisco code 151 Type of piloting Piloted Pilot air supply Pilot air supply Positive overlap Switching time off Switching time on Duty cycle Max. positive test pulse with logic 0 Max. positive test pulse with logic 1 Characteristic coil data Permissible voltage fluctuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Vibration resistance Final Conformation and final positive set with severity level 1 as per FN 942017-5 and 60068-2-27 | Grid dimension | 43 mm |
| Assembly position Conforms to standard ISO 5599-1 Manual override Pushing ISO code 151 Type of piloting Piloted Piloted Pilot air supply Flow direction Lap Positive overlap Switching time off Some Switching time on Duty cycle 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 Vibration resistance Shock resistance Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Exhaust-air function | throttleable |
| Conforms to standard ISO 5599-1 Manual override Pushing ISO code 151 Type of piloting Piloted Pilot air supply Internal Flow direction non reversible Lap Positive overlap Switching time off 36 ms Switching time on 25 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 a EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Sealing principle | soft |
| Manual override Pushing ISO code 151 Type of piloting Piloted Pilot air supply Internal Flow direction non reversible Lap Positive overlap Switching time off 36 ms Switching time on 25 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 coperation) Vibration resistance Shock resistance Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Assembly position | Any |
| ISO code Type of piloting Pilot air supply Internal Pilot direction Inon reversible Lap Positive overlap Switching time off Switching time on Symthetian Symthetian Symthetian Switching time on Symthetian Symtheti | Conforms to standard | ISO 5599-1 |
| Type of piloting Piloted Pilot air supply Internal Flow direction non reversible Lap Positive overlap Switching time off 36 ms Switching time on 25 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 942017-5 and 60068-2-27 | Manual override | Pushing |
| Pilot air supply Flow direction Lap Positive overlap Switching time off Switching time on Duty cycle 100 % Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 Characteristic coil data 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 942017-4 a EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | ISO code | 151 |
| Flow direction non reversible Lap Positive overlap Switching time off 36 ms Switching time on 25 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 a EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Type of piloting | Piloted |
| Lap Positive overlap Switching time off 36 ms Switching time on 25 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 a EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Pilot air supply | Internal |
| Switching time off Switching time on 25 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 a EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Flow direction | non reversible |
| Switching time on25 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 a EN 60068-2-6Shock resistanceShock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Lap | Positive overlap |
| 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 a EN 60068-2-6Shock resistanceShock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Switching time off | 36 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 a EN 60068-2-6Shock resistanceShock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Switching time on | 25 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 a EN 60068-2-6Shock resistanceShock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Duty cycle | 100 % |
| 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 a EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | 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 a EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Max. negative test pulse with logic 1 | 4,900 μs |
| 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 a EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | 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 a EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | Permissible voltage fluctuation | +/- 10 % |
| operation) Vibration resistance Transport application test with severity level 1 as per FN 942017-4 a EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and 60068-2-27 | 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 60068-2-27 | Note on operating and pilot medium | |
| 60068-2-27 | Vibration resistance | Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6 |
| PWIS conformity VDMA24364-B1/B2-L | 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) | · · · · · · · · · · · · · · · · · · · | 85 dB(A) |
| Ambient temperature -10 50 °C | · · · · · · · · · · · · · · · · · · · | |
| Product weight 420 g | <u> </u> | |
| Electrical connection M12x1 | | |
| Mounting type On subbase | | |
| with through hole | mounting type | |
| Pneumatic connection, port 1 Connection plate size 1 as per ISO 5599-1 | Pneumatic connection, port 1 | 9 |
| Pneumatic connection, port 2 Connection plate size 1 as per ISO 5599-1 | ··· | · |



| Feature | Value |
|------------------------------|---|
| 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 |