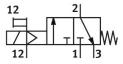
## Solenoid valve MCH-3-1/2-S Part number: 7983



## **Data sheet**

ActionElectricConstruction width52 mmStandard nominal flow rate (standardised to DIN 1343)3700 l/minIstandard nominal flow rate (standardised to DIN 1343)3700 l/minOperating voltageVia solenoid coil, must be ordered separatelyOperating voltageVia solenoid coil, must be ordered separatelyOperating pressure-0.95 bar10 barOperating pressure-0.95 bar10 barVige of resetMechanical springVige of resetMechanical springVoperotectionP65Iominal size14 mmIominal size14 mmSchlage principleSoftAounting positionoptionalAnounting positionOptionalAnounting positionDetentingVipe of plotingPilot actuatedVilot air supplyExternalNow directionNon-reversibleapUnderlapVilot pressure0.3Soft solutionSoftAnnal override0.3Vipe of ploting time offS4 msSolutionSolutionalAir Solution22 msAix, positive test pulse with 0 signal3200 µsAix, negative test pulse with 1 signal3200 µs	Feature	Value
Solution     S2 mm       Standard nominal flow rate (standardised to DIN 1343)     3700 l/min       Operating port     G1/2       Operating voltage     Via solenoi col, must be ordered separately       Operating pressure     -0.095 MPa1 MPa       -0.95 bar10 bar     -0.95 bar10 bar       Vies of reset     Mechanical spring       Vaporoval     c UL us - Recognized (OL)       Degree of protection     IP65       Oominal size     14 mm       Schud dimension     69 mm       Schud starf function     With flow control option       Sealing principle     Soft       Aounting position     optional       Anaual override     Detenting       Viet of piloting     Pilot actuated       Viet of piloting     Oin MPa1 MPa       Viet of Area     0.3       Viet of piloting time off     54 ms       Viet off     S4 ms       Viet off     S4 ms       Viet off	Valve function	3/2-way, closed, monostable
Attandard nominal flow rate (standardised to DIN 1343)   3700 l/min     sneumatic working port   G1/2     Operating voltage   Via solenoid coil, must be ordered separately     >o.095 MPa1 MPa   -0.95 bar10 bar     >besign   Poppet seat     Yupe of reset   Mechanical spring     vpproval   c UL us - Recognized (OL)     begree of protection   IP65     Jorninal size   14 mm     sirid dimension   69 mm     Avaust-air function   With flow control option     sealing principle   Soft     Anaual override   Detenting     vpod or fissure   0.1 MPa1 MPa     via direction   Non-reversible     app   Underlap     Via direction   0.1 MPa1 APA     soluting time off   54 ms     value   0.3     switching time on   22 ms     Aax. negative test pulse with 0 signal   2200 µs     Aax. negative test pulse with 1 signal   3700 µs	Type of actuation	Electric
oneumatic working portG1/2Operating voltageVia solenoid coil, must be ordered separatelyOperating pressure-0.95 MP1 MPa -0.95 bar10 barOperating pressure-0.95 bar10 barVge of resetMechanical spring c UL us - Recognized (OL)Vgeree of protectionIP65Jominal size14 mmSirld dimension69 mmXxhaust-air functionWith flow control optionSealing principleSoftAounting positionoptionalAnaual overrideDetentingVilot air supplyExternalNon-reversibleUnderlapapp0.1 MPa 10 barVilot pressure0.3Switching time on22 ms Axa. positive test pulse with 0 signalAxa. negative test pulse with 1 signal3700 µsAxarcegative test pulse with 1 signalSee solenoid coil, to be ordered separately	Construction width	52 mm
Operating voltage     Via solenoid coil, must be ordered separately       Operating pressure     -0.095 MPa1 MPa -0.95 bar10 bar       Design     Poppet seat       Wechanical spring     CUL us - Recognized (OL)       Degree of protection     IP65       Nominal size     14 mm       Grid dimension     69 mm       xxhaust-air function     With flow control option       Soft     Optional       Anaual override     Detenting       Vipo of piloting     Pilot actuated       Vito vipo of piloting     Non-reversible       App     0.1 MPa1 MPa       App of piloting     0.1 MPa1 MPa       App of piloting     Non-reversible       App     0.1 MPa1 MPa       App of piloting     0.1 MPa1 MPa       App of piloting     Non-reversible       App     0.3 Modeling       Victo pilot pilot set pulse with 0 signal     2200 µs       Aax. negative test pulse with 1 signal     3700 µs	Standard nominal flow rate (standardised to DIN 1343)	3700 l/min
Operating pressure-0.95 MPa1 MPa -0.95 bar10 barDesignPoppet seatVype of resetMechanical springVpprovalc UL us - Recognized (OL)Degree of protectionIP65Iominal size14 mmGoridal size14 mmSirld dimension69 mmXxhaust-air functionWith flow control optionSoftAnnual overrideJoper of pilotingDetentingVipo of pilotingPilot actuatedVito air supplyExternalIow directionNon-reversibleap0.1 MPa1 MPa 1 bar10 barvolue0.3witching time off54 mswitching time on22 ms Aax. positive test pulse with 0 signalAax. negative test pulse with 1 signal3700 µsSee solenoid coil, to be ordered separately	pneumatic working port	G1/2
-0.95 bar10 barDesignPoppet seatype of resetMechanical springypprovalc UL us - Recognized (OL)Degree of protectionIP65kominal size14 mmsirid dimension69 mmskaust-air functionWith flow control optionsealing principleSoftAounting positionoptionalAnual overrideDetentingVilot air supplyExternalVilot ressure0.1 MPa1 MPaapaUnderlapVilot pressure0.3switching time off54 msswitching time off54 msswitching time off54 msswitching time off54 msswitching time off3700 µsAax. negative test pulse with 0 signal3700 µsStenarderistic coil dataSee solenoid coil, to be ordered separately	Operating voltage	Via solenoid coil, must be ordered separately
Type of resetMechanical springApprovalc UL us - Recognized (OL)Degree of protectionIP65Aominal size14 mmSrid dimension69 mmExhaust-air functionWith flow control optionSealing principleSoftAounting positionoptionalAunual overrideDetentingPilot air supplyExternalPilot air supplyExternalPilot pressure0.1 MPa1 MPaSiviching time off54 msSwitching time off54 msSwitching time on22 msAax, negative test pulse with 0 signal3700 µsSee solenoid coil, to be ordered separatelySee solenoid coil, to be ordered separately	Operating pressure	
Approvalc UL us - Recognized (OL)Degree of protectionIP65Nominal size14 mmGrid dimension69 mmExhaust-air functionWith flow control optionSealing principleSoftAounting positionoptionalAnaual overrideDetentingYpe of pilotingPilot actuatedPilot air supplyExternalYour directionNon-reversibleapUnderlapPilot pressure0.1 MPa1 MPa 1 bar10 barSwitching time off54 msSwitching time on22 msAax. negative test pulse with 0 signal3700 µsCharacteristic coil dataSee solenoid coil, to be ordered separately	Design	Poppet seat
Degree of protectionIP65Nominal size14 mmSirld dimension69 mmStatust-air functionWith flow control optionSealing principleSoftAounting positionoptionalAnnual overrideDetentingYpe of pilotingPilot actuatedPilot air supplyExternalNon-reversible0.1 MPa1 MPaapp0.1 MPa1 MPaPilot piloting time off54 msSwitching time on22 msAax. positive test pulse with 0 signal3700 µsAnarcteristic coil dataSee solenoid coil, to be ordered separately	Type of reset	Mechanical spring
Advantage14 mmSind dimension69 mmSixhaust-air functionWith flow control optionSealing principleSoftAdounting positionoptionalAnaual overrideDetentingVipe of pilotingPilot actuatedVilot air supplyExternalVinderlapUnderlapVilot pressure0.1 MPa1 MPa 1 bar10 barSwitching time off54 msSwitching time on22 msAax. negative test pulse with 0 signal3700 µsAax. negative test pulse with 1 signal3700 µsCharacteristic coil dataSee solenoid coil, to be ordered separately	Approval	c UL us - Recognized (OL)
Grid dimension69 mmExhaust-air functionWith flow control optionSealing principleSoftAounting positionoptionalAnaual overrideDetentingYpe of pilotingPilot actuatedPilot air supplyExternalYou directionNon-reversibleapUnderlapPilot pressure0.1 MPa1 MPa 1 bar10 barSwitching time off54 msSwitching time on22 msAax. negative test pulse with 0 signal3700 µsCharacteristic coil dataSee solenoid coil, to be ordered separately	Degree of protection	IP65
Action and the second	Nominal size	14 mm
Sealing principleSoftAounting positionoptionalAnual overrideDetentingYpe of pilotingPilot actuatedPilot air supplyExternalNon-reversibleUnderlapPilot pressure0.1 MPa1 MPa 1 bar10 barOvalue0.3Switching time off54 msSwitching time on22 msAax. positive test pulse with 0 signal2200 µsAax. negative test pulse with 1 signal3700 µsCharacteristic coil dataSee solenoid coil, to be ordered separately	Grid dimension	69 mm
Anounting positionoptionalAnounting positionoptionalAnaual overrideDetentingType of pilotingPilot actuatedPilot air supplyExternalPilot air supplyExternalIlow directionNon-reversibleapUnderlapPilot pressure0.1 MPa1 MPa 1 bar10 barO value0.3Switching time off54 msSwitching time on22 msAax. positive test pulse with 0 signal3700 µsAnaracteristic coil dataSee solenoid coil, to be ordered separately	Exhaust-air function	With flow control option
Annual overrideDetentingType of pilotingPilot actuatedPilot air supplyExternalPilot directionNon-reversibleapUnderlapPilot pressure0.1 MPa1 MPa 1 bar10 baro value0.3Switching time off54 msSwitching time on22 msAax. positive test pulse with 0 signal2200 μsAax. negative test pulse with 1 signal3700 μsCharacteristic coil dataSee solenoid coil, to be ordered separately	Sealing principle	Soft
Type of pilotingPilot actuatedPilot air supplyExternalPilot air supplyExternalPilot air supplyNon-reversibleapUnderlapPilot pressure0.1 MPa1 MPa 1 bar10 baro value0.3Switching time off54 msSwitching time on22 msMax. positive test pulse with 0 signal2200 µsMax. negative test pulse with 1 signal3700 µsCharacteristic coil dataSee solenoid coil, to be ordered separately	Mounting position	optional
Pilot air supplyExternalPilot air supplyKaternalNon-reversibleUnderlapapUnderlapPilot pressure0.1 MPa1 MPa 1 bar10 baro value0.3o value0.3Switching time off54 msSwitching time on22 msMax. positive test pulse with 0 signal2200 µsMax. negative test pulse with 1 signal3700 µsCharacteristic coil dataSee solenoid coil, to be ordered separately	Manual override	Detenting
Non-reversibleapUnderlapDilot pressure0.1 MPa1 MPa 1 bar10 baro value0.3Switching time off54 msSwitching time on22 msAax. positive test pulse with 0 signal2200 µsAax. negative test pulse with 1 signal3700 µsCharacteristic coil dataSee solenoid coil, to be ordered separately	Type of piloting	Pilot actuated
apUnderlapDilot pressure0.1 MPa1 MPa 1 bar10 baro value0.3Switching time off54 msSwitching time on22 msAax. positive test pulse with 0 signal2200 μsMax. negative test pulse with 1 signal3700 μsCharacteristic coil dataSee solenoid coil, to be ordered separately	Pilot air supply	External
Dilot pressure0.1 MPa1 MPa 1 bar10 barO value0.3O value0.3Switching time off54 msSwitching time on22 msMax. positive test pulse with 0 signal2200 μsMax. negative test pulse with 1 signal3700 μsCharacteristic coil dataSee solenoid coil, to be ordered separately	Flow direction	Non-reversible
1 bar10 baro value0.3Switching time off54 msSwitching time on22 msMax. positive test pulse with 0 signal2200 μsMax. negative test pulse with 1 signal3700 μsCharacteristic coil dataSee solenoid coil, to be ordered separately	lap	Underlap
Switching time off   54 ms     Switching time on   22 ms     Aax. positive test pulse with 0 signal   2200 µs     Aax. negative test pulse with 1 signal   3700 µs     Characteristic coil data   See solenoid coil, to be ordered separately	Pilot pressure	
Switching time on   22 ms     Max. positive test pulse with 0 signal   2200 µs     Max. negative test pulse with 1 signal   3700 µs     Characteristic coil data   See solenoid coil, to be ordered separately	b value	0.3
Aax. positive test pulse with 0 signal2200 µsAax. negative test pulse with 1 signal3700 µsCharacteristic coil dataSee solenoid coil, to be ordered separately	Switching time off	54 ms
Max. negative test pulse with 1 signal 3700 µs   Characteristic coil data See solenoid coil, to be ordered separately	Switching time on	22 ms
Characteristic coil data See solenoid coil, to be ordered separately	Max. positive test pulse with 0 signal	2200 µs
	Max. negative test pulse with 1 signal	3700 μs
Operating medium Compressed air to ISO 8573-1:2010 [7:4:4]	Characteristic coil data	See solenoid coil, to be ordered separately
	Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]

**FESTO** 



Feature	Value
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Corrosion resistance class CRC	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Storage temperature	-20 °C60 °C
Media temperature	-10 °C60 °C
Pilot medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Ambient temperature	-5 °C40 °C
Product weight	1115 g
Type of mounting	On manifold rail With through-hole Either:
Auxiliary pilot air port 12	G1/8
Pilot air port 12	G1/8
Pneumatic connection, port 1	G1/2
Pneumatic connection, port 2	G1/2
Pneumatic connection, port 3	G1/2
Note on materials	RoHS-compliant
Material seals	NBR
Material housing	Die-cast aluminium