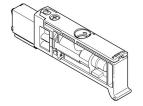
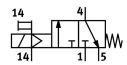
## Air solenoid valve VUVB-ST12-M32C-MZD-QX-D-1T1

**FESTO** 

Part number: 576002





General operating condition

## **Data sheet**

Actuation type  Electrical  Valve size  12 mm  Standard nominal flow rate  Pneumatic working port  Q5-6  Operating pressure  0.2 MPa 0.8 MPa  Operating pressure  2 bar 8 bar  Structural design  Poppet valve with return spring  Degree of protection  Nominal width  4 mm  Eschaust air function  Sealing principle  Soft  Mounting position  Any  Manual override  Detenting  Non-detenting  Non-detenting  Non-detenting  Non-reversible  Symbol  Information on operating pressure  2 bar 8 bar  Switching time off  1 4 ms  On switching time off  On switching time  Max. positive test pulse with 0 signal  Max. negative test pulse with 0 signal  Max. negative test pulse with 0 signal  Max. negative test pulse with 0 signal  Max. poperating resistance  Premissible voltage fluctuations  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil ubrication possible (required for further use)  Shock resistance  Shock resistance	Feature	Value
Valve size  Standard nominal flow rate  240 I/min 400 I/min  Pneumatic working port  QS-6  Operating pressure  0.2 MPa 0.8 MPa  Operating pressure  2 bar 8 bar  Structural design  Poppet valve with return spring  Degree of protection  IP65  Nominal width  4 mm  Exhaust air function  Sealing principle  Soft  Mounting position  Any  Manual override  Detenting  Non-detenting  Type of control  Pilot controlled  Pilot air supply port  External  Flow direction  Non-reversible  Symbol  Information on operating pressure  2 bar 8 bar  Switching time off  0 x MPa 0.8 MPa  Pilot pressure MPa  Op x WPa 0.8 MPa  Switching time off  0 x WPa 0.8 MPa  Down yccle  Max. positive test pulse with 0 signal  800 µs  Max. negative test pulse with 0 signal  Mondard pressure operating pressible voltage fluctuations  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4-4]  Information on operating and pilot media  Operation medium  Compressed air as per ISO 8573-1:2010 [7:4-4]  Information on operating and pilot media  Operation with severity level 1 as per FN 942017-5 and EN 60068-2-27	Valve function	3/2, closed, monostable
Standard nominal flow rate Pneumatic working port QS-4 QS-6 Operating pressure Q2-2 MPa 0.8 MPa Operating pressure Q5-6 Operating pressure Q6-6 Operating flow control option Operating pressure Q6-6 Operating pressure Q7-0 Operating pressure Q7-0 Operating pressure Q8-6 Operating pressure Q8-6 Operating pressure Q8-6 Operating pressure Q9-0 Operating pressure Q9-0 Operating pressure Q1-0 Operating pressure Q1-0 Operating time off Q8-6 Operating time Q8-6 Operating time Q8-6 Operating time Q8-6 Operating medium Q8-6 Operating medium Q8-6 Operating medium C6-6 Operating medium C6-6 Operating medium C6-6 Operating medium C6-6 Operating medit operating tevel 1 as per FN 942017-4 and EN 60068-2-27 Operating medit operating tevel 1 as per FN 942017-4 and EN 60068-2-27 Operating medit operating tevel 1 as per FN 942017-4 and EN 60068-2-26 Operating teverity level 1 as per FN 942017-4 and EN 60068-2-26 Operating standard Shock test with severity level 1 as per FN 942017-4 and EN 60068-2-26 Operating standard Shock test with severity level 1 as per FN 942017-4 and EN 60068-2-26 Operating standard Shock test with severity level 1 as per FN 942017-4 and EN 60068-2-26 Operating standard Shock test with severity level 1 as per FN 942017-4 and EN 60068-2-26 Operating standard Shock test with severity level 1 as per FN 942017-4 and EN 60068-2-26 Operating standard Shock test with severity level 1 as per FN 942017-4 and EN 60068-2-26 Operating standard Shock test with severity level 1 as per FN 942017-4 and EN 60068-2-26 Operating standard Shock test with severity level 1 as per FN 942017-4 and EN 60068-2-26	Actuation type	Electrical
Preumatic working port  QS-4 QS-6 Operating pressure  Q2 MPa 0.8 MPa Operating pressure  2 bar 8 bar Structural design Poppet valve with return spring Degree of protection Pressure Pressure Sort Protection Pressure Sort Protection Pressure Sort Protection Pressure Sort Protection Pressure Sort Pressure Sort Pressure Sort Pressure Pressure Pressure MPa On owitching time off On switching time off On switching time Duty cycle Doors Amax. positive test pulse with 0 signal Pressure Sort Pressure Sort Premissible woltage fluctuations Premissible woltage fluctuation on operating and pilot media Premissible woltage fluctuation on operating and pilot media Premissible woltage fluctuation on operating and pilot media Premissible woltage fluctuations Premissible woltage fluctuations Premissible woltage fluctuations Premissible woltage fluctuations Premissible woltage fluctuation on operating and pilot media Premissible woltage fluctuation selection with oil lubrication possible (required for further use) Premissible woltage fluctuation selection with oil lubrication possible (required for further use) Pressure Shock resistance Processors P	Valve size	12 mm
Operating pressure Operating pressure 2 bar 8 bar Structural design Peppet valve with return spring Degree of protection IP65 Nominal width 4 mm Exhaust air function Sealing principle Soft Mounting position Any Manual override Detenting Non-detenting Pilot-controlled External Flow direction Non-reversible Symbol Information on operating pressure Desirection On switching time off On switching time Operating medium Operating sealing principle Operating medium Operating general Operating on operating on operating of Soft Operating medium Operating on	Standard nominal flow rate	240 l/min 400 l/min
Operating pressure 2 bar 8 bar  Structural design Poppet valve with return spring Degree of protection IP65 Nominal width 4 mm Exhaust air function Without flow control option Sealing principle Soft Mounting position Any Manual override Detenting Type of control Pilot air supply port External Flow direction Non-reversible Symbol Operating pressure 0 - 0.8 bar with external pilot air O - 8 bar with external	Pneumatic working port	l '
Structural design Poppet valve with return spring Degree of protection IP65  Nominal width 4 mm  Exhaust air function Without flow control option Sealing principle Soft  Mounting position Any  Manual override Detenting Non-detenting Non-detenting Pilot-controlled  Pilot air supply port External  Flow direction Non-reversible  Symbol 0992123  Information on operating pressure 0 - 0.8 bar with external pilot air 0 - 8 bar with external pilot air	Operating pressure	0.2 MPa 0.8 MPa
Degree of protection IP65  Nominal width 4 mm  Exhaust air function Without flow control option  Sealing principle Soft  Mounting position Any  Manual override Detenting Non-detenting  Type of control Pilot air supply port  External  Flow direction Non-reversible  Symbol 00992123  Information on operating pressure 0-0.8 bar with external pilot air 0-8 bar with external pilot air  Pilot pressure MPa 0.2 MPa 0.8 MPa  Pilot pressure 2 bar 8 bar  Switching time off 0 14 ms  On switching time 6 ms  Duty cycle 100%  Max. positive test pulse with 0 signal 800 µs  Max. negative test pulse on 1 signal 300 µs  Coil characteristics 24 V DC: 1.0 W  Permissible voltage fluctuations 4-/- 10 %  Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media Operation with severity level 1 as per FN 942017-4 and EN 60068-2-6  Shock resistance Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27	Operating pressure	2 bar 8 bar
Nominal width 4 mm  Exhaust air function Without flow control option  Sealing principle Soft  Mounting position Any  Manual override Detenting Non-detenting Type of control Pilot-controlled  Pilot air supply port External  Flow direction Non-reversible  Symbol 00992123  Information on operating pressure 0 - 0.8 bar with external pilot air 0 - 8	Structural design	Poppet valve with return spring
Exhaust air function  Sealing principle  Soft  Mounting position  Any  Manual override  Detenting Non-detenting Type of control  Pilot-controlled  External  Flow direction  Non-reversible  Symbol  Information on operating pressure  O - 0.8 bar with external pilot air O - 8 bar	Degree of protection	IP65
Sealing principle  Mounting position  Any  Manual override  Detenting Non-detenting Type of control  Pilot-controlled  External  Flow direction  Non-reversible  Symbol  10992123  Information on operating pressure  0 - 0.8 bar with external pilot air 0 - 8 bar  Switching time off 14 ms 0 ns witching time off 0 ms  Duty cycle 100%  Max. positive test pulse with 0 signal 800 µs  Max. negative test pulse on 1 signal 300 µs  Coil characteristics 24 V DC: 1.0 W  Permissible voltage fluctuations +/- 10 %  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) 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 1 as per FN 942017-5 and EN 60068-2-27	Nominal width	4 mm
Mounting position  Manual override  Detenting Non-detenting Pilot-controlled  Pilot-controlled  Pilot is supply port  External  Flow direction  Non-reversible Symbol  Information on operating pressure  O - 0.8 bar with external pilot air O - 8	Exhaust air function	Without flow control option
Manual override  Detenting Non-detenting Pilot-controlled Pilot air supply port External Flow direction Non-reversible Symbol 00992123 Information on operating pressure 0 - 0.8 bar with external pilot air 0 - 8 bar with external pilot air 0 - 0.8 bar with external pilot	Sealing principle	Soft
Non-detenting Type of control Pilot air supply port External Flow direction Non-reversible Symbol O0992123 Information on operating pressure O - 0.8 bar with external pilot air O - 8 bar with external pilot air	Mounting position	Any
Pilot air supply port       External         Flow direction       Non-reversible         Symbol       00992123         Information on operating pressure       0 – 0.8 bar with external pilot air         Pilot pressure MPa       0.2 MPa 0.8 MPa         Pilot pressure       2 bar 8 bar         Switching time off       14 ms         On switching time       6 ms         Duty cycle       100%         Max. positive test pulse with 0 signal       800 μs         Max. negative test pulse on 1 signal       300 μs         Coil characteristics       24 V DC: 1.0 W         Permissible voltage fluctuations       +/- 10 %         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)         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 1 as per FN 942017-5 and EN 60068-2-27	Manual override	
Flow direction  Non-reversible  Symbol  10992123  Information on operating pressure  0 - 0.8 bar with external pilot air 0 - 8 bar with external pilot air 0 - 8 bar with external pilot air 0 - 8 bar with external pilot air  0.2 MPa 0.8 MPa  Pilot pressure  2 bar 8 bar  Switching time off  14 ms  On switching time  6 ms  Duty cycle  100%  Max. positive test pulse with 0 signal  800 µs  Max. negative test pulse on 1 signal  300 µs  Coil characteristics  24 V DC: 1.0 W  Permissible voltage fluctuations  +/- 10 %  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Vibration resistance  Transport application test with severity level 1 as per FN 942017-5 and EN 60068-2-27  Shock resistance  Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27	Type of control	Pilot-controlled
Symbol  Information on operating pressure  O - 0.8 bar with external pilot air O - 8 bar with external pilot air O - 9 bar with external pilot air O - 9 bar with external pilot air O - 9 bar with external pilo	Pilot air supply port	External
Information on operating pressure  0 – 0.8 bar with external pilot air 0 - 8 bar with external pilot air 0.2 MPa 0.8 MPa  2 bar 8 bar  Switching time off 14 ms  On switching time 6 ms  Duty cycle 100%  Max. positive test pulse with 0 signal 800 μs  Max. negative test pulse on 1 signal 300 μs  Coil characteristics 24 V DC: 1.0 W  Permissible voltage fluctuations +/- 10 %  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)  Vibration resistance Transport application test with severity level 1 as per FN 942017-5 and EN 60068-2-27	Flow direction	Non-reversible
0 - 8 bar with external pilot air  2 bar 0.8 MPa  2 bar 8 bar  14 ms  6 ms  Duty cycle 100%  Max. positive test pulse with 0 signal 800 μs  Max. negative test pulse on 1 signal 300 μs  Coil characteristics 24 V DC: 1.0 W  Permissible voltage fluctuations 4/- 10 %  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)  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 1 as per FN 942017-5 and EN 60068-2-27	Symbol	00992123
Pilot pressure  2 bar 8 bar  Switching time off  14 ms  On switching time  6 ms  Duty cycle  100%  Max. positive test pulse with 0 signal  800 µs  Max. negative test pulse on 1 signal  300 µs  Coil characteristics  24 V DC: 1.0 W  Permissible voltage fluctuations  +/- 10 %  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Vibration resistance  Transport application test with severity level 1 as per FN 942017-5 and EN 60068-2-27  Shock resistance  Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27	Information on operating pressure	
Switching time off On switching time 6 ms Duty cycle 100% Max. positive test pulse with 0 signal 800 µs Max. negative test pulse on 1 signal 300 µs Coil characteristics 24 V DC: 1.0 W Permissible voltage fluctuations +/- 10 % Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Information on operating and pilot media Vibration resistance Transport application test with severity level 1 as per FN 942017-5 and EN 60068-2-27	Pilot pressure MPa	0.2 MPa 0.8 MPa
On switching time  Duty cycle  100%  Max. positive test pulse with 0 signal  Max. negative test pulse on 1 signal  300 µs  Coil characteristics  24 V DC: 1.0 W  Permissible voltage fluctuations  +/- 10 %  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  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 1 as per FN 942017-5 and EN 60068-2-27	Pilot pressure	2 bar 8 bar
Duty cycle100%Max. positive test pulse with 0 signal800 μsMax. negative test pulse on 1 signal300 μsCoil characteristics24 V DC: 1.0 WPermissible voltage fluctuations+/- 10 %Operating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Vibration resistanceTransport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6Shock resistanceShock test with severity level 1 as per FN 942017-5 and EN 60068-2-27	Switching time off	14 ms
Max. positive test pulse with 0 signal  Max. negative test pulse on 1 signal  Coil characteristics  24 V DC: 1.0 W  Permissible voltage fluctuations  +/- 10 %  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)  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 1 as per FN 942017-5 and EN 60068-2-27	On switching time	6 ms
Max. negative test pulse on 1 signal  Coil characteristics  24 V DC: 1.0 W  Permissible voltage fluctuations  +/- 10 %  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)  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 1 as per FN 942017-5 and EN 60068-2-27	Duty cycle	100%
Coil characteristics 24 V DC: 1.0 W  Permissible voltage fluctuations +/- 10 %  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)  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 1 as per FN 942017-5 and EN 60068-2-27	Max. positive test pulse with 0 signal	800 µs
Permissible voltage fluctuations +/- 10 %  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)  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 1 as per FN 942017-5 and EN 60068-2-27	Max. negative test pulse on 1 signal	300 µs
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)  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 1 as per FN 942017-5 and EN 60068-2-27	Coil characteristics	24 V DC: 1.0 W
Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  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 1 as per FN 942017-5 and EN 60068-2-27	Permissible voltage fluctuations	+/- 10 %
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 1 as per FN 942017-5 and EN 60068-2-27	Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
EN 60068-2-6 Shock resistance Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27	Information on operating and pilot media	Operation with oil lubrication possible (required for further use)
	Vibration resistance	
Corrosion resistance class (CRC) 0 - No corrosion stress	Shock resistance	Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27
	Corrosion resistance class (CRC)	0 - No corrosion stress

Feature	Value
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Temperature of medium	-5 °C 60 °C
Noise level	85 dB(A)
Ambient temperature	-5 °C 60 °C
Product weight	26.3 g
Electrical connection	Via sub-base
Type of mounting	On sub-base
Auxiliary pilot air port 14	Sub-base
Pneumatic connection 1	Sub-base
Pneumatic connection 3	Sub-base
Pneumatic connection 5	Sub-base
Note on materials	RoHS-compliant
Seals material	NBR TPE-U(PU)
Housing material	PA-reinforced
Piston slide material	Wrought aluminum alloy