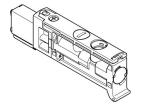
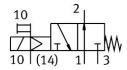
## Air solenoid valve VUVB-ST12-M32U-MZD-QX-D-1T1

**FESTO** 

Part number: 576004





## General operating condition

## **Data sheet**

Valve function 3/2, open, monostable Electrical Actuation type Electrical 12 mm Standard nominal flow rate 240 l/min 400 l/min Pneumatic working port 0,5 4 0,5 6 Operating pressure 0,28 MPa 0.8 MPa Operating pressure 2,8 bar 8 bar Structural design Poppet valve with return spring Operating of the time of time of the time of time of time of the time of time	Feature	Value
Valve size  Standard nominal flow rate  Penumatic working port  QS-4  Operating pressure  Operating pressure  Operating pressure  1.8 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  Type of control  Pilot air supply port  External  Flow direction  Pilot pressure  0 -0.8 bar with external pilot air  0 -8 bar with external pilot air  0 -9 bar with external pilot air  0 -8 bar with	Valve function	3/2, open, monostable
Standard nominal flow rate Pneumatic working port QS-4 QS-6 Operating pressure Q.28 MPa 0.8 MPa Operating pressure Q.28 bar 8 bar Structural design Poppet valve with return spring Degree of protection Person Perso	Actuation type	Electrical
Preumatic working port         QS-4 QS-6           Operating pressure         0.28 MPa 0.8 MPa           Operating pressure         2.8 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 Non-detenting           Type of control         Pilot-controlled           Pilot air supply port         External           Elwow direction         Non-reversible           Symbol         00995279           Information on operating pressure         0 - 0.8 bar with external pilot air           Pilot pressure MPa         0.28 MPa 0.8 MPa           Pilot pressure         2.8 bar 8 bar           Switching time off         14 ms           On switching time off         14 ms           On switching time off         100%           Max positive test pulse with 0 signal         800 μs           Max. positive test pulse with 0 signal         800 μs           Max. negative test pulse on 1 signal         300 μs           <	Valve size	12 mm
Operating pressure Operating pressure 2.8 bar 8 MPa Operating pressure Structural design Poppet valve with return spring Degree of protection PiP65 Nominal width 4 mm Exhaust air function Soft Sealing principle Soft Mounting position Any Manual override Detenting Non-detenting Pilot-controlled Pilot-controlled Pilot air supply port External Flow direction Non-reversible Symbol O0995279 Information on operating pressure 0 - 0.8 bar with external pilot air 0 - 8 bar with external pilot air 0 - 9 bar with external pilot air 0 - 10 bar with external pilot a	Standard nominal flow rate	240 l/min 400 l/min
Operating pressure  2.8 bar 8 bar  Structural design Poppet valve with return spring Degree of protection Possore Nominal width Amm Exhaust air function Sealing principle Soft Mounting position Manual override Mounting position Manual override Pilot controlled Pilot air supply port External Flow direction Non-reversible Symbol Non-reversible Symbol Non-getanting pressure 0-0.8 bar with external pilot air 0-8 bar with external pilot air 0-9 bar with external pilot air 0-9 bar with external pilot air 0-8 bar with external pilot air 0-9 bar with external pilot air 0-9 bar with external pilot air 0-10 bar with	Pneumatic working port	•
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 Pilot-controlle Pilot air supply port External Flow direction Non-reversible Symbol 09995279 Information on operating pressure 0-0.8 bar with external pilot air 0-8 bar with external pi	Operating pressure	0.28 MPa 0.8 MPa
Degree of protection  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  Oo995279  Information on operating pressure  O - 0.8 bar with external pilot air O - 8	Operating pressure	2.8 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       00995279         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         Pilot pressure MPa       0.28 MPa 0.8 MPa         Pilot pressure       2.8 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       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 t	Structural design	Poppet valve with return spring
Exhaust air function       Without flow control option         Sealing principle       Soft         Mounting position       Any         Manual override       Detenting Non-detenting         Type of control       Pilot-controlled         Pilot controlled       Pilot-controlled         Pilot air supply port       External         Flow direction       Non-reversible         Symbol       00995279         Information on operating pressure       0 – 0.8 bar with external pilot air         Pilot pressure MPa       0.28 MPa 0.8 MPa         Pilot pressure       2.8 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	Degree of protection	IP65
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  00995279  Information on operating pressure  0-0.8 bar with external pilot air 0-8 bar with external pilot air 0-9 bar	Nominal width	4 mm
Mounting position       Any         Manual override       Detenting Non-detenting         Type of control       Pilot-controlled         Pilot air supply port       External         Flow direction       Non-reversible         Symbol       00995279         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         Pilot pressure MPa       0.28 MPa 0.8 MPa         Pilot pressure       2.8 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	Exhaust air function	Without flow control option
Manual overrideDetenting Non-detentingType of controlPilot-controlledPilot air supply portExternalFlow directionNon-reversibleSymbol00995279Information on operating pressure0 - 0.8 bar with external pilot air 0 - 8 bar with external pilot airPilot pressure MPa0.28 MPa 0.8 MPaPilot pressure2.8 bar 8 barSwitching time off14 msOn switching time6 msDuty 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 60068-2-2	Sealing principle	Soft
Type of controlPilot-controlledPilot air supply portExternalFlow directionNon-reversibleSymbol00995279Information on operating pressure0 - 0.8 bar with external pilot air 0 - 8 bar with external pilot airPilot pressure MPa0.28 MPa 0.8 MPaPilot pressure2.8 bar 8 barSwitching time off14 msOn switching time6 msDuty 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	Mounting position	Any
Pilot air supply portExternalFlow directionNon-reversibleSymbol00995279Information on operating pressure0 – 0.8 bar with external pilot air 0 - 8 bar with external pilot airPilot pressure MPa0.28 MPa 0.8 MPaPilot pressure2.8 bar 8 barSwitching time off14 msOn switching time6 msDuty 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	Manual override	<u> </u>
Flow direction  Non-reversible  Symbol  00995279  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  Pilot pressure MPa  0.28 MPa 0.8 MPa  Pilot pressure  14 ms  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  1-/- 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	Type of control	Pilot-controlled
Symbol 00995279  Information on operating pressure 0-0.8 bar with external pilot air 0-8 bar with external pilot air 0-9 bar with external pilot air 0-9 bar w	Pilot air supply port	External
Information on operating pressure  O - 0.8 bar with external pilot air O - 8 bar with external pilot air O -	Flow direction	Non-reversible
0 - 8 bar with external pilot airPilot pressure MPa0.28 MPa 0.8 MPaPilot pressure2.8 bar 8 barSwitching time off14 msOn switching time6 msDuty 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 942017-5 and EN 60068-2-27Shock resistanceShock test with severity level 1 as per FN 942017-5 and EN 60068-2-27	Symbol	00995279
Pilot pressure  2.8 bar 8 bar  Switching time off  14 ms  On switching time  6 ms  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  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	Information on operating pressure	· '
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	Pilot pressure MPa	0.28 MPa 0.8 MPa
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	Pilot pressure	2.8 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 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	On switching time	6 ms
Max. 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	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	29.4 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 Sub-base
Pneumatic connection 5	Sub-base Sub-base
Note on materials	RoHS-compliant
Seals material	NBR TPE-U(PU)
Housing material	PA-reinforced
Piston slide material	Wrought aluminum alloy