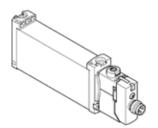
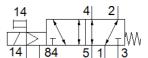
solenoid valve VUVG-B14-M52-MZT-F-1R8L Part number: 578158

FESTO

This type is suitable for vacuum.





Data sheet

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 Restriction ambient and medium temperature -5 - 50 °C Without holding current reduction Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Feature	Value
Valve size 14 mm Standard nominal flow rate 520 630 Vmin Operating pressure -0.9 8 bar Piston slide Piston slide slide slide slide Piston slide sl	Valve function	5/2 monostable
Standard nominal flow rate Operating pressure 1-0.9 8 bar Design structure Piston slide Type of reset Authorisation RCM Mark c CSA us (OL) c UL us - Recognized (OL) Nominal size Eshaust-air function Sealing principle Assembly position Manual override Type of piloting Piloted Type of piloting Pilot pressure 3 8 bar Switching time off Ad ms Switching time on 13 ms Duty cycle Max. negative test pulse with logic 1 Max. negative test pulse with logic 1 Dermissible voltage fluctuation Characteristic coil data Permissible voltage fluctuation Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Vibration resistance Satical mich on CRC Exercise Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with ISO8573-1:2010 [7:4:4] Redium temperature -5 60 °C Compressed air in accordance with ISO8573-1:2010 [7:4:4] Redium temperature -5 60 °C Compressed air in accordance with ISO8573-1:2010 [7:4:4] Foliot medium Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942017-5 and ENG in Compressed air in accordance with FN 942	Type of actuation	electrical
Operating pressure -0.9 8 bar	Valve size	14 mm
Design structure Type of reset Mechanical spring Protection class With plug socket RCM Mark c CSA us (OL) c UL us - Recognized (OL) Nominal size Exhaust-air function Bealing principle Sealing principle Soft Assembly position Any Manual override Pushing Covered Type of piloting Pushing Covered Type of piloting Piloted Pilot air supply Reternal Pilot pressure Pilot pressur	Standard nominal flow rate	520 630 l/min
Type of reset Protection class Protection class IP65	Operating pressure	-0.9 8 bar
Protection class Authorisation RCM Mark c CSA us (OL) c UL us - Recognized (OL) Nominal size Exhaust-air function Bealing principle Sealing principle S	Design structure	Piston slide
with plug socket Authorisation RCM Mark C SSA us (OL) c UL us - Recognized (OL) Nominal size Exhaust-air function Sealing principle Sealing principle Sealing principle Any Manual override Description Manual override Type of piloting Pushing Covered Pilot air supply External Pilot pressure 3 8 bar Switching time off 40 ms Switching time on 13 ms Duty cycle Max. positive test pulse with logic 1 Duty cycle Max. negative test pulse with logic 1 Dermissible voltage fluctuation Permissible voltage fluctuation Ary We service operating and pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Transport application test at severity level 2 in accordance with FN 942017-5 and EN 80068-2-27 Restriction ambient and medium temperature 5 60 °C Compressed air in accordance with ISO8573-1:2010 [7:4:4] Without holding current reduction Compressed air in accordance with FN 942017-5 and EN 80068-2-27 Without holding current reduction Corosion resistance classification CRC 2 Moderate corrosion stress Medium temperature 5 60 °C Compressed air in accordance with ISO8573-1:2010 [7:4:4] Prilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Type of reset	mechanical spring
Authorisation RCM Mark c CSA us (OL) c UL us - Recognized (OL) Nominal size 5.6 mm Exhaust-air function throttleable Sealing principle Assembly position Any Manual override Pushing Covered Type of piloting Piloted Pilot air supply Riching throw of the same of	Protection class	IP65
Authorisation RCM Mark c CSA us (OL) c UL us - Recognized (OL) Nominal size 5.6 mm Exhaust-air function throttleable Sealing principle Assembly position Any Manual override Pushing Covered Type of piloting Piloted Pilot air supply Riching throw of the same of		with plug socket
c UL us - Recognized (OL) Nominal size 5.6 mm Exhaust-air function throttleable Sealing principle soft Assembly position Any Manual override detenting Pushing Covered Type of piloting Piloted	Authorisation	
Nominal size 5.6 mm Exhaust-air function throttleable Sealing principle soft Assembly position Any Manual override detenting Pushing Covered Type of piloting Piloted Pilot air supply external Pilot pressure 38 bar Suitability for vacuum Yes Switching time off 40 ms Switching time off 40 ms Switching time on 13 ms Duty cycle 100% Max. positive test pulse with logic 0 700 µs Max. positive test pulse with logic 1 900 µs Max. negative test pulse with logic 1 900 µs Permissible voltage fluctuation +/- 10 % Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Urbraich operation) Vibration resistance Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Restriction ambient and medium temperature -5 - 50 °C Without holdaic purposed air in accordance with ISO8573-1:2010 [7:4:4] Redium temperature -5 60 °C Pilot medium temperature -5 60 °C Pilot medium temperature (Compressed air in accordance with ISO8573-1:2010 [7:4:4]		c CSA us (OL)
Exhaust-air function Sealing principle soft Assembly position Manual override detenting Pushing Covered Type of piloting Pilot air supply Pilot air supply Pilot air supply Pilot pressure 3 8 bar Suitability for vacuum Yes Switching time off 40 ms Switching time off 40 ms Switching time on 13 ms Duty cycle Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 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 classification CRC Without holding current reduction Compressed air in accordance with ISO8573-1:2010 [7:4:4] Restriction ambient and medium temperature -5 - 5 0 °C Without holding current reduction Compressed air in accordance with ISO8573-1:2010 [7:4:4] Redium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]		c UL us - Recognized (OL)
Sealing principle Assembly position Any Manual override Manual override Metenting Pushing Covered Type of piloting Pilot air supply Pilot air supply Pilot air supply Pilot pressure 3 8 bar Suitability for vacuum Yes Switching time off 40 ms Switching time off 13 ms Duty cycle 100% Max. positive test pulse with logic 0 700 µs Max. positive test pulse with logic 1 900 µs Characteristic coil data 24 V DC: 1 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 Ubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Restriction ambient and medium temperature -5 -5 0° C Without holding current reduction Compressed air in accordance with ISO8573-1:2010 [7:4:4] Redium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Nominal size	5.6 mm
Assembly position Manual override Manual override Metenting Pushing Covered Type of piloting Piloted Piloted Piloted Pilot air supply Pushing Covered Type of piloting Piloted Piloted Pilot ressure 3 8 bar Suitability for vacuum Yes Switching time off 40 ms Switching time on 13 ms Duty cycle 100% Max. positive test pulse with logic 0 Max. positive test pulse with logic 1 900 µs Characteristic coil data 24 V DC: 1 W Permissible voltage fluctuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Urbration resistance Transport application test at severity level 2 in accordance with FN 942017-5 and EN 60068-2-6 Shock resistance Shock resistance classification CRC Without holding current reduction Compressed air in accordance with ISO8573-1:2010 [7:4:4] Shock resistance classification CRC Without holding current reduction Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Exhaust-air function	throttleable
Manual override detenting Pushing Covered Type of piloting Piloted Piloted Piloted Piloted Pilot air supply external Pilot pressure 3 8 bar Suitability for vacuum Yes Switching time off 40 ms Switching time on 13 ms Duty cycle 100% Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 Permissible voltage fluctuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Ubiration resistance Transport application test at severity level 2 in accordance with FN 942017-5 and EN 60068-2-6 Without holding current reduction Corrosion resistance classification CRC Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Compressed air in accordance with FN 942017-5 and EN 60068-2-67 Without holding current reduction	Sealing principle	soft
Pushing Covered Type of piloting Pilot air supply Pilot air supply Pilot pressure 3 8 bar Suitability for vacuum Yes Switching time off 40 ms Switching time on 13 ms Duty cycle Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 900 µs Max.negative test pulse with logic 1 900 µs Characteristic coil data 24 V DC: 1 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 at severity level 2 in accordance with FN 942017-5 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Restriction ambient and medium temperature -5 -50 °C Without holding current reduction Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Assembly position	Any
Type of piloting Piloted Pilot air supply external Pilot pressure 3 8 bar Suitability for vacuum Yes Switching time off 40 ms Switching time on 13 ms Duty cycle 100% Max. positive test pulse with logic 0 700 µs 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 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Restriction ambient and medium temperature -5 - 5 0° C Without medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Manual override	detenting
Type of piloting Piloted Pilot air supply external Pilot pressure 3 8 bar Suitability for vacuum Yes Switching time off 40 ms Switching time on 13 ms Duty cycle 100% Max. positive test pulse with logic 0 700 μs Max. negative test pulse with logic 1 900 μs Characteristic coil data 24 V DC: 1 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 at severity level 2 in accordance with 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 Restriction ambient and medium temperature -5 - 50 °C Without holding current reduction Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]		Pushing
Pilot air supply Pilot pressure 3 8 bar Suitability for vacuum Yes Switching time off 40 ms Switching time on 13 ms Duty cycle 100% Max. positive test pulse with logic 0 700 µs Max. negative test pulse with logic 1 900 µs Characteristic coil data 24 V DC: 1 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 Transport application test at severity level 2 in accordance with 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 Restriction ambient and medium temperature -5 -5 0° C Without holding current reduction Corrosion resistance Classification CRC Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]		Covered
Pilot pressure 3 8 bar Suitability for vacuum Yes Switching time off 40 ms Switching time on 13 ms Duty cycle 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 Vibration resistance Transport application test at severity level 2 in accordance with 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 Restriction ambient and medium temperature -5 -5 0 °C Without holding current reduction Compressed air in accordance with ISO8573-1:2010 [7:4:4] Compressed air in accordance with FN 942017-5 and EN 60068-2-7 Which will be severity level 2 in accordance with FN 942017-5 and EN 60068-2-7 Without holding current reduction Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Type of piloting	Piloted
Suitability for vacuum Switching time off 40 ms Switching time on 13 ms Duty cycle 100% Max. positive test pulse with logic 0 700 µs Max. negative test pulse with logic 1 Permissible voltage fluctuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Ubiration resistance Transport application test at severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Restriction ambient and medium temperature Shock resistance classification CRC Q - Moderate corrosion stress Medium temperature Pilot medium Yes 40 ms 40 ms 40 ms 40 ms 50 ms 40 ms 40 ms 50 ms 40 ms 50 ms 40 ms 50 ms 60 ps 6	Pilot air supply	external
Switching time off Switching time on 13 ms Duty cycle 100% Max. positive test pulse with logic 0 700 µs Max. negative test pulse with logic 1 900 µs 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 Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with 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 Restriction ambient and medium temperature -5 - 50 °C Without holding current reduction Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Pilot pressure	3 8 bar
Switching time on 13 ms Duty cycle 100% Max. positive test pulse with logic 0 700 µs Max. negative test pulse with logic 1 900 µs Characteristic coil data 24 V DC: 1 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 at severity level 2 in accordance with 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 Restriction ambient and medium temperature -5 - 50 °C Without holding current reduction Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Suitability for vacuum	Yes
Duty cycle Max. positive test pulse with logic 0 700 μs	Switching time off	40 ms
Max. positive test pulse with logic 0700 μsMax. negative test pulse with logic 1900 μsCharacteristic coil data24 V DC: 1 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 at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6Shock resistanceShock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27Restriction ambient and medium temperature-5 - 50 °CWithout holding current reductionCorrosion resistance classification CRC2 - Moderate corrosion stressMedium temperature-5 60 °CPilot mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]	Switching time on	13 ms
Max. negative test pulse with logic 1900 μsCharacteristic coil data24 V DC: 1 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 at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6Shock resistanceShock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27Restriction ambient and medium temperature-5 - 50 °CWithout holding current reductionCorrosion resistance classification CRC2 - Moderate corrosion stressMedium temperature-5 60 °CPilot mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]	Duty cycle	100%
Characteristic coil data 24 V DC: 1 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 at severity level 2 in accordance with 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 Restriction ambient and medium temperature -5 - 50 °C Without holding current reduction Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Max. positive test pulse with logic 0	700 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 at severity level 2 in accordance with 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 Restriction ambient and medium temperature -5 - 50 °C Without holding current reduction Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Max. negative test pulse with logic 1	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 at severity level 2 in accordance with 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 Restriction ambient and medium temperature -5 - 50 °C Without holding current reduction Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Characteristic coil data	24 V DC: 1 W
Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with 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 Restriction ambient and medium temperature -5 - 50 °C Without holding current reduction Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Permissible voltage fluctuation	+/- 10 %
operation) Vibration resistance Transport application test at severity level 2 in accordance with 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 Restriction ambient and medium temperature -5 - 50 °C Without holding current reduction Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]
Vibration resistance Transport application test at severity level 2 in accordance with 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 Restriction ambient and medium temperature -5 - 50 °C Without holding current reduction Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Note on operating and pilot medium	
Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Restriction ambient and medium temperature -5 - 50 °C Without holding current reduction Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Vibration resistance	Transport application test at severity level 2 in accordance with FN
Restriction ambient and medium temperature -5 - 50 °C Without holding current reduction Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Shock resistance	Shock test with severity level 2 in accordance with FN 942017-5
Corrosion resistance classification CRC 2 - Moderate corrosion stress Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Restriction ambient and medium temperature	-5 - 50 °C
Medium temperature -5 60 °C Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Corrosion resistance classification CRC	
Pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]		
		7 77 7
rampient temperature 1-5 bu C	Ambient temperature	-5 60 °C
Product weight 70 g	•	



Feature	Value
Electrical connection	Via electrical connection plate
Mounting type	on manifold rail
Materials note	Conforms to RoHS
Material seals	HNBR
	NBR
Material housing	Wrought Aluminium alloy