## Air solenoid valve VSVA-B-M52-MZD-A2-1T1L-APP

**FESTO** 

Part number: 573202





General operating condition

## **Data sheet**

Feature	Value
Valve function	5/2, monostable
Actuation type	Electrical
Width	18 mm
Standard nominal flow rate	550 l/min
Pneumatic working port	Sub-base, size 18 mm according to ISO 15407-2 G1/8
Operating voltage	24V DC
Operating pressure	-0.09 MPa 1 MPa
Operating pressure	-0.9 bar 10 bar
Structural design	Piston gate valve
Reset method	Mechanical spring
KC characters	KC EMC
CE marking (see declaration of conformity)	As per EU EMC directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC
Degree of protection	IP65 NEMA 4
Nominal width	5 mm
Exhaust air function	With flow control option Via throttle plate Via individual sub-base
Sealing principle	Soft
Mounting position	Any
Manual override	Detenting Non-detenting Covered
Type of control	Pilot-controlled
Pilot air supply port	External Internal
Flow direction	Non-reversible
Symbol	00997392
Measuring principle	Inductive
Lap	Overlap
Sensor reverse polarity protection	For all electrical connections
Signal status display	LED
Switching position sensing	Normal position with sensor
Sensor switching status indication	LED
Pilot pressure MPa	0.3 MPa 1 MPa
Pilot pressure	3 bar 10 bar

Flow rate of pneumatic valve on individual sub-base Optimized flow rate of pneumatic valve, pneumatically concatenated flow Optimized flow rate of pneumatic valve, pneumatically concatenated flow Optimized flow rate of pneumatic valve pneumatically concatenated flow Strictining time 12 ms Pneumatic valve - sensor ON switching time 12 ms Pneumatic valve - sensor ON switching time 12 ms Pneumatic valve - sensor ON switching time 100% Max. positive test pulse with 0 signal 100% Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse on 1 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse with 0 signal 1000 ps Max. positive test pulse description 1000 ps Max. positive test pulse with 1000 ps Max. positive test pulse with 1000 ps Max. positive test pulse with 1000 ps Max. positive test ps Max. ps Max. positive test ps Max. ps Max	Feature	Value
Flow rate of pneumatic valve on individual sub-base Optimized flow rate of pneumatic valve, pneumatically concatenated flow Optimized flow rate of pneumatic valve pneumatically concatenated flow Stortling time On switching time 12 ms Preumatic valve sensor ON switching time 13 ms Preumatic valve sensor ON switching time Preumatic valve sensor Switching time Preumatic valve sensor Switching time off 100% Max. positive test pubs with 0 signal Max.	Flow rate of pneumatic valve	750 l/min
South Comment   South Commen	Flow rate of pneumatic valve on individual sub-base	600 l/min
Switching time off         38 ms           On switching time         12 ms           Preumatic valve - sensor on Switching time off         9 ms           Duty cycle         100%           Max. positive test pulse with 0 signal         1500 µs           Max. positive test pulse on 1 signal         800 µs           Monario operating voltage DC         74 V           Switching output         PNP           Coll characteristics         2 V V DC 1.6 W           Sugge resistance         2.5 kW           Contamination level         3           Permissible voltage fluctuations         4/-10 %           Operating medium         Compressed air as per ISO 8573-12010 [7:44]           Information on aperating and pilot media         Operation with oil lubrication possible (required for further use)           Vibration resistance         Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-26           Shock resistance         Shock resistance stance class (CRC)         0 No consolon stess           Corrosion resistance dass (CRC)         0 No consolon stess           Cor	Optimized flow rate of pneumatic valve, pneumatically concatenated flow	700 l/min
On switching time         12 ms           Precumatic valve - sensor ON switching time off         9 ms           Duty cycle         100%           Max. positive test pulse with 0 signal         1500 µs           Max. positive test pulse on 1 signal         800 µs           Nominal operating voltage OC         24 V           Switching output         PNP           Coll characteristics         22 V DC1.6 W           Surge resistance         2.5 kV           Contamination level         3           Permissible voltage fluctuations         -/-10 %           Operating medium         Compressed air as per ISO 8573-12010 [7:4:4]           Information on operating and pilot media         Operation with oil lubrication possible (required for further use)           Vibration resistance         Shock resistance           Shock resistance         Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27           Corrosion resistance class (CRO         0 No corrosion stress           LABS (PWIS) conformity         VDMA2436-481/82-1           Temperature of medium         -5 °C 50 °C           Relative air humidity         0 -90 %           Noise level         85 dBIQ           Ambient temperature         -5 °C 50 °C           Max. Egithering torque for valve mou	Optimized flow rate of pneumatic valve pneumatically concatenated flow	550 l/min
Pneumatic valve - sensor ON switching time         32 ms           Pneumatic valve - sensor switching time off         9 ms           Duty cycle         100%           Max. positive test pulse with 0 signal         1500 µs           Maz. negative test pulse on 1 signal         800 µs           Mominal operating voltage DC         24 V           Switching output         PNP           Coll characteristics         24 V DC: 1.6 W           Surge resistance         2.5 kW           Contamination level         3           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 fubrication possible (equired for further use)           Vibration resistance         Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6           Shock resistance         Shock test with severity level 2 as per FN 942017-5 and FN 60068-2-7           Corrosion resistance class (CRC)         0 - No corrosion stress           Corrosion resistance class (CRC)         0 - No corrosion stress           Corrosion resistance class (CRC)         0 - No corrosion stress           Corrosion resistance class (CRC)         0 - No corrosion stress           Corrosion resistance class (CRC)	Switching time off	38 ms
Pneumatic valve - sensor switching time off Duty cycle 100% Max. positive test pulse with 0 signal 1009 ps Max. negative test pulse on 1 signal 800 µs Mominal operating wintage DC 2a V Switchilag output PNP Coll characteristics 2a V DC: 1.6 W Surge resistance Contamination level 3 Permissible voltage fluctuations Querating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Information on operating and pilot media Operating medium Information on operating and pilot media Operation with oil lubrication possible (required for further use) Vibration resistance Transport application test with severity level 2 as per FN 942017-4 and EN 60068-7.2 or Corrosion resistance class (CRC) O- No corrosion stress LABS (PWIS) conformity VDMAx2364-81 [72-1] Temperature of medium Associated and the several possible from the several possible for the se	On switching time	12 ms
Duty cycle	Pneumatic valve - sensor ON switching time	32 ms
Max. positive test pulse on 1 signal  Max. nogative test pulse on 1 signal  Max. nogative test pulse on 1 signal  800 μs  Nominal operating voltage DC  Switching output  Coli characteristics  2 V DC: 1.6 W  Surge resistance  Contamination level  3  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  Shock resistance  Shock tests with severity level 2 as per FN 942017-4 and en 80668-2-6  Shock resistance  Shock tests with severity level 2 as per FN 942017-5 and EN 60069-2-7  Corrosion resistance class (CRC)  O. No corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Temperature of medium  5-9°C 50 °C  Relative air hundity  O. 90 %  Noise level  85 dB(Λ)  Ambient temperature  5-9°C 50 °C  Max. sightening torque for valve mounting  DC sensor operating voltage range  DC sensor operating voltage range  DC sensor operating voltage range  DC sensor operating protection  Pulsed  Sensor short circuit protection  Sensor indic current  410 πA  Max. courted, sensor  2000 πA  Sensor residual ripple  10 %  Sensor residual ripple  1	Pneumatic valve - sensor switching time off	9 ms
Max. negative test pulse on 1 signal         800 µs           Nominal operating voltage DC         24 V           Switching outpt         PMP           Coil characteristics         24 V DC: 1.6 W           Surge resistance         2.5 kW           Contratinisation level         3           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         Shock test with severity level 2 as per FN 942017-4 and EN 60068-2-6           Shock resistance class (CRC)         0 - No corrosion stress           Corrosion resistance class (CRC)         0 - No corrosion stress           Corrosion resistance class (CRC)         0 - No corrosion stress           Corrosion resistance class (CRC)         0 - No corrosion stress           Corrosion mesistance class (CRC)         0 - No corrosion stress           Corrosion mesistance class (CRC)         0 - No corrosion stress           Corrosion mesistance class (CRC)         0 - No corrosion stress           Corrosion mesistance class (CRC)         0 - No corrosion stress           Mass (PWIS) conformity         0 - No corrosion stress           Molica (PWIS) conformity	Duty cycle	100%
Nominal operating voltage DC  Switching output  PNP  Coll characteristics  2x V DC: 1.6 W  Surge resistance  2,5 kV  Contamination level  3  Permissible voltage fluctuations	Max. positive test pulse with 0 signal	1500 μs
Switching output  Coll characteristics  24 V DC: 1.6 W  Surge resistance  2.5 kW  Contamination level  3  Permissible voltage fluctuations  4-7 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 2 as per FN 942017-4 and EN 60068-2-27  Corrosion resistance class (CRC)  Shock resistance class (CRC)  O-No corrosion stress  ALBS (PWIS) conformity  VDMA2364-8-18-2-1  Temperature of medium  5 °C 50 °C  Relative air humidity  0.9 %  Noise level  85 dB(A)  Ambient temperature  3-°C 50 °C  Max. rightening torque for valve mounting  0.8 Nm 1.2 Nm  Product weight  DC sensor operating voltage range  10 V 30 V  Sensor short circuit protection  Pulsed  Sensor rollecurrent, sensor  200 mA  Sensor max. switching frequency  Sensor rollecurrent, sensor  200 mA  Sensor max. switching frequency  Sensor rollecurrent  1 10 %  Sensor connection  Plug  3 sper ISO 15407-2  Plug  3-pin  Max  Type of mounting  On sub-base  Pilot air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 1  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2	Max. negative test pulse on 1 signal	800 μs
Coil characteristics	Nominal operating voltage DC	24 V
Surge resistance Contamination level 3 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 2 as per FN 942017-4 and EN 60068-2-27 Corrosion resistance Shock resistance Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27 Corrosion resistance class (CRC) O - No corrosion stress LABS (PWIS) conformity VDMA2436-481/82-1 Temperature of medium - 5° C 50 °C Relative air humidity O - 90 % Relative air humidity O - 90 % Relative air humidity O - 90 % Max. tightening torque for valve mounting O - 8 Nm 1.2 Nm Product weight 140 g De sensor operating voltage range 10 V 30 V Sensor short circuit protection Pulsed Sensor ille current 110 mA Max. output current, sensor 200 mA Sensor residual ripple 110 % Sensor voltage drop 12 V Sensor voltage drop 12 V Sensor voltage drop 12 V Sensor voltage drop 12 Plug 3-pin M8x.1 Type of mounting On sub-base Pilot air port 12/14 Sub-base, size 18 mm as per ISO 15407-2 Preumatic connection 1 Sub-base, size 18 mm as per ISO 15407-2 Preumatic connection 2 Pheumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2 Preumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2 Preumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2	Switching output	PNP
Contamination level  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  Fransport application test with severity level 2 as per FN 942017-4 and EN 600068-2-6  Shock resistance  Shock resistance (ass (CRC)  O - No corrosion stress  Corrosion resistance class (CRC)  O - No corrosion stress  LABS (PWIS) conformity  VDMA26364-81/82-L  Temperature of medium  -5 *C** 50 *C**  Relative air humidity  O -90 %  Noise level  85 dB(N)  Ambient temperature  5 *SC** 50 *C**  Max. tightening torque for valve mounting  O .8 Nm 1.2 Nm  Product weight  140 g  DC sensor operating voltage range  10 V 30 V  Sensor short circuit protection  Pulsed  Sensor short circuit protection  Pulsed  Sensor idle current  410 mA  Max. output current, sensor  200 mA  Sensor residual ripple  10 %  Sensor voltage drop  Electrical connection  Pulse  Pulse  Sensor voltage drop  Electrical connection  Pulse of mounting  On sub-base  Pilot air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Pheumatic connection 1  Pheumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pheumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pheumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pheumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pheumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2	Coil characteristics	24 V DC: 1.6 W
Permissible voltage fluctuations 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 Shock resistance Shock resistance Shock sest with severity level 2 as per FN 942017-4 and EN 60068-2-6 Corrosion resistance class (CRC) O No corrosion stress LABS (PWIS) conformity VDMA24364-B1/B2-L Temperature of medium -5°C 50°C Relative air humidity O -90 % Noise level S5 dB(A) Ambient temperature -5°C 50°C Max. tightening torque for valve mounting Ox 8 Nm 1.2 Nm Product weight 140 g DC sensor operating voltage range 10 V 30 V Sensor short circuit protection Pulsed Sensor idle current 110 mA Max. output current, sensor Sensor max. switching frequency 5000 Hz Sensor residual ripple 110 % Sensor residual ripple 110 % Sensor rosidual ripple 110 % Sensor connection Plug 3-pin Max.1 Type of mounting On sub-base Pilot air port 12/14 Sub-base, size 18 mm as per ISO 15407-2 Pneumatic connection 1 Sub-base, size 18 mm as per ISO 15407-2 Pneumatic connection 3 Pneumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2 Pneumatic connection 1 Sub-base, size 18 mm as per ISO 15407-2 Pneumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2	Surge resistance	2.5 kV
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 2 as per FN 942017-4 and EN 60068-2-6  Shock resistance  Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance class (CRC)  O - No corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Temperature of medium  -5 °C 50 °C  Relative air humidity  O -90 %  Noise level  85 dB(A)  Ambient temperature  -5 °C 50 °C  Max. tightening torque for valve mounting  DC sensor operating voltage range  10 V 30 V  Sensor operating voltage range  10 V 30 V  Sensor short circuit protection  Pulsed  Sensor idle current  4-10 mA  Max. output current, sensor  200 mA  Sensor max. switching frequency  5000 Hz  Sensor robradual ripple  1 10 %  Sensor robradual ripple  2 10 %  Sensor robradual ripple  2 10 %  Sensor robradual ripple  Sensor robradual ripple  Sensor robradual ripple  Sensor robradual ripple  Detertical connection  4-pin Pulsa 3-pin M8x1  Type of mounting  On sub-base  Pilot air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Plot exhaust air port 82/84  Ducted Not ducted Optionally:  Pneumatic connection 1  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2	Contamination level	3
Information on operating and pilot media Operation with oil lubrication possible (required for further use) Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6 Shock resistance Shock resistance Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27 Corrosion resistance class (CRC) O - No corrosion stress  LABS (PWIS) conformity VDMA24364-B1/B2-L Temperature of medium -5°C50°C Relative air humidity O -90% Noise level 85 dB(A) Ambient temperature -5°C50°C Max. tightening torque for valve mounting 140 g DC sensor operating voltage range 10 v30 v Sensor operating voltage range 10 v30 v Sensor short circuit protection Pulsed Sensor idle current 410 mA Max. output current, sensor 200 mA Sensor max. switching frequency 5000 Hz Sensor residual ripple 110% Sensor voltage drop 22 V Electrical connection Plug 3-pin M8x1  Type of mounting On sub-base Pilot air port 12/14 Sub-base, size 18 mm as per ISO 15407-2 Pneumatic connection 1 Sub-base, size 18 mm as per ISO 15407-2 Pneumatic connection 3 Sub-base, size 18 mm as per ISO 15407-2 Pneumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2 Pneumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2 Pneumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2	Permissible voltage fluctuations	+/- 10 %
Vibration resistance  Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6 Shock resistance  Shock resistance  Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27 Corrosion resistance class (CRC)  0 - No corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/82-L  Temperature of medium  -5 °C 50 °C  Relative air humidity  Noise level  85 dB(A)  Ambient temperature  -5 °C 50 °C  Max. tightening torque for valve mounting  0.8 km 1.2 km  Product weight  140 g  DC sensor operating voltage range  10 v 30 v  Sensor short circuit protection  Pulsed  Sensor idle current  \$10 mA  Max. output current, sensor  200 mA  Sensor idle current  \$10 mA  Sensor voltage drop  \$1 10 %  Sensor voltage drop  \$2 V  Electrical connection  Plug  as per ISO 15407-2  Sensor connection  Plug of mounting  On sub-base  Plot air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2	Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
EN 60068-2-6  Shock resistance  Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance class (CRC)  O No corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Temperature of medium -5°C 50°C  Relative air humidity O 90 %  Noise level 85 dB(A)  Ambient temperature -5°C 50°C  Max. tightening torque for valve mounting O 8 hm 1.2 hm  Product weight 140 g  DC sensor operating voltage range 10 V 30 V  Sensor short circuit protection Pulsed  Sensor tircuit protection Pulsed  Sensor white in frequency Sonon Hz  Sensor worklade drop 110 %  Sensor voltage drop 2 V  Electrical connection Plug as per ISO 15407-2  Sensor connection Plug of mounting On sub-base Plot air port 12/14 Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 1 Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2	Information on operating and pilot media	Operation with oil lubrication possible (required for further use)
Corrosion resistance class (CRC)  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Temperature of medium  -5°C50°C  Relative air humidity  0 -90 %  Noise level  85 dB(A)  Ambient temperature  -5°C50°C  Max. tightening torque for valve mounting  0.8 Nm1.2 Nm  Product weight  140 g  DC sensor operating voltage range  10 V30 V  Sensor short circuit protection  Sensor idle current  410 mA  Max. output current, sensor  200 mA  Sensor max. switching frequency  Sensor ravilating frequency  Sensor voltage drop  Electrical connection  Pulug as per ISO 15407-2  Sensor connection  Plug 3-pin M8x.1  Type of mounting  On sub-base Pilot air port 12/14  Puluted Not ducted Optionally:  Pneumatic connection 2  Pneumatic connection 3  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2	Vibration resistance	
ABS (PWIS) conformity	Shock resistance	Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27
Temperature of medium  5° C 50°C Relative air humidity  0° 90 % Noise level  85 dB(A) Ambient temperature  -5° C 50°C  Max. tightening torque for valve mounting  0.8 Nm 1.2 Nm  Product weight  140 g  DC sensor operating voltage range  10 V 30 V  Sensor short circuit protection  Pulsed  Sensor idle current  410 mA  Max. output current, sensor  Sensor raws. switching frequency  Sensor residual ripple  \$10 W  Sensor voltage drop  \$2 V  Electrical connection  Plug  3-pin  M8x.1  Type of mounting  On sub-base  Pilot air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Pheumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2	Corrosion resistance class (CRC)	0 - No corrosion stress
Temperature of medium  5° C 50°C Relative air humidity  0° 90 % Noise level  85 dB(A) Ambient temperature  -5° C 50°C  Max. tightening torque for valve mounting  0.8 Nm 1.2 Nm  Product weight  140 g  DC sensor operating voltage range  10 V 30 V  Sensor short circuit protection  Pulsed  Sensor idle current  410 mA  Max. output current, sensor  Sensor raws. switching frequency  Sensor residual ripple  \$10 W  Sensor voltage drop  \$2 V  Electrical connection  Plug  3-pin  M8x.1  Type of mounting  On sub-base  Pilot air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Pheumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2	LABS (PWIS) conformity	VDMA24364-B1/B2-L
Noise level 85 dB(A) Ambient temperature -5° C 50° C  Max. tightening torque for valve mounting 0.8 Nm 1.2 Nm  Product weight 140 g  DC sensor operating voltage range 10 V 30 V  Sensor short circuit protection Pulsed  Sensor idle current 110 mA  Max. output current, sensor 200 mA  Sensor residual ripple 110 %  Sensor voltage drop 12 V  Electrical connection 4-pin Plug as per ISO 15407-2  Sensor connection Plug 4	Temperature of medium	-5 °C 50 °C
Noise level 85 dB(A) Ambient temperature -5° C 50° C  Max. tightening torque for valve mounting 0.8 Nm 1.2 Nm  Product weight 140 g  DC sensor operating voltage range 10 V 30 V  Sensor short circuit protection Pulsed  Sensor idle current 110 mA  Max. output current, sensor 200 mA  Sensor residual ripple 110 %  Sensor voltage drop 12 V  Electrical connection 4-pin Plug as per ISO 15407-2  Sensor connection Plug 4	·	0 - 90 %
Max. tightening torque for valve mounting  Product weight  DC sensor operating voltage range  10 V 30 V  Sensor short circuit protection  Pulsed  Sensor idle current  \$10 mA  Max. output current, sensor  \$200 mA  Sensor max. switching frequency  \$5000 Hz  Sensor residual ripple  \$10 %  Sensor voltage drop  \$2 V  Electrical connection  \$4-pin Plug 3-pin M8x1  Type of mounting  Pilot air port 12/14  Pilot exhaust air port 82/84  Ducted Not ducted Optionally:  Pneumatic connection 2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5		85 dB(A)
Product weight  DC sensor operating voltage range  10 V 30 V  Sensor short circuit protection  Pulsed  Sensor idle current  410 mA  Max. output current, sensor  200 mA  Sensor max. switching frequency  5000 Hz  Sensor residual ripple  ± 10 %  Sensor voltage drop  Electrical connection  Plug as per ISO 15407-2  Sensor connection  Plug as per ISO 15407-2  Plud air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 2  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2	Ambient temperature	-5 °C 50 °C
DC sensor operating voltage range  10 V 30 V  Sensor short circuit protection  Pulsed  Sensor idle current  \$10 mA  Max. output current, sensor  200 mA  Sensor max. switching frequency  Sensor residual ripple  \$10 %  Sensor voltage drop  Electrical connection  Plug as per ISO 15407-2  Sensor connection  Plug 3-pin M8x1  Type of mounting  On sub-base Pilot air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2	Max. tightening torque for valve mounting	0.8 Nm 1.2 Nm
Sensor short circuit protection  Sensor idle current  \$10 mA  Max. output current, sensor  \$200 mA  Sensor max. switching frequency  \$5000 Hz  Sensor residual ripple  \$10 %  Sensor voltage drop  \$2 V  Electrical connection  \$4-pin Plug as per ISO 15407-2  Sensor connection  Plug 3-pin M8x1  Type of mounting  On sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 1  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5	Product weight	140 g
Sensor short circuit protection  Sensor idle current  \$10 mA  Max. output current, sensor  \$200 mA  Sensor max. switching frequency  \$5000 Hz  Sensor residual ripple  \$10 %  Sensor voltage drop  \$2 V  Electrical connection  \$4-pin Plug as per ISO 15407-2  Sensor connection  Plug 3-pin M8x1  Type of mounting  On sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 2  Pneumatic connection 2  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5	DC sensor operating voltage range	10 V 30 V
Sensor idle current  Max. output current, sensor  Sensor max. switching frequency  Sensor residual ripple  \$10 %  Sensor voltage drop  \$2 V  Electrical connection  4-pin Plug as per ISO 15407-2  Sensor connection  Plug 3-pin M8x1  Type of mounting  On sub-base  Pilot air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 2  Pneumatic connection 2  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 2  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2		Pulsed
Sensor max. switching frequency  Sensor residual ripple  \$10 %  Sensor voltage drop  \$2 V  Electrical connection  \$4-pin Plug as per ISO 15407-2  Sensor connection  Plug 3-pin M8x1  Type of mounting  On sub-base  Pilot air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Pleumatic connection 1  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 2  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2	· · · · · · · · · · · · · · · · · · ·	≤10 mA
Sensor residual ripple  \$2 V\$  Electrical connection  \$4-pin Plug as per ISO 15407-2  Sensor connection  \$Plug 3-pin M8x1  Type of mounting  On sub-base  Pilot air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Plug Mot ducted Optionally:  Pneumatic connection 1  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 2  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5	Max. output current, sensor	200 mA
Sensor voltage drop  Electrical connection  4-pin Plug as per ISO 15407-2  Sensor connection  Plug 3-pin M8x1  Type of mounting  On sub-base Pilot air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 1  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 2  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Sub-base, size 18 mm as per ISO 15407-2  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2	Sensor max. switching frequency	5000 Hz
Electrical connection  4-pin Plug as per ISO 15407-2  Sensor connection  Plug 3-pin M8x1  Type of mounting  On sub-base  Pilot air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Pilot exhaust air port 82/84  Ducted Not ducted Optionally:  Pneumatic connection 1  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 2  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2	Sensor residual ripple	± 10 %
Piug as per ISO 15407-2  Sensor connection  Plug 3-pin M8x1  Type of mounting  On sub-base  Pilot air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Pieumatic connection 1  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 2  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5	Sensor voltage drop	≤2 V
3-pin M8x1  Type of mounting On sub-base Pilot air port 12/14 Sub-base, size 18 mm as per ISO 15407-2  Pilot exhaust air port 82/84 Ducted Not ducted Optionally:  Pneumatic connection 1 Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 2 Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3 Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4 Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2  Sub-base, size 18 mm as per ISO 15407-2	Electrical connection	Plug
Pilot air port 12/14  Sub-base, size 18 mm as per ISO 15407-2  Pilot exhaust air port 82/84  Ducted Not ducted Optionally:  Pneumatic connection 1  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 2  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Sub-base, size 18 mm as per ISO 15407-2	Sensor connection	3-pin
Pilot exhaust air port 82/84  Ducted Not ducted Optionally:  Pneumatic connection 1  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Sub-base, size 18 mm as per ISO 15407-2  Sub-base, size 18 mm as per ISO 15407-2	Type of mounting	On sub-base
Not ducted Optionally:  Pneumatic connection 1  Pneumatic connection 2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2  Sub-base, size 18 mm as per ISO 15407-2	Pilot air port 12/14	Sub-base, size 18 mm as per ISO 15407-2
Pneumatic connection 2  Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2	Pilot exhaust air port 82/84	Not ducted
Pneumatic connection 3  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 4  Sub-base, size 18 mm as per ISO 15407-2  Pneumatic connection 5  Sub-base, size 18 mm as per ISO 15407-2	Pneumatic connection 1	Sub-base, size 18 mm as per ISO 15407-2
Pneumatic connection 4 Sub-base, size 18 mm as per ISO 15407-2 Pneumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2	Pneumatic connection 2	Sub-base, size 18 mm as per ISO 15407-2
Pneumatic connection 5 Sub-base, size 18 mm as per ISO 15407-2	Pneumatic connection 3	Sub-base, size 18 mm as per ISO 15407-2
	Pneumatic connection 4	Sub-base, size 18 mm as per ISO 15407-2
Note on materials RoHS-compliant	Pneumatic connection 5	Sub-base, size 18 mm as per ISO 15407-2
	Note on materials	RoHS-compliant

Feature	Value
	FPM NBR
•	Die-cast aluminum PA
Material of screws	Steel, galvanized
Switching element function	N/C contact