

# Air solenoid valve VSVA-B-P53U-H-A2-1C1

Part number: 546705

FESTO



[General operating condition](#)

## Data sheet

Feature	Value
Valve function	5/3, pressurized
Actuation type	Electrical
Valve size	18 mm
Normal nominal flow rate (normalized to DIN 1343)	450 l/min
Pneumatic working port	Sub-base, size 18 mm as per ISO 15407-1 Connecting plate size 02 according to VDMA 24563 G1/8
Operating voltage	24V DC
Operating pressure	0.3 MPa ... 1 MPa
Operating pressure	3 bar ... 10 bar
Structural design	Piston gate valve
Reset method	Mechanical spring
Certification	c UL us - Recognized (OL)
Degree of protection	IP65 NEMA 4
Nominal width	5 mm
Exhaust air function	With flow control option
Sealing principle	Soft
Mounting position	Any
Conforms to standard	ISO 15407-1 VDMA 24563
Manual override	Non-detenting
Type of control	Pilot-controlled
Pilot air supply port	Internal
Flow direction	Non-reversible
Symbol	00991083
Lap	Overlap
Signal status display	LED
Pilot pressure MPa	0.3 MPa ... 1 MPa
Pilot pressure	3 bar ... 10 bar
Flow rate of pneumatic valve	650 l/min
Flow rate of pneumatic valve on individual sub-base	500 l/min
Optimized flow rate of pneumatic valve pneumatically concatenated flow	450 l/min
Switching time off	30 ms
On switching time	18 ms
Changeover time	20 ms
Duty cycle	100%

Feature	Value
Max. positive test pulse with 0 signal	1800 µs
Max. negative test pulse on 1 signal	800 µs
Coil characteristics	24 V DC: 1.8 W
Permissible voltage fluctuations	-15 % / +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 60068-2-6
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/B2-L
Temperature of medium	-5 °C ... 50 °C
Relative air humidity	0 - 90 %
Noise level	85 dB(A)
Pilot medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
Ambient temperature	-5 °C ... 50 °C
Max. tightening torque for valve mounting	0.9 Nm ... 1.1 Nm
Product weight	174 g
Electrical connection	Form C as per DIN EN 175301-803 Without PE conductor
Type of mounting	On sub-base
Auxiliary pilot air port 12	Sub-base, size 18 mm as per ISO 15407-1
Auxiliary pilot air port 14	Sub-base, size 18 mm as per ISO 15407-1
Pilot exhaust air port 82/84	Ducted Not ducted as per standard
Pneumatic connection 1	Sub-base, size 18 mm as per ISO 15407-1
Pneumatic connection 2	Sub-base, size 18 mm as per ISO 15407-1
Pneumatic connection 3	Sub-base, size 18 mm as per ISO 15407-1
Pneumatic connection 4	Sub-base, size 18 mm as per ISO 15407-1
Pneumatic connection 5	Sub-base, size 18 mm as per ISO 15407-1
Pilot interface	as per ISO 15218
Note on materials	RoHS-compliant
Seals material	HNBR NBR
Housing material	Die-cast aluminum
Material of screws	Steel Galvanized