

Air solenoid valve VSVA-B-P53U-ZH-A1-1R5L

FESTO

Part number: 534551



 [General operating condition](#)

Data sheet

Feature	Value
Valve function	5/3, pressurized
Actuation type	Electrical
Width	26 mm
Normal nominal flow rate (normalized to DIN 1343)	1000 l/min
Pneumatic working port	Sub-base, size 26 mm according to ISO 15407-1
Operating voltage	24V DC
Operating pressure	-0.09 MPa ... 1.6 MPa
Operating pressure	-0.9 bar ... 16 bar
Structural design	Piston gate valve
Reset method	Mechanical spring
Certification	RCM compliance mark c UL us - Recognized (OL)
CE marking (see declaration of conformity)	As per EU EMC directive
UKCA marking (see declaration of conformity)	To UK RoHS instructions
Degree of protection	IP65 NEMA 4
Nominal width	9 mm
Width dimension	27 mm
Exhaust air function	With flow control option Via throttle plate Via individual sub-base
Sealing principle	Soft
Mounting position	Any
Conforms to standard	ISO 15407-1
Manual override	Non-detenting
Type of control	Pilot-controlled
Pilot air supply port	External
Flow direction	Any
Symbol	00992940
Lap	Overlap
Reverse polarity protection	for all electrical connections
Additional functions	Safety shut-down
Signal status display	LED
Pilot pressure MPa	0.3 MPa ... 0.8 MPa
Pilot pressure	3 bar ... 8 bar
Flow rate of pneumatic valve	1400 l/min
Flow rate of pneumatic valve on individual sub-base	1100 l/min

Feature	Value
Optimized flow rate of pneumatic valve pneumatically concatenated flow	1000 l/min
Switching time off	52 ms
On switching time	20 ms
Duty cycle	100%
Max. positive test pulse with 0 signal	400 µs
Max. negative test pulse on 1 signal	100 µs
Nominal pick-up current per solenoid coil	110 mA to 20 ms
Nominal current with current reduction	30 mA after 20 ms
Coil characteristics	24 V DC: low-current phase 1.0 W, high-current phase 2.4 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 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)	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Temperature of medium	-5 °C ... 50 °C
Relative air humidity	0 - 90 %
Protection against direct and indirect contact	PELV
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	1.8 Nm ... 2.2 Nm
Product weight	270 g
Electrical connection	3-pin M12x1 Central plug Round design
Type of mounting	On sub-base With through-hole and screw
Pilot air port 12/14	Sub-base, size 26 mm as per ISO 15407-1
Pilot exhaust air port 82/84	Ducted Not ducted as per standard Optionally:
Note on materials	RoHS-compliant
Seals material	FPM HNBR NBR
Housing material	Die-cast aluminum