

solenoid valve

VSVA-B-P53U-ZH-A1-1R5L

Part number: 534551

FESTO

with central plug, round design M12x1.



Data sheet

Feature	Value
Valve function	5/3 pressurised
Type of actuation	electrical
Width	26 mm
Standard nominal flow rate	1,000 l/min
Operating pressure MPa	-0.09 ... 1.6 MPa
Operating pressure	-0.9 ... 16 bar
Design structure	Piston slide
Type of reset	mechanical spring
Authorisation	RCM Mark c UL us - Recognized (OL)
CE mark (see declaration of conformity)	to EU directive for EMC
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Protection class	IP65 NEMA 4
Nominal size	9 mm
Grid dimension	27 mm
Exhaust-air function	throttleable Via throttle plate Via individual sub-base
Sealing principle	soft
Assembly position	Any
Conforms to standard	ISO 15407-1
Manual override	Pushing
Type of piloting	Piloted
Pilot air supply	external
Flow direction	Any
Overlap	Positive overlap
Polarity protected	for all electrical connections
Additional functions	Reduction of holding current Safety shut-off
Signal status display	LED
Pilot pressure MPa	0.3 ... 0.8 MPa
Pilot pressure	3 ... 8 bar
Flow rate of valve	1,400 l/min
Flow rate of valve on individual sub-base	1,100 l/min
Flow rate of pneumatically linked valve	1,000 l/min
Switching time off	52 ms
Switching time on	20 ms
Duty cycle	100 %
Max. positive test pulse with logic 0	400 µs
Max. negative test pulse with logic 1	100 µs
Nominal breakaway current per solenoid coil	110 mA up to 20 ms
Nominal current with current reduction	30 mA after 20 ms

Feature	Value
Characteristic coil data	24 V DC: low-current phase 1 W, high-current phase 2.4 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
Corrosion resistance classification CRC	2 - Moderate corrosion stress
PWIS conformity	VDMA24364-B1/B2-L
Medium temperature	-5 ... 50 °C
Relative air humidity	0 - 90 %
Protection against direct and indirect contact	Protective extra-low voltage with safe disconnection (PELV)
Pilot medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]
Ambient temperature	-5 ... 50 °C
Max. tightening torque, valve mounting	1.8 ... 2.2 Nm
Product weight	270 g
Electrical connection	3-pin M12x1 Central plug Round design
Mounting type	On sub-base With through-hole and screw
Auxiliary pilot air port 12/14	Connection plate size 26 mm, according to ISO 15407-1
Pilot exhaust port 82/84	Optional Not ducted as per standard Ducted
Materials note	Conforms to RoHS
Material seals	FPM HNBR NBR
Material housing	Aluminium die cast