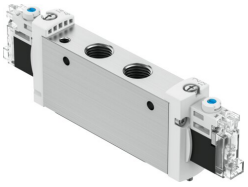
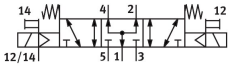
Solenoid valve
VUVG-L18-P53U-ZT-G14-1H2L-F1A

Part number: 8172849





Data sheet

Feature	Value
Valve function	5/3-way, pressurised
Type of actuation	Electrical
Valve size	18 mm
Standard nominal flow rate (standardised to DIN 1343)	1000 l/min
pneumatic working port	G1/4
Operating voltage	24 V DC
Operating pressure	-0.09 MPa...1 MPa -0.9 bar...10 bar
Design	Piston gate valve
Type of reset	Mechanical spring
Approval	RCM c UL us - Recognised (Oil)
Certificate issuing authority	UL MH19482
Degree of protection	IP40
Nominal size	6.5 mm
Exhaust-air function	Can be throttled
Sealing principle	Soft
Mounting position	Any
Manual override	Detenting Non-detenting Concealed
Type of piloting	Piloted
Pilot air supply	External
lap	Indeterminate overlap
Pilot pressure	0.3 MPa...0.8 MPa 3 bar...8 bar
Suitability for vacuum	Yes
Switching time off	68 ms
Switching time on	20 ms
Switching time reversal	39 ms
Duty cycle	100%
Max. positive test pulse with 0 signal	700 µs
Max. negative test pulse with 1 signal	900 µs

Feature	Value
Characteristic coil data	24 V DC: 0.8 W
Permissible voltage fluctuations	+/-10%
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Vibration resistance	Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6
Restrictions for environmental and media temperature	-5 - 50 °C Without holding current reduction
Shock resistance	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27
Corrosion resistance class CRC	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Suitability for the production of Li-ion batteries	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)
Cleanroom suitability, measured according to ISO 14644-14	Class 5 according to ISO 14644-1
Storage temperature	-20 °C...60 °C
Media temperature	-5 °C...50 °C
Pilot medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Ambient temperature	-5 °C...50 °C
Product weight	164 g
Electrical connection	2-pin Plug pattern H, horizontal connection Plug
Type of mounting	Either: On manifold rail With through-hole
Pilot air port 12/14	M5
Pneumatic connection, port 1	G1/4
Pneumatic connection, port 2	G1/4
Pneumatic connection, port 3	G1/4
Pneumatic connection, port 4	G1/4
Pneumatic connection, port 5	G1/4
Note on materials	RoHS compliant
Material seals	HNBR NBR
Material housing	Wrought aluminium alloy
Material screws	Coated steel