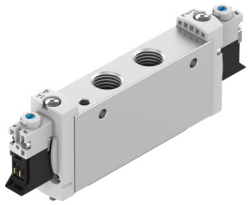
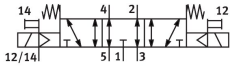
Solenoid valve
VUVG-L18-P53E-ZT-G14-1P3

Part number: 574441





Data sheet

Feature	Value
Valve function	5/3 exhausted
Type of actuation	Electrical
Valve size	18 mm
Standard nominal flow rate (standardised to DIN 1343)	910 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)
CE mark (see declaration of conformity)	To EU EMC Directive To EU Low Voltage Directive In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions To UK regulations for electrical equipment
Degree of protection	IP40 IP65 With plug socket
Nominal size	6.3 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
Switching time off	48 ms

Feature	Value
Switching time on	15 ms
Switching time reversal	29 ms
Duty cycle	100%
Max. positive test pulse with 0 signal	700 µs
Max. negative test pulse with 1 signal	900 µs
Characteristic coil data	24 V DC: 1.0 W 24 V DC: low-current phase 0.3 W, high-current phase 1.0 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	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Cleanroom suitability, measured according to ISO 14644-14	Class 5 according to ISO 14644-1
Media temperature	-5 °C...60 °C
Pilot medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Ambient temperature	-5 °C...60 °C
Product weight	160 g
Electrical connection	Via electrical sub-base
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