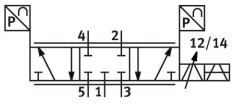
Proportional directional control valve
VPWP-10-L-5-Q-10-E-G-EX1

Part number: 1552544





Data sheet

Feature	Value
Nominal width	10 mm
Actuation type	Electrical
Sealing principle	Hard
Mounting position	Any Preferably horizontal (display elements facing upwards); if the pneumatic valve is moved, it must be mounted at right angles to the direction of movement
Structural design	Piston gate valve With integrated pressure sensors
Reset method	Magnetic spring
Safety instructions	VPWP safety position: the blocked mid-position is approached in case of a control interface malfunction.
Type of control	directly
Flow direction	Non-reversible
Valve function	5/3 proportional directional control valve, closed
Status indications	LED yellow = PL (power load) LED green = power Red LED = error
Operating pressure	0 MPa...1 MPa 0 bar...10 bar
Operating pressure for positioning/soft stop	4 bar...8 bar
Nominal operating pressure	0.6 MPa 6 bar 87 psi
Normal nominal flow rate (normalized to DIN 1343)	2000 l/min
Nominal operating voltage DC	24 V
DC operating voltage range	18 V...30 V
Load voltage range DC	18 V...30 V
Max. load current at voltage output	500 mA
Max. load current of the digital output	500 mA
Max. current consumption, valve drive	1.2 A
Logic max. current consumption	0.15 A
Nominal voltage DC	24 V
Supply voltage of the digital output	24 V load voltage

Feature	Value
Supply voltage of the voltage output	24 V load voltage
Certification	RCM compliance mark
CE marking (see declaration of conformity)	As per EU EMC directive as per EU explosion protection directive (ATEX) As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC acc. to UK EX instructions To UK RoHS instructions
Explosion prevention and protection	Zone 2 (ATEX)
ATEX category gas	II 3G
Type of ignition protection for gas	Ex nA IIC T5 X Gc
Explosive ambient temperature	0°C <= Ta <= +50°C
Operating medium	Compressed air as per ISO 8573-1:2010 [6:4:4]
Information on operating and pilot media	Operation with oil lubrication not possible
Corrosion resistance class (CRC)	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Temperature of medium	0 °C...50 °C
Degree of protection	IP65 In mounted state
Ambient temperature	0 °C...50 °C
Product weight	1010 g
Pressure resolution	0.01 bar
Linearity error FS	1.5 %
Repetition accuracy FS	1 %
Design of the 24 V voltage output	Reverse supply without destruction No galvanic isolation Short circuit-proof Reverse supply without destruction
Digital output design	As per IEC 61131-2 Positive logic (PNP) No galvanic isolation Short circuit-proof Reverse supply without destruction
Control interface	digital CAN bus with Festo protocol Terminating resistor integrated
Fieldbus interface electrical connection IN	Plug M9 5-pin
Fieldbus interface electrical connection OUT	Socket M9 5-pin
Fieldbus interface electrical connection	Socket M8 4-pin
Type of mounting	With through-hole With accessories
Color of connections	Connection 2: Blue Connection 4: Black
Pneumatic connection 1	G3/8
Pneumatic connection 2	G3/8
Pneumatic connection 3	G3/8
Pneumatic connection 4	G3/8
Pneumatic connection 5	G3/8
Note on materials	RoHS compliant
Cover material	PA-reinforced
Housing material	Wrought aluminum alloy Anodized