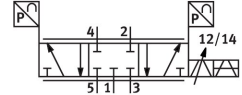


Proportional directional control valve VPWP-6-

FESTO

Part number: 550171



General operating condition

Data sheet

Overall data sheet – Individual values depend upon your configuration.

Feature	Value
Nominal size	6 mm
Type of actuation	Electrical
Sealing principle	Hard
Mounting position	Any Preferably horizontal (display elements facing upwards) If the valve is moved, it must be mounted at a right angle to the direction of movement
Design	Piston gate valve With integrated pressure sensors
Type of reset	Magnetic spring
Safety instructions	Safety position VPWP: if there is a problem with the control interface, the valve assumes the closed mid-position.
Type of piloting	Direct
Flow direction	Non-reversible
Symbol	00992136
Valve function	5/3-way proportional directional control valve, closed
Status displays	LED yellow = PL (power load) LED green = power Red LED = error
Operating pressure	0 MPa ... 1 MPa
Operating pressure	0 bar ... 10 bar
Operating pressure positioning/Soft Stop	4 bar ... 8 bar
Nominal operating pressure	0.6 MPa
Nominal operating pressure	6 bar
Nominal operating pressure	87 psi
Standard nominal flow rate (standardised to DIN 1343)	700 l/min
Nominal operating voltage DC	24 V
Operational voltage range DC	18 V ... 30 V
Load voltage range DC	18 V ... 30 V
Max. load current of the voltage output	500 mA
Max. load current of the digital output	500 mA
Max. current consumption of valve drive	1.2 A
Max. current consumption, logic	0.15 A
Nominal load voltage DC	24 V
Supply voltage of the digital output	24 V load voltage
Supply voltage of the voltage output	24 V load voltage
Approval	RCM

Feature	Value
CE mark (see declaration of conformity)	To EU EMC Directive To EU Explosion Protection Directive (ATEX) In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK RoHS instructions
Explosion protection	Zone 2 (ATEX)
ATEX category gas	II 3G
Explosion ignition protection type for gas	Ex nA IIC T5 X Gc
Explosion ambient temperature	0°C ≤ Ta ≤ +50°C
Operating medium	Compressed air to ISO 8573-1:2010 [6:4:4]
Note on operating and pilot medium	Lubricated operation not possible
Corrosion resistance class CRC	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Media temperature	0 °C ... 50 °C
Degree of protection	IP65 In mounted state
Ambient temperature	0 °C ... 50 °C
Product weight	776 g
Pressure resolution	0.01 bar
Linearity error in ± %FS	<1.5 %
Repetition accuracy FS	<1 %
Design of the 24 V voltage output	Reverse supply with no damage No galvanic isolation Protected against short circuits Reverse supply with no damage
Digital output design	To IEC 61131-2 positive logic (PNP) No galvanic isolation Protected against short circuits Reverse supply with no damage
Control-Interface	Digital CAN bus with Festo protocol Integrated terminating resistor
Electrical connection fieldbus interface IN	Plug M9 5-pin
Electrical connection fieldbus interface OUT	Socket M9 5-pin
Fieldbus interface electrical connection	Socket M8 4-pin
Type of mounting	With through-hole With accessories
Colour of connections	Port 2: Blue Port 4: Black
Pneumatic connection, port 1	G1/8
Pneumatic connection, port 2	G1/8
Pneumatic connection, port 3	G1/8
Pneumatic connection, port 4	G1/8
Pneumatic connection, port 5	G1/8
Note on materials	RoHS compliant
Material cover	Reinforced PA
Material housing	Wrought aluminium alloy anodised