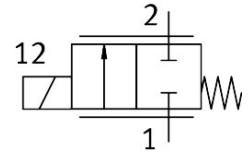


# Proportional directional control valve VPWS-1-B-6-PC15-10-V

FESTO

Part number: 8186783



 General operating condition

## Data sheet

Feature	Value
Nominal size	1 mm
Type of actuation	Electrical
Sealing principle	Soft
Mounting position	Any
Design	Directly actuated poppet valve
Type of reset	Mechanical spring
Type of piloting	Direct
Flow direction	Non-reversible
Symbol	00995954
Valve function	2/2 proportional directional control valve, closed
Operating pressure	0 MPa ... 1 MPa
Operating pressure	0 bar ... 10 bar
Nominal operating pressure	1 MPa
Nominal operating pressure	10 bar
Nominal operating pressure	145 psi
Burst pressure	3 MPa
Burst pressure	30 bar
Burst pressure	435 psi
Standard flow rate (standardised to DIN 1343)	68 l/min ... 88 l/min
Hysteresis	16 mA
Max. switching frequency	18 Hz
Current regulating range	0 mA ... 200 mA
Max. electrical power consumption	2.5 W
Coil resistance R20	60.5 Ohm
Duty cycle	100% (see operating instructions)
Frequency PWM control	>3 kHz
Voltage PWM control	24 V
Note on PWM control	The permissible current range must not be exceeded when using pulse-width modulation.
Oxygen suitability according to standard	ISO 15001
Biocompatibility according to standard	ISO 18562
Maximum impurity level for hydrocarbons	550 mg/m <sup>2</sup>
Vibration resistance	Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6
Note on vibration resistance	Oscillation in the Z direction can lead to fluctuations in the flow rate

Feature	Value
Shock resistance	Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27
Note on shock resistance	A shock in the Z-direction can lead to fluctuations in the flow rate
Corrosion resistance class CRC	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Medium	Inert gases Air Oxygen
Note on the medium	Lubricated operation not possible Maximum particle size 10 µm
Media temperature	5 °C ... 50 °C
Degree of protection	IP60
Note on degree of protection	In mounted state
Ambient temperature	5 °C ... 50 °C
Storage temperature	-40 °C ... 80 °C
Product weight	23 g
Electrical connection 1, connection type	Cable
Electrical connection 1, connector system	Open end
Electrical connection 1, number of connections/cores	2
Cable length	0.07 m ... 0.08 m
Type of mounting	On sub-base Plug-in With accessories
Pneumatic connection, port 1	Cartridge 15 mm
Pneumatic connection, port 2	Cartridge 7.2 mm
Note on materials	RoHS compliant
Material seals	Fluoro rubber
Material housing	High-alloy steel