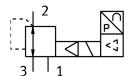
Proportional pressure control valve VPPM-8L-L-1-G14-0L10H-A4P-S1C1

FESTO

Part number: 571290





Data sheet

General operating condition

Exhaust nominal width 7 mm Actuation type Electrical Sealing principle Soft Mounting position Any Structural design Pilot-controlled diaphragm regulator Short-circuit protection For all electrical connections Safety instructions VPPM safety position: if the supply cable breaks, the outlet pressure is maintained in uncontrolled form. Symbol 00995303 Reverse polarity protection for all electrical connections Reset method Mechanical spring Type of control Valve function 3-way proportional pressure control valve Display type Back-lit LCD Pressure regulation range MPa 0.01 MPa 1 MPa Pressure regulation range MPa 0.02 har 10 bar Inlet pressure 1 0 bar 11 bar Inlet pressure 1 MPa 0 MPa 1.1 MPa Max. pressure hysteresis 0.05 bar Standard nominal flow rate 2750 l/min DC operating voltage range 21.6 V 26.4 V Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption PNP Residual ripple 10 % Switching output Analog input signal range 4-20 mA Analog input signal range 4-20 mA Analog input signal range Comperating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Operation with oil lubrication not possible Certification CRM compliance mark c UL us - Listed (OL)	Feature	Value
Actuation type Electrical Sealing principle Soft Mounting position Any Short-circuit protection For all electrical connections Safety instructions VPPM safety position: if the supply cable breaks, the outlet pressure is maintained in uncontrolled form. Symbol CO0995303 Reverse polarity protection For all electrical connections Symbol CO0995303 Reverse polarity protection For all electrical connections Reset method Mechanical spring Type of control Pilot-controlled Valve function 3-way proportional pressure control valve Display type Back-lit LCD Pressure regulation range MPa O.01 MPa 1 MPa Pressure regulation range O.1 bar 10 bar Inlet pressure 1 O bar 11 bar Inlet pressure 1 O bar 11 MPa Max. pressure hysteresis O.05 bar Standard nominal flow rate 2750 1/min DC operating voltage range 21.6 V 26.4 V Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output PNP Analog output signal range 4 - 20 mA Analog input signal range 4 - 20 mA Analog input signal range Compressed air as per ISO 8573-1:2010 [7.4:4] Inert gas Information on operating and pilot media Operating with oil lubrication not possible Certification Compressed air as per ISO 8573-1:2010 [7.4:4] Inert gas Information on operating and pilot media Operating medium Compressed air as per ISO 8573-1:2010 [7.4:4] Inert gas	Nominal width pressurization	8 mm
Sealing principle Soft Mounting position Any Structural design Pilot-controlled diaphragm regulator For all electrical connections Safety instructions VPPM safety position: if the supply cable breaks, the outlet pressure is maintained in uncontrolled form. Symbol Symbol Symbol Symbol Reverse polarity protection For all electrical connections Reverse polarity protection For all electrical connections Reset method Mechanical spring Type of control Pilot-controlled Valve function 3-way proportional pressure control valve Display type Back-lit LCD Pressure regulation range MPa Ool MPa 1 MPa Pressure regulation range Ol bar 10 bar Inlet pressure 1 Inlet pressure 1 Nax. pressure hysteresis Oosb bar Standard nominal flow rate DC operating voltage range 21.6 V 26.4 V Max. current consumption Duty cycle 100% Max. electrical power consumption TW Residual ripple 10 % Switching output PNP Analog output signal range 4 - 20 mA Analog input signal range Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Certification RCM compliance mark cUL us - Listed (OL)	Exhaust nominal width	7 mm
Mounting position Structural design Pilot-controlled diaphragm regulator For all electrical connections Safety instructions VPPM safety position: if the supply cable breaks, the outlet pressure is maintained in uncontrolled form. Symbol O0995303 Reverse polarity protection for all electrical connections Reset method Mechanical spring Pilot-controlled Valve function Jaway proportional pressure control valve Display type Back-lit LCD Pressure regulation range MPa O1 MPa 1 MPa Pressure regulation range MPa O1 MPa 1 MPa Inlet pressure 1 Obar 1 D bar Inlet pressure 1 MPa Max. pressure hysteresis O.05 bar Standard nominal flow rate DC operating voltage range 21.6 V 26.4 V Max. current consumption Max. electrical power consumption T W Residual ripple 10 % Switching output PNP Analog on put signal range 4 - 20 mA Analog input signal range Certification RCM compliance mark cUL us - Listed (OL)	Actuation type	Electrical
Structural design Pilot-controlled diaphragm regulator Short-circuit protection For all electrical connections Safety instructions VPPM safety position: if the supply cable breaks, the outlet pressure is maintained in uncontrolled form. Symbol 0995303 Reverse polarity protection for all electrical connections Reset method Mechanical spring Type of control Pilot-controlled Valve function 3-way proportional pressure control valve Display type Back-lift LCD Pressure regulation range MPa 0.01 MPa 1 MPa Pressure regulation range MPa 0.10 MPa 1 MPa Pressure regulation range 0.1 bar 11 bar Inlet pressure 1	Sealing principle	Soft
Short-circuit protection Safety instructions WPPM safety position: if the supply cable breaks, the outlet pressure is maintalined in uncontrolled form. Symbol 00995303 Reverse polarity protection for all electrical connections Reset method Mechanical spring Type of control Pilot-controlled Walve function 3-way proportional pressure control valve Display type Back-lit LCD Pressure regulation range MPa 0.01 MPa 1 MPa Pressure regulation range 0.1 bar 10 bar Inlet pressure 1 10 bar 11 MPa Max. pressure hysteresis 0.05 bar Standard nominal flow rate 2750 l/min Duty cycle 100% Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output Analog output signal range 4 - 20 mA Analog output signal range Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Operation with oil lubrication not possible Certification ReM compliance mark cul Lu s - Listed (OL)	Mounting position	Any
Safety instructions VPPM safety position: if the supply cable breaks, the outlet pressure is maintained in uncontrolled form. Symbol O0995303 Reverse polarity protection Reset method Mechanical spring Type of control Pilot-controlled Valve function 3-way proportional pressure control valve Back-lit LCD Pressure regulation range MPa O.01 MPa 1 MPa Pressure regulation range O.1 bar 10 bar Inlet pressure 1 O bar 11 MPa Max. pressure 1 MPa Max. pressure hysteresis O.05 bar Standard nominal flow rate 2750 I/min DC operating voltage range 21.6 V 26.4 V Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output PNP Analog output signal range 4 · 20 mA Analog input signal range Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Certification RCM compiliance mark c UL us - Listed (OL)	Structural design	Pilot-controlled diaphragm regulator
Symbol 00995303 Reverse polarity protection for all electrical connections Reset method Mechanical spring Type of control Pilot-controlled Valve function 3-way proportional pressure control valve Display type Back-lit LCD Pressure regulation range MPa 0.01 MPa 1 MPa Pressure regulation range Pressure regulation range 00.1 bar 10 bar Inlet pressure 1 0 bar 11 bar Inlet pressure 1 0 MPa 1.1 MPa Max. pressure hysteresis 0.05 bar Standard nominal flow rate 2750 I/min DC operating voltage range 21.6 V 26.4 V Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output PNP Analog output signal range 4 · 20 mA Analog input signal range 4 · 20 mA Analog input signal range 4 · 20 mA Analog input signal range 0 Operating with oil lubrication not possible Certification RCM Compiliance mark cUL us - Listed (OL)	Short-circuit protection	For all electrical connections
Reverse polarity protection Reset method Mechanical spring Type of control Pilot-controlled Valve function 3-way proportional pressure control valve Display type Back-lit LCD Pressure regulation range MPa O.01 MPa 1 MPa Pressure regulation range MPa O.1 bar 10 bar Inlet pressure 1 Inlet pressure 1 0 bar 11 MPa Max. pressure hysteresis O.05 bar Standard nominal flow rate DC operating voltage range 21.6 V 26.4 V Max. current consumption Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output PNP Analog output signal range 4 - 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inlert gas Information on operating and pilot media Operation with oil lubrication not possible Certification RC Compliance mark c UL us - Listed (OL)	Safety instructions	
Reset method Mechanical spring Type of control Pilot-controlled Valve function 3-way proportional pressure control valve Display type Back-lit LCD Pressure regulation range MPa 0.01 MPa 1 MPa Pressure regulation range Pressure regulation range MPa 0.1 bar 10 bar Inlet pressure 1 0 bar 11 bar Inlet pressure 1 MPa 0 MPa 1.1 MPa Max. pressure hysteresis 0.05 bar Standard nominal flow rate 2750 I/min DC operating voltage range 21.6 V 26.4 V Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output Analog output signal range 4 · 20 mA Analog input signal range 4 · 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Innert gas Information on operating and pilot media Operation with oil lubrication not possible Certification RCM compliance mark c UL us - Listed (OL)	Symbol	00995303
Type of control Valve function 3-way proportional pressure control valve Display type Back-lit LCD Pressure regulation range MPa 0.01 MPa 1 MPa Pressure regulation range 0.1 bar 10 bar Inlet pressure 1 0 bar 11 bar Inlet pressure 1 MPa 0.05 bar Standard nominal flow rate DC operating voltage range 21.6 V 26.4 V Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output Analog output signal range 4 · 20 mA Analog input signal range Certification RCM compliance mark cUL us - Listed (OL) RCM compliance mark cUL us - Listed (OL)	Reverse polarity protection	for all electrical connections
Valve function 3-way proportional pressure control valve Back-lit LCD Pressure regulation range MPa 0.01 MPa 1 MPa Pressure regulation range 0.1 bar 10 bar Inlet pressure 1 0 bar 11 bar Inlet pressure 1 MPa Max. pressure hysteresis 0.05 bar Standard nominal flow rate 2750 I/min DC operating voltage range 21.6 V 26.4 V Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output signal range 4 · 20 mA Analog input signal range 4 · 20 mA Analog input signal range Certification Certification RCM compliance mark cult us - Listed (OL)	Reset method	Mechanical spring
Display type Back-lit LCD Pressure regulation range MPa 0.01 MPa 1 MPa Pressure regulation range 0.1 bar 10 bar Inlet pressure 1 Inlet pressure 1 MPa Max. pressure hysteresis 0.05 bar Standard nominal flow rate 2750 l/min DC operating voltage range 21.6 V 26.4 V Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output Analog output signal range 4 - 20 mA Analog input signal range 4 - 20 mA Operating medium Certification RCM compliance mark c UL us - Listed (OL)	Type of control	Pilot-controlled
Pressure regulation range MPa O.01 MPa 1 MPa Pressure regulation range O.1 bar 10 bar Inlet pressure 1 Inlet pressure 1 MPa O MPa 1.1 MPa O MPa 1.1 MPa Max. pressure hysteresis O.05 bar Standard nominal flow rate DC operating voltage range 21.6 V 26.4 V Max. current consumption Outy cycle 100% Max. electrical power consumption T W Residual ripple 10 % Switching output PNP Analog output signal range 4 - 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Operation with oil lubrication not possible Certification RCM compliance mark c UL us - Listed (OL)	Valve function	3-way proportional pressure control valve
Pressure regulation range O.1 bar 10 bar Inlet pressure 1 Inlet pressure 1 MPa Max. pressure hysteresis O.05 bar Standard nominal flow rate DC operating voltage range 21.6 V 26.4 V Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output Analog output signal range 4 - 20 mA Analog input signal range 4 - 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Certification RCM compliance mark c UL us - Listed (OL)	Display type	Back-lit LCD
Inlet pressure 1 Inlet pressure 1 MPa Inlet pressure 1 MPa O MPa 1.1 MPa O.05 bar Max. pressure hysteresis O.05 bar Standard nominal flow rate DC operating voltage range 21.6 V 26.4 V Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output PNP Analog output signal range 4 - 20 mA Analog input signal range 4 - 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Operation with oil lubrication not possible Certification RCM compliance mark c UL us - Listed (OL)	Pressure regulation range MPa	0.01 MPa 1 MPa
Inlet pressure 1 MPa Max. pressure hysteresis 0.05 bar Standard nominal flow rate 2750 l/min DC operating voltage range 21.6 V 26.4 V Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output Analog output signal range 4 - 20 mA Analog input signal range 4 - 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Certification RCM compliance mark c UL us - Listed (OL)	Pressure regulation range	0.1 bar 10 bar
Max. pressure hysteresis Standard nominal flow rate 2750 l/min DC operating voltage range 21.6 V 26.4 V Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output Analog output signal range 4 - 20 mA Analog input signal range 4 - 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Certification RCM compliance mark c UL us - Listed (OL)	Inlet pressure 1	0 bar 11 bar
Standard nominal flow rate DC operating voltage range 21.6 V 26.4 V Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output Analog output signal range 4 - 20 mA Analog input signal range 4 - 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Certification RCM compliance mark c UL us - Listed (OL)	Inlet pressure 1 MPa	0 MPa 1.1 MPa
DC operating voltage range 21.6 V 26.4 V Max. current consumption 300 mA Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output PNP Analog output signal range 4 - 20 mA Analog input signal range 4 - 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Certification RCM compliance mark c UL us - Listed (OL)	Max. pressure hysteresis	0.05 bar
Max. current consumption Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output Analog output signal range 4 - 20 mA Analog input signal range 4 - 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Certification RCM compliance mark c UL us - Listed (OL)	Standard nominal flow rate	2750 l/min
Duty cycle 100% Max. electrical power consumption 7 W Residual ripple 10 % Switching output PNP Analog output signal range 4 - 20 mA Analog input signal range 4 - 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Operation with oil lubrication not possible Certification RCM compliance mark c UL us - Listed (OL)	DC operating voltage range	21.6 V 26.4 V
Max. electrical power consumption 7 W Residual ripple 10 % Switching output PNP Analog output signal range 4 - 20 mA Analog input signal range 4 - 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Operation with oil lubrication not possible Certification RCM compliance mark c UL us - Listed (OL)	Max. current consumption	300 mA
Residual ripple 10 % Switching output PNP Analog output signal range 4 - 20 mA Analog input signal range 4 - 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Operation with oil lubrication not possible Certification RCM compliance mark c UL us - Listed (OL)	Duty cycle	100%
Switching output Analog output signal range 4 - 20 mA Analog input signal range 4 - 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Operation with oil lubrication not possible Certification RCM compliance mark c UL us - Listed (OL)	Max. electrical power consumption	7 W
Analog output signal range 4 - 20 mA Analog input signal range 4 - 20 mA Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Operation with oil lubrication not possible Certification RCM compliance mark c UL us - Listed (OL)	Residual ripple	10 %
Analog input signal range 4 - 20 mA Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Certification RCM compliance mark c UL us - Listed (OL)	Switching output	PNP
Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas Information on operating and pilot media Operation with oil lubrication not possible RCM compliance mark c UL us - Listed (OL)	Analog output signal range	4 - 20 mA
Inert gas Information on operating and pilot media Operation with oil lubrication not possible RCM compliance mark c UL us - Listed (OL)	Analog input signal range	4 - 20 mA
Certification RCM compliance mark c UL us - Listed (OL)	Operating medium	1
c UL us - Listed (OL)	Information on operating and pilot media	Operation with oil lubrication not possible
KC characters KC EMC	Certification	
	KC characters	KC EMC

Feature	Value
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Certificate issuing authority	UL E322346
Corrosion resistance class (CRC)	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Temperature of medium	10 °C 50 °C
Degree of protection	IP65
Ambient temperature	0 ℃ 50 ℃
Product weight	560 g
Linearity	1 %FS
Hysteresis	0.5 %FS
Reproducibility	0.5 %FS
Overall accuracy	1.25 %FS
Temperature coefficient	0.04 %/K
Repetition accuracy FS	0.5 %
Electrical connection	8-pin M12 Plug
Type of mounting	Optionally: With through-hole With accessories
Pneumatic connection 1	G1/4
Pneumatic connection 2	G1/4
Pneumatic connection 3	G1/4
Note on materials	RoHS-compliant
Housing material	Wrought aluminum alloy Anodized