PROPORTIONAL PRESSURE REGULATOR FOR FLOW APPLICATIONS

Description The pneumatic proportional regulator controls the outlet pressure in proportion to an electrical command input signal. It comprises a complete closed loop servo system in a compact mono block assembly with proportional solenoid valve. electronic regulator and internal pressure transducer. The valve works as a slide valve and is designed for flow

applications such as thermal cutting. The digital control system offers advantages at installation and commissioning for adapting the valve to special applications. The regulator can be set and optimised using a PC, PR adapter and software. Data record can be saved and used for further valves. The valve has a constant bleed. At absence of input signal or supply voltage the valve exhausts.

Software

Signal range Electr. connection

Accuracy

Temp. range

Display: signal, outlet pressure, PID parameters, pressure switch signal etc.

Scope function view setpoint, outlet pressure, internal signals from PID control

fluid / ambient: 0 °C to 60 °C / 32 °F to 140 °F

dry, lubricated, unlubricated and 50 μ m filtered compressed air or non-corrosive gases 24 V DC \pm 10 V, residual ripple < 10% Power consumption 14 W Media Supply voltage 14 W (810mA current consumption)

0-10 V, 100 kΩ impedance 0/4-20 mA plug M12x1, 5-pin (protection class IP65) hysteresis: 0.5% FS 0/4-20 mA, 250 Ω impedance

Mounting position any, preferably solenoid on top

Linearity/repeatability < ± 0.5% FS

Body: aluminium Elastomer: NBR/Buna-N

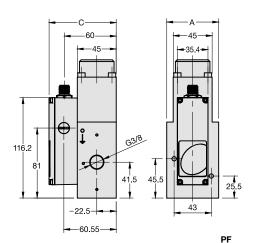
	Dimensions		Nominal	K _v -	Flow	Supply	Connection	Pressure	Order	
Α	В	С	size	value	rate	max.	thread	range	number	E*
mm	mm	mm	DN	(m^3/h)	I/min*1	bar	G	bar		

0-10 V command signal, supply voltage 24 V DC, without M12 coupling socket Proportional pressure regulator 160 1,45 1700 12 G¾ PF000-0600 18 0... 10 PF000-1000 0... 16 PF000-1600 18 22 0... 20 PF000-2000 40 0...30 PF000-3000 0... 40 50 PF000-4000 60 0... 50 PF000-5000

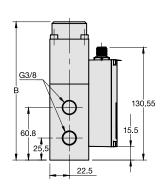
Special options, add the appropriate letter or number PF..**1**-.... commmand signal 0-20 mA 4-20 mA PF . . **2**- monitor signal 0-10 V PF.1.-.... 4-20 mA PF.3.-.... PF...-**XX**.. indicate on order deviant pressure range for oxygen specially cleaned, FKM elastomers PF...-..**15**

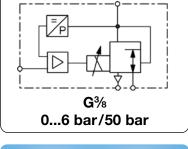
Accessories, enclosed

PDUSB PR adapter with USB plug and 1 m cable PDSOFT1*2 software basic version "light" KM12-C5-2 coupling socket M12x1, 5-pin, with 2 m cable, 5 x 0.25 angular KM12-C5-5 M12x1, 5-pin, with 5 m cable, 6 x 0.25 angular



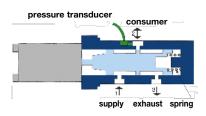
at 6 bar supply pressure and 5 bar outlet pressure



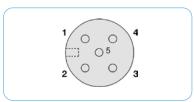








The position of the slide is continuously shifting according to command signal and pressure change at the outlet. Thereby a constant outlet pressure is achieved.



view from solder pin side

pin	description	5-wire cable (2m)
1	24 V supply voltage	brown
2	analog input signal	white
3	supply ground	blue
	analog ground	
4	analog outlet signal	black
5	digital pressure switch signal	grey
housing	EMC shield	shield

connection diagram



CAD

PDF www.aircom.net





^{*2} You do not need any software to use the valve!