

Description The pneumatic proportional valve 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, RS232 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 Display: signal, outlet pressure, PID parameters, pressure switch signal etc.

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

Media dry, lubricated, unlubricated and 50 µm filtered compressed air or non-corrosive gases

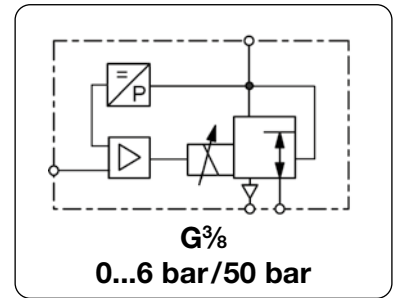
Supply voltage 24 V DC ± 10 V, residual ripple < 10% **Power consumption** 14 W (810mA current consumption)

Signal range 0-10 V, 100 kΩ impedance 0/4-20 mA, 250 Ω impedance

Electr. connection plug M12x1, 5-pin (protection class IP65) **Mounting position** any, preferably solenoid on top

Accuracy hysteresis: 0.5% FS **Linearity/repeatability** < ± 0.5% FS

Temp. range fluid / ambient: 0 °C to 60 °C / 32 °F to 140 °F **Material** Body: aluminium Elastomer: NBR/Buna-N



Dimensions			Nominal size	K _v -value	Flow rate	Supply max.	Connection thread	Pressure range	Order number
A	B	C	DN	(m³/h)	l/min*1	bar	G	bar	

Proportional pressure regulator									
0-10 V command signal, supply voltage 24 V DC, without M12 coupling socket									
60	160	78	8	1,45	1700	12	G3/8	0 ... 6	PF000-0600
						18		0 ... 10	PF000-1000
						18		0 ... 16	PF000-1600
						22		0 ... 20	PF000-2000
						40		0 ... 30	PF000-3000
						50		0 ... 40	PF000-4000
						60		0 ... 50	PF000-5000



PF000-1000

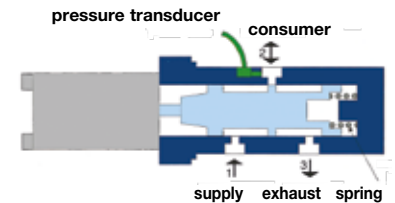


Special options, add the appropriate letter or number

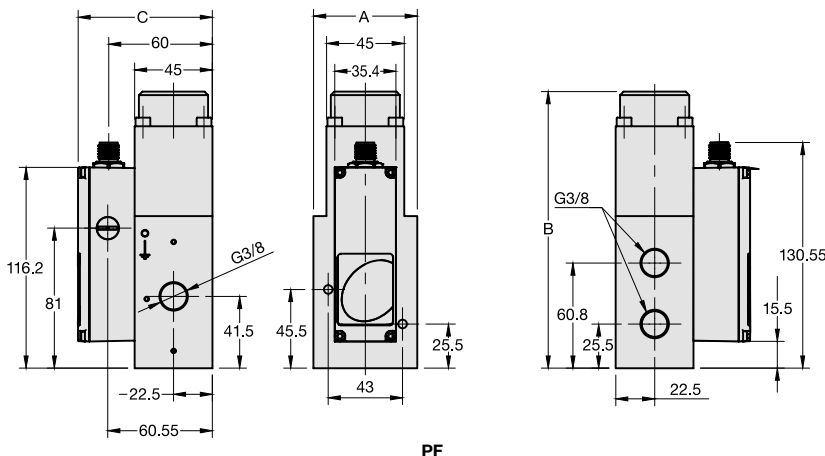
command signal	0-20 mA	PF..1-....
	4-20 mA	PF..2-....
monitor signal	0-10 V	PF.1.-....
	4-20 mA	PF.3.-....
deviant pressure range for oxygen	indicate on order	PF...-XX.
	specialy cleaned, FKM elastomers	PF...-..15

Accessories, enclosed

RS232 module	with 9-pin D-sub plug and 2 m cable	PDRS232
	with USB plug and 2 m cable	PDUSB
software	basic version "light"	PDSOFT1
coupling socket	M12x1, 5-pin, with 2 m cable, 5 x 0.25	angular KM12-C5-2
	M12x1, 5-pin, with 5 m cable, 6 x 0.25	angular KM12-C5-5

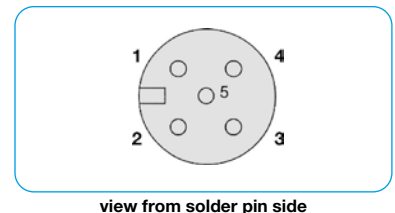


The position of the slide is continuously shifting according to command signal and pressure change at the outlet. Thereby a constant outlet pressure is achieved.



PF

*1 at 6 bar supply pressure and 5 bar outlet pressure



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
4	analog outlet signal	black
5	digital pressure switch signal	grey
housing	EMC shield	shield

connection diagram

