

Description

The pneumatic proportional pressure regulator controls the outlet pressure in a complete closed loop servo system in proportion to an digital IO-Link command signal. By using the IO-Link Master the valve can be adapted to special applications and optimize the the response time, the overshoot and the precision of the valve. The valve has no constant bleed. At absence of input signal or supply voltage the pressure of the valve stands.

Media

dry, lubricated, unlubricated and 50 µm filtered compr. air or non-corrosive gases

Command signal

Digital command signal in 1mbar steps (0-10000 = 0-10 bar)

Control IO-Link (Class A)

Hysteresis

1,5% FS

Supply voltage 24 VDC

Software: IODD (necessary)

Linearity

1,5% FS

Electrical connector M12, 5-pin

Repeatability

1,5% FS

Protection class IP65

Minimum Command signal

0,5% FS

Current consumption 180 mA

Minimum Outlet Pressure

1,0% FS

Power consumption 3,8 W (< 1W if regulated)

Temperature range

0-60 °C Media and Ambient

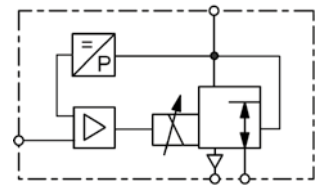
Material

Body: aluminium Inner valve: POM (Polyacetal)

Elastomer: NBR

Mounting position

any, preferably perpendicular



G $\frac{1}{4}$ to G $\frac{1}{2}$
0...3 bar/10 bar

Dimensions			K _v - value	Flow rate		Supply pressure	Connection thread	Pressure range	Order number	E*
A	B	C		(m ³ /h)	l/min					
mm	mm	mm	(m ³ /h)	(m ³ /h)	l/min	bar ⁻¹	G	bar		

Proportional pressure regulator						Supply 24 V DC via IO-Link master without coupling socket			PIO
52	115	73	0.43	28,2	470	4	G $\frac{1}{4}$	0... 3	PIO2-03
						7	G $\frac{1}{4}$	0... 6	PIO2-06
						11	G $\frac{1}{4}$	0... 10	PIO2-10
66	129	89	1.2	78	1300	4	G $\frac{3}{8}$	0... 3	PIO3-03
						7	G $\frac{3}{8}$	0... 6	PIO3-06
						11	G $\frac{3}{8}$	0... 10	PIO3-10
66	144	102	4.8	312	5200	4	G $\frac{1}{2}$	0... 3	PIO4-03
						7	G $\frac{1}{2}$	0... 6	PIO4-06
						11	G $\frac{1}{2}$	0... 10	PIO4-10



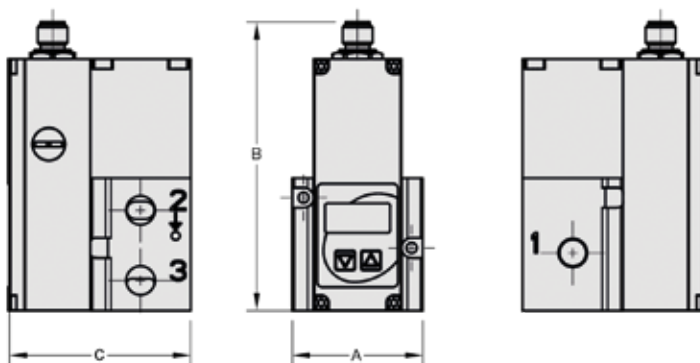
PIO

Special options, add the appropriate letter or number**Display**

PIO-... B

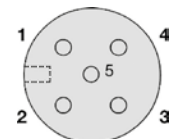
for oxygen

PIO-... 15



- 1: inlet
2: outlet
3: exhaust

PIO



view from solder pin side

Pin	Description
1	24V supply voltage
2	not occupied
3	supply ground
4	C/Q
5	not occupied
Housing	EMC shield

connection plan

*1 To use the valve, you need the IODD
P1 = at least 1 bar higher than the maximum outlet pressure

