

Piezo Proportional Pressure Regulator with ATEX approval

PDEX

Description

Piezo-operated proportional pressure valve with closed loop in a two-wire system. Outlet pressure is proportional to an electrical input signal. The valve can be mounted in any position and is immune to shock or vibration. It is pilot-controlled to reach a higher flow rate.

Media

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

Supply voltage

not necessary due to two-wire system (supply through 4...20 mA command signal)

Electrical connector

coupling socket, 4-pin according to DIN 43651, size 15 x 15 mm connector turnable in 90° steps

ATEX classification

Compliance with directive 94/9/EC for use in potentially explosive atmosphere of group IIC, temperature classification T4. Ignition protection type: II1G Ex ia IIC T4; II1D Ex D20 T135°C

Power consumption

< 200 mW

Fail-safe feature

exhaust at power breakdown

Linearity/Hysteresis

< 1% FS

Repeatability

< 0.5% FS

Mounting position

any

Protection class

IP 65

Air consumption

The pilot valve has an air consumption of 1.6 l/min

Ambient:

0 °C to 60 °C / 32 °F to 140 °F

Temperature range

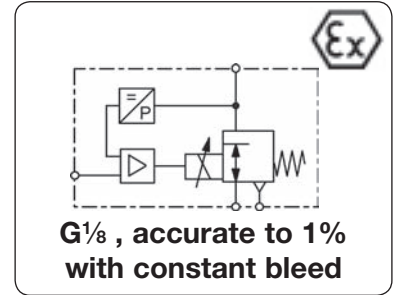
Media: 0 °C to 60 °C / 32 °F to 140 °F

Elastomer:

NBR/Buna-N and FKM

Material

Body: aluminium and plastic
Inner valve: stainless steel and plastic

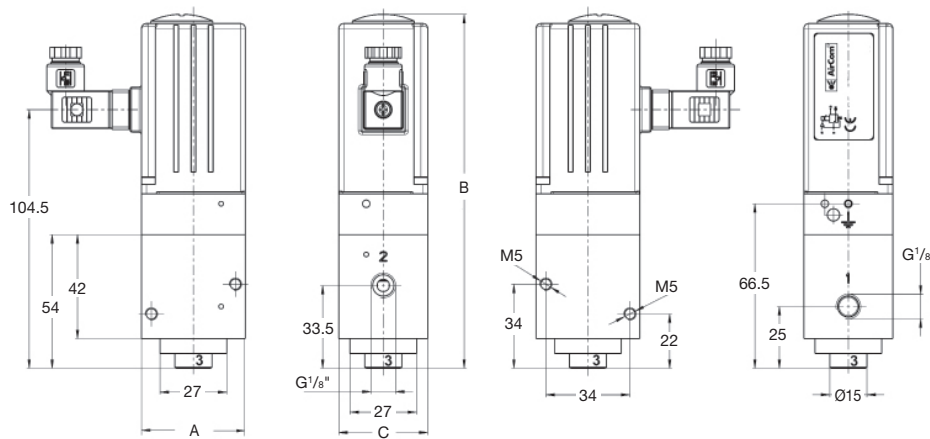
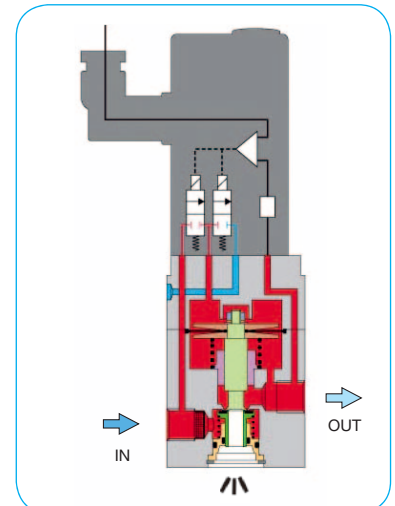


Dimensions			Nominal size	K _v value	Flow rate	P ₁ min./max.	Connection thread	Pressure range	Order number
A	B	C	DN	(m ³ /h)	l/min*1	bar	G	bar	



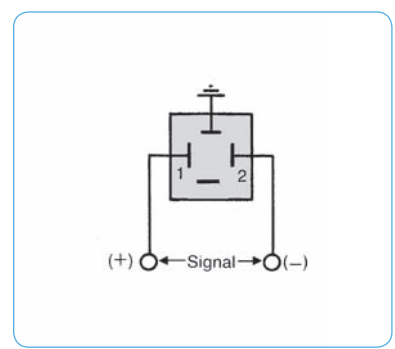
PDEX

Proportional Pressure Regulator						4-20 mA input signal, ATEX, with coupling socket, with constant bleed		PDEX	
42	143	36	4.0	0.24	550	2.5 / 3.0	G ¹ / ₈	0...2	PDEX-02
						3.5 / 5.0		0...3	PDEX-03
						4.5 / 6.0		0...4	PDEX-04
						5.5 / 8.0		0...5	PDEX-05
						6.5 / 8.0		0...6	PDEX-06



- 1: supply port
- 2: outlet port
- 3: exhaust

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



Order example:
PDEX-02
China website: www.duray-control.cn

