

## Description

Piezo-operated proportional pressure regulator 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 43650, size 15 x 15 mm connector turnable in 90° steps

## ATEX classification

Compliance with directive 2014/34/EU 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

## Linearity/Hysteresis

< 1% FS

## Mounting position

any

## Air consumption

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

## Temperature range

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

## Material

Body: aluminium and plastic

Inner valve: stainless steel and plastic

## Fail-safe feature

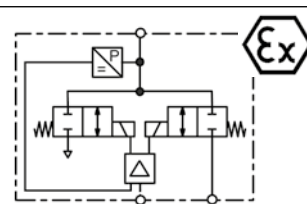
## Repeatability

## Protection class

exhaust at power breakdown

< 0.5% FS

IP 65



**G<sup>1</sup>/<sub>8</sub>, accurate to 1% with constant bleed**

Dimensions			Nominal size	K <sub>v</sub> -value	Flow rate	Supply min./max.	Connection thread	Pressure range	Order number
A	B	C	DN	(m <sup>3</sup> /h)	l/min*1	bar	G	bar	
mm	mm	mm							

## Proportional pressure regulator

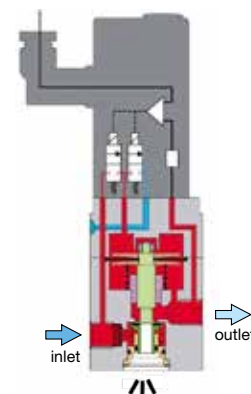
4-20 mA input signal, ATEX with coupling socket, with constant bleed

## PCEX

42	143	36	4	0.5	550	2.5 / 3.0	G <sup>1</sup> / <sub>8</sub>	0 ... 2	<b>PCEX-02</b>
						3.5 / 5.0		0 ... 3	<b>PCEX-03</b>
						4.5 / 6.0		0 ... 4	<b>PCEX-04</b>
						5.5 / 8.0		0 ... 5	<b>PCEX-05</b>
						6.5 / 8.0		0 ... 6	<b>PCEX-06</b>



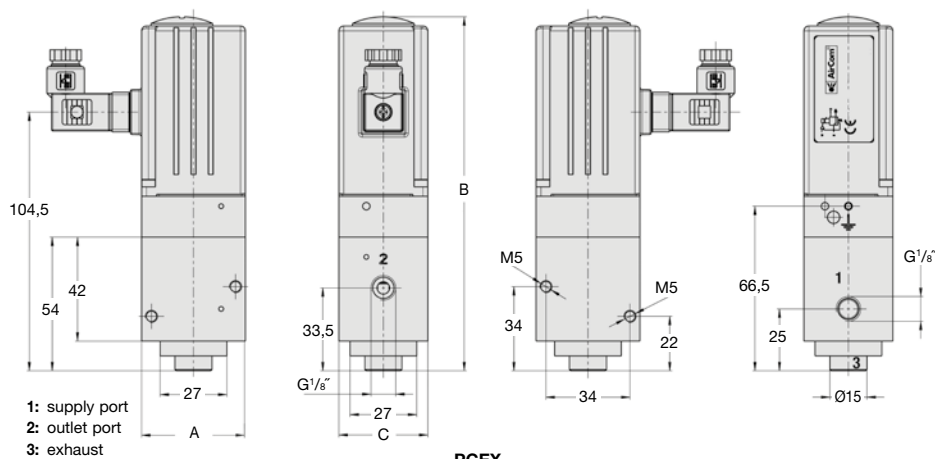
PCEX



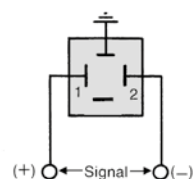
cross-section

Parameter	max. Value
Voltage U <sub>i</sub>	30 V
Current I <sub>i</sub>	120 mA
Power P <sub>i</sub>	800 mW
Inductance L <sub>i</sub>	0 µH
Capacitance C <sub>i</sub>	0 µF

Safety parameters



PCEX



connection diagram

\*1 at 6 bar supply pressure, 5 bar outlet pressure, equal exhaust forward flow

\* Product group

PDF CAD  
www.aircom.net



Order example:  
**PCEX-02**