

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

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

Fail-safe feature

Repeatability

Protection class

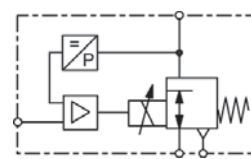
exhaust at power breakdown

< 0.5% FS

IP 65

Elastomer:

NBR/Buna-N and FKM



G¹/₈, accurate to 1% with constant bleed

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

Proportional pressure regulator

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

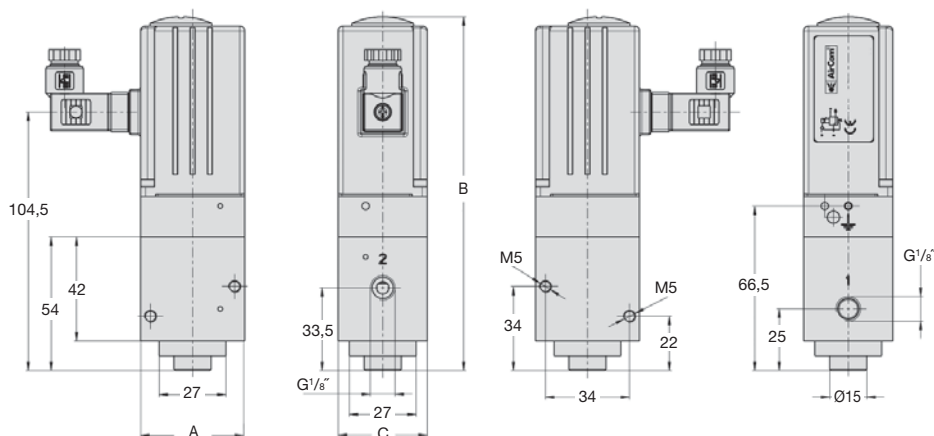
PCEX

42	143	36	4.0	0.5	550	2.5 / 3.0	G ¹ / ₈	0 ... 2	PCEX-02
						3.5 / 5.0		0 ... 3	PCEX-03
						4.5 / 6.0		0 ... 4	PCEX-04
						5.5 / 8.0		0 ... 5	PCEX-05
						6.5 / 8.0		0 ... 6	PCEX-06

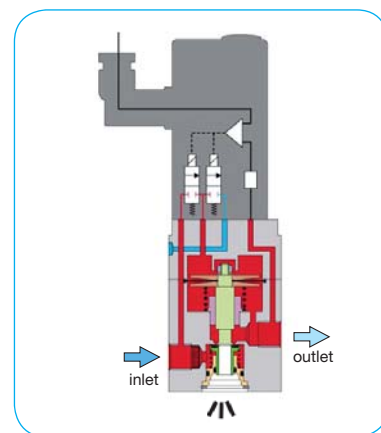


PCEX

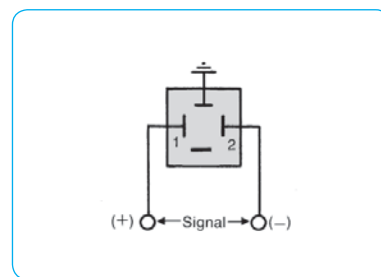
- 1: supply port
- 2: outlet port
- 3: exhaust



PCEX



cross-section



connection diagram

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

