

DESCRIPTION

The 2-wire proportional valve is a compact, electropneumatic pressure regulator which converts an electrical signal into pneumatic pressure (E/P transducer). It is particularly suited for precise pressure regulation due to its integrated control loop with electronic pressure feedback. The electrical connection uses 2-wire technology. The pressure regulator is fitted with a piezo proportional pilot and a downstream pressure and flow amplifier.

CHARACTERISTICS OF THE INTRINSIC SAFE VERSION

- Valve for use in potentially explosive atmospheres according to ATEX-Directive 94/9/EC
- EC type examination certificate no.: IBExU07ATEX1014X
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with European Standards EN 60079-0:2012, EN 60079-11:2012 and EN 60079-26:2007
- Intrinsically safe valve (Ex ia) for use in group IIC, temperature class T4 environments. Suitable for applications in the oil & gas, paint coating, and paint & varnish manufacturing industries.

GENERAL

- Fluids** : Air or neutral gases, filtered at 50 µm, lubricated or unlubricated
- Connection** : G 1/8
- Internal air consumption** : 100 l/h
- Pressure range** : see table below
- Temperature** - Fluid : 0 °C to +60 °C
 - Ambient : 0 °C to +60 °C
- Analogue setpoint** : 4 - 20 mA
- Failsafe behaviour** : Pressure released on loss of power
- Hysteresis** : < 1 % of span
- Repeatability** : ± 0,5 % of span

CONSTRUCTION

Body: Aluminium and plastic
 Internal parts: Stainless steel and plastic
 Seals: NBR, FPM



C

SAFETY CODE

- ⊕ II 1G Ex ia IIC T4 Ga
 - ⊕ II 1D Ex ia IIIC T135°C Da
- 20°C ≤ Ta ≤ +60 °C

ELECTRICAL CHARACTERISTICS

input signal/supply voltage (min. input voltage: 12V)	max. power (W)	insulation class	protection degree	electrical connection
4...20 mA	< 200mW	F	IP65	Connector size 15 - CM6 (Pg7P) with 4 pins (pin spacing 9,4mm) supplied with the valve

SPECIFICATIONS

∅ ports	∅ orifice DN (mm)	flow at 6 bar (l/min - ANR)
G 1/8"	4	550

CATALOGUE NUMBER

6 0 5 A S O F P

A: CONSTRUCTION (connection)
 7 = DN 4, 1/8", indirectly operated

S: SETPOINT
 2 = 4 ... 20 mA

O: OPTION
 8 = Low power without ATEX
 9 = Intrinsically safe / ATEX Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da

P: PRESSURE RANGE
Outlet pressure: min./max. allowable pressure:

2 = 0 - 2 bar	2,5 - 5 bar
3 = 0 - 3 bar	3,5 - 5 bar
4 = 0 - 4 bar	4,5 - 6 bar
5 = 0 - 5 bar	5,5 - 8 bar
6 = 0 - 6 bar	6,5 - 8 bar

F: PNEUMATIC CONNECTION
 (tapped port 1, 2 and 3)
 0 = tapped G (ISO 228/1), exhaust (3) protected, non connectable
 3 = tapped G (ISO 228/1) with connectable exhaust (3)
 4 = tapped NPT, exhaust (3) protected, non connectable
 5 = tapped NPT with connectable exhaust (3)

ACCESSORY

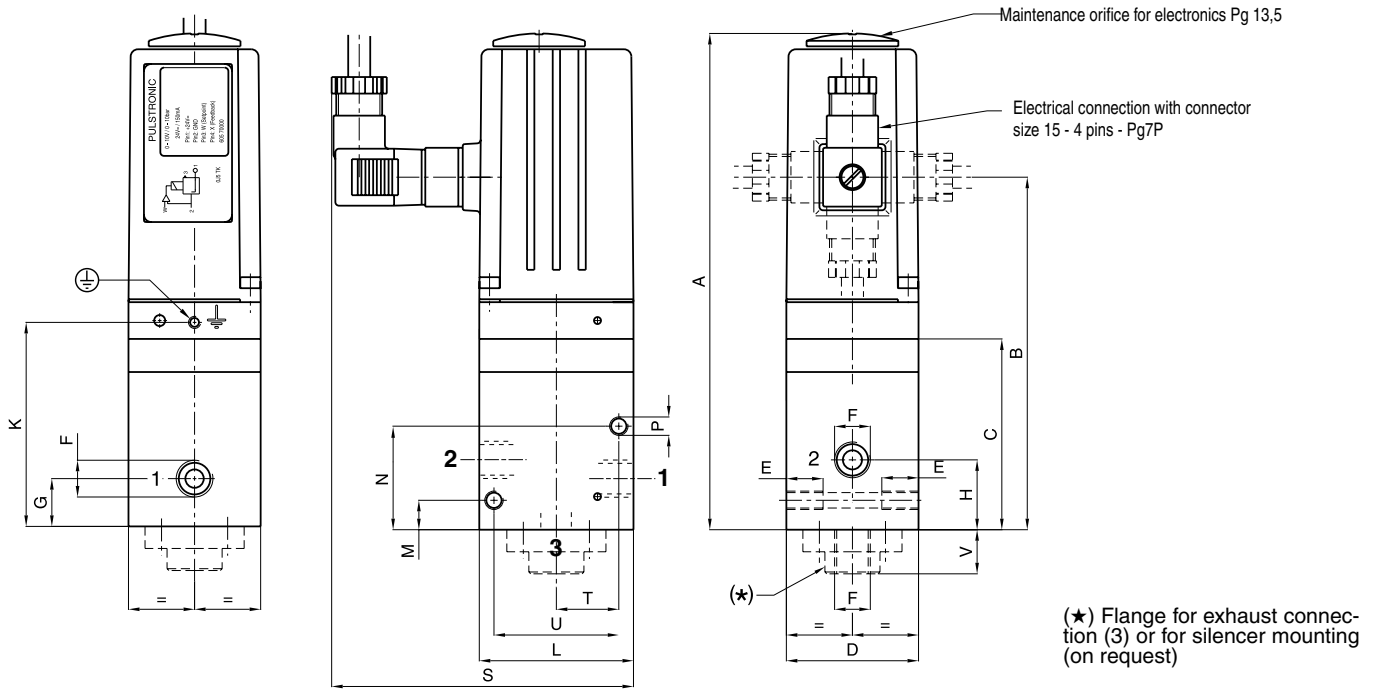
- Connector size 15, IP65, 4 pins (pin spacing: 9,4 mm), cable gland CM6 (Pg7P) - catalogue no.: **88100240**

All leaflets are available on: www.asconumatics.eu

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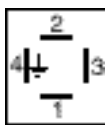
DIMENSIONS AND WEIGHTS

VERSION G 1/8 (DN 4)



Ø ports	nominal diameter	dimensions (mm)																weight (kg)	
		A	B	C	D	E	F	G	H	K	L	M	N	P	S	T	U		V
G 1/8	DN 4	135	96	51	36	10	G1/8	13	21,5	55,5	42	10	22	M5	83	17	34	12	0,400

CONNECTOR PINNING



- 1: + SETPOINT (4...20mA)
- 2: - SETPOINT GND (POWER)
- 3 and 4: not used

SAFETY PARAMETERS

- Max. voltage: $U_i = 30V$
- Max. current: $i_i = 120mA$
- Max. power: $P_i = 800mW$
- Max. inductance: $L_i = 0\mu H$
- Max. capacitance: $C_i = 0\mu F$