



INSTALLATION AND MAINTENANCE INSTRUCTIONS

I to P Converter

PC20

GENERAL

1. These instructions must be carefully read before any work involving products supplied by VALSTEAM ADCA ENGINEERING S.A. is undertaken.
2. The installation procedure is a critical stage in a life of a I to P converter and care should be taken to avoid damage of the equipment.

DESCRIPTION

The PC20 is a two wire, wall mounted, I to P converter and is for use with linear pneumatic actuators.

Input standard: 4÷20 mA

Output: 3÷15 psi (0,2÷1 bar)

2÷18 psi or 2÷20 psi (both on request)

1.1- Applications

The PC20 can be used with any pneumatic valve actuator.

INSTALLATION

2.1- Fitting the Converter

Note: When fitting the converter vertically, we recommend that the electrical connection is positioned at the top. In case of different installation check the zero point.

1. Mount a suitable length of 35 mm DIN rail to the panel.
2. Slide the converter onto the rail. The air and electrical connections may now be made.

2.2- Air and Electrical Connections

All pneumatic connections are accessible externally (See fig.1). To ensure trouble free use of this converter, the air supply should be conditioned to remove dirt and moisture. A filter regulator of 25 micron maximum should be fitted upstream of the device. Electrical connections are made as follow:

1. Remove the lid.
2. Insert the two wires through the cable gland.
3. Connect the wires to the screw terminals marked + and - (item 11 fig.2).

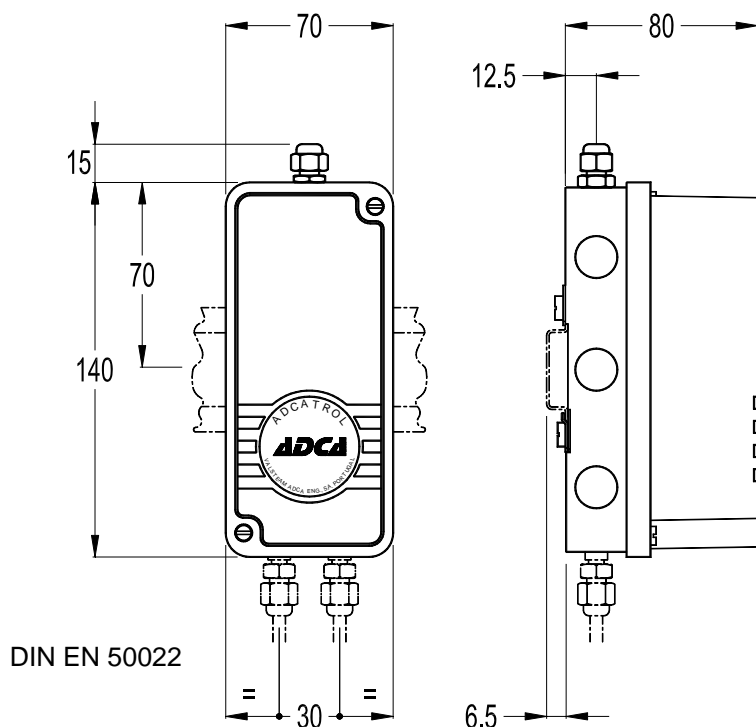


Fig. 1

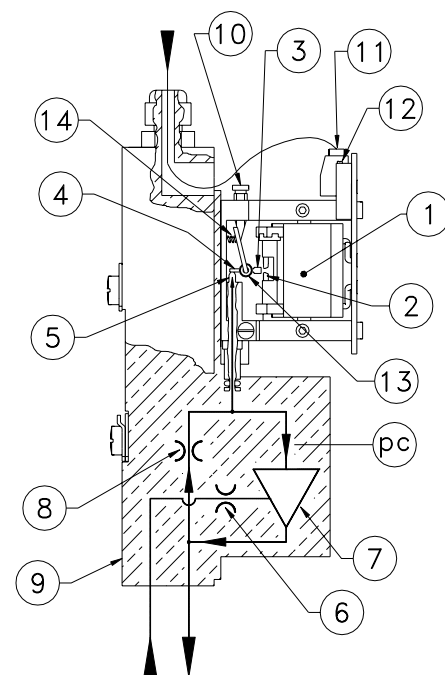


Fig. 2

COMMISSIONING

1. Check that all the pneumatic and electrical connections are correct.
Note: The PC20 is factory set and should not require any commissioning. However, should the output signal be low then the zero may be adjusted by rotating the zero adjustment screw (item 10, fig.2).
2. Set the input signal to 4 mA and check the output.
3. Rotate screw (item 10, fig.2) until the output reaches the desired value. The PC20 is now commissioned.

MAINTENANCE

CAUTION!

Before be over any operate of maintenance, make sure that the converter has not in pressure.



Weekly drain the regulator filter located on the air supply line until all the oil and water, or any other impurity is completely discharged; these impurities are the main causes of failure.

ATTENTION!

In case of failure close the inlet hole and feed the output with compressed air (5 bar max) for about 10 seconds.



TECHNICAL DATA

Mounting	On 35 mm wide rail acc. to DIN EN 50 022	
Pneumatic connections	1/4" NPT	
Supply air pressure	25 psi / 1,7 bar	45 psi / 3 bar
Output	3÷15 (2÷18, 2÷20)* psi	(4÷30)* psi
Trimmer adjustment	±0.5 psi	
Linearity error	≤ 1 %	
Hysteresis error	≤ 0,5 %	
Max repeatability error	≤ 0,2%	
Air Consumption	0,15 Nm ³ /h (supply. 25 psi)	
Air delivery	2,6 Nm ³ /h (supply. 25 psi)	
Ambient Temperature	- 20 to + 70 °C	
Storage Temperature	- 30 to + 80 °C	
Weight	0,8 Kg	

ELECTRICAL FEATURES

U _i	≤ 30 V
I _i	≤ 150 mA
P _i	≤ 0 0,80 W
Impedance	Max 250 W
C _i	≈ 0 (negligible)
L _i	≈ 0 (negligible)
Electric Connections	PG9 (PG13,5)* , Terminal for 2 wires conn. Ø0,5..1,5 mm
Input	4 ÷ 20 mA (0÷20mA , 1÷5V , 0÷10V)*

Note : * on request