



DATA SHEET

CP 116

Atmospheric pressure transmitter

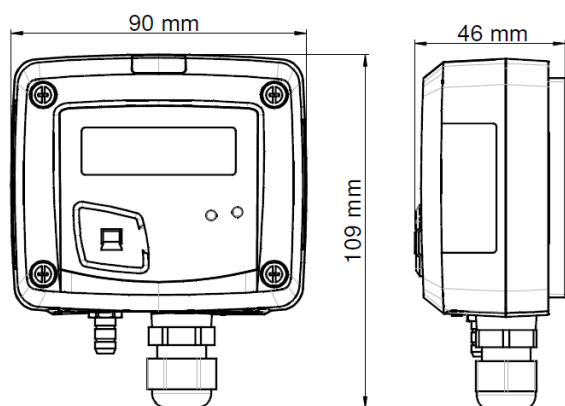


Measuring range from
800 to 1100 hPa



Indication of the pressure
in mbar, mmHG or hPa

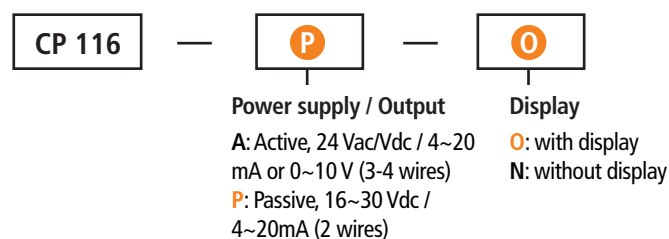
- Analogue output : 4~20mA, power supply from 16~30 Vdc (2 wires), 0~10V or 4~20mA, power supply 24 Vac/Vdc (3/4 wires)
- ABS V0 housing, IP65, with or without display
- "1/4 turn" system mounting with wall-mount plate
- Housing with simplified mounting system



Part number

Example: CP 116 – P0

Transmitter of atmospheric pressure, passive transmitter 16/30 Vdc, with display.



General features

Measuring ranges	CP116 : 800 ~ 1100 hPa
Measurement units	mbar, mmHG, hPa
Accuracy *	±3 hPa
Resolution	1 mbar; 1 mmHG; 1 hPa;
Response time	< 10 s
Type of fluid	Air and neutral gases
Conditions of use (°C/%RH/m)	From 0 to +50°C. In non-condensing condition. From 0 to 2000 m
Storage temperature	From -10 to +70 °C

Features of the housing

Material	ABS V0 as per UL94
Protection	IP65
Display	LCD 10 digits. Dimensions: 50 x 17 mm. Height of digits: Values: 10 mm; Units: 5 mm
Connections	Ribbed, Ø 4 x 6 mm
Cable gland	For cables Ø 8 mm maximum
Weight	143 g

*All the accuracies indicated in this technical datasheet were stated in laboratory conditions, and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation.

Technical specifications

Output / Supply	Active sensor 0-10 V or 4-20 mA (alim. 24 Vac/Vdc $\pm 10\%$), 3-4 wires passive loop 4~20 mA (power supply 16/30Vdc), 2 wires Common mode voltage <30 VAC Maximum load: 500 Ohms (4-20 mA) Minimum load: 1 K Ohms (0-10 V)
Consumption	2 VA (0~10 V) or 0.6 VA (4~20 mA)
European directives	2014/30/EU EMC; 2014/35/EU Low Voltage; 2011/65/EU RoHS II; 2012/19/EU WEEE
Electrical connection	Screw terminal block for cables from 0.05 to 2.5 mm ² or from 30 to 14 AWG. Carried out according to the code of good practice
Environment	Air and neutral gases

Settings and use of the transmitter

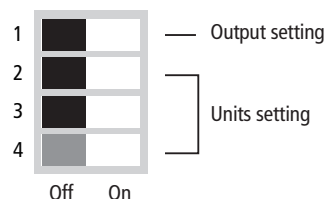
Configuration

To configure the transmitter, unscrew the 4 screws from the housing then open it. DIP switches allowing the different settings are then accessible.



To configure the transmitter, it must not be energized. Then, you can make the settings required, with the DIP switches (as shown on the drawing below). When the transmitter is configured, you can power it up.

Right DIP switch



Please follow carefully the combinations beside with the DIP switch. If the combination is wrongly done, the following message will appear on the display of the transmitter «CONF ERROR». In that case, you will have to unplug the transmitter, place the DIP switches correctly, and then power the transmitter up.

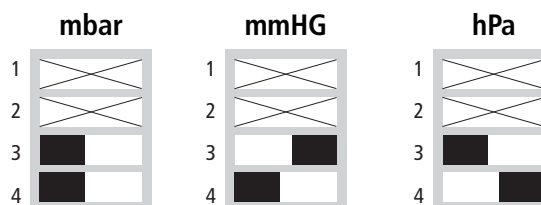
Output setting - Right DIP switch

To set the type of analogue output, please put the on-off switch of the output as shown below :

Configurations	4~20 mA	0~10 V
Combinations	1 2 3 4	1 2 3 4

Units setting - Right DIP switch

To set a measurement unit, put the on-off switches 2, 3 and 4 of the units as shown below :



Configuration via LCC-S software (option)

An easy and friendly configuration with the software!

To access the configuration via software:

- Set the DIP switches as shown beside. Nota: the on-off switch 1 of the active DIP switch can be in any position (selection of the analogue output 0-10 V or 4-20 mA).
- Connect the cable of the LCC-S to the connection of the transmitter.



Caution: the configuration of the parameters can be done either with the DIP switch or via software (you can not combine both solutions).

Configuration via PC

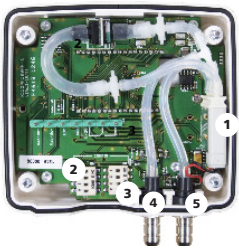


Active switch

Please refer to the user manual of the LCC 100 to make the configuration.

Connections

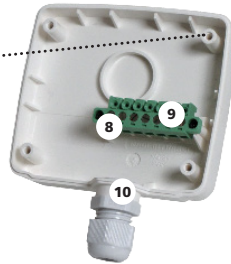
CP116



Inside the front housing



Removable front face



Fixed back housing

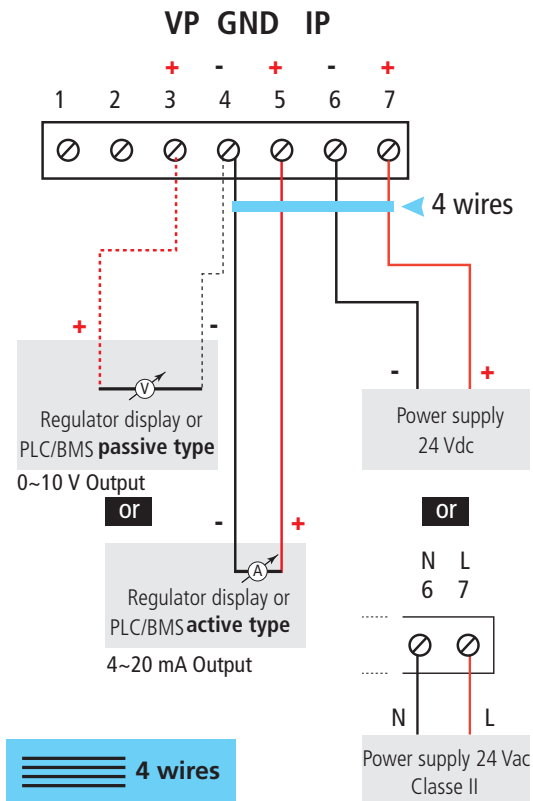
1. Solenoid valve (only CP111)
2. Left DIP switch
3. Right DIP switch
4. Pressure connections
5. Pressure connections
6. Autozero
7. LCC-S software connection
8. Output terminal block
9. Power supply terminal block
10. Cable gland

Electrical connections - as per NFC15-100 standard

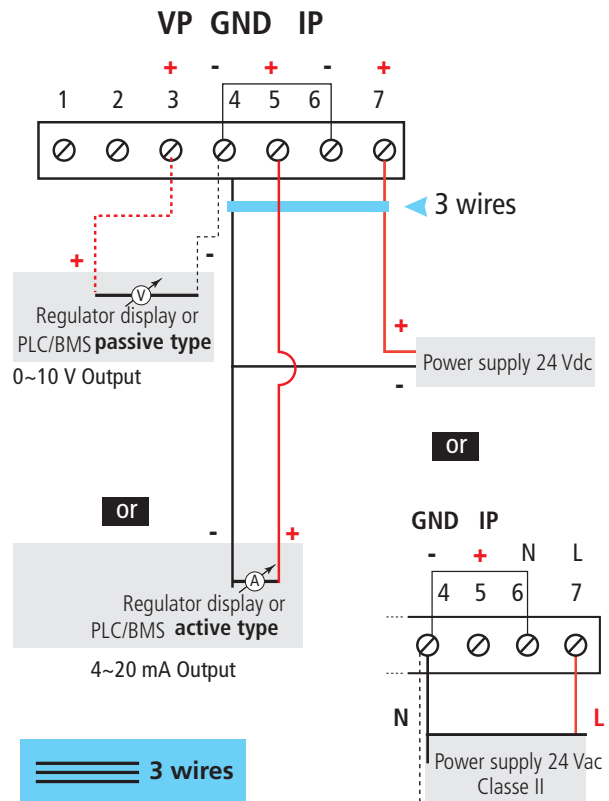


This connection must be made by a qualified technician.
To make the connection, the transmitter must not be energized.

For **CP116-AO / CP116-AN** models,
with 0~10 V or 4~20 mA output - **active, 4 wires**:

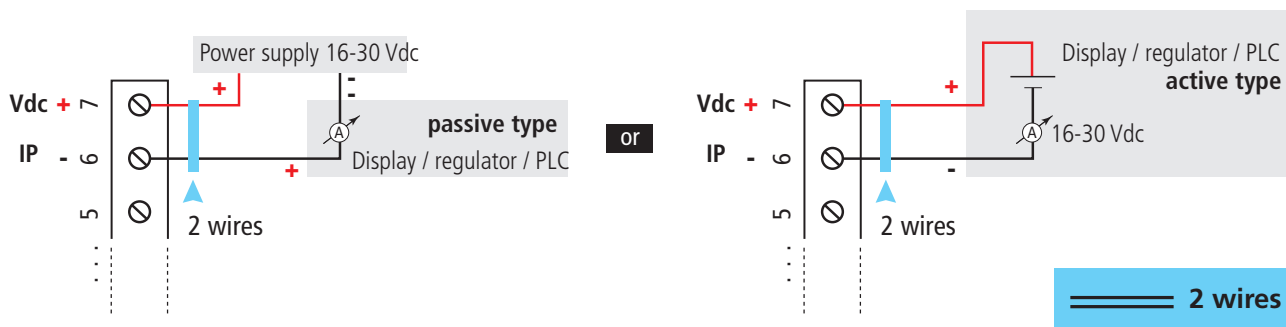


To make a 3-wires connection, before powering up the transmitter, please connect the output ground to the input ground, see below drawing.



This connection must be made by a qualified technician. To make the connection, the transmitter must not be energized.

For **CP116-PO / CP116-PN** models, with 4~20 mA output - **passive, 2 wires**:



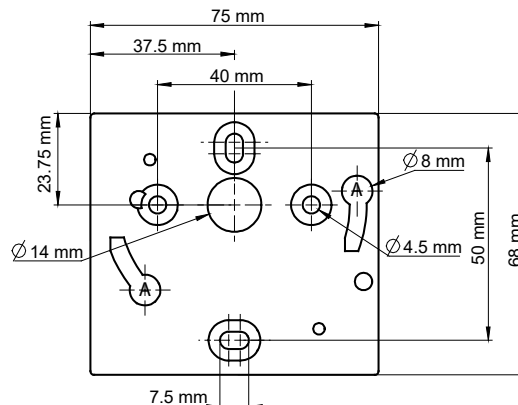
Mounting

To mount the transmitter, mount the ABS plate on the wall (drilling: Ø 6 mm, screws and pins are supplied). Insert the transmitter on the fixing plate (see A on the drawing beside).

Rotate the housing in clockwise direction until you hear a "click" which confirms that the transmitter is correctly installed.



Once the transmitter is installed and powered up, please make an autozero to guarantee the correct working of the transmitter in any position.



Maintenance:

- Avoid any aggressive solvent.
- Protect the transmitter and its probes from any cleaning product containing formalin, that may be used for cleaning rooms or ducts.

Precautions for use:

always use the device in accordance with its intended use and within parameters described in the technical features in order not to compromise the protection ensured by the device.

Accessories

Ref.	Description
LCC-S	Configuration software with USB cable
Connection tube	
Connection fittings	

Warranty

Instruments have 1-year guarantee for any manufacturing defect.



Only the accessories supplied with the device must be used.