

The Proper Installation & Maintenance of BP-CL.

All power and signals must be de-energised before connecting any wiring.

MOUNTING.

- (1) Mount in a clean environment.
- (2) Do not subject to vibration.
- (3) Avoid mounting near power control equipment.
- (4) Mount the BP-CL-D on a solid wall or panel, where air will flow freely around it.
- (5) Always mount the BP-CL so that the protective cap is either horizontal or sloping downwards. This helps prevent condensate build up in high humidity situations.
- (6) Avoid mounting where the protective cap will get wet as this may cause false readings.
- (7) Again ensure there is adequate air flow over the sensor.

WIRING.

- (1) All cables should be good quality overall screened INSTRUMENTATION CABLE with the screen earthed at one end only.
- (2) Signal cables should be laid a minimum distance of 300mm from any power cables.
- (3) For the two, 2 wire current loops Austral Standard Cables B5002CS is recommended.
- (4) It is recommended that you do not ground current loops and use power supplies with ungrounded outputs.
- (5) Lightning arrestors should be used when there is a danger from this source.
- (6) Cables are available ready made from your supplier. Standard cables are 1, 5 and 10 meter.
- (7) To make your own cable you will need:
 - 1 off JST connector shell 04R-JWPF-VSLE-S
 - 2 off JST female pins SWPR-001T-P025
 - Screened 1 pair cable.
 - Crimp tool.

Positive wire to pin 2 of connector.
Negative wire to pin 1 of connector.

Pins 3 and 4 of connector are for a programming cable to set up the unit. End users should not have to change the setup or calibrate this sensor.

COMMISSIONING.

- (1) Once all the above conditions have been carried out and the wiring checked apply power to the BP-CL loop and allow five minutes for them to stabilize.
- (2) To check pressure accuracy use a calibrated standard device in the same location. If the location has an airport close and about the same height above sea level then its barometric reading can be found via the internet and used as a reference.

MAINTENANCE.

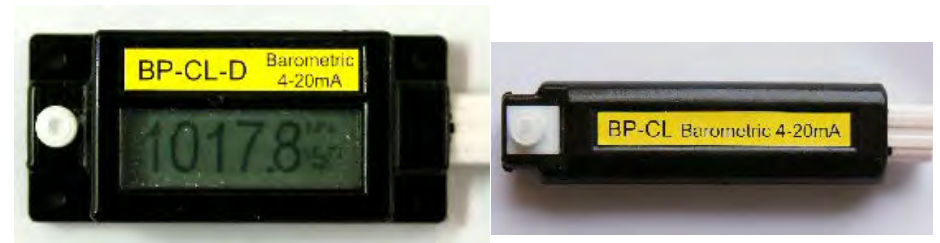
- (1) Check against another instrument
- (2) Do it regularly - at least once every 6 months.
- (3) Check cables entering the BP-CL.



BP-CL Barometric Pressure Transmitter

Features:

- ◇ **Single 4~20mA Loop Powered Output**
- ◇ **Factory Calibrated digital Barometric sensor**
- ◇ **700~1100 hPa**
- ◇ **Very Compact Design**
- ◇ **High Accuracy**
- ◇ **Low Cost**
- ◇ **Easy to Install**
- ◇ **Reverse Polarity Protection**
- ◇ **Wide Power Supply Range**
- ◇ **IP67 weather proof.**



Description.

The BP-CL is a complete Barometric pressure current loop sensing module, with one Barometric pressure (700~1100 hPa) loop powered 4~20mA output.

Two versions are available:

- Display (BP-CL-D)
- Non Display (BP-CL).

Both versions come completely encapsulated in a "Macromelt" molding to create a IP67 weather proof unit. The connector used is also rated to IP67.

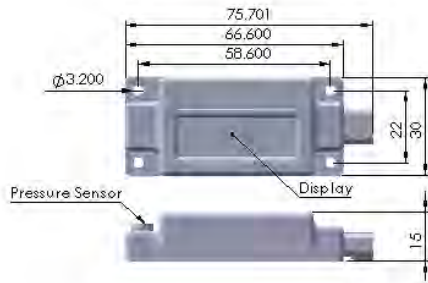
Ordering Information.

- BP-CL-D 700~1100 hPa, Weather Proof Transmitter with Display.
BP-CL 700~1100 hPa, Weather Proof Transmitter NO Display.

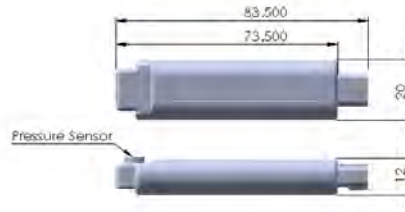
BP-CL Barometric Pressure Transmitter Specifications.

Accurate to	±1hPa Typical absolute (700-1100 hPa and 0 to 60oC). ±0.2hPa Typical relative @ 25oC.
Important:	The sensor is protected by a IP67 filter to allow use in wet environments.
Output.	700~1100 hPa for 4~20mA (2 wire Loop Powered).
Power Supply.	9~33Vdc.
Supply Voltage Sensitivity.	<±0.01%/V FSO.
Maximum Output Current.	Limited to <32mA.
Max output Load Resistance.	800Ω @ 24Vdc. (50Ω/V Above 8Vdc).
Operating Temperature.	-30~70C
Storage Temperature.	-30~85C.
Operating Humidity.	100%RH.
Operating height	below 2000 meters.

Note. Filter must be uncovered and clean to ensure accurate measurements.



BP-CL-D Display Version



BP-CL No Display

Product Liability.

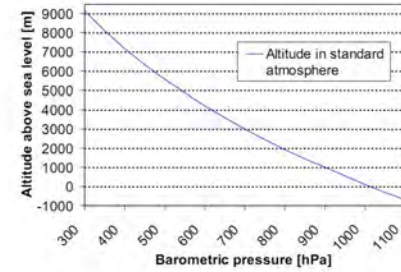
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Warning: These products are not designed for use in, and should not be used for patient connected applications. In any critical installation an independent fail-safe back-up system must always be implemented.

Barometric Pressure Sensor Operating Range.

The sensor used in this Transmitter is a Bosch Sensortec BMP085. This sensor is fully calibrated at Bosch.

The sensor is supplied calibrated for actual barometric pressure. Your supplier can set the offset to allow the display of sea level pressure when the probe is above sea level. For the end user to configure this offset a programming cable is required.



Graph Of Maximum Load Versus Power Supply.

