

Operating Manual

Barometer

GDH200-12



Specification

Measuring Range:	Abs. Pressure: 0 ... 1300 mbar, resolution 1mbar non corrosive gases	resp.	0 ... 975 mmHg, resolution 1mmHg
Max. Overpressure:	2000 mbar	resp.	1500 mmHg
Accuracy: (± 1 Digit) (at nominal temperature = 25°C)	+/- 0.25% FS hysteresis and linearity +/- 0.50% FS temperature dependency 0 to 50°C		
Pressure Connection:	metal pressure port for connection to 6 x 1 mm tubes at the top of device (4mm inner tube \varnothing) standing out approx. 11mm		
Offset and Scale:	digital offset and scale correction for pressure measuring		
Measuring Frequency:	1 measuring per second		
Display:	approx. 13 mm high, 3½-digit LCD		
Operation Elements:	3 keys for ON/OFF, min-/max-value display, zero setting		
Min-/Max-Value Memory:	Min and max measured value are stored		
Sea Level Correction:	By entering the elevation above sea level, the pressure at sea level can be displayed		
Zero Function:	Difference measuring: the display value is set to zero		
Ambient Conditions:	-25 to 50°C; 0 to 80% RH. (not condensing)		
Storage Temperature:	-25 to 70°C		
Power Supply:	9V-battery type JEC 6F22 (in scope of supply)		
Power Consumption:	approx. 250 μ A (battery life: with standard zinc carbon battery more than 1200 hours!)		
Battery Change Indicator:	automatically if battery is used up: "BAT"		
Auto-Off-Function:	when the Auto Off Function is activated, the device switches automatically off, if keypad is not attended for a longer time (selectable 1..120min).		
Housing:	impact-resistant ABS, transparent panel, front side IP65		
Dimensions:	approx. 106 x 67 x 30 mm (L x W x D) without pressure ports		
Weight:	approx. 135g incl. battery		
EMC:	The device corresponds to the essential protection ratings established in the Regulations of the Council for the Approximation of Legislation for the member countries regarding electromagnetic compatibility (89/336/EWG). Additional fault: <1%		

Safety instructions:

This device has been designed and tested in accordance to the safety regulations for electronic devices.

However, its trouble-free operation and reliability cannot be guaranteed unless the standard safety measures and special safety advises given in this manual will be adhered to when using it.

- Trouble-free operation and reliability of the device can only be guaranteed if it is not subjected to any other climatic conditions than those stated under "Specification".
If the device is transported from a cold to a warm environment condensation may result in a failure of the function. In such a case make sure the device temperature has adjusted to the ambient temperature before trying a new start-up.
- If there is a risk whatsoever involved in running it, the device has to be switched off immediately and to be marked accordingly to avoid re-starting. Operator safety may be a risk if:
 - there is visible damage to the device
 - the device is not working as specified
 - the device has been stored under unsuitable conditions
 In case of doubt, please return device to manufacturer for repair or maintenance.
- Warning:** Do not use these product as safety or emergency stop device, or in any other application where failure of the product could result in personal injury or material damage.
Failure to comply with these instructions could result in death or serious injury and material damage.
- The battery has to be taken out, when storing device above 50°C.
It is recommended to take the battery out, when storing device for a longer period of time.

Measuring And Functions

Measuring The Atmospheric Pressure

The device measures the absolute pressure of the ambient atmosphere. This is not necessarily the same like the values given by weather stations! The weather stations' values are pressure at sea level. Usually the sensor is placed above sea level and therefore, if the value at sea level(zero) is to be measured, the pressure loss resulting from the actual elevation above zero has to be considered! The device can correct the pressure. Therefore S.L (Sea Level correction) has to be activated in the configuration (= "on") and the elevation above sea level (Alt = Altitude in [m]) has to be entered to get the correct value.

