

Applications

- environmental pressure monitoring
- agriculture
- hydrology
- data buoys
- laser interferometers

Features

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- Standard pressure ranges 900-1100 mBar 800-1060 mBar 600-1060 mBar
- Accuracy at room temperature including traceability to NIST

±0.30 mBar 900-1100 mBar ±0.30 mBar 800-1060 mBar ±0.50 mBar 600-1060 mBar

- Long term stability ±0.1 mBar/year
- Supply voltage 10-30 Vdc
- On/off control with external trigger
- Output voltage 0-2.5 or 0-5 Vdc
- Current consumption less than 4mA

Design Features

The WBP analogue barometer pressure transmitters are designed both for accurate barometric measurements at room temperature and for general environmental pressure monitoring over a wide temperature range.

The excellent long-term stability of the barometer minimizes or even removes the need for field adjustment in many applications.

The compact WBP are ideal for data logger applications because of their low power consumption, selectable external on/off control, practical output voltage ranges and three or four wire connection capability.

The WBP use silicon capacitive absolute pressure sensor barometric pressure measurement applications.

The WBP combines the outstanding elasticity characteristics and mechanical stability of single-crystal silicon with the proven capacitive detection principle.

Automatikprodukter have this successful barometric pressure transmitter and housed it in an IP65 Box complete with GORETEX® venting system to produce an outstanding all round sensor.

Ordering Codes

Barometric pressure transmitter

Туре	Supply	Output	Pressure range
WBP1	10-30 Vdc	0-5 Vdc	800-1060 mBar
WBP 2	10-30 Vdc	0-5 Vdc	600-1060 mBar
WBP3	10-30 Vdc	0-2,5 Vdc	600-1060 mBar
WBP 4	10-30 Vdc	0-2,5 Vdc	900-1100 mBar

Accessories

WMB 2 Mast bracket for assembly different products such as WBP

WBP

Jan.09

Technical Specifications

Operating Range (1Mbar = 1hPa)

800-1060 mBar
WBP 3 600-1060 mBar
900-1100 mBar
-40+60°C
non-condensing

Accuracy

WBP 1 resp. WBP 4	Linearity*	±0.25 mBar
	Hysteresis*	±0.03 mBar
	Repeatability*	±0.03 mBar
	Calibration uncertainty**	±0.15 mBar
	Accuracy at +20°C***	±0.30 mBar
WBP 2 resp. WBP 3	Linearity*	±0.45 mBar
· ·	Hysteresis*	±0.05 mBar
	Repeatability*	±0.05 mBar
	Calibration uncertainty**	±0.15 mBar
	Accuracy at +20°C***	±0.50 mBar

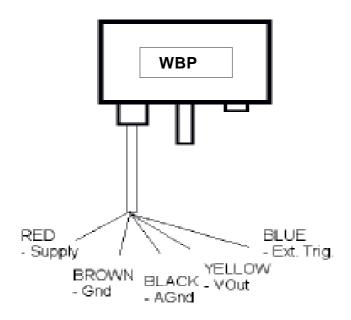
- * Defined as ±2 standard deviation limits of end-point non-linearity, hysteresis error or repeatability error
- ** Defined as ±2 standard deviation limits of in-accuracy of the working standard including traceability to NIST
- *** Defined as the root sum of the squares (RSS) of end-point non-linearity, hysteresis error, repeatability error and calibration uncertainty at room temperature

Total Accuracy WBP 1 resp. WBP 4	+20°C	±0.30 mBar
	0+40°C	±1.00 mBar
	-20+45°C	±1.50 mBar
	-40+60°C	±2.50 mBar
Total Accuracy WBP 2 resp. WBP 3	+20°C	±0.50 mBar
	0+40°C	±1.50 mBar
	-20+45°C	±2.00 mBar
	-40+60°C	±3.00 mBar

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Supply Voltage	10-30 Vdc	
Current Consumption	Operation mode	less than 4 mA
	Shutdown mode	less than 1 uA
Response time (100%)		300 ms
Settling time at power-up		1s
Dimensions		120mm x 80mm x 55mm

Wiring Diagram



RED = SUPPLY

BROW = GND

BLACK = AGND

YELLOW = Vout

BLUE = Ext. Trig.

We reserve the right to make changes and improvements in our products which may effect the accuracy of the information contained in this leaflet.