

## Barometric Pressure Sensor Vaisala PTB110

S32100 / S32200 / S32300

Order-No: S32100	PTB 110.3A 800 ... 1100 hPa
S32200	PTB 110.2A 600 ... 1100 hPa
S32300	PTB 110.1A 500 ... 1100 hPa

### Description

The Vaisala BAROCAP® Barometer PTB110 is designed both for accurate barometric pressure measurements at a room temperature and for general environmental pressure monitoring over a wide temperature range.

#### Vaisala BAROCAP® technology

The PTB110 barometric pressure sensor uses the Vaisala BAROCAP® sensor, a silicon capacitive absolute pressure sensor developed by Vaisala for barometric pressure measurement applications. The sensor combines the outstanding elasticity characteristics and mechanical stability of single-crystal silicon with the proven capacitive detection principle.

#### Accuracy and stability

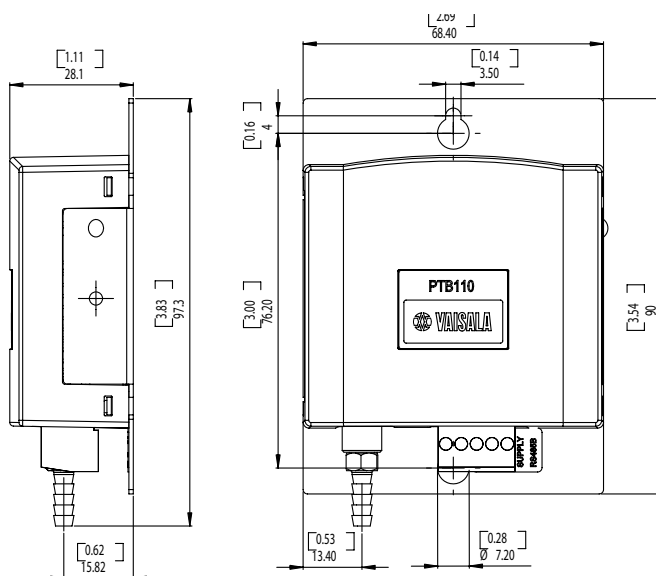
The excellent long-term stability of the barometric pressure sensor minimizes or even removes the need for field adjustment in many applications.

#### Applications

The PTB110 is suitable for a variety of applications, such as environmental pressure monitoring, data buoys, laser interferometers, and in agriculture and hydrology. The compact PTB110 is especially ideal for data logger applications as it has low power consumption.



### Dimensional Drawing



### Your Advantages

- Several pressure ranges, from 500 / 600 / 800 ... 1100hPa
- Accuracy  $\pm 0.3$  hPa at +20 °C
- Long-term stability
- On / off control with external trigger
- Output voltage 0 ... 5 VDC
- Current consumption less than 4 mA
- Mountable on a (35 mm wide) DIN rail
- NIST traceable (certificate included)

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### Specifications

Operating range	
Operating pressure	S32100: 800 ... 1100 hPa (mbar) S32200: 600 ... 1100 hPa (mbar) S32300: 500 ... 1100 hPa (mbar)
Temperature range	-40 ... +60 °C
Humidity range	non-condensing
Electrical data	
Output voltage	0 ... 5 VDC
Supply voltage	10 ... 30 VDC
Current consumption	< 4 mA
Accuracy	
Total accuracy	±0.3 hPa (+15 ... +25 °C) ±0.6 hPa ( 0 ... +40 °C) ±1.0 hPa (-20 ... +45 °C) ±1.5 hPa (-40 ... +60 °C)
Repeatability	±0.03 hPa
Long term stability	±0.1 hPa/year
Resolution	0.1 hPa
General	
Dimensions	Length 72 mm, diameter 22 mm
Weight	90 g
Connection	Screw terminal plug (5-pole plug)
Housing	ABS / PC lend
Housing classification	IP 32
Manufacturer	Vaisala

**Sensor Connection to Ammonit Meteo-40 Data Logger**

Sensor	Plug Pin No.	Ammonit Cable Wire Colour	Meteo-40 Analog Voltage	Supply Sensor
Air Pressure Output Voltage	5	white	A	
Analog Ground	2	blue	B	
Supply	Pin 4	red		10 ... 30 VDC
Ground	Pin 3	black		Main Ground

Connect the shield logger-sided to Ground (GND)

Cable type: LiYCY 4 x 0.25 mm<sup>2</sup>

**Sensor connection diagram to Ammonit Meteo-40 data logger**

