



## OMC-506e Intrinsically Safe Barometric pressure sensor

Observer always advice to place barometric pressure sensors inside, nearby the processing equipment, such like a signal conditioning unit. In case it is placed in a room with overpressure a tube may me used to ventilate to the outside pressure. The OMC-509 pressure port may be used to prevent wind effects on the measurement. This is also recommended in the CAP437 from the CAA.

In some cases on special customer demands a barometric pressure sensor is placed outside and in case this is a hazardous area the OMC-506e can be applied. This sensor is based on a stable, floating piezoresistive transducer with a micro-processor with integrated 16 bit A/D converter. Temperature dependencies and non-linearities of the sensor are mathematically compensated.

### Features:

- High accuracy  $\pm 0.5$  hPa
- Intrinsically safe, ATEX and IECEx certificates available
- Temperature compensated
- Range 800..1100 hPa (on request 600..1100 hPa)
- RS485 output and 4..20 mA output
- Low power consumption
- Fast response
- Excellent Long term stability



*Platform*



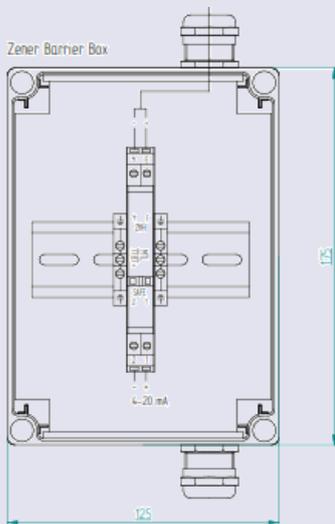
*LNG Carrier*

## GENERAL DESCRIPTION

The OMC-506e is an ATEX and IECEx approved sensor based on the stable floating, piezoresistive transducers and a microprocessor with integrated 16 bit A/D converter with 4..20 mA output. The sensor is placed into IP66 ATEX approved housing (II2G Ex is IIC) with a process connection suitable to mount a pressure port

## DATA SUMMARY

- Operating range 800 to 1100 hPa
- On request other ranges available
- Floating piezoresistive transducer
- Temperature compensated (polynomial compensation)
- Output RS485 and 4..20 mA
- Accuracy  $\pm 0.5$  hPa
- Temperature range  $-40^{\circ}\text{C}..70^{\circ}\text{C}$
- CE-conformity EN61000-6-1 to 6-4
- IECEx DEK 14.0070x
- KEMA 04 ATEX 1081 X



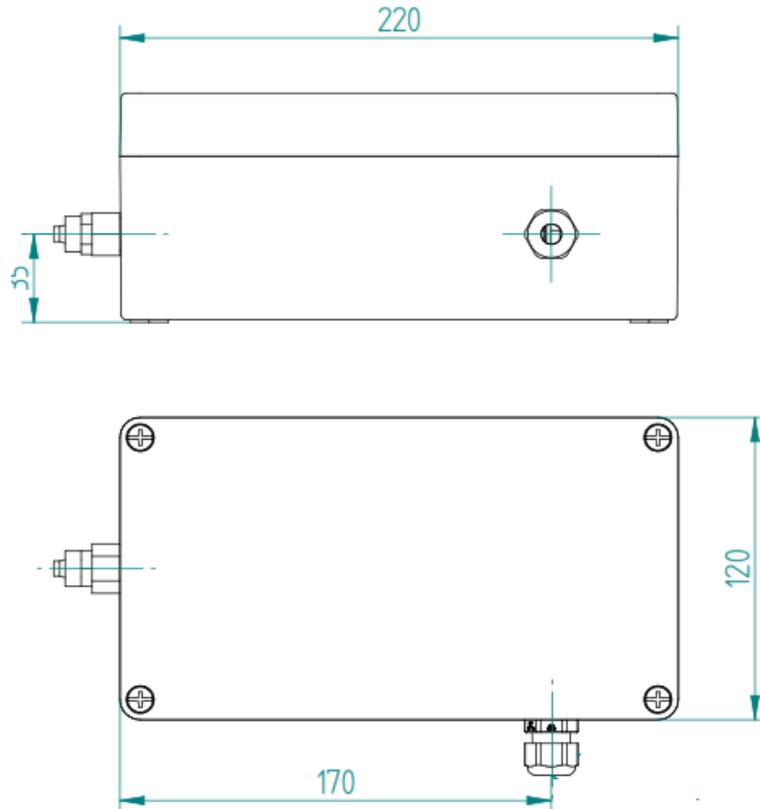
The OMC-506e is supplied including a Zener Barrier box

**OBSERVATOR**  
instruments

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Dimensions

## OPTINAL

- OMC-509 Pressure Port to minimise airflow influences, when the barometric sensor is vented outside via tube.

