



OMC-406 to be fitted into OMC-422 anti-radiation shield



OMC-422



OMC-443 Temperature Sensor



OMC-448 to be fitted into OMC-449 Thermowell

Datasheet

OMC-4XX Temperature Sensors

The Temperature humidity range consists of several sensors and accessories, for measuring air temperature, sea water temperature and relative humidity. As standard an OMC-406 is used for measurement of temperature and humidity. This sensor is supplied with two 4..20 mA out-puts and should be mounted into a radiation shield. When only air temperature is required the OMC-443 may be applied. This sensor is also used on board ships for sea water temperature. In this last case the sensor is mounted into a the sea water inlet using a thermowell.

On request Eex sensors are available.

Features

OMC-406

- Combined temperature and humidity sensor
- High accuracy
- 4...20 mA outputs

OMC-443/448

- Temperature sensor
- High accuracy (A class)
- 4...20 mA output

OMC-422

- Multiplate radiation shield
- Used for air temperature and/or humidity measurement

General

OMC-406

The air temperature and humidity probe OMC-406 provides accurate and precise measurements of both temperature and humidity in two 4...20 mA outputs. The temperature sensor within this probe is a Pt100 element while the principle of humidity measurement is based on a capacitive measuring device.

OMC443/448

The air temperature sensor OMC-443/448 provides an accurate measurement of temperature using a Pt100 sensing element. A build-in amplifier is provided with a 4...20 mA output. This corresponds with -40 to +60 deg. C. Other range -30 to +70 deg. C. is available on request.

The OMC-443 has a 1" NPT connection and fits in the OMC-422 (air temperature). The OMC-448 has a 1/2" NPT connection and fits in the OMC-449 (water temperature).

OMC-422

The OMC-422 multiplate anti-radiation shield is a naturally ventilated shield, designed for ambient temperature and relative humidity sensors. The convenient size and weight of this type make it useful for a wide range of applications.

OMC-449

The OMC-449 Flanged Thermowell (EN1092-1/05-DN25PN16/4B1-1.4401/14404) is made of stainless steel 316 and has a 1/2" NPT connection.

Data summary

OMC-406

HUMIDITY

- Measuring range 0 to 100% RH
- Accuracy at 23 deg. C. $< \pm 1.5\%$ RH between 5 to 95%
- Linear output 4...20 mA = 0...100 %

TEMPERATURE

- Measuring range -40 to +60 deg. C
- Accuracy at 23 deg. C. $< \pm 0.3$ deg. C
- Linear output 4...20 mA
- Measuring system Pt100, 1/3 DIN

GENERAL

- Power supply 8 to 26.5 VDC, 50 mA
- Protection of the sensors Teflon filter
- Dimensions L. 265 mm, 25 mm dia
- Cable length 3m, tolerance +/- 1%

OMC-443/448

TEMPERATURE

- Measuring range -40 to +60 deg. C
- Accuracy $< \pm 0.3$ deg. C
- Linear output 4...20 mA
- Measuring system Pt100, DIN class A
- Connection 2-wire

GENERAL

- Power supply 10 to 30 VDC
- LED indication for proper connection
- Dimensions L. 225 mm, 65mm dia

OMC-422 RADIATION SHIELD

- Dimensions overall 16,7 cm dia, height 26,6 cm
- Mounting fit vertical pipe 25-51 mm diameter
- See brochure OMC-422 for more details

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