

Quick guide

HBPH-MK2- pH Sensor..... LEAK-ALARM for brine and cooling water

HB Products – dedicated to optimal solutions for level measurement and control of oil and refrigerants.

HB Products is a development-oriented company, which specializes in the development and production of sensors for industrial refrigeration systems. Apart from expertise within oil and refrigerant control, we have great know-how in the design and optimization of industrial refrigeration systems. This knowledge enables us to develop and produce the best sensors!

Since its start more than 25 years ago, HB Products has attained a strong global position. This is the result of our ability to think in terms of new technological solutions, create

For further info and guidance please visit our homepage

www.hbproducts.dk



Functionality:

The HBPH sensor is made to detect pH in brine. If the pH sensor is to be used in a different way, prior approval must be obtained from HB Products.

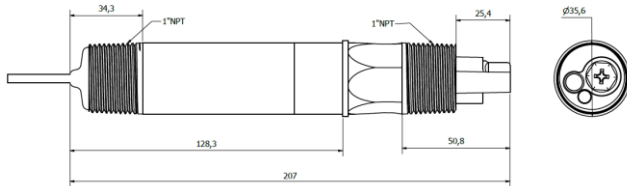
Download complete manual:

For further information please download the instruction manual from our homepage: www.hbproducts.dk.

Caution:

Only qualified personnel should work with the product. The technician must be aware of the consequences of an improperly installed sensor, and must be committed to adhering to the applicable local legislation.

Mechanical installation



For best results probes should always be mounted vertically with electrodes down. If this is not possible, the probe must be at least 15° above horizontal.

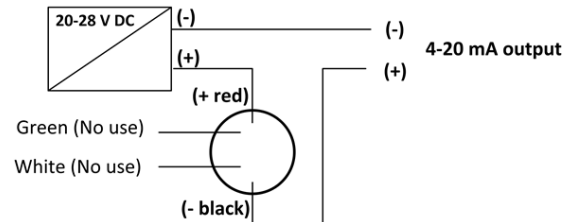
Specifications:

Measurement range: 0...14 pH
 Output: two-wire 4-20mA, not calibrated
 Ambient temperature: -5...+50°C
 Liquid temperature: -10...+95°C
 Max. pressure: 6.9 bar @ 65°C & 2.75 bar @ 95°C
 Material: CPVC, Kynar/ceramic, titanium, Viton
 Thread connection: 1 1/2" NPT
 Flow rate: max 3.0 m/s

NOTE: Do not discard the protective cap(s) that came with the sensor. If the sensor is removed from the process for an extended period of time, thoroughly clean the sensor, put a piece of cotton ball with few drops of water into the protective cap and replace it on the sensor. This keeps the junction from drying out which causes slow response when put back into operation or causes permanent damage to the sensor. **Sensors should not be left in dry lines or empty tanks for extended periods.**

The Sensor should always be checked or calibrated acc. to the service instruction/manual.

Electrical installation



HBPH probes have two wires; black, red. The red wire is to be connected to the +24 VDC terminal and the black wire to the + Analog input terminal on the PLC, the PLC minus terminal should be connected to common in the loop.

Electrical specifications:

Cable: 4.6 m
 Enclosure: IP65
 Output: 4...20 mA – two-wire
 Voltage supply: 20...28 V DC
 Maximum load: 450 Ω

The sensor is not calibrated, the mA signal between pH 4 and pH 10 buffer solutions should be in the range 8mA +1 to 16.0mA +/-1

