

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



Mechanical installation



Quick guide

HBTS-TR - Temperature Transmitter



Functionality:

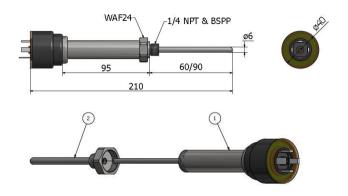
The HBTS-TR transmitter/sensor is made to detect refrigerant temperature in refrigeration systems. If the temperature sensor is to be used in a different way, prior approval must be obtained from HB Products.

Download complete manual:

For further information please download the instruction manual from our homepage: $\underline{www.hbproducts.dk}.$

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 specifications:

Refrigerant type: R1234, R22, R134A, R404A, R410A, R507, R717 & R718

Oil type: PAO, POE, PAG & mineral Ambient temperature: -30...+50°C Media temperature: -50...+130°C Max. pressure: 150 bar

Material, mechanical: AISI304 Thread connection: '%" NPT / BSPP

Sensor well: OD 6 mm

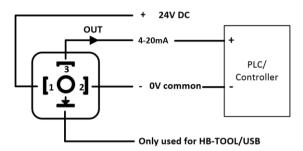
Sensor element length: 60 & 90 mm

Spare parts:

Pos 1: Electronic part – see part number in extended instruction manual Pos 2: Mechanical part – see part number in extended instruction manual

Caution! In case of welding work on the unit, please make sure that proper ground is carried out to avoid damaging the electronics.

Electrical installation



Note: Special USB cable and adaptor/converter plug is needed for scaling the temperature measuring range.

Electrical specifications:

Sensor output: 4-20mA

Sensor type: PT1000 Sensor element: DIN EN 60751, Class B - 1/3

Plug: DIN 43 650 Enclosure: IP65

Accessories:

1. Converter Plug M12/TR

2. HB-USB cable