

Electrical Connection

The sensor must be wired with a 4-cord cable with an M12 connection plug. Colour codes in the diagram below are related to the cables delivered by HB. The supply voltage is limited to 24V AC/DC.



LED Indication

LED indication:

- 1) Green LED indicates 24 V AC/DC power supply
- 2) Red LED indicates ALARM at 100 %



LED signal	ON/OFF/Frequency	Functionality
Green	ON	Power supply
	OFF	No power supply
Red	ON	Alarm to be activated at 100% level. The liquid level has to drop
		below hysteresis
	OFF	No alarm

Further Information

Extended and detailed manuals are available on our homepage www.hbproducts.dk.



Quick Installation Guide for: HBLT-WIRE

Mechanical Installation



pipe.



To install the HBLT-wire, you must use a 2.5 mm Allen key, shifting spanner, wire cutter and liquid gasket.





Define the sensor length from the standpipe height. Shorten the wire and Teflon hose to required length.





thread).



Make sure that wire is in bottom of the hole.



The sensor is installed in the standpipe or directly in the tank. The sensor length is determined by standpipe length or tank height. Please leave 50 mm space between the let and the bottom of the pipe. Steel wire and Teflon hose most be cut to desired length with wire cutters or a bolt cutter, in the end where the let must be installed. Teflon hose must be mounted outside on the wire.

Standpipe must be insulated to avoid boiling in the stand

Loosen the electronic part from mechanical part.



Teflon hose must be 20 mm shorter than the wire.



Tighten the 2 setscrews to fix the wire.

When sealing the conical thread, you must use liquid conductive sealant, which creates a ground connection between the standpipe/tank and the sensor, since the sensor uses the standpipe/tank as reference. If Teflon is used, it must only be used on part of the thread so that the ground connection is established. If you are in doubt regarding the ground connection, measuring the resistance between the tank and sensor is recommended. This should be approx. 0 ohms. For cylindrical thread, an alu sealing ring is included.

L = Programmable sensor length

L= Wire length + 86 mm

Teflon hose most be 20 mm shorter than wire length.

Insert wire in let part and tighten the 2 setscrews. Turn the top cover plastic part on the metal part (right-hand



Configuration with PC and HB-TOOL

The HBLT-Wire sensor should be configured to the actual application. The software program can be downloaded at www.hbproducts.dk. Programming cable has been included. The actual sensor settings can be displayed by pressing the "Show current figuration" button.

Setup	Factory settings	Configuration options
Refrigerant	NH3*	NH3/HFC
Sensor probe length	Sensor length*	6004000 mm
Standpipe size in inches	DN40-1½"*	DN25, DN32, DN40, DN50, DN65, DN80, DN100
Offset from max level	0 mm	08000 mm

The above shows the factory settings and configuration possibilities in an HBLT-Wire sensor. *

Basic settings Advanced settings: Read configuration is successful Sensor Long Part Sensor length (L) should be input here Setect COM Port Sensor Settings: Sensor Long the COM Part Sensor Long the Comparison of the Co	HB HBLT-Wire Management configuration tool	Select the refrigerant type here
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Offset minimum level in mm: If Real Offset minimum level in mm: Change relevant parameters Instruction video - HBLT-Wire Change relevant parameters Not Tube Promotion video - HBLT-Wire You Tube You Tube Reset data to default: Reset data to default: Reset data to default: Save by clicking "Save to sensor" Select all data Save by clicking "Save to sensor"	Sensor length in mm: 1000 Standpipe size in inch: DN40 1% Offset max level in mm:	2) Connect USB-M12 cable to PC and His set 3) Press selec Cereer LEDs should be at 1400 mm and the sensor length is 1600 mm, the offset length should be 200 mm.
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	YOU LUDE YOU LUDE	Reset data to default: Reset sensor Save by clicking "Save to sensor"
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Configuration from sensor front

In case a PC is not available, the sensor configuration can be carried out To enter the configuration parameters please press the "R" button for 10 The yellow LED will flash in 5 seconds and after this it will be off. When change in 15 sec will interrupt the configuration. In that case please pre

Button Time/sequence	Parameter	Range	Display
>10 sec	Enterring the configuration mode		CAL
1 push	Enterring length configuration mode		-L-
1 push to change the length	To roll digit 3 from 1-9.	1-9	0.00
in cm.		1 = 100 cm,	
		2 = 200 cm,	
		3 = 300 cm	
>5 sec	To switch to digit 2		10.0
1 push to change the length	To roll digit 2 from 1-9.	1-9	
in cm.		1 = 110 cm,	
		2 = 120 cm,	
		3 = 130 cm	
>5 sec	To switch to digit 3		110.
1 push to change the length	To roll digit 1 from 1-9.	1-9	
in cm.		1 = 111 cm,	
		2 = 112 cm,	
		3 = 113 cm	
>5 sec	To switch to refrigeration mode		111
1 push to change	Change of refrigeration/liquid type	R717=717	-F-
refrigeration/liquid type		OIL= OIL	
		R134= 134	
		R507= 507	
		R404 = 404	
		R407= 407	
		R410= 410	
		R22 = 022	
		R123ZE = 123	
>5 sec	To swtich to selection of standpipe		
1 push to switch	Size of standpipe to select	DN25 = 025	-O-
		DN32 = 032	
		DN40 = 040	
		DN50 = 050	
		DN65 = 065	
		DN80 = 080	
		DN100 = 100	
>5 sec	Saving all data and leaving		BYE
	calibration mode.		

The sensor configuration is saved when leaving the calibration mode. The "BYE" signal is a confirmation on this. To view the configuration parameters please press the "R" button for 10 seconds and then press 5 seconds. It will start to show programmed parameter, with a jump each 3 seconds. It will repeat the selected parameters once and then return to the actual value in %.

Button	Display
Time/sequence	
5 sec	-L- / xxx (length)
	-F- / xxx (type of refrigerant)
	-O- / xxx (stand pipe dimension)

t by the sensor push bottom of the front.	
0 seconds and then follow the steps in the table	le.
en it is ON again the programming can start.	No
ss the "R" button for 10 seconds again.	