

Data sheet: HBLC & HBSLC

Liquid Level Sensors are vital for accurately measuring liquids in tanks and vessels across industries. These capacitive sensors are designed to measure liquid levels in gas-filled vessels. The HBLC provides a 4-20 mA output, while HBSLC includes a built-in controller for direct valve control. Both are part of the split-design sensor family, sharing the same electronic unit with a digital display that shows the liquid level percentage.

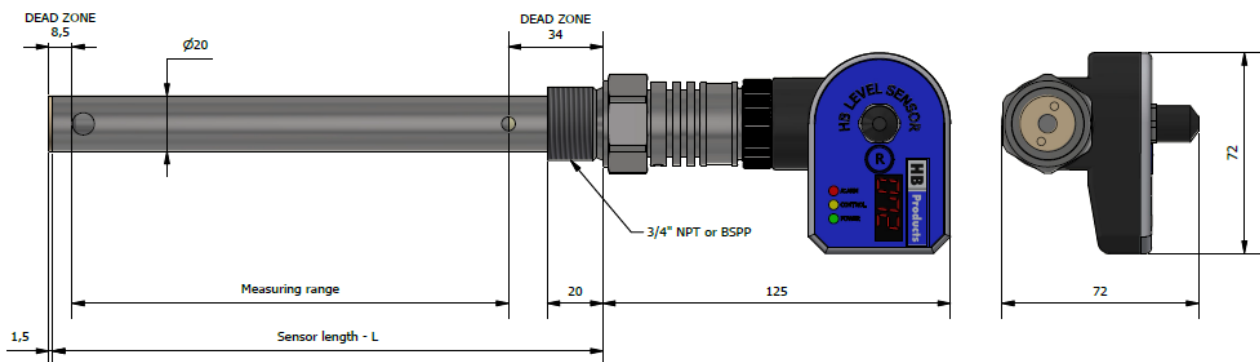


Model	Refrigerants	Liquids
HBLC-CO2 & HBSLC-CO2	R744, R600, R600a, R290	CO2, Propane, Butane Iso butane, and other hydrocarbons
HBLC-HFC & HBSLC-HFC	All HFC, HFO, CFC, HCFC	Synthetic refrigerants in general
HBLC-OIL & HBSLC-OIL	Mineral, PAO, PAG, POE oils	All oils in refrigeration systems

Power supply	HBLT & HBLC	HBSLC/C, S, PWM
Voltage	24V AC/DC + 10%	24V AC/DC + 10%
Max. load resistance	500 Ω	500 Ω
Max. energy consumption	600 mA	600 mA + valve consumption
Plug connection	M12 - 5 pins	M12 - 5 pins + cable output
Output		
Analog output	4-20 mA	4-20 mA + valve output max 1A
Transistor output - alarm	PNP, 1 A	None
Contact function - alarm	NO/NC (Programmable)	None
Environmental conditions		
Ambient temperature	-30°C to 50°C (-22°F to 122°F)	
Liquid temperature	-60°C to 145°C (-76°F to 140°F)	
Max. pressure	150 bar (2175 psi)	
Protection degree	IP65	
Vibrations	IEC 60068-2-6 (4g)	
Mechanical specifications		
Thread connections	3/4" NPT or BSPP	
Adapter - 3/4" NPT / 1" BSPP (option)	HBS/ADAP/8/2 and HBS/ADAP/9/6	
Sensor length	200 mm to 3.000 mm	
Installation	Top-down or bottom-up	
Dead zone	8.5 mm at the bottom – max 34 mm at the top, depending on the installation	
Size	See the dimensional drawing on the next page	
Material - mechanical part	AISI 304 / PTFE / PEEK / PA6	

Material - electronic part	PA46 / PC
House type	Angled oval house for vertical installation
Approvals	
EMC-Emission	EN 61000-3-2
EMC-Immunity	EN 61000-4-2
Indication	
Display	3-digit percentage display
LED indication	Green, yellow & red LED
Configurations	
Configuration	HB Tool is used for calibration USB-M12 cable is needed
Calibration	Standard for CO ₂ , R134a or mineral oil other liquid on request
Scope of supply	
Package includes	Sensor with specified length 5m Supply cable with M12 plug

Dimensional drawing



For any inquiries or further information, please don't hesitate to contact us at info@hbproducts.dk.

HB Products A/S
 DK-8361 Hasselager
 Phone: +45 87 47 62 00
www.hbproducts.dk