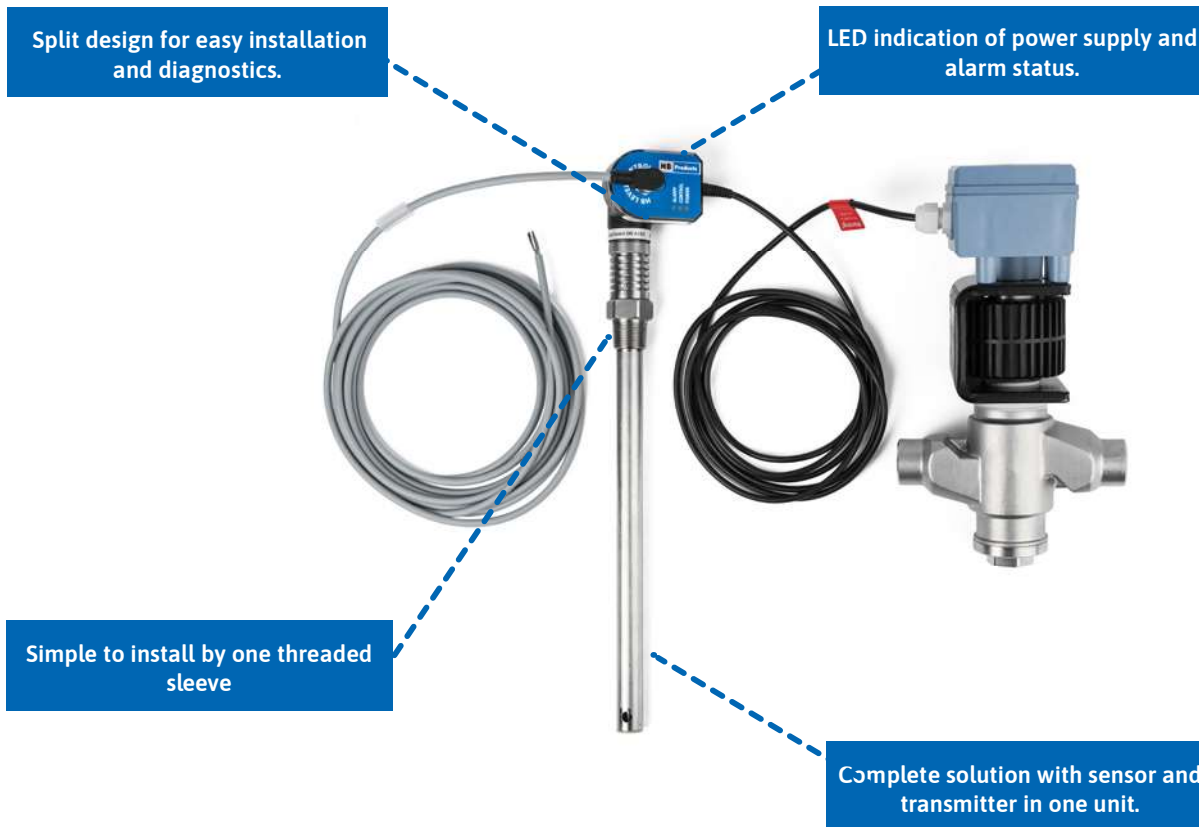


HFC Liquid Level Sensor

Category: HBLC-HFC & HBSLC-HFC



- Available as 2-wire sensor
- Now with ATEX / IECEx certificate (This version is without LED display)

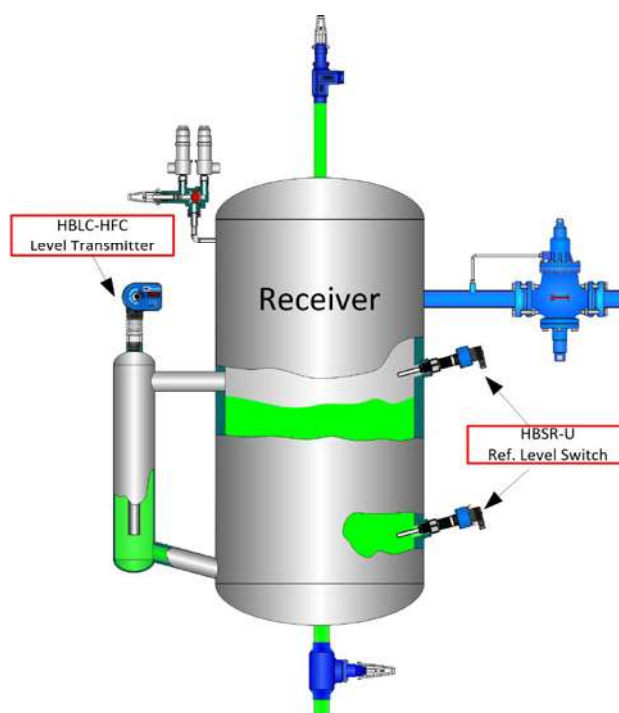
Functional description:

HBLC-HFC is an intelligent sensor with a built-in microprocessor. It is designed for continuous level measurement of liquid HFC refrigerant in refrigeration systems.

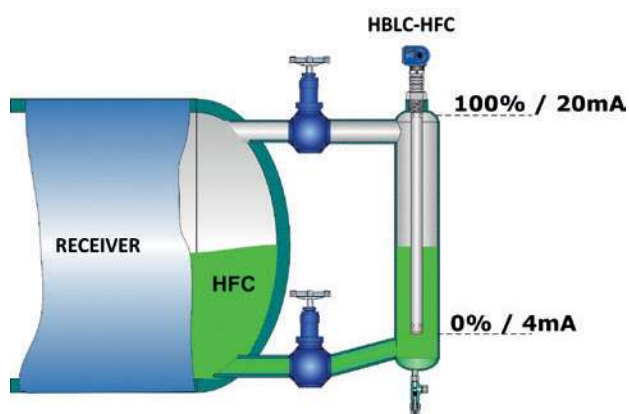
HBLC-HFC is designed for the measurement of HFC refrigerant level in chillers, evaporators and condensers. The sensor is pre-configured to R134, but can be configured for other HFC types.

The sensor emits a 4-20mA analog signal, which is proportional to the liquid level. The construction of the sensor makes it suitable for systems with pressure of up to 150 bar.

The sensor is delivered in a version without integrated cable (named HBLC) and a version with cable for direct control of valves (named HBSLC).



HBLC-HFC on receiver

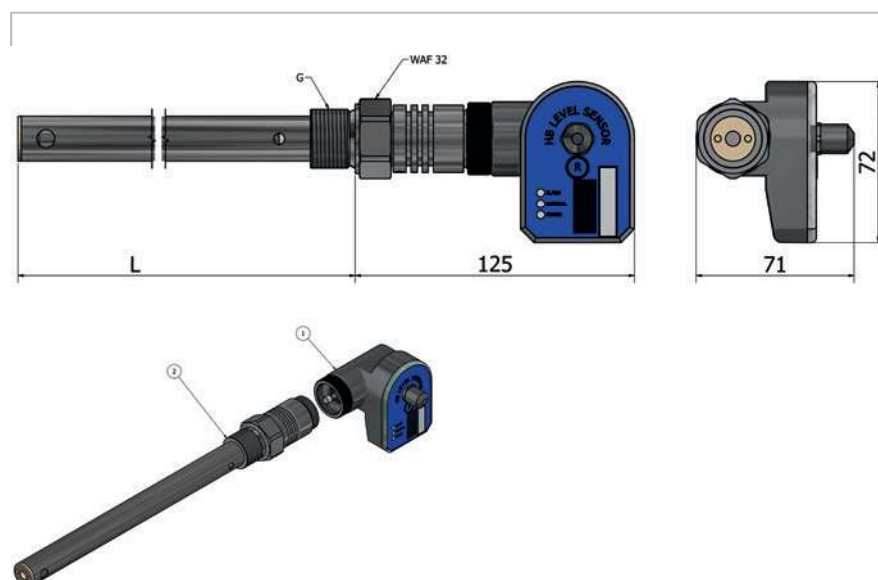


Technical data - sensor

Supply		Mechanical Specifications	
Supply:	24 V AC/DC $\pm 10\%$ *	Thread connection	$\frac{3}{4}$ " NPT & BSPP
Current consumption - sensor only*	Max 50 mA	Materials - mechanical parts:	AISI304/PTFE
Plug	M12, 5 pins - DIN 0627	Materials - electronic parts:	Nylon 6 (PA)
		Dimensions	See drawing
Output			
Analog output	4-20 mA	Ambient temperature	-30...+50°C
Permitted load on potential free contactless set	1A (24V DC)	Refrigerant temperature	-60...+80°C
LED indication	Green, yellow, and red	Max. operational pressure:	150 bar
Cable specification		Protection degree	IP65
Supply cable, 5 meters	HBxC-M12/5	Vibrations	IEC 68-2-6 (4g)
Cable size	PUR - 5 x 0,34 mm ²		
Approvals			
EMC Emission:	EN61000-3-2		
EMC Immunity:	EN61000-4-2		

* Total consumption is sensor consumption plus output and it depends on ambient temperature.

Mechanical dimensions



Ordering codes

Length	Length/Thread	Without integrat- ed cable	Modulating valve*	Stepper motor valve**	Pulse width modula- tion***
200 mm	3/4" NPT	HBLC-HFC-2-2	HSBLC-HFC-2-2	HSBLC-HFC/C-2-2	HSBLC-HFC/PWM-2-2
200 mm	3/4" BSPP	HBLC-HFC-2-6	HSBLC-HFC-2-6	HSBLC-HFC/C-2-6	HSBLC-HFC/PWM-2-6
300 mm	3/4" NPT	HBLC-HFC-3-2	HSBLC-HFC-3-2	HSBLC-HFC/C-3-2	HSBLC-HFC/PWM-3-2
300 mm	3/4" BSPP	HBLC-HFC-3-6	HSBLC-HFC-3-6	HSBLC-HFC/C-3-6	HSBLC-HFC/PWM-3-6
400 mm	3/4" NPT	HBLC-HFC-4-2	HSBLC-HFC-4-2	HSBLC-HFC/C-4-2	HSBLC-HFC/PWM-4-2
400 mm	3/4" BSPP	HBLC-HFC-4-6	HSBLC-HFC-4-6	HSBLC-HFC/C-4-6	HSBLC-HFC/PWM-4-6
500 mm	3/4" NPT	HBLC-HFC-5-2	HSBLC-HFC-5-2	HSBLC-HFC/C-5-2	HSBLC-HFC/PWM-5-2
500 mm	3/4" BSPP	HBLC-HFC-5-6	HSBLC-HFC-5-6	HSBLC-HFC/C-5-6	HSBLC-HFC/PWM-5-6
600 mm	3/4" NPT	HBLC-HFC-6-2	HSBLC-HFC-6-2	HSBLC-HFC/C-6-2	HSBLC-HFC/PWM-6-2
600 mm	3/4" BSPP	HBLC-HFC-6-6	HSBLC-HFC-6-6	HSBLC-HFC/C-6-6	HSBLC-HFC/PWM-6-6
700 mm	3/4" NPT	HBLC-HFC-7-2	HSBLC-HFC-7-2	HSBLC-HFC/C-7-2	HSBLC-HFC/PWM-7-2
700 mm	3/4" BSPP	HBLC-HFC-7-6	HSBLC-HFC-7-6	HSBLC-HFC/C-7-6	HSBLC-HFC/PWM-7-6
800 mm	3/4" NPT	HBLC-HFC-8-2	HSBLC-HFC-8-2	HSBLC-HFC/C-8-2	HSBLC-HFC/PWM-8-2
800 mm	3/4" BSPP	HBLC-HFC-8-6	HSBLC-HFC-8-6	HSBLC-HFC/C-8-6	HSBLC-HFC/PWM-8-6
900 mm	3/4" NPT	HBLC-HFC-9-2	HSBLC-HFC-9-2	HSBLC-HFC/C-9-2	HSBLC-HFC/PWM-9-2
900 mm	3/4" BSPP	HBLC-HFC-9-6	HSBLC-HFC-9-6	HSBLC-HFC/C-9-6	HSBLC-HFC/PWM-9-6
1000 mm	3/4" NPT	HBLC-HFC-10-2	HSBLC-HFC-10-2	HSBLC-HFC/C-10-2	HSBLC-HFC/PWM-10-2
1000 mm	3/4" BSPP	HBLC-HFC-10-6	HSBLC-HFC-10-6	HSBLC-HFC/C-10-6	HSBLC-HFC/PWM-10-6
1100 mm	3/4" NPT	HBLC-HFC-11-2	HSBLC-HFC-11-2	HSBLC-HFC/C-11-2	HSBLC-HFC/PWM-11-2
1100 mm	3/4" BSPP	HBLC-HFC-11-6	HSBLC-HFC-11-6	HSBLC-HFC/C-11-6	HSBLC-HFC/PWM-11-6
1200 mm	3/4" NPT	HBLC-HFC-12-2	HSBLC-HFC-12-2	HSBLC-HFC/C-12-2	HSBLC-HFC/PWM-12-2
1200 mm	3/4" BSPP	HBLC-HFC-12-6	HSBLC-HFC-12-6	HSBLC-HFC/C-12-6	HSBLC-HFC/PWM-12-6
1300 mm	3/4" NPT	HBLC-HFC-13-2	HSBLC-HFC-13-2	HSBLC-HFC/C-13-2	HSBLC-HFC/PWM-13-2
1300 mm	3/4" BSPP	HBLC-HFC-13-6	HSBLC-HFC-13-6	HSBLC-HFC/C-13-6	HSBLC-HFC/PWM-13-6
1400 mm	3/4" NPT	HBLC-HFC-14-2	HSBLC-HFC-14-2	HSBLC-HFC/C-14-2	HSBLC-HFC/PWM-14-2
1400 mm	3/4" BSPP	HBLC-HFC-14-6	HSBLC-HFC-14-6	HSBLC-HFC/C-14-6	HSBLC-HFC/PWM-14-6
1500 mm	3/4" NPT	HBLC-HFC-15-2	HSBLC-HFC-15-2	HSBLC-HFC/C-15-2	HSBLC-HFC/PWM-15-2
1500 mm	3/4" BSPP	HBLC-HFC-15-6	HSBLC-HFC-15-6	HSBLC-HFC/C-15-6	HSBLC-HFC/PWM-15-6
1700 mm	3/4" NPT	HBLC-HFC-17-2	HSBLC-HFC-17-2	HSBLC-HFC/C-17-2	HSBLC-HFC/PWM-17-2
1700 mm	3/4" BSPP	HBLC-HFC-17-6	HSBLC-HFC-17-6	HSBLC-HFC/C-17-6	HSBLC-HFC/PWM-17-6
2000 mm	3/4" NPT	HBLC-HFC-20-2	HSBLC-HFC-20-2	HSBLC-HFC/C-20-2	HSBLC-HFC/PWM-20-2
2000 mm	3/4" BSPP	HBLC-HFC-20-6	HSBLC-HFC-20-6	HSBLC-HFC/C-20-6	HSBLC-HFC/PWM-20-6
2500 mm	3/4" NPT	HBLC-HFC-25-2	HSBLC-HFC-25-2	HSBLC-HFC/C-25-2	HSBLC-HFC/PWM-25-2
2500 mm	3/4" BSPP	HBLC-HFC-25-6	HSBLC-HFC-25-6	HSBLC-HFC/C-25-6	HSBLC-HFC/PWM-25-6
3000 mm	3/4" NPT	HBLC-HFC-30-2	HSBLC-HFC-30-2	HSBLC-HFC/C-30-2	HSBLC-HFC/PWM-30-2
3000 mm	3/4" BSPP	HBLC-HFC-30-6	HSBLC-HFC-30-6	HSBLC-HFC/C-30-6	HSBLC-HFC/PWM-30-6

Spare parts

Position	Specification	Type	Ordering code
1	Mechanical parts	Mechanical part for HBLC-HFC	HBLC-HFC-XXX-MEK*
2	Electronic part	Electronic part for HBLC-HFC - With LED	HBLC-HFC-EL-LED*

*When ordering mechanical parts please inform about length- and thread type.

*Electronic part must be calibrated on-site