

# CT801-LB/S

## Electro-pneumatic Tank Level Transmitter – Protected Areas

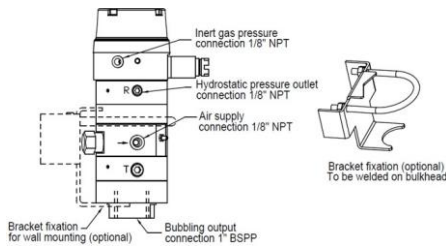
The CT801-LB/S electro-pneumatic tank level transmitter performs level measurements of tanks on ships, barges and yachts based on the bubbler-type principle. Compressed air is sent via a simple pipe to the bottom of the tank; the pressure equivalent to the column of liquid is measured by a very sensitive differential pressure sensor and transmitted as output signal. A simple pipe being the only wetted part rules out any chances of instrument corrosion. Measurement accuracy is totally immune to bad conditions like sloshing, angled surface, foam, solid deposits, unlike many other gauging technologies. Ease of installation and simple on-board maintenance with pre-stocked spare parts has made CT801 series the instrument of choice since 1966, whenever electro-pneumatic tank level measurement is required. The pneumatic level indicator CT080 can be connected to CT801 series without additional power supply.

Honeywell offers a wide variety of choices for electro-pneumatic level measurement with a portfolio spanning independent stand alone level transmitters, and bubbling cabinets for measurement and signal accumulation from a common cabinet. The CT801-LB/S is designed for tank top mounting in protected area (away from open deck) using a bracket or flanged connection. These transmitters are designed to avoid common malfunctions such as lack of air pressure supply or overpressure. An automatic non-return valve is activated as soon as the supply pressure falls below 1 bar in order to prevent the liquid from going into the bubbling line and reaching the transmitter. For pressurized tanks, the level is calculated by deducting the inert gas pressure above the liquid from the measured hydrostatic pressure.

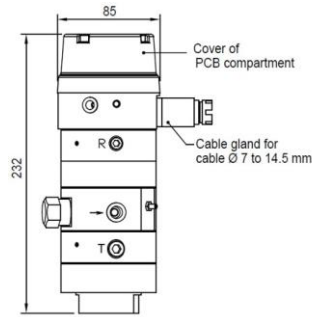


TECHNICAL SPECIFICATIONS		PNEUMATIC FEATURES & CONNECTIONS	
Operating Temperature	- 20°C to + 70°C	Safety Features	<ul style="list-style-type: none"> <li>• Automatic operation of:               <ul style="list-style-type: none"> <li>- Overpressure valve</li> <li>- Air supply safety valve</li> <li>- Bubbling line non-return valve</li> <li>- Bubbling line cleaning</li> </ul> </li> <li>• Venting nipple for open deck mounting</li> </ul>
Air Supply Quality	4 to 10 Bar Quality 3 Particle size 5 microns Pressure Dew point: -20°C Oil content: 1mg/m <sup>3</sup>		
Range	0 mBar to 4000 mBar		
Power Supply	12 to 28V DC	Connections	<ul style="list-style-type: none"> <li>• Pressurized tanks</li> <li>• Pressure level indicator</li> </ul>
Accuracy	+/-0.3% FS @20°C	Bubbling flow	• 10l/h (automatic regulator)
Output Signal	4-20mA	Bubbling line connections	1" BSPP 1/2" NPT (With Flange) 1/4" NPT
Protection Class	IP66		
DOCUMENTATION		APPROVALS	
Technical manual	MT5005	Usage Area	Safe Area (Not for on-deck mounting)
Installation manual	MI5005		
Maintenance manual	MM5005		

## MECHANICAL CONNECTIONS – 1" BSPP



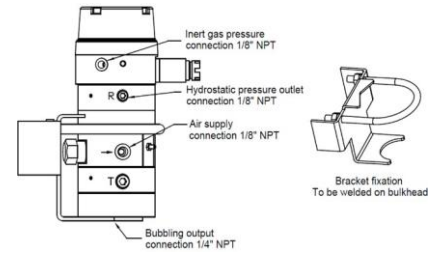
## MECHANICAL DIMENSIONS – 1" BSPP



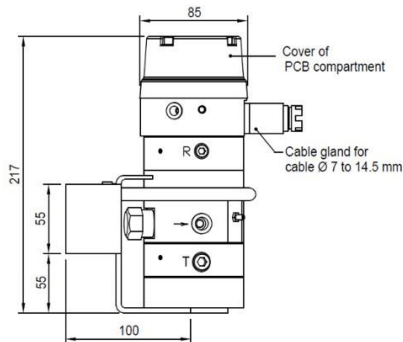
Weight : 6,4 Kg

**MATERIALS** Head & Body: Brass  
Bracket (Optional): Carbon Steel CS

## MECHANICAL CONNECTIONS – 1/4" NPT



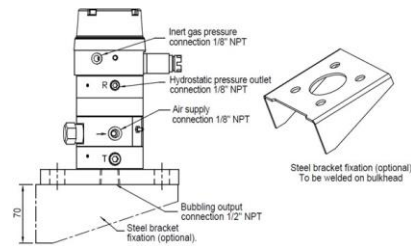
## MECHANICAL DIMENSIONS – 1/4" NPT



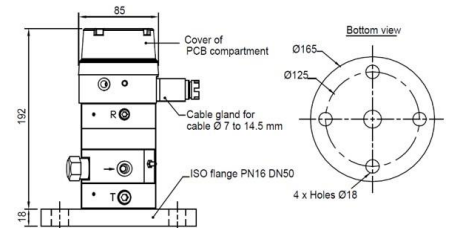
Weight : 6,4 Kg

**MATERIALS** Head & Body: Brass  
Bracket (Optional): Carbon Steel CS

## MECHANICAL CONNECTION – 1/2" NPT



## MECHANICAL DIMENSION – 1/2" NPT



Weight : 8,4 Kg

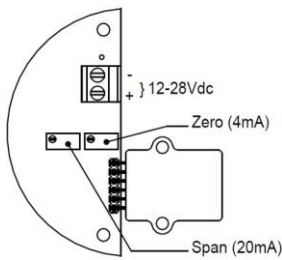
## FLANGE OPTIONS

SELECTION	PROCESS CONNECTION TYPE
*_*-B01-****	PN16/DN50 Brass, 1/2 IN NPT
*_*-B02-****	PN10/DN80 Brass, 1/2 IN NPT
*_*-B03-****	PN20/DN50 Brass, 1/2 IN NPT
*_*-B04-****	JIS 5K/DN65 Brass, 1/2 IN NPT

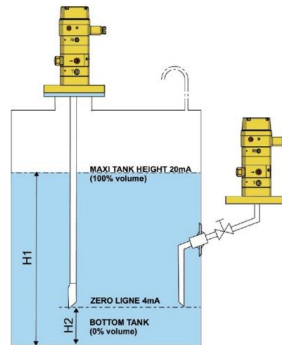
**MATERIALS**

Head & Body: Brass  
Flange: Brass  
Bracket (Optional): Carbon Steel CS with rust proof coating

## ELECTRICAL CONNECTION



## EXAMPLE OF INSTALLATION



## AVAILABLE PRESSURE RANGES

SELECTION	PRESSURE RANGE - ELECTRONIC PCB
1	0-40/70mbar
2	0-70/350mbar
3	0-350/1050mbar
4	0-1050/2100mbar
5	0-2100/4100mbar

### For More Information

[www.process.honeywell.com](http://www.process.honeywell.com)

### Honeywell Marine

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This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements.

All specifications are subject to change without notice.

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