

# Level Transmitter

## CYB3100 series

(0m~0.5m...300m)



**Tianshui Huatian Sensor Co., Ltd**  
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# CYB3120

## • Summary

CYB3100 series level transmitter carefully selects high-reliability silicone piezoresistive or ceramic capacitors or sapphire sensors as the pressure sensitive core according to different industry applications. After automatic temperature compensation, programmable digital circuit correction and signal conditioning, the products output the standard industrial application and networking signal. The production process continues



the rigorous work style and fine process control of military enterprises. Each type of product has been carefully designed, component screening, process curing, and through pressure cycle distressing, aging, environmental simulation testing, etc., to ensure each is stable and reliable.

CYB3100 series level transmitter has universal design suitable for multi industry application, also special design for different industry application characteristics. We will carefully analyze the customer's working environment and requirements, then select the most appropriate products; we can also customize the products according to the user's special requirements, so that every user of Huatian can get the best use experience.

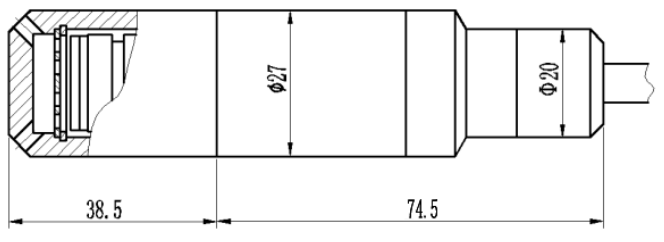
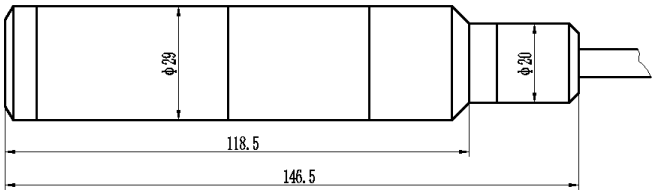
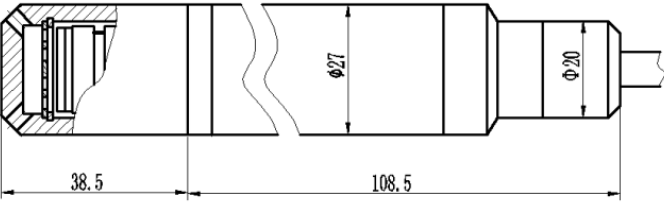
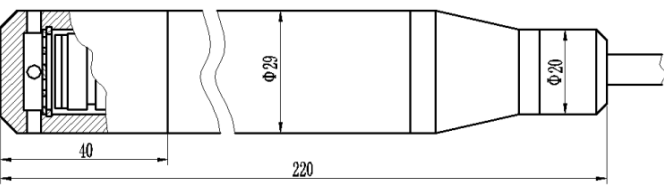
## • Application

CYB3100 series level transmitter has been widely used in all kinds of fluid measurement users for many years, especially in coal mine, oil field, petrochemical, environmental protection, medicine, water and other industries, for its excellent accuracy and reliability.

## • Technical Index

Range	0m~0.5m...300m		
Pressure form	G (gauge pressure) / A (absolute pressure)		
Output signal	4~20mA (Hart protocol could be added)		
	RS485		
	0~10V(range could be customized)		
Accuracy	0.1 (customized)	0.25 (typ.)	0.5 (max)
Long-term stability (%FS/year)	±0.1(typ.)		±0.2(max)
Zero Temperature Drift (%FS/°C)	±0.02		±0.03
Sensitivity Temperature Drift (%FS/°C)	±0.02		±0.03
Compensation Temperature (°C)	0~50		-10~65
Working Voltage (VDC)	+12~+30		
Medium Temperature (°C)	-30~+65		
Load resistance (Ω)	Current type: ≤(U-12)/0.02(Ω)		
Measuring medium	Liquid compatible with SS316L		
Diaphragm material	SS316L		
Shell material	SS304		
Protection level	IP68		

• Model & Structure (unit: mm)

Model	Feature	Outline Drawing
CYB3120	1. fully welded structure 2. pressure sensitive diaphragm moves forward, easy to clean	
CYB3110	1. classic structure 2. o-ring sealed 3. standard shape, special product for coal mine	
CYB3128	1. level and temperature integrated type 2. fully welded structure	
CYB3124	1. special product for deep water, up to 300m 2. fully welded structure, housing material can be customized	

• Notes

1. Please pay attention to the compatibility between the tested medium and the part of the product contacting the medium. When it is not clear, please consult our company.
2. Please specify the appropriate measuring range and accuracy requirements when ordering. In order to ensure the stability and accuracy of the product, it is recommended that the measuring range of the pressure transmitter should be 120% of the actual measuring pressure range, and the maximum pressure should be within the measuring range.
3. when ordering the transmitter with LCD or LED junction box, the power supply of the transmitter should be no less than 15VDC.
4. In order to ensure reliable outdoor operation, it is recommended that users order transmitters equipped with lightning protection. During the installation, ensure that the product and power supply are reliably grounded, which can reduce the damage probability of the transmitter caused by lightning.
5. When selecting digital display products, the temperature range of transmitter working environment is - 30 °C ~ 70 °C.



6. The product is vertically installed on the site pressure interface, and the display screen is horizontally facing the observer.
8. For media containing silt and sand, the transmitter head needs to take protective measures such as filtering measures to prevent the pressure tap from blocking or particles scratching the diaphragm.
9. When using in inflammable and explosive environment, please install safety barrier as required, and cable connection shall be sealed and reliable. Tighten the junction box lid before energizing, and ensure that the inner chamber of the transmitter is isolated from the environment. When cleaning, overhauling or modifying parameters, the power must be cut off completely, then remove the transmitter and move it to the safe environment for processing. Live operation on site is strictly prohibited.