

## CYB-20S-DW Ultra-low Temperature Pressure Transmitter



### Overview

CYB-20S-DW ultra-low temperature pressure transmitter adopts advanced ion beam sputtering and ion beam etching process to directly fabricate the strain bridge on the metal pressure measuring diaphragm. Since the traditional gluing process is not used, the long-term stability and creep resistance of the strain gauge sensor are significantly improved, and the temperature range of the product is greatly expanded. Since there are no moving parts, it is highly resistant to vibration and shock, and can be used in harsh environments.

It is an ideal product for pressure measurement in low temperature and high pressure environments. Its products have the characteristics of low temperature, high pressure, high precision, waterproof, vibration resistance, shock resistance, corrosion resistance, all stainless steel structure, small size, light weight, direct process installation, high stability, high precision, etc. The lowest temperature of this product can reach  $-196^{\circ}\text{C}$ , widely used in the medium testing of liquid nitrogen, liquid oxygen and liquid hydrogen, and is favored by aerospace military equipment and low-temperature scientific experiments.

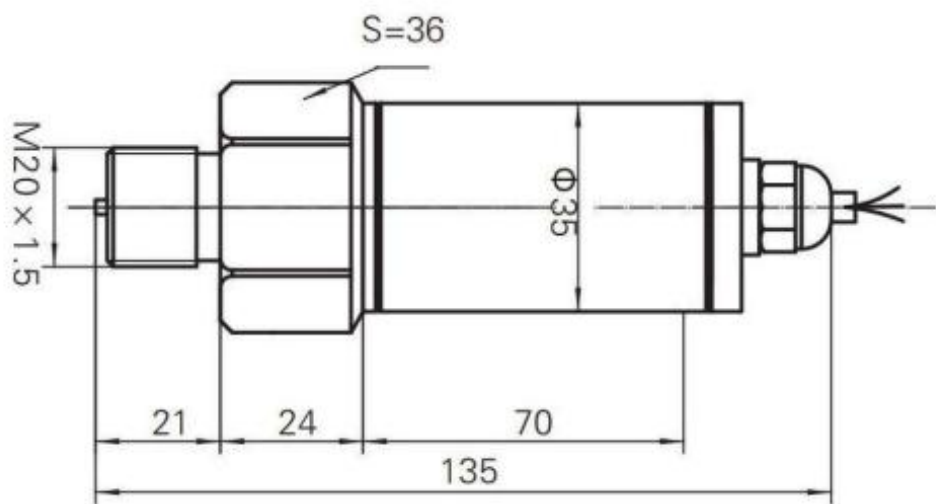
### Application

- 1). Medium test of liquid oxygen, liquid hydrogen and liquid nitrogen.
- 2). Liquid nitrogen, liquid oxygen and liquid hydrogen production equipment.
- 3). Aviation and aerospace liquid engine testing.

### Technical Features

- 1). Ultra-low temperature, the lowest temperature can reach  $-196^{\circ}\text{C}$ .
- 2). High precision, accuracy up to  $\pm 0.2\% \text{FS}$
- 3). High stability, better than  $\pm 0.2\% \text{FS}$  per year
- 4). ExiallCT6 explosion-proof certification
- 5). All stainless steel structure resistant to severe vibration, strong impact and corrosion

### Outline Dimension



## Technical Parameter

Model	CYB-20S-DW
Measured medium	Gas liquid and steam
Pressure type	G: Gauge pressure J: Absolute pressure
Measuring range	0-1MPa-300MPa (optional)
Power	D1:12VDC D2: 24VDC D3: customize
Output	S1: 4-20mA S2:1-5V S3:0-5V S4:1-10V S5:0-10V S6: customize
Accuracy	J1: $\pm 0.2\%$ F.S J2: $\pm 0.5\%$ F.S
Pressure connection	A1: M20×1.5 A2: M14X1.5 A3: G1/2 A4: G1/4 A5: 1/2NPT A6: 1/4NPT A7: customize
Media temperature	W1: -60~85°C W2: -100~85°C W3: -196~85°C
Electrical connection	Y1: Cable connection Y2: Aviation plug Y3: Hirschmann
Explosion proof	ExiallCT6
Overload capability	200%F.S
Insulation resistance	$\geq 500\text{MQ}$ ( 250VDC )
Temperature drift	$\pm 0.02\%$ FS/°C
Process material	Diaphragm 17-4PH Process connection 304
Process material	Materials compatible with silicon, stainless steel