

FBG-High Precision Piezometer

Applications

For precision water level measurement and monitoring of

- Weirs
- Tanks
- Stream levels
- Reservoir levels
- Laboratory tests, such as triaxial test.

Features

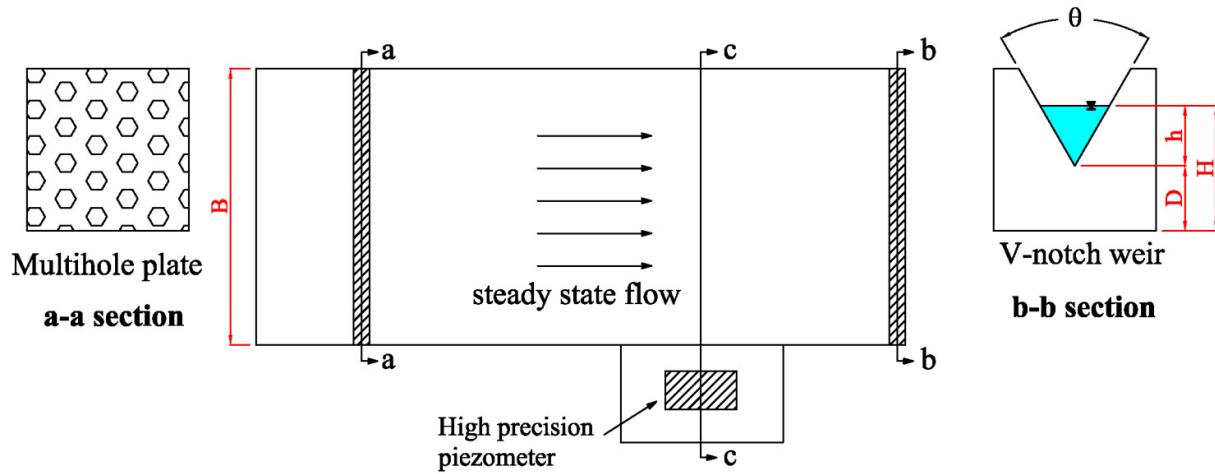
- Immune to EMI and short circuits
- Low noise long distance signal transmission



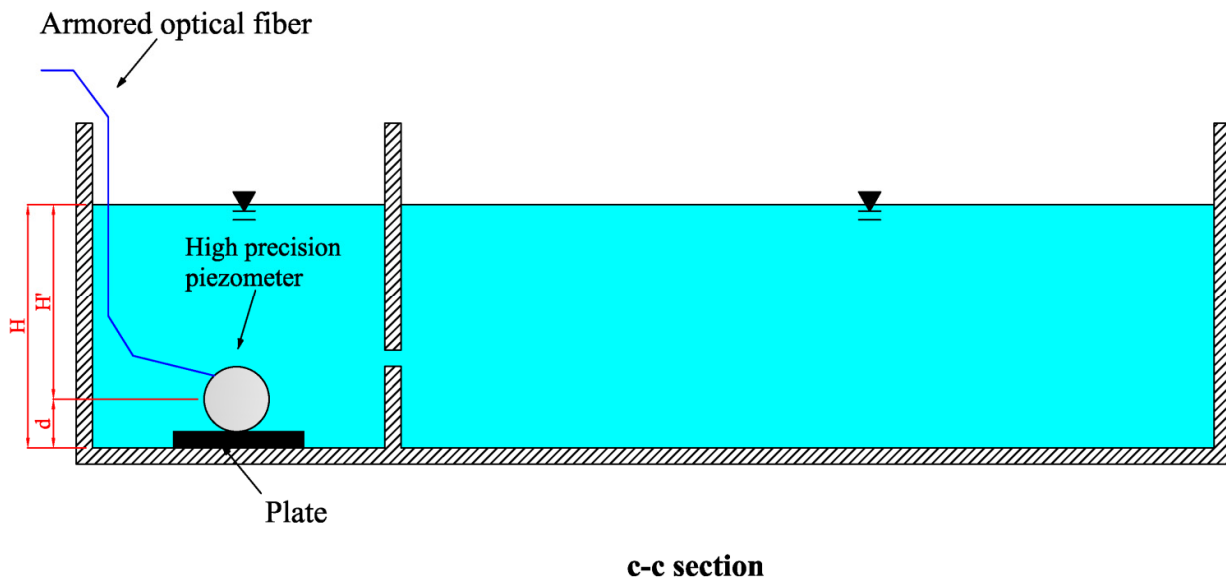
Description

The body of this high precision piezometer is made of 316 stainless steel. An FBG is used to sense the deflection of an enlarged diaphragm resulting from pressure variations. The design enables pressure measurement with substantially increased sensitivity. A dummy FBG is used for temperature measurement and compensation. The measurement range can be varied to fit the application need.

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Top view of a V-notch weir.



FBG5700 installed in a V-notch weir.

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Specifications	FBG-High Precision Piezometer
Physical Properties	
Operating Temp. range	0 to 80°C
Pressure measurement range	0.05MPa
Resolution	<0.025% Full scale range
Accuracy	±0.25% Full scale range
Connectors	FC/APC, SC/APC, or customer specified
Fiber type	Armored, PVC coated ≥ 1mm
Length	60mm
Dimensions	φ55mm
Weight	~530g
Optical Properties	
Peak Reflectivity (Rmax)	>70%
FWHM (-3dB point)	0.25nm(±0.05nm)
Notes:	

Ordering Information

FBG5700-1XX-005-15YY

1XX: Cable 1, Length & Connector

1: 1m Standard, Cable Length

FC: FC/APC Connector

SC: SC/APC Connector

LC: LC/APC Connector

YY: FBG Wavelength

Standard: 12, 18, 24, 30, 36, 42, 48, 54, 60,

66, 72, 78, 84