

QS series

Quartz Type Water Level Gauge

The greatest accuracy 0.01% F.S. !

- High Accurate Water Level Measurement (selectable $\pm 0.05\%$ / $\pm 0.02\%$ / $\pm 0.01\%$ F.S.)
- Wide Measurement Range (selectable 10/20/30/50/70m)
- High Stability by no aging degradation of accuracy, high temperature character
- High Durability by Robust Body and Built-in Arrester
- Easy Installation and Maintenance



Summary

The quartz type water level gauge is pressure type sensor using a quartz oscillator of the same standard as for clocks or communication equipment. Water pressure that changes with water level is applied to the quartz oscillator, and the water level can be detected from the change in oscillation frequency, providing high-accuracy measurement.

Additionally, there is no conversion error caused by aged deterioration of a diaphragm, etc. like a conventional pressure type sensor.

The measurement range covered by a single unit is as extensive as 10m-70m. Consequently, it can be applied not only to a river but also to a dam, reservoir and tidal level measurement economically. Easy installation and maintenance are possible.

System block diagram

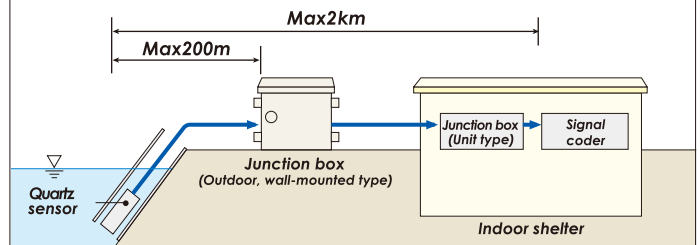
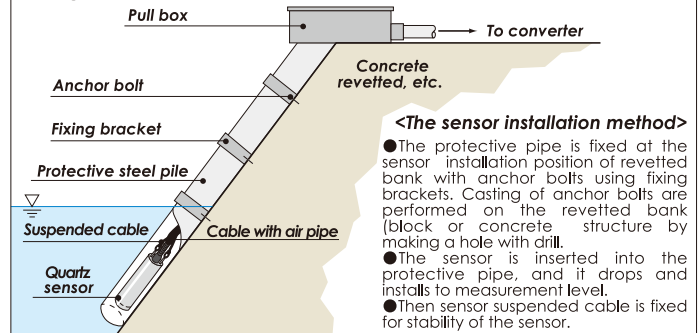
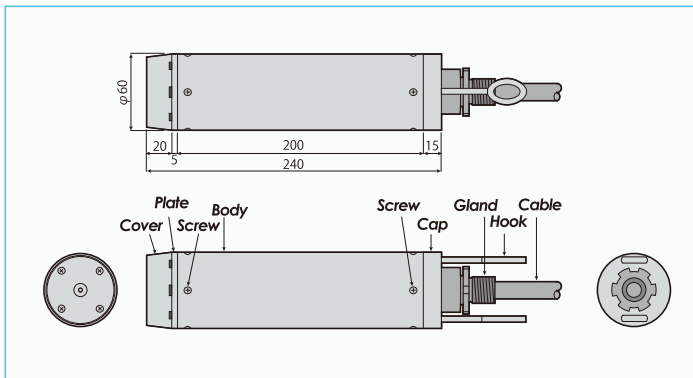


Diagram of standard installation

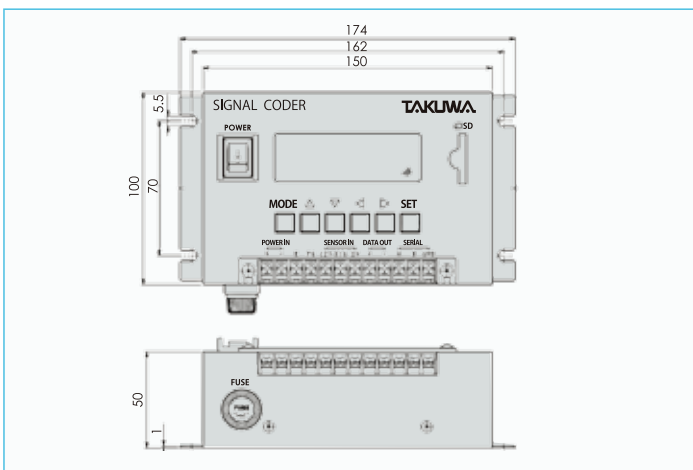


Outline drawing

● Quartz sensor



● Signal coder



Specifications

● Quartz sensor

- Model : Q S-10 (for measuring range 10m)
Q S-20 (for measuring range 20m)
Q S-30 (for measuring range 30m)
Q S-50 (for measuring range 50m)
Q S-70 (for measuring range 70m)
- Accuracy : 0.05% F.S.
0.02% or 0.01% F.S (High accuracy type)
- Temperature coefficient at 0 point : 0.0007% F.S/°C
- Temperature sensitivity coefficient : 0.0049%/°C
- Overload resistance: 120%
- Power supply : DC12V (10.5~16.5V)
- Current consumption: 3mA
- Material : SUS316 or Titanium (For sea)
- Dimension : 240×Φ60mm
- Weight : approx. 3kg
- Cable : -Dedicated cable (Sensor to J.Box): Max. 200m
-General cable (J.Box to coder): Max. 2km

● Signal coder

- Model : QSC-□
□ : Output signal option(1: DC4-20mA, 2: DC1-5V)
- Input form : Frequency signal 28-44kHz
- Display : LCD
- Operation : 6 key switch
- Output : DC4-20mA or DC1-5V (option:RS-485)
- Power supply : DC12V
- Current Consumption : 300mA and less
- Ambient Temperature : -10 to 50 °C
- Dimension : 174W × 100H × 50D mm
- Weight : 1.5kg or less

Example of installations



Urban river



General river

※Information in this document is subject to change without notice



Inquiry:E-mail e-info@takuwa.co.jp

1-4-15 Uchi-kanda, Chiyoda-ku, Tokyo 101-0047 Japan
Tel:+81-3-3291-5380,Fax:+81-3-3291-5226