

TECHNOLOGY

HOLYKELL®

HPT604-FW
LEVEL
• DATASHEET •

1. Pressure Measurement **2. Level Measurement** 3. Temperature Measurement
4. Flow Measurement 5. Display & Control Instruments
6. Wireless Monitoring System 7. Velocity Measurement

HPT604-FW

Submersible Water Detector and Fuel Level & Temperature Transducer



Features:

- Accuracy: $\leq \pm 0.25\%F.S.$
- Wide working temperature scope
- Advanced digital temperature compensation
- Excellent resistance against impact, overload, shock and erosion.
- Water detection, fuel level & temperature optional
- Impact resistance and disturbance

Applications:

- Fuel Tank Level Monitor Systems
- Water detection Under the diesel
- Water Under Oil and Fuel Level Monitor
- Oil and Water Separation Location Detection
- Position Detector Of Silt Layer
- Water Level Position Detector
- Fuel containers
- And so on

Profiles

HPT604-FW is full sealed submersible level transducer. Users can select different versions to detect water presence, fuel level and fuel temperature. It is made by high stable and reliable piezo-resistive pressure sensor with water detect sensors and high accurate circuit board into the stainless steel housing. Integrated conductivity sensor and standard signal provide the user easy and convenient application in the local working place. The special cable connected with housing, can be immersed into the media for a long time.

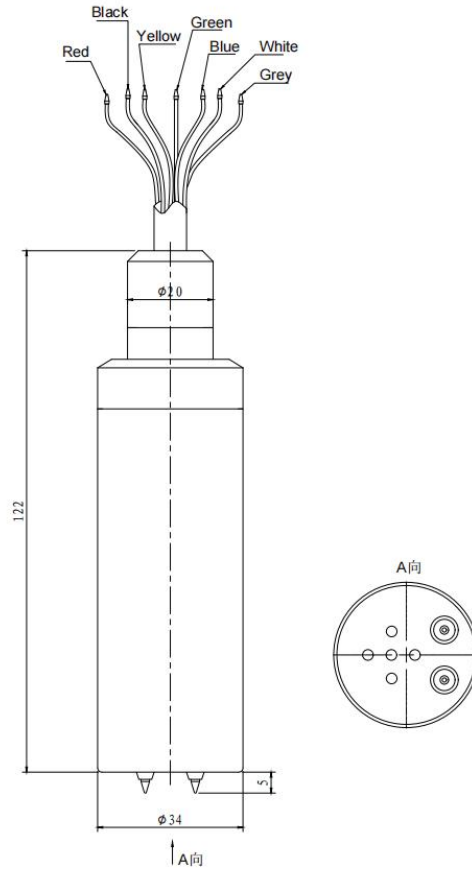
HPT604-FW has compact size, light weight and good stability; it can be used for water alarm for the diesel tanks, water position and others hierarchy liquids level and position monitor.

Specifications

Ambient Temperature: 25°C (unless otherwise specified)

| PARAMETERS | | | | | |
|------------------------------|--|----------------------|-------------|----------------------------------|---------------|
| Level range | 0m~0.5m···20m Optional | | | | |
| Pressure Type | Gauge/Relative pressure type(Typical); Absolute pressure Optional | | | | |
| Overload | 150%F.S Rated | | | | |
| Water Existence alarm Output | ohm, or PNP switch, or NPN switch signal output optional. Water detection signal: ohm signal (When $\geq 100 \Omega$, it means that water has been detected, and 0 ohm means no water exists). | | | | |
| Fuel Level Output | 4~20mA | 0~5V | 0~10V | RS485 Modbus RTU optional | |
| Electronic Wire | 2 wires Loop | 3 wires | 3 wires | 4 wires | |
| Power Supply | DC 7...30V | DC 8...30V | DC 13...30V | DC 7...30V | |
| Polarity protection | Yes | Power supply+&- only | | Power supply+&-; Signal A&B only | |
| Accuracy | 0.5 | 0.25 | 0.1 | %FS | By Customized |
| Long-term Stability | 0.15%FS/year | | | | |
| Zero temp. drift | $\pm 0.02\%FS/^\circ C$ | | | | |
| Sensitivity temp. drift | $\pm 0.02\%FS/^\circ C$ | | | | |
| Temperature Compensation | 0~50°C(Typical); -10~60°C(by customized) | | | | |
| Medium Temp. | -30...70 degree C | | | | |
| Load Resistance | Current: $(U-12)/0.02(\Omega)$ | | | | |
| Max work current | (4-20mA) 21.8mA | (0-5/10V) 5mA | | (RS485 MODBUS RTU) 10mA | |
| Max signal transfer distance | 1000m | 200m | | 1000m | |
| Lighting&Surge protection | Surge: $\pm 2000V$ Air conduction more than 8000V; external sensor more than 4000 Voltage protection. | | | | |
| EMC Standard | EN61326-1:2013;EN61326-2-3:2013 EN61000-6-2:2005;EN61000-6-4:2007+A1 | | | | |
| Intrinsic safety Certificate | Exia IICT6 | | | | |
| Water Proof Grade | IP68 | | | | |

Dimensions and Drawing



Electronic Connections

| Ohm signal | Signal output | 4-20mA+100Ω | RS485+100Ω | 0-5V/0-10V+100Ω |
|------------|---------------|------------------|------------------|------------------|
| | Wire color | | | |
| | Red | V _{CC+} | V _{CC+} | V _{CC+} |
| | Black | GND | GND | GND |
| | Green | S _{i+} | RS485A | V _{out} |
| | Blue | R | RS485B | R |
| | Yellow | R | R | R |
| | Grey | Shield/Earth | Shield/Earth | Shield/Earth |
| White | | R | | |

| PNP signal | Signal output | 4-20mA+PNP | RS485+PNP | 0-5V/0-10V+PNP |
|------------|---------------|------------------|------------------|------------------|
| | Wire color | | | |
| | Red | V _{CC+} | V _{CC+} | V _{CC+} |
| | Black | GND | GND | GND |
| | Green | S _{i+} | RS485A | V _{out} |
| | Blue | PNP+ | RS485B | PNP+ |
| | Yellow | Shield/Earth | Shield/Earth | Shield/Earth |
| White | | PNP+ | | |

How to Order

Use the **bold** characters from the chart below to construct a product code

