

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 Transducer



Features:

- Accuracy: $\pm 0.25\%$ F.S.
- Wide working temperature scope
- Advanced digital temperature compensation.
- Excellent resistance against impact, overload, Shock and erosion.
- Detect water exist under the fuel
- Impact resistance and disturbance
- 2 times range standard overload
- CE approved

Applications:

- Fuel Tank Level Monitor Systems
- Water Detect 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
- And so on

Profiles

HPT604-FW is full sealed and potting waterproof submersible water detect and fuel level transducers. 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 connects with housing, can be immersed into the media for a long time.

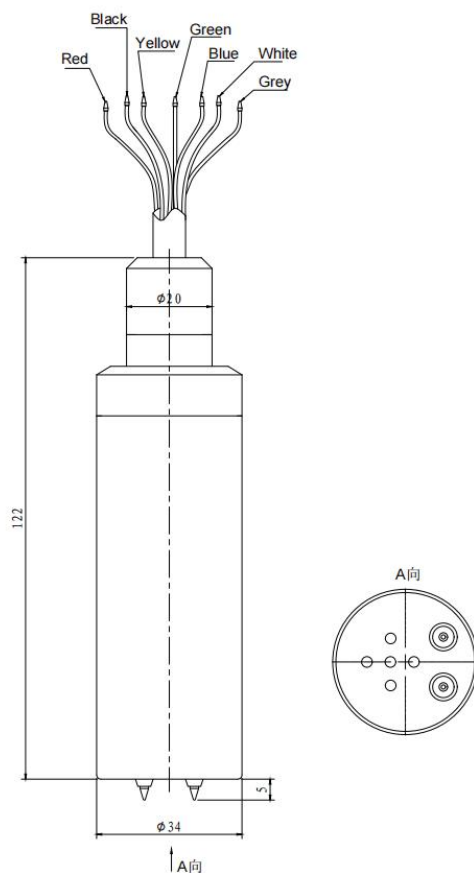
HPT604-FW Fuel tank water and fuel level transducer has compact size, light weight and good stability; it can be used for water alarm under the diesel tank, water position under fuel tanks detect and others hierarchy liquids level and position monitor.

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 Exist alarm Output	100 ohm signal output or PNP signal optional.				
	Ohm signal: Blank load & Fuel exist: Non-signal, water detected output 100 ohm \pm 1ohm PNP signal: Blank load & Fuel exist: normally open, water detected output PNP closed.				
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/°C				
Sensitivity temp. drift	\pm 0.02%FS/°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(Ω)				
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

		604FW	F	G	11	S11	E5E50	D1	N	1	003		
Model:												Cable Length	
		604FW									003	3 meters	
Pressure & Level Units											X	By Customized	
B	bar(Min: 0.05bar Max: 2bar)												
P	Psi(Min:0.73Psi; Max:29Psi)												
F	m Fuel(Min:0.5m; Max:20m)												
Pressure type												Accuracy	
											1	≤±0.5%F.S (Typical)	
											2	≤±0.25%F.S	
											3	≤±0.1%F.S(by customized)	
Pressure type												Other Function (Optional)	
											N	Standard with water detection function	
G	Gage/Relative pressure type (universal)												
A	Absolute pressure (customized)												
Pressure Range												Measuring Medium	
00	0...0.5	18	0...4.0									D1	0.84g/cm3 density diesel
01	0...1.0	19	0...5.0									D2	0.83g/cm3 density diesel
03	0...1.2	21	0...7.0									D3	0.85g/cm3 density diesel
06	0...1.5	24	0...10									D4	0.86g/cm3 density diesel
09	0...1.8	25	0...12									X	By Customized
11	0...2.0	26	0...15										
13	0...2.2	27	0...16										
16	0...2.5	28	0...20										
17	0...3.0	X	By Customized										
Power supply:												Signal Output	
												Fuel/oil level signal	
												E5	4-20 mA (2 wires)
												E6	0-5 V (3 wires)
												E7	0-10 V (3 wires)
												E11	RS485 MODBUS RTU (4 wires)
												X0	By Customized
												Water detection signal	
												E50	Ohm
												E51	PNP
												X1	By Customized