

TECHNOLOGY

HOLYKELL®

HPT621

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

HPT 621

Capacitive Fuel Level Sensor



RoHS

Applications

- Oil and gas
- Fleet management
- Food and medical industries
- Water treatment
- Chemical industry
- Pharmaceutical industry
- Industrial automation

Features

- Ultra high resolution up to 0.01mm
- High accuracy $\pm 0.5\%$ F.S
- Wide probe temp range -50°C to 150°C , no drift
- Wide power supply 9-36 V DC and 5 V
- Multiple analog and digital output options
- Flexible integration with different vehicle systems
- Rugged 304 stainless steel construction, no moving parts
- Full protection against corrosion, moisture, condensation, and leakage
- Ex ia IIC T5 approved

Profiles

The Capacitive Level Sensor HPT621 is designed to offer precise fuel management in various applications, including construction machinery, trucks, agricultural vehicles, and special vehicles. With ultra-high resolution 0.01mm, it provides measurement accuracy up to $\leq 0.5\%$ FS, enabling the detection of even the smallest changes in fuel levels. This results in more sensitive fuel theft alarms and accurate fuel consumption analysis, reducing fuel loss.

The sensor operates in a wide temperature range, making it suitable for extreme global climates. It features multiple signal outputs, including RS485, RS232, and 4-20mA, ensuring compatibility with most vehicle ECUs, GPS trackers, PLCs, and instruments, simplifying integration and reducing system costs.

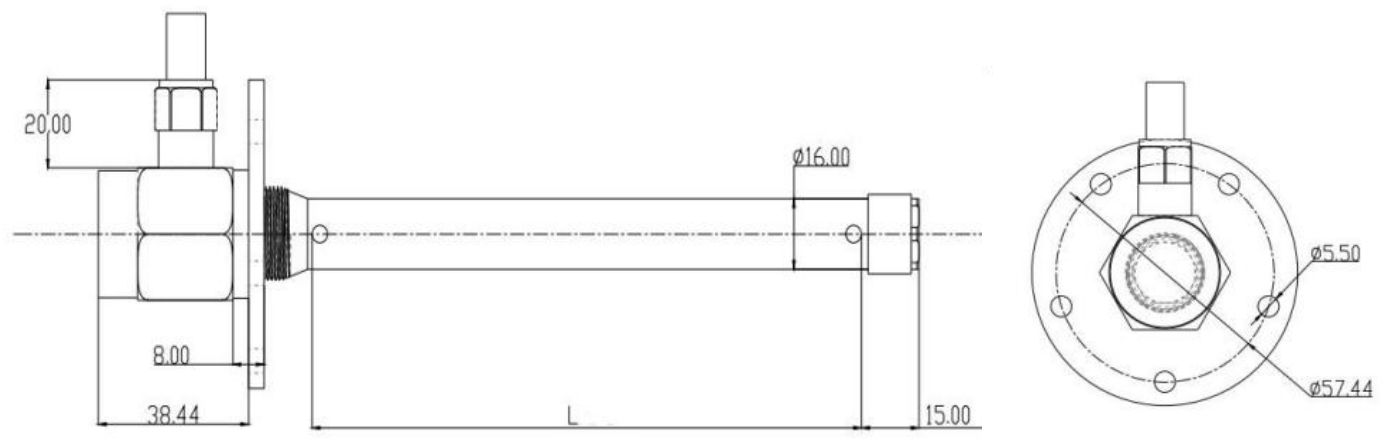
Its all-stainless steel construction ensures durability against corrosion, vibration, and mechanical wear. The sensor is explosion-proof, making it ideal for use in hazardous and harsh environments like oil tankers, gas stations, and chemical plants. The customizable measurement range (10mm to 3000mm) allows for flexible installation, supporting both threaded and flange mounts to suit different tank structures.

Specifications

Ambient Temperature: 25°C (unless specified)

Item	HPT621
Probe diameter	Φ18 mm
Measuring range	10mm-3000mm (Customizable)
Output	RS485, RS232, 0-5, 0-3.3 V, 0.5-4.5 V
Measuring medium	Gasoline, Diesel, Lubricating Oil, Cooling Oil and more
Operating voltage	9-36 V DC, 5 V
Measuring accuracy	≤0.5%FS
Operating temperature	-40°C to +80°C
Probe Temp. resistance	-50°C to 150°C
Hysteresis time	Set time from 1 second to 1800 seconds
Resolution	0.01mm
Overall structure	Column type
Main body material	304 Stainless steel
Flange dimensions	Outer diameter 70mm—Inner diameter 20mm
Mounting method	Top mounted
Fixing method	M20×1.5 or by flange

Dimensions and Drawing



Electrical Connections

Cable-out	
Red	5 V
Black	Grounding wire
Green	485B
Yellow	485A

How to Order

1. Range Selection Table:

01	100mm	07	285mm	13	430mm	19	650mm	25	1000mm	31	1400mm	37	1700mm	43	2200mm	48	2800mm
02	150mm	08	300mm	14	450mm	20	660mm	26	1100mm	32	1450mm	38	1750mm	44	2250mm	49	3000mm
03	180mm	09	310mm	15	500mm	21	670mm	27	1200mm	33	1500mm	39	1800mm	45	2300mm		
04	200mm	10	350mm	16	525mm	22	690mm	28	1250mm	34	1550mm	40	1900mm	46	2350mm		
05	220mm	11	400mm	17	550mm	23	700mm	29	1300mm	35	1600mm	41	2000mm	47	2500mm		
06	250mm	12	420mm	18	600mm	24	800mm	30	1350mm	36	1650mm	42	2100mm	X	By Customized		


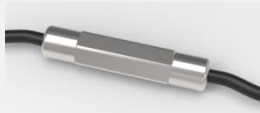




Kindly according to your application select suitable range code , Example: Code 10 =350mm.

2. Part Number Selection Table:

621 Selection Type	06	B	E6	S18	M	1	1	000
Range	Range reference to range selection table code							
Probe Diameter	B=18mm X=By customized							
Signal Output	E5=4-20 mA E6=5=0-5 V E11=RS485 E12=RS232 E21= 0.5-4.5 V non-ratiometric E59=0-3.3 V X=By customized							
Power Supply	S6=5 VDC	S18=9-36 VDC	X=By customized					
Process Connection	M=M20×1.5	F=Flange	X=By customized					
Measuring Medium	1=Water 4=Lubricating Oil	2=Gasoline 5=Cooling Oil	3=Diesel X=By customized					
Accuracy	1=0.5%F.S							
Cable length	000=Non-Cable		001= Cable 1m		X= By Customized			

Accessories

(Notes: Please purchase separately. For the price of accessories, please contact our sales.)

	Description	Order number
	<p>Liquid level display control device With all kinds of liquid level sensor, measurement according to liquid level, and according to the setting of the container structure and size and the density of liquid, calculation, display liquid volume or quality.</p>	0008
	<p>IP68 rated deep water level cable extender Mainly used to extend the cable of deep water level transmitter. Users can rewire it locally. It can work continuously for more than 10 years 500 meters underwater, and the safe tensile strength of the cables at both ends can reach 200N</p>	0028
	<p>Desiccant drying cartridge Desiccant Pack installed on Vented Transducer cable. The cartridge will have to be field replaced as site environment requires.</p>	0010
	<p>Terminal box The terminal box, with IP67 ingress protection and watertight ventilation element, provides a moisture-free electrical termination for the submersible pressure transmitter. It should be mounted in dry environment or directly in the switch cabinet.</p>	0003
	<p>Adapter Converter It is able to convert RS-232 signal to RS-485 balanced differential signal and extend the communication distance to 1.2km. It uses a particular pump to gain power from RS-232 signal (RTS, DTR, TXD) without initializing the RS-232 series interface. This interface converter does this without requiring any AC or DC power.</p>	0005
	<p>Surge electrostatic protector Anti-surge $\pm 2000V/\pm 4000V$, anti-static 18KV, suitable for protecting 4-20ma and RS485 circuits.</p>	0014

Ordering information

Model / Measuring range / Output signal / Temperature measurement / Cable material / Cable length / Case / Lightning protection / Accessories