

TECHNOLOGY

**HOLYKELL®**

**HPT604**  
**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 (Type HE) Submersible Pressure Level Transducers



### Features:

- Accuracy:  $\leq \pm 0.5\% F.S$
- Wide working temperature scope
- Compact size
- Excellent resist impact, Shock and erosion
- Surge protection and RFI & EMI resistance
- Impact resistance and disturbance
- 1.5 times range standard overload
- 5 times range burst pressure
- CE approved

### Applications:

- Industrial course testing and control
- Automatic testing and detection systems
- Water tank level measurement and control
- Fuel tank level measurement and control
- Laboratory equipment
- Building monitoring and control for water level.
- Various liquid tanks pressure measurement
- And so on

### Profiles:

HPT604HE economic type is full sealed submersible level transducer. It is made by building in high stable and reliable Germany imported FS piezo-resistive pressure sensor and high accurate circuit board into the stainless steel housing. Integrated construction 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.

HPT604HE level transducer has compact smaller size, light weight and good stability; it can be used for water level tanks or others liquid measure and control of city water supply and drainage and hydrology, etc.

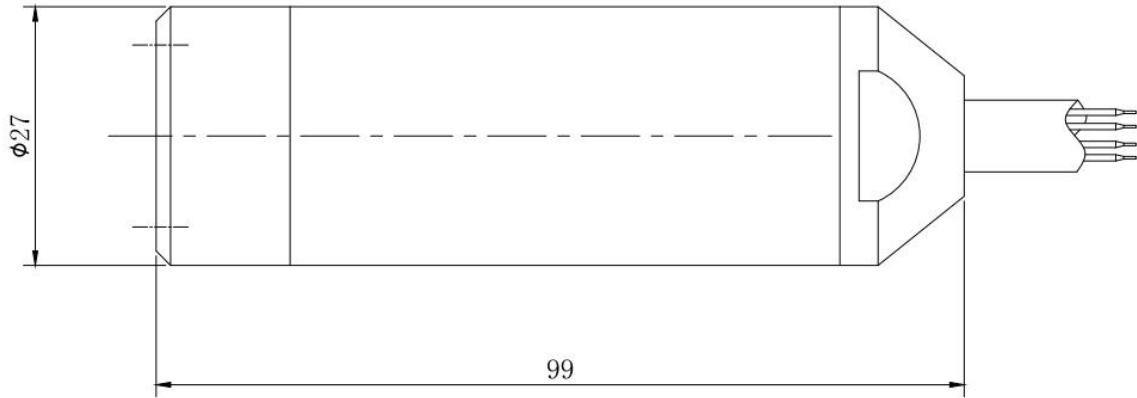
### Specifications:

Ambient Temperature: 25°C (unless otherwise specified)

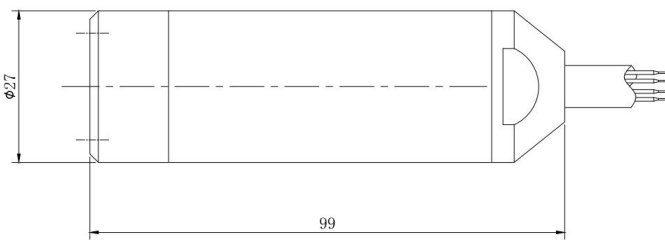
Parameters	MIN	TYP	MAX	UNITS	NOTES
Pressure range	0.2	0-0.3	2	bar	Optional
Level range	2	0-3	20	mH <sub>2</sub> O	Optional
Overload	150%F.S				
Burst pressure	300%F.S				
Electrical wire	2 Wires		3 Wires		
Signal Output	4-20 mA		0.5-4.5 V		
Power Supply	10-30 V DC		5 V DC±5%		
Polarity Protection	The power lines feature reverse polarity protection; however, the signal lines do not have reverse polarity protection against the positive power supply and must not be cross-connected.				
Accuracy(Linearity, Hysteresis, Repeatability)	≤ ±0.5%F.S(Typical); ≤ ±0.25%F.S (optional) @25°C including non-lin., rep. and hys. optional				
Long-term Stability	≤ ±0.2%F.S/ year				
Zero temp. drift	0.02%FS/°C				
FS temp. drift	0.01%FS/°C				
Working Temp.	-40 °C to +85°C				
Medium Temp.	0°C to +70°C				
Storage Temp.	-40°C to +85°C				
Temp.Compensation	0°C to 50°C; -10°C to 70°C (Range > 200 kPa / 20 mH <sub>2</sub> O)				
Insulation resistance	>100MΩ@100V				
Response time	≤20 ms(Current and voltage signals); ≤100 ms (digital signals)				
Diameter of body	27mm				
Medium compatible	Compatible with 316 Stainless Steel				
Power Consumption	24V: 2.8mA; 12V: 5.1mA; 5V: 10.1mA				
Pressure Type	Gauge pressure; Sealed gauge and absolute optional				
Certificate	ATEX (II 1G Ex ia IIC T5 Ga), TUV, RoHS and CE				
EMC standard	EN 61326-1:2013; EN 61326-2-3:2013 EN 61000-6-2:2005; EN61000-6-4:2007+A1				
Cable optional	Cable materials are PUR Cable(Diesel-proof)and PE Cable (Water-proof)				

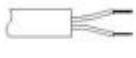
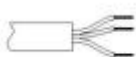
**Dimensions and Drawing:**

Unit, mm



**Electrical Connections**



		Cable-out	
	Current	Red	U+
		Green	Iout(U-)
		Yellow	⊥ Connect to earth ground
	Voltage	Red	U+
		Green	Vout
		Yellow	⊥ Connect to earth ground
		Black	U-

### How to Order

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

	<b>604HE</b>	<b>H</b>	<b>G</b>	<b>19</b>	<b>S6</b>	<b>E8</b>	<b>CW</b>	<b>N</b>	<b>1</b>	<b>003</b>
Model	_____			_____	_____	_____	_____	_____	_____	_____
<b>604HE</b>	Economic Compact Type									<b>003</b> 3 Meters <b>X</b> By customized
Pressure & Level Units	_____			_____	_____	_____	_____	_____		
<b>H</b>	m H2O									<b>1</b> $\leq \pm 0.5\%FS$ (Typical) <b>2</b> $\leq \pm 0.25\%FS$ (by customized)
<b>B</b>	Bar									
<b>P</b>	Psi									
<b>F</b>	m Fuel									
Pressure type	_____			_____	_____	_____	_____	_____		<b>Others Function (Optional)</b> <b>N</b> Standard Type (with 316 SS filter)
<b>G</b>	Gauge/Relative pressure type (universal)									
<b>A</b>	Absolute pressure (customized)									
Pressure Range	_____			_____	_____	_____	_____	_____		<b>Measuring Medium</b> <b>CW</b> Water <b>D1</b> 0.84g/cm3 density diesel <b>D2</b> 0.83g/cm3 density diesel <b>D3</b> 0.85g/cm3 density diesel <b>D4</b> 0.86g/cm3 density diesel <b>X</b> By Customized
<b>11</b>	0...2	<b>20</b>	0...6							
<b>16</b>	0...2.5	<b>22</b>	0...8							
<b>17</b>	0...3	<b>23</b>	0...10							
<b>18</b>	0...4	<b>27</b>	0...20							
<b>19</b>	0...5	<b>X</b>	By Customized							
Power supply	_____			_____	_____	_____	_____	_____		<b>Signal Output</b> <b>E5</b> 4-20mA (2 wires) <b>E21</b> 0.5-4.5V non-ratiometric (by default, 3 wires) <b>E8</b> 0.5-4.5V ratiometric (by customized, 3 wires) <b>X</b> By Customized
<b>S6</b>	5 V DC									
<b>S17</b>	10-30 V DC									
<b>X</b>	By Customized									

Example of a complete PN: **604HEHG19S6E8CWN1003**

(Model: HPT604-HE, water level range 0-5m, gauge type, 5 V DC supply, 0.5-4.5V ratiometric, standard type, 0.5%F.S accuracy with 3 meters cable)