

TECHNOLOGY

HOLYKELL®

HPT604-FW

LEVEL

• DATASHEET •

1. Pressure Measurement **2. Level Measurement** 3. Temperature Measurement
4. Flow Measurement 5. Display & Control Instruments

HPT604-FW Submersible Water Detector and Fuel Level Transducers



Characters:

- Accuracy: $\leq \pm 0.25\% \text{F.S.}$
- 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
- 1.5 times range standard overload.
- 3 times range burst pressure
- CE approving

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 MEAS high stable and reliable OEM 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.

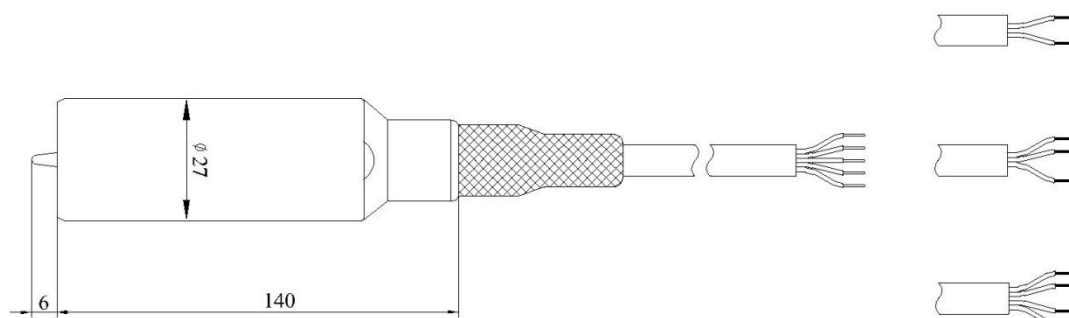
HPT604-FW Fuel tank water and fuel level transducer has compact size, light weight and good stability; it can be used for water alarm under the diesel tank, water position under fuel tanks detect and others hierarchy liquids level and position monitor.

Specifications:

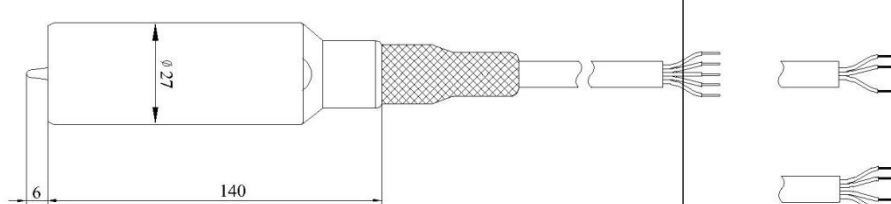
Ambient Temperature: 25°C (unless otherwise specified)

PARAMETERS	MIN	TYP	MAX	UNITS	NOTES
Pressure Range:	0.05	0-50	50	bar	Optional
Level range:	0.5	0-500	500	mH2O	Optional
Pressure Type:	Gage /Absolute pressure				Optional
Overload:	1.5X			Rated	
Burst Pressure:	3X			Rated	
Power Supply:	12	24	30	Vdc	
Water Exist alarm Output:	Blank load:30...300M Ω Fuel: infinite Ω Water: 5k...5 M Ω				Optional
Fuel Level Output:	4~20mA, 0~5V, 1~5V, 0.5~4.5 V(5Vdc), 0~10V, 0-100 mV/V,RS485 Modbus RTU				
Electronic Wire:	2	2/3/4	4	wire	
Accuracy: (Included Linearity Hysteresis Repeatability)	0.5	0.25	0.1	%FS	By Customized
Long-term Stability:	± 0.3	± 0.2	± 0.1	%FS/year	
Zero temp. drift:	0.1	0.2	0.3	%FS/°C	
FS temp. drift:	0.01	0.02	0.03	%FS/°C	
Temperature Compensation:	-20	-10-50	80	°C	By Customized
Working Temp:	-40	-30-70	100	°C	By Customized
Storage Temp:	-40	-40-125	125	°C	
Insulation Resistance:	100			MΩ	50Vdc
Response time:	10			ms	Customized
Certificate approve:	ATEX intrinsic safety or ExdIICT6, TUV RoHSand CE Certificate approving				
EMC Standard:	EN 61326-1:2013; EN 61326-2-3:2013 EN 61000-6-2:2005; EN61000-6-4:2007+A1				
Lighting Protection: (optional functions)	Air conduction more than 8000V; external sensor more than 4000 Voltage protection (By Customize)				
Water Proof Grade:	IP68				
Cable optional:	Cable materials are optional according request, we offer 3 type special cable as follow: PE Cable （Water Proof） ; PUR Cable （Oil Proof） ; PTFE Cable （Anti-Corrosive） .				
Weight:	Net weight is about 0.35KG, Full Packing weight is about 1.0 KG (Not Include Cable)				

Dimensions and Drawing:



Electronic Connections:

	Directly sealed cable		
	Current	Red	Vcc+
		Green	S+
		Blue	Resistance (Ω)
		Black	Resistance (Ω)
	Voltage	Red	Vcc+
		Green	Vcc-&S-
		Yellow	S+
		Blue	Resistance (Ω)
		Black	Resistance (Ω)
	RS485 RTU Modbus	Red	Vcc+
		Green	Vcc-/0Vcc
		Yellow	RS485A
		Blue	RS485B
		White	Resistance (Ω)
		Brown	Resistance (Ω)

How to Order

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

604FW		H	G	19	S3	E5	CW	N	1	003
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Model:	604FW	Cable Length	003 3 Meters XXX By Customized																																																									
Pressure & Level Units		Accuracy:	1 $\leq \pm 0.5\% F.S$ 2 $\leq \pm 0.25\% F.S$ 3 $\leq \pm 0.1\% F.S$ (high cost!) 4 $\leq \pm 0.15\% F.S$ (by customized)																																																									
H m H ₂ O (Min: 0.5 mH ₂ O; Max: 500 mH ₂ O) B Bar (Min: 0.05 Bar Max: 50 Bar) P Psi (Min: 1 Psi; Max: 725 Psi) F m Fuel (Min: 0.5 m; Max: 500 m)		Others Function (Optional)	N Standard Type (without water detect) NW With water detect sensors																																																									
Pressure type		Measuring Medium	CW Water D1 Diesel, density 0.84 D2 Diesel, density 0.83 D3 Diesel, density 0.85 D4 Diesel, density 0.86 X By Customized																																																									
Pressure Range	<table border="0"> <tr><td>00</td><td>0...0.5</td><td>26</td><td>0...15</td></tr> <tr><td>01</td><td>0...1.0</td><td>27</td><td>0...16</td></tr> <tr><td>03</td><td>0...1.2</td><td>28</td><td>0...20</td></tr> <tr><td>06</td><td>0...1.5</td><td>29</td><td>0...25</td></tr> <tr><td>09</td><td>0...1.8</td><td>30</td><td>0...30</td></tr> <tr><td>11</td><td>0...2.0</td><td>32</td><td>0...50</td></tr> <tr><td>13</td><td>0...2.2</td><td>34</td><td>0...100</td></tr> <tr><td>16</td><td>0...2.5</td><td>35</td><td>0...150</td></tr> <tr><td>17</td><td>0...3.0</td><td>36</td><td>0...200</td></tr> <tr><td>18</td><td>0...4.0</td><td>37</td><td>0...300</td></tr> <tr><td>19</td><td>0...5.0</td><td>38</td><td>0...500</td></tr> <tr><td>21</td><td>0...7.0</td><td>X</td><td>By Customized</td></tr> <tr><td>24</td><td>0...10</td><td></td><td></td></tr> <tr><td>25</td><td>0...12</td><td></td><td></td></tr> </table>	00	0...0.5	26	0...15	01	0...1.0	27	0...16	03	0...1.2	28	0...20	06	0...1.5	29	0...25	09	0...1.8	30	0...30	11	0...2.0	32	0...50	13	0...2.2	34	0...100	16	0...2.5	35	0...150	17	0...3.0	36	0...200	18	0...4.0	37	0...300	19	0...5.0	38	0...500	21	0...7.0	X	By Customized	24	0...10			25	0...12				Signal Output:	E0 1-5 V (3 wires) +Ohm (water) E5 4-20 mA (2 wires) +Ohm (water) E6 0-5 V (3 wires) +Ohm (water) E7 0-10 V (3 wires) +Ohm (water) E8 0.5-4.5 V (3 wires) +Ohm (water) E11 RS485 MODBUS RTU (4 wires) +Ohm (water) X By Customized
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Power supply:	S3 24 V DC (standard) S5 12 V DC (for code E0, E6) S6 5 V DC (for code E8) S9 15~30 V DC (for code E7) S10 12~30V DC (for code E0, E5, E6) S17 10~30 V DC (for code E11)																																																											