TECHNOLOGY

HOLYKELL®

HPT611

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 611

Anti-clogging Submersible Level Transmitter

Applications

- Sewage
- Lift stations
- Storm canals
- Reservoirs / dams
- Weirs, wells, pond, reservoir, and dam
- Sludge, slurry
- For sewage water tank level

Features

- All 316L stainless steel construction for durability
- Open double flange design
- Diaphragm is protected from physical damage and turbulence
- Added weight prevents movement of the transmitter
- Cable withstand over 200 pounds of strain
- Ingress protection up to IP68

Profiles

HPT611 a fully submersible level transducer is the cost effective solution for sewage or waste water with viscous medium level measurement.It consists of the U.S.A imported GE piezoresistive sensing element encased in a 316L SS housing. Its all stainless steel, hermetically sealed housing make it suitable for immersion for a long time in most industrial sewage and waste water .

Each submersible sewage level transducer has "Steel cage" design offers the highest reliability in level measurement for severe high solids environments .The steel cage front end design allows for proper flow of liquids while keeping the sensor at the bottom of the tank or well. The "Steel cage" design gives full protection and allows sensing to sewage levels no matter how much debris/mud /sand or rags build up.

Ventilation tube in the cable automatically compensates for changes in atmospheric pressure . The vent is protected with a filter eliminating moisture in the transducer. The circuit design can the under the input and output short-circuit conditions to prevent reverse connection .

Holykell can provide a cost effective solution for level monitoring for a variety of applications. Welcome your inquiry.

Measuring range	
bar	0...10
inWC	0…1000
psi	0...150
mH2O	0...100

When choosing the PTFE cable, only measuring ranges up to 0 ...10 bar, 0 ... 150 psi and 0 ... 100 mH2O are available. The given measuring ranges are also available in mbar, kPA and MPa

Materials

Wetted Parts	Standard	Optional
Case	Stainless steel 316L	316L SST/SUS321
Sensor	Stainless steel 316	
Cable	PE	FEP/PUR

Mounting position

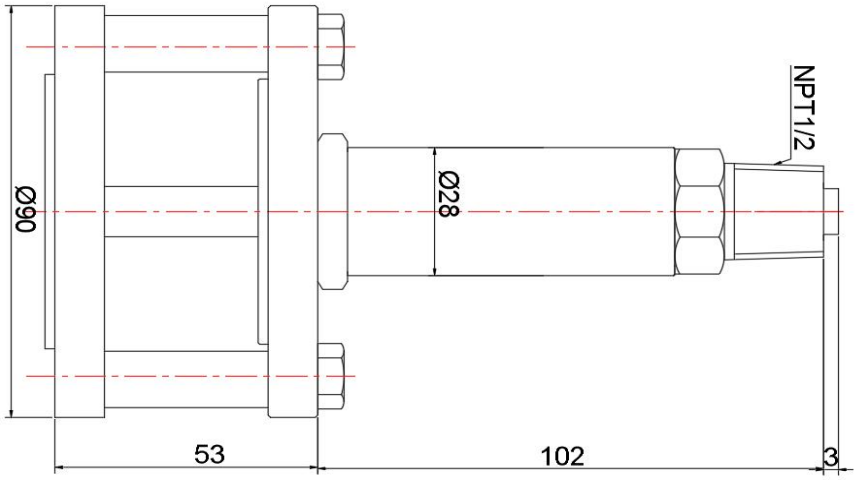
Calibrated in vertical mounting position with pressure connection facing downwards.

Specifications

Ambient Temperature: 25°C (unless specified)

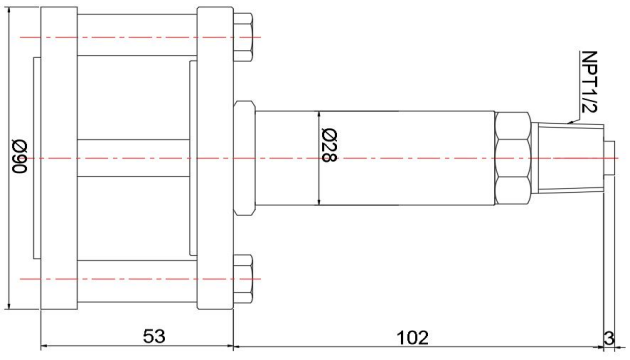
Parameter	HPT611				
Overload	150% F.S				
Burst Pressure	300% F.S				
Accuracy (Linearity, Hysteresis, Repeatability)	≤ ±0.5%F.S (typical); ≤ ±0.25%F.S (optional) @25°C Including non-lin., rep. and hys. optional				
Long-term Stability	0.1%F.S±0.05%/year				
Working Temp.	-40°C to +80°C(non-corrosive medium)				
Storage Temp.	-40°C to +80°C(Nitrile rubber sealing ring); -20°C to +80°C (fluororubber rubber sealing ring)				
Temperature Compensation	0°C to +50°C				
Medium Compatible	Compatible with 316L Stainless Steel				
Electrical Wire	2 Wires	3 Wires			4 wires
Output	4-20 mA	0-5 V	0-10 V	0.5-4.5 V	RS485 Modbus RTU
Power Supply	7-30 V DC	8-30 V DC	13-30 V DC	5V DC±5%	3.5-36 V DC
Insulation Resistance	>100M Ω@100V				
Zero-point Temp. Drift	0.01%FS/°C				
Full scale Temp. Drift	0.005%FS/°C				
Electronic Connection	Over molded and Fixed cable with vented tube				
Process Connection	90mm (3.5'') flange				
Body Diameter	28 mm				
Material of Housing	Stainless Steel				
Response Time	≤20 ms(Current and voltage signals); ≤100 ms (digital signals)				
Pressure Type	Gage pressure and absolute pressure optional				
Certificate	ATEX (II 1G Ex ia IIC), IECEx, 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				
IP Rating	IP68				

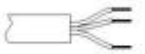
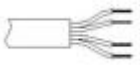
Dimensions and Drawing



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-
	RS485 RTU Modbus	Red	U+
		Black	U-
		Green	RS485A
		Blue	RS485B
		Yellow	⏚ Connect to earth ground

How to Order

1. Range Selection Table:

		01	0~1.0	02	0~1.1	03	0~1.2	04	0~1.3	05	0~1.4	06	0~1.5	07	0~1.6	08	0~1.7
09	0~1.8	10	0~1.9	11	0~2	12	0~2.1	13	0~2.2	14	0~2.3	15	0~2.4	16	0~2.5	17	0~3
18	0~4	19	0~5	20	0~6	21	0~7	22	0~8	23	0~10	24	0~12	25	0~15	26	0~16
27	0~20	28	0~25	29	0~30	30	0~35	31	0~40	32	0~50	33	0~60	34	0~80	35	0~100
										X	By Customized						

Kindly according to your application select suitable range code , Example: code 19 =5 .
Unit of measure select on the Part Number Selection Table . Example: Code H=mH_2O, that's 5mH_2O

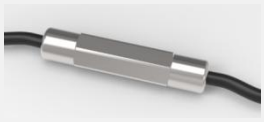
2. Part Number Selection Table:

611 Selection Type	19	H	G	E5	S11	1	1	002

Range	Range reference to range selection table code
Pressure Unit	B=bar P=Psi K=KPa M=MPa H=mH_2O
Pressure type	G=Gage/Relative A=Absolute
Signal Output	E5=4-20 mA(2 wires) E6=0-5 V(3 wires) E7=0-10 V(3 wires) E21=0.5-4.5 V non-ratiometric (default, 3 wires) E8=0.5-4.5 V ratiometric (by customized, 3 wires) E11=RS485(MODBUS) X= By Customized
Power Supply	S6=5 V DC S11=7-30 V DC S12=8-30 V DC S42=3.5-36 V DC S43=13-30 V DC X= By Customized
Pressure connection	1=Double 90mm(3.5'') diameter flange
Accuracy	1=0.5%F.S (Typical) 2=0.25%F.S optional
Cable length	000=Non-Cable 001= Cable 1M 002= Cable 2M X= By Customized

Accessories

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

	Description	Order number
	**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.	0008
	**Locking flange** For locking cables, made of aluminum alloy	0029
	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	0028
	Desiccant drying cartridge Desiccant Pack installed on Vented Transducer cable.The cartridge will have to be field replaced as site environment requires.	0010
	**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.	0003
	**Adapter Converter** It is able to convert RS232 signal to RS485 balanced differential signal and extend the communication distance to 1.2km.It uses a particular pump to gain power from RS232 signal (RTS, DTR, TXD) without initializing the RS232 series interface.This interface converter does this without requiring any AC or DC power.	0005
	**Surge electrostatic protector** Anti-surge ±2000V/±4000V, anti-static 18KV, suitable for protecting 4-20mA and RS485 circuits.	0014

Ordering information

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

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