

TECHNOLOGY

HOLYKELL®

HPT613

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 613

Analog & Digital Ceramic Capacitor Pressure Level Transmitter

Applications

- Dam, weir, reservoir
- Seawater, diesel, water
- Marine Vessel
- Waterways that are occasionally iced over
- Brackish water, saltwater
- Coastal & Estuary
- River, Lake and Ocean
- Power & Energy Fields

Features

- Corrosion-resistant
- Surge protection from lightning strikes and voltage spikes
- Flush Ceramic pressure cell resistant to 6x burst pressure
- Rugged design: Ingress protection up to IP68
- Anti-reverse connection Protection
- Excellent long term stability
- EMI/RFI Protection
- CE/IECEX/ATEX Certificate approved

Profiles

HPT613 series is a high reliability, high stability, high precision of the ceramic capacitor liquid level transmitter. They're widely used in slightly corrosive liquid level measurement, such as river water, sea water, oil, natural gas, liquefied gas and other corrosive liquids. The semi-flush ceramic sensing face resists clogging and is easily cleaned.

HPT613 with 316L stainless steel casing adopts Germany E+H ceramic capacitance flush diaphragm pressure sensors, special amplifier and V/I conversion circuit in the transmitter. It can convenient to zero and full range of calibration, and can undertake external program-controlled adjustment of zero and range. This product has got intrinsic safety explosion proof certification and CE certification.

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



RoHS

Measuring range

bar	-1 to 0-0.025...20
inWC	-100 to 0-2.5... 2000
psi	-15 to 0-0 5...300
mH2O	-1 to 0- 0.25...200

The given measuring ranges are also available in mbar, KPa and MPa

Materials

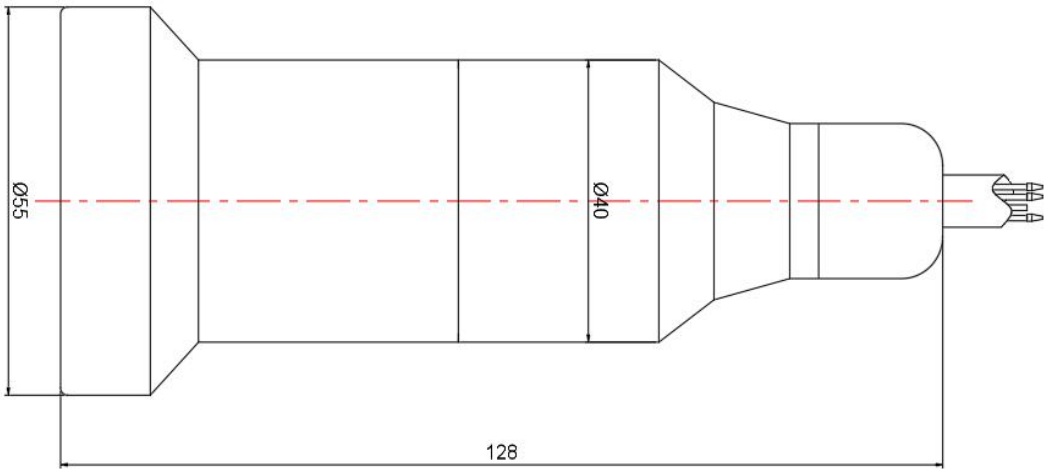
Wetted Parts	Standard	Optional
Case	Stainless steel 316L	Ti/Titanium alloy
Sensor	Ceramic	
Cable	PUR	FEP

Specifications

Ambient Temperature: 25°C (unless specified)

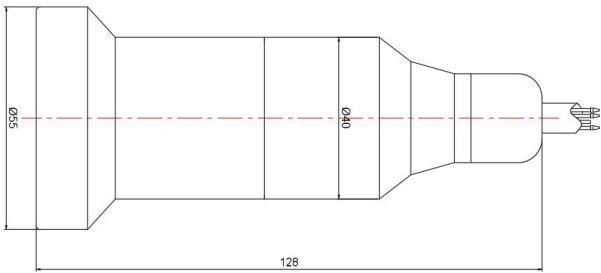
Parameters	HPT613
Overload	300% F.S.
Burst Pressure	600% F.S.
Accuracy	$\leq \pm 0.25\% \text{F.S}$ (Typical); $\leq \pm 0.1\% \text{F.S}$ (optional) @25 degree C
Long-term Stability	0.1%F.S \pm 0.05%
Working Temp.	-20-80°C (Corrosive medium)
Storage Temp.	-40°C~80°C (Nitrile rubber sealing ring); -20°C~80°C (fluororubber rubber sealing ring)
Temperature Compensation	0°C~50°C
Medium compatible	Compatible with 316L Stainless Steel or Titanium Alloy& PTFE optional
Electronic Wire	2 Wires 4 wires
Output	4-20mA 4-20mA+Hart RS485 Modbus RTU
Power Supply	7-30Vdc 12-30Vdc 3.5-36Vdc
Load Resistance	(U-12)/0.02 Ω
Response time	$\leq 10\text{ms}$
Certificate	CE Certificate
Electronic connection	Fixed cable with vented tube and water proof IP68
Pressure Type	Gage pressure and absolute pressure optional
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

Electronic Connections



	Directly sealed cable		
	Current	Red	V _{cc} +
		Green	S _I +
		Yellow	Shield
RS485 RTU Modbus		Red	V _{cc} +
		Black	GND
		Green	RS485A
		Blue	RS485B
		Yellow	Shield

How to Order

1. Range Selection Table:

00	0~0.5	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
36	0~150	37	0~200	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=mH₂ O, that's 5m H₂ O

2. Part Number Selection Table:

613 Selection Type	S	35	H	G	E5	S11	CW	2	002
Material	S=316L (Typical) T=Titanium F=PTFE								
Range	Range reference to range selection table code								
Pressure Unit	B=bar P=Psi K=KPa H=mH ₂ O F=m Fuel								
Pressure type	G=Gage/Relative A=Absolute								
Signal Output	E5= 4-20mA E11=RS485 Modbus RTU E14=4-20mA+Hart X=By Customized								
Power Supply	S11=7-30Vdc S10=12-30Vdc S42=3.5-36Vdc S17=10-30Vdc X=By Customized								
Measuring Medium	CW=Water/Seawater D1=0.84g/cm ³ density diesel D2=0.83g/cm ³ density diesel D3=0.85g/cm ³ density diesel D4=0.86g/cm ³ density diesel X=By Customized								
Accuracy	2=0.25%F.S(Typical) 3=0.1%F.S X=By Customized								
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
	Flange 4 holes 316 SS flange, size can be customized	0001
	Locking flange For locking cables, made of aluminum alloy	0029
	Conduit adapter 316 SS 1/2" NPT male cable conduit adapter. Must be factory installed.	0011
	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
	Additional weight The additional weight increases the dead weight of the submersible pressure transmitter. It simplifies the lowering into monitoring wells, narrow shafts and deep wells. It effectively reduces negative environmental influences on the measuring result from the measured medium (e.g. turbulent flow). Stainless steel 316L, approx. 1.46kg, height (H) 70 mm	0009
	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.	0005
	Surge electrostatic protector Anti-surge $\pm 2000V/\pm 4000V$, 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