

HPT604-GT Generator Lower Fuel Tank Application

Submersible Fuel Level Transducers



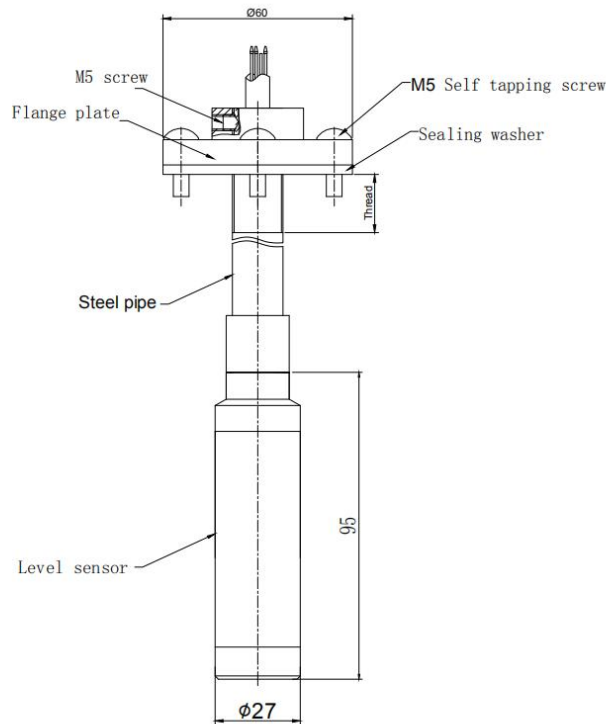
I . Profiles

HPT604-GT series digital pressure level transducer with high stable and reliable, which use USA GE pressure CHIPS 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. HPT604 series digital pressure level transducers are a high accuracy digital and intellectual product development by HOLYKELL to meet the market needs of worldwide. HPT604 designed incorporating with monolithic computer technology and sensor digital conversion technology, which core component adopts 24-bit AD MCU micro-processor to ensure high quality of the transducer relaying on its strong function and high speed operation capacity. The overall designed framework is to meet the requirements of increasingly enhanced industrial site application with a view to reliability, stability, high accuracy and the product also features strong function and without manually operating device to ensure good interaction. Application digital signal processing technology is made for good disturbance immunity. It's also feature zero point automatic stable follow up capacity and temperature automatic compensation.

II . Specifications

Model:	HPT604-GT	
Parameter:		
Level Range:	150...2500mm by customize for RS485 Modbus. 500...2500mm by customize for 4-20mA&0-5V	
Programmable:	Zero point adjustable for RS485 output	
Overload:	150% F.S.	
Burst Pressure	300% F.S.	
Accuracy@25degree C: (Linearity/Hysteresis/ Repeatability)	Digital output: $\leq \pm 0.25\%F.S$; Analog output: $\leq \pm 0.25\%F.S$ ($2m \leq LR \leq 2.5m$); $\leq \pm 0.5\%F.S$ ($1m \leq LR < 2m$); $\leq \pm 1.0\%F.S$ ($0.5m \leq LR < 1m$); Including non-lin., rep. and hys. Optional	
Long Stability:	$0.1\%F.S \pm 0.05\%/Year$	Max: $0.15\%F.S \pm 0.05\%/Year$
Temp Compensation:	$0^{\circ}C \sim 50^{\circ}C$	
Working Temp:	$-30^{\circ}C \sim 70^{\circ}C$	
Storage Temp:	$-40^{\circ}C \sim 85^{\circ}C$	
Medium compatible:	Compatible with SUS304 Stainless Steel	
Output:	RS485 Modbus Rtu (4 bits display output data, INT Date and 4 wires); 4-20mA Loop 2 wires; 0-5V 3 wires Optional	
Power Supply:	10~ 30Vdc	
Baud rate:	9600 (standard), 2400,4800,19200 on request	
Data format:	1 start bit, 8 data bits, 1 stop bit	
Odd and even calibration:	None	
Sampling rate:	3 points/second at RS485 mode.	
Resolution:	1mm	
Loading Resistance:	99 channels	
Insulate resistance:	$>100M \Omega$ @100V dc	
Temp. Drift:	$\leq 0.02\%FS/^{\circ}C$	
Electronic connection:	Fixed cable and water proof IP67	
Mounting Type:	Flange with four install holes and diameter 62mm, others by customized.	
Response time:	$\leq 10ms$	
Pressure Type:	Gauge pressure	
Certificate approving:	Exia IICT6 and CE Certificate.	
EMC Standard:	EN 61326-1:2013; EN 61326-2-3:2013 EN 61000-6-2:2005; EN61000-6-4:2007+A1	
Protection:	With protection of static electronics, lighting, overload voltage (max 32VDC)	
Water Proof:	IP68	

III. Dimension and Drawing



IV. Electronic Wires Connection

RS485 4 wires connection

Wires No.	Wires Colors	Electronic Connection
1	Red wire	Power Supply V+
2	Green wire	GND
3	Yellow wire	RS485 +/A
4	Blue wire	RS485 -/B
5	Black wire	Shield wires to ground

Analog signal wires connection

Wires No.	Wires Colors	Electronic Connection
4-20mA Loop Wires Connection		
1	Red wire	Power Supply Vcc+
2	Green wire	I _{out} & GND
3	Black wire	Shield wire
0-5V Wires Connection		
1	Red wire	Power Supply Vcc+
2	Black wire	Power Supply V- & V _{out} -
3	Green wire	V _{out} +
4	Yellow wire	Shield wire






V . Part Number Selection Table

604GT Submersible Pressure Fuel Level Transducer											
Code		Pressure & Level Range									
00		0...0.5 m				02		0...2 m			
01		0...1 m				X		By customized			
Code		Pressure & Level Units									
H		m H2O									
F		m Fuel									
Code		Pressure type									
G		Gauge/Relative pressure type (universal)									
Code		Power Supply									
S17		DC 10~30V									
Code		Signal Output									
E11		RS485 MODBUS RTU (4 wires)									
E5		4-20mA									
E6		0-5V									
Code		Measuring Medium									
CW		Water			P0		petrol, density 0.72				
D0		Diesel, density 0.83			P1		petrol, density 0.725				
D1		Diesel, density 0.84			P2		petrol, density 0.74				
D3		Diesel, density 0.85			X		Others by customized				
Code		Probe Length Selection									
L23		23cm (13cm≤Tank Heights≤30cm)									
L43		43cm (30cm≤Tank Heights≤50cm)									
L68		68cm (50cm≤Tank Heights≤75cm)									
L93		93cm (75cm≤Tank Heights≤100cm)									
X		by customized									
Code		Blind Zone Of Sensor									
A		34 mm (Taper Filter)									
B		5 mm (Flat Filter)									
Code		Accuracy									
0		≤±1.0%F.S									
1		≤±0.5%F.S									
2		≤±0.25%F.S									
Code		Cable Length									
002		2 Meters									
X		By customize									
604GT	00	F	G	S17	E11	D1	L23	B	2	002	Remarks

Example Part No.: 604GT00FGS17E11D1L23B2002

(Model:HPT604-GT, Fuel level range 0-500mm 0.84g/cm3, gauge type, 10-30Vdc supply, RS485 MODBUS 4 wires signal, Probe length 23cm, 0.25%F.S. accuracy and with 2 meters PU cable)

Accessories List

Items Name	Picture	Specifications	P/N	Qty	Remarks
Adjustable Pipe		Length: 23cm Materials: steel or aluminum Suitable for tank height span: 13...30cm	AP023	1pc	Pipes spec according to order P/N and each one sensor with 1pcs pipe, 1pc flange, 1pc fix screw, 1pc O-ring and 4pcs screws.
		Length: 43cm Materials: steel or aluminum Suitable for tank height span: 30...50cm	AP043	1pc	
		Length: 68cm Materials: steel or aluminum Suitable for tank height span: 50...75cm	AP068	1pc	
		Length: 293cm Materials: steel or aluminum Suitable for tank height span: 75...100cm	AP093	1pc	
Flange		Size: 60mm diameter with 4 holes Material: Nylon With a fix screw hole	0022	1pc	
Pipe fix screw		Size: M5 Material: stainless steel Use for fix pipe and flange	0025	1pc	
Sealing O-ring		Size: Diameter 60mm with 4 holes Material: NBR Use for sealing flange and tank top	0023	1pc	
Mounting Screws		Size: M4.8 Material: stainless steel Use for fix flange and tank top	0026	4pcs	