

HPT604-GT Generator Lower Fuel Tank Application

Submersible Fuel Level Transducer



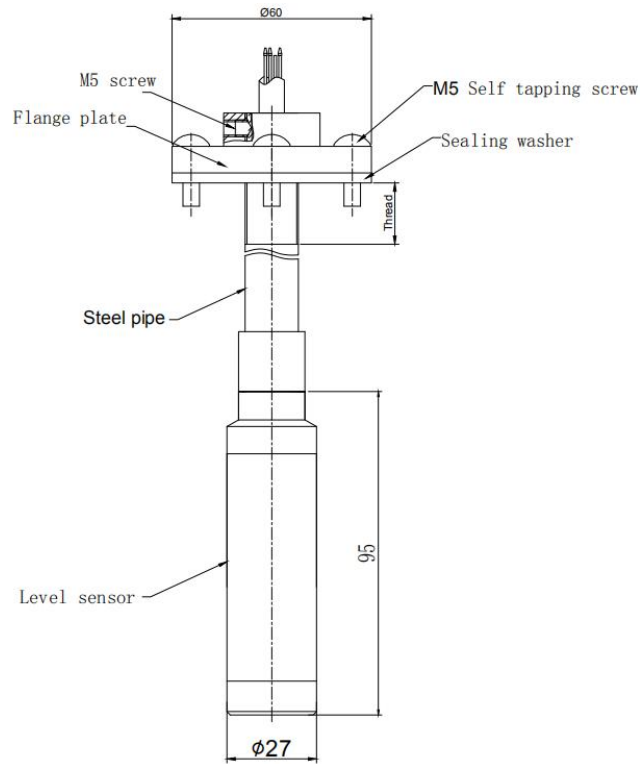
I . Profiles

HPT604-GT series digital pressure level transducer is highly stable and reliable. It uses the U.S.A. imported GE pressure core 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-GT 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 Parameter	HPT604-GT		
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 (Linearity/Hysteresis/ Repeatability)	Digital output: $\leq \pm 0.25\%F.S.$; Analog output: $\leq \pm 0.25\%F.S$ ($2m \leq LR \leq 2.5m$); $\leq \pm 0.5\%F.S$ ($1m \leq LR < 2m$); $\leq \pm 1.0\%F.S$ ($0.5m \leq LR < 1m$); All above @25 degree C Including non-lin., rep. and hys. Optional		
Long-term Stability	$0.1\%F.S \pm 0.05\%/Year$		
Temp.Compensation	$0^{\circ}C \sim 80^{\circ}C$		
Working Temp.	$-40-80^{\circ}C$ (non-corrosive medium)		
Storage Temp.	$-40^{\circ}C \sim 80^{\circ}C$ (Nitrile rubber sealing ring); $-20^{\circ}C \sim 80^{\circ}C$ (fluororubber rubber sealing ring)		
Medium compatible	Compatible with SUS304 Stainless Steel		
Output	4-20mA	0-5V	RS485 Modbus RTU
Power Supply	7-30Vdc	8-30Vdc	3.5-36Vdc
Baud rate	9600 (typical), 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 with vented tube 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	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, lightning, overload voltage (max 32VDC)		
IP Rating	IP68		

III. Dimension and Drawing



IV. Electronic Wires Connection

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






V . Part Number Selection Table

604GT Submersible Pressure Fuel Level Transducer														
604GT	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											
	S12		8-30Vdc		S42		3.5-36Vdc		S11		7-30Vdc		X	Customized
	Code		Signal Output											
	E11		RS485 Modbus		E5		4-20mA		E6		0-5V			
	X		Customized											
	Code		Measuring Medium											
	CW		Water			G0		petrol, density 0.72						
	D0		Diesel, density 0.83			G2		petrol, density 0.725						
	D1		Diesel, density 0.84			G5		petrol, density 0.737						
	D3		Diesel, density 0.85			X		Others by customized						
	Code		Probe Length Selection											
	L23		23cm (13cm≤Tank Height≤30cm)											
	L43		43cm (30cm≤Tank Height≤50cm)											
	L68		68cm (50cm≤Tank Height≤75cm)											
	L93		93cm (75cm≤Tank Height≤100cm)											
	X		by customized											
Code		Blind Zone Of Sensor												
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 customized												
604GT	00	F	G	S11	E5	D1	L23	B	2	002	Remarks			

Example Part No.: 604GT00FGS42E11D1L23B2002

(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: 93cm 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	