Tawreed Fuel Series Submersible

Petrol/ Gasoline and Diesel Pressure Level Transmitters

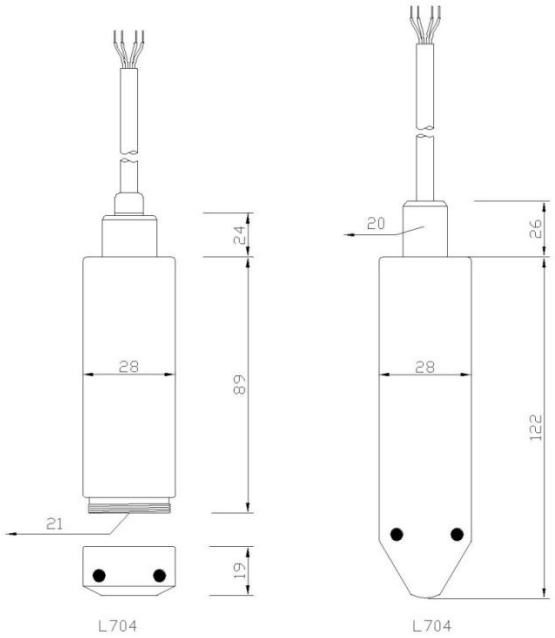
Ⅰ. Profiles:

Tawreed 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 immerged into the media for a long time. Tawreed series digital pressure level transducers are a high accuracy digital and intellectual product development by HOLYKELL to meet the market needs of worldwide. Tawreed 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:	Tawreed			
Pressure Range:	-1...0-0.05Bar...50 Bar Optional			
Programmable:	Zero point adjustable for RS485 output			
Overload:	150% F.S.			
Burst Pressure	300% F.S.			
Accuracy:(Linearity Hysteresis Repeatability)	⩽ ±0.5%F.S; ⩽ ±0.25%F.S; ⩽ ±0.15%F.S Including non-lin., rep. and hys. Optional			
Long Stability:	Standard: 0.1%F.S±0.05%/Year	Max: 0.15%F.S±0.05%/Year		
Temp Compensation:	-10℃~60℃			
Working Temp:	-20℃~70℃			
Storage Temp:	-30℃~100℃			
Temperature Compensation:	-10℃~60℃			
Medium compatible:	Compatible with 316 Stainless Steel or Titanium Alloy or PTFE materials.			
Output:	4-20 mA or 4-20mA +HART (2 wires)	0-5V/0.5-4.5V/1-5V/0-10 V/0-2.5V... (3 wires)	RS485 (4 wires)	RS485+4-20mA (6 wires)
Power Supply:	12~ 36 Vdc	12~ 30Vdc/5Vdc/12Vdc	10~ 30 Vdc	12~ 30 V DC
Baud rate:	9600 (standard), 2400,4800,19200, 115200 by customized.			
Data format:	1 start bit, 8 data bits, 1 stop bit			
Odd and even calibration:	None			
Sampling rate:	10 points/second to 1 point/50 minutes			
Resolution:	20 bit 10ppm			
Loading Resistance:	Standard 99 channels and Max 255 chaneels			
Insulate resistance:	>100M Ω @50V dc			
Zero Temp. Drift:	Typical: 0.05%FS/℃	Max: 0.1%FS/℃		
FS Temp. Drift:	Typical: 0.05%FS/℃	Max: 0.1%FS/℃		
Electronic connection:	Fixed cable and water proof IP68			
Mounting Type:	None (standard type), G1/4'' male, 1/4''NPT male/Female, others by customized.			
Response time:	⩽1ms			
Pressure Type:	Gauge pressure, absolute pressure optional			
Certificate approving:	Exia IICT6 and CE Certificate.			
EMC Standard:	electromagnetic radiation:EN50081-1/-2 electromagnetic susceptibility:EN50082-2			
Lighting Proof:	None (standard type); Air conducts withstand voltage 8000V Shell and Cable conduct withstand voltage 4000V. This function is customized.			
Water Proof:	IP68			
Temperature Range:	-30 to 70 Degree C (by customized)			
Temperature type:	PT100, K, J type thermocouple customized.			
Weight:	Net weight is about 0.30KG, Full Packing weight is about 0.5KG (Not Include Cable)			

Ⅲ. Dimension and Drawing:



Ⅳ. Electronic Wires Connection:

4-20 mA and 4-20mA+HART 2 wires connection:

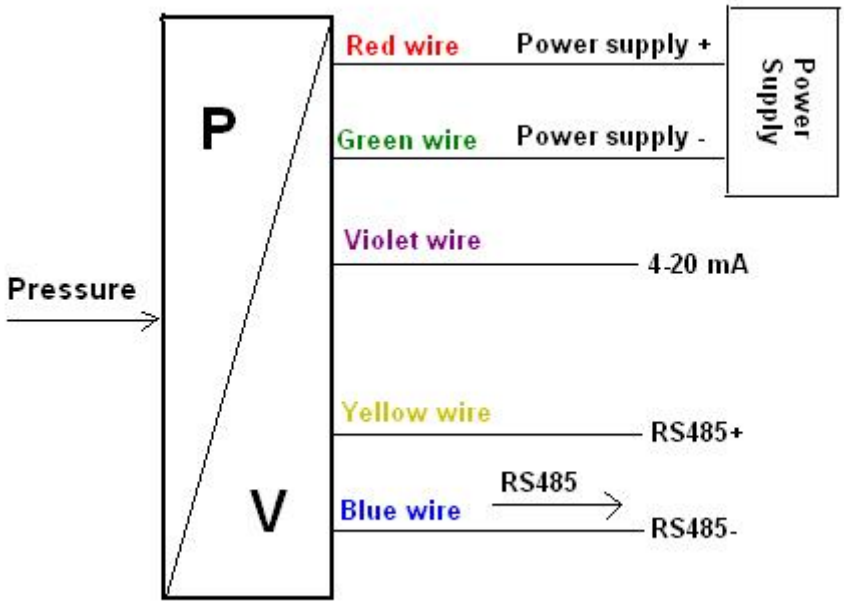
Wires No.	Wires Color	Electronic Connection
1	Red wire	Power Supply V+
2	Green wire	4-20 mA output +
5	Black wire	Shield wires to ground

RS485 4 wires connection:

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

Double signal 6 wires connection:

Wires No.	Wires Color	Electronic Connection
1	Red wire	Power Supply V+
2	Green wire	Power Supply V-
6	Violet wire	4-20 mA output
3	Yellow wire	RS485 +/A
4	Blue wire	RS485 -/B



Ⅴ. Part Number Code Table For Pressure Range:

	000	-1-0		016	0-1.5		031	0-10		047	0-125
	001	-1-1		017	0-1.6		032	0-12		048	0-150
	002	-1-9		018	0-1.7		033	0-15		049	0-200
	003	-1-10		019	0-1.8		034	0-16		050	0-250
	004	-1-16		020	0-1.9		035	0-20		051	0-300
	005	-1-20		021	0-2.0		036	0-25		052	0-350
	006	-1-25		016	0-2.1		037	0-30		053	0-400
	007	-1-30		022	0-2.2		038	0-35		054	0-450
	008	-1-35		023	0-2.3		039	0-40		055	0-500
	009	-1-40		024	0-2.5		040	0-50		056	0-600
	010	-1-65		025	0-3		041	0-60		057	0-700
	011	0-0.5		026	0-4		042	0-65		058	0-800
	012	0-1.0		027	0-5		043	0-70		059	0-1000
	013	0-1.1		028	0-6		044	0-80		060	0-10000
	014	0-1.2		029	0-7		045	0-90		061	0-15000
	015	0-1.3		030	0-8		046	0-100		X	Customized