

Liquid Level 4-20mA Output

APT10





DESCRIPTION

The APT10 is a submersible liquid level transducer. The stainless steel housing and piezo-resistive pressure sensor design allows for highly reliable design and great stability over time.

The APT10 has a response time of ~3ms for fast response applications. Please contact us for custom design availability.

- Liquid Level Measurements
- IP68
- ±0.5% Linearity FS
- 4-20mA
- Measure up to 600 FT.
- 0.3%FS Stability Over 12 months
- Custom Water Depth Calibration

APPLICATIONS

- Waste Water
- Hydrology
- Gasoline/Diesel
- Hydraulic Systems
- Medical Applications
- City Water

Measuring Ranges

Order Code	30	60	150	300	600
Units	Ft-H ₂ 0				
Water Depth	30	60	150	300	600

Note: 1. Standard Factory calibration is for Water depth measurement. Contact factory for custom calibrations.

APT10 Operational Characteristics

V ₊ = 10V, V ₋ = 0V, Temperature = 25°C					
PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS
Excitation Voltage	V _{EX}	8		28	V
Output	mA	4		20	mA
Linearity (Note 2)			.25	0.5	%FS
Repeatability		05		.05	%FS
Temperature Compensation		0 – 50		С	
Operation Temperature		-10 – 80		С	
Full Scale Thermal Error			.05	.07	%FS/C
Response Time	t _R		10	150	ms
Long Term Stability			.2		%FS/Yr

Application Information

Package

The port and diaphragm are made of stainless steel (SS316L), which allows for harsh media such as hydraulic oils, inks, etc. Automotive grade vibration proof design for high vibration applications.

Stability

The silicon MEMS oil-filled pressure sensor exhibit low thermal hysteresis and excellent long term stability. The rigid 316 Stainless steel housing isolates the sensor from mechanical stress during the mounting of the sensor.

Additional stability is gained from factory stabilization of all sensors.

Pressure port

The media isolated port is encased in a 316 stainless steel cavity at the end of the probe. There are 8 holes that allow the media to make contact with the senor element. The base of the probe can be unscrewed to clean out the holes if they are plugged by the media over time.

Media

The pressure port is tolerant to most media including but not limited to oil, air, gas, some corrosive media, and salt water.

Wetted parts

The wetted surfaces are composed of stainless steel, Viton, and/or Tantalum.

Pressure ranges

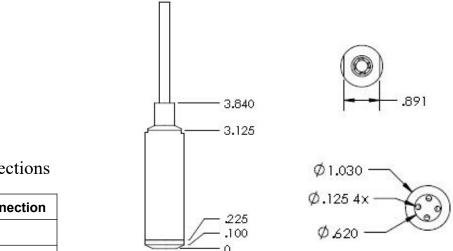
Standard H_2O depth ranges are 5, 10, 15, 30, 50, 100, and 200 Ft- H_2O . Custom depths are available for OEM customers.



City Waste Water

Mechanical Dimensions (inches)

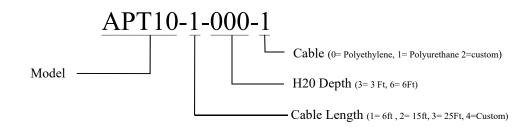
Cable: .20" Diameter Polyethylene/Polyurethane Cable Diaphragm: SS 316L



Electrical Connections

Wire Color	Connection		
Red	V+		
Black	0V, Out+		

Part Number Configuration



Standard Part Numbers

Model	H20 Depth Feet	Max Depth Feet
APT10-1-05-1	15	25
APT10-1-10-1	30	40
APT10-1-60-1	60	80
APT10-1-150-1	150	200
APT10-1-300-1	300	350
APT10-1-600-1	600	650

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