



PRINCIPLE OF OPERATION:

The immersion probe / submersible probe consists of a measuring cell, two wire transmitter and a special cable with capillary. The probe is housed in stainless steel with a pressure sensitive diaphragm, protected with a plastic cap. The level signal is determined by the pressure difference between the water column over the probe and atmospheric pressure which is transferred to the probe through the capillary tube. This differential pressure is converted to a 4-20 mA analogue signal by the measuring cell and the electronics. The Pressure Range is factory set. No field calibration is required.

APPLICATIONS:

The 131-HPT is used for hydrostatic level measuring in wells, reservoirs, clarification plants and other vessels. Due to its small physical diameter, it is easy to install and is ideally suited for protecting submersible pumps.

SPECIFICATIONS:

- Measuring Range: Upto 20m water column.
- Supply Voltage: 12V to 30V DC.
- Output Signal: 4-20mA
- Maximum Load: 600 ohms @ 24 VDC
- Operating Temperature: 0° C to 70 ° C.
- Zero Pressure Offset (mA) : 4.0 ± 0.2mA
- Full Scale Span (mA) : 16.0 ± 0.2mA
- Repeatability: ± 0.1% FSO
- Max. Permissible Pressure: 2 X rated Pressure.
- Wetted Material: Stainless Steel.

***ACCESSORIES:**

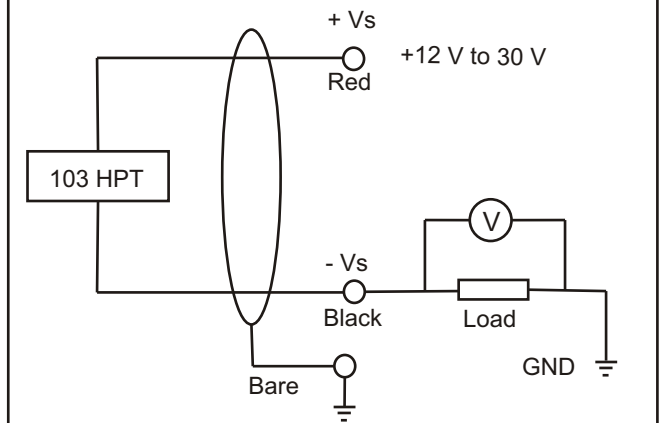
- Standard Accessories: 1. Cast Aluminium Weatherproof Flameproof Junction box with 1 double compression brass Cable gland.
2. GI Cable Termination Plate
- Optional Accessories : 1.176 Remote Indicator (with Inbuilt 24VDC Power Supply).
2. Power Supply Unit 24 VDC



FEATURES:

- Submersible Transmitter - Two Wire.
- Highly accurate and long-term stable sensor element.
- Compensated for Temperature and air pressure.
- Stainless steel housing < 22mm diameter can be used even in 1" Bore pipes.
- Compact and easy to install.
- No site calibration required.
- Reliable
- Maintenance free.

ELECTRICAL CONNECTION:



ORDER CODE:

103 - HPT P

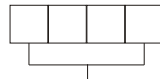
Type:

P - Piezoresistive

1

Output:

1. 2 Wire, 4-20mA,
calibrated in millibar



Range:

8250 - 250 mbar
8400 - 400 mbar
8600 - 600 mbar
81K0 - 1000 mbar
81K6 - 1600 mbar
82K0 - 2000 mbar

L=

Cable Length in m:

05- for 250 mbar
06- for 400 mbar
08- for 600 mbar
12- for 1000 mbar
18- for 1600 mbar
22- for 2000 mbar

Example of Model Code Selection : 103- HPT P 1 8600 L=08 m

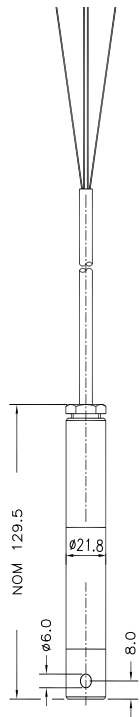
The above model code specifies that Hydrostatic Pressure Transmitter 103 - HPT works on piezoresistive principle. The output is 2 wire, 4-20mA , range is 600mbar (6.12 m of water column) & Cable length = 8 m

- Notes:**
1. The package is an all sealed housing. For proper function, the gauge port is vented to the atmosphere through the connecting cable.. Thus the vent tube of the cable end must have access to the atmospheric pressure.
 2. Span is the arithmetic difference in Transmitter output signal measured at normal pressure and the maximum operating pressure.
 3. Suitable for water duties.
 4. Cable Length supplied would be Range + 2m.Contact H.O for applications requiring longer lengths.
 5. 1mbar = 1.02 cm of water column.

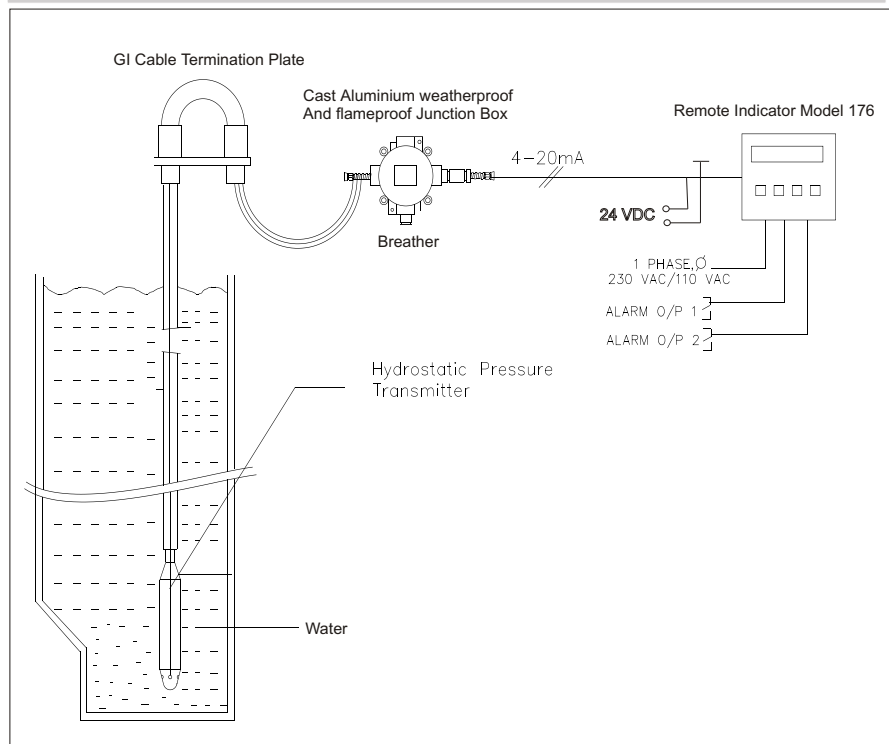
MECHANICAL DIMENSION:

Wiring Details:

Red: +Vs
Black : -Vs
Transparent: Vent tube
Bare: Case/ Shield



GENERAL ARRANGEMENT:



Continuous changes may necessitate changes without notice

LF-103- 0805 R00 07/2007



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