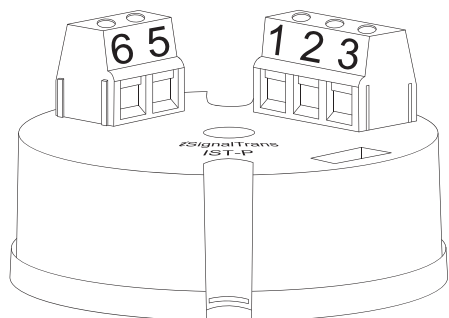


Programmable Isolated 3 wire Potentiometer Transmitter

Model IST-P

Installation and Operation Guide



Electromagnetic compatibility (EMC) : En 50081-2, En 50082-2

Dimension : shown in Figure 1.

Housing material : ABS plastic. UL 94V0

Weight : 19g

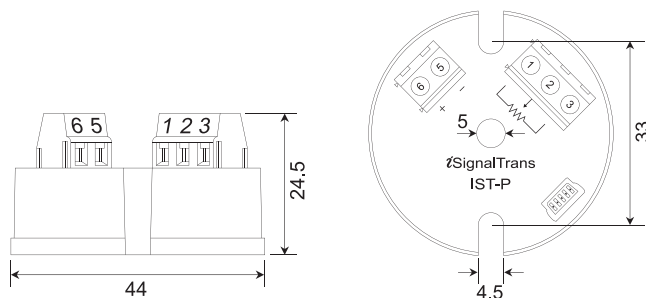


Figure 1. Dimension in mm

iSignalTrans® IST-P is a 2-wire loop-powered isolated potentiometer transmitter. It converts 3 wire potentiometer into a scalable linear 4~20mA output current. Microprocessor based designed make it flexible to accept up to 15 user defined linearization points. various input signals including mV, V, mA, PT100 and 9 different thermocouples. The measuring unit and range are also configurable with a user-friendly software *iSignalWin*® via PC.

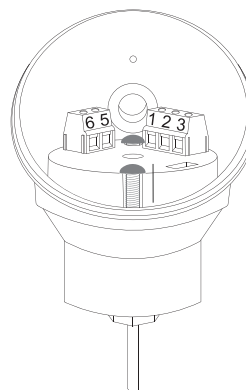
Features

- Up to 15 User defined linearization points available
The user linearization feature allows the volume of a tank's contents to be calculated from the height of the material in the container. Up to 15 linearization points can be defined by user in the measurement range.
- Configurable without power connected
- 3750 Vrms isolation between input and output
- 2-wire loop-power technology 4 to 20mA analogue output
- Fault signal on sensor break presettable
- Accept 200~60K ohms 3 wire potentiometer input

Specification

- Input signal :** 3 wire 200~60K ohms potentiometer.
- Measuring accuracy :** $\pm 0.1\%$
- A/D resolution :** 16 bits
- Input sampling rate :** <200mS.
- Output signal :** Analogue 4 to 20mA, 20 to 4mA.
- Output resolution :** 0.6uA (15 bits)
- Output response time :** <200mS.
- Load :** Max. (VPower supply - 10 V) / 0.020
- Power supply :** 10 to 36 V, internal protection against polarity inversion.
- Common mode rejection ratio :** >80dB.
- Galvanic isolation :** 3.75 KVRms. between input and output
- Input current required** $\leq 3.8\text{mA}$
- Current limit** $\leq 23\text{mA}$
- Operating temperature :** 0to 55°C
- Humidity :** 0 to 90% RH

Installation



Mounting

Electrical Connection

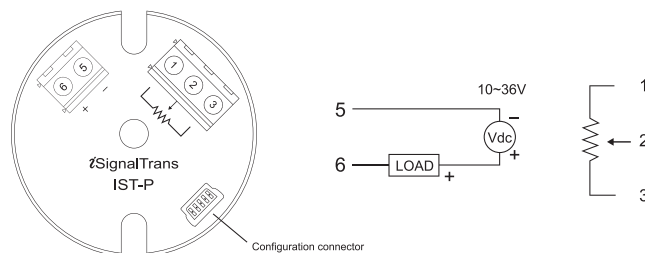


Figure 2. Terminal connections

Wiring Specification :

- Srew tightening torque : 3.5 lb-in
- Wire range : 16~26 AWG
- Wire strip length : 5~6mm

Wiring Precaution :

1. Always keep signal wires away from power or contactor wires.
2. The power supply of *iSignalTrans*® should not be shared with contactors, electrical motor and other inductive devices.

