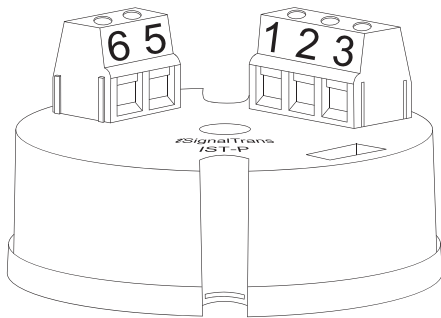




Programmable Isolated 3 wire Potentiometer Transmitter

Model IST-P

Installation and Operation Guide



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

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

Dimension : shown in Figure 1.

Housing material : ABS plastic. UL 94V0

Weight : 19g

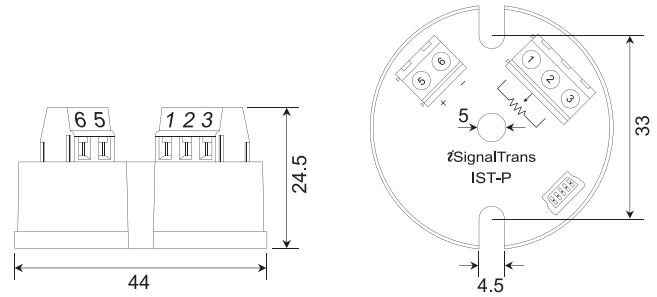
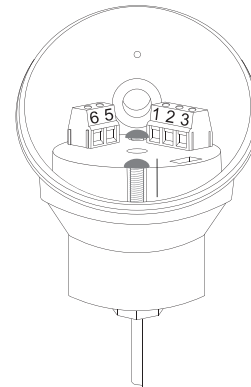


Figure 1. Dimension in mm

Installation



Mounting

Electrical Connection

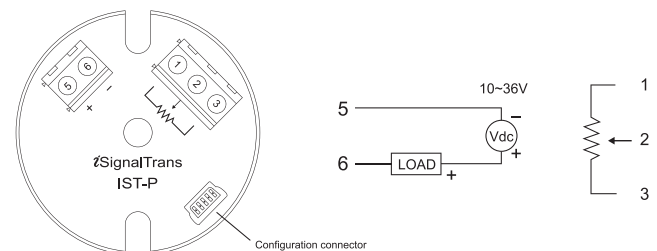


Figure 2. Terminal connections

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.

