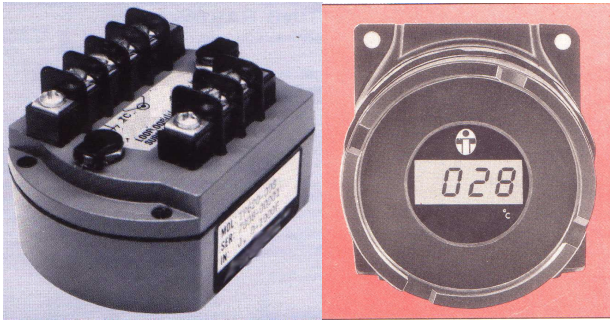




teletherm
INSTRUMENT CO. PVT. LTD.

**THERMOCOUPLE INPUT, ISOLATED
TWO WIRE TRANSMITTER
MODEL:(TP723)**



- **PROVIDES AN ISOLATED CURRENT LOOP IN PROPORTION TO A THERMOCOUPLE INPUT**
- **ELIMINATES GROUND LOOP**
- **INTEGRAL COLD JUNCTION COMPENSATION**
- **WIDE RANGING ZERO AND SPAN ADJUSTABILITY(80%)**
- **PROTECTS EQUIPMENT WITH 1500 V INPUT TO OUTPUT ISOLATION**
- **RUGGED EMI / RFI SHIELDED HOUSING**
- **3 ½ DIGIT LCD LOOP POWERED INDICATOR**
- **3 YEAR WARRANTY**

APPLICATION

The model TP723 is useful in any application requiring an isolated two-wire loop current from a Thermocouple input. Typical applications include energy management and data acquisition such as monitoring remote boiler temperatures etc. The output of TP723 can drive a digital meter for direct display or interface with a computer for monitoring and control applications.

DESCRIPTION

The TP723 offers a choice of J/K/T or E/R/S input ranges and two output ranges. TP723 provides 600 V DC isolation with outputs of either 4 – 20 mA or 10 – 50 mA. The Current output is linear to mV input signal from thermocouple. Upscale burnout is standard which provides a maximum output with an open thermocouple. A major advantage of TP723 is its wide-ranging capability. TP723 enables 80% zero and span adjustability within any user selected input range. For example, range K1 of the table 1 specifies 0 Deg C – 500 Deg C with minimum span of 100 Deg C ie.(500 Deg C –100 Deg C =400 or 80%). This 80% adjustability factor allows the user to field calibrate in unit for the maximum (0 – 500Deg C) down to any minimum (100 Deg C) span (eg.14 Deg C to 114 Deg C) as long as the adjusted span remains within the selected 0 to 500 Deg C range.

INPUT RANGE TABLE 1:(J / K / T)

| T/C Type | Input Limit In Deg C | Min Span In Deg C |
|----------|-------------------------|----------------------|
| J1 | 0 to 500 | 100 |
| J2 | 0 to 760 | 150 |
| J3 | -200 to 600 | 200 |
| K1 | 0 to 500 | 100 |
| K2 | 0 to 1000 | 200 |
| K3 | 0 to 1370 | 300 |
| T1 | -270 to 500 | 200 |
| T2 | 0 to 400 | 100 |
| T3 | -270 to 400 | 200 |

INPUT RANGE TABLE 2:(E / R / S)

| T/C Type | Input Limit in Deg C | Min Span In Deg C |
|----------|-------------------------|----------------------|
| E1 | 0 to 150 | 30 |
| E2 | 0 to 300 | 60 |
| E3 | 0 to 500 | 100 |
| E4 | 0 to 1000 | 200 |
| E5 | -270 to 0 | 100 |
| E6 | -270 to 150 | 150 |
| E7 | -270 to 350 | 200 |
| E8 | -270 to 850 | 300 |
| R/S1 | 0 to 950 | 220 |

CALIBRATION

- Connect the input to a calibrated Thermocouple source and monitor output current (refer to terminal wiring)
- Set the calibrator to desired minimum temperature
- Adjust fine zero to obtain an output of 4 mA or 10mA
- Set the calibration to desired maximum temperature and perform similar adjustment using fine span potentiometer to obtain an output of 20mA or 50mA
- Repeat 1 & 2 point to get better accuracy

MOUNTING

The TP723 model is designed for installation in industrial field environments. A sealed, die – cast aluminium housing protects against corrosion, moisture, dust and electrical noise such as (RFI) and (EMI) interference. All circuit boards are Urethane coated for environmental protection. For protection against extreme moisture, hose – directed water or hazardous environments, the model TP 723 is supplied with a rugged IP –65 enclosure with standard, ready to install plumbing process for easy hook –up and operation in harsh process environment. TP723 model allows intrinsically safe installation in Class 1, Division 1, Group A – D hazardous locations when installed with approved safety barriers as per manufacturer’s drawings.

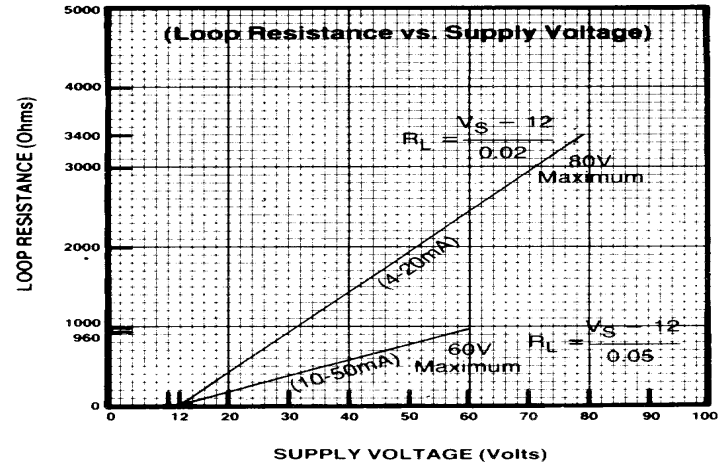
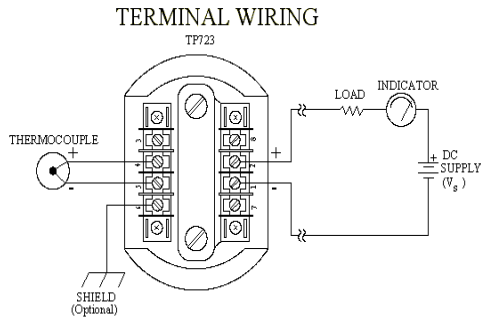
OPTIONS

- Option 1 : Option 1 : IP – 65 enclosure
Option 2 : Downscale Burnout
Option 3 : Loop powered indicator

ACCESSORIES CODE (Optional)

- MOO4 - Snap in channel track, 4 ‘
T902 - Mounting plate for M004, including 4 ‘ track
T 910 - Bulk head (Flat surface) mounting plate

- CAL 25 - Thermocouple Calibrator
- RPS 25 - 24 V DC, 30 mA power supply
- LPI 25 - 3½ digits LCD remote loop powered indicator



ORDERING INFORMATION

Specify

1. Model No : TP723
2. Input Thermocouple
J/K/T (or) E/R/S
3. Temperature Range
See TABLE 1 & TABLE 2
4. Output : 4 - 20 mA / 10 - 50mA
5. Options : Refer OPTIONS
6. Accessories : Refer Data Sheet

MANUFACTURED BY:

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