

**Super-mini Two-wire Signal Conditioners T-UNIT****SIGNAL TRANSMITTER**

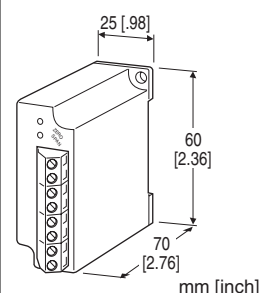
(non-isolated)

**Functions & Features**

- Converting a DC input into a standard 4 – 20 mA DC signal
- Monitor terminals
- High-density mounting

**Typical Applications**

- mV, voltage and current scaling

**MODEL: TV-[1]****ORDERING INFORMATION**

- Code number: TV-[1]
- Specify a code from below for [1].  
(e.g. TV-6)
- Special input range (For code 0)

**[1] INPUT****Voltage**

- 2: 0 – 100 mV DC (Input resistance 50 kΩ min.)
- 3: 0 – 1 V DC (Input resistance 1 MΩ min.)
- 4: 0 – 10 V DC (Input resistance 2 MΩ min.)
- 5: 0 – 5 V DC (Input resistance 2 MΩ min.)
- 6: 1 – 5 V DC (Input resistance 1 MΩ min.)
- 0: Specify voltage (See INPUT SPECIFICATIONS)

**GENERAL SPECIFICATIONS****Construction:** Stand-alone; terminal access at the front**Connection:** Euro type terminal(applicable wire size: 0.25 to 1.5 mm<sup>2</sup>, stripped length 7 mm)**Housing material:** Flame-resistant resin (black)**Zero adjustment:** -5 to +5 % (front)**Span adjustment:** 95 to 105 % (front)**INPUT SPECIFICATIONS****Input:** 0 – 300 V DC**Minimum span:** 0.1 V**Offset:** max. 0.25 times span**Input resistance****Input Span: Input Resistance**

0.1 – 1 V: ≥ 50 kΩ

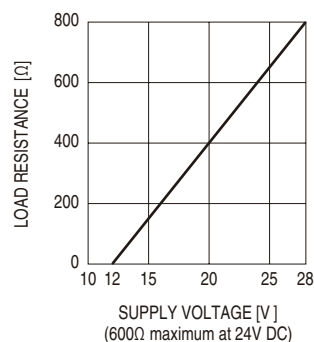
1 – 5 V: ≥ 1 MΩ

≥ 5 V : ≥ 2 MΩ

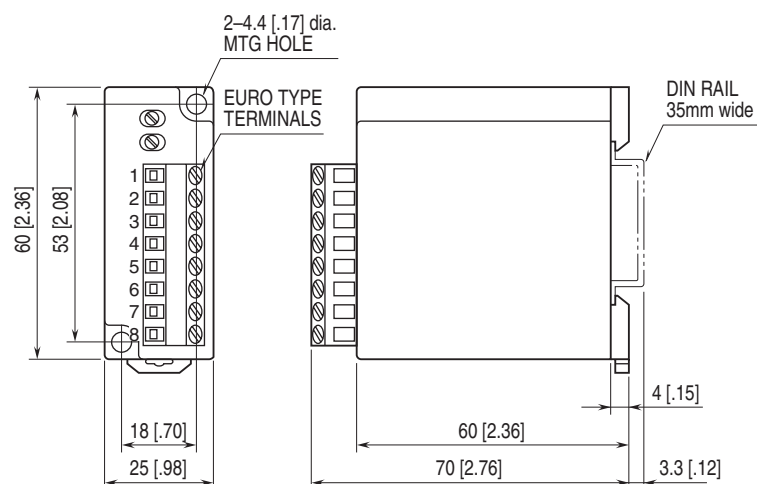
**OUTPUT SPECIFICATIONS****Output:** 4 – 20 mA DC**Load resistance vs. supply voltage:**

Load Resistance (Ω) = (Supply Voltage (V) – 12 (V)) ÷ 0.02

(A) (including leadwire resistance)

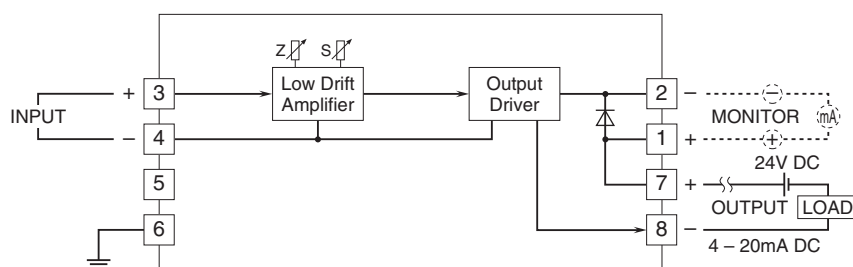
**INSTALLATION****Supply voltage:** 12 – 28 V DC**Operating temperature:** -5 to +60°C (23 to 140°F)**Operating humidity:** 30 to 90 %RH (non-condensing)**Mounting:** Surface or DIN rail**Weight:** 120 g (0.26 lb)**PERFORMANCE in percentage of span****Accuracy:** ±0.1 %**Temp. coefficient:** ±0.015 %/°C (±0.008 %/°F)**Response time:** ≤ 0.5 sec. (0 – 90 %)

## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



•When mounting, no extra space is needed between units.

## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.