

## Field-mounted Two-wire Signal Conditioners 6-UNIT

### SIGNAL TRANSMITTER

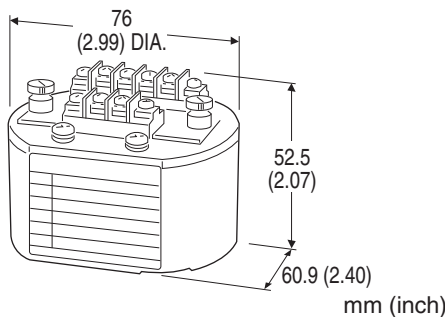
(field-selectable range)

#### Functions & Features

- Converting a DC input into an isolated 4 - 20 mA DC signal
- Field selectable input range
- Rugged enclosure

#### Typical Applications

- mV, voltage and current scaling



### MODEL: 6VS-[1]

#### ORDERING INFORMATION

- Code number: 6VS-[1]
- Specify a code from below for [1].  
(e.g. 6VS-U3)
- Input range (e.g. 1 - 5 V DC)
  - Mounting adapter (e.g. surface mounting adapter plate, model: A-01)
- Note: When a mounting adapter is required, specify mounting adapter. Not included without specifying.

#### [1] INPUT

- U1:** Range  $\pm 100$  mV; 3 mV - 100 mV span;  
input resistance 20 k $\Omega$  minimum
- U2:** Range  $\pm 1$  V; 100 mV - 1 V span;  
input resistance 200 k $\Omega$  minimum
- U3:** Range  $\pm 10$  V; 1 V - 10 V span;  
input resistance 1 M $\Omega$  minimum

#### RELATED PRODUCTS

- Outdoor enclosure (model: 6BX-E)

#### PACKAGE INCLUDES...

- Mounting adapter  
surface mounting adapter plate (model: A-01)

Spring clip (model: A-02)

DIN rail mounting plate (model: A-31)

Note: When a mounting adapter is required, specify mounting adapter. Not included without specifying.  
When using in combination with outdoor enclosure (model: 6BX-E), use a spring clip (model: A-02).

#### GENERAL SPECIFICATIONS

**Connection:** M3 screw terminals (torque 0.6 N·m)

**Screw terminal:** Nickel-plated steel

**Housing material:** Diecast aluminum

**Isolation:** Input to output

**Output limit:** Approx. 120 %

**Zero adjustment:** -3 - +15 % (behind the access cover)

**Span adjustment:** 90 to 110 % (behind the access cover)

**DIP SW Setting:** For input calibration

(Refer to the instruction manual)

#### INPUT SPECIFICATIONS

**Input:** -10 - +10 V DC

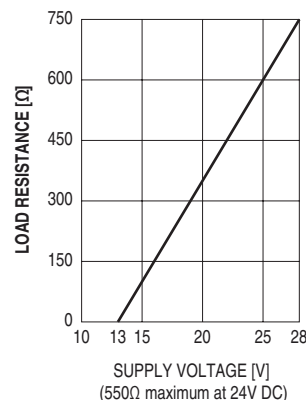
**Span:** Min. 3 mV, max. 10 V

**Offset:** Max. 2 times span

#### OUTPUT SPECIFICATIONS

**Output:** 4 - 20 mA DC

**Load resistance vs. supply voltage:** Load Resistance ( $\Omega$ ) =  
(Supply Voltage (V) - 13 (V))  $\div$  0.02 (A)  
(including leadwire resistance)



#### INSTALLATION

**Supply voltage:** 13 - 28 V DC

**Operating temperature:** -5 to +70°C (23 to 158°F)

**Operating humidity:** 30 to 90 %RH (non-condensing)

**Mounting:** DIN rail with mounting plate A-31; surface mounting with adapter plate A-01; spring clip A-02 for 3-inch hub

**Weight:** 220 g (0.49 lb)

## PERFORMANCE in percentage of span

Accuracy:  $\pm 0.1\%$

Temp. coefficient:  $\pm 0.015\%/^{\circ}\text{C}$  ( $\pm 0.008\%/^{\circ}\text{F}$ )

$\pm 0.02\%/^{\circ}\text{C}$  ( $\pm 0.01\%/^{\circ}\text{F}$ ) at spans  $\leq 10\text{ mV}$

Response time:  $\leq 0.5\text{ sec.}$  (0 - 90 %)

Insulation resistance:  $\geq 100\text{ M}\Omega$  with 500 V DC

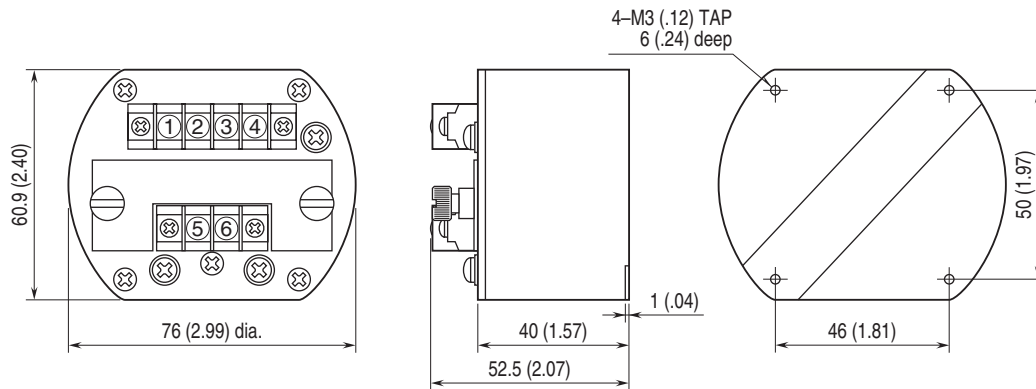
Dielectric strength: 500 V AC @ 1 minute

(input to output)

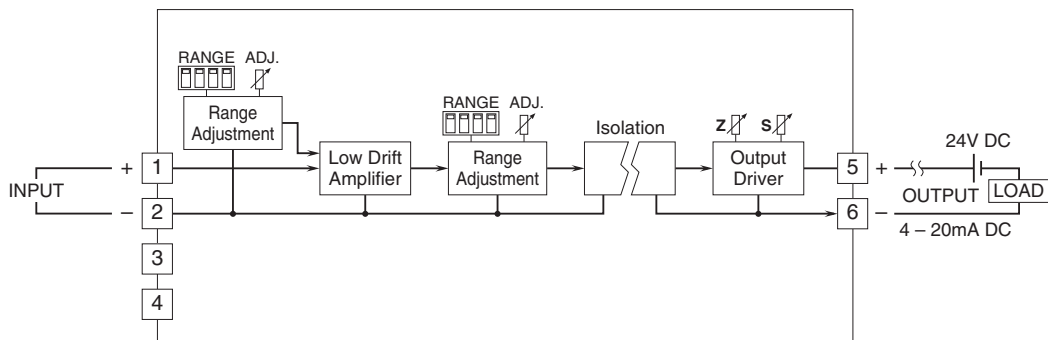
1500 V AC @ 1 minute

(input or output to ground)

## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.