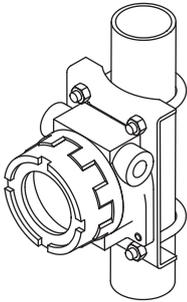


Field-mounted Two-wire Signal Conditioners 6B-UNIT

STRAIN GAUGE TRANSMITTER

Functions & Features

- IP66 / IP67 housing enables field mounting
- Stainless steel field housing selectable
- Used in conjunction with bridge type strain gauges utilized in load cells, pressure transducers, etc.
- Excitation in pulses enables use with strain gauges of the bridge resistance 350 Ω
- Non-isolated
- Zero adjustment range: 0 to 80 %, span adjustment range 100 to 20 %



MODEL: 6BLC-02[1][2][3]

ORDERING INFORMATION

- Code number: 6BLC-02[1][2][3]

Specify a code from below for each of [1] through [3].
(e.g. 6BLC-020A1)

SAFETY APPROVAL

0: None

INPUT STRAIN GAUGE

2: 2 mV/V

[1] WIRING CONDUIT

- 0: G 1/2
- 1: 1/2 NPT
- 2: M20 \times 1.5
- 3: PG 13.5

[2] ENCLOSURE MATERIAL

- A: Diecast aluminum
- S: Stainless steel casting

[3] MOUNTING BRACKET

- 0: Without
- 1: With

PACKAGE INCLUDES...

- **Mounting screws**
 - Bolt (M8 x 15): 4
 - Spring washer for M8: 4
- **Material:** Stainless steel 304
- **Mounting bracket assembly (option):**
 - Mounting bracket: 1
 - M10 U-bolt: 2
 - Nut for M10: 4
 - Spring washer for M10: 4
- **Material:** Stainless steel 304
- **Applicable pipe:** 1 1/2" min.; 2" max.

GENERAL SPECIFICATIONS

Degree of protection: NEMA 4X, IP66/IP67

Wiring conduit: See 'Ordering information.'

Electrical connection: M3 screw terminals
(torque 0.6 N·m)

Materials

- **Transmitter housing:** Diecast aluminum
- **Screw terminals:** Nickel-plated steel
- **Enclosure:** Diecast aluminum or stainless steel casting (equivalent to type 316); silver color, epoxy resin coated
- Isolation:** Input or output to outdoor enclosure
- Zero adjustment:** 0 - 80 % (behind the access cover)
- Span adjustment:** 100 - 20 % (behind the access cover)

INPUT SPECIFICATIONS

Input: Bridge voltage from load cells

Rated output from strain gauge: 2 mV/V

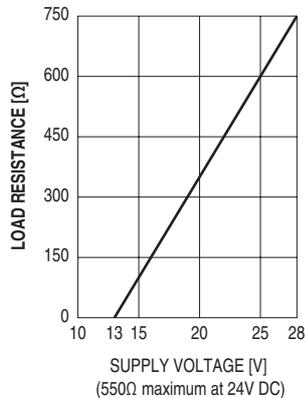
Nominal bridge resistance: 350 Ω minimum

Excitation: 5 V voltage pulse

OUTPUT SPECIFICATIONS

Output: 4 - 20 mA DC

Load resistance vs. supply voltage: Load Resistance (Ω) =
(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)

Weight:

- Unit
 - Approx. 1.5 kg (2.9 lb), aluminium
 - Approx. 4.2 kg (8.8 lb), stainless steel
- Mounting bracket assembly (option)
 - Approx. 0.78 kg (1.72 lb)

PERFORMANCE in percentage of span

Accuracy: ± 0.2 %

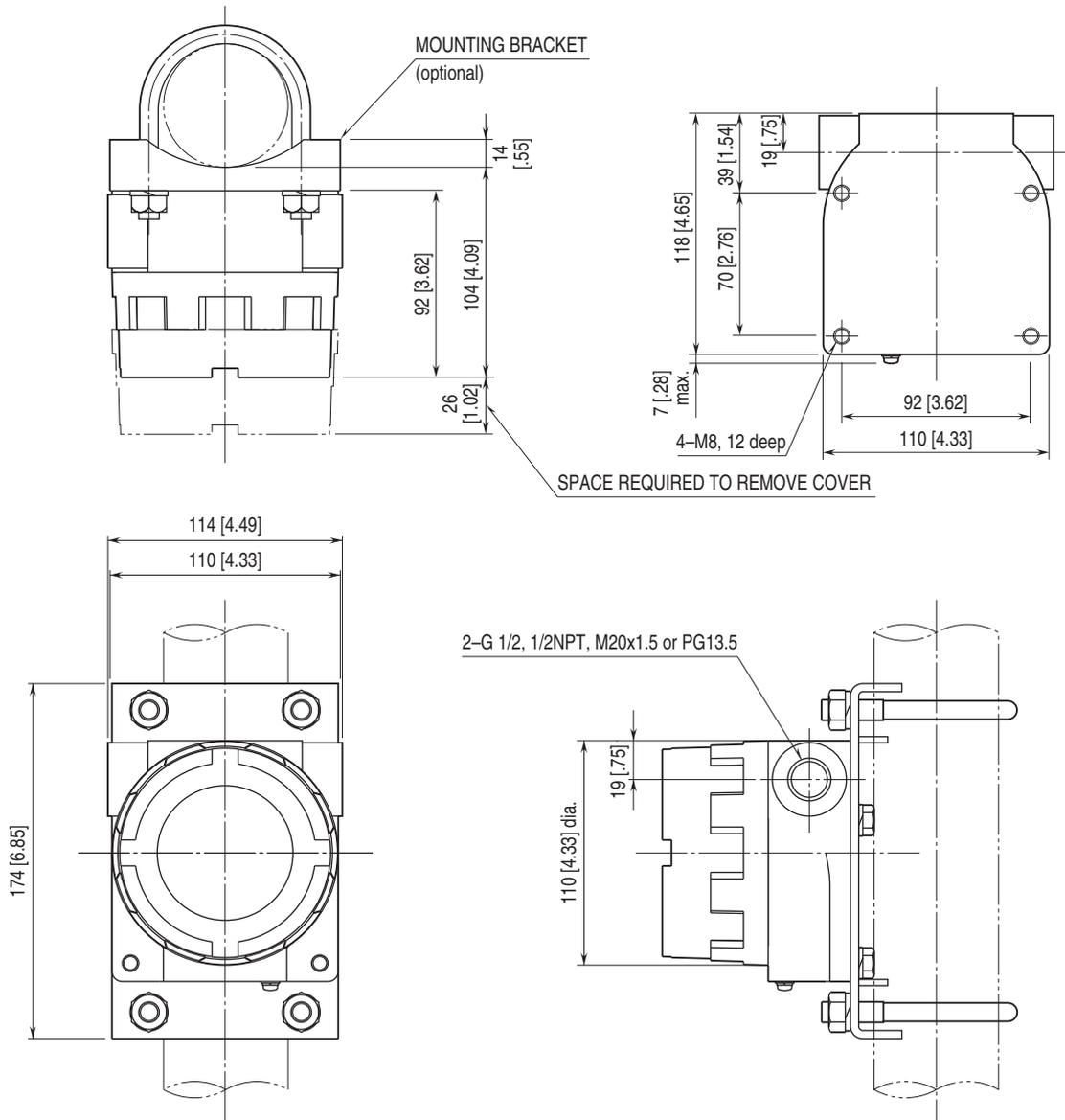
Temp. coefficient: ± 0.02 %/°C (± 0.01 %/°F)

Response time: ≤ 0.5 sec. (0 - 90 %)

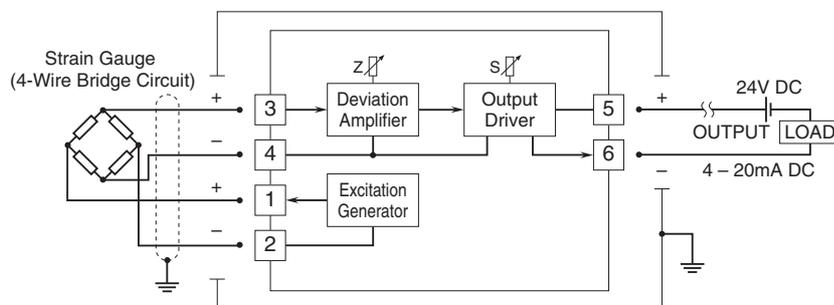
Insulation resistance: ≥ 100 M Ω with 500 V DC

Dielectric strength: 1500 V AC @ 1 minute
(input or output to outdoor enclosure)

EXTERNAL DIMENSIONS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.