

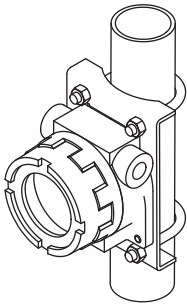
Field-mounted Two-wire Signal Conditioners 6B-UNIT

SIGNAL TRANSMITTER

(field-selectable range)

Functions & Features

- IP66 / IP67 housing enables field mounting
- Stainless steel field housing selectable
- Transmitter that takes DC voltage signals as input
- Freely configurable input range



MODEL: 6BVS-0[1][2][3][4]

ORDERING INFORMATION

- Code number: 6BVS-0[1][2][3][4]
- Specify a code from below for each of [1] through [4].
(e.g. 6BVS-0U30A1)
- Input range (e.g. 1 - 5V DC)

SAFETY APPROVAL

0: None

[1] INPUT

U1: Range ± 100 mV; 3 mV - 100 mV span;
input resistance 20 k Ω minimum

U2: Range ± 1 V; 100 mV - 1 V span;
input resistance 200 k Ω minimum

U3: Range ± 10 V; 1 V - 10 V span;
input resistance 1 M Ω minimum

[2] WIRING CONDUIT

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

[3] ENCLOSURE MATERIAL

A: Diecast aluminum
S: Stainless steel casting

[4] 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 to output to outdoor enclosure
Output limit: Approx. 120 %
Zero adjustment: -3 - +15 % (behind the access cover)
Span adjustment: 90 to 110 % (behind the access cover)

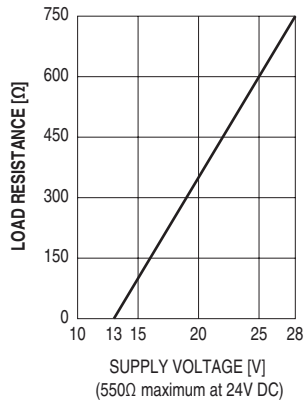
INPUT SPECIFICATIONS

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 (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: ± 0.1 %

Temp. coefficient: ± 0.015 %/°C (± 0.008 %/°F)

± 0.02 %/°C (± 0.01 %/°F) at spans ≤ 10 mV

Response time: ≤ 0.5 sec. (0 - 90 %)

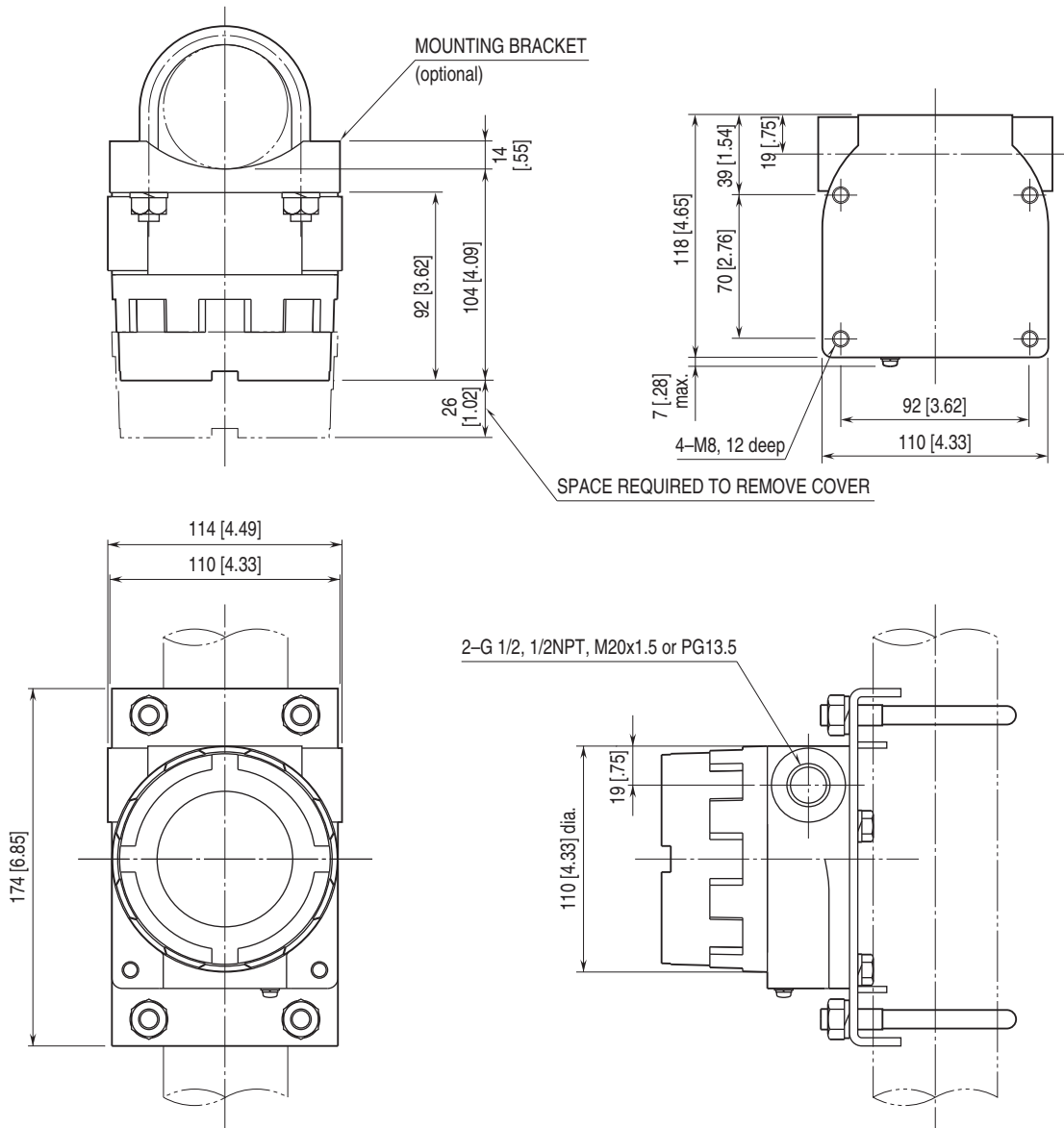
Insulation resistance: ≥ 100 M Ω with 500 V DC

Dielectric strength: 500 V AC @1 minute

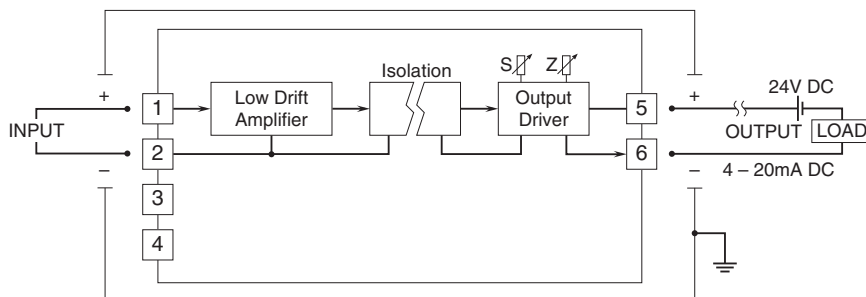
(input to output)

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.