

**Space-saving Two-wire Signal Conditioners *B-UNIT***

**SIGNAL TRANSMITTER**  
(isolated)

MODEL **BVS**

**MODEL & SUFFIX CODE SELECTION**

BVS-

MODEL \_\_\_\_\_

INPUT \_\_\_\_\_

Current	Voltage
<b>A</b> : 4 – 20mA DC	<b>1</b> : 0 – 10mV DC
<b>B</b> : 2 – 10mA DC	<b>2</b> : 0 – 100mV DC
<b>C</b> : 1 – 5mA DC	<b>3</b> : 0 – 1V DC
<b>D</b> : 0 – 20mA DC	<b>4</b> : 0 – 10V DC
<b>E</b> : 0 – 16mA DC	<b>5</b> : 0 – 5V DC
<b>F</b> : 0 – 10mA DC	<b>6</b> : 1 – 5V DC
<b>G</b> : 0 – 1mA DC	<b>0</b> : Specify voltage *
<b>H</b> : 10 – 50mA DC	
<b>Z</b> : Specify current *	

\*0% or 50% input must be equal to 0mA or 0V

**OUTPUT**  
4 – 20mA DC

**SUPPLY VOLTAGE**  
12 – 60V DC

**OPTIONS** \_\_\_\_\_

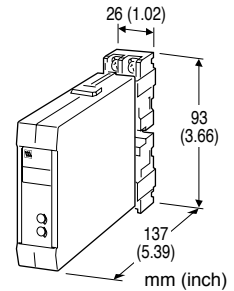
/CE : CE marking

**ORDERING INFORMATION**

- Specify code number and variables.
- Code number (e.g. BVS-6)
  - Special input range (For codes Z & 0)

**GENERAL SPECIFICATIONS**

**Construction:** Plug-in  
**Connection:** M3.5 screw terminals  
 (nickel-plated steel; torque 0.8 N·m)  
**Housing material:** Flame-resistant resin (black)  
**Isolation:** Input to output  
**Zero/span adjustments:** ±5% (front)



**Functions & Features**

- Converts a DC input into an isolated 4 – 20mA DC signal
- Monitor terminals
- CE marking

**INPUT & OUTPUT**

■ **INPUT**

• **DC Current:** Shunt resistor attached to the input terminals (0.5W)

**Input resistance:** For resistance values other than listed below, specify when ordering.

(Range) 4 – 20mA	: 250 (Ω)
2 – 10mA	: 500
1 – 5mA	: 1000
0 – 20mA	: 50
0 – 16mA	: 62.5
0 – 10mA	: 100
0 – 1mA	: 1000
10 – 50mA	: 100

• **DC Voltage:** -300 – +300V DC (-30 – +30V for CE)

**Minimum span:** 10mV (max. 30V for CE)

**Input resistance**

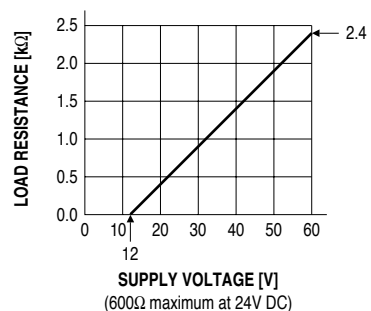
(Span) 10 – 100mV	: 20k (Ω minimum)
0.1 – 1V	: 100k
1 – 10V	: 1M
≥10V	: 2M

■ **OUTPUT:** 4 – 20mA DC

**Load resistance vs. supply voltage:**

$$\text{Load Resistance } (\Omega) = \frac{\text{Supply Voltage (V)} - 12 \text{ (V)}}{0.02 \text{ (A)}}$$

(including leadwire resistance)



**INSTALLATION**

**Supply voltage:** 12 – 60V DC  
**Operating temperature:** -5 to +55°C (23 to 131°F)  
**Operating humidity:** 30 to 90% RH (non-condensing)  
**Mounting:** Surface or DIN rail; Standard Rack Mounting Frame BX-16H available  
**Dimensions:** W26×H93×D137 mm (1.02"×3.66"×5.39")  
 See General Spec. Sheet Figure A.  
**Weight:** 160 g (0.35 lbs)  
**Terminal assignment:** See General Spec. Sheet Figure B-2.

**PERFORMANCE in percentage of span**

**Accuracy:** ±0.1%  
**Temp. coefficient:** ±0.015%/°C (±0.008%/°F)  
**Response time:** ≤0.5 second (0 – 90%)  
**Insulation resistance:** ≥100MΩ with 500V DC  
**Dielectric strength:** 500V AC @1 minute (input to output)  
 1500V AC @1 minute  
 (input or output to ground)

**STANDARDS & APPROVALS**

**CE conformity:** EMC Directive (2004/108/EC)  
 EN 61000-6-4 (EMI)  
 EN 61000-6-2 (EMS)

**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**