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

SIGNAL TRANSMITTER
(field-selectable range)

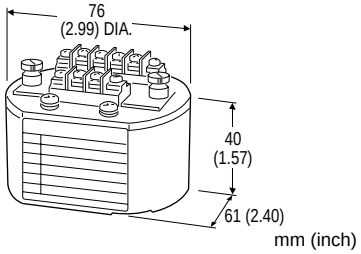
MODEL **6VS**

MODEL & SUFFIX CODE SELECTION

6VS–❑

MODEL
INPUT
U1 : Range ±100mV; 3mV – 100mV span
U2 : Range ±1V; 100mV – 1V span
U3 : Range ±10V; 1V – 10V span
OUTPUT
4 – 20mA DC
SUPPLY VOLTAGE
13 – 28V DC

ISOLATION



Functions & Features
• Converting a DC input into an isolated 4 – 20mA DC signal • Field selectable input range • Rugged enclosure
Typical Applications
• mV, voltage and current scaling

ORDERING INFORMATION

Specify code number and variables.
•**Code number** (e.g. 6VS-U3)
•**Input range** (e.g. 1 – 5V DC)

GENERAL SPECIFICATIONS

Connection: M3 screw terminals
(nickel-plated steel; torque ≤0.6 N·m)
Housing material: die cast aluminium
Isolation: input to output
Adjustments
Zero & span: 3-turn screwdrivers behind the access cover; approx. -3 – +15% for zero, approx. ±10% for span
Input range: rotary switches behind the covering
Output limit: approx. 120%

INPUT & OUTPUT

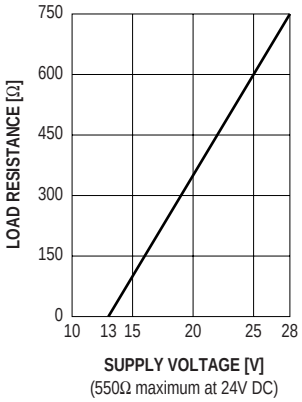
■**INPUT**: -10 – +10V DC
Span: min. 3mV, max. 10V
Zero suppression/elevation: max. 2 times span
Input resistance

Input Span	Input Resistance
3 – 100mV	: 20k (Ω minimum)
0.1 – 1V	: 200k
1 – 10V	: 1M

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

$$\text{Load Resistance } (\Omega) = \frac{\text{Supply Voltage (V)} - 13\text{ (V)}}{0.02\text{ (A)}}$$

(including leadwire resistance)



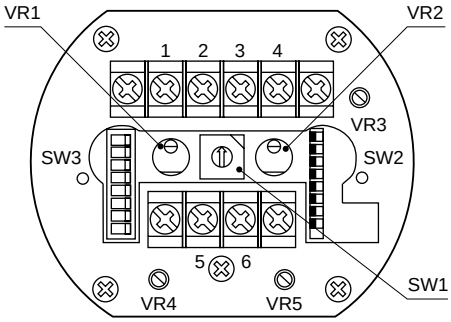
INSTALLATION

Supply voltage: 13 – 28V 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
Dimensions: W76×H52.5×D61 mm (2.99"×2.07"×2.40")
See General Spec. Sheet Figure A-1.
Weight: 220 g (0.49 lbs)
Terminal assignment: See General Spec. Sheet Figure B-1.

PERFORMANCE in percentage of span

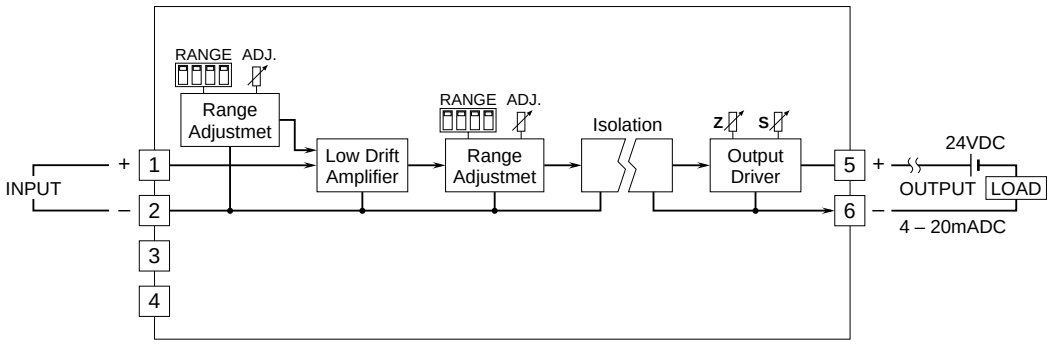
Accuracy: ±0.1%
Temp. coefficient: ±0.015%/°C (±0.008%/°F)
±0.02%/°C (±0.01%/°F) at spans ≤10mV
Response time: ≤0.5 seconds (0 – 90%)
Insulation resistance: ≥100MΩ with 500V DC
Dielectric strength: 500V AC @1 minute
(input to output)
1500V AC @1 minute
(input or output to ground)

TOP VIEW DIAGRAM



SW2 : Zero Bias Selector
SW3 : Span Gain Selector
VR1 : 0% Adjustment (fine)
VR2 : 100% Adjustment (fine)
VR5 : 0% Adjustment (coarse)
VR4 : 100% Adjustment (coarse)

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications subject to change without notice.