

Field-mounted Two-wire Signal Conditioners 6-UNIT

FREQUENCY TRANSMITTER

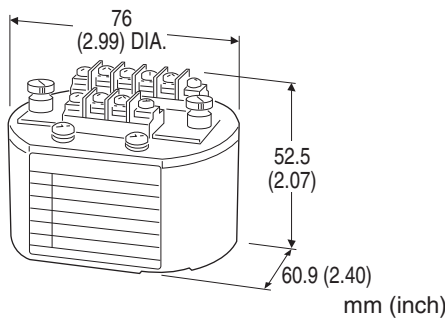
(field-selectable freq. range)

Functions & Features

- Converting the output from a pulse-type transducer into a standard 4 - 20 mA DC signal
- Field selectable frequency range
- Rugged enclosure

Typical Applications

- Positive displacement flowmeters, turbine flowmeters and vortex flowmeters
- Proximity switches
- Oval flowmeters



MODEL: 6PA-2

ORDERING INFORMATION

- Code number: 6PA-2
- Frequency range (e.g. 0 - 500 Hz)

User's frequency range specified when ordering determines the field adjustable range of the 6PA. Refer to the table below and check the range before ordering.

ORDER SPECIFIED FREQ: ADJUSTABLE RANGE

36 Hz - 100 Hz: 36 Hz - 120 Hz

100 Hz - 240 Hz: 90 Hz - 300 Hz

240 Hz - 480 Hz: 180 Hz - 600 Hz

480 Hz - 1.0 kHz: 360 Hz - 1.2 kHz

1.0 kHz - 2.4 kHz: 0.9 kHz - 3.0 kHz

2.4 kHz - 4.8 kHz: 1.8 kHz - 6.0 kHz

4.8 kHz - 12 kHz: 3.6 kHz - 12 kHz

- 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.

INPUT

2: Voltage pulse

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

Zero adjustment: -5 to +5 % (behind the access cover)

Span adjustment: 95 to 105 % (behind the access cover)

Rotary switch: For input calibration

(Refer to the instruction manual)

INPUT SPECIFICATIONS

■ Voltage Pulse:

Frequency range: 0 - 36 Hz through 12 kHz

Input amplitude:

100 mVp-p - 50 Vp-p (≤ 1.2 kHz range)

200 mVp-p - 50 Vp-p (≥ 0.9 kHz range)

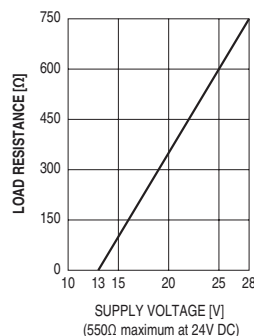
Pulse width requirement: Duty ratio 20 - 80 %

Input impedance: 100 k Ω

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)



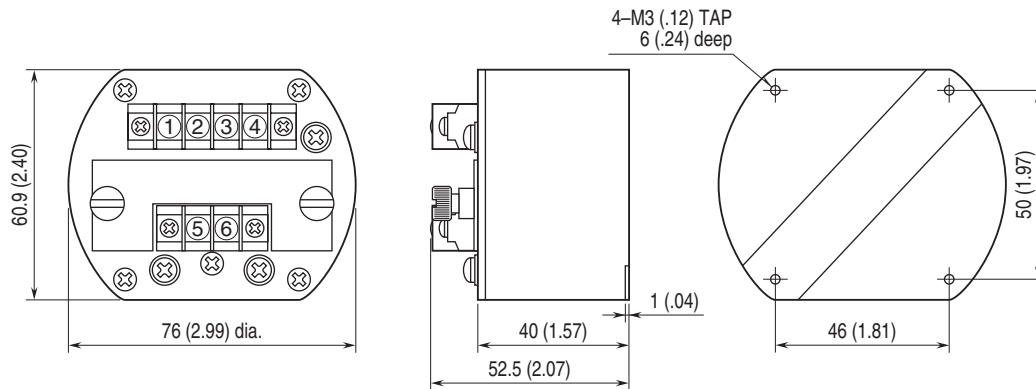
INSTALLATION

Supply voltage: 13 - 28 V DC
Operating temperature: -5 to +70°C (23 to 158°F)
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)

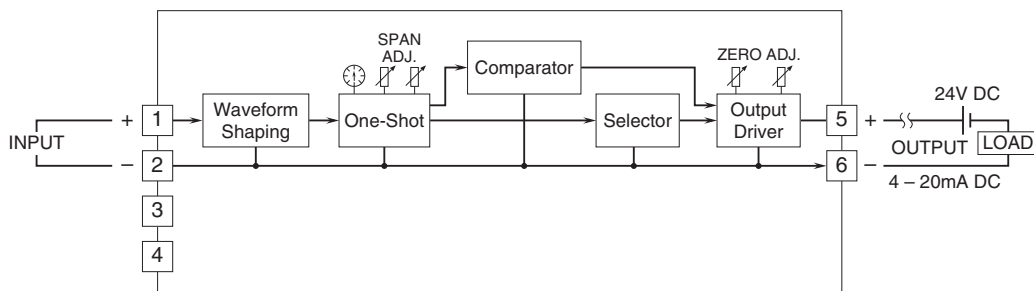
PERFORMANCE in percentage of span

Accuracy: ±0.2 % (±0.5 % at spans ≤ 600 Hz)
Temp. coefficient: ±0.015 %/°C (±0.008 %/°F)
Response time: Approx. 4 sec. (0 - 90 %)

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.