

GS 1C21B1-E

The high performance differential pressure transmitter model EJA110A can be used to measure liquid, gas, or steam flow as well as liquid level, density and pressure. It outputs a 4 to 20 mA DC signal corresponding to the measured differential pressure. Model EJA110A also features remote setup and monitoring through communications with the BRAIN™ terminal and CENTUM CS™ or mXL™ or HART® 275 host.



STANDARD SPECIFICATIONS

Refer to GS 1C22T2-E for Fieldbus communication type marked with “◇.”

PERFORMANCE SPECIFICATIONS

Zero-based calibrated span, linear output, wetted parts material code ‘S’ and silicone oil.

Reference Accuracy of Calibrated Span

(including the effects of zero-based linearity, hysteresis, and repeatability)

±0.075 % of Span

For spans below X

$$\pm[0.025 + 0.05 \frac{X}{\text{Span}}] \% \text{ of Span}$$

where X equals:

| | |
|---------|----------------------------|
| Capsule | X kPa {inH ₂ O} |
| L | 3 {12} |
| M | 10 {40} |
| H | 100 {400} |
| V | 1.4 MPa {200 psi} |

Square Root Output Accuracy

The square root accuracy is a percent of flow span.

| Output | Accuracy |
|-----------------------|---|
| 50 % or Greater | same as reference accuracy |
| 50 % to Dropout point | reference accuracy × 50 square root output (%) |

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Ambient Temperature Effects

Total Effects per 28 °C (50 °F) Change

| Capsule | Effect |
|---------|------------------------------|
| L | ±[0.08 % Span + 0.09 % URL] |
| M | ±[0.07 % Span + 0.02 % URL] |
| H | ±[0.07 % Span + 0.015 % URL] |
| V | ±[0.07 % Span + 0.03 % URL] |

Static Pressure Effects

Total Effects per Change

L capsule

±[0.07 % Span+0.052 % URL] per 3.4 MPa {500 psi}

M, H and V capsules

±[0.1% Span+0.028 % URL] per 6.9 MPa {1000 psi}

Effect on Zero (can be corrected at line pressure)

L capsule

±[0.02 % Span+0.052 % URL] per 3.4 MPa {500 psi}

M, H and V capsules

±0.028 % of URL per 6.9 MPa {1000 psi}

Overpressure Effects (M, H and V capsules)

±0.03 % of URL per 14 MPa {2000 psi}

Stability (M, H and V capsules)

±0.1 % of URL for 24 months

Power Supply Effects “◇”

±0.005 % per Volt (from 21.6 to 32 V DC, 350 Ω for Output signal code D and E.)

FUNCTIONAL SPECIFICATIONS

Span & Range Limits

| Measurement Span/Range | kPa | inH ₂ O/(D1) | mbar/(D3) | mmH ₂ O/(D4) | |
|------------------------|-------|-------------------------|-----------------|-------------------------|--------------------------------|
| L | Span | 0.5 to 10 | 2 to 40 | 5 to 100 | 50 to 1000 |
| | Range | -10 to 10 | -40 to 40 | -100 to 100 | -1000 to 1000 |
| M | Span | 1 to 100 | 4 to 400 | 10 to 1000 | 100 to 10000 |
| | Range | -100 to 100 | -400 to 400 | -1000 to 1000 | -10000 to 10000 |
| H | Span | 5 to 500 | 20 to 2000 | 50 to 5000 | 0.05 to 5 kgf/cm ² |
| | Range | -500 to 500 | -2000 to 2000 | -5000 to 5000 | -5 to 5 kgf/cm ² |
| V*1 | Span | 0.14 to 14 MPa | 20 to 2000 psi | 1.4 to 140 bar | 1.4 to 140 kgf/cm ² |
| | Range | -0.5 to 14 MPa | -71 to 2000 psi | -5 to 140 bar | -5 to 140 kgf/cm ² |

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*1: For Wetted parts material code other than S, the ranges are 0 to 14 MPa, 0 to 2000 psi, 0 to 140 bar, and 0 to 140 kgf/cm².

URL is defined as the Upper Range Limit from the table above.

Zero Adjustment Limits

Zero can be fully elevated or suppressed, within the Lower and Upper Range Limits of the capsule.

External Zero Adjustment “◇”

External zero is continuously adjustable with 0.01 % incremental resolution of span. Span may be adjusted locally using the digital indicator with range switch.

Mounting Position Effect

Rotation in diaphragm plane has no effect. Tilting up to 90 ° will cause zero shift up to 0.4 kPa {1.6 inH₂O} which can be corrected by the zero adjustment.

Output “◇”

Two wire 4 to 20 mA DC output with digital communications, linear or square root programmable. BRAIN or HART FSK protocol are superimposed on the 4 to 20 mA signal.

Damping Time Constant (1st order)

The sum of the amplifier and capsule damping time constant must be used for the overall time constant. Amp damping time constant is adjustable from 0.2 to 64 seconds.

| | | | |
|-----------------------------|-----|-----|---------|
| Capsule (Silicone Oil) | L | M | H and V |
| Time Constant (approx. sec) | 0.8 | 0.6 | 0.3 |

Ambient Temperature Limits

(approval codes may affect limits)

- 40 to 85 °C (-40 to 185 °F)
- 30 to 80 °C (-22 to 176 °F) with LCD Display

Process Temperature Limits

(approval codes may affect limits)

- 40 to 120 °C (-40 to 248 °F)

Ambient Humidity Limits

- 5 to 100 % RH @ 40 °C (104 °F)

Working Pressure Limits (Silicone Oil)

Maximum Pressure Limit

| Capsule | Pressure |
|-------------|--------------------|
| L | 3.5 MPa {500 psig} |
| M, H, and V | 14 MPa {2000 psig} |

Minimum Pressure Limit

See graph below

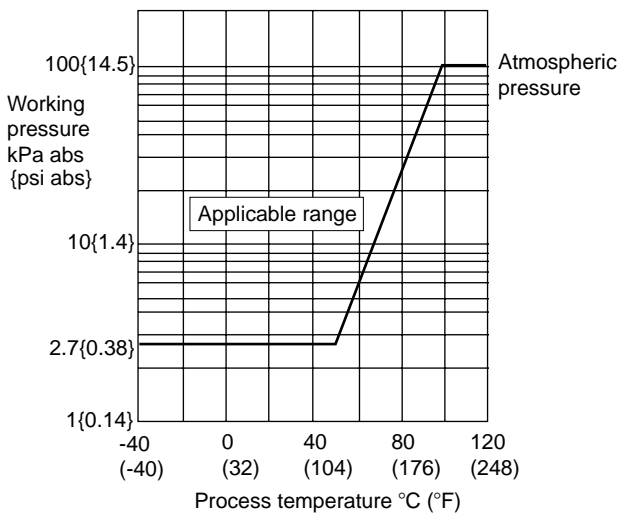


Figure 1. Working Pressure and Process Temperature

Supply & Load Requirements “◇”

(Safety approvals may affect electrical requirements) With 24 V DC supply, up to a 570 Ω load can be used. See graph below.

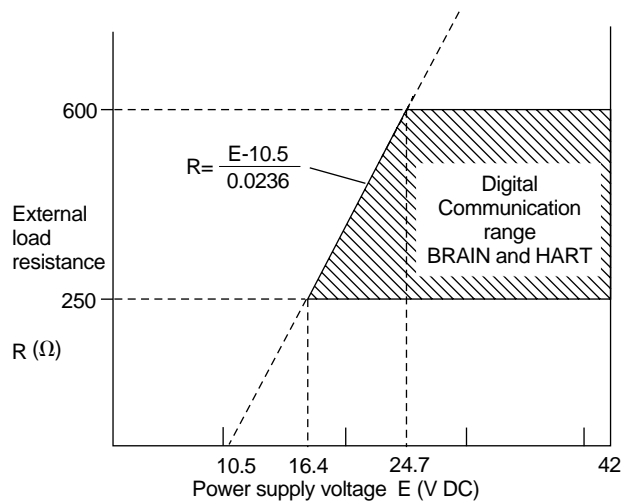


Figure 2. Relationship Between Power Supply Voltage and External Load Resistance

Supply Voltage

- 10.5 to 42 V DC for operation (10.5 to 30 V DC for Intrinsically safe type)
- 16.4 to 42 V DC for digital communications, BRAIN and HART protocols (16.4 to 30 V DC for Intrinsically safe type)
- 9.0 to 32 V DC for digital communication, FOUNDATION Fieldbus protocol

Load (Output signal code D and E)

- 0 to 1335 Ω for operation
- 250 to 600 Ω for digital communication

EMC Conformity Standards

- For EMI (Emission): EN55011
- For EMS (Immunity): EN50082-2

Communication Requirements “◇”

BRAIN

Communication Distance

Up to 2 km (1.25 miles) when using CEV polyethylene-insulated PVC-sheathed cables. Communication distance varies depending on type of cable used.

Load Capacitance

0.22 μF or less (see note)

Load Inductance

3.3 mH or less (see note)

Input Impedance of communicating device

10 kΩ or more at 2.4 kHz.

Note : For general-use and Flameproof type.
For Intrinsically safe type, please refer to 'OPTIONAL SPECIFICATIONS.'

HART**Communication Distance**

Up to 1.5 km (1 mile) when using multiple twisted pair cables. Communication distance varies depending on type of cable used.

Use the following formula to determine cable length for specific applications:

$$L = \frac{65 \times 10^6}{(R \times C)} - \frac{(C_f + 10,000)}{C}$$

Where:

L = length in meters or feet

R = resistance in Ω (including barrier resistance)

C = cable capacitance in pF/m or pF/ft

C_f = maximum shunt capacitance of receiving devices in pF/m or pF/ft

□ PHYSICAL SPECIFICATIONS**Wetted Parts Materials****Diaphragm, Cover flange, Process connector, and Vent/Drain Plug**

Refer to 'MODEL AND SUFFIX CODE.'

Capsule Gasket

For wetted parts material code S, Teflon-coated SUS316L.

For wetted parts material code other than S, PTFE(Teflon).

Process Connector Gasket

PTFE Teflon

Non-wetted Parts Materials**Bolting**

SCM435 or SUS630

Housing

Low copper cast-aluminum alloy with polyurethane paint (Munsell 0.6GY3.1/2.0)

Enclosure Classification

JIS C0920 immersion proof (equivalent to NEMA 4X and IEC IP67)

Cover O-rings

Buna-N

Name plate and tag

SUS304

Fill Fluid

Silicone, Fluorinated oil (option)

Weight

3.9 kg (8.6 lbs.) without integral indicator, mounting bracket, and process connector.

Connections

Refer to the model code to specify the process and electrical connection type.

MODEL AND SUFFIX CODES

| Model | Suffix Codes | Description |
|---------------------------|--|---|
| EJA110A | | Differential pressure transmitter |
| Output Signal | -D..... -E..... -F..... | 4 to 20 mA DC with digital communication (BRAIN protocol) 4 to 20 mA DC with digital communication (HART protocol, refer to GS 1C22T1-E) Digital communication (FOUNDATION Fieldbus protocol, refer to GS 1C22T2-E) |
| Measurement span(capsule) | L..... M..... H..... V..... | 0.5 to 10 kPa {50 to 1000 mmH ₂ O} 1 to 100 kPa {100 to 10000 mmH ₂ O} 5 to 500 kPa { 0.05 to 5 kgf/cm ² } 0.14 to 14 MPa { 1.4 to 140 kgf/cm ² } ^{*1} |
| Wetted parts material | S..... H..... M..... T..... A..... D..... | [Body] ^{*2} [Capsule] [Vent plug] SCS14A SUS316L ^{*4} SUS316 SCS14A Hastelloy C-276 ^{*5} SUS316 SCS14A Monel ^{*5} SUS316 SCS14A Tantalum ^{*5} SUS316 Hastelloy C-276 equivalent ^{*3} Hastelloy C-276 ^{*5} Hastelloy C-276 Hastelloy C-276 equivalent ^{*3} Tantalum ^{*5} Hastelloy C-276 |
| Process connections | 0..... 1..... 2..... 3..... 4..... ☆ 5..... | without process connector (Rc1/4 female on the cover flanges) with Rc1/4 female process connector with Rc1/2 female process connector with 1/4 NPT female process connector with 1/2 NPT female process connector without process connector (1/4 NPT female on the cover flanges) |
| Bolts and nuts material | ☆ A..... B..... | [Maximum working pressure] (L capsule) (M, H, and V capsule) SCM435 3.5 MPa {35 kgf/cm ² } 14 MPa {140 kgf/cm ² } SUS630 3.5 MPa {35 kgf/cm ² } 14 MPa {140 kgf/cm ² } |
| Installation | -2..... -3..... -6..... -7..... -8..... ☆ -9..... | Vertical impulse piping type, right side high pressure, process connector upside ^{*6} Vertical impulse piping type, right side high pressure, process connector downside ^{*6} Vertical impulse piping type, left side high pressure, process connector upside ^{*6} Vertical impulse piping type, left side high pressure, process connector downside ^{*6} Horizontal impulse piping type, right side high pressure ^{*7} Horizontal impulse piping type, left side high pressure ^{*7} |
| Electrical connection | ☆ 0..... 2..... 3..... 4..... 5..... 7..... 8..... 9..... | G1/2 female, one electrical connection 1/2 NPT female, two electrical connections without blind plug PG 13.5 female, two electrical connections without blind plug M20 female, two electrical connections without blind plug G1/2 female, two electrical connections and a blind plug 1/2 NPT female, two electrical connections and a blind plug PG 13.5 female, two electrical connections and a blind plug M20 female, two electrical connections and a blind plug |
| Integral indicator | ☆ D..... E..... N..... | Digital indicator Digital indicator with the range setting switch (None) |
| Mounting bracket | ☆ A..... B..... C..... D..... N..... | SECC Carbon steel 2-inch pipe mounting (flat type) SUS304 2-inch pipe mounting (flat type) SECC Carbon steel 2-inch pipe mounting (L type) SUS304 2-inch pipe mounting (L type) (None) |
| Optional codes | | /□ Optional specification |

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The '☆' marks indicate the most typical selection for each specification. Example: EJA110A-DMS5A-92NA/□

- *1: For Wetted parts material code H, M, T, A, and D, the range limits are 0 to 14 MPa{0 to 140 kgf/cm²}.
- *2: Indicates material of cover flanges and process connectors.
- *3: Indicated material is equivalent to ASTM CW-12MW.
- *4: Diaphragm material is Hastelloy C-276. Indicated is other wetted parts materials.
- *5: Indicates diaphragm and other wetted parts material.
- *6: If necessary, specify Mounting bracket code C or D.
- *7: If necessary, specify Mounting bracket code A or B.

OPTIONAL SPECIFICATIONS (For Explosion Protected type)

| Item | Description | Code |
|---|---|------------|
| Factory Mutual (FM) | FM Explosionproof Approval Explosionproof for Class I, Division 1, Groups B, C and D Dust-ignitionproof for Class II/III, Division 1, Groups E, F and G Hazardous (classified) locations, indoors and outdoors (NEMA 4X) Temperature class : T6 Amb. Temp. : -40 to 60 °C (-40 to 140 °F) Electrical connection : 1/2 NPT female *1 | FF1 |
| | FM Intrinsically safe Approval *3 Intrinsically Safe for Class I, Division 1, Groups A, B, C & D, Class II, Division 1, Groups E, F & G and Class III, Division 1 Hazardous Locations. Nonincendive for Class I, Division 2, Groups A, B, C & D, Class II, Division. 2, Groups E, F & G, and Class III, Division 1 Hazardous Locations. Enclosure : "NEMA 4X", Temp. Class : T4, Amb. Temp. : -40 to 60 °C (-40 to 140 °F) Intrinsically Safe Apparatus Parameters [Groups A, B, C, D, E, F and G] Vmax=30 V, Imax=165 mA, Pmax=0.9 W, Ci=22.5 nF, Li=730 μH [Groups C, D, E, F and G] Vmax=30 V, Imax=225 mA, Pmax=0.9 W, Ci=22.5 nF, Li=730 μH Electrical connection : 1/2 NPT female *1 | FS1 |
| | Combined FF1 and FS1 *3 Electrical connection : 1/2 NPT female *1 | FU1 |
| CENELEC (KEMA) | CENELEC (KEMA) Flameproof Approval EExd IIC T4, T5, T6, Amb. Temp. : -40 to 80 °C (-40 to 176 °F) Max. process Temp. : T4 ; 120 °C (248 °F), T5 ; 100 °C (212 °F), T6 ; 85 °C (185 °F) Electrical connection : 1/2 NPT female, PG 13.5 female and M20 female *2 | KF1 |
| | CENELEC (KEMA) Intrinsically safe Approval *3 EEx ia IIC T4, Amb. Temp. : -40 to 60 °C (-40 to 140 °F) Ui=30 V, Ii=165 mA, Pi=0.9 W, Ci=22.5 nF, Li=730 μH Electrical connection : 1/2 NPT female, PG 13.5 female and M20 female *2 | KS1 |
| | Combined KF1, KS1 and Type N Approval *3 KEMA Type N Approval Ex nA IIC T4, Amb. Temp. : -40 to 60 °C (-40 to 140 °F) U=30 V, I=165 mA Electrical connection : 1/2 NPT female, PG 13.5 female and M20 female *2 | KU1 |
| Canadian Standards Association (CSA) | CSA Explosionproof Approval Explosionproof for Class I, Division 1, Groups B, C and D Dustignitionproof for Class II/III, Division 1, Groups E, F and G Division2 'SEALS NOT REQUIRED', Temp. Class : T4, T5, T6 Encl Type 4x Max. Process Temp. : T4 ; 120 °C (248 °F), T5 ; 100 °C (212 °F), T6 ; 85 °C (185 °F) Amb. Temp. : -40 to 80 °C (-40 to 176 °F) Electrical connection : 1/2 NPT female *1 | CF1 |
| | CSA Intrinsically safe Approval *3 Class I, Groups A, B, C and D Class II and III, Groups E, F and G Encl Type 4x, Temp. Class : T4, Amb. Temp. : -40 to 60 °C (-40 to 140 °F) Vmax=30 V, Imax=165 mA, Pmax=0.9 W, Ci=22.5 nF, Li=730 μH Electrical connection : 1/2 NPT female *1 | CS1 |
| | Combined CF1 and CS1 *3 Electrical connection : 1/2 NPT female *1 | CU1 |
| Standards Association of Australia (SAA) *3 | SAA Flameproof, Intrinsically safe and Non-sparking Approval Ex d IIC T4/T5/T6, IP67 class I, Zone 1, Amb. Temp. : -40 to 80 °C (-40 to 176 °F) Max. Process Temp. : T4 ; 120 °C (248 °F), T5 ; 100 °C (212 °F), T6 ; 85 °C (185 °F) Ex ia IIC T4, IP67 class I, Zone 0 Ex n IIC T4, IP67 class I, Zone 2 Ui=30 V DC, Ii=165 mA DC, Wi=0.9 W, Amb. Temp. : -40 to 60 °C (-40 to 140 °F) Electrical connection : 1/2 NPT female, PG 13.5 female and M20 female *2 | SU1 |

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- *1: Applicable for Electrical connection code 2 and 7.
- *2: Applicable for Electrical connection code 2, 3, 4, 7, 8, and 9.
- *3: Applicable for Output signal code D and E.

OPTIONAL SPECIFICATION

| Item | Description | Code | |
|--|--|--|-----------|
| Painting | Color change | Amplifier cover only P□ | |
| | Coating change | Epoxy resin-baked coating X1 | |
| Lightning protector | Transmitter power supply voltage: 10.5 to 32 V DC (10.5 to 30 V DC for intrinsically safe type, 9 to 32 V DC for Fieldbus communication type.) Allowable current: Max. 6000 A (1×40 μs), Repeating 1000 A (1×40 μs) 100 times | A | |
| Oil-prohibited use*11 | Degrease cleansing treatment | K1 | |
| | Degrease cleansing treatment and with fluorinated oilfilled capsule. Operating temperature -20 to 80 °C | K2 | |
| Oil-prohibited use with dehydrating treatment*11 | Degrease cleansing treatment and dehydrating treatment | K5 | |
| | Degrease cleansing treatment and dehydrating treatment with fluorinated oilfilled capsule. Operating temperature -20 to 80 °C | K6 | |
| Calibration units*1 | P calibration (psi unit) | (See Table for Span and Range Limits.) D1 | |
| | bar calibration (bar unit) | | D3 |
| | M calibration (kgf/cm ² unit) | | D4 |
| Sealing treatment to SUS630 nuts | Sealant (liquid silicone rubber) is coated on surfaces of SUS630 nuts used for cover flange mounting. | Y | |
| Long vent*2 | Total vent plug Length: 112mm (standard, 32mm) | U | |
| Down-scale burnout in CPU failure*3 | Down-scale: -5 %, 3.2 mA DC or less | C1 | |
| Stainless steel amplifier housing*4 | Amplifier housing material: SCS14A stainless steel (equivalent to SUS316 cast stainless steel or ASTM CF-8M) | E1 | |
| Gold-plate*5 | Gold-plated diaphragm | A1 | |
| Mill Certificate | Cover flange *6 | M01 | |
| | Cover flange, Process connector *7 | M11 | |
| Pressure test / Leak test Certificate | Test Pressure: 3.5 MPa{35 kgf/cm ² }*8 | Nitrogen(N ₂) Gas*10 T01 | |
| | Test Pressure: 14 MPa{140 kgf/cm ² }*9 | Retention time: 10 minutes T02 | |

- *1: The unit of MWP (Max. working pressure) on the name plate of a housing is the same unit as specified by Optional code D1, D3, and D4.
- *2: Applicable for vertical impulse piping type (Installation code 2, 3, 6, and 7) and Wetted parts material code S, H, M, and T. Long vent material is SUS316.
- *3: Initial preset status of the standard type (without /C1): Up-scale (110 %, 21.6 mA DC or more) Applicable for Output signal code D and E.
- *4: Applicable for Electrical connection code 2, 3, 4, 7, 8, and 9. Not applicable for Optional code P□ and X1.
- *5: Applicable for Wetted parts material code S.
- *6: Applicable for Process connections code 0 and 5.
- *7: Applicable for Process connections code 1, 2, 3, and 4.
- *8: Applicable for Capsule code L.
- *9: Applicable for Capsule code M, H and V.
- *10: Pure nitrogen gas is used for oil-prohibited use (Optional code K1, K2, K5, and K6).
- *11: Applicable for Wetted parts material code S, H, M, and T.

< Settings When Shipped > “◇”

| | | | |
|--------------------------|--|--------------------------------------|--|
| Tag Number | As specified in order *1 | Calibration Range Lower Range Value | As specified in order |
| Output Mode | 'Linear' unless otherwise specified in order | Calibration Range Higher Range Value | As specified in order |
| Display Mode | 'Linear' unless otherwise specified in order | Calibration Range Units | Selected from mmH ₂ O, mmAq, mmWG, mmHg, kPa, MPa, mbar, bar, gf/cm ² , kgf/cm ² , inH ₂ O, inHg, ftH ₂ O, or psi. (Only one unit can be specified) |
| Operation Mode | 'Normal' unless otherwise specified in order | | |
| Damping Time Constant *2 | '2 sec.' | | |

- *1: Up to 16 alphanumeric characters (including - and .) will be entered in the amplifier memory.
- *2: If using square root output, set damping time constant to 2 sec. or more.

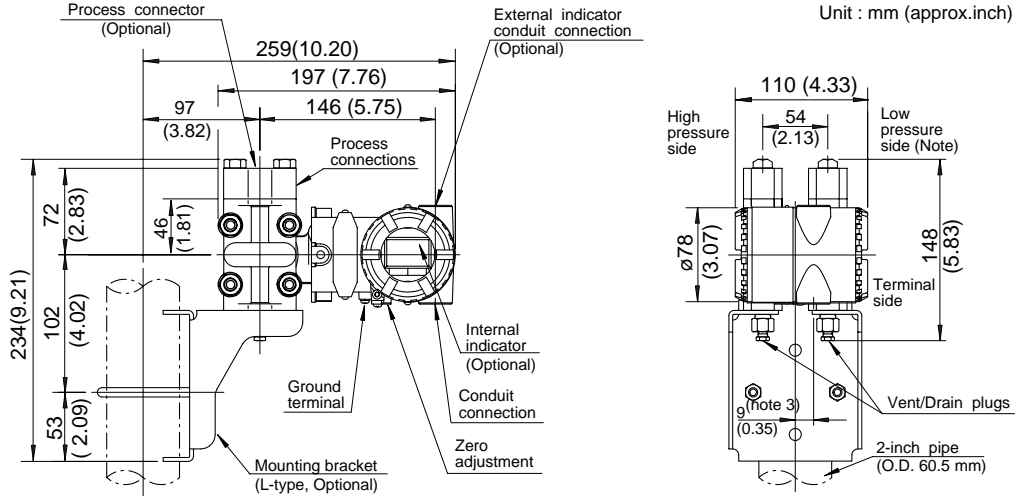
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■ DIMENSIONS

● **Model EJA110A**

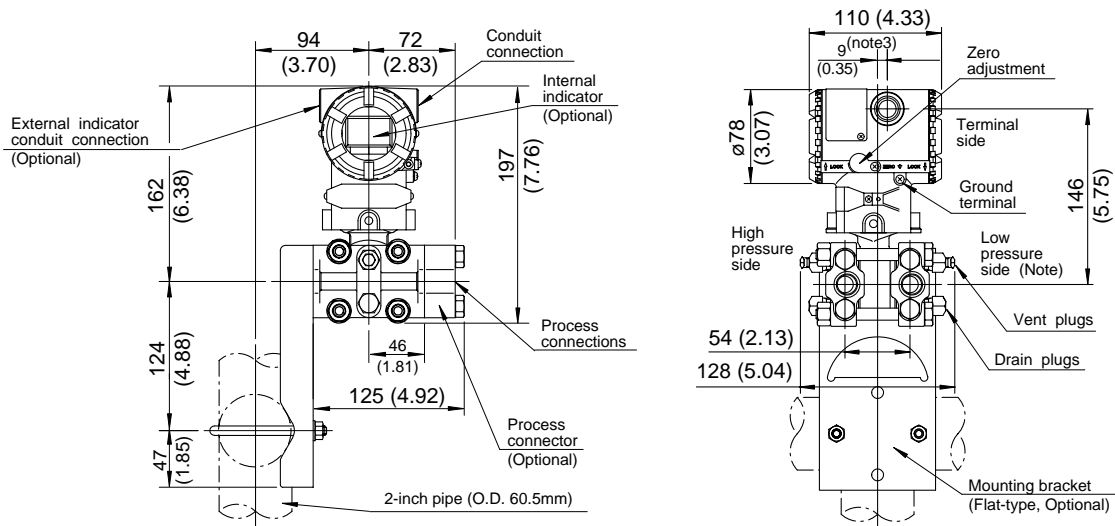
Vertical Impulse Piping Type

Process connector upside (INSTALLATION CODE '6') (For CODE '2','3' or '7', refer to the notes below.)



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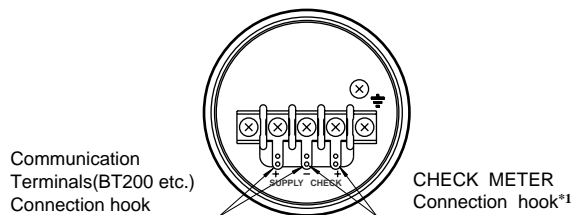
Horizontal Impulse Piping Type (INSTALLATION CODE '9') (For CODE '8', refer to the notes below.)



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- * 1: When Installation code 2, 3, or 8 is selected, high and low pressure side on above figure are reversed. (i.e. High pressure side is on the right side.)
- * 2: When Installation code 3 or 7 is selected, process connection mounting bracket on above figure are reversed.
- * 3: 15 mm(0.59 inch) for right side high pressure.(for code 2, 3 or 8)

● **Terminal Configuration**



● **Terminal Wiring**

| | |
|--------------|--|
| SUPPLY \pm | Power supply and output terminal |
| CHECK \pm | External indicator(ammeter) terminal*1 |
| --- | Ground terminal |

- *1: When using an external indicator or a check meter, the internal resistance must be 10 Ω or less. Not available for Fieldbus communication(Output signal code F).

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SELECTION GUIDE

| Application | Type | Model | Capsule | Measurement Span | | Maximum Working Pressure | |
|--|----------------------------|-------------------------------|---------|-----------------------------|--------------------------------|--------------------------|--------------------------------------|
| | | | | kPa | inH ₂ O | MPa | psi |
| Differential Pressure | Traditional-Mounting*1 | EJA110A | L | 0.5 to 10 | 2 to 40 | 3.5 | 500 |
| | | | M | 1 to 100 | 4 to 400 | 14 | 2000 |
| | | | H | 5 to 500 | 20 to 2000 | 14 | 2000 |
| | | | V | 0.14 to 14MPa | 20 to 2000 psi | 14 | 2000 |
| Flow | Integral Orifice | EJA115 | L | 1 to 10 | 4 to 40 | 3.5 | 500 |
| | | | M | 2 to 100 | 8 to 400 | 14 | 2000 |
| | | | H | 20 to 210 | 80 to 830 | 14 | 2000 |
| Differential Pressure & Liquid Level with Remote Seals | Extended Flush Combination | EJA118N EJA118W EJA118Y | M | 2.5 to 100 | 10 to 400 | Based on Flange Rating | |
| | | | H | 25 to 500 | 100 to 2000 | | |
| | | | | | | | |
| Draft Range | Traditional-Mounting*1 | EJA120A | E | 0.1 to 1 | 0.4 to 4 | 50 kPa | 7.25 |
| Differential Pressure & Liquid Level | Traditional-Mounting*1 | EJA130A | M | 1 to 100 | 4 to 400 | 32 | 4500 |
| | | | H | 5 to 500 | 20 to 2000 | 32 | 4500 |
| Liquid Level, Closed or Open Tank | Flush Extended | EJA210A EJA220A | M | 1 to 100 | 4 to 400 | Based on Flange Rating | |
| | | | H | 5 to 500 | 20 to 2000 | | |
| Absolute (vacuum) Pressure | Traditional-Mounting*1 | EJA310A | L | 0.67 to 10 ^{*2} | 2.67 to 40 ^{*2} | 10 kPa ^{*2} | 40 in H ₂ O ^{*2} |
| | | | M | 1.3 to 130 ^{*2} | 0.38 to 38 inHg ^{*2} | 130 kPa ^{*2} | 18.65 ^{*2} |
| | | | A | 0.03 to 3 MPa ^{*2} | 4.3 to 430 psi ^{*2} | 3000 kPa ^{*2} | 430 ^{*2} |
| Gauge Pressure | Traditional-Mounting*1 | EJA430A | A | 0.03 to 3 MPa | 4.3 to 430 psi | 3 | 430 |
| | | | B | 0.14 to 14 | 20 to 2000 psi | 14 | 2000 |
| Gauge Pressure with Remote Seal | Extended | EJA438N | A B | 0.06 to 3 MPa 0.46 to 7 | 9 to 430 psi 66 to 1000 psi | Based on Flange Rating | |
| Gauge Pressure with Remote Seal | Flush | EJA438W | A B | 0.06 to 3 MPa 0.46 to 7 | 8 to 430 psi 66 to 2000 psi | Based on Flange Rating | |
| High Gauge | Traditional-Mounting*1 | EJA440A | C | 5 to 32 MPa | 720 to 4500 psi | 32 | 4500 |
| | | | D | 5 to 50 MPa | 720 to 7200 psi | 50 | 7200 |

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*1: Traditional-mounting is 1/4 - 18 NPTF process connections (1/2 - 14 NPTF with process adapters) on 2-1/8" centers.
 *2: Measurement values in absolute.

< Ordering Information > “◇”

- Specify the following when ordering
1. Model, suffix codes, and optional codes
 2. Calibration range and units:
 - 1) Calibration range can be specified with range value specifications up to 5 digits (excluding any decimal point) for low or high range limits within the range of -32000 to 32000.
 - 2) Specify only one unit from the table, 'Settings when shipped.'
 3. Select linear or square root for output mode and display mode.

Note: If not specified, the instrument is shipped set for linear mode.
 4. Select normal or reverse for operation mode

Note: If not specified, the instrument is shipped in normal operation mode.
 5. Display scale and units (for transmitters equipped with integral indicator only)

Specify either 0 to 100 % or engineering unit scale and 'Range and Unit' for engineering units scale: Scale range can be specified with range limit specifications up to 5 digits (excluding any decimal point) for low or high range limits within the range of -19999 to 19999.
 6. Tag Number (if required)

< Related Instruments > “◇”

Power Distributor: Refer to GS 1B4T1-E, 1B4T2-E.
 3-Value Manifold: Refer to GS 22B1C1-E
 BRAIN TERMINAL: Refer to GS 1C0A11-E

< Reference >

1. Teflon; Trademark of E.I. DuPont de Nemours & Company (USA) for polytetrafluoroethylene.
2. Hastelloy C-276; Trademark of Union Carbide Corporation (USA) for nickel-molybdenum alloy.

Material Cross Reference Table

| | |
|---------|------------|
| SUS316L | AISI 316L |
| SUS316 | AISI 316 |
| SUS304 | AISI 304 |
| S25C | AISI 1025 |
| SCM435 | AISI 4137 |
| SUS630 | ASTM630 |
| SCS14A | ASTM CF-8M |

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< Specification Conformance >

The model EJA110A maintains a specification conformance to at least 3 σ.