

# *Tek-Bar 3120C*


## *Tri-Clamp Gauge Pressure Transmitter*




# Quick Start Guide

## 1. Before You Begin

Before installation check the model, specifications, and installation location for the transmitter. Follow the Operating Instruction Manual for detailed installation and other information.

 Installation of the device should be carried out by a technician or qualified specialists. The technician should read and understand these Operating Instructions and must follow the instructions they contain.

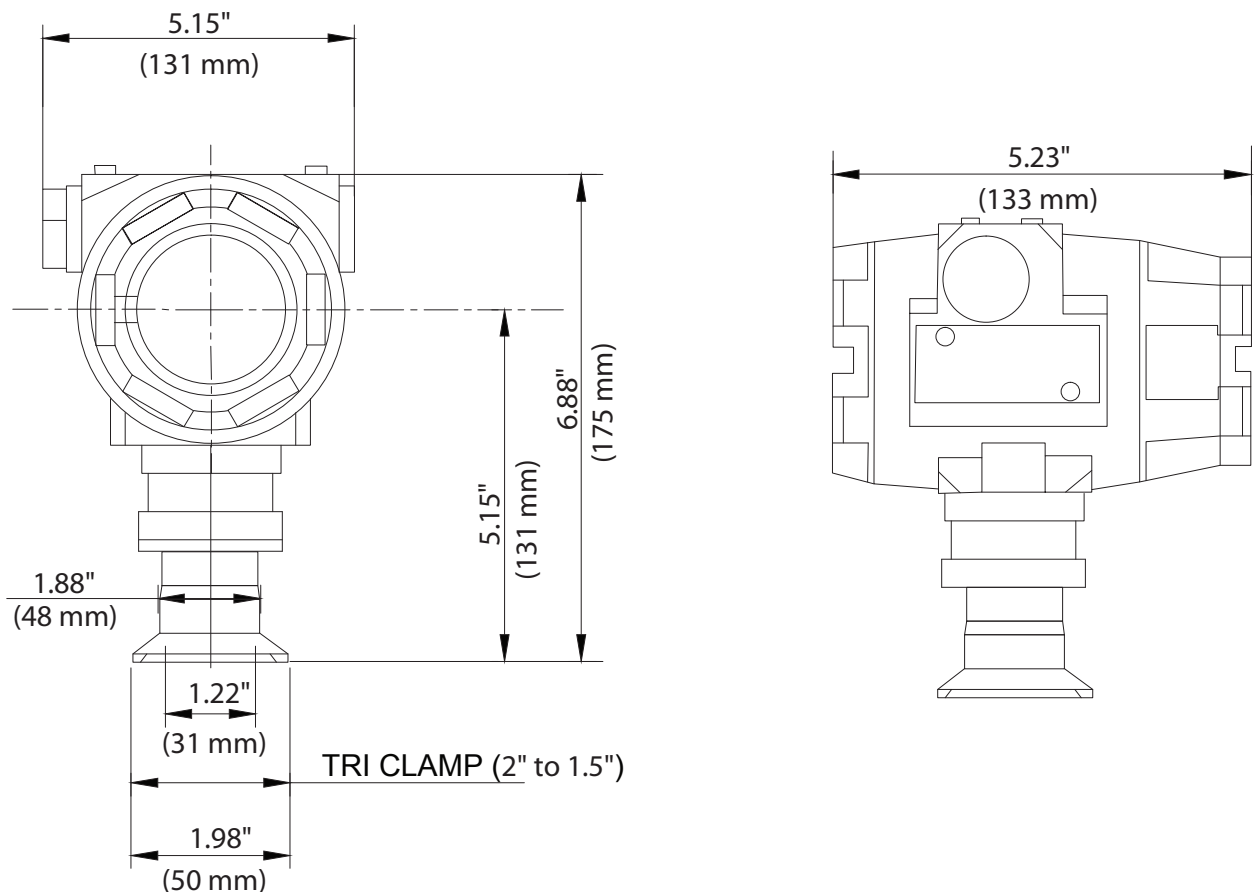
 Do not clean or touch diaphragm seals with hard or pointed object.

## 2. Unpack

Tek-Bar 3120C Tri-Clamp Gauge Pressure Transmitter

## 3. Dimensional Drawings

Dimension with Display

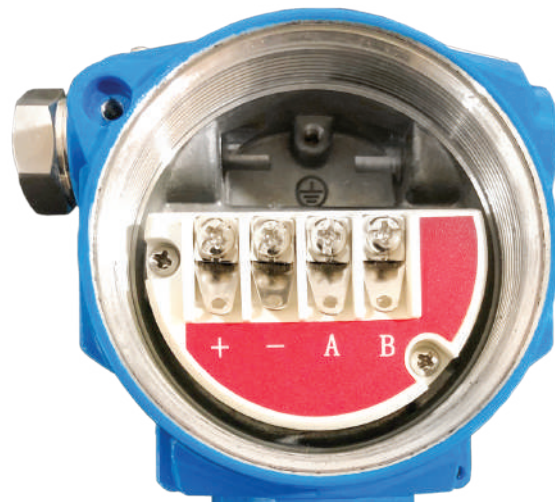
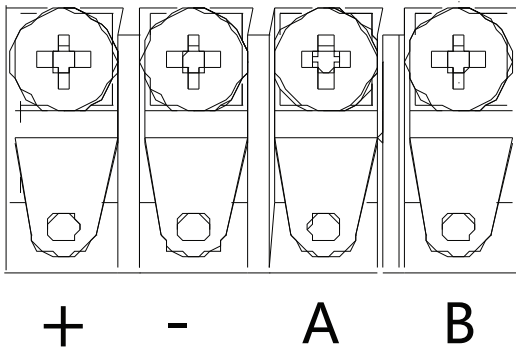


## 4. Display

The local display enables you to read all important parameters directly at the measuring point and configure the device using the menu tree. It has a 5-digit LCD display.



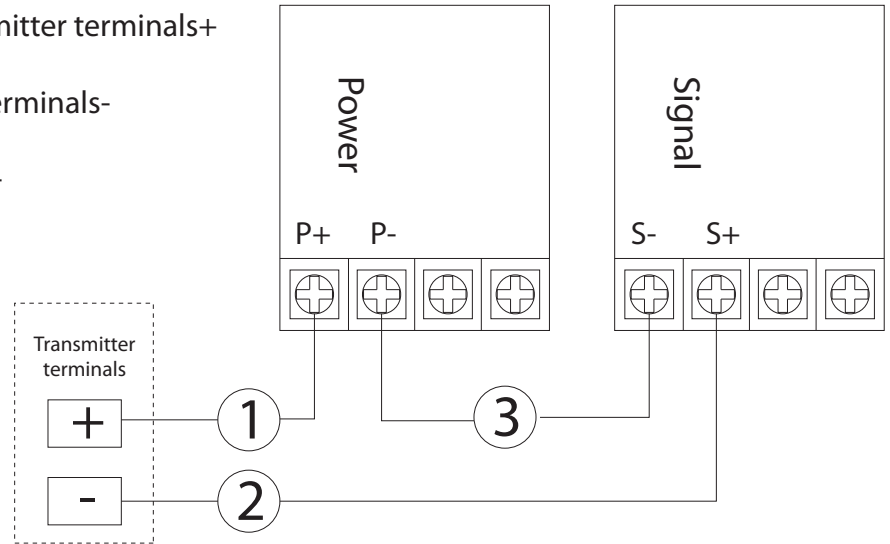
## 5. Power Supply Wirings



Label	Two Wires	Three Wires	Four Wires
+	Power +	Power +	Power +
-	Power -	Power -	Power -
A		Signal +	Signal +
B			Signal -

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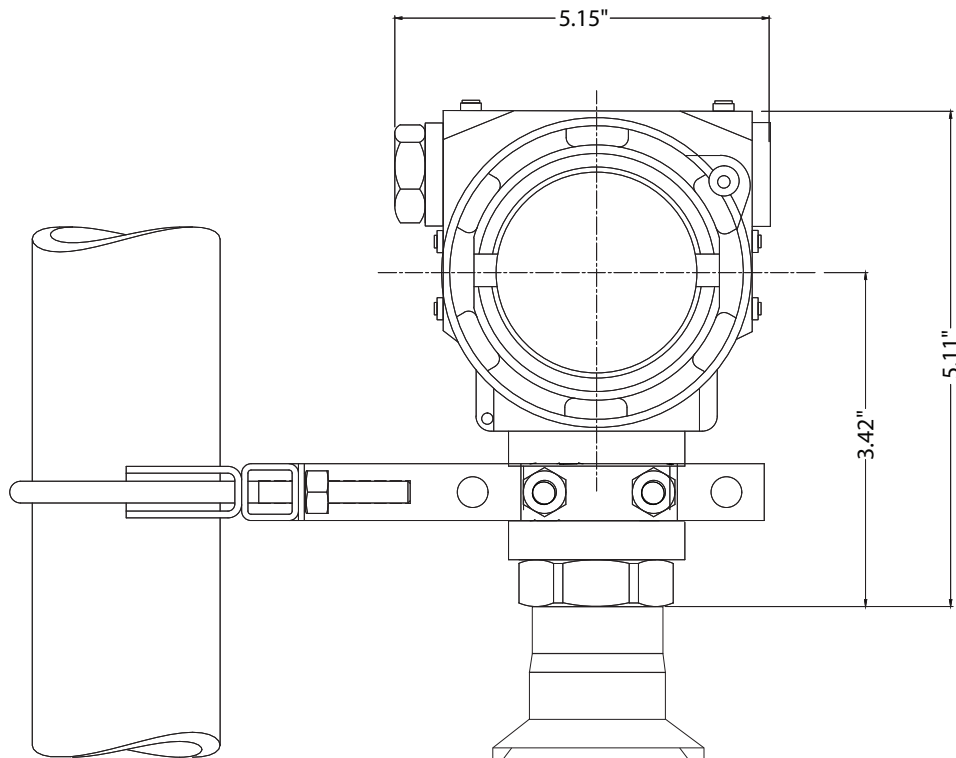
- ① Power supply+ is connected with transmitter terminals+
- ② Signal+ is connected with transmitter terminals-
- ③ Signal- is connected with power supply-



## 6. Grounding

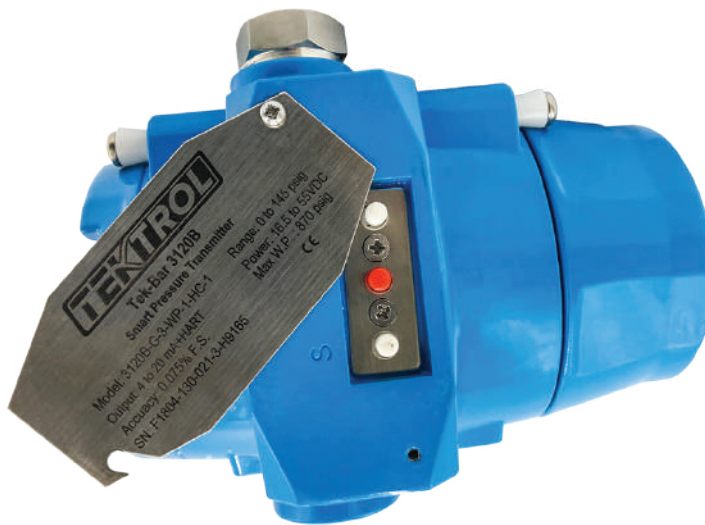
- Shielded twisted pair signal cable is used to avoid ground loops.
- Shielded signal cable is used for single-grounding, insulated floating at the side of pressure transmitter, and grounding at the control cabinet.
- Internal ground terminals are used for direct grounding.

## 7. Mounting



## 8. Configurations

The top nameplate is located in the upper part of the transmitter. Slide the name plate until the Zero/Span button is visible and fully accessible.



## 9. Installation of Transmitter

### Liquid Flow Measurement

- Place the taps to the side of the line to prevent sediment deposits on the transmitters process isolators
- Mount the transmitter beside or below the taps so gases can vent into the process line
- Mount drain/vent the valve upward to allow gases to vent

### Gas Flow Measurement

- Place taps in the top or side of the line
- Mount the transmitter beside or above the taps so liquid will drain into the process line

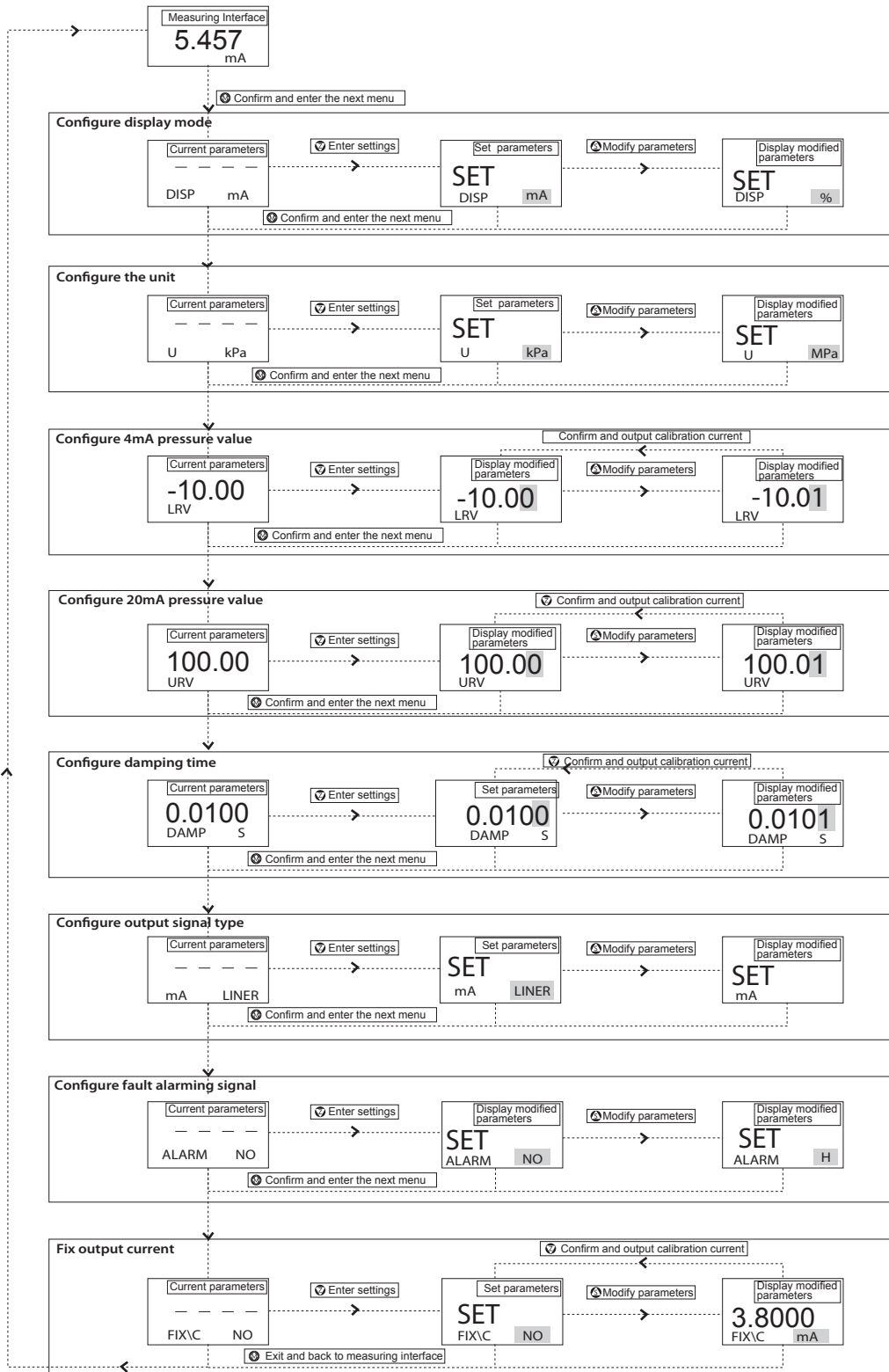
### Steam Flow Measurement

- Place taps to the side of the line
- Mount the transmitter below the taps to ensure that the impulse piping will stay filled with condensate
- In steam service above 250°F (121°C), fill impulse lines with water to prevent the steam from contacting the transmitter directly and to ensure accurate measurement at start-up

**Note:** For steam or other elevated temperature services, it is important that temperatures at the process connection do not exceed the transmitters process temperature limits.

# Quick Start Guide

## 10. Menu Tree



## Parameters table

### Display mode

%	Percentage
PV	Process variable
mA	Current

### Units

(↺, ↻, ↷)

kPa
MPa
bar
psi
mmHg
mmH <sub>2</sub> O
mH <sub>2</sub> O
inH <sub>2</sub> O
inHg
mHg
TORR
mbar
g/cm <sup>2</sup>
kg/cm <sup>2</sup>
Pa
ATM
mm
m

### Lower range value

-19999-99999
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### Upper range value

-19999-99999
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### Damping time

0 to 100S
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### Output signal type

√	Square root
LINER	Linearity

### Fault alarm signal

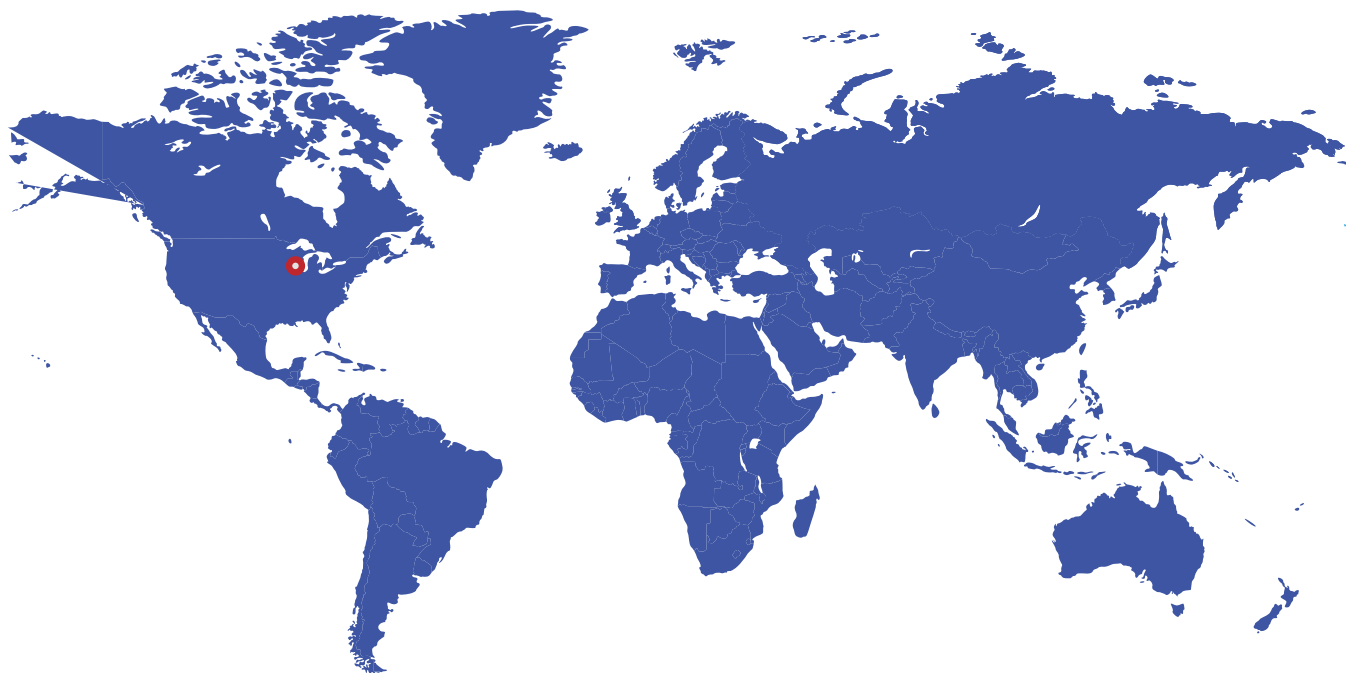
NO	None
H	20.8 mA
L	3.8 mA

### Output current

NO (none)
3.8000 mA
4.0000 mA
8.0000 mA
12.0000 mA
16.0000 mA
20.0000 mA
20.8000 mA



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