



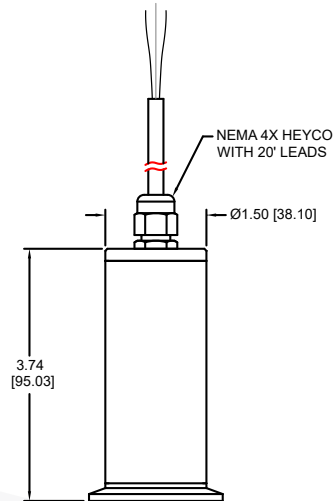
# SANITARY

## MODEL 280/380 & 283/383 SANITARY TRI-CLAMP PRESSURE TRANSMITTER



| STANDARD WIRING |               |               |
|-----------------|---------------|---------------|
| WIRE            | MODEL 280/283 | MODEL 380/383 |
| 1/RED           | +EXC          | +EXC/SIG      |
| 2/GRN           | +SIG          | N/C           |
| 3/WHT           | N/C           | N/C           |
| 4/BLK           | -EXC/SIG      | -EXC/SIG      |
| 5/BLU           | N/C           | N/C           |
| 6/BRN           | N/C           | N/C           |
| SHIELD          | OPEN          | OPEN          |

Inches (mm)



**REF DIMENSIONS ONLY.  
CONSULT FACTORY FOR ACTUAL DIMENSIONS.**

### PRODUCT OVERVIEW:

Models 280/380 & 283/383 from GP:50 are a family of food and beverage grade tri-clamp process connection pressure transmitters. Their rugged design also meets 3A sanitary standards for dairy applications. Tri-clamp fitting sizes as small as 3/4" are available to provide reduced surface area exposure. The Model 383 is also available with optional high-temperature compensation to +400 °F (+204 °C). Standard models feature all 316L stainless steel construction. Optional Inconel or Hastelloy wetted parts may be substituted for improved corrosion resistance. An optional vented quick disconnect cable provides a barometric reference on lower ranges while providing a NEMA 4X rating.

### FEATURES:

- Standard tri-clamp fitting sizes from 3/4" to 3"
- Complies with 3A standard 74-07
- Flush process connection eliminates plugging
- All 316L stainless steel or Inconel wetted parts
- Pressure ranges from 0 to 30" WC thru 0 to 1,000 PSI (150 mBAR to 59 BAR)

### APPLICATIONS:

- Food and beverage manufacturing
- Dairy and beverage processing
- Pharmaceutical
- Sanitary

### OPTIONS:

- Vented quick disconnect cable
- Standard tri-clamp fitting sizes from 3/4" to 3"
- High-temperature compensation to +400 °F (+204 °C)
- Inconel and Hastelloy wetted parts
- FM, CSA Explosion Proof option available\*

\*For details of available approvals go to:  
<https://www.gp50.com/certifications>



# GP:50 MODEL 280/283 & 380/383

## REFERENCE SPECIFICATIONS

(Standard configurations shown, consult factory for other options)

| ELECTRICAL                   |   |
|------------------------------|---|
| Output Signal:<br>(@ +70 °F) | (Models 280/283) 0 to 5 Vdc $\pm$ 2% FSO<br>(Models 380/383) 4-20 mA $\pm$ 2% FSO |
| Excitation Voltage:          | (Models 280/283) 10.5 to 42 Vdc<br>(Models 380/383) 13 to 37 Vdc                  |
| Output Current:              | (Models 280/283) 2.0 mA max. for <0.1% FSO attenuation                            |
| Input Current:               | (Models 280/283) 6.2 mA nominal   |
| Load Resistance:             | (Models 380/383) 1200 $\Omega$ max. at 37 Vdc,<br>550 $\Omega$ max. at 24 Vdc     |
| Circuit Protection:          | RFI and EMI   |

| MATERIALS OF CONSTRUCTION |   |
|---------------------------|---|
| Wetted Parts:             | 316 stainless steel, NEMA-4X (3A 74-03 compliant) rated<br>Inconel and Hastelloy optional |
| Housing:                  | 316 stainless steel   |

| ACCURACY (BFSL): Hysteresis, non-Linearity & Repeatability @ +70 °F |                                |
|---|--------------------------------|
| Standard:   | $\pm$ 0.5% FSO                 |
| Improved:   | $\pm$ 0.2% FSO, $\pm$ 0.1% FSO |
| Zero/Span Balance:  | $\pm$ 2.0% FSO at +70 °F       |

| MECHANICAL             |  |
|------------------------|--|
| Process Connection:    | Tri-Clamp 1/2" thru 3"                           |
| Electrical Connection: | 20 ft 6-conductor vented Hytrel jacketed cable   |
| Proof Pressure:        | 3X FSO   |
| Burst Pressure:        | 6X FSO   |
| Approximate Weight:    | 14 oz. nominal,<br>dependent on pressure fitting |

| PRESSURE RANGES                     |                             |
|-------------------------------------|-----------------------------|
| From 0 to 30" WC thru 0 to 1000 PSI |                             |
| $\geq$ 30" WC to 300 PSI:           | 3" tri-clamp fitting        |
| 30" WC to 1000 PSI:                 | 1 1/2" tri-clamp            |
| 30" WC to 300 PSI:                  | 2", 2 1/2" and 3" tri-clamp |
| $\geq$ 50 PSI to 1000 PSI:          | 1/2" and 3/4" tri-clamp     |

| THERMAL SPECIFICATIONS |  |
|------------------------|--|
| Operating Range:       | (Model 80) -20 °F to 200 °F (-29 °C to +93 °C)<br>(Model 83) -20 °F to +400 °F (-29 °C to +204 °C) |
| Compensated Range:     | (Model 80) 0 °F to +180 °F (-17 °C to +82 °C)<br>(Model 83) 0 °F to +400 °F (-17 °C to +204 °C)    |
| Effect on Zero/Span:   | $<$ $\pm$ 2% FSO/100 °F  |

