

## HB "Mini" Level Transmitter

FEATURES:

- Specifically designed for balance tank, CIP vessel, and other sanitary level control applications
- Rugged reliability in the harshest applications and environments
- Compact, ulifra-sanitary package meets or exceeds requirements for Food, Beverage, Dairy and Bio-Pharmaceutical applications
- Fast shipment -
(4 day standard)

The "HB" has been specifically designed for use in simple level control applications such as balance tanks and CIP vessels. We understand the harsh environment typically encountered in such applications and have designed this product to stand up to direct wash-downs and wide variations in temperature. The sensor is available in three ranges for tanks 20" to 60" ("low range"), 60.1" to 100 " ("mid range") and 101" to160"
("high range"). Connections includes a 2" Tri-Clamp ${ }^{\circledR}$ and all sensors are supplied with up to 100' of sealed, shielded cable ( $25^{\prime}$ is standard). Internal compensation allows the transmitter to perform at temperatures up to $200^{\circ} \mathrm{F}\left(93^{\circ}\right.$ C) and withstand cleaning and sterilization to $250^{\circ} \mathrm{F}\left(121^{\circ} \mathrm{C}\right)$.

Detailed specifications, ordering matrix and application information are listed on the reverse.


## Complete Product Ordering Matrix

## Span Range


$0^{\prime \prime}-20^{\prime \prime}$ to 0 " $-60^{\prime \prime}$ Water Column $0^{"-60.1 " ~ t o ~} 0 "-100^{\prime \prime}$ Water Column $0 "-101^{\prime \prime}$ to 0 " -160 " Water Column
Fitting
005 2" Tri-Clamp

## Diaphragm Material

1 Stainless Steel - 316L

Note: Calibration information must be provided at time of order. Inches of Water Column or Inches Height and Specific Gravity.


## Calibration

\#\#\# Height in inches W.C. (to nearest tenth up to 99.9 then whole numbers from $100^{\prime \prime}$ to $160^{\prime \prime}$ )
000 Field Calibrated Examples:
Cable Length
$100 \quad 100$ inches
305
100 inches
30.5 inches
$05 \quad 25$
10 50'
15 75'
20 100'
Mounting
0 Horizontal
1 Verticle (Diaphragm facing up)
2 Other (Specify angle)

## GEN:RALSPECCIFCAIONS

## Environmental Specifications

| Ambient Operating Temperature Range: |  | $40^{\circ} \mathrm{F}$ to $120^{\circ} \mathrm{F}\left(4^{\circ} \mathrm{C}\right.$ to $\left.49^{\circ} \mathrm{C}\right)$ |
| :---: | :---: | :---: |
| Storage Temperature Range: |  | $-40^{\circ} \mathrm{F}$ to $250^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.$ to 12 |
| Humidity: |  | 0 to $95 \% \mathrm{RH}$, condensing |
| Material / Construction |  |  |
| Housing: | 304 Stainless S | , $\mathrm{R}_{\mathrm{a}} 40$ maximum finish |
| Wetted Parts: | 316L Stainless | eel, $\mathrm{R}_{\mathrm{a}} 25$ maximum finish |
| Process Connection: | 2" Tri-Clamp |  |
| Ratings: | NEMA 4XIIP-66 | P-67 3A Authorized |
| Standards: | Designed and $m$ engineering pra Article 3.3 of the CSA B51-03 CRN\# CSAOF9 | nufactured to sound ices in accordance with PED 97/23/EC |

Operating Specifications Rang
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Process Temperature Limits:

Over-Range Capacity:
Response Time:
Power / Signal / Electrical
Voltage:
Load Impedance:
Output:
Electrical Ratings:

$\begin{array}{ll}\text { Temperature Stability: } & \begin{array}{l}\text { Within }+/-2.0^{\prime \prime} / 100^{\circ} \mathrm{F} \text { over the compensated } \\ \text { process and ambient operational temperature } \\ \text { range }\end{array}\end{array}$
HB1 0-20" to 0-60" Water Column
HB2 0-60.1" to 0-100" Water Column HB3 0-101" to 0-160" Water Column

Factory calibrated to $+/-0.2 \%$ of Upper Range Limit (URL) Stabilized at $75^{\circ} \mathrm{F}\left(24^{\circ} \mathrm{C}\right)$
$32^{\circ} \mathrm{F}$ to $250^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.$ to $\left.121^{\circ} \mathrm{C}\right)$
Compensated $32^{\circ} \mathrm{F}$ to $200^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.$ to $\left.93^{\circ} \mathrm{C}\right)$ range
2.5 times Upper Range Limit

200 uSec

12-40 VDC
1400 ohms (max) @ 40 VDC
4-20 mA DC, 2-wire


