

# HB "Mini" Level Transmitter

## Introduction

The HB Mini level transmitter is specifically intended for use in shallow level control applications such as balance tanks, stationary fillers bowls and CIP make up vessels. Uniquely designed to thrive in sanitary process environments the HB has the durability to withstand pressurized wash-downs, cascading water, and condensing humidity. Dual diaphragm architecture, fully potted electronics and a welded sealed stainless enclosure assure years of trouble free service.

Utilizing a highly accurate pressure cell to measure hydrostatic head, the HB ignores false level readings from foam, accommodates low or nonconductive fluids and conveniently mounts on the bottom or lower side of vessels. Compact in size with a 2" Tri-Clamp connection, the HB is easily mounted in the tightest of piping layouts. The HB is available in three ranges 20" to 60" (HB1 low-range), 60.1" to 100" (HB2 mid-range) and 101" to 160" (HB3 high range). Internal temperature compensation allows the transmitter to perform accurately at temperatures to 200°F (93°C) and withstand CIP and SIP to 250°F (121°C). Standard m12 quick disconnect receptacle when paired with the Anderson shielded molded cord-set provides a secure and convenient waterproof connection; alternatively available with sealed, shielded cable with ½" female NPT to accommodate conduit connection.

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



## Authorizations



## Features

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

## Applications

- Pasteurization balance tanks
- CIP make up vessels
- Process shallow vessel level measurement
- Vessel level monitoring in wet hostile environments

**Specifications**

**Environmental Specifications**

Ambient Operating Temperature Range: 40°F to 120°F (4°C to 49°C)  
 Storage Temperature Range: -40°F to 250°F (-40°C to 121°C)  
 Humidity: 0 to 95% RH, condensing

**Material / Construction**

Housing: 304 Stainless Steel, Ra40 maximum finish  
 Wetted Parts: 316L Stainless Steel, Ra25 maximum finish  
 Process Connection: 2" Tri-Clamp

**Approvals & Documentation**

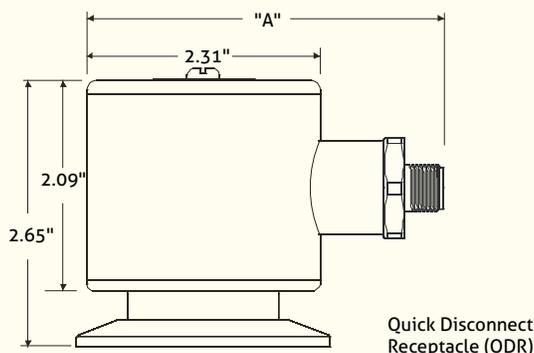
Ratings: NEMA 4X/IP-66, IP-67 3A Authorized Models equipped with optional conduit connector must be installed with conduit to maintain environmental rating  
 Standards: Designed and manufactured to sound engineering practices in accordance with Article 3.3 of the PED 97/23/EC  
 CSA B51-03  
 CRN# CSA0F9754.5C

**Operating Specifications**

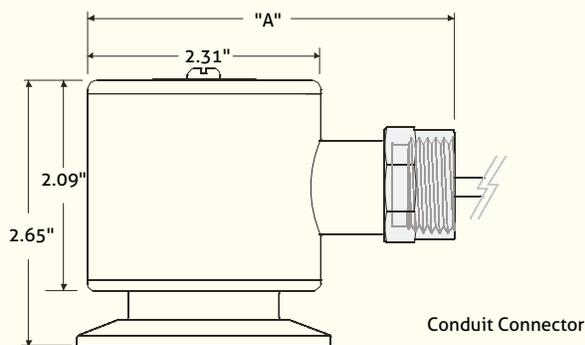
Range: HB1 0-20" to 0-60" Water Column  
 HB2 0-60.1" to 0-100" Water Column  
 HB3 0-101" to 0-160" Water Column  
 Over-Range Capacity: 2.5 times Upper Range Limit  
 Response Time: 200 uSec  
 Accuracy: Factory calibrated to ±0.2% of Upper Range Limit (URL) Stabilized at 75°F (24°C)  
 Process Temperature Limits: 32°F to 250°F (0°C to 121°C)  
 Compensated 32°F to 200°F (0°C to 93°C)  
 Temperature Stability: Within ±2.0"/100°F over the compensated process and ambient operational temperature range

**Power / Signal / Electrical**

Voltage: 12-40 VDC  
 Load Impedance: 1400 ohms (max) @ 40 VDC  
 Output: 4-20 mA DC, 2-wire  
 Electrical Connection: Standard - 5 pin M12  
 Pins 1 & 2 active



Recommended Cable: Shielded 5 pin M12 molded cordset  
 Pins 1 & 2 Active, Shield must connect to cordset nut



Optional: Sealed Cable with 1/2" NPT Conduit Connection

**Order Information**

