

# Technical Specifications

hydra-wave Tote and Drum  
Ultrasonic Level Transmitter

**Transmitter provides accurate and reliable measurements up to six feet.**

The two-wire, Tote and Drum ultrasonic level transmitter is mounted through the top wall of the tank and provides non-contact measurement up to 6 feet. With non-contact technology, the transmitter is an excellent choice for applications with dirty, coating, or corrosive type liquids. The compact design is the perfect size for small tank applications.

A high frequency ultrasonic sound wave is pulsed two times per second from the base of the transducer. The sound wave reflects against the process medium below and returns to the transducer. The microprocessor based electronics measure the time of flight between the sound generation and receipt, and translates this figure into the distance between the transmitter and process medium below.



## Features & Benefits

- Accurate and reliable measurement from 0.36 feet to 6 feet
- Low cost solution for OEM and process applications
- Compact size and 3/4 inch NPT transducer for small tanks
- Polypropelene enclosure rated NEMA 4X with PVDF transducer
- Digital signal filtration eliminates false echo signal returns
- Fail-Safe intelligence provides maximum process safety

## Features & Benefits Continued...

General Purpose	Yes
Conductive	Yes
Non-conductive	Yes
△ Conductive	Yes
Non-contact	Yes
Clean	Yes
Dirty	Yes
Coating	Yes
Non-coating	Yes
Ambient pressure	Yes
Low pressure	Yes
Medium pressure	No
Intrinsically safe	No
Integral relay	No
Foam	No
Contact	No
Vapors	No
△ Gas density	No
Vacuum	No

## Specifications

Range:	0.36 to 6' (11 cm to 1.8 m)
Accuracy:	± 0.25% of span in air
Resolution:	0.125" (3 mm)
Frequency:	83 kHz.
Pulse rate:	2 per second
Beam width:	8° conical
Dead band:	0.36' (11 cm) minimum
LED indication:	Power status & Fail-safe diagnosis
Fail-safe diag.:	Relay inverts to safe position
Supply voltage:	12-36 VDC
Loop resistance:	600 ohms @ 36 VDC
Signal output:	4-20 mA, 2 wire

Temp. rating:	F: -40° to 140° C: -40° to 60°
Pressure rating:	30 psi (2 bar) @ 25°C., derated @ 1.667 psi (.113 bar) per °C. above 25 °C.
Enclosure rating:	NEMA 4X (IP65)
Enclosure Mat'l:	Polypropelene (U.L. 94 VO)
Transducer Mat'l:	PVDF
Mounting threads:	3/4" NPT
Mounting gasket:	Viton (3/4")
Conduit conn.:	1/2" NPT
CE Compliance:	EN 50082-2 immunity EN 55011 emission EN 61010-1 safety



**KM is represented in your area by:**

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