

*Instrumentation designed  
with the user in mind.*

## ULTRASONIC LEVEL TRANSMITTERS

for  
**LIQUIDS**

- ◆ **Breweries**
- ◆ **Chemicals**
- ◆ **Food Processing**
- ◆ **Pharmaceuticals**
- ◆ **Power Plants**
- ◆ **Pulp & Paper**
- ◆ **Water & Wastewater**

### **ADVANTAGES**

- **Two-Wire Loop Powered Operation**
- **Narrow Beam Angle ( $\pm 2.5^\circ$  from center axis)**
- **Open channel flow characterization**
- **Vessel volume conversion**
- **32-point linearization**
- **Full temperature compensation**
- **Fixed target suppression**
- **Simple push-button programming**
- **Operating modes:**

**Basic:** Simple start up and 4/20 mA programming without Display Module option.

**Sophisticated:** Using the Display Module which includes a 6 digit custom LCD display, the operator can choose between a menu driven QUICKSET and full parameter programming.

### *Narrow Beam Technology*



The **SmartSonic™ L4660-SE/SG-300** series are **TWO-WIRE** Loop-Powered **SMART** ultrasonic level transmitters that incorporate Princo's unique narrow beam technology.

**SmartSonic™** compact transmitters include field proven innovative advanced, process adaptive signal processing software to identify and validate the surface signal.

**Princo's SmartSonic™** utilizing innovative patented technology, is the best ultrasonic level measurement system on the market today.

*The only*

**10 Year  
Warranty**

*The longest in the industry!*

# Specifications

## Two-Wire SmartSonic L4660

<b>Transducer materials</b> Polypropylene (PP), Kynar (PVDF) or Teflon (PTFE)	<b>Power supply</b> 12 ...36 VDC / 48 mW ...720 mW electrically isolated; transient & surge protected
<b>Housing material (2 versions)</b> Plastic: PBT fibreglass reinforced Aluminium: Powder paint coated	<b>Accuracy *</b> ± 0.2% of the measured distance plus 0.05% of the range
<b>Process temperature</b> -22 °F ... +194 °F PTFE -4 °F ... +176 °F PP & PVDF	<b>Resolution (Dependent upon measured distance)</b> < 80 inches:      0.04 inches 80...198 inches: 0.08 inches 16.4... 33 feet:    0.2 inches
<b>Ambient temperature</b> -22 °F ...+158 °F with SAP-200 -13 °F ...+140 °F	<b>Dead Band - 10" (20' range); 14" (26' range);                  14" (33' range); 18" (49' range)</b>
<b>Pressure (Absolute)</b> 0.5** ... 3 bar (0.05 ... 0.3 MPa)	<b>Analog: 4 ...20 mA</b>
<b>Seals</b> PP transducer:            EPDM PVDF transducer:        FPM (Viton)	<b>Loop power test connectors:</b> ammeter plug-in, 200 mV, 0.5%
<b>Enclosure:</b> Sensor ~ NEMA 6; Housing ~ NEMA 4X	<b>Display: 6 digits, icons and bargraph                  (SAP-200 display module only)</b>

\* Under optimal reflection conditions and stabilized transducer temperature.  
 \*\* At pressures under 1 bar absolute, consult Princo.

## ORDER CODE

SmartSonic L4660 S   - 3   -

TYPE	CODE	TRANSDUCER / HOUSING	CODE	MEASURING RANGE *	CODE	MOUNTING	CODE	SUPPLY / OUTPUT	CODE
Transmitter	E	PP/Aluminium	A	49 feet	4	NPT thread	N	4 ... 20 mA / 12 ... 36 VDC	2
Transmitter with local indicator	G	PVDF/Aluminium	B	33 feet	6	** Flange 3" Std.	A	4 ... 20 mA / 12 ... 36 VDC - HART	4
		PTFE/Aluminium	T	26 feet	7	** Flange 6" Std.	D	4 ... 20 mA / 12 ... 36 VDC - IS	6
		PP/Plastic	P	20 feet	8			4 ... 20 mA / 12 ... 36 VDC HART + IS	8
		PVDF/Plastic	V						
		PTFE/Plastic	F						

IS = Intrinsically Safe

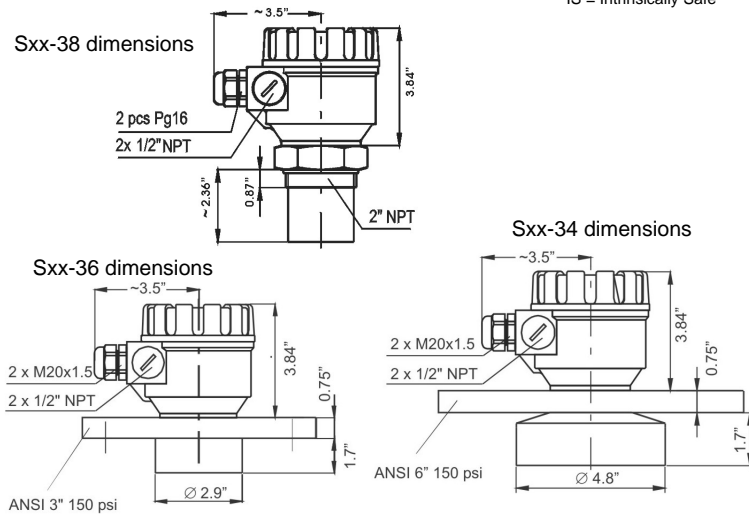
\* Measuring range depends on the material of the transducer

\*\* Flange mount standard on 33 and 49 foot range units

Note: not all combinations are possible

**10-YEAR WARRANTY**

All PRINCO level control instruments are backed by a 10-year warranty. PRINCO will repair or replace, at our option, any instrument that fails under normal use for up to 10 years after purchase.



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