

# LT25 Linear Cable Position Transducer

BEI Sensors



Model LT25 linear cable position transducer provides digital position and speed information in a rugged, easy-to-install package. Simply connect the cable to your moving equipment and secure the base to a fixed object. No need to worry about shaft misalignment. The sturdy measuring cable is made of nylon coated stainless steel for ultimate strength, with a measurement range up to 125 inches. This unit is ideal for wet, dirty or outdoor environments and applications where your measuring range travels over harsh environments.

The LT25 is available with the following certifications:



EN 55011 and EN 61000-6-2



CENELEC EEX ia IIC T4\*



U.S. Standards Class I, Group A, B, C & D;  
Class I Group E, F & G



Canadian Standards  
Class I, Zone 0, Group IIC

## Mechanical Specifications

**Enclosure:** Anodized Aluminum and glass filled polycarbonate (transducer), die cast aluminum (encoder)

**Measuring Range:** 0 to 125 Inches

**Measuring Cable:** Nylon Coated Stainless Steel (.034 Dia.)

**Maximum Velocity:** 80" per second

**Measuring Cable Tension:** 24.8 ± 30% oz

**Rotational Sensitivity:** 12" ± .020 in/rev

**Maximum Retraction Acceleration:** 10 G

**Weight:** Approximately 3.3 lbs (max)

**Mechanical life of cable:** 1.3 million cycles (min)  
(1 cycle = 1 extension + 1 retraction)

## Electrical Specifications

**Supply Voltage:** 5-28 VDC available

**Voltage/Output:**

25V/V: 5-28 VDC in, Vout = Vin

**Current Requirements:** 100 mA typical + output load, 250 mA max

**Protection Level:** Reverse, over voltage and output short circuit

**Code:** Incremental

**Output Format:** 2 Channels in quadrature, with ½ cycle index gated with negative B channel

**Resolution:** Pulses per Inch (see Table 1)

**Output Termination:** M18 Connector (See Table 2)

## Environmental Specifications

**Enclosure Rating:** IP66

**Temperature:** Operating, 0° to 70°C; storage (non-operating), -25° to 90°C. Consult factory for extended temperature ratings.

**Shock:** 50 g's for 11 msec duration

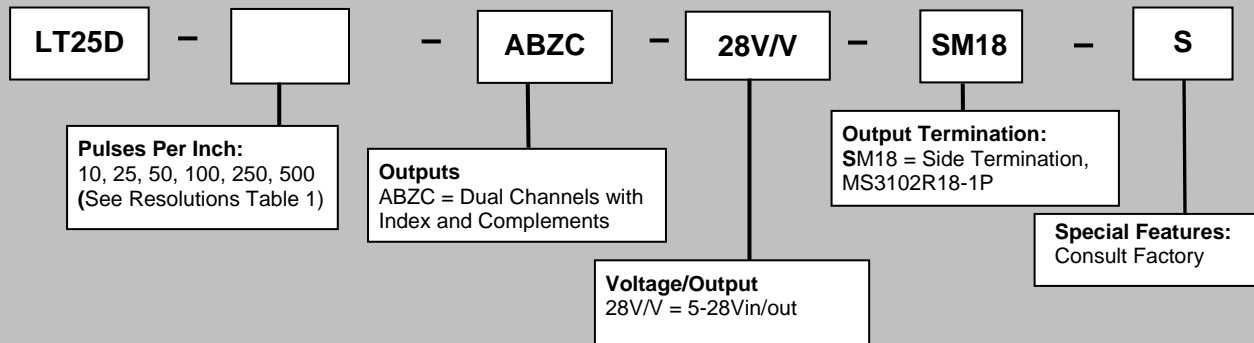
**Vibration:** 5 to 2000 Hz @ 20 g's

**Humidity:** 98% RH without condensation

## LT25 Linear Cable Position Transducer Ordering Options *For assistance, call 800-350-2727*

Use this diagram, working from left to right, to construct your model number.

Example: **LT25D-100-ABZC-28V/V-SM18**



\* For ordering information on the LT25 with Ex certification, contact factory.

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Tel: 805-968-0782 / 800-350-2727 | Fax: 805-968-3154 / 800-960-2726 | 7230 Hollister Ave., Goleta, CA 93117-2807

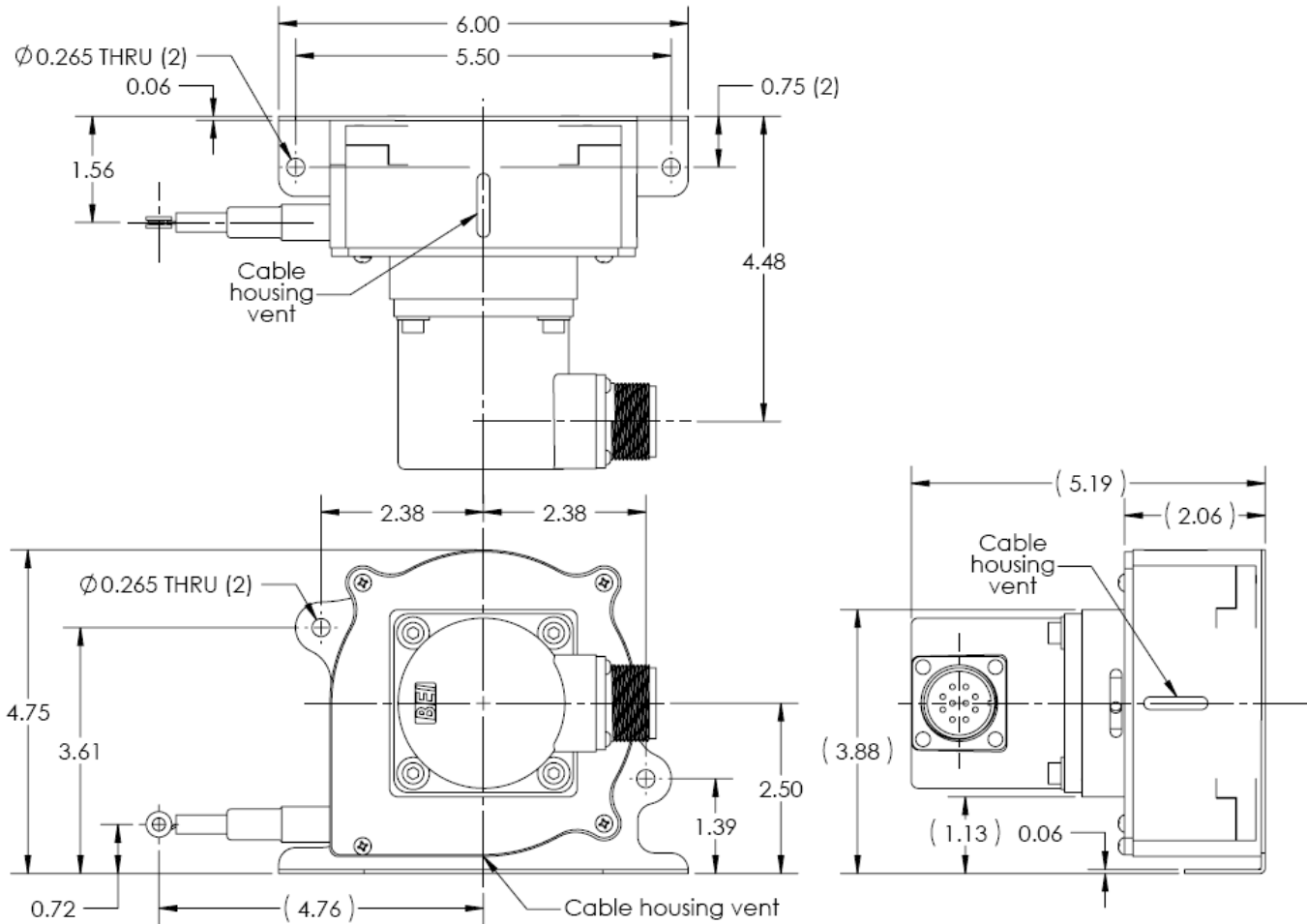
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Specification No. 02115-001 Rev.08-11

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\*Measurements in inches



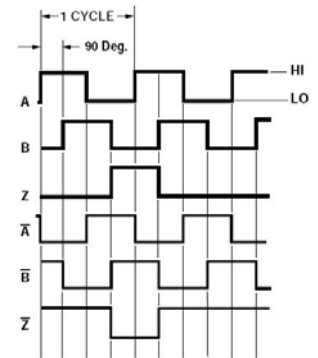
**Table 1: Resolution Options**

Pulses Per Inch	Resolution (in inches)
10	.100"
25	.040"
50	.020"
100	.010"
250	.004"
500	.002"

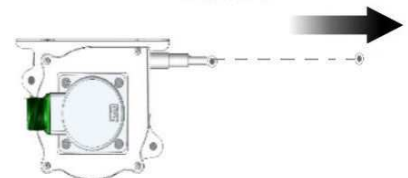
**Table 2: Output Termination**

M18 Connector	
PIN	CHANNEL
A	A
B	B
C	Z
D	+V
E	---
F	0V
G	CG
H	A/
I	B/
J	Z/

**Output Waveform**



CABLE EXTENSION



A leads B for cable extension  
B leads A for cable retraction

These commodities, technology or software, if exported from the United States must be in accordance with the Bureau of Industry, Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

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