

Model HR-LNC

Bulletin SS01046 Issue/Rev. 0.0 (9/88)

Smith Meter® PD Meter Accessories

The **Model HR-LNC** (High Resolution - Large Numeral Counter) Transmitter is used to provide a digital signal for remote instrumentation.

The transmitter output can either be single-channel with 100 pulses per revolution (of LNC right-hand wheel) or dual-channel, with 50 pulses per channel per revolution (of LNC right-hand wheel). The dual channel pulse train is overlapping and Channel 1 leads Channel 2 by 90°. This dual-channel overlapping pulse train can be used as a signal to a Smith Meter® Comparator Totalizer (CDC-45 or CDC-41) which detects and alarms on; failure of a pulse transmission line; failure of a transmitter chip; or noise on the transmission lines.

Features

- **UL-Listed, Explosion-Proof.**
- **Solid-state switching mechanism.**
- **Choice of 50 or 100** pulses per revolution of right-hand wheel.
- **One-way clutch**
- **Reliable – Long life.**

Models

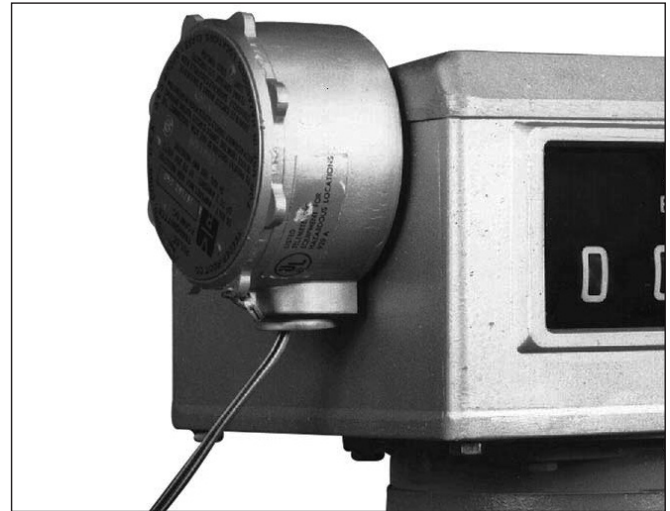
Model No.	Closures per Revolution of Right-hand Wheel
HR-LNC-100	100 pulses (Single-Channel)
HR-LNC-50	50 Pulses (Dual-Channel)

Specifications

Input Power

Normal Operation: 10 to 15 Vdc; 65 mA max. single channel; 100 mA dual channel.

Special Operation: 6 Vdc for DFR Indicator.

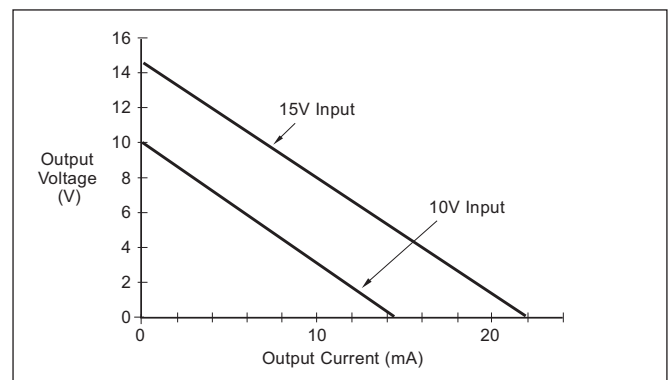


Output Voltage

Logic Off: 250 mV maximum.

Logic On:

Input Impedance (Ω)	100K	22K	1K	330
Output vs. Input Voltage (%)	99	97	60	33



On Time

50% \pm 10%. Channel 1 leads Channel 2 by 90° \pm 18°.

Switching Time

Rise Time: 0.002 seconds maximum at 1 to 10 mA.

Fall Time: 0.0005 seconds maximum.

Input Shaft Speed

250 rpm maximum.

Torque

2 oz-in (1 N·cm) maximum.

Operating Temperature

-40°F to 180°F (-40°C to 82°C).

Storage Temperature

-67°F to 257°F (-55°C to 125°C).

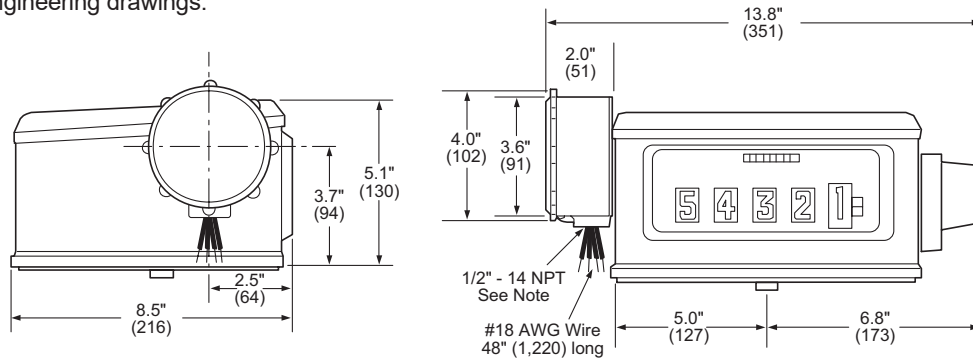
Approval

UL listed for hazardous locations: Class I, Group D, Division 1.

Dimensions

Inches (Millimeters)

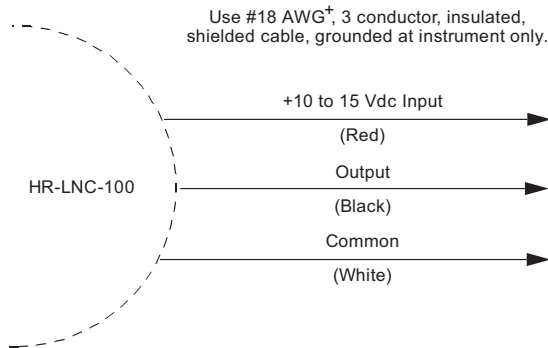
Dimensions – Inches to the nearest tenth (millimetres to the nearest whole mm), each independently dimensioned from respective engineering drawings.



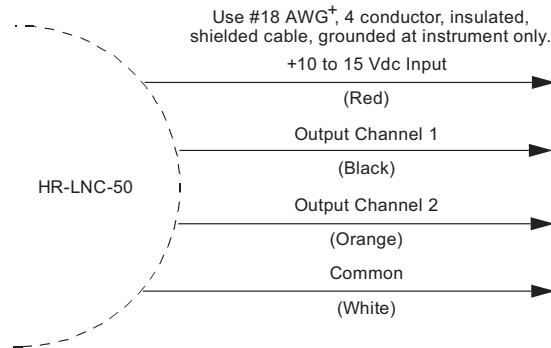
Note: It is recommended that a sufficient length of flexible conduit be used to relieve stresses on the transmitter/housing interface caused by rigid conduiting.

Transmission

Single-Channel 100 Pulse Output



Dual-Channel 50 Pulse Output/Channel



+ Maximum distance between transmitter and receiver - 2,000 feet (610 metres).

Ordering Information

Please Specify:

- Units of registration required.
- Pulse resolution required.
- Meter gearing ratio (e.g., 5:1 gallon, 1:1 barrel, etc.).

LNC transmitter can be either mounted at the factory or field-mounted. Please specify 100 pulses per rev. (Model HR-LNC-100) or 50 pulses per rev. (Model HR-LNC-50).

Revisions included in SS01046 Issue/Rev. 0.0 (9/88):

March 2019 - Editorial Change - Branding and contact information updated.

The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.