



# 951 Quik-Stik II

## The Gemco Quik-Stik II

Gemco brand position sensing products have been known for reliability and high resolution. We have taken over twenty years experience in magnetostrictive linear sensors and married it with our understanding of rugged industrial applications to develop the Quik-Stik II LDT, with patented design for high resolution magnetostrictive linear sensing.

The Quik-Stik II LDT is field proven to provide top performance & repeatability. The on-board microprocessor is programmed to compensate for variables and to linearize outputs, providing high resolution and linearity. The Quik-Stik II LDTs rugged sensing tube construction is welded stainless steel, suitable for insertion in 5000 PSI hydraulic cylinders. The electronics are enclosed behind an anodized housing with O-ring seals for IP67 indoor applications (Type 6 rating available as a special option). There is no need to re-calibrate the sensor once installed.

The Quik-Stik II LDT is available in Analog, Start/Stop Pulse, Control Pulse or Variable Pulse versions. The analog units offer 16 bits of resolution and are available with voltage or current outputs. The output format, voltage or current, is hardware specified. If voltage outputs are specified, the unit can be programmed for voltage type 5 VDC or 10 VDC, polarity, span, and zero reference point. The ability to select voltage type and polarity allows selection of 0 to 5 VDC, 0 to 10 VDC, -5 to 5 VDC, or -10 VDC to 10 VDC output. The current-type units are programmable for polarity, span, and zero reference. The units are programmable via a hand-held programmer or RS232 serial communications. As an added benefit, the 951 has an optional 12-Bit Velocity output that can provide a separate analog output of speed.

The Quik-Stik II LDT, with its high resolution and industrial construction, is at home in areas such as assembly automation, material handling, robotics, and any other industrial area where highly accurate and reliable continuous linear position sensing is needed. Units are available with radiused (curved) probes and in a rugged mill-duty housing.

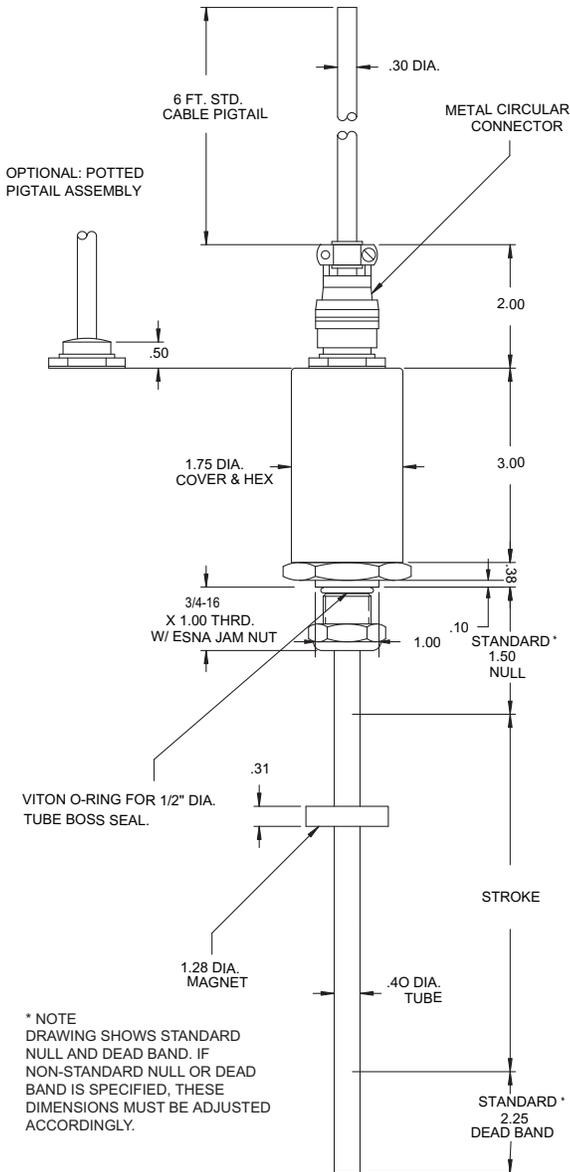


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Specifications	
Input Voltage	15 VDC to 26 VDC
Current Draw	< 200mA at 15 VDC
Output Analog (Position)	Absolute Analog Position via Digital-to-Analog Converter -10 to 10 VDC 16-Bit (65,535) Resolution 0 to 10 VDC 15-Bit (32,768) Resolution -5 to 5 VDC 15-Bit (32,768) Resolution 0 to 5 VDC 14-Bit (16,384) Resolution 4 to 20mA 16-Bit (65,535) Resolution
Analog (Velocity)	0 to +/-10 VDC 12-Bit (4,096) Resolution 0 to +/-5 VDC 11-Bit (2,048) Resolution
Digital	TTL Level Pulse/Pulse, RS422 Pulse/Pulse RS422 Pulse Width Modulated
Resolution Internal Analog Output	.001" 16 Bit ( One Part In 65,535 )
Linearity	Less than 0.05% of Full Stroke with +/- 0.002" (+/- 0.05 mm) Maximum
Repeatability	+/- 0.001% of Full Scale or +/- 0.0004" (0.102 mm), whichever is greater
Hysteresis	.001" (.025 mm) Maximum
Operating Temperature Head Electronics Guide Tube	-40° to 155° F (-40° to 70° C) -40° to 220° F (-40° to 105° C)
Operating Pressure	5000 psi Operational, 10,000 psi Spike
Span Length	1" to 300"
Null Zone	1.5"
Dead Band	2.25"
Connectors	1/4 Turn MS Connector Standard. Potted Pigtail Assembly Available Optionally
Update Time	2ms Typically
Enclosure	IP67

Specifications are subject to change without notice.

## Dimension Drawing



951 Accessories	
Part Number	Description
9511405	Hand Held Programmer
04521410	Additional Phone Jack Interface Connector
SD0488000	PC Interface Cable Program the LDT via a laptop computer
SD0457900	In Line Hand Held Cable - Plug in the hand held programmer (Programmer sold separately)
SD0514200	Velocity Programming Disk Change factory set velocity parameters.

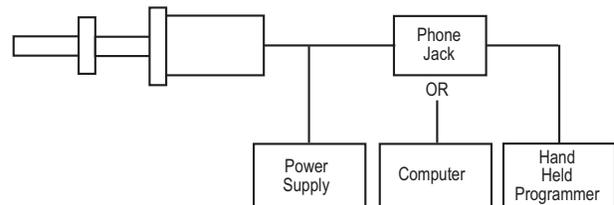
## Hand Held Programmer

The 951 Quik-Stik II LDT analog units are field programmable for voltage type, span, polarity, zero reference and velocity. This programming is accomplished via the RS232 protocol. It can be programmed using a PC or other computer capable of producing ASCII characters. For applications where a computer is not available we offer a hand held, battery operated programmer. The hand held programmer interfaces with the LDT through a small phone jack connection attached to the end of the LDT cable. Programmer operates off a 9 VDC battery (included) and the 9511405 includes all cables and hardware to interface one LDT.

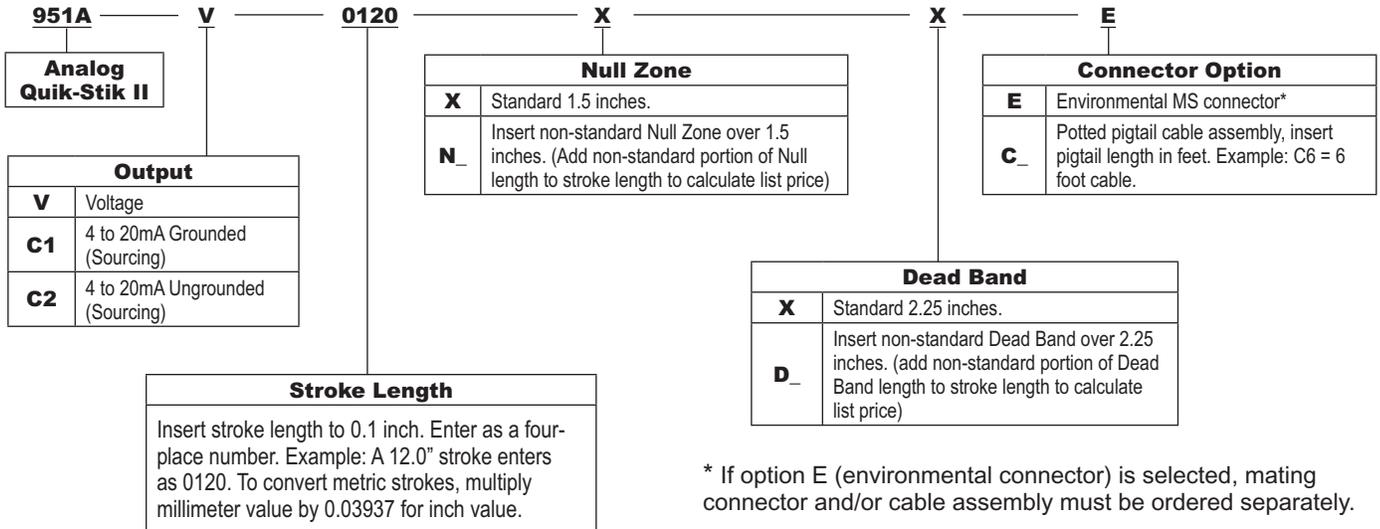


## Programming Configurations

Each style of Quik-Stik II LDT is field programmable for a variety of functions via RS232. ASCII characters are used to represent each function. Common characters are used for all styles, with functionality of the characters changing from unit to unit. This allows the hand-held programmer to be used with all styles of LDTs. The serial communications is set at 9600 baud, no parity, eight bits, one stop bit. Particular code representations will be provided with each unit.



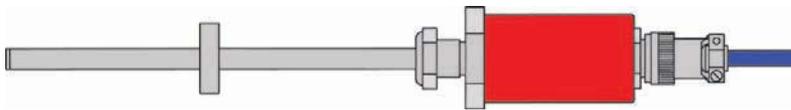
## Part Numbering



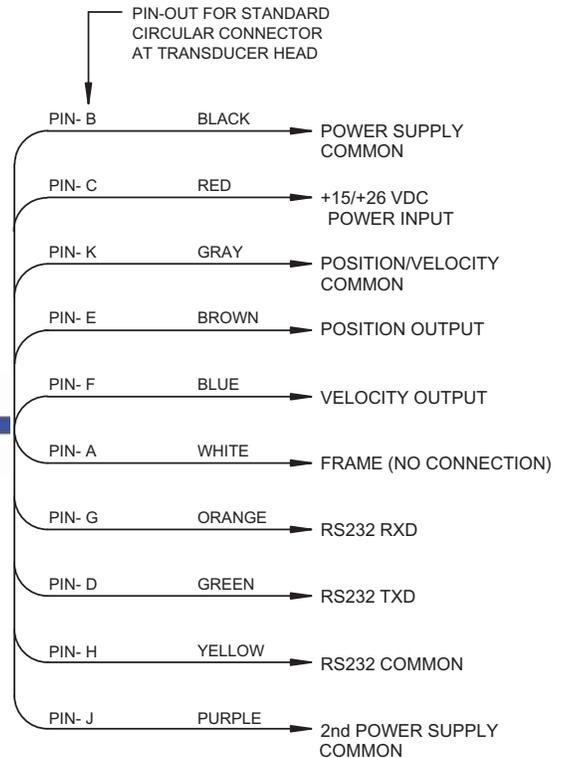
\* If option E (environmental connector) is selected, mating connector and/or cable assembly must be ordered separately.

**Note 1:** On unsupported stroke lengths greater than 4 feet, rod support bracket(s) and a special magnet should be used.

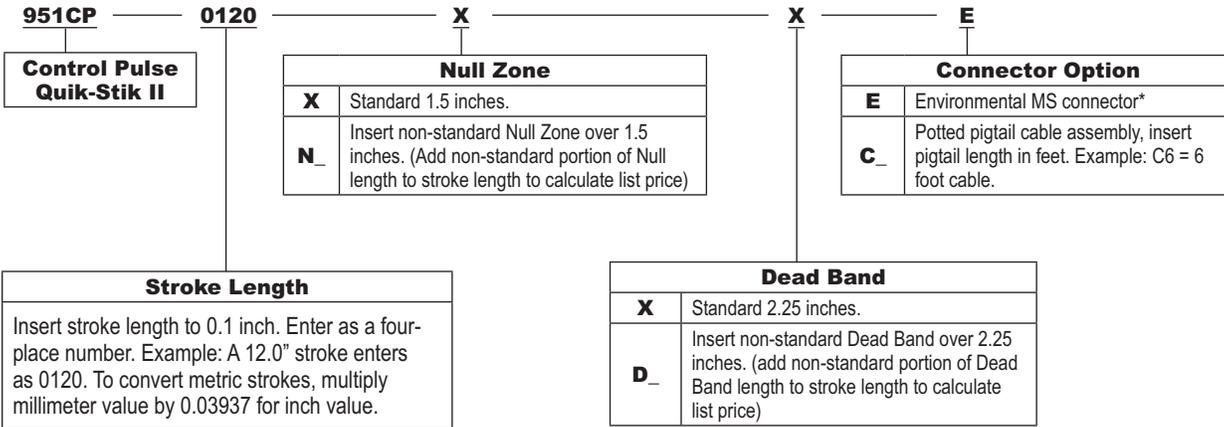
**Note 2:** Specify magnet desired as separate line item (standard magnet is SD0400800).



## Wiring Diagram



## Part Numbering



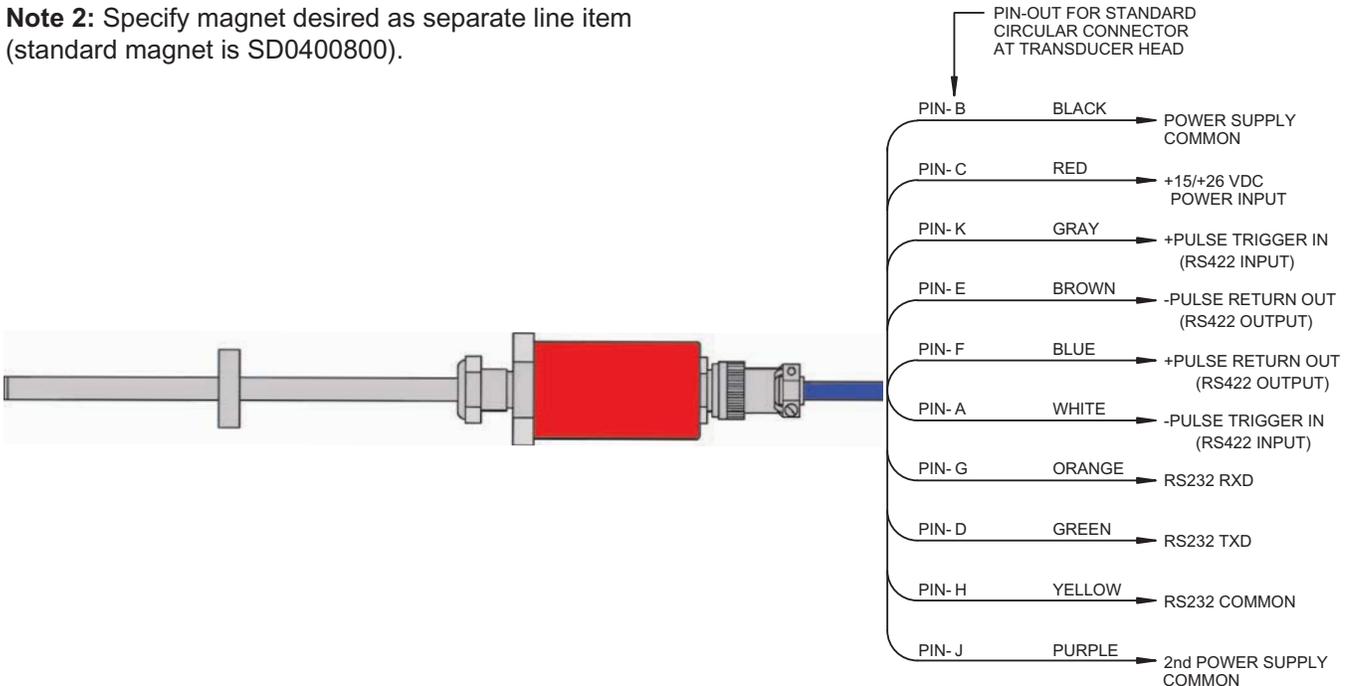
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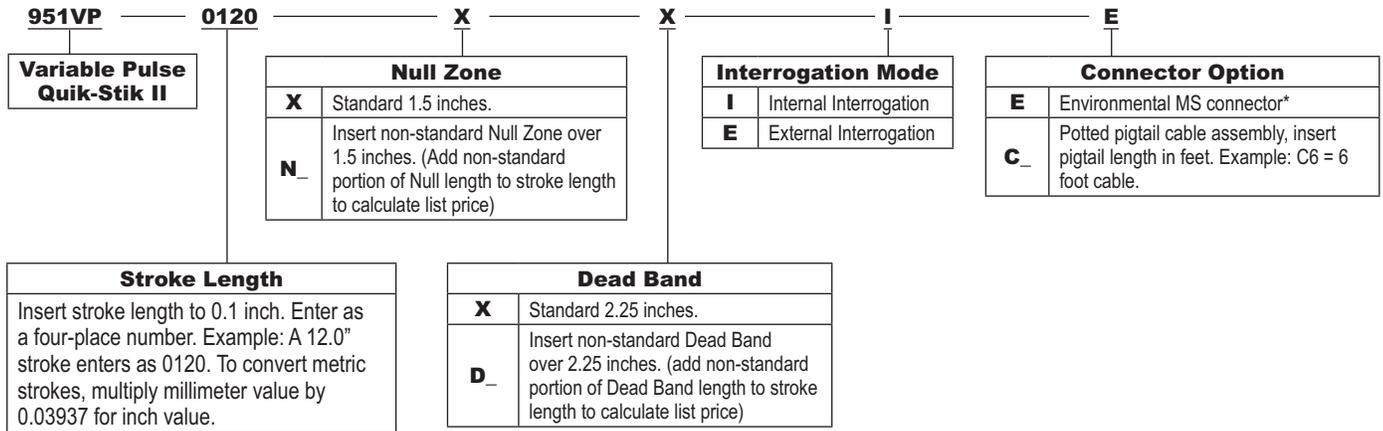
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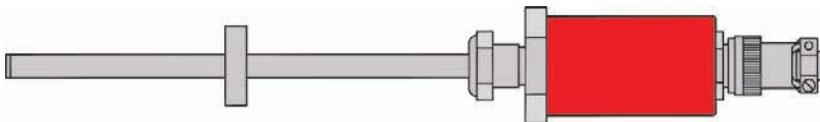
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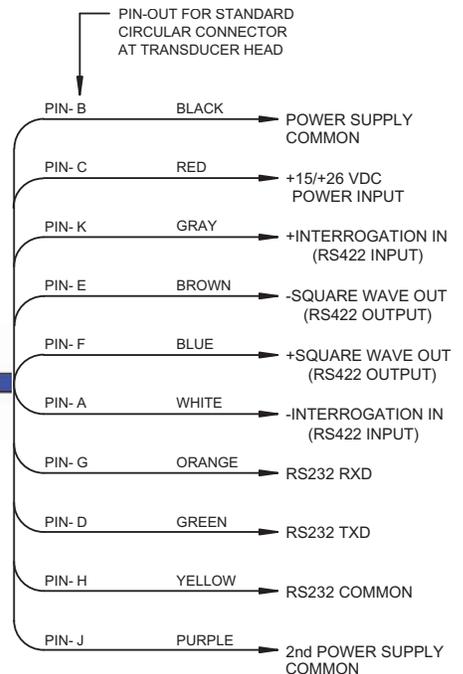
**Note 2:** Specify magnet desired as a separate line item (standard magnet is SD0400800).

**Note 3:** The unit is field programmable (via PC or hand-held programmer) for number of recirculations.

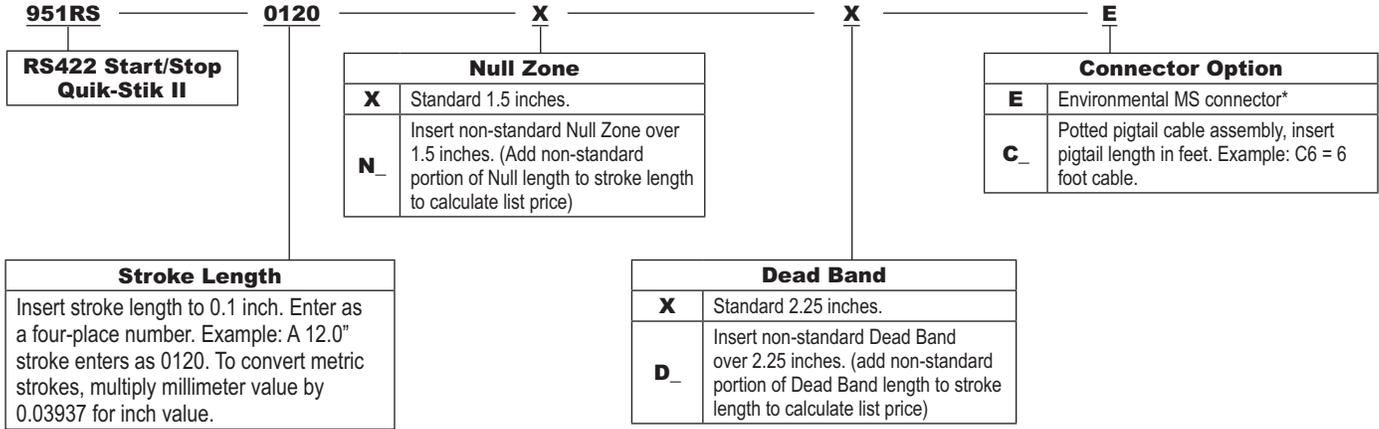
**Note 4:** Recirculations from 1-128 (in binary increments) are available. The recirculations are programmed via RS232.



## Wiring Diagram



## Part Numbering

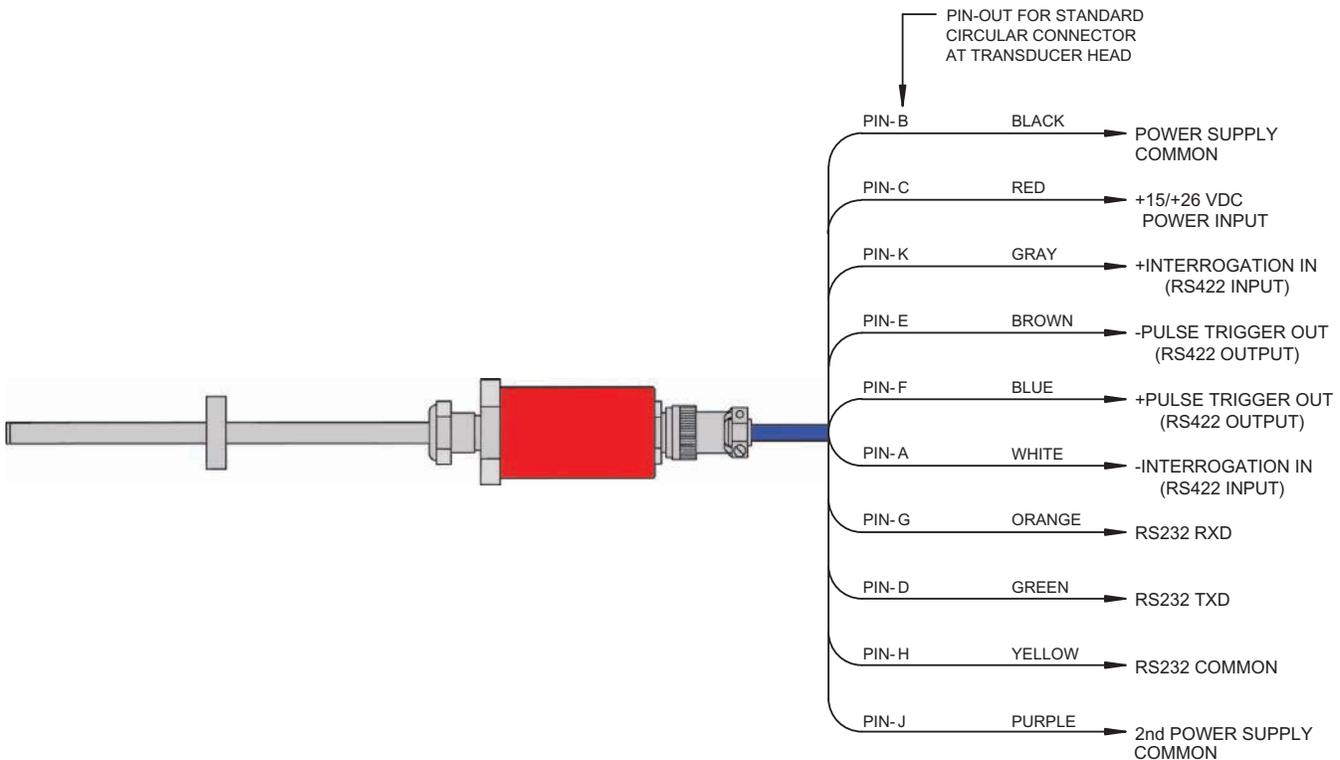


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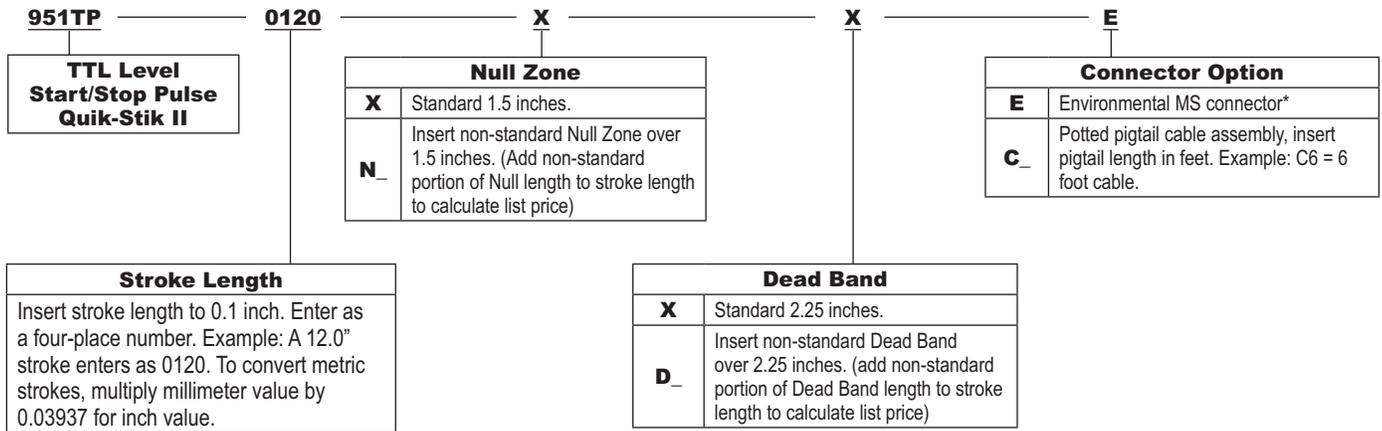
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