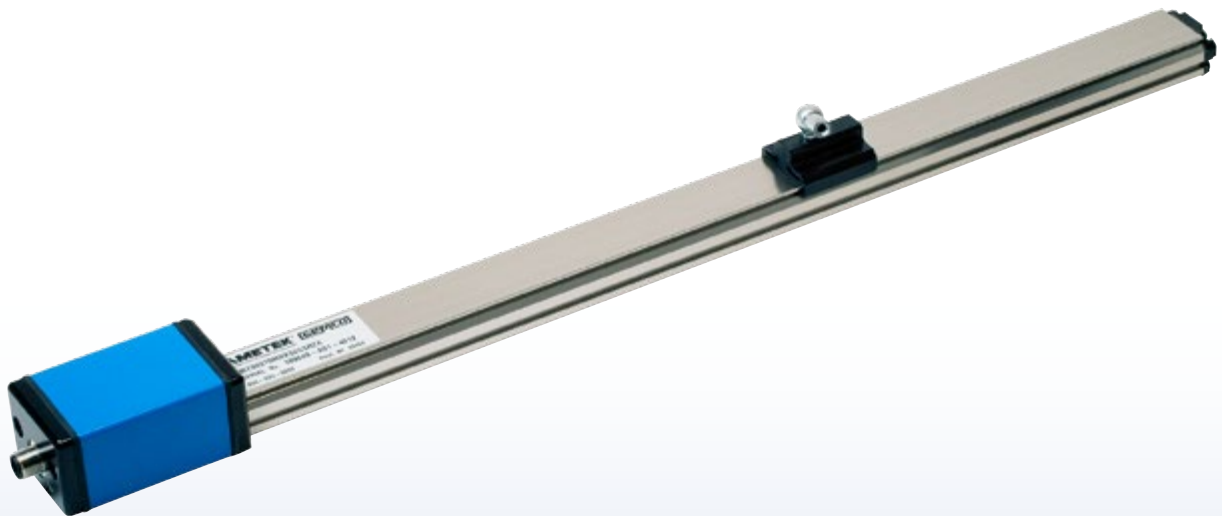




**Series 957 Brik™**

**957 Brik™**

**Ordering Guide and Technical Information  
Analog, Digital & SSI Outputs**



**ABSOLUTE PROCESS CONTROL  
KNOW WHERE YOU ARE... REGARDLESS**



## The need for automation is greater today than ever before

Linear Displacement Transducers (LDT) play an important role in factory automation. They provide accurate, reliable, absolute position feedback to help automate today's sophisticated machinery. Sensors must deliver value, be easy to set up, and interface easily into the host controller.

We know the manufacturing challenges of today are extreme, so we designed and built a sensor to meet and exceed these demands, regardless of the application or environment. Innovation, proprietary technology and decades of experience were the key to the development of our 957 Brik™ Linear Displacement Transducer.

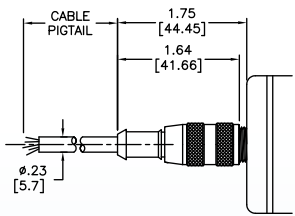
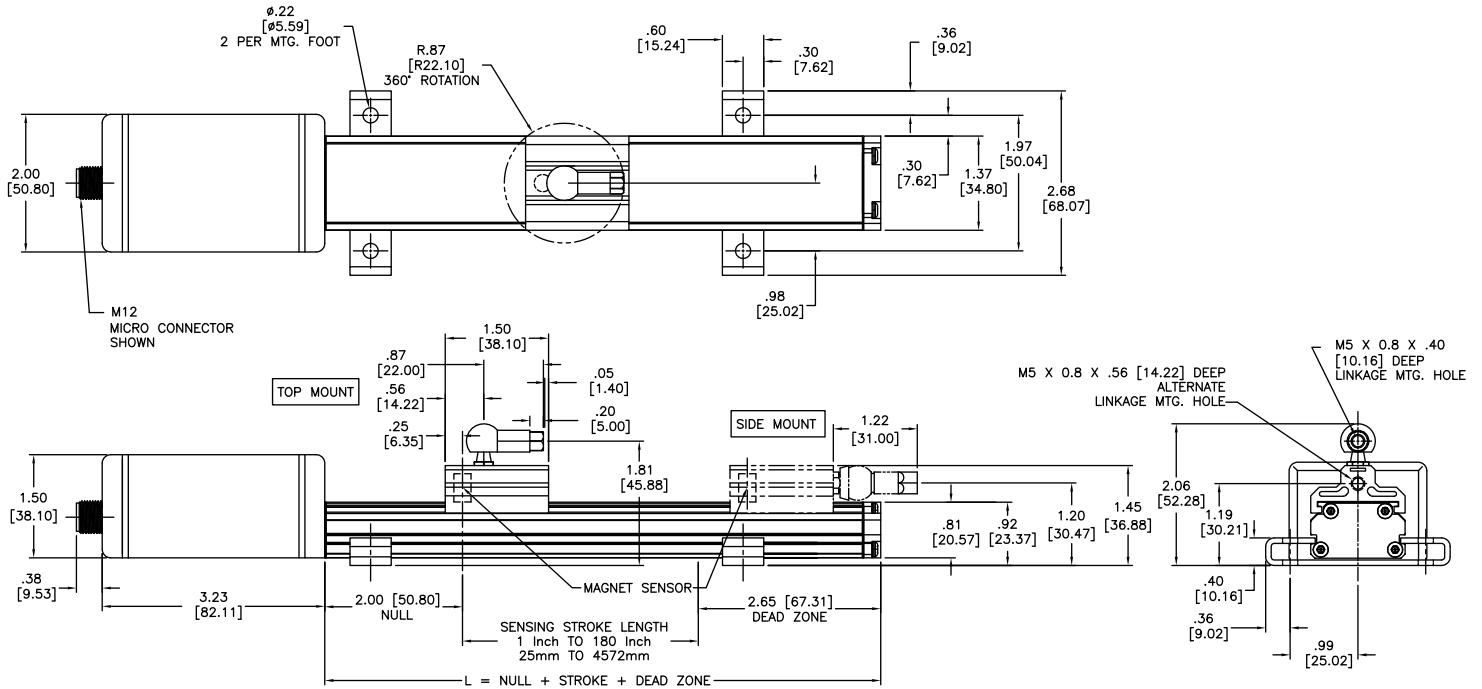
The 957 Brik™ is an accurate, programmable zero & span, auto-tuning, non-contact linear displacement transducer in a low profile aluminum extrusion. The transducer utilizes our field-proven Magnetostrictive technology to give absolute position, accurate to 0.01% of the programmable sensing distance. A variety of different outputs are available, including Analog (Voltage or Current), Digital (Start/Stop or PWM) and SSI (Serial Synchronous Interface). The 957 Brik™ has a variety of truly unique features. The first one is the wide power range of 7 to 30 VDC @ 1 watt. The second is the LDT's auto-tuning capability, the ability to sense a magnet other than the standard slide magnet and adjust its signal strength accordingly. All units have a diagnostic LED to display the health of the unit and to help aid in troubleshooting. Our Analog units offer programmable Zero & Span points, the analog output is programmable over the entire active stroke length. Units can be ordered in span lengths from 1" to 180" in 0.1" increments.

### Introducing the 957 A/D/SSI Brik™ LDT features:

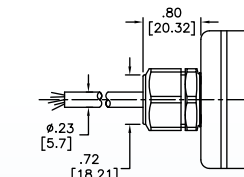
- High Vibration Resistance to 30 Gs
- High Shock Resistance to 1000 Gs
- Wide Input Power Range of 7 to 30 VDC (no need to specify different models)
- High Accuracy with High Resolution
- Applications Include All Mobile/Stationary Equipment, or Both with the Same Sensor
- Sensor Lengths up to 180"
- Durability and Reliability Exceeds Competitive Offerings
- Tri-Color Diagnostic LED Indicator Gives Quick Indication on the Status of the LDT
- Very Low Power Consumption, 1 Watt Typical, Allows Direct Connection to Display and Control Interface Modules
- Digital Output, Start/Stop, Variable Pulse (PWM), Control Pulse
- SSI (Synchronous Serial Interface), 24, 25 or 26 Bit, Binary or Gray Code, Position Update
- Analog Output, 0-10 VDC, +/-10 VDC, 0-5 VDC, +/-5 VDC, 4-20mA
- Contaminant Resistant
- IP67 Rated
- Multi-Magnet Option (Digital Start/Stop only)
- Competitive connector styles for drop-in replacement



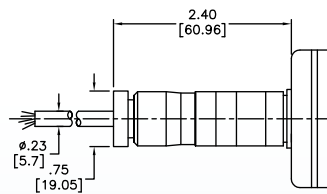
# Dimensions



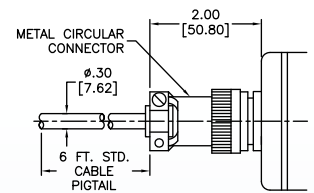
CONNECTOR OPTION S



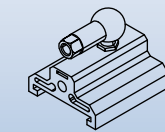
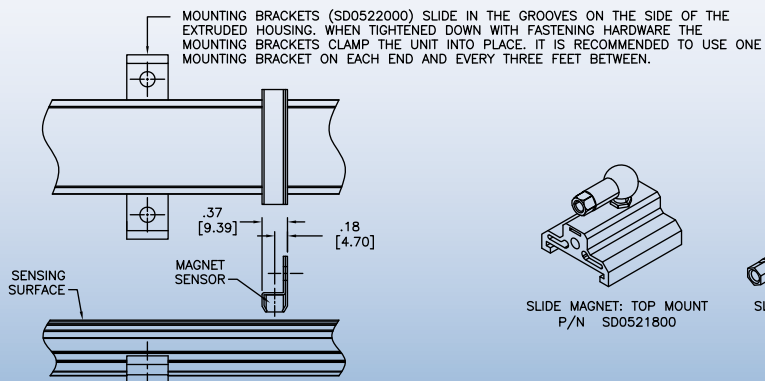
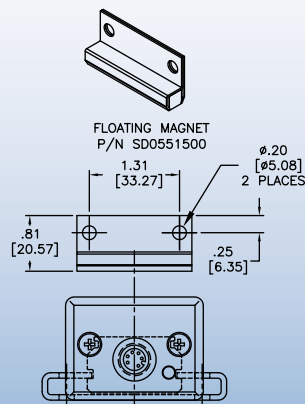
CONNECTOR OPTIONS C & H



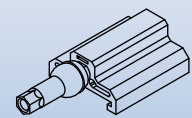
CONNECTOR OPTIONS M & B



CONNECTOR OPTION E



SLIDE MAGNET: TOP MOUNT  
P/N SD0521800



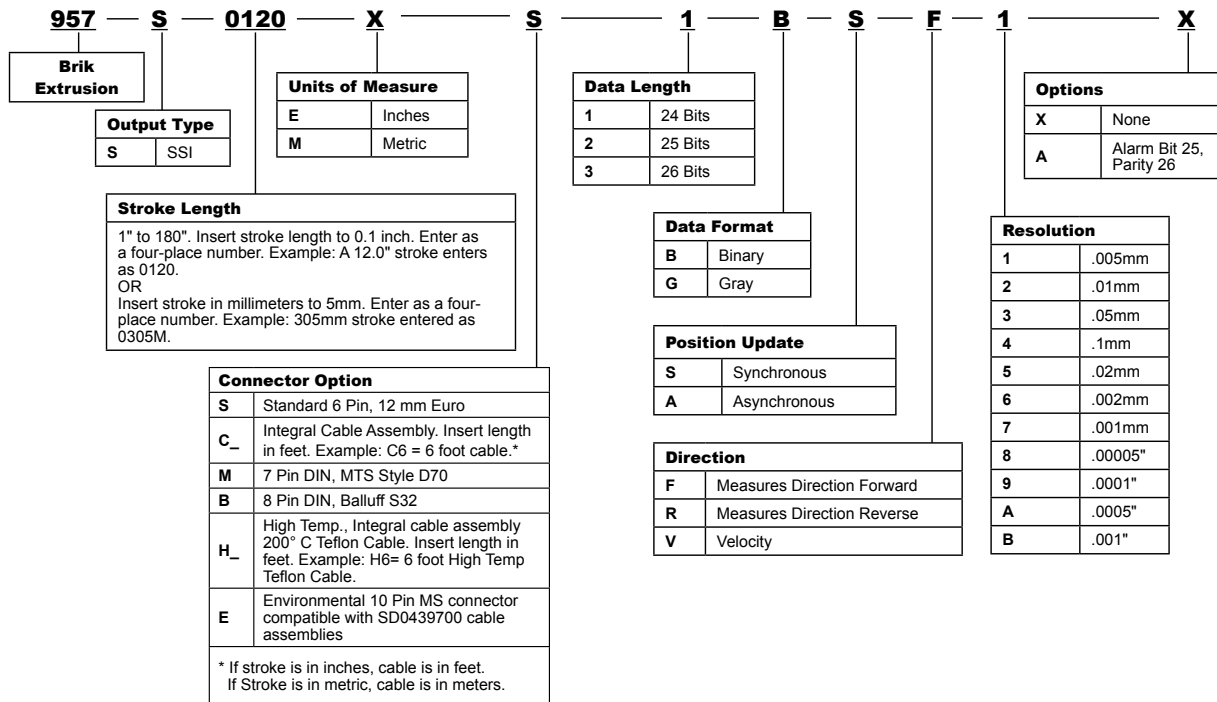
SLIDE MAGNET: SIDE MOUNT  
P/N SD0521801

# 957A/D/SSI Brik™

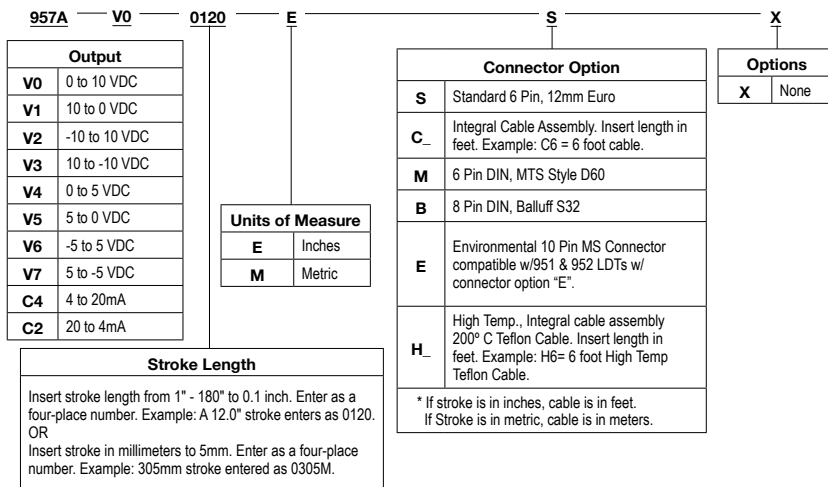
Specifications					
957SSI Connector Interface	6 Pin 12mm Euro micro, Standard. Integral cable ass'y, 7 Pin or 8 Pin DIN - option	Shock	1000 Gs IEC 60068-2-27	957SSI Output	24, 25 or 26 Bit, Binary or Gray Code (optional parity and error bit), Position Update
957D Connector Interface	6 Pin 12mm Euro micro, Standard. Integral cable ass'y, 6 Pin or 8 Pin DIN or 10 Pin MS- Optional	Vibration	30 Gs IEC 60068-2-6	957D Output	RS = RS422 Start/Stop Pulse VP = RS422 Variable Pulse (PWM), Internal/External Interrogation CP = RS422 Control Pulse TP = TTL Start/Stop Pulse
957A Connector Interface	5 Pin 12mm Euro micro, Standard Integral cable ass'y, 6 Pin or 8 Pin DIN or 10 Pin MS- Optional	957SSI Update Time	Measuring Length      300   750   1000   2000   5000mm Measurements/      3.7k   3.0k   2.3k   1.2k   0.5k sec.	957A Output Voltage Current	0-10 VDC, +/-10 VDC, 0-5 VDC, +/-5 VDC 4-20mA
Sensor Housing	Body length 3.2". Aluminum housing.	957D Update Time	Controller Dependant	957A Current Output	Max Load Resistance: 500 Ohms
Displacement	1" to 180"	957A Update Time	< 2mS Typical	957A Voltage Output	Minimum Load Resistance: 2K Ohm Output Current: Guaranteed 5mA minimum Analog Ripple: ≤1 mV maximum
Dead Band	2.50" (63.5 mm) standard, (2.25" Minimum)	Approvals	CE (EMC)	Hysteresis	0.001"
Null Zone	2.00" (50.8 mm) standard, (1.5" Minimum)	Input Voltage	7 to 30 VDC	Non-linearity	< 0.01% or +/- 0.005", whichever is greater, (+/- 0.002 Typical)
Enclosure Rating	IP67, IEC 600529	Current Draw	1 watt typical*, 40mA at 24 VDC typical	Storage Temperature	-40° to 221° F (-40° to 105° C)
957SSI Resolution	English or Metric Units Metric: 1, 5, 10, 20 micron (5 micron standard) English: .00005", .0001", .0005", .001" Consult Factory for Others.	957A Zero & Span Adjustability	Factory set at Null & Dead Band locations Field re-settable at any location within active stroke	Operating Temperature	-40° to 185° F (-40° to 85° C)
957D Resolution	Controller Dependant	957D Repeatability 957A Repeatability 957SSI Repeatability	Equal to Resolution of Controller Equal to Resolution Equal to Output Resolution	Diagnostics	Tri-Color LED beside connector/cable exit,
957A Resolution Internal Output	0.00006" 16-Bit	957SSI Measured Variables	Single Magnet Displacement, Consult Factory for Velocity or Differential Operation		

NOTE: Specifications subject to change and are based on a typical 48" stroke.  
\*One watt typical at 1ms interrogation time with no recirculations. Faster interrogation times and/or recirculations increase power consumption.

## Part Numbering - SSI



## Part Numbering - Analog



## Applications

Absolute linear position feedback for equipment and process automation in extreme applications.

### Process Automation

- Steel Mills, Primary and Secondary Metals Processing that includes Stamping, Roll Forming and Die-Casting
- Hydraulic & Pneumatic Cylinders
- Hydro Power Generation

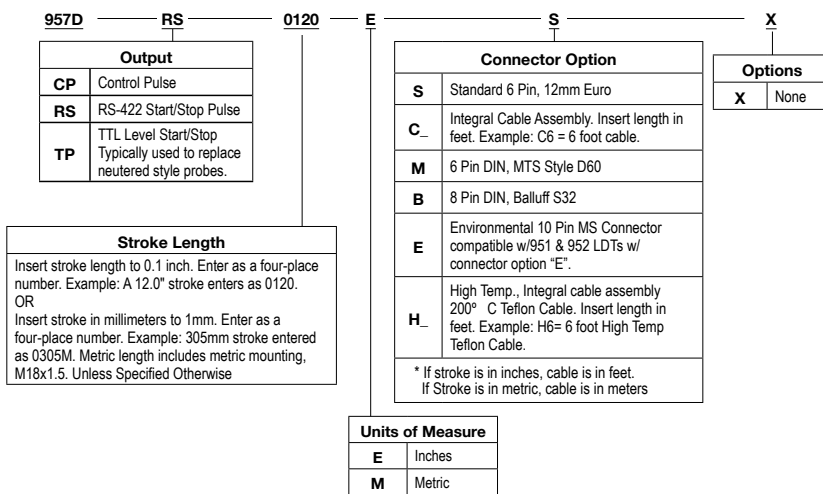
### Mobile Equipment

- Lumber and Forest Products Processing
- Refuse Collection, Vehicles, Recycling and Compaction
- Off Road

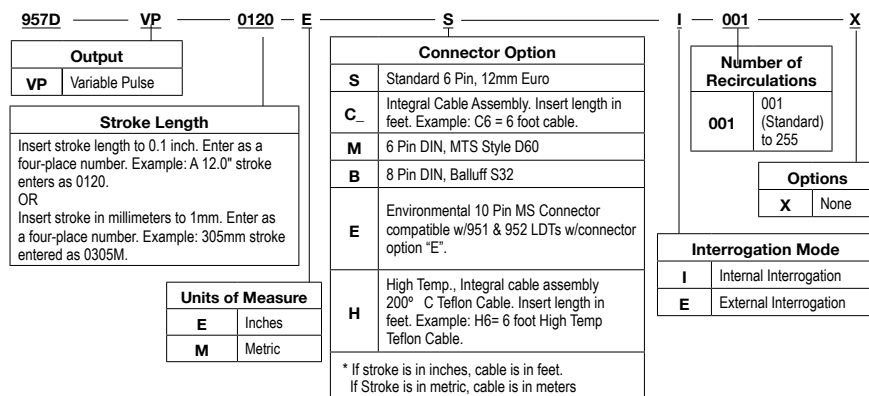
### Stationary Machines

- Sawmill, Plastic, Rubber, Injection Molding, Extrusion Equipment, Material Handling, Nonwoven, Dancers and Accumulators

## Part Numbering - Digital, CP and RS



## Part Numbering - Digital, VP (PWM)



## Benefits

- Non-contact technology (Magnetostrictive)
- Absolute feedback, Analog, Digital & SSI
- Longevity – Nothing to wear out
- Economically priced
- Programmable Zero & Span points
- Floating or Slide magnet option for easy integration to the host controller
- Wide operation temperature range with low drift
- Competitive connector styles

## Accessories

Magnets & Mounting	
Part Number	Description
SD0521800	Slide Magnet
SD0521801	Slide Magnet Side Adapter
SD0551500	Large Float Magnet
SD0522000	Mounting Foot

953D/953SSI Cable Accessories		
Part Number	Description	Use With Connector
949029L6	6 Foot, 6 Pin, Straight, 12mm Euro Cable	S
949029L12	12 Foot, 6 Pin, Straight, 12mm Euro Cable	S
949030L6	6 Foot, 6 Pin, Right Angle, 12mm Euro Cable	S
949030L12	12 Foot, 6 Pin, Right Angle, 12mm Euro Cable	S
SD0554500LXX	6 Pin DIN (953D)	M
SD0558500LXX	7 Pin DIN (953SSI)	M
SD0554600LXX	8 Pin DIN	B
Consult factory for complete accessory offerings. XX = Length in Feet.		

953A Cable Accessories		
Part Number	Description	Use With Connector
949011L6	6 Foot, 5 Pin, Straight, 12mm Euro Cable	S
949011L12	12 Foot, 5 Pin, Straight, 12mm Euro Cable	S
949012L6	6 Foot, 5 Pin, Right Angle, 12mm Euro Cable	S
949012L12	12 Foot, 5 Pin, Right Angle, 12mm Euro Cable	S
SD0553200LXX	6 Pin DIN	M
SD0553300LXX	8 Pin DIN Voltage	B
SD0553400LXX	8 Pin DIN Current	B
Consult factory for complete accessory offerings. XX = Length in Feet.		

## Other Products



MADE IN AMERICA

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