

SENC 50 PRECISION GLASS SCALE



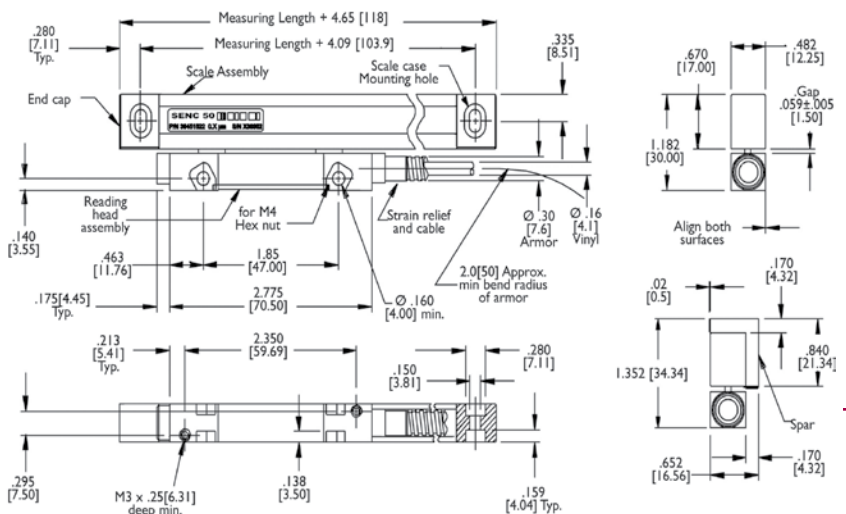
A high performance SENC 50 is a compact, flexible and versatile Precision Glass Scale Linear Encoder designed for applications involving limited or confined mounting spaces. An SENC 50 also withstands elements of contamination found in even the harshest machine shop environment. Every ACU-RITE® Precision Glass Scale incorporates our long-standing tradition of quality, reliability, durability and dependability at an affordable price.

Product Features

- Travel Lengths of 2" (.05m) - 20" (.5m)
- Multiple Resolutions with Exceptional Accuracy
0.5µm (.00002"), 1µm (.00004"), 5µm (.0002")
- Armored or Vinyl Cable Available
- Flexible Mounting Features
- Durable and Rugged Scale Case
- Position-Trac™ - Enables Quick, Easy Workpiece Zero-Reset After Power Loss



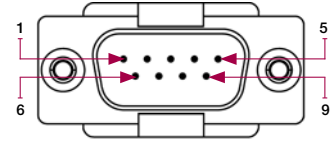
SENC 50 Assembly and Mounting Dimensions



SENC 50 Technical Data

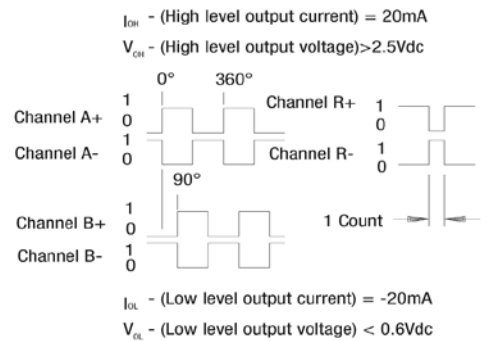
ELECTRICAL SPECIFICATIONS	DIGITAL	ANALOG
Light Source	LED (Light-Emitting Diode)	
Operating Voltage (VDC)	5.1 ± 0.1	5.0 ± 0.1
Operating Current (Max.)	0.5µm, 1µm 220mA 5µm 180 mA	75mA
Output Signals Incremental	Square-Wave Voltage Signals Channels A and B, in 90° Quadrature Relationship	Similar Phasing, but Differential Sinusoidal Current or Voltage Output
RM	One Square-Wave Signal	Differential Current or Voltage Output
Signal Levels	TTL-Level	7-16 µA _{pp} or 1.0 V _{pp} <small>(w/ 1K Ohm load)</small>
RM	TTL-Level	2-8 µA _{pp} or 1.2 V _{pp} <small>(w/ 100K Ohm load)</small>

MECHANICAL SPECIFICATIONS	DIGITAL	ANALOG
Resolution	.5, 1, 5 µm	
Grating Pitch	20 µm	
Scale Medium	Reflective from Chrome-Coated Glass	
Accuracy (@20°C) in any 1000mm	± 5µm/m	
Max. Slew Speed @ 10°C to 30°C	40 in/sec	
Max. Slew Speed @ 0°C to 40°C	21 in/sec	
Force Required to Move Reading Head	≤ 0.5 lbs.	
Operating Environment Temperature	0° to 50°C	
Relative Humidity	25% to 95% (non-condensing)	
Storage Environment Temperature	-20° to 70°C	
Storage Environment Humidity	20% to 85% (non-condensing)	
Weight (lbs)	1.1 + 0.2/ft of measuring length	
Connecting Cable (Armored or Vinyl)	Length = 5, 13, 19 ft. Connector: DE-9P	
Maximum Cable Length	20 ft.	75 ft.
Measuring Lengths	1 – 20	
Reference Mark Interval	50mm fixed or Position-Trac™	
Protection (IEC 529)	IP53 when installed as per instructions	



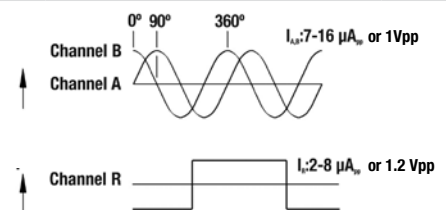
Digital Pin-Outs and Output Signals

PIN	SIGNAL	WIRE
1	No Connect	
2	Channel A+	Green
3	Channel A-	Yellow
4	Channel B+	Pink
5	Channel B-	Red
6	Ground <i>Power Supply and Signal Return</i>	White
7	Supply Voltage	Black
8	Channel R+ <i>+ Reference Mark</i>	Gray
9	Channel R- <i>- Reference Mark</i>	Brown
Shell	Shield	



Analog Pin-Outs and Output Signals

PIN	SIGNAL	WIRE
1	Ground	White w/ Green Stripe and Brown
2	Channel A+	Green
3	Channel A-	Yellow
4	Channel B+	Orange
5	Channel B-	Red
6	N/C	
7	Supply Voltage	Black
8	Channel R+ <i>+ Reference Mark</i>	Blue
9	Channel R- <i>- Reference Mark</i>	Violet
Shell	Shield	



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