# Acu-Rite Companies Inc.

An **SENC 125** precision glass scale withstands the elements of contamination found in even the harshest environment. All

### **Acu-Rite Companies Inc.**

precision glass scales incorporate our long-standing tradition of quality,



reliability, durability and dependability at an affordable price. The all new **SENC 125** precision glass scale is designed to satisfy a wide range of application needs and is available in top (**T**) and end (**E**) mount scale configurations.

# **Features**

- Resolution: .0002 (5μm)
- Travel lengths from 2 (.05m) 120 (3.04m).
- Braided cable.

- Flexible mounting features.
- 3 Year HASSLE-FREE Warranty.

2.0 [50.8] 15.75 [460] Typ. [400] Typ. [50.8] [7.1] 15.75 [400] Typ. [50.8] [7.1] 1.25 [31.7] Min. Bend Rad. Over Travel 1.75\*

9 for 8-32 or M4 SHCS mounting screws [7.1] 2.37 [60.2] 7.1 [18] 1.125 [28.6] 2.25 [57.1] 5.56 [14.2] 3.31 [7.9] 5.57 [44.5] 0.070 [1.7]

Top Mount

## End Mount

Center Support

700
[14.2] Measuring Length +6.552 [166.4]

Measuring Length +6.552 [166.4]

Mounting Hole e .500 C'Bore e .313 Thru

94
[23.9] 1.25 [31.7] Min:
Bend Radious

Over Travel 1.75:

95
[24.1]

71
[18]

31
[7.9]

37[9.4]

31
[7.9]

31
[7.9]

37[14.5]

.57[14.5]

.700
[17.8]

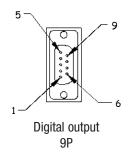
SENC 125 T/E assembly and mounting dimensions

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#### **Electrical Specifications**

Electrical Specifications	Digital	
Light Source	LED (light-emitting diode)	
Operating voltage (VDC)	5.1 ± 0.1	
Operating current (Max. mA)	100	
Output signals Incremental	Square-wave voltage signals channels A and B, in 90° quadrature relationship	
RM Signal Levels	One square-wave signal TTL-level	
RM	TTL-level	

#### **Options**



### **Mechanical Specifications**

Mechanical Specifications	Digital	
Resolution (µm)	5	
Grating pitch (µm)	20	
Scale medium	Reflective from nickel-coated glass	
Accuracy (@ 20° C) in any 1000mm	± 10μm/m	
Max. slew speed (in/sec)	30	
Force required to move reading head (lbs.)	≤ 0.75	
Operating Environment		
Temperature	0° to 40° C	
Relative Humidity	20% to 95% (non-condensing)	
Storage Environment		
Temperature	-20° to 65° C	
Humidity	20% to 95% (non-condensing)	
Weight (lbs)	1.4 + 0.05/in of measuring length	
Connecting cable	Measuring Length < 42" = 13 ft.  Measuring Length > 42" = 19 ft.	
Max. cable length (ft)	35	
Measuring lengths (in)	2 - 120 ( <b>T</b> ) 2 - 60 ( <b>E</b> )	
Reference mark interval	50mm fixed	
Protection (IEC 529)	IP53 when installed as per instructions	

#### Digital pin-outs and output signals

Pin	Signal	Wire color
_1	No Connect	
2	Channel A+	Green
3	No Connect	
4	Channel B+	Blue
5	No Connect	
6	Ground (power supply and signal return)	White
7	Supply Voltage	Brown
8	Channel R+ (+Reference Mark)	Pink
9	No Connect	
Shell	Shield	

