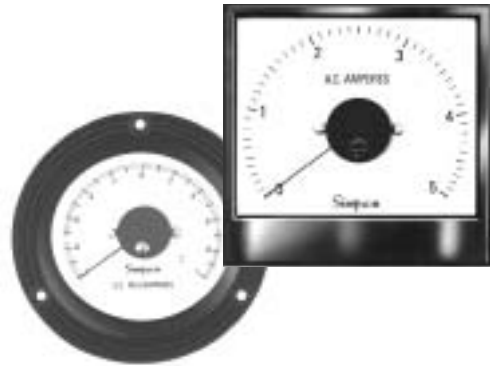




- More Than Double the Standard Scale Length
- Zero Adjust from Front Panel
- Two Popular Sizes: 3-1/2", 4-1/2"
- Round or Rectangular Case Styles
- $\pm 2\%$  of Full Scale Accuracy



Model Number	Size	Meter Movement
2523	3-1/2"	Self-shielding
2123L	3-1/2"	Self-shielding
2524	4-1/2"	Self-shielding

Look to the 250° Long Scale analog meters for a full 250° readability that provides more than double the scale length of the standard 90° or 100° movements. Simpson's 250° panel meters are designed for applications that require high-resolution readings - all in a compact and attractive design.

mounted on steel panels. These easy-to-read instruments are available in either sealed round metal or in molded square phenolic cases with glass windows.

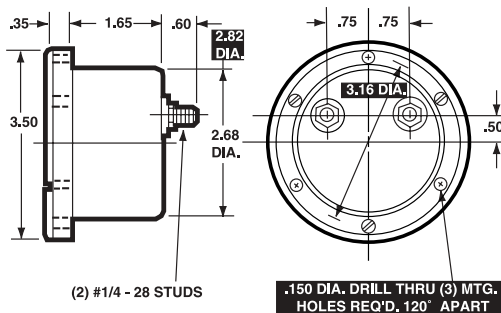
They are self-shielded, permanent magnet, moving coil instruments with nonmagnetic pivots and spring-backed jewels. The movement construction allows meter to be

The zero adjust is conveniently located on the external front portion of the meter. Two different standard sizes of 3-1/2" and 4-1/2" are available in selected current ranges. This style meter is ideal for other electrical functions. See "Function Reference Table."

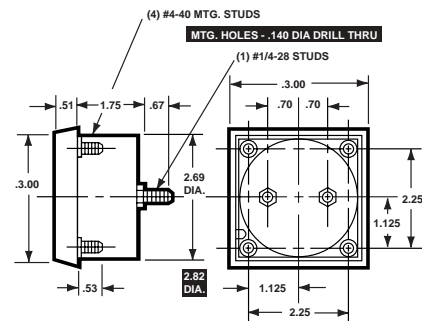
### Dimensions and Compatibility

3-1/2"-Model 2523

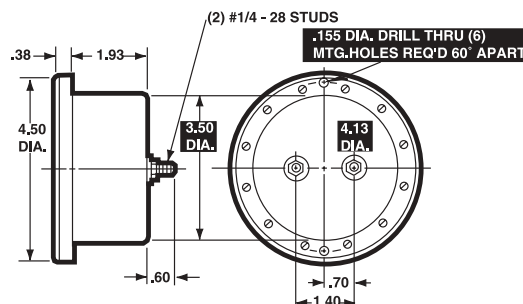
1 = Panel Meter Cut-out Dimensions



3-1/2"-Model 2123L



4-1/2" Model 2524



## Specifications

<b>Accuracy:</b>	±2% full scale (F.S.)
<b>Movement:</b>	Self-shielded, permanent magnet
<b>Suspension:</b>	Pivot and jewel
<b>Tracking:</b>	±3%
<b>Shielding:</b>	Calibration is unaffected by magnetic panel mounting.
<b>Response Time:</b>	1.5 seconds maximum
<b>Overload (1 sec.):</b>	10 times F.S.
<b>Overload (Continuous):</b>	1.5 times F.S.
<b>Repeatability:</b>	2%
<b>Dial:</b>	Sharp clear scale. Each dial arc is calibrated to track the specific type of movement used.

<b>Case:</b>	Models 2523 & 2524: Round metal Model 2123L: Square, black phenolic
<b>Resistance:</b>	±15%
<b>Operating Temperature:</b>	-4°F to +149°F (-20°C to +65°C)
<b>Pointer:</b>	Red, knife-edge
<b>Scale Length:</b>	Model 2523 & 2123L: 4.77" (121.16mm) Model 2524: 6.54" (63.0mm)
<b>Net Weight:</b>	Model 2523 & 2123L: 8oz (230g) Model 2524: 9oz (260g)

## Ordering Information

### DC Microammeters Self-Shielding Meter Movement

Range	Approx. Impedance (Ohms)	Model/Size and Catalog Number		
		3-1/2" Model 2523	3-1/2" Model 2123L	4-1/2" Model 2524
0-50	8000	17970	17910	17980
0-100	4200	17971	17911	17981
0-500	340	17972	17912	17982

### DC Milliammeters Self-Shielding Meter Movement

Range	Approx. Impedance (Ohms)	Model/Size and Catalog Number		
		3-1/2" Model 2523	3-1/2" Model 2123L	4-1/2" Model 2524
0-1	135.0	17973	17913	17983
0-10	10.0	17974	< >	17984
0-500	0.2	17975	< >	17985
1-0-1	50.0	17996	< >	17997

< > Available on special order.

### DC Current Meters Self-Shielding Meter Movement

Range	Approx. Impedance (Ohms)	Model/Size and Catalog Number		
		3-1/2" Model 2523	3-1/2" Model 2123L	4-1/2" Model 2524
0-10	.005	17976	< >	17986

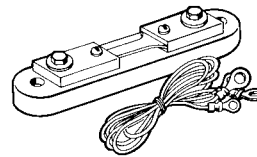
< > Available on special order.

## Accessories

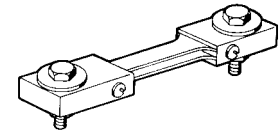
### External Portable and Switchboard Shunts

These shunts are adjusted for a 50 millivolt drop for use with switchboard and panel current meters where external shunts are required. Portable shunts have phenolic base and accept up to 200 amperes. Accuracy ±1%, 5' leads (0.065Ω resistance) included.

#### Portable



#### Switchboard



#### Portable 50mV Shunts

Range	Cat. Number
1	06700
5	06703
10	06704
15	06705
25	06707
30	06708
50	06709
75	06711
100	06713
150	06714
200	06715

#### Switchboard 50mV Shunts

Range	Cat. Number
100	06500
150	06503
200	06504
250	06505
300	06506
400	06507
500	06508

#### Portable 100mV Shunts\*

Amps	Cat. Number
10	06716
100	06717

\*leads not included

## Function Reference Table

For your convenience, the table below lists Long Scale models for other electrical monitoring functions with page number reference.

Function	Section	Page
AC Current	E	25
AC Voltage	E	45
DC Voltage	E	85