



DC Voltage

Rugged Seal Style

- Rugged Metal Case for Rigorous Environments
- Commercially Sealed, Moisture and Dust Proof
- Calibration Not Affected by Steel Panel Mounting
- Metal Cased and Shielded
- O-Ring Sealed Zero Adjust and Electrical Termination
- Sizes: 3-1/2" and 4-1/2"

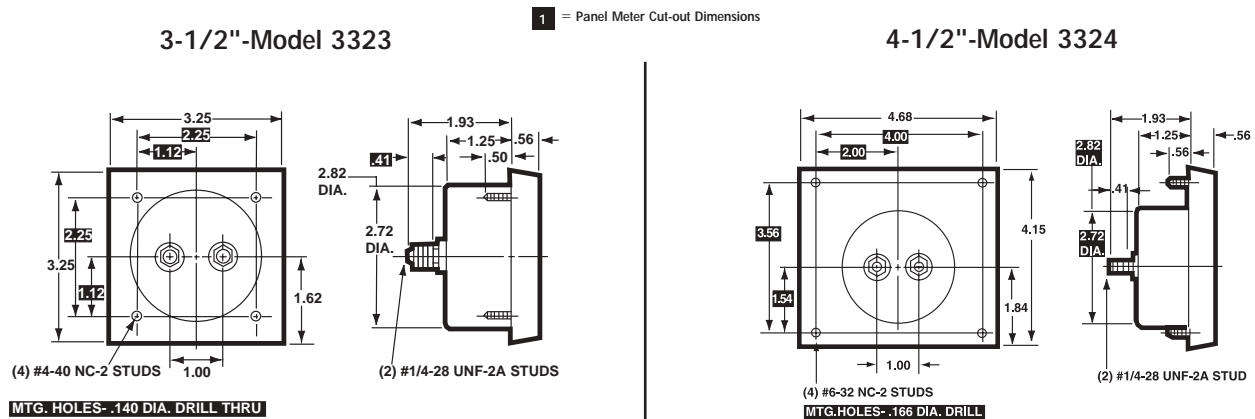


| Model Number | Size | Meter Movement |
|--------------|--------|----------------|
| 3323 | 3-1/2" | Annular |
| 3324 | 4-1/2" | Annular |

Specifically designed for harsh environments, Simpson's Rugged Seal panel meters are ideal for use in field test equipment or wherever rigorous environmental conditions are encountered. This line of panel meters offers a stylish look with its black metal case and clear glass window. The metal case gives complete magnetic isolation for steel panel mounting, where stray magnetic fields can induce errors in your reading. In addition, each meter is moisture, dirt, and dust proof. For added environmental protection, both zero adjust and electrical terminals are O-ring sealed.

The Rugged Seal meters are available in two convenient sizes; 3-1/2" and 4-1/2". All DC units have self-shielding meter movements with pivot and jewel suspension and offer $\pm 2\%$ of full scale (F.S.) accuracy. This style meter is ideal for many other electrical functions. See the "Function Reference Table."

Dimensions and Compatibility



Compatibility Reference Table

| Manufacturer | Size/Model | |
|---------------------|------------|--------|
| | 3-1/2" | 4-1/2" |
| Modutec K Series | K3S- | K4S- |

Specifications

| | | | |
|------------------------|---|------------------------|--|
| Accuracy: | ±2% F.S. | Resistance: | ±15% |
| Movement: | Annular, self-shielding | Operating Temperature: | -4°F to +149°F (-20°C to +65°C) |
| Suspension: | Pivot and jewel | Case: | Metal shielded cover with black matte finish |
| Tracking: | ±3% | Pointer: | Knife-edge with black matte finish |
| Shielding: | Calibration is unaffected by magnetic panel mounting. | | |
| Response Time: | 1.5 seconds maximum | Scale Length: | Model 3323: 2.74" (70.0mm) |
| Overload (1 sec.): | 10 times F.S. | | Model 3324: 4.05" (103.0mm) |
| Overload (Continuous): | 1.5 times F.S. | | |
| Repeatability: | 2% | Net Weight: | Model 3323: 12oz (0.340kg) |
| Dial: | Sharp clear scale. Each dial arc is calibrated to track the specific type of movement used. | | Model 3324: 17oz (0.48kg) |

Ordering Information

DC Millivoltmeters Self-Shielding Meter Movement

| Range | Approx. Impedance (Ohms) | Model/Size and Catalog Number | |
|-------|--------------------------|-------------------------------|-------------------|
| | | 3-1/2" Model 3323 | 4-1/2" Model 3324 |
| 0-50 | 10 | 16062 | 16157 |

DC Voltage Meters Self-Shielding Meter Movement

| Range | Approx. Impedance (Ohms) | Model/Size and Catalog Number | |
|-------|--------------------------|-------------------------------|-------------------|
| | | 3-1/2" Model 3323 | 4-1/2" Model 3324 |
| 0-1.5 | 1000 ohms per volt | 16000 | <> |
| 0-10 | | 16005 | <> |
| 0-15 | | 16010 | <> |
| 0-25 | | 16015 | <> |
| 0-50 | | 16020 | <> |
| 0-100 | | 16025 | <> |
| 0-500 | | 16030 | <> |

<> Available on special order.

Function Reference Table

For your convenience, the table below lists Rugged Seal models for other electrical monitoring functions and page reference.

| Function | Section | Page |
|------------|---------|------|
| AC Current | E | 23 |
| AC Voltage | E | 43 |
| DC Current | E | 63 |

Engineer's Notes