

**Round Style
 Analog Panel Meters**



- UL Recognized - File # E91015
 Except for the Wattmeters & Frequency Meters
- Glass Window for optimum viewing
- Rugged black plastic case
- Black spade-type pointer for easy distant reading



Ordering Information

| AC Microammeter Rectifier Type Self-Shielding Movement | | |
|--|--------------------------|------------------------------|
| Range | Approx. Impedance (Ohms) | Model / Size and Catalog No. |
| | | 3 - 1/2" Model 45 |
| 0 - 100 | 3400 | 04080 |

| AC Milliammeters Iron Vane & Rectified Movement * | | | | |
|---|---------------------------------|------------------------------|-------------------|---------------------|
| Range | Approx. Impedance (Ohms) @ 60Hz | Model / Size and Catalog No. | | |
| | | 2 - 1/2" Model 155 | 3 - 1/2" Model 55 | 3 - 1/2" Model 45 * |
| 0 - 1 | 600 | <> | <> | 06820 * |
| 0 - 5 | 200 | <> | <> | 06840 * |
| 0 - 15 | 887.0 | <> | 05380 | <> |
| 0 - 50 | 80.0 | <> | 05400 | <> |
| 0 - 100 | 717.2 | <> | 05410 | <> |
| 0 - 150 | 8.76 | <> | 35069 | <> |
| 0 - 250 | 3.1 | 06080 | 05420 | <> |
| 0 - 500 | .9 | <> | 05430 | <> |

* Rectified Models

Ordering Information


| AC Ammeters Iron Vane Movement | | | |
|---|----------------------------------|------------------------------|-------------------|
| Range | Approx. Impedance (Ohms) @ 60 Hz | Model / Size and Catalog No. | |
| | | 2 - 1/2" Model 155 | 3 - 1/2" Model 55 |
| 0 - 1 | .213 | 02100 | 00950 |
| 0 - 1.5 | .105 | < > | 00960 |
| 0 - 2 | .065 | 02120 | 00970 |
| 0 - 3 | .028 | 02130 | 00980 |
| 0 - 5 | .008 | 02140 | 00990 |
| 0 - 10 | .004 | 02150 | 01001 |
| 0 - 15 | .0025 | 02160 | 01010 |
| 0 - 25 | .002 | 02170 | 01020 |
| 0 - 30 | .0015 | 02180 | 01030 |
| 0 - 50 | .001 | 02190 | 01040 |
| 0 - 75 | .0002 | < > | 03432 |
| 0 - 75 | .008 | 02200 * | < > |
| 0 - 100 | .008 | 02210 * | 01060 * |
| 0 - 150 | .008 | 02220 * | 01070 * |
| 0 - 200 | .008 | < > | 01080 * |
| 0 - 250 | .008 | 02240 * | 01090 * |
| 0 - 300 | .008 | < > | 01100 * |
| 0 - 500 | .008 | 02260 * | 01110 * |
| < > Available on special order | | | |
| * These meters require use of an external current transformer | | | |


| AC Voltmeters Iron Vane Movement | | | |
|---|----------------------------------|------------------------------|-------------------|
| Range | Approx. Impedance (Ohms) @ 60 Hz | Model / Size and Catalog No. | |
| | | 2 - 1/2" Model 155 | 3 - 1/2" Model 55 |
| 0 - 5 | 33 | < > | 08410 |
| 0 - 10 | 133 | < > | 08420 |
| 0 - 15 | 300 | < > | 08430 |
| 0 - 25 | 833 | < > | 08440 |
| 0 - 50 | 3,333 | 09290 | 08450 |
| 0 - 100 | 16,166 | < > | 08460 |
| 0 - 150 | 25,000 | 09310 | 08470 |
| 0 - 250 | 41,166 | 09320 | 08480 |
| 0 - 300 | 50,000 | 09330 | 08490 |
| 0 - 500 | 83,333 | 09340 * | 08500 * |
| 0 - 750 | 125,000 | < > | 08510 * |
| < > Available on special order | | | |
| * External multipliers (Model 183) are furnished on AC meters having a range of 500 volts or higher | | | |

Ordering Information

| AC Voltmeter Rectifier Type Self-Shielding Movement | | |
|---|----------------------------------|------------------------------|
| Range | Approx. Impedance (Ohms) @ 60Hz | Model / Size and Catalog No. |
| | | |
| 0 - 150 | 300K | 08010 |

| 4-20mA Process Meters Dial indicates 0-100 Percent | | |
|--|--------------------------|------------------------------|
| Range | Approx. Impedance (Ohms) | Model / Size and Catalog No. |
| | | |
| 4- 20 | 5.0 | 35022 |

| Wattmeters - Dynamometer Type | | | Not  |
|-------------------------------|---------|------|---|
| Range | Maximum | | Model / Size and Catalog No. |
| | Volts | Amps | 3 - 1/2" Model 75 |
| 0 - 300 | 150 | 4.0 | 10600 |

| Frequency Meters Self-Shielding Movement | | | | Not  |
|--|---------|------------------------------|----------------------|---|
| Range | Voltage | Model / Size and Catalog No. | | |
| | | 2 - 1/2" Model 185 | 3 - 1/2" Model 85 | |
| 45 - 55 Hz | 120V | 35154 | 35160 | |
| 55 - 65 Hz | 120V | 35156 | 35162 | |
| 380 - 420 Hz | 120V | 35158 | 35164 | |
| 45 - 55 Hz | 240V | 35155 | 35161 | |
| 55 - 65 Hz | 240V | 35157 | 35163 | |
| 380 - 420 Hz | 240V | 35159 | 35165 | |

| DC Microammeters Self-Shielding Movement | | | |
|--|----------------------------------|------------------------------|----------------------|
| Range | Approx. Impedance (Ohms) @ 60Hz | Model / Size and Catalog No. | |
| | | 2 - 1/2" Model 125 | 3 - 1/2" Model 25 |
| 0 - 50 | 1800 | 04210 | 03760 |
| 0 - 100 | 1800 | 04220 | 03770 |
| 0 - 200 | 1100 | 04230 | 03780 |
| 0 - 500 | 90 | 04240 | 03790 |
| 50-0-50 | 1800 | 04194 | 03810 |
| 100-0-100 | 1100 | 04196 | 03820 |
| 500-0-500 | 43 | < > | 03830 |

< > Available on special order

Ordering Information

| DC Taut-Band Microammeters Self-Shielding Movement | | | |
|--|---------------------------------|------------------------------|--------------------|
| Range | Approx. Impedance (Ohms) @ 60Hz | Model / Size and Catalog No. | |
| | | 2 - 1/2" Model 125T | 3 - 1/2" Model 25T |
| 0 - 10 | 4900 | 04197 | < > |
| 0 - 15 | 1960 | < > | 03741 |
| 0 - 25 | 1960 | 04201 | 03751 |
| 0 - 50 | 960 | < > | 03761 |
| 0 - 100 | 500 | < > | 03771 |
| < > Available on special order | | | |

| DC Milliammeters Self-Shielding Movement | | | |
|--|---------------------------------|------------------------------|-------------------|
| Range | Approx. Impedance (Ohms) @ 60Hz | Model / Size and Catalog No. | |
| | | 2 - 1/2" Model 125 | 3 - 1/2" Model 25 |
| 0 - 1 | 43.0 | 05580 | 04610 |
| 0 - 1.5 | 43.0 | < > | 04620 |
| 0 - 5 | 2.0 | 05610 | 04640 |
| 0 - 10 | 10.0 | 05620 | 04650 |
| 0 - 15 | 6.6 | 05630 | 04660 |
| 0 - 25 | 4.0 | 05650 | 04680 |
| 0 - 50 | 2.0 | < > | 04690 |
| 0 - 75 | 1.3 | 05670 | < > |
| 0 - 100 | 1.0 | 05680 | 04710 |
| 0 - 150 | .66 | 05690 | 04720 |
| 0 - 200 | .5 | 05700 | 04730 |
| 0 - 250 | .5 | 05710 | < > |
| 0 - 300 | .33 | < > | 04750 |
| 0 - 500 | .2 | 05730 | 04760 |
| 0 - 1000 | .05 | < > | 04780 |
| < > Available on special order | | | |

Ordering Information

| DC Ammeters Self-Shielding Movement | | | |
|---|---------------------------------|------------------------------|-------------------|
| Range | Approx. Impedance (Ohms) @ 60Hz | Model / Size and Catalog No. | |
| | | 2 - 1/2" Model 125 | 3 - 1/2" Model 25 |
| 0 - 1 | .050 | 01460 | 00005 |
| 0 - 2 | .025 | < > | 00030 |
| 0 - 3 | .0166 | 01490 | 00040 |
| 0 - 5 | .010 | 01500 | 00050 |
| 0 - 10 | .005 | 01510 | 00060 |
| 0 - 15 | .0033 | 01520 | 00070 |
| 0 - 25 | .002 | 01530 | 00080 |
| 0 - 30 | .0017 | 01540 | 00090 |
| 0 - 50 | .001 | 01550 | 00099 |
| 0 - 75 | 10.0 | 01560 * | 00110 * |
| 0 - 100 | 10.0 | 01570 * | 00120 * |
| 0 - 150 | 10.0 | 01580 * | 00130 * |
| 0 - 200 | 10.0 | 01590 * | 00140 * |
| 0 - 250 | 10.0 | < > | 00151 * |
| 0 - 300 | 10.0 | 01610 * | 00160 * |
| 0 - 500 | 10.0 | 01620 | 00170 * |
| 0 - 750 | 10.0 | < > | 00177 * |
| 0 - 1000 | 10.0 | < > | 00188 * |
| 15-0-15 | .0033 | < > | 00200 |
| 30-0-30 | .0017 | 01660 | 00210 |
| 50-0-50 | .001 | 01670 | 00220 |
| 75-0-75 | 20.0 | 35066 | 35037 * |
| * DC current meters are self-contained for ranges up to and including 50 amperes | | | |
| Higher range DC current meters (50 mV) listed above are calibrated for 5' leads and require external shunts | | | |
| < > Available on special order | | | |

Ordering Information

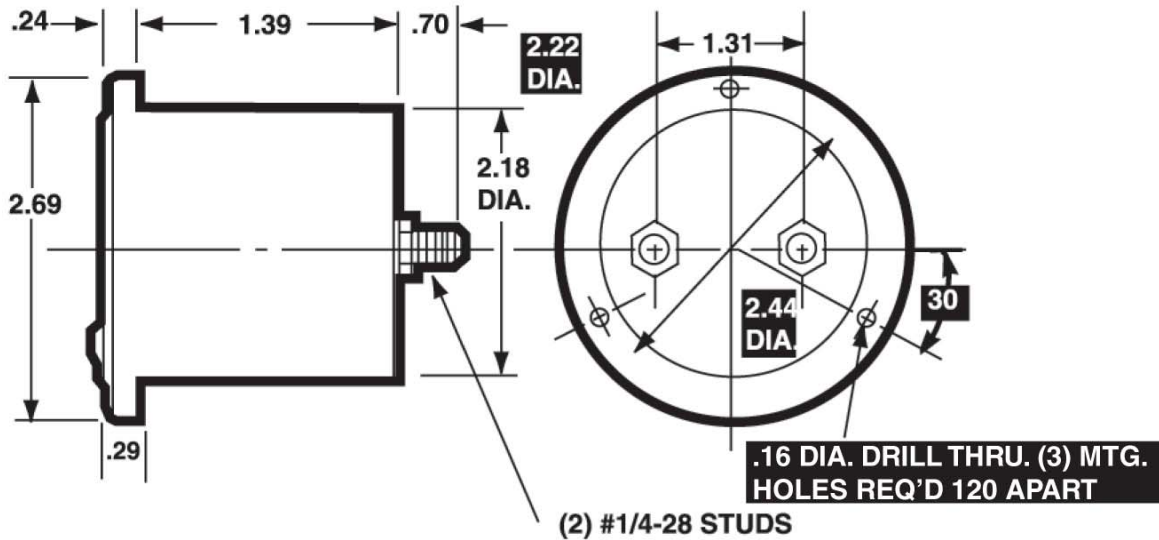
| DC Millivoltmeters Self-Shielding Movement | | | |
|--|----------------------------------|------------------------------|-------------------|
| Range | Approx. Impedance (Ohms) @ 60Hz | Model / Size and Catalog No. | |
| | | 2 - 1/2" Model 125 | 3 - 1/2" Model 25 |
| 0 - 50 | 10.0 | 06970 | 06910 |
| 0 - 100 | 20.0 | < > | 35093 |
| < > Available on special order | | | |

| DC Voltmeters Self-Shielding Movement | | | |
|--|----------------------------------|------------------------------|-------------------|
| Range | Approx. Impedance (Ohms) @ 60Hz | Model / Size and Catalog No. | |
| | | 2 - 1/2" Model 125 | 3 - 1/2" Model 25 |
| 0 - 1.5 | 1000 Ohms Per Volt | 08850 | < > |
| 0 - 3 | | < > | 07070 |
| 0 - 5 | | 08870 | 07080 |
| 0 - 10 | | 08890 | 07100 |
| 0 - 15 | | 08900 | 07110 |
| 0 - 25 | | 08910 | 07120 |
| 0 - 30 | | 08920 | 07130 |
| 0 - 50 | | 08930 | 07140 |
| 0 - 100 | | 08940 | 07150 |
| 0 - 150 | | 08950 | 07160 |
| 0 - 200 | | 08960 | 07170 |
| 0 - 250 | | 08970 | 07180 |
| 0 - 300 | 2000 Ohms Per Volt | < > | 07190 |
| 0 - 500 | | < > | 07200 |
| 0 - 750 | | < > | 07210 |
| 0 - 1000 | | < > | 07220 * |
| 0 - 2000 | | < > | 07240 * |
| 0 - 3000 | | < > | 07260 * |
| 0 - 5000 | | < > | 07280 * |
| *External multipliers, Model 183, are furnished on 3-1/2" DC meters 1000 volts or higher | | | |
| < > Available on special order | | | |

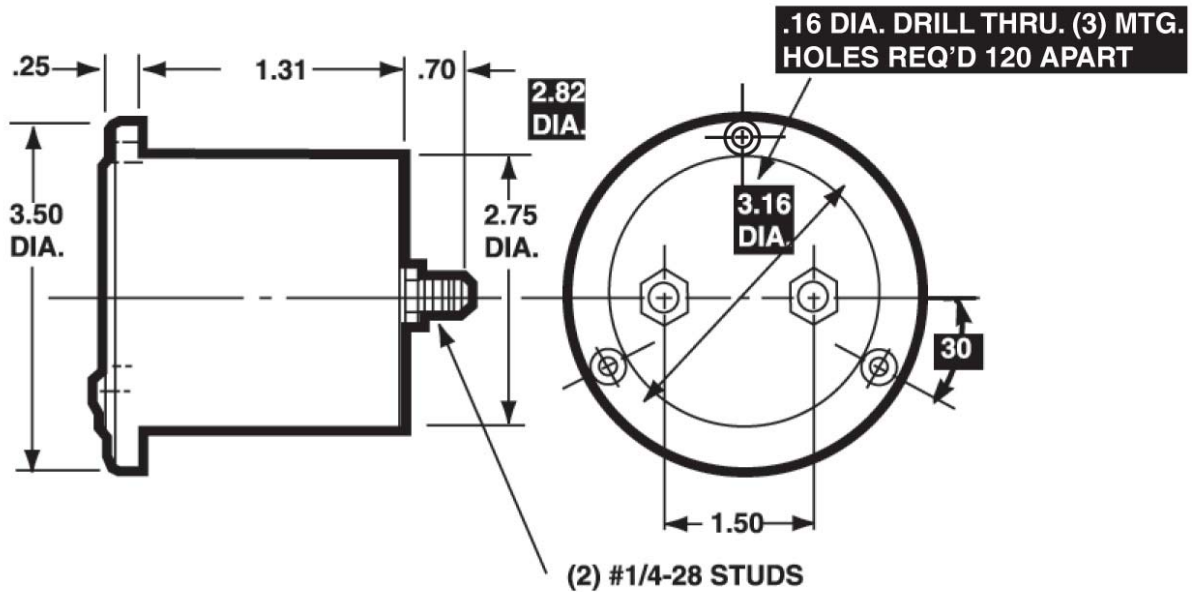
| Specifications | |
|-----------------------|--|
| Accuracy | ± 2% F.S. (Iron-Vane), ± 3 F.S. (Rectifier) |
| Frequency models | 45-55Hz ±0.3Hz (120V-240V) 55-65Hz ±0.3Hz (120V-240V) 380-420Hz ±1.2Hz (120V-240V) |
| Wattmeters | +2% F.S.; Compensated Meters: +3% F.S. |
| Movement | Models 55, 155: Iron-vane, magnetically damped Models 45, 145: Annular, rectifier type Models 85 & 185: small core magnet, self-shielding Models 25, 27, 29, 125: Annular, self-shielding |
| Tracking | ± 3% |
| Shielding | Calibration is unaffected by magnetic field or panel mounting |
| Response Time | 1.5 seconds maximum |
| Overload (1 sec.) | 10 times F.S. |
| Overload (Continuous) | 1.5 times F.S. |
| Repeatability | 2% |
| Dial | Sharp clear scale. Each dial arc is calibrated to track the specific type of movement used |
| Case | High density black plastic |
| Resistance | ± 15% |
| Operating Temperature | - 4°F to + 149°F (- 20°C to + 65°C) |
| Pointer | Models 85 & 185: Knife edge, black finish All others: Spade pointer with black matte finish |
| Scale Length | Model 155 & 185: 1.6" (40.6mm) Models 125 & 145: 1.8" (45.7mm) Model 55: 2.3" (58.4mm) Models 25, 27, 45 & 85: 2.5" (63.5mm) Model 29: 3.80" (96.5mm) |
| Net Weight | Models 55, 155 & 185: 5oz (0.14kg) Models 85, 125, 145 & 45: 7oz (0.20kg) Models 25 & 27: 8oz (.23kg) Model 29: 11oz. (.31kg) |

Dimensions

2 - 1/2" Models 125, 125T, 145, 155 & 185



3 - 1/2" Models 25, 25T, 55, 85 & Model 45 AC Rectified Meter



NOTE: "T" model suffix used for Taut-Band Movement

Dimensions

3 - 1/2" Model 75 Wattmeter

