Simpson®

MADE IN THE USA SINCE 1936 RELIABILITY BEYOND MEASURE

# *Wide-Vue Analog Panel Meters*

- **UL Recognized - File # E91015**
  **Except for the Wattmeters & Frequency Meters**
- **Clear acrylic window for wide viewing area**
- **Rugged black plastic case**
- **Black spade pointer for easy distant reading**
- **Optional: Behind-panel mounting bezel kit**

**The Specification and Dimensions are on pages 8, 9 & 10**

## Ordering Information

| **AC Milliammeters** Iron Vane Movement | | | | |
|---|---|---|---|---|
| Range | Approx. Impedance (Ohms) @ 60 Hz | Model / Size and Catalog No. | | |
| | | 2 - 1/2" Model 1257 | 3 - 1/2" Model 1357 | 4 - 1/2" Model 1359 |
| 0 - 10 | 1,650 | 06294 | 06625 | 06665 |
| 0 - 50 | 80 | 06295 | 06630 | 06670 |
| 0 - 100 | 17.2 | 06296 | 06640 | 06680 |
| 0 - 250 | 3.15 | 06297 | 06650 | 06690 |
| 0 - 500 | 0.9 | 06300 | 06660 | 06699 |
| 0 - 1000 | .213 | < > | 35065 | < > |
| < > Available on special order | | | | |

## Ordering Information

| AC Ammeters Iron Vane Movement | | | | |
|---|---|---|---|---|
| Range | Approx. Impedance (Ohms ) @ 60Hz | Model / Size and Catalog No. | | |
| | | 2 - 1/2" Model 1257 | 3 - 1/2" Model 1357 | 4 - 1/2" Model 1359 |
| 0 - 1 | .213 | 02560 | 03130 | 03260 |
| 0 - 1.5 | .105 | 02570 | 03140 | 03270 |
| 0 - 2 | .065 | < > | 03150 | 03280 |
| 0 - 3 | .025 | 02575 | 03160 | 03290 |
| 0 - 5 | .008 | 02580 | 03170 | 03300 |
| 0 - 10 | .004 | 02590 | 03180 | 03310 |
| 0 - 10 | .008 | < > | 35073 * | 35077 * |
| 0 - 15 | .0025 | 02599 | 03190 | 03320 |
| 0 - 25 | .002 | 02609 | 03200 | 03330 |
| 0 - 25 | .008 | < > | 35074 * | 35078 * |
| 0 - 30 | .0015 | 02615 | 03205 | 03335 |
| 0 - 50 | .001 | 02619 | 03210 | 03340 |
| 0 - 50 | .008 | < > | 35075 * | 35079 * |
| 0 - 75 | .0002 | < > | 03215 | 03345 |
| 0 - 75 | .008 | < > | 35076 * | 35080 * |
| 0 - 100 | .008 | 02622 * | 03220 * | 03350 * |
| 0 - 150 | .008 | 02624 * | 03230 * | 03360 * |
| 0 - 200 | .008 | 02626 * | 03240 * | 03370 * |
| 0 - 300 | .008 | 02627 * | 03250 * | 03380 * |
| < > Available on special order | | | | |

* These meters are 5 amp meters to be used with an external current transformer.

Additional current transformer ranges can be achieved through wrapping the primary and secondary wires.

| AC Dual Range Ammeter/Voltmeter | | | | |
|---|---|---|---|---|
| Range | Approx. Impedance (Ohms) @ 60 Hz | Model / Size and Catalog No. | | |
| | | 2 - 1/2" Model 1257 | 3 - 1/2" Model 1357 | 4 - 1/2" Model 1359 |
| 0 - 150V and 0 - 5A | 15030 and .021 | --------- | 03129 | 03259 |
| < > Available on special order | | | | |

## Ordering Information

| AC Voltmeters Iron Vane Movement | | | | |
|---|---|---|---|---|
| Range | Approx. Impedance (Ohms) @ 60 Hz | Model / Size and Catalog No. | | |
| | | 2 - 1/2" Model 1257 | 3 - 1/2" Model 1357 | 4 - 1/2" Model 1359 |
| 0 - 5 | 33 | < > | 10160 | 10260 |
| 0 - 10 | 133 | 09670 | 10170 | 10270 |
| 0 - 15 | 300 | 09675 | 10180 | 10280 |
| 0 - 25 | 833 | 09680 | 10190 | 10290 |
| 0 - 50 | 3,333 | 09690 | 10200 | 10300 |
| 0 - 100 | 16,333 | 09695 | 10210 | 10310 |
| 0 - 150 | 25,000 | 09700 | 10220 | 10320 |
| 0 - 250 | 41,166 | 09705 | 10230 | 10330 |
| 0 - 300 | 50,000 | 09710 | 10240 | 10340 |
| 0 - 500 | 83,333 | 09715 * | 10250 * | 10350 * |
| < > Available on special order | | | | |

* External multipliers (model 183) are furnished on AC meters having a range of 500 volts or higher.

| AC Voltmeters Rectified Self-Shielding Movement | | | | |
|---|---|---|---|---|
| Range | Approx. Impedance (Ohms) @ 60 Hz | Model / Size and Catalog No. | | |
| | | 2 - 1/2" Model 1247 | 3 - 1/2" Model 1347 | 4 - 1/2" Model 1349 |
| 0 - 5 | 2000 Ohms Per Volt | 10015 | 10020 | 10090 |
| 0 - 10 | | 10016 | 10030 | 10100 |
| 0 - 15 | | < > | 10040 | 10110 |
| 0 - 50 | | < > | 10050 | 10120 |
| 0 - 150 | | 10017 | 10060 | 10130 |
| 0 - 300 | | 10018 | 10070 | 10140 |
| < > Available on special order | | | | |

## Ordering Information

| DC Microammeters Self-Shielding Movement | | | | | | |
|---|---|---|---|---|---|---|
| Range | Approx. Impedance (Ohms) @ 60 Hz | | Model / Size and Catalog No. | | | |
| | | | 1 - 1/2" Model 1212 | 2 - 1/2" Model 1227 | 3 - 1/2" Model 1327 | 4 - 1/2" Model 1329 |
| 0 - 50 | 1800 | (5500) * | 04294 | 04310 | 04380 | 04480 |
| 0 - 100 | 1800 | | 04295 | 04320 | 04390 | 04490 |
| 0 - 200 | 1100 | | 04296 | 04330 | 04400 | 04500 |
| 0 - 500 | 90 | (190) * | 04297 | 04340 | 04410 | 04510 |
| 25 -0-25 | 1800 | | 04298 | < > | 04420 | 04520 |
| 50-0-50 | 1800 | (5500) * | 04302 | 04350 | 04430 | 04530 |
| 100-0-100 | 1100 | | 04300 | 04351 | 04440 | 04540 |
| 500-0-500 | 43 | | 04301 | 04352 | 04450 | 04550 |
| * Impedance of Model 1212 shown in ( ) | | | | | | |
| < > Available on special order | | | | | | |

| DC Taut-Band Microammeters Iron Vane Movement | | | | | |
|---|---|---|---|---|---|
| Range | Approx. Impedance (Ohms) @ 60 Hz | Model / Size and Catalog No. | | | |
| | | 1 - 1/2" Model 1212T | 2 - 1/2" Model 1227T | 3 - 1/2" Model 1327T | 4 - 1/2" Model 1329T |
| 0 - 10 | 4900 | < > | 04303 | 04359 | 04459 |
| 0 - 15 | 1960 (5500) * | 04601 | 04304 | 04361 | 04461 |
| 0 - 25 | 1960 | 04602 | 04306 | 04371 | 04471 |
| 0 - 50 | 960 | 04603 | 04311 | 04381 | 04481 |
| 0 - 100 | 500 | 04604 | 04321 | 04391 | 04491 |
| 0 - 200 | 234 | 04605 | 04331 | 04401 | 04501 |
| * Impedance of Model 1212 shown in ( ) | | | | | |
| < > Available on special order | | | | | |

Simpson®
MADE IN THE USA SINCE 1936 RELIABILITY BEYOND MEASURE

# Wide-Vue Analog Panel Meters

## Ordering Information

### DC Milliammeters Self-Shielding Movement

| Range | Approx. Impedance (Ohms) @ 60 Hz | | Model / Size and Catalog No. | | | |
|---|---|---|---|---|---|---|
| | | | 1 - 1/2" Model 1212 | 2 - 1/2" Model 1227 | 3 - 1/2" Model 1327 | 4 - 1/2" Model 1329 |
| 0 - 1 | 43.0 | | 06163 | 06175 | 06310 | 06470 |
| 0 - 3 | 2.0 | | < > | 06180 | 06320 | 06480 |
| 0 - 5 | 2.0 | (20) † | 06164 | 06190 | 06330 | 06490 |
| 0 - 10 | 10.0 | (2.2) † | 06165 | 06200 | 06340 | 06495 |
| 0 - 15 | 6.6 | (2.2) † | 06166 | 06210 | 06350 | 06502 |
| 0 - 20 | 5.0 | | < > | 06215 | 06360 | 06524 |
| 0 - 25 | 4.0 | (6.0) † | 06167 | 06220 | 06370 | 06530 |
| 0 - 50 | 2.0 | (3.0) † | 06168 | 06230 | 06380 | 06540 |
| 0 - 100 | 1.0 | (1.5) † | 06169 | 06240 | 06390 | 06550 |
| 0 - 150 | .66 | (1.0) † | 06170 | 06250 | 06400 | 06560 |
| 0 - 200 | .50 | (.75) † | 06171 | 06260 | 06410 | 06570 |
| 0 - 250 | .40 | (.60) † | 06172 | 06270 | 06420 | 06580 |
| 0 - 300 | .33 | (.50) † | 06173 | 06280 | 06430 | 06590 |
| 0 - 500 | .20 | (.30) † | 06174 | 06290 | 06440 | 06600 |
| 0 - 750 | .13 | | < > | < > | 06450 | 06610 |
| 0 - 1000 | .05 | | < > | 06292 | 06460 | 06620 |

† Impedance of Model 1212 shown in ( )

< > Available on special order

### DC Ammeters Self-Shielding Movement

| Range | Approx. Impedance (Ohms) @ 60 Hz | Model / Size and Catalog No. | | | |
|---|---|---|---|---|---|
| | | 1 - 1/2" Model 1212 | 2 - 1/2" Model 1227 | 3 - 1/2" Model 1327 | 4 - 1/2" Model 1329 |
| 0 - 1 | .050 | 02431 | 02440 | 02640 | 02820 |
| 0 - 1.5 | .033 | < > | 02450 | 02650 | 02830 |
| 0 - 2 | .025 | 02432 | 02460 | 02660 | 02840 |
| 0 - 3 | .0166 | 02433 | 02470 | 02670 | 02850 |
| 0 - 5 | .010 | 02434 | 02480 | 02680 | 02860 |
| 0 - 10 | .005 | 02435 | 02490 | 02690 | 02870 |
| 0 - 15 | .0033 * | 02436 † | 02500 | 02700 | 02880 |
| 0 - 25 | .0020 * | 02437 † | 02510 | 02710 | 02890 |
| 0 - 30 | .0017 | < > | 02520 | 02720 | 02900 |
| 0 - 50 | .001 * | 02438 † | 02530 | 02730 | 02910 |
| 0 - 100 | 10.0 | < > | 02540 † | 02740 † | 02920 † |
| 0 - 150 | 10.0 | < > | 02550 † | 02750 † | 02930 † |
| 0 - 200 | 10.0 | < > | 02552 † | 02760 † | 02940 † |
| 0 - 300 | 10.0 | < > | 02554 † | 02770 † | 02950 † |
| 0 - 500 | 10.0 | < > | < > | 02780 † | 02960 † |
| 15-0-15 | .0033 | < > | < > | 02790 | < > |
| 30-0-30 | .0017 | < > | < > | 02800 | < > |
| 50-0-50 | .001 | < > | < > | 02810 | < > |

† 1 - 1/2" DC current meters are self-contained through 10 amps.

15 amps and higher are supplied as 50 mV meters to be used with external shunts.

2 - 1/2", 3 - 1/2" and 4 - 1/2 " DC current meters are self-contained through 50 amps.

Higher range DC current meters are 50 mV meters to be used with external shunts.

< > Available on special order

* Model 1212 only - 10 Ohms

Simpson®
MADE IN THE USA SINCE 1936 RELIABILITY BEYOND MEASURE

# Wide-Vue Analog Panel Meters

## Ordering Information

### Wattmeters / Dynamometer Type

Not

| Range | Maximum | | Model / Size and Catalog No. |
|---|---|---|---|
| | Volts | Amps | 4 - 1/2" Model 1379 |
| 0 - 10 | 150 | .175 | 10930 * |
| 0 - 20 | 150 | .400 | 10940 * |
| 0 - 75 | 150 | 1.0 | 10960 |
| 0 - 150 | 150 | 2.0 | 10970 |
| 0 - 300 | 150 | 4.0 | 10975 |
| 0 - 600 | 300 | 4.0 | 10980 |
| 0 - 750 | 150 | 10.0 | 10990 |
| 0 - 1500 | 300 | 10.0 | 11000 |
| 0 - 3000 | 300 | 20.0 | 11010 |

* Compensated wattmeters:

Calibrated for either magnetic or non-magnetic panels and for a frequency of 25 - 125 Hz

### DC Millivoltmeters Self-Shielding Movement

| Range | Approx. Impedance (Ohms) @ 60 Hz | Model / Size and Catalog No. | | | |
|---|---|---|---|---|---|
| | | 1 - 1/2" Model 1212 | 2 - 1/2" Model 1227 | 3 - 1/2" Model 1327 | 4 - 1/2" Model 1329 |
| 0 - 50 | 10.0 | 07005 | 07010 | 07020 | 07030 |
| 50-0-50 | 20.0 | < > | < > | 07021 | 07031 |

< > Available on special order

### DC Voltmeters Self-Shielding Movement

| Range | Approx. Impedance (Ohms) @ 60 Hz | Model / Size and Catalog No. | | | |
|---|---|---|---|---|---|
| | | 1 - 1/2" Model 1212 | 2 - 1/2" Model 1227 | 3 - 1/2" Model 1327 | 4 - 1/2" Model 1329 |
| 0 - 5 | 1000 Ohms Per Volt | 09540 | 09550 | 09720 | 09870 |
| 0 - 8 | | < > | < > | 09730 | 09880 |
| 0 - 10 | | 09541 | 09560 | 09740 | 09890 |
| 0 - 15 | | 09542 | 09570 | 09750 | 09900 |
| 0 - 25 | | 09543 | 09580 | 09760 | 09910 |
| 0 - 30 | | 09544 | 09590 | 09770 | 09920 |
| 0 - 50 | | 09545 | 09600 | 09780 | 09930 |
| 0 - 100 | | 09546 | 09610 | 09790 | 09940 |
| 0 - 150 | | 09547 | 09620 | 09800 | 09950 |
| 0 - 200 | | < > | 09622 | 09810 | 09960 |
| 0 - 250 | | < > | 09623 | 09820 | 09970 |
| 0 - 300 | | < > | 09630 | 09830 | 09980 |
| 0 - 300 | 2000 Ohms Per Volt | 09548 | < > | < > | < > |
| 0 - 500 | | 09549 * | 09640 | 09840 | 09990 |
| 0 - 750 | | < > | 09650 * | 09850 | 10000 |
| 0 - 1000 | | < > | 09660 * | 09860 * | 10010 * |

< > Available on special order

* External multipliers (Model 183) are furnished

on 1 - 1/2" DC Meters 500 volts or higher;

on 2 - 1/2" DC Meters 750 volts or higher;

and on 3 - 1/2" and 4 - 1/2" DC Meters 1000 volts or higher.

All others have self-contained multipliers.

## Ordering Information

### Percent Motor Load Meters

| Type | Rating | Model / Size and Catalog No. | | | |
|---|---|---|---|---|---|
| | | 3 - 1/2" Model 1327 | 3 - 1/2" Model 1357 | 4 - 1/2" Model 1329 | 4 - 1/2" Model 1359 |
| DC (Note 1) | 30 mV | 07028 | | 07029 | |
| AC (Note 2) | 5 amps | | 03171 | | 03301 |

**Note 1:** DC load meters require an external shunt and potentiometer (not supplied). Use 8 to 10Ω, 2 watt wire-wound potentiometer.

The appropriate shunt should be selected from accessory section and ordered separately.

To select the proper shunt, first obtain the full load current rating of your motor from the name plate, manufacturer's specifications of N.E.C. listing. Multiply that rating by 1.25 and select and order the shunt with an amps rating as large or slightly larger than the calculated value.

Installation and calibration instructions are included with the meter .

**Note 2:** AC load meters must be used with external donut transformers. Complete instructions for proper selection are included with each AC load meter.

Advance assistance in selecting the appropriate transformer and determining the correct primary / secondary turns ratio can be obtained from a Simpson technical service representative or authorized service center.

Meters come with color coded dial.

Green 0 - 100% Yellow 100 - 125% Red 125 - 150%

### 4 - 20mA Process Meters

| Size | Scale | Model | Catalog No. |
|---|---|---|---|
| 3 - 1/2" | 0 - 100% | 1327 | 35025 |
| 4 - 1/2" | 0 - 100% | 1329 | 35026 |

### Frequency Meters Self-Shielding Movement Not

| Range | Voltage | Model / Size and Catalog No. | | |
|---|---|---|---|---|
| | | 2 - 1/2" Model 1287 | 3 - 1/2" Model 1387 | 4 - 1/2" Model 1389 |
| 45 - 55 Hz | 120V | 35100 | 35106 | 35112 |
| 55 - 65 Hz | 120V | 35102 | 35108 | 35114 |
| 380 - 420 Hz | 120V | 35104 | 35110 | 35116 |
| 45 - 55 Hz | 240V | 35101 | 35107 | 35113 |
| 55 - 65 Hz | 240V | 35103 | 35109 | 35115 |
| 380 - 420 Hz | 240V | 35105 | 35111 | 35117 |

Simpson®
MADE IN THE USA SINCE 1936 RELIABILITY BEYOND MEASURE

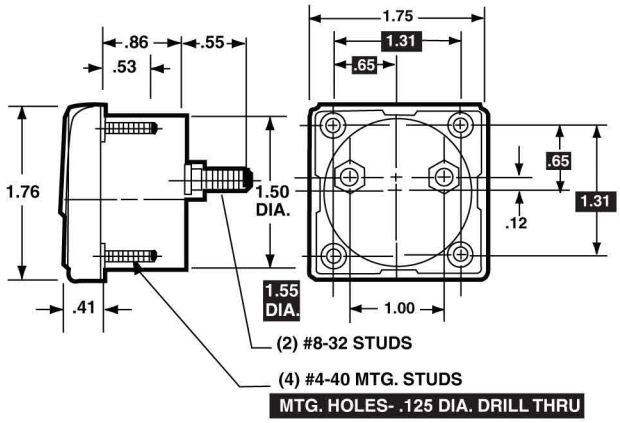
# Wide-Vue Analog Panel Meters

| Specifications | |
|---|---|
| Accuracy | ± 2% F.S. (Iron-Vane), ± 3 F.S. (Rectified) |
| Movement | Models 1212, 1212T: Small Core Magnet<br>Models 1247, 1347, 1349: Annular, rectifier<br>Models 1257, 1357, 1359: Iron-vane, magnetically damped |
| Tracking | ± 3% |
| Shielding | Calibration is unaffected by magnetic panel mounting. |
| Response Time | 1.5 seconds maximum |
| Overload (1 sec.) | 10 times F.S. |
| Overload (Continuous) | 1.5 times F.S. |
| Repeatability | 2%: AC Current, DC Process<br>3%: AC Voltage, DC Voltage, Wattmeters<br>0.5%: DC Current |
| Dial | Sharp clear scale.<br>Each dial arc is calibrated to track the specific type of movement used. |
| Resistance | ± 15% of meter impedance |
| Operating Temperature | - 4ºF to + 149ºF (- 20ºC to + 65ºC) |
| Case | High density black plastic |
| Pointer | Model 1212: Black lance<br>All other models: Spade with black matte finish |
| Scale Length | Model 1212, 1212T: 1.50” (38.1mm)<br>Model 1227, 1227T, 1247, 1257: 2.30” (58.4mm)<br>Model 1327, 1327T, 1347, 1357, 1377: 3.14” (79.9mm)<br>Model 1329, 1329T, 1349, 1359, 1379: 3.93” (100mm) |
| Net Weight | Model 1212, 1212T: 2 oz. (0.06 kg)<br>Model 1257: 4 oz. (0.11 kg)<br>Model 1359: 5 oz. (0.14 kg)<br>Model 1227, 1227T: 6 oz. (0.17 kg)<br>Model 1327, 1327T, 1347: 8 oz. (0.23 kg)<br>Model 1329, 1329T, 1349, 1377: 9 oz. (0.26 kg)<br>Model 1379: 10 oz. (0.28 kg) |

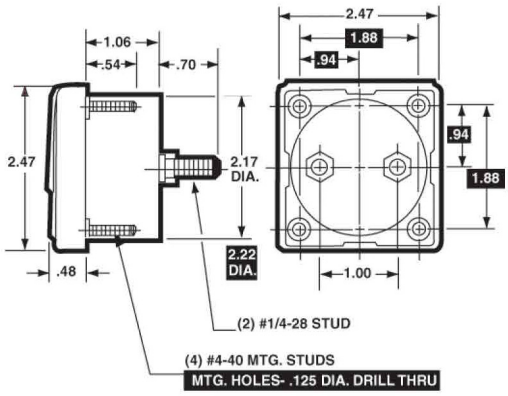
# Wide-Vue Analog Panel Meters

## Dimensions

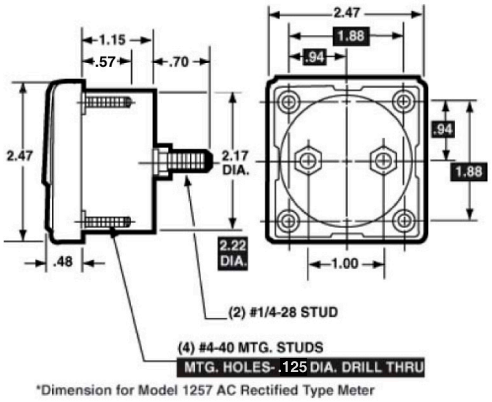
### 1 - 1/2" Model 1212, 1212T




### 2 - 1/2" Model 1287

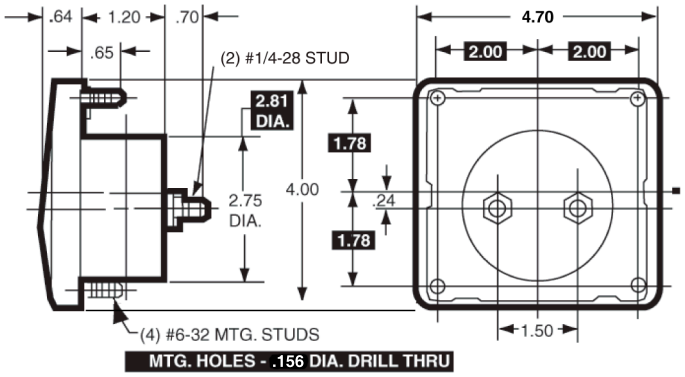



### 2 - 1/2" Model 1227, 1227T, 1247, 1257

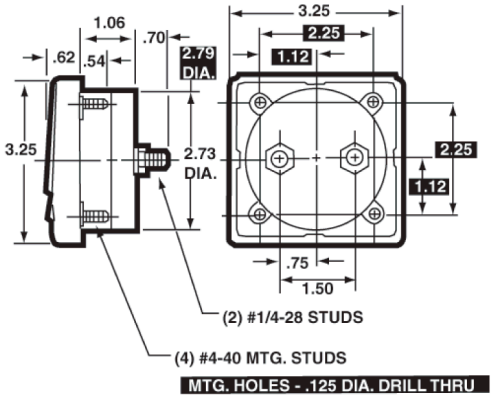



*Dimension for Model 1257 AC Rectified Type Meter

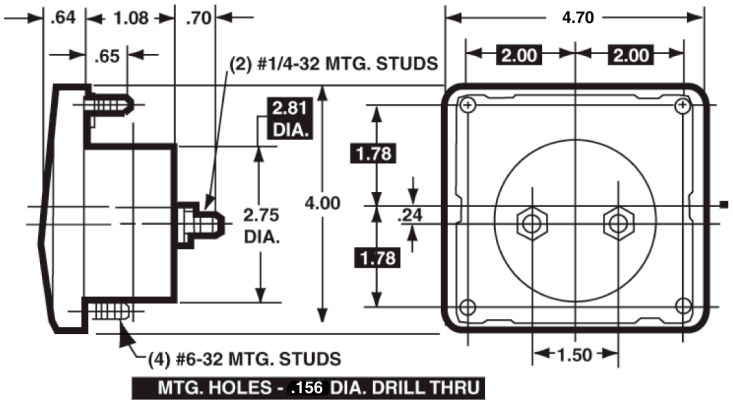
### 4 - 1/2" Model 1329, 1329T, 1349, 1359




### 3 - 1/2" Model 1387

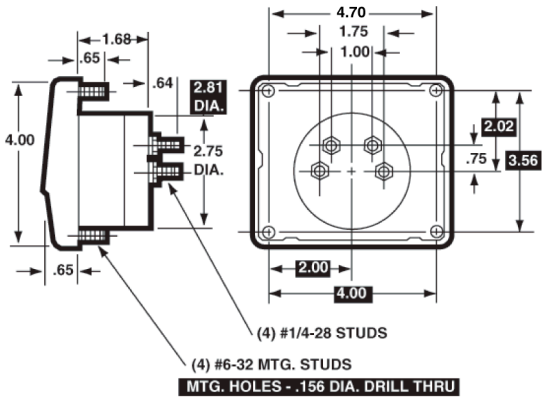



### 4 - 1/2" Model 1389

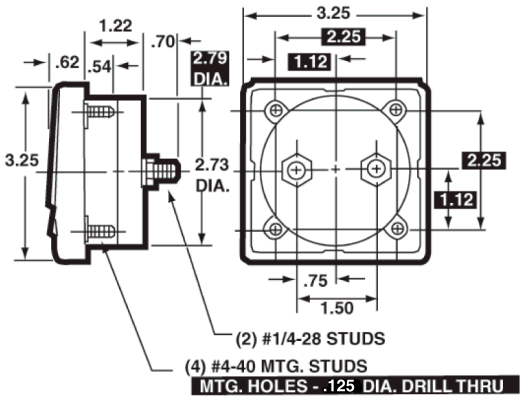


## Dimensions

### 4 - 1/2” Model 1379




### 3 - 1/2” Model 1327, 1327T, 1347, 1357



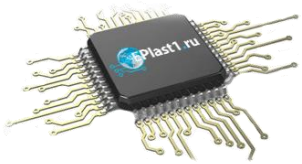
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.




**Как с нами связаться**

**Телефон:** 8 (812) 309 58 32 (многоканальный)
**Факс:** 8 (812) 320-02-42
**Электронная почта:** org@eplast1.ru
**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.