

A range of 2 1/2", 3 1/2" and 4 1/2" surface mount panel meters utilising pivot and jewel mechanisms and offering IP54 protection. The range offers iron vane and moving coil AC and DC ammeters and voltmeters, elapsed time and frequency meters designed to perform in demanding environmental applications.

## Features

- Three compact case sizes
- Withstands high levels of shock, vibration, dirt and humidity
- Pivot and jewel mechanisms

## Benefits

- Complies with ANSI C39.1 (IEC 51)
- IP54 (NEMA 3) protection
- Instruments comply with BSEN61010-1 and meet IEC414 (BS5458)
- Dielectric Test (2600V for 1min)

## Applications

- Switchgear
- Distribution systems
- Generator sets
- Control panels
- Energy management
- Building management
- Utility power monitoring
- Process control
- Motor control

## Approvals

UL approvals file no. E203000

## Specification – Elapsed Time Meter and Frequency Meter

Accuracy:	0.15 = 60Hz, 1.25 = 400Hz, 0.15 = 50Hz, 0.25 = 55Hz
Voltage:	110/130V, 200/250V
Frequency:	50Hz or 60Hz
Burden:	4VA Maximum

## Specification – Moving Iron A.C. Ammeter & Voltmeter

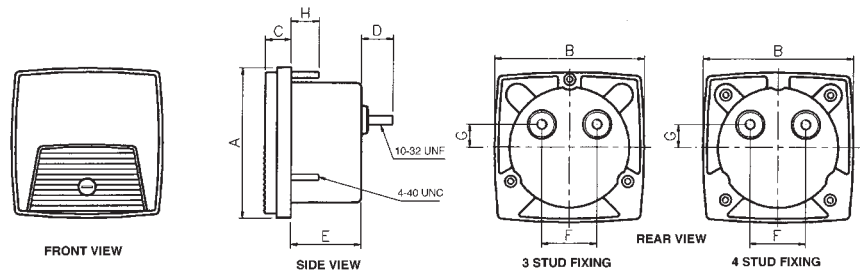
Accuracy:	±2%
Rating:	Ammeters: 1 to 30A Volts: 10V to 600V
Overload:	Ammeters: x1.2 for 2 hours, x10 for 5 seconds Volts: x1.2 for 2 hours, x2 for 5 seconds
Burden:	Ammeters: 0.5VA Volts: 4.5VA maximum

## Specification – Moving Coil D.C. Ammeter & Voltmeter

Accuracy:	±2%
Rating:	Ammeters: 100µA to 30A Volts: 50mV - 600V
Operating Temp:	-20°C to 60°C (-4°F to 140°F)
Storage Temp:	-30°C to 70°C (-22°F to 158°F)

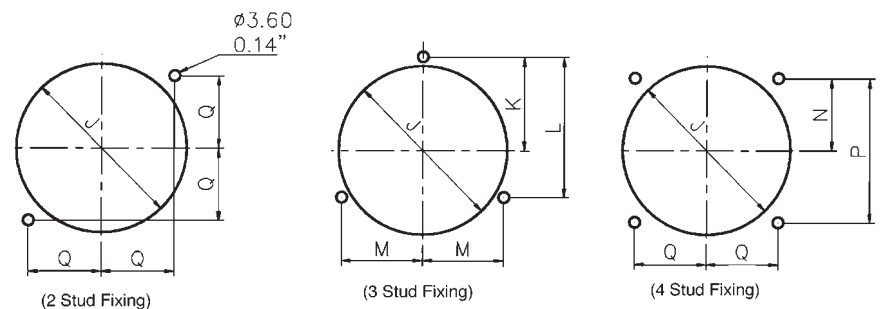
## Dimensions

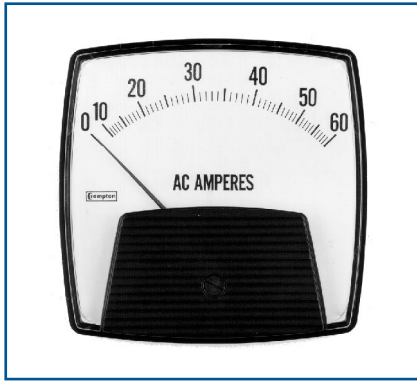
Specify number of fixing studs when ordering 2 1/2" and 3 1/2" meters. 4 1/2" meters are supplied with 4 fixing studs.



	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
2 1/2 mm	68.6	68.6	11.8	14.6	32.0	25.4	10.4	12.7	55.9	31	46.5	26.9	23.9	47.8	23.9
inch	2.70	2.70	0.46	0.57	1.26	1.00	0.41	0.50	2.20	1.22	1.83	1.06	0.94	1.88	0.94
3 1/2 mm	88.9	88.9	11.8	14.6	36.0	25.4	10.4	12.7	69.9	40.2	60.3	34.8	28.5	57.0	28.5
inch	3.5	3.5	0.46	0.57	1.42	1.00	0.41	0.50	2.75	1.58	2.37	1.37	1.12	2.24	1.12
4 1/2 mm	112.0	123.2	12.7	16.3	30.5	28.4	0.38	12.7	70.9				51.6	90.4	50.8
inch	4.41	4.85	0.50	0.64	1.20	1.12	0.41	0.50	2.78				2.03	3.56	2.00

## Panel cut-out





A.C. Ammeter

### Product Codes – A.C. Ammeter True RMS Reading - Accuracy ±2% ES

Rating	Scaling	Catalogue No.
5A	0-5A	(01*)-75AA-LSLS-C6-B*
10A	0-10A	(01*)-75AA-MTMT-C6-B*
15A	0-15A	(01*)-75AA-NDND-C6-B*
20A	0-20A	(01*)-75AA-NGNG-C6-B*
30A	0-30A	(01*)-75AA-NLNL-C6-B*
1A	Transformer Rated	(01*)-75AA-LA**-C6-B*
5A	Transformer Rated	(01*)-75AA-LS**-C6-B*

### Product Codes – A.C. Voltmeter True RMS Reading - Accuracy ±2% ES

150V	0-150V	(01*)-75VA-PZPZ-C6-B*
300V	0-300V	(01*)-75VA-RXRX-C6-B*
600V	0-600V	(01*)-75VA-SJSJ-C6-B*
150V	Transformer Rated	(01*)-75VA-PZ**-C6-B*



A.C. Voltmeter

### Product Codes – D.C. Ammeters - Accuracy ±2% ES

0-1mA	To Suit Requirements	(01*)-01AA-FA**-B*
0-5mA	0-5mA	(01*)-01AA-FXFX-B*
0-10mA	0-10mA	(01*)-01AA-GZGZ-B*
0-20mA	0-20mA	(01*)-01AA-HFHF-B*
0-50mA	0-50mA	(01*)-01AA-HYHY-B*
0-100mA	0-100mA	(01*)-01AA-JRJR-B*
0-200mA	0-200mA	(01*)-01AA-KAKA-B*
0-500mA	0-500mA	(01*)-01AA-KMKM-B*
0-1A	0-1A	(01*)-01AA-LALA-B*
0-2A	0-2A	(01*)-01AA-LELE-B*
0-5A	0-5A	(01*)-01AA-LSLS-B*
0-10A	0-10A	(01*)-01AA-MTMT-B*
0-50mV	To Suit	(01*)-01AA-EC**-B*

### Product Codes – Milliammeters Suppressed Zero - Accuracy ±2% ES

4-20mA	To Suit Requirements	(01*)-01RA-HG**-B*
		**Specify scale value

### Product Codes – D.C. Voltmeters Sensitivity 1000Ω/Volt - Accuracy ±2% ES

0-15V	0-15V	(01*)-01VA-NDND-B*
0-30V	0-30V	(01*)-01VA-NLNL-B*
0-50V	0-50V	(01*)-01VA-NTNT-B*
0-150V	0-150V	(01*)-01VA-PZPZ-B*
0-300V	0-300V	(01*)-01VA-RXRX-B*
0-600V	0-600V	(01*)-01VA-SJSJ-B*



Frequency Meter

### Product Codes – Frequency Meters 120V - Self Contained

50Hz	45-55Hz	(01*)-41SA-PNAG-AG-B*
55Hz	45-65Hz	(01*)-41SA-PNAJ-AJ-B*
60Hz	55-65Hz	(01*)-41SA-PNAN-AN-B*

### Product Codes – Elapsed Time Meters 99999.99 hours - non reset

110/130V, 50Hz	–	(01*)-155A-PNZH-C5-B*
200/250V, 50Hz	–	(01*)-155A-RNZH-C5-B*
480V, 50Hz	–	(01*)-155A-SEZH-C5-B*
110/130V, 60Hz	–	(01*)-156A-PNZH-C6-B*
200/250V, 60Hz	–	(01*)-156A-RNZH-C6-B*
480V, 60Hz	–	(01*)-156A-SEZH-C6-B*

To denote the required case size, replace the 01\* in the catalogue number with 012, 013 or 014 for 2½", 3½" or 4½" respectively.

To denote the required stud fixing configuration, replace B\* with B2 (2 stud), B3 (3 stud) or B4 (4 stud)