

## Features

- » Rugged taut band suspension i.e. bump, shock and vibration proof
- » Accuracy class 1.5
- » Shock tested to 50G
- » Meets all requirements of ANSI-C39.1 (1981)
- » IP54 to BS5490/IEC529 (NEMA 3S)
- » Parallax error-free platform dials
- » Ambient temperature range -10°C to +55°C (14° to 131°F)
- » Calibrated at 23°C
- » Dielectric: 2kV for 1 minute
- » Overload: x1.2 rated current or voltage for 2 hours, x10 rated current, and X2 rated voltage for 5 seconds
- » Panel space saving
- » UL 94V2 cases
- » Internally illuminated option
- » ABS American Bureau of Shipping approved (where applicable)

6" Edgewise meters provide a high ratio of scale length to a panel area. Several units can be stacked together in a single rectangular panel cut-out to facilitate adjacent comparisons and the mounting arrangement is as simple as possible.

Instruments are available to measure A.C. or D.C. current and voltage, Watts, Vars, Frequency, Power Factor, Speed or any other parameter that can be converted to a D.C. analog signal. Dimensions comply with ANSI C39.1



## Description

### Cases

The shatterproof polycarbonate case is a single moulding which has no joints at the panel front and the enclosure is splashproof. The materials used for case and terminal plate tray are non drip self extinguishing engineering thermoplastics which meet the U.S. Bureau of Underwriters specification Grade SE1. Case and bezels are finished matt black, aluminium silver is available if specified.

### Movements

Movements are available to measure most electrical quantities. They are fully self-shielding and unaffected by stray magnetic fields, the panel thickness or the material used.

The high-torque system and large clearances between fixed and moving elements enhance their reliability and robustness which is inherent in the Hi-Q taut band suspension system.

### Panel Mounting

Two simple screw clamps secure the instrument so that only one cut out is required in the panel. Panel thickness from 0.073 inches (1.5mm) to 0.375 inches (10mm) is acceptable.

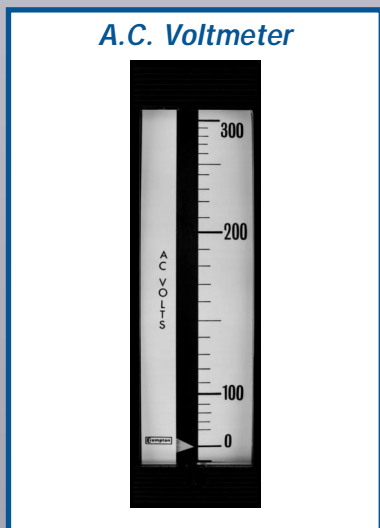
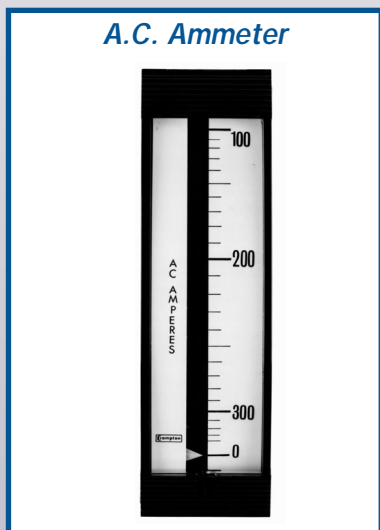
Any number of units may be stacked flush against each other horizontally or vertically on one cut-out. In this arrangement, the detachable side bezels which conceal the cut edge of the panel are attached only to the outside faces of end units.

## Specifications

<b>Performance:</b>	Instruments comply with U.S.A. specification ANSI C39.1	<b>Ambient Temperature:</b>	Calibrated for 23°C Other values may be specified.
<b>Accuracy:</b>	Iron vane and moving coil: 1.5%		Working temperature range is 10°C to +55°C (14 to 131°F)
<b>Moving coil rectifier:</b>	2.5%	<b>Enclosure code:</b>	IP55 dust proof and splash proof.
<b>Overload capacity:</b>	1.2 times rated current or voltage for 2 hours. 10 times rated current or 2 times rated voltage for 5 seconds.	<b>Movements:</b>	Self shielding Hi-Q taut band 60° rotation.
		<b>Shock:</b>	Type tested to 50G
		<b>Panel material:</b>	No restrictions
		<b>Dielectric Test:</b>	2kV AC for 1 minute, case to terminals.

# 128 Series Edgewise Meters

## A.C. Ammeters



Rating	Scaling	Transformer	Horizontal Catalogue No.	Vertical Catalogue No.
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**60Hz, Iron Vane**  
**Self Contained Burden 1VA - Accuracy ±1.5%**

1A	0-1A	-	128-07AA-LALA	128-07CA-LALA
3A	0-3A	-	128-07AA-LJLJ	128-07CA-LJLJ
5A	0-5A	-	128-07AA-LSLS	128-07CA-LSLS
10A	0-10A	-	128-07AA-MTMT	128-07CA-MTMT
15A	0-15A	-	128-07AA-NDND	128-07CA-NDND
20A	0-20A	-	128-07AA-NGNG	128-07CA-NGNG
30A	0-30A	-	128-07AA-NLNL	128-07CA-NLNL

### Transformer Rated

5A	0-10A	10/5	128-07AA-LSMT	128-07CA-LSMT
5A	0-15A	15/5	128-07AA-LSND	128-07CA-LSND
5A	0-20A	20/5	128-07AA-LSNG	128-07CA-LSNG
5A	0-25A	25/5	128-07AA-LSNJ	128-07CA-LSNJ
5A	0-30A	30/5	128-07AA-LSNL	128-07CA-LSNL
5A	0-40A	40/5	128-07AA-LSNP	128-07CA-LSNP
5A	0-50A	50/5	128-07AA-LSNT	128-07CA-LSNT
5A	0-75A	75/5	128-07AA-LSPB	128-07CA-LSPB
5A	0-100A	100/5	128-07AA-LSPK	128-07CA-LSPK
5A	0-150A	150/5	128-07AA-LSPZ	128-07CA-LSPZ
5A	0-200A	200/5	128-07AA-LSRL	128-07CA-LSRL
5A	0-300A	300/5	128-07AA-LSRX	128-07CA-LSRX
5A	0-400A	400/5	128-07AA-LSSC	128-07CA-LSSC
5A	0-500A	500/5	128-07AA-LSSF	128-07CA-LSSF
5A	0-600A	600/5	128-07AA-LSSJ	128-07CA-LSSJ
5A	0-800A	800/5	128-07AA-LSSN	128-07CA-LSSN
5A	0-1KA	1000/5	128-07AA-LSSS	128-07CA-LSSS
5A	0-1.2KA	1200/5	128-07AA-LSSU	128-07CA-LSSU
5A	0-1.5KA	1500/5	128-07AA-LSTC	128-07CA-LSTC
5A	0-2KA	2000/5	128-07AA-LSTM	128-07CA-LSTM
5A	0-3KA	3000/5	128-07AA-LSUA	128-07CA-LSUA
5A	0-4KA	4000/5	128-07AA-LSUE	128-07CA-LSUE

### Moving Coil Rectified

1A	-	-	128-10B	128-10B
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## A.C. Voltmeters

**60Hz, Iron Vane**  
**Self Contained Burden 3VA - Accuracy ±1.5%**

150V	0-150V	-	128-07VA-PZPZ	128-07PA-PZPZ
300V	0-300V	-	128-07VA-RXR X	128-07PA-RXR X
500V	0-500V	-	128-07VA-SFSF	128-07PA-SFSF
600V	0-600V	-	128-07VA-SJSJ	128-07PA-SJSJ

### Transformer Rated

150V	0-300V	240/120	128-07VA-PZRX	128-07PA-PZRX
150V	0-600V	480/120	128-07VA-PZSJ	128-07PA-PZSJ
150V	0-750V	600/120	128-07VA-PZSM	128-07PA-PZSM
150V	0-3KV	2400/120	128-07VA-PZUA	128-07PA-PZUA
150V	0-5.25KV	4200/120	128-07VA-PZUL	128-07PA-PZUL
150V	0-6KV	4800/120	128-07VA-PZUP	128-07PA-PZUP
150V	0-9KV	7200/120	128-07VA-PZUY	128-07PA-PZUY
150V	0-15KV	12,000/120	128-07VA-PZWZ	128-07PA-PZWZ
150V	0-18KV	14,400/120	128-07VA-PZWD	128-07PA-PZWD

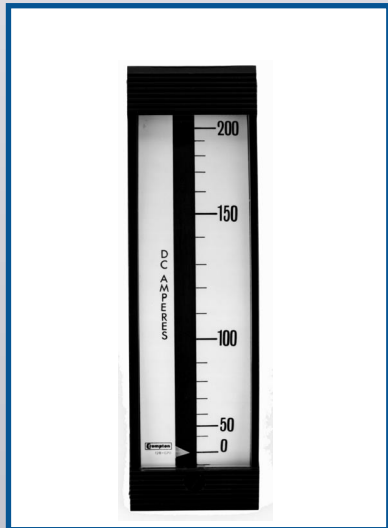
### Moving Coil Rectified

600V	-	-	128-10W	128-10W
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# 128 Series Edgewise Meters

## D.C. Ammeters



Rating	Scaling	Horizontal Catalogue No.	Vertical Catalogue No.
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### Shunt Rated - Accuracy $\pm 1.5\%$

50mV	0-10A	128-10AA-ECMT	128-10GA-ECMT
50mV	0-20A	128-10AA-ECNG	128-10GA-ECNG
50mV	0-30A	128-10AA-ECNL	128-10GA-ECNL
50mV	0-40A	128-10AA-ECNP	128-10GA-ECNP
50mV	0-60A	128-10AA-ECNW	128-10GA-ECNW
50mV	0-80A	128-10AA-ECPD	128-10GA-ECPD
50mV	0-100A	128-10AA-ECPK	128-10GA-ECPK
50mV	0-200A	128-10AA-ECRL	128-10GA-ECRL
50mV	0-300A	128-10AA-ECRX	128-10GA-ECRX
50mV	0-400A	128-10AA-ECSC	128-10GA-ECSC
50mV	0-500A	128-10AA-ECSF	128-10GA-ECSF
50mV	0-600A	128-10AA-ECSJ	128-10GA-ECSJ
50mV	0-800A	128-10AA-ECSN	128-10GA-ECSN
50mV	0-1000A	128-10AA-ECSS	128-10GA-ECSS
50mV	To suit	128-10AA-ECXC	128-10GA-ECXC
50-0-50mV	To suit	128-10CA-GB-**-HL	128-10CA-GB**-VL
100mV	To suit	128-10AA-GB**	128-10DA-GB**
100-0-100mV	To suit	128-10CA-GJ**-HL	128-10CA-GJ**-VL

### Moving Coil - Accuracy $\pm 1.5\%$

200 $\mu$ A	0-200 $\mu$ A	128-10AA-EAEA	128-10GA-EAEA
500 $\mu$ A	0-200 $\mu$ A	128-10AA-EMEM	128-10GA-EMEM
800 $\mu$ A	0-200 $\mu$ A	128-10AA-EWEW	128-10GA-EWEW
1mA	0-1mA	128-10AA-FAFA	128-10GA-FAFA
2mA	0-2mA	128-10AA-FGFG	128-10GA-FGFG
5mA	0-5mA	128-10AA-FXFX	128-10GA-FXFX
10mA	0-10mA	128-10AA-GZGZ	128-10GA-GZGZ
50mA	0-50mA	128-10AA-HYHY	128-10GA-HYHY
100mA	0-100mA	128-10AA-JRJR	128-10GA-JRJR
200mA	0-200mA	128-10AA-KAKA	128-10GA-KAKA
500mA	0-500mA	128-10AA-KMKM	128-10GA-KMKM
800mA	0-800mA	128-10AA-KWKW	128-10GA-KWKW
1A	0-1A	128-10AA-LALA	128-10GA-LALA
2A	0-2A	128-10AA-LELE	128-10GA-LELE
5A	0-5A	128-10AA-LSLS	128-10GA-LSLS
10A	0-10A	128-10AA-MTMT	128-10GA-MTMT
15A	0-15A	128-10AA-NDND	128-10GA-NDND
20A	0-20A	128-10AA-NGNG	128-10GA-NGNG
30A	0-30A	128-10AA-NLNL	128-10GA-NLNL

## D.C. Voltmeters

### 1000 $\Omega$ / Volt - Moving Coil

1V	0-1V	128-10VA-LALA	128-10PA-LALA
5V	0-5V	128-10VA-LSLS	128-10PA-LSLS
15V	0-15V	128-10VA-NDND	128-10PA-NDND
30V	0-30V	128-10VA-NLNL	128-10PA-NLNL
50V	0-50V	128-10VA-NTNT	128-10PA-NTNT
80V	0-80V	128-10VA-PDPD	128-10PA-PDPD
150V	0-150V	128-10VA-PZPZ	128-10PA-PZPZ
300V	0-300V	128-10VA-RXR X	128-10PA-RXR X
600V	0-600V	128-10VA-SJSJ	128-10PA-SJSJ
150-0-150V	150-0-150V	128-10NA-RXR X-HL	128-10NA-RXR X-VL
300-0-300V	300-0-300V	128-10NA-SJSJ-HL	128-10NA-SJSJ-VL

### D.C. Volts - Suppressed Zero

1-5V	To suit	128-10S-LMXXHL	128-10S-LMXXVL
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# 128 Series Edgewise Meters

## D.C. Milliammeters, Transducer and Temperature Indicators

Rating	Scaling	Horizontal Catalogue No.	Vertical Catalogue No.
<b>D.C. Milliammeter - Suppressed Zero</b>			
1-5mA	To suit	128-10RA-GM**·HL	128-10RA-GM**·VL
4-20mA	To suit	128-10RA-HG**·HL	128-10RA-HG**·VL
10-50mA	To suit	128-10RA-HZ**·HL	128-10RA-HZ**·VL
<b>Transducers Indicators (IMA D.C. Rated)</b>			
Volts	To suit	128-108A-FA**·HL	128-108A-FA**·VL
Amps	To suit	128-109A-FA**·HL	128-109A-FA**·VL
Watts	To suit	128-105A-FA**·HL	128-105A-FA**·VL
VARs	To suit	128-106A-FA**·HL	128-106A-FA**·VL
Hertz	To suit	128-103A-FA**·HL	128-103A-FA**·VL
Power Factor	To suit	128-104A-FA**·HL	128-104A-FA**·VL
Speed	To suit	128-102A-FA**·HL	128-102A-FA**·VL
<b>Temperature Indicators</b>			
Thermocouple inputs J and K	To suit	128-45T	128-45T

### Notes

- Only one scale, one set of figures and one legend can be supplied.
- Specify horizontal or vertical mounting at time of ordering.
- Where asterisks (\*\*) are shown in the catalog number, describe scale detail.

### Optional features

Construction		Scale Variations	
Option	Option code	Option	Option code
1. Internal illumination	EL	1. Spare black dial and legend plate	SA
2. Anti-glare window	BR	2. Black scale, white markings and pointer	SB
3. Aluminium finish to case (standard is black)	FS	3. Colored index marker on scale	SL
4. Other trim colors (specify)	-	4. Coloured zone(s)	SZ
5. Additional sealing	-	5. Standard scale with non-standard caption or legend	SD

### Ratings and Calibration

Option	Option code
1. 1 percent accuracy (D.C. only)	C1
2. Calibrated for 400Hz	C4
3. Heavily damped movement	PD
4. Special calibration to customer specifications	SX
5. Calibration angle other than standard	CM
6. Externally adjustable calibration potentiometer	EP

