

# Moving Coil Ammeters & Voltmeters

Instrument Division

# (Slide in Scale)

Data sheet No.: MCSL/10/11

#### DESCRIPTION

Moving Coil Instruments are protected from damage or breakage under adverse conditions due to spring loaded jewel & pivot system. These instruments are free from external magnetic field influences because of centre magnet system & are "CE" certified. Voltmeters are made upto 600V for direct connection and upto 1200V with external multiplier with sensitivity 1000 ohms/V. Higher sensitivities are available. Scale printed for other variables viz. Speed, Temp, pH, kW, kVAR, Hz or cos etc. can be supplied on request. Ammeters with internal shunts are available upto 30 Amps and for higher currents upto 12000 Amps use external shunts of 50mV, 60mV etc. (Please refer data sheet no. Shunt 03/99.)

#### **FEATURES**

SCALE : Linear.

SCALE COLOUR
 Special colour scales & marks for different ranges. (on request).

GLASS : Anti-glare. (on request).
HOUSING : Engineering plastic.

TERMINAL PROTECTION : Shrouded terminals to protect from accident. (on request).

## **ELECTRICAL SPECIFICATIONS**

TYPE : Moving Coil Slide in scale. (72/96 mm Size)

OPERATING VOLTAGE : 50mV to 600V.

OPERATING CURRENT
 ACCURACY
 INSULATION RESISTANCE
 100μA to 30A. & Above 30A external shunt.
 Class 1.5%.(1% for 144 x 144 mm Size)
 Greater than 20MΩ at 500V DC

DIELECTRIC TEST : 2kV for RMS for 1min.

OVERLOAD CONTINUOUS : 1.2 times.

♦ OVERLOAD SHORT TIME : 2 times V<sub>N</sub> /10 times I<sub>N</sub> for 5 seconds.

OPERATING TEMP. : -10°C to 55°C.
 STORAGE TEMP. : -20°C to 70°C.
 HUMIDITY : up to 95% RH

• CONFORMS TO : I.S. 1248 / I.E.C. 60051 (Part 2).

### MECHANICAL SPECIFICATIONS

MODEL	SMC 72	SMC 96
SIZE (mm)	72 X 72 X 60	96 X 96 X 60
PANEL CUTOUT (mm)	68 X 68 <sup>+0.7</sup>	92 X 92 <sup>+0.8</sup>
SCALE LENGTH (Approx. mm)	60	90
WEIGHT (Approx. gms.)	130	190

# Note: METERS ARE ALSO AVAILABLE IN 48X48X45 (SMC48) & 144X144X60 (SMC144) IN NON SLIDE IN DIAL VERSION.

MODEL	SMC 48	SMC 144
SIZE (mm)	48 x 48 x 45	144 x 144 x 50
PANEL CUTOUT (mm)	45 X 45 <sup>+0.6</sup>	138 X 138 <sup>+0.1</sup>
SCALE LENGTH (Approx. mm)	40	145
WEIGHT (Approx. gms.)	100	400

# **Ordering information**

1) Type 2) Model 3) Operating Voltage / Current 4) mV in case of Ammeter with external shunt.



