

Moving Iron Ammeters & Voltmeters (Slide in Scale)



DATA SHEET NO. MISL / 10 / 99



DESCRIPTION

Moving Iron Instruments are protected from damage or breakage under adverse condition due to its spring loaded jewel & pivot system. And are free from external magnetic field influences because of magnetic shielding & are 'CE' certified. These instruments have a very efficient oil damping system, which gives almost a deadbeat movement to the pointer, without irksome oscillation. The movement is light yet sturdy and has a large torque to weight ratio which assures long life to instruments. These indicate true RMS values practically independent of waveform even of high harmonics. The scale is compressed initially. Readability starts from 10 to 15 degree approximately.

FEATURES

- ◆ Scale : Non-linear.
- ◆ Suppression : Initial suppression for Voltmeter & End suppression upto 6 times for Ammeter.
- ◆ Scale Colour : Special colour scales and marks for different ranges. (on request).
- ◆ Housing : Engineering plastic.
- ◆ Terminal Protection : Shrouded terminals to protect from accident. (on request).

ELECTRICAL SPECIFICATIONS

- ◆ TYPE : Moving Iron Slide In Scale.
- ◆ OPERATING VOLTAGE : 15V to 600V.
(For Voltmeter)
Burden : 100V/110V for PT secondary.
15V to 30V - <100mA, 50V to 100V - < 30mA, 110V to 200V - <15mA,
200V to 600V - <7.5mA.
- ◆ OPERATING CURRENT : 1A to 100A in 72 x 72, 1A to 200A in 96 x 96
(For Ammeter)
Burden : 1A/5A for CT secondary.
0.25A to 30A - < 1VA, Above 30A - < 1.5 VA.
- ◆ FREQUENCY : 45Hz ~ 65Hz. (400Hz. on request).
- ◆ ACCURACY : Class 1.5
- ◆ INSULATION RESISTANCE : Greater than 20MΩ at 500V DC
- ◆ DIELECTRIC TEST : 2kV RMS for 1 minute.
- ◆ OVERLOAD CONTINUOUS : 1.2 times
- ◆ OVERLOAD SHORT TIME : 2 times V_N / 10 times I_N 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	SMI72 (Slide in)	SMI96 (Slide in)
SIZE (mm)	72 x 72 x 60	96 x 96 x 60
PANEL CUTOUT (mm)	68 x 68 ^{+0.7}	92 x 92 ^{+0.8}
SCALE LENGTH (Approx. mm)	60	90
WEIGHT (Approx. gms.)	< 145 For 72 SQ Amps < 180 For 72 SQ Volts	< 200 For 96 SQ Amps < 230 For 96 SQ Volts

Note : METERS ARE ALSO AVAILABLE IN 48X48X45 (SMI48) & 144X144X60 (SMI144) IN NON SLIDE IN DIAL VERSION.

MODEL	SMI48	SMI144
SIZE (mm)	48 X 48 X 45	144 X 144 X 50
PANEL CUTOUT (mm)	45 X 45 ^{+0.6}	138 X 138 ^{+1.0}
SCALE LENGTH (Approx. mm)	40	145
WEIGHT (Approx. gms.)	100	400

Ordering information

1) Type 2) Model 3) Operating Voltage & PTR for Voltmeter 4) Operating Current & CTR for Ammeter.