



## VIBRATING WIRE REBAR STRAIN METER

### FEATURES

- \* For direct embankment in concrete.
- \* Extremely rugged design.
- \* Water proof.
- \* Various sizes available.
- \* Highly sensitive.
- \* Long-term stability.
- \* Weldable to form part of the rebar System

### APPLICATION

- \* Model SME-2380 Rebar strain meter is very use full device for strain measurement in dams.
- \* To measure strains in foundations, Slurry walls precast piles, caissons, bridge abutment tunnel line etc.
- \* To measure strains in bore holes in mines.



### DESCRIPTION

The Rebar strain meter comprises of stainless steel element of suitable length welded or weldable between two rebars to reach the required length. A vibrating wire sensor is provided and it is covered with a water proof cover with inbuilt two core shielded cable of required length or four core shielded cable where thermister provision is required. This cable is connected to Model SME 2460-S portable readout unit or connected to datalogger.

These instruments provide the necessary excitation to pluck the vibrating wire element so that it vibrates at its resonant frequency. This frequency is then measured by the readout unit. Strain in the concrete causes the same strain in the rebar and a corresponding change in the resonant frequency of the vibrating wire. Each strain meter is individually calibrated at the factory so that the relationship between strain & frequency is known and presented as a calibration factor. Since the vibrating wire element is axially located the strain meter is not affected by bending moments.

## ADVANTAGE

The advantage of the vibrating wire rebar strain meter over more conventional electrical resistance types lies mainly in its long term stability and its use of the a frequency, rather than a voltage as the output signal. Frequencies may be transmitted over long cable lengths without appreciable degradation caused by variations in cable resistance, contact resistance or leakage to ground. A thermistor is included in each strain meter as a standard feature and permits measurement of temperature at the strain meter location.

## SPECIFICATIONS

Model	:	SME 2380
Sensitivity	:	0.1% FS
Accuracy	:	±1.0% FS
Dimensions	:	As Per requirement

## ORDERING INFORMATION

- \* Model no.
- \* Cable length.
- \* Rebar length and diameter

## ACCESSORIES

- \* Readout unit Model SME 2460-S
- \* Terminal boxes
- \* Data logger

Due to continuous development program the specification and dimensions are subject to change without notice. Our engineers do undertake the work for development as per the customer's requirement.

## Sensors & Measurements Enterprises

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