

Product Name :
THERMAL CONDUCTIVITY OF METAL BAR APPARATUS

Product Code :
Heat and Mass0013



Description :

THERMAL CONDUCTIVITY OF METAL BAR APPARATUS

Technical Specification :

The unit consists of a copper bar, which is heated at one end, a Cold water jacket is provided at other end. The test section of bar is properly insulated and along the length of bar, thermocouples are attached. Heat conducted through the section of bar is measured by thermocouples and also heat dissipated in water measured by thermocouples. A panel comprising of controls and measurements is provided, which provides easy operation and study mounting of unit.

SPECIFICATIONS:-

- Material of metal bar - Copper
- Length of the metal bar (Total) - 510 mm
- Diameter of metal bar - 25.4 mm
- Test length of bar - 292.5 mm
- No. of thermocouples mounted on the bar - 6
- No. of thermocouples in the insulation shell - 2
- Heater - Band type
- Cooling jacket diameter - 75 mm
- No. of thermocouples - 10
- Position 1 to 6 - on the bar
- Position 7 & 8 - in the shell.
- Position 9 & 10 - cooling water in & out
- Dimmerstat - 1000 watt

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- Voltmeter - 0 - 300 volt
 - Ammeter - 0 - 5 amp
 - Temperature Indicator - 0 – 3000 C

SERVICE REQUIRED:-

- Bench area to mount equipment
- 15amps Single Phase, AC electric supply with earthing connection.
- Continuous Water supply at constant head.

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