Instrumentation Cables

Applications

For the connection of instruments to their terminal locations, offering maximum security to buried and exposed cables:

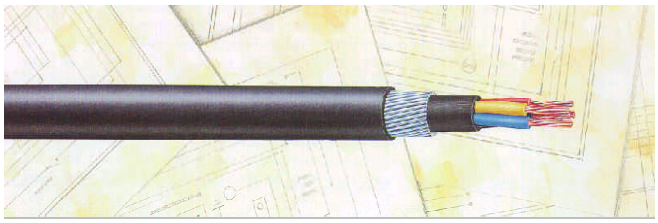
- Between borehole and buried instruments and junction boxes
- Between junction boxes and monitoring locations
- Between junction boxes and centralised monitoring locations

Principle

Costly instruments used to measure the performance and safety of structures requires secure connections between the sensors and the readout locations. It is essential that adequate consideration is given to the connecting cables, particularly when they are to be buried in the ground or exposed where they could be accidentally damaged. Vibrating Wire transducers manufactured by Soil Instruments Limited do not require the use of specialist instrument cables to link them to the readout location since the signals they generate are in the form of a Current and not a Voltage. Voltage output instruments require the use of our high quality instrument cable.

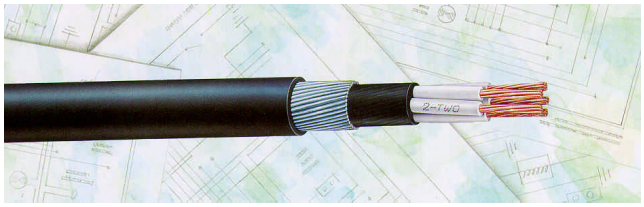
The type of cables recommended by Soil instruments Limited are of the highest quality and are manufactured to British Standards. The cables are specified for use by power cable and telephone cable companies for permanent installation.

All cables can be jointed on site with appropriate epoxy jointing kits.



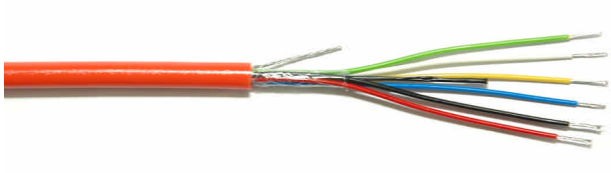
CA-1.1 Armoured 2 / 4 Core Cable

- Cable for connection to instruments with internal thermistors (4 core) or without (2 core).
- Manufactured to BS 5467
- Plain annealed 1.5mm^2 copper conductors, XLPE insulated, PVC extruded bedding, Steel wire armoured and PVC sheathed.
- Maximum operating temperature 90 Deg. C
- Rated to 600 Volts with Black PVC Sheath.
- Conductor resistance 92 Ohms DC/Km
- Conductors 1.5 sq. mm.
- Weight 280 Kg/km
- Resistance to tensile loading (Tested to in excess of 500 kg).



CA-2.2 & CA-2.3 Multicore Cable

- Available in 2, 4, 5, 10, 12, 20 and other pair configuration.
- Cable for connecting between junction boxes and terminal panels.
- Manufactured to BS 5308 Pt.1 and BS 6234
- Plain annealed copper conductors, polyethylene insulated, in twisted pairs each screened with aluminium backed polyester tape, copper drain wire, overall screened and sheathed with Polyethylene.
- Rated to 440 Volts with Blue MDPE Sheath.
- Conductor resistance 92 Ohms DC/Km
- Conductors 0.6 sq. mm.
- Weight 2 pairs - 154 Kg/km
  5 pairs - 254 Kg/km
  10 pairs - 421 Kg/km
  20 pairs - 706 Kg/km



CA-3.1 Instrument 4 / 6 Core Cable

- Cable for connecting between voltage or resistance output instruments to dataloggers.
- Tinned copper conductors, polyethylene insulated, screened with aluminium backed polyester tape, tinned copper drain wire and sheathed with Polyethylene.
- Rated to 30 Volts with Polyurethane Sheath.
- Conductor resistance 39 Ohms DC/Km
- Conductors 0.6 sq. mm.