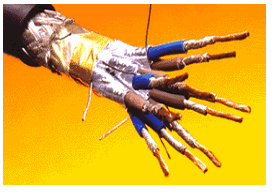
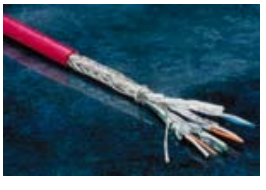
INSTRUMENTATION CABLES





T C Communication Pvt. Ltd., manufactures a wide variety of cables suitable for purpose instrumentation. In the projects related to Power Generation & Distribution, Chemicals & Fertilizers Industries and various other type of engineering industries, the process instrumentation plays a vital role in measurement, supervision and control of the process.

Shield is provided to prevent harmful electrostatic interface. There are three basic reasons for providing an electrostatic shield in a cable. The first, and most common, reason concerns the need to keep external electrical disturbances from affecting the signal in the cable. The second reason is to prevent the signal in the cable from being detectable at location other than all the cable ends. The third reason is the combination of the first two, it is the elimination of unwanted transfer of signals between circuit in the same cable, commonly called cross talk.

The interfacing and connection of most data transmission equipment can be effected using either coaxial cable, sereened or unscreened twisted pair cables. For microcomputers, which use low speed data transmission over short distances, unscreened multicore or multipair cables can be used. For the inter connection of data processor, instruments, and microcomputers where signal interface is a consideration, cables are generally screened. Minicomputers require medium speed data transmission and for these, interfaces with screen twisted pair cables are suitable. When signal speeds are fairly low a braid screen is sufficient but for higher speeds a foiled screen or composite foil and braid screen is more suitable. A further refinement is to use individually screened pairs to minimize the effect of cross talk, thus making possible the transmission or data over long distances.

Technocab Cables with its meticulous efforts in maintaining quality, stringent inprocess control during manufacture and the knowledge of cable designing, is proud to say that it is capable of supplying instrumentation cables meeting any Indian/International Standard or a specific requirement desired by project authority.

RANGE OF INSTRUMENTATION CABLES

CONDUCTOR

0.4 mm dia (0.126 sqmm) to 2.5 sqmm or higher sizes of electrolytic grade Bare/Tinned, Solid/Standard, copper conductors.

INSULATION

70 Deg. C / 85 Deg. C PVC, Polyethylene, Halogen free FRLS Polymeric Compounds.

ELEMENTS

Pairs/Triads/Quads, Colour Coded/Number Printed.

SHIELDED

Aluminum polyester tape screen with copper drain wire or ultimately with copper wire braiding. Individually element or overall shielding as specified.

ARMOURING

Galvanized Steel Wire/Strip armour.

SHEATHING

70 Deg.C / 85 Deg.C Grade PVC, FRLS, Halogen Free FRLS polymeric Compounds.

SPECIFICATION

BS-5308 (Part I,II), IEC-189 (Part I,II), VDE 0815, ENI - 0181.00 and meet to customers specific requirement.

ELECTRICAL PROPERTIES

Conductor Area	Sqmm	0.50	0.75	1.00	1.50	2.50
Max. DC Resistance at 20° C [Multi-Core]	Ω/km	39.00	24.50	18.10	12.10	7.41
Max. DC Resistance at 20° C [Multi-Pair]	Ω/km	39.70	25.00	18.50	12.30	7.56
Max. Mutual Capacitance at 1 kHz [Pairs Or Adjacent Core	pF/m	250	250	250	250	250
Max. Mutual Capacitance at 1 kHz [Between any Core or Screen]	pF/m	400	400	400	400	400
Max. L/R Ratio [Inductance/Resistance]	µH/ohm	25	25	25	40	40
Max. Inductance	mH/ohm	1	1	1	1	1
Min. Insulation Resistance	MΩ/Km	25	25	25	25	25
Test Voltage	V	1000 V for 1 minute between conductors and between conductors and Screen / Armour				