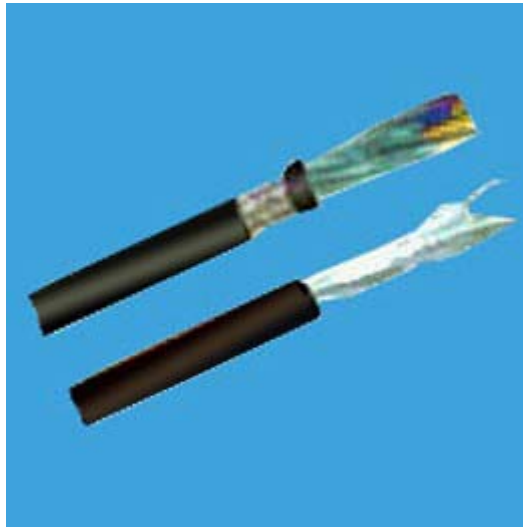


INSTRUMENTATION CABLES



We have specialization in Manufacturing various types of Instrumentation Cables such as pair, Tied, Individual etc. With over all Alluminium Polyester Tape and ATC drain having Tin-copper bridging, these wires are available in armoured as well as unarmoured cables. These Cables facilitate smooth communication of Low Level Signal from Electronics transmitters.

F&S Cables Instrumentation cable offers total interference free data transfer in measuring, process-control & security systems. Instrumentation process in any industry is a very important factor for controlling various parameters during process. Microprocessor based control devices demand very low noise level & attenuation of signals in the cable. This calls for careful designing & manufacturing of cables with stringent quality control. F&S Cables never compromise to use the high class of Mylar / Alluminium Tape / Polyester Tape & ATC Drain Wire that ensures smooth communication of very Low level signal from transmitter to control room & also effectively Cut the cross communication & noise.

» CONDUCTOR

Annealed bare/ uniform coated with Tinned/Silver Platted, High Conductivity, and Electrolytic Grade Solid/Stranded/Flexible Conductor.

» INSULATION

Conductor are insulated with General Purpose PE / HR / FRLS / LSZH / PVC Compound / or any other dielectric material as per customers specification.

» COLOUR OF DIELECTRIC

Cores are identified with different type of color scheme as per requirement as below:-
i) As per IS:1554[Pt-I]:88, 694:90.
ii) As Per IEC, ITD or number Printing.
iii) As Per Customers Scheme.

» **PAIR/TRIAD/QUAD**

Two/Three/Four cores are uniformly twisted together to form a Pair/Triad/Quad with maximum lay length 80 mm/as per requirement of customer. The lay shall be so chosen as to minimize cross talk in the cable.

» **INDIVIDUAL SHIELDING**

If required, Individual Shielding may be of Poly Aluminum [Thin Layer of Aluminum Foil bonded to Polyester Film] Tape with Annealed Tinned Copper Drain Wire. It prevents the shorting of adjacent shield and minimizes the cross talk and ground loops. A Tinned Copper drain Wire is installed to provide continuous contact with the shield and allow to connection to ground. Tinning the drain wire reduces galvanic corrosion between drain and shield.

» **LAYING OF PAIRS/TRIAD/QUAD**

Pair/Triad/Quad are laid up with suitable lay. The outer most layers are right hand lay and successive layers are laid up with opposite lay. Then, a Polyester Tape is provided to bind up laid up Pair/Triad/Quad.

» **OVERALL SHIELDING**

If required, Overall Shielding may be of Annealed Tinned Copper Braiding / Poly Aluminum [Thin Layer of Aluminum Foil bonded to Polyester Film] Tape with Annealed Tinned Copper Drain Wire. Braiding ATC Shield has high tensile Strength and provides better coverage in flexing application. They are easier to terminate. This provides effective shielding; cross talk and noise are kept to an absolute minimum.

» **INNER SHEATH**

The laid up pair/triad/quad after shielding are provided with an inner sheath, which may be either Extruded Inner Sheath or wrap with PVC Tape.

» **ARMOURING**

It is applied over inner Sheath. It may consist of galvanized Round Steel wires or galvanized Flat Steel Strips.

» **OUTER SHEATH**

It is applied over Armouring in case of Armoured Cable or over Inner Sheath in case of Unarmoured Cable. The Color of Sheath is Black or Grey. The Sheath material may be General Purpose/HR / FRLS / LSZH PVC Compound as per requirement of specification.

» **TYPICAL APPLICATION**

For Connection of Instruments, Process Control Systems, Computers, Data Transmission etc.