

## Instrumentation Cables

Instrumentation Cables are specially designed to transmit signals without any external interference. They are used in Data Acquisition Systems, Connections to Instruments, Computer Networking, PA Systems, Digital / Analog Control / Measuring & Communication Systems, Data Communication, Sensors, Transducers etc.

<b>Construction</b>	: Cores, pairs, triads or quads
<b>Voltage Grade</b>	: Up to 1100 V
<b>Conductor</b>	: Electrolytic Grade Copper Bare / Tinned / Nickel Plated / Silver Plated Solid / Stranded / Flexible Conductors
<b>Range</b>	: 0.5 / 0.75 / 1.0 / 1.5 / 2.5 Sq mm up to 100 pair
<b>Primary Insulation</b>	: General Purpose PVC / Heat Resistant PVC / PE / XLPE / PTFE / FEP / PFA / EPR / Silicone Rubber / Fibre Glass
<b>Screening</b>	: Individual and / or overall with following options - - Aluminum Mylar / Copper Tape with Tinned Copper Drain Wire - Braided with Bare or Tinned or Nickel Plated or Silver Plated Copper
<b>Inner Sheath</b>	: PVC / HRPVC / FRPVC / FRLS PVC / ZHFR / LSF
<b>Armouring</b>	: GI Round Wire / Flat Strip or GI / SS Wire Braiding
<b>Outer Sheath</b>	: PVC / HRPVC / FRPVC / FRLS PVC / ZHFR / LSF
<b>Rip Cord</b>	: For easy removal of sheath
<b>Standards</b>	: BS-5308 Part-1 & 2, BS-7655, IEC-189 (1 & 2), VDE-0815 & 0816 and BS-EN 50288-7, IEC-60332-1, IEC-60332-3-22, 23, 24
<b>Additional Features</b>	: Communication pairs, Bi-colour extrusion, Band marking
<b>Optional Bedding</b>	: Aluminum Tape + HDPE + Polyamide Sheath for Alternate Lead Sheath Cables

*Note: We also offer Data Communication and Low Capacitance Cables*

### Technical Data

Conductor Resistance at 20° C Ohms/Km	Conductor Size mm <sup>2</sup>	0.5	0.75	1.0	1.5	2.5
	Maximum Resistance (Plain Copper, Class-2 Conductor)	39.0	26.0	19.5	13.3	7.98
Capacitance nf/Km	Between Conductors	< 250 for PVC < 150 for Polyolefin				
Inductance mH/Km		<1.0				
L/R Ratio $\mu$ H/Ohm	Conductor Size mm <sup>2</sup>	0.5	0.75	1.0	1.5	2.5
	L/R	< 25	< 25	< 25	< 40	< 60
Insulation Resistance at 20° C MOhm-Km	PVC	More than 100				
	PE/XLPE	More than 5000				
Electrostatic noise rejection ratio		More than 76.0 db				