

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.

Construction	: Cores, pairs, triads or quads
Voltage Grade	: 90 V to 1100 Volts
Conductor	: Electrolytic Grade Copper Bare / Tinned / Nickel Plated / Silver Plated Solid / Stranded / Flexible Conductors
Range	: 0.5 / 0.75 / 1.0 / 1.5 / 2.5 Sq. mm up to 100 pair
Primary Insulation	: General Purpose PVC / Heat Resistant PVC / PE / XLPE / PTFE / FEP / PFA / EPR / Silicone Rubber / Fibre Glass
Screening	: Individual and / or overall with following options - - Aluminum Mylar with Drain Wire / Copper Tape with Tinned Copper Drain Wire - Braided with Bare or Tinned or Nickel Plated or Silver Plated Copper
Inner Sheath	: PVC / HRPVC / FRPVC / FRLS PVC / ZHFR / LSF
Armouring	: GI Round Wire / Flat Strip or GI / SS Wire Braiding / GI Braiding
Outer Sheath	: PVC / HRPVC / FRPVC / FRLS PVC / ZHFR / LSF
Rip Cord (Optional)	: For easy removal of sheath
Standards	: BS-EN 50288-7, BS-5308 Part-1 & 2, BS-7655, IEC-189 (1 & 2), VDE-0815 & 0816, IEC-60332-1, IEC-60332-3-22, 23, 24
Additional Features	: Communication pairs, Bi-colour extrusion, Band marking
Optional Bedding	: 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 ²	0.5	0.75	1.0	1.5	2.5	
	Maximum Resistance (Plain Copper Conductor)	39.0	26.0	19.5	13.3	7.98	Class-5
Capacitance nf/Km	Between Conductors	< 250 for PVC < 150 for Polyolefin					
Inductance mH/Km		< 1.0					
L/R Ratio μ H/Ohm	Conductor Size mm ²	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					