

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.

Construction	: Cores, pairs, triads or quads
Voltage Grade	: Up to 1100 V
Conductor	: Electrolytic grade copper Bare / Tinned 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 / PFA/ EPR / Fibre Glass / FEP / Silicone Rubber
Screening	: Individual and/or overall with following options - - Aluminum Mylar/Copper Tape with Tinned Copper Drain Wire or - 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 Wire Braiding
Outer Sheath	: PVC / HRPVC / FRPVC / FRLS PVC / ZHFR / LSF
Rip Cord	: For easy removal of sheath
Standards	: BS-5308 Part-1 & 2, BS-7655, IEC-189 (1 & 2), VDE-0815 & 0816 and BS EN 50288-7
Additional Features	: Communication pairs, Bi-colour extrusion, Band marking
Optional Bedding	: Aluminum Tape + HDPE + Polyamide Sheath for Alternate Lead Sheath Cables

Note:- These cables are also designed as Data/Analogue 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	39.0	26.0	19.5	13.3	7.98
Capacitance nf/Km	Between Conductors	< 250 for PVC				
	Between Conductors & screen	< 150 for Polyolefin				
Inductance mH/Km		Less than 1.0				
L/R Ratio μH/Ohm	Conductor Size mm ²	0.5	0.75	1.0	1.5	2.5
	L/R	<25	<25	<25	<40	<40
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				