



## INSTRUMENTATION CABLES



Instrumentation cables come with or without flame retardant properties and are suitable in process control, A/D converters and other modern microprocessor based instrumentation circuits. These cables are designed to offer excellent resistance to noise and induction phenomena encountered in instrumentation circuits. Voltage grade 650/ 1100 Volts (U<sub>o</sub>/U). Conforming to standard specifications such as IS: 5608 (Parts I, II, III), BS 5308 (Part I), BS 1584 (Parts I, II, III), IEC 189-5 (Part III), BS 6360, BS 5099 (Part II).

### Configuration

Multi-core, multi-pair or multi-quad laid up concentrically or in units.

### Conductor

Solid or stranded, tinned, bare or silver-plated annealed, high conductivity EC grade copper, sizes ranging from 0.5 sq. mm to 2.5 sq. mm.

### Insulation

PVC, Solid PE or special thermoplastic materials, heat resistant PVC with an operating temperature range of 85°C to 105°C. Halogen free polymeric or elastomeric insulation may also be provided. Core identification through colour coding or character printing.

### Core-Wrap

One or more Plastic Tape

### Screen

Cores, Pairs or Quads can be individually or collectively screened or both. Screening with Copper or Aluminium Mylar Tape, Copper Wire Braid or Aluminium Wire.

### Drain Wire

Drain Wire of solid or stranded, bare or tinned copper wire normally provided with both individual and overall screening.

### Mechanical Protection

Cables can be armoured with galvanized steel wires and strips or double helical steel tape.

### Inner and Outer Sheath

PVC of Black or Grey colour. Heat Resistant, FRLS PVC Sheathing, Halogen Free Polymeric or Elastomeric sheathing also available.

### Additional Features

Communication Pairs, Bicolor Extrusion, Band Marking can be provided on request. Designed to combat all the basic types of noise which affect process instrument signals namely static, magnetic disturbance, manmade noise and cross-talk. Reference specifications for testing are IS: 10810, ASTM D2863, ASTM D2843, IEC-754(I), VDE 0815, VDE 0207 (PT5), IEE383, SS-424-14-75 (F3), VDE0207 (Part IV), VDE0472, IEEE Transit No.467 and as per customer's requirement.



## RANGE OF THERMO COUPLE EXTENSION AND COMPENSATING CABLES

Extension Cables	Conductor Material	
	Positive	Negative
* KX (Ni,Cr,NiAl)	CHROMEL®	ALUMEL®
* JX (Fe/Cu Ni )	IRON	Constantan
* EX (Ni Cr/Cu Ni )	CHROMEL®	Constantan
* TX (Cu/Cu Ni )	Copper	Constantan
<b>Compensating Cables</b>		
+ KX (A)/BX ( Ni Cr /Ni Al )	Copper	Constantan
# SX/RX ( PtRH-pt )	Copper	Constantan

**NOTE:** \* Extension Cables as per ANSI MC 96.1  
 + For Compensating Cables as per IS:8784/87  
 # Compensating Cables as per ANSI MC 96.1 and IS:8784/87  
 ° CHROMEL® & ALUMEL® are registered trademarks of Hoskins Manufacturing Co., USA.

## COLOUR CODES AS PER VARIOUS STANDARD SPECIFICATIONS

Standard Preferred									
ANSI MC-96.1, ENI - 163.00				IS: 8784			BS: 4937		
	+ve	-ve	Overall	+ve	-ve	Overall	+ve	-ve	Overall
<b>EXTENSION CABLES</b>									
KX	Yellow	Red	Yellow	Red	Green	Green	Brown	Blue	Red
JX	White	Red	Black	Red	Blue	Blue	Yellow	Blue	Black
TX	Blue	Red	Blue	Red	Black	Black	White	Blue	Black
EX	Purple	Red	Purple	Red	Violet	Violet	Brown	Blue	Brown
<b>COMPENSATING CABLES</b>									
KX/BX	-	-	-	Red	Green	Green	White	Blue	Red
SX/RX	Black	Red	Green	Red	White	White	White	Blue	Green

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ISO 9001 & 14001 Certified

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