

## **Master Flex Cables**

### INSTRUMENTATION CABLES, UN-ARMOURED / ARMOURED, UN-SHIELDED I OVERALL I INDIVIDUAL SHIELDED I FRLS I NON FRLS

### Specifications :

Generally to BS-5308 Part-1 (Polyethylene Insulation)

### **Applications :**

Can be used for instrumentation/process control in chemical and petrochemical industries

	CONSTRUCTIONS	TECHNICAL DATA	
Conductor	Solid/Stranded/Flexible Annealed Bare/Tinned Copper class 1/2/5 to BS:6360 Available in the following sizes : 0.50 Sq.mm (1/0 80 mm) 1.00 Sq.mm (1/1.13 mm) 0.50 Sq.mm (16/0.20 mm) 1.50 Sq.mm (7/0.53 mm)	Temperature range Stationary Flexing	-30°C to +70°C -5°C to +50°C
Insulation	The conductors are insulated with Polyethylene Type 03 as per BS : 6234, uniformly twisted together to form a pair with a max. lay length of 100 mm, and color coded for identification. Available in the following no. of pairs : 1.2(1 quad) , 5, 10, 15, 20, 30 and 50 Pairs.	Working voltage	300/500 Volt
Color code	As per BS: 5308 Part-1.	Minimum bending radius	12 X cable diameter
Pair shield (for individual paid shielded cables)	Each twisted pair shielded with aluminum polyester tape and a stranded tinned copper drain wire of size 0.5 mm2 for maximum electrostatic noise and	R.M.S. test voltage : Core to Core &	1000 V rms for 1 minute
Overall shield (for overall shielded cables only)	Twisted pairs are cabled with non-hygroscopic fillers If necessary, and the entire assembly is shielded with aluminum polyester tape and a stranded tinned copper drain wire of size 0.5 mm2.	Mutual Capacitance NF/Km Core to Core	250 pF/250 nf Max.
Bedding (applicable for Type 2 cables)	Extruded Black Polyethylene Type 2 C or 03 as per BS:6234		
Wire Armour (applicable for Type 2 Cables)	A serving of round galvanzed steel wires as per BS : 1442, is applied with 90% minimum coverage.		
Sheath	Type - 1 & 2 Extruded Black PVC Type TM1 of BS:7655		
Printing Legend	Master Flex Cables Conductor area of cross section x no of pairs, BS:5308 Part No. Type No., year of manufacture of any other making detail on request.		

### NOTE :

- Type 1 are Unarmoured Cables and Type 2 are Armoured Cables.
- 2 pair cable shall be cabled in Quad formation and colour coded in clockwise order of rotation with BLACK, BLUE. GREEN & BROWN.
- Other Conductor Sizes and Types, Alternative Color Codes, Higher Pair Count and Sheath Material
  FR/FRLS/ZERO HALOGEN compound are available on request.
- As an alternate, armoured cable shall be supplied with Flat Strip/Double Steel Tape/Wire Braided as per customer requirement.
- The given picture of the product may differ to its actual in construction/color

# Master Flex Cables

## INSTRUMENTATION CABLES, UN-ARMOURED / ARMOURED, UN-SHIELDED / OVERALL / INDIVIDUAL SHIELDED / FRLS / NON FRLS

### **Specifications:**

Generally to BS-5308 Part-II (PVC Insulation)

### **Applications :**

Can be used for instrumentation/process control in chemical and petrochemical industries

	CONSTRUCTIONS	TECHNICAL DATA	
Conductor	Plain Annealed Copper Wire in accordance with BS:6360 Available in the following sizes : 0.50 Sq.mm (16/0.20 mm) 0.75 Sq.mm (24/0.20mm) 1.00 Sq.mm (32/0.20 mm) 1.50 Sq.mm (7/0.53 mm)	Temperature range Stationary Flexing	-30°C to +70°C -5°C to +50°C
Insulation	The conductors are insulated with PVC Type 1 to BS : 7655, uniformly twisted together to form a pair with a max. lay length of 100 mm, and color coded for identification. Available in the following no of pairs : $1,2(1 \text{ quad})$ , $5,10, 15,20,30$ and 50 Pairs.	Working voltage	300/500 Volt
Color code	As per BS: 5308 Part-2.	Minimum bending radius	12 X cable diameter
Pair shield (for individual paid shielded cables)	Each twisted pair shielded with aluminium polyester tape and a stranded tinned copper drain wire of size 0.5 mm2 for maximum electrostatic noise and cross talk rejection. All pair shields are electrically isolated from each other.	Conductor resistance at 20°C -	Refer Technical Section. Or BS : 6360
Overall shield (for overall shielded cables only)	Individually shielded pairs are cabled with non-hygroscopic fillers if necessary, and the entire assembly is shielded with aluminum polyester tape and a stranded tinned copper drain wire of size 0.5 mm2	R.M.S. test voltage : Core to Core & Core to Screen	1000 V rms for 1 minute
Bedding (applicable for Type 2 cables)	Extruded Black PVC Type TM1 of BS:7655	L/R ratio (Max)	40 Micro Henry/Ohms for 1.5 Sq.mm 25 Micro Henry/Ohms for 0.5/0.75/1 .0sq.mm.
Wire Armour (applicable for Type 2 Cables)	A serving of round galvanzed steel wires as per BS : 1442, is applied with 90% minimum coverage.	Mutual Capacitance Core to Core Core to Screen	250 nF/Km.Max. 400 nF/Km.Max.
Sheath	Type - 1 & 2 Extruded Black PVC Type TM1 of BS:7655		
Printing Legend	Master Flex Cables Conductor area of cross section x no of pairs, BS:5308 Part No. Type No., year of manufacture of any other making detail on request		

### NOTE :

- Type 1 are Unarmored Cables and Type 2 are Armored Cables.
- 2 pair cable shall be cabled in Quad formation and color coded in clockwise order of rotation with BLACK, BLUE, GREEN & BROWN.
- Other Conductor Sizes and Types , Alternative Color Codes, Higher Pair Count and Sheath Material FR/FRLS/ZERO HALOGEN compound are available on request.
- As an alternate, armoured cable shall be supplied with Flat Strip/Double Steel Tape/Wire Braided as per customer requirement.
- The given picture of the product may differ to its actual in construction/colour.

