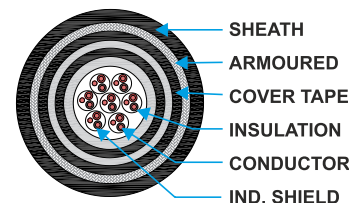




Instrumentation Cable

Multi Pair Individual & Overall-Shielded Armoured.



0304 - Instrumentation Cables

Application

Instrumentation cables are used for diverse applications within industrial process manufacturing plants for control, monitoring, communication, data and voice transmission signals and process control circuits in industrial applications such as oil, gas, petrochemical industry, fertilizers, cement, steel plants, etc.

Properties

- Halogen free
- Excellent fire resistance
- No smoke and fume generation
- Low gas emission
- Good mechanical tensile strength & elongation

Technical Parameter

Parameter	Unit	Conductor Size				
		0.5mm ² 1/0.8 mm	0.5mm ² 16/0.2 mm	0.75mm ² 24/0.2 mm	1.0mm ² 1/1.13 mm	1.5mm ² 7/0.53 mm
Insulation Thickness	mm	0.50	0.50	0.50	0.50	0.60
Conductor (Bare) resistance	Ω/Km (max.)	36	39	26	18.1	12.1
Insulation resistance	MΩ x Km	> 36.7	> 36.7	> 36.7	> 36.7	> 36.7
Mutual capacitance (c to c)	pF/m (max.)	250	250	250	250	250
Mutual capacitance (c to s)	pF/m (max.)	450	450	450	450	450
Inductance/resistance ratio (L/R)	μH/Ω (max.)	25	25	25	25	40

Construction

- Conductor : Plain or tin plated copper, class-1 solid, class-2 stranded, class-5 flexible as per IS : 8130, BS 6360, IEC : 60228)
- Insulation : PVC-70°C/HR-85°C /105°C., BS 5308 or polyethylene to BS 6234
- Individual screen : Twisted Pair or Triad are individually shielded with aluminium-mylar tape along with tin copper drain wire. longitudinal. Shielding of copper tape can also be provided as per customer specific requirements
- Pair / Triad identification: Identifications can be done by numbered polyester tape applied over each Pair / Triad or by number printing on core of each Pair / triad
- Overall screen : Multi Pair / Triad are laid up together and are shielded with aluminium-mylar tape along with tin copper drain wire longitudinal. Shielding of copper tape can also be provided
- Inner sheath : Extruded PVC / LSZH inner sheath applied
- Armour : Galvanized steel wire or strip are applied spirally over inner sheath as a mechanical protection.
- Outer sheath : Extruded PVC / FR / FRLS / LSZH Sheathed

Characteristics

- Signal protection between pairs.
- Good electromagnetic protection from external influences.
- Excellent electrical, thermal & physical properties.
- Flame / Fire retardant- highly recommended in areas with high explosion & fire risks.
- Excellent mechanical protection during laying, installation & service.
- Optional class-5 conductor provides extra flexibility



Multipair Instrumentation Cables (Armoured) To BS 5308 Part 1 type 2-Individual Pair And Collectively Screened

Part code	Conductor	Number of Pairs	Nominal Dia Under Armour (mm)	Nominal Overall Dia (mm)	Armour Wire Dia (mm)	Approx Weight (kg/km)
0304T020005S	1/0.8mm (0.5mm ²)	2	10.1	14.3	0.9	411
0304T050005S		5	13.5	18.4	1.25	686
0304T100005S		10	18.3	23.6	1.25	1037
0304T200005S		20	23.5	29.7	1.6	1664
0304T300005S		30	27.9	34.3	1.6	2136
0304T020005	16/0.2mm (0.5mm ²)	2	12.0	15.8	0.9	460
0304T050005		5	15.2	20.1	1.25	760
0304T100005		10	21.1	27.0	1.6	1300
0304T200005		20	27.3	33.3	1.6	1870
0304T300005		30	32.3	39.6	2.0	2620
0304T020007	24/0.2mm (0.75mm ²)	2	12.8	16.8	0.9	500
0304T050007		5	16.2	21.1	1.25	920
0304T100007		10	22.6	28.6	1.6	1610
0304T200007		20	29.8	37.0	2.0	2420
0304T020010S		1/1.13mm (1.0mm ²)	2	12.8	17.0	0.9
0304T050010S	5		16.2	21.3	1.25	950
0304T100010S	10		22.6	28.8	1.6	1670
0304T200010S	20		29.8	37.2	2.0	2540
0304T020015	7/0.53mm (1.5mm ²)		2	14.7	19.5	1.25
0304T050015		5	18.4	24.5	1.6	1180
0304T100015		10	26.5	32.3	1.6	1820
0304T200015		20	28.0	41.3	2.0	3030

Note: 1 S=solid
Note: 2 Bare Copper On request