NEELKANTH CABLES

Instrumentation Cable

COPPER CONDUCTOR, POLYETHYLENE OR XLPE INSULATED STEEL WIRE ARMOURED, PVC SHEATHED INDIVIDUAL & OVERALL SCREENED, INSTRUMENTATION CABLE, 500V, BS EN 50288-7

Application : Cables are generally designed for indoor and outdoor that convey low energy electrical signals used for monitoring or controlling electrical power systems and their associated processes. Typical applications include industrial equipment control, broadcasting, assemble equipment or mass transit systems.

Description : Multi-pair cables with copper conductor, XLPE or PE insulated, Individual & overall screened, Extrudered PVC inner sheath, Steel wire armoured, PVC sheathed Cable.

CONSTRUCTION

Conductor : Stranded annealed plain / tinned class-2 or Flexible class-5 copper conductor as per EN 60228

Insulation : XLPE (Cross-Linked Polyethylene) as per EN 50290-2-29 or PE (Polyethylene) as per EN 50290-2-23

Insulation Colour : Pair Colour: Blue & Black with number printing

Pairing : Two insulated cores shall be uniformly twisted together to form a pair.

Individual Screening : Each pair screened with aluminium backed mylar tape, helically applied with the metallic side down in electrical contact with a stranded annealed tinned copper drain wire of 0.5 Sq.mm.

Cabling : Twisted pairs are laid up together with Non-Hygroscopic fillers if required.

Overall Screening : Accumulated pair screened with aluminium backed mylar tape, helically applied with the metallic side down in electrical contact with a stranded annealed tinned copper drain wire of 0.5 Sq.mm.

Binder Tape (Optional) : Polyester (Mylar)Tape

Inner Sheath : PVC (Polyvinyl Chloride) as per EN 50290-2-22
(Specical Requirement Low Halogen Flame Retardent & Zero Halogen Flame Retardent as per EN 50290-2-27)

Armour : Galvanized Steel Wire Armour (GSWA)

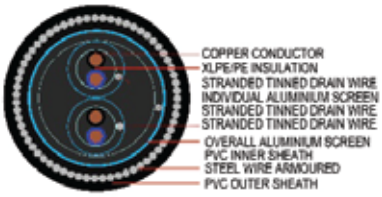
Outer Sheath : PVC (Polyvinyl Chloride) as per EN 50290-2-22
(Specical Requirement Low Halogen Flame Retardent & Zero Halogen Flame Retardent as per EN 50290-2-27)

Technical Characteristic

Voltage Grade : 500V

Temperature Rating : -15°C to +90°C

Flame Retardent : IEC 60332-1-2



Electrical Characteristics for Instrumentation Cable

TECHNICAL DATA					
Conductor Size (Sq.mm)	05	0.75	1.0	1.5	2.5
Insulation Resistance M Ohm/km (Min.)	1000	1000	1000	1000	1000
Mutual Capacitance nf/km(Max.)	150	150	150	150	150
Inductance to Resistance Ratio (L/R) µH/Ohm (Max.)	25	25	25	40	60
Test Voltage AC Volt (rms) for 1 Minute	2000	2000	2000	2000	2000

Instrumentation Cable – 500V, CU/PE or XLPE/PVC/GSWA/PVC, Individual & Overall Screened

PHYSICAL PROPERTIES

Catalouge Number	Size	Minimum Insulation Thickness	Nominal Inner Sheath Thickness	Diameter of Steel Wire Armour	Nominal Outer Sheath Thickness	Approx. Overall Dia	Approx. Cable Weight
	Pair x SQMM	MM	MM	MM	MM	MM	MM
NINC2XWY**P005	2 x 0.5	0.44	1.0	0.9	1.4	15.5	400
	3 x 0.5	0.44	1.0	0.9	1.4	16.5	450
	4 x 0.5	0.44	1.0	0.9	1.4	17.5	500
	5 x 0.5	0.44	1.1	0.9	1.5	18.5	580
	10 x 0.5	0.44	1.3	1.25	1.6	25.5	1050
	20 x 0.5	0.44	1.4	1.25	1.8	31.0	1500
	30 x 0.5	0.44	1.6	1.6	1.9	36.5	2200
	36 x 0.5	0.44	1.7	1.6	2.0	39.5	2500
	48 X 0.5	0.44	1.8	1.6	2.1	43.6	2980
NINC2XWY**P075	2 x 0.75	0.44	1.0	0.9	1.4	16.5	450
	3 x 0.75	0.44	1.0	0.9	1.4	17.5	500
	4 x 0.75	0.44	1.1	0.9	1.5	18.5	580
	5 x 0.75	0.44	1.1	0.9	1.5	20.0	650
	10 x 0.75	0.44	1.3	1.25	1.7	27.0	1150
	20 x 0.75	0.44	1.5	1.25	1.8	33.5	1750
	30 x 0.75	0.44	1.7	1.6	2.0	39.5	2500
	36 x 0.75	0.44	1.8	1.6	2.0	42.5	2850
	48 X 0.75	0.44	1.9	1.6	2.2	48.0	3500
NINC2XWY**P010	2 x 1	0.44	1.0	0.9	1.4	17.0	480
	3 x 1	0.44	1.1	0.9	1.5	17.5	510
	4 x 1	0.44	1.1	0.9	1.5	19.5	610
	5 x 1	0.44	1.1	0.9	1.5	20.5	700
	10 x 1	0.44	1.3	1.25	1.7	28.5	1280
	20 x 1	0.44	1.5	1.25	1.8	35.0	1950
	30 x 1	0.44	1.7	1.6	2.0	42.0	2800
	36 x 1	0.44	1.8	1.6	2.1	45.0	3200
	48 X 1	0.44	2.0	2.0	2.2	52.0	4250
NINC2XWY**P015	2 x 1.5	0.44	1.1	0.9	1.5	18.5	550
	3 x 1.5	0.44	1.1	0.9	1.5	19.5	650
	4 x 1.5	0.44	1.1	0.9	1.5	21.0	750
	5 x 1.5	0.44	1.2	0.9	1.6	23.0	850
	10 x 1.5	0.44	1.4	1.25	1.8	31.5	1550
	20 x 1.5	0.44	1.7	1.6	2.0	40.5	2600
	30 x 1.5	0.44	1.9	1.6	2.1	47.5	3700
	36 x 1.5	0.44	2.0	2.0	2.2	51.0	4250
	48 X 1.5	0.44	2.2	2.0	2.4	59.0	5750

Notes: Y(**) Add Number of Pairs.
The above data is indicative & may be changed without prior information.
Cables can be supplied in multiples of 1000/500/250 mtrs or required by customer.mer.