NEELKANTH CABLES

Low Voltage Power Cable

COPPER/ALUMINIUM CONDUCTOR, XLPE INSULATED, ARMOURED, 600/1000V LOW VOLTAGE POWER CABLE

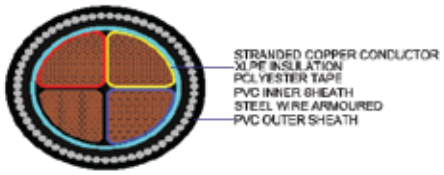
These cables are used for electricity supply in low voltage installation system.
They are well adapted to underground, outdoors, use in industrial applications where mechanical protections are needed.

Standard	:	IEC 60502-1
Construction Conductor	:	Aluminium or Copper conductor, round stranded or shaped class 2 to IEC 60228
Heat Brrier (Optional)	:	Mica Tape (High Temperature Sustaining Tape for Specical requirment of Fire Survival Cables Known as CIRCUIT INTEGRITY CABLES)
Insulation	:	Cross linked polyethylene (XLPE) to IEC 60502-1
Insulation colour	:	2C: Red & Black 3C: Red, Yellow & Blue 4C: Red, Yellow, Blue & Black 5C: Red, Yellow, Blue, Black & Green / Yellow (Other core colour also available on request)
Filler (Optional)	:	Non Hygroscopic filler
Binder Tape (Optional)	:	Polyester (Mylar)Tape
Inner Sheath	:	Extruded PVC compatible with the operating temperature of the conductor in Black colour. (Specical Requirment Low Halogen Flame Retardent & Low Smoke Zero Halogen)
Armour	:	Single Core: A single layer of Aluminium Wire Armour (AWA) Multi core: A single layer of Galvanized Steel Wire Armour (GSWA)
Outer Sheath	:	Extruded PVC (Polyvinyl Chloride) type ST-2 to IEC 60502-1 in Black colour. (Specical Requirement Low Halogen Flame Retardent & Low Smoke Zero Halogen) (Other sheath colour also available on request)

Technical Characteristic

Voltage Grade	:	600/1000V
Temperature Rating	:	-15°C to +90°C
Flame Retardent	:	IEC 60332-1-2
Fire Resistance (Circuit Integrity Test)	:	IEC 60331, Category CWZ Test as per BS 6387 (Applicable only for Fire Survival Cable)
Halogen Acid Gas Emission	:	Max. 0.5% (IEC 60754-1: Applicable only for LSZH cables)

4 CORE CABLES - 600/1000 V



4 Core Cables - 600/1000 V, CU OR AL Conductor, XLPE Insulation, Steel Wire Armoured, PVC Sheathed

PHYSICAL PROPERTIES

Catalouge Number	Nominal Cross Section Area	Nominal Insulation Thickness	Thickness of Inner Sheath	Nominal Steel Wire Armour Dia.	Nominal Outer Sheath Thickness	Approx Overall Dia
	SQ.MM	**MM**	**MM**	**MM**	**MM**	**MM**
NLVC2XWY040015ST10	1.5*	0.7	1.0	0.9	1.8	14
NLVC2XWY040025ST10	2.5*	0.7	1.0	0.9	1.8	15
NLVC2XWY040040ST10	4*	0.7	1.0	0.9	1.8	16
NLVC2XWY040060ST10	6*	0.7	1.0	1.25	1.8	18
NLV*2XWY040100DST10	10*	0.7	1.0	1.25	1.8	21
NLV*2XWY040160DST10	16*	0.7	1.0	1.6	1.8	23
NLV*2XWY040250JST10	25	0.9	1.0	1.6	1.8	26
NLV*2XWY040350JST10	35	0.9	1.0	1.6	1.9	29
NLV*2XWY040500JST10	50	1.0	1.0	1.6	2.0	31
NLV*2XWY040700JST10	70	1.1	1.2	2.0	2.2	37
NLV*2XWY040950JST10	95	1.1	1.2	2.0	2.3	40
NLV*2XWY041200JST10	120	1.2	1.4	2.5	2.5	47
NLV*2XWY041500JST10	150	1.4	1.4	2.5	2.6	51
NLV*2XWY041850JST10	185	1.6	1.4	2.5	2.8	56
NLV*2XWY042400JST10	240	1.7	1.6	2.5	3.0	62
NLV*2XWY043000JST10	300	1.8	1.6	2.5	3.2	68
NLV*2XWY044000JST10	400	2.0	1.8	3.15	3.5	78

Notes: *1.5 Sq.mm to 16 Sq.mm Circular Conductor & Other shaped conductors
N(*) Add "A"for Aluminium Conductor & "C" for Copper Conductor
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.

4 Core Cables - 600/1000 V, CU OR AL Conductor, XLPE Insulation, Steel Wire Armoured, PVC Sheathed

ELECTRICAL PROPERTIES

Nominal Cross Section Area	Current Rating						Approx Voltage Drop of 2 core cables (1 Phase)		Reactance at 50 Hz	Capacitance for Cable (Approx)	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Three cables,Trefoil three Phase a.c.													
	CU.			AL.			CU.	AL.			CU.	AL.	CU.	AL.
SQ.MM	**Amps(A)**			**Amps(A)**			**V/A/km**		**Ohm/ Km**	**µF/Km**	**Ohm/Km**		**kA(rms)**	
1.5	24	23	21	-	-	-	26.73	-	0.102	0.09	12.1	-	0.21	-
2.5	32	30	28	-	-	-	16.37	-	0.100	0.10	7.41	-	0.36	-
4.0	42	39	36	-	-	-	9.73	-	0.098	0.11	4.61	-	0.57	-
6.0	54	49	44	-	-	-	6.52	-	0.090	0.13	3.08	-	0.86	-
10	75	65	58	58	57	46	3.89	-	0.084	0.16	1.83	3.08	1.43	0.94
16	100	84	75	77	64	59	2.46	3.46	0.080	0.14	1.15	1.91	2.29	1.50
25	135	107	96	103	82	75	1.58	2.20	0.08	0.20	0.727	1.20	3.58	2.35
35	169	129	115	129	98	90	1.15	1.81	0.08	0.23	0.524	0.868	5.00	3.29
50	207	153	135	159	117	106	0.86	1.21	0.078	0.24	0.387	0.641	7.15	4.70
70	268	188	167	206	144	130	0.61	0.86	0.077	0.26	0.268	0.443	10.01	6.58
95	328	226	197	253	172	154	0.45	0.64	0.074	0.29	0.193	0.320	13.59	8.93
120	393	257	223	296	197	174	0.37	0.52	0.072	0.29	0.153	0.253	17.16	11.28
150	444	287	251	343	220	197	0.31	0.44	0.072	0.29	0.124	0.206	21.45	14.10
185	510	324	281	395	250	220	0.25	0.37	0.072	0.29	0.0991	0.164	26.46	17.39
240	607	375	324	471	290	253	0.20	0.30	0.072	0.31	0.0754	0.125	34.32	22.56
300	703	419	365	547	326	286	0.17	0.25	0.071	0.33	0.0601	0.100	42.9	28.20
400	823	480	415	663	395	338	0.16	0.21	0.07	0.33	0.0470	0.0778	57.2	37.60