



## COPPER CONDUCTOR, MGT XLPE INSULATED ARMoured, 600/1000V, **LOW VOLTAGE POWER CABLE**

<b>Application</b>	: These power cables are used for electricity supply in low voltage installation system. They are well adapted to mass transit underground passenger systems, airports, petrochemical plants, hotels, hospitals and high-rise buildings, use in industrial applications where mechanical protections are needed. For installation where fire, smoke emission and toxic fumes create a potential threat to life and equipment.
<b>Standards</b>	: BS 7846
<b>CONSTRUCTION</b>	
<b>Conductor</b>	: Copper conductor, round stranded or shaped class 2 to BS EN 60228
<b>Fire Barrier</b>	: MGT (Mica Glass Tape)
<b>Insulation</b>	: Cross linked polyethylene (XLPE) to BS 7655-1.3
<b>Insulation Colour</b>	: 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)
<b>Filler (Optional)</b>	: Non Hygroscopic filler
<b>Binder Tape (Optional)</b>	: Polyester (Mylar)Tape
<b>Bedding</b>	: Extruded Low Smoke Zero Halogen (LSZH) thermoplastic in Black colour.
<b>Armour</b>	: A single layer of Galvanized Steel Wire Armour (GSWA)
<b>Outer Sheath</b>	: Extruded Low Smoke Zero Halogen (LSZH) thermoplastic as per BS 7655-6.1 in Black colour. (Other sheath colour also available on request)

### Technical Characteristic

<b>Voltage Grade</b>	: 600/1000V
<b>Temperature Rating</b>	: -15°C to +90°C
<b>Flame Retardent</b>	: IEC 60332-1-2 & IEC 60332-3-24
<b>Fire Resistant</b>	: IEC 60331-21, BS 6387
<b>Halogen Acid Gas Emission</b>	: Max. 0.5% (IEC 60754-1)

## 2 CORE CABLES - 600/1000 V



### 2 Core Cables - 600/1000 V, CU Conductor, MGT, XLPE Insulation, Steel Wire Armoured, LSZH Sheathed

PHYSICAL PROPERTIES						
Catalogue Number	Nominal Cross Section Area	Nominal Insulation Thickness	Thickness of Bedding	Nominal Steel Wire Armour Dia.	Nominal Outer Sheath Thickness	Approx Overall Dia
	SQ.MM	MM	MM	MM	MM	MM
NLVC2XWH020015ST10FRBS	1.5*	0.6	0.8	0.9	1.3	15.0
NLVC2XWH020025ST10FRBS	2.5*	0.7	0.8	0.9	1.4	16.0
NLVC2XWH020040ST10FRBS	4*	0.7	0.8	0.9	1.4	17.0
NLVC2XWH020060ST10FRBS	6*	0.7	0.8	0.9	1.4	18.0
NLVC2XWH020100DST10FRBS	10*	0.7	0.8	0.9	1.5	20.0
NLVC2XWH020160DST10FRBS	16*	0.7	0.8	1.25	1.5	23.0
NLVC2XWH020250JST10FRBS	25	0.9	0.8	1.25	1.6	23.0
NLVC2XWH020350JST10FRBS	35	0.9	1.0	1.6	1.7	25.0
NLVC2XWH020500JST10FRBS	50	1.0	1.0	1.6	1.8	28.0
NLVC2XWH020700JST10FRBS	70	1.1	1.0	1.6	1.9	30.0
NLVC2XWH020950JST10FRBS	95	1.1	1.2	2.0	2.0	34.0
NLVC2XWH021200JST10FRBS	120	1.2	1.2	2.0	2.1	36.0
NLVC2XWH021500JST10FRBS	150	1.4	1.2	2.0	2.2	39.0
NLVC2XWH021850JST10FRBS	185	1.6	1.4	2.5	2.4	44.0
NLVC2XWH022400JST10FRBS	240	1.7	1.4	2.5	2.5	47.0
NLVC2XWH023000JST10FRBS	300	1.8	1.6	2.5	2.6	51.0
NLVC2XWH024000JST10FRBS	400	2.0	1.6	2.5	2.8	57.0

**Notes:** \*1.5 Sq.mm to 16 Sq.mm Circular Conductor & Other shaped conductors.

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.

**2 Core Cables – 600/1000 V, CU Conductor, MGT, XLPE Insulation, Steel Wire Armoured, LSZH 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					
	Three cables, Trefoil three Phase a.c.			CU.	CU.	CU.	CU.	
	CU.							
SQ.MM	Amps(A)			V/A/km	Ohm/Km	µF/Km	Ohm/Km	kA(rms)
1.5	24	23	21	30.86	0.102	0.09	12.1	0.21
2.5	32	30	28	18.9	0.100	0.10	7.41	0.36
4.0	42	39	36	11.76	0.098	0.11	4.61	0.57
6.0	54	49	44	7.86	0.090	0.13	3.08	0.86
10	75	65	58	4.67	0.084	0.16	1.83	1.43
16	100	84	75	2.94	0.080	0.14	1.15	2.29
25	135	107	96	1.86	0.08	0.20	0.727	3.58
35	169	129	115	1.35	0.08	0.23	0.524	5.00
50	207	153	135	1.00	0.078	0.24	0.387	7.15
70	268	188	167	0.70	0.077	0.26	0.268	10.01
95	328	226	197	0.51	0.074	0.29	0.193	13.59
120	393	257	223	0.42	0.072	0.29	0.153	17.16
150	444	287	251	0.35	0.072	0.29	0.124	21.45
185	510	324	281	0.29	0.072	0.29	0.0991	26.46
240	607	375	324	0.24	0.072	0.31	0.0754	34.32
300	703	419	365	0.21	0.071	0.33	0.0601	42.9
400	823	480	415	0.18	0.07	0.33	0.0470	57.2