

Low Voltage Fire Resistance Cable





COMPANY INTRODUCTION

MASTER TEC WIRE & CABLE

Founded in 2005, with a decade wire and cable manufacturing experience. Our current factory located at Rembia Industrial Park, Alor gajah Melaka. Our Sale Corporate Office at Oasis Square Ara Damansara, Selangor. Currently we have 4 manufacturing plants in Melaka. Our principally involved in the manufacturing and distribution of power cables, control cables, instrumentation cables, trading of power cables, fibre optic cables, and other related products.

We have extensive experience in wires & cables since 2006. We have established a reputable MASTER TEC brand and track record for our LV power cables and control and instrumentation cables. Through our brand, customers recognize our products and they are given the assurance and confidence of our products' quality, performance, safety and durability.



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CU / MGT / PVC-FR - 600 / 1000 VOLT (NYA-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, PVC-FR INSULATED			
Application : This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.		Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- PVC-FR Insulated	
Voltage rating : 600/1000 Volt		Insulation colour : Orange or as per request	
Conductor Operating Temperature : 70 ° c			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1			
Optional : BS 6387 (C,W,Z). IEC 60332-3A. IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area mm ²	Min. no of wire and conductor shape		Nominal Thickness Insulation mm	Approximately		Bending radius min mm	Standard delivery length m
				Overall diameter mm	Net Weight Kg/Km		
1.5	7	circular	0.8	4.2	33	42	1000
2.5	7	circular	0.8	4.6	44	46	1000
4	7	circular	1.0	5.5	65	55	1000
6	7	circular	1.0	6.1	87	61	1000
10	7	compacted	1.0	6.9	129	69	1000
16	7	compacted	1.0	7.9	187	79	1000
25	7	compacted	1.0	9.4	283	94	1000
35	7	compacted	1.2	10.5	378	105	1000
50	7	compacted	1.4	12.2	507	122	1000
70	12	compacted	1.4	13.7	696	137	1000
95	15	compacted	1.6	16.1	958	161	1000
120	18	compacted	1.6	17.3	1192	173	1000
150	18	compacted	1.8	19.2	1467	192	1000
185	30	compacted	2.0	21.5	1826	215	1000
240	34	compacted	2.2	24.0	2373	240	1000
300	34	compacted	2.4	26.6	2950	266	1000
400	53	compacted	2.6	29.5	3740	295	1000
500	53	compacted	2.8	33.1	4747	331	800
630	53	compacted	2.8	36.7	6065	367	450



ELECTRICAL DATA

Nominal cross-sectional area mm ²	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	Clipped Direct (Trefoil)	Trunking (on a Wall)	Single-phase (Trefoil)	Three-phase (Trefoil)
	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	8.240	18	15.5	29.00	25.00
2.5	7.41	7.221	25	21	18.00	15.00
4	4.61	7.378	33	28	11.00	9.50
6	3.08	6.721	43	36	7.30	6.40
10	1.83	5.798	59	50	4.40	3.80
16	1.15	4.827	79	68	2.80	2.40
25	0.727	4.737	104	89	1.80	1.50
35	0.524	4.310	129	110	1.30	1.10
50	0.387	4.310	167	134	1.00	0.82
70	0.268	3.718	214	171	0.72	0.57
95	0.193	3.586	261	207	0.56	0.43
120	0.153	3.378	303	239	0.47	0.36
150	0.124	3.417	349	262	0.41	0.30
185	0.0991	3.335	400	296	0.37	0.26
240	0.0754	3.312	472	346	0.33	0.22
300	0.0601	3.257	545	394	0.31	0.19
400	0.0470	3.136	634	467	0.29	0.18
500	0.0366	3.025	723	533	0.28	0.16
630	0.0283	2.702	826	611	0.27	0.15

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / PVC-FR - 600 / 1000 VOLT (N2XY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC-FR SHEATHED			
Application : This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.		Construction	: 1- Copper conductor
			: 2- Mica tape fire barrier
			: 3- XLPE Insulated
Voltage rating : 600/1000 Volt			: 4- PVC-FR Sheathed
Conductor Operating Temperature : 90 ° C		Insulation colour	: Natural or as per order
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1		Sheath colour	: Orange or as per order
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
mm ²	no	shape	mm		mm	Kg/Km	mm	m
1.5	7	circular	0.7	1.4	6.8	62	68	1000
2.5	7	circular	0.7	1.4	7.2	75	72	1000
4	7	circular	0.7	1.4	7.7	93	77	1000
6	7	circular	0.7	1.4	8.3	117	83	1000
10	7	compacted	0.7	1.4	9.1	162	91	1000
16	7	compacted	0.7	1.4	10.1	224	101	1000
25	7	compacted	0.9	1.4	11.6	323	116	1000
35	7	compacted	0.9	1.4	12.7	420	127	1000
50	7	compacted	1.0	1.4	14.2	546	142	1000
70	12	compacted	1.1	1.4	15.9	745	159	1000
95	15	compacted	1.1	1.5	18.1	1004	181	1000
120	18	compacted	1.2	1.5	19.5	1246	195	1000
150	18	compacted	1.4	1.6	21.6	1529	216	1000
185	30	compacted	1.6	1.7	24.1	1899	241	1000
240	34	compacted	1.7	1.8	26.6	2448	266	1000
300	34	compacted	1.8	1.8	29.0	3017	290	1000
400	53	compacted	2.0	1.9	32.1	3817	321	800
500	53	compacted	2.2	2.1	36.1	4850	361	500
630	53	compacted	2.4	2.2	40.3	6227	403	500



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	Clipped Direct (Trefoil)	Trunking (on a Wall)	Single-phase (Trefoil)	Three-phase (Trefoil)
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	740	23	19	31.00	27.00
2.5	7.41	645	31	26	19.00	16.00
4	4.61	548	41	35	12.00	10.00
6	3.08	502	54	45	7.90	6.80
10	1.83	430	74	63	4.70	4.00
16	1.15	353	99	85	2.90	2.50
25	0.727	365	130	111	1.85	1.60
35	0.524	334	161	138	1.35	1.15
50	0.387	319	209	168	1.00	0.87
70	0.268	297	268	214	0.71	0.61
95	0.193	253	326	259	0.52	0.45
120	0.153	260	379	299	0.43	0.37
150	0.124	271	436	328	0.36	0.31
185	0.0991	270	500	370	0.30	0.26
240	0.0754	261	590	433	0.25	0.22
300	0.0601	249	681	493	0.22	0.20
400	0.0470	245	793	584	0.20	0.18
500	0.0366	241	904	666	0.19	0.16
630	0.0283	233	1033	764	0.18	0.15

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / PVC-FR - 600 / 1000 VOLT (N2XY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
2 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC-FR SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC-FR Sheathed	
Voltage rating : 600/1000 Volt		Insulation colour : 2-Core (Red & Black) or (Brown & Blue)	
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1		Sheath colour : Orange or as per order	
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1			
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
mm ²	no	shape	mm		mm	Kg/Km	mm	m
1.5	7	circular	0.7	1.8	11.7	151	117	1000
2.5	7	circular	0.7	1.8	12.5	181	125	1000
4	7	circular	0.7	1.8	13.5	224	135	1000
6	7	circular	0.7	1.8	14.7	278	147	1000
10	7	compact	0.7	1.8	16.4	384	164	1000
16	7	compact	0.7	1.8	18.4	522	184	1000
25	7	compact	0.9	1.8	21.4	749	214	1000
35	7	compact	0.9	1.8	23.6	967	236	1000
50	7	compact	1.0	1.8	26.6	1253	266	1000
70	12	compact	1.1	1.9	30.2	1708	302	1000
95	15	compact	1.1	2.0	34.4	2286	344	1000
120	18	compact	1.2	2.1	37.8	2844	378	500
150	18	compact	1.4	2.3	42.0	3501	420	500
185	30	compact	1.6	2.4	46.8	4336	468	500
240	34	compact	1.7	2.6	51.8	5565	518	350
300	34	compact	1.8	2.7	56.8	6850	568	300
400	53	compact	2.0	3.0	63.2	8674	632	300
500	53	compact	2.2	3.2	70.8	10970	708	300



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Trunking (on a Wall)	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	740	23	19.5	31.00	27.00
2.5	7.41	645	32	26	19.00	16.00
4	4.61	548	42	35	12.00	10.00
6	3.08	502	54	44	7.90	6.80
10	1.83	430	75	60	4.70	4.00
16	1.15	353	100	80	2.90	2.50
25	0.727	365	127	105	1.90	1.65
35	0.524	334	158	128	1.35	1.15
50	0.387	319	192	154	1.00	0.87
70	0.268	297	246	194	0.69	0.60
95	0.193	253	298	233	0.52	0.45
120	0.153	260	346	268	0.42	0.37
150	0.124	271	399	300	0.35	0.30
185	0.0991	270	456	340	0.29	0.26
240	0.0754	261	538	398	0.24	0.21
300	0.0601	249	621	455	0.21	0.19
400	0.0470	245	741	536	0.19	0.17
500	0.0366	241	842	599	0.18	0.15

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / PVC-FR - 600 / 1000 VOLT (N2XY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
3 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC-FR SHEATHED			
Application :	This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	: 1- Copper conductor
			: 2- Mica tape fire barrier
			: 3- XLPE Insulated
			: 4- PVC-FR Sheathed
Voltage rating : 600/1000V		Insulation colour	:3-Core : (Red, Yellow & Blue) or (Brown, Black & Grey)
Conductor Operating Temperature : 90° C			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1,IEC 60331, IEC 60332-3C, IEC 60332-1		Sheath colour	: Orange or as per order
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
mm ²	no	shape	mm		mm	Kg/Km	mm	m
1.5	7	circular	0.7	1.8	12.4	181	99	1000
2.5	7	circular	0.7	1.8	13.2	218	106	1000
4	7	circular	0.7	1.8	14.3	276	114	1000
6	7	circular	0.7	1.8	15.6	352	125	1000
10	7	Compacted	0.7	1.8	17.4	497	139	1000
16	7	compacted	0.7	1.8	19.6	689	157	1000
25	7	compacted	0.9	1.8	22.8	1003	182	1000
35	7	compacted	0.9	1.8	25.2	1312	202	1000
50	7	compacted	1.0	1.8	28.4	1708	227	1000
70	12	compacted	1.1	2.0	32.8	2369	262	1000
95	15	compacted	1.1	2.1	37.4	3188	299	500
120	18	compacted	1.2	2.2	40.6	3968	325	500
150	18	compacted	1.4	2.4	45.1	4881	361	500
185	30	compacted	1.6	2.5	50.2	6047	402	350
240	34	compacted	1.7	2.7	55.6	7794	445	300
300	34	compacted	1.8	2.9	61.1	9637	489	250
400	53	compacted	2.0	3.1	67.8	12193	542	250
500	53	compacted	2.2	3.4	76.2	15482	610	250



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Trunking (on a Wall)	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	740	23	19.5	31.00	27.00
2.5	7.41	645	32	26	19.00	16.00
4	4.61	548	42	35	12.00	10.00
6	3.08	502	54	44	7.90	6.80
10	1.83	430	75	60	4.70	4.00
16	1.15	353	100	80	2.90	2.50
25	0.727	365	127	105	1.90	1.65
35	0.524	334	158	128	1.35	1.15
50	0.387	319	192	154	1.00	0.87
70	0.268	297	246	194	0.69	0.60
95	0.193	253	298	233	0.52	0.45
120	0.153	260	346	268	0.42	0.37
150	0.124	271	399	300	0.35	0.30
185	0.0991	270	456	340	0.29	0.26
240	0.0754	261	538	398	0.24	0.21
300	0.0601	249	621	455	0.21	0.19
400	0.0470	245	741	536	0.19	0.17
500	0.0366	241	842	599	0.18	0.15

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / PVC-FR - 600 / 1000 VOLT (N2XY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC-FR SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction		: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC-FR Sheathed
	Insulation colour		: 4-Core (Red, Yellow, Blue & Black) or (Brown, Black, Grey & Blue)
	Voltage rating : 600/1000V		Sheath colour : Orange or as per order
	Conductor Operating Temperature : 90 ° C		
	Reference Standard : IEC 60502-1		
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1			
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
mm ²	no	shape	mm		mm	Kg/Km	mm	m
1.5	7	circular	0.7	1.8	13.4	214	107	1000
2.5	7	circular	0.7	1.8	14.4	263	115	1000
4	7	circular	0.7	1.8	15.6	343	125	1000
6	7	circular	0.7	1.8	17.1	437	137	1000
10	7	compacted	0.7	1.8	19.1	626	153	1000
16	7	compacted	0.7	1.8	21.5	878	172	1000
25	7	compacted	0.9	1.8	25.1	1284	201	1000
35	7	compacted	0.9	1.8	27.8	1685	222	1000
50	7	compacted	1.0	1.9	31.9	2224	319	1000
70	12	compacted	1.1	2.1	36.4	3077	364	1000
95	15	compacted	1.1	2.2	41.5	4148	415	500
120	18	compacted	1.2	2.4	45.2	5183	452	500
150	18	compacted	1.4	2.5	50.0	6352	500	500
185	30	compacted	1.6	2.7	56.0	7913	560	350
240	34	compacted	1.7	2.9	61.9	10192	619	300
300	34	compacted	1.8	3.1	68.1	12625	681	250
400	53	compacted	2.0	3.4	75.7	16002	757	250



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Trunking (on a Wall)	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	740	23	19.5	31.00	27.00
2.5	7.41	645	32	26	19.00	16.00
4	4.61	548	42	35	12.00	10.00
6	3.08	502	54	44	7.90	6.80
10	1.83	430	75	60	4.70	4.00
16	1.15	353	100	80	2.90	2.50
25	0.727	365	127	105	1.90	1.65
35	0.524	334	158	128	1.35	1.15
50	0.387	319	192	154	1.00	0.87
70	0.268	297	246	194	0.69	0.60
95	0.193	253	298	233	0.52	0.45
120	0.153	260	346	268	0.42	0.37
150	0.124	271	399	300	0.35	0.30
185	0.0991	270	456	340	0.29	0.26
240	0.0754	261	538	398	0.24	0.21
300	0.0601	249	621	455	0.21	0.19
400	0.0470	245	741	536	0.19	0.17

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / PVC-FR - 600 / 1000 VOLT (N2XY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
5 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC-FR SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC-FR Sheathed	
Voltage rating : 600/1000V		Insulation colour	:5-Core (Red, Yellow, Blue, Black & green) or (Brown, Black, Grey, Blue & green)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1		Sheath colour	: Orange or as per order
Cable Standard : IEC 60502-1,IEC 60331, IEC 60332-3C, IEC 60332-1			
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
mm ²	no	shape	Mm		mm	Kg/Km	mm	m
1.5	7	circular	0.7	1.8	14.5	242	145	1000
2.5	7	circular	0.7	1.8	15.6	302	156	1000
4	7	circular	0.7	1.8	17.1	396	171	1000
6	7	circular	0.7	1.8	18.7	508	187	1000
10	7	compacted	0.7	1.8	20.9	756	209	1000
16	7	compacted	0.7	1.8	23.6	1069	236	1000
25	7	compacted	0.9	1.8	27.6	1573	276	1000
35	7	compacted	0.9	1.9	30.8	2087	308	800
50	7	compacted	1.0	1.8	25.7	2718	257	800
70	12	compacted	1.1	1.9	29.7	3780	297	800

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Trunking (on a Wall)	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	740	23	19.5	31.00	27.00
2.5	7.41	645	32	26	19.00	16.00
4	4.61	548	42	35	12.00	10.00
6	3.08	502	54	44	7.90	6.80
10	1.83	430	75	60	4.70	4.00
16	1.15	353	100	80	2.90	2.50
25	0.727	365	127	105	1.90	1.65
35	0.524	334	158	128	1.35	1.15
50	0.387	319	192	154	1.00	0.87
70	0.268	297	246	194	0.69	0.60

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLPE / PVC-FR - 600 / 1000 VOLT (N2XY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1.5mm² : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC-FR SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC-FR Sheathed	
	Voltage rating : 600/1000V	Insulation colour	: Black core with White numbering or White core with Black numbering as per order
	Conductor Operating Temperature : 90 ° C		
	Reference Standard : IEC 60502-1		
	Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1	Sheath colour	: Orange or as per order
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
Core x mm ²	no	shape	mm		mm	Kg/Km	mm	m
7x1.5	7	circular	0.7	1.8	15.8	302	158	1000
8x1.5	7	circular	0.7	1.8	17.6	352	176	1000
10x1.5	7	circular	0.7	1.8	19.8	428	198	1000
12x1.5	7	circular	0.7	1.8	20.5	474	205	1000
14x1.5	7	circular	0.7	1.8	21.5	535	215	1000
16x1.5	7	circular	0.7	1.8	22.6	596	226	1000
19x1.5	7	circular	0.7	1.8	23.8	679	238	1000
21x1.5	7	circular	0.7	1.8	25.2	755	252	1000
24x1.5	7	circular	0.7	1.8	27.8	856	278	1000
30x1.5	7	circular	0.7	1.9	29.7	1029	297	500
40x1.5	7	circular	0.7	2.0	33.6	1343	336	500
52x1.5	7	circular	0.7	2.1	38.1	1701	381	500
61x1.5	7	circular	0.7	2.2	40.6	1967	406	500



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Trunking (on a Wall)	Single-phase	Three-phase
	mm ²	Ω/Km	MΩ.Km	A	mV/A/m	
7x1.5	12.1	740	23	19.5	31.00	27.00
8x1.5	12.1	740	23	19.5	31.00	27.00
10x1.5	12.1	740	23	19.5	31.00	27.00
12x1.5	12.1	740	23	19.5	31.00	27.00
14x1.5	12.1	740	23	19.5	31.00	27.00
16x1.5	12.1	740	23	19.5	31.00	27.00
19x1.5	12.1	740	23	19.5	31.00	27.00
21x1.5	12.1	740	23	19.5	31.00	27.00
24x1.5	12.1	740	23	19.5	31.00	27.00
30x1.5	12.1	740	23	19.5	31.00	27.00
40x1.5	12.1	740	23	19.5	31.00	27.00
52x1.5	12.1	740	23	19.5	31.00	27.00
61x1.5	12.1	740	23	19.5	31.00	27.00

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / PVC-FR - 600 / 1000 VOLT (N2XY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
2.5mm² : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC-FR SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC-FR Sheathed	
	Voltage rating : 600/1000V	Insulation colour	: Black core with numbering or White
	Conductor Operating Temperature : 90 ° C		: White core with numbering
	Reference Standard : IEC 60502-1		: Black as per order
	Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1	Sheath colour	: Orange or as per order
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
Core x mm²	no	shape	Mm		mm	Kg/Km	mm	m
7x2.5	7	circular	0.7	1.8	17.0	382	170	1000
8x2.5	7	circular	0.7	1.8	19.0	446	190	1000
10x2.5	7	circular	0.7	1.8	21.4	544	214	1000
12x2.5	7	circular	0.7	1.8	22.2	609	222	1000
14x2.5	7	circular	0.7	1.8	23.3	691	233	1000
16x2.5	7	circular	0.7	1.8	24.5	772	245	1000
19x2.5	7	circular	0.7	1.8	25.8	885	258	1000
21x2.5	7	circular	0.7	1.8	27.3	981	273	1000
24x2.5	7	circular	0.7	1.9	30.4	1132	304	1000
30x2.5	7	circular	0.7	1.9	32.3	1352	323	500
40x2.5	7	circular	0.7	2.1	36.7	1784	367	500
52x2.5	7	circular	0.7	2.3	41.9	2293	419	500
61x2.5	7	circular	0.7	2.3	44.4	2630	444	500



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Trunking (on a Wall)	Single-phase	Three-phase
	mm²	Ω/Km	MΩ.Km	A	mV/A/m	
7x2.5	7.41	645	32	26	19.00	16.00
8x2.5	7.41	645	32	26	19.00	16.00
10x2.5	7.41	645	32	26	19.00	16.00
12x2.5	7.41	645	32	26	19.00	16.00
14x2.5	7.41	645	32	26	19.00	16.00
16x2.5	7.41	645	32	26	19.00	16.00
19x2.5	7.41	645	32	26	19.00	16.00
21x2.5	7.41	645	32	26	19.00	16.00
24x2.5	7.41	645	32	26	19.00	16.00
30x2.5	7.41	645	32	26	19.00	16.00
40x2.5	7.41	645	32	26	19.00	16.00
52x2.5	7.41	645	32	26	19.00	16.00
61x2.5	7.41	645	32	26	19.00	16.00

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / PVC-FR - 600 / 1000 VOLT (N2XY-FE)			IEC 60502-1, IEC 60331, IEC 60332-3C		
4mm² : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC-FR SHEATHED					
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.			Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC-FR Sheathed		
Voltage rating : 600/1000V			Insulation colour : Black core with numbering or White White core with numbering Black as per order		
Conductor Operating Temperature : 90 ° C					
Reference Standard : IEC 60502-1					
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1			Sheath colour : Orange or as per order		
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B					

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
Core x mm ²	no	shape	mm		mm	Kg/Km	mm	m
7x4	7	circular	0.7	1.8	18.5	503	185	1000
8x4	7	circular	0.7	1.8	20.8	592	208	1000
10x4	7	circular	0.7	1.8	23.4	719	234	1000
12x4	7	circular	0.7	1.8	24.2	809	242	1000
14x4	7	circular	0.7	1.8	25.5	927	255	1000
16x4	7	circular	0.7	1.8	26.9	1044	269	1000
19x4	7	circular	0.7	1.8	28.3	1200	283	1000
21x4	7	circular	0.7	1.9	30.2	1349	302	1000
24x4	7	circular	0.7	2.0	33.6	1549	336	1000
30x4	7	circular	0.7	2.1	35.9	1880	359	500
40x4	7	circular	0.7	2.2	40.6	2465	406	500
52x4	7	circular	0.7	2.4	46.6	3166	466	500
61x4	7	circular	0.7	2.5	49.7	3680	497	500



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Trunking (on a Wall)	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
7x4	4.61	548	42	35	12.00	10.00
8x4	4.61	548	42	35	12.00	10.00
10x4	4.61	548	42	35	12.00	10.00
12x4	4.61	548	42	35	12.00	10.00
14x4	4.61	548	42	35	12.00	10.00
16x4	4.61	548	42	35	12.00	10.00
19x4	4.61	548	42	35	12.00	10.00
21x4	4.61	548	42	35	12.00	10.00
24x4	4.61	548	42	35	12.00	10.00
30x4	4.61	548	42	35	12.00	10.00
40x4	4.61	548	42	35	12.00	10.00
52x4	4.61	548	42	35	12.00	10.00
61x4	4.61	548	42	35	12.00	10.00

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / PVC / AWA / PVC-FR- 600 / 1000 VOLT (N2XRY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC BEDDING, ALUMINIUM WIRES ARMoured, PVC-FR SHEATHED			
Application : This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.		Construction	: 1- Copper conductor
Voltage rating : 600/1000 Volt			: 2- Mica tape fire barrier
Conductor Operating Temperature : 90 ° C			: 3- XLPE Insulated
Reference Standard : IEC 60502-1			: 4- PVC Bedding
Cable Standard : IEC 60502-1,IEC 60331, IEC 60332-3C, IEC 60332-1		Insulation colour	: 5- Armoured
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			: 6- PVC-FR Sheathed
		Sheath colour	: Natural or as per order
			: Orange or as per order

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Aluminium wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
mm ²	no	shape	mm			mm		Kg/Km	mm	m
1.5	7	circular	0.7	1.6	1.8	6.0	13.4	220	134.0	1000
2.5	7	circular	0.7	1.6	1.8	6.4	13.8	240	138.0	1000
4	7	circular	0.7	1.6	1.8	6.9	14.3	268	143.0	1000
6	7	circular	0.7	1.6	1.8	7.5	14.9	301	149.0	1000
10	7	compacted	0.7	1.6	1.8	8.3	15.7	358	157.0	1000
16	7	compacted	0.7	1.6	1.8	9.3	16.7	437	167.0	1000
25	7	compacted	0.9	1.6	1.8	10.8	18.2	558	182.0	1000
35	7	compacted	0.9	1.6	1.8	11.9	19.3	674	193.0	1000
50	7	compacted	1.0	1.6	1.8	13.4	20.8	827	208.0	1000
70	12	compacted	1.1	1.6	1.8	15.1	22.5	1049	225.0	1000
95	15	compacted	1.1	1.6	1.8	17.1	24.5	1336	245.0	1000
120	18	compacted	1.2	1.6	1.8	18.5	25.9	1598	259.0	1000
150	18	compacted	1.4	1.6	1.8	20.4	27.8	1900	278.0	1000
185	30	compacted	1.6	1.6	1.9	22.7	30.3	2309	303.0	1000
240	34	compacted	1.7	1.6	2.0	25.0	32.8	2897	328.0	1000
300	34	compacted	1.8	2.0	2.1	27.4	36.2	3598	362.0	1000
400	53	compacted	2.0	2.0	2.2	30.7	39.7	4488	397.0	800
500	53	compacted	2.2	2.0	2.3	34.3	43.5	5577	435.0	500
630	53	compacted	2.4	2.5	2.5	38.3	48.9	7184	489.0	500



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil Touching)	Laid Direct In Ground	Single-phase (Trefoil Touching)	Three-phase (Trefoil)
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	740	28	36	31.00	27.00
2.5	7.41	645	37	47	19.00	16.00
4	4.61	548	48	61	11.50	10.00
6	3.08	502	60	75	7.90	6.80
10	1.83	430	82	100	4.60	4.00
16	1.15	353	106	127	2.90	2.50
25	0.727	365	140	163	1.87	1.62
35	0.524	334	170	195	1.36	1.18
50	0.387	319	222	235	1.00	0.87
70	0.268	297	285	290	0.71	0.62
95	0.193	253	346	345	0.55	0.47
120	0.153	260	402	389	0.45	0.39
150	0.124	271	463	435	0.38	0.33
185	0.0991	270	529	490	0.33	0.28
240	0.0754	261	625	560	0.28	0.24
300	0.0601	249	720	630	0.25	0.21
400	0.0470	245	815	700	0.22	0.20
500	0.0366	241	918	770	0.21	0.18
630	0.0283	233	1027	840	0.195	0.17

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / PVC / SWA / PVC-FR- 600 / 1000 VOLT (N2XRY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
2 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC BEDDING, GALVANIZED STEEL WIRES ARMOURED, PVC-FR SHEATHED			
Application :	This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC Bedding : 5- Armoured : 6- PVC-FR Sheathed
Voltage rating : 600/1000V		Insulation colour	: 2-Core (Red & Black) or (Brown & Blue)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1		Sheath colour	: Orange or as per order
Optional : BS 6387 (C.W.Z). IEC 60332-3A. IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Gal. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
mm ²	no	shape	mm			mm		Kg/Km	mm	m
1.5	7	circular	0.7	0.9	1.8	10.1	16.1	398	161	1000
2.5	7	circular	0.7	0.9	1.8	10.9	16.9	447	169	1000
4	7	circular	0.7	1.3	1.8	11.9	18.6	596	186	1000
6	7	circular	0.7	1.3	1.8	13.1	19.8	676	198	1000
10	7	compacted	0.7	1.6	1.8	14.8	21.5	828	215	1000
16	7	compacted	0.7	1.6	1.8	16.8	24.2	1129	242	1000
25	7	compacted	0.9	1.6	1.8	19.8	27.2	1450	272	1000
35	7	compacted	0.9	1.6	1.9	22.0	29.6	1757	296	1000
50	7	compacted	1.0	1.6	2.0	25.0	32.8	2153	328	1000
70	12	compacted	1.1	2.0	2.1	28.8	37.6	2987	376	1000
95	15	compacted	1.1	2.0	2.3	32.8	42.0	3739	420	1000
120	18	compacted	1.2	2.5	2.4	36.0	46.4	4779	464	500
150	18	compacted	1.4	2.5	2.6	40.2	51.0	5668	510	500
185	30	compacted	1.6	2.5	2.7	44.8	55.8	6738	558	500
240	34	compacted	1.7	2.5	2.9	49.8	61.2	8258	612	350
300	34	compacted	1.8	2.5	3.1	54.6	66.4	9816	664	300
400	53	compacted	2.0	2.5	3.3	60.4	72.6	11946	726	300
500	53	compacted	2.2	3.2	3.6	68.0	82.1	15531	821	300



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Laid Direct In Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A			
			mV/A/m			
1.5	12.1	739.586	25	28	31.00	27.00
2.5	7.41	645.350	33	36	19.00	16.00
4	4.61	547.715	44	48	12.00	10.00
6	3.08	501.605	56	60	7.90	6.80
10	1.83	430.107	78	80	4.70	4.00
16	1.15	352.933	99	115	2.90	2.50
25	0.727	364.742	131	150	1.90	1.65
35	0.524	333.675	162	180	1.35	1.15
50	0.387	319.375	197	215	1.00	0.87
70	0.268	297.423	251	265	0.69	0.60
95	0.193	253.454	304	315	0.52	0.45
120	0.153	259.601	353	360	0.42	0.37
150	0.124	271.309	406	405	0.35	0.30
185	0.0991	270.396	463	460	0.29	0.26
240	0.0754	260.664	546	530	0.24	0.21
300	0.0601	249.464	628	590	0.21	0.19
400	0.0470	244.850	728	670	0.19	0.17
500	0.0366	241.204	826	723	0.17	0.15

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / PVC / SWA / PVC-FR- 600 / 1000 VOLT (N2XRY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
3 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC BEDDING, GALVANIZED STEEL WIRES ARMOURED, PVC-FR SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC Bedding : 5- Armoured : 6- PVC-FR Sheathed
Voltage rating : 600/1000V		Insulation colour	: 3-Core (Red, Yellow & Black) or (Brown, Black & Grey)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1		Sheath colour	: Orange or as per order
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Gal. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
mm ²	no	shape	mm			mm		Kg/Km	mm	m
1.5	7	circular	0.7	0.9	1.8	10.8	16.8	441	168	1000
2.5	7	circular	0.7	1.3	1.8	11.6	18.3	578	183	1000
4	7	circular	0.7	1.3	1.8	12.7	19.4	661	194	1000
6	7	circular	0.7	1.3	1.8	14.0	20.7	773	207	1000
10	7	compacted	0.7	1.3	1.8	15.8	22.5	966	225	1000
16	7	compacted	0.7	1.6	1.8	18.0	25.4	1334	254	1000
25	7	compacted	0.9	1.6	1.8	21.2	28.6	1759	286	1000
35	7	compacted	0.9	1.6	1.9	23.6	31.2	2158	312	1000
50	7	compacted	1.0	2.0	2.0	26.8	35.4	2869	354	1000
70	12	compacted	1.1	2.0	2.2	31.2	40.2	3741	402	1000
95	15	compacted	1.1	2.0	2.4	35.6	45.0	4763	450	500
120	18	compacted	1.2	2.5	2.5	39.0	49.6	6082	496	500
150	18	compacted	1.4	2.5	2.7	43.1	54.1	7193	541	500
185	30	compacted	1.6	2.5	2.8	48.0	59.2	8596	592	350
240	34	compacted	1.7	2.5	3.0	53.4	65.0	10680	650	300
300	34	compacted	1.8	2.5	3.2	58.5	70.5	12809	705	250
400	53	compacted	2.0	3.2	3.5	65.2	79.1	16536	791	250
500	53	compacted	2.2	3.2	3.7	73.0	87.3	20310	873	250



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Laid Direct In Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A			
			mV/A/m			
1.5	12.1	739.586	25	28	31.00	27.00
2.5	7.41	645.350	33	36	19.00	16.00
4	4.61	547.715	44	48	12.00	10.00
6	3.08	501.605	56	60	7.90	6.80
10	1.83	430.107	78	80	4.70	4.00
16	1.15	352.933	99	115	2.90	2.50
25	0.727	364.742	131	150	1.90	1.65
35	0.524	333.675	162	180	1.35	1.15
50	0.387	319.375	197	215	1.00	0.87
70	0.268	297.423	251	265	0.69	0.60
95	0.193	253.454	304	315	0.52	0.45
120	0.153	259.601	353	360	0.42	0.37
150	0.124	271.309	406	405	0.35	0.30
185	0.0991	270.396	463	460	0.29	0.26
240	0.0754	260.664	546	530	0.24	0.21
300	0.0601	249.464	628	590	0.21	0.19
400	0.0470	244.850	728	670	0.19	0.17
500	0.0366	241.204	826	723	0.17	0.15

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / PVC / SWA / PVC-FR- 600 / 1000 VOLT (N2XRY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC BEDDING, GALVANIZED STEEL WIRES ARMOURED, PVC-FR SHEATHED			
Application :	This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC Bedding : 5- Armoured : 6- PVC-FR Sheathed
		Voltage rating : 600/1000V	Insulation colour : 4-Core (Red, Yellow, Blue & Black) or (Brown, Black, Grey & Blue)
		Conductor Operating Temperature : 90 ° C	
		Reference Standard : IEC 60502-1	
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1		Sheath colour	: Orange or as per order
Optional : BS 6387 (C.W.Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Gal. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
mm ²	no	shape	mm			mm		Kg/Km	mm	m
1.5	7	circular	0.7	1.3	1.8	11.8	18.5	576	185	1000
2.5	7	circular	0.7	1.3	1.8	12.8	19.5	659	195	1000
4	7	circular	0.7	1.3	1.8	14.0	20.7	764	207	1000
6	7	circular	0.7	1.3	1.8	15.5	22.2	895	222	1000
10	7	compactd	0.7	1.6	1.8	17.5	24.9	1252	249	1000
16	7	compactd	0.7	1.6	1.8	19.9	27.3	1580	273	1000
25	7	compactd	0.9	1.6	1.9	23.5	31.1	2113	311	1000
35	7	compactd	0.9	2.0	2.0	26.2	34.8	2818	348	1000
50	7	compactd	1.0	2.0	2.2	30.5	39.5	3581	395	1000
70	12	compactd	1.1	2.0	2.3	34.6	43.8	4575	438	1000
95	15	compactd	1.1	2.5	2.5	39.9	50.5	6308	505	500
120	18	compactd	1.2	2.5	2.7	43.2	54.2	7495	542	500
150	18	compactd	1.4	2.5	2.8	47.8	59.0	8899	590	500
185	30	compactd	1.6	2.5	3.0	53.8	65.4	10840	654	350
240	34	compactd	1.7	2.5	3.2	59.3	71.3	13410	713	300
300	34	compactd	1.8	2.5	3.5	65.5	79.4	17032	794	250
400	53	compactd	2.0	3.2	3.7	72.5	86.8	20825	868	250



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Laid Direct In Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A			
			mV/A/m			
1.5	12.1	739.586	25	28	31.00	27.00
2.5	7.41	645.350	33	36	19.00	16.00
4	4.61	547.715	44	48	12.00	10.00
6	3.08	501.605	56	60	7.90	6.80
10	1.83	430.107	78	80	4.70	4.00
16	1.15	352.933	99	115	2.90	2.50
25	0.727	364.742	131	150	1.90	1.65
35	0.524	333.675	162	180	1.35	1.15
50	0.387	319.375	197	215	1.00	0.87
70	0.268	297.423	251	265	0.69	0.60
95	0.193	253.454	304	315	0.52	0.45
120	0.153	259.601	353	360	0.42	0.37
150	0.124	271.309	406	405	0.35	0.30
185	0.0991	270.396	463	460	0.29	0.26
240	0.0754	260.664	546	530	0.24	0.21
300	0.0601	249.464	628	590	0.21	0.19
400	0.0470	244.850	728	670	0.19	0.17

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / PVC / SWA / PVC-FR- 600 / 1000 VOLT (N2XRY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
5 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC BEDDING, GALVANIZED STEEL WIRES ARMOURED, PVC-FR SHEATHED			
Application :	This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC Bedding : 5- Armoured : 6- PVC-FR Sheathed
Voltage rating : 600/1000V		Insulation colour	: 5-Core (Red, Yellow, Blue, Black & green) or (Brown, Black, Grey, Blue & Green)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1		Sheath colour	: Orange or as per order
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1			
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Gal. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
mm ²	no	shape	mm			mm		Kg/Km	mm	m
1.5	7	circular	0.7	1.3	1.8	12.9	19.6	638	196	1000
2.5	7	circular	0.7	1.3	1.8	14.0	20.7	723	207	1000
4	7	circular	0.7	1.3	1.8	15.5	22.2	855	222	1000
6	7	circular	0.7	1.6	1.8	17.1	24.5	1132	245	1000
10	7	compacted	0.7	1.6	1.8	19.3	26.7	1439	267	1000
16	7	compacted	0.7	1.6	1.9	22.0	29.6	1858	296	1000
25	7	compacted	0.9	2.0	2.0	26.0	34.6	2704	346	1000
35	7	compacted	0.9	2.0	2.1	29.4	38.2	3369	382	800
50	7	compacted	1.0	2.0	2.3	33.8	43.0	4241	430	800
70	12	compacted	1.1	2.5	2.5	38.4	49.0	5851	490	800

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Laid Direct In Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	739.586	25	28	31.00	27.00
2.5	7.41	645.350	33	36	19.00	16.00
4	4.61	547.715	44	48	12.00	10.00
6	3.08	501.605	56	60	7.90	6.80
10	1.83	430.107	78	80	4.70	4.00
16	1.15	352.933	99	115	2.90	2.50
25	0.727	364.742	131	150	1.90	1.65
35	0.524	333.675	162	180	1.35	1.15
50	0.387	319.375	197	215	1.00	0.87
70	0.268	297.423	251	265	0.69	0.60

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLPE / PVC / SWA / PVC-FR- 600 / 1000 VOLT (N2XRY-FE)			IEC 60502-1, IEC 60331, IEC 60332-3C		
1.5mm² : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC BEDDING, GALVANIZED STEEL WIRES ARMoured, PVC-FR SHEATHED					
Application :		This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction	
				: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC Bedding : 5- Armoured : 6- PVC-FR Sheathed	
Voltage rating : 600/1000V				Insulation colour	
Conductor Operating Temperature : 90 ° C					
Reference Standard : IEC 60502-1				Sheath colour	
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1					
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B					

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Galv. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
Core x mm ²	no	shape	mm			mm		Kg/Km	mm	m
7x1.5	7	circular	0.7	1.3	1.8	14.2	20.9	734	209	1000
8x1.5	7	circular	0.7	1.6	1.8	16.0	23.4	939	234	1000
10x1.5	7	circular	0.7	1.6	1.8	18.2	25.6	1089	256	1000
12x1.5	7	circular	0.7	1.6	1.8	18.9	26.3	1155	263	1000
14x1.5	7	circular	0.7	1.6	1.8	19.9	27.3	1237	273	1000
16x1.5	7	circular	0.7	1.6	1.8	21.0	28.4	1334	284	1000
19x1.5	7	circular	0.7	1.6	1.9	22.2	29.8	1470	298	1000
21x1.5	7	circular	0.7	1.6	1.9	23.6	31.2	1601	312	1000
24x1.5	7	circular	0.7	2.0	2.0	26.2	34.8	1988	348	1000
30x1.5	7	circular	0.7	2.0	2.1	27.9	36.7	2224	367	500
40x1.5	7	circular	0.7	2.0	2.2	32.0	41.0	2746	410	500
52x1.5	7	circular	0.7	2.5	2.4	36.3	46.7	3638	467	500
61x1.5	7	circular	0.7	2.5	2.5	39.0	49.6	4082	496	500



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Laid Direct In Ground	Single-phase	Three-phase
	mm ²	Ω/Km	MΩ.Km	A	mV/A/m	
7x1.5	12.1	739.586	25	28	31.00	27.00
8x1.5	12.1	739.586	25	28	31.00	27.00
10x1.5	12.1	739.586	25	28	31.00	27.00
12x1.5	12.1	739.586	25	28	31.00	27.00
14x1.5	12.1	739.586	25	28	31.00	27.00
16x1.5	12.1	739.586	25	28	31.00	27.00
19x1.5	12.1	739.586	25	28	31.00	27.00
21x1.5	12.1	739.586	25	28	31.00	27.00
24x1.5	12.1	739.586	25	28	31.00	27.00
30x1.5	12.1	739.586	25	28	31.00	27.00
40x1.5	12.1	739.586	25	28	31.00	27.00
52x1.5	12.1	739.586	25	28	31.00	27.00
61x1.5	12.1	739.586	25	28	31.00	27.00

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / PVC / SWA / PVC-FR- 600 / 1000 VOLT (N2XRY-FE)			IEC 60502-1, IEC 60331, IEC 60332-3C		
2.5mm² : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC BEDDING, GALVANIZED STEEL WIRES ARMoured, PVC-FR SHEATHED					
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.			Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC Bedding : 5- Armoured : 6- PVC-FR Sheathed		
Voltage rating : 600/1000V			Insulation colour : Black core with White numbering or White core with Black numbering as per order		
Conductor Operating Temperature : 90 ° C					
Reference Standard : IEC 60502-1			Sheath colour : Orange or as per order		
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1					
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B					

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Galv. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
Core x mm²	no	shape	mm			mm		Kg/Km	mm	m
7x2.5	7	circular	0.7	1.3	1.8	15.4	22.1	840	221	1000
8x2.5	7	circular	0.7	1.6	1.8	17.4	24.8	1072	248	1000
10x2.5	7	circular	0.7	1.6	1.8	19.8	27.2	1245	272	1000
12x2.5	7	circular	0.7	1.6	1.8	20.6	28.0	1346	280	1000
14x2.5	7	circular	0.7	1.6	1.8	21.7	29.1	1449	291	1000
16x2.5	7	circular	0.7	1.6	1.9	22.9	30.5	1582	305	1000
19x2.5	7	circular	0.7	1.6	1.9	24.2	31.8	1749	318	1000
21x2.5	7	circular	0.7	1.6	2.0	25.7	33.5	1902	335	1000
24x2.5	7	circular	0.7	2.0	2.1	29.0	37.8	2411	378	1000
30x2.5	7	circular	0.7	2.0	2.2	30.9	39.9	2713	399	500
40x2.5	7	circular	0.7	2.0	2.3	34.9	44.1	3309	441	500
52x2.5	7	circular	0.7	2.5	2.5	40.1	50.7	4436	507	500
61x2.5	7	circular	0.7	2.5	2.6	42.6	53.4	4933	534	500

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Laid Direct In Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
7x2.5	7.41	645.350	33	36	19.00	16.00
8x2.5	7.41	645.350	33	36	19.00	16.00
10x2.5	7.41	645.350	33	36	19.00	16.00
12x2.5	7.41	645.350	33	36	19.00	16.00
14x2.5	7.41	645.350	33	36	19.00	16.00
16x2.5	7.41	645.350	33	36	19.00	16.00
19x2.5	7.41	645.350	33	36	19.00	16.00
21x2.5	7.41	645.350	33	36	19.00	16.00
24x2.5	7.41	645.350	33	36	19.00	16.00
30x2.5	7.41	645.350	33	36	19.00	16.00
40x2.5	7.41	645.350	33	36	19.00	16.00
52x2.5	7.41	645.350	33	36	19.00	16.00
61x2.5	7.41	645.350	33	36	19.00	16.00

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLPE / PVC / SWA / PVC-FR- 600 / 1000 VOLT (N2XRY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4mm² : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC BEDDING, GALVANIZED STEEL WIRES ARMoured, PVC-FR SHEATHED			
Application :	This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC Bedding : 5- Armoured : 6- PVC-FR Sheathed
Voltage rating : 600/1000V		Insulation colour	: Black core with White numbering or White core with Black numbering as per order
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1		Sheath colour	: Orange or as per order
Optional : BS 6387 (C.W.Z). IEC 60332-3A. IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Galv. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
Core x mm²	no	shape	mm			mm		Kg/Km	mm	m
7x4	7	circular	0.7	1.6	1.8	16.9	24.3	1110	243	1000
8x4	7	circular	0.7	1.6	1.8	19.2	26.6	1274	266	1000
10x4	7	circular	0.7	1.6	1.8	21.8	29.2	1494	292	1000
12x4	7	circular	0.7	1.6	1.9	22.6	30.2	1617	302	1000
14x4	7	circular	0.7	1.6	1.9	23.9	31.5	1775	315	1000
16x4	7	circular	0.7	1.6	2.0	25.3	33.1	1946	331	1000
19x4	7	circular	0.7	2.0	2.0	26.7	35.3	2360	353	1000
21x4	7	circular	0.7	2.0	2.1	28.8	37.6	2628	376	1000
24x4	7	circular	0.7	2.0	2.2	32.0	41.0	2952	410	1000
30x4	7	circular	0.7	2.0	2.3	34.1	43.3	3374	433	500
40x4	7	circular	0.7	2.5	2.5	39.0	49.6	4580	496	500
52x4	7	circular	0.7	2.5	2.7	44.6	55.6	5567	556	500
61x4	7	circular	0.7	2.5	2.8	47.5	58.7	6225	587	500



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Laid Direct In Ground	Single-phase	Three-phase
mm²	Ω/Km	MΩ.Km	A		mV/A/m	
7x4	4.61	547.715	44	48	12.00	10.00
8x4	4.61	547.715	44	48	12.00	10.00
10x4	4.61	547.715	44	48	12.00	10.00
12x4	4.61	547.715	44	48	12.00	10.00
14x4	4.61	547.715	44	48	12.00	10.00
16x4	4.61	547.715	44	48	12.00	10.00
19x4	4.61	547.715	44	48	12.00	10.00
21x4	4.61	547.715	44	48	12.00	10.00
24x4	4.61	547.715	44	48	12.00	10.00
30x4	4.61	547.715	44	48	12.00	10.00
40x4	4.61	547.715	44	48	12.00	10.00
52x4	4.61	547.715	44	48	12.00	10.00
61x4	4.61	547.715	44	48	12.00	10.00

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / LS0H - 600 / 1000 VOLT (NHA-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1 CORE-COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, LS0H INSULATED			
Application : This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.		Construction	: 1- Copper conductor : 2- Mica Tape Fire Barrier : 3- LS0H Insulated
Voltage rating : 450/750 Volt or 600/1000 Volt			
Conductor Operating Temperature : 70 ° C			
Reference Standrad : IEC 60502-1		Insulation colour	: Orange or as per request
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC 61034			
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min. no of wire and conductor shape		Nominal Thickness Insulation	Approximately		Bending radius min	Standard delivery length
				Overall diameter	Net Weight		
mm ²	no	shape	mm	mm	Kg/Km	mm	m
1.5	7	circular	0.8	4.2	33	42	1000
2.5	7	circular	0.8	4.6	44	46	1000
4	7	circular	1.0	5.5	65	55	1000
6	7	circular	1.0	6.1	87	61	1000
10	7	compacted	1.0	6.9	129	69	1000
16	7	compacted	1.0	7.9	187	79	1000
25	7	compacted	1.0	9.4	283	94	1000
35	7	compacted	1.2	10.5	378	105	1000
50	7	compacted	1.4	12.2	507	122	1000
70	12	compacted	1.4	13.7	696	137	1000
95	15	compacted	1.6	16.1	958	161	1000
120	18	compacted	1.6	17.3	1192	173	1000
150	18	compacted	1.8	19.2	1467	192	1000
185	30	compacted	2.0	21.5	1826	215	1000
240	34	compacted	2.2	24.0	2373	240	1000
300	34	compacted	2.4	26.6	2950	266	1000
400	53	compacted	2.6	29.5	3740	295	500
500	53	compacted	2.8	33.1	4747	331	500
630	53	compacted	2.8	36.7	6065	367	500

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	Clipped Direct (Trefoil)	Trunking (on a Wall)	Single-phase (Trefoil)	Three-phase (Trefoil)
Mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	8.240	18	16	29.00	25.00
2.5	7.41	7.221	25	21	18.00	15.00
4	4.61	7.378	33	28	11.00	9.50
6	3.08	6.721	43	36	7.30	6.40
10	1.83	5.798	59	50	4.40	3.80
16	1.15	4.827	79	68	2.80	2.40
25	0.727	4.737	104	89	1.75	1.5
35	0.524	4.310	129	110	1.25	1.1
50	0.387	4.310	167	134	0.95	0.82
70	0.268	3.718	214	171	0.66	0.57
95	0.193	3.586	261	207	0.5	0.43
120	0.153	3.378	303	239	0.41	0.36
150	0.124	3.417	349	262	0.34	0.3
185	0.0991	3.335	400	296	0.29	0.26
240	0.0754	3.312	472	346	0.25	0.22
300	0.0601	3.257	545	394	0.22	0.19
400	0.0470	3.136	634	467	0.2	0.175
500	0.0366	3.025	723	533	0.185	0.16
630	0.0283	2.702	826	611	0.175	0.15

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLPE / LS0H - 600 / 1000 VOLT (N2XH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1 CORE-COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H SHEATHED			
Application :	This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.	Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Sheathed
Voltage rating : 600/1000 Volt		Insulation colour	: Natural or as per request
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard	: IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034	Sheath colour	: Orange or as per request
Optional	: BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B		

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
mm ²	no	shape	mm	mm	mm	Kg/Km	mm	m
1.5	7	circular	0.7	1.4	6.8	62	68	1000
2.5	7	circular	0.7	1.4	7.2	75	72	1000
4	7	circular	0.7	1.4	7.7	93	77	1000
6	7	circular	0.7	1.4	8.3	117	83	1000
10	7	compacted	0.7	1.4	9.1	162	91	1000
16	7	compacted	0.7	1.4	10.1	224	101	1000
25	7	compacted	0.9	1.4	11.6	323	116	1000
35	7	compacted	0.9	1.4	12.7	420	127	1000
50	7	compacted	1.0	1.4	14.2	546	142	1000
70	12	compacted	1.1	1.4	15.9	745	159	1000
95	15	compacted	1.1	1.5	18.1	1004	181	1000
120	18	compacted	1.2	1.5	19.5	1246	195	1000
150	18	compacted	1.4	1.6	21.6	1529	216	1000
185	30	compacted	1.6	1.7	24.1	1899	241	1000
240	34	compacted	1.7	1.8	26.6	2448	266	1000
300	34	compacted	1.8	1.8	29.0	3017	290	1000
400	53	compacted	2.0	1.9	32.1	3817	321	500
500	53	compacted	2.2	2.1	36.1	4850	361	500
630	53	compacted	2.4	2.2	40.3	6227	403	500



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil)	Trunking (on a Wall)	Single-phase (Trefoil)	Three-phase (Trefoil)
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	739.586	23	19	31.00	27.00
2.5	7.41	645.350	31	26	19.00	16.00
4	4.61	547.715	41	35	12.00	10.00
6	3.08	501.605	54	45	7.90	6.80
10	1.83	430.107	74	63	4.70	4.00
16	1.15	352.933	99	85	2.90	2.50
25	0.727	364.742	130	111	1.85	1.60
35	0.524	333.675	161	138	1.35	1.15
50	0.387	319.375	209	168	1.00	0.87
70	0.268	297.423	268	214	0.71	0.61
95	0.193	253.454	326	259	0.52	0.45
120	0.153	259.601	379	299	0.43	0.37
150	0.124	271.309	436	328	0.36	0.31
185	0.0991	270.396	500	370	0.30	0.26
240	0.0754	260.664	590	433	0.25	0.22
300	0.0601	249.464	681	493	0.22	0.20
400	0.0470	244.850	793	584	0.20	0.18
500	0.0366	241.204	904	666	0.19	0.16
630	0.0283	232.871	1033	764	0.18	0.15

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / LS0H - 600 / 1000 VOLT (N2XH-FE)			IEC 60502-1, IEC 60331, IEC 60332-3C		
2 CORE-COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H SHEATHED					
Application :		This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Sheathed	
Voltage rating : 600/1000V			Insulation colour : 2-Core (Red & Black) or (Brown & Blue)		
Conductor Operating Temperature : 90 ° C					
Reference Strandard : IEC 60502-1					
Cable Standard		: IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034		Sheath colour : Orange or as per request	
Optional		: BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
mm ²	no	shape	mm	mm	mm	Kg/Km	mm	m
1.5	7	circular	0.7	1.8	11.7	151	117	1000
2.5	7	circular	0.7	1.8	12.5	181	125	1000
4	7	circular	0.7	1.8	13.5	224	135	1000
6	7	circular	0.7	1.8	14.7	278	147	1000
10	7	compacted	0.7	1.8	16.4	384	164	1000
16	7	compacted	0.7	1.8	18.4	522	184	1000
25	7	compacted	0.9	1.8	21.4	749	214	1000
35	7	compacted	0.9	1.8	23.6	967	236	1000
50	7	compacted	1.0	1.8	26.6	1253	266	1000
70	12	compacted	1.1	1.9	30.2	1708	302	1000
95	15	compacted	1.1	2.0	34.4	2286	344	1000
120	18	compacted	1.2	2.1	37.8	2844	378	500
150	18	compacted	1.4	2.3	42.0	3501	420	500
185	30	compacted	1.6	2.4	46.8	4336	468	500
240	34	compacted	1.7	2.6	51.8	5565	518	350
300	34	compacted	1.8	2.7	56.8	6850	568	300
400	53	compacted	2.0	3.0	63.2	8674	632	300
500	53	compacted	2.2	3.2	70.8	10970	708	300

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil)	Trunking (on a Wall or Ceiling)	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	739.586	23	20	31.00	27.00
2.5	7.41	645.350	32	26	19.00	16.00
4	4.61	547.715	42	35	12.00	10.00
6	3.08	501.605	54	44	7.90	6.80
10	1.83	430.107	75	60	4.70	4.00
16	1.15	352.933	100	80	2.90	2.50
25	0.727	364.742	127	105	1.90	1.65
35	0.524	333.675	158	128	1.35	1.15
50	0.387	319.375	192	154	1.00	0.87
70	0.268	297.423	246	194	0.69	0.60
95	0.193	253.454	298	233	0.52	0.45
120	0.153	259.601	346	268	0.42	0.37
150	0.124	271.309	399	300	0.35	0.30
185	0.0991	270.396	456	340	0.29	0.26
240	0.0754	260.664	538	398	0.24	0.21
300	0.0601	249.464	621	455	0.21	0.19
400	0.0470	244.850	741	536	0.19	0.17
500	0.0366	241.204	842	599	0.18	0.15

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLPE / LSOH - 600 / 1000 VOLT (N2XH-FE)			IEC 60502-1, IEC 60331, IEC 60332-3C		
3 CORE-COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LSOH SHEATHED					
Application :		This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LSOH Sheathed	
Voltage rating : 600/1000V				Insulation colour : 3-Core (Red, Yellow & Blue) or (Brown, Black & Grey)	
Conductor Operating Temperature : 90 ° C					
Reference Standard : IEC 60502-1					
Cable Standard			: IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034	Sheath colour : Orange or as per order	
Optional			: BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B		

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
mm ²	no	shape	mm	mm	mm	Kg/Km	mm	m
1.5	7	circular	0.7	1.8	12.4	181	124	1000
2.5	7	circular	0.7	1.8	13.2	218	132	1000
4	7	circular	0.7	1.8	14.3	276	143	1000
6	7	circular	0.7	1.8	15.6	352	156	1000
10	7	compacted	0.7	1.8	17.4	497	174	1000
16	7	compacted	0.7	1.8	19.6	689	196	1000
25	7	compacted	0.9	1.8	22.8	1003	228	1000
35	7	compacted	0.9	1.8	25.2	1312	252	1000
50	7	compacted	1.0	1.8	28.4	1708	284	1000
70	12	compacted	1.1	2.0	32.8	2369	328	1000
95	15	compacted	1.1	2.1	37.4	3188	374	500
120	18	compacted	1.2	2.2	40.6	3968	406	500
150	18	compacted	1.4	2.4	45.1	4881	451	500
185	30	compacted	1.6	2.5	50.2	6047	502	350
240	34	compacted	1.7	2.7	55.6	7794	556	300
300	34	compacted	1.8	2.9	61.1	9637	611	250
400	53	compacted	2.0	3.1	67.8	12193	678	250
500	53	compacted	2.2	3.4	76.2	15482	762	250



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil)	Trunking (on a Wall or Ceiling)	Single-phase	Three-phase
	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	739.586	23	20	31.00	27.00
2.5	7.41	645.350	32	26	19.00	16.00
4	4.61	547.715	42	35	12.00	10.00
6	3.08	501.605	54	44	7.90	6.80
10	1.83	430.107	75	60	4.70	4.00
16	1.15	352.933	100	80	2.90	2.50
25	0.727	364.742	127	105	1.90	1.65
35	0.524	333.675	158	128	1.35	1.15
50	0.387	319.375	192	154	1.00	0.87
70	0.268	297.423	246	194	0.69	0.60
95	0.193	253.454	298	233	0.52	0.45
120	0.153	259.601	346	268	0.42	0.37
150	0.124	271.309	399	300	0.35	0.30
185	0.0991	270.396	456	340	0.29	0.26
240	0.0754	260.664	538	398	0.24	0.21
300	0.0601	249.464	621	455	0.21	0.19
400	0.0470	244.850	741	536	0.19	0.17
500	0.0366	241.204	842	599	0.18	0.15

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / LS0H - 600 / 1000 VOLT (N2XH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4 CORE-COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Sheathed	
Voltage rating : 600/1000V		Insulation colour : 4-Core (Red, Yellow, Blue & Black) or (Brown, Black, Grey & Blue)	
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1		Sheath colour : Orange or as per request	
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034			
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
mm ²	no	shape	mm	mm	mm	Kg/Km	mm	m
1.5	7	circular	0.7	1.8	13.4	214	134	1000
2.5	7	circular	0.7	1.8	14.4	263	144	1000
4	7	circular	0.7	1.8	15.6	343	156	1000
6	7	circular	0.7	1.8	17.1	437	171	1000
10	7	compacted	0.7	1.8	19.1	626	191	1000
16	7	compacted	0.7	1.8	21.5	878	215	1000
25	7	compacted	0.9	1.8	25.1	1284	251	1000
35	7	compacted	0.9	1.8	27.8	1685	278	1000
50	7	compacted	1.0	1.9	31.9	2224	319	1000
70	12	compacted	1.1	2.1	36.4	3077	364	1000
95	15	compacted	1.1	2.2	41.5	4148	415	500
120	18	compacted	1.2	2.4	45.2	5183	452	500
150	18	compacted	1.4	2.5	50.0	6352	500	500
185	30	compacted	1.6	2.7	56.0	7913	560	350
240	34	compacted	1.7	2.9	61.9	10192	619	300
300	34	compacted	1.8	3.1	68.1	12625	681	250
400	53	compacted	2.0	3.4	75.7	16002	757	250

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil)	Trunking (on a Wall or Ceiling)	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	739.586	23	20	31.00	27.00
2.5	7.41	645.350	32	26	19.00	16.00
4	4.61	547.715	42	35	12.00	10.00
6	3.08	501.605	54	44	7.90	6.80
10	1.83	430.107	75	60	4.70	4.00
16	1.15	352.933	100	80	2.90	2.50
25	0.727	364.742	127	105	1.90	1.65
35	0.524	333.675	158	128	1.35	1.15
50	0.387	319.375	192	154	1.00	0.87
70	0.268	297.423	246	194	0.69	0.60
95	0.193	253.454	298	233	0.52	0.45
120	0.153	259.601	346	268	0.42	0.37
150	0.124	271.309	399	300	0.35	0.30
185	0.0991	270.396	456	340	0.29	0.26
240	0.0754	260.664	538	398	0.24	0.21
300	0.0601	249.464	621	455	0.21	0.19
400	0.0470	244.850	741	536	0.19	0.17

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLPE / LSOH - 600 / 1000 VOLT (N2XH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
5 CORE-COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LSOH SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LSOH Sheathed
Voltage rating : 600/1000V		Insulation colour	: 5-Core (Red, Yellow, Blue, Black & Green) or (Brown, Black, Grey, Blue & Green)
Conductor Operating Temperature : 90 ° C			
Reference Standrad : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034		Sheath colour	: Orange or as per order
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
mm ²	no	shape	mm	mm	mm	Kg/Km	mm	m
1.5	7	circular	0.7	1.8	14.5	242	145	1000
2.5	7	circular	0.7	1.8	15.6	302	156	1000
4	7	circular	0.7	1.8	17.1	396	171	1000
6	7	circular	0.7	1.8	18.7	508	187	1000
10	7	compacted	0.7	1.8	20.9	756	209	1000
16	7	compacted	0.7	1.8	23.6	1069	236	1000
25	7	compacted	0.9	1.8	25.1	1284	251	1000
35	7	compacted	0.9	1.9	30.8	2087	308	1000
50	7	compacted	1.0	2.0	35.4	2756	354	1000
70	12	compacted	1.1	2.2	40.4	3818	404	1000

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil)	Trunking (on a Wall or Ceiling)	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	739.586	23	20	31.00	27.00
2.5	7.41	645.350	32	26	19.00	16.00
4	4.61	547.715	42	35	12.00	10.00
6	3.08	501.605	54	44	7.90	6.80
10	1.83	430.107	75	60	4.70	4.00
16	1.15	352.933	100	80	2.90	2.50
25	0.727	364.742	127	105	1.90	1.65
35	0.524	333.675	158	128	1.35	1.15
50	0.387	319.375	192	154	1.00	0.87
70	0.268	297.423	246	194	0.69	0.60

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLPE / LS0H - 600 / 1000 VOLT (N2XH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1.5mm² : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Sheathed	
Voltage rating : 600/1000V		Insulation colour : Black with White numbering or White with Black numbering or as per order	
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1		Sheath colour : Orange or as per request	
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034			
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
Core x mm²	no	shape	mm	mm	mm	Kg/Km	mm	m
7x1.5	7	circular	0.7	1.8	15.8	302	158	1000
8x1.5	7	circular	0.7	1.8	17.6	352	176	1000
10x1.5	7	circular	0.7	1.8	19.8	428	198	1000
12x1.5	7	circular	0.7	1.8	20.5	474	205	1000
14x1.5	7	circular	0.7	1.8	21.5	535	215	1000
16x1.5	7	circular	0.7	1.8	22.6	596	226	1000
19x1.5	7	circular	0.7	1.8	23.8	679	238	1000
21x1.5	7	circular	0.7	1.8	25.2	755	252	1000
24x1.5	7	circular	0.7	1.8	27.8	856	278	1000
30x1.5	7	circular	0.7	1.9	29.7	1029	297	500
40x1.5	7	circular	0.7	2.0	33.6	1343	336	500
52x1.5	7	circular	0.7	2.1	37.8	1655	378	500
61x1.5	7	circular	0.7	2.2	40.6	1967	406	500

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil)	Trunking (on a Wall or Ceiling)	Single-phase	Three-phase
Core x mm²	Ω/Km	MΩ.Km	A		mV/A/m	
7x1.5	12.1	739.586	23	19.5	31.00	27.00
8x1.5	12.1	739.586	23	19.5	31.00	27.00
10x1.5	12.1	739.586	23	19.5	31.00	27.00
12x1.5	12.1	739.586	23	19.5	31.00	27.00
14x1.5	12.1	739.586	23	19.5	31.00	27.00
16x1.5	12.1	739.586	23	19.5	31.00	27.00
19x1.5	12.1	739.586	23	19.5	31.00	27.00
21x1.5	12.1	739.586	23	19.5	31.00	27.00
24x1.5	12.1	739.586	23	19.5	31.00	27.00
30x1.5	12.1	739.586	23	19.5	31.00	27.00
40x1.5	12.1	739.586	23	19.5	31.00	27.00
52x1.5	12.1	739.586	23	19.5	31.00	27.00
61x1.5	12.1	739.586	23	19.5	31.00	27.00

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLPE / LS0H - 600 / 1000 VOLT (N2XH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
2.5mm² : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Sheathed	
Voltage rating : 600/1000V		Insulation colour : Black with White numbering or White with Black numbering or as per order	
Conductor Operating Temperature : 90 ° C			
Reference Strandard : IEC 60502-1		Sheath colour : Orange or as per request	
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034			
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
Core x mm ²	no	shape	mm	mm	mm	Kg/Km	mm	m
7x2.5	7	circular	0.7	1.8	17.0	382	170	1000
8x2.5	7	circular	0.7	1.8	19.0	446	190	1000
10x2.5	7	circular	0.7	1.8	21.4	544	214	1000
12x2.5	7	circular	0.7	1.8	22.2	609	222	1000
14x2.5	7	circular	0.7	1.8	23.3	691	233	1000
16x2.5	7	circular	0.7	1.8	24.5	772	245	1000
19x2.5	7	circular	0.7	1.8	25.8	885	258	1000
21x2.5	7	circular	0.7	1.8	27.3	981	273	1000
24x2.5	7	circular	0.7	1.9	30.4	1132	304	500
30x2.5	7	circular	0.7	1.9	32.3	1352	323	500
40x2.5	7	circular	0.7	2.1	36.7	1784	367	500
52x2.5	7	circular	0.7	2.2	41.4	2212	414	500
61x2.5	7	circular	0.7	2.3	44.4	2630	444	500



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil)	Trunking (on a Wall or Ceiling)	Single-phase	Three-phase
Core x mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
7x2.5	7.41	645.35	32	26	19.00	16.00
8x2.5	7.41	645.35	32	26	19.00	16.00
10x2.5	7.41	645.35	32	26	19.00	16.00
12x2.5	7.41	645.35	32	26	19.00	16.00
14x2.5	7.41	645.35	32	26	19.00	16.00
16x2.5	7.41	645.35	32	26	19.00	16.00
19x2.5	7.41	645.35	32	26	19.00	16.00
21x2.5	7.41	645.35	32	26	19.00	16.00
24x2.5	7.41	645.35	32	26	19.00	16.00
30x2.5	7.41	645.35	32	26	19.00	16.00
40x2.5	7.41	645.35	32	26	19.00	16.00
52x2.5	7.41	645.35	32	26	19.00	16.00
61x2.5	7.41	645.35	32	26	19.00	16.00

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / LS0H - 600 / 1000 VOLT (N2XH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4mm² : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Sheathed	
Voltage rating : 600/1000V		Insulation colour : Black with White numbering or White with Black numbering or as per order	
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1		Sheath colour : Orange or as per request	
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034			
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
Core x mm²	no	shape	mm	mm	mm	Kg/Km	mm	m
7x4	7	circular	0.7	1.8	18.5	503	185	1000
8x4	7	circular	0.7	1.8	20.8	592	208	1000
10x4	7	circular	0.7	1.8	23.4	719	234	1000
12x4	7	circular	0.7	1.8	24.2	809	242	1000
14x4	7	circular	0.7	1.8	25.5	927	255	1000
16x4	7	circular	0.7	1.8	26.9	1044	269	1000
19x4	7	circular	0.7	1.8	28.3	1200	283	1000
21x4	7	circular	0.7	1.9	30.2	1349	302	1000
24x4	7	circular	0.7	2.0	33.6	1549	336	500
30x4	7	circular	0.7	2.1	35.9	1880	359	500
40x4	7	circular	0.7	2.2	40.6	2465	406	500
52x4	7	circular	0.7	2.4	46.3	3079	463	500
61x4	7	circular	0.7	2.5	49.7	3680	497	500

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil)	Trunking (on a Wall or Ceiling)	Single-phase	Three-phase
Core x mm²	Ω/Km	MΩ.Km	A		mV/A/m	
7x4	4.61	547.715	42	35	12.00	10.00
8x4	4.61	547.715	42	35	12.00	10.00
10x4	4.61	547.715	42	35	12.00	10.00
12x4	4.61	547.715	42	35	12.00	10.00
14x4	4.61	547.715	42	35	12.00	10.00
16x4	4.61	547.715	42	35	12.00	10.00
19x4	4.61	547.715	42	35	12.00	10.00
21x4	4.61	547.715	42	35	12.00	10.00
24x4	4.61	547.715	42	35	12.00	10.00
30x4	4.61	547.715	42	35	12.00	10.00
40x4	4.61	547.715	42	35	12.00	10.00
52x4	4.61	547.715	42	35	12.00	10.00
61x4	4.61	547.715	42	35	12.00	10.00

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLPE / LSOH / AWA / LSOH - 600 / 1000 VOLT (N2XRH-FE)				IEC 60502-1, IEC 60331, IEC 60332-3C			
1 CORE-COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LSOH BEDDING, ALUMINIUM WIRES ARMoured, LSOH SHEATHED							
Application : This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.				Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LSOH Bedding : 5- Armoured : 6- LSOH Sheathed			
Voltage rating : 600/1000 Volt							
Conductor Operating Temperature : 90 ° C							
Reference Standard : IEC 60502-1							
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034				Insulation colour : Natural or as per request			
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B				Sheath colour : Orange or as per request			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Aluminium wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
mm ²	no	shape	mm			mm		Kg/Km	mm	m
1.5	7	circular	0.7	1.6	1.8	6.0	13.4	220	134.0	1000
2.5	7	circular	0.7	1.6	1.8	6.4	13.8	240	138.0	1000
4	7	circular	0.7	1.6	1.8	6.9	14.3	268	143.0	1000
6	7	circular	0.7	1.6	1.8	7.5	14.9	301	149.0	1000
10	7	compacted	0.7	1.6	1.8	8.3	15.7	358	157.0	1000
16	7	compacted	0.7	1.6	1.8	9.3	16.7	437	167.0	1000
25	7	compacted	0.9	1.6	1.8	10.8	18.2	558	182.0	1000
35	7	compacted	0.9	1.6	1.8	11.9	19.3	674	193.0	1000
50	7	compacted	1.0	1.6	1.8	13.4	20.8	827	208.0	1000
70	12	compacted	1.1	1.6	1.8	15.1	22.5	1049	225.0	1000
95	15	compacted	1.1	1.6	1.8	17.1	24.5	1336	245.0	1000
120	18	compacted	1.2	1.6	1.8	18.5	25.9	1598	259.0	1000
150	18	compacted	1.4	1.6	1.8	20.4	27.8	1900	278.0	1000
185	30	compacted	1.6	1.6	1.9	22.7	30.3	2309	303.0	1000
240	34	compacted	1.7	1.6	2.0	25.0	32.8	2897	328.0	1000
300	34	compacted	1.8	2.0	2.1	27.4	36.2	3598	362.0	800
400	53	compacted	2.0	2.0	2.2	30.7	39.7	4488	397.0	500
500	53	compacted	2.2	2.0	2.3	34.3	43.5	5577	435.0	500
630	53	compacted	2.4	2.5	2.5	38.3	48.9	7184	489.0	500



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil Touching)	Laid Direct In Ground	Single-phase (Trefoil Touching)	Three-phase (Trefoil)
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	739.586	28	36	31.00	27.00
2.5	7.41	645.350	37	47	19.00	16.00
4	4.61	547.715	48	61	11.50	10.00
6	3.08	501.605	60	75	7.90	6.80
10	1.83	430.107	82	100	4.60	4.00
16	1.15	352.933	106	127	2.90	2.50
25	0.727	364.742	140	163	1.87	1.62
35	0.524	333.675	170	195	1.36	1.18
50	0.387	319.375	222	235	1.00	0.87
70	0.268	297.423	285	290	0.71	0.62
95	0.193	253.454	346	345	0.55	0.47
120	0.153	259.601	402	389	0.45	0.39
150	0.124	271.309	463	435	0.38	0.33
185	0.0991	270.396	529	490	0.33	0.28
240	0.0754	260.664	625	560	0.28	0.24
300	0.0601	249.464	720	630	0.25	0.21
400	0.0470	244.850	815	700	0.22	0.20
500	0.0366	241.204	918	770	0.21	0.18
630	0.0283	232.871	1027	840	0.20	0.17

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLPE / LS0H / SWA / LS0H - 600 / 1000 VOLT (N2XRH-FE)			IEC 60502-1, IEC 60331, IEC 60332-3C		
2 CORE-COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H BEDDING, ALUMINIUM WIRES ARMoured, LS0H SHEATHED					
Application :		This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Bedding : 5- Armoured : 6- LS0H Sheathed	
Voltage rating : 600/1000 Volt			Insulation colour : 2-Core (Red & Black) or (Brown & Blue)		
Conductor Operating Temperature : 90 ° C					
Reference Standard : IEC 60502-1			Sheath colour : Orange or as per request		
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034					
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B					

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately		Bending radius min	Standard delivery length
			Insulation	Gal. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter		
mm ²	no	shape	mm			mm		Kg/Km	m
1.5	7	circular	0.7	0.9	1.8	10.1	16.1	398	161
2.5	7	circular	0.7	0.9	1.8	10.9	16.9	447	169
4	7	circular	0.7	1.3	1.8	11.9	18.6	596	186
6	7	circular	0.7	1.3	1.8	13.1	19.8	676	198
10	7	compacted	0.7	1.6	1.8	14.8	21.5	828	215
16	7	compacted	0.7	1.6	1.8	16.8	24.2	1129	242
25	7	compacted	0.9	1.6	1.8	19.8	27.2	1450	272
35	7	compacted	0.9	1.6	1.9	22.0	29.6	1757	296
50	7	compacted	1.0	1.6	2.0	25.0	32.8	2153	328
70	12	compacted	1.1	2.0	2.1	28.8	37.6	2987	376
95	15	compacted	1.1	2.0	2.3	32.8	42.0	3739	420
120	18	compacted	1.2	2.5	2.4	36.0	46.4	4779	464
150	18	compacted	1.4	2.5	2.6	40.2	51.0	5668	510
185	30	compacted	1.6	2.5	2.7	44.8	55.8	6738	558
240	34	compacted	1.7	2.5	2.9	49.8	61.2	8258	612
300	34	compacted	1.8	2.5	3.1	54.6	66.4	9816	664
400	53	compacted	2.0	2.5	3.3	60.4	72.6	11946	726
500	53	compacted	2.2	3.2	3.6	68.0	82.1	15531	821

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Laid Direct In Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A			
			mV/A/m			
1.5	12.1	739.586	25	28	31.00	27.00
2.5	7.41	645.350	33	36	19.00	16.00
4	4.61	547.715	44	48	12.00	10.00
6	3.08	501.605	56	60	7.90	6.80
10	1.83	430.107	78	80	4.70	4.00
16	1.15	352.933	99	115	2.90	2.50
25	0.727	364.742	131	150	1.90	1.65
35	0.524	333.675	162	180	1.35	1.15
50	0.387	319.375	197	215	1.00	0.87
70	0.268	297.423	251	265	0.69	0.60
95	0.193	253.454	304	315	0.52	0.45
120	0.153	259.601	353	360	0.42	0.37
150	0.124	271.309	406	405	0.35	0.30
185	0.0991	270.396	463	460	0.29	0.26
240	0.0754	260.664	546	530	0.24	0.21
300	0.0601	249.464	628	590	0.21	0.19
400	0.0470	244.850	728	670	0.19	0.17
500	0.0366	241.204	826	723	0.18	0.15

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLPE / LS0H / SWA / LS0H - 600 / 1000 VOLT (N2XRH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
3 CORE-COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H BEDDING, ALUMINIUM WIRES ARMoured, LS0H SHEATHED			
Application :	This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Bedding : 5- Armoured : 6- LS0H Sheathed
Voltage rating : 600/1000 Volt		Insulation colour	: 3-Core (Red, Yellow & Black) or (Brown, Black & Grey)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard	: IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034	Sheath colour	: Orange or as per request
Optional	: BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B		

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Gal. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
mm ²	no	shape	mm			mm		Kg/Km	mm	m
1.5	7	circular	0.7	0.9	1.8	10.8	16.8	441	168	1000
2.5	7	circular	0.7	1.25	1.8	11.6	18.3	578	183	1000
4	7	circular	0.7	1.25	1.8	12.7	19.4	661	194	1000
6	7	circular	0.7	1.25	1.8	14.0	20.7	773	207	1000
10	7	compacted	0.7	1.25	1.8	15.8	22.5	966	225	1000
16	7	compacted	0.7	1.60	1.8	18.0	25.4	1334	254	1000
25	7	compacted	0.9	1.60	1.8	21.2	28.6	1759	286	1000
35	7	compacted	0.9	1.60	1.9	23.6	31.2	2158	312	1000
50	7	compacted	1.0	2.00	2.0	26.8	35.4	2869	354	1000
70	12	compacted	1.1	2.00	2.2	31.2	40.2	3741	402	1000
95	15	compacted	1.1	2.00	2.4	35.6	45.0	4763	450	500
120	18	compacted	1.2	2.50	2.5	39.0	49.6	6082	496	500
150	18	compacted	1.4	2.50	2.7	43.1	54.1	7193	541	500
185	30	compacted	1.6	2.50	2.8	48.0	59.2	8596	592	350
240	34	compacted	1.7	2.50	3.0	53.4	65.0	10680	650	300
300	34	compacted	1.8	2.50	3.3	58.5	70.5	12809	705	250
400	53	compacted	2.0	3.15	3.5	65.2	79.1	16536	791	250
500	53	compacted	2.2	3.15	3.7	73.0	87.3	20310	873	250

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Laid Direct In Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
1.5	12.1	739.586	25	28	31.00	27.00
2.5	7.41	645.350	33	36	19.00	16.00
4	4.61	547.715	44	48	12.00	10.00
6	3.08	501.605	56	60	7.90	6.80
10	1.83	430.107	78	80	4.70	4.00
16	1.15	352.933	99	115	2.90	2.50
25	0.727	364.742	131	150	1.90	1.65
35	0.524	333.675	162	180	1.35	1.15
50	0.387	319.375	197	215	1.00	0.87
70	0.268	297.423	251	265	0.69	0.60
95	0.193	253.454	304	315	0.52	0.45
120	0.153	259.601	353	360	0.42	0.37
150	0.124	271.309	406	405	0.35	0.30
185	0.0991	270.396	463	460	0.29	0.26
240	0.0754	260.664	546	530	0.24	0.21
300	0.0601	249.464	628	590	0.21	0.19
400	0.0470	244.850	728	670	0.19	0.17
500	0.0366	241.204	826	723	0.18	0.15

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU/MGT/XLPE/LS0H/AWA/LS0H - 600 / 1000 VOLT (N2XRH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4 CORE-COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H BEDDING, ALUMINIUM WIRES ARMoured, LS0H SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Bedding : 5- Armoured : 6- LS0H Sheathed	
Voltage rating : 600/1000 Volt		Insulation colour 4-Core (Red, Yellow, Blue & Black) or (Brown, Black, Grey, Blue)	
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1		Sheath colour : Orange or as per request	
Cable : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034			
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Gal. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
mm ²	no	shape	mm			mm		Kg/Km	mm	m
1.5	7	circular	0.7	1.25	1.8	11.8	18.5	576	185	1000
2.5	7	circular	0.7	1.25	1.8	12.8	19.5	659	195	1000
4	7	circular	0.7	1.25	1.8	14.0	20.7	764	207	1000
6	7	circular	0.7	1.25	1.8	15.5	22.2	895	222	1000
10	7	compacted	0.7	1.60	1.8	17.5	24.9	1252	249	1000
16	7	compacted	0.7	1.60	1.8	19.9	27.3	1580	273	1000
25	7	compacted	0.9	1.60	1.9	23.5	31.1	2113	311	1000
35	7	compacted	0.9	2.00	2.0	26.2	34.8	2818	348	1000
50	7	compacted	1.9	2.00	2.2	30.5	39.5	3581	395	1000
70	12	compacted	2.1	2.00	2.3	34.6	43.8	4575	438	500
95	15	compacted	2.2	2.50	2.5	39.9	50.5	6308	505	500
120	18	compacted	2.4	2.50	2.7	43.2	54.2	7495	542	500
150	18	compacted	2.5	2.50	2.8	47.8	59.0	8899	590	500
185	30	compacted	2.7	2.50	3.0	53.8	65.4	10840	654	350
240	34	compacted	2.9	2.50	3.2	59.3	71.3	13410	713	300
300	34	compacted	3.1	3.15	3.5	65.5	79.4	17032	794	250
400	53	compacted	3.4	3.15	3.7	72.5	86.8	20825	868	250

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Laid Direct In Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A			
			mV/A/m			
1.5	12.1	739.586	25	28	31.00	27.00
2.5	7.41	645.350	33	36	19.00	16.00
4	4.61	547.715	44	48	12.00	10.00
6	3.08	501.605	56	60	7.90	6.80
10	1.83	430.107	78	80	4.70	4.00
16	1.15	352.933	99	115	2.90	2.50
25	0.727	364.742	131	150	1.90	1.65
35	0.524	333.675	162	180	1.35	1.15
50	0.387	319.375	197	215	1.00	0.87
70	0.268	297.423	251	265	0.69	0.60
95	0.193	253.454	304	315	0.52	0.45
120	0.153	259.601	353	360	0.42	0.37
150	0.124	271.309	406	405	0.35	0.30
185	0.0991	270.396	463	460	0.29	0.26
240	0.0754	260.664	546	530	0.24	0.21
300	0.0601	249.464	628	590	0.21	0.185
400	0.0470	244.850	728	670	0.19	0.165

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU/MGT/XLPE/LS0H/AWA/LS0H - 600 / 1000 VOLT (N2XRH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
5 CORE-COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H BEDDING, ALUMINIUM WIRES ARMoured, LS0H SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Bedding : 5- Armoured : 6- LS0H Sheathed
Voltage rating : 600/1000 Volt		Insulation colour	5-Core (Red, Yellow, Blue & Black, Green) or (Brown, Black, Grey, Blue & Green)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard	: IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034	Sheath colour	: Orange or as per request
Optional	: BS 6387 (C.W.Z) IEC 60332-3A. IEC 60332-3B		

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Gal. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
mm ²	no	shape	mm			mm		Kg/Km	mm	m
1.5	7	circular	0.7	1.25	1.8	12.9	19.6	638	196	1000
2.5	7	circular	0.7	1.25	1.8	14.0	20.7	723	207	1000
4	7	circular	0.7	1.25	1.8	15.5	22.2	855	222	1000
6	7	circular	0.7	1.60	1.8	17.1	24.5	1132	245	1000
10	7	compacted	0.7	1.60	1.8	19.3	26.7	1439	267	1000
16	7	compacted	0.7	1.60	1.9	22.0	29.6	1858	296	1000
25	7	compacted	0.9	2.00	2.0	26.0	34.6	2704	346	1000
35	7	compacted	0.9	2.00	2.1	29.4	38.2	3369	382	1000
50	7	compacted	1.0	2.00	2.3	33.8	43.0	4241	430	1000
70	12	compacted	1.1	2.50	2.5	38.4	49.0	5851	490	500

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Laid Direct In Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A			
			mV/A/m			
1.5	12.1	739.586	25	28	31.00	27.00
2.5	7.41	645.350	33	36	19.00	16.00
4	4.61	547.715	44	48	12.00	10.00
6	3.08	501.605	56	60	7.90	6.80
10	1.83	430.107	78	80	4.70	4.00
16	1.15	352.933	99	115	2.90	2.50
25	0.727	364.742	131	150	1.90	1.65
35	0.524	333.675	162	180	1.35	1.15
50	0.387	319.375	197	215	1.00	0.87
70	0.268	297.423	251	265	0.69	0.60

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLPE / LS0H / SWA / LS0H - 600 / 1000 VOLT (N2XRH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1.5MM : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H BEDDING, GALVANIZED STEEL WIRE ARMoured, LS0H SHEATHED			
Application :	This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Bedding : 5- Armoured : 6- LS0H Sheathed
Voltage rating : 600/1000V		Insulation colour	: Black with white numbering or White with Black numbering as per request
Conductor Operating Temperature : 90 ° C			
Reference Strandard : IEC 60502-1		Sheath colour	: Orange or as per request
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC 61034			
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Galv. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
Core x mm ²	no	shape	mm			mm		Kg/Km	mm	m
7x1.5	7	circular	0.7	1.3	1.8	14.2	20.9	734	209	1000
8x1.5	7	circular	0.7	1.6	1.8	16.0	23.4	939	234	1000
10x1.5	7	circular	0.7	1.6	1.8	18.2	25.6	1089	256	1000
12x1.5	7	circular	0.7	1.6	1.8	18.9	26.3	1155	263	1000
14x1.5	7	circular	0.7	1.6	1.8	19.9	27.3	1237	273	1000
16x1.5	7	circular	0.7	1.6	1.8	21.0	28.4	1334	284	1000
19x1.5	7	circular	0.7	1.6	1.9	22.2	29.8	1470	298	1000
21x1.5	7	circular	0.7	1.6	1.9	23.6	31.2	1601	312	1000
24x1.5	7	circular	0.7	2.0	2.0	26.2	34.8	1988	348	1000
30x1.5	7	circular	0.7	2.0	2.1	27.9	36.7	2224	367	500
40x1.5	7	circular	0.7	2.0	2.2	32.0	41.0	2746	410	500
52x1.5	7	circular	0.7	2.5	2.4	36.3	46.7	3638	467	500
61x1.5	7	circular	0.7	2.5	2.5	39.0	49.6	4082	496	500

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Laid Direct In Ground	Single-phase	Three-phase
	mm ²	Ω/Km	MΩ.Km	A	mV/A/m	
7x1.5	12.1	739.586	25	28	31.00	27.00
8x1.5	12.1	739.586	25	28	31.00	27.00
10x1.5	12.1	739.586	25	28	31.00	27.00
12x1.5	12.1	739.586	25	28	31.00	27.00
14x1.5	12.1	739.586	25	28	31.00	27.00
16x1.5	12.1	739.586	25	28	31.00	27.00
19x1.5	12.1	739.586	25	28	31.00	27.00
21x1.5	12.1	739.586	25	28	31.00	27.00
24x1.5	12.1	739.586	25	28	31.00	27.00
30x1.5	12.1	739.586	25	28	31.00	27.00
40x1.5	12.1	739.586	25	28	31.00	27.00
52x1.5	12.1	739.586	25	28	31.00	27.00
61x1.5	12.1	739.586	25	28	31.00	27.00

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLPE / LS0H / SWA / LS0H - 600 / 1000 VOLT (N2XRH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
2.5MM : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H BEDDING, GALVANIZED STEEL WIRE ARMoured, LS0H SHEATHED			
Application :	This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Bedding : 5- Armoured : 6- LS0H Sheathed
Voltage rating : 600/1000V		Insulation colour	: Black with white numbering or White with Black numbering as per request
Conductor Operating Temperature : 90 ° C			
Reference Strandard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC 61034		Sheath colour	: Orange or as per request
Optional : BS 6387 (C.W.Z) IEC 60332-3A. IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Galv. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
Core x mm ²	no	shape	mm			mm		Kg/Km	mm	m
7x2.5	7	circular	0.7	1.25	1.8	15.4	22.1	840	221	350
8x2.5	7	circular	0.7	1.60	1.8	17.4	24.8	1072	248	300
10x2.5	7	circular	0.7	1.60	1.8	19.8	27.2	1245	272	250
12x2.5	7	circular	0.7	1.60	1.8	20.6	28.0	1346	280	1000
14x2.5	7	circular	0.7	1.60	1.8	21.7	29.1	1449	291	1000
16x2.5	7	circular	0.7	1.60	1.9	22.9	30.5	1582	305	1000
19x2.5	7	circular	0.7	1.60	1.9	24.2	31.8	1749	318	1000
21x2.5	7	circular	0.7	1.60	2.0	25.7	33.5	1902	335	1000
24x2.5	7	circular	0.7	2.00	2.1	29.0	37.8	2411	378	500
30x2.5	7	circular	0.7	2.00	2.2	30.9	39.9	2713	399	500
40x2.5	7	circular	0.7	2.00	2.3	34.9	44.1	3309	441	500
52x2.5	7	circular	0.7	2.50	2.5	40.1	50.7	4436	507	500
61x2.5	7	circular	0.7	2.50	2.6	42.6	53.4	4933	534	500

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Laid Direct In Ground	Single-phase	Three-phase
	mm ²	Ω/Km	MΩ.Km	A	mV/A/m	
7x2.5	7.41	645.35	33	36	19.00	16.00
8x2.5	7.41	645.35	33	36	19.00	16.00
10x2.5	7.41	645.35	33	36	19.00	16.00
12x2.5	7.41	645.35	33	36	19.00	16.00
14x2.5	7.41	645.35	33	36	19.00	16.00
16x2.5	7.41	645.35	33	36	19.00	16.00
19x2.5	7.41	645.35	33	36	19.00	16.00
21x2.5	7.41	645.35	33	36	19.00	16.00
24x2.5	7.41	645.35	33	36	19.00	16.00
30x2.5	7.41	645.35	33	36	19.00	16.00
40x2.5	7.41	645.35	33	36	19.00	16.00
52x2.5	7.41	645.35	33	36	19.00	16.00
61x2.5	7.41	645.35	33	36	19.00	16.00

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLPE / LS0H / SWA /LS0H - 600 / 1000 VOLT (N2XRH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4MM : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H BEDDING, GALVANIZED STEEL WIRE ARMoured, LS0H SHEATHED			
Application :	This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Bedding : 5- Armoured : 6- LS0H Sheathed
Voltage rating : 600/1000V		Insulation colour	: Black with white numbering or White with Black numbering as per request
Conductor Operating Temperature : 90 ° C			
Reference Strandard : IEC 60502-1		Sheath colour	: Orange or as per request
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC 61034			
Optional	: BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B		

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Galv. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
Core x mm ²	no	Shape	mm			mm		Kg/Km	mm	m
7x4	7	Circular	0.7	1.6	1.8	16.9	24.3	1110	243	350
8x4	7	Circular	0.7	1.6	1.8	19.2	26.6	1274	266	300
10x4	7	circular	0.7	1.6	1.8	21.8	29.2	1494	292	250
12x4	7	circular	0.7	1.6	1.9	22.6	30.2	1617	302	1000
14x4	7	circular	0.7	1.6	1.9	23.9	31.5	1775	315	1000
16x4	7	circular	0.7	1.6	2.0	25.3	33.1	1946	331	1000
19x4	7	circular	0.7	2.0	2.0	26.7	35.3	2360	353	1000
21x4	7	circular	0.7	2.0	2.1	28.8	37.6	2628	376	1000
24x4	7	circular	0.7	2.0	2.2	32.0	41.0	2952	410	500
30x4	7	circular	0.7	2.0	2.3	34.1	43.3	3374	433	500
40x4	7	circular	0.7	2.5	2.5	39.0	49.6	4580	496	500
52x4	7	circular	0.7	2.5	2.7	44.6	55.6	5567	556	500
61x4	7	circular	0.7	2.5	2.8	47.5	58.7	6225	587	500

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Laid Direct In Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
7x4	4.61	547.715	44	48	12.00	10.00
8x4	4.61	547.715	44	48	12.00	10.00
10x4	4.61	547.715	44	48	12.00	10.00
12x4	4.61	547.715	44	48	12.00	10.00
14x4	4.61	547.715	44	48	12.00	10.00
16x4	4.61	547.715	44	48	12.00	10.00
19x4	4.61	547.715	44	48	12.00	10.00
21x4	4.61	547.715	44	48	12.00	10.00
24x4	4.61	547.715	44	48	12.00	10.00
30x4	4.61	547.715	44	48	12.00	10.00
40x4	4.61	547.715	44	48	12.00	10.00
52x4	4.61	547.715	44	48	12.00	10.00
61x4	4.61	547.715	44	48	12.00	10.00

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLEVA - 600 / 1000 VOLT (NX4G-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLEVA INSULATED			
Application : This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.		Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLEVA Insulated	
Voltage rating : 600/1000 Volt		Insulation colour : Orange or as per request	
Conductor Operating Temperature : 70 ° c			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1			
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area mm ²	Min. no of wire and conductor shape		Nominal Thickness Insulation mm	Approximately		Bending radius min mm	Standard delivery length m
				Overall diameter mm	Net Weight Kg/Km		
mm ²	no	shape	mm	mm	Kg/Km	mm	m
1.5	7	circular	0.8	4.2	32	42	1000
2.5	7	circular	0.8	4.6	43	46	1000
4	7	circular	1.0	5.5	64	55	1000
6	7	circular	1.0	6.1	85	61	1000
10	7	compacted	1.0	6.9	128	69	1000
16	7	compacted	1.0	7.9	185	79	1000
25	7	compacted	1.0	9.4	280	94	1000
35	7	compacted	1.2	10.5	375	105	1000
50	19	compacted	1.4	12.2	503	122	1000
70	19	compacted	1.4	13.7	692	137	1000
95	19	compacted	1.6	16.1	952	161	1000
120	37	compacted	1.6	17.3	1185	173	1000
150	37	compacted	1.8	19.2	1458	192	1000
185	37	compacted	2.0	21.5	1815	215	1000
240	37	compacted	2.2	24.0	2360	240	1000
300	61	compacted	2.4	26.6	2935	266	1000
400	61	compacted	2.6	29.5	3722	295	800
500	61	compacted	2.8	33.1	4724	331	500
630	61	compacted	2.8	36.7	6041	367	500



ELECTRICAL DATA

Nominal cross-sectional area mm ²	Resistance at 20 °C	Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Clipped Direct (Trefoil)	Trunking (on a wall)	Single-phase (Trefoil)	Three-phase (Trefoil)
mm ²	Ω/Km	A		mV/A/m	
1.5	12.1	23	19.0	31.00	27.00
2.5	7.41	31	26	19.00	16.00
4	4.61	41	35	12.00	10.00
6	3.08	54	45	7.90	6.80
10	1.83	74	63	4.70	4.00
16	1.15	99	85	2.90	2.50
25	0.727	130	111	1.85	1.60
35	0.524	161	138	1.35	1.15
50	0.387	209	168	1.00	0.87
70	0.268	268	214	0.71	0.61
95	0.193	326	259	0.52	0.45
120	0.153	379	299	0.43	0.37
150	0.124	436	328	0.36	0.31
185	0.0991	500	370	0.30	0.26
240	0.0754	590	433	0.25	0.22
300	0.0601	681	493	0.22	0.20
400	0.0470	793	584	0.20	0.18
500	0.0366	904	666	0.19	0.16
630	0.0283	1033	764	0.18	0.15

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLEVA / LS0H - 600 / 1000 VOLT (NX4GH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLEVA INSULATED, LS0H SHEATHED			
Application :	This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.	Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLEVA Insulated : 4- LS0H Sheathed
Voltage rating : 600/1000 Volt		Insulation colour	: Natural or as per request
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard	: IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC 61034	Sheath colour	: Orange or as per request
Optional	: BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B		

DIMENSIONAL & MECHANICAL DATA

Nominal cross sectional area	No of wire and conductor shape		Nominal Thickness Insulation	Nominal Sheathing Thickness	Approximately		Bending Radius Min	Standard Delivery Length
					Overall Diameter	Net Weight		
mm ²	no	shape	mm		mm	Kg/Km	mm	m
1.5	7	circular	0.7	1.4	6.8	67	68	1000
2.5	7	circular	0.7	1.4	7.2	80	72	1000
4	7	circular	0.7	1.4	7.7	100	77	1000
6	7	circular	0.7	1.4	8.3	124	83	1000
10	7	compacted	0.7	1.4	9.1	171	91	1000
16	7	compacted	0.7	1.4	10.1	234	101	1000
25	7	compacted	0.9	1.4	11.6	337	116	1000
35	7	compacted	0.9	1.4	12.7	437	127	1000
50	19	compacted	1.0	1.4	14.2	569	142	1000
70	19	compacted	1.1	1.4	15.9	772	159	1000
95	19	compacted	1.1	1.5	18.1	1037	181	1000
120	37	compacted	1.2	1.5	19.5	1285	195	1000
150	37	compacted	1.4	1.6	21.6	1578	216	1000
185	37	compacted	1.6	1.7	24.1	1961	241	1000
240	37	compacted	1.7	1.8	26.6	2521	266	1000
300	61	compacted	1.8	1.8	29.0	3100	290	1000
400	61	compacted	2.0	1.9	32.1	3919	321	800
500	61	compacted	2.2	2.1	36.1	4978	361	500
630	61	compacted	2.4	2.2	40.3	6375	403	500



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C	Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Clipped Direct (Trefoil)	Trunking (on a wall)	Single-phase (Trefoil)	Three-phase (Trefoil)
mm ²	Ω/Km	A		mV/A/m	
1.5	12.1	23	19.0	31.00	27.00
2.5	7.41	31	26	19.00	16.00
4	4.61	41	35	12.00	10.00
6	3.08	54	45	7.90	6.80
10	1.83	74	63	4.70	4.00
16	1.15	99	85	2.90	2.50
25	0.727	130	111	1.85	1.60
35	0.524	161	138	1.35	1.15
50	0.387	209	168	1.00	0.87
70	0.268	268	214	0.71	0.61
95	0.193	326	259	0.52	0.45
120	0.153	379	299	0.43	0.37
150	0.124	436	328	0.36	0.31
185	0.0991	500	370	0.30	0.26
240	0.0754	590	433	0.25	0.22
300	0.0601	681	493	0.22	0.20
400	0.0470	793	584	0.20	0.18
500	0.0366	904	666	0.19	0.16
630	0.0283	1033	764	0.18	0.15

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLEVA / LSOH - 600 / 1000 VOLT (NX4GH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLEVA INSULATED, LSOH SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLEVA Insulated : 4- LSOH Sheathed	
Voltage rating : 600/1000V		Insulation colour : 4-Core (Red, Yellow, Blue & Black) or (Brown, Black, Grey & Blue)	
Conductor Operating Temperature : 90 ° C			
Reference Strandard : IEC 60502-1		Sheath colour : Orange or as per request	
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC 61034			
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness		Approximately		Bending radius min	Standard delivery length
			Insulation	Outer sheath	Overall diameter	Net Weight		
mm ²	no	shape	mm	mm	mm	Kg/Km	mm	m
1.5	7	circular	0.7	1.8	13.4	234	134	1000
2.5	7	circular	0.7	1.8	14.4	286	144	1000
4	7	circular	0.7	1.8	15.6	368	156	1000
6	7	circular	0.7	1.8	17.1	467	171	1000
10	7	compacted	0.7	1.8	19.1	661	191	1000
16	7	compacted	0.7	1.8	21.5	921	215	1000
25	7	compacted	0.9	1.8	25.1	1343	251	1000
35	7	compacted	0.9	1.8	27.8	1755	278	1000
50	7	compacted	1.0	1.9	31.9	2314	319	1000
70	12	compacted	1.1	2.1	36.4	3185	364	1000
95	15	compacted	1.1	2.2	41.5	4281	415	1000
120	18	compacted	1.2	2.4	45.2	5340	452	1000
150	18	compacted	1.4	2.5	50.0	6550	500	1000
185	30	compacted	1.6	2.7	56.0	8159	560	1000
240	34	compacted	1.7	2.9	61.9	10484	619	800
300	34	compacted	1.8	3.1	68.1	12959	681	800
400	53	compacted	2.0	3.4	75.7	16410	757	800



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C	Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Clipped Direct (Trefoil)	Trunking (on a wall)	Single-phase	Three-phase
mm ²	Ω/Km	A		mV/A/m	
1.5	12.1	22	19.5	31.00	27.00
2.5	7.41	30	26	19.00	16.00
4	4.61	40	35	12.00	10.00
6	3.08	52	44	7.90	6.80
10	1.83	71	60	4.70	4.00
16	1.15	96	80	2.90	2.50
25	0.727	119	105	1.90	1.65
35	0.524	147	128	1.35	1.15
50	0.387	179	154	1.00	0.87
70	0.268	229	194	0.69	0.60
95	0.193	278	233	0.52	0.45
120	0.153	322	268	0.42	0.37
150	0.124	371	300	0.35	0.30
185	0.0991	424	340	0.29	0.26
240	0.0754	500	398	0.24	0.21
300	0.0601	676	455	0.21	0.19
400	0.0470	667	536	0.19	0.17

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLEVA / LS0H / AWA / LS0H - 600 / 1000 VOLT (NX4GRH-FE)			IEC 60502-1, IEC 60331, IEC 60332-3C		
1 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLEVA INSULATED, LS0H BEDDING, ALUMINIUM WIRE ARMoured, LS0H SHEATHED					
Application : This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.			Construction : 1- Copper conductor : 2- Mica tape fire barrier : 3- XLEVA Insulated : 4- LS0H Bedding : 5- Armoured : 6- LS0H Sheathed		
Voltage rating : 600/1000 Volt					
Conductor Operating Temperature : 90 ° C					
Reference Standard : IEC 60502-1					
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034			Insulation colour : Natural or as per request		
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			Sheath colour : Orange or as per request		

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately		Net Weight	Bending radius min	Standard delivery length
			Insulation	Aluminium wire armour	Outer sheath	Inner sheath diameter	Overall diameter			
mm ²	no	shape	mm			mm		Kg/Km	mm	m
1.5	7	circular	0.7	1.6	1.8	6.0	13.4	224	134.0	1000
2.5	7	circular	0.7	1.6	1.8	6.4	13.8	246	138.0	1000
4	7	circular	0.7	1.6	1.8	6.9	14.3	274	143.0	1000
6	7	circular	0.7	1.6	1.8	7.5	14.9	309	149.0	1000
10	7	compacted	0.7	1.6	1.8	8.3	15.7	367	157.0	1000
16	7	compacted	0.7	1.6	1.8	9.3	16.7	448	167.0	1000
25	7	compacted	0.9	1.6	1.8	10.8	18.2	573	182.0	1000
35	7	compacted	0.9	1.6	1.8	11.9	19.3	692	193.0	1000
50	7	compacted	1.0	1.6	1.8	13.4	20.8	850	208.0	1000
70	12	compacted	1.1	1.6	1.8	15.1	22.5	1076	225.0	1000
95	15	compacted	1.1	1.6	1.8	17.1	24.5	1369	245.0	1000
120	18	compacted	1.2	1.6	1.8	18.5	25.9	1637	259.0	1000
150	18	compacted	1.4	1.6	1.8	20.4	27.8	1949	278.0	1000
185	30	compacted	1.6	1.6	1.9	22.7	30.3	2371	303.0	1000
240	34	compacted	1.7	1.6	2.0	25.0	32.8	2970	328.0	1000
300	34	compacted	1.8	2.0	2.1	27.4	36.2	3681	362.0	1000
400	53	compacted	2.0	2.0	2.2	30.7	39.7	4589	397.0	800
500	53	compacted	2.2	2.0	2.3	34.3	43.5	5705	435.0	500
630	53	compacted	2.4	2.5	2.5	38.3	48.9	7332	489.0	500

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C	Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	In Air (Trefoil Touching)	Laid Direct In Ground (Trefoil Touching)	Single-phase (Trefoil)	Three-phase (Trefoil)
mm ²	Ω/Km	A		mV/A/m	
1.5	12.1	28	36	31.00	27.00
2.5	7.41	37	47	19.00	16.00
4	4.61	48	61	11.50	10.00
6	3.08	60	75	7.90	6.80
10	1.83	82	100	4.60	4.00
16	1.15	106	127	2.90	2.50
25	0.727	140	163	1.87	1.62
35	0.524	170	195	1.36	1.18
50	0.387	222	235	1.00	0.87
70	0.268	285	290	0.71	0.62
95	0.193	346	345	0.55	0.47
120	0.153	402	389	0.45	0.39
150	0.124	463	435	0.38	0.33
185	0.0991	529	490	0.33	0.28
240	0.0754	625	560	0.28	0.24
300	0.0601	720	630	0.25	0.21
400	0.0470	815	700	0.22	0.20
500	0.0366	918	770	0.21	0.18
630	0.0283	1027	840	0.19	0.17

Note: For condition of current carrying capacity please refer to Table 1 Page 62



CU / MGT / XLEVA / LS0H / SWA / LS0H - 600 / 1000 VOLT (NX4GRH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLEVA INSULATED, LS0H BEDDING,GALVANIZED STEEL WIRE ARMoured, LS0H SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLEVA Insulated : 4- LS0H Bedding : 5- Armoured : 6- LS0H Sheathed
Voltage rating : 600/1000 Volt		Insulation colour	4-Core (Red, Yellow, Blue & Black) or (Brown, Black, Grey, Blue)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034		Sheath colour	: Orange or as per request
Optional : BS 6387 (C.W.Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Gal. Steel wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
mm ²	no	shape	mm			mm		Kg/Km	mm	m
1.5	7	circular	0.7	1.3	1.8	11.8	18.5	596	185	1000
2.5	7	circular	0.7	1.3	1.8	12.8	19.5	681	195	1000
4	7	circular	0.7	1.3	1.8	14.0	20.7	790	207	1000
6	7	circular	0.7	1.3	1.8	15.5	22.2	925	222	1000
10	7	compacted	0.7	1.6	1.8	17.5	24.9	1287	249	1000
16	7	compacted	0.7	1.6	1.8	19.9	27.3	1622	273	1000
25	7	compacted	0.9	1.6	1.9	23.5	31.1	2172	311	1000
35	7	compacted	0.9	2.0	2.0	26.2	34.8	2887	348	1000
50	7	compacted	1.0	2.0	2.2	30.5	39.5	3672	395	1000
70	12	compacted	1.1	2.0	2.3	34.6	43.8	4684	438	500
95	15	compacted	1.1	2.5	2.5	39.9	50.5	6442	505	500
120	18	compacted	1.2	2.5	2.7	43.2	54.2	7652	542	500
150	18	compacted	1.4	2.5	2.8	47.8	59.0	9097	590	500
185	30	compacted	1.6	2.5	3.0	53.8	65.4	11087	654	350
240	34	compacted	1.7	2.5	3.2	59.3	71.3	13702	713	300
300	34	compacted	1.8	3.2	3.5	65.5	79.4	17365	794	250
400	53	compacted	2.0	3.2	3.7	72.5	86.8	21233	868	250



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C	Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	In Air (Trefoil Touching)	Laid Direct In Ground (Trefoil Touching)	Single-phase	Three-phase
mm ²	Ω/Km	A		mV/A/m	
1.5	12.1	25	28	31.00	25.00
2.5	7.41	33	36	19.00	15.00
4	4.61	44	48	12.00	9.70
6	3.08	56	60	7.90	6.50
10	1.83	78	80	4.70	3.90
16	1.15	99	115	2.90	2.60
25	0.727	131	150	1.90	1.60
35	0.524	162	180	1.35	1.20
50	0.387	197	215	1.00	0.87
70	0.268	251	265	0.69	0.61
95	0.193	304	315	0.52	0.45
120	0.153	353	360	0.42	0.36
150	0.124	406	405	0.35	0.30
185	0.0991	463	460	0.29	0.25
240	0.0754	546	530	0.24	0.21
300	0.0601	628	590	0.21	0.19
400	0.0470	728	670	0.19	0.18

Note: For condition of current carrying capacity please refer to Table 1 Page 62

AL / MGT / PVC-FR - 600 / 1000 VOLT (NAYA-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, PVC-FR INSULATED			
Application	: This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.	Construction	: 1- Aluminium Conductor : 2- Mica Tape : 3- PVC-FR Insulated
Voltage rating : 600/1000 Volt		Insulation colour	: Orange or as per request
Conductor Operating Temperature : 70 ° C			
Reference Strandard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1			
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min. no of wire and conductor shape		Nominal Thickness Insulation	Approximately		Bending radius min	Standard delivery length
				Overall diameter	Net Weight		
mm ²	no	shape	mm	mm	Kg/Km	mm	m
16	7	compacted	1.00	7.8	91	78	1000
25	7	compacted	1.20	9.4	133	94	1000
35	7	compacted	1.20	10.5	169	105	1000
50	7	compacted	1.40	12.2	230	122	1000
70	12	compacted	1.40	13.7	298	137	1000
95	15	compacted	1.60	16.1	409	161	1000
120	15	compacted	1.60	17.3	490	173	1000
150	15	compacted	1.80	19.2	598	192	1000
185	30	compacted	2.00	21.5	741	215	1000
240	30	compacted	2.20	24	946	240	1000
300	30	compacted	2.40	26.6	1157	266	1000
400	53	compacted	2.60	29.5	1452	295	500
500	53	compacted	2.80	33.1	1840	331	500
630	54	compacted	2.80	36.7	2264	367	500

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Touching trefoil)	Trunking (on a Wall)	Single-phase (Enclosed in conduit or trunking)	Three-phase (Enclosed in conduit or trunking)
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	4.956	73	48	4.5	3.9
25	1.20	4.737	97	62	2.9	2.5
35	0.868	4.31	120	77	2.1	1.8
50	0.641	4.31	128	104	1.6	1.4
70	0.443	3.718	166	133	1.15	0.97
95	0.320	3.586	203	161	0.86	0.74
120	0.253	3.378	237	186	0.7	0.61
150	0.206	3.419	274	204	0.59	0.51
185	0.164	3.335	316	230	0.5	0.44
240	0.125	3.312	375	269	0.42	0.37
300	0.100	3.257	434	306	0.37	0.32
400	0.0778	3.136	507	352	0.35	0.30
500	0.0605	3.025	590	405	0.32	0.27
630	0.0469	2.702	680	462	0.3	0.26

Note: For condition of current carrying capacity please refer to Table 1 Page 62



AL / MGT / XLPE / PVC-FR - 600 / 1000 VOLT (NA2XY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC-FR SHEATHED			
Application : This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.		Construction	: 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC-FR Sheathed
Voltage rating : 600/1000 Volt		Insulation colour	: Natural or as per order
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1		Sheath colour	: Orange or as per order
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area mm ²	Min. no of wire and conductor shape		Nominal Thickness Insulation mm	Approximately		Bending radius min mm	Standard delivery length m
				Overall diameter mm	Net Weight Kg/Km		
mm ²	no	shape	mm	mm	Kg/Km	mm	m
16	7	compacted	0.70	10	127	100	1000
25	7	compacted	0.90	11.6	173	116	1000
35	7	compacted	0.90	12.7	212	127	1000
50	7	compacted	1.00	14.2	269	142	1000
70	12	compacted	1.10	15.9	346	159	1000
95	15	compacted	1.10	18.1	454	181	1000
120	15	compacted	1.20	19.5	543	195	1000
150	15	compacted	1.40	21.6	660	216	1000
185	30	compacted	1.60	24.1	814	241	1000
240	30	compacted	1.70	26.6	1022	266	1000
300	30	compacted	1.80	29	1224	290	1000
400	53	compacted	2.00	32.1	1530	321	500
500	53	compacted	2.20	36.1	1943	361	500
630	54	compacted	2.40	40.3	2426	403	500



ELECTRICAL DATA

Nominal cross-sectional area mm ²	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Spaced by 1 diameter – vertical)	Clipped Direct (trefoil or flat and touching)	Single-phase (touching, trefoil)	Three-phase (touching, trefoil)
	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	78	94	4.85	4.2
25	1.20	364.742	89	123	3.12	2.7
35	0.868	333.6750	121	136	2.25	1.95
50	0.641	319.375	188	148	1.66	1.45
70	0.443	297.423	244	174	1.14	0.98
95	0.320	253.454	300	211	0.84	0.73
120	0.253	259.601	351	245	0.67	0.59
150	0.206	271.309	408	283	0.55	0.47
185	0.164	270.396	470	323	0.46	0.39
240	0.125	260.664	561	382	0.36	0.32
300	0.100	249.464	652	440	0.31	0.27
400	0.0778	244.85	742	594	0.27	0.23
500	0.0605	241.204	865	692	0.23	0.2
630	0.0469	232.871	990	791	0.21	0.185

Note: For condition of current carrying capacity please refer to Table 1 Page 62

AL / MGT / XLPE / PVC-FR - 600 / 1000 VOLT (NA2XY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
2 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC-FR SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC-FR Sheathed	
Voltage rating : 600/1000 Volt		Insulation colour : 2-Core (Red & Black) or (Brown & Blue)	
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1		Sheath colour : Orange or as per order	
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1			
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area mm ²	Min. no of wire and conductor shape		Nominal Thickness Insulation mm	Approximately		Bending radius min mm	Standard delivery length m
				Overall diameter mm	Net Weight Kg/Km		
16	7	compactd	0.70	18.2	328	182	1000
25	7	compactd	0.90	21.4	449	214	1000
35	7	compactd	0.90	23.6	550	236	1000
50	7	compactd	1.00	26.6	697	266	1000
70	12	compactd	1.10	30.2	910	302	1000
95	15	compactd	1.10	34.4	1184	344	1000
120	15	compactd	1.20	37.8	1436	378	500
150	15	compactd	1.40	42	1759	420	500
185	30	compactd	1.60	46.8	2161	468	500
240	30	compactd	1.70	51.8	2704	518	350
300	30	compactd	1.80	56.8	3256	568	300
400	53	compactd	2.00	63.2	4089	632	300

ELECTRICAL DATA

Nominal cross-sectional area mm ²	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Trunking (on a Wall)	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	77	64	4.8	4.2
25	1.20	364.742	97	84	3.1	2.7
35	0.868	333.675	120	103	2.2	1.95
50	0.641	319.375	146	124	1.165	1.45
70	0.443	297.423	187	156	1.15	0.97
95	0.320	253.454	227	188	0.84	0.72
120	0.253	259.601	263	216	0.67	0.58
150	0.206	271.309	304	240	0.54	0.47
185	0.164	270.396	347	272	0.45	0.39
240	0.125	260.664	409	318	0.36	0.31
300	0.100	249.464	471	364	0.30	0.26
400	0.0778	244.85	546	422	0.24	0.21

Note: For condition of current carrying capacity please refer to Table 1 Page 62



AL / MGT / XLPE / PVC-FR - 600 / 1000 VOLT (NA2XY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
3 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC-FR SHEATHED			
Application :	This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	: 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC-FR Sheathed
Voltage rating : 600/1000V		Insulation colour	:3-Core : (Red, Yellow & Blue) or (Brown, Black & Grey)
Conductor Operating Temperature : 90° C			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1		Sheath colour	: Orange or as per order
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min. no of wire and conductor shape		Nominal Thickness Insulation	Approximately		Bending radius min	Standard delivery length
				Overall diameter	Net Weight		
mm ²	no	shape	mm	mm	Kg/Km	mm	m
16	7	compacted	0.70	19.4	400	194	1000
25	7	compacted	0.90	22.8	552	228	1000
35	7	compacted	0.90	25.2	686	252	1000
50	7	compacted	1.00	28.4	874	284	1000
70	12	compacted	1.10	32.8	1171	328	1000
95	15	compacted	1.10	37.4	1534	374	500
120	15	compacted	1.20	40.6	1855	406	500
150	15	compacted	1.40	45.1	2269	451	500
185	30	compacted	1.60	50.2	2784	502	350
240	30	compacted	1.70	55.6	3502	556	300
300	30	compacted	1.80	61.1	4243	611	250
400	53	compacted	2.00	67.8	5313	678	250



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Trunking (on a Wall)	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	77	64	4.8	4.2
25	1.20	364.742	97	84	3.1	2.7
35	0.868	333.675	120	103	2.2	1.95
50	0.641	319.375	146	124	1.165	1.45
70	0.443	297.423	187	156	1.15	0.97
95	0.320	253.454	227	188	0.84	0.72
120	0.253	259.601	263	216	0.67	0.58
150	0.206	271.309	304	240	0.54	0.47
185	0.164	270.396	347	272	0.45	0.39
240	0.125	260.664	409	318	0.36	0.31
300	0.100	249.464	471	364	0.30	0.26
400	0.0778	244.85	546	422	0.24	0.21

Note: For condition of current carrying capacity please refer to Table 1 Page 62

AL / MGT / XLPE / PVC-FR - 600 / 1000 VOLT (NA2XY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4 CORE : ALIMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC-FR SHEATHED			
Application :	This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	1- Aluminium conductor
			2- Mica tape fire barrier
			3- XLPE Insulated
			4- PVC-FR Sheathed
Voltage rating : 600/1000V		Insulation colour	:4-Core (Red, Yellow, Blue & Black) or (Brown, Black, Grey & Blue)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1,IEC 60331, IEC 60332-3C, IEC 60332-1		Sheath colour	: Orange or as per order
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area mm ²	Min. no of wire and conductor shape		Nominal Thickness Insulation mm	Approximately		Bending radius min mm	Standard delivery length m
				Overall diameter mm	Net Weight Kg/Km		
no	shape	mm	mm	Kg/Km	mm	m	
16	7	compacted	0.70	21.2	486	212	1000
25	7	compacted	0.90	25.1	682	251	1000
35	7	compacted	0.90	27.8	849	278	1000
50	7	compacted	1.00	31.9	1111	319	1000
70	12	compacted	1.10	36.4	1479	364	1000
95	15	compacted	1.10	41.5	1942	415	500
120	15	compacted	1.20	45.2	2364	452	500
150	15	compacted	1.40	50	2867	500	500
185	30	compacted	1.60	56	3560	560	350
240	30	compacted	1.70	61.9	4466	619	300
300	30	compacted	1.80	68.1	5430	681	250
400	53	compacted	2.00	75.7	6823	757	250

ELECTRICAL DATA

Nominal cross-sectional area mm ²	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Trunking (on a Wall)	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	77	64	4.8	4.2
25	1.20	364.742	97	84	3.1	2.7
35	0.868	333.675	120	103	2.2	1.95
50	0.641	319.375	146	124	1.165	1.45
70	0.443	297.423	187	156	1.15	0.97
95	0.320	253.454	227	188	0.84	0.72
120	0.253	259.601	263	216	0.67	0.58
150	0.206	271.309	304	240	0.54	0.47
185	0.164	270.396	347	272	0.45	0.39
240	0.125	260.664	409	318	0.36	0.31
300	0.100	249.464	471	364	0.30	0.26
400	0.0778	244.85	546	422	0.24	0.21

Note: For condition of current carrying capacity please refer to Table 1 Page 62



AL / MGT / XLPE / PVC / AWA / PVC-FR - 600 / 1000 VOLT (NA2XRY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC BEDDING, ALUMINIUM WIRES ARMoured, PVC-FR SHEATHED			
Application : This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.		Construction	: 1- Aluminium conductor
Voltage rating : 600/1000 Volt			: 2- Mica tape fire barrier
Conductor Operating Temperature : 90 ° C			: 3- XLPE Insulated
Reference Standard : IEC 60502-1			: 4- PVC Bedding
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1		Insulation colour	: 5- Armoured
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			: 6- PVC-FR Sheathed
		Sheath colour : Orange or as per order	

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately		Bending diameter min	Standard Delivery Length
			Insulation	Aluminium wire armour	Outer Sheath	Overall Diameter	Net Weight		
mm ²	no	shape	mm			mm	Kg/Km	mm	m
16	7	compacted	0.7	1.6	1.8	16.6	340	166	1000
25	7	compacted	0.9	1.6	1.8	18.2	408	182	1000
35	7	compacted	0.9	1.6	1.8	19.3	466	193	1000
50	7	compacted	1	1.6	1.8	20.8	550	208	1000
70	12	compacted	1.1	1.6	1.8	22.5	651	225	1000
95	15	compacted	1.1	1.6	1.8	24.5	786	245	1000
120	15	compacted	1.2	1.6	1.8	25.9	895	259	1000
150	15	compacted	1.4	1.6	1.8	27.8	1032	278	1000
185	30	compacted	1.6	1.6	1.9	30.3	1224	303	1000
240	30	compacted	1.7	1.6	2.0	32.8	1471	328	1000
300	30	compacted	1.8	2.0	2.1	36.2	1805	362	800
400	53	compacted	2.0	2.0	2.2	39.7	2200	397	500
500	53	compacted	2.2	2.0	2.3	43.5	2670	435	500
630	53	compacted	2.4	2.5	2.5	48.9	3382	489	500

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil Touching)	In Ground (Direct or Ducting)	Single-phase (touching, trefoil)	Three-phase (touching, trefoil)
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	82	98	4.8	4.2
25	1.20	364.742	108	127	3.10	2.7
35	0.868	333.675	132	151	2.25	1.95
50	0.641	319.375	162	177	1.6	1.4
70	0.443	297.423	207	218	1.15	0.98
95	0.320	253.454	252	260	0.85	0.74
120	0.253	259.601	292	296	0.69	0.6
150	0.206	271.309	337	331	0.57	0.49
185	0.164	270.396	391	374	0.47	0.41
240	0.125	260.664	465	433	0.39	0.34
300	0.100	249.464	540	486	0.33	0.29
400	0.0778	244.85	625	563	0.29	0.25
500	0.0605	241.204	714	629	0.25	0.22
630	0.0469	232.871	801	701	0.24	0.2

Note: For condition of current carrying capacity please refer to Table 1 Page 62



AL / MGT / XLPE / PVC / SWA / PVC-FR - 600 / 1000 VOLT (NA2XRY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
2 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC BEDDING, GALVANIZED STEEL WIRES ARMoured, PVC-FR SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction	: 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC Bedding : 5- Armoured : 6- PVC-FR Sheathed
Voltage rating : 600/1000V		Insulation colour	: 2-Core (Red & Black) or (Brown & Blue)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1		Sheath colour	: Orange or as per order
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately		Bending diameter min	Standard Delivery Length
			Insulation	Gal, Steel wire armour	Outer Sheath	Overall Diameter	Net Weight		
mm ²	no	shape	mm			mm	Kg/Km	mm	m
16	7	compacted	0.7	1.6	1.8	24.0	934	240	1000
25	7	compacted	0.9	1.6	1.8	27.2	1150	272	1000
35	7	compacted	0.9	1.6	1.9	29.6	1339	296	1000
50	7	compacted	1.0	1.6	2.0	32.8	1597	328	1000
70	12	compacted	1.1	2.0	2.1	37.6	2188	376	1000
95	15	compacted	1.1	2.0	2.3	42.0	2637	420	1000
120	15	compacted	1.2	2.5	2.4	46.4	3372	464	500
150	15	compacted	1.4	2.5	2.6	51.0	3927	510	500
185	30	compacted	1.6	2.5	2.7	55.8	4564	558	500
240	30	compacted	1.7	2.5	2.9	61.2	5398	612	350
300	30	compacted	1.8	2.5	3.1	66.4	6222	664	300
400	53	compacted	2.0	2.5	3.3	72.6	7360	726	300



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil Touching)	Direct in Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	74	88.5	4.80	4.20
25	1.20	364.742	98	112.5	3.10	2.70
35	0.868	333.675	120	135.0	2.20	1.95
50	0.641	319.375	145	159.0	1.16	1.45
70	0.443	297.423	185	195.0	1.15	0.97
95	0.320	253.454	224	231.0	0.84	0.72
120	0.253	259.601	264	260.9	0.67	0.58
150	0.206	271.309	305	295.4	0.54	0.47
185	0.164	270.396	350	329.9	0.45	0.39
240	0.125	260.664	418	379.4	0.36	0.31
300	0.100	249.464	488	428.9	0.30	0.26
400	0.0778	244.85	551	574.4	0.24	0.21

Note: For condition of current carrying capacity please refer to Table 1 Page 62

AL / MGT / XLPE / PVC / SWA / PVC-FR - 600 / 1000 VOLT (NA2XRY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
3 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC BEDDING, GALVANIZED STEEL WIRES ARMoured, PVC-FR SHEATHED			
Application :	This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	: 1- Aluminium conductor
			: 2- Mica tape fire barrier
			: 3- XLPE Insulated
			: 4- PVC Bedding
			: 5- Armoured
			: 6- PVC-FR Sheathed
Voltage rating : 600/1000V		Insulation colour	: 3-Core (Red, Yellow & Black) or (Brown, Black & Grey)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1		Sheath colour	: Orange or as per order
Optional : BS 6387 (C.W.Z). IEC 60332-3A. IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately		Bending diameter min	Standard Delivery Length
			Insulation	Gal. Steel wire armour	Outer Sheath	Overall Diameter	Net Weight		
mm ²	no	shape	mm			mm	Kg/Km	mm	m
16	7	compacted	0.7	1.6	1.8	25.2	1043	252	1000
25	7	compacted	0.9	1.6	1.8	28.6	1308	286	1000
35	7	compacted	0.9	1.6	1.9	31.2	1531	312	1000
50	7	compacted	1.0	2.0	2.0	35.4	2035	354	1000
70	12	compacted	1.1	2.0	2.2	40.2	2543	402	1000
95	15	compacted	1.1	2.0	2.4	45.0	3110	450	1000
120	15	compacted	1.2	2.5	2.5	49.6	3970	496	500
150	15	compacted	1.4	2.5	2.7	54.1	4580	541	500
185	30	compacted	1.6	2.5	2.8	59.2	5333	592	500
240	30	compacted	1.7	2.5	3.0	65.0	6388	650	350
300	30	compacted	1.8	2.5	3.2	70.5	7416	705	300
400	53	compacted	2.0	3.1	3.5	79.1	9655	791	300



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil Touching)	Direct in Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	74	88.5	4.80	4.20
25	1.20	364.742	98	112.5	3.10	2.70
35	0.868	333.675	120	135.0	2.20	1.95
50	0.641	319.375	145	159.0	1.16	1.45
70	0.443	297.423	185	195.0	1.15	0.97
95	0.320	253.454	224	231.0	0.84	0.72
120	0.253	259.601	264	260.9	0.67	0.58
150	0.206	271.309	305	295.4	0.54	0.47
185	0.164	270.396	350	329.9	0.45	0.39
240	0.125	260.664	418	379.4	0.36	0.31
300	0.100	249.464	488	428.9	0.30	0.26
400	0.0778	244.85	551	574.4	0.24	0.21

Note: For condition of current carrying capacity please refer to Table 1 Page 62

AL / MGT / XLPE / PVC / SWA / PVC-FR - 600 / 1000 VOLT (NA2XRY-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, PVC BEDDING, GALVANIZED STEEL WIRES ARMoured, PVC-FR SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction	: 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- PVC Bedding : 5- Armoured : 6- PVC-FR Sheathed
Voltage rating : 600/1000V		Insulation colour	: 4-Core (Red, Yellow, Blue & Black) or (Brown, Black, Grey & Blue)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1		Sheath colour	: Orange or as per order
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1			
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately		Bending diameter min	Standard Delivery Length
			Insulation	Gal. Steel wire armour	Outer Sheath	Overall Diameter	Net Weight		
mm ²	no	shape	mm			mm	Kg/Km	mm	m
16	7	compacted	0.7	1.6	1.8	27.0	1186	270	1000
25	7	compacted	0.9	1.6	1.9	31.1	1512	311	1000
35	7	compacted	0.9	2.0	2.0	34.8	1982	348	1000
50	7	compacted	1.0	2.0	2.2	39.5	2469	395	1000
70	12	compacted	1.1	2.0	2.3	43.8	2977	438	800
95	15	compacted	1.1	2.5	2.5	50.5	4103	505	500
120	15	compacted	1.2	2.5	2.7	54.2	4676	542	500
150	15	compacted	1.4	2.5	2.8	59.0	5414	590	500
185	30	compacted	1.6	2.5	3.0	65.4	6487	654	350
240	30	compacted	1.7	2.5	3.2	71.3	7684	713	300
300	30	compacted	1.8	3.1	3.5	79.4	9836	794	250
400	53	compacted	2.0	3.1	3.7	86.8	11646	868	250

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil Touching)	Direct in Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	74	88.5	4.80	4.20
25	1.20	364.742	98	112.5	3.10	2.70
35	0.868	333.675	120	135.0	2.20	1.95
50	0.641	319.375	145	159.0	1.16	1.45
70	0.443	297.423	185	195.0	1.15	0.97
95	0.320	253.454	224	231.0	0.84	0.72
120	0.253	259.601	264	260.9	0.67	0.58
150	0.206	271.309	305	295.4	0.54	0.47
185	0.164	270.396	350	329.9	0.45	0.39
240	0.125	260.664	418	379.4	0.36	0.31
300	0.100	249.464	488	428.9	0.30	0.26
400	0.0778	244.85	551	574.4	0.24	0.21

Note: For condition of current carrying capacity please refer to Table 1 Page 62



AL / MGT / XLPE / LS0H - 600 / 1000 VOLT (NA2XH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H SHEATHED			
Application :	This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.	Construction	: 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Sheathed
Voltage rating : 600/1000 Volt		Insulation colour	: Natural or as per request
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard	: IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC 61034	Sheath colour	: Orange or as per request
Optional	: BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B		

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area mm ²	Min. no of wire and conductor shape		Nominal Thickness Insulation mm	Approximately		Bending radius min mm	Standard delivery length m
				Overall diameter mm	Net Weight Kg/Km		
mm ²	no	shape	mm	mm	Kg/Km	mm	m
16	7	compacted	0.7	10.0	127	100	1000
25	7	compacted	0.9	11.6	173	116	1000
35	7	compacted	0.9	12.7	212	127	1000
50	7	compacted	1.0	14.2	269	142	1000
70	12	compacted	1.1	15.9	346	159	1000
95	15	compacted	1.1	18.1	454	181	1000
120	15	compacted	1.2	19.5	543	195	1000
150	15	compacted	1.4	21.6	660	216	1000
185	30	compacted	1.6	24.1	814	241	1000
240	30	compacted	1.7	26.6	1022	266	1000
300	30	compacted	1.8	29.0	1224	290	1000
400	53	compacted	2.0	32.1	1530	321	500
500	53	compacted	2.2	36.1	1943	361	500
630	53	compacted	2.4	40.3	2426	403	500



ELECTRICAL DATA

Nominal cross-sectional area mm ²	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Spaced by 1 diameter - vertical)	In Ground (Trefoil or flat and touching)	Single-phase (touching, trefoil)	Three-phase (touching, trefoil)
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	78	94	4.85	4.20
25	1.20	364.742	89	123	3.12	2.70
35	0.868	333.675	121	136	2.25	1.95
50	0.641	319.375	188	148	1.66	1.45
70	0.443	297.423	244	174	1.14	0.98
95	0.320	253.454	300	211	0.84	0.73
120	0.253	259.601	351	245	0.67	0.59
150	0.206	271.309	408	283	0.55	0.47
185	0.164	270.396	470	323	0.46	0.39
240	0.125	260.664	561	382	0.36	0.32
300	0.100	249.464	652	440	0.31	0.27
400	0.0778	244.85	742	594	0.27	0.23
500	0.0605	241.204	865	692	0.23	0.2
630	0.0469	232.871	990	791	0.21	0.185

Note: For condition of current carrying capacity please refer to Table 1 Page 62

AL / MGT / XLPE / LS0H - 600 / 1000 VOLT (NA2XH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
2 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H SHEATHED			
Application :	This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.	Construction	: 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Sheathed
		Voltage rating : 600/1000 Volt	Insulation colour : 2-Core (Red & Black) or (Brown & Blue)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1		Sheath colour	: Orange or as per request
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC 61034			
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area mm ²	Min. no of wire and conductor shape		Nominal Thickness Insulation mm	Approximately		Bending radius min mm	Standard delivery length m
				Overall diameter mm	Net Weight Kg/Km		
mm ²	no	shape	mm	mm	Kg/Km	mm	m
16	7	compactd	0.7	18.2	328	182	1000
25	7	compactd	0.9	21.4	449	214	1000
35	7	compactd	0.9	23.6	550	236	1000
50	7	compactd	1.0	26.6	697	266	1000
70	12	compactd	1.1	30.2	910	302	1000
95	15	compactd	1.1	34.4	1184	344	1000
120	15	compactd	1.2	37.8	1436	378	500
150	15	compactd	1.4	42.0	1759	420	500
185	30	compactd	1.6	46.8	2161	468	500
240	30	compactd	1.7	51.8	2704	518	350
300	30	compactd	1.8	56.8	3256	568	300
400	53	compactd	2.0	63.2	4089	632	300

ELECTRICAL DATA

Nominal cross-sectional area mm ²	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Spaced by 1 diameter - vertical)	In Ground (Trefoil or flat and touching)	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	77	64	4.8	4.2
25	1.20	364.742	97	84	3.1	2.7
35	0.868	333.675	120	103	2.2	1.95
50	0.641	319.375	146	124	1.16	1.45
70	0.443	297.423	187	156	1.15	0.97
95	0.320	253.454	227	188	0.84	0.72
120	0.253	259.601	263	216	0.67	0.58
150	0.206	271.309	304	240	0.54	0.47
185	0.164	270.396	347	272	0.45	0.39
240	0.125	260.664	409	318	0.36	0.31
300	0.100	249.464	471	364	0.30	0.26
400	0.0778	244.85	546	422	0.24	0.21

Note: For condition of current carrying capacity please refer to Table 1 Page 62



AL / MGT / XLPE / LS0H - 600 / 1000 VOLT (NA2XH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
3 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H SHEATHED			
Application :	This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.	Construction	: 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Sheathed
Voltage rating : 600/1000 Volt		Insulation colour	: 3-Core (Red, Yellow & Blue) or (Brown, Black & Grey)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard	: IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC 61034	Sheath colour	: Orange or as per request
Optional	: BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B		

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min. no of wire and conductor shape		Nominal Thickness Insulation	Approximately		Bending radius min	Standard delivery length
				Overall diameter	Net Weight		
mm ²	no	shape	mm	mm	Kg/Km	mm	m
16	7	compacted	0.7	19.4	400	194	1000
25	7	compacted	0.9	22.8	552	228	1000
35	7	compacted	0.9	25.2	686	252	1000
50	7	compacted	1.0	28.4	874	284	1000
70	12	compacted	1.1	32.8	1171	328	1000
95	15	compacted	1.1	37.4	1534	374	500
120	15	compacted	1.2	40.6	1855	406	500
150	15	compacted	1.4	45.1	2269	451	500
185	30	compacted	1.6	50.2	6047	502	350
240	30	compacted	1.7	55.6	7794	556	300
300	30	compacted	1.8	61.1	9637	611	250
400	53	compacted	2.0	67.8	12193	678	250

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Spaced by 1 diameter - vertical)	In Ground (Trefoil or flat and touching)	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	77	64	4.8	4.2
25	1.20	364.742	97	84	3.1	2.7
35	0.868	333.675	120	103	2.2	1.95
50	0.641	319.375	146	124	1.165	1.45
70	0.443	297.423	187	156	1.15	0.97
95	0.320	253.454	227	188	0.84	0.72
120	0.253	259.601	263	216	0.67	0.58
150	0.206	271.309	304	240	0.54	0.47
185	0.164	270.396	347	272	0.45	0.39
240	0.125	260.664	409	318	0.36	0.31
300	0.100	249.464	471	364	0.30	0.26
400	0.047	244.85	546	422	0.24	0.21

Note: For condition of current carrying capacity please refer to Table 1 Page 62



AL / MGT / XLPE / LS0H - 600 / 1000 VOLT (NA2XH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Sheathed	
Voltage rating : 600/1000V		Insulation colour : 4-Core (Red, Yellow, Blue & Black) or (Brown, Black, Grey & Blue)	
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1		Sheath colour : Orange or as per request	
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034			
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area mm ²	Min. no of wire and conductor shape		Nominal Thickness Insulation mm	Approximately		Bending radius min mm	Standard delivery length m
				Overall diameter mm	Net Weight Kg/Km		
mm ²	no	shape	mm	mm	Kg/Km	mm	m
16	7	compacted	0.7	21.2	486	212	1000
25	7	compacted	0.9	25.1	682	251	1000
35	7	compacted	0.9	27.8	849	278	1000
50	7	compacted	1.0	31.9	1111	319	1000
70	12	compacted	1.1	36.4	1479	364	1000
95	15	compacted	1.1	41.5	1942	415	500
120	15	compacted	1.2	45.2	2364	452	500
150	15	compacted	1.4	50.0	2867	500	500
185	30	compacted	1.6	56.0	3560	560	350
240	30	compacted	1.7	61.9	4466	619	300
300	30	compacted	1.8	68.1	5430	681	250
400	53	compacted	2.0	75.7	6823	757	250

ELECTRICAL DATA

Nominal cross-sectional area mm ²	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Spaced by 1 diameter - vertical)	In Ground (Trefoil or flat and touching)	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	77	64	4.8	4.2
25	1.20	364.742	97	84	3.1	2.7
35	0.868	333.675	120	103	2.2	1.95
50	0.641	319.375	146	124	1.17	1.45
70	0.443	297.423	187	156	1.15	0.97
95	0.320	253.454	227	188	0.84	0.72
120	0.253	259.601	263	216	0.67	0.58
150	0.206	271.309	304	240	0.54	0.47
185	0.164	270.396	347	272	0.45	0.39
240	0.125	260.664	409	318	0.36	0.31
300	0.100	249.464	471	364	0.30	0.26
400	0.0778	244.85	546	422	0.24	0.21

Note: For condition of current carrying capacity please refer to Table 1 Page 62



AL / MGT / XLPE / LSOH / AWA / LSOH - 600 / 1000 VOLT (NA2XRH-FE)			IEC 60502-1, IEC 60331, IEC 60332-3C		
1 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LSOH BEDDING, ALUMINIUM WIRES ARMoured LSOH SHEATHED					
Application : This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.			Construction : 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LSOH Bedding : 5- Armoured : 6- LSOH Sheathed		
Voltage rating : 600/1000 Volt					
Conductor Operating Temperature : 90 ° C					
Reference Standard : IEC 60502-1					
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034			Insulation colour : Natural or as per request		
Optional : BS 6387 (C.W.Z) IEC 60332-3A, IEC 60332-3B			Sheath colour : Orange or as per request		

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately		Bending diameter min	Standard Delivery Length
			Insulation	Aluminium wire armour	Outer Sheath	Overall Diameter	Net Weight		
mm ²	no	shape	mm			mm	Kg/Km	mm	m
16	7	compacted	0.7	1.6	1.8	16.6	340	166	1000
25	7	compacted	0.9	1.6	1.8	18.2	408	182	1000
35	7	compacted	0.9	1.6	1.8	19.3	466	193	1000
50	7	compacted	1	1.6	1.8	20.8	550	208	1000
70	12	compacted	1.1	1.6	1.8	22.5	651	225	1000
95	15	compacted	1.1	1.6	1.8	24.5	786	245	1000
120	15	compacted	1.2	1.6	1.8	25.9	895	259	1000
150	15	compacted	1.4	1.6	1.8	27.8	1032	278	1000
185	30	compacted	1.6	1.6	1.9	30.3	1224	303	1000
240	30	compacted	1.7	1.6	2.0	32.8	1471	328	1000
300	30	compacted	1.8	2.0	2.1	36.2	1805	362	800
400	53	compacted	2.0	2.0	2.2	39.7	2200	397	500
500	53	compacted	2.2	2.0	2.3	43.5	2670	435	500
630	53	compacted	2.4	2.5	2.5	48.9	3382	489	500



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil Touching)	In Ground (Direct or Ducting)	Single-phase (touching, trefoil)	Three-phase (touching, trefoil)
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	82	98	4.8	4.2
25	1.20	364.742	108	127	3.10	2.7
35	0.868	333.675	132	151	2.25	1.95
50	0.641	319.375	162	177	1.6	1.4
70	0.443	297.423	207	218	1.15	0.98
95	0.320	253.454	252	260	0.85	0.74
120	0.253	259.601	292	296	0.69	0.6
150	0.206	271.309	337	331	0.57	0.49
185	0.164	270.396	391	374	0.47	0.41
240	0.125	260.664	465	433	0.39	0.34
300	0.100	249.464	540	486	0.33	0.29
400	0.0778	244.85	625	563	0.29	0.25
500	0.0605	241.204	714	629	0.25	0.22
630	0.0469	232.871	801	701	0.24	0.2

Note: For condition of current carrying capacity please refer to Table 1 Page 62

AL / MGT / XLPE / LS0H / SWA / LS0H - 600 / 1000 VOLT (NA2XRH-FE)			IEC 60502-1, IEC 60331, IEC 60332-3C		
2 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H BEDDING, ALUMINIUM WIRES ARMoured, LS0H SHEATHED					
Application :		This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Bedding : 5- Armoured : 6- LS0H Sheathed	
Voltage rating : 600/1000 Volt			Insulation colour : 2-Core (Red & Black) or (Brown & Blue)		
Conductor Operating Temperature : 90 ° C					
Reference Standard : IEC 60502-1			Sheath colour : Orange or as per request		
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034					
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B					

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately		Bending diameter min	Standard Delivery Length
			Insulation	Gal, Steel wire armour	Outer Sheath	Overall Diameter	Net Weight		
mm ²	no	shape	mm			mm	Kg/Km	mm	m
16	7	compacted	0.7	1.6	1.8	24.0	934	240	1000
25	7	compacted	0.9	1.6	1.8	27.2	1150	272	1000
35	7	compacted	0.9	1.6	1.9	29.6	1339	296	1000
50	7	compacted	1.0	1.6	2.0	32.8	1597	328	1000
70	12	compacted	1.1	2.0	2.1	37.6	2188	376	1000
95	15	compacted	1.1	2.0	2.3	42.0	2637	420	1000
120	15	compacted	1.2	2.5	2.4	46.4	3372	464	500
150	15	compacted	1.4	2.5	2.6	51.0	3927	510	500
185	30	compacted	1.6	2.5	2.7	55.8	4564	558	500
240	30	compacted	1.7	2.5	2.9	61.2	5398	612	350
300	30	compacted	1.8	2.5	3.1	66.4	6222	664	300
400	53	compacted	2.0	2.5	3.3	72.6	7360	726	300

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil Touching)	Direct in Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	74	88.5	4.80	4.20
25	1.20	364.742	98	112.5	3.10	2.70
35	0.868	333.675	120	135.0	2.20	1.95
50	0.641	319.375	145	159.0	1.16	1.45
70	0.443	297.423	185	195.0	1.15	0.97
95	0.320	253.454	224	231.0	0.84	0.72
120	0.253	259.601	264	260.9	0.67	0.58
150	0.206	271.309	305	295.4	0.54	0.47
185	0.164	270.396	350	329.9	0.45	0.39
240	0.125	260.664	418	379.4	0.36	0.31
300	0.100	249.464	488	428.9	0.30	0.26
400	0.0778	244.85	551	574.4	0.24	0.21

Note: For condition of current carrying capacity please refer to Table 1 Page 62



AL / MGT / XLPE / LS0H / SWA / LS0H - 600 / 1000 VOLT (NAXXRH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
3 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H BEDDING, ALUMINIUM WIRES ARMoured LS0H SHEATHED			
Application :	This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.	Construction	: 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Bedding : 5- Armoured : 6- LS0H Sheathed
Voltage rating : 600/1000 Volt		Insulation colour	: 3-Core (Red, Yellow & Black) or (Brown, Black & Grey)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1		Sheath colour	: Orange or as per request
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034			
Optional : BS 6387 (C.W.Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately		Bending diameter min	Standard Delivery Length
			Insulation	Gal. Steel wire armour	Outer Sheath	Overall Diameter	Net Weight		
mm ²	no	shape	mm			mm	Kg/Km	mm	m
16	7	compacted	0.7	1.6	1.8	25.2	1043	252	1000
25	7	compacted	0.9	1.6	1.8	28.6	1308	286	1000
35	7	compacted	0.9	1.6	1.9	31.2	1531	312	1000
50	7	compacted	1.0	2.0	2.0	35.4	2035	354	1000
70	12	compacted	1.1	2.0	2.2	40.2	2543	402	1000
95	15	compacted	1.1	2.0	2.4	45.0	3110	450	1000
120	15	compacted	1.2	2.5	2.5	49.6	3970	496	500
150	15	compacted	1.4	2.5	2.7	54.1	4580	541	500
185	30	compacted	1.6	2.5	2.8	59.2	5333	592	500
240	30	compacted	1.7	2.5	3.0	65.0	6388	650	350
300	30	compacted	1.8	2.5	3.2	70.5	7416	705	300
400	53	compacted	2.0	3.1	3.5	79.1	9655	791	300



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (on Perforated Cable Tray)	Direct in Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	74	88.5	4.80	4.20
25	1.20	364.742	98	112.5	3.10	2.70
35	0.868	333.675	120	135.0	2.20	1.95
50	0.641	319.375	145	159.0	1.16	1.45
70	0.443	297.423	185	195.0	1.15	0.97
95	0.320	253.454	224	231.0	0.84	0.72
120	0.253	259.601	264	260.9	0.67	0.58
150	0.206	271.309	305	295.4	0.54	0.47
185	0.164	270.396	350	329.9	0.45	0.39
240	0.125	260.664	418	379.4	0.36	0.31
300	0.100	249.464	488	428.9	0.30	0.26
400	0.0778	244.85	551	574.4	0.24	0.21

Note: For condition of current carrying capacity please refer to Table 1 Page 62

AL / MGT / XLPE / LS0H / SWA / LS0H - 600 / 1000 VOLT (NA2XRH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLPE INSULATED, LS0H BEDDING, ALUMINIUM WIRES ARMoured, LS0H SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction : 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLPE Insulated : 4- LS0H Bedding : 5- Armoured : 6- LS0H Sheathed	
Voltage rating : 600/1000 Volt		Insulation colour 4-Core (Red, Yellow, Blue & Black) or (Brown, Black, Grey, Blue)	
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1		Sheath colour : Orange or as per request	
Cable : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC			
Standard : 60754, IEC61034			
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately		Bending diameter min	Standard Delivery Length
			Insulation	Gal. Steel wire armour	Outer Sheath	Overall Diameter	Net Weight		
mm ²	no	shape	mm			mm	Kg/Km	mm	m
16	7	compacted	0.7	1.6	1.8	27.0	1186	270	1000
25	7	compacted	0.9	1.6	1.9	31.1	1512	311	1000
35	7	compacted	0.9	2.0	2.0	34.8	1982	348	1000
50	7	compacted	1.0	2.0	2.2	39.5	2469	395	1000
70	12	compacted	1.1	2.0	2.3	43.8	2977	438	800
95	15	compacted	1.1	2.5	2.5	50.5	4103	505	500
120	15	compacted	1.2	2.5	2.7	54.2	4676	542	500
150	15	compacted	1.4	2.5	2.8	59.0	5414	590	500
185	30	compacted	1.6	2.5	3.0	65.4	6487	654	350
240	30	compacted	1.7	2.5	3.2	71.3	7684	713	300
300	30	compacted	1.8	3.1	3.5	79.4	9836	794	250
400	53	compacted	2.0	3.1	3.7	86.8	11646	868	250



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C		Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Insulation min (Calculated)	In Air (Trefoil Touching)	Direct in Ground	Single-phase	Three-phase
mm ²	Ω/Km	MΩ.Km	A		mV/A/m	
16	1.91	363.983	74	88.5	4.80	4.20
25	1.20	364.742	98	112.5	3.10	2.70
35	0.868	333.675	120	135.0	2.20	1.95
50	0.641	319.375	145	159.0	1.16	1.45
70	0.443	297.423	185	195.0	1.15	0.97
95	0.320	253.454	224	231.0	0.84	0.72
120	0.253	259.601	264	260.9	0.67	0.58
150	0.206	271.309	305	295.4	0.54	0.47
185	0.164	270.396	350	329.9	0.45	0.39
240	0.125	260.664	418	379.4	0.36	0.31
300	0.100	249.464	488	428.9	0.30	0.26
400	0.0778	244.85	551	574.4	0.24	0.21

Note: For condition of current carrying capacity please refer to Table 1 Page 62

AL / MGT / XLEVA - 600 / 1000 VOLT (NAX4G-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLEVA INSULATED			
Application : This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.		Construction : 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLEVA Insulated	
Voltage rating : 600/1000 Volt		Insulation colour : Orange or as per request	
Conductor Operating Temperature : 90 ° c			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1			
Optional : BS 6387 (C,W,Z), IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area mm ²	Min. no of wire and conductor shape		Nominal Thickness Insulation mm	Approximately		Bending radius min mm	Standard delivery length m
				Overall diameter mm	Net Weight Kg/Km		
mm ²	no	shape	mm	mm	Kg/Km	mm	m
16	7	compacted	1.00	7.8	89	78	1000
25	7	compacted	1.20	9.4	130	94	1000
35	7	compacted	1.20	10.5	166	105	1000
50	7	compacted	1.40	12.2	226	122	1000
70	12	compacted	1.40	13.7	293	137	1000
95	15	compacted	1.60	16.1	402	161	1000
120	15	compacted	1.60	17.3	483	173	1000
150	15	compacted	1.80	19.2	589	192	1000
185	30	compacted	2.00	21.5	731	215	1000
240	30	compacted	2.20	24	933	240	1000
300	30	Compacted	2.40	26.6	1142	266	1000
400	53	Compacted	2.60	29.5	1434	295	800
500	53	compacted	2.80	33.1	1818	331	500
630	54	compacted	2.80	36.6	2275	366	500

ELECTRICAL DATA

Nominal cross-sectional area mm ²	Resistance at 20 °C	Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	In Air (Spaced by 1 diameter - vertical)	In Ground (Trefoil or flat and touching)	Single-phase (touching, trefoil)	Three-phase (touching, trefoil)
	Ω/Km	A		mV/A/m	
16	1.91	78	94	4.85	4.20
25	1.20	89	123	3.12	2.70
35	0.868	121	136	2.25	1.95
50	0.641	188	148	1.66	1.45
70	0.443	244	174	1.14	0.98
95	0.320	300	211	0.84	0.73
120	0.253	351	245	0.67	0.59
150	0.206	408	283	0.55	0.47
185	0.164	470	323	0.46	0.39
240	0.125	561	382	0.36	0.32
300	0.100	652	440	0.31	0.27
400	0.0778	742	594	0.27	0.23
500	0.0605	865	692	0.23	0.2
630	0.0469	990	791	0.21	0.185

Note: For condition of current carrying capacity please refer to Table 1 Page 62



AL / MGT / XLEVA / LSOH - 600 / 1000 VOLT (NAX4GH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
1 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLEVA INSULATED, LSOH SHEATHED			
Application :	This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.	Construction	: 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLEVA Insulated : 4- LSOH Sheathed
Voltage rating : 600/1000 Volt		Insulation colour	: Natural or as per request
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard	: IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC 61034	Sheath colour	: Orange or as per request
Optional	: BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B		

DIMENSIONAL & MECHANICAL DATA

Nominal cross sectional area	No of wire and conductor shape		Nominal Thickness Insulation	Nominal Sheathing Thickness	Approximately		Bending Radius Min	Standard Delivery Length
					Overall Diameter	Net Weight		
mm ²	no	shape	mm		mm	Kg/Km	mm	m
16	7	compacted	0.7	1.4	10.0	137	100	1000
25	7	compacted	0.9	1.4	11.6	187	116	1000
35	7	compacted	0.9	1.4	12.7	229	127	1000
50	19	compacted	1.0	1.4	14.2	291	142	1000
70	19	compacted	1.1	1.4	15.9	373	159	1000
95	19	compacted	1.1	1.5	18.1	488	181	1000
120	37	compacted	1.2	1.5	19.5	582	195	1000
150	37	compacted	1.4	1.6	21.6	710	216	1000
185	37	compacted	1.6	1.7	24.1	876	241	1000
240	37	compacted	1.7	1.8	26.6	1094	266	1000
300	61	compacted	1.8	1.8	29.0	1307	290	1000
400	61	compacted	2.0	1.9	32.1	1631	321	800
500	61	compacted	2.2	2.1	36.1	2072	361	500
630	61	compacted	2.4	2.2	40.2	2608	402	500



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C	Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Clipped Direct (Trefoil)	Trunking (on a wall)	Single-phase (touching, trefoil)	Three-phase (touching, trefoil)
mm ²	Ω/Km	A		mV/A/m	
16	1.15	99	85	4.85	4.2
25	0.727	130	111	3.12	2.7
35	0.524	161	138	2.25	1.95
50	0.387	209	168	1.66	1.45
70	0.268	268	214	1.14	0.98
95	0.193	326	259	0.84	0.73
120	0.153	379	299	0.67	0.59
150	0.124	436	328	0.55	0.47
185	0.0991	500	370	0.46	0.39
240	0.0754	590	433	0.36	0.32
300	0.0601	681	493	0.31	0.27
400	0.0470	793	584	0.27	0.23
500	0.0366	904	666	0.23	0.2
630	0.0283	1033	764	0.21	0.185

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CU / MGT / XLEVA / LS0H - 600 / 1000 VOLT (NX4GH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4 CORE : COPPER CONDUCTOR, MICA TAPE FIRE BARRIER, XLEVA INSULATED, LS0H SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction	: 1- Copper conductor : 2- Mica tape fire barrier : 3- XLEVA Insulated : 4- LS0H Sheathed
Voltage rating : 600/1000V		Insulation colour	: 4-Core (Red, Yellow, Blue & Black) or (Brown, Black, Grey & Blue)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC 61034		Sheath colour	: Orange or as per request
Optional : BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross sectional area mm ²	No of wire and conductor shape		Nominal Thickness Insulation mm	Approximately		Bending Radius Min mm	Standard Delivery Length m
				Overall Diameter Mm	Net Weight Kg/Km		
mm ²	no	shape	mm	Mm	Kg/Km	mm	m
16	7	compacted	0.7	21.2	527	212	1000
25	7	compacted	0.9	25.1	741	251	1000
35	7	compacted	0.9	27.8	919	278	1000
50	19	compacted	1.0	31.9	1202	319	1000
70	19	compacted	1.1	36.4	1587	364	1000
95	19	compacted	1.1	41.5	2075	415	1000
120	37	compacted	1.2	45.2	2521	452	1000
150	37	compacted	1.4	50.0	3065	500	1000
185	37	compacted	1.6	56.0	3806	560	1000
240	37	compacted	1.7	61.9	4759	619	500
300	61	compacted	1.8	75.7	5764	681	800
400	61	compacted	2.0	75.7	7231	757	800



ELECTRICAL DATA

Nominal cross-sectional area mm ²	Resistance at 20 °C	Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	Clipped Direct (Trefoil)	Trunking (on a wall)	Single-phase	Three-phase
mm ²	Ω/Km	A		mV/A/m	
16	1.91	76	64	4.80	4.20
25	1.20	90	84	3.10	2.70
35	0.868	112	103	2.20	1.95
50	0.641	136	124	1.17	1.45
70	0.443	174	156	1.15	0.97
95	0.320	211	188	0.84	0.72
120	0.253	245	216	0.67	0.58
150	0.206	283	240	0.54	0.47
185	0.164	323	272	0.45	0.39
240	0.125	382	318	0.36	0.31
300	0.100	440	364	0.30	0.26
400	0.0778	510	422	0.24	0.21

Note: For condition of current carrying capacity please refer to Table 1 Page 62

AL / MGT / XLEVA / LS0H / AWA / LS0H - 600 / 1000 VOLT (NAX4GRH-FE)			IEC 60502-1, IEC 60331, IEC 60332-3C	
1 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLEVA INSULATED, LS0H BEDDING, ALUMINIUM WIRE ARMoured, LS0H SHEATHED				
Application :	This cable is used in fire extinguishing systems, sprinklers control panels, and exit lights in high-rise buildings, hotel, hospital sub-ways, and public facilities.		Construction	: 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLEVA Insulated : 4- LS0H Bedding : 5- Armoured : 6- LS0H Sheathed
Voltage rating : 600/1000 Volt				
Conductor Operating Temperature : 90 ° C				
Reference Standard : IEC 60502-1				
Cable Standard	: IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034		Insulation colour	: Natural or as per request
Optional	: BS 6387 (C,W,Z) IEC 60332-3A, IEC 60332-3B		Sheath colour	: Orange or as per request

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Aluminium wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
mm ²	no	shape	mm			mm		Kg/Km	mm	m
16	7	circular	0.7	1.6	1.8	9.2	16.6	350	166	1000
25	7	circular	0.9	1.6	1.8	10.8	18.2	423	182	1000
35	7	circular	0.9	1.6	1.8	11.9	19.3	483	193	1000
50	7	circular	1.0	1.6	1.8	13.4	20.8	573	208	1000
70	7	compacted	1.1	1.6	1.8	15.1	22.5	678	225	1000
95	7	compacted	1.1	1.6	1.8	17.1	24.5	819	245	1000
120	7	compacted	1.2	1.6	1.8	18.5	25.9	935	259	1000
150	7	compacted	1.4	1.6	1.8	20.4	27.8	1081	278	1000
185	7	compacted	1.6	1.6	1.9	22.7	30.3	1286	303	1000
240	12	compacted	1.7	1.6	2.0	25.0	32.8	1544	328	1000
300	15	compacted	1.8	2.0	2.1	27.4	36.2	1888	362	800
400	18	compacted	2.0	2.0	2.2	30.7	39.7	2302	397	800
500	18	compacted	2.2	2.0	2.3	34.3	43.5	2799	435	500
630	30	compacted	2.4	2.5	2.5	38.2	48.8	3564	488	500

ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C	Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	In Air (Trefoil Touching)	In Ground (Direct or Ducting)	Single-phase (touching, trefoil)	Three-phase (touching, trefoil)
mm ²	Ω/Km	A		mV/A/m	
16	1.91	82	98	4.8	4.2
25	1.20	108	127	3.10	2.7
35	0.868	132	151	2.25	1.95
50	0.641	162	177	1.6	1.4
70	0.443	207	218	1.15	0.98
95	0.320	252	260	0.85	0.74
120	0.253	292	296	0.69	0.6
150	0.206	337	331	0.57	0.49
185	0.164	391	374	0.47	0.41
240	0.125	465	433	0.39	0.34
300	0.100	540	486	0.33	0.29
400	0.0778	625	563	0.29	0.25
500	0.0605	714	629	0.25	0.22
630	0.0469	801	701	0.24	0.2

Note: For condition of current carrying capacity please refer to Table 1 Page 62



AL / MGT / XLEVA / LS0H / SWA / LS0H - 600 / 1000 VOLT (NAX4GRH-FE)		IEC 60502-1, IEC 60331, IEC 60332-3C	
4 CORE : ALUMINIUM CONDUCTOR, MICA TAPE FIRE BARRIER, XLEVA INSULATED, LS0H BEDDING,GALVANIZED STEEL WIRE ARMOURED, LS0H SHEATHED			
Application : This cable is designed for areas where the integrity of the electrical circuit is critical in maintaining power supply. Applications can be found in emergency lightings, control and power circuits, power stations, fire alarm systems, underground tunnels, communications systems, sewage treatment plants, lifts, escalators, and high-rise buildings.		Construction	: 1- Aluminium conductor : 2- Mica tape fire barrier : 3- XLEVA Insulated : 4- LS0H Bedding : 5- Armoured : 6- LS0H Sheathed
Voltage rating : 600/1000 Volt		Insulation colour	4-Core (Red, Yellow, Blue & Black) or (Brown, Black, Grey, Blue)
Conductor Operating Temperature : 90 ° C			
Reference Standard : IEC 60502-1			
Cable Standard : IEC 60502-1, IEC 60331, IEC 60332-3C, IEC 60332-1, IEC 60754, IEC61034		Sheath colour	: Orange or as per request
Optional : BS 6387 (C.W.Z) IEC 60332-3A, IEC 60332-3B			

DIMENSIONAL & MECHANICAL DATA

Nominal cross-sectional area	Min no of wire and conductor shape		Nominal Thickness			Approximately			Bending radius min	Standard delivery length
			Insulation	Aluminium wire armour	Outer sheath	Inner sheath diameter	Overall diameter	Net Weight		
mm ²	no	shape	mm			mm		Kg/Km	mm	m
16	7	circular	0.7	1.6	1.8	19.6	27.0	1227	270.0	1000
25	7	circular	0.9	1.6	1.9	23.5	31.1	1570	311.0	1000
35	7	circular	0.9	2.0	2.0	26.2	34.8	2051	348.0	1000
50	19	circular	1.0	2.0	2.2	30.5	39.5	2560	395.0	1000
70	19	compactd	1.1	2.0	2.3	34.6	43.8	3085	438.0	800
95	19	compactd	1.1	2.5	2.5	39.9	50.5	4236	505.0	500
120	37	compactd	1.2	2.5	2.7	43.2	54.2	4834	542.0	500
150	37	compactd	1.4	2.5	2.8	47.8	59.0	5612	590.0	500
185	37	compactd	1.6	2.5	3.0	53.8	65.4	6734	654.0	350
240	37	compactd	1.7	2.5	3.2	59.3	71.3	7977	713.0	300
300	61	compactd	1.8	3.2	3.5	65.5	79.4	10170	794.0	250
400	61	compactd	2.0	3.2	3.7	72.5	86.8	12054	868.0	250



ELECTRICAL DATA

Nominal cross-sectional area	Resistance at 20 °C	Current Carrying Capacity at 30 °C		Voltage Drop	
	DC conductor max	In Air (Trefoil Touching)	In Ground (Direct or Ducting)	Single-phase	Three-phase
mm ²	Ω/Km	A		mV/A/m	
16	1.91	74.0	89	4.80	4.20
25	1.20	98.0	113	3.10	2.70
35	0.868	120	135	2.20	1.95
50	0.641	145	159	1.65	1.45
70	0.443	185	195	1.15	0.97
95	0.320	224	231	0.84	0.72
120	0.253	264	261	0.67	0.58
150	0.206	305	295	0.54	0.47
185	0.164	350	330	0.45	0.39
240	0.125	418	379	0.36	0.31
300	0.100	488	429	0.30	0.26
400	0.0778	551	574	0.24	0.21

Note: For condition of current carrying capacity please refer to Table 1 Page 62

CURRENT CARRYING CAPACITY

The current carrying capacity given in this catalogue based on the condition shown below:

Table 1 : Condition for Current Carrying Capacity

Conductor Operating Temperature	70 ° C (PVC/LSOH) 90 ° C (XLPE)
Ambient Temperature	30°C
Ground Temperature	15°C
Soil Thermal Resistivity	1.2km/W
Depth Of Laying	0.5 m
Phase	3-phase a.c
Frequency	50 Hz
Load Factor	100%

Table 2 : Rating Factors for Ambient Air Temperatures

Temperature(°C)	25	30	35	40	45	50	55
70°C Thermoplastic	1.03	1.00	0.94	0.87	0.79	0.71	0.61
90°C Thermosetting	1.02	1.00	0.96	0.91	0.87	0.82	0.76

Table 3 : Rating Factors for Ambient Ground Temperatures

Temperature(°C)	10	15	20	25	30	35	40	45	50
70°C Thermoplastic	1.05	1.00	0.95	0.90	0.85	0.80	0.73	0.68	0.60
90°C Thermosetting	1.03	1.00	0.96	0.92	0.89	0.86	0.82	0.77	0.73

Table 4 : Rating Factors for Soil Thermal Resistivity for Buries Cables

Thermal Resistivity (Km/W)	0.5	0.8	1	1.2	1.5	2	2.5	3
Buries in Duct	1.13	1.06	1.04	1.00	0.97	0.93	0.88	0.85
Direct Buried	1.34	1.16	1.07	1.00	0.91	0.80	0.71	0.64

Table 5 : Rating Factors for Depth for Buried Cables (Up to 1kV)

Depth (m)	0.5	0.7	1	1.25	1.5	1.75	2	2.5	3
Buried in Duct	1.00	0.98	0.96	0.94	0.93	0.92	0.91	0.90	0.89
Direct Buried	1.00	0.97	0.94	0.92	0.91	0.90	0.89	0.87	0.86

Table 6 : Rating Factors for Depth for Buried Cables (1.9/3kV or 1.8/3kV)

Depth (m)	0.5	0.7	1	1.25	1.5	1.75	2	2.5	3
Buried in Duct	1.00	1.00	0.98	0.96	0.95	0.94	0.92	0.91	0.90
Direct Buried	1.00	1.00	0.97	0.95	0.94	0.92	0.90	0.89	0.88

Table 7 : Flexible Conductors (Class 5)

Cable Size	Current-Carrying Capacity	Voltage Drop
≤ 16 mm ²	0.95	1.10
≥ 25mm ²	0.97	1.06

Table 8 : Min Bending Radius (mm)

To install the cables safely without damaging the electrical and physical properties of the cables, the tabulated

Type of Product	Construction	Overall Dia. (mm)	Min Bending Radius
PVC Insulated Power/ Control Cables	NonArmoured	Any	8D
	Armoured	Any	10D
	Sector	Any	10D
XLPE Insulated Power/ Control Cable	NonArmoured	Any	8D
	Armoured	Any	10D
	Sector	Any	10D
LSOH Insulated Power/ Control Cable	NonArmoured	Any	10D
	Armoured	Any	10D
Fire Resistant Cables	NonArmoured	Any	10D
	Armoured	Any	10D

TECHNICAL DATA RATING FACTORS FOR OTHER TEMPERATURE CONDITIONS

Table 9 : Correction Factors for Ambient Temperatures & Group Installation

Correction for group of more than one circuit of single-core cables, or more than one multi-core cable

Reference Methods of Installation		Correction Factor (Cg)													
		Number of Circuits or Multi-Core Cables													
		2	3	4	5	6	7	8	9	10	12	14	16	18	20
Enclosed (Method 3 or 4) or bunched and clipped to a non-metallic surface (Method 1)		0.80	0.70	0.65	0.60	0.57	0.54	0.52	0.50	0.48	0.45	0.43	0.41	0.39	0.38
Single layer clipped to a non-metallic surface (Method 1)	Touching	0.85	0.79	0.75	0.73	0.72	0.72	0.71	0.70	-	-	-	-	-	-
	Spaced	0.94	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Single layer single-core on a perforated metal cable tray, vertical or horizontal (Method 11)	Touching	0.86	0.81	0.77	0.75	0.74	0.73	0.73	0.72	0.71	0.70	-	-	-	-
	Spaced	0.91	0.89	0.88	0.87	0.87	-	-	-	-	-	-	-	-	-
Single layer single-core on a perforated metal cable tray, touching (Method 11)	Horizontal	0.90	0.85	-	-	-	-	-	-	-	-	-	-	-	-
	Vertical	0.85	-	-	-	-	-	-	-	-	-	-	-	-	-
Single a layer multi-core touching on ladder support		0.86	0.82	0.80	0.79	0.78	0.78	0.78	0.77	-	-	-	-	-	-

Space means a clearance between adjacent surfaces of at least one cable diameter (DE). Where the horizontal clearance between adjacent cable exceeds 2 De, no correction factor need be applied.

Note:

1. The factors in the table are applicable to a group of cables all of the same sizes. The value of the current derived from application of the appropriate factors is the maximum continuous current to be carried by any of the cables in the group.
2. If, due to known operating conditions, a cable is expected to carry not more than 30% of its grouped rating, it may be ignored for the purpose of obtaining the rating factor for the rest of the group.

For example, a group of N loaded cables would normally require a group reduction factor of Cg applied to the tabulated Lt. However, if M cables in the group carry loads which are not greater than 0.3Cg Lt. amperes, the other cables can be sized by using the group rating factor corresponding to (N-M) cables.



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