

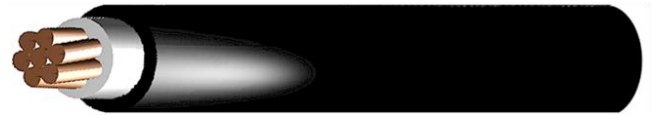
ENERGY CABLES

Building &

Construction

XLPE 0.6/1kV

Single Core Copper







APPLICATION		
For mains, submains and subcircuits unenclosed, enclosed in conduit, buried direct or in underground ducts for buildings and industrial plants where not subject to mechanical damage. Suitable where space is at a premium and/or where conditions of overload may occur. Suitable for glanding.	STANDARD	AS/NZS 5000.1
	VOLTAGE	600/1000V
	CONDUCTOR	Copper 16 – 630mm ²
	INSULATION	XLPE, X-90 Natural
	SHEATH	PVC, 5V-90 Black
	MAX. OPERATING TEMP.	90°C

TECHNICAL SPECIFICATIONS

ITEM NUMBER	CONDUCTOR		NOMINAL OVERALL DIAMETER mm	APPROX. MASS kg/km	MINIMUM INSTALLED BENDING RADIUS mm
	mm ²	(No./mm)			
23430016	16	7/1.70	9.4	230	40
23450016	25	7/2.14	11.3	320	50
23470016	35	19/1.53	12.5	425	55
64630016	50*	19 strands	13.1	550	55
64650016	70*	19 strands	15.0	760	65
64670016	95*	19 strands	16.8	1040	70
64690016	120*	18 strands	18.6	1300	80
64710016	150*	19 strands	20.6	1570	85
64730016	185*	37 strands	22.7	1980	95
64750016	240*	37 strands	25.6	2610	160
64770016	300*	37 strands	28.4	3300	175
64790016	400*	60 strands	31.7	4200	195
64810016	500*	61 strands	35.4	5500	220
64830016	630	32 strands	40.5	7000	260

*Conductors are circular compacted

TECHNICAL SPECIFICATIONS

CONDUCTOR	CURRENT RATING (a)				ELECTRICAL CHARACTERISTICS			
	THREE PHASE		SINGLE PHASE		Maximum DC Resistance @20°C Ω/km	Maximum AC Resistance @90°C Ω/km	Equivalent Star Reactance (Trefoil) Ω/km	3 Phase Voltage Drop mV/Am (b),(c)
Nominal Area mm ²	In Conduit In Air 	Buried In Ducts 	In Conduit In Air 	Buried In Ducts 				
16	72	86	84	100	1.15	1.47	0.106	2.55
25	97	113	113	131	0.727	0.927	0.102	1.62
35	120	137	135	157	0.524	0.668	0.0982	1.17
50	143	163	166	189	0.387	0.494	0.0924	0.872
70	183	203	204	233	0.268	0.342	0.0893	0.615
95	220	244	255	285	0.193	0.247	0.0868	0.457
120	261	284	292	325	0.153	0.197	0.0844	0.373
150	295	320	329	365	0.124	0.160	0.0844	0.316
185	335	363	387	423	0.0991	0.129	0.0835	0.269
240	399	426	461	497	0.0754	0.0991	0.0818	0.227
300	469	491	-	562	0.0601	0.0803	0.0809	0.202
400	534	557	-	653	0.0470	0.0646	0.0802	0.183
500	633	648	-	739	0.0366	0.0525	0.0796	0.170
630	714	727	-	856	0.0283	0.0432	0.0787	0.159

(a) Based on 40°C ambient air temperature and where applicable, burial depth of 0.5m, soil temperature of 25°C and soil resistivity of 1.2°C.m/W.

(b) Assumes trefoil formation with cables touching.

(c) For single phase voltage drop, multiply by 1.155.

The above information is from the following sources:

- AS/NZS 3008.1.1 (tables 5, 8, 30, 34, 40)
- AS 1125 (table 2.3)

For installation with thermal insulation refer to AS/NZS 3008 for de-rating factors.

Do not put in direct contact with polystyrene, polyurethane or similar thermal insulation materials.

CONDUCTOR				CONDUCTOR			
mm ²	(No./mm)	NOMINAL DIAMETER mm	NOMINAL INSULATION THICKNESS mm	mm ²	(No./mm)	NOMINAL DIAMETER mm	NOMINAL INSULATION THICKNESS mm
16	7/1.70	4.9	0.7	150	19 strands	14.3	1.4
25	7/2.14	6.3	0.9	185	37 strands	16.0	1.6
35	19/1.53	7.7	0.9	240	37 strands	18.4	1.7
50	19 strands	8.1	1.0	300	37 strands	20.8	1.8
70	19 strands	9.8	1.1	400	60 strands	23.5	2.0
95	19 strands	11.4	1.1	500	61 strands	26.6	2.2
120	18 strands	12.9	1.2	630	62 strands	30.8	2.4