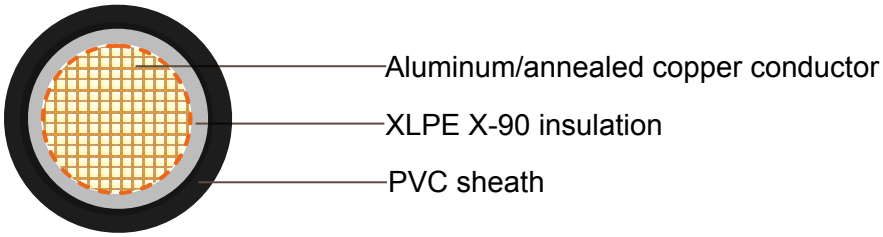
Single core XLPE Insulated, PVC Sheathed Unarmoured Cables, 0.6/1kV

Application

These cables are used for outdoor and indoor installations in damp and wet applications. They are normally used for power distribution in urban networks, industrial plants and energy distribution.
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.

Standard

AS/NZS 5000.1
AS/NZS 3008
AS/NZS 1125



Cable Construction

Conductor: Aluminum/plain annealed copper
Insulation: XLPE X-90
Insulation colour: black, other colors are available upon request
Sheath: Polyvinylchloride compound PVC 5V-90
Sheath colour: Black, other colors are available upon request

Technical Characteristics

Conductor	Current Ratings				Electrical Characteristics			
Nominal Area mm^2	In conduit In Air A	Buried In Ducts A	In conduit In Air A	Buried In Ducts A	Maximum DC Resistance @20°C Ohm/km	Maximum AC Resistance @90°C Ohm/km	Reactance (trefoil) Ohm/km	3 phase Voltage Drop mV/A
Aluminum								
16	70	74	74	86	1.91	2.45	0.106	4.25
25	99	96	100	112	1.20	1.54	0.102	2.67
35	116	118	121	134	0.868	1.11	0.0982	1.94

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50	138	139	149	161	0.641	0.822	0.0924	1.43
70	176	177	193	198	0.443	0.568	0.0893	0.997
95	215	209	237	241	0.320	0.411	0.0868	0.727
120	253	241	281	278	0.253	0.325	0.0844	0.582
150	286	273	319	310	0.206	0.265	0.0844	0.482
185	330	310	374	358	0.164	0.212	0.0835	0.394
240	396	369	440	428	0.125	0.162	0.0818	0.314
300	457	428	-	482	0.100	0.130	0.0809	0.266
400	534	487	-	567	0.0778	0.103	0.0802	0.226
500	616	578	-	653	0.0605	0.0813	0.0796	0.197
630	726	663	-	770	0.0469	0.0649	0.0787	0.177
Copper								
16	86	95	95	112	1.15	1.47	0.106	2.550
25	121	123	127	144	0.727	0.927	0.102	1.620
35	138	150	160	171	0.524	0.668	0.098	1.170
50	171	182	193	209	0.387	0.494	0.092	0.872
70	209	225	242	257	0.268	0.342	0.089	0.615
95	253	268	286	310	0.193	0.247	0.087	0.457
120	297	310	341	358	0.153	0.197	0.084	0.373
150	341	353	385	401	0.124	0.160	0.084	0.316
185	391	401	440	465	0.099	0.129	0.084	0.269
240	462	471	523	546	0.075	0.099	0.082	0.227
300	534	546	-	621	0.060	0.080	0.081	0.202
400	616	621	-	717	0.047	0.065	0.080	0.183
500	715	717	-	813	0.037	0.053	0.080	0.170
630	836	813	-	952	0.028	0.043	0.079	0.159

Australian Standard

Cable Parameter

Nom. conductor area mm^2	Main conductor type		Nom. insulation thickness mm	Nom. sheath thickness mm	Nom. overall diameter mm	Approx. mass kg/km
Aluminium Conductor						
16	7/1.70	circular	0.7	1.4	9.4	100
25	7strands	compacted	0.9	1.4	11.3	160
35	19strands	compacted	0.9	1.4	12.5	210
50	19strands	compacted	1.0	1.4	13.1	260
70	19strands	compacted	1.1	1.4	15.0	330
95	19strands	compacted	1.1	1.5	17.0	420
120	19strands	compacted	1.2	1.5	18.6	510
150	19strands	compacted	1.4	1.6	20.7	640
185	36strands	compacted	1.6	1.6	22.7	780
240	36strands	compacted	1.7	1.7	25.5	990
300	37strands	compacted	1.8	1.8	28.1	1220
400	60strands	compacted	2.0	1.9	31.8	1600
500	60strands	compacted	2.2	2	35.4	2000
630	60strands	compacted	2.4	2.2	39.6	2600
Copper Conductor						
16	7/1.70	circular	0.7	1.4	9.4	230
25	7/2.14	circular	0.9	1.4	11.3	320
35	19/1.53	circular	0.9	1.4	12.5	425
50	19strands	compacted	1.0	1.4	13.1	550
70	19strands	compacted	1.1	1.4	15.0	760
95	19strands	compacted	1.1	1.5	16.8	1040
120	19strands	compacted	1.2	1.5	18.6	1305
150	19strands	compacted	1.4	1.6	20.6	1585
185	36strands	compacted	1.6	1.6	22.7	1980
240	36strands	compacted	1.7	1.7	25.6	2610
300	37strands	compacted	1.8	1.8	28.4	3340
400	60strands	compacted	2.0	1.9	31.7	4245
500	60strands	compacted	2.2	2.0	35.4	5500
630	91strands	compacted	2.4	2.2	42.4	7220