Technical Characteristics

LIGHT DUTY

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz	Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
							Unenclosed In Air	Unenclosed In Air	Unenclosed In Air
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
35	0.868	1.11	0.12	8700	0.278	1.92	122	137	114
50	0.641	0.822	0.115	7800	0.309	1.87	95	166	137
70	0.443	0.569	0.106	6800	0.353	1.82	185	193	176
95	0.32	0.41	0.101	6000	0.4	1.77	222	238	198
120	0.253	0.325	0.0976	5500	0.439	1.74	257	270	225
150	0.206	0.265	0.0948	5100	0.477	1.72	293	306	254
185	0.164	0.211	0.0923	4700	0.518	1.7	333	342	292
240	0.125	0.162	0.0896	4300	0.561	1.62	390	394	331
300	0.1	0.13	0.0885	4100	0.582	1.5	447	447	378

Cable Parameter

LIGHT DUTY

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on Each core	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	kg/100m
35	6.9	2.5	13	6.8		14.5	39.5	123
50	8.1	2.5	14.2	6.8		15.6	42.1	141
70	9.6	2.5	15.8	7.9		17.3	45.9	174
95	11.4	2.5	17.5	8.5		18.9	49.6	209
120	12.8	2.5	18.9	9.1		20.5	53.2	241
150	14.2	2.5	20.3	9.6		21.9	56.4	276
185	15.7	2.5	21.8	10.2		23.5	60.1	320
240	18	2.6	24.3	10.8		26.1	66.2	392
300	20.1	2.8	27	11.9		29.0	72.7	473

Technical Characteristics

HEAVY DUTY

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz	Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
							Unenclosed In Air	Unenclosed In Air	Unenclosed In Air
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
35	0.868	1.11	0.12	8700	0.278	1.92	122	137	114
50	0.641	0.822	0.115	7800	0.309	1.87	95	166	137
70	0.443	0.569	0.106	6800	0.353	1.82	185	193	176
95	0.32	0.41	0.101	6000	0.4	1.77	222	238	198
120	0.253	0.325	0.0976	5500	0.439	1.74	257	270	225
150	0.206	0.265	0.0948	5100	0.477	1.72	293	306	254
185	0.164	0.211	0.0923	4700	0.518	1.7	333	342	292
240	0.125	0.162	0.0896	4300	0.561	1.62	390	394	331
300	0.1	0.13	0.0885	4100	0.582	1.5	447	447	378
400	0.0778	0.102	0.0857	3900	0.613	1.39			

Cable Parameter

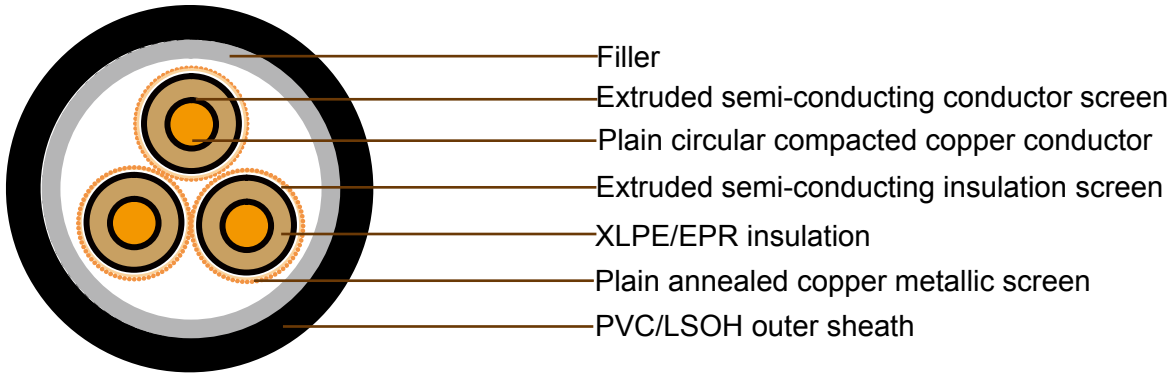
HEAVY DUTY

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on Each core	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	kg/100m
35	6.9	2.5	13	7.9	14 x 0.85	16.3	40.5	140
50	8.1	2.5	14.2	10.8	19 x 0.85	17.5	43.1	170
70	9.6	2.5	15.8	15.3	27 x 0.85	19.1	46.8	210
95	11.4	2.5	17.5	20.4	36 x 0.85	20.8	50.8	270
120	12.8	2.5	18.9	22.7	40 x 0.85	22.2	54.1	305
150	14.2	2.5	20.3	22.7	40 x 0.85	23.6	57.3	340
185	15.7	2.5	21.8	22.7	40 x 0.85	25.1	60.8	385
240	18	2.6	24.3	22.7	40 x 0.85	27.6	66.6	465
300	20.1	2.8	27	22.7	40 x 0.85	30.3	72.8	550
400	23	3	30.3	22.7	40 x 0.85	33.6	80.3	660

6.35/11kV Three Core Individual Screened & PVC Sheathed (Cu Conductor)

Application

These cables are designed to be used for the supply of electrical energy in fixed applications up to the rated voltages at a nominal power frequency between 49Hz and 61Hz., they are suitable for use in distribution installation, electrical power station , they are applied for installation, outdoors, underground where subject to mechanical damage.



Standard

AS/NZS 1429.1

Cable Construction

CONDUCTOR: Plain circular compacted copper to AS/NZS1125
Maximum Continuous Operating Temperature: 90°C

CONDUCTOR SCREEN: Extruded semi-conducting compound, bonded to the insulation and applied in the same operation as the insulation

INSULATION: Cross Linked Polyethylene (XLPE) – standard
Ethylene Propylene Rubber (EPR) – alternative

INSULATION SCREEN: Extruded semi-conducting compound

METALLIC SCREEN: Plain annealed copper wire: 3kA for nominal 1 second(LIGHT DUTY)
Plain annealed copper wire: 10kA for nominal 1 second(HEAVY DUTY)

SHEATH: Black 5V-90 polyvinyl chloride (PVC) – standard
Orange 5V-90 PVC inner plus black high density polyethylene (HDPE) outer – alternative
Low smoke zero halogen (LSOH) – alternative

Technical Characteristics

LIGHT DUTY

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz	Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
							Unenclosed In Air	Unenclosed In Air	Unenclosed In Air
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
16	1.15	1.47	0.142	14000	0.177	2.77	111	112	93
25	0.727	0.927	0.134	12000	0.198	2.65	145	143	119
35	0.524	0.668	0.127	11000	0.219	2.55	175	171	143
50	0.387	0.494	0.121	10000	0.242	2.46	210	202	169
70	0.268	0.342	0.115	8800	0.275	2.37	259	246	206
95	0.193	0.247	0.106	7700	0.314	2.3	315	294	246
120	0.153	0.196	0.102	7000	0.346	2.25	360	333	284
150	0.124	0.16	0.099	6400	0.374	2.21	408	373	318
185	0.0991	0.128	0.0961	5900	0.407	2.17	466	421	358
240	0.0754	0.0985	0.0926	5300	0.456	2.13	546	486	414
300	0.0601	0.0796	0.0904	4800	0.503	2.1	622	547	474
400	0.047	0.0638	0.087	4300	0.561	2.07	714	618	536

Cable Parameter

LIGHT DUTY

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on Each core	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	kg/100m
16	4.8	3.4	12.8	5.7	10 x 0.85	14.1	40	146
25	5.8	3.4	13.8	6.8	12 x 0.85	15.3	42.3	186
35	6.8	3.4	14.8	6.8	12 x 0.85	16.3	44.7	220
50	8	3.4	16	6.8	12 x 0.85	17.6	47.4	267
70	9.6	3.4	17.6	7.4	13 x 0.85	19.0	51	342
95	11.5	3.4	19.4	7.9	14 x 0.85	20.7	55.3	432
120	13.1	3.4	21	8.5	15 x 0.85	22.1	58.9	520
150	14.5	3.4	22.4	8.5	15 x 0.85	23.5	62.3	610
185	16.1	3.4	24.1	9.6	17 x 0.85	25.3	66	735
240	18.5	3.4	26.5	10.2	18 x 0.85	27.6	71.6	920
300	20.7	3.4	28.9	11.3	20 x 0.85	29.8	76.9	1120
400	23.6	3.4	31.8	11.9	21 x 0.85	33.2	84.2	1405

Technical Characteristics

HEAVY DUTY

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz	Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
							Unenclosed In Air	Unenclosed In Air	Unenclosed In Air
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
16	1.15	1.47	0.142	14000	0.177	2.77	111	112	93
25	0.727	0.927	0.134	12000	0.198	2.65	145	143	119
35	0.524	0.668	0.127	11000	0.219	2.55	175	171	143
50	0.387	0.494	0.121	10000	0.242	2.46	210	202	169
70	0.268	0.342	0.115	8800	0.275	2.37	259	246	206
95	0.193	0.247	0.106	7700	0.314	2.3	315	294	246
120	0.153	0.196	0.102	7000	0.346	2.25	360	333	284
150	0.124	0.16	0.099	6400	0.374	2.21	408	373	318
185	0.0991	0.128	0.0961	5900	0.407	2.17	466	421	358
240	0.0754	0.0985	0.0926	5300	0.456	2.13	546	486	414
300	0.0601	0.0796	0.0904	4800	0.503	2.1	622	547	474
400	0.047	0.0638	0.087	4300	0.561	2.07	714	618	536
500	0.0373	0.0525	0.0847	3900	0.62	2.05			

Cable Parameter

HEAVY DUTY

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on Each core	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	kg/100m
16	4.8	3.4	12.8	5.7	10 x 0.85	16.1	40	150
25	5.8	3.4	13.8	8.5	15 x 0.85	17.1	42.3	195
35	6.8	3.4	14.8	11.3	20 x 0.85	18.1	44.7	240
50	8	3.4	16	16.5	29 x 0.85	19.3	47.4	295
70	9.6	3.4	17.6	22.7	40 x 0.85	20.9	51	390
95	11.5	3.4	19.4	22.7	40 x 0.85	22.7	55.3	480
120	13.1	3.4	21	22.7	40 x 0.85	24.3	58.9	575
150	14.5	3.4	22.4	22.7	40 x 0.85	25.7	62.3	665
185	16.1	3.4	24.1	22.7	40 x 0.85	27.4	66	770
240	18.5	3.4	26.5	22.7	40 x 0.85	29.8	71.6	965
300	20.7	3.4	28.9	22.7	40 x 0.85	32.2	76.9	1160
400	23.6	3.4	31.8	22.7	40 x 0.85	35.3	84.2	1460

6.35/11kV Three Core Individual Screened & PVC Sheathed (Al Conductor)

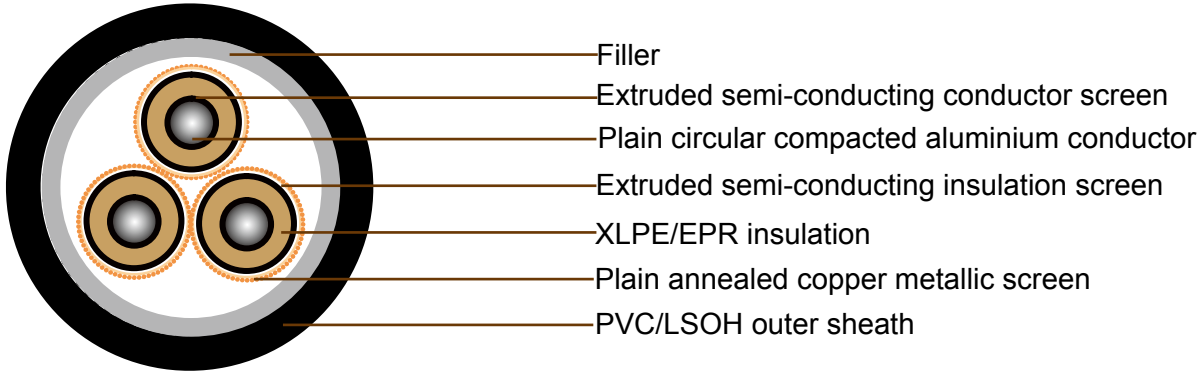
Application

These cables are designed to be used for the supply of electrical energy in fixed applications up to the rated voltages at a nominal power frequency between 49Hz and 61Hz., they are suitable for use in distribution installation, electrical power station , they are applied for installation, outdoors, underground where subject to mechanical damage.

Standard

AS/NZS 1429.1

Cable Construction



CONDUCTOR: Plain circular compacted aluminium to AS/NZS1125
Maximum Continuous Operating Temperature: 90°C

CONDUCTOR SCREEN: Extruded semi-conducting compound, bonded to the insulation and applied in the same operation as the insulation

INSULATION: Cross Linked Polyethylene (XLPE) – standard
Ethylene Propylene Rubber (EPR) – alternative

INSULATION SCREEN: Extruded semi-conducting compound

METALLIC SCREEN: Plain annealed copper wire: 3kA for nominal 1 second(LIGHT DUTY)
Plain annealed copper wire: 10kA for nominal 1 second(HEAVY DUTY)

SHEATH: Black 5V-90 polyvinyl chloride (PVC) – standard
Orange 5V-90 PVC inner plus black high density polyethylene (HDPE) outer – alternative
Low smoke zero halogen (LSOH) – alternative

Technical Characteristics

LIGHT DUTY

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz	Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
							Unenclosed In Air	Unenclosed In Air	Unenclosed In Air
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
35	0.868	1.11	0.127	11000	0.22	2.54	136	133	111
50	0.641	0.821	0.121	9900	0.243	2.46	162	157	130
70	0.443	0.569	0.112	8700	0.276	2.37	201	191	160
95	0.32	0.41	0.106	7800	0.311	2.3	244	228	191
120	0.253	0.325	0.103	7100	0.339	2.25	280	259	220
150	0.206	0.265	0.0996	6600	0.368	2.22	317	290	246
185	0.164	0.211	0.0968	6100	0.398	2.18	363	328	279
240	0.125	0.161	0.0933	5400	0.445	2.14	426	379	323
300	0.1	0.13	0.091	4900	0.491	2.11	486	427	370
400	0.0778	0.102	0.0876	4400	0.548	2.08	562	487	423

Cable Parameter

LIGHT DUTY

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on Each core	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	kg/100m
35	6.9	3.4	14.9	6.8	12 x 0.85	16.3	43.9	153
50	8.1	3.4	16	6.8	12 x 0.85	17.5	46.7	175
70	9.6	3.4	17.6	7.4	13 x 0.85	19.0	50.4	211
95	11.4	3.4	19.3	7.9	14 x 0.85	20.7	54.2	251
120	12.8	3.4	20.7	8.5	15 x 0.85	22.1	57.5	289
150	14.2	3.4	22.1	8.5	15 x 0.85	23.5	60.7	326
185	15.7	3.4	23.6	9.6	17 x 0.85	25.2	64.6	379
240	18	3.4	25.9	10.2	18 x 0.85	27.6	70.2	459
300	20.1	3.4	28.3	10.8	19 x 0.85	29.6	74.7	535
400	23	3.4	31.1	11.9	21 x 0.85	32.7	82.3	655

Technical Characteristics

HEAVY DUTY

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz	Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
							Unenclosed In Air	Unenclosed In Air	Unenclosed In Air
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
35	0.868	1.11	0.127	11000	0.22	2.54	136	133	111
50	0.641	0.821	0.121	9900	0.243	2.46	162	157	130
70	0.443	0.569	0.112	8700	0.276	2.37	201	191	160
95	0.32	0.41	0.106	7800	0.311	2.3	244	228	191
120	0.253	0.325	0.103	7100	0.339	2.25	280	259	220
150	0.206	0.265	0.0996	6600	0.368	2.22	317	290	246
185	0.164	0.211	0.0968	6100	0.398	2.18	363	328	279
240	0.125	0.161	0.0933	5400	0.445	2.14	426	379	323
300	0.1	0.13	0.091	4900	0.491	2.11	486	427	370
400	0.0778	0.102	0.0876	4400	0.548	2.08	562	487	423

Cable Parameter

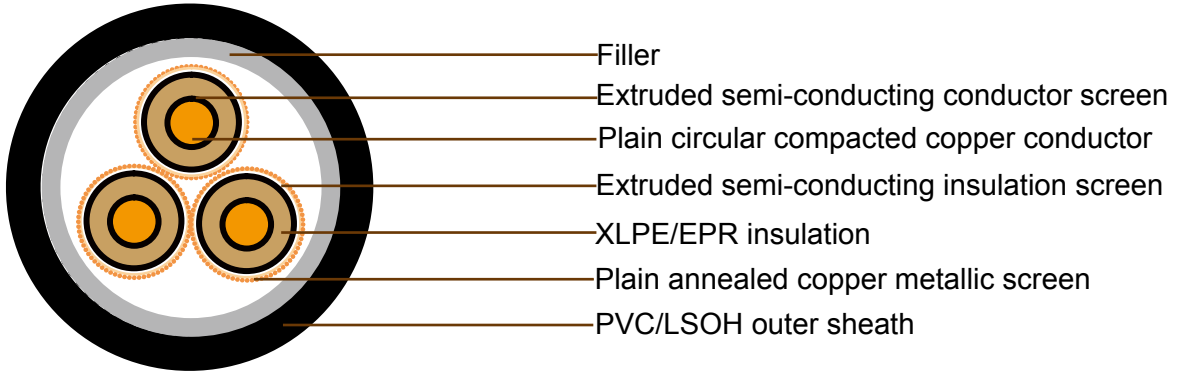
HEAVY DUTY

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on Each core	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	kg/100m
35	6.9	3.4	14.9	7.9	14 x 0.85	18.2	44.6	165
50	8.1	3.4	16	10.8	19 x 0.85	19.3	47.5	195
70	9.6	3.4	17.6	15.3	27 x 0.85	20.9	51.1	245
95	11.4	3.4	19.3	20.4	36 x 0.85	22.6	55	295
120	12.8	3.4	20.7	22.7	40 x 0.85	24	58.2	340
150	14.2	3.4	22.1	22.7	40 x 0.85	25.4	61.5	375
185	15.7	3.4	23.6	22.7	40 x 0.85	26.9	64.9	420
240	18	3.4	25.9	22.7	40 x 0.85	29.2	70.3	490
300	20.1	3.4	28.3	22.7	40 x 0.85	31.6	75.5	570
400	23	3.4	31.1	22.7	40 x 0.85	34.6	82.8	690

12.7/22kV Three Core Individual Screened & PVC Sheathed (Cu Conductor)

Application

These cables are designed to be used for the supply of electrical energy in fixed applications up to the rated voltages at a nominal power frequency between 49Hz and 61Hz., they are suitable for use in distribution installation, electrical power station , they are applied for installation, outdoors, underground where subject to mechanical damage.



Standard

AS/NZS 1429.1

Cable Construction

CONDUCTOR: Plain circular compacted copper to AS/NZS1125
Maximum Continuous Operating Temperature: 90°C

CONDUCTOR SCREEN: Extruded semi-conducting compound, bonded to the insulation and applied in the same operation as the insulation

INSULATION: Cross Linked Polyethylene (XLPE) – standard
Ethylene Propylene Rubber (EPR) – alternative

INSULATION SCREEN: Extruded semi-conducting compound

METALLIC SCREEN: Plain annealed copper wire: 3kA for nominal 1 second(LIGHT DUTY)
Plain annealed copper wire: 10kA for nominal 1 second(HEAVY DUTY)

SHEATH: Black 5V-90 polyvinyl chloride (PVC) – standard
Orange 5V-90 PVC inner plus black high density polyethylene (HDPE) outer – alternative
Low smoke zero halogen (LSOH) – alternative

Technical Characteristics

LIGHT DUTY

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz	Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
							Unenclosed In Air	Unenclosed In Air	Unenclosed In Air
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
35	0.524	0.668	0.141	16000	0.156	3.63	177	170	144
50	0.387	0.494	0.134	14000	0.171	3.48	212	201	173
70	0.268	0.342	0.127	13000	0.192	3.31	261	245	210
95	0.193	0.247	0.117	11000	0.216	3.16	317	293	251
120	0.153	0.196	0.112	10000	0.236	3.07	363	333	285
150	0.124	0.16	0.109	9500	0.254	3	411	373	319
185	0.0991	0.128	0.105	8800	0.274	2.93	469	421	366
240	0.0754	0.0981	0.101	7900	0.305	2.85	549	486	423

Cable Parameter

LIGHT DUTY

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on Each core	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	kg/100m
35	6.8	5.5	19.1	7.4	13 x 0.85	20.1	52.9	276
50	8	5.5	20.3	7.9	14 x 0.85	21.4	56.0	328
70	9.6	5.5	21.9	8.5	15 x 0.85	22.8	59.2	404
95	11.5	5.5	23.8	9.1	16 x 0.85	24.5	63.1	499
120	13.1	5.5	25.3	9.6	17 x 0.85	25.9	66.6	590
150	14.5	5.5	26.8	10.2	18 x 0.85	27.3	69.8	685
185	16.1	5.5	28.4	10.8	19 x 0.85	29.1	73.9	810
240	18.5	5.5	30.8	11.3	20 x 0.85	31.4	79.3	1005

Technical Characteristics

HEAVY DUTY

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz	Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
							Unenclosed In Air	Unenclosed In Air	Unenclosed In Air
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
35	0.524	0.668	0.141	16000	0.156	3.63	177	170	144
50	0.387	0.494	0.134	14000	0.171	3.48	212	201	173
70	0.268	0.342	0.127	13000	0.192	3.31	261	245	210
95	0.193	0.247	0.117	11000	0.216	3.16	317	293	251
120	0.153	0.196	0.112	10000	0.236	3.07	363	333	285
150	0.124	0.16	0.109	9500	0.254	3	411	373	319
185	0.0991	0.128	0.105	8800	0.274	2.93	469	421	366
240	0.0754	0.0981	0.101	7900	0.305	2.85	549	486	423
300	0.0601	0.0792	0.0988	7200	0.334	2.79			
400	0.047	0.0633	0.0944	6500	0.371	2.73			
500	0.0373	0.0518	0.0915	5900	0.407	2.69			

Cable Parameter

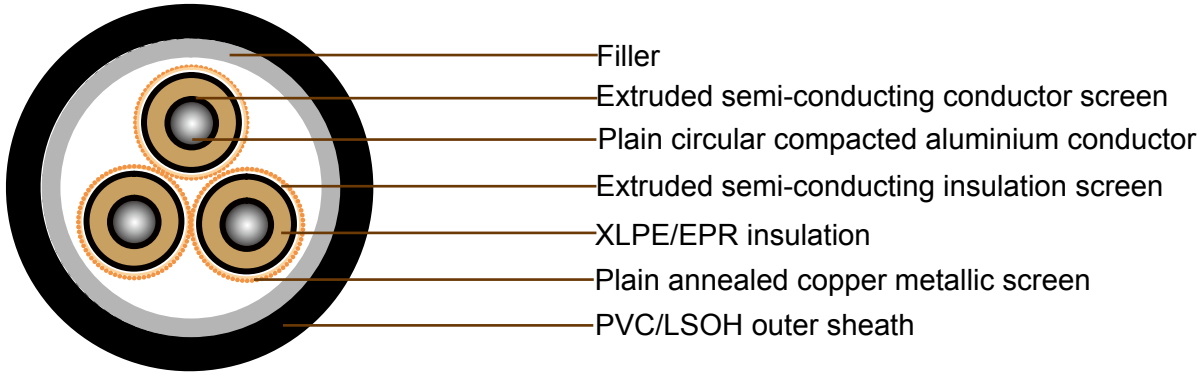
HEAVY DUTY

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on Each core	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	kg/100m
35	6.8	5.5	19.1	11.3	20 x 0.85	22.4	54.6	300
50	8	5.5	20.3	16.5	29 x 0.85	23.6	57.3	360
70	9.6	5.5	21.9	22.7	40 x 0.85	25.2	60.9	460
95	11.5	5.5	23.8	22.7	40 x 0.85	27.1	65.2	560
120	13.1	5.5	25.3	22.7	40 x 0.85	28.6	68.9	650
150	14.5	5.5	26.8	22.7	40 x 0.85	30.1	72.2	750
185	16.1	5.5	28.4	22.7	40 x 0.85	31.7	75.9	855
240	18.5	5.5	30.8	22.7	40 x 0.85	34.1	81.5	1060
300	20.7	5.5	33.2	22.7	40 x 0.85	36.7	87.5	1270
400	23.6	5.5	36.1	22.7	40 x 0.85	39.6	94.1	1570
500	26.5	5.5	39	22.7	40 x 0.85	42.5	100.8	1910

12.7/22kV Three Core Individual Screened & PVC Sheathed (Al Conductor)

Application

These cables are designed to be used for the supply of electrical energy in fixed applications up to the rated voltages at a nominal power frequency between 49Hz and 61Hz., they are suitable for use in distribution installation, electrical power station , they are applied for installation, outdoors, underground where subject to mechanical damage.



Standard

AS/NZS 1429.1

Cable Construction

CONDUCTOR: Plain circular compacted aluminium to AS/NZS1125
Maximum Continuous Operating Temperature: 90°C

CONDUCTOR SCREEN: Extruded semi-conducting compound, bonded to the insulation and applied in the same operation as the insulation

INSULATION: Cross Linked Polyethylene (XLPE) – standard
Ethylene Propylene Rubber (EPR) – alternative

INSULATION SCREEN: Extruded semi-conducting compound

METALLIC SCREEN: Plain annealed copper wire: 3kA for nominal 1 second(LIGHT DUTY)
Plain annealed copper wire: 10kA for nominal 1 second(HEAVY DUTY)

SHEATH: Black 5V-90 polyvinyl chloride (PVC) – standard
Orange 5V-90 PVC inner plus black high density polyethylene (HDPE) outer – alternative
Low smoke zero halogen (LSOH) – alternative

Technical Characteristics

LIGHT DUTY

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz	Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
							Unenclosed In Air	Unenclosed In Air	Unenclosed In Air
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
35	0.868	1.11	0.14	15000	0.157	3.62	137	132	112
50	0.641	0.821	0.134	14000	0.172	3.47	164	156	134
70	0.443	0.568	0.124	13000	0.192	3.3	203	190	163
95	0.32	0.41	0.117	11000	0.214	3.17	246	227	195
120	0.253	0.325	0.113	10000	0.232	3.08	282	259	221
150	0.206	0.265	0.11	9700	0.25	3.01	319	289	247
185	0.164	0.211	0.106	9000	0.269	2.95	365	328	285
240	0.125	0.161	0.102	8100	0.298	2.87	428	379	330

Cable Parameter

LIGHT DUTY

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on Each core	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	kg/100m
35	6.9	5.5	19.2	7.4	13 x 0.85	20.1	52.9	208
50	8.1	5.5	20.3	7.9	14 x 0.85	21.3	55.7	236
70	9.6	5.5	21.9	8.5	15 x 0.85	22.8	59.2	273
95	11.4	5.5	23.6	9.1	16 x 0.85	24.5	63.1	318
120	12.8	5.5	25	9.6	17 x 0.85	25.9	66.3	358
150	14.2	5.5	26.4	10.2	18 x 0.85	27.3	69.5	402
185	15.7	5.5	27.9	10.8	19 x 0.85	29.0	73.4	456
240	18	5.5	30.3	11.3	20 x 0.85	31.4	79.0	540

Technical Characteristics

HEAVY DUTY

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz	Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
							Unenclosed In Air	Unenclosed In Air	Unenclosed In Air
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
35	0.868	1.11	0.14	15000	0.157	3.62	137	132	112
50	0.641	0.821	0.134	14000	0.172	3.47	164	156	134
70	0.443	0.568	0.124	13000	0.192	3.3	203	190	163
95	0.32	0.41	0.117	11000	0.214	3.17	246	227	195
120	0.253	0.325	0.113	10000	0.232	3.08	282	259	221
150	0.206	0.265	0.11	9700	0.25	3.01	319	289	247
185	0.164	0.211	0.106	9000	0.269	2.95	365	328	285
240	0.125	0.161	0.102	8100	0.298	2.87	428	379	330
300	0.1	0.13	0.0996	7400	0.327	2.81			
400	0.0778	0.102	0.0951	6700	0.363	2.75			
500	0.0617	0.0819	0.0915	5900	0.407	2.69			

Cable Parameter

HEAVY DUTY

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on Each core	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	kg/100m
35	6.9	5.5	19.2	7.9	14 x 0.85	22.5	54.7	225
50	8.1	5.5	20.3	10.8	19 x 0.85	23.6	57.4	260
70	9.6	5.5	21.9	15.3	27 x 0.85	25.2	61	310
95	11.4	5.5	23.6	20.4	36 x 0.85	26.9	64.9	370
120	12.8	5.5	25	22.7	40 x 0.85	28.3	68.1	415
150	14.2	5.5	26.4	22.7	40 x 0.85	29.7	71.4	460
185	15.7	5.5	27.9	22.7	40 x 0.85	31.2	74.8	505
240	18	5.5	30.3	22.7	40 x 0.85	33.6	80.2	585
300	20.1	5.5	32.6	22.7	40 x 0.85	36.1	86	685
400	23	5.5	35.4	22.7	40 x 0.85	38.9	92.7	800
500	26.5	5.5	39	22.7	40 x 0.85	42.5	100.8	960

19/33kV Three Core Individual Screened & PVC Sheathed (Cu Conductor)

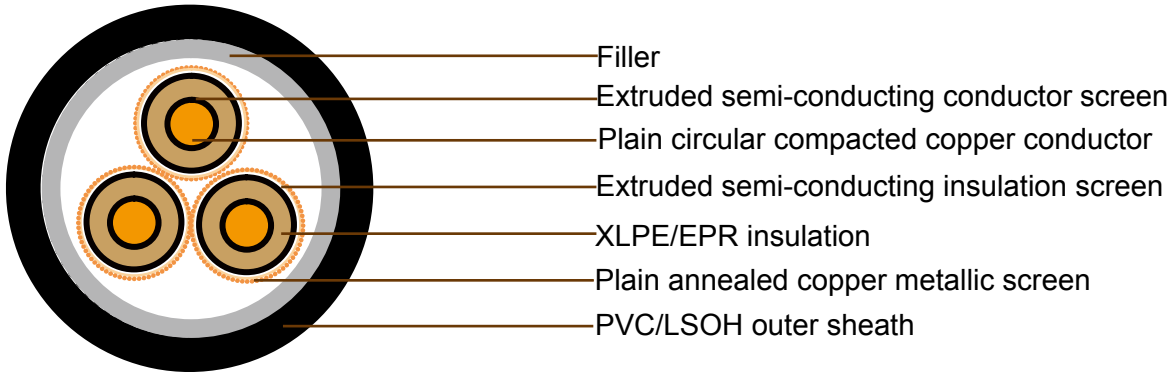
Application

These cables are designed to be used for the supply of electrical energy in fixed applications up to the rated voltages at a nominal power frequency between 49Hz and 61Hz., they are suitable for use in distribution installation, electrical power station , they are applied for installation, outdoors, underground where subject to mechanical damage.

Standard

AS/NZS 1429.1

Cable Construction



CONDUCTOR: Plain circular compacted copper to AS/NZS1125
Maximum Continuous Operating Temperature: 90°C

CONDUCTOR SCREEN: Extruded semi-conducting compound, bonded to the insulation and applied in the same operation as the insulation

INSULATION: Cross Linked Polyethylene (XLPE) – standard
Ethylene Propylene Rubber (EPR) – alternative

INSULATION SCREEN: Extruded semi-conducting compound

METALLIC SCREEN: Plain annealed copper wire: 3kA for nominal 1 second(LIGHT DUTY)
Plain annealed copper wire: 10kA for nominal 1 second(HEAVY DUTY)

SHEATH: Black 5V-90 polyvinyl chloride (PVC) – standard
Orange 5V-90 PVC inner plus black high density polyethylene (HDPE) outer – alternative
Low smoke zero halogen (LSOH) – alternative