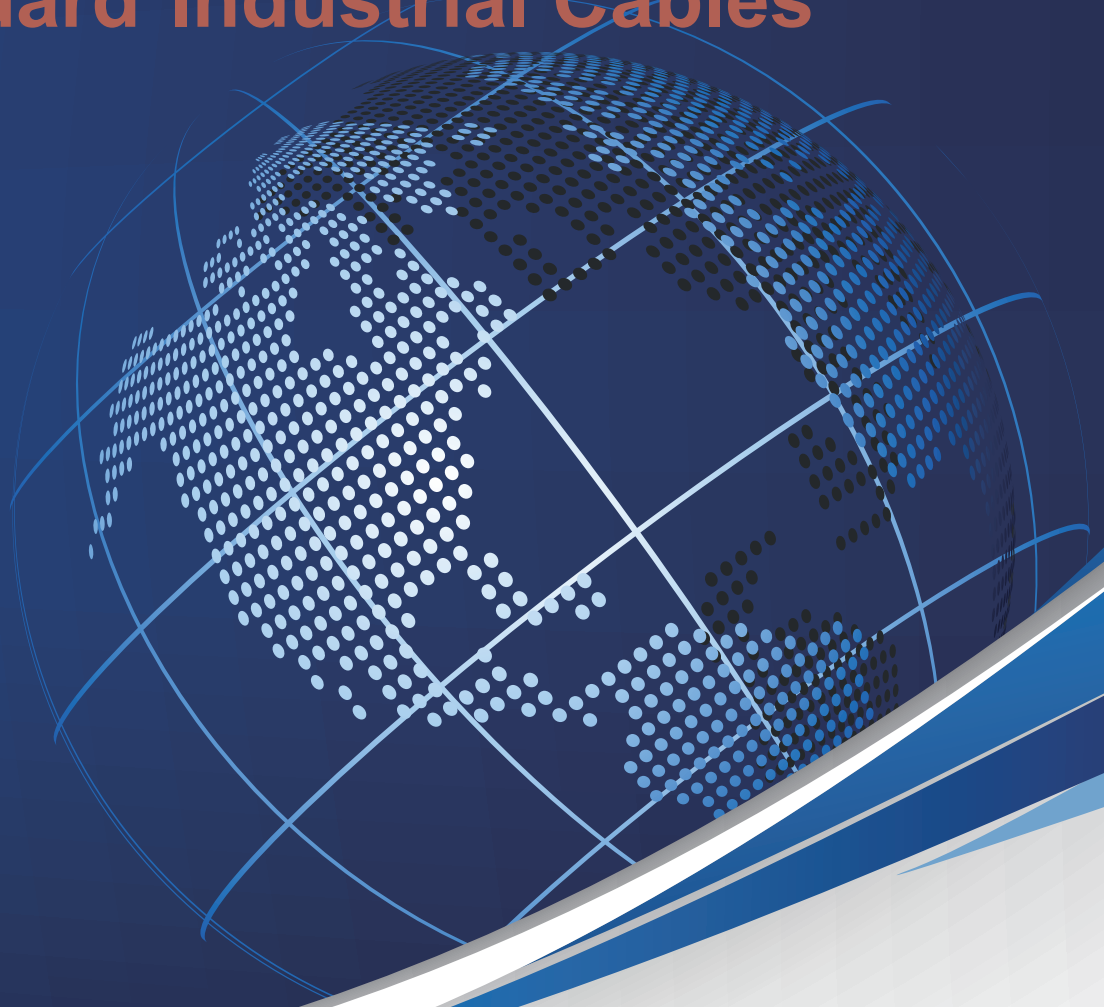
Caledonian Cables Ltd

Australian Standard Industrial Cables

Medium Voltage



www.caledonian-cables.co.uk
www.caledonian-cables.com

Addison

Company Profile

Caledonian, established in 1978, offers one of the most complete lines of fiber and copper cabling system solutions with over hundreds of different cabling system products. Our superior products provide leading edge within every cable series and for every application.

Among the national and international standards with which our cables could comply are: BS - British Standard; LPCB Fire Performance Standard. ISO Standard etc. Caledonian Cables offers a comprehensive st°Ck of cables and cabling products through its nationwide network of resellers and distributors. Caledonian Cables has continually expanded its global presence in Europe and Asia.

Caledonian & Addison, produces a wide range of cables for communication. power and electronics in its primary plants in UK. Italy and Spain. To stay in front. we continually keep expanding our manufacturing capabilities in more low cost region such as Romania. Taiwan. Malaysia etc. This low-cost manufacturing facilities enable us provide a flexible. scalable global system that delivers superior operational performance and optimal results for our customers.

Our extensive global network of manufacturing facilities gives us significant scale and the flexibility to fulfill our customer requirements. This global presence provides design and consultancy solutions that are combined with core cable manufacturing. logistic services. and vertically integrated with our E commerce technologies. to optimize customer operations by lowering costs and reducing time to market.


ISO 9001
REGISTERED FIRM

Registration Certificate

This document certifies that the administration systems of

Caledonian Cables Limited/Addison Technology Limited
Pheonix Works, North Street, Lewes, E. Sussex, BN7 2QJ

have been assessed and approved by QAS International to the following management systems, standards and guidelines:

ISO 9001 : 2000
With the permitted exclusion of clauses 7.3 Design and Development, 7.5.2 Validation of Processes for Production and Service Provision and 7.5.4 Customer Property

The approved administration systems apply to the following:

The manufacture and supply of electrical cables and ancillary power equipment to customers internationally.

Original Approval 6th September 1997
Current Certificate 7th February 2010
Certificate Expiry 7th April 2011
Certificate Number A6211

On behalf of QAS International
www.qas-international.com

This certificate remains valid while the holder maintains their quality administration systems in accordance with the standards and guidelines stated above, which will be audited annually by QAS International.
The holder is entitled to display the above registration mark for the duration of this certificate.
This certificate must be returned to QAS International on reasonable request.
Issuing Office: QAS International, The Gig House, Oxford Street, Malmesbury, Wiltshire, SN16 9AX

Caledonian & Addison has been respected for its high standards of quality. excellent service level. competitive pricing and a unique and innovative spirit. With our latest technologies. we are both inspired and well-positioned to meet the changing needs of our customers. We have the resources to diversify and to enhance our product lines and services. We understand the need for change and with our accurate planning. we are ready for the future and the promise of new marketing opportunities. Our tradition of growth through excellence is assured.

Our Design Centers work closely with customers to constantly improve its standard range of products and technologies and to develop customized. country and industry-specific solutions. Caledonian & Addison has established an extensive network of design. manufacturing. and logistics facilities in the world's major markets to serve the growing outsourcing needs of both multinational and regional customers.

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Single Core Unarmoured Cables

Three Core Individual Screened Cables

Three Core Individual Screened Armoured Cables

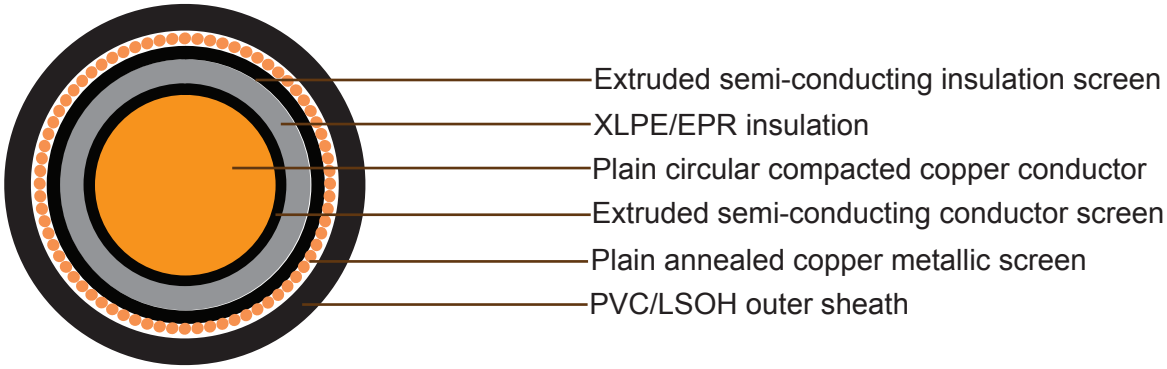
3.8/6.6kV Single Core Screened & PVC Sheathed (Cu Conductor)

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
16	1.15	1.47	1.47	0.155	0.170	0.216	11000	0.221	2.06	106	116	111
25	0.727	0.927	0.927	0.146	0.161	0.207	9700	0.248	1.99	138	148	141
35	0.524	0.668	0.668	0.142	0.157	0.203	8700	0.276	1.93	167	178	169
50	0.387	0.494	0.494	0.135	0.150	0.196	7800	0.308	1.87	205	214	203
70	0.268	0.342	0.342	0.130	0.145	0.191	6900	0.352	1.82	252	258	244
95	0.193	0.247	0.247	0.120	0.135	0.181	6000	0.404	1.77	303	314	287
120	0.153	0.196	0.195	0.113	0.128	0.174	5400	0.447	1.74	349	346	325
150	0.124	0.160	0.159	0.110	0.125	0.171	5000	0.486	1.72	400	389	365
185	0.0991	0.128	0.127	0.107	0.122	0.168	4600	0.530	1.69	455	435	407
240	0.0754	0.0982	0.0973	0.103	0.119	0.164	4200	0.576	1.61	536	501	466
300	0.0601	0.0792	0.0781	0.102	0.117	0.163	4000	0.597	1.49	616	562	523
400	0.0470	0.0632	0.0618	0.0982	0.113	0.159	3800	0.627	1.38	727	649	595

Cable Parameter

LIGHT DUTY

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on Each core	Nom. Diamete Over Screened Wires	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	mm	mm	kg/100m
16	4.8	2.5	11	15.9	12.4	17.9	53
25	5.8	2.5	12	17.6	13.6	19.1	65
35	6.8	2.5	13	17.6	14.5	20.0	76
50	8	2.5	14.1	17.6	15.6	21.1	90
70	9.6	2.5	15.7	17.6	17.3	22.8	110
95	11.5	2.5	17.6	17.6	18.9	24.4	140
120	13.1	2.5	19.2	17.6	20.5	26.0	160
150	14.5	2.5	20.6	17.6	21.9	27.4	190
185	16.1	2.5	22.2	17.6	23.5	29.2	230
240	18.5	2.6	24.9	17.6	26.1	31.8	290
300	20.7	2.8	27.6	17.6	29.0	34.9	350
400	23.6	3	30.9	17.6	32.1	38.2	440

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
16	1.15	1.47	1.47	0.155	0.170	0.216	11000	0.221	2.06	106	116	111
25	0.727	0.927	0.927	0.146	0.161	0.207	9700	0.248	1.99	138	148	141
35	0.524	0.668	0.668	0.142	0.157	0.203	8700	0.276	1.93	167	177	167
50	0.387	0.494	0.494	0.135	0.150	0.196	7800	0.308	1.87	209	215	200
70	0.268	0.342	0.342	0.130	0.145	0.191	6900	0.352	1.82	254	258	236
95	0.193	0.247	0.247	0.120	0.135	0.181	6000	0.404	1.77	306	312	271
120	0.153	0.196	0.195	0.113	0.128	0.174	5400	0.447	1.74	352	341	303
150	0.124	0.160	0.159	0.110	0.125	0.171	5000	0.486	1.72	398	383	334
185	0.0991	0.128	0.127	0.107	0.122	0.168	4600	0.530	1.69	449	425	362
240	0.0754	0.0982	0.0973	0.103	0.119	0.164	4200	0.576	1.61	526	484	411
300	0.0601	0.0792	0.0781	0.102	0.117	0.163	4000	0.597	1.49	600	541	453
400	0.0470	0.0632	0.0618	0.0982	0.113	0.159	3800	0.627	1.38	700	618	509

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	2.5	11	15.9	28 x 0.85	14.3	18.4	54
25	5.8	2.5	12	24.4	43 x 0.85	15.3	19.4	72
35	6.8	2.5	13	34.4	24 x 1.35	17.3	21.4	93
50	8	2.5	14.1	48.7	34 x 1.35	18.4	22.5	120
70	9.6	2.5	15.7	68.1	30 x 1.70	20.7	25	160
95	11.5	2.5	17.6	68.1	30 x 1.70	22.6	26.9	190
120	13.1	2.5	19.2	68.7	48 x 1.35	23.5	27.6	215
150	14.5	2.5	20.6	68.7	48 x 1.35	24.9	29	245
185	16.1	2.5	22.2	68.7	48 x 1.35	26.5	30.8	275
240	18.5	2.6	24.9	68.7	48 x 1.35	29.2	33.7	335
300	20.7	2.8	27.6	68.7	48 x 1.35	31.9	36.6	400
400	23.6	3	30.9	68.7	48 x 1.35	35.2	40.2	500

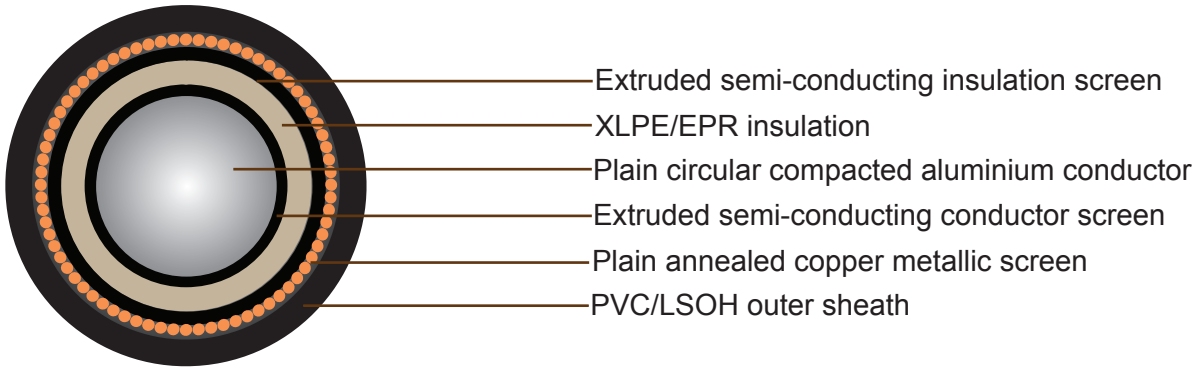
3.8/6.6kV Single Core Screened & PVC Sheathed (Al Conductor)

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	kV x mm	A	A	A
35	0.868	1.11	1.11	0.138	0.154	0.199	8700	0.278	1.92	131	139	132
50	0.641	0.821	0.821	0.135	0.15	0.196	7800	0.309	1.87	160	167	159
70	0.443	0.568	0.568	0.125	0.14	0.185	6800	0.353	1.82	196	201	192
95	0.32	0.41	0.41	0.118	0.134	0.179	6000	0.4	1.77	237	245	227
120	0.253	0.325	0.325	0.114	0.129	0.175	5500	0.439	1.74	273	270	256
150	0.206	0.265	0.264	0.111	0.126	0.171	5100	0.477	1.72	313	305	289
185	0.164	0.211	0.211	0.108	0.123	0.169	4700	0.518	1.7	356	340	320
240	0.125	0.161	0.161	0.104	0.119	0.165	4300	0.561	1.62	421	394	372
300	0.1	0.13	0.129	0.102	0.118	0.163	4100	0.582	1.5	486	444	419
400	0.0778	0.102	0.101	0.0989	0.114	0.16	3900	0.613	1.39	578	516	491

Cable Parameter

LIGHT DUTY

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on Each core	Nom. Diamete Over Screened Wires	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	mm	mm	kg/100m
35	6.9	2.5	13	17.6	14.5	20.0	54
50	8.1	2.5	14.2	17.6	15.6	21.1	60
70	9.6	2.5	15.8	17.6	17.3	22.8	69
95	11.4	2.5	17.5	17.6	19.1	24.6	80
120	12.8	2.5	18.9	17.6	20.5	26.0	89
150	14.2	2.5	20.3	17.6	21.9	27.4	99
185	15.7	2.5	21.8	17.6	23.5	29.2	114
240	18	2.6	24.3	17.6	26.1	31.8	135
300	20.1	2.8	27	17.6	29.0	34.9	160
400	23	3	30.3	17.6	32.1	38.2	200

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	kV x mm	A	A	A
35	0.868	1.11	1.11	0.138	0.154	0.199	8700	0.278	1.92	131	138	132
50	0.641	0.821	0.821	0.135	0.15	0.196	7800	0.309	1.87	160	167	158
70	0.443	0.568	0.568	0.125	0.14	0.185	6800	0.353	1.82	197	201	192
95	0.32	0.41	0.41	0.118	0.134	0.179	6000	0.4	1.77	240	245	218
120	0.253	0.325	0.325	0.114	0.129	0.175	5500	0.439	1.74	275	268	246
150	0.206	0.265	0.264	0.111	0.126	0.171	5100	0.477	1.72	314	302	273
185	0.164	0.211	0.211	0.108	0.123	0.169	4700	0.518	1.7	356	336	299
240	0.125	0.161	0.161	0.104	0.119	0.165	4300	0.561	1.62	419	386	342
300	0.1	0.13	0.129	0.102	0.118	0.163	4100	0.582	1.5	480	434	380
400	0.0778	0.102	0.101	0.0989	0.114	0.16	3900	0.613	1.39	566	501	432

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	22.7	40 x 0.85	16.3	20.4	60
50	8.1	2.5	14.2	32.9	23 x 1.35	18.5	22.6	76
70	9.6	2.5	15.8	45.8	32 x 1.35	20.1	24.2	97
95	11.4	2.5	17.5	61.5	43 x 1.35	21.8	25.9	120
120	12.8	2.5	18.9	68.7	48 x 1.35	23.2	27.3	140
150	14.2	2.5	20.3	68.7	48 x 1.35	24.6	28.7	150
185	15.7	2.5	21.8	68.7	48 x 1.35	26.1	30.4	160
240	18	2.6	24.3	68.7	48 x 1.35	28.6	33.1	185
300	20.1	2.8	27	68.7	48 x 1.35	31.3	36	210
400	23	3	30.3	68.7	48 x 1.35	34.6	39.5	245

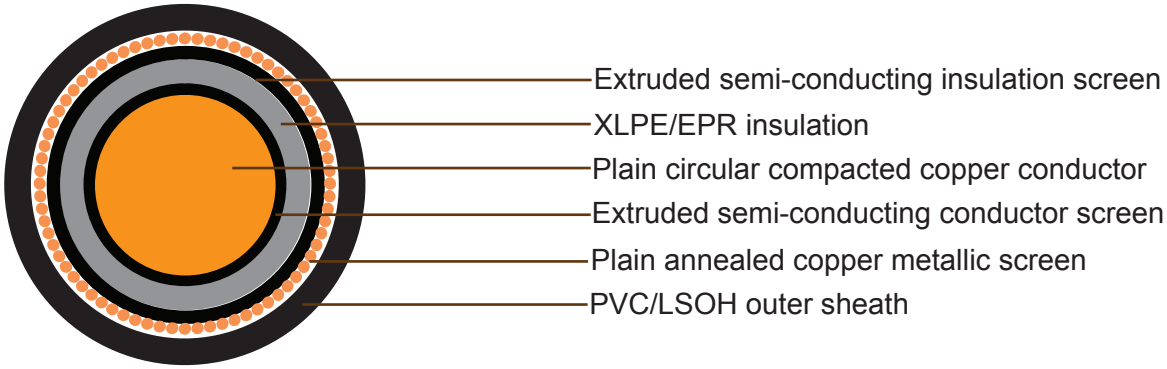
6.35/11kV Single Core Screened & PVC Sheathed (Cu Conductor)

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	kV x mm	A	A	A
16	1.15	1.47	1.47	0.161	0.176	0.222	14000	0.177	2.77	125	120	101
25	0.727	0.927	0.927	0.152	0.167	0.213	12000	0.198	2.65	163	154	129
35	0.524	0.668	0.668	0.147	0.163	0.208	11000	0.219	2.55	197	183	153
50	0.387	0.494	0.494	0.14	0.155	0.201	10000	0.242	2.46	237	216	181
70	0.268	0.342	0.342	0.135	0.15	0.196	8800	0.275	2.37	294	263	221
95	0.193	0.247	0.247	0.122	0.138	0.183	7700	0.314	2.3	359	313	264
120	0.153	0.196	0.195	0.117	0.133	0.178	7000	0.346	2.25	413	355	305
150	0.124	0.16	0.159	0.114	0.129	0.175	6400	0.374	2.21	470	397	341
185	0.0991	0.128	0.127	0.111	0.126	0.172	5900	0.407	2.17	539	447	384
240	0.0754	0.098	0.0973	0.106	0.122	0.167	5300	0.456	2.13	637	516	443
300	0.0601	0.0791	0.0781	0.104	0.119	0.165	4800	0.503	2.1	730	579	509
400	0.047	0.0631	0.0618	0.0988	0.115	0.161	4300	0.561	2.07	848	655	575
500	0.0366	0.0508	0.0489	0.097	0.112	0.158	3900	0.62	2.05	978	737	647
630	0.0283	0.0412	0.0389	0.0953	0.111	0.156	3500	0.694	2.02	1122	823	722

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	16	28 x 0.85	14.1	20.3	58
25	5.8	3.4	13.8	20	36 x 0.85	15.3	21.5	73
35	6.8	3.4	14.8	20	36 x 0.85	16.3	22.5	84
50	8	3.4	16	20	36 x 0.85	17.6	23.8	98
70	9.6	3.4	17.6	20	36 x 0.85	19.0	25.2	121
95	11.5	3.4	19.4	20	36 x 0.85	20.7	26.9	148
120	13.1	3.4	21	20	36 x 0.85	22.1	28.3	174
150	14.5	3.4	22.4	20	36 x 0.85	23.5	29.7	202
185	16.1	3.4	24.1	20	36 x 0.85	25.3	31.5	240
240	18.5	3.4	26.5	20	36 x 0.85	27.6	33.8	298
300	20.7	3.4	28.9	20	36 x 0.85	29.8	36.2	360
400	23.6	3.4	31.8	20	36 x 0.85	33.2	39.8	449
500	26.5	3.4	34.7	20	36 x 0.85	36.5	43.3	550
630	29.9	3.4	38.4	20	36 x 0.85	40.1	47.1	690

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	kV x mm	A	A	A
16	1.15	1.47	1.47	0.161	0.176	0.222	14000	0.177	2.77	125	120	101
25	0.727	0.927	0.927	0.152	0.167	0.213	12000	0.198	2.65	164	154	129
35	0.524	0.668	0.668	0.147	0.163	0.208	11000	0.219	2.55	200	184	154
50	0.387	0.494	0.494	0.14	0.155	0.201	10000	0.242	2.46	242	217	183
70	0.268	0.342	0.342	0.135	0.15	0.196	8800	0.275	2.37	298	262	221
95	0.193	0.247	0.247	0.122	0.138	0.183	7700	0.314	2.3	362	311	267
120	0.153	0.196	0.195	0.117	0.133	0.178	7000	0.346	2.25	413	351	301
150	0.124	0.16	0.159	0.114	0.129	0.175	6400	0.374	2.21	467	391	336
185	0.0991	0.128	0.127	0.111	0.126	0.172	5900	0.407	2.17	535	439	377
240	0.0754	0.098	0.0973	0.106	0.122	0.167	5300	0.456	2.13	627	503	432
300	0.0601	0.0791	0.0781	0.104	0.119	0.165	4800	0.503	2.1	715	561	493
400	0.047	0.0631	0.0618	0.0988	0.115	0.161	4300	0.561	2.07	824	630	553
500	0.0366	0.0508	0.0489	0.097	0.112	0.158	3900	0.62	2.05	943	702	616
630	0.0283	0.0412	0.0389	0.0953	0.111	0.156	3500	0.694	2.02	1072	777	681

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	15.9	28 x 0.85	16.1	20.3	59
25	5.8	3.4	13.8	24.4	43 x 0.85	17.1	21.2	78
35	6.8	3.4	14.8	34.4	24 x 1.35	19.1	23.2	99
50	8	3.4	16	48.7	34 x 1.35	20.3	24.4	125
70	9.6	3.4	17.6	68	30 x 1.70	22.6	26.9	165
95	11.5	3.4	19.4	69	48 x 1.35	23.7	27.9	195
120	13.1	3.4	21	69	48 x 1.35	25.3	29.4	225
150	14.5	3.4	22.4	69	48 x 1.35	26.7	31.1	255
185	16.1	3.4	24.1	69	48 x 1.35	28.4	32.7	285
240	18.5	3.4	26.5	69	48 x 1.35	30.8	35.3	345
300	20.7	3.4	28.9	69	48 x 1.35	33.2	37.9	410
400	23.6	3.4	31.8	69	48 x 1.35	36.3	41.2	505
500	26.5	3.4	34.7	69	48 x 1.35	39.2	44.3	605
630	29.9	3.4	38.4	69	48 x 1.35	42.9	48.7	730
800	35.9	3.4	44.5	69	48 x 1.35	49	55	925

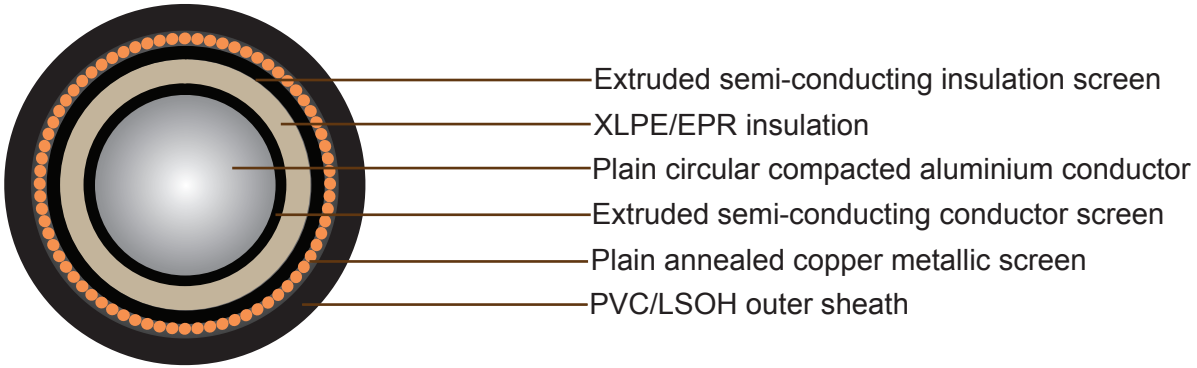
6.35/11kV Single Core Screened & PVC Sheathed (Al Conductor)

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	kV x mm	A	A	A
35	0.868	1.11	1.11	0.144	0.159	0.205	11000	0.22	2.54	153	142	119
50	0.641	0.821	0.821	0.14	0.155	0.201	9900	0.243	2.46	184	167	140
70	0.443	0.568	0.568	0.129	0.145	0.19	8700	0.276	2.37	229	204	172
95	0.32	0.41	0.41	0.123	0.138	0.184	7800	0.311	2.3	279	243	205
120	0.253	0.325	0.325	0.118	0.134	0.179	7100	0.339	2.25	322	276	237
150	0.206	0.265	0.264	0.115	0.13	0.176	6600	0.368	2.22	365	309	265
185	0.164	0.211	0.211	0.112	0.127	0.172	6100	0.398	2.18	421	349	300
240	0.125	0.161	0.161	0.107	0.123	0.168	5400	0.445	2.14	499	404	347
300	0.1	0.13	0.129	0.105	0.12	0.166	4900	0.491	2.11	572	455	399
400	0.0778	0.102	0.101	0.101	0.116	0.162	4400	0.548	2.08	669	519	456
500	0.0605	0.0803	0.079	0.097	0.112	0.158	3900	0.62	2.05	779	590	518
630	0.0469	0.0636	0.062	0.095	0.11	0.156	3500	0.695	2.02	907	669	587
800	0.0367	0.0516	0.0494	0.092	0.107	0.153	3100	0.782	2	1050	752	687

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	20	36 x 0.85	16.3	22.5	62
50	8.1	3.4	16	20	36 x 0.85	17.5	23.7	68
70	9.6	3.4	17.6	20	36 x 0.85	19.0	25.2	78
95	11.4	3.4	19.3	20	36 x 0.85	20.7	26.9	89
120	12.8	3.4	20.7	20	36 x 0.85	22.1	28.3	99
150	14.2	3.4	22.1	20	36 x 0.85	23.5	29.7	109
185	15.7	3.4	23.6	20	36 x 0.85	25.2	31.4	123
240	18	3.4	25.9	20	36 x 0.85	27.6	33.8	145
300	20.1	3.4	28.3	20	36 x 0.85	29.6	36.0	168
400	23	3.4	31.1	20	36 x 0.85	32.7	39.3	202
500	26.5	3.4	34.7	20	36 x 0.85	35.8	42.6	239
630	29.9	3.4	38.4	20	36 x 0.85	39.4	46.4	289
800	34.2	3.4	42.8	20	36 x 0.85	44.0	51.3	351

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	kV x mm	A	A	A
35	0.868	1.11	1.11	0.144	0.159	0.205	11000	0.22	2.54	153	142	119
50	0.641	0.821	0.821	0.14	0.155	0.201	9900	0.243	2.46	185	168	141
70	0.443	0.568	0.568	0.129	0.145	0.19	8700	0.276	2.37	229	204	172
95	0.32	0.41	0.41	0.123	0.138	0.184	7800	0.311	2.3	281	243	205
120	0.253	0.325	0.325	0.118	0.134	0.179	7100	0.339	2.25	323	275	236
150	0.206	0.265	0.264	0.115	0.13	0.176	6600	0.368	2.22	366	307	263
185	0.164	0.211	0.211	0.112	0.127	0.172	6100	0.398	2.18	420	346	297
240	0.125	0.161	0.161	0.107	0.123	0.168	5400	0.445	2.14	496	399	342
300	0.1	0.13	0.129	0.105	0.12	0.166	4900	0.491	2.11	567	447	392
400	0.0778	0.102	0.101	0.101	0.116	0.162	4400	0.548	2.08	659	507	445
500	0.0605	0.0803	0.079	0.097	0.112	0.158	3900	0.62	2.05	763	572	502
630	0.0469	0.0636	0.062	0.095	0.11	0.156	3500	0.695	2.02	881	644	565
800	0.0367	0.0516	0.0494	0.092	0.107	0.153	3100	0.782	2	1013	718	656

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	23	40 x 0.85	18.2	22.3	66
50	8.1	3.4	16	33	23 x 1.35	20.3	24.4	82
70	9.6	3.4	17.6	46	32 x 1.35	21.9	26	105
95	11.4	3.4	19.3	62	43 x 1.35	23.6	27.7	130
120	12.8	3.4	20.7	69	48 x 1.35	25	29.1	145
150	14.2	3.4	22.1	69	48 x 1.35	26.4	30.7	155
185	15.7	3.4	23.6	69	48 x 1.35	27.9	32.2	170
240	18	3.4	25.9	69	48 x 1.35	30.2	34.7	190
300	20.1	3.4	28.3	69	48 x 1.35	32.6	37.3	215
400	23	3.4	31.1	69	48 x 1.35	35.6	40.5	250
500	26.5	3.4	34.7	69	48 x 1.35	39.2	44.3	295
630	29.9	3.4	38.4	69	48 x 1.35	42.9	48.4	345
800	34.2	3.4	42.8	69	48 x 1.35	47.3	53	405

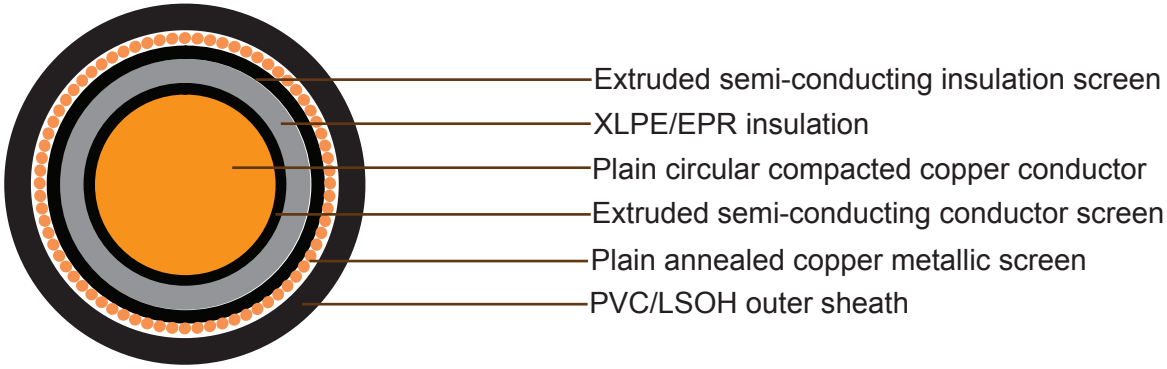
12.7/22kV Single Core Screened & PVC Sheathed (Cu Conductor)

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Rating		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	kV x mm	A	A	A
35	0.524	0.668	0.668	0.159	0.174	0.219	16000	0.156	3.63	202	183	156
50	0.387	0.494	0.494	0.151	0.166	0.212	14000	0.171	3.48	242	216	183
70	0.268	0.342	0.342	0.143	0.158	0.204	13000	0.192	3.31	299	263	227
95	0.193	0.247	0.247	0.132	0.147	0.193	11000	0.216	3.16	365	314	271
120	0.153	0.196	0.195	0.127	0.143	0.188	10000	0.236	3.07	419	355	307
150	0.124	0.159	0.159	0.123	0.138	0.184	9500	0.254	3	476	398	343
185	0.0991	0.128	0.127	0.119	0.135	0.18	8800	0.274	2.93	546	448	386
240	0.0754	0.0978	0.0972	0.115	0.13	0.176	7900	0.305	2.85	644	517	455
300	0.0601	0.0788	0.078	0.112	0.127	0.172	7200	0.334	2.79	737	581	511
400	0.047	0.0628	0.0617	0.107	0.122	0.168	6500	0.371	2.73	855	658	579
500	0.0366	0.0503	0.0488	0.104	0.119	0.165	5900	0.407	2.69	986	740	651
630	0.0283	0.0407	0.0388	0.101	0.117	0.162	5300	0.453	2.64	1132	829	758

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	20	36 x 0.85	20.1	26.3	98
50	8	5.5	20.3	20	36 x 0.85	21.4	27.6	112
70	9.6	5.5	21.9	20	36 x 0.85	22.8	29.0	135
95	11.5	5.5	23.8	20	36 x 0.85	24.5	30.7	164
120	13.1	5.5	25.3	20	36 x 0.85	25.9	32.1	191
150	14.5	5.5	26.8	20	36 x 0.85	27.3	33.5	220
185	16.1	5.5	28.4	20	36 x 0.85	29.1	35.5	260
240	18.5	5.5	30.8	20	36 x 0.85	31.4	37.8	319
300	20.7	5.5	33.2	20	36 x 0.85	33.6	40.2	383
400	23.6	5.5	36.1	20	36 x 0.85	37.0	43.8	473
500	26.5	5.5	39	20	36 x 0.85	40.3	47.3	575
630	29.9	5.5	42.7	20	36 x 0.85	43.9	51.2	720

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Rating		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	kV x mm	A	A	A
35	0.524	0.668	0.668	0.159	0.174	0.219	16000	0.156	3.63	202	183	156
50	0.387	0.494	0.494	0.151	0.166	0.212	14000	0.171	3.48	244	216	187
70	0.268	0.342	0.342	0.143	0.158	0.204	13000	0.192	3.31	301	262	226
95	0.193	0.247	0.247	0.132	0.147	0.193	11000	0.216	3.16	365	311	269
120	0.153	0.196	0.195	0.127	0.143	0.188	10000	0.236	3.07	419	351	303
150	0.124	0.159	0.159	0.123	0.138	0.184	9500	0.254	3	474	392	338
185	0.0991	0.128	0.127	0.119	0.135	0.18	8800	0.274	2.93	541	440	387
240	0.0754	0.0978	0.0972	0.115	0.13	0.176	7900	0.305	2.85	635	504	444
300	0.0601	0.0788	0.078	0.112	0.127	0.172	7200	0.334	2.79	722	563	496
400	0.047	0.0628	0.0617	0.107	0.122	0.168	6500	0.371	2.73	832	633	556
500	0.0366	0.0503	0.0488	0.104	0.119	0.165	5900	0.407	2.69	953	707	621
630	0.0283	0.0407	0.0388	0.101	0.117	0.162	5300	0.453	2.64	1083	783	716
800	0.0221	0.0341	0.0317	0.096	0.111	0.157	4600	0.528	2.58	1110	829	741
1000	0.0182	0.0246	0.024	0.0948	0.11	0.156	4000	0.597	2.54	1295	961	856
1200	0.015	0.0208	0.0201	0.0932	0.108	0.154	3700	0.646	2.51	1420	1036	921

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	34.4	24 x 1.35	23.4	27.5	115
50	8	5.5	20.3	48.7	34 x 1.35	24.6	28.7	140
70	9.6	5.5	21.9	68.7	48 x 1.35	26.2	30.5	185
95	11.5	5.5	23.8	68.7	48 x 1.35	28.1	32.4	215
120	13.1	5.5	25.3	68.7	48 x 1.35	29.6	34.1	245
150	14.5	5.5	26.8	68.7	48 x 1.35	31.1	35.6	275
185	16.1	5.5	28.4	68.7	48 x 1.35	32.7	37.4	310
240	18.5	5.5	30.8	68.7	48 x 1.35	35.1	40	375
300	20.7	5.5	33.2	68.7	48 x 1.35	37.7	42.6	440
400	23.6	5.5	36.1	68.7	48 x 1.35	40.6	46.1	535
500	26.5	5.5	39	68.7	48 x 1.35	43.5	49	640
630	29.9	5.5	42.7	68.7	48 x 1.35	47.2	53.4	765
800	35.9	5.5	48.8	68.7	48 x 1.35	53.3	59.7	965
1000	40.2	5.5	54.3	68.7	48 x 1.35	58.8	65.4	1160
1200	43.8	5.5	58.3	68.7	48 x 1.35	62.8	69.6	1360

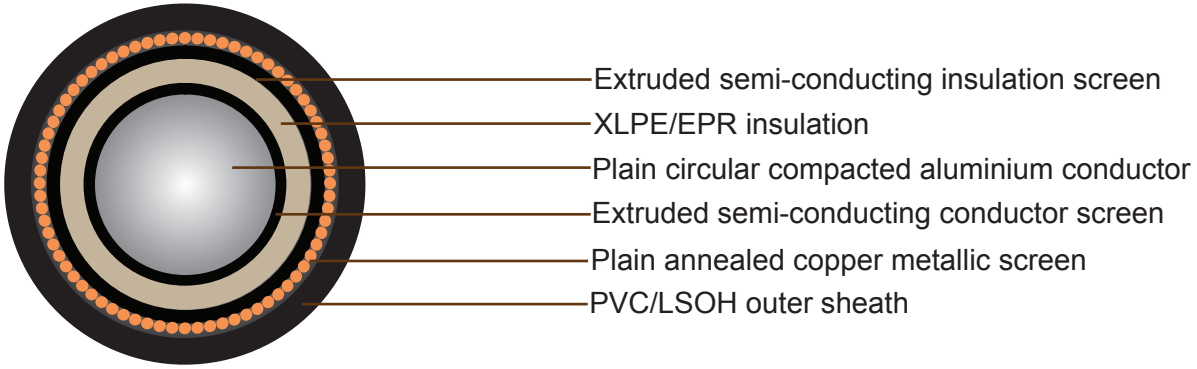
12.7/22kV Single Core Screened & PVC Sheathed (Al Conductor)

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Rating		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	kV x mm	A	A	A
35	0.868	1.11	1.11	0.156	0.171	0.217	15000	0.157	3.62	157	142	121
50	0.641	0.821	0.821	0.151	0.166	0.212	14000	0.172	3.47	187	167	142
70	0.443	0.568	0.568	0.14	0.155	0.201	13000	0.192	3.3	233	204	176
95	0.32	0.41	0.41	0.133	0.148	0.194	11000	0.214	3.17	283	244	210
120	0.253	0.325	0.325	0.128	0.143	0.189	10000	0.232	3.08	326	277	239
150	0.206	0.264	0.264	0.124	0.139	0.185	9700	0.25	3.01	370	309	267
185	0.164	0.211	0.211	0.121	0.136	0.181	9000	0.269	2.95	426	350	301
240	0.125	0.161	0.161	0.116	0.131	0.177	8100	0.298	2.87	504	405	356
300	0.1	0.129	0.129	0.113	0.128	0.173	7400	0.327	2.81	577	455	401
400	0.0778	0.102	0.101	0.108	0.123	0.169	6700	0.363	2.75	673	520	458
500	0.0605	0.08	0.079	0.104	0.119	0.165	5900	0.407	2.69	783	592	520
630	0.0469	0.0632	0.0619	0.101	0.116	0.162	5300	0.453	2.64	912	672	615
800	0.0367	0.0511	0.0493	0.0976	0.113	0.159	4800	0.507	2.59	1054	756	691
1000	0.0298	0.0391	0.0387	0.0945	0.11	0.155	4000	0.597	2.54	1194	836	764

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	20	36 x 0.85	20.1	26.3	75
50	8.1	5.5	20.3	20	36 x 0.85	21.3	27.5	82
70	9.6	5.5	21.9	20	36 x 0.85	22.8	29.0	92
95	11.4	5.5	23.6	20	36 x 0.85	24.5	30.7	104
120	12.8	5.5	25	20	36 x 0.85	25.9	32.1	115
150	14.2	5.5	26.4	20	36 x 0.85	27.3	33.5	127
185	15.7	5.5	27.9	20	36 x 0.85	29.0	35.4	143
240	18	5.5	30.3	20	36 x 0.85	31.4	37.8	166
300	20.1	5.5	32.6	20	36 x 0.85	33.4	40.0	190
400	23	5.5	35.4	20	36 x 0.85	36.5	43.3	226
500	26.5	5.5	39	20	36 x 0.85	39.6	46.6	265
630	29.9	5.5	42.7	20	36 x 0.85	43.2	50.5	317
800	34.2	5.5	47.1	20	36 x 0.85	47.8	55.3	383
1000	40.2	5.5	54.3	20	36 x 0.85	51.9	59.4	454

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Rating		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	kV x mm	A	A	A
35	0.868	1.11	1.11	0.156	0.171	0.217	15000	0.157	3.62	157	142	121
50	0.641	0.821	0.821	0.151	0.166	0.212	14000	0.172	3.47	188	168	142
70	0.443	0.568	0.568	0.14	0.155	0.201	13000	0.192	3.3	235	204	177
95	0.32	0.41	0.41	0.133	0.148	0.194	11000	0.214	3.17	286	243	210
120	0.253	0.325	0.325	0.128	0.143	0.189	10000	0.232	3.08	327	275	237
150	0.206	0.264	0.264	0.124	0.139	0.185	9700	0.25	3.01	370	307	265
185	0.164	0.211	0.211	0.121	0.136	0.181	9000	0.269	2.95	425	346	305
240	0.125	0.161	0.161	0.116	0.131	0.177	8100	0.298	2.87	501	399	351
300	0.1	0.129	0.129	0.113	0.128	0.173	7400	0.327	2.81	571	447	394
400	0.0778	0.102	0.101	0.108	0.123	0.169	6700	0.363	2.75	663	508	447
500	0.0605	0.08	0.079	0.104	0.119	0.165	5900	0.407	2.69	768	574	505
630	0.0469	0.0632	0.0619	0.101	0.116	0.162	5300	0.453	2.64	886	647	592
800	0.0367	0.0511	0.0493	0.0976	0.113	0.159	4800	0.507	2.59	1019	722	660
1000	0.0298	0.0391	0.0387	0.0945	0.11	0.155	4000	0.597	2.54	1146	793	724
1200	0.0247	0.0328	0.0323	0.093	0.108	0.154	3700	0.646	2.51	1248	869	763

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	22.7	40 x 0.85	22.5	26.6	81
50	8.1	5.5	20.3	32.9	23 x 1.35	24.6	28.7	98
70	9.6	5.5	21.9	45.8	32 x 1.35	26.2	30.5	120
95	11.4	5.5	23.6	61.5	43 x 1.35	27.9	32.2	150
120	12.8	5.5	25	68.7	48 x 1.35	29.3	33.8	170
150	14.2	5.5	26.4	68.7	48 x 1.35	30.7	35.2	180
185	15.7	5.5	27.9	68.7	48 x 1.35	32.2	36.9	195
240	18	5.5	30.3	68.7	48 x 1.35	34.6	39.5	220
300	20.1	5.5	32.6	68.7	48 x 1.35	37.1	42	245
400	23	5.5	35.4	68.7	48 x 1.35	39.9	45.2	280
500	26.5	5.5	39	68.7	48 x 1.35	43.5	49	325
630	29.9	5.5	42.7	68.7	48 x 1.35	47.2	53.1	380
800	34.2	5.5	47.1	68.7	48 x 1.35	51.6	57.7	445
1000	40.2	5.5	54.3	68.7	48 x 1.35	58.8	65.1	540
1200	43.8	5.5	58.3	68.7	48 x 1.35	62.8	69.3	620

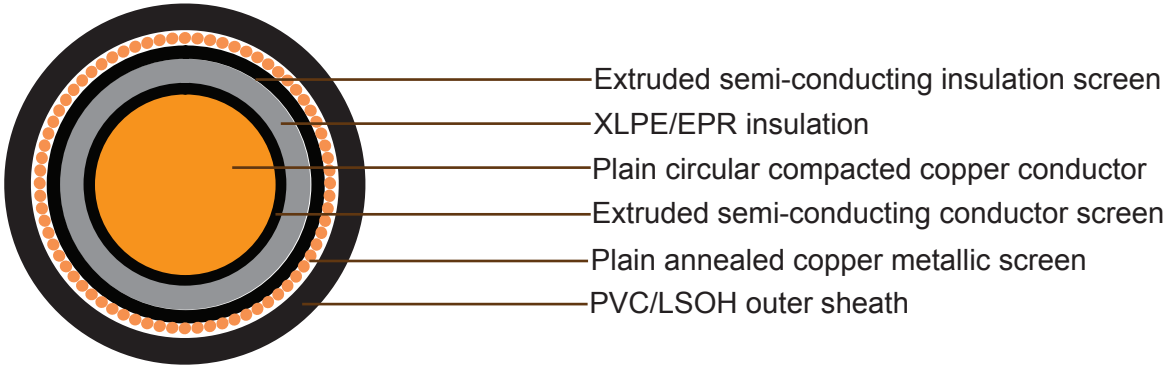
19/33kV Single Core Screened & PVC Sheathed (Cu Conductor)

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	kV x mm	A	A	A
50	0.387	0.494	0.494	0.163	0.178	0.224	18000	0.133	4.05	246	216	188
70	0.268	0.342	0.342	0.154	0.169	0.215	16000	0.148	3.82	304	263	228
95	0.193	0.247	0.247	0.143	0.158	0.204	15000	0.165	3.61	370	314	272
120	0.153	0.195	0.195	0.137	0.153	0.198	14000	0.179	3.48	425	356	315
150	0.124	0.159	0.159	0.133	0.148	0.194	13000	0.191	3.38	482	398	352
185	0.0991	0.127	0.127	0.129	0.144	0.19	12000	0.205	3.29	552	448	396
240	0.0754	0.0976	0.0972	0.124	0.139	0.185	11000	0.227	3.17	650	518	458
300	0.0601	0.0786	0.0779	0.12	0.135	0.181	9800	0.247	3.09	743	582	514
400	0.047	0.0625	0.0616	0.115	0.13	0.176	8900	0.272	3	861	660	582
500	0.0366	0.0499	0.0487	0.111	0.126	0.172	8100	0.297	2.93	993	744	682
630	0.0283	0.0403	0.0387	0.108	0.123	0.169	7300	0.329	2.86	1139	835	764

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
50	8	8	25.5	20	36 x 0.85	26.2	32.4	133
70	9.6	8	27.1	20	36 x 0.85	27.6	33.8	157
95	11.5	8	29	20	36 x 0.85	29.3	35.7	188
120	13.1	8	30.6	20	36 x 0.85	30.7	37.1	216
150	14.5	8	32	20	36 x 0.85	32.1	38.7	247
185	16.1	8	33.6	20	36 x 0.85	33.9	40.5	288
240	18.5	8	36	20	36 x 0.85	36.2	43.0	350
300	20.7	8	38.4	20	36 x 0.85	38.4	45.4	416
400	23.6	8	41.3	20	36 x 0.85	41.8	49.1	510
500	26.5	8	44.2	20	36 x 0.85	45.1	52.6	615
630	29.9	8	47.9	20	36 x 0.85	48.7	56.4	760

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	kV x mm	A	A	A
50	0.387	0.494	0.494	0.163	0.178	0.224	18000	0.133	4.05	248	216	188
70	0.268	0.342	0.342	0.154	0.169	0.215	16000	0.148	3.82	305	262	227
95	0.193	0.247	0.247	0.143	0.158	0.204	15000	0.165	3.61	370	311	276
120	0.153	0.195	0.195	0.137	0.153	0.198	14000	0.179	3.48	424	352	311
150	0.124	0.159	0.159	0.133	0.148	0.194	13000	0.191	3.38	479	392	347
185	0.0991	0.127	0.127	0.129	0.144	0.19	12000	0.205	3.29	547	441	389
240	0.0754	0.0976	0.0972	0.124	0.139	0.185	11000	0.227	3.17	641	506	447
300	0.0601	0.0786	0.0779	0.12	0.135	0.181	9800	0.247	3.09	729	565	499
400	0.047	0.0625	0.0616	0.115	0.13	0.176	8900	0.272	3	840	636	583
500	0.0366	0.0499	0.0487	0.111	0.126	0.172	8100	0.297	2.93	961	711	651
630	0.0283	0.0403	0.0387	0.108	0.123	0.169	7300	0.329	2.86	1094	790	723
800	0.0221	0.0336	0.0315	0.102	0.117	0.163	6300	0.381	2.78	1103	838	748
1000	0.0182	0.0245	0.024	0.1	0.115	0.161	5600	0.427	2.72	1300	966	880
1200	0.015	0.0207	0.0201	0.0984	0.114	0.159	5200	0.461	2.68	1426	1043	948

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
50	8	8	25.5	48.7	34 x 1.35	29.8	34.3	170
70	9.6	8	27.1	68.7	48 x 1.35	31.4	36.1	215
95	11.5	8	29	68.7	48 x 1.35	33.3	38	245
120	13.1	8	30.6	68.7	48 x 1.35	34.9	39.8	280
150	14.5	8	32	68.7	48 x 1.35	36.5	41.4	310
185	16.1	8	33.6	68.7	48 x 1.35	38.1	43.2	345
240	18.5	8	36	68.7	48 x 1.35	40.5	45.9	410
300	20.7	8	38.4	68.7	48 x 1.35	42.9	48.4	475
400	23.6	8	41.3	68.7	48 x 1.35	45.8	51.5	575
500	26.5	8	44.2	68.7	48 x 1.35	48.7	54.9	685
630	29.9	8	47.9	68.7	48 x 1.35	52.4	58.8	815
800	35.9	8	54	68.7	48 x 1.35	58.5	65.3	1020
1000	40.2	8	59.5	68.7	48 x 1.35	64	71	1220
1200	43.8	8	63.5	68.7	48 x 1.35	68	75.2	1420

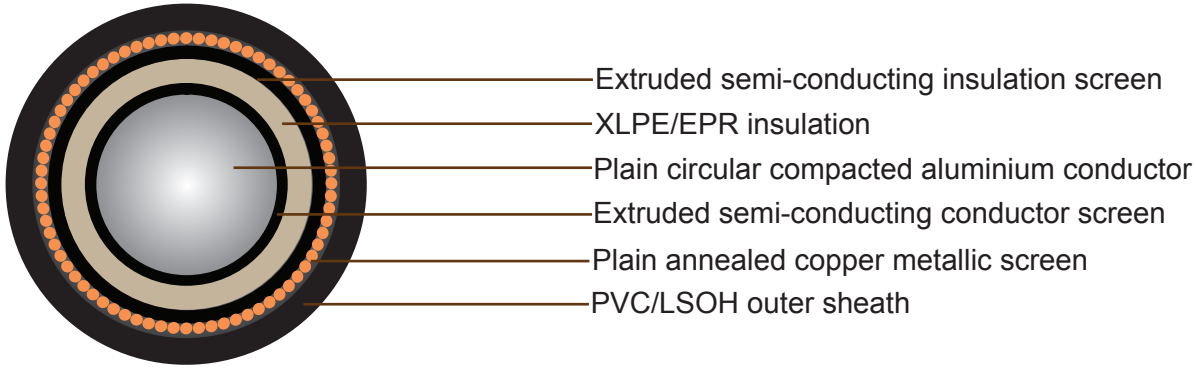
19/33kV Single Core Screened & PVC Sheathed (Al Conductor)

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

METALLIC SCREEN: Plain annealed copper wire: 10kA for nominal 1 second

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	kV x mm	A	A	A
50	0.641	0.821	0.821	0.163	0.178	0.223	18000	0.134	4.04	190	167	146
70	0.443	0.568	0.568	0.151	0.166	0.212	16000	0.148	3.81	236	204	177
95	0.32	0.41	0.41	0.143	0.159	0.204	15000	0.164	3.62	287	244	211
120	0.253	0.325	0.325	0.138	0.154	0.199	14000	0.176	3.5	330	277	245
150	0.206	0.264	0.264	0.134	0.149	0.195	13000	0.189	3.4	374	309	274
185	0.164	0.211	0.211	0.13	0.145	0.191	12000	0.202	3.31	430	350	309
240	0.125	0.161	0.161	0.125	0.14	0.186	11000	0.222	3.2	508	405	358
300	0.1	0.129	0.129	0.121	0.136	0.182	10000	0.242	3.11	581	456	402
400	0.0778	0.101	0.101	0.116	0.131	0.177	9100	0.267	3.02	677	521	459
500	0.0605	0.0797	0.0789	0.111	0.126	0.172	8100	0.297	2.93	787	593	544
630	0.0469	0.0629	0.0618	0.108	0.123	0.168	7300	0.329	2.86	914	674	617
800	0.0367	0.0507	0.0492	0.104	0.119	0.165	6600	0.366	2.8	1057	759	694
1000	0.0298	0.039	0.0387	0.1	0.115	0.161	5600	0.427	2.72	1197	841	768

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
50	8.1	8	25.6	20	36 x 0.85	26.1	32.3	103
70	9.6	8	27.2	20	36 x 0.85	27.6	33.8	114
95	11.4	8	28.9	20	36 x 0.85	29.3	35.7	128
120	12.8	8	30.3	20	36 x 0.85	30.7	37.1	140
150	14.2	8	31.7	20	36 x 0.85	32.1	38.7	154
185	15.7	8	33.2	20	36 x 0.85	33.8	40.4	171
240	18	8	35.5	20	36 x 0.85	36.2	43	197
300	20.1	8	37.8	20	36 x 0.85	38.2	45.2	223
400	23	8	40.7	20	36 x 0.85	41.3	48.6	261
500	26.5	8	44.2	20	36 x 0.85	44.4	51.9	304
630	29.9	8	48	20	36 x 0.85	48	55.7	358
800	34.2	8	52.3	20	36 x 0.85	52.6	60.5	428
1000	40.2	8	59.5	21	37 x 0.85	56.7	64.6	505

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 and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Maximum diaelectric stress	Current Ratings		
		Trefoil or Flat touching	flat spaced	Trefoil touching	flat touching	flat spaced				Unenclosed In Air	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	kV x mm	A	A	A
50	0.641	0.821	0.821	0.163	0.178	0.223	18000	0.134	4.04	191	168	146
70	0.443	0.568	0.568	0.151	0.166	0.212	16000	0.148	3.81	238	204	178
95	0.32	0.41	0.41	0.143	0.159	0.204	15000	0.164	3.62	288	243	215
120	0.253	0.325	0.325	0.138	0.154	0.199	14000	0.176	3.5	331	275	244
150	0.206	0.264	0.264	0.134	0.149	0.195	13000	0.189	3.4	374	307	272
185	0.164	0.211	0.211	0.13	0.145	0.191	12000	0.202	3.31	429	346	306
240	0.125	0.161	0.161	0.125	0.14	0.186	11000	0.222	3.2	505	400	353
300	0.1	0.129	0.129	0.121	0.136	0.182	10000	0.242	3.11	575	448	395
400	0.0778	0.101	0.101	0.116	0.131	0.177	9100	0.267	3.02	668	509	449
500	0.0605	0.0797	0.0789	0.111	0.126	0.172	8100	0.297	2.93	772	576	528
630	0.0469	0.0629	0.0618	0.108	0.123	0.168	7300	0.329	2.86	891	650	595
800	0.0367	0.0507	0.0492	0.104	0.119	0.165	6600	0.366	2.8	1023	726	663
1000	0.0298	0.039	0.0387	0.1	0.115	0.161	5600	0.427	2.72	1152	799	728
1200	0.0247	0.0327	0.0323	0.0981	0.113	0.159	5200	0.461	2.68	1200	873	794

Cable Parameter

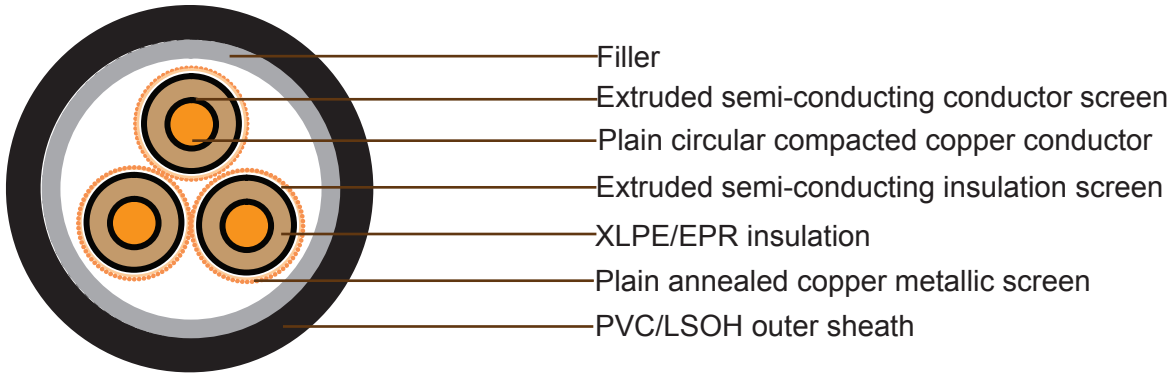
HEAVY DUTY

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
50	8.1	8	25.6	32.9	23 x 1.35	29.9	34.4	125
70	9.6	8	27.2	45.8	32 x 1.35	31.5	36.2	150
95	11.4	8	28.9	61.5	43 x 1.35	33.2	37.9	180
120	12.8	8	30.3	68.7	48 x 1.35	34.6	39.5	200
150	14.2	8	31.7	68.7	48 x 1.35	36.2	41.1	215
185	15.7	8	33.2	68.7	48 x 1.35	37.7	42.8	230
240	18	8	35.5	68.7	48 x 1.35	40	45.1	255
300	20.1	8	37.8	68.7	48 x 1.35	42.3	47.8	285
400	23	8	40.7	68.7	48 x 1.35	45.2	50.9	320
500	26.5	8	44.2	68.7	48 x 1.35	48.7	54.6	370
630	29.9	8	48	68.7	48 x 1.35	52.5	58.6	430
800	34.2	8	52.3	68.7	48 x 1.35	56.8	63.4	500
1000	40.2	8	59.5	68.7	48 x 1.35	64	70.8	600
1200	43.8	8	63.5	68.7	48 x 1.35	68	75	680

3.8/6.6kV 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	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
16	1.15	1.47	0.134	11000	0.221	2.06	100	115	95
25	0.727	0.927	0.127	9700	0.248	1.99	129	147	122
35	0.524	0.668	0.12	8700	0.276	1.93	156	176	150
50	0.387	0.494	0.115	7800	0.308	1.87	193	213	176
70	0.268	0.342	0.109	6900	0.352	1.82	238	247	225
95	0.193	0.247	0.101	6000	0.404	1.77	284	304	253
120	0.153	0.196	0.0969	5400	0.447	1.74	329	345	289
150	0.124	0.16	0.0942	5000	0.486	1.72	375	392	325
185	0.0991	0.128	0.0917	4600	0.53	1.69	426	436	373
240	0.0754	0.0986	0.089	4200	0.576	1.61	497	501	422
300	0.0601	0.0798	0.0879	4000	0.597	1.49	567	567	479

Cable Parameter

LIGHT DUTY

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on Each core	Nom. Diamete Over Screened Wires	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	mm	mm	kg/100m
16	4.8	2.5	11	5.7	12.4	34.6	120
25	5.8	2.5	12	6.2	13.6	37.3	154
35	6.8	2.5	13	6.8	14.5	39.5	190
50	8	2.5	14.1	6.8	15.6	42.1	231
70	9.6	2.5	15.7	7.9	17.3	45.9	302
95	11.5	2.5	17.6	8.5	18.9	49.6	387
120	13.1	2.5	19.2	9.1	20.5	53.2	467
150	14.5	2.5	20.6	9.6	21.9	56.4	554
185	16.1	2.5	22.2	10.2	23.5	60.1	669
240	18.5	2.6	24.9	10.8	26.1	66.2	859
300	20.7	2.8	27.6	11.9	29.0	72.7	1059

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	Buried Direct	Buried In Ducts (c)
mm	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
16	1.15	1.47	0.134	11000	0.221	2.06	100	115	95
25	0.727	0.927	0.127	9700	0.248	1.99	129	147	120
35	0.524	0.668	0.12	8700	0.276	1.93	156	176	147
50	0.387	0.494	0.115	7800	0.308	1.87	193	213	176
70	0.268	0.342	0.109	6900	0.352	1.82	238	247	225
95	0.193	0.247	0.101	6000	0.404	1.77	284	304	253
120	0.153	0.196	0.0969	5400	0.447	1.74	329	345	289
150	0.124	0.16	0.0942	5000	0.486	1.72	375	392	325
185	0.0991	0.128	0.0917	4600	0.53	1.69	426	436	373
240	0.0754	0.0986	0.089	4200	0.576	1.61	497	501	430
300	0.0601	0.0798	0.0879	4000	0.597	1.49	559	567	488
400	0.047	0.064	0.0852	3800	0.627	1.38	612	634	532

Cable Parameter

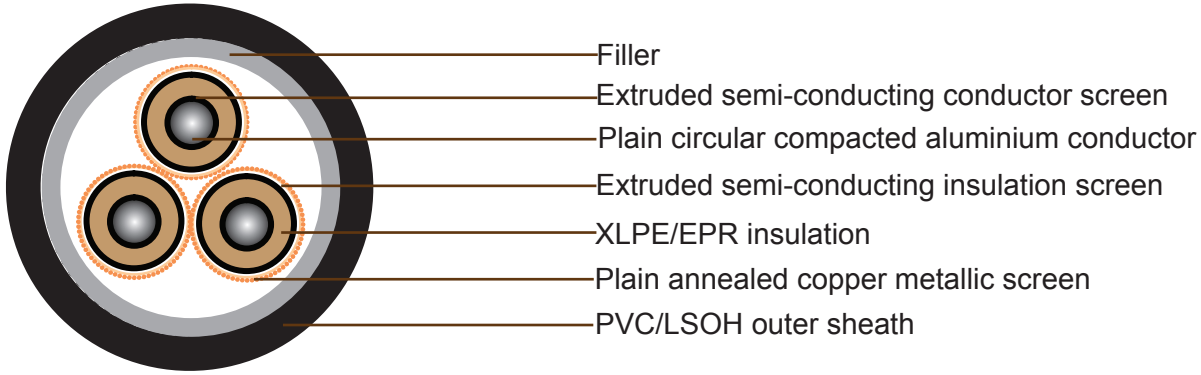
HEAVY DUTY

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	2.5	11	5.7	10 x 0.85	14.3	35.6	130
25	5.8	2.5	12	8.5	15 x 0.85	15.3	37.9	170
35	6.8	2.5	13	11.3	20 x 0.85	16.3	40.3	215
50	8	2.5	14.1	16.5	29 x 0.85	17.4	43	275
70	9.6	2.5	15.7	22.7	40 x 0.85	19	46.7	360
95	11.5	2.5	17.6	22.7	40 x 0.85	20.9	51.1	455
120	13.1	2.5	19.2	22.7	40 x 0.85	22.5	54.8	545
150	14.5	2.5	20.6	22.7	40 x 0.85	23.9	58.2	630
185	16.1	2.5	22.2	22.7	40 x 0.85	25.5	61.8	735
240	18.5	2.6	24.9	22.7	40 x 0.85	28.2	67.9	930
300	20.7	2.8	27.6	22.7	40 x 0.85	30.9	74.3	1130
400	23.6	3	30.9	22.7	40 x 0.85	34.2	81.8	1440

3.8/6.6kV 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	Buried Direct	Buried In Ducts (c)
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	Nom. Diamete Over Screened Wires	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	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	Buried Direct	Buried In Ducts (c)
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	493	500	420

Cable Parameter

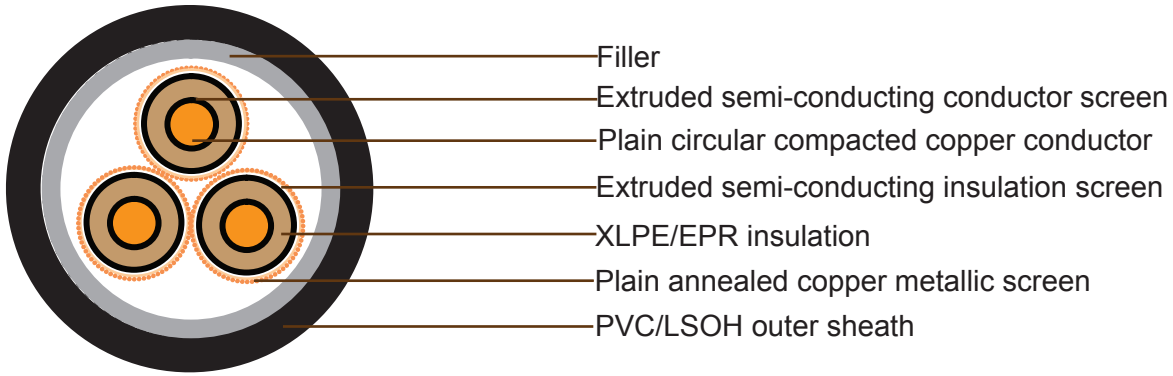
HEAVY DUTY

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	Buried Direct	Buried In Ducts (c)
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	Buried Direct	Buried In Ducts (c)
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	779	710	597

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)

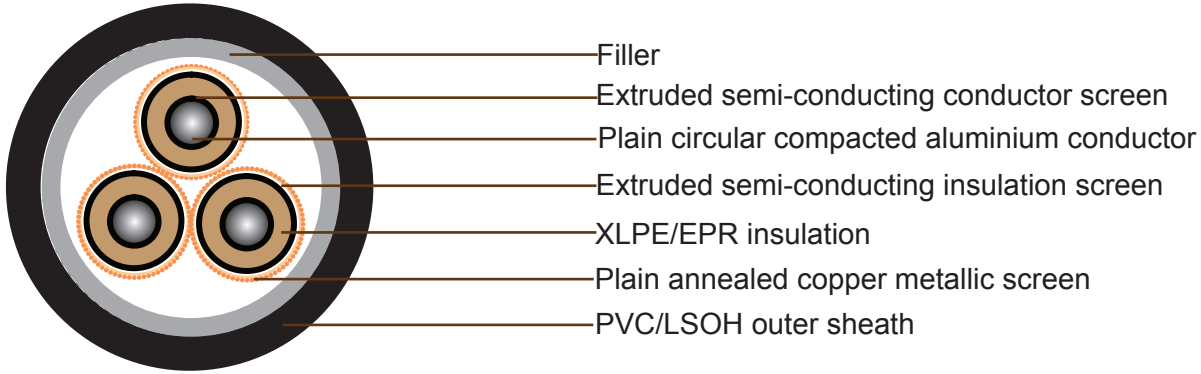
Application

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	Buried Direct	Buried In Ducts (c)
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	Buried Direct	Buried In Ducts (c)
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

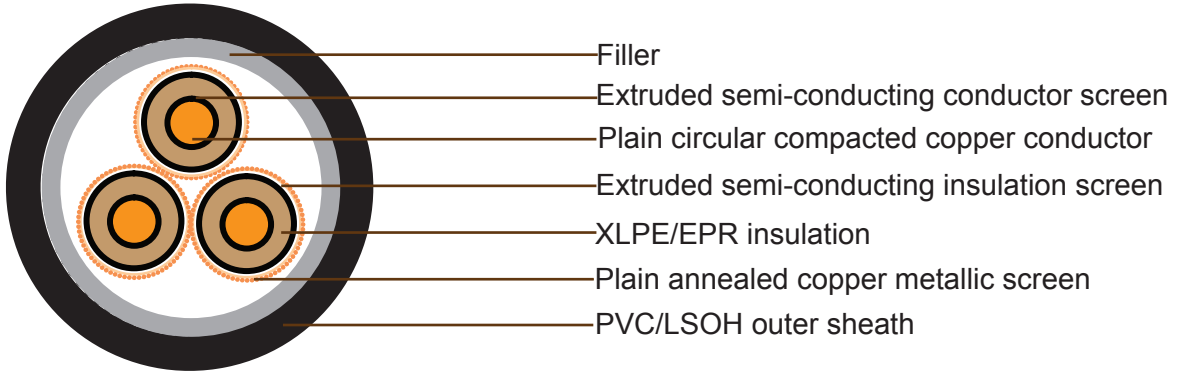
HEAVY DUTY

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	Buried Direct	Buried In Ducts (c)
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	Buried Direct	Buried In Ducts (c)
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	645	558	474
400	0.047	0.0633	0.0944	6500	0.371	2.73	743	634	539
500	0.0373	0.0518	0.0915	5900	0.407	2.69	851	710	624

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)

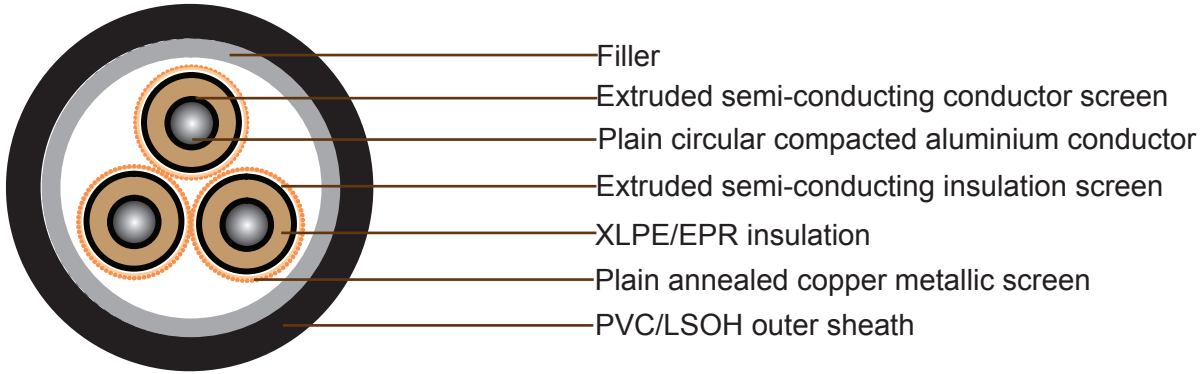
Application

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	Buried Direct	Buried In Ducts (c)
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	Buried Direct	Buried In Ducts (c)
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	478	437	369
400	0.0778	0.102	0.0951	6700	0.363	2.75	553	501	423
500	0.0617	0.0819	0.0915	5900	0.407	2.69	638	568	797

Cable Parameter

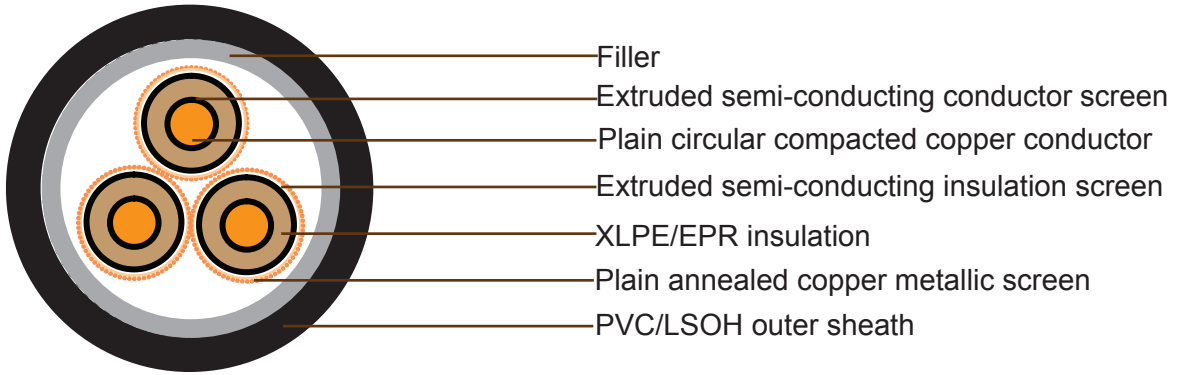
HEAVY DUTY

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

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	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
50	0.387	0.494	0.147	18000	0.133	4.05	212	200	173
70	0.268	0.342	0.139	16000	0.148	3.82	262	244	211
95	0.193	0.247	0.128	15000	0.165	3.61	317	292	256
120	0.153	0.196	0.123	14000	0.179	3.48	364	331	290
150	0.124	0.159	0.12	13000	0.191	3.38	411	372	325

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
50	8	8	25.5	9.6	17 x 0.85	26.2	66.9	415
70	9.6	8	27.1	10.2	18 x 0.85	27.6	70.4	499
95	11.5	8	29	10.8	19 x 0.85	29.3	74.5	600
120	13.1	8	30.6	11.3	20 x 0.85	30.7	77.8	690
150	14.5	8	32	11.9	21 x 0.85	32.1	81.0	795

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	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
50	0.387	0.494	0.147	18000	0.133	4.05	212	200	173
70	0.268	0.342	0.139	16000	0.148	3.82	262	244	211
95	0.193	0.247	0.128	15000	0.165	3.61	317	292	256
120	0.153	0.196	0.123	14000	0.179	3.48	364	331	290
150	0.124	0.159	0.12	13000	0.191	3.38	411	372	325
185	0.0991	0.128	0.116	12000	0.205	3.29	481	430	366
240	0.0754	0.0978	0.111	11000	0.227	3.17	570	494	424
300	0.0601	0.0788	0.107	9800	0.247	3.09	651	559	478
400	0.047	0.0628	0.102	8900	0.272	3	749	633	562
500	0.0373	0.0513	0.099	8100	0.297	2.93	858	711	630

Cable Parameter

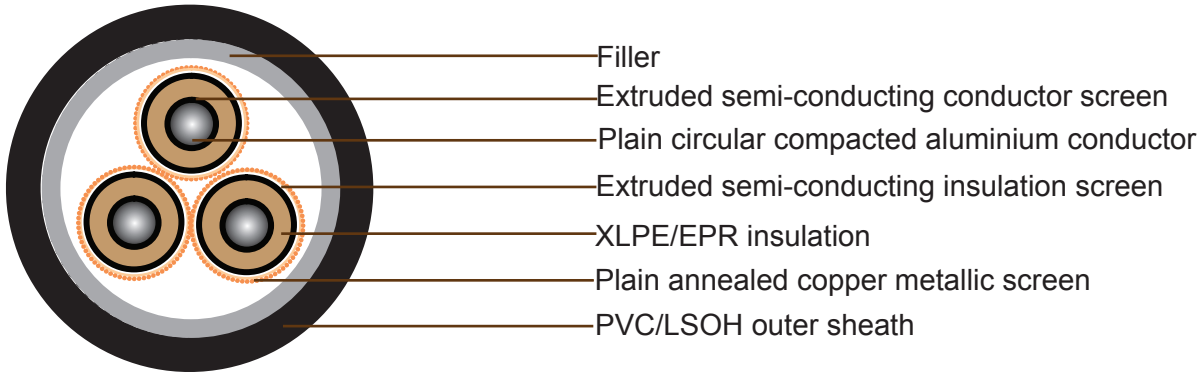
HEAVY DUTY

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
50	8	8	25.5	16.5	29 x 0.85	28.8	69.4	460
70	9.6	8	27.1	22.7	40 x 0.85	30.4	73	560
95	11.5	8	29	22.7	40 x 0.85	32.3	77.3	665
120	13.1	8	30.6	22.7	40 x 0.85	33.9	81.1	765
150	14.5	8	32	22.7	40 x 0.85	35.5	84.8	875
185	16.1	8	33.6	22.7	40 x 0.85	37.1	88.4	990
240	18.5	8	36	22.7	40 x 0.85	39.5	94.1	1190
300	20.7	8	38.4	22.7	40 x 0.85	41.9	99.4	1410
400	23.6	8	41.3	22.7	40 x 0.85	44.8	106.2	1730
500	26.5	8	44.2	22.7	40 x 0.85	47.7	112.9	2070

19/33kV 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	Buried Direct	Buried In Ducts (c)
mm	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
50	0.641	0.821	0.147	18000	0.134	4.04	164	155	134
70	0.443	0.568	0.136	16000	0.148	3.81	203	189	163
95	0.32	0.41	0.129	15000	0.164	3.62	246	226	198
120	0.253	0.325	0.124	14000	0.176	3.5	283	257	226
150	0.206	0.264	0.12	13000	0.189	3.4	319	288	252

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
50	8.1	8	25.6	9.6	17 x 0.85	26.1	66.7	322
70	9.6	8	27.2	10.2	18 x 0.85	27.6	70.4	367
95	11.4	8	28.9	10.8	19 x 0.85	29.3	74.2	418
120	12.8	8	30.3	11.3	20 x 0.85	30.7	77.5	463
150	14.2	8	31.7	11.9	21 x 0.85	32.1	80.7	510

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	Buried Direct	Buried In Ducts (c)
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF x km	kV x mm	A	A	A
50	0.641	0.821	0.147	18000	0.134	4.04	164	155	134
70	0.443	0.568	0.136	16000	0.148	3.81	203	189	163
95	0.32	0.41	0.129	15000	0.164	3.62	246	226	198
120	0.253	0.325	0.124	14000	0.176	3.5	283	257	226
150	0.206	0.264	0.12	13000	0.189	3.4	319	288	252
185	0.164	0.211	0.117	12000	0.202	3.31	365	330	284
240	0.125	0.161	0.112	11000	0.222	3.2	435	383	330
300	0.1	0.13	0.108	10000	0.242	3.11	498	431	372
400	0.0778	0.102	0.103	9100	0.267	3.02	583	499	440
500	0.0617	0.0815	0.099	8100	0.297	2.93	671	563	499

Cable Parameter

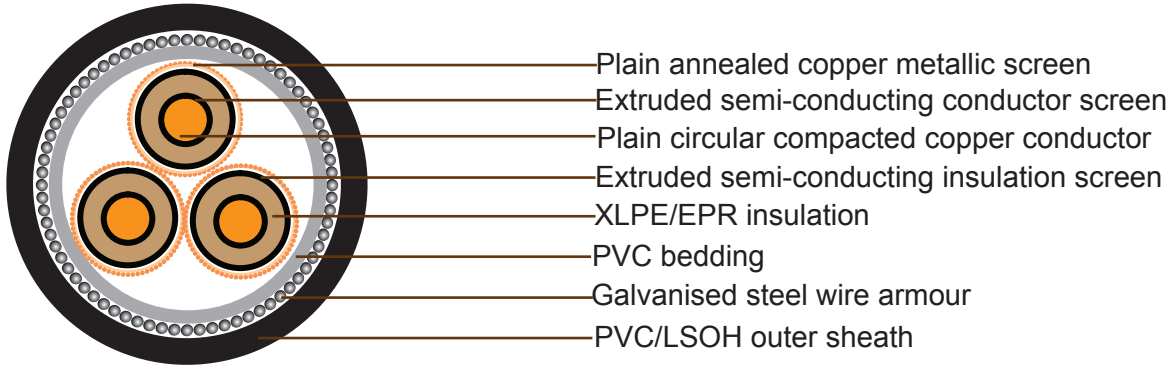
HEAVY DUTY

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
50	8.1	8	25.6	10.8	19 x 0.85	28.9	69.5	355
70	9.6	8	27.2	15.3	27 x 0.85	30.5	73.1	415
95	11.4	8	28.9	20.4	36 x 0.85	32.2	77	480
120	12.8	8	30.3	22.7	40 x 0.85	33.6	80.2	525
150	14.2	8	31.7	22.7	40 x 0.85	35.2	83.9	580
185	15.7	8	33.2	22.7	40 x 0.85	36.7	87.3	635
240	18	8	35.5	22.7	40 x 0.85	39	92.9	730
300	20.1	8	37.8	22.7	40 x 0.85	41.3	98.1	820
400	23	8	40.7	22.7	40 x 0.85	44.2	104.8	955
500	26.5	8	44.2	22.7	40 x 0.85	47.7	112.9	1120

3.8/6.6kV Three Core Individual Screened & PVC/SWA/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: 10kA for nominal 1 second(HEAVY DUTY)

BEDDING: PVC

ARMOURING: Galvanised steel wires

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

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	Charging current per phase	Dielectric loss per phrase	Maximum diaelectric stress	Screen DC resistance at 20°C	Armour DC resistance at 20°C	Zero sequence resistance at 20°C	Zero seq. react. at 50Hz
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	A x km	W x km	kV x mm	Ohm/km	Ohm/km	Ohm/km	Ohm/km
16	1.15	1.47	0.134	11000	0.221	0.263	4	2.06	1.06	0.857	2.58	0.0842
25	0.727	0.927	0.127	9700	0.248	0.296	4.5	1.99	0.706	0.811	1.86	0.077
35	0.524	0.668	0.12	8700	0.276	0.33	5.01	1.93	0.533	0.657	1.41	0.0712
50	0.387	0.494	0.115	7800	0.308	0.368	5.59	1.87	0.366	0.616	1.08	0.066
70	0.268	0.342	0.109	6900	0.352	0.42	6.39	1.82	0.265	0.559	0.807	0.0603
95	0.193	0.247	0.101	6000	0.404	0.482	7.33	1.77	0.265	0.521	0.721	0.0525
120	0.153	0.196	0.0969	5400	0.447	0.534	8.11	1.74	0.266	0.487	0.669	0.0491
150	0.124	0.16	0.0942	5000	0.486	0.58	8.81	1.72	0.265	0.458	0.629	0.0467
185	0.0991	0.128	0.0917	4600	0.53	0.632	9.61	1.69	0.265	0.431	0.593	0.0443
240	0.0754	0.0986	0.089	4200	0.576	0.687	10.4	1.61	0.266	0.307	0.504	0.0418
300	0.0601	0.0798	0.0879	4000	0.597	0.713	10.8	1.49	0.265	0.284	0.473	0.0409
400	0.047	0.064	0.0852	3800	0.627	0.749	11.4	1.38	0.265	0.257	0.44	0.0384

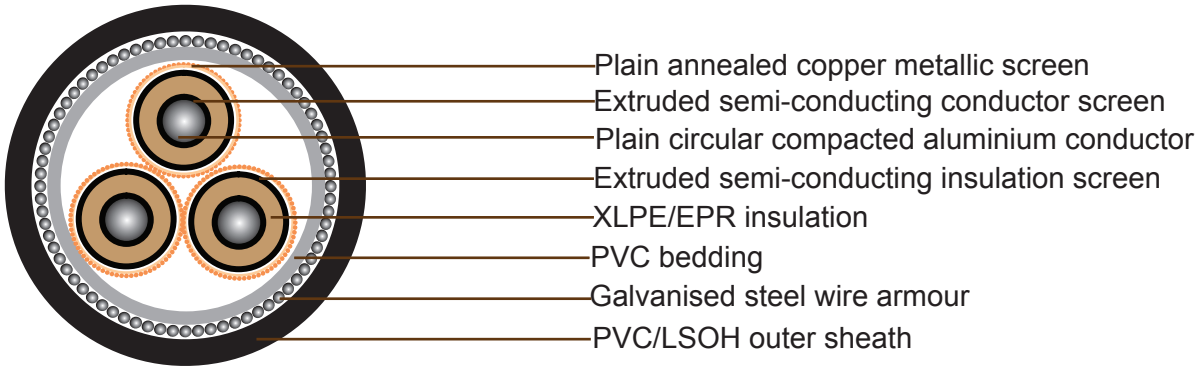
Cable Parameter

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on cores	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Diamete Over Bedding	Nom. Diamete of Armour	Nom. Diamete Over Armour	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	mm	mm	mm	kg/100m
16	4.8	2.5	11	17	10 x 0.85	14.3	34	2	38	42.6	295
25	5.8	2.5	12	25.5	15 x 0.85	15.3	36.1	2	40.1	44.9	345
35	6.8	2.5	13	34	20 x 0.85	16.3	38.5	2.5	43.5	48.7	440
50	8	2.5	14.1	49.4	29 x 0.85	17.4	41	2.5	46	51.4	515
70	9.6	2.5	15.7	68.1	40 x 0.85	19	44.6	2.5	49.6	55.2	630
95	11.5	2.5	17.6	68.1	40 x 0.85	20.9	48.9	2.5	53.9	59.7	745
120	13.1	2.5	19.2	68.1	40 x 0.85	22.5	52.3	2.5	57.3	63.3	850
150	14.5	2.5	20.6	68.1	40 x 0.85	23.9	55.7	2.5	60.7	66.9	960
185	16.1	2.5	22.2	68.1	40 x 0.85	25.5	59.4	2.5	64.4	70.8	1090
240	18.5	2.6	24.9	68.1	40 x 0.85	28.2	65.3	3.15	71.6	78.6	1410
300	20.7	2.8	27.6	68.1	40 x 0.85	30.9	71.4	3.15	77.7	85.2	1660
400	23.6	3	30.9	68.1	40 x 0.85	34.2	78.8	3.15	85.1	92.9	2030

3.8/6.6kV Three Core Individual Screened & PVC/SWA/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: 10kA for nominal 1 second(HEAVY DUTY)

BEDDING: PVC

ARMOURING: Galvanised steel wires

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

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	Charging current per phase	Dielectric loss per phrase	Maximum diaelectric stress	Screen DC resistance at 20°C	Armour DC resistance at 20°C	Zero sequence resistance at 20°C	Zero seq. react. at 50Hz
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	A x km	W x km	kV x mm	Ohm/km	Ohm/km	Ohm/km	Ohm/km
35	0.868	1.11	0.12	8700	0.278	0.332	5.04	1.92	0.761	0.643	1.91	0.0709
50	0.641	0.822	0.115	7800	0.309	0.369	5.61	1.87	0.559	0.616	1.52	0.0658
70	0.443	0.569	0.106	6800	0.353	0.422	6.41	1.82	0.393	0.559	1.14	0.0574
95	0.32	0.41	0.101	6000	0.4	0.478	7.26	1.77	0.295	0.521	0.884	0.0528
120	0.253	0.325	0.0976	5500	0.439	0.524	7.96	1.74	0.265	0.487	0.769	0.0497
150	0.206	0.265	0.0948	5100	0.477	0.569	8.66	1.72	0.266	0.465	0.714	0.0472
185	0.164	0.211	0.0923	4700	0.518	0.618	9.4	1.7	0.265	0.438	0.66	0.0449
240	0.125	0.162	0.0896	4300	0.561	0.67	10.2	1.62	0.265	0.312	0.556	0.0424
300	0.1	0.13	0.0885	4100	0.582	0.695	10.6	1.5	0.265	0.288	0.515	0.0415
400	0.0778	0.102	0.0857	3900	0.613	0.731	11.1	1.39	0.265	0.261	0.473	0.039

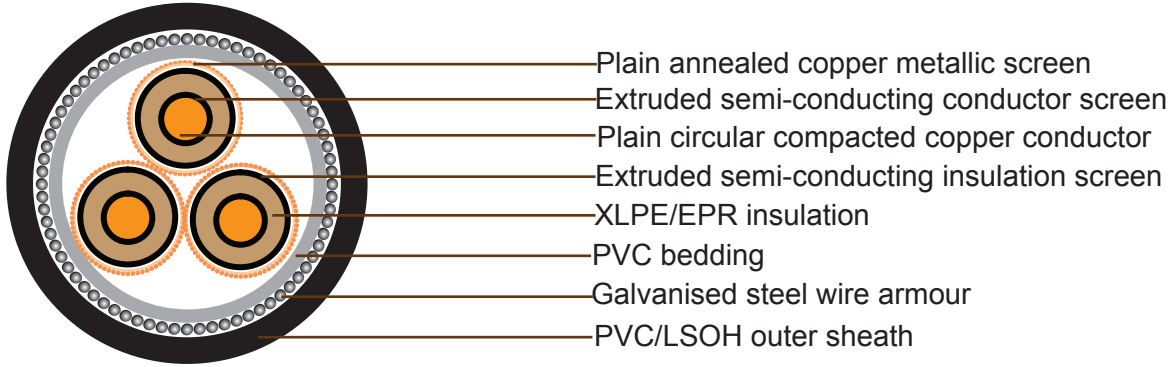
Cable Parameter

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on cores	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Diamete Over Bedding	Nom. Diamete of Armour	Nom. Diamete Over Armour	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm2	no x mm	mm	mm	mm	mm	mm	kg/100m
35	6.9	2.5	13	23.8	14 x 0.85	16.3	38.6	2.5	43.6	48.6	370
50	8.1	2.5	14.2	32.3	19 x 0.85	17.5	41.1	2.5	46.1	51.5	410
70	9.6	2.5	15.8	46	27 x 0.85	19.1	44.7	2.5	49.7	55.3	480
95	11.4	2.5	17.5	61.3	36 x 0.85	20.8	48.6	2.5	53.6	59.4	555
120	12.8	2.5	18.9	68.1	40 x 0.85	22.2	51.6	2.5	56.6	62.6	615
150	14.2	2.5	20.3	68.1	40 x 0.85	23.6	54.9	2.5	59.9	66.1	665
185	15.7	2.5	21.8	68.1	40 x 0.85	25.1	58.3	2.5	63.3	69.7	735
240	18	2.6	24.3	68.1	40 x 0.85	27.6	63.9	3.15	70.2	77.3	940
300	20.1	2.8	27	68.1	40 x 0.85	30.3	70	3.15	76.3	83.7	1070
400	23	3	30.3	68.1	40 x 0.85	33.6	77.2	3.15	83.5	91.4	1240

6.35/11kV Three Core Individual Screened & PVC/SWA/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: 10kA for nominal 1 second(HEAVY DUTY)

BEDDING: PVC

ARMOURING: Galvanised steel wires

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

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	Charging current per phase	Dielectric loss per phrase	Maximum diaelectric stress	Screen DC resistance at 20°C	Armour DC resistance at 20°C	Zero sequence resistance at 20°C	Zero seq. react. at 50Hz
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	A x km	W x km	kV x mm	Ohm/km	Ohm/km	Ohm/km	Ohm/km
16	1.15	1.47	0.142	14000	0.177	0.354	8.98	2.77	1.06	0.77	2.49	0.0922
25	0.727	0.927	0.134	12000	0.198	0.394	10	2.65	0.707	0.629	1.73	0.0845
35	0.524	0.668	0.127	11000	0.219	0.436	11.1	2.55	0.53	0.592	1.36	0.0782
50	0.387	0.494	0.121	10000	0.242	0.484	12.3	2.46	0.366	0.559	1.05	0.0725
70	0.268	0.342	0.115	8800	0.275	0.549	13.9	2.37	0.265	0.521	0.795	0.0663
95	0.193	0.247	0.106	7700	0.314	0.626	15.9	2.3	0.265	0.479	0.706	0.058
120	0.153	0.196	0.102	7000	0.346	0.689	17.5	2.25	0.265	0.451	0.655	0.0543
150	0.124	0.16	0.099	6400	0.374	0.747	19	2.21	0.266	0.425	0.616	0.0515
185	0.0991	0.128	0.0961	5900	0.407	0.811	20.6	2.17	0.265	0.403	0.58	0.0488
240	0.0754	0.0985	0.0926	5300	0.456	0.909	23.1	2.13	0.266	0.293	0.495	0.0455
300	0.0601	0.0796	0.0904	4800	0.503	1	25.5	2.1	0.265	0.272	0.464	0.0434
400	0.047	0.0638	0.087	4300	0.561	1.12	28.5	2.07	0.265	0.25	0.435	0.0403
500	0.0373	0.0525	0.0847	3900	0.62	1.24	31.4	2.05	0.265	0.232	0.411	0.0381

Cable Parameter

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on cores	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Diamete Over Bedding	Nom. Diamete of Armour	Nom. Diamete Over Armour	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	mm	mm	mm	kg/100m
16	4.8	3.4	12.8	17	10 x 0.85	16.1	37.9	2	41.9	46.9	330
25	5.8	3.4	13.8	25.5	15 x 0.85	17.1	40.2	2.5	45.2	50.4	430
35	6.8	3.4	14.8	34	20 x 0.85	18.1	42.6	2.5	47.6	53	490
50	8	3.4	16	49.4	29 x 0.85	19.3	45.1	2.5	50.1	55.7	565
70	9.6	3.4	17.6	68.1	40 x 0.85	20.9	48.8	2.5	53.8	59.6	680
95	11.5	3.4	19.4	68.1	40 x 0.85	22.7	53	2.5	58	64.1	795
120	13.1	3.4	21	68.1	40 x 0.85	24.3	56.4	2.5	61.4	67.9	910
150	14.5	3.4	22.4	68.1	40 x 0.85	25.7	59.9	2.5	64.9	71.5	1020
185	16.1	3.4	24.1	68.1	40 x 0.85	27.4	63.3	2.5	68.3	75.2	1150
240	18.5	3.4	26.5	68.1	40 x 0.85	29.8	68.8	3.15	75.1	82.3	1470
300	20.7	3.4	28.9	68.1	40 x 0.85	32.2	74.1	3.15	80.4	88	1710
400	23.6	3.4	31.8	68.1	40 x 0.85	35.3	81.2	3.15	87.5	95.5	2070
500	26.5	3.4	34.7	68.1	40 x 0.85	38.2	87.6	3.15	93.9	102.4	2450

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

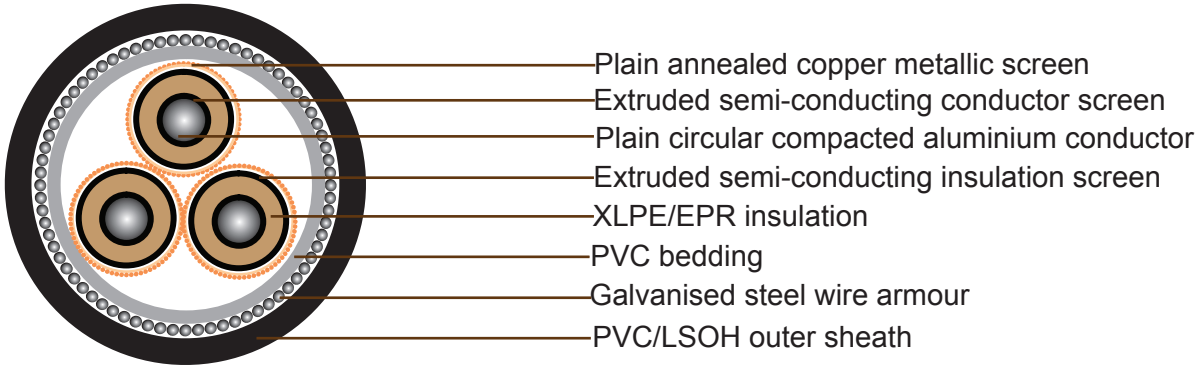
Application

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: 10kA for nominal 1 second(HEAVY DUTY)

BEDDING: PVC

ARMOURING: Galvanised steel wires

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

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	Charging current per phase	Dielectric loss per phrase	Maximum diaelectric stress	Screen DC resistance at 20°C	Armour DC resistance at 20°C	Zero sequence resistance at 20°C	Zero seq. react. at 50Hz
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	A x km	W x km	kV x mm	Ohm/km	Ohm/km	Ohm/km	Ohm/km
35	0.868	1.11	0.127	11000	0.22	0.439	11.1	2.54	0.758	0.592	1.87	0.0779
50	0.641	0.821	0.121	9900	0.243	0.486	12.3	2.46	0.559	0.559	1.48	0.0723
70	0.443	0.569	0.112	8700	0.276	0.551	14	2.37	0.393	0.521	1.12	0.0634
95	0.32	0.41	0.106	7800	0.311	0.62	15.8	2.3	0.295	0.479	0.868	0.0583
120	0.253	0.325	0.103	7100	0.339	0.677	17.2	2.25	0.265	0.458	0.757	0.0549
150	0.206	0.265	0.0996	6600	0.368	0.734	18.6	2.22	0.265	0.431	0.699	0.052
185	0.164	0.211	0.0968	6100	0.398	0.794	20.2	2.18	0.265	0.408	0.646	0.0494
240	0.125	0.161	0.0933	5400	0.445	0.887	22.5	2.14	0.266	0.297	0.546	0.0461
300	0.1	0.13	0.091	4900	0.491	0.98	24.9	2.11	0.266	0.28	0.51	0.0441
400	0.0778	0.102	0.0876	4400	0.548	1.09	27.8	2.08	0.266	0.254	0.468	0.0409
500	0.0617	0.0823	0.0847	3900	0.62	1.24	31.4	2.05	0.265	0.232	0.434	0.0381

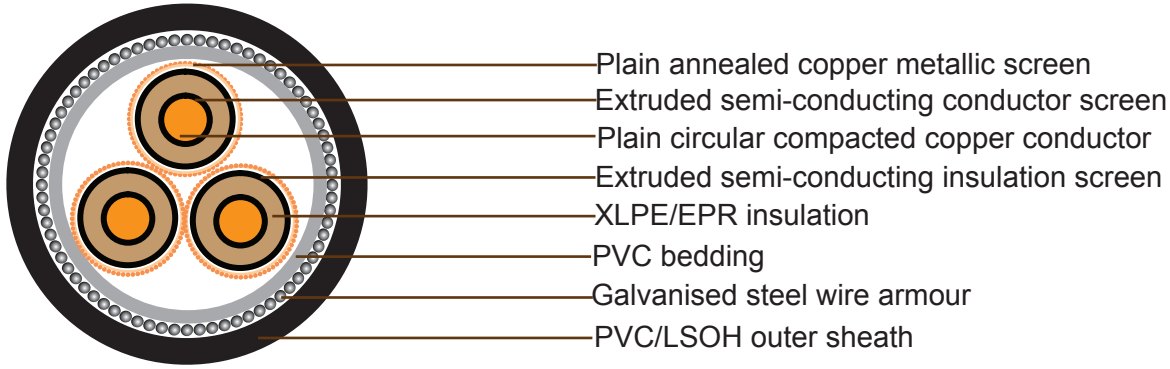
Cable Parameter

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on cores	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Diamete Over Bedding	Nom. Diamete of Armour	Nom. Diamete Over Armour	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	mm	mm	mm	kg/100m
35	6.9	3.4	14.9	23.8	14 x 0.85	18.2	42.6	2.5	47.6	53	415
50	8.1	3.4	16	32.3	19 x 0.85	19.3	45.2	2.5	50.2	55.8	460
70	9.6	3.4	17.6	46	27 x 0.85	20.9	48.9	2.5	53.9	59.7	530
95	11.4	3.4	19.3	61.3	36 x 0.85	22.6	52.8	2.5	57.8	63.8	610
120	12.8	3.4	20.7	68.1	40 x 0.85	24	55.8	2.5	60.8	67.2	675
150	14.2	3.4	22.1	68.1	40 x 0.85	25.4	59	2.5	64	70.7	730
185	15.7	3.4	23.6	68.1	40 x 0.85	26.9	62.3	2.5	67.3	74.1	800
240	18	3.4	25.9	68.1	40 x 0.85	29.2	67.4	3.15	73.7	81	990
300	20.1	3.4	28.3	68.1	40 x 0.85	31.6	72.6	3.15	78.9	86.6	1110
400	23	3.4	31.1	68.1	40 x 0.85	34.6	79.8	3.15	86.1	94.1	1290
500	26.5	3.4	34.7	68.1	40 x 0.85	38.2	87.6	3.15	93.9	102.4	1500

12.7/22kV Three Core Individual Screened & PVC PVC/SWA/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: 10kA for nominal 1 second(HEAVY DUTY)

BEDDING: PVC

ARMOURING: Galvanised steel wires

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

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	Charging current per phase	Dielectric loss per phrase	Maximum diaelectric stress	Screen DC resistance at 20°C	Armour DC resistance at 20°C	Zero sequence resistance at 20°C	Zero seq. react. at 50Hz
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	A x km	W x km	kV x mm	Ohm/km	Ohm/km	Ohm/km	Ohm/km
35	0.524	0.668	0.141	16000	0.156	0.622	31.6	3.63	0.531	0.487	1.29	0.0923
50	0.387	0.494	0.134	14000	0.171	0.682	34.7	3.48	0.367	0.465	1	0.0858
70	0.268	0.342	0.127	13000	0.192	0.765	38.9	3.31	0.265	0.438	0.763	0.0786
95	0.193	0.247	0.117	11000	0.216	0.862	43.8	3.16	0.265	0.408	0.675	0.0693
120	0.153	0.196	0.112	10000	0.236	0.942	47.8	3.07	0.265	0.302	0.577	0.0648
150	0.124	0.16	0.109	9500	0.254	1.01	51.5	3	0.266	0.288	0.54	0.0615
185	0.0991	0.128	0.105	8800	0.274	1.09	55.6	2.93	0.266	0.276	0.506	0.0582
240	0.0754	0.0981	0.101	7900	0.305	1.22	61.8	2.85	0.265	0.257	0.468	0.0542
300	0.0601	0.0792	0.0988	7200	0.334	1.33	67.8	2.79	0.265	0.241	0.44	0.0519
400	0.047	0.0633	0.0944	6500	0.371	1.48	75.1	2.73	0.265	0.224	0.413	0.0477
500	0.0373	0.0518	0.0915	5900	0.407	1.62	82.4	2.69	0.265	0.209	0.39	0.045

Cable Parameter

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on cores	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Diamete Over Bedding	Nom. Diamete of Armour	Nom. Diamete Over Armour	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	mm	mm	mm	kg/100m
35	6.8	5.5	19.1	34	20 x 0.85	22.4	52.1	2.5	57.1	63.2	610
50	8	5.5	20.3	49.4	29 x 0.85	23.6	54.8	2.5	59.8	66	685
70	9.6	5.5	21.9	68.1	40 x 0.85	25.2	58.5	2.5	63.5	70.1	810
95	11.5	5.5	23.8	68.1	40 x 0.85	27.1	62.6	2.5	67.6	74.4	935
120	13.1	5.5	25.3	68.1	40 x 0.85	28.6	66.3	3.15	72.6	79.6	1140
150	14.5	5.5	26.8	68.1	40 x 0.85	30.1	69.6	3.15	75.9	83.1	1270
185	16.1	5.5	28.4	68.1	40 x 0.85	31.7	73	3.15	79.3	87	1400
240	18.5	5.5	30.8	68.1	40 x 0.85	34.1	78.5	3.15	84.8	92.6	1640
300	20.7	5.5	33.2	68.1	40 x 0.85	36.7	84.2	3.15	90.5	98.8	1900
400	23.6	5.5	36.1	68.1	40 x 0.85	39.6	90.7	3.15	97	105.6	2260
500	26.5	5.5	39	68.1	40 x 0.85	42.5	97.1	3.15	103.4	112.5	2640

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

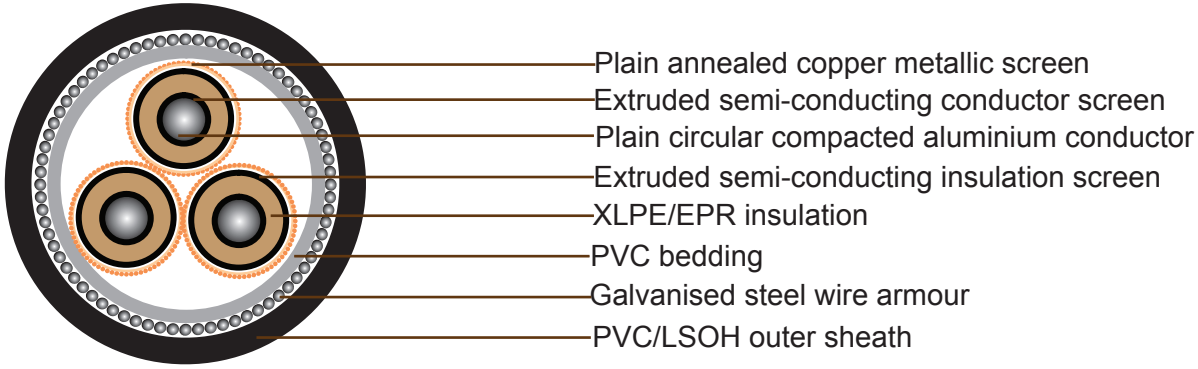
Application

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: 10kA for nominal 1 second(HEAVY DUTY)

BEDDING: PVC

ARMOURING: Galvanised steel wires

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

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	Charging current per phase	Dielectric loss per phrase	Maximum diaelectric stress	Screen DC resistance at 20°C	Armour DC resistance at 20°C	Zero sequence resistance at 20°C	Zero seq. react. at 50Hz
mm^2	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	A x km	W x km	kV x mm	Ohm/km	Ohm/km	Ohm/km	Ohm/km
35	0.868	1.11	0.14	15000	0.157	0.626	31.8	3.62	0.759	0.487	1.76	0.0919
50	0.641	0.821	0.134	14000	0.172	0.685	34.8	3.47	0.56	0.465	1.4	0.0855
70	0.443	0.568	0.124	13000	0.192	0.768	39	3.3	0.393	0.431	1.06	0.0757
95	0.32	0.41	0.117	11000	0.214	0.855	43.4	3.17	0.294	0.408	0.833	0.0697
120	0.253	0.325	0.113	10000	0.232	0.926	47	3.08	0.265	0.307	0.68	0.0657
150	0.206	0.265	0.11	9700	0.25	0.997	50.7	3.01	0.266	0.293	0.624	0.0622
185	0.164	0.211	0.106	9000	0.269	1.07	54.5	2.95	0.265	0.28	0.573	0.0591
240	0.125	0.161	0.102	8100	0.298	1.19	60.4	2.87	0.265	0.261	0.52	0.055
300	0.1	0.13	0.0996	7400	0.327	1.3	66.3	2.81	0.265	0.244	0.482	0.0527
400	0.0778	0.102	0.0951	6700	0.363	1.45	73.5	2.75	0.266	0.226	0.446	0.0484
500	0.0617	0.0819	0.0915	5900	0.407	1.62	82.4	2.69	0.265	0.209	0.414	0.045

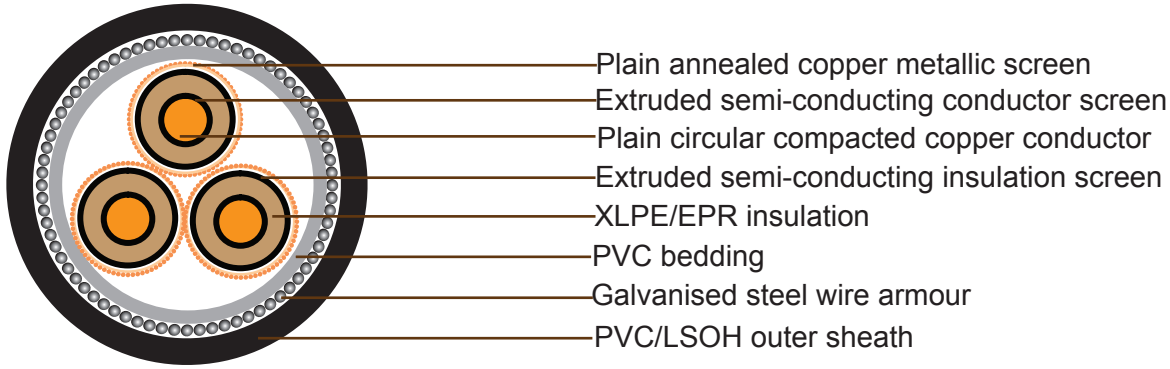
Cable Parameter

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on cores	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Diamete Over Bedding	Nom. Diamete of Armour	Nom. Diamete Over Armour	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	mm	mm	mm	kg/100m
35	6.9	5.5	19.2	23.8	14 x 0.85	22.5	52.3	2.5	57.3	63.3	535
50	8.1	5.5	20.3	32.3	19 x 0.85	23.6	54.9	2.5	59.9	66.1	585
70	9.6	5.5	21.9	46	27 x 0.85	25.2	58.6	2.5	63.6	70	665
95	11.4	5.5	23.6	61.3	36 x 0.85	26.9	62.3	2.5	67.3	74.1	750
120	12.8	5.5	25	68.1	40 x 0.85	28.3	65.5	3.15	71.8	78.8	900
150	14.2	5.5	26.4	68.1	40 x 0.85	29.7	68.7	3.15	75	82.3	975
185	15.7	5.5	27.9	68.1	40 x 0.85	31.2	72	3.15	78.3	85.9	1040
240	18	5.5	30.3	68.1	40 x 0.85	33.6	77.1	3.15	83.4	91.3	1160
300	20.1	5.5	32.6	68.1	40 x 0.85	36.1	82.8	3.15	89.1	97.3	1300
400	23	5.5	35.4	68.1	40 x 0.85	38.9	89.3	3.15	95.6	104.2	1480
500	26.5	5.5	39	68.1	40 x 0.85	42.5	97.1	3.15	103.4	112.5	1700

19/33kV Three Core Individual Screened & PVC/SWA/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: 10kA for nominal 1 second(HEAVY DUTY)

BEDDING: PVC

ARMOURING: Galvanised steel wires

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

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	Charging current per phase	Dielectric loss per phrase	Maximum diaelectric stress	Screen DC resistance at 20°C	Armour DC resistance at 20°C	Zero sequence resistance at 20°C	Zero seq. react. at 50Hz
mm	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	A x km	W x km	kV x mm	Ohm/km	Ohm/km	Ohm/km	Ohm/km
50	0.387	0.494	0.147	18000	0.133	0.796	60.5	4.05	0.366	0.302	0.884	0.0988
70	0.268	0.342	0.139	16000	0.148	0.883	67.1	3.82	0.265	0.288	0.682	0.0909
95	0.193	0.247	0.128	15000	0.165	0.984	74.8	3.61	0.265	0.272	0.596	0.0807
120	0.153	0.196	0.123	14000	0.179	1.07	81.1	3.48	0.265	0.261	0.548	0.0757
150	0.124	0.159	0.12	13000	0.191	1.14	86.8	3.38	0.266	0.247	0.509	0.0722
185	0.0991	0.128	0.116	12000	0.205	1.23	93.2	3.29	0.266	0.238	0.476	0.0685
240	0.0754	0.0978	0.111	11000	0.227	1.35	103	3.17	0.265	0.224	0.441	0.0637
300	0.0601	0.0788	0.107	9800	0.247	1.48	112	3.09	0.266	0.211	0.415	0.0605
400	0.047	0.0628	0.102	8900	0.272	1.62	123	3	0.266	0.198	0.389	0.0557
500	0.0373	0.0513	0.099	8100	0.297	1.77	135	2.93	0.265	0.215	0.395	0.0524

Cable Parameter

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on cores	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Diamete Over Bedding	Nom. Diamete of Armour	Nom. Diamete Over Armour	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	mm	mm	mm	kg/100m
50	8	8	25.5	49.4	29 x 0.85	28.8	66.5	3.15	72.8	80.1	950
70	9.6	8	27.1	68.1	40 x 0.85	30.4	70.2	3.15	76.5	83.9	1080
95	11.5	8	29	68.1	40 x 0.85	32.3	74.2	3.15	80.5	88.2	1220
120	13.1	8	30.6	68.1	40 x 0.85	33.9	78	3.15	84.3	92.1	1340
150	14.5	8	32	68.1	40 x 0.85	35.5	81.7	3.15	88	96	1490
185	16.1	8	33.6	68.1	40 x 0.85	37.1	85.2	3.15	91.5	99.9	1630
240	18.5	8	36	68.1	40 x 0.85	39.5	90.6	3.15	96.9	105.6	1880
300	20.7	8	38.4	68.1	40 x 0.85	41.9	95.9	3.15	102.2	111.3	2140
400	23.6	8	41.3	68.1	40 x 0.85	44.8	102.4	3.15	108.7	118.1	2510
500	26.5	8	44.2	68.1	40 x 0.85	47.7	109	3.15	115.3	125.2	2900

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

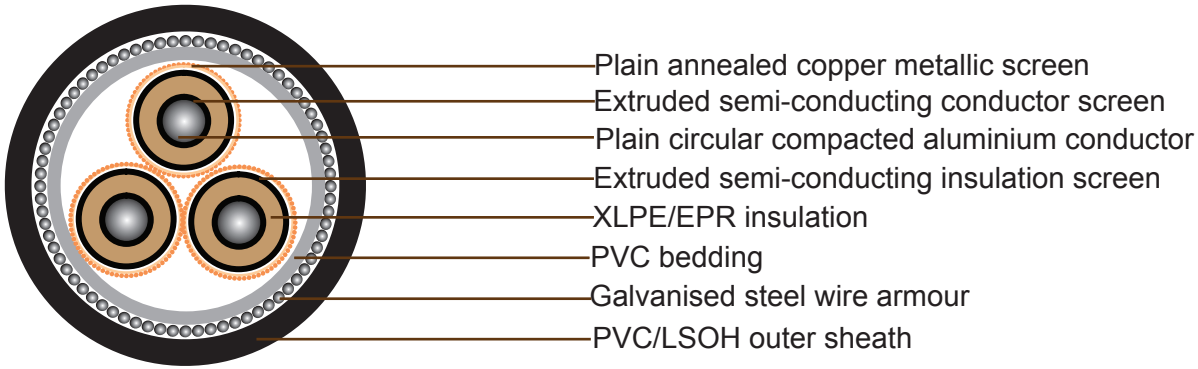
Application

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: 10kA for nominal 1 second(HEAVY DUTY)

BEDDING: PVC

ARMOURING: Galvanised steel wires

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

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	Charging current per phase	Dielectric loss per phrase	Maximum diaelectric stress	Screen DC resistance at 20°C	Armour DC resistance at 20°C	Zero sequence resistance at 20°C	Zero seq. react. at 50Hz
mm	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	A x km	W x km	kV x mm	Ohm/km	Ohm/km	Ohm/km	Ohm/km
50	0.641	0.821	0.147	18000	0.134	0.798	60.7	4.04	0.559	0.302	1.23	0.0985
70	0.443	0.568	0.136	16000	0.148	0.885	67.3	3.81	0.392	0.288	0.942	0.0879
95	0.32	0.41	0.129	15000	0.164	0.977	74.3	3.62	0.294	0.272	0.744	0.0812
120	0.253	0.325	0.124	14000	0.176	1.05	79.9	3.5	0.265	0.264	0.647	0.0766
150	0.206	0.264	0.12	13000	0.189	1.13	85.5	3.4	0.265	0.25	0.593	0.0731
185	0.164	0.211	0.117	12000	0.202	1.2	91.5	3.31	0.265	0.241	0.543	0.0694
240	0.125	0.161	0.112	11000	0.222	1.32	101	3.2	0.266	0.226	0.492	0.0647
300	0.1	0.13	0.108	10000	0.242	1.44	110	3.11	0.265	0.216	0.458	0.0614
400	0.0778	0.102	0.103	9100	0.267	1.59	121	3.02	0.265	0.202	0.423	0.0565
500	0.0617	0.0815	0.099	8100	0.297	1.77	135	2.93	0.265	0.215	0.419	0.0524

Cable Parameter

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diamete Over insulation	Screen Area on cores	No. and Diamter of Screened Wires	Nom. Diamete Over Screened Wires	Nom. Diamete Over Bedding	Nom. Diamete of Armour	Nom. Diamete Over Armour	Nom. Overall Diameter	Approx. mass
mm^2	mm	mm	mm	mm^2	no x mm	mm	mm	mm	mm	mm	kg/100m
50	8.1	8	25.6	32.3	19 x 0.85	28.9	66.6	3.15	72.9	80.2	850
70	9.6	8	27.2	46	27 x 0.85	30.5	70.3	3.15	76.6	84	935
95	11.4	8	28.9	61.3	36 x 0.85	32.2	74	3.15	80.3	87.9	1030
120	12.8	8	30.3	68.1	40 x 0.85	33.6	77.2	3.15	83.5	91.3	1100
150	14.2	8	31.7	68.1	40 x 0.85	35.2	80.9	3.15	87.2	95.2	1190
185	15.7	8	33.2	68.1	40 x 0.85	36.7	84.1	3.15	90.4	98.8	1270
240	18	8	35.5	68.1	40 x 0.85	39	89.4	3.15	95.7	104.4	1400
300	20.1	8	37.8	68.1	40 x 0.85	41.3	94.6	3.15	100.9	110	1540
400	23	8	40.7	68.1	40 x 0.85	44.2	101	3.15	107.3	116.7	1720
500	26.5	8	44.2	68.1	40 x 0.85	47.7	109	3.15	115.3	125.2	1960

Caledonian Cables Ltd

Merchant Ind. Centre
Mill-Lane, Laughton, Lewes, Sussex, BN8 6AJ
England
United Kingdom
Tel: 44- 207- 4195087
Fax: 44- 207- 8319489
Email: *sales@caledonian-cables.com*
sales@caledonian-cables.co.uk
uk@addison-tech.com
sales@addison-cables.com