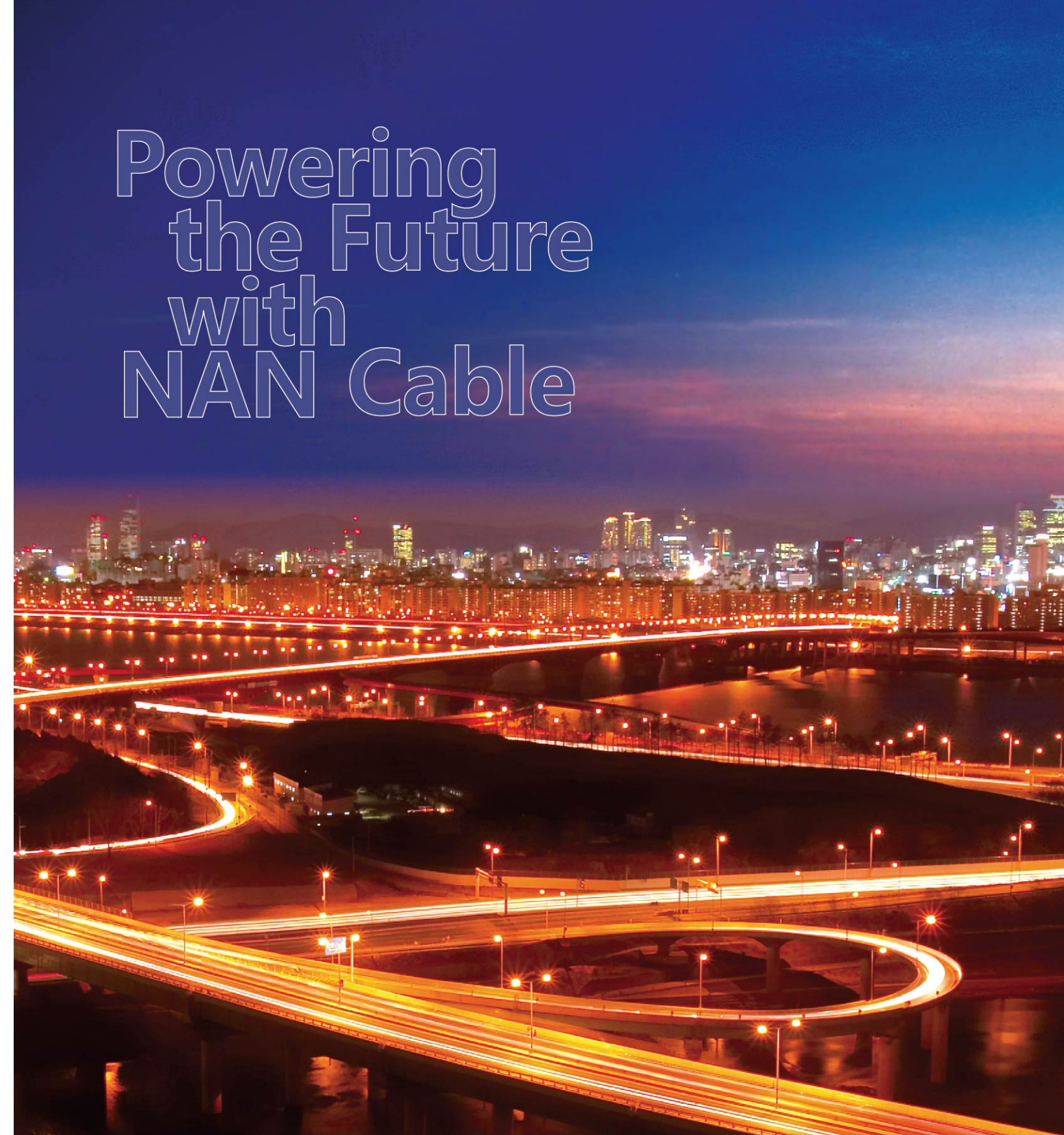


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Powering
the Future
with
NAN Cable



NAN[®]

Medium Voltage Cables

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Disclaimer:

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Persons using this information must make their own enquiries, are specifically referred to the appropriate Australian Standard and/or to the relevant local Electricity Supply Authority rulings and are solely responsible to ensure that the correct products are used for their intended applications.

NAN reserves the right to change specifications of products from time to time and at any time without notice.

Edition 2015

SINGLE CORE POWER CABLE



Single Core Power Cable



Three Core Power Cable



Three Core Armoured Cable



Three Core URD Power Cable



Three Core Triplex Power Cable

Single Core Power Cable 3.8/6.6kV

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 3.8/6.6 (7.2) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)

D = Overall diameter of cable



DESIGN

CONDUCTOR:

Stranded, round and compacted copper complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request

3.8/6.6kV Single Core Copper Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
1MV035C06HP	35	2.5	13.1	24/1.35	20.8	917.6	2.5	370	250
1MV050C06HP	50	2.5	14.3	34/1.35	22.5	1190	3.5	410	270
1MV070C06HP	70	2.5	16.1	30/1.70	25.2	1608	4.9	450	300
1MV095C06HP	95	2.5	17.7	38/1.52	26.5	1882	6.7	480	320
1MV120C06HP	120	2.5	19.2	48/1.35	28.2	2135	8.4	510	340
1MV150C06HP	150	2.5	20.7	48/1.35	29.4	2409	11	530	350
1MV185C06HP	185	2.5	22.5	48/1.35	31.3	2778	13	560	380
1MV240C06HP	240	2.6	24.9	48/1.35	33.4	3342	17	600	400
1MV300C06HP	300	2.8	27.4	48/1.35	36.1	3959	21	650	430
1MV400C06HP	400	3.0	30.7	48/1.35	39.6	4805	25	710	480

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/.km	Ω/.km	Ω/.km	MΩ.km	A/.km	W/.km	Ω/.km	Ω/.km
35	0.524	0.668	0.133	8400	0.345	5.24	1.04	0.0724
50	0.387	0.494	0.128	7500	0.385	5.86	0.759	0.0677
70	0.268	0.342	0.120	6500	0.446	6.78	0.534	0.0597
95	0.193	0.247	0.113	5800	0.499	7.59	0.456	0.0547
120	0.153	0.196	0.109	5200	0.550	8.35	0.416	0.0514
150	0.124	0.159	0.105	4800	0.600	9.12	0.388	0.0482
185	0.0991	0.128	0.102	4400	0.660	10.0	0.363	0.0454
240	0.0754	0.0981	0.0981	4100	0.708	10.8	0.341	0.0427
300	0.0601	0.0792	0.0962	4000	0.725	11.0	0.326	0.0414
400	0.0470	0.0632	0.0929	3800	0.762	11.6	0.313	0.0388

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Current rating at core temp. 90°C in underground ducts	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	A	kA	kA
35	177	178	161	5.0	5.2
50	208	214	187	7.1	7.2
70	251	268	223	10.0	10.1
95	296	321	260	13.6	10.2
120	332	367	290	17.1	10.2
150	368	413	320	21.4	10.2
185	410	469	354	26.4	10.2
240	464	542	397	34.3	10.2
300	512	612	436	42.9	10.2
400	567	696	479	57.2	10.2

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 3.8/6.6 (7.2) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)
D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



3.8/6.6kV Single Core Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
1MV050A06HP	50	2.5	14.3	23/1.35	22.1	735.5	2.5	400	270
1MV070A06HP	70	2.5	16.1	32/1.35	24.0	957.7	3.5	430	290
1MV095A06HP	95	2.5	17.7	43/1.35	26.2	1216	4.8	470	310
1MV120A06HP	120	2.5	19.2	48/1.35	27.8	1385	6.0	500	330
1MV150A06HP	150	2.5	20.7	48/1.35	29.4	1493	7.5	530	350
1MV185A06HP	185	2.5	22.5	48/1.35	31.3	1637	9.3	560	380
1MV240A06HP	240	2.6	24.9	48/1.35	33.4	1844	12	600	400
1MV300A06HP	300	2.8	27.4	48/1.35	36.1	2080	15	650	430
1MV400A06HP	400	3.0	30.7	48/1.35	39.6	2410	20	710	480

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.822	0.127	7500	0.385	5.86	1.19	0.0669
70	0.443	0.568	0.117	6500	0.446	6.78	0.837	0.0579
95	0.320	0.411	0.113	5800	0.499	7.59	0.614	0.0542
120	0.253	0.325	0.109	5200	0.550	8.35	0.516	0.0509
150	0.206	0.265	0.105	4800	0.600	9.12	0.469	0.0482
185	0.164	0.211	0.102	4400	0.660	10.0	0.428	0.0454
240	0.125	0.161	0.0981	4100	0.708	10.8	0.390	0.0427
300	0.100	0.130	0.0962	4000	0.725	11.0	0.365	0.0414
400	0.0778	0.102	0.0929	3800	0.762	11.6	0.343	0.0388

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Current rating at core temp. 90°C in underground ducts	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	A	kA	kA
50	162	167	148	4.7	4.8
70	198	208	178	6.6	6.8
95	234	252	209	9.0	9.1
120	263	290	234	11.3	10.2
150	293	328	258	14.2	10.2
185	329	375	291	17.5	10.2
240	375	437	329	22.7	10.2
300	418	497	364	28.4	10.2
400	470	574	408	37.8	10.2

Single Core Power Cable 6.35/11kV

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 6.35/11(12)kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)

D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted copper complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



6.35/11kV Single Core Copper Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
1MV035C11HP	35	3.4	14.9	24/1.35	22.7	968.8	2.5	410	270
1MV050C11HP	50	3.4	16.1	34/1.35	24.0	1243.0	3.5	430	290
1MV070C11HP	70	3.4	17.9	38/1.52	26.8	1670.6	4.9	480	320
1MV095C11HP	95	3.4	19.5	48/1.35	28.1	1938.6	6.7	510	340
1MV120C11HP	120	3.4	21.0	48/1.35	29.7	1295.1	8.4	530	360
1MV150C11HP	150	3.4	22.5	48/1.35	31.3	2479.9	11	560	380
1MV185C11HP	185	3.4	24.3	48/1.35	32.8	2844.3	13	590	390
1MV240C11HP	240	3.4	26.5	48/1.35	35.1	3412.1	17	630	420
1MV300C11HP	300	3.4	28.6	48/1.35	37.4	4011.3	21	670	450
1MV400C11HP	400	3.4	31.5	48/1.35	40.5	4836.3	25	730	490
1MV500C11HP	500	3.4	35.3	48/1.35	44.6	6166.3	25	800	540
1MV630C11HP	630	3.4	38.7	48/1.35	48.2	7759.0	25	870	580
1MV800C11HP	800	3.4	43.9	48/1.35	53.8	9775.2	25	970	650
1MV10MC11HP	1000	3.4	48.2	48/1.35	58.5	11124	25	1050	700

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
35	0.524	0.668	0.139	11000	0.455	11.5	1.04	0.0792
50	0.387	0.494	0.132	9500	0.505	12.8	0.756	0.0732
70	0.268	0.342	0.123	8300	0.580	14.7	0.530	0.0648
95	0.193	0.247	0.117	7400	0.646	16.4	0.456	0.0595
120	0.153	0.196	0.113	6800	0.708	18.0	0.417	0.0558
150	0.124	0.159	0.109	6300	0.770	19.6	0.388	0.0528
185	0.0991	0.128	0.105	5700	0.844	21.4	0.364	0.0492
240	0.0754	0.0980	0.101	5200	0.934	23.7	0.341	0.0462
300	0.0601	0.0791	0.0984	4700	1.02	25.9	0.326	0.0438
400	0.0470	0.0632	0.0943	4200	1.14	28.9	0.313	0.0403
500	0.0366	0.0508	0.0925	3700	1.30	32.9	0.303	0.0391
630	0.0283	0.0414	0.0899	3400	1.43	36.4	0.295	0.0370
800	0.0221	0.0348	0.0867	2900	1.65	41.8	0.290	0.0343
1000	0.0176	0.0255	0.0846	2600	1.82	46.3	0.286	0.0324

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Current rating at core temp. 90°C in underground ducts	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	A	kA	kA
35	177	181	161	5.00	5.2
50	207	216	187	7.1	7.3
70	251	269	223	10.0	10.2
95	296	323	261	13.6	10.2
120	332	370	292	17.1	10.2
150	369	417	322	21.4	10.2
185	410	472	356	26.4	10.2
240	465	546	400	34.3	10.2
300	513	615	439	42.9	10.2
400	568	698	481	57.2	10.2
500	625	788	529	71.5	10.2
630	680	880	567	90.0	10.2
800	735	982	618	114.0	10.2
1000	817	1120	649	143.0	10.2

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 6.35/11(12) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements.

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)
D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



6.35/11kV Single Core Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
1MV050A11HP	50	3.4	16.1	23/1.35	23.4	795.4	2.5	420	280
1MV070A11HP	70	3.4	17.9	32/1.35	25.9	1027.6	3.5	470	310
1MV095A11HP	95	3.4	19.5	43/1.35	28.1	1291.7	4.8	510	340
1MV120A11HP	120	3.4	21.0	48/1.35	29.7	1465.5	6.0	530	360
1MV150A11HP	150	3.4	22.5	48/1.35	31.3	1578.1	7.5	560	380
1MV185A11HP	185	3.4	24.3	48/1.35	32.8	1717.9	9.3	590	390
1MV240A11HP	240	3.4	26.5	48/1.35	35.1	1930.8	12	630	420
1MV300A11HP	300	3.4	28.6	48/1.35	37.4	2149.5	15	670	450
1MV400A11HP	400	3.4	31.5	48/1.35	40.5	2461.1	20	730	490
1MV500A11HP	500	3.4	35.3	48/1.35	44.6	3118.2	25	800	540
1MV630A11HP	630	3.4	38.7	48/1.35	48.2	3813.2	25	870	580
1MV800A11HP	800	3.4	43.9	48/1.35	53.8	4718.2	25	970	650
1MV10MA11HP	1000	3.4	48.2	48/1.35	58.5	5364.0	25	1050	700
1MV12MA11HP	1200	3.4	51.4	48/1.35	61.9	5998.0	25	1110	740

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.822	0.130	9500	0.505	12.8	1.19	0.0722
70	0.443	0.568	0.121	8300	0.580	14.7	0.837	0.0636
95	0.320	0.411	0.117	7400	0.646	16.4	0.614	0.0595
120	0.253	0.325	0.113	6800	0.708	18.0	0.516	0.0558
150	0.206	0.265	0.109	6300	0.770	19.6	0.469	0.0528
185	0.164	0.211	0.105	5700	0.844	21.4	0.429	0.0492
240	0.125	0.161	0.101	5200	0.934	23.7	0.390	0.0462
300	0.100	0.130	0.0984	4700	1.02	25.9	0.365	0.0438
400	0.0778	0.102	0.0943	4200	1.14	28.9	0.343	0.0403
500	0.0605	0.0802	0.0925	3700	1.30	32.9	0.326	0.0391
630	0.0469	0.0636	0.0899	3400	1.43	36.4	0.313	0.0370
800	0.0367	0.0517	0.0867	2900	1.65	41.8	0.303	0.0343
1000	0.0291	0.0379	0.0846	2600	1.82	46.3	0.296	0.0324
1200	0.0247	0.0324	0.0832	2500	1.95	49.6	0.292	0.0313

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Current rating at core temp. 90°C in underground ducts	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	A	kA	kA
50	162	167	148	4.7	4.9
70	197	210	179	6.6	6.8
95	234	255	209	9.0	9.1
120	263	292	234	11.3	10.2
150	293	331	262	14.2	10.2
185	329	377	291	17.5	10.2
240	376	440	330	22.7	10.2
300	418	499	366	28.4	10.2
400	470	576	409	37.8	10.2
500	526	660	456	47.3	10.2
630	584	751	500	59.5	10.2
800	643	855	552	75.6	10.2
1000	725	989	595	94.5	10.2
1200	770	1070	630	113	10.2

Single Core Power Cable 12.7/22kV

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 12.7/22 (24) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)

D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted copper complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



12.7/22kV Single Core Copper Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
1MV035C22HP	35	5.5	19.1	24/1.35	26.6	1123.7	2.5	480	320
1MV050C22HP	50	5.5	20.3	34/1.35	28.5	1414.7	3.5	510	340
1MV070C22HP	70	5.5	22.1	48/1.35	30.9	1849.3	4.9	560	370
1MV095C22HP	95	5.5	23.7	48/1.35	32.2	2126.4	6.7	580	390
1MV120C22HP	120	5.5	25.2	48/1.35	33.8	2393.5	8.4	610	410
1MV150C22HP	150	5.5	26.7	48/1.35	35.4	2688.9	11	640	420
1MV185C22HP	185	5.5	28.5	48/1.35	37.3	3075.2	13	670	450
1MV240C22HP	240	5.5	30.7	48/1.35	39.6	3658.8	17	710	480
1MV300C22HP	300	5.5	32.8	48/1.35	41.9	4273.1	21	750	500
1MV400C22HP	400	5.5	35.7	48/1.35	45.0	5119.1	25	810	540
1MV500C22HP	500	5.5	39.5	48/1.35	49.1	6404.6	25	880	590
1MV630C22HP	630	5.5	42.9	48/1.35	52.7	7825.2	25	950	630
1MV800C22HP	800	5.5	48.1	48/1.35	58.3	9634.3	25	1050	700
1MV10MC22HP	1000	5.5	52.4	48/1.35	62.9	11510	25	1130	750

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
35	0.524	0.668	0.148	15000	0.0646	32.8	1.05	0.0917
50	0.387	0.494	0.143	14000	0.710	36.1	0.756	0.0859
70	0.268	0.342	0.132	12000	0.805	40.9	0.531	0.0758
95	0.193	0.247	0.125	11000	0.888	45.1	0.458	0.0698
120	0.153	0.196	0.121	10000	0.966	49.1	0.418	0.0655
150	0.124	0.159	0.117	9200	1.04	53.0	0.389	0.0619
185	0.0991	0.128	0.113	8500	1.14	57.7	0.364	0.0583
240	0.0754	0.0978	0.109	7700	1.25	63.5	0.341	0.0546
300	0.0601	0.0788	0.105	7100	1.36	68.9	0.326	0.0517
400	0.0470	0.0628	0.101	6400	1.50	76.4	0.313	0.0475
500	0.0366	0.0504	0.0986	5700	1.70	86.3	0.303	0.0457
630	0.0283	0.0408	0.0955	5100	1.87	95.1	0.295	0.0430
800	0.0221	0.0342	0.0918	4500	2.14	108	0.290	0.0397
1000	0.0176	0.0254	0.0891	4100	2.35	119	0.286	0.0374

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Current rating at core temp. 90°C in underground ducts	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	A	kA	kA
35	176	184	161	5.00	5.1
50	207	220	188	7.1	7.3
70	250	273	227	10.0	10.2
95	296	328	265	13.6	10.2
120	333	375	296	17.1	10.2
150	369	422	326	21.4	10.2
185	411	479	361	26.4	10.2
240	467	555	406	34.3	10.2
300	515	624	445	42.9	10.2
400	571	709	490	57.2	10.2
500	629	800	532	71.5	10.2
630	686	894	580	90.0	10.2
800	742	997	613	114.0	10.2
1000	822	1130	664	143	10.2

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 12.7/22 (24) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)

D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



12.7/22kV Single Core Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
1MV050A22HP	50	5.5	20.3	23/1.35	27.9	966.4	2.5	500	330
1MV070A22HP	70	5.5	22.1	32/1.35	30.4	1212.3	3.5	550	370
1MV095A22HP	95	5.5	23.7	43/1.35	32.2	1479.6	4.8	580	390
1MV120A22HP	120	5.5	25.2	48/1.35	33.8	1663.9	6.0	610	410
1MV150A22HP	150	5.5	26.7	48/1.35	35.4	1787.2	7.5	640	420
1MV185A22HP	185	5.5	28.5	48/1.35	37.3	1948.8	9.3	670	450
1MV240A22HP	240	5.5	30.7	48/1.35	39.6	2177.5	12	710	480
1MV300A22HP	300	5.5	32.8	48/1.35	41.9	2411.4	15	750	500
1MV400A22HP	400	5.5	35.7	48/1.35	45.0	2743.8	20	810	540
1MV500A22HP	500	5.5	39.5	48/1.35	49.1	3356.4	25	880	590
1MV630A22HP	630	5.5	42.9	48/1.35	52.7	3879.4	25	950	630
1MV800A22HP	800	5.5	48.1	48/1.35	58.3	4577.4	25	1050	700
1MV10MA22HP	1000	5.5	52.4	48/1.35	62.9	5632.0	25	1130	750
1MV12MA22HP	1200	5.5	55.6	48/1.35	66.3	6345.0	25	1190	800

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.822	0.141	14000	0.710	36.1	1.19	0.0851
70	0.443	0.568	0.131	12000	0.805	40.9	0.837	0.0752
95	0.320	0.411	0.125	11000	0.888	45.1	0.615	0.0698
120	0.253	0.325	0.121	10000	0.966	49.1	0.518	0.0655
150	0.206	0.265	0.117	9200	1.04	53.0	0.471	0.0619
185	0.164	0.211	0.113	8500	1.14	57.7	0.429	0.0583
240	0.125	0.161	0.109	7700	1.25	63.5	0.390	0.0546
300	0.100	0.130	0.105	7100	1.36	68.9	0.365	0.0517
400	0.0779	0.102	0.101	6400	1.50	76.4	0.343	0.0475
500	0.0606	0.0799	0.0986	5700	1.70	86.3	0.326	0.0457
630	0.0469	0.0633	0.0955	5100	1.87	95.1	0.313	0.0430
800	0.0367	0.0512	0.0918	4500	2.14	108	0.303	0.0397
1000	0.0291	0.0379	0.0891	4100	2.35	119	0.296	0.0374
1200	0.0247	0.0323	0.0875	3800	2.51	128	0.292	0.0335

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Current rating at core temp. 90°C in underground ducts	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	A	kA	kA
50	162	171	147	4.7	4.9
70	197	214	181	6.6	6.8
95	233	258	212	9.0	9.1
120	263	296	238	11.3	10.2
150	293	334	263	14.2	10.2
185	329	382	294	17.5	10.2
240	376	445	336	22.7	10.2
300	419	505	371	28.4	10.2
400	472	582	415	37.8	10.2
500	528	667	459	47.3	10.2
630	586	759	508	59.5	10.2
800	647	863	550	75.6	10.2
1000	728	997	606	94.5	10.2
1200	768	1050	637	113	10.2

Single Core Power Cable 19/33kV

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 19/33 (36) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)

D = Overall diameter of cable



DESIGN

CONDUCTOR:

Stranded, round and compacted copper complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC, PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request

19/33kV Single Core Copper Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
1MV050C33HP	50	8.0	25.3	34/1.35	33.9	1658.7	3.5	610	410
1MV070C33HP	70	8.0	27.1	48/1.35	35.8	2099.9	4.9	640	430
1MV095C33HP	95	8.0	28.7	48/1.35	37.5	2399.5	6.7	680	450
1MV120C33HP	120	8.0	30.2	48/1.35	39.1	2679.5	8.4	700	470
1MV150C33HP	150	8.0	31.7	48/1.35	40.7	2987.8	11	730	490
1MV185C33HP	185	8.0	33.5	48/1.35	42.6	3389.5	13	770	510
1MV240C33HP	240	8.0	35.7	48/1.35	45.0	3992.5	17	810	540
1MV300C33HP	300	8.0	37.8	48/1.35	47.2	4624.4	21	850	570
1MV400C33HP	400	8.0	40.7	48/1.35	50.3	5495.2	25	910	600
1MV500C33HP	500	8.0	44.5	48/1.35	54.4	6833.0	25	980	650
1MV630C33HP	630	8.0	47.9	48/1.35	58.1	8282.8	25	1050	700
1MV800C33HP	800	8.0	53.1	48/1.35	63.6	10136.6	25	1150	760
1MV10MC33HP	1000	8.0	57.4	48/1.35	68.3	11799.0	25	1230	820

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.387	0.494	0.153	17000	0.828	15.7	0.756	0.0982
70	0.268	0.342	0.142	16000	0.929	17.6	0.533	0.0868
95	0.193	0.247	0.135	14000	1.02	19.3	0.458	0.0806
120	0.153	0.196	0.130	13000	1.10	20.9	0.418	0.0759
150	0.124	0.159	0.126	12000	1.18	22.4	0.389	0.0718
185	0.0991	0.127	0.121	11000	1.28	24.3	0.364	0.0676
240	0.0754	0.0976	0.117	10000	1.39	26.5	0.341	0.0634
300	0.0601	0.0785	0.113	9600	1.51	28.6	0.326	0.0600
400	0.0470	0.0625	0.108	8700	1.66	31.5	0.313	0.0552
500	0.0366	0.0500	0.105	7700	1.86	35.4	0.303	0.0527
630	0.0283	0.0404	0.102	7100	2.04	38.8	0.295	0.0495
800	0.0221	0.0336	0.0973	6200	2.31	44.0	0.290	0.0456
1000	0.0176	0.0253	0.0943	5700	2.54	48.2	0.286	0.0428

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Current rating at core temp. 90°C in underground ducts	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	A	kA	kA
50	207	224	191	7.1	7.3
70	251	277	228	10.0	10.2
95	296	333	267	13.6	10.2
120	333	380	301	17.1	10.2
150	370	428	332	21.4	10.2
185	413	486	367	26.4	10.2
240	469	562	413	34.3	10.2
300	518	633	450	42.9	10.2
400	575	719	496	57.2	10.2
500	634	811	545	71.5	10.2
630	693	907	580	90.0	10.2
800	751	1010	629	114	10.2
1000	829	1150	682	143	10.2

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 19/33 (36) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)
D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



19/33kV Single Core Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
1MV050A33HP	50	8.0	25.3	23/1.35	33.2	1209.4	2.5	600	400
1MV070A33HP	70	8.0	27.1	32/1.35	35.8	1471.7	3.5	640	430
1MV095A33HP	95	8.0	28.7	43/1.35	37.5	1752.7	4.8	680	450
1MV120A33HP	120	8.0	30.2	48/1.35	39.1	1949.9	6.0	700	470
1MV150A33HP	150	8.0	31.7	48/1.35	40.7	2086.0	7.5	730	490
1MV185A33HP	185	8.0	33.5	48/1.35	42.6	2263.1	9.3	770	510
1MV240A33HP	240	8.0	35.7	48/1.35	45.0	2510.7	12	810	540
1MV300A33HP	300	8.0	37.8	48/1.35	47.2	2762.6	15	850	570
1MV400A33HP	400	8.0	40.7	48/1.35	50.3	3119.9	20	910	600
1MV500A33HP	500	8.0	44.5	48/1.35	54.4	3784.9	25	980	650
1MV630A33HP	630	8.0	47.9	48/1.35	58.1	4337.0	25	1050	700
1MV800A33HP	800	8.0	53.1	48/1.35	63.6	5079.7	25	1150	760
1MV10MA33HP	1000	8.0	57.4	48/1.35	68.3	5815.0	25	1230	820
1MV12MA33HP	1200	8.0	60.6	48/1.35	71.7	6521.0	25	1290	860

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.822	0.152	17000	0.828	15.7	1.19	0.0976
70	0.443	0.568	0.142	16000	0.929	17.6	0.837	0.0868
95	0.320	0.411	0.135	14000	1.02	19.3	0.615	0.0806
120	0.253	0.325	0.130	13000	1.10	20.9	0.518	0.0759
150	0.206	0.265	0.126	12000	1.18	22.4	0.471	0.0718
185	0.164	0.211	0.121	11000	1.28	24.3	0.429	0.0676
240	0.125	0.161	0.117	10000	1.39	26.5	0.390	0.0634
300	0.100	0.129	0.113	9600	1.51	28.6	0.365	0.0600
400	0.0778	0.101	0.108	8700	1.66	31.5	0.343	0.0552
500	0.0605	0.0797	0.105	7700	1.86	35.4	0.326	0.0527
630	0.0469	0.0630	0.102	7100	2.04	38.8	0.313	0.0495
800	0.0367	0.0508	0.0973	6200	2.31	44.0	0.303	0.0456
1000	0.0291	0.0378	0.0943	5700	2.54	48.2	0.296	0.0428
1200	0.0247	0.0322	0.0924	5300	2.70	51.4	0.292	0.0412

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Current rating at core temp. 90°C in underground ducts	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	A	kA	kA
50	162	174	150	4.70	4.9
70	197	217	182	6.60	6.8
95	233	261	213	8.99	9.1
120	264	300	242	11.4	10.2
150	293	338	267	14.2	10.2
185	330	386	299	17.5	10.2
240	377	450	339	22.7	10.2
300	421	510	376	28.4	10.2
400	474	587	419	37.8	10.2
500	531	673	467	47.3	10.2
630	590	766	510	59.6	10.2
800	652	871	561	75.7	10.2
1000	733	1000	620	96.1	10.2
1200	779	1090	632	116.7	10.2

THREE CORE POWER CABLE



Single Core Power Cable

Three Core Power Cable

Three Core Armoured Cable

Three Core URD Power Cable

Three Core Triplex Power Cable

Three Core Power Cable 3.8/6.6kV

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 3.8/6.6 (7.2)kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)

D = Overall diameter of cable



DESIGN

CONDUCTOR:

Stranded, round and compacted copper complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request

3.8/6.6kV Three Core Copper Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
3MV035C06HP	35	2.5	13.1	20/0.85	40.4	2188	7.4	730	480
3MV050C06HP	50	2.5	14.3	29/0.85	43.2	2770	11	780	520
3MV070C06HP	70	2.5	16.1	40/0.85	47.4	3671	15	850	570
3MV095C06HP	95	2.5	17.7	40/0.85	51.0	4529	20	920	610
3MV120C06HP	120	2.5	19.2	40/0.85	54.5	5335	25	980	650
3MV150C06HP	150	2.5	20.7	40/0.85	58.0	6230	25	1040	700
3MV185C06HP	185	2.5	22.5	40/0.85	62.1	7405	25	1120	750
3MV240C06HP	240	2.6	24.9	40/0.85	67.6	9225	25	1220	810
3MV300C06HP	300	2.8	27.4	40/0.85	73.4	11194	25	1320	880
3MV400C06HP	400	3.0	30.7	40/0.85	81.0	13901	25	1460	970

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
35	0.524	0.668	0.118	8400	0.345	5.24	2.12	0.0712
50	0.387	0.494	0.112	7500	0.385	5.86	1.49	0.0658
70	0.268	0.342	0.103	6500	0.446	6.78	1.06	0.0569
95	0.193	0.247	0.0987	5800	0.499	7.59	0.990	0.0527
120	0.153	0.196	0.0954	5200	0.550	8.35	0.950	0.0495
150	0.124	0.159	0.0926	4800	0.600	9.12	0.921	0.0468
185	0.0991	0.128	0.0898	4400	0.660	10.0	0.896	0.0442
240	0.0754	0.0986	0.0874	4100	0.708	10.8	0.873	0.0420
300	0.0601	0.0797	0.0860	4000	0.725	11.0	0.858	0.0407
400	0.0470	0.0640	0.0833	3800	0.762	11.6	0.845	0.0382

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
35	173	160	5.0	5.1
50	204	192	7.1	7.3
70	249	240	10.0	10.1
95	298	292	13.6	10.1
120	338	336	17.1	10.1
150	379	382	21.4	10.1
185	428	439	26.4	10.1
240	495	517	34.3	10.1
300	557	591	42.9	10.1
400	631	683	57.2	10.1

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 3.8/6.6 (7.2)kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)

D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



3.8/6.6kV Three Core Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
3MV050A06HP	50	2.5	14.3	19/0.85	43.2	1735	7.5	780	520
3MV070A06HP	70	2.5	16.1	27/0.85	47.4	2203	11	850	570
3MV095A06HP	95	2.5	17.7	36/0.85	51.0	2714	14	920	610
3MV120A06HP	120	2.5	19.2	40/0.85	54.5	3131	18	980	650
3MV150A06HP	150	2.5	20.7	40/0.85	58.0	3506	23	1040	700
3MV185A06HP	185	2.5	22.5	40/0.85	62.1	4003	25	1120	750
3MV240A06HP	240	2.6	24.9	40/0.85	67.6	4751	25	1220	810
3MV300A06HP	300	2.8	27.4	40/0.85	73.4	5570	25	1320	880
3MV400A06HP	400	3.0	30.7	40/0.85	81.0	6726	25	1460	970

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.822	0.112	7500	0.385	5.86	2.32	0.0658
70	0.443	0.568	0.103	6500	0.446	6.78	1.62	0.0569
95	0.320	0.411	0.0987	5800	0.499	7.59	1.20	0.0527
120	0.253	0.325	0.0954	5200	0.550	8.35	1.05	0.0495
150	0.206	0.265	0.0926	4800	0.600	9.12	1.00	0.0468
185	0.164	0.211	0.0898	4400	0.660	10.0	0.961	0.0442
240	0.125	0.162	0.0874	4100	0.708	10.8	0.922	0.0420
300	0.100	0.130	0.0860	4000	0.725	11.0	0.897	0.0407
400	0.0778	0.102	0.0833	3800	0.762	11.6	0.875	0.0382

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
50	158	149	4.7	4.8
70	194	186	6.6	6.8
95	231	226	9.0	9.1
120	263	261	11.3	10.1
150	294	297	14.2	10.1
185	334	342	17.5	10.1
240	386	403	22.7	10.1
300	436	463	28.4	10.1
400	499	540	37.8	10.1

Three Core Power Cable 6.35/11kV

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 6.35/11(12)kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)

D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted copper complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



6.35/11kV Three Core Copper Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
3MV035C11HP	35	3.4	14.9	20/0.85	44.6	2412	7.4	800	540
3MV050C11HP	50	3.4	16.1	29/0.85	47.4	3010	11	850	570
3MV070C11HP	70	3.4	17.9	40/0.85	51.5	3933	15	930	620
3MV095C11HP	95	3.4	19.5	40/0.85	55.2	4811	20	990	660
3MV120C11HP	120	3.4	21.0	40/0.85	58.6	5635	25	1060	700
3MV150C11HP	150	3.4	22.5	40/0.85	62.1	6549	25	1120	750
3MV185C11HP	185	3.4	24.3	40/0.85	66.3	7746	25	1190	800
3MV240C11HP	240	3.4	26.5	40/0.85	71.3	9553	25	1280	860
3MV300C11HP	300	3.4	28.6	40/0.85	76.2	11459	25	1370	910
3MV400C11HP	400	3.4	31.5	40/0.85	82.8	14095	25	1490	990
3MV500C11HP	500	3.4	35.3	40/0.85	97.4	18331	25	1750	1170

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
35	0.524	0.668	0.125	11000	0.455	11.5	2.12	0.0781
50	0.387	0.494	0.118	9500	0.505	12.8	1.49	0.0722
70	0.268	0.342	0.109	8300	0.580	14.7	1.06	0.0627
95	0.193	0.247	0.104	7400	0.646	16.4	0.990	0.0581
120	0.153	0.196	0.100	6800	0.708	18.0	0.950	0.0545
150	0.124	0.159	0.0971	6300	0.770	19.6	0.921	0.0515
185	0.0991	0.128	0.0940	5700	0.844	21.4	0.896	0.0486
240	0.0754	0.0984	0.0909	5200	0.934	23.7	0.873	0.0456
300	0.0601	0.0796	0.0884	4700	1.02	25.9	0.858	0.0432
400	0.0470	0.0638	0.0848	4200	1.14	28.9	0.845	0.0397
500	0.0373	0.0524	0.0835	3700	1.29	32.9	0.836	0.0386

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
35	173	163	5.0	5.1
50	204	195	7.1	7.3
70	250	243	10.0	10.1
95	298	295	13.6	10.1
120	338	340	17.1	10.1
150	380	386	21.4	10.1
185	429	443	26.4	10.1
240	495	520	34.3	10.1
300	557	594	42.9	10.1
400	631	685	57.2	10.1
500	691	754	71.5	10.1

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 6.35/11 (12) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)

D = Overall diameter of cable



DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request

6.35/11kV Three Core Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
3MV050A11HP	50	3.4	16.1	19/0.85	47.4	1975	7.5	850	570
3MV070A11HP	70	3.4	17.9	27/0.85	51.5	2464	11	930	620
3MV095A11HP	95	3.4	19.5	36/0.85	55.2	2996	14	990	660
3MV120A11HP	120	3.4	21.0	40/0.85	58.6	3431	18	1060	700
3MV150A11HP	150	3.4	22.5	40/0.85	62.1	3824	23	1120	750
3MV185A11HP	185	3.4	24.3	40/0.85	66.3	4343	25	1190	800
3MV240A11HP	240	3.4	26.5	40/0.85	71.3	5078	25	1280	860
3MV300A11HP	300	3.4	28.6	40/0.85	76.2	5834	25	1370	910
3MV400A11HP	400	3.4	31.5	40/0.85	82.8	6919	25	1490	990
3MV500A11HP	500	3.4	35.3	40/0.85	96.9	8084	25	1740	1160

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.822	0.118	9500	0.505	12.8	2.32	0.0722
70	0.443	0.568	0.109	8300	0.580	14.7	1.62	0.0627
95	0.320	0.411	0.104	7400	0.646	16.4	1.20	0.0581
120	0.253	0.325	0.100	6800	0.708	18.0	1.05	0.0545
150	0.206	0.265	0.0971	6300	0.770	19.6	1.00	0.0515
185	0.164	0.211	0.0940	5700	0.844	21.4	0.961	0.0486
240	0.125	0.162	0.0909	5200	0.934	23.7	0.922	0.0456
300	0.100	0.130	0.0884	4700	1.02	25.9	0.897	0.0432
400	0.0778	0.102	0.0848	4200	1.14	28.9	0.875	0.0397
500	0.0617	0.0822	0.0835	3700	1.29	32.9	0.859	0.0386

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
50	158	151	4.7	4.8
70	194	189	6.6	6.8
95	231	229	9.0	9.1
120	263	264	11.3	10.1
150	294	300	14.2	10.1
185	334	344	17.5	10.1
240	387	406	22.7	10.1
300	436	465	28.4	10.1
400	499	542	37.8	10.1
500	553	604	47.3	10.1

Three Core Power Cable 12.7/22kV

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 12.7/22 (24) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)
D = Overall diameter of cable



DESIGN

CONDUCTOR:

Stranded, round and compacted copper complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request

12.7/22kV Three Core Copper Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
3MV035C22HP	35	5.5	19.1	20/0.85	54.3	3023	7.4	980	650
3MV050C22HP	50	5.5	20.3	29/0.85	57.0	3655	11	1030	680
3MV070C22HP	70	5.5	22.1	40/0.85	61.2	4629	15	1100	730
3MV095C22HP	95	5.5	23.7	40/0.85	64.9	5553	20	1170	780
3MV120C22HP	120	5.5	25.2	40/0.85	68.3	6421	25	1230	820
3MV150C22HP	150	5.5	26.7	40/0.85	71.8	7377	25	1290	860
3MV185C22HP	185	5.5	28.5	40/0.85	75.9	8626	25	1370	910
3MV240C22HP	240	5.5	30.7	40/0.85	81.0	10496	25	1460	970
3MV300C22HP	300	5.5	32.8	40/0.85	85.8	12462	25	1550	1030
3MV400C22HP	400	5.5	35.7	40/0.85	92.5	15181	25	1670	1110
3MV500C22HP	500	5.5	39.5	40/0.85	106.6	19454	25	1920	1280

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
35	0.524	0.668	0.138	15000	0.646	32.8	2.12	0.0917
50	0.387	0.494	0.131	14000	0.710	36.1	1.49	0.0851
70	0.268	0.342	0.120	12000	0.805	40.9	1.06	0.0745
95	0.193	0.247	0.115	11000	0.888	45.1	0.990	0.0691
120	0.153	0.196	0.110	10000	0.966	49.1	0.950	0.0649
150	0.124	0.159	0.107	9200	1.04	53.0	0.921	0.0613
185	0.0991	0.128	0.103	8500	1.14	57.7	0.896	0.0577
240	0.0754	0.0981	0.0991	7700	1.25	63.5	0.873	0.0541
300	0.0601	0.0792	0.0961	7100	1.36	68.9	0.858	0.0512
400	0.047	0.0633	0.0919	6400	1.50	76.4	0.845	0.0471
500	0.0373	0.0518	0.0900	5700	1.70	86.2	0.836	0.0452

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
35	173	167	5.0	5.1
50	204	200	7.1	7.3
70	250	249	10.0	10.1
95	298	301	13.6	10.1
120	339	346	17.1	10.1
150	380	393	21.4	10.1
185	429	449	26.4	10.1
240	496	527	34.3	10.1
300	559	602	42.9	10.1
400	634	694	57.2	10.1
500	697	766	71.5	10.1

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 12.7/22 (24) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)
D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



12.7/22kV Three Core Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
3MV050A22HP	50	5.5	20.3	19/0.85	57.0	2620	7.5	1030	680
3MV070A22HP	70	5.5	22.1	27/0.85	61.2	3161	11	1100	730
3MV095A22HP	95	5.5	23.7	36/0.85	64.9	3738	14	1170	780
3MV120A22HP	120	5.5	25.2	40/0.85	68.3	4216	18	1230	820
3MV150A22HP	150	5.5	26.7	40/0.85	71.8	4653	23	1290	860
3MV185A22HP	185	5.5	28.5	40/0.85	75.9	5223	25	1370	910
3MV240A22HP	240	5.5	30.7	40/0.85	81.0	6021	25	1460	970
3MV300A22HP	300	5.5	32.8	40/0.85	85.8	6838	25	1550	1030
3MV400A22HP	400	5.5	35.7	40/0.85	92.5	8006	25	1670	1110
3MV500A22HP	500	5.5	41.8	40/0.85	106.0	10245	25	1920	1280

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.822	0.131	14000	0.710	36.1	2.32	0.0851
70	0.443	0.568	0.120	12000	0.805	40.9	1.62	0.0745
95	0.320	0.411	0.115	11000	0.888	45.1	1.20	0.0691
120	0.253	0.325	0.110	10000	0.966	49.1	1.05	0.0649
150	0.206	0.265	0.107	9200	1.04	53.0	1.00	0.0613
185	0.164	0.211	0.103	8500	1.14	57.7	0.961	0.0577
240	0.125	0.161	0.0991	7700	1.25	63.5	0.922	0.0541
300	0.100	0.130	0.0961	7100	1.36	68.9	0.897	0.0512
400	0.0778	0.102	0.0919	6400	1.50	76.4	0.875	0.0471
500	0.0617	0.0818	0.0900	5700	1.70	86.2	0.859	0.0452

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
50	158	155	4.7	4.8
70	194	193	6.6	6.8
95	231	233	9.0	9.1
120	263	269	11.3	10.1
150	295	305	14.2	10.1
185	334	350	17.5	10.1
240	387	411	22.7	10.1
300	436	470	28.4	10.1
400	500	547	37.8	10.1
500	555	610	47.3	10.1

Three Core Power Cable 19/33kV

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 19/33 (36)kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)
D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted copper complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



19/33kV Three Core Copper Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
3MV050C33HP	50	8.0	25.3	29/0.85	68.6	4580	11	1230	820
3MV070C33HP	70	8.0	27.1	40/0.85	72.7	5616	15	1310	870
3MV095C33HP	95	8.0	28.7	40/0.85	76.4	6594	20	1380	920
3MV120C33HP	120	8.0	30.2	40/0.85	79.9	7513	25	1440	960
3MV150C33HP	150	8.0	31.7	40/0.85	83.3	8521	25	1500	1000
3MV185C33HP	185	8.0	33.5	40/0.85	87.5	9831	25	1570	1050
3MV240C33HP	240	8.0	35.7	40/0.85	92.5	11776	25	1670	1110
3MV300C33HP	300	8.0	37.8	40/0.85	97.4	13814	25	1750	1170
3MV400C33HP	400	8.0	40.7	40/0.85	104.1	16632	25	1870	1250
3MV500C33HP	500	8.0	44.5	40/0.85	118.1	21113	25	2130	1420

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.387	0.494	0.143	17000	0.828	15.7	1.49	0.0976
70	0.268	0.342	0.131	16000	0.929	17.6	1.06	0.0862
95	0.193	0.247	0.125	14000	1.02	19.3	0.990	0.0801
120	0.153	0.196	0.120	13000	1.10	20.9	0.950	0.0753
150	0.124	0.159	0.116	12000	1.18	22.4	0.921	0.0713
185	0.0991	0.128	0.112	11000	1.28	24.3	0.896	0.0671
240	0.0754	0.0978	0.108	10000	1.39	26.5	0.873	0.0629
300	0.0601	0.0788	0.104	9600	1.51	28.6	0.858	0.0595
400	0.047	0.0629	0.0995	8700	1.66	31.5	0.845	0.0558
500	0.0373	0.0513	0.0969	7700	1.86	35.4	0.836	0.0525

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
50	204	204	7.1	7.3
70	250	254	10.0	10.1
95	299	307	13.6	10.1
120	339	352	17.1	10.1
150	381	399	21.4	10.1
185	430	456	26.4	10.1
240	497	534	34.3	10.1
300	560	609	42.9	10.1
400	637	702	57.2	10.1
500	703	776	71.5	10.1

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 19/33 (36) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18x D. When installed: 12 x D (PVC sheathed cables)
D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



19/33kV Three Core Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
3MV050A33HP	50	8.0	25.3	19/0.85	68.6	3545	7.5	1230	820
3MV070A33HP	70	8.0	27.1	27/0.85	72.7	4147	11	1310	870
3MV095A33HP	95	8.0	28.7	36/0.85	76.4	4779	14	1380	920
3MV120A33HP	120	8.0	30.2	40/0.85	79.9	5309	18	1440	960
3MV150A33HP	150	8.0	31.7	40/0.85	83.3	5796	23	1500	1000
3MV185A33HP	185	8.0	33.5	40/0.85	87.5	6428	25	1570	1050
3MV240A33HP	240	8.0	35.7	40/0.85	92.5	7301	25	1670	1110
3MV300A33HP	300	8.0	37.8	40/0.85	97.4	8189	25	1750	1170
3MV400A33HP	400	8.0	40.7	40/0.85	104.1	9456	25	1870	1250
3MV500A33HP	500	8.0	46.8	40/0.85	118.1	11904	25	2130	1420

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.822	0.143	17000	0.828	15.7	2.32	0.0976
70	0.443	0.568	0.131	16000	0.929	17.6	1.62	0.0862
95	0.320	0.411	0.125	14000	1.02	19.3	1.20	0.0801
120	0.253	0.325	0.120	13000	1.10	20.9	1.05	0.0753
150	0.206	0.265	0.116	12000	1.18	22.4	1.00	0.0713
185	0.164	0.211	0.112	11000	1.28	24.3	0.961	0.0671
240	0.125	0.161	0.108	10000	1.39	26.5	0.922	0.0629
300	0.100	0.130	0.104	9600	1.51	28.6	0.897	0.0595
400	0.0778	0.102	0.0995	8700	1.66	31.5	0.875	0.0548
500	0.0617	0.0815	0.0969	7700	1.86	35.4	0.859	0.0523

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
50	158	158	4.7	4.8
70	194	197	6.6	6.8
95	231	238	9.0	9.1
120	263	273	11.3	10.1
150	295	309	14.2	10.1
185	334	354	17.5	10.1
240	387	416	22.7	10.1
300	437	475	28.4	10.1
400	501	552	37.8	10.1
500	557	616	47.3	10.1

THREE CORE ARMoured CABLE



Single Core Power Cable

Three Core Power Cable

Three Core Armoured Cable

Three Core URD Power Cable

Three Core Triplex Power Cable

Three Core Armoured Power Cable 3.8/6.6kV

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 3.8/6.6 (7.2)kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)

D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted copper complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

INNER SHEATH:

Black PVC or PE

ARMOUR:

Galvanized steel wires complying with AS/NZS 3863

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



3.8/6.6kV Three Core Armoured Copper Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Diameter over inner sheath (approx.)	Diameter of steel wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
										During installation	Installed
	mm ²	mm	mm	no./mm	mm	mm	mm	kg/km	kN	mm	mm
3MV035C06HS	35	2.5	13.1	20/0.85	38.6	2.5	48.6	4488	7.4	880	580
3MV050C06HS	50	2.5	14.3	29/0.85	41.3	2.5	51.5	5225	11	930	620
3MV070C06HS	70	2.5	16.1	40/0.85	45.3	2.5	55.8	6380	15	1000	670
3MV095C06HS	95	2.5	17.7	40/0.85	48.9	2.5	59.6	7450	20	1070	720
3MV120C06HS	120	2.5	19.2	40/0.85	52.2	2.5	63.2	8467	25	1140	760
3MV150C06HS	150	2.5	20.7	40/0.85	55.6	2.5	66.8	9574	25	1200	800
3MV185C06HS	185	2.5	22.5	40/0.85	59.6	2.5	71.1	11016	25	1280	850
3MV240C06HS	240	2.6	24.9	40/0.85	65.0	3.15	78.3	14121	25	1410	940
3MV300C06HS	300	2.8	27.4	40/0.85	70.6	3.15	84.3	16513	25	1520	1010
3MV400C06HS	400	3.0	30.7	40/0.85	78.0	3.15	92.2	19814	25	1660	1110

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
35	0.524	0.668	0.118	8400	0.345	5.24	1.38	0.0712
50	0.387	0.494	0.112	7500	0.385	5.86	1.06	0.0658
70	0.268	0.342	0.103	6500	0.446	6.78	0.798	0.0569
95	0.193	0.247	0.0987	5800	0.499	7.59	0.710	0.0527
120	0.153	0.196	0.0954	5200	0.550	8.35	0.659	0.0495
150	0.124	0.159	0.0926	4800	0.600	9.12	0.618	0.0468
185	0.0991	0.128	0.0898	4400	0.660	10.0	0.580	0.0442
240	0.0754	0.0986	0.0874	4100	0.708	10.8	0.492	0.0420
300	0.0601	0.0797	0.0860	4000	0.725	11.0	0.462	0.0407
400	0.047	0.064	0.0833	3800	0.762	11.6	0.430	0.0382

Current Ratings

Conductor size	Current rating at core temp. 90 in ground	Current rating at core temp. 90 in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
35	171	162	5.0	5.1
50	201	194	7.1	7.3
70	245	240	10.0	10.1
95	291	290	13.6	10.1
120	328	331	17.1	10.1
150	366	374	21.4	10.1
185	410	425	26.4	10.1
240	466	493	34.3	10.1
300	517	554	42.9	10.1
400	574	627	57.2	10.1

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 3.8/6.6 (7.2) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)
D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

INNER SHEATH:

Black PVC or PE

ARMOUR:

Galvanized steel wires complying with AS/NZS 3863

OUTER SHEATH:

Black PVC, PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.822	0.112	7500	0.385	5.86	1.49	0.0658
70	0.443	0.568	0.103	6500	0.446	6.78	1.12	0.0569
95	0.320	0.411	0.0987	5800	0.499	7.59	0.873	0.0527
120	0.253	0.325	0.0954	5200	0.550	8.35	0.758	0.0495
150	0.206	0.265	0.0926	4800	0.600	9.12	0.700	0.0468
185	0.164	0.211	0.0898	4400	0.660	10.0	0.645	0.0442
240	0.125	0.162	0.0874	4100	0.708	10.8	0.541	0.0420
300	0.100	0.130	0.0860	4000	0.725	11.0	0.502	0.0407
400	0.0778	0.102	0.0833	3800	0.762	11.6	0.460	0.038

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
50	156	151	4.7	4.8
70	191	187	6.6	6.8
95	227	226	9.0	9.1
120	257	259	11.3	10.1
150	287	293	14.2	10.1
185	323	335	17.5	10.1
240	371	391	22.7	10.1
300	414	444	28.4	10.1
400	467	510	37.8	10.1

3.8/6.6kV Three Core Armoured Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Diameter over inner sheath (approx.)	Diameter of steel wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
										During installation	Installed
	mm ²	mm	mm	no./mm	mm	mm	mm	kg/km	kN	mm	mm
3MV050A06HS	50	2.5	14.3	19/0.85	41.3	2.5	51.5	4186	7.5	880g	580
3MV070A06HS	70	2.5	16.1	27/0.85	45.3	2.5	55.8	4908	11	930	620
3MV095A06HS	95	2.5	17.7	36/0.85	48.9	2.5	59.6	5631	14	1000	670
3MV120A06HS	120	2.5	19.2	40/0.85	52.2	2.5	63.2	6257	18	1070	720
3MV150A06HS	150	2.5	20.7	40/0.85	55.6	2.5	66.8	6845	23	1140	760
3MV185A06HS	185	2.5	22.5	40/0.85	59.6	2.5	71.1	7607	25	1200	800
3MV240A06HS	240	2.6	24.9	40/0.85	65.0	3.15	78.3	9639	25	1280	850
3MV300A06HS	300	2.8	27.4	40/0.85	70.6	3.15	84.3	10880	25	1410	940
3MV400A06HS	400	3.0	30.7	40/0.85	78.0	3.15	92.2	12629	25	1520	1010
										1660	1110

Three Core Armoured Power Cable 6.35/11kV

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 6.35/11 (12) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)

D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted copper complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

INNER SHEATH:

Black PVC or PE, Black

ARMOUR:

Galvanized steel wires complying with AS/NZS 3863

OUTER SHEATH:

Black PVC, PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



6.35/11kV Three Core Armoured Copper Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Diameter over inner sheath (approx.)	Diameter of steel wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
										During installation	Installed
	mm ²	mm	mm	no./mm	mm	mm	mm	kg/km	kN	mm	mm
3MV035C11HS	35	3.4	14.9	20/0.85	42.6	2.5	52.9	4962	7.4	950	640
3MV050C11HS	50	3.4	16.1	29/0.85	45.3	2.5	55.8	5715	11	1000	670
3MV070C11HS	70	3.4	17.9	40/0.85	49.3	2.5	60.1	6896	15	1080	720
3MV095C11HS	95	3.4	19.5	40/0.85	52.9	2.5	64.0	7987	20	1150	770
3MV120C11HS	120	3.4	21.0	40/0.85	56.3	2.5	67.5	9024	25	1220	810
3MV150C11HS	150	3.4	22.5	40/0.85	59.6	2.5	71.1	10153	25	1280	850
3MV185C11HS	185	3.4	24.3	40/0.85	63.7	2.5	75.5	11618	25	1360	910
3MV240C11HS	240	3.4	26.5	40/0.85	68.6	3.15	82.1	14698	25	1480	990
3MV300C11HS	300	3.4	28.6	40/0.85	73.3	3.15	87.2	16948	25	1570	1050
3MV400C11HS	400	3.4	31.5	40/0.85	79.8	3.15	94.1	20162	25	1670	1130

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
35	0.524	0.668	0.125	11000	0.455	11.5	1.34	0.0781
50	0.387	0.494	0.118	9500	0.505	12.8	1.03	0.0722
70	0.268	0.342	0.109	8300	0.580	14.7	0.782	0.0627
95	0.193	0.247	0.104	7400	0.646	16.4	0.696	0.0581
120	0.153	0.196	0.100	6800	0.708	18.0	0.645	0.0545
150	0.124	0.159	0.0971	6300	0.770	19.6	0.605	0.0515
185	0.0991	0.128	0.0940	5700	0.844	21.4	0.568	0.0486
240	0.0754	0.0984	0.0909	5200	0.934	23.7	0.483	0.0456
300	0.0601	0.0796	0.0884	4700	1.02	25.9	0.457	0.0432
400	0.047	0.0638	0.0848	4200	1.14	28.9	0.425	0.0397

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
35	171	164	5.0	5.1
50	201	196	7.1	7.3
70	245	242	10.0	10.1
95	291	292	13.6	10.1
120	328	334	17.1	10.1
150	366	376	21.4	10.1
185	410	427	26.4	10.1
240	466	495	34.3	10.1
300	517	556	42.9	10.1
400	574	628	57.2	10.1

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 6.35/11kV(12)

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)
D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

INNER SHEATH:

Black PVC or PE

ARMOUR:

Galvanized steel wires complying with AS/NZS 3863

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.
Other colours available on request



6.35/11kV Three Core Armoured Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Diameter over inner sheath (approx.)	Diameter of steel wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
										During installation	Installed
	mm ²	mm	mm	no./mm	mm	mm	mm	kg/km	kN	mm	mm
3MV050A11HS	50	3.4	16.1	19/0.85	45.3	2.5	55.8	4680	7.5	1000	670
3MV070A11HS	70	3.4	17.9	27/0.85	49.3	2.5	60.1	5428	11	1080	720
3MV095A11HS	95	3.4	19.5	36/0.85	52.9	2.5	64.0	6172	14	1150	770
3MV120A11HS	120	3.4	21.0	40/0.85	56.3	2.5	67.5	6820	18	1220	810
3MV150A11HS	150	3.4	22.5	40/0.85	59.6	2.5	71.1	7428	23	1280	850
3MV185A11HS	185	3.4	24.3	40/0.85	63.7	2.5	75.5	8215	25	1360	910
3MV240A11HS	240	3.4	26.5	40/0.85	68.6	3.15	82.1	10223	25	1480	990
3MV300A11HS	300	3.4	28.6	40/0.85	73.3	3.15	87.2	11324	25	1570	1050
3MV400A11HS	400	3.4	31.5	40/0.85	79.8	3.15	94.1	12986	25	1690	1130

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.822	0.118	9500	0.505	12.8	1.45	0.0722
70	0.443	0.568	0.109	8300	0.580	14.7	1.09	0.0627
95	0.320	0.411	0.104	7400	0.646	16.4	0.856	0.0581
120	0.253	0.325	0.100	6800	0.708	18.0	0.744	0.0545
150	0.206	0.265	0.0971	6300	0.770	19.6	0.687	0.0515
185	0.164	0.211	0.0940	5700	0.844	21.4	0.632	0.0486
240	0.125	0.162	0.0909	5200	0.934	23.7	0.532	0.0456
300	0.100	0.130	0.0884	4700	1.02	25.9	0.496	0.0432
400	0.0778	0.102	0.0848	4200	1.14	28.9	0.455	0.0397

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
50	156	152	4.7	4.8
70	191	189	6.6	6.8
95	227	228	9.0	9.1
120	257	261	11.3	10.1
150	287	295	14.2	10.1
185	323	337	17.5	10.1
240	371	393	22.7	10.1
300	414	445	28.4	10.1
400	467	510	37.8	10.1

Three Core Armoured Power Cable 12.7/22kV

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 12.7/22 (24) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)

D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted copper complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

INNER SHEATH:

Black PVC or PE

ARMOUR:

Galvanized steel wires complying with AS/NZS 3863

OUTER SHEATH:

Black PVC, PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



12.7/22kV Three Core Armoured Copper Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Diameter over inner sheath (approx.)	Diameter of steel wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
										During installation	Installed
	mm ²	mm	mm	no./mm	mm	mm	mm	kg/km	kN	mm	mm
3MV035C22HS	35	5.5	19.1	20/0.85	52.0	2.5	63.0	6146	7.4	1130	760
3MV050C22HS	50	5.5	20.3	29/0.85	54.7	2.5	65.9	6939	11	1190	790
3MV070C22HS	70	5.5	22.1	40/0.85	58.7	2.5	70.2	8178	15	1260	840
3MV095C22HS	95	5.5	23.7	40/0.85	62.3	2.5	74.0	9322	20	1330	890
3MV120C22HS	120	5.5	25.2	40/0.85	65.7	3.15	79.0	11321	25	1420	950
3MV150C22HS	150	5.5	26.7	40/0.85	69.0	3.15	82.6	12530	25	1490	990
3MV185C22HS	185	5.5	28.5	40/0.85	73.1	3.15	86.9	14111	25	1560	1040
3MV240C22HS	240	5.5	30.7	40/0.85	78.0	3.15	92.2	16399	25	1660	1110
3MV300C22HS	300	5.5	32.8	40/0.85	82.7	3.15	97.2	18718	25	1750	1170
3MV400C22HS	400	5.5	35.7	40/0.85	89.2	3.15	104.2	21962	25	1880	1250

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
35	0.524	0.668	0.138	15000	0.646	32.8	1.26	0.0917
50	0.387	0.494	0.131	14000	0.710	36.1	0.987	0.0851
70	0.268	0.342	0.120	12000	0.805	40.9	0.751	0.0745
95	0.193	0.247	0.115	11000	0.888	45.1	0.666	0.0691
120	0.153	0.196	0.110	10000	0.966	49.1	0.569	0.0649
150	0.124	0.159	0.107	9200	1.04	53.0	0.531	0.0613
185	0.0991	0.128	0.103	8500	1.14	57.7	0.495	0.0577
240	0.0754	0.0981	0.0991	7700	1.25	63.5	0.458	0.0541
300	0.0601	0.0792	0.0961	7100	1.36	68.9	0.433	0.0512
400	0.0470	0.0633	0.0919	6400	1.50	76.4	0.406	0.0471

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
35	171	167	5.0	5.1
50	201	199	7.1	7.3
70	244	246	10.0	10.1
95	290	296	13.6	10.1
120	328	339	17.1	10.1
150	365	381	21.4	10.1
185	408	431	26.4	10.1
240	465	499	34.3	10.1
300	516	560	42.9	10.1
400	573	633	57.2	10.1

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 12.7/22 (24) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)
D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

INNER SHEATH:

Black PVC or PE

ARMOUR:

Galvanized steel wires complying with AS/NZS 3863

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



12.7/22kV Three Core Armoured Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Diameter over inner sheath (approx.)	Diameter of steel wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
										During installation	Installed
	mm ²	mm	mm	no./mm	mm	mm	mm	kg/km	kN	mm	mm
3MV050A22HS	50	5.5	20.3	19/0.85	54.7	2.5	65.9	5904	7.5	1190	790
3MV070A22HS	70	5.5	22.1	27/0.85	58.7	2.5	70.2	6710	11	1260	840
3MV095A22HS	95	5.5	23.7	36/0.85	62.3	2.5	74.0	7507	14	1330	890
3MV120A22HS	120	5.5	25.2	40/0.85	65.7	3.15	79.0	9117	18	1420	950
3MV150A22HS	150	5.5	26.7	40/0.85	69.0	3.15	82.6	9806	23	1490	990
3MV185A22HS	185	5.5	28.5	40/0.85	73.1	3.15	86.9	10709	25	1560	1040
3MV240A22HS	240	5.5	30.7	40/0.85	78.0	3.15	92.2	11924	25	1660	1110
3MV300A22HS	300	5.5	32.8	40/0.85	82.7	3.15	97.2	13093	25	1750	1170
3MV400A22HS	400	5.5	35.7	40/0.85	89.2	3.15	104.2	14786	25	1880	1250

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.822	0.131	14000	0.710	36.1	1.38	0.0851
70	0.443	0.568	0.120	12000	0.805	40.9	1.04	0.0745
95	0.320	0.411	0.115	11000	0.888	45.1	0.823	0.0691
120	0.253	0.325	0.110	10000	0.966	49.1	0.669	0.0649
150	0.206	0.265	0.107	9200	1.04	53.0	0.613	0.0613
185	0.164	0.211	0.103	8500	1.14	57.7	0.560	0.0577
240	0.125	0.161	0.0991	7700	1.25	63.5	0.507	0.0541
300	0.100	0.130	0.0961	7100	1.36	68.9	0.472	0.0512
400	0.0778	0.102	0.0919	6400	1.50	76.4	0.436	0.0471

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
50	156	155	4.7	4.8
70	191	192	6.6	6.8
95	227	231	9.0	9.1
120	257	265	11.3	10.1
150	286	299	14.2	10.1
185	322	340	17.5	10.1
240	370	396	22.7	10.1
300	413	448	28.4	10.1
400	466	513	37.8	10.1

Three Core Armoured Power Cable 19/33kV

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 19/33 (36) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)

D = Overall diameter of cable



DESIGN

CONDUCTOR:

Stranded, round and compacted copper complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

INNER SHEATH:

Black PVC or PE

ARMOUR:

Galvanized steel wires complying with AS/NZS 3863

OUTER SHEATH:

Black PVC, PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request

19/33kV Three Core Armoured Copper Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Diameter over inner sheath (approx.)	Diameter of steel wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
										During installation	Installed
	mm ²	mm	mm	no./mm	mm	mm	mm	kg/km	kN	mm	mm
3MV050C33HS	50	8.0	25.3	29/0.85	65.9	3.15	79.2	9484	11	1430	950
3MV070C33HS	70	8.0	27.1	40/0.85	69.9	3.15	83.6	10849	15	1500	1000
3MV095C33HS	95	8.0	28.7	40/0.85	73.5	3.15	87.4	12152	20	1570	1050
3MV120C33HS	120	8.0	30.2	40/0.85	76.9	3.15	91.0	13329	25	1640	1090
3MV150C33HS	150	8.0	31.7	40/0.85	80.2	3.15	94.6	13597	25	1700	1140
3MV185C33HS	185	8.0	33.5	40/0.85	84.3	3.15	98.9	16248	25	1780	1190
3MV240C33HS	240	8.0	35.7	40/0.85	89.2	3.15	104.2	18557	25	1880	1250
3MV300C33HS	300	8.0	37.8	40/0.85	93.9	3.15	109.2	21022	25	1970	1310
3MV400C33HS	400	8.0	40.7	40/0.85	100.4	3.15	116.2	24379	25	2090	1390

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.387	0.494	0.143	17000	0.828	15.7	0.873	0.0976
70	0.268	0.342	0.131	16000	0.929	17.6	0.672	0.0862
95	0.193	0.247	0.125	14000	1.02	19.3	0.586	0.0801
120	0.153	0.196	0.120	13000	1.10	20.9	0.538	0.0753
150	0.124	0.159	0.116	12000	1.18	22.4	0.501	0.0713
185	0.0991	0.128	0.112	11000	1.28	24.3	0.466	0.0671
240	0.0754	0.0978	0.108	10000	1.39	26.5	0.434	0.0629
300	0.0601	0.0788	0.104	9600	1.51	28.6	0.407	0.0595
400	0.0470	0.0629	0.0995	8700	1.66	31.5	0.382	0.0548

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
50	201	203	7.1	7.3
70	244	250	10.0	10.1
95	290	300	13.6	10.1
120	327	342	17.1	10.1
150	364	385	21.4	10.1
185	407	435	26.4	10.1
240	465	503	34.3	10.1
300	515	564	42.9	10.1
400	573	637	57.2	10.1

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 19/33 (36) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)
D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

INNER SHEATH:

Black PVC or PE

ARMOUR:

Galvanized steel wires complying with AS/NZS 3863

OUTER SHEATH:

Black PVC. PE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape and chemical additive also available.

Other colours available on request



19/33kV Three Core Armoured Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Diameter over inner sheath (approx.)	Diameter of steel wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
										During installation	Installed
	mm ²	mm	mm	no./mm	mm	mm	mm	kg/km	kN	mm	mm
3MV050A33HS	50	8.0	25.3	19/0.85	65.9	3.15	79.2	8449	7.5	1430	950
3MV070A33HS	70	8.0	27.1	27/0.85	69.9	3.15	83.6	9381	11	1500	1000
3MV095A33HS	95	8.0	28.7	36/0.85	73.5	3.15	87.4	10338	14	1570	1050
3MV120A33HS	120	8.0	30.2	40/0.85	76.9	3.15	91.0	11125	18	1640	1090
3MV150A33HS	150	8.0	31.7	40/0.85	80.2	3.15	94.6	11873	23	1700	1140
3MV185A33HS	185	8.0	33.5	40/0.85	84.3	3.15	98.9	12845	25	1780	1190
3MV240A33HS	240	8.0	35.7	40/0.85	89.2	3.15	104.2	14082	25	1880	1250
3MV300A33HS	300	8.0	37.8	40/0.85	93.9	3.15	109.2	15398	25	1970	1310
3MV400A33HS	400	8.0	40.7	40/0.85	100.4	3.15	116.2	17203	25	2090	1390

Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.822	0.143	17000	0.828	15.7	1.21	0.0976
70	0.443	0.568	0.131	16000	0.929	17.6	0.927	0.0862
95	0.320	0.411	0.125	14000	1.02	19.3	0.733	0.0801
120	0.253	0.325	0.120	13000	1.10	20.9	0.638	0.0753
150	0.206	0.265	0.116	12000	1.18	22.4	0.583	0.0713
185	0.164	0.211	0.112	11000	1.28	24.3	0.531	0.0671
240	0.125	0.161	0.108	10000	1.39	26.5	0.483	0.0629
300	0.100	0.130	0.104	9600	1.51	28.6	0.447	0.0595
400	0.0778	0.102	0.0995	8700	1.66	31.5	0.412	0.0548

Current Ratings

Conductor size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1sec
mm ²	A	A	kA	kA
50	156	158	4.7	4.8
70	191	195	6.6	6.8
95	227	234	9.0	9.1
120	257	268	11.3	10.1
150	286	301	14.2	10.1
185	322	343	17.5	10.1
240	370	399	22.7	10.1
300	413	450	28.4	10.1
400	466	516	37.8	10.1

THREE CORE POWER CABLE FOR URD APPLICATION



Single Core Power Cable



Three Core Power Cable



Three Core Armoured Cable



Three Core URD Power Cable



Three Core Triplex Power Cable

Three Core Power Cable For URD Application 6.35/11kV

STANDARD: AS/NZS 4026

RATED VOLTAGE: 6.35/11 (12) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 25x D. When installed: 15 x D (HDPE sheathed cables)
D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

INNER SHEATH:

PVC, Orange

OUTER SHEATH:

HDPE, Black



Electrical Data

Conductor size	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	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence resistance at 50Hz
mm ²	Ω/.km	Ω/.km	Ω/.km	MΩ.km	A/.km	W/.km	Ω/km	Ω/km
95	0.320	0.411	0.104	7400	0.646	16.4	1.20	0.0581
185	0.164	0.211	0.0940	5700	0.844	21.4	0.961	0.0486
240	0.125	0.162	0.0909	5200	0.934	23.7	0.922	0.0456
300	0.100	0.130	0.0984	4700	1.02	25.9	0.897	0.0432

Current Ratings

Conductor size	Continuous current-carrying capacity, A		Conductor fault current carrying capacity for 1 second	Short circuit current rating of the screen 1sec
	in ground	In air		
mm ²			kA	kA
95	232	231	9.0	4.8
185	336	348	17.5	6.8
240	389	410	22.7	9.1
300	439	469	28.4	10.1

6.35/11kV Three Core PVC/HDPE Sheathed URD

Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
3MV095A11HH	95	3.4	19.5	36/0.85	52.5	2850	14.4	1380	830
3MV185A11HH	185	3.4	24.3	40/0.85	63.1	4050	25	1660	990
3MV240A11HH	240	3.4	26.5	40/0.85	68.8	4750	25	1780	1070
3MV300A11HH	300	3.4	28.6	40/0.85	72.7	5500	25	1910	1140

Three Core Power Cable For URD Application 12.7/22kV

STANDARD: AS/NZS 4026

RATED VOLTAGE: 12.7/22 (24) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 25 x D. When installed: 15 x D (HDPE sheathed cables)

D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

INNER SHEATH:

PVC, Orange

OUTER SHEATH:

HDPE, Black



Electrical Data

Conductor size	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	Charging current Per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence resistance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
95	0.32	0.411	0.115	11000	0.888	45.1	1.20	0.0691
185	0.164	0.211	0.103	8500	1.14	57.7	0.961	0.0577
240	0.125	0.161	0.0991	7700	1.25	63.5	0.922	0.0541

Current Ratings

Conductor size	Continuous current-carrying capacity, A		Conductor fault current carrying capacity for 1 second	Short circuit current rating of the screen 1sec
	in ground	In air		
mm ²			kA	kA
95			9.0	4.8
185			17.5	6.8
240			22.7	9.1

12.7/22kV Three Core PVC/HDPE Sheathed URD

Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm ²	mm	mm	no./mm	mm	kg/km	kN	mm	mm
3MV095A22HH	95	5.5	23.7	36/0.85	27.0	3600	14.4	1620	970
3MV185A22HH	185	5.5	28.5	40/0.85	31.8	4850	25.0	1900	1140
3MV240A22HH	240	5.5	30.7	40/0.85	34.0	5650	25.0	2030	1220

THREE CORE TRIPLEX POWER CABLE



Single Core Power Cable



Three Core Power Cable



Three Core Armoured Cable



Three Core URD Power Cable



Three Core Triplex Power Cable

Three Core Triplex Power Cable 6.35/11kV

STANDARD: AS/NZS 4026

RATED VOLTAGE: 6.35/11(12)kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 25 x CD. When installed: 15 x CD (HDPE sheathed cables)
CD = Diameter of phase cable

DESIGN

CONDUCTOR:

Stranded, round and compacted copper complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN: Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN: Circular copper wires

BINDER: Water Blocking Taped

OUTER SHEATH: HDPE, Black





6.35/11kV Triplex HDPE Sheathed Copper Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Diameter of phase cable	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius			
									Phase cable		Cable bundle	
									During Installation	Installed	During Installation	Installed
	mm ²	mm	mm	no./mm	mm	mm	kg/km	kN	mm	mm	mm	mm
3MV035C11TH	35	3.4	14.9	24/1.35	22.7	49.0	2915	7.4	570	340	730	490
3MV050C11TH	50	3.4	16.1	34/1.35	24.0	51.7	3740	11	600	360	780	520
3MV070C11TH	70	3.4	17.9	30/1.70	26.8	57.6	5027	15	670	400	860	580
3MV095C11TH	95	3.4	19.5	38/1.52	28.1	60.5	5834	20	700	420	910	610
3MV120C11TH	120	3.4	21.0	48/1.35	29.7	64.0	6606	25	740	450	960	640
3MV150C11TH	150	3.4	22.5	48/1.35	31.3	67.5	7463	25	780	470	1010	670
3MV185C11TH	185	3.4	24.3	48/1.35	32.8	70.6	8559	25	820	490	1060	710
3MV240C11TH	240	3.4	26.5	48/1.35	35.1	75.7	10268	25	880	530	1140	760
3MV300C11TH	300	3.4	28.6	48/1.35	37.4	80.6	12071	25	930	560	1210	810
3MV400C11TH	400	3.4	31.5	48/1.35	40.5	87.2	14554	25	1010	610	1310	870
3MV500C11TH	500	3.4	35.3	48/1.35	44.6	96.0	18813	25	1110	670	1440	960

Electrical Data

Conductor size	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	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/.km	Ω/.km	Ω/.km	MΩ.km	A/.km	W/.km	Ω/.km	Ω/.km
35	0.524	0.668	0.139	11000	0.455	11.5	1.04	0.0792
50	0.387	0.494	0.132	9500	0.505	12.8	0.756	0.0732
70	0.268	0.342	0.123	8300	0.580	14.7	0.530	0.0648
95	0.193	0.247	0.117	7400	0.646	16.4	0.456	0.0595
120	0.153	0.196	0.113	6800	0.708	18.0	0.417	0.0558
150	0.124	0.159	0.1090	6300	0.770	19.6	0.388	0.0528
185	0.0991	0.128	0.1050	5700	0.844	21.4	0.364	0.0492
240	0.0754	0.098	0.1010	5200	0.934	23.7	0.341	0.0462
300	0.0601	0.0791	0.0984	4700	1.02	25.9	0.326	0.0438
400	0.0470	0.0632	0.0943	4200	1.14	28.9	0.313	0.0403
500	0.0373	0.0516	0.0925	3700	1.30	32.9	0.304	0.0391

Current Ratings

Conductor size	Continuous current-carrying capacity, A		Fault current carrying capacity for 1 second	Short circuit current rating of the screen 1sec
	in ground	In air		
mm ²			Cond. kA	kA
35	145	135	5.0	5.0
50	172	165	7.1	7.1
70	209	202	10.0	10.0
95	252	248	13.6	10.0
120	285	282	17.1	10.0
150	318	315	21.4	10.0
185	357	354	26.4	10.0
240	408	408	34.3	10.0
300	467	478	42.9	10.0
400	524	539	57.2	10.0
500	581	602	71.5	10.0

STANDARD: AS/NZS 4026

RATED VOLTAGE: 6.35/11 (12)kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 25 x CD. When installed: 15 x CD (HDPE sheathed cables)

CD = Diameter of phase cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN: Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN: Circular copper wires

BINDER: Water Blocking Taped

OUTER SHEATH: HDPE, Black



6.35/11kV Triplex HDPE Sheathed Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Diameter of phase cable	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius			
									Phase cable		Cable bundle	
									During Installation	Installed	During Installation	Installed
mm ²	mm	mm	no./mm	mm	mm	kg/km	kN	mm	mm	mm	mm	
3MV050A11TH	50	3.4	16.1	23/1.35	23.4	50.4	2394	7.5	590	350	760	500
3MV070A11TH	70	3.4	17.9	32/1.35	25.9	55.9	3092	11	650	390	840	560
3MV095A11TH	95	3.4	19.5	43/1.35	28.1	60.5	3887	14	700	420	910	610
3MV120A11TH	120	3.4	21.0	48/1.35	29.7	64.0	4410	18	740	450	960	640
3MV150A11TH	150	3.4	22.5	48/1.35	31.3	67.5	4749	23	780	470	1010	670
3MV185A11TH	185	3.4	24.3	48/1.35	32.8	70.6	5170	25	820	490	1060	710
3MV240A11TH	240	3.4	26.5	48/1.35	35.1	75.7	5810	25	880	530	1140	760
3MV300A11TH	300	3.4	28.6	48/1.35	37.4	80.6	6468	25	930	560	1210	810
3MV400A11TH	400	3.4	31.5	48/1.35	40.5	87.2	7406	25	1010	610	1310	870
3MV500A11TH	500	3.4	35.3	48/1.35	44.6	103.0	9640	25	1120	670	1540	1030

Electrical Data

Conductor size	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	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.822	0.130	9500	0.505	12.8	1.19	0.0722
70	0.443	0.568	0.121	8300	0.580	14.7	0.837	0.0636
95	0.32	0.411	0.117	7400	0.646	16.4	0.614	0.0595
120	0.253	0.325	0.113	6800	0.708	18.0	0.516	0.0558
150	0.206	0.265	0.109	6300	0.770	19.6	0.469	0.0528
185	0.164	0.211	0.105	5700	0.844	21.4	0.429	0.0492
240	0.125	0.161	0.101	5200	0.934	23.7	0.340	0.0462
300	0.100	0.130	0.0984	4700	1.02	25.9	0.365	0.0438
400	0.0778	0.102	0.0943	4200	1.14	28.9	0.343	0.0403
500	0.0617	0.0817	0.0926	3700	1.30	32.9	0.327	0.0391

Current Ratings

Conductor size	Continuous current-carrying capacity, A		Fault current carrying capacity for 1 second	Short circuit current rating of the screen 1sec
	in ground	In air		
mm ²			Cond. kA	kA
50	132	125	4.7	4.6
70	163	157	6.6	6.5
95	197	194	9.0	8.8
120	223	221	11.3	10.0
150	249	247	14.2	10.0
185	281	279	17.5	10.0
240	323	323	22.7	10.0
300	372	380	28.4	10.0
400	422	434	37.8	10.0
500	474	490	47.3	10.0

Three Core Triplex Power Cable 12.7/22kV

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 12.7/22 (24)kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 25 x CD. When installed: 15 x CD (HDPE sheathed cables)
CD = Diameter of phase cable

DESIGN

CONDUCTOR:

Stranded, round and compacted copper or complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN: Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN: Circular copper wires

BINDER: Water Blocking Taped

OUTER SHEATH: HDPE, Black





12.7/22kV Triplex HDPE Sheathed Copper Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Diameter of phase cable	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius			
									Phase cable		Cable bundle	
									During Installation	Installed	During Installation	Installed
mm ²	mm	mm	no./mm	mm	mm	kg/km	kN	mm	mm	mm	mm	
3MV035C22TH	35	5.5	19.1	24/1.35	26.6	57.3	3382	7.4	670	400	860	570
3MV050C22TH	50	5.5	20.3	34/1.35	28.5	61.4	4257	11	710	430	920	610
3MV070C22TH	70	5.5	22.1	30/1.70	30.9	66.5	5565	15	770	460	1000	670
3MV095C22TH	95	5.5	23.7	38/1.52	32.2	69.3	6399	20	800	480	1040	690
3MV120C22TH	120	5.5	25.2	48/1.35	33.8	72.7	7203	25	840	510	1090	730
3MV150C22TH	150	5.5	26.7	48/1.35	35.4	76.2	8092	25	880	530	1140	760
3MV185C22TH	185	5.5	28.5	48/1.35	37.3	80.3	9254	25	930	560	1200	800
3MV240C22TH	240	5.5	30.7	48/1.35	39.6	85.4	11010	25	990	590	1280	850
3MV300C22TH	300	5.5	32.8	48/1.35	41.9	90.2	12859	25	1050	630	1350	900
3MV400C22TH	400	5.5	35.7	48/1.35	45.0	96.9	15405	25	1120	670	1450	970
3MV500C22TH	500	5.5	39.5	48/1.35	49.1	105.7	19843	25	1230	740	1590	1060

Electrical Data

Conductor size	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	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
35	0.524	0.668	0.148	15000	0.646	32.8	1.05	0.0917
50	0.387	0.494	0.143	14000	0.710	36.1	0.756	0.0859
70	0.268	0.342	0.132	12000	0.805	40.9	0.531	0.0758
95	0.193	0.247	0.125	11000	0.888	45.1	0.458	0.0698
120	0.153	0.196	0.121	10000	0.966	49.1	0.418	0.0655
150	0.124	0.159	0.117	9200	1.04	53.0	0.389	0.0619
185	0.0991	0.128	0.113	8500	1.14	57.7	0.364	0.0583
240	0.0754	0.0978	0.109	7700	1.25	63.5	0.341	0.0546
300	0.0601	0.0788	0.105	7100	1.36	68.9	0.326	0.0517
400	0.0470	0.0628	0.101	6400	1.50	76.4	0.313	0.0475
500	0.0373	0.0512	0.0986	5700	1.70	86.3	0.304	0.0457

Current Ratings

Conductor size	Continuous current-carrying capacity, A		Fault current carrying capacity for 1 second	Short circuit current rating of the screen 1sec
	in ground	In air		
mm ²			Cond. kA	kA
35	147	140	5.0	5.0
50	176	171	7.1	7.1
70	214	210	10.0	10.0
95	254	250	13.6	10.0
120	286	283	17.1	10.0
150	319	317	21.4	10.0
185	367	372	26.4	10.0
240	421	429	34.3	10.0
300	470	481	42.9	10.0
400	527	543	57.2	10.0
500	584	605	71.5	10.0

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 12.7/22 (24) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 25 x CD. When installed: 15 x CD (HDPE sheathed cables)

CD = Diameter of phase cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN: Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN: Circular copper wires

BINDER: Water Blocking Taped

OUTER SHEATH: HDPE, Black



12.7/22kV Triplex HDPE Sheathed Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Diameter of phase cable	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius			
									Phase cable		Cable bundle	
									During pulling	Installed	During installation	Installed
3MV050A22TH	50	5.5	20.3	23/1.35	27.9	60.1	2908	7.5	730	440	940	630
3MV070A22TH	70	5.5	22.1	32/1.35	30.4	65.6	3648	11	770	460	1000	670
3MV095A22TH	95	5.5	23.7	43/1.35	32.2	69.3	4453	14	820	490	1060	700
3MV120A22TH	120	5.5	25.2	48/1.35	33.8	72.7	5007	18	860	510	1110	740
3MV150A22TH	150	5.5	26.7	48/1.35	35.4	76.2	5378	23	890	540	1150	770
3MV185A22TH	185	5.5	28.5	48/1.35	37.3	80.3	5864	25	930	560	1210	810
3MV240A22TH	240	5.5	30.7	48/1.35	39.6	85.4	6553	25	1000	600	1290	860
3MV300A22TH	300	5.5	32.8	48/1.35	41.9	90.2	7256	25	1060	640	1370	910
3MV400A22TH	400	5.5	35.7	48/1.35	45.0	96.9	8257	25	1140	690	1480	980
3MV500A22TH	500	5.5	41.8	48/1.35	54.7	117.9	10670	25	1230	740	1590	1060

Electrical Data

Conductor size	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	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm ²	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.820	0.144	14000	0.685	34.80	1.19	0.0869
70	0.443	0.567	0.133	13000	0.768	39.00	0.838	0.0769
95	0.32	0.409	0.126	11000	0.855	43.40	0.613	0.0709
120	0.253	0.324	0.122	10000	0.926	47.00	0.516	0.0668
150	0.206	0.263	0.1180	9700	0.997	50.70	0.469	0.0633
185	0.164	0.210	0.1150	9000	1.07	54.50	0.428	0.0601
240	0.125	0.160	0.1100	8100	1.19	60.4	0.388	0.0560
300	0.100	0.128	0.1070	7400	1.30	66.3	0.364	0.0536
400	0.0778	0.101	0.1030	6700	1.45	73.5	0.342	0.0492
500	0.0617	0.0814	0.0989	5900	1.62	82.4	0.326	0.0457

Current Ratings

Conductor size	Continuous current-carrying capacity, A		Fault current carrying capacity for 1 second	Short circuit current rating of the screen 1sec
	in ground	In air		
mm ²			Cond. kA	kA
50	158	159	4.73	4.6
70	191	196	6.62	6.5
95	227	237	8.99	8.8
120	257	271	11.4	10.0
150	287	307	14.2	10.0
185	317	344	17.5	10.0
240	372	411	22.7	10.0
300	418	469	28.4	10.0
400	476	546	37.8	10.0
500	538	630	47.3	10.0

Technical Information - Current Ratings

Continuous Current Ratings

The continuous current ratings given in this catalogue have been calculated in accordance with the International Electrotechnical Commission Publication IEC 60287-“Electric Cables-Calculations of the Current rating”. Based on the following standard operating condition.

Maximum conductor temperature	90°C
Ambient air temperature	40°C
Ambient soil temperature	25°C
Soil thermal resistivity	1.2K.m/W

Ambient Air Temperature Variation

Where it is desired to depart from the standard conditions, the rating correction factors given in the following table should be applied.

Air temp.(°C)	20	25	35	40	45	50	55
Rating factor	1.18	1.14	1.05	1.00	0.95	0.89	0.84

Ground Temperature Variation

Cables laid direct in ground or in ducts

Ground temp.(°C)	10	15	20	25	30	35	40
Rating factor	1.11	1.07	1.04	1.00	0.96	0.92	0.88

Depth of Burial Variation

Depth of Burial (m)	Cables laid Direct in Ground		Cables laid direct in Ducts	
	Rating factor up to 300mm ²	Rating factor above 300mm ²	Rating factor(single core)	Rating factor(three cores)
0.80	1.00	1.00	1.00	1.00
1.00	0.98	0.97	0.98	0.99
1.25	0.96	0.95	0.95	0.97
1.50	0.95	0.93	0.94	0.96
1.75	0.94	0.91	0.92	0.96
2.00	0.92	0.89	0.91	0.95
2.50	0.91	0.88	0.89	0.94
3.00	0.90	0.86	0.88	0.93

Locations

HEAD OFFICE

NAN Electrical Cable Australia Pty Ltd
 22 Agosta Drive, Laverton North
 Vic 3026 Australia
 Tel: +61 (03) 8368 2688
 Fax: +61 (03) 8368 2489
 info@nancable.com.au
 www.nancable.com.au

MANUFACTURING LOCATIONS

Nanyang Cable (Tianjin) Co., Ltd
 No 239, Zhonghuan Dong Road,
 Tianjin Airport Economic Zone,
 China 300308

Guangzhou Nanyang Cable Co., Ltd

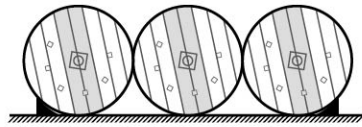
No 19, Yongfeng Road,
 Yonghe Economic District,
 Guangzhou Economic & Technology Development Zone
 China 511356

Drum Handling Guide

STORAGE



Keep the drum standing upright, using wedges in the heels of the flanges

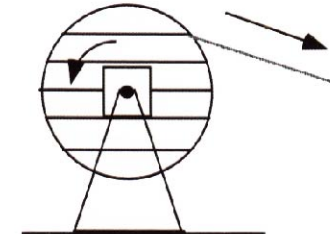


Keep in sequence

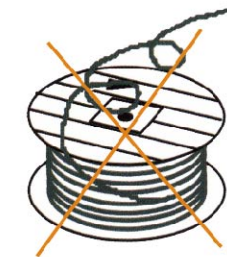


Do not lay drums on their side

UNWINDING

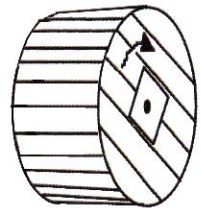


Unwind this way



Never unwind this way

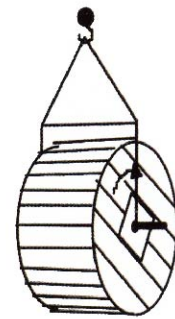
TRANSPORT



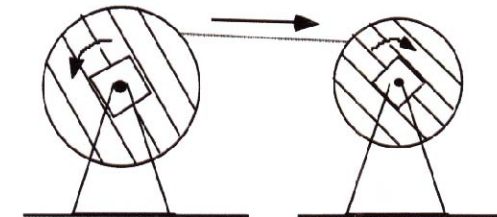
Roll the drum in the direction used during cable reeling



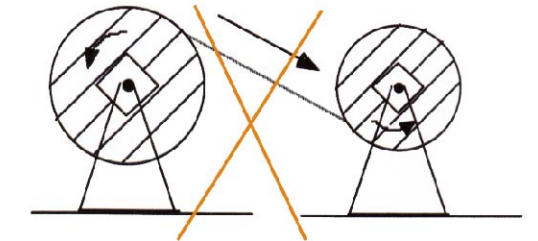
Drums may be lifted either by fork-lift truck or crane with appropriate lifting attachments



RE-WINDING

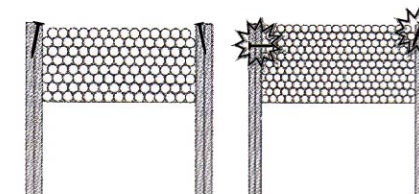


Recommended

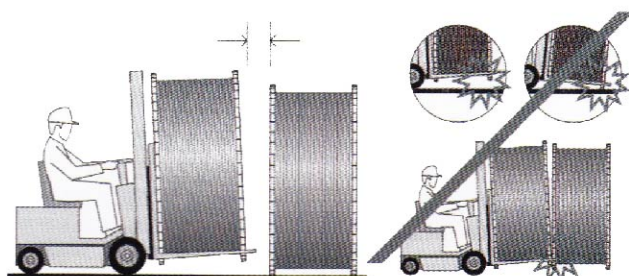


Not recommended

NAIL WITH CAUTION



If the wooden lagging needs to be refastened, the nailing should be done carefully in the middle of the drum flange.



The forks of the truck must be longer than the width of the drum, so that the lagging is not damaged. When moving the drum, tilt the truck mast so that the drum remains in the fork and the points do not touch the ground. Insufficient raising may cause the drum to be dragged on the ground and damaged or dropped off the forks if the ground surface is uneven. Do not release the drum until the truck has stopped completely. Do not push the drum with the truck.