



SOUTHERN CABLE

Design with specification,
manufacture with integrity.

DESIGN FOR
**BUILDING &
CONSTRUCTION**



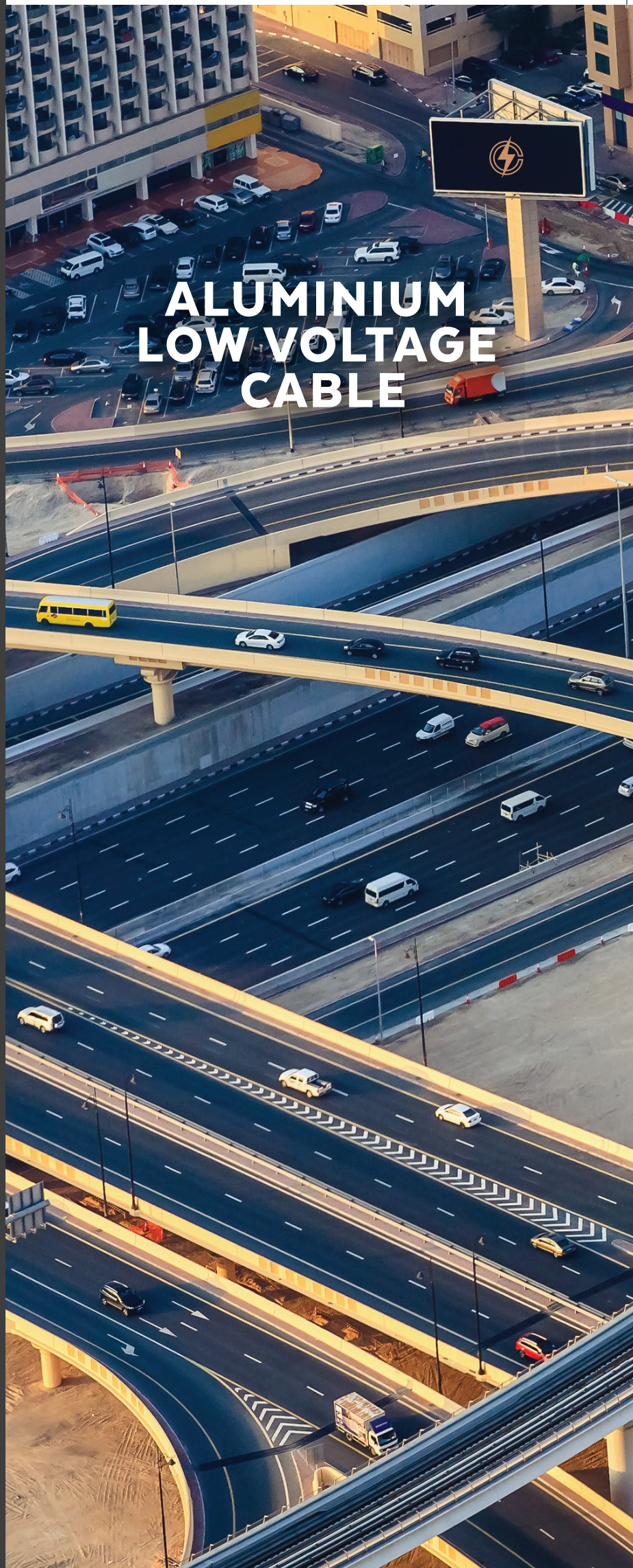
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FULL BOOKLET



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SEPERATE PAGES



SOUTHERNCABLE.COM.MY



**ALUMINIUM
LOW VOLTAGE
CABLE**

Southern Cable manufactures a wide range of low voltage cables based on International Electrotechnical Commission (IEC), Malaysia Standard (MS) and British Standard (BS) specifications. Our low voltage cables are commonly used in final circuits in building, like lighting application, power supply, grounding usage and other fixed wiring usage typically in domestic and light industrial areas.

The low voltage cables are manufactured by Southern Cable complied to the specification of:

STANDARD SPECIFICATIONS

IEC 60227-3	450/750V Non-Sheathed PVC Cable Design Guideline
IEC 60502-1	1kV to 3kV Cable Design Guideline
IEC 60502-2	6kV to 30kV Cable Design Guideline
MS 2112-3	Malaysia Non-Sheathed PVC Cable Design Guideline
MS 2112-4	Malaysia Sheathed PVC Cable Design Guideline
BS 6004	300/500V Cable Design Guideline
BS 6346	600/1000V Cable Design Guideline

IEC 60502-1		IEC 60502-2	
TEST METHOD		DESIGN GUIDELINE	
Class 2 conductor cables for rated voltage from 1kV ($U_m=1,2kV$) up to 3kV ($U_m=3,6kV$) with extruded solid insulation.		Class 2 conductor cables for rated voltage from 6kV ($U_m=7,2kV$) up to 30kV ($U_m=36kV$) with extruded solid insulation.	
Cat. A	Systems in which any phase conductor that comes in contact with earth or an earth conductor is disconnected from the system within 1 minute		
Cat. B	Systems which, under fault conditions, are operated for a short time with one phase earthed (not exceeding 8hrs on any occasion and no more than 125hrs per annum)		
Cat. C	All systems which do not fall into category A or B		

ALUMINIUM**PVC INSULATED LOW VOLTAGE CABLE**

Single Core — Aluminium, PVC Insulated, Non-sheathed Cable (600/1000V)	02
Single Core — Aluminium, PVC Insulated, PVC sheathed Cable (600/1000V)	03
Two Core — Aluminium, PVC Insulated, PVC Sheathed Cable (600/1000V)	04
Three Core — Aluminium, PVC Insulated, PVC Sheathed Cable (600/1000V)	05
Four Core — Aluminium, PVC Insulated, PVC Sheathed Cable (600/1000V)	06

XLPE INSULATED LOW VOLTAGE CABLE

Single Core — Aluminium, XLPE Insulated, PVC Sheathed Cable (600/1000V)	07
Two Core — Aluminium, XLPE Insulated, PVC Sheathed Cable (600/1000V)	08
Three Core — Aluminium, XLPE Insulated, PVC Sheathed Cable (600/1000V)	09
Four Core — Aluminium, XLPE Insulated, PVC Sheathed Cable (600/1000V)	10

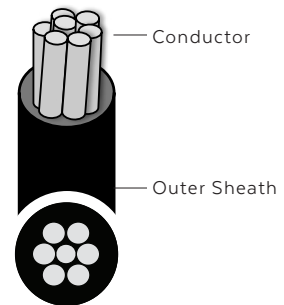
XLPE INSULATED AMOURED LOW VOLTAGE CABLE

Single Core — Aluminium, XLPE Insulated, Aluminium Wire Amoured, PVC Sheathed Cable (600/1000V)	11
Two Core — Aluminium, XLPE Insulated, Steel Wire Amoured, PVC Sheathed Cable (600/1000V)	12
Three Core — Aluminium, XLPE Insulated, Steel Wire Amoured, PVC Sheathed Cable (600/1000V)	13
Four Core — Aluminium, XLPE Insulated, Steel Wire Amoured, PVC Sheathed Cable (600/1000V)	14
Four Core — Aluminium, XLPE Insulated, Copper Tape Screening, PE Sheathed Cable (600/1000V, TNB Spec)	15

SINGLE CORE – ALUMINIUM, PVC INSULATED, NON-SHEATHED CABLE

600/1000V, AL / PVC

STANDARD SPECIFICATION	IEC 60502-1
CABLE DESCRIPTION	Aluminium Conductor, PVC Insulated, Non-sheathed Cables - 1 Core
CABLE SIZES RANGE	1 Core x (16 - 1000)mm ²
SHEATHING COLOURS	Black, other colours is available upon request.



APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, electrical appliances, switchgear and control gear. Uniform insulation thickness of wire to ensure easy stripping and cutting.

SPECIAL FEATURE ON REQUEST

- UV Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen
- Flame Retardant

CUSTOMISATION

Customisation is available upon request based on your cable specification.

CONSTRUCTION DATA

Number of Core	Nominal Sectional Area	Conductor Diameter (Approx)	Nominal Insulation Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm ²	mm	mm	mm	kg/km
1	16	4.74	1.00	6.8	72
	25	5.97	1.20	8.5	112
	35	7.10		9.6	145
	50	8.10	1.40	11.0	196
	70	9.74		12.6	265
	95	11.46	1.60	14.8	363
	120	12.93		16.2	448
	150	14.33	1.80	18.0	562
	185	16.05	2.00	20.2	684
	240	18.43	2.20	22.9	879
	300	20.64	2.40	25.5	1105
	400	23.34	2.60	28.6	1397
	500	26.21	2.80	31.9	1743
	630	29.80		35.5	2198
	800	34.32		40.0	2659
	1000	41.25		47.4	3408

ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit - 3 Phase	Ampacity in Clipped Direct - 3 Phase Touching
Ω/km	kA	A	A
1.91	1.22	-	-
1.200	1.90		
0.868	2.66		
0.641	3.80	104	110
0.443	5.32	133	140
0.320	7.22	161	170
0.253	9.12	186	197
0.206	11.40	204	227
0.1640	14.07	230	259
0.1250	18.25	269	305
0.1000	22.81	306	351
0.0780	30.41	352	472
0.0605	38.02	405	546
0.0469	47.90	462	626
0.0367	60.82	-	709
0.0291	76.03		823

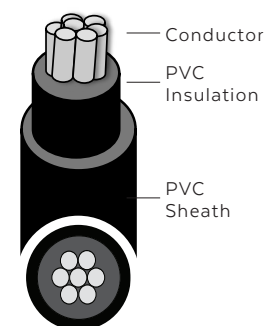
SHAPE OF CONDUCTOR

16 - 800 sqmm Compacted
1000 sqmm Circular

SINGLE CORE – ALUMINIUM, PVC INSULATED, PVC SHEATHED CABLE

600/1000V, AL / PVC / PVC

STANDARD SPECIFICATION	IEC 60502-1
CABLE DESCRIPTION	Aluminium Conductor, PVC Insulated PVC Sheathed Cables - 1 Core
CABLE SIZES RANGE	1 Core x (16 - 1000)mm ²
SHEATHING COLOURS	Black, other colours is available upon request.



APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, electrical appliances, switchgear and control gear. Uniform insulation thickness of wire to ensure easy stripping and cutting.

SPECIAL FEATURE ON REQUEST

- UV Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen
- Flame Retardant

CUSTOMISATION

Customisation is available upon request based on your cable specification.

CONSTRUCTION DATA

Number of Core	Nominal Sectional Area	Conductor Diameter (Approx)	Nominal Insulation Thickness	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm ²	mm	mm	mm	mm	kg/km
1	16	4.74	1.00	1.40	9.7	136
	25	5.97	1.20		11.4	188
	35	7.10			12.5	230
	50	8.10	1.40		13.9	291
	70	9.74			15.5	372
	95	11.46	1.60		17.9	487
	120	12.93			19.4	578
	150	14.33	1.80		21.3	619
	185	16.05	2.00		23.6	859
	240	18.43	2.20		26.5	1089
	300	20.64	2.40		29.3	1350
	400	23.34	2.60		32.6	1687
	500	26.21			35.7	2082
	630	29.80			39.6	2589
	800	34.32	2.80		44.8	3050
	1000	41.25	3.00		51.6	3901

ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit - 3 Phase	Ampacity in Clipped Direct - 3 Phase Touching
Ω/km	kA	A	A
1.91	1.22	-	-
1.200	1.90		
0.868	2.66		
0.641	3.80	104	110
0.443	5.32	133	140
0.320	7.22	161	170
0.253	9.12	186	197
0.206	11.40	204	227
0.1640	14.07	230	259
0.1250	18.25	269	305
0.1000	22.81	306	351
0.0780	30.41	352	472
0.0605	38.02	405	546
0.0469	47.90	462	626
0.0367	60.82	-	709
0.0291	76.03		823

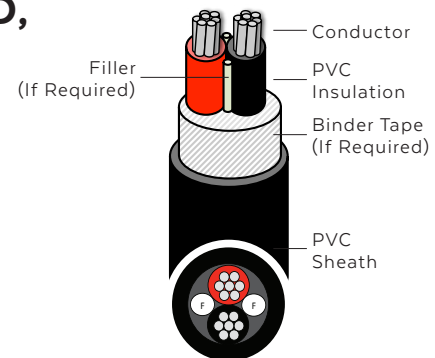
SHAPE OF CONDUCTOR

16 - 800 sqmm Compacted
1000 sqmm Circular

TWO CORE – ALUMINIUM, PVC INSULATED, PVC SHEATHED CABLE

600/1000V, AL / PVC / PVC

STANDARD SPECIFICATION	IEC 60502-1
CABLE DESCRIPTION	Aluminium Conductor, PVC Insulated PVC Sheathed Cables - 2 Core
CABLE SIZES RANGE	2 Core x (16 - 400)mm ²
SHEATHING COLOURS	Black, other colours is available upon request.



APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, electrical appliances, switchgear and control gear. Uniform insulation thickness of wire to ensure easy stripping and cutting.

SPECIAL FEATURE ON REQUEST

- UV Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen
- Flame Retardant

CUSTOMISATION

Customisation is available upon request based on your cable specification.

CONSTRUCTION DATA

Number of Core	Nominal Sectional Area	Conductor Diameter (Approx)	Nominal Insulation Thickness	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm ²	mm	mm	mm	mm	kg/km
2	16	4.74	1.00	1.80	17.0	297
	25	5.97	1.20		20.7	444
	35	7.10			23.0	549
	50	8.10	1.40		25.8	700
	70	9.74			29.3	921
	95	11.46	1.60	1.90	33.9	1238
	120	12.93		2.02	37.1	1491
	150	14.33	1.80	2.16	40.9	1667
	185	16.05	2.00	2.33	45.5	2254
	240	18.43	2.20	2.56	51.5	2879
	300	20.64	2.40	2.77	57.2	3576
	400	23.34	2.60	3.01	63.9	4482

ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit - 1 Phase	Ampacity in Free Air - 1 Phase
Ω/km	kA	A	A
1.91	1.22	54	73
1.200	1.90	71	89
0.868	2.66	86	111
0.641	3.80	104	135
0.443	5.32	131	173
0.320	7.22	157	210
0.253	9.12	-	-
0.206	11.40		
0.1640	14.07		
0.1250	18.25		
0.1000	22.81		
0.0780	30.41		

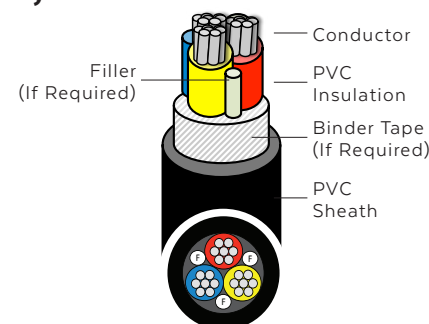
SHAPE OF CONDUCTOR

16 - 400 sqmm Compacted

THREE CORE – ALUMINIUM, PVC INSULATED, PVC SHEATHED CABLE

600/1000V, AL / PVC / PVC

STANDARD SPECIFICATION	IEC 60502-1
CABLE DESCRIPTION	Aluminium Conductor, PVC Insulated, PVC Sheathed Cables - 3 Core
CABLE SIZES RANGE	3 Core x (16 - 400)mm ²
SHEATHING COLOURS	Black, other colours is available upon request.



APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, electrical appliances, switchgear and control gear. Uniform insulation thickness of wire to ensure easy stripping and cutting.

SPECIAL FEATURE ON REQUEST

- UV Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen
- Flame Retardant

CUSTOMISATION

Customisation is available upon request based on your cable specification.

CONSTRUCTION DATA

Number of Core	Nominal Sectional Area	Conductor Diameter (Approx)	Nominal Insulation Thickness	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm ²	mm	mm	mm	mm	kg/km
3	16	4.74	1.00	1.80	18.1	372
	25	5.97	1.20		22.1	556
	35	7.10	1.20		24.7	693
	50	8.10	1.40		28.0	891
	70	9.74	1.40		31.7	1183
	95	11.46	1.60		36.7	1591
	120	12.93	1.60		40.0	1927
	150	14.33	1.80		44.2	2127
	185	16.05	2.00		49.1	2927
	240	18.43	2.20		55.5	3740
	300	20.64	2.40		61.5	4655
	400	23.34	2.60		68.7	5848

ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit - 3 Phase	Ampacity in Free Air - 3 Phase
Ω/km	kA	A	A
1.91	1.22	48	61
1.200	1.90	62	78
0.868	2.66	77	96
0.641	3.80	92	117
0.443	5.32	116	150
0.320	7.22	139	183
0.253	9.12	160	212
0.206	11.40	176	245
0.1640	14.07	199	280
0.1250	18.25	232	330
0.1000	22.81	265	381
0.0780	30.41	-	-

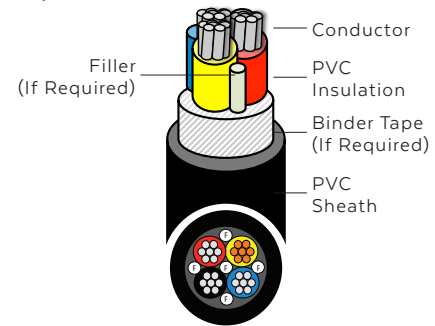
SHAPE OF CONDUCTOR

16 - 400 sqmm Compacted

FOUR CORE – ALUMINIUM, PVC INSULATED, PVC SHEATHED CABLE

600/1000V, AL / PVC / PVC

STANDARD SPECIFICATION	IEC 60502-1
CABLE DESCRIPTION	Aluminium Conductor, PVC Insulated, PVC Sheathed Cables - 4 Core
CABLE SIZES RANGE	4 Core x (16 - 400)mm ²
SHEATHING COLOURS	Black, other colours is available upon request.



APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, electrical appliances, switchgear and control gear. Uniform insulation thickness of wire to ensure easy stripping and cutting.

SPECIAL FEATURE ON REQUEST

- UV Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen
- Flame Retardant

CUSTOMISATION

Customisation is available upon request based on your cable specification.

CONSTRUCTION DATA

Number of Core	Nominal Sectional Area	Conductor Diameter (Approx)	Nominal Insulation Thickness	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm ²	mm	mm	mm	mm	kg/km
4	16	4.74	1.00	1.80	19.9	465
	25	5.97	1.20		24.5	697
	35	7.10			27.4	880
	50	8.10	1.40		31.0	1156
	70	9.74			35.3	1534
	95	11.46	1.60		40.7	2073
	120	12.93			44.5	2508
	150	14.33	1.80		49.2	2763
	185	16.05	2.00		54.7	3813
	240	18.43	2.20		61.8	4880
	300	20.64	2.40		68.6	6084
	400	23.34	2.60		76.6	7644

ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit - 3 Phase	Ampacity in Free Air - 3 Phase
Ω/km	kA	A	A
1.91	1.22	48	61
1.200	1.90	62	78
0.868	2.66	77	96
0.641	3.80	92	117
0.443	5.32	116	150
0.320	7.22	139	183
0.253	9.12	160	212
0.206	11.40	176	245
0.1640	14.07	199	280
0.1250	18.25	232	330
0.1000	22.81	265	381
0.0780	30.41	-	-

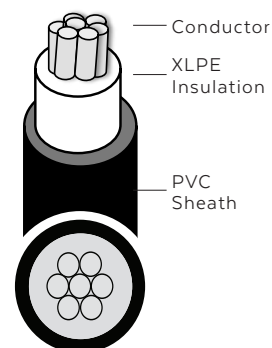
SHAPE OF CONDUCTOR

16 - 400 sqmm Compacted

ONE CORE – ALUMINIUM, XLPE INSULATED, PVC SHEATHED CABLE

600/1000V, AL / XLPE / PVC

STANDARD SPECIFICATION	IEC 60502-1
CABLE DESCRIPTION	Aluminium Conductor, XLPE Insulated, PVC Sheathed Cables - 1 Core
CABLE SIZES RANGE	1 Core x (16 - 1000)mm ²
SHEATHING COLOURS	Black, other colours is available upon request.



APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, electrical appliances, switchgear and control gear. Uniform insulation thickness of wire to ensure easy stripping and cutting.

SPECIAL FEATURE ON REQUEST

- UV Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen
- Flame Retardant

CUSTOMISATION

Customisation is available upon request based on your cable specification.

CONSTRUCTION DATA

Number of Core	Nominal Sectional Area	Conductor Diameter (Approx)	Nominal Insulation Thickness	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm ²	mm	mm	mm	mm	kg/km
1	16	4.74	0.70	1.40	9.0	106
	25	5.97	0.90		10.7	150
	35	7.10			11.8	188
	50	8.10	1.00		13.0	236
	70	9.74	1.10	1.45	14.9	318
	95	11.46		1.55	16.9	416
	120	12.93	1.20	1.60	18.6	511
	150	14.33	1.40	1.65	20.5	545
	185	16.05	1.60	1.70	22.8	765
	240	18.43	1.70	1.80	25.5	967
	300	20.64	1.80	1.85	28.0	1191
	400	23.34	2.00	2.00	31.4	1506
	500	26.21	2.20	2.10	34.9	1868
	630	29.80	2.40	2.25	39.2	2387
	800	34.32	2.60	1.40	44.4	2988
	1000	41.25	2.80		52.3	3766

ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit - 3 Phase	Ampacity in Clipped Direct - 3 Phase Touching
Ω/km	kA	A	A
1.91	1.51	-	-
1.200	2.36		
0.868	3.31		
0.641	4.72	140	136
0.443	6.61	179	174
0.320	8.98	217	211
0.253	11.34	251	245
0.206	14.17	267	283
0.1640	17.48	300	323
0.1250	22.68	351	382
0.1000	28.35	402	440
0.0780	37.79	-	594
0.0605	47.24		692
0.0469	59.52		791
0.0367	75.79		911
0.0291	94.48		1072

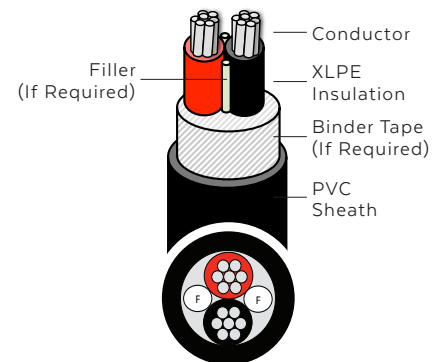
SHAPE OF CONDUCTOR

16 - 800 sqmm Compacted
1000 sqmm Circular

TWO CORE – ALUMINIUM, XLPE INSULATED, PVC SHEATHED CABLE

600/1000V, AL / XLPE / PVC

STANDARD SPECIFICATION	IEC 60502-1
CABLE DESCRIPTION	Aluminium Conductor, XLPE Insulated, PVC Sheathed Cables - 2 Core
CABLE SIZES RANGE	2 Core x (16 - 400)mm ²
SHEATHING COLOURS	Black, other colours is available upon request.



APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, electrical appliances, switchgear and control gear. Uniform insulation thickness of wire to ensure easy stripping and cutting.

SPECIAL FEATURE ON REQUEST

- UV Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen
- Flame Retardant

CUSTOMISATION

Customisation is available upon request based on your cable specification.

CONSTRUCTION DATA

Number of Core	Nominal Sectional Area	Conductor Diameter (Approx)	Nominal Insulation Thickness	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm ²	mm	mm	mm	mm	kg/km
2	16	4.74	0.70	1.80	15.9	268
	25	5.97	0.90		19.6	385
	35	7.10			22.0	488
	50	8.10	1.00		24.6	623
	70	9.74	1.10	1.90	28.4	843
	95	11.46		2.05	32.2	1099
	120	12.93	1.20	2.15	35.7	1355
	150	14.33	1.40	2.30	39.6	1692
	185	16.05	1.60	2.45	44.2	2059
	240	18.43	1.70	2.60	49.6	2599
	300	20.64	1.80	2.80	54.8	3218
	400	23.34	2.00	3.00	61.4	4049

ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit - 1 Phase	Ampacity in Free Air - 1 Phase
Ω/km	kA	A	A
1.91	1.51	72	91
1.200	2.36	94	108
0.868	3.31	115	135
0.641	4.72	138	164
0.443	6.61	175	211
0.320	8.98	210	257
0.253	11.34	-	-
0.206	14.17		
0.1640	17.48		
0.1250	22.68		
0.1000	28.35		
0.0780	37.79		

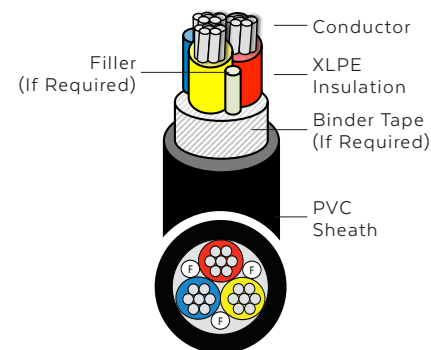
SHAPE OF CONDUCTOR

16 - 400 sqmm Compacted

THREE CORE – ALUMINIUM, XLPE INSULATED, PVC SHEATHED CABLE

600/1000V, AL / XLPE / PVC

STANDARD SPECIFICATION	IEC 60502-1
CABLE DESCRIPTION	Aluminium Conductor, XLPE Insulated, PVC Sheathed Cables - 3 Core
CABLE SIZES RANGE	3 Core x (16 - 400)mm ²
SHEATHING COLOURS	Black, other colours is available upon request.



APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, electrical appliances, switchgear and control gear. Uniform insulation thickness of wire to ensure easy stripping and cutting.

SPECIAL FEATURE ON REQUEST

- UV Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen
- Flame Retardant

CUSTOMISATION

Customisation is available upon request based on your cable specification.

CONSTRUCTION DATA

Number of Core	Nominal Sectional Area	Conductor Diameter (Approx)	Nominal Insulation Thickness	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm ²	mm	mm	mm	mm	kg/km
3	16	4.74	0.70	1.80	16.7	308
	25	5.97	0.90		20.7	470
	35	7.10			23.2	595
	50	8.10	1.00		25.7	755
	70	9.74	1.10	30.0	1043	
	95	11.46		1.91	34.0	1373
	120	12.93	1.20	2.05	37.9	1709
	150	14.33	1.40	2.21	42.1	1869
	185	16.05	1.60	2.39	47.0	2620
	240	18.43	1.70	2.61	53.0	3337
	300	20.64	1.80	2.82	58.7	4147
	400	23.34	2.00	3.09	65.9	5251

ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit - 3 Phase	Ampacity in Free Air - 3 Phase
Ω/km	kA	A	A
1.91	1.51	64	77
1.200	2.36	84	97
0.868	3.31	103	120
0.641	4.72	124	146
0.443	6.61	156	187
0.320	8.98	188	227
0.253	11.34	216	263
0.206	14.17	240	304
0.1640	17.48	272	347
0.1250	22.68	318	409
0.1000	28.35	364	471
0.0780	37.79	-	-

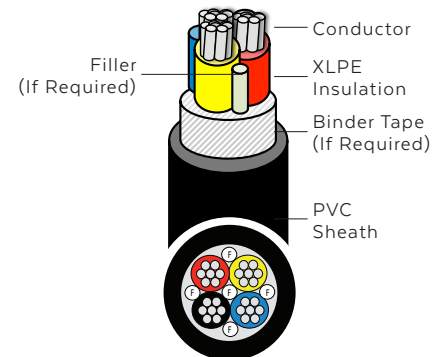
SHAPE OF CONDUCTOR

16 - 630 sqmm Compacted

FOUR CORE – ALUMINIUM, XLPE INSULATED, PVC SHEATHED CABLE

600/1000V, AL / XLPE / PVC

STANDARD SPECIFICATION	IEC 60502-1
CABLE DESCRIPTION	Aluminium Conductor, XLPE Insulated, PVC Sheathed Cables - 4 Core
CABLE SIZES RANGE	4 Core x (16 - 400)mm ²
SHEATHING COLOURS	Black, other colours is available upon request.



APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, electrical appliances, switchgear and control gear. Uniform insulation thickness of wire to ensure easy stripping and cutting.

SPECIAL FEATURE ON REQUEST

- UV Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen
- Flame Retardant

CUSTOMISATION

Customisation is available upon request based on your cable specification.

CONSTRUCTION DATA

Number of Core	Nominal Sectional Area	Conductor Diameter (Approx)	Nominal Insulation Thickness	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm ²	mm	mm	mm	mm	kg/km
4	16	4.74	0.70	1.80	18.4	396
	25	5.97	0.90		22.8	585
	35	7.10			25.5	747
	50	8.10	1.00		28.6	967
	70	9.74	1.10	1.88	33.4	1341
	95	11.46		2.05	37.9	1770
	120	12.93	1.20	2.21	42.2	2206
	150	14.33	1.40	2.39	46.9	2406
	185	16.05	1.60	2.59	52.5	3390
	240	18.43	1.70	2.84	59.2	4323
	300	20.64	1.80	3.07	65.5	5380
	400	23.34	2.00	3.37	73.5	6818

ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit - 3 Phase	Ampacity in Free Air - 3 Phase
Ω/km	kA	A	A
1.91	1.51	64	77
1.200	2.36	84	97
0.868	3.31	103	120
0.641	4.72	124	146
0.443	6.61	156	187
0.320	8.98	188	227
0.253	11.34	216	263
0.206	14.17	240	304
0.1640	17.48	272	347
0.1250	22.68	318	409
0.1000	28.35	364	471
0.0780	37.79	-	-

SHAPE OF CONDUCTOR

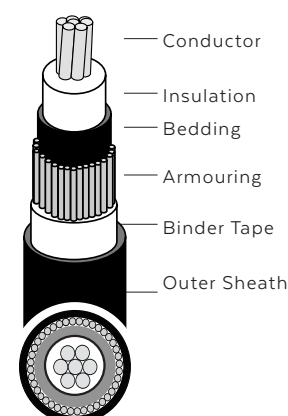
16 - 400 sqmm Compacted

ONE CORE – ALUMINIUM CONDUCTOR, XLPE INSULATED, PVC BEDDING, ALUMINIUM WIRE ARMoured, PVC SHEATHED CABLE

600/1000V, AL / XLPE / AWA / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Aluminium Conductor, XLPE Insulated, PVC Bedding, Aluminium Wire Armoured, PVC Sheathed Cables - 1 Core

CABLE SIZES RANGE 1 Core x (16 - 1000)mm²
SHEATHING COLOURS Black, other colours is available upon request.


APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, electrical appliances, switchgear and control gear. Uniform insulation thickness of wire to ensure easy stripping and cutting.

SPECIAL FEATURE ON REQUEST

- UV Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen
- Flame Retardant

CUSTOMISATION

Customisation is available upon request based on your cable specification.

CONSTRUCTION DATA

No. of Core	Nominal Sectional Area	Conductor Diameter (Approx)	Nominal Insulation Thickness	Nominal Inner Sheath Thickness	Inner Sheath Diameter (Approx)	Aluminium Wire Armoured Diameter	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm ²	mm	mm	mm	mm	mm	mm	mm	kg/km
1	16	4.74	0.70	1.00	8.0	1.04	1.80	14.50	247
	25	5.97	0.90		10.0			16.00	311
	35	7.10			11.5			17.50	383
	50	8.10	1.00		12.5	1.25		18.50	447
	70	9.74	1.10		14.0			20.50	556
	95	11.46			16.0			23.00	727
	120	12.93	1.20		17.5	1.60		25.00	851
	150	14.33	1.40		19.5			26.50	1004
	185	16.05	1.60		21.5		1.90	29.00	1174
	240	18.43	1.70		24.0		2.00	32.00	1419
	300	20.64	1.80		26.5	2.00	2.10	35.50	1775
	400	23.34	2.00	30.0	2.20		39.00	2180	
	500	26.21	2.20	33.5	2.35		42.50	2618	
	630	29.80	2.40	37.5	2.45		49.00	3363	
	800	34.32	2.60	1.40	42.5	2.50	2.50	51.50	4143
	1000	41.25	2.80	2.00	50.9		2.70	62.00	5165

ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity Clipped Direct - 3 Phase	Ampacity in Free Air - 3 Phase
Ω/km	kA	A	A
1.91	1.51	-	-
1.200	2.36		
0.868	3.31		
0.641	4.72	165	162
0.443	6.61	209	207
0.320	8.98	252	252
0.253	11.34	291	292
0.206	14.17	333	337
0.1640	17.48	378	391
0.1250	22.68	443	465
0.1000	28.35	508	540
0.0780	37.79	573	625
0.0605	47.24	642	714
0.0469	59.52	706	801
0.0367	75.79	764	897
0.0291	94.48	838	1014

SHAPE OF CONDUCTOR

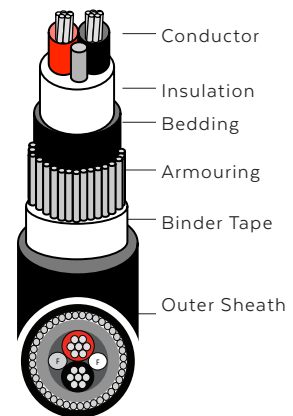
16 - 800 sqmm Compacted
1000 sqmm Circular

TWO CORE – ALUMINIUM, XLPE INSULATED, PVC BEDDING, GALVANIZE STEEL WIRE ARMoured, PVC SHEATHED CABLE

600/1000V, AL / XLPE / SWA / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Aluminium Conductor, XLPE Insulated, PVC Bedding Galvanize Steel Wire Armoured, PVC Sheathed Cables - 2 Core

CABLE SIZES RANGE 2 Core x (16 - 400)mm²
SHEATHING COLOURS Black, other colours is available upon request.


APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, electrical appliances, switchgear and control gear. Uniform insulation thickness of wire to ensure easy stripping and cutting.

SPECIAL FEATURE ON REQUEST

- UV Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen
- Flame Retardant

CUSTOMISATION

Customisation is available upon request based on your cable specification.

CONSTRUCTION DATA

Number of Core	Nominal Sectional Area	Nominal Insulation Thickness	Nominal Inner Sheath Thickness	Inner Sheath Diameter (Approx)	Gal. Steel Wire Armoured Diameter	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm ²	mm	mm	mm	mm	mm	mm	kg/km
2	16	0.7	1.0	14.6	1.25	1.8	21.0	793
	25	0.9		17.8	1.60		25.0	1174
	35			20.1			27.5	1378
	50			19.5			26.0	1726
	70	1.1		22.6	2.00		29.5	2397
	95		24.6	33.5			2930	
	120	1.2	1.2	25.6	2.00		36.0	3445
	150	1.4		28.0			39.0	4440
	185	1.6	1.4	30.8	2.50		44.5	5383
	240	1.7		38.6			48.5	6470
	300	1.8	1.6	42.6			53.0	7760
	400	2.0		47.0			58.0	9345

ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity In Air - 1 Phase	Ampacity in Ground - 1 Phase
Ω/km	kA	A	A
1.91	1.51	85	71
1.200	2.36	112	90
0.868	3.31	138	108
0.641	4.72	166	128
0.443	6.61	211	158
0.320	8.98	254	186
0.253	11.34	-	-
0.206	14.17		
0.1640	17.48		
0.1250	22.68		
0.1000	28.35		
0.0780	37.79		

SHAPE OF CONDUCTOR

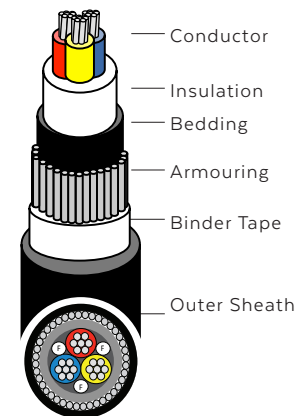
1.5 - 6 sqmm Circular
10 - 50 sqmm Compacted
70 - 400 sqmm Shape

THREE CORE – ALUMINIUM, XLPE INSULATED, PVC BEDDING, GALVANIZE STEEL WIRE ARMoured, PVC SHEATHED CABLE

600/1000V, AL / XLPE / SWA / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Aluminium Conductor, XLPE Insulated, PVC Bedding Galvanize Steel Wire Armoured, PVC Sheathed Cables – 3 Core

CABLE SIZES RANGE 3 Core x (16 – 400)mm²
SHEATHING COLOURS Black, other colours is available upon request.


APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, electrical appliances, switchgear and control gear. Uniform insulation thickness of wire to ensure easy stripping and cutting.

SPECIAL FEATURE ON REQUEST

- UV Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen
- Flame Retardant

CUSTOMISATION

Customisation is available upon request based on your cable specification.

CONSTRUCTION DATA

Number of Core	Nominal Sectional Area	Nominal Insulation Thickness	Nominal Inner Sheath Thickness	Inner Sheath Diameter (Approx)	Gal. Steel Wire Armoured Diameter	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm ²	mm	mm	mm	mm	mm	mm	kg/km
3	16	0.7	1.0	15.5	1.60	1.8	24.0	963
	25	0.9		19.1			27.8	1210
	35			21.5			30.4	1749
	50	1.0		22.6			29.0	2073
	70	1.1	1.2	26.6	2.00		34.0	2517
	95			30.1			38.0	3048
	120	1.2		32.6			41.0	3974
	150	1.4	1.4	35.9	2.50		45.5	4636
	185	1.6		40.3			50.0	5558
	240	1.7	1.6	45.4			55.5	6681
	300	1.8		49.5			60.5	8024
	400	2.0		55.2	3.15		66.5	10517

ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity In Air – 1 Phase	Ampacity in Ground – 1 Phase
Ω/km	kA	A	A
1.91	1.51	74	59
1.200	2.36	98	75
0.868	3.31	120	90
0.641	4.72	145	106
0.443	6.61	185	130
0.320	8.98	224	154
0.253	11.34	264	174
0.206	14.17	305	197
0.1640	17.48	350	220
0.1250	22.68	418	253
0.1000	28.35	488	286
0.0780	37.79	-	-

SHAPE OF CONDUCTOR

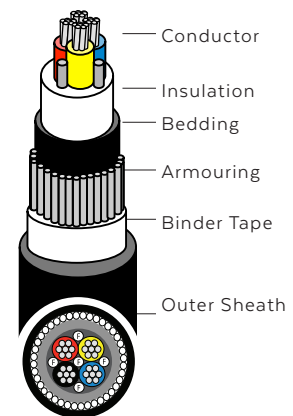
1.5 – 6 sqmm Circular
10 – 50 sqmm Compacted
70 – 400 sqmm Shape

FOUR CORE – ALUMINIUM, XLPE INSULATED, PVC BEDDING, GALVANIZE STEEL WIRE ARMoured, PVC SHEATHED CABLE

600/1000V, AL / XLPE / SWA / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Aluminium Conductor, XLPE Insulated, PVC Bedding, Galvanize Steel Wire Armoured, PVC Sheathed Cables - 4 Core

CABLE SIZES RANGE 4 Core x (16 - 400)mm²
SHEATHING COLOURS Black, other colours is available upon request.


APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, electrical appliances, switchgear and control gear. Uniform insulation thickness of wire to ensure easy stripping and cutting.

SPECIAL FEATURE ON REQUEST

- UV Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen
- Flame Retardant

CUSTOMISATION

Customisation is available upon request based on your cable specification.

CONSTRUCTION DATA

Number of Core	Nominal Sectional Area	Nominal Insulation Thickness	Nominal Inner Sheath Thickness	Inner Sheath Diameter (Approx)	Gal. Steel Wire Armoured Diameter	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm ²	mm	mm	mm	mm	mm	mm	kg/km
4	16	0.7	1.0	17.2	1.60	1.8	24.0	1097
	25	0.9		21.1			27.8	1406
	35			23.8			30.4	1666
	50	1.0		24.9			32.0	2332
	70	1.1	1.2	29.5	2.00		37.5	2989
	95			33.1			41.5	4032
	120	1.2	1.4	36.6	2.50		46.5	4743
	150	1.4		40.9			51.0	5563
	185	1.6		45.6			56.0	6716
	240	1.7		1.6			51.1	62.0
	300	1.8	56.6				67.5	10652
	400	2.0	1.8	63.5	3.15		76.5	12822

ELECTRICAL DATA

Max. Conductor Resistance, DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity In Air - 1 Phase	Ampacity in Ground - 1 Phase
Ω/km	kA	A	A
1.91	1.51	74	59
1.200	2.36	98	75
0.868	3.31	120	90
0.641	4.72	145	106
0.443	6.61	185	130
0.320	8.98	224	154
0.253	11.34	264	174
0.206	14.17	305	197
0.1640	17.48	350	220
0.1250	22.68	418	253
0.1000	28.35	488	286
0.0780	37.79	-	-

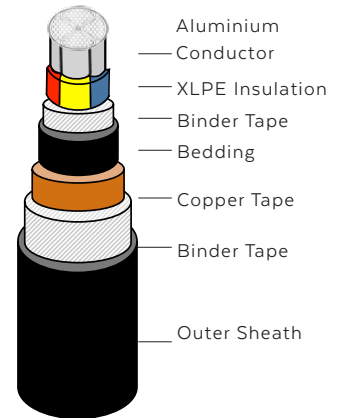
SHAPE OF CONDUCTOR

1.5 - 6 sqmm Circular
10 - 50 sqmm Compacted
70 - 400 sqmm Shape

FOUR CORE – ALUMINIUM, XLPE INSULATED, COPPER TAPE SCREENING, PE SHEATHED CABLE

600/1000V, AL / XLPE / CTS / PE

STANDARD SPECIFICATION	IEC 60502-1, TNB SPEC
CABLE DESCRIPTION	Aluminium Conductor, XLPE Insulated, Copper Tape Screening, PE Sheathed Cable- 4 Core
CABLE SIZES RANGE	4 Core x (25, 70, 120, 185 & 300)mm ²
SHEATHING COLOURS	Black, other colours is available upon request.



APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, electrical appliances, switchgear and control gear. Uniform insulation thickness of wire to ensure easy stripping and cutting.

SPECIAL FEATURE ON REQUEST

- UV Resistance
- Anti Termite
- Anti Rodent

CUSTOMISATION

Customisation is available upon request based on your cable specification.

CONSTRUCTION DATA

Number of Wires	Nominal Sectional Area	Nominal Insulation Thickness	Nominal Bedding Thickness	Nominal Thickness Copper Tape Screen	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
-	mm ²	mm	mm	mm	mm	mm	kg/km
min; 6	25	0.9	1.0	0.1	1.8	26.0	740
min; 12	70	1.1	1.1			36.0	1615
min; 18	120	1.2	1.2			42.0	2430
min; 30	185	1.6	1.4			55.0	3640
min; 34	300	1.8	1.6			66.0	5610

ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec
Ω/km	kA
1.2	2.36
0.443	6.61
0.253	11.34
0.164	17.48
0.100	28.35

SHAPE OF CONDUCTOR

Stranded Shaped

HEAD OFFICE & FACTORY

Lot 42, Jalan Merbau Pulas,
Kawasan Perusahaan Kuala Ketil,
09300 Kuala Ketil, Baling, Kedah.

CUSTOMER SERVICE

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QUALITY ACCREDITATION



MS ISO 9001:2015
QMS 00688



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