

# SOUTHERN CABLE

Design with specification, manufacture with integrity.

# DESIGN FOR **BUILDING & CONSTRUCTION**







SOUTHERNCABLE.COM.MY



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

# IEC 60502-1

### TEST METHOD

Class 2 conductor cables for rated voltage from 1kV ( $U_m = 1,2kV$  up to 3kV ( $U_m = 3,6kV$ ) 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 E

# IEC 60502-2

### **DESIGN GUIDELINE**

Class 2 conductor cables for rated voltage from 6kV (U<sub>m</sub>=7,2kV) up to 30kV (U<sub>m</sub>=36kV) with extruded solid insulation.



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### **PVC INSULATED ARMOURED LOW VOLTAGE AUXILARY CABLE**

### **BRITISH STANDARD**

Multicore — Copper, PVC Insulated, Steel Wire Amoured, 26 - 31 PVC Sheathed Cable (600/1000V) (1.5mm², 2.5mm² & 4mm²)

## **IEC STANDARD**

Multicore — Copper, PVC Insulated, Steel Wire Amoured, 32 - 37 PVC Sheathed Cable (600/1000V) (1.5mm², 2.5mm² & 4mm²)

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# SINGLE CORE — COPPER, PVC SHEATHED CABLE

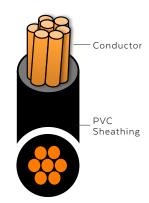
450/750V, CU / PVC

STANDARD SPECIFICATION IEC 60227-3, MS2112-3

CABLE DESCRIPTION Copper Conductor, PVC Sheathed Cables - 1 Core

CABLE SIZES RANGE 1 Core x (1.5 - 630)mm<sup>2</sup>

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 similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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	mm²	mm	mm	mm	kg/km
	1.5	1.59	0.70	3.1	23
	2.5	2.01		3.7	36
	4	2.55	0.80	4.3	52
	6	3.12		4.8	74
	10	3.80	1.00	5.9	119
	16	4.74	1.00	6.8	179
	25	5.97	1.20	8.5	281
	35	7.10	1.20	9.6	380
	50	8.10	1.40	11.0	556
1	70	9.74	1.40	12.6	786
	95	11.46	1.60	14.8	1085
	120	12.93	1.60	16.2	1369
	150	14.33	1.80	18.0	1718
	185	16.05	2.00	20.2	2141
	240	18.43	2.20	22.9	2776
	300	20.64	2.40	25.5	3544
	400	23.34	2.60	28.6	4517
	500	26.21	2.80	31.9	5675
	630	29.80	2.80	35.5	7307

### **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	А	А
12.10	0.17	15.5	18
7.41	0.29	21	25
4.61	0.46	28	33
3.08	0.86	36	43
1.83	1.15	50	59
1.15	1.84	68	79
0.727	2.88	89	104
0.524	4.03	110	129
0.387	5.75	134	167
0.268	8.05	171	214
0.193	10.93	207	261
0.153	13.80	239	303
0.124	17.25	262	349
0.0991	21.28	296	400
0.0754	27.60	346	472
0.0601	34.50	394	545
0.0470	46.00	467	634
0.0366	57.50	533	723
0.0283	72.45	611	826

### SHAPE OF CONDUCTOR

1.5 - 6 sqmm Circular10 - 630 sqmm Compacted



# SINGLE CORE — COPPER, PVC INSULATED, PVC SHEATHED CABLE

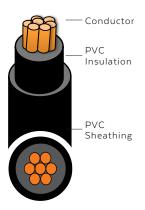
600/1000V CU / PVC / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, PVC Insulated, PVC Sheathed Cables - 1 Core

CABLE SIZES RANGE 1 Core x (1.5 - 630)mm<sup>2</sup>

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 similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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
- $\cdot$  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	mm²	mm	mm	mm	mm	kg/km	
	1.5	1.59	0.80		6.2	61	
	2.5	2.01	0.80		6.6	74	
	4	2.55			7.6	101	
	6	3.12	1.00		8.1	126	
	10	3.80	1.00		8.8	171	
	16	4.74			9.7	236	
	25	5.97	1.20	120	11.4	347	
	35	7.10	1.40	1.20		12.5	450
	50	8.10			13.9	589	
1	70	9.74	1.40	1.40	15.5	804	
	95	11.46	1.60		17.9	1085	
	120	12.93	1.60		19.4	1334	
	150	14.33	1.80		21.3	1375	
	185	16.05	2.00		23.6	2024	
	240	18.43	2.20		26.5	2600	
	300	20.64	2.40		29.3	3270	
	400	23.34	2.60		32.6	4142	
	500	26.21	2.60		35.7	5178	
	630	29.80	2.60		39.6	6617	

### **ELECTRICAL DATA**

Max. Conduc- tor 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	А	А
12.10	0.17	15.5	18
7.41	0.29	21	25
4.61	0.46	28	33
3.08	0.86	36	43
1.83	1.15	50	59
1.15	1.84	68	79
0.727	2.88	89	104
0.524	4.03	110	129
0.387	5.75	134	167
0.268	8.05	171	214
0.193	10.93	207	261
0.153	13.80	239	303
0.124	17.25	262	349
0.0991	21.28	296	400
0.0754	27.60	346	472
0.0601	34.50	394	545
0.0470	46.00	467	634
0.0366	57.50	533	723
0.0283	72.45	611	826

# SHAPE OF CONDUCTOR

1.5 - 6 sqmm Circular10 - 630 sqmm Compacted



# TWO CORE — COPPER, PVC INSULATED, PVC SHEATHED CABLE

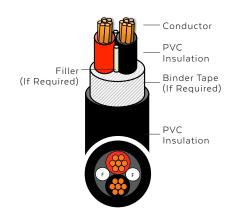
600/1000V CU / PVC / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated,
PVC Sheathed Cables - 2 Core

CABLE SIZES RANGE 2 Core x (1.5 - 400)mm<sup>2</sup>

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 similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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	mm²	mm	mm	mm	mm	kg/km	
	1.5	1.59	0.00		9.9	119	
	2.5	2.01	0.80		10.7	148	
	4	2.55			12.6	209	
	6	3.12	100		13.7	263	
	10	3.80	1.00	1.00	100	15.1	361
	16	4.74		17.0	502		
	25	5.97	1.20		20.7	769	
	35	7.10	1.20		23.0	999	
2	50	8.10	1.40		25.8	1309	
	70	9.74	1.40		29.3	1801	
	95	11.46	1.60	1.90	33.9	2458	
	120	12.93	1.60	2.02	37.1	3033	
	150	14.33	1.80	2.16	40.9	3208	
	185	16.05	2.00	2.33	45.5	4630	
	240	18.43	2.20	2.56	51.5	5961	
	300	20.64	2.40	2.77	57.2	7493	
	400	23.34	2.60	3.01	63.9	9492	

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	ort Circuit Conduit- 1 Free	
Ω/km	kA	А	А
12.10	0.17	16.5	22
7.41	0.29	23	30
4.61	0.46	30	40
3.08	0.86	38	51
1.83	1.15	52	70
1.15	1.84	69	94
0.727	2.88	90	119
0.524	4.03	111	148
0.387	5.75	133	180
0.268	8.05	168	232
0.193	10.93	201	282
0.153	13.80	232	328
0.124	17.25	258	379
0.0991	21.28	294	434
0.0754	27.60	344	514
0.0601	34.50	394	593
0.0470	46.00	470	715

# SHAPE OF CONDUCTOR

1.5 - 6 sqmm Circular

10 - 630 sqmm Compacted

3



# THREE CORE — COPPER, PVC INSULATED, PVC SHEATHED CABLE

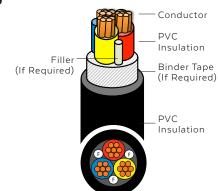
600/1000V CU / PVC / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated,
PVC Sheathed Cables - 3 Core

CABLE SIZES RANGE 3 Core x (1.5 - 400)mm<sup>2</sup>

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 similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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
- $\cdot$  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	mm²	mm	mm	mm	mm	kg/km	
	1.5	1.59	0.80		10.5	145	
	2.5	2.01	0.80		11.4	185	
	4	2.55			13.4	265	
	6	3.12	100		14.6	341	
	10	3.80	1.20	1.00		16.1	480
	16	4.74			18.1	679	
	25	5.97			22.1	1042	
	35	7.10			24.7	1367	
3	50	8.10	1.40	1.80	28.0	1804	
	70	9.74	1.40		31.7	2503	
	95	11.46	1.60		36.7	3421	
	120	12.93	1.60		40.0	4239	
	150	14.33	1.80		44.2	4439	
	185	16.05	2.00		49.1	6490	
	240	18.43	2.20	2.20	55.5	8362	
	300	20.64	2.40		61.5	10530	
	400	23.34	2.60		68.7	13363	

### **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	А	А
12.10	0.17	15	18.5
7.41	0.29	20	25
4.61	0.46	27	34
3.08	0.86	34	43
1.83	1.15	46	60
1.15	1.84	62	80
0.727	2.88	80	101
0.524	4.03	99	126
0.387	5.75	118	153
0.268	8.05	149	196
0.193	10.93	179	238
0.153	13.80	206	276
0.124	17.25	225	319
0.0991	21.28	255	364
0.0754	27.60	297	430
0.0601	34.50	339	497
0.0470	46.00	402	597

# SHAPE OF CONDUCTOR

1.5 - 6 sqmm Circular10 - 630 sqmm Compacted



# FOUR CORE — COPPER, PVC INSULATED, PVC SHEATHED CABLE

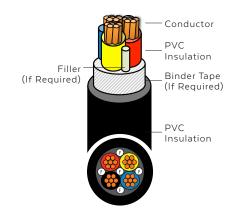
600/1000V CU / PVC / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, PVC Insulated,
PVC Sheathed Cables - 4 Core

CABLE SIZES RANGE 4 Core x (1.5 - 400)mm<sup>2</sup>

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 similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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 RodentLow 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	mm²	mm	mm	mm	mm	kg/km	
	1.5	1.59	0.00		11.3	177	
	2.5	2.01	0.80		12.3	228	
	4	2.55			14.6	332	
	6	3.12	100		16.0	431	
	10	3.80	1.00		17.6	613	
	16	4.74			19.9	874	
	25	5.97	1.20		24.5	1346	
	35	7.10	1.20	1.20		27.4	1780
4	50	8.10	1.40	1.80	31.0	2374	
	70	9.74	1.40		35.3	3294	
	95	11.46	1.60		40.7	4513	
	120	12.93	1.60		44.5	5591	
	150	14.33	1.80		49.2	5846	
	185	16.05	2.00		54.7	8565	
	240	18.43	2.20		61.8	11043	
	300	20.64	2.40		68.6	13917	
	400	23.34	2.60		76.6	17664	

### 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	А	А
12.10	0.17	15	18.5
7.41	0.29	20	25
4.61	0.46	27	34
3.08	0.86	34	43
1.83	1.15	46	60
1.15	1.84	62	80
0.727	2.88	80	101
0.524	4.03	99	126
0.387	5.75	118	153
0.268	8.05	149	196
0.193	10.93	179	238
0.153	13.80	206	276
0.124	17.25	225	319
0.0991	21.28	255	364
0.0754	27.60	297	430
0.0601	34.50	339	497
0.0470	46.00	402	597

# SHAPE OF CONDUCTOR

1.5 - 6 sqmm Circular

10 - 630 sqmm Compacted



# MULTICORE — COPPER, PVC INSULATED, PVC SHEATHED CABLE (1.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V CU / PVC / PVC

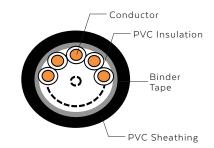
**STANDARD SPECIFICATION** IEC 60502-1

CABLE DESCRIPTION Copper Conductor, PVC Insulated,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (2 - 27) Core x 1.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### APPLICATION

# Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### 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	Con- ductor Diameter (Approx)	Nominal Insu- lation Thick- ness	Nominal Outer Sheath Thick- ness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm²	mm	mm	mm	mm	kg/km
2			9.9	119		
3					10.5	145
4					11.3	177
5					12.3	222
6					13.3	257
7					15.5	266
8					14.3	300
9					15.3	333
10				1.80		369
11						394
12					17.1	421
13					17.9	453
14	1.50	1.59	0.00		17.9	478
15	1.50	1.59	0.80		18.4	507
16					18.9	537
17						584
18					19.8	609
19						618
20					20.0	651
21					20.8	676
22					21.0	709
23					21.9	734
24					23.2	774
25						799
26						824
27					23.7	853

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
		16.5	22
		15	18.5
		15	18.5
12.10	O.17	N/A	N/A



# MULTICORE — COPPER, PVC INSULATED, PVC SHEATHED CABLE (1.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V CU / PVC / PVC

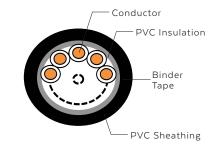
STANDARD SPECIFICATION IEC 60502-1

 CABLE DESCRIPTION
 Copper Conductor, PVC Insulated,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (28 - 50) Core x 1.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### APPLICATION

Control cables are multi-conductor cables used in automation and instrumentation applications.

Control cables can measure and regulate transmissions of automated processes.

### 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	Con- ductor Diameter (Approx)	Nominal Insu- lation Thick- ness	Nominal Outer Sheath Thick- ness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm²	mm	mm	mm	mm	kg/km
28					23.7	878
29					247	916
30					24.7	941
31						989
32					25.6	1004
33						1029
34					26.7	1063
35				1.80		1088
36						1113
37						1137
38					27.7	1172
39	1.50	1.59	0.80			1196
40						1221
41						1262
42						1287
43						1312
44						1355
45						1380
46					30.2	1404
47						1429
48					30.8	1466
49					71.7	1499
50					31.7	1524

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
12.10	0.17	N/A	N/A



# MULTICORE — COPPER, PVC INSULATED, PVC SHEATHED CABLE (2.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V CU / PVC / PVC

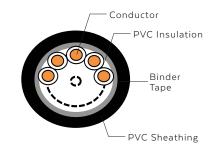
STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, PVC Insulated,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (2 - 27) Core x 2.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### APPLICATION

Control cables are multi-conductor cables used in automation and instrumentation applications.

Control cables can measure and regulate transmissions of automated processes.

### SPECIAL FEATURE ON REQUEST

- · UV Resistance
- Anti TermiteAnti 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	Con- ductor Diameter (Approx)	Nominal Insu- Iation Thick- ness	Nominal Outer Sheath Thick- ness	Overall Diameter (Approx)	Cable Weight (Approx)	
Nos	mm²	mm	mm	mm	mm	kg/km	
2						10.7	148
3					11.4	185	
4					12.3	228	
5					13.4	288	
6					14.5	338	
7					14.5	351	
8					15.7	396	
9					16.8	441	
10				1.80		489	
11						525	
12					18.8	563	
13					19.8	607	
14	2.5	1.59	0.80		19.0	642	
15	2.5	1.59	0.80		20.3	682	
16					20.8	724	
17					21.9	789	
18						824	
19						837	
20					23.2	887	
21					23.2	923	
22					24.4	974	
23					Z4.4	1010	
24					26.0	1063	
25						1098	
26						1134	
27					26.5	1174	

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
		23.0	30
		20	25
		20	25
7.41	0.29	N/A	N/A



# MULTICORE – COPPER, PVC INSULATED, PVC SHEATHED CABLE (2.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V CU / PVC / PVC

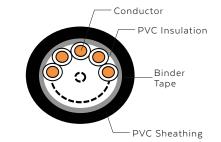
STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, PVC Insulated,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (28 - 50) Core x 2.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### APPLICATION

Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### 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	Con- ductor Diameter (Approx)	Nominal Insu- lation Thick- ness	Nominal Outer Sheath Thick- ness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm²	mm	mm	mm	mm	kg/km
28					26.5	1210
29					27.0	1261
30					27.6	1296
31						1364
32					28.6	1382
33						1418
34						1465
35					20.0	1500
36					29.9	1536
37				1.80		1571
38						1625
39	2.5	1.59	0.80		31.1	1661
40						1696
41						1750
42					32.3	1786
43						1821
44						1878
45					77.0	1914
46					33.9	1949
47						1985
48					34.4	2026
49					75.5	2080
50					35.5	2116

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
7.41	0.29	N/A	N/A



# MULTICORE – COPPER, PVC INSULATED, PVC SHEATHED CABLE (4.0MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V CU / PVC / PVC

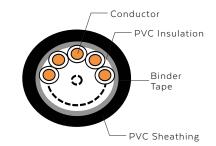
STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, PVC Insulated,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (2 - 27) Core x 4.0mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### APPLICATION

Control cables are multi-conductor cables used in automation and instrumentation applications.

Control cables can measure and regulate transmissions of automated processes.

### SPECIAL FEATURE ON REQUEST

- · UV Resistance
- Anti TermiteAnti 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	Con- ductor Diameter (Approx)	Nominal Insu- Iation Thick- ness	Nominal Outer Sheath Thick- ness	Overall Diameter (Approx)	Cable Weight (Approx)		
Nos	mm²	mm	mm	mm	mm	kg/km		
2							12.6	209
3					13.4	265		
4					14.6	332		
5					15.9	419		
6					17.3	511		
7					17.5	521		
8					18.8	589		
9					20.2	658		
10						730		
11						786		
12				1.80		847		
13					24.0	919		
14	4.0	2.55	0.80		24.0	976		
15	4.0	2.55	0.80		24.7	1043		
16					25.4	1107		
17						1227		
18					26.9	1284		
19						1293		
20					28.5	1369		
21					20.5	1426		
22					700	1503		
23					30.0	1559		
24						1647		
25					32.0	1703		
26						1760		
27					32.7	1824		

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
		23.0	30
		20	25
		20	25
4.61	0.46	N/A	N/A

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.



# MULTICORE – COPPER, PVC INSULATED, PVC SHEATHED CABLE (4.0MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V CU / PVC / PVC

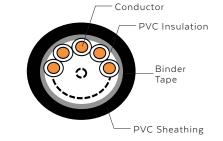
STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, PVC Insulated,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (28 - 50) Core x 4.0mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### APPLICATION

# Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### 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	Con- ductor Diameter (Approx)	Nominal Insu- lation Thick- ness	Nominal Outer Sheath Thick- ness	Overall Diameter (Approx)	Cable Weight (Approx)	
Nos	mm²	mm	mm	mm	mm	kg/km	
28					32.7	1880	
29					740	1957	
30					34.0	2013	
31						2138	
32					35.4	2153	
33						2210	
34						2284	
35					70.0	2340	
36					36.9	2397	
37						2454	
38						2534	
39	4.0	1.59	0.80		38.5	2591	
40							2648
41						2729	
42					40.0	2785	
43						2842	
44						2928	
45					41.0	2984	
46					41.9	3041	
47						3097	
48					42.7	3172	
49					4.7.	3243	
50					43.9	3299	

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
4.61	0.46	N/A	N/A



# SINGLE CORE — COPPER, XLPE INSULATED, PVC SHEATHED CABLE

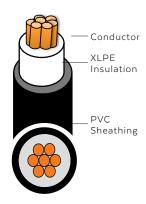
600/1000V CU / XLPE / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated,
PVC Sheathed Cables - 1 Core

CABLE SIZES RANGE 1 Core x (1.5 - 630)mm<sup>2</sup>

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 similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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
- $\cdot$  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	mm²	mm	mm	mm	mm	kg/km
	1.5	1.59			5.9	51
	2.5	2.01			6.3	64
	4	2.55	0.70		6.9	83
	6	3.12	0.70		7.4	107
	10	3.80		1.40	8.1	150
	16 4.74		9.0	214		
	25	5.97	0.90		10.7	319
	35	7.10			11.8	422
	50	8.10	1.00		13.0	579
1	70	9.74	1.10	1.45	14.9	810
	95	11.46		1.55	16.9	1099
	120	12.93	1.20	1.60	18.6	1395
	150	14.33	1.40	1.65	20.5	1732
	185	16.05	1.60	1.70	22.8	2127
	240	18.43	1.70	1.80	25.5	2737
	300	20.64	1.80	1.85	28.0	3466
	400	23.34	2.00	2.00	31.4	4406
	500	26.21	2.20	2.10	34.9	5525
	630	29.80	2.40	2.25	39.2	7141

### **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	А	А
12.10	0.21	20	23
7.41	0.36	28	31
4.61	0.57	37	41
3.08	0.86	48	45
1.83	1.43	66	74
1.15	2.29	88	99
0.727	3.58	117	130
0.524	5.01	144	161
0.387	7.15	175	209
0.268	10.02	222	268
0.193	13.59	269	326
0.153	17.17	312	379
0.124	21.46	342	436
0.0991	26.47	384	500
0.0754	34.34	450	590
0.0601	42.93	514	681
0.0470	57.23	584	793
0.0366	71.54	666	904
0.0283	90.14	764	1033

# SHAPE OF CONDUCTOR

1.5 - 6 sqmm Circular10 - 630 sqmm Compacted



# TWO CORE — COPPER, XLPE INSULATED, PVC SHEATHED CABLE

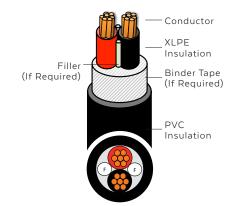
600/1000V CU / XLPE / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated,
PVC Sheathed Cables - 2 Core

CABLE SIZES RANGE 2 Core x (1.5 - 400)mm<sup>2</sup>

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 similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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 RodentLow 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	mm²	mm	mm	mm	mm	kg/km
	1.5	1.59			9.6	112
	2.5	2.01			10.4	140
	4	2.55	0.70		11.5	184
	6	3.12	0.70		12.6	237
	10	3.80		1.80	14.0	333
	16	4.74			15.9	472
	25	5.97	0.90		19.6	710
	35	7.10			22.0	937
2	50	8.10	1.00		24.6	1231
	70	9.74	1.10	1.90	28.4	1722
	95	11.46	1.10	2.05	32.2	2319
	120	12.93	1.20	2.15	35.7	2896
	150	14.33	1.40	2.30	39.6	3659
	185	16.05	1.60	2.45	44.2	4435
	240	18.43	1.70	2.60	49.6	5681
	300	20.64	1.80	2.80	54.8	7135
	400	23.34	2.00	3.00	61.4	9059

### **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	А	А	
12.10	0.21	22	26	
7.41	0.36	30	36	
4.61	0.57	40	49	
3.08	0.86	51	63	
1.83	1.43	69	86	
1.15	2.29	91	115	
0.727	3.58	110	149	
0.524	5.01	146	185	
0.387	7.15	175	225	
0.268	10.02	221	289	
0.193	13.59	265	352	
0.153	17.17	305	410	
0.124	21.46	334	473	
0.0991	26.47	384	542	
0.0754	34.34	459	641	
0.0601	42.93	532	741	
0.0470	57.23	625	865	

# SHAPE OF CONDUCTOR

1.5 - 6 sqmm Circular

10 - 400 sqmm Compacted

13



# THREE CORE — COPPER, XLPE INSULATED, PVC SHEATHED CABLE

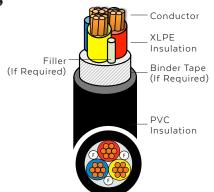
600/1000V CU / XLPE / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated,
PVC Sheathed Cables - 3 Core

CABLE SIZES RANGE 3 Core x (1.5 - 400)mm<sup>2</sup>

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 similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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
- $\cdot$  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	mm²	mm	mm	mm	mm	kg/km
	1.5	1.59			10.0	145
	2.5	2.01			10.9	185
	4	2.55	0.70		12.0	265
	6	3.12	0.70	0.70	13.2	341
	10	3.80		1.80	14.7	480
	16	4.74			16.7	679
	25	5.97	0.90		20.7	1042
	35	7.10			23.2	1367
3	50	8.10	1.00		25.7	1804
	70	9.74	1.10		30.0	2503
	95	11.46	1.10	1.91	34.0	3421
	120	12.93	1.20	2.05	37.9	4239
	150	14.33	1.40	2.21	42.1	4439
	185	16.05	1.60	2.39	47.0	6490
	240	18.43	1.70	2.61	53.0	8362
	300	20.64	1.80	2.82	58.7	10530
	400	23.34	2.00	3.09	65.9	13363

### **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	А	А
12.10	0.21	19.5	23
7.41	0.36	26	32
4.61	0.57	35	42
3.08	0.86	44	54
1.83	1.43	60	75
1.15	2.29	80	100
0.727	3.58	105	127
0.524	5.01	128	158
0.387	7.15	154	192
0.268	10.02	194	246
0.193	13.59	233	298
0.153	17.17	268	346
0.124	21.46	300	399
0.0991	26.47	340	456
0.0754	34.34	398	538
0.0601	42.93	455	621
0.0470	57.23	536	741

# SHAPE OF CONDUCTOR

1.5 - 6 sqmm Circular10 - 400 sqmm Compacted



# FOUR CORE — COPPER, XLPE INSULATED, PVC SHEATHED CABLE

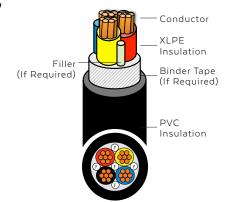
600/1000V CU / XLPE / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated,
PVC Sheathed Cables - 4 Core

CABLE SIZES RANGE 4 Core x (1.5 - 400)mm<sup>2</sup>

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 similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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 RodentLow 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	mm²	mm	mm	mm	mm	kg/km
	1.5	1.59			10.8	158
	2.5	2.01			11.8	206
	4	2.55	0.70		13.1	281
	6	3.12	0.70		14.4	375
	10	3.80		1.80	16.1	551
	16	4.74			18.4	805
	25	5.97	0.90		22.8	1234
	35	7.10			25.5	1646
4	50	8.10	1.00		28.6	2185
	70	9.74	110	1.88	33.4	3101
	95	11.46	1.10	2.05	37.9	4210
	120	12.93	1.20	2.21	42.2	5290
	150	14.33	1.40	2.39	46.9	5489
	185	16.05	1.60	2.59	52.5	8141
	240	18.43	1.70	2.84	59.2	10486
	300	20.64	1.80	3.07	65.5	13213
	400	23.34	2.00	3.37	73.5	16838

### **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	А	А	
12.10	0.21	19.5	23	
7.41	0.36	26	32	
4.61	0.57	35	42	
3.08	0.86	44	54	
1.83	1.43	60	75	
1.15	2.29	80	100	
0.727	3.58	105	127	
0.524	5.01	128	158	
0.387	7.15	154	192	
0.268	10.02	194	246	
0.193	13.59	233	298	
0.153	17.17	268	346	
0.124	21.46	300	399	
0.0991	26.47	340	456	
0.0754	34.34	398	538	
0.0601	42.93	455	621	
0.0470	57.23	536	741	

# SHAPE OF CONDUCTOR

1.5 - 6 sqmm Circular

10 - 400 sqmm Compacted



# MULTICORE — COPPER, XLPE INSULATED, PVC SHEATHED CABLE (1.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V CU / XLPE / PVC

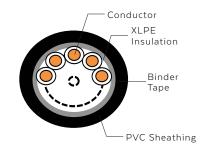
STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated, PVC Insulated,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (2 - 27) Core x 1.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### APPLICATION

# Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### SPECIAL FEATURE ON REQUEST

- · UV Resistance
- Anti TermiteAnti 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	Con- ductor Diameter (Approx)	Nominal Insu- Iation Thick- ness	Nominal Outer Sheath Thick- ness	Overall Diameter (Approx)	Cable Weight (Approx)			
Nos	mm²	mm	mm	mm	mm	kg/km			
2								9.6	112
3					10.0	145			
4					10.8	158			
5					11.7	193			
6					12.7	220			
7					12.7	228			
8					13.6	255			
9					14.6	284			
10			75.0	15.8	314				
11				1.80	15.8	334			
12					16.2	356			
13					17.0	384			
14	1.5	1.50	0.70		17.0	405			
15	1.5	1.59	0.70		17.4	428			
16					17.9	455			
17						490			
18					18.8	510			
19						517			
20			20.7	554					
21					20.3	574			
22					21.2	602			
23					21.2	622			
24						657			
25						677			
26						697			
27					23.1	726			

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
		22	26
		19.5	23
		19.5	23
12.10	0.21	N/A	N/A

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.



# MULTICORE — COPPER, XLPE INSULATED, PVC SHEATHED CABLE (1.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V CU / XLPE / PVC

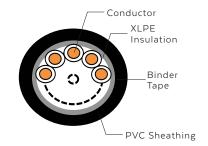
STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated, PVC Insulated,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (28 - 50) Core x 1.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### APPLICATION

Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### 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	Con- ductor Diameter (Approx)	Nominal Insu- lation Thick- ness	Nominal Outer Sheath Thick- ness	Overall Diameter (Approx)	Cable Weight (Approx)			
Nos	mm²	mm	mm	mm	mm	kg/km			
28					21.1	746			
29					27.0	27.0	775		
30					23.9	795			
31						840			
32					24.9	852			
33						873			
34						901			
35				1.80	25.0	922			
36						25.9	942		
37								962	
38								990	
39	1.5	1.59	0.70		26.8	1011			
40			27.9			1031			
41							1067		
42								27.9	1087
43							1107		
44									1144
45					20.2	1164			
46					29.2	1184			
47							1204		
48					29.7	1229			
49					70.6	1266			
50					30.6	1286			

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
12.10	0.21	N/A	N/A



# MULTICORE — COPPER, XLPE INSULATED, PVC SHEATHED CABLE (2.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V CU / XLPE / PVC

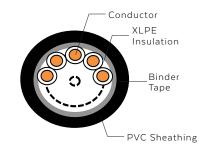
STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated, PVC Insulated,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (2 - 27) Core x 2.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### APPLICATION

# Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### 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	Con- ductor Diameter (Approx)	Nominal Insu- Iation Thick- ness	Nominal Outer Sheath Thick- ness	Overall Diameter (Approx)	Cable Weight (Approx)							
Nos	mm²	mm	mm	mm	mm	kg/km							
2					10.4	140							
3				10.9	185								
4					11.8	206							
5					12.9	255							
6					13.9	295							
7					15.9	306							
8					15.0	345							
9					16.1	384							
10					17.4	425							
11							17.4	455					
12		25 150 070 190			18.0	487							
13			E 150	2.5 1.59 0.70 1.80								18.9	527
14	2.5				10.5	557							
15	2.5	1.59	0.70	1.60	19.4	590							
16					20.4	637							
17						688							
18					21.4	718							
19							728						
20					22.6	773							
21					22.0	802							
22					23.8	848							
23					23.8	877							
24						924							
25					25.2	954							
26						984							
27					25.8	1018							

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
		30	36
		26	32
		26	32
7.41	0.36	N/A	N/A

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.



# MULTICORE — COPPER, XLPE INSULATED, PVC SHEATHED CABLE (2.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V CU / XLPE / PVC

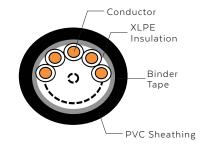
STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated, PVC Insulated,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (28 - 50) Core x 2.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### APPLICATION

# Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### 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	Con- ductor Diameter (Approx)	Nominal Insu- lation Thick- ness	Nominal Outer Sheath Thick- ness	Overall Diameter (Approx)	Cable Weight (Approx)		
Nos	mm²	mm	mm	mm	mm	kg/km		
28					25.8	1048		
29					20.0	1095		
30					26.8	1125		
31						1187		
32					27.9	1205		
33						1234		
34				1.80		1274		
35					29.0	20.0	1304	
36						1333		
37							1363	
38						1403		
39	2.5	1.59	0.70		1.80	30.1	1434	
40								
41						1512		
42					31.3	1541		
43						1571		
44						1621		
45					70.7	1651		
46					32.7	1681		
47						1711		
48					33.4	1541		
49					7.4.7	1796		
50					34.3	1825		

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
12.10	0.21	N/A	N/A



# MULTICORE — COPPER, XLPE INSULATED, PVC SHEATHED CABLE (4.0MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V CU / XLPE / PVC

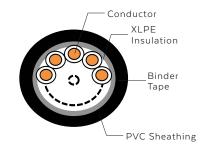
STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated, PVC Insulated,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (2 - 27) Core x 4.0mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### APPLICATION

Control cables are multi-conductor cables used in automation and instrumentation applications.

Control cables can measure and regulate transmissions of automated processes.

### 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	Con- ductor Diameter (Approx)	Nominal Insu- lation Thick- ness	Nominal Outer Sheath Thick- ness	Overall Diameter (Approx)	Cable Weight (Approx)								
Nos	mm²	mm	mm	mm	mm	kg/km								
2		11.5		11.5	184									
3					12.0	265								
4					13.1	281								
5					14.3	350								
6					15.5	413								
7					15.5	428								
8					16.8	483								
9					18.0	539								
10					20.1	606								
11		3.55				652								
12					20.8	705								
13			2.55										22.0	768
14	4.0			0.70	1.80	22.0	814							
15	4.0	2.55	0.70	22.5	22.5	863								
16				23.2	926									
17									1009					
18					24.5	1054								
19						1069								
20					25.8	1132								
21					25.8	1178								
22				27.2	1242									
23					21.2	1287								
24						1353								
25					28.9	1399								
26						1444								
27					29.5	1496								

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
		40	49
		35	42
		35	42
4.61	0.57	N/A	N/A

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# MULTICORE — COPPER, XLPE INSULATED, PVC SHEATHED CABLE (4.0MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V CU / XLPE / PVC

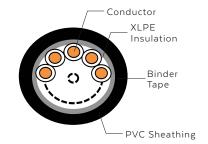
STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated, PVC Insulated,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (28 - 50) Core x 4.0mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### APPLICATION

# Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### 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	Con- ductor Diameter (Approx)	Nominal Insu- lation Thick- ness	Nominal Outer Sheath Thick- ness	Overall Diameter (Approx)	Cable Weight (Approx)		
Nos	mm²	mm	mm	mm	mm	kg/km		
28					29,5	1541		
29					70.6	1607		
30					30.6	1653		
31						1744		
32					31.9	1769		
33						1814		
34						1871		
35							77.0	1916
36					33.2	1961		
37				1.80	0.70 1.80 34		2007	
38			5 0.70 1.80				2073	
39	4.0	2.55				34.5	2119	
40								
41								2232
42					35.9	2278		
43							2323	
44						2394		
45					77.0	2439		
46					37.6	2484		
47						2530		
48					38.2	2582		
49					70.4	2661		
50					39.4	2707		

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
4.61	0.57	N/A	N/A



# SINGLE CORE — COPPER, PVC INSULATED, ALUMINIUM WIRE ARMOURED, PVC SHEATHED CABLE

600/1000 CU / PVC / AWA / PVC

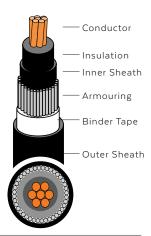
STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, PVC Insulated, Aluminium Wire

Armoured, PVC Sheathed Cables - 1 Core

CABLE SIZES RANGE 1 Core x (10 - 630)mm<sup>2</sup>

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 similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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
- $\cdot$  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)	Alumini- um Wire Armoured Diameter	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm²	mm	mm	mm	mm	mm	mm	mm	kg/km
	10	3.80	1.00		7.9	104		13.8	310
	16	4.74	1.00		8.8	1.04		14.8	388
	25	5.97	1.20		10.5			16.8	542
	35	7.10	1.20	1.0	11.6	1.25	5	18.0	666
	50	8.10	1.40		13.0			19.4	871
	70	9.74	1.40		14.6			21.0	1135
	95	11.46	1.60		16.8			24.0	1535
1	120	12.93	1.00		18.2		1.8	25.5	1860
	150	14.33	1.80		20.0	1.60		27.5	2260
	185	16.05	2.00		22.2			29.7	2745
	240	18.43	2.20		24.9			32.7	3462
	300	20.64	2.40		27.9			36.8	4440
	400	23.34		1.2	31.0	2.00		40.1	5523
	500	26.21	2.60		34.3			43.6	6801
	630	29.80		1.4	38.3	2.50		48.9	8774

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C	conductor Short Circuit esistance. Current for		Ampacity in Free Air
Ω/km	kA	А	А
1.83	1.15		
1.15	1.84		
0.727	2.88	_	-
0.524	4.03		
0.387	5.75	179	181
0.268	8.05	225	231
0.193	10.93	269	280
0.153	13.80	309	324
0.124	17.25	352	373
0.0991	21.28	399	425
0.0754	27.60	465	501
0.0601	34.50	515	567
0.0470	46.00	575	657
0.0366	57.50	622	731
0.0283	72.45	669	809

## SHAPE OF CONDUCTOR

10 - 630 sqmm Circular Compacted



# TWO CORE — COPPER, PVC INSULATED, STEEL WIRE ARMOURED, PVC SHEATHED CABLE

600/1000 CU / PVC / SWA / PVC

STANDARD SPECIFICATION IEC 60502-1

 CABLE DESCRIPTION
 Copper Conductor, PVC Insulated, Steel Wire

Armoured, PVC Sheathed Cables - 2 Core

CABLE SIZES RANGE 2 Core x (1.5 - 400)mm<sup>2</sup>

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 similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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
- $\cdot$  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	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	mm²	mm	mm	mm	mm	mm	mm	kg/km
	1.5	0.80		8.7	0.00		14.3	340
	2.5	0.80		9.5	0.90		15.2	380
	4	1.00		11.4			17.8	490
	6	1.00		12.5	1.25	1.8	18.9	570
	10 1.00 16 1.00 25 1.20	1.00	1.0	13.9			20.3	680
		1.00		15.8			22.9	870
		1.20		19.0			26.4	1310
	35	1.20		21.3	1.60		28.8	1570
2	50	1.40		24.1			31.0	1970
	70	1.40		23.1			31.0	2700
	95	1.60	1.2	26.9			35.5	3500
	120	1.60		28.9	2.00		37.5	4110
	150	1.80		31.7			40.5	4830
	185	2.00	1.4	35.7			46.0	6240
	240	2.20		40.1	250		50.5	7810
	300	2.40	1.6	44.7	2.50		55.5	9320
	400	2.60	1.0	49.1			60.5	11420

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
12.10	0.17	22	22
7.41	0.29	31	29
4.61	0.46	41	37
3.08	0.86	53	46
1.83	1.15	72	60
1.15	1.84	97	78
0.727	2.88	128	99
0.524	4.03	157	119
0.387	5.75	190	140
0.268	8.05	241	173
0.193	10.93	291	204
0.153	13.80	336	231
0.124	17.25	386	261
0.0991	21.28	439	292
0.0754	27.60	516	336
0.0601	34.50	592	379
0.0470	46.00	683	-

# SHAPE OF CONDUCTOR

 1.5 - 6 sqmm
 Circular

 10 - 50 sqmm
 Compacted

 70 - 400 sqmm
 Shape



# THREE CORE — COPPER, PVC INSULATED, STEEL WIRE ARMOURED, PVC SHEATHED CABLE

600/1000 CU / PVC / SWA / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, PVC Insulated, Steel Wire Armoured, PVC Sheathed Cables - 3 Core

CABLE SIZES RANGE 3 Core x (1.5 - 400)mm<sup>2</sup>

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 similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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	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	mm²	mm	mm	mm	mm	mm	mm	kg/km
	1.5	0.00		9.2	0.90		14.8	370
	2.5	0.80		10.1			16.4	430
	4			12.1	1.25		18.5	560
	6	100		13.3	1.25		19.7	660
	10	1.00	10	14.8		1.8	21.2	820
	16		1.0	16.8	1.60		24.0	1070
	25	120		20.3			27.8	1670
	35	1.20		22.8			30.4	2050
3	50	1.40		23.8			31.0	2610
	70	1.40		27.2			35.5	3650
	95	1.60		31.6	2.00		40.0	4720
	120	1.60	1.2	33.7			42.0	5560
	150	1.80		37.0			47.0	7010
	185	2.00	1.4	41.6	2.50		52.0	8490
	240	240 2.20	1.4	47.2	2.50		58.0	10750
	300	2.40	1.6	52.0			63.0	12870
	400	2.60	1.0	57.6	3.15		70.5	16680

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
12.10	0.17	19	18
7.41	0.29	26	24
4.61	0.46	35	30
3.08	0.86	45	38
1.83	1.15	62	50
1.15	1.84	83	64
0.727	2.88	110	82
0.524	4.03	135	98
0.387	5.75	163	116
0.268	8.05	207	143
0.193	10.93	251	169
0.153	13.80	290	192
0.124	17.25	332	217
0.0991	21.28	378	243
0.0754	27.60	445	280
0.0601	34.50	510	316
0.0470	46.00	590	-

# SHAPE OF CONDUCTOR

 1.5 - 6 sqmm
 Circular

 10 - 50 sqmm
 Compacted

 70 - 400 sqmm
 Shape



# FOUR CORE — COPPER, PVC INSULATED, STEEL WIRE ARMOURED, PVC SHEATHED CABLE

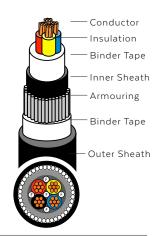
600/1000 CU / PVC / SWA / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, PVC Insulated, Steel Wire Armoured, PVC Sheathed Cables - 4 Core

CABLE SIZES RANGE 4 Core x (1.5 - 400)mm<sup>2</sup>

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 similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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	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	mm²	mm	mm	mm	mm	mm	mm	kg/km
	1.5	0.80		10.0	0.90		14.8	430
	2.5	0.80		11.0			16.4	500
	4			13.3	1.25		18.5	650
	6	100	1.0	14.7	1.25	.25	19.7	790
	10	1.00	1.0	16.3			21.2	980
	16			18.6	1.60		24.0	1560
	25	1.20		22.5			27.8	2030
	35	1.20		25.3			30.4	2520
4	50	1.40		26.6	2.00	1.8	34.5	3480
	70	1.40	1.2	30.1	2.00		38.5	4520
	95	1.60		34.6			44.5	6220
	120	1.60	1.5	37.8			47.5	7440
	150	1.80	1.5	42.0	2.50		52.5	8880
	185	2.00		47.3			58.0	10830
	240	2.20	1.6	52.9			64.0	13650
	300	2.40	40	59.0	3.15		72.0	17240
	400	2.60	1.8	66.0	3.13		79.5	21390

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Conduit	Ampacity in Free Air
Ω/km	kA	А	А
12.10	0.17	19	18
7.41	0.29	26	24
4.61	0.46	35	30
3.08	0.86	45	38
1.83	1.15	62	50
1.15	1.84	83	64
0.727	2.88	110	82
0.524	4.03	135	98
0.387	5.75	163	116
0.268	8.05	207	143
0.193	10.93	251	169
0.153	13.80	290	192
0.124	17.25	332	217
0.0991	21.28	378	243
0.0754	27.60	445	280
0.0601	34.50	510	316
0.0470	46.00	590	-

# SHAPE OF CONDUCTOR

 1.5 - 6 sqmm
 Circular

 10 - 50 sqmm
 Compacted

 70 - 400 sqmm
 Shape

25



MULTICORE — COPPER, PVC INSULATED, STEEL WIRE ARMOUR, PVC SHEATHED CABLE (1.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V, CU / PVC / SWA / PVC

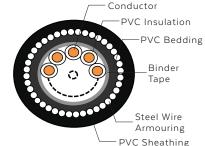
STANDARD SPECIFICATION BS 63

CABLE DESCRIPTION Copper Conductor, PVC Insulated, Steel Wire Armour,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (5 - 19) Core x 1.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### APPLICATION

Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate

transmissions of automated processes. Especially - Substation Power Project

### 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	Diameter (Approx)	Nominal Insulation Thickness	Norminal Bedding Thickness	Bedding Diameter (Approx)	Nominal Galvanized Steel Wire	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)		
Nos	mm	mm	mm	mm	mm	mm	mm	kg/km		
5				10.2			14.4	390		
6				11,1	0.0	1.4	15.7	440		
7				11.1	0.9		15.3	450		
8				12.0	] [		16.4	510		
9				12.9			18.0	650		
10				14.0		1.50	19.1	700		
11		0.60	0.60	0.60	0 0.80	14.0			13.1	720
12	1.59					14.5			19.6	760
13				14.8			20.1	800		
14				15.3	1.25		20.6	840		
15				15.7			21.0	880		
16				16.1		1.60	21.4	910		
17				16.6			21.9	960		
18				17.0			22.7	990		
19				17.0			22.3	1000		

### ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C
Ω/km
12.1

## SHAPE OF CONDUCTOR

5 - 19 Core Circular Stranded



MULTICORE — COPPER, PVC INSULATED, STEEL WIRE ARMOUR, PVC SHEATHED CABLE (1.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V, CU / PVC / SWA / PVC

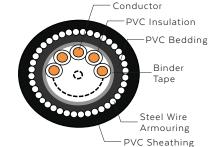
STANDARD SPECIFICATION B

CABLE DESCRIPTION Copper Conductor, PVC Insulated, Steel Wire Armour

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (20 - 50) Core x 1.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### **APPLICATION**

Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes. Especially - Substation Power Project

### SPECIAL FEATURE ON REQUEST

- · UV Resistance
- Anti TermiteAnti Rodent
- · Low Smoke Zero Halogen
- · Flame Retardant

### CUSTOMISATION

Customisation is available upon request based on your cable specification.

### CONSTRUCTION DATA

Number of Core	Diameter (Approx)	Nominal Insulation Thickness	Nominal Bedding Thickness	Bedding Diameter (Approx)	Nominal Galvanized Steel Wire	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)		
Nos	mm	mm	mm	mm	mm	mm	mm	kg/km		
20				17.6	1.05	1.00	22.9	1060		
21				17.9	1.25	1.60	23.2	1090		
22				18.9			25.1	1300		
23				19.3					25.5	1350
24									1400	
25				20.4			26.6	1430		
26		1.59 0.60	0.80			1.70		1450		
27	1.59						271	1490		
28							20.9	1.60		27.1
29					21.1			27.4	1540	
30				21.7			27.9	1580		
37				23.4			29.8	1810		
40				24.3		1.80	30.7	1930		
48						100	77.5	2230		
50				26.9		1.90	33.5	2270		

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C
Ω/km
12.1

## SHAPE OF CONDUCTOR

20 - 50 Core Circular Stranded



MULTICORE — COPPER, PVC INSULATED, STEEL WIRE ARMOUR, PVC SHEATHED CABLE (2.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V, CU / PVC / SWA / PVC

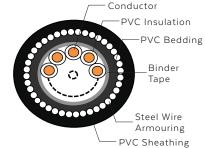
STANDARD SPECIFICATION BS

CABLE DESCRIPTION Copper Conductor, PVC Insulated, Steel Wire Armour,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (5 - 19) Core x 2.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### **APPLICATION**

Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate

transmissions of automated processes. Especially - Substation Power Project

### SPECIAL FEATURE ON REQUEST

- · UV Resistance
- Anti TermiteAnti Rodent
- · Low Smoke Zero Halogen
- · Flame Retardant

### CUSTOMISATION

Customisation is available upon request based on your cable specification.

### **CONSTRUCTION DATA**

Number of Core	Diameter (Approx)	Nominal Insulation Thickness	Nominal Bedding Thickness	Bedding Diameter (Approx)	Nominal Galvanized Steel Wire	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)			
Nos	mm	mm	mm	mm	mm	mm	mm	kg/km			
5				11.8			16.2	510			
6				12.0		150	10.0	650			
7				12.9		1.50	18.0	670			
8		14.0	14.0			19.1	760				
9			0.80	15.1	0.80		20.4	850			
10				16.5			21.8	920			
11		0.70		16.5		1.60	21.0	950			
12	2.01		0.70	0.70	0.70		17.1			22.4	1000
13									17.4		
14				18.4			24.6	1260			
15				18.9			25.1	1330			
16			100	19.5	1.0	170	25.7	1380			
17			1.00	20.0	1.0	1.70	26.3	1440			
18				20.5			20.0	1490			
19				20.5			26.8	1510			

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C
Ω/km
7.41

## SHAPE OF CONDUCTOR

5 - 19 Core Circular Stranded

Conductor

PVC Insulation
PVC Bedding



# **BRITISH STANDARD**

MULTICORE — COPPER, PVC INSULATED, STEEL WIRE ARMOUR, PVC SHEATHED CABLE (2.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V, CU / PVC / SWA / PVC

STANDARD SPECIFICATION

CABLE DESCRIPTION Copper Conductor, PVC Insulated, Steel Wire Armour

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (20 - 50) Core x 2.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.

Binder Tape

Steel Wire Armouring

PVC Sheathing

### **APPLICATION**

Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### SPECIAL FEATURE ON REQUEST

- · UV Resistance
- Anti TermiteAnti Rodent
- · Low Smoke Zero Halogen
- · Flame Retardant

### CUSTOMISATION

Customisation is available upon request based on your cable specification.

### CONSTRUCTION DATA

Especially - Substation Power Project

Number of Core	Diameter (Approx)	Nominal Insulation Thickness	Nominal Bedding Thickness	Bedding Diameter (Approx)	Nominal Galvanized Steel Wire	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm	mm	mm	mm	mm	mm	mm	kg/km
20							27.6	1590
21							28.1	1650
22							28.7	1710
23				0 1.0 1.60		29.2	1770	
24					1.60	1.80	30.6	1860
25			100					1890
26		2.01 0.70	1.00					1920
27	2.01							1980
28								2010
29							31.6	32.3
30						1.90	32.3	2140
37						2.00	34.4	2460
40						2.00	36.9	2880
48			1.20	1.20	2.00	210	40.2	3330
50						2.10	40.2	3400

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C
Ω/km
7.41

## SHAPE OF CONDUCTOR

20 - 50 Core Circular Stranded



MULTICORE — COPPER, PVC INSULATED, STEEL WIRE ARMOUR, PVC SHEATHED CABLE (4.0MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V, CU / PVC / SWA / PVC

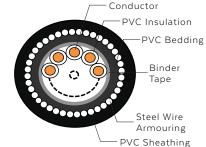
STANDARD SPECIFICATION BS 634

CABLE DESCRIPTION Copper Conductor, PVC Insulated, Steel Wire Armour,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (5 - 19) Core x 4.0mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### **APPLICATION**

Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate

transmissions of automated processes. Especially - Substation Power Project

### SPECIAL FEATURE ON REQUEST

- · UV Resistance
- Anti TermiteAnti Rodent
- · Low Smoke Zero Halogen
- · Flame Retardant

### CUSTOMISATION

Customisation is available upon request based on your cable specification.

### CONSTRUCTION DATA

Number of Core	Diameter (Approx)	Nominal Insulation Thickness	Nominal Bedding Thickness	Bedding Diameter (Approx)	Nominal Galvanized Steel Wire	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)							
Nos	mm	mm	mm	mm	mm	mm	mm	kg/km							
5				13.8		1.50	18.9	750							
6			0.00	15.1	1.25		20.4	860							
7			0.80	15.1		1.60	20.4	890							
8		5 0.80		16.5			21.8	1000							
9			-	18.2		1.70	24.4	1280							
10				19.9			26.1	1380							
11				19.9				1430							
12	2.55		0.80	0.80	0.80	0.80	0.80	0.80	0.80		20.6			26.8	1510
13				20.9			27.1	1580							
14									1.00	21.7	1.60		28.1	1670	
15				22.3			28.7	1760							
16				22.9			29.4	1820							
17				23.6		1.80	30.1	1930							
18				242			70.7	2000							
19				24.2			30.7	2020							

# ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C
Ω/km
4.61

## SHAPE OF CONDUCTOR

5 - 19 Core Circular Stranded



MULTICORE — COPPER, PVC INSULATED, STEEL WIRE ARMOUR, PVC SHEATHED CABLE (4.0MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V, CU / PVC / SWA / PVC

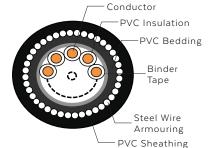
STANDARD SPECIFICATION BS

CABLE DESCRIPTION Copper Conductor, PVC Insulated, Steel Wire Armour

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (20 - 50) Core x 4.0mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### **APPLICATION**

Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes. Especially - Substation Power Project

### SPECIAL FEATURE ON REQUEST

- · UV Resistance
- Anti TermiteAnti Rodent
- · Low Smoke Zero Halogen
- · Flame Retardant

### CUSTOMISATION

Customisation is available upon request based on your cable specification.

### CONSTRUCTION DATA

Number of Core	Diameter (Approx)	Nominal Insulation Thickness	Nominal Bedding Thickness	Bedding Diameter (Approx)	Nominal Galvanized Steel Wire	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)	
Nos	mm	mm	mm	mm	mm	mm	mm	kg/km	
20				25.0		1.90	31.7	2130	
21				25.6			32.4	2220	
22			1.00	26.4	160		33.2	2320	
23		6 0.80		26.9	1.60	2.00		33.7	2410
24				28.6			35.4	2510	
25								2560	
26			.80	29.0		2.00	36.6	2880	
27	2.55			29.7			37.3	2960	
28								3010	
29				30.0			37.7	3100	
30			1.20	30.8	2.00		38.4	3180	
37				33.3			41.2	3660	
40				34.7		2.10	42.5	3900	
48						2.20	46.4	4540	
50				38.4		2.20	46.4	4640	
	1		1		1	ı			

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C
Ω/km
4.61

## SHAPE OF CONDUCTOR

20 - 50 Core Circular Stranded

31



MULTICORE — COPPER, PVC INSULATED, STEEL WIRE ARMOUR, PVC SHEATHED CABLE (1.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V, CU / PVC / SWA / PVC

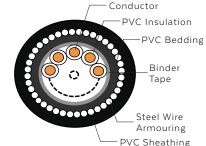
STANDARD SPECIFICATION

CABLE DESCRIPTION Copper Conductor, PVC Insulated, Steel Wire Armour,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (2 - 18) Core x 1.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### **APPLICATION**

Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### SPECIAL FEATURE ON REQUEST

- · UV Resistance
- · Anti Termite
- Anti RodentLow Smoke Zero Halogen
- Flame Retardant

### CUSTOMISATION

Customisation is available upon request based on your cable specification.

### CONSTRUCTION DATA

Number of Core	Diameter (Approx)	Nominal Insulation Thickness	Nominal Bedding Thickness	Bedding Diameter (Approx)	Nominal Galvanized Steel Wire	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)											
Nos	mm	mm	mm	mm	mm	mm	mm	kg/km											
2				8.7			14.0	340											
3				9.3			14.5	370											
4				10.1			15.5	430											
5				11.1			16.5	480											
6					12.1			17.5	540										
7			0.80 1.00	12.1		1.80	17.5	550											
8				13.2	0.90		18.5	610											
9		1.59 0.80		14.2				19.5	680										
10	1.59			15.5			21.0	730											
11								15.5			21.0	760							
12																16.0	1		01.5
13				16.3			21.5	830											
14				16.9			22.5	870											
15				17.4			22.5	920											
16				17.9			23.0	950											
17				18.4	160		25.0	1270											
18				18.9	1.60		25.5	1310											

### ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Ampacity in Ground	Ampacity in Free Air	
Ω/km	А	А	
	22	22	
	29	31	
	29	31	
12.1	N/A	N/A	

### SHAPE OF CONDUCTOR

2 - 18 Core Circular Stranded



MULTICORE — COPPER, PVC INSULATED, STEEL WIRE ARMOUR, PVC SHEATHED CABLE (1.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V, CU / PVC / SWA / PVC

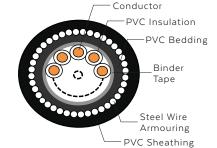
STANDARD SPECIFICATION IEC 6050

CABLE DESCRIPTION Copper Conductor, PVC Insulated, Steel Wire Armour

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (19 - 50) Core x 1.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### **APPLICATION**

Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### SPECIAL FEATURE ON REQUEST

- · UV Resistance
- Anti TermiteAnti Rodent
- · Low Smoke Zero Halogen
- · Flame Retardant

### CUSTOMISATION

Customisation is available upon request based on your cable specification.

### CONSTRUCTION DATA

Number of Core	Diameter (Approx)	Nominal Insulation Thickness	Nominal Bedding Thickness	Bedding Diameter (Approx)	Nominal Galvanized Steel Wire	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)	
Nos	mm	mm	mm	mm	mm	mm	mm	kg/km	
19				18.9			25.5	1320	
20				19.5			26.5	1380	
21				19.9			26.5	1430	
22				20.6			27.5	1480	
23				21.0		100		1530	
24				22.3			29.0	1590	
25					160			1620	
26	150	59 0.80	100		1.60			1640	
27	1.59		1.00	1.00	22.0		1.80	20.5	1690
28				22.8			29.5	1720	
29				23.1			30.0	1760	
30				23.7			30.5	1810	
37				25.7			32.5	2080	
40				26.7			33.5	2210	
48				20.6	200		77.5	2790	
50				29.6	2.00		37.5	2840	

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C	Ampacity in Ground	Ampacity in Free Air		
Ω/km	А	А		
12.1	N/A	N/A		

## SHAPE OF CONDUCTOR

19 - 50 Core Circular Stranded



MULTICORE — COPPER, PVC INSULATED, STEEL WIRE ARMOUR, PVC SHEATHED CABLE (2.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V, CU / PVC / SWA / PVC

STANDARD SPECIFICATION IE

CABLE DESCRIPTION Copper Conductor, PVC Insulated, Steel Wire Armour,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (2 - 18) Core x 1.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.

PVC Insulation
PVC Bedding
Binder
Tape

Steel Wire
Armouring
PVC Sheathing

### **APPLICATION**

Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### SPECIAL FEATURE ON REQUEST

- · UV Resistance
- Anti TermiteAnti Rodent
- · Low Smoke Zero Halogen
- · Flame Retardant

### CUSTOMISATION

Customisation is available upon request based on your cable specification.

### CONSTRUCTION DATA

Number of Core	Diameter (Approx)	Nominal Insulation Thickness	Nominal Bedding Thickness	Bedding Diameter (Approx)	Nominal Galvanized Steel Wire	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm	mm	mm	mm	mm	mm	mm	kg/km
2				9.6			15.0	380
3				10.2			15.5	430
4				11.2			16.5	500
5			.80 1.00	12.2			17.5	570
6				13.4		1.80	18.5	640
7					0.90			660
8				14.5			20.0	740
9				15.7			21.0	830
10	2.01	0.80		17.2			22.5	890
11					17.2	2		22.5
12				17.8			23.0	980
13				18.1			25.0	1280
14				18.8			25.5	1360
15				19.3	160		26.0	1420
16				19.9	1.60		26.5	1470
17				20.5			27.0	1550
18				21.0			27.5	1590

### ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Ampacity in Ground	Ampacity in Free Air	
Ω/km	А	А	
	29	31	
	24	26	
	24	26	
7.41	N/A	N/A	

### SHAPE OF CONDUCTOR

2 - 18 Core Circular Stranded



MULTICORE — COPPER, PVC INSULATED, STEEL WIRE ARMOUR, PVC SHEATHED CABLE (2.5MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V, CU / PVC / SWA / PVC

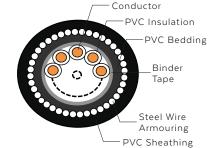
STANDARD SPECIFICATION IE

CABLE DESCRIPTION Copper Conductor, PVC Insulated, Steel Wire Armour

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE (19 - 50) Core x 2.5mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### **APPLICATION**

Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### SPECIAL FEATURE ON REQUEST

- · UV Resistance
- Anti TermiteAnti Rodent
- · Low Smoke Zero Halogen
- · Flame Retardant

### CUSTOMISATION

Customisation is available upon request based on your cable specification.

### **CONSTRUCTION DATA**

Number of Core	Diameter (Approx)	Nominal Insulation Thickness	Nominal Bedding Thickness	Bedding Diameter (Approx)	Nominal Galvanized Steel Wire	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)		
Nos	mm	mm	mm	mm	mm	mm	mm	kg/km		
19				21.0			27.5	1610		
20				21.7			28.5	1690		
21				22.2			29.0	1740		
22				22.9			29.5	1810		
23				23.3			30.0	1870		
24										1970
25							24.8	1.60		32.0
26	2.01	0.00	100	1.60	1.80		2050			
27	2.01	0.80	1.00	25.4		1.80	32.5	2100		
28								2140		
29				25.7				2200		
30				26.4			33.5	2250		
37				28.6			36.0	2600		
40				29.8			37.5	3000		
48				77.4	200		41.5	3540		
50				33.4	2.00		42.0	3630		

### ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Ampacity in Ground	Ampacity in Free Air
Ω/km	А	А
7.41	N/A	N/A

## SHAPE OF CONDUCTOR

19 - 50 Core Circular Stranded

35

Conductor

PVC Insulation
PVC Bedding

Binder Tape

Steel Wire Armouring

PVC Sheathing



## **IEC STANDARD**

MULTICORE — COPPER, PVC INSULATED, STEEL WIRE ARMOUR, PVC SHEATHED CABLE (4.0MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V, CU / PVC / SWA / PVC

STANDARD SPECIFICATION

IEC 60502-1

CABLE DESCRIPTION

Copper Conductor, PVC Insulated, Steel Wire Armour,

PVC Sheathed Cables - Multicore

CABLE SIZES RANGE

(2 - 18) Core x 4.0mm<sup>2</sup>

SHEATHING COLOURS

Black, other colours is available upon request.

### CUSTOMISATION

Customisation is available upon request based on your cable specification.

### **APPLICATION**

Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### SPECIAL FEATURE ON REQUEST

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

### CONSTRUCTION DATA

Number of Core	Diameter (Approx)	Nominal Insulation Thickness	Nominal Bedding Thickness	Bedding Diameter (Approx)	Nominal Galvanized Steel Wire	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm	mm	mm	mm	mm	mm	mm	kg/km
2				11.5			17.0	490
3				12.2	0.00		17.5	560
4				13.4	0.90		19.0	650
5				14.8		1.80	20.0	760
6				10.0	1.60		21.5	860
7				16.2				890
8				17.6			24.5	1270
9			00 1.00	19.1			26.0	1400
10	2.55	1.00		21.0			27.5	1520
11				21.0				1570
12				21.7			28.5	1650
13				22.1			29.0	1740
14				22.9			29.5	1810
15				23.6			30.5	1920
16				24.3			31.0	1990
17				25.1		100	32.0	2110
18				25.7		1.90	32.5	2190

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C	Ampacity in Ground	Ampacity in Free Air	
Ω/km	А	А	
	37	41	
	30	35	
	30	35	
4.61	N/A	N/A	

# SHAPE OF CONDUCTOR

2 - 18 Core Circular Stranded



MULTICORE — COPPER, PVC INSULATED, STEEL WIRE ARMOUR, PVC SHEATHED CABLE (4.0MM<sup>2</sup> AUXILIARY CONTROL CABLE)

600/1000V, CU / PVC / SWA / PVC

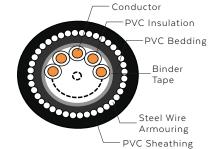
STANDARD SPECIFICATION IEC 6050

CABLE DESCRIPTION Copper Conductor, PVC Insulated, Steel Wire Armour

PVC Sheathed Cables - Multi Core

CABLE SIZES RANGE (20 - 50) Core x 4.0mm<sup>2</sup>

SHEATHING COLOURS Black, other colours is available upon request.



### **APPLICATION**

Control cables are multi-conductor cables used in automation and instrumentation applications. Control cables can measure and regulate transmissions of automated processes.

### SPECIAL FEATURE ON REQUEST

- · UV Resistance
- Anti TermiteAnti Rodent
- · Low Smoke Zero Halogen
- · Flame Retardant

### CUSTOMISATION

Customisation is available upon request based on your cable specification.

### CONSTRUCTION DATA

Number of Core	Diameter (Approx)	Nominal Insulation Thickness	Nominal Bedding Thickness	Bedding Diameter (Approx)	Nominal Galvanized Steel Wire	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)				
Nos	mm	mm	mm	mm	mm	mm	mm	kg/km				
19				25.7			32.5	2220				
20				26.5	1.60		33.5	2330				
21			1.00	27.1			34.0	2400				
22				28.1			36.0	2780				
23		1.00	100	100			28.6			36.5	2850	
24					100							3050
25							30.9			39.0	3110	
26	2.55							100		2170		
27	2.55			77.0	2.00	1.80	70.5	3260				
28				1.20	31.6			39.5	3310			
29				32.0			40.0	3380				
30				32.8			41.0	3490				
37				35.6			44.0	4030				
40					37.0			45.5	4310			
48			1.40	41.5	2.50		53.0	5460				
50			1.40	41.5	2.50		51.0	5580				

### ELECTRICAL DATA

Max. Conductor Resistance. DC at 20°C	Ampacity in Ground	Ampacity in Free Air
Ω/km	А	А
4.61	N/A	N/A

## SHAPE OF CONDUCTOR

19 - 50 Core Circular Stranded



# SINGLE CORE — COPPER, XLPE INSULATED, ALUMINIUM WIRE ARMOURED, PVC SHEATHED CABLE

600/1000V CU / XLPE / AWA / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated, Aluminium Wire

Armoured, PVC Sheathed Cables - 1 Core

CABLE SIZES RANGE 1 Core x (10 - 630)mm<sup>2</sup>

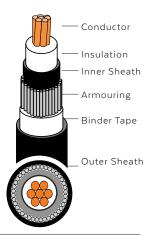
SHEATHING COLOURS Black, other colours is available upon request.

#### APPLICATION

For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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
- $\cdot$  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)	Alumini- um Wire Armoured Diameter	Nominal Outer Sheath Thickness	Overall Diameter (Approx)	Cable Weight (Approx)
Nos	mm²	mm	mm	mm	mm	mm	mm	mm	kg/km
	10	3.80	0.70		7.5			13.50	311
	16	4.74	0.70		8.0	1.04		14.50	398
	25	5.97	0.90		10.0			16.00	551
	35	7.10	0.90		11.5		1.80	17.50	711
	50	8.10	1.00		12.5	1.25		18.50	912
	70	9.74	1.10	1.00	14.0			20.50	1221
	95	11.46	1.10	1.00	16.0			23.00	1635
1	120	12.93	1.20		17.5			25.00	2009
	150	14.33	1.40		19.5	1.60		26.50	2453
	185	16.05	1.60		21.5		1.90	29.00	2982
	240	18.43	1.70		24.0		2.00	32.00	3763
	300	20.64	1.80		26.5		2.10	35.50	4750
	400	23.34	2.00		30.0	2.00	2.20	39.00	5978
	500	26.21	2.20	1.20	33.5		2.35	42.50	7399
	630	29.80	2.40		37.5	2.50	2.45	49.00	9398

### **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	А	А
1.83	1.43		
1.15	2.29		
0.727	3.58	-	-
0.524	5.01		
0.387	7.15	220	222
0.268	10.02	277	285
0.193	13.59	333	346
0.153	17.17	383	402
0.124	21.46	437	463
0.0991	26.47	496	529
0.0754	34.34	579	625
0.0601	42.93	662	720
0.0470	57.23	717	815
0.0366	71.54	791	918
0.0283	90.14	861	1027

# SHAPE OF CONDUCTOR

10 - 630 sqmm Compacted



# TWO CORE — COPPER, XLPE INSULATED, STEEL WIRE ARMOURED, PVC SHEATHED CABLE

600/1000V CU / XLPE / SWA / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated, Steel Wire Armoured,

PVC Sheathed Cable - 2 Core

CABLE SIZES RANGE 2 Core x (1.5 - 300)mm<sup>2</sup>

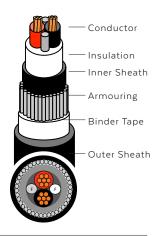
SHEATHING COLOURS Black, other colours is available upon request.



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

### SPECIAL FEATURE ON REQUEST

- · UV Resistance
- $\cdot$  Anti Termite
- Anti RodentLow Smoke Zero Halogen
- · Flame Retardant



#### CUSTOMISATION

Customisation is available upon request based on your cable specification.

### **CONSTRUCTION DATA**

No. 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	mm²	mm	mm	mm	mm	mm	mm	kg/km
	1.5			8.3	0.00		13.5	320
	2.5			9.1	0.90		14.5	370
	4	0.7		10.2			16.5	500
	6	0.7		11.3	1.25		17.5	590
	10		1.0	12.7	1.25		19.0	730
	16	16	1.0	14.6			21.0	920
	25	0.9		17.8			25.0	1210
	35	0.9		20.1	1.60		27.5	1460
2	50	1.0		19.5	1.60	2.00	26.0	1790
	70	1.1		22.6			29.5	2360
	95	1.1		24.6			33.5	3220
	120	1.2	1.2	25.6	2.00		36.0	3850
	150	1.4		28.0			39.0	4550
	185	1.6	1.4	30.8			44.5	5870
	240	1.7	1.4	38.6	2.50		48.5	7320
	300	1.8	1.6	42.6	2.50		53.0	8720
	400	2.0	0.1	47.0			58.0	10750

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Free Air - 3 Phase	Ampacity in Ground - 1 Phase
Ω/km	kA	А	А
12.10	0.21	29	25
7.41	0.36	39	33
4.61	0.57	52	43
3.08	0.86	66	53
1.83	1.43	90	71
1.15	2.29	115	91
0.727	3.58	152	116
0.524	5.01	188	139
0.387	7.15	228	164
0.268	10.02	291	203
0.193	13.59	354	239
0.153	17.17	410	271
0.124	21.46	472	306
0.0991	26.47	539	343
0.0754	34.34	636	395
0.0601	42.93	732	446
0.0470	57.23	847	-

# SHAPE OF CONDUCTOR

 1.5 - 6 sqmm
 Circular

 10 - 50 sqmm
 Compacted

 70 - 400 sqmm
 Shape



# THREE CORE — COPPER, XLPE INSULATED, STEEL WIRE ARMOURED, PVC SHEATHED CABLE

600/1000V CU / XLPE / SWA / PVC

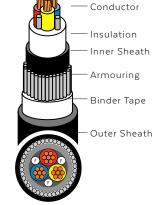
**STANDARD SPECIFICATION** IEC 60502-2, TNB Spec

CABLE DESCRIPTION Copper Conductor, XLPE Insulated, Steel Wire Armoured,

PVC Sheathed Cable - 3 Core

CABLE SIZES RANGE 3 Core x (1.5 - 400)mm<sup>2</sup>

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 similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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
- $\cdot$  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	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	mm²	mm	mm	mm	mm	mm	mm	kg/km
	1.5			8.8	0.00		14.8	360
	2.5			9.7	0.90		16.4	480
	4	0.7		10.8			18.5	570
	6	0.7		12.0	1.25		19.7	680
	10		1.0	13.5			21.2	860
	16			15.5	1.60		24.0	1110
	25	0.9		19.1			27.8	1550
	35	0.9		21.5	1.60		30.4	1920
3	50	1.0		22.6		1.8	29.0	2400
	70	1.1		26.6			34.0	3420
	95	1.1	1.2	30.1	2.00		38.0	4390
	120	1.2		32.6			41.0	5230
	150	1.4	1.4	35.9			45.5	6640
	185	1.6	1.4	40.3	2.50		50.0	8020
	240	1.7		45.4	2.50		55.5	10140
	300	1.8	1.6	49.5			60.5	12080
	400	2.0		55.2	3.15		66.5	15020

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Free Air - 3 Phase	Ampacity in Ground - 1 Phase	
Ω/km	kA	А	А	
12.10	0.21	25	21	
7.41	0.36	33	28	
4.61	0.57	44	36	
3.08	0.86	56	44	
1.83	1.43	78	58	
1.15	2.29	99	75	
0.727	3.58	131	96	
0.524	5.01	162	115	
0.387	7.15	197	135	
0.268	10.02	251	167	
0.193	13.59	304	197	
0.153	17.17	353	223	
0.124	21.46	406	251	
0.0991	26.47	463	281	
0.0754	34.34	546	324	
0.0601	42.93	628	365	
0.0470	57.23	728	-	

# SHAPE OF CONDUCTOR

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



# FOUR CORE — COPPER, XLPE INSULATED, STEEL WIRE ARMOURED, PVC SHEATHED CABLE

600/1000V CU / XLPE / SWA / PVC

STANDARD SPECIFICATION IEC 60502-1

CABLE DESCRIPTION Copper Conductor, XLPE Insulated, Steel Wire Armoured,

PVC Sheathed Cable - 4 Core

CABLE SIZES RANGE 4 Core x (1.5 - 400)mm<sup>2</sup>

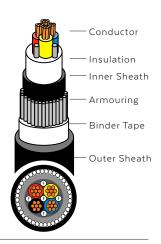
SHEATHING COLOURS Black, other colours is available upon request.



For general purpose internal wiring of electronic and electrical equipment, installation in surface mounted or embedded conduits or similiar closed systems. Commonly use for protected installation in or on lighting fitting inside electronic, eletrical 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 RodentLow Smoke Zero Halogen
- · Flame Retardant



#### CUSTOMISATION

Customisation is available upon request based on your cable specification.

### **CONSTRUCTION DATA**

No. 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	mm²	mm	mm	mm	mm	mm	mm	kg/km
	1.5		1.0	9.6	0.90	1.8	14.8	407
	2.5			10.6			16.4	478
	4	0.7		11.9	1.25		18.5	678
	6			13.2			19.7	816
	10			14.9			21.2	1041
	16			17.2	1.60		24.0	1506
	25	0.0		21.1			27.8	2054
35 4 50	35	0.9		23.8			30.4	2565
	50	1.0		24.9			32.0	2970
	70	1.1	1.2	29.5	2.00		37.5	4270
-	95	1.1		33.1			41.5	5450
	120	1.2	1.4	36.6	2.50		46.5	7010
	150	1.4		40.9			51.0	8400
	185	1.6		45.6			56.0	10180
	240	1.7	1.0	51.1			62.0	12900
	300	1.8	1.6	56.6			67.5	15470
	400	2.0	1.8	63.5	3.15		76.5	20230

### **ELECTRICAL DATA**

Max. Conductor Resistance. DC at 20°C	Conductor Short Circuit Current for 1 sec	Ampacity in Free Air - 3 Phase	Ampacity in Ground - 1 Phase	
Ω/km	kA	А	А	
12.10	0.21	25	21	
7.41	0.36	33	28	
4.61	0.57	44	36	
3.08	0.86	56	44	
1.83	1.15	78	58	
1.15	1.84	99	75	
0.727	2.88	131	96	
0.524	4.03	162	115	
0.387	5.75	197	135	
0.268	8.05	251	167	
0.193	10.93	304	197	
0.153	13.80	353	223	
0.124	17.25	406	251	
0.0991	21.28	463	281	
0.0754	27.60	546	324	
0.0601	34.50	628	365	
0.0470	46.00	728	-	

# SHAPE OF CONDUCTOR

 1.5 - 6 sqmm
 Circular

 10 - 50 sqmm
 Compacted

 70 - 400 sqmm
 Shape

# **HEAD OFFICE & FACTORY**

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

## **CUSTOMER SERVICE**

% +6 03 6151 160<sup>-1</sup>

☐ sc@southerncable.com.my

**强** @southerncable

# **QUALITY ACCREDITATION**







074 SNI 04-6629



