

شركة الخليج للكابلات والصناعات المتعددة - الأردن
Gulf Cable & Multi Industries Co. Jordan



شركة الخليج للكابلات والصناعات الكهربائية ش.م.ك.ع. - الكويت
Gulf Cable & Electrical Industries Co. K.S.C.P. - Kuwait

We Build Cables For Life



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DOMESTIC WIRES

PRODUCT DATA TABLES



cables that **pulse with life**

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□ Introduction:

Gulf Cables and Electrical Industries Co. K.S.C.P. was established in 1975 with objective of meeting growing local and export markets requirements, it owns two factories one located in Kuwait the other in Jordan. Our Vision is to be the leader of Gulf and Middle East region in manufacturing and supplying Cables and Conductors. Through continuous improvements driven by the integrity, teamwork and innovation, we are committed to provide such a Quality that:

- Our customers will receive superior value
- Our shareholders will receive ever exceeding returns on their investments
- Our business partners will share our success
- Our employees will prosper

Our products are designed and manufactured to meet the needs of the Local, regional and International markets. All our products meet the respective world standards.

We handle all available means for exporting products - land, marine and air.

We are also equipped to meet all export requirements and formalities in the local Arab markets, including Saudi Arabia, United Arab Emirates, Oman, Bahrain, Jordan , Iraq and MENA. Opportunities to Export to Syria, Lebanon, Yemen and other countries worldwide will also be available soon.

We have developed and established communication channels with our customers through which, we constantly get updates and feedbacks on their stated / implied needs and problems. Based on this information, we have devised new modalities to provide better service to our valued customers. Thus, we not only provide Quality Products, but also offer a host of related services before and after the sale.

□ Products:

Medium Voltage Power Cables up to 19/33(36) KV

Low Voltage Power Cables up to 600/1000V

Control Cables 600/1000V

Bare Conductors for Overhead Lines

Earthing Conductors

PVC or XLPE Insulated Conductors

Domestic Applications / Internal Wiring

LSF Cables & Wires

Lead Sheathed Cables

Enamelled Wires

Telephone, communication & Instrumentation Cables

□ Quality:

Quality has always been our top priority and to meet customer's expectation has been our prime objective; the very basis on which we earned the confidence of our clientele. It is this concern and commitment, rather than just sell of product, has given us a distinct image and competitive advantage.

□ Certificates:

ISO 9001: 2015

ISO 14001: 2015

BS OHSAS 18001:2007

BS EN ISO 9001:2015 CERTIFIED BY BASEC

ISO 9001:2015 CERTIFIED BY SGS



CERTIFIED BY TUV NORD



□ PRODUCT RANGE

We at Gulf Cables always aim for the best. While most of the Cable Manufacturers in Gulf and Middle East region settled for ISO 9002, we stand out with ISO 9001 which recognizes our ability for Design & Development as well.

As a philosophy, our commitment to Customers does not end with a sale. We also offer a host of related services before and after the sale. These include,

- Application engineering service for selection of appropriate product best suiting the end use.
- An extensive range of cables, single core wires, flexible cords bare & insulated conductors manufactured to stringent Quality standards going beyond international specifications.
- Design and Development of products tailored to meet specific requirements of the application.
- To help the customers understand the product intricacies and its performance levels.

□ NOTE 1:

THE TABULATIONS ON SUBSEQUENT PAGES FURNISH OVERALL DIMENSIONS, NET & GROSS WEIGHTS AND DRUM DIMENSIONS. PLEASE NOTE THAT THESE ARE "APPROXIMATE" VALUES. THEY HAVE BEEN FURNISHED FOR GENERAL GUIDELINES AND INTENDED TO BE USED FOR THUMB RULE ESTIMATIONS / FREIGHT CALCULATIONS.

□ NOTE 2:

THE FOLLOWING LIST TABULATES ONLY THE "STANDARD" PRODUCTS. FOR ANY PRODUCT NOT LISTED BELOW, PLEASE DO NOT HESITATE TO CONTACT OUR SALES & MARKETING DIVISION. WE SHALL BE TOO PLEASED TO MEET YOUR SPECIFIC REQUIREMENTS.

□ PRODUCT

□ STANDARD

DOMESTIC APPLICATIONS / INTERNAL WIRING

- | | |
|--|--------------------------------|
| • PVC insulated non sheathed single core wires | BS 6004 / BS 6231 |
| • PVC insulated PVC sheathed flexible cords | BS 6500 / BS 6141 / BS 6004 |
| • PVC insulated PVC sheathed twin flat cables and cords with
Or Without circuit protective conductors (ECC) | BS 6004 / Client specification |



450 / 750 V - SINGLE CORE

COPPER CONDUCTOR PVC INSULATED
UNSHEATHED CABLES

(CU / PVC)

Nominal Area of Conductor	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Approx Overall Diameter	Approx Cable Weight	Standard Packing Length	Drum Size/Coil	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	Kg/Km	Yard/Metre		KG
1.0*	18.1	0.6	2.5	15	100Y	COIL	1.4
1.5**	12.1	0.7	3.0	21	100Y	COIL	1.9
1.5	12.1	0.7	3.2	22	100Y	COIL	2.0
2.5**	7.41	0.8	3.6	32	100Y	COIL	2.9
2.5	7.41	0.8	3.8	34	100Y	COIL	3.1
4	4.61	0.8	4.3	49	100Y	COIL	4.5
6	3.08	0.8	4.9	68	100Y	COIL	6.2
10	1.83	1.0	6.0	115	100Y	COIL	10.5
16	1.15	1.0	7.1	170	100Y	COIL	15.5
25	0.727	1.2	8.8	265	Metre±10% 1000M	D-9	24.3
35	0.524	1.2	9.9	360	1000M	D-10	420
50	0.387	1.4	11.4	490	1000M	D-9	550
70	0.268	1.4	13.0	690	1000M	D-10	750
95	0.193	1.6	15.3	950	500M	D-9	535
120	0.153	1.6	16.8	1180	500M	D-10	650
150	0.124	1.8	18.6	1480	500M	D-10	800
185	0.0991	2.0	20.6	1810	500M	D-11	1010
240	0.0754	2.2	23.5	2360	500M	D-12	1290
300	0.0601	2.4	25.9	2960	500M	D-12	1590
400	0.0470	2.6	29.2	3820	500M	D-16	2120
500	0.0366	2.8	32.6	4810	500M	D-18	2640
630	0.0283	2.8	38.2	6180	250M	D-14	1700

* Circular solid conductors (Class 1) and 300/500V.

** Circular solid conductors (Class 1).

All other conductors Circular stranded or circular stranded compacted (Class 2).

Above cables are insulated with either PVC Type 5 Heat Resisting 85°C or TI1 compound.

Cables rated 450/750V are Suitable for Voltages up to 1000V a.c or up to 750V to earth d.c.

Cables conform to BS 6004.



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DOMESTIC WIRES



600 / 1000 V - SINGLE CORE

COPPER CONDUCTOR PVC INSULATED
CABLES FOR SWITCHGEAR AND
CONTROLGEAR WIRING TYPE CU
AND CR AS PER BS 6231 - 1990

(CU / PVC)

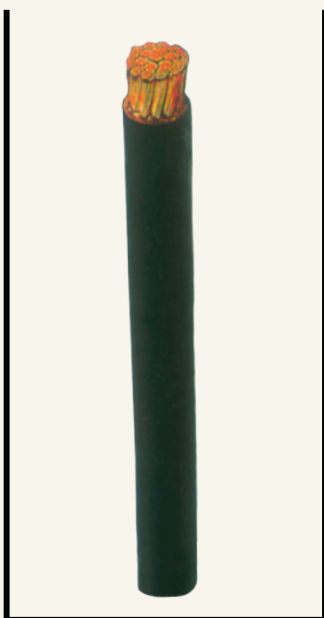
Type	Nominal Area of Conductor	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Mean Overall Diameter (Max.)	Approx. Cable Weight	Standard Packing length	Drum Size/Coil	Approx Gross Weight
	Sqmm	Ohm/Km	mm	mm	Kg/Km	Yard/Metre		KG
CU	1.0	18.1	0.8	3.2	18	100Y	COIL	1.8
	1.5	12.1	0.8	3.5	23	100Y	COIL	2.3
	2.5	7.41	0.8	3.9	32	100Y	COIL	3.2
CR	2.5	7.41	0.8	4.2	34	100Y	COIL	3.4
	4	4.61	0.8	4.8	49	100Y	COIL	4.9
	6	3.08	0.8	5.4	68	100Y	COIL	6.8
	10	1.83	1.0	6.8	115	100Y	COIL	12
	16	1.15	1.0	8.0	170	100Y	COIL	17
	25	0.727	1.2	9.8	265	100Y	COIL	27
	35	0.524	1.2	11.0	360	Metre±10% 1000M	D-8	410
	50	0.387	1.4	13.0	490	1000M	D-9	550
	70	0.268	1.4	15.0	685	1000M	D-9	745
	95	0.193	1.6	17.0	950	500M	D-8	525
	120	0.153	1.6	19.0	1180	500M	D-9	650
	150	0.124	1.8	21.0	1480	500M	D-10	800
	185	0.0991	2.0	23.5	1810	500M	D-10	965
	240	0.0754	2.2	26.5	2360	500M	D-11	1280

Type CU: Rigid, round, solid conductors (Class 1).

Type CR: Rigid, round, stranded conductors (Class 2).

All the cables are insulated with PVC Type 5 Heat Resisting 85°C compound.

Cables conform to BS 6231-1990



450 / 750 V - SINGLE CORE FLEXIBLE CABLES

COPPER CONDUCTOR PVC INSULATED
NON SHEATHED

CABLES - TYPE -HO 7V-K OF BS 6004

(CU / PVC)

Nominal Area of Conductor	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Mean Overall Diameter (Max.)	Approx. Cable Weight	Standard Packing length	Drum Size/Coil	Approx Gross Weight
Sqmm	Ohm/Km	mm	mm	Kg/Km	Yard/Metre		KG
1.5	13.3	0.7	3.4	21	100Y	COIL	1.9
2.5	7.98	0.8	4.1	33	100Y	COIL	3.0
4	4.95	0.8	4.8	48	100Y	COIL	4.4
6	3.3	0.8	5.3	70	100Y	COIL	6.4
10	1.91	1.0	6.8	115	100Y	COIL	11
16	1.21	1.0	8.1	170	100Y	COIL	16
25	0.780	1.2	10.2	270	100Y	COIL	25
35	0.554	1.2	11.7	365	Metre±10% 1000M	D-9	430
50	0.386	1.4	13.9	505		D-10	570
70	0.272	1.4	16.0	700	1000M	D-11	800
95	0.206	1.6	18.2	960	1000M	D-12	1070
120	0.161	1.6	20.2	1200	1000M	D-12	1310
150	0.129	1.8	22.5	1510	1000M	D-14	1660
185	0.106	2.0	24.9	1830	1000M	D-14	1980
240	0.0801	2.2	28.4	2390	1000M	D-18	2630

All Conductors are flexible (Class 5).

Above cables are insulated with either PVC Type 5 Heat Resisting 85°C or TI 1 compound.

Cables conform to BS 6004.



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DOMESTIC WIRES



600 / 1000 V - SINGLE CORE FLEXIBLE CABLES

COPPER CONDUCTOR PVC INSULATED
CABLES FOR SWITCHGEAR AND
CONTROLGEAR WIRING TYPE
CK AS PER BS 6231 - 1990

(CU / PVC)

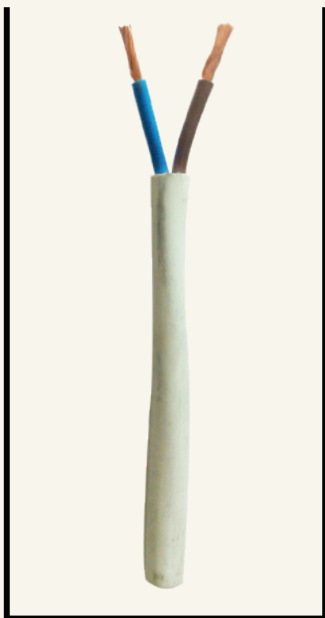
Nominal Area of Conductor	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Mean Overall Diameter (Max.)	Approx. Cable Weight	Standard Packing length	Drum Size/Coil	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	Kg/Km	Yard/Metre		KG
0.5	39	0.8	3.0	12	100Y	COIL	1.1
0.75	26	0.8	3.2	15	100Y	COIL	1.4
1.0	19.5	0.8	3.4	18	100Y	COIL	1.6
1.5	13.3	0.8	3.7	23	100Y	COIL	2.2
2.5	7.98	0.8	4.2	33	100Y	COIL	3.0
4.0	4.95	0.8	4.8	48	100Y	COIL	4.4
6	3.3	0.8	6.3	70	100Y	COIL	6.4
10	1.91	1.0	7.8	115	100Y	COIL	11.0
16	1.21	1.0	9.0	170	100Y	COIL	16.0
25	0.78	1.2	11.5	270	100Y	COIL	25
35	0.554	1.2	13.0	365	Metre±10% 1000M 1000M	D- 9	430
50	0.386	1.4	15.0	505		D-10	570
70	0.272	1.4	17.5	700	1000M	D-12	810
95	0.206	1.6	19.5	960	1000M	D-12	1070
120	0.161	1.6	21.5	1200	1000M	D-14	1350
150	0.129	1.8	24.0	1510	1000M	D-14	1660
185	0.106	2.0	26.5	1830	1000M	D-16	2040
240	0.0801	2.2	30.0	2390	1000M	D-18	2630
300*	0.0641	2.4	32.0	2990	500M	D-14	1650
400*	0.0486	2.6	37.0	3940	500M	D-18	2210
500*	0.0384	2.8	41.0	5020	500M	D-18	2750
630*	0.0287	2.8	44.0	6070	250M	D-14	1670

All Conductors are flexible (Class 5).

Above cables are insulated with PVC Type 5 Heat Resisting 85°C compound.

*Cables generally to BS 6231-1990.

All other Cables conform to BS 6231-1990.



300 / 500 V - TWO CORE FLEXIBLE CORDS

COPPER CONDUCTOR PVC INSULATED
PVC SHEATHED FLEXIBLE CORDS

(CU / PVC / PVC)

Nominal Area of Conductor	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Thickness Of Outer Sheath	Mean Overall Diameter Max.	Approx. Cable Weight	Standard Packing Length	Drum Size/Coil
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Yard / Metre	
0.5	39.0	0.6	0.8	7.0	53	100Y	COIL
0.75	26.0	0.6	0.8	7.6	62	100Y	COIL
1.0	19.5	0.6	0.8	8.0	74	100Y	COIL
1.25	15.6	0.7	0.8	8.6	88	100Y	COIL
1.5	13.3	0.7	0.8	9.0	95	100Y	COIL
2.5	7.98	0.8	1.0	11.0	140	100Y	COIL
4	4.95	0.8	1.1	12.0	195	100Y	COIL
6*	3.30	0.8	1.2	14.0	275	Metre±10% 1000M	D-10
10*	1.91	1.0	1.4	17.5	435	1000M	D-12
16*	1.21	1.0	1.4	20.0	595	1000M	D-12

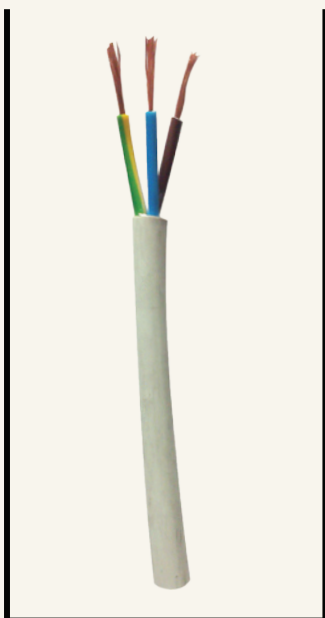
All Conductors flexible (Class 5).

Above Cable are insulated and sheathed with Heat Resisting 85°C PVC Type 4 compound OR insulated with PVC Type TI2 & Sheathed with PVC Type TM2 compound.

*Cables generally conform to BS 6500 and BS 6004.

All other cables conform BS 6500 except Core identification.

Core identification - Red & Black OR
Blue & Brown.



300 / 500 V - THREE CORE FLEXIBLE CORDS

COPPER CONDUCTOR PVC INSULATED
PVC SHEATHED FLEXIBLE CORDS

(CU / PVC / PVC)

Nominal Area of Conductor	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Thickness Of Outer Sheath	Mean Overall Diameter Max.	Approx. Cable Weight	Standard Packing Length	Drum Size/ Coil
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Yard / Metre	
0.5*	39.0	0.6	0.8	7.5	60	100Y	COIL
0.75	26.0	0.6	0.8	8.0	75	100Y	COIL
1.0	19.5	0.6	0.8	8.4	85	100Y	COIL
1.25	15.6	0.7	0.9	9.4	110	100Y	COIL
1.5	13.3	0.7	0.9	9.8	120	100Y	COIL
2.5	7.98	0.8	1.1	12.0	175	100Y	COIL
4	4.95	0.8	1.2	13.0	240	Metre±10% 1000M	D-9
6*	3.30	0.8	1.4	15.5	350	1000M	D-11
10*	1.91	1.0	1.4	19.0	535	1000M	D-12
16*	1.21	1.0	1.4	21.5	745	1000M	D-14

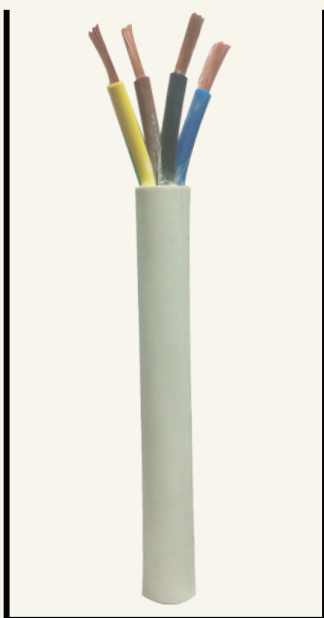
All Conductors flexible (Class 5).

Above Cable are insulated and sheathed with Heat Resisting 85°C PVC Type 4 compound OR insulated with PVC Type TI2 & Sheathed with PVC Type TM2 compound.

*Cables generally conform to BS 6500 and BS 6004.

All other Cables conform to BS 6500 except core identification.

Core Identification: Red, Black & Green OR
Blue, Brown & green (or green/yellow)



300 / 500 V - FOUR CORE FLEXIBLE CORDS

COPPER CONDUCTOR

PVC INSULATED

PVC SHEATHED FLEXIBLE CORDS

(CU / PVC / PVC)

Nominal Area of Conductor	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Thickness Of Outer Sheath	Mean Overall Diameter Max.	Approx. Cable Weight	Standard Packing Length	Drum Size/ Coil
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Yard/Metre	
0.75 1.0	26.0 19.5	0.6 0.6	0.8 0.9	8.6 9.4	90 105	100Y 100Y	COIL COIL
1.5 2.5	13.3 7.98	0.7 0.8	1.0 1.1	11.0 13.0	150 210	100Y 100Y	COIL COIL
4 6* 10* 16*	4.95 3.30 1.91 1.21	0.8 0.8 1.0 1.0	1.2 1.4 1.4 1.4	14.0 17.0 20.5 23.5	290 430 660 925	Metre±10% 1000M 1000M 1000M 1000M	D-10 D-11 D-12 D-14

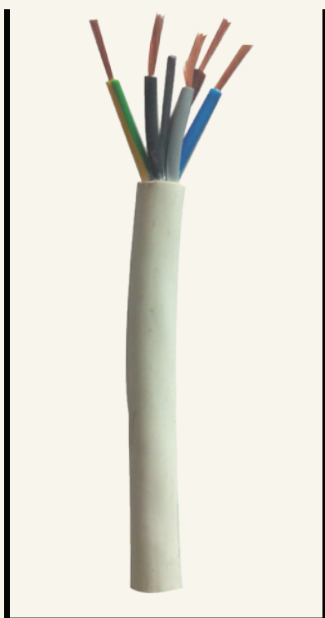
All conductors flexible (Class 5).

Above Cable are insulated and sheathed with Heat Resisting 85°C PVC Type 4 compound OR insulated with PVC Type T12 & Sheathed with PVC Type TM2 compound.

*Cables generally conform to BS 6500 and BS 6004.

All other Cables conform to BS 6500 except core identification.

Core Identification: Red, Yellow, Blue & Black OR
Blue, Brown, green (or green/yellow) & Black



300 / 500 V - FIVE CORE FLEXIBLE CORDS

COPPER CONDUCTOR PVC INSULATED
PVC SHEATHED FLEXIBLE CORDS

(CU / PVC / PVC)

Nominal Area of Conductor	Maximum Conductor Resistance at 20 °C	Thickness of Insulation	Thickness Of Outer Sheath	Mean Overall Diameter Max.	Approx. Cable Weight	Standard Packing Length	Drum Size/ Coil
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Yard/Metre	
0.75 1.0	26.0 19.5	0.6 0.6	0.9 0.9	9.6 10.0	125 145	100Y 100Y	COIL COIL
1.5	13.3	0.7	1.1	12.0	205	100Y	COIL
2.5 4	7.98 4.95	0.8 0.8	1.2 1.4	14.0 15.5	290 410	Metre±10% 1000M 1000M	D-10 D-11

All Conductors flexible (Class 5).

Above Cable are insulated and sheathed with Heat Resisting 85°C PVC Type 4 compound OR insulated with PVC Type T12 & Sheathed with PVC Type TM2 compound.
All Cables conform to BS 6500 except core identification.

Core Identification: Red, Yellow, Blue, Black & Green OR
Blue, Brown, Black, Grey & green or green/yellow



300 / 500 V - TWIN FLAT CABLE

COPPER CONDUCTOR PVC INSULATED
PVC SHEATHED CABLES
WITH CIRCUIT PROTECTIVE CONDUCTOR
(CU / PVC / PVC) (PREVIOUSLY ECC)

Nominal Area		Maximum Resistance at 20° C		Thickness of Insulation	Thickness Of Outer Sheath	Overall Dimensions of cable (Max.)	Approx. Cable Weight	Standard Packing Length in Coil / Drum
Conductor	Circuit protective Conductor	Conductor	Circuit protective Conductor					
Sqmm		Ohm/km		mm	mm	mm	Kg/Km	Yard/Metre
1.0*	1.0	18.1	18.1	0.6	0.9	4.7x8.6	74	100 COIL
1.5*	1.0	12.1	18.1	0.7	0.9	5.4x9.6	93	100 COIL
1.5	1.0	12.1	18.1	0.7	0.9	5.6x10.0	97	100 COIL
2.5*	1.5	7.41	12.1	0.8	1.0	6.2x11.5	130	100 COIL
2.5	1.5	7.41	12.1	0.8	1.0	6.6x12.0	135	100 COIL
4	1.5	4.61	12.1	0.8	1.0	7.2x13.0	175	100 COIL
6	2.5	3.08	7.41	0.8	1.1	8.0x15.0	235	100 COIL
10	4	1.83	4.61	1.0	1.2	9.6x19.0	370	1000M Drum±10%
16	6	1.15	3.08	1.0	1.3	11.0x22.5	525	1000M Drum±10%

*Circular solid conductors (Class 1).

All other conductors Circular stranded (Class 2).

Circuit protective conductors - solid except for 10 sqmm & 16 sqmm cables.

Colour of Insulation Red and Black.

Colour of sheath Grey or White.

Above Cable are insulated with PVC Type 5 Heat Resisting 85°C and sheathed with PVC Type 9 compound OR insulated with PVC Type TI1 & Sheathed with PVC Type TM1 compound.

Cables conform to BS 6004.



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DOMESTIC
WIRES



■ 300 / 500 V - TWIN FLAT CABLE

COPPER CONDUCTOR PVC INSULATED
PVC SHEATHED CABLES
WITHOUT CIRCUIT PROTECTIVE CONDUCTOR
(CU / PVC / PVC)

Nominal Area of Conductor	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Thickness Of Outer Sheath	Overall Dimensions of cable (Max.)	Approx. Cable Weight	Standard Packing Length in Coil / Drum
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Yard/Metre
1.0*	18.1	0.6	0.9	4.7x7.4	62	100 COIL
1.5*	12.1	0.7	0.9	5.4x8.4	80	100 COIL
1.5	12.1	0.7	0.9	5.6x8.8	83	100 COIL
2.5*	7.41	0.8	1.0	6.2x9.8	110	100 COIL
2.5	7.41	0.8	1.0	6.6x10.5	120	100 COIL
4	4.61	0.8	1.0	7.2x11.5	155	100 COIL
6	3.08	0.8	1.1	8.0x13.0	205	100 COIL
10	1.83	1.0	1.2	9.6x22.5	320	1000M Drum±10%
16	1.15	1.0	1.3	11.0x26.5	450	1000M Drum±10%

*Circular solid conductors (Class 1).

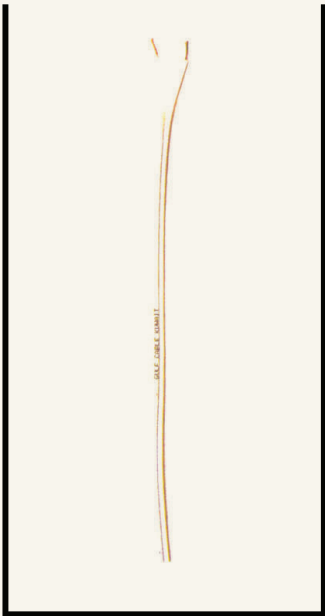
All other conductors Circular stranded (Class 2).

Colour of Insulation Red and Black.

Colour of sheath Grey or White.

Above Cable are insulated with PVC Type 5 Heat Resisting 85°C and sheathed with PVC Type 9 compound OR insulated with PVC Type TI1 & Sheathed with PVC Type TM1 compound.

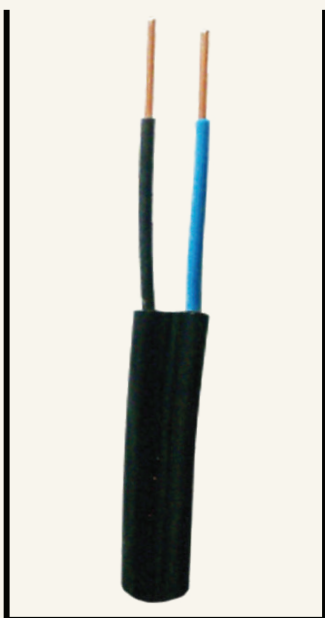
Cables conform to BS 6004.



- 300/300V - PARALLEL TWIN
COPPER CONDUCTOR PVC INSULATED
HO 3 VH - H AS PER BS 6500 - 1994
(CU / PVC)

Nominal Area of Conductor	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Overall Dimensions of Cable (Max.)	Approx. Cable Weight	Standard coil Length
Sqmm	Ohm/km	mm	mm	Kg/km	Yard
0.5	39.0	0.8	3.0x6.0	27	100
0.75	26.0	0.8	3.2x6.4	32	100

All conductors are flexible (Class 6).
All Cables are insulated with Heat Resisting 85°C PVC- Type 4 Compound.
Cables conform to BS 6500.



■ SIEMENS CABLES

COPPER CONDUCTORS PVC INSULATED
PVC SHEATHED
(CU / PVC / PVC)

Size	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Thickness Of Outer Sheath	Approx. Overall Dimensions	Approx. Cable Weight	Standard Coil Length
NO. x Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Yard
2x1.5	12.1	0.4	0.8	4.4x12.0	60	100
3x1.5	12.1	0.4	0.8	4.4x18.9	90	100
2x2.5	7.28	0.5	0.9	5.2x13.3	90	100
3x2.5	7.28	0.5	0.9	5.2x20.9	130	100

All conductors are solid (Class 1).

All Cables are insulated with PVC Type TI1 compound and sheathed with PVC type TM1.

Core identification : for two cores : Blue & Black.

for three cores: Green / Yellow, Black and Blue, OR
Black , Blue and Brown.

Current Rating & Voltage Drop

Current rating and Voltage drop of Cables given below are based on the IEEE wiring regulations 17th edition. For detailed information, reference should be made to Appendix 4 of above IEEE edition.

Current Carrying Capacity (Amps)

Single Core PVC Insulated Non-Sheathed Cables - Cables in conduit on a wall or ceiling or in trunking

Nominal Area of conductor	2 cables single phase ac or dc		3 or 4 cables three phase ac	
	at 70°C	at 85 °C	at 70°C	at 85°C
sqmm				
1	13.5	16	12	14
1.5	17.5	21	15.5	18
2.5	24	28	21	25
4	32	38	28	33
6	41	48	36	42
10	57	67	50	59
16	76	87	68	78
25	101	116	89	102
35	125	143	110	126
50	151	173	134	154
70	192	220	171	196
95	232	266	207	237
120	269	309	239	274
150	300	342	262	298
185	341	390	296	339
240	400	458	346	396
300	458	525	394	452
400	546	626	467	535
500	626	712	533	606
630	720	816	611	693

Installation conditions for above Rating:

Maximum Conductor Temp. for PVC Type 5 Insulation	85°C
Maximum Conductor Temp. for PVC TI1/Type A Insulation	70°C
Ambient Air Temperature	30°C



■ Voltage Drop (mV/A/m)

Nominal Area of conductor	2 cables single phase ac (enclosed in conduit or trunking)			3 or 4 cables, three phase ac (enclosed in conduit or trunking)		
Sqmm	Reference method A & B			Reference method A & B		
1		44			38	
1.5		29			25	
2.5		18			15	
4		11			9.5	
6		7.3			6.4	
10		4.4			3.8	
16		2.8			2.4	
	r	x	z	r	x	z
25	1.80	0.33	1.80	1.50	0.29	1.55
35	1.30	0.31	1.30	1.10	0.27	1.10
50	0.95	0.30	1.00	0.81	0.26	0.85
70	0.65	0.29	0.72	0.56	0.25	0.61
95	0.49	0.28	0.56	0.42	0.24	0.48
120	0.39	0.27	0.47	0.33	0.23	0.41
150	0.31	0.27	0.41	0.27	0.23	0.36
185	0.25	0.27	0.37	0.22	0.23	0.32
240	0.195	0.26	0.33	0.17	0.23	0.29
300	0.160	0.26	0.31	0.14	0.23	0.27
400	0.130	0.26	0.29	0.12	0.22	0.25
500	0.110	0.26	0.28	0.10	0.22	0.25
630	0.094	0.25	0.27	0.08	0.22	0.24

Note: For cables having conductors of 16 mm² or less cross-sectional area, their inductance can be ignored and (mV/A/m)_r values only are tabulated. For cables having conductor greater than 16 mm² cross-sectional area the impedance values are given as (mV/A/m)_z, together with the resistive component (mV/A/m)_r, and the reactive component (mV/A/m)_x

Rating factor for variation in Ambient temperature

Ambient temperature (°C)	25	30	35	40	45	50	55	60	65
PVC Insulated Cable (85°C)	1.02	1	0.95	0.90	0.85	0.80	0.74	0.67	0.6
PVC Insulated Cable (70°C)	1.03	1	0.94	0.87	0.79	0.71	0.61	0.5	0.35

Correction Factor for groups of Cables

Arrangement (Cables touching)	Number of circuits or multicore Cables													
	2	3	4	5	6	7	8	9	10	12	14	16	18	20
Bunched in Air, on a surface, embedded or enclosed (Methods A to F)	0.80	0.70	0.65	0.60	0.57	0.54	0.52	0.50	0.48	0.45	0.43	0.41	0.39	0.38
Single layer on wall or Floor (Method C)	0.85	0.79	0.75	0.73	0.72	0.72	0.71	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Single layer multicore on a perforated horizontal or vertical cable tray system (Methods E&F)	0.88	0.82	0.77	0.75	0.73	0.73	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Single layer multicore on cable ladder system or cleats etc. (Methods E&F)	0.87	0.82	0.80	0.80	0.79	0.79	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78

(Ref. IEEE wiring regulation Seventeenth edition)

300/500 V Flexible cords

Current rating and Voltage drop of Cables given below are based on the IEEE wiring regulations 17th edition. For detailed information, reference should be made to Appendix 4 of above IEEE edition.

Current Carrying Capacity, Voltage Drop and Mass Supportable.

Nominal Area of Conductor	Current-carrying Capacity		Voltage Drop		Maximum Mass supported by flexible cord
	Single-phase a.c.	Three-phase a.c.	Single-phase a.c.	Three-phase a.c.	
Sq.mm	A	A	mV/A/m	mV/A/m	kg
0.5	3	3	100	86	2
0.75	6	6	67	58	3
1	10	10	50	43	5
1.5	16	16	35	29	5
2.5	25	20	21	17	5
4	32	25	13	11	5

Installation conditions for above Rating:

Maximum Conductor Temp. for PVC Type 5 Insulation 85° C

Maximum Conductor Temp. for PVC TI1/Type A Insulation 70° C

Ambient Air Temperature 30° C

Rating factor for variation in Ambient temperature

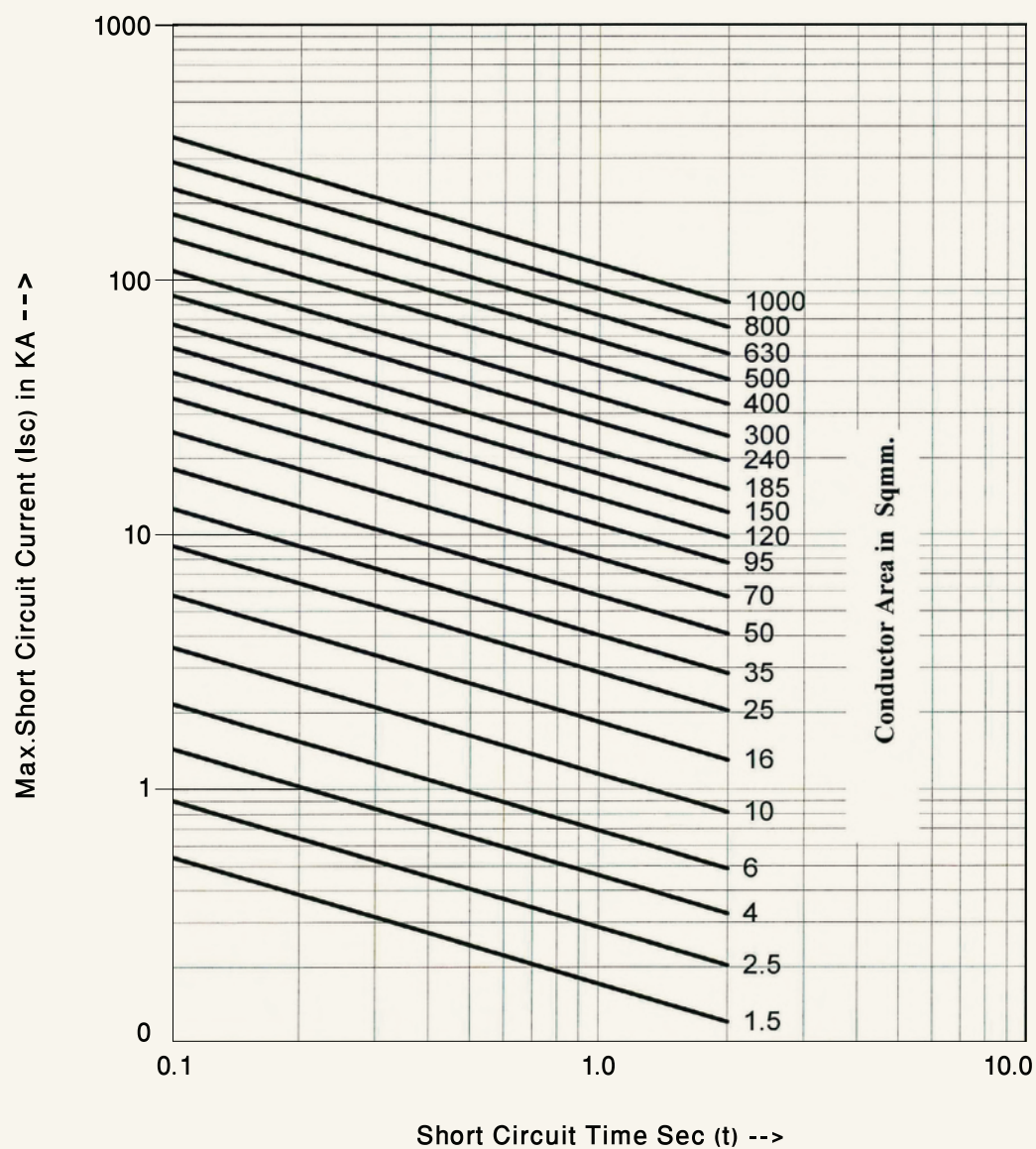
Ambient temperature (°C)	25	30	35	40	45	50	55	60	65
PVC Insulated Cable (85°C)	1	1	1	1	1	0.94	0.87	0.79	0.71
PVC Insulated Cable (70°C)	1	1	0.94	0.87	0.79	0.71	0.61	0.5	0.35

Short Circuit Curves For Copper Conductor PVC 70° C Insulated Cable

$$I_{sc} = 0.115 \frac{A}{\sqrt{t}}$$

I_{sc} - Short Circuit Current in KA
 A - Conductor Area in Sqmm
 t - Short Circuit Time in Sec.

Note: Max. permissible conductor temprature during short circuit = 160° C



■ Short Circuit Curves For Copper Conductor
PVC 85° C Insulated Cable

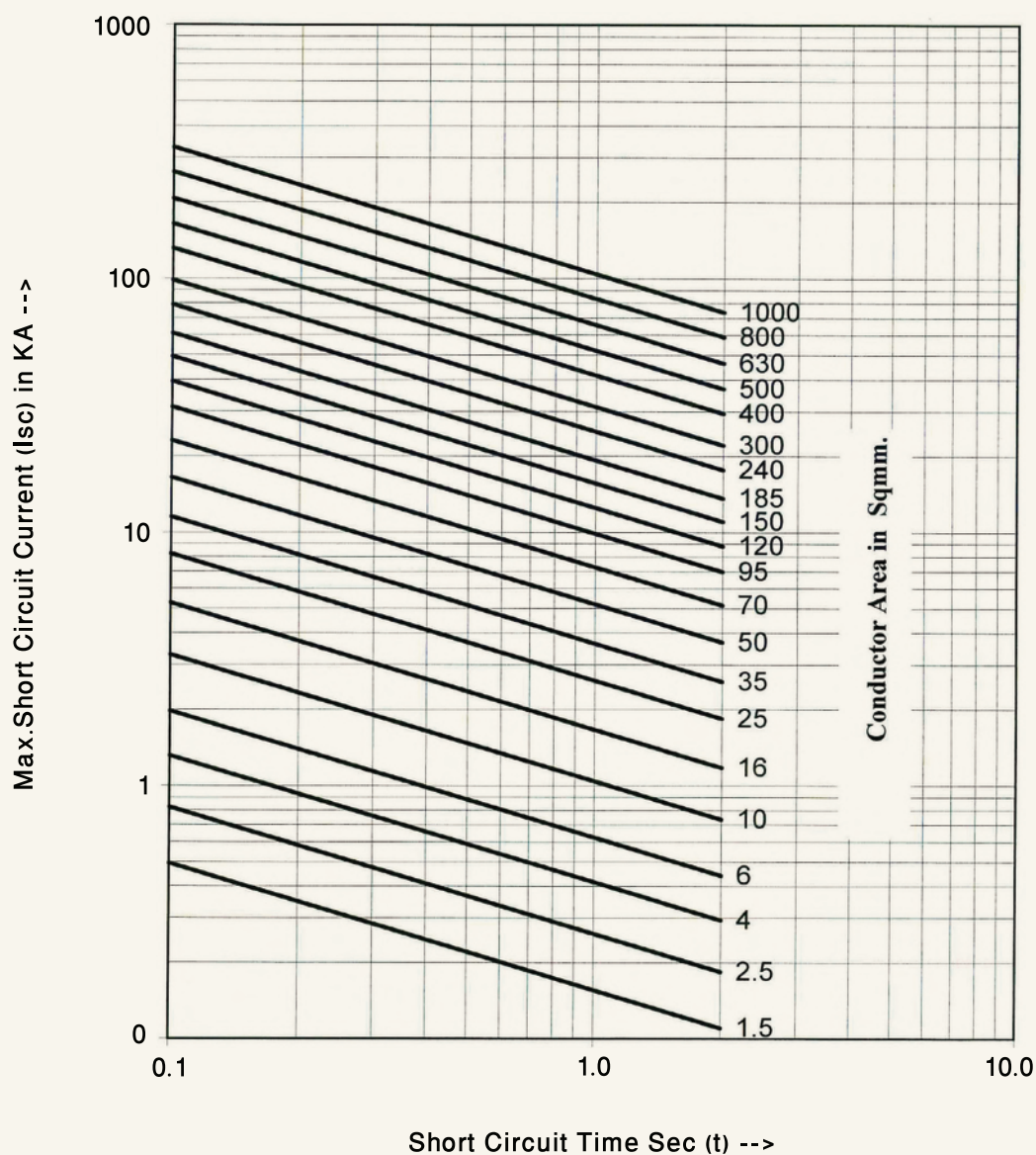
$$I_{sc} = 0.104 \frac{A}{\sqrt{t}}$$

I_{sc} - Short Circuit Current in KA

A - Conductor Area in Sqmm

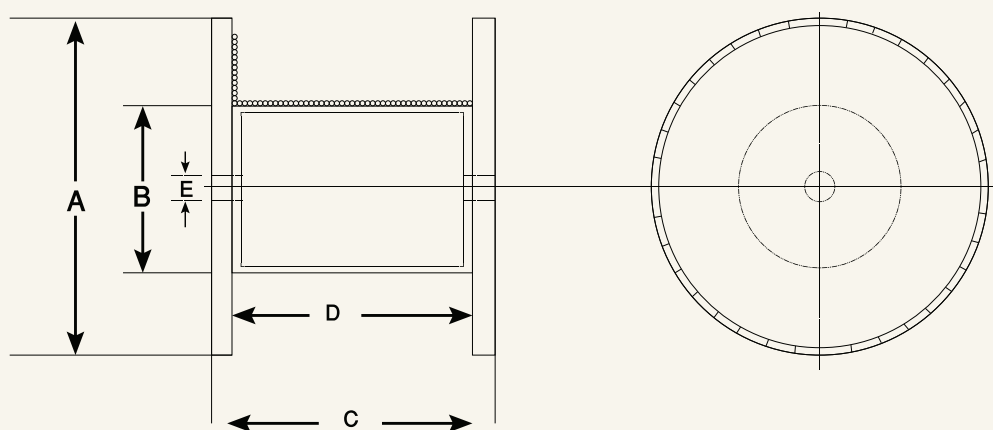
t - Short Circuit Time in Sec.

Note: Max. permissible conductor temperature during short circuit = 160° C



DRUM SIZES AND DIMENSIONS

- A-** Flange diameter (Excluding Lagging), mm
- B-** Barrel diameter, mm
- C-** Overall width, mm
- D-** Traves width, mm
- E-** Minimum spindle hole diameter, mm



DIMENSIONS

Drum size D-No	A	B	C	D	E
D-6	600	250	470	400	110
D-7	700	325	570	500	110
D-8	800	375	570	500	110
D-9	900	425	620	550	110
D-10	1000	500	690	600	110
D-11	1100	575	740	650	110
D-12	1200	675	950	850	110
D-14	1400	800	950	850	110
D-16	1600	950	970	850	110
D-18	1800	1100	1220	1100	110
D-19	1900	1100	1230	1100	110
D-20	2000	1300	1235	1100	110
D-21	2100	1150	1290	1100	110
D-22	2200	1400	1390	1250	110
D-23	2340	1200	1795	1625	110
D-24	2400	1200	1795	1625	110
D-25-S	2540	1200	1825	1625	110
D-25	2540	1400	1800	1625	110
D-26	2600	1400	1970	1800	110

Drum dimensions in actual deliveries are subject to change without notice.

NOTES

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