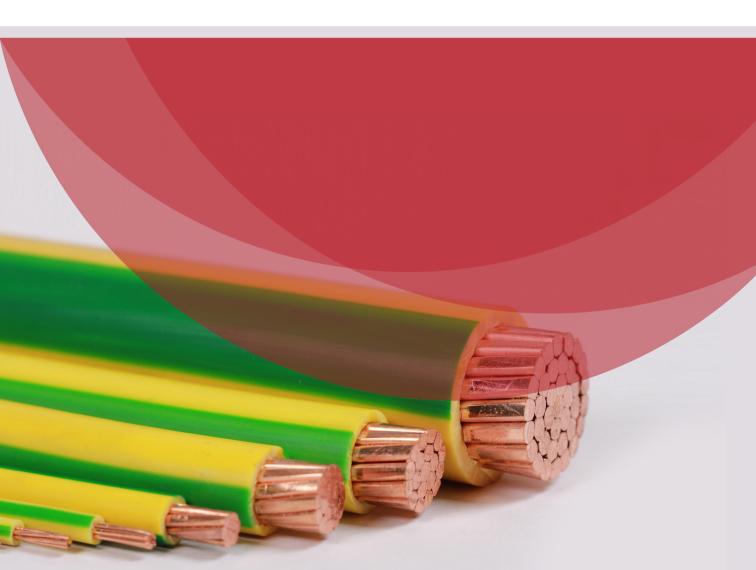
CHINA-WIRES.COM



POWER CABLE CATALOGUE





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POWER CABLE About Us

DEDICATED TO DELIVERING EXCELLENCE IN THE CABLE MANUFACTURING INDUSTRY

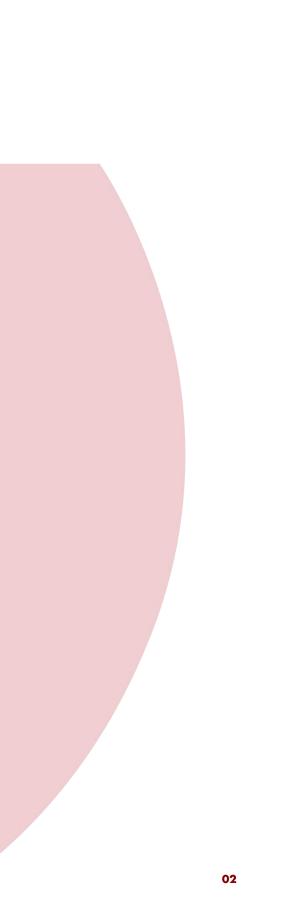
China Loong Power Cable Co., Ltd., a key enterprise within the China Loong Group Co.,Ltd, specializes in the manufacture of superior quality power cable products, each of which has successfully attained CE certification. This certification underscores our unwavering commitment to adhering to stringent European safety and quality standards, ensuring our products meet the highest international requirements. Our strategic focus encompasses swift market penetration, upholding the highest standards of product quality, and delivering outstanding after-sales service to each of our customers.

MARKET SEGMENTS



Our power cable range is renowned for its superior features, including exceptional durability, high conductivity, excellent flexibility, resistance to environmental stress, and eco-friendliness. These characteristics distinguish our offerings in the market, addressing diverse application requirements across various industries.

Technical Information



TECHNICAL INFORMATION OF PVC INSULATED WIRES

TECHNICAL INFORMATION OF LSZH INSULATED WIRES

Polyvinyl Chloride (PVC) Compounds

PVC compounds used in wires and cables as per BS 6004/BS EN 50525-2-31, are described in BS EN 50363-3 / BS 7655-4.2.

Several grades of compounds are detailed in these standards for both insulation and sheathing requirements. PVC compounds are thermoplastic by nature and consequently are designed to operate within a prescribed temperature range.

Grades of PVC can therefore be selected to suit particular environment temperatures, with the maximum conductor temperature for heat resisting grade PVC being 90°C and the lowest operating temperature grade PVC below minus 30°C. Oman Cables also offer LSZH suitable for use in fire hazards areas or where safety of human life against toxic gases is of prime importance.

The majority of wiring installations, however, use a general purpose grade of PVC which has a maximum conductor operating temperature of 70°C; this grade of PVC wires should not be installed or flexed when the air temperature is below 0°C. A wide range of bright colours can be formulated with PVC compounds against toxic gases is of prime importance.

Sheath colours are normally grey, black or white. Other colours can be provided on special order but experience has shown that for outdoor use, black colour has the highest resistance to Direct sunlight, with other colour tending to fade in the time under these conditions.



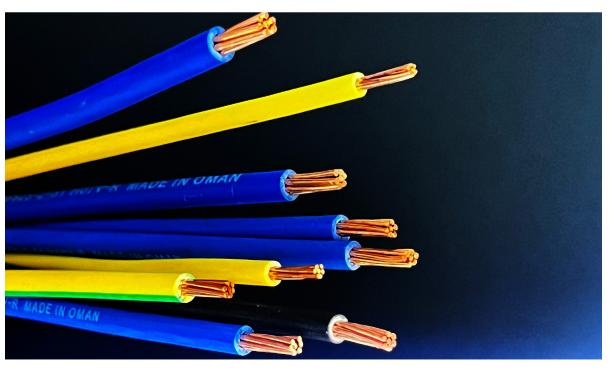
LSZH Compound used in wires as per BS 7211/BS EN 50525-3-41 is Thermosetting Insulation suitable for operating temperature of 90°C, Type EI5 to BS EN 50363-5.

PVC, when burnt, emits large quantities of dense black smoke and acid gas, and in addition to the debilitating effect of smoke and toxic fume inhalation, obscuration of fire safety exits delays or prevents escape. Improved PVC formulations producing less smoke and acid gas have been developed but still do not satisfy required emission levels. The demand therefore has been for materials to replace PVC which do not give off smoke and toxic fumes and do not contain halogens. The materials need to have the following characteristics:-

1 Fire retardant and zero halogen

Detailed properties of the above material are

- 2 Low emission of smoke, toxic fumes and acid gases during combustion
- **3** Similar mechanical and electrical properties to PVC
- **4** Acceptable process-ability
- **5** Low additional cost



• Halogen Content – Max 0.5%

o pH value - Minimum 4.3

o Conductivity - Maximum 10 micro

Siemens/mm



COMPARISON OF CHEMICAL RESISTANCE PROPERTIES OF LSZH AND PVC

PROPERTIES	Ρ٧Ϲ	LSZH
Oxidation Resistance	E	E
Heat Resistance	G-E	G
Oil Resistance	F	Р
Low-Temperature Flexibility	P-G	F-G
Weather, Sun Resistance	G-E	Р
Ozone Resistance	E	E
Abrasion Resistance	F-G	F
Electrical Properties	F-G	F
Flame Resistance	G	E
Nuclear Radiation Resistance	F	G
Water Resistance	F-G	F
Acid Resistance	G-E	G
Alkali Resistance	G-E	G
Aliphatic Hydrocarbons Resistance	Р	Р
Aromatic Hydrocarbons Resistance	P-F	Р
Halogenated Hydrocarbons Resistance	P-F	Р
Alcohol Resistance	P-F	G
Underground Burial	P-G	F-G

Legend: E = Excellent, G = Good, P = Poor, F = Fair

CONDUCTOR CLASS

Class 1 Solid Rigid Conductor Single Wire	Class 2 Stranded Conductor Stranded Multi Wire	Class 5 Flexible Conductor Stranded Thin Multi Wire
NOMINAL CROSS-SECTIONAL	APPROX. NUMBER OF W	VIRES (CLASS 5)
AREA (mm ²)	Cu	
0.5	16	
0.75	24	
1	32	
1.5	30	
2.5	50	
4	56	
6	84	
10	80	
NOMINAL CROSS-SECTIONAL	APPROX. NUMBER OF W	/IRES (CLASS 2)
AREA (mm ²)	Cu	AI
1.5, 2.5, 4, 6 & 10	7	-
16, 25, 35 & 50	6	6
70	12	12
95	15	15
120 & 150	18	15
185	30	30
240 & 300	34	30
400, 500, 630, 800 & 1000	53	53



06

Products Range

MKXXS001.05-23



BARE COPPER EARTHING CONDUCTOR

APPLICATION

Soft Drawn Bare Copper Conductors are primarily used for grounding purposes where high conductivity and flexibility is required. Soft Drawn Bare Copper Conductors are used as grounding connections in circuits, grounding for machinery or equipment and for numerous other applications.

CONSTRUCTION

Stranded Annealed Plain Copper Conductor. These conductors can be Non-compacted or Compacted depending upon the applicable standard & the project requirement. Metal coated tinned copper conductor can also be supplied based on project/customer's requirement.

APPLICATION STANDARDS

IEC 60228 BS EN 60228



CHARACTERISTICS

CONDUCTOR SIZE	FLEXIBILITY CLASS	MINIMUM NUMBER OF WIRES AS PER IEC 60228/ BS EN 60228	MAXIMUM DC RESISTANCE FOR PLAIN COPPER CONDUCTOR AT 20°C	MAXIMUM DC RESISTANCE FOR TINNED COPPER CONDUCTOR AT 20°C
(mm²)		NOS	(Ω/KM)	(Ω/ΚΜ)
1.5	2	7	12.1	12.2
2.5	2	7	7.41	7.56
4	2	7	4.61	4.7
6	2	7	3.08	3.11
10	2	7	1.83	1.84
16	2	6	1.15	1.16
25	2	6	0.727	0.734
35	2	6	0.524	0.529
50	2	6	0.387	0.391
70	2	12	0.268	0.27
95	2	15	0.193	0.195
120	2	18	0.153	0.154
150	2	18	0.124	0.126
185	2	30	0.0991	0.1
240	2	34	0.0754	0.0762
300	2	34	0.0601	0.0607
400	2	53	0.0470	0.0475
500	2	53	0.0366	0.0369
630	2	53	0.0283	0.0286
800	2	53	0.0221	0.0224
1000	2	53	0.0176	0.0177

PACKING:

These SDBC Conductor shall be supplied in Drums for 1,000 meters or more.

COPPER CONDUCTOR PROPERTIES:

Electrical Resistivity (P) : 1.7241x10⁻⁸ (Ω .m) Purity % : 99.9

SOLID CONDUCTOR PVC INSULATED BUILDING WIRES (H05V-U) 300/500V

1

APPLICATION

Suitable for power, lighting circuits and building wiring. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Single strand solid annealed plain copper conductor, extruded PVC insulation of PVC Type TI 1 or PVC Type C (for 70°C application), 500/300 V Wires to BS EN 50525-2-31 or IEC 60227-3.

1. Conductor

Annealed plain copper (single strand solid, class-1)

2. Insulation

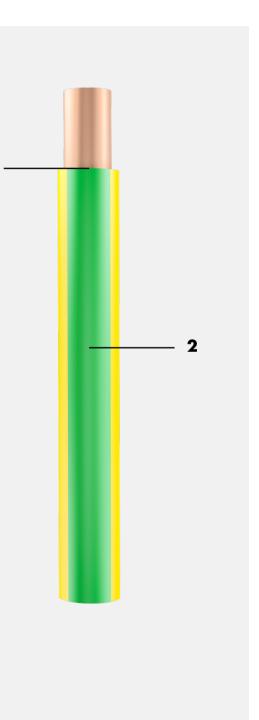
Extruded PVC Type TI 1 or PVC Type C

APPLICATION STANDARDS

BS EN 50525-2-31 IEC 60227-3



BS EN 50525-2-31 wires only



CORE COLOUR IDENTIFICATION

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Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	Α
0.5	0.6	70	2.3	9
0.75	0.6	70	2.5	10
1	0.6	70	2.7	12

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION





Conduit/ Ducts

Fixed or Clipped Direct on Wall



On Perforated Tray



Minimum **Bending Radius**

SOLID CONDUCTOR HR-PVC INSULATED BUILDING WIRES (H05V2-U) 300/500V

APPLICATION

Suitable for power, lighting circuits and building wiring. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Single strand solid annealed plain copper conductor, extruded PVC insulation of HRPVC Type TI 3 or PVC Type E (for 90°C application), 300/500 V Wires to BS EN 50525-2-31 or IEC 60227-3.

1. Conductor

Annealed plain copper (single strand solid, class-1)

2. Insulation

Extruded HR-PVC Type TI 3 or PVC Type E

APPLICATION STANDARDS

BS EN 50525-2-31 EC 60227-3



CORE COLOUR IDENTIFICATION

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Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	Α
0.5	0.6	90	2.3	10
0.75	0.6	90	2.5	11.5
1	0.6	90	2.7	14

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

2

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION





Conduit/ Ducts

Fixed or Clipped Direct on Wall



On Perforated Tray



Minimum **Bending Radius**

SOLID CONDUCTOR LSZH **INSULATED BUILDING WIRES** (H05Z-U) 300/500V

APPLICATION

Suitable for power, lighting circuits and building wiring. Incorporates low smoke zero halogen insulation for use in areas where dense smoke and toxic fumes may cause a threat to life and equipment. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Single strand solid annealed plain copper conductor, extruded LSZH Type EI 5 Insulation (for 90°C application), 300/500 V Wires to BS EN 50525-3-41.

1. Conductor

Annealed plain copper (single strand solid, class-1)

2. Insulation Extruded LSZH Type EI 5

APPLICATION STANDARDS

BS EN 50525-3-41



2

CORE COLOUR IDENTIFICATION

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Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	Α
0.5	0.6	90	2.4	11
0.75	0.6	90	2.6	13
1	0.6	90	2.8	15

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION







Conduit/ Ducts

Fixed or Clipped Direct on Wall





Minimum **Bending Radius**

16

FLEXIBLE CONDUCTOR PVC INSULATED BUILDING WIRES (H05V-K) 300/500V

APPLICATION

For use in applications where greater flexibility is required to assist installation. Suitable for power, lighting circuits and building wiring. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Multi stranded flexible annealed plain copper conductor, extruded PVC insulation of PVC Type TI 1 or PVC Type C (for 70°C application), 300/500 V Wires to BS EN 50525-2-31 or IEC 60227-3.

1. Conductor

Annealed plain copper (multi stranded flexible, class-5)

2. Insulation

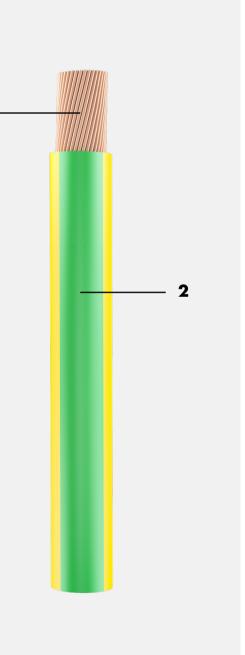
Extruded PVC Type TI 1 or PVC Type C

APPLICATION STANDARDS

BS EN 50525-2-31 IEC 60227-3



BS EN 50525-2-31 wires only



CORE COLOUR IDENTIFICATION

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Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS:

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	Α
0.5	0.6	70	2.5	9
0.75	0.6	70	2.7	10
1	0.6	70	2.8	12

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION







Conduit/ Ducts

Fixed or Clipped Direct on Wall



On Perforated Tray



FLEXIBLE CONDUCTOR HR-PVC INSULATED BUILDING WIRES (H05V2-K) 300/500V

APPLICATION

For use in applications where greater flexibility is required to assist installation. Suitable for power, lighting circuits and building wiring. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Multi stranded flexible annealed plain copper conductor, extruded PVC insulation of HR-PVC Type TI 3 or PVC Type E (for 90°C application), 300/500 V Wires to BS EN 50525-2-31 or IEC 60227-3.

1. Conductor

Annealed plain copper (multi stranded flexible, class-5)

2. Insulation

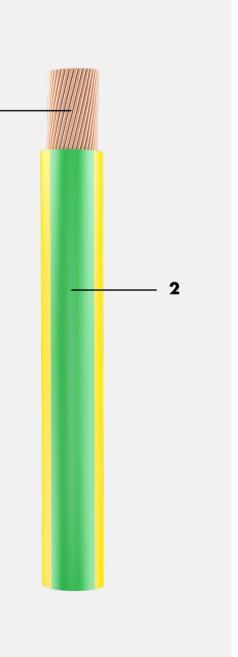
Extruded HR-PVC Type TI 3 or PVC Type E

APPLICATION STANDARDS

BS EN 50525-2-31 IEC 60227-3



BS EN 50525-2-31 wires only



CORE COLOUR IDENTIFICATION

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Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS:

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	Α
0.5	0.6	90	2.5	10
0.75	0.6	90	2.7	11.5
1	0.6	90	2.8	14

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION



Ducts





Fixed or Clipped Direct on Wall

On Perforated Tray





FLEXIBLE CONDUCTOR LSZH INSULATED BUILDING WIRES (H05Z-K) 300/500V

APPLICATION

For use in applications where greater flexibility is required to assist installation. Incorporates low smoke zero halogen insulation for use in areas where dense smoke and toxic fumes may cause a threat to life and equipment. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

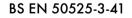
Multi stranded flexible annealed plain copper conductor, extruded LSZH Type El 5 Insulation (for 90°C application), 300/500 V Wires to BS EN 50525-3-41.

1. Conductor

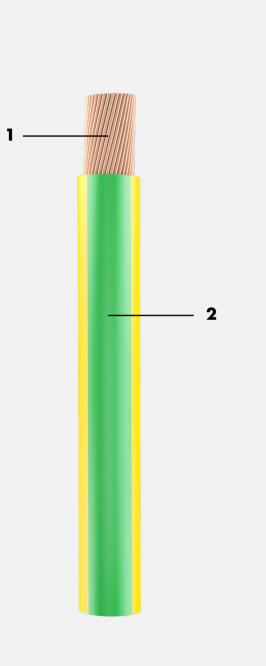
Annealed plain copper (multi stranded flexible, class-5)

2. Insulation Extruded LSZH Type EI 5

APPLICATION STANDARDS







CORE COLOUR IDENTIFICATION

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Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS:

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm²	mm	°C	mm	Α
0.5	0.6	90	2.6	11
0.75	0.6	90	2.8	13
1	0.6	90	2.9	15

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION



Ducts



Fixed or Clipped

Direct on Wall



Conduit/





SOLID CONDUCTOR PVC INSULATED BUILDING WIRES (H07V-U) 450/750V

APPLICATION

Suitable for power, lighting circuits and building wiring. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Single strand solid annealed plain copper conductor, extruded PVC insulation of PVC Type TI 1 or PVC Type C (for 70°C application), 450/750 V Wires to BS EN 50525-2-31 or IEC 60227-3.

1. Conductor

Annealed plain copper (single strand solid, class-1)

2. Insulation Extruded PVC Type TI 1 or PVC Type C

APPLICATION STANDARDS

BS EN 50525-2-31 IEC 60227-3



CORE COLOUR IDENTIFICATION

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Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS:

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	Α
1.5	0.7	70	3.2	15.5
2.5	0.8	70	3.9	21
4	0.8	70	4.4	28
6	0.8	70	5.0	36
10	1.0	70	6.4	50

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION





Conduit/ Ducts Fixed or Clipped Direct on Wall On Perforated Tray

1

2





Minimum Bending Radius

24

SOLID CONDUCTOR HR-PVC INSULATED BUILDING WIRES (H07V2-U) 450/750V

APPLICATION

Suitable for power, lighting circuits and building wiring. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Single strand solid annealed plain copper conductor, extruded PVC insulation of HRPVC Type TI 3 or PVC Type E (for 90°C application), 450/750 V Wires to BS EN 50525-2-31 or IEC 60227-3.

1. Conductor

Annealed plain copper (single strand solid, class-1)

2. Insulation

Extruded HR-PVC Type TI 3 or PVC Type E

APPLICATION STANDARDS

BS EN 50525-2-31 IEC 60227-3



CORE COLOUR IDENTIFICATION

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Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	Α
1.5	0.7	90	3.2	18
2.5	0.8	90	3.9	24
4	0.8	90	4.4	32
6	0.8	90	5.0	41
10	1.0	90	6.4	58

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

2

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION





)

Conduit/ Ducts Fixed or Clipped Direct on Wall On Perforated Tray





SOLID CONDUCTOR LSZH **INSULATED BUILDING WIRES** (H07Z-U) 450/750V

APPLICATION

Suitable for power, lighting circuits and building wiring. Incorporates low smoke zero halogen insulation for use in areas where dense smoke and toxic fumes may cause a threat to life and equipment. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Single strand solid annealed plain copper conductor, LSZH Insulation Type EI 5 (for 90°C application), 450/750 V Wires to BS EN 50525-3-41.

1. Conductor

Annealed plain copper (single strand solid, class-1)

2. Insulation Extruded LSZH Type EI 5

APPLICATION STANDARDS

BS EN 50525-3-41



CORE COLOUR IDENTIFICATION

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Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm²	mm	° C	mm	Α
1.5	0.7	90	3.3	20
2.5	0.8	90	4.0	28
4	0.8	90	4.6	37
6	0.8	90	5.2	48
10	1.0	90	6.6	66

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

2

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION



Ducts





Fixed or Clipped Direct on Wall







STRANDED CONDUCTOR PVC INSULATED BUILDING WIRES (H07V-R) 450/750V

APPLICATION

Suitable for power, lighting circuits and building wiring. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Stranded annealed plain copper conductor, extruded PVC insulation of PVC Type TI 1 or PVC Type C (for 70°C application), 450/750 V Wires to BS EN 50525-2-31 or IEC 60227-3.

1. Conductor

Annealed plain copper (multi stranded, class-2)

2. Insulation

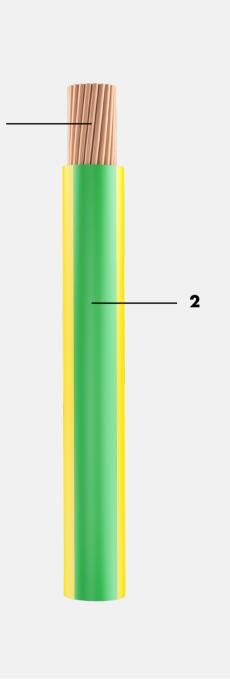
Extruded PVC Type TI 1 or PVC Type C

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APPLICATION STANDARDS

BS EN 50525-2-31 IEC 602227-3





CORE COLOUR IDENTIFICATION $\mathbf{O} \mathbf{O} \mathbf{O} \mathbf{O} \mathbf{O}$ \bigcirc

Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERIS	STICS			
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm²	mm	°C	mm	Α
1.5	0.7	70	3.3	15.5
2.5	0.8	70	4.0	21
4	0.8	70	4.6	28
6	0.8	70	5.2	36
10	1.0	70	6.7	50
16	1.0	70	7.8	68
25	1.2	70	9.7	89
35	1.2	70	10.9	110
50	1.4	70	12.8	134
70	1.4	70	14.6	171
95	1.6	70	17.1	207
120	1.6	70	18.8	239
150	1.8	70	20.9	262
185	2.0	70	23.3	296
240	2.2	70	26.6	346
300	2.4	70	29.6	394
400	2.6	70	33.2	467
500	2.8	70	36.9	533
630	2.8	70	41.1	611
800	2.8	70	45.7	663
1000	3.0	70	51.0	706

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION





Conduit/ Fixed or Clipped Ducts Direct on Wall

On Perforated

Tray



STRANDED CONDUCTOR HR-PVC INSULATED BUILDING WIRES (H07V2-R) 450/750V

APPLICATION

Suitable for power, lighting circuits and building wiring. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Stranded annealed plain copper conductor, extruded PVC insulation of HR-PVC Type TI 3 or PVC Type E (for 90°C application), 450/750 V Wires to BS EN 50525-2-31 or IEC 60227-3.

1. Conductor

Annealed plain copper (multi stranded, class-2)

2. Insulation

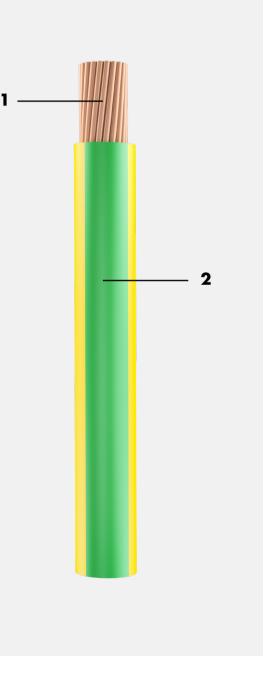
Extruded HR-PVC Type TI 3 or PVC Type E

APPLICATION STANDARDS

BS EN 50525-2-31 IEC 60227-3



BASEC is applicable to BS EN 50525-2-31 wires only



CORE COLOUR IDENTIFICATION OO(

Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm²	mm	°C	mm	A
1.5	0.7	90	3.3	18
2.5	0.8	90	4.0	24
4	0.8	90	4.6	32
6	0.8	90	5.2	41
10	1.0	90	6.7	58
16	1.0	90	7.8	78
25	1.2	90	9.7	102
35	1.2	90	10.9	127
50	1.4	90	12.8	154
70	1.4	90	14.6	197
95	1.6	90	17.1	238
120	1.6	90	18.8	275
150	1.8	90	20.9	301
185	2.0	90	23.3	340
240	2.2	90	26.6	398
300	2.4	90	29.6	453
400	2.6	90	33.2	537
500	2.8	90	36.9	613
630	2.8	90	41.1	703
800	2.8	90	45.7	762
1000	3.0	90	51.0	812

PACKING

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION







Conduit/ Ducts

Fixed or Clipped Direct on Wall

Tray



On Perforated



STRANDED CONDUCTOR LSZH **INSULATED BUILDING WIRES** (H07Z-R) 450/750V

APPLICATION

Suitable for power, lighting circuits and building wiring. Incorporates low smoke zero halogen insulation for use in areas where dense smoke and toxic fumes may cause a threat to life and equipment. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Stranded annealed plain copper conductor, LSZH Insulation Type El 5 (for 90°C application), 450/750 V Wires to BS EN 50525-3-41.

1. Conductor

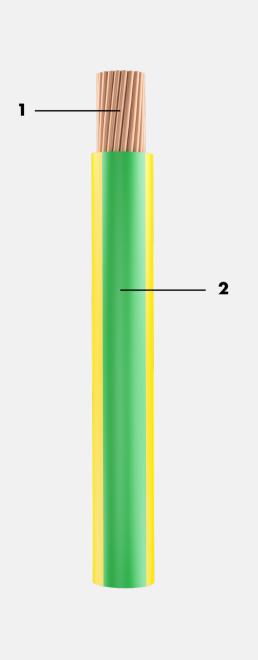
Annealed plain copper (multi stranded, class-2)

2. Insulation Extruded LSZH Type EI 5

APPLICATION STANDARDS

BS EN 50525-3-41





CORE COLOUR IDENTIFICATION $\bigcirc \bigcirc$

Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	Α
1.5	0.7	90	3.4	20
2.5	0.8	90	4.1	28
4	0.8	90	4.7	37
6	0.8	90	5.4	48
10	1.0	90	7.0	66
16	1.0	90	8.0	88
25	1.2	90	10.1	117
35	1.2	90	11.3	144
50	1.4	90	13.2	175
70	1.4	90	15.1	222
95	1.6	90	17.6	269
120	1.6	90	19.4	312
150	1.8	90	21.6	342
185	2.0	90	24.1	384
240	2.2	90	27.5	450
300	2.4	90	30.6	514
400	2.6	90	34.3	584
500	2.8	90	28.2	666
630	2.8	90	4.5	764
Current Rating	At 30°C, enclosed	in metal conduit, 3 P	hase A.C.)	

PACKING

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION





Conduit/ Ducts

Fixed or Clipped Direct on Wall

On Perforated Tray



Minimum **Bending Radius**

34

FLEXIBLE CONDUCTOR PVC INSULATED BUILDING WIRES (H07V-K) 450/750V

APPLICATION

For use in applications where greater flexibility is required to assist installation. Suitable for power, lighting circuits and building wiring. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Multi stranded flexible annealed plain copper conductor, extruded PVC insulation of PVC Type TI 1 or PVC Type C (for 70°C application), 450/750 V Wires to BS EN 50525-2-31 or IEC 60227-3.

1. Conductor

Annealed plain copper (multi stranded flexible, class-5)

2. Insulation

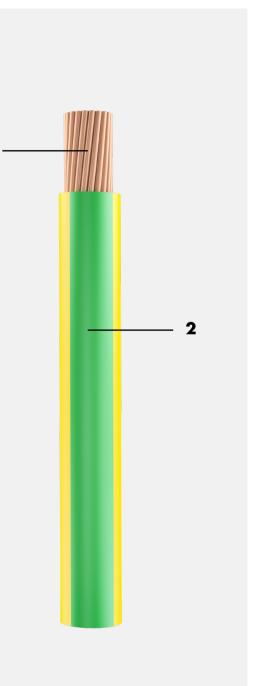
Extruded PVC Type TI 1 or PVC Type C

APPLICATION STANDARDS

BS EN 50525-2-31 IEC 60227-3



BASEC is applicable to BS EN 50525-2-31 wires only



CORE COLOUR IDENTIFICATION

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Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	Α
1.5	0.7	70	3.4	15.5
2.5	0.8	70	4.1	21
4	0.8	70	4.8	28
6	0.8	70	5.3	36
10	1.0	70	6.8	50

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION







Conduit/ Ducts

Fixed or Clipped Direct on Wall



On Perforated Tray



Minimum **Bending Radius**

FLEXIBLE CONDUCTOR HR-PVC INSULATED BUILDING WIRES (H07V2-K) 450/750V

APPLICATION

For use in applications where greater flexibility is required to assist installation. Suitable for power, lighting circuits and building wiring. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Multi stranded flexible annealed plain copper conductor, extruded PVC insulation of HR-PVC Type TI 3 or PVC Type E (for 90°C application), 450/750 V Wires to BS EN 50525-2-31 or IEC 60227-3.

1. Conductor

Annealed plain copper (multi stranded flexible, class-5)

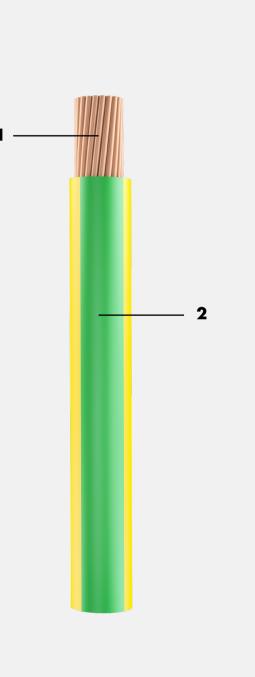
2. Insulation

Extruded HR-PVC Type TI 3 or PVC Type E

APPLICATION STANDARDS

BS EN 50525-2-31 IEC 60227-3





CORE COLOUR IDENTIFICATION

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Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	Α
1.5	0.7	90	3.4	18
2.5	0.8	90	4.1	24
4	0.8	90	4.8	32
6	0.8	90	5.3	41
10	1.0	90	6.8	57.5

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION





Fixed or Clipped

Direct on Wall



Conduit/ Ducts On Pe



On Perforated Tray



FLEXIBLE CONDUCTOR LSZH INSULATED BUILDING WIRES (H07Z-K) 450/750V

APPLICATION

For use in applications where greater flexibility is required to assist installation. Incorporates low smoke zero halogen insulation for use in areas where dense smoke and toxic fumes may cause a threat to life and equipment. Suitable for power, lighting circuits and building wiring. The cable is intended for use in the indoor, distribution in conduits as well as in closed installation ducts. and is ideal for the internal wiring of appliances and apparatus.

CONSTRUCTION

Multi stranded flexible annealed plain copper conductor, LSZH Insulation Type El 5 (for 90°C application), 450/750 V Wires to BS EN 50525-3-41.

1. Conductor

Annealed plain copper (multi stranded flexible, class-5)

2. Insulation

Extruded LSZH Type EI 5

APPLICATION STANDARDS

BS EN 50525-3-41



CORE COLOUR IDENTIFICATION

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Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	Α
1.5	0.7	90	3.5	20
2.5	0.8	90	4.3	28
4	0.8	90	4.9	37
6	0.8	90	5.5	48
10	1.0	90	7.1	66

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

2

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION







Conduit/ Ducts

Fixed or Clipped Direct on Wall

39



On Perforated Tray



Minimum **Bending Radius**

40

STRANDED CONDUCTOR PVC INSULATED WIRES 600/1000V

APPLICATION

Suitable for power, lighting circuits and building wiring. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Stranded annealed plain copper conductor, PVC (Type A) Insulation (for 70°C application), 600/1000 V Wires to IEC 60502-1.

1. Conductor

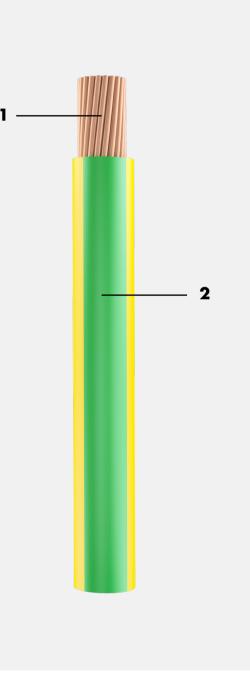
Annealed plain copper (multi stranded, class-2)

2. Insulation

Extruded PVC (Type A)

APPLICATION STANDARDS

IEC 60502-1



CORE COLOUR IDENTIFICATION



Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CHARACTERISTICS

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm²	mm	°C	mm	Α
1.5	0.8	70	3.3	15.5
2.5	0.8	70	3.7	21
4	1.0	70	4.6	28
6	1.0	70	5.2	36
10	1.0	70	6.1	50
16	1.0	70	7.0	68
25	1.2	70	8.5	89
35	1.2	70	9.5	110
50	1.4	70	11.5	134
70	1.4	70	13.0	171
95	1.6	70	15.0	207
120	1.6	70	16.5	239
150	1.8	70	18.0	262
185	2.0	70	20.5	296
240	2.2	70	23.0	346
300	2.4	70	25.5	394
400	2.6	70	29.0	467
500	2.8	70	32.5	533
630	2.8	70	36.0	611
800	2.8	70	40.0	663
1000	3.0	70	44.5	706

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION







Fixed or Clipped Direct on Wall

On Perforated Tray



STRANDED CONDUCTOR XLPE INSULATED WIRES 600/1000V

APPLICATION

Suitable for power, lighting circuits and building wiring. These wires are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Stranded annealed plain copper conductor, XLPE Insulation (for 90°C application), 600/1000 V Wires to IEC 60502-1.

1. Conductor

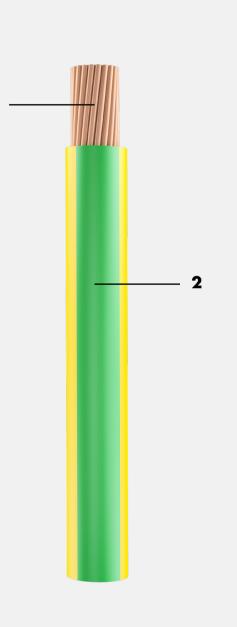
Annealed plain copper (multi stranded, class-2)

2. Insulation

Extruded XLPE

APPLICATION STANDARDS

IEC 60502-1



CORE COLOUR IDENTIFICATION 00000 \bigcirc

Depending upon the project requirements, Oman Cables can provide various other colours e.g. Grey, White, Orange, Pink, Turquoise, Violet etc.

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm²	mm	°C	mm	Α
1.5	0.7	90	3.1	20
2.5	0.7	90	3.5	28
4	0.7	90	4.0	37
6	0.7	90	4.6	48
10	0.7	90	5.5	66
16	0.7	90	6.5	88
25	0.9	90	8.0	117
35	0.9	90	9.0	144
50	1.0	90	10.5	175
70	1.1	90	12.5	222
95	1.1	90	14.0	269
120	1.2	90	15.5	312
150	1.4	90	17.5	342
185	1.6	90	19.5	284
240	1.7	90	22.0	450
300	1.8	90	24.5	514
400	2.0	90	27.5	584
500	2.2	90	31.0	666
630	2.4	90	35.0	764
800	2.6	90	39.5	835
1000	2.8	90	44.0	900

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION







Fixed or Clipped **On Perforated** Direct on Wall

Tray



SOLID CONDUCTOR PVC INSULATED, PVC SHEATHED CABLES (6181Y) 300/500V

APPLICATION

Suitable for domestic and light industrial wiring and can be installed on tray, free air or dlipped direct. It should be installed into areas where there is low risk of mechanical damage. Also used for transferring electrical signals among different control units and also used in alarm systems.

CONSTRUCTION

Single core solid annealed plain copper conductor, PVC Type TI 1 insulation (for 70°C application), Overall PVC Type 6 Sheath, 300/500 V Cables to BS 6004. Sheath colour shall be Grey or any other colour as mutually agreed.

1. Conductor

Annealed plain copper (single strand solid, class-1)

2. Insulation

Extruded PVC Type TI 1

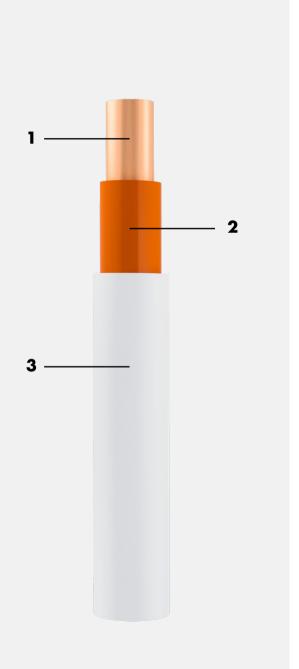
3. Sheath

Extruded PVC Type 6

APPLICATION STANDARDS

BS 6004





CORE COLOUR IDENTIFICATION

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Note: Insulation colour shall be Brown or Blue as per BS 6004. However, Oman Cables has the capability to provide color identification as per project requirements.

CHARACTERISTICS

CONDUCTOR SIZE	INSULATION	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING
mm²	mm	°C	mm	mm	Α
1.0	0.6	70	0.8	4.5	12
1.5	0.7	70	0.8	5.0	15.5
2.5	0.8	70	0.8	5.7	21

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

These cables are supplied in our standard wooden/steel drums for 1,000 meters or as mutually agreed

CABLE INSTALLATION





Fixed or Clipped

Direct on Wall



Conduit/ Ducts On Perforated Tray





Minimum Bending Radius

46

STRANDED CONDUCTOR PVC **INSULATED, PVC SHEATHED CABLES** (6181Y) 300/500V

APPLICATION

Suitable for domestic and light industrial wiring and can be installed on tray, free air or clipped direct. It should be installed into areas where there is low risk of mechanical damage. Also used for transferring electrical signals among different control units and also used in alarm systems.

CONSTRUCTION

Single core stranded annealed plain copper conductor, PVC Type TI 1 insulation (for 70°C application), Overall PVC Type 6 Sheath, 300/500 V Cables to BS 6004. Outer sheath colour shall be Grey or any other colour as mutually agreed.

1. Conductor

Annealed plain copper (multi stranded class-2)

2. Insulation

Extruded PVC Type TI 1

3. Sheath

Extruded PVC Type 6

APPLICATION STANDARDS

BS 6004



2 3

CORE COLOUR IDENTIFICATION

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Note: Insulation colour shall be Brown or Blue as per BS 6004. However, Oman Cables has the capability to provide color identification as per project requirements

CHARACTERISTICS

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	mm	Α
4	0.8	70	0.9	6.7	28
6	0.9	70	0.9	7.3	36
10	1.0	70	0.9	8.8	50
16	1.0	70	1.0	10.1	68
25	1.2	70	1.1	12.1	89
35	1.2	70	1.1	13.5	110

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Wires shall be supplied in coils / spools of 100 yard or 500 meters & drums for 1,000 meters and above.

CABLE INSTALLATION







Conduit/ Ducts

Fixed or Clipped Direct on Wall

MKXXS001.05-23





SOLID CONDUCTOR XLPE INSULATED, LSZH SHEATHED CABLES 450/750V

APPLICATION

Incorporates low smoke zero halogen outer sheath for use in areas where dense smoke and toxic fumes may cause a threat to life and equipment. Suitable for domestic and light industrial wiring and can be installed on tray, free air or clipped direct. It should be installed into areas where there is low risk of mechanical damage. Also used for transferring electrical signals among different control units and also used in alarm systems.

CONSTRUCTION

Single core solid annealed plain copper conductor, XLPE Type GP 8 Insulation (for 90°C application), Overall LSZH Type LTS 4 Sheath, 450/750 V Cables to BS 7211. Outer sheath colour shall be White or any other colour as mutually agreed.

1. Conductor

Annealed plain copper (single strand solid, class-1)

2. Insulation

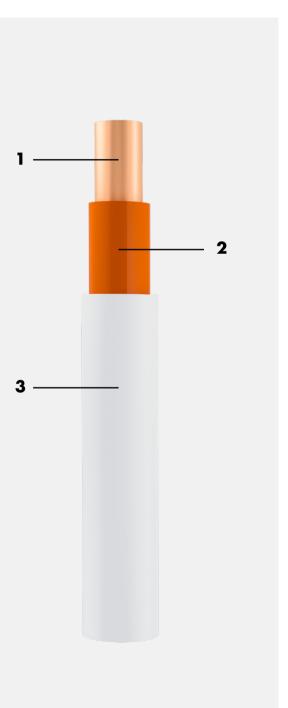
Extruded XLPE Type GP 8

3. Sheath

Extruded LSZH Type LTS 4

APPLICATION STANDARDS

BS 7211



CORE COLOUR IDENTIFICATION

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Note: Insulation colour shall be Brown or Blue as per BS 6004. However, Oman Cables has the capability to provide color identification as per project requirements.

CHARACTERISTICS

CONDUCTOR SIZE	INSULATION	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	mm	Α
1.0	0.7	90	0.8	4.8	15
1.5	0.7	90	0.8	5.0	20
2.5	0.7	90	0.8	5.5	28
4	0.7	90	0.9	6.3	37
6	0.7	90	0.9	6.8	48

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

These cables are supplied in our standard wooden/steel drums for 1,000 meters or as mutually agreed.

CABLE INSTALLATION







Conduit/ Ducts

Fixed or Clipped Direct on Wall On Pe T



Tray



Minimum Bending Radius

STRANDED CONDUCTOR XLPE **INSULATED, LSZH SHEATHED CABLES** 450/750V

APPLICATION

Incorporates low smoke zero halogen outer sheath for use in areas where dense smoke and toxic fumes may cause a threat to life and equipment. Suitable for domestic and light industrial wiring and can be installed on tray, free air or clipped direct. It should be installed into areas where there is low risk of mechanical damage. Also used for transferring electrical signals among different control units and also used in alarm systems.

CONSTRUCTION

Single core stranded annealed plain copper conductor, XLPE Type GP 8 Insulation (for 90°C application), Overall LSZH Type LTS 4 Sheath, 450/750 V Cables to BS 7211. Outer sheath colour shall be White or any other colour as mutually agreed.

1. Conductor

Annealed plain copper (multi stranded class-2)

2. Insulation

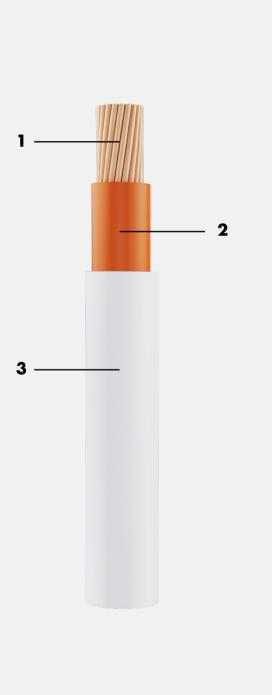
Extruded XLPE Type GP 8

3. Sheath

Extruded LSZH Type LTS 4

APPLICATION STANDARDS

BS 7211



CORE COLOUR IDENTIFICATION

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Note: Insulation colour shall be Brown or Blue as per BS 6004. However, Oman Cables has the capability to provide color identification as per project requirements

CHARACTERISTICS

CONDUCTOR SIZE	INSULATION	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING
mm ²	mm	° C	mm	mm	Α
1.5	0.7	90	0.8	5.2	20
2.5	0.7	90	0.8	5.6	28
4	0.7	90	0.9	6.4	37
6	0.7	90	0.9	7.1	48
10	0.7	90	0.9	8.1	66
16	0.7	90	0.9	9.2	88
25	0.9	90	1.0	11.4	117
35	0.9	90	1.1	12.8	144

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

These cables are supplied in our standard wooden/steel drums for 1,000 meters or as mutually agreed.

CABLE INSTALLATION







Conduit/ Ducts

Fixed or Clipped Direct on Wall



Tray



Minimum **Bending Radius**

SOLID CONDUCTOR LSZH **INSULATED, LSZH SHEATHED CABLES** 450/750V

APPLICATION

Incorporates low smoke zero halogen insulation for use in areas where dense smoke and toxic fumes may cause a threat to life and equipment. Suitable for domestic and light industrial wiring and can be installed on tray, free air or clipped direct. It should be installed into areas where there is low risk of mechanical damage. Also used for transferring electrical signals among different control units and also used in alarm systems.

CONSTRUCTION

Single core solid annealed plain copper conductor, LSZH Type El 5 Insulation (for 90°C application), Overall LSZH Type LTS 4 Sheath, 450/750 V Cables to BS 7211. Outer sheath colour shall be White or any other colour as mutually agreed.

1. Conductor

Annealed plain copper (single strand solid, class-1)

2. Insulation

Extruded LSZH Type EI 5

3. Sheath

Extruded LSZH Type LTS 4

APPLICATION STANDARDS

BS 7211



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Note: Insulation colour shall be Brown or Blue as per BS 6004. However, Oman Cables has the capability to provide color identification as per project requirements

CHARACTERISTICS

CONDUCTOR SIZE	INSULATION	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	mm	Α
1.0	0.7	90	0.8	4.8	15
1.5	0.7	90	0.8	5.0	20
2.5	0.7	90	0.8	5.5	28
4	0.7	90	0.9	6.3	37
6	0.7	90	0.9	6.8	48

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

2

These cables are supplied in our standard wooden/steel drums for 1,000 meters or as mutually agreed.

CABLE INSTALLATION







Ducts

Fixed or Clipped Direct on Wall

On Perforated Tray

3





Minimum **Bending Radius**

STRANDED CONDUCTOR LSZH **INSULATED, LSZH SHEATHED CABLES** 450/750V

APPLICATION

Incorporates low smoke zero halogen insulation for use in areas where dense smoke and toxic fumes may cause a threat to life and equipment. Suitable for domestic and light industrial wiring and can be installed on tray, free air or clipped direct. It should be installed into areas where there is low risk of mechanical damage. Also used for transferring electrical signals among different control units and also used in alarm systems.

CONSTRUCTION

Single core stranded annealed plain copper conductor, LSZH Type EI 5 Insulation (for 90°C application), Overall LSZH Type LTS 4 Sheath, 450/750 V Cables to BS 7211. Outer sheath colour shall be White or any other colour as mutually agreed.

1. Conductor

Annealed plain copper (multi stranded class-2)

2. Insulation

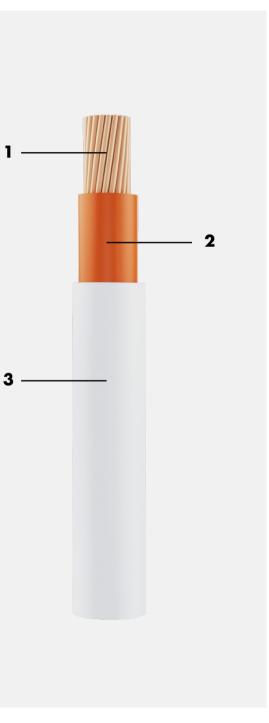
Extruded LSZH Type EI 5

3. Sheath

Extruded LSZH Type LTS 4

APPLICATION STANDARDS

BS 7211



CORE COLOUR IDENTIFICATION

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Note: Insulation colour shall be Brown or Blue as per BS 6004. However, Oman Cables has the capability to provide color identification as per project requirements.

CHARACTERISTICS

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	mm	Α
1.5	0.7	90	0.8	5.2	20
2.5	0.7	90	0.8	5.6	28
4	0.7	90	0.9	6.4	37
6	0.7	90	0.9	7.1	48
10	0.7	90	0.9	8.1	66
16	0.7	90	0.9	9.2	88
25	0.9	90	1.0	11.4	117
35	0.9	90	1.1	12.8	144

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

These cables are supplied in our standard wooden/steel drums for 1,000 meters or as mutually agreed.

CABLE INSTALLATION







Conduit/ Ducts



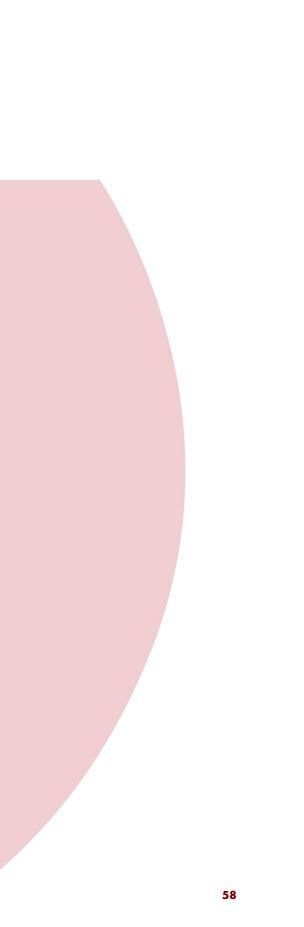






Minimum **Bending Radius**

Flexible Cables



PVC INSULATED FLEXIBLE CABLE 300/500V

APPLICATION

For use in applications where greater flexibility is required to assist installation. Suitable for power, lighting circuits and building wiring. These cables are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Flexible cable consists of two cores, three cores or four cores of the following construction

1. Conductor

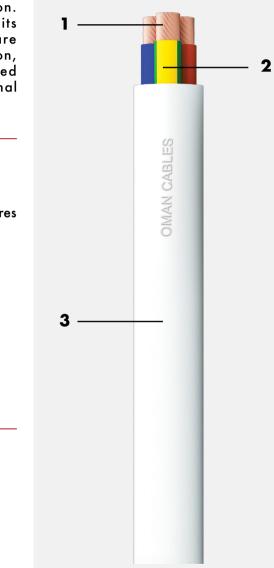
Annealed plain copper (multi stranded flexible, class-5)

2. Insulation Extruded PVC TI 1

3. Outer sheath Extruded PVC type TM 1

APPLICATION STANDARDS

BS EN 50525-2-11



CORE COLOUR IDENTIFICATION



Depending upon the project requirements, Oman Cables can provide other core colors like BS old colors (Red, Blue, Yellow)

CHARACTERISTICS

	EMPERATURE	DIAMETER FOR TWO CORE CABLE	DIAMETER FOR THREE CORE	DIAMETER	RATING
ım	°C	mm	mm	mm	A
.6	70	7.0	7.5	8.0	10
.6	70	7.5	7.5	8.5	12
.7	70	8.5	9.0	10.0	14
.8	70	10.0	11.0	11.5	20
.8	70	11.0	12.0	13.5	28
.8	70	13.0	13.5	15.0	34
.0	70	15.5	16.5	18.5	48
1	m 6 6 7 8 8 8 8	m °C 6 70 6 70 7 70 8 70 8 70 8 70 8 70	FOR TWO CORE CABLE m ° C mm 6 70 7.0 6 70 7.5 7 70 8.5 8 70 10.0 8 70 11.0 8 70 13.0	FOR TWO CORE CABLE FOR THREE CORE CABLE m °C mm mm 6 70 7.0 7.5 6 70 7.5 7.5 7 70 8.5 9.0 8 70 10.0 11.0 8 70 13.0 13.5	FOR TWO CORE CABLEFOR THREE CORE CABLEFOR FOUR CORE CABLEm°Cmmmm6707.07.58.06707.57.58.57708.59.010.087010.011.011.587011.012.013.587013.013.515.0

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Cable Shall be supplied in coils / spools of 100 yard or 500 meters & Drums for 1,000 meters and above.

CABLE INSTALLATION







Conduit/ Ducts

Fixed or Clipped Direct on Wall

On Perforated Tray



Minimum Bending Radius 6XOD

HR PVC INSULATED FLEXIBLE CABLE 300/500V

APPLICATION

For use in applications where greater flexibility is required to assist installation. Suitable for power, lighting circuits and building wiring. These cables are intended for use in the indoor application, distribution in conduits as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

CONSTRUCTION

Flexible cable consists of two cores, three cores or four cores of the following construction

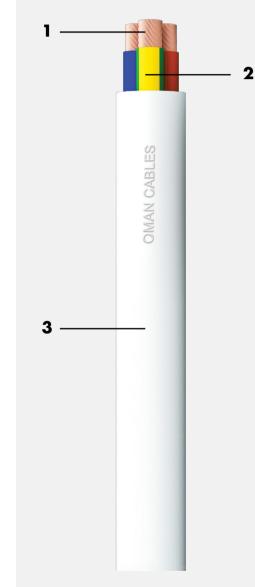
1. Conductor Annealed plain copper (multi stranded flexible, class-5)

2. Insulation Extruded HR PVC Type TI 3

3. Outer sheath Extruded HR PVC type TM 3

APPLICATION STANDARDS

BS EN 50525-2-11



CORE COLOUR IDENTIFICATION



Depending upon the project requirements, Oman Cables can provide other core colors like BS old colors (Red, Blue, Yellow)

CHARACTERISTICS

NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	APPROX OVERALL DIAMETER FOR TWO CORE CABLE	APPROX OVERALL DIAMETER FOR THREE CORE CABLE	APPROX OVERALL DIAMETER FOR FOUR CORE CABLE	CURRENT RATING
mm	°C	mm	mm	mm	A
0.6	90	7.0	7.5	8.0	11.5
0.6	90	7.5	7.5	8.5	14.0
0.7	90	8.5	9.0	10.0	16.0
0.8	90	10.0	11.0	11.5	22.0
0.8	90	11.0	12.0	13.5	32.0
0.8	90	13.0	13.5	15.0	38.0
1.0	90	15.5	16.5	18.5	56.0
	INSULATION THICKNESS mm 0.6 0.6 0.7 0.8 0.8 0.8 0.8	INSULATION THICKNESSOPERATING TEMPERATUREmm°C0.6900.6900.7900.8900.8900.8900.890	INSULATION THICKNESSOPERATING TEMPERATUREOVERALL DIAMETER SORE 	INSULATION HICKNESSOPERATING EMPERATUREOVERALL DIAMETER SORE<	INSULATION HICKNESSOPERATING EMPERATUREOVERALL PIAMETER SORE CABLEOVERALL PIAMETER SORE CABLEOVERALL PIAMETER SORE CABLEOVERALL PIAMETER SORE CABLEOVERALL PIAMETER SORE CABLEOVERALL PIAMETER SORE CABLEOVERALL PIAMETER SORE CABLEOVERALL PIAMETER SORE CABLEOVERALL PIAMETER SORE CABLEOVERALL PIAMETER SORE CABLEOVERALL PIAMETER SORE CABLEOVERALL PIAMETER SORE CABLEOVERALL PIAMETER SORE CABLEOVERALL PIAMETER SORE SORE CABLEOVERALL PIAMETER SORE CABLEOVERALL PIAMETER SORE SORE CABLEOVERALL PIAMETER SORE SORE CABLEOVERALL PIAMETER SORE SORE CABLEOVERALL PIAMETER SORE<

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Cable Shall be supplied in coils / spools of 100 yard or 500 meters & Drums for 1,000 meters and above.

CABLE INSTALLATION







Conduit/ Ducts

Fixed or Clipped Direct on Wall

On Perforated Tray



Minimum Bending Radius 6XOD

LSZH INSULATED FLEXIBLE CABLE 300/500V

APPLICATION

For use in applications where greater flexibility is required to assist installation. Suitable for power, lighting circuits and building wiring. These cables are intended for use in the indoor application, distribution in conductor as well as in closed installation ducts, and for the internal wiring of appliances and apparatus.

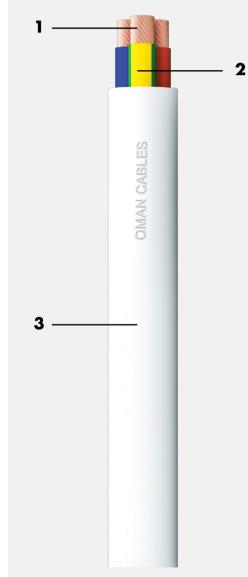
CONSTRUCTION

Flexible cable consists of two cores, three cores or four cores of the following construction

- 1. Conductor Annealed plain copper (multi stranded flexible, class-5)
- 2. Insulation Extruded LSZH Type EI 5
- 3. Outer sheath Extruded LSZH Type LTS1

APPLICATION STANDARDS

Generally, as per BS EN 50525-2-11



CORE COLOUR IDENTIFICATION



Depending upon the project requirements, Oman Cables can provide other core colors like BS old colors (Red, Blue, Yellow)

CHARACTERISTICS

CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	APPROX OVERALL DIAMETER FOR TWO CORE CABLE	APPROX OVERALL DIAMETER FOR THREE CORE CABLE	APPROX OVERALL DIAMETER FOR FOUR CORE CABLE	CURRENT RATING
mm ²	mm	°C	mm	mm	mm	Α
0.8	0.6	90	7.0	7.5	8.0	13
1.0	0.6	90	7.5	7.5	8.5	15
1.5	0.7	90	8.5	9.0	10.0	18
2.5	0.8	90	10.0	11.0	11.5	26
4.0	0.8	90	11.0	12.0	13.5	37
6.0	0.8	90	13.0	13.5	15.0	45
10.0	1.0	90	15.5	16.5	18.5	63

(Current Rating - - At 30°C, enclosed in metal conduit, 3 Phase A.C.)

PACKING

Cable Shall be supplied in coils / spools of 100 yard or 500 meters & Drums for 1,000 meter and above.

CABLE INSTALLATION







Conduit/ Ducts

Fixed or Clipped Direct on Wall

On Perforated

Four Cores









Minimum Bending Radius 6XOD

General Tables



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Ambient temperature: 30°C

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Table 1:	Table 1: Current Carrying Capacity	arrying (Capacity						Ambient temperature: 30°C Conductor operating temper	Ambient remperature: 30 °C Conductor operating temperature: 70°C	ture: 70°C
Con Re	Reference Method A (Enclosed In Conduit In Thermallv	hod n llv	Reference Method B (Enclosed In Conduit On A Wall Or In	lethod B Conduit Or In	Reference Method C (Clipped Direct)	ethod C \irect)	Reference	e Method F (In Free Air Or On A P Cable Tray Horizontal Or Vertical)	n Free Air O orizontal Or	Reference Method F (In Free Air Or On A Perforated Cable Tray Horizontal Or Vertical)	rated
Inst	Insulating Wall Etc.)	Etc.)	Trunking Etc.)	Etc.)	:			Touching		Spaced By One Diamet	ne Diameta
CONDUCTOR CROSS SECTIONAL		3 OR 4 CABLES, THREE	2 CABLES, SINGLE-PHASE A.C. OR D.C.	3 OR 4 CABLES, THREE	2 CABLES, SINGLE-PHASE A.C. OR D.C.	3 OR 4 CABLES, THREE PHASE A.C.	2 CABLES, SINGLEPHASE A.C. OR D.C.	3 CABLES, THREE-PHASE A.C. FLAT	3 CABLES, THREEPHASE A.C. TREFOIL	2 CABLES, SINGLE-PHASE A.C. OR D.C. OR 3 CABLES THREE-PHASE A.C. FLAT	ile-PHASE R 3 CABLES .C. FLAT
AREA	OR D.C.	PHASE A.C.		PHASE A.C.	FLAT AND TOUCHING	FLAT AND TOUCHING OR TREFOIL	FLAT			HORIZONTAL	VERTICAL
-	м	e	4	5	Q	7	8	0	10	F	12
(mm²)	(A)	(A)	(¥)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
-	11	10.5	13.5	12	15.5	14		I			
1.5	14.5	13.5	17.5	15.5	20	18	I	I		1	
2.5	20	18	24	21	27	25	I	I		ı	
4	26	24	32	28	37	33	ı	ı			
6	34	31	41	36	47	43	ı	I	1	1	
10	46	42	57	50	65	59		ı			
16	61	56	76	68	87	79	ı	ı			
25	80	73	101	89	114	104	131	114	110	146	130
35	66	89	125	110	141	129	162	143	137	181	162
50	119	108	151	134	182	167	196	174	167	219	197
70	151	136	192	171	234	214	251	225	216	281	254
95	182	164	232	207	284	261	304	275	264	341	311
120	210	188	269	239	330	303	352	321	308	396	362
150	240	216	300	262	381	349	406	372	356	456	419
185	273	245	341	296	436	400	463	427	409	521	480
240	321	286	400	346	515	472	546	507	485	615	569
300	367	328	458	394	594	545	629	587	561	709	659
400	I		546	467	694	634	754	689	656	852	795
500	ı		626	533	792	723	868	789	749	982	920
630			720	611	904	826	1005	905	855	1138	1070

SINGLE CORE COPPER CONDUCTOR 70° C THERMOPLASTIC (PVC) IN SULATED, UN-ARMOURED, WITH OR WITHOUT SHEATH

Table - 1 A: Voltage Drop

Table - 1 A: \	Table - 1 A: Voltage Drop					Condu	Conductor operating temperature: 70°C	berature: 70°C
		9	2 Cables, Single-Phase A.C.	se A.C.		3 Or 4 cables,	3 Or 4 cables, Three-Phase A.C.	
CONDUCTOR CROSSSECTIONAL AREA	2 CABLES, SINGLEPHASE A.C. OR D.C.	REFERENCE METHODS A & B (ENCLOSED IN CONDUIT	REFERENCE METHODS C & F (Clipped DIRECT, ON TRAY OR IN FREE AIR)	DS C & F (Clipped R IN FREE AIR)	REFERENCE METHODS A & B (ENCLOSED IN CONDUIT OR CABLES TOUCHING	«REFERENCE METHO OR IN FREE AIR)»	«REFERENCE METHODS C & F (Clipped Direct, ON TRY OR IN FREE AIR)»	set, ON TRY
		OK TRUNKING)	CABLES TOUCHING	CABLES SPACED*	CABLES SPACED* TRUNKING) CABLES SPACED* TRUNKING)	CABLES TOUCHING, TREFOIL	CABLES TOUCHING, FLAT	CABLES SPACED *, FLAT
-	2	£	4	Ŋ	Q	7	œ	6
(mm²)	(mV/A/m)	(m/A/m)	(m/A/m)	(m/A/m)	(m/A/m)	(m/A/m)	(mV/A/m)	(m//W)
-	44	44	44	44	38	38	38	38
1.5	29	29	29	29	25	25	25	25
2.5	18	18	18	18	15	15	15	15
4	11	11	11	11	9.5	9.5	9.5	9.5
6	7.3	7.3	7.3	7.3	6.4	6.4	6.4	6.4
10	4.4	4.4	4.4	4.4	3.8	3.8	3.8	3.8
16	2.8	2.8	2.8	2.8	2.4	2.4	2.4	2.4

MKXXS001.05-23

2	2	2		2		i	i	i
25	1.75	1.80	1.75				1.55	1.55
35	1.25	1.30	1.25	1.30	1.10	1.10	1.10	1.15
50	0.93	1.0	0.95	0.97	0.85	0.82	0.84	0.86
70	0.63	0.72	0.66	0.69	0.61	0.57	0.60	0.63
95	0.46	0.56	0.50	0.54	0.48	0.43	0.47	0.51
120	0.36	0.47	0.41	0.45	0.41	0.36	0.40	0.44
150	0.29	0.41	0.34	0.39	0.36	0.30	0.34	0.40
185	0.23	0.37	0.29	0.35	0.32	0.26	0.31	0.36
240	0.180	0.33	0.25	0.31	0.29	0.22	0.27	0.34
300	0.145	0.31	0.22	0.29	0.27	0.190	0.25	0.32
400	0.105	0.29	0.20	0.27	0.25	0.175	0.24	0.31
500	0.086	0.28	0.185	0.26	0.25	0.160	0.23	0.30
630	0.068	0.27	0.175	0.25	0.24	0.150	0.22	0.29
Note: Spacing larger th	Note: Spacing larger than one cable diameter will result in a larger	l result in a larger voltage drop	drop					

Table 2: Cu	Table 2: Current Carrying Capacity	ng Capacity					Ambient te Conductor	Ambient temperature: 30°C Conductor operating temperature: 90°C	rature: 90°C
Ŭ ≌	Reference Method A (Enclosed In Conduit In Thermallv	A A allv	Reference (Enclosed On A W	Reference Method B (Enclosed In Conduit On A Wall Or In	Reference Method C (Clipped Direct)	Method C Direct)	Reference Mei Perforated (Reference Method F (In Free Air Or On A Perforated Cable Tray Horizontal Or Vertical)	Air Or On A izontal Or
7 - 7	Insulating Wall Etc.)	Etc.)	Trunki	Trunking Etc.)				Touching	
CONDUCTOR CROSS SECTIONAL AREA	2 CABLES, SINGLEPHASE A.C. OR D.C.	3 OR 4 CABLES, THREE PHASE A.C.	2 CABLES, SINGLE-PHASE A.C. OR D.C.	3 OR 4 CABLES, THREE PHASE A.C.	2 CABLES, SINGLE-PHASE A.C. OR D.C. FLAT AND TOUCHING	3 OR 4 CABLES, THREE PHASE A.C. FLAT AND TOUCHING OR TREFOIL	2 CABLES, SINGLEPHASE A.C. OR D.C. FLAT	3 CABLES, THREE-PHASE A.C. FLAT	3 CABLES, THREEPHASE A.C. TREFOIL
-	2	m	4	Ŋ	Q	7	80	0	10
(mm²)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
-	14	13	17	15	19	17.5			
1.5	19	17	23	20	25	23			
2.5	26	23	31	28	34	31			
4	35	31	42	37	46	41			
6	45	40	54	48	59	54			
10	61	54	75	66	81	74			
16	81	73	100	88	109	66			
25	106	95	133	117	143	130	161	114	135
35	131	117	164	144	176	161	200	176	169
50	158	141	198	175	228	209	242	216	207
70	200	179	253	222	293	268	310	279	268
95	241	216	306	269	355	326	377	342	328
120	278	249	354	312	413	379	437	400	383
150	318	285	393	342	476	436	504	464	444
185	362	324	449	384	545	500	575	533	510
240	424	380	528	450	644	590	679	634	607
300	486	435	603	514	743	681	783	736	703
400			683	584	868	793	940	868	823
500			783	666	066	904	1083	998	946
630			006	764	1130	1033	1254	1151	1088

SINGLE CORE COPPER CONDUCTOR 90° CTHERMOPLASTIC (XLPE OR LSZH) INSULATED, UN-ARMOURED, WITH OR WITHOUT SHEATH

Conductor operating temperature: 90°C

Table - 2 A: Voltage Drop

CONDUCTOR AREA AREA AREA AREA AREA AREA AREA AR	2 Cables	2 Cables, Single-Phase A.C.	e A.C.		3 Or 4 Cables, 1	3 Or 4 Cables, Three-Phase A.C.	
CONTINUE CARLES FORCHING CARLES FORCHING CARLES FORCE CONTINUE 1) (mV/A/m) (mV/A/m) (mV/A/m) (mV/A/m) (mV/A/m) 10 (mV/A/m) (mV/A/m) (mV/A/m) (mV/A/m) (mV/A/m) 11 (mV/A/m) (mV/A/m) (mV/A/m) (mV/A/m) (mV/A/m) 11 (mV/A/m) (mV/A/m) (mV/A/m) (mV/A/m) (mV/A/m) 12 31	ERENCE HODS A & NCLOSED	RENCE METHODS CT, ON TRAY OR	.C.&F.(Clipped IN FREE AIR)	REFERENCE METHODS A & B (ENCLOSED IN CONDUIT OR CABLES	«REFERENCE METHOI OR IN FREE AIR)»	«REFERENCE METHODS C & F (Clipped Direct, ON TRY OR IN FREE AIR)»	ect, ON TRY
2 3 4 5 6 (inV/A/m) (inV/A/m) (inV/A/m) (inV/A/m) (inV/A/m) 46 46 46 46 46 10 14 46 46 46 11 19 19 19 16 1 12 12 12 12 12 16 1 13 13 31 31 31 27 1 1 19 19 19 19 19 16 1 1 12 12 12 12 12 12 1 1 279 29 29 29 29 27 1 1 135 135 12 12 12 1 1 1 135 135 135 135 135 1 1 1 1 1 1 1 1 1 1 1 1 1	NKING)		CABLES SPACED*	TOUCHING CABLES SPACED * TRUNKING)	CABLES TOUCHING, TREFOIL	CABLES TOUCHING, FLAT	CABLES SPACED*, FLAT
1) (mV/A/m) (mV/A/m) (mV/A/m) (mV/A/m) (mV/A/m) 46 46 46 46 46 40 1 31 31 31 31 31 1 46 46 46 46 40 19 19 19 19 16 1 12 29 29 29 27 27 21 12 12 12 12 10 16 1 16 12 29 29 29 29 269 26 27 135 1.90 1.85 1.85 1.85 1.65 1.65 135 1.35 1.35 1.35 1.35 1.65 1.65 135 1.90 1.85 1.35 1.65 1.65 1.65 135 0.99 0.75 0.79 0.73 0.65 0.65 135 0.85 0.79 0.73 0.73			6	Ŷ	7	ø	0
46 46 46 46 40 31 31 31 31 27 19 19 19 19 16 12 12 12 27 7.9 7.9 7.9 7 27 7.9 7.9 7.9 7 40 12 1.2 1.2 1.2 10 135 1.9 1.2 2.9 2.5 1.85 1.90 1.85 1.85 1.65 1.85 1.90 1.85 1.85 1.65 1.35 1.35 1.35 1.85 1.65 1.35 1.35 1.35 1.35 1.65 0.99 1.05 0.73 0.73 0.40 0.40 0.56 0.73 0.40 0.45 0.49 0.41 0.73 0.42 0.42 0.49 0.41 0.41 0.42 0.42 0.40 0.41 0.4			(m/A/m)	(m/A/m)	(m//A/m)	(mV/A/m)	(mV/A/m)
31 31 31 31 31 27 19 19 19 16 16 16 12 12 12 12 10 16 79 79 79 77 47 16 12 12 12 12 10 16 135 1,90 7,9 7,9 5,9 5,9 1,85 1,90 1,85 1,85 1,65 1,65 1,85 1,90 1,85 1,85 1,65 1,65 1,85 1,85 1,85 1,65 1,65 1,65 0,99 1,05 1,85 1,65 0,76 0,76 0,99 1,05 1,85 1,65 0,76 0,76 0,49 0,56 0,71 0,73 0,76 0,76 0,49 0,75 0,71 0,73 0,72 0,72 0,79 0,79 0,74 0,74 0,72 0,72 <			46	40	40	40	40
19 19 19 19 16 12 12 12 12 10 7.9 7.9 7.9 7.9 6.8 7.9 7.9 7.9 7.9 6.8 4.7 4.7 4.7 4.7 4.0 1.85 1.90 1.85 1.40 1.65 1.35 1.35 1.35 1.35 1.35 1.55 1.35 1.35 1.35 1.35 1.65 1.65 0.99 1.05 1.85 1.35 1.15 1.15 0.99 1.05 0.10 0.73 0.73 0.75 0.99 0.75 0.71 0.73 0.75 0.75 0.99 0.75 0.73 0.74 0.75 0.75 0.99 0.75 0.73 0.74 0.72 0.72 0.91 0.73 0.74 0.74 0.72 0.75 0.91 0.79 0.74 0.74			31	27	27	27	27
121212121210 79 79 79 79 79 6.8 47 4.7 4.7 4.7 6.8 47 4.7 4.7 4.7 4.0 29 2.9 2.9 2.9 2.5 1.85 1.90 1.85 1.85 1.65 1.35 1.35 1.35 1.35 1.65 1.35 1.35 1.35 1.65 0.90 0.99 0.75 0.79 0.73 0.90 0.49 0.75 0.77 0.73 0.65 0.49 0.75 0.73 0.73 0.65 0.49 0.75 0.73 0.73 0.72 0.79 0.73 0.73 0.73 0.72 0.79 0.73 0.73 0.73 0.72 0.93 0.73 0.29 0.74 0.72 0.160 0.31 0.29 0.72 0.29 0.17 0.79 0.79 0.79 0.72 0.93 0.29 0.29 0.29 0.29 0.93 0.29 0.93 0.29 0.29			19	16	16	16	16
79 79 79 79 6.8 4.7 4.7 4.7 4.7 6.8 4.7 4.7 4.7 4.7 4.0 2.9 2.9 2.9 2.9 2.5 1.85 1.85 1.85 1.65 1.65 1.35 1.35 1.35 1.35 1.65 1.35 1.35 1.35 1.35 1.65 0.99 0.79 0.79 0.73 0.90 0.99 0.75 0.71 0.73 0.66 0.49 0.75 0.71 0.73 0.65 0.49 0.75 0.71 0.73 0.65 0.49 0.75 0.73 0.73 0.65 0.79 0.73 0.73 0.73 0.65 0.19 0.73 0.73 0.73 0.72 0.190 0.37 0.36 0.36 0.36 0.190 0.155 0.29 0.29 0.29 0.093 0.29 0.29 0.26 0.26		-	12	10	10	10	10
4.7 4.7 4.7 4.7 4.7 4.0 2.9 2.9 2.9 2.9 2.9 2.5 1.85 1.90 1.85 1.85 1.65 1.65 1.35 1.35 1.35 1.35 1.65 1.65 1.35 1.35 1.35 1.35 1.65 0.90 0.99 0.75 0.77 0.73 0.66 0.66 0.68 0.75 0.71 0.73 0.65 0.65 0.49 0.75 0.71 0.73 0.65 0.65 0.79 0.79 0.73 0.73 0.65 0.65 0.32 0.48 0.74 0.73 0.73 0.72 0.79 0.79 0.79 0.71 0.72 0.72 0.190 0.33 0.25 0.31 0.29 0.27 0.155 0.29 0.29 0.29 0.29 0.29 0.093 0.28 0.29 0.29 0.29 0.29			7.9	6.8	ó.8	6.8	6.8
2.9 2.9 2.9 2.9 2.9 2.5 1.85 1.90 1.85 1.65 1.65 1.35 1.35 1.35 1.35 1.65 1.35 1.35 1.35 1.35 1.15 0.99 1.05 0.71 0.73 0.90 0.68 0.75 0.71 0.73 0.65 0.68 0.75 0.73 0.65 0.65 0.79 0.73 0.73 0.65 0.65 0.39 0.74 0.73 0.73 0.65 0.32 0.48 0.73 0.73 0.72 0.75 0.73 0.73 0.73 0.72 0.92 0.31 0.25 0.31 0.29 0.190 0.29 0.20 0.29 0.21 0.155 0.29 0.20 0.29 0.26 0.093 0.28 0.26 0.26 0.26			4.7	4.0	4.0	4.0	4.0
1.85 1.90 1.85 1.65 1.65 1.35 1.35 1.35 1.35 1.65 1.35 1.35 1.35 1.35 1.15 0.99 1.05 1.00 0.73 0.90 0.68 0.75 0.73 0.73 0.66 0.68 0.75 0.73 0.65 0.65 0.79 0.68 0.75 0.73 0.65 0.39 0.68 0.73 0.66 0.62 0.32 0.43 0.47 0.47 0.42 0.32 0.43 0.43 0.47 0.37 0.75 0.36 0.36 0.47 0.37 0.79 0.36 0.36 0.36 0.37 0.190 0.37 0.36 0.31 0.37 0.155 0.31 0.29 0.31 0.29 0.150 0.29 0.29 0.29 0.21 0.093 0.29 0.20 0.20 0.26			2.9	2.5	2.5	2.5	2.5
1.35 1.35 1.35 1.35 1.15 0.99 1.05 1.00 1.0 0.90 0.68 0.75 0.71 0.73 0.65 0.68 0.75 0.71 0.73 0.65 0.79 0.79 0.73 0.65 0.65 0.39 0.68 0.52 0.47 0.42 0.32 0.48 0.43 0.47 0.42 0.32 0.48 0.36 0.41 0.37 0.75 0.32 0.36 0.41 0.37 0.75 0.32 0.32 0.36 0.36 0.75 0.33 0.25 0.36 0.32 0.190 0.31 0.22 0.31 0.29 0.155 0.29 0.20 0.29 0.27 0.093 0.28 0.26 0.26 0.26			1.85	1.65	1.60	1.60	1.65
0.99 1.05 1.00 0.90 0.68 0.75 0.71 0.65 0.65 0.48 0.75 0.71 0.73 0.65 0.49 0.58 0.71 0.73 0.65 0.39 0.58 0.52 0.47 0.50 0.39 0.48 0.43 0.47 0.42 0.32 0.48 0.43 0.47 0.42 0.32 0.43 0.43 0.41 0.37 0.32 0.34 0.36 0.41 0.37 0.190 0.37 0.36 0.36 0.37 0.190 0.37 0.36 0.36 0.37 0.155 0.31 0.25 0.31 0.29 0.155 0.29 0.29 0.27 0.27 0.093 0.28 0.26 0.26 0.25			1.35	1.15	1.15	1.15	1.20
0.68 0.75 0.71 0.73 0.65 0.49 0.58 0.71 0.56 0.50 0.39 0.58 0.52 0.56 0.50 0.32 0.48 0.43 0.47 0.42 0.32 0.43 0.47 0.42 0.42 0.32 0.43 0.36 0.41 0.37 0.190 0.37 0.36 0.36 0.37 0.190 0.33 0.36 0.36 0.37 0.190 0.33 0.25 0.31 0.32 0.155 0.33 0.25 0.31 0.29 0.150 0.29 0.29 0.29 0.29 0.120 0.29 0.29 0.29 0.27 0.093 0.28 0.26 0.26 0.24			1.0	0.90	0.87	0.87	0.89
0.49 0.58 0.52 0.56 0.50 0.39 0.48 0.43 0.47 0.42 0.39 0.48 0.43 0.47 0.42 0.32 0.43 0.47 0.42 0.42 0.32 0.43 0.36 0.41 0.37 0.25 0.37 0.36 0.36 0.37 0.190 0.33 0.36 0.36 0.37 0.155 0.31 0.25 0.31 0.29 0.155 0.31 0.22 0.31 0.29 0.155 0.31 0.29 0.29 0.29 0.155 0.31 0.29 0.29 0.29 0.150 0.29 0.29 0.29 0.25 0.093 0.28 0.185 0.26 0.24			0.73	0.65	0.61	0.62	0.65
0.39 0.48 0.43 0.47 0.42 0.32 0.43 0.35 0.47 0.42 0.32 0.43 0.36 0.41 0.37 0.120 0.37 0.36 0.36 0.37 0.190 0.37 0.30 0.36 0.37 0.155 0.33 0.25 0.31 0.29 0.155 0.31 0.22 0.31 0.29 0.150 0.29 0.29 0.29 0.27 0.120 0.29 0.29 0.29 0.29 0.29 0.120 0.29 0.29 0.29 0.29 0.25 0.25 0.093 0.28 0.185 0.26 0.24 0.24 0.24			0.56	0.50	0.45	0.46	0.49
0.32 0.43 0.36 0.41 0.37 0.25 0.37 0.36 0.37 0.32 0.190 0.37 0.30 0.36 0.32 0.155 0.33 0.25 0.31 0.29 0.156 0.31 0.25 0.31 0.29 0.150 0.31 0.22 0.31 0.29 0.120 0.29 0.29 0.27 0.27 0.120 0.29 0.20 0.27 0.25 0.093 0.28 0.185 0.26 0.24		-	0.47	0.42	0.37	0.38	0.42
0.25 0.37 0.30 0.36 0.32 0.190 0.33 0.25 0.31 0.29 0.155 0.31 0.22 0.31 0.27 0.120 0.29 0.20 0.27 0.27 0.120 0.29 0.20 0.27 0.25 0.093 0.28 0.20 0.24 0.25			0.41	0.37	0.31	0.32	0.37
0.190 0.33 0.25 0.31 0.29 0.155 0.31 0.22 0.27 0.27 0.120 0.29 0.20 0.25 0.25 0.120 0.29 0.20 0.25 0.25 0.093 0.28 0.185 0.26 0.24		-	0.36	0.32	0.26	0.28	0.33
0.155 0.31 0.22 0.27 0.27 0.120 0.29 0.20 0.25 0.25 0.093 0.28 0.185 0.26 0.24			0.31	0.29	0.22	0.24	0.29
0.120 0.29 0.20 0.25 0.25 0.093 0.28 0.185 0.26 0.24			0.29	0.27	0.195	0.21	0.27
0.093 0.28 0.185 0.26 0.24			0.27	0.25	0.175	0.195	0.26
			0.26	0.24	0.160	0.180	0.25
630 0.072 0.27 0.175 0.25 0.23 0.			0.25	0.23	0.150	0.170	0.24

MKXXS001.05-23

SINGLE-CORE 90 ° C THERMOSETTING INSULATED (XLPE OR LSZH) CABLES, NON-ARMOURED, WITH OR WITHOUT SHEATH

INSTALLATION METHODS FOR WIRES/CABLES

TABLE - 3

EXAMPLES	DESCRIPTION	REFERENCE METHOD TO BE USED TO DETERMINE CURRENT CARRYING CAPACITY
	Non-sheathed cables in conduit in a thermally insulated wall with an inner skin having a thermal conductance of not less than 10 W/m ² K	A
	Non-sheathed cables in a conduit on a wooden or masonry wall or spaced less than 0.3 x conduit diameter from it ^c	В
	Single-core or multicore cables: Fixed on (Clipped Direct), or spaced less than 0.3 x cable diameter from wooden or masonry wall ^c	C
	Single-core or multicore cables: On perforated tray run horizontally or vertically ^{c,h}	E or F

- Care is needed where the cable runs vertically and ventilation is restricted. The ambient С temperature at the top of the vertical section can be much higher.
- De = the external diameter of a multicore cable: Н
 - 2.2 x the cable diameter when three single core cables are bound in trefoil, or
 - 3 x the cable diameter when three single core cables are laid in flat formation

RATING FACTORS

TABLE - 4

The tabulated ratings must be reduced for ambient air temperatures higher than 30°C; appropriate temperature ratings factors are as follows:

AMBIENT TEMPERATURE	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
PVC (70°C)	1.03	1	0.94	0.87	0.79	0.71	0.61	0.5
HR-PVC/XLPE/ LSZH (90°C)	1.02	1	0.96	0.91	0.87	0.82	0.76	0.71

GROUP RATING FACTORS

TABLE - 5

Rating factors for one circuit or one multicore cable or for a group of circuits, or a group of multicore cables, to be used with current carrying capacities of table 1 & 2

	N	JWE	ER C	OF C	IRCL	JITS	OR	MUL	τις	DRE C	ABLES	;	
Arrangement (cables touching)	1	2	3	4	5	6	7	8	9	12	16	2 0	To be used with current carrying capacities, Reference
Bunched in air, on a surface, embedded or enclosed	1.0	0 0.	80 0.:	70 0.	65 0.	60 0.	57 0	.54 0	.52 0	.50 0.4	15 0.41	0.38	Methods A to F
Single layer on wall or floor	1.0	0 0.	85 0.:	79 0.	75 0.	.73 0.	72 0	.72 0	.71 0	.70 0.7	70 0.70	0.70	Method C

NOTE 1: These factors are applicable to uniform groups of cables, equally loaded. NOTE 2: Where horizontal clearances between adjacent cables exceeds twice their overall diameter, no rating factor need be applied.

NOTE 3: If a group consists of n single-core cables it may either be considered as n/2 circuits of two loaded conductors or n /3 circuits of three loaded conductors.

Storage and Installation



STORAGE

Cables should be stored with special care to prevent immediate as well as mid-term failures. The below recommendations are for both indoor and outdoor storage applications. Additional measures need to be considered for outdoor drum storage considering the surrounding environmental conditions and in accordance with cable specifications; LSZH, PVC or PE as applicable.

- Cables must be stored in proper packed condition, in the shade. Direct exposure to sun must be avoided.
- Drums should be stacked flange-to-flange and preferably not on top of each other.
- Drums should be stacked so that they are easily accessible.
- Fire prevention rules should be observed.
- Cable types shall be kept together and shall be easily identifiable.
- o Cable ends must be sealed at all times.

- If drums are expected to be stored for a long time they should be specially treated, or, if applicable, use pesticides at regular intervals in the storage area to avoid termite and rodent attack on wooden drums.
- Drums must be chocked to prevent inadvertent rolling during storage.
- Dispatch on a "first in first out" (FIFO) basis.



RECOMMENDED



Lift drums correctly onto/ from trucks while loading and unloading. Cradle both fringes between forks



Lifting drums through both flanges using crane



Roll in the direction shown by the arrow





Lower reels from truck using hydraulic gate, hoist or fork lift. Lower carefully

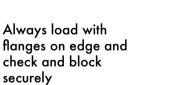
check and block

Secure drums

transportation

adequately before

securely



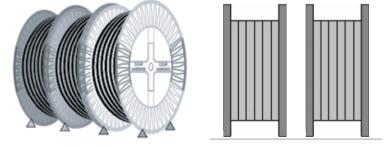






Warning: Failure to store or install in a proper manner, not in-line with the above may void factory warranty.

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RECOMMENDED







RECOMMENDED



Do not lift by top flange, Cable or reel



The reel flanges and mashes the cable



Upended heavy reels will often arrive damaged. Refuse or receive subject to inspection for hidden damage



Never allow forks to touch cable surface or reel wrap



Never drop reels



Do not lay drums flat on their sides, use proper wedges to prevent drums rolling

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