



CHINA-WIRES.COM

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# POWER CABLE CATALOGUE



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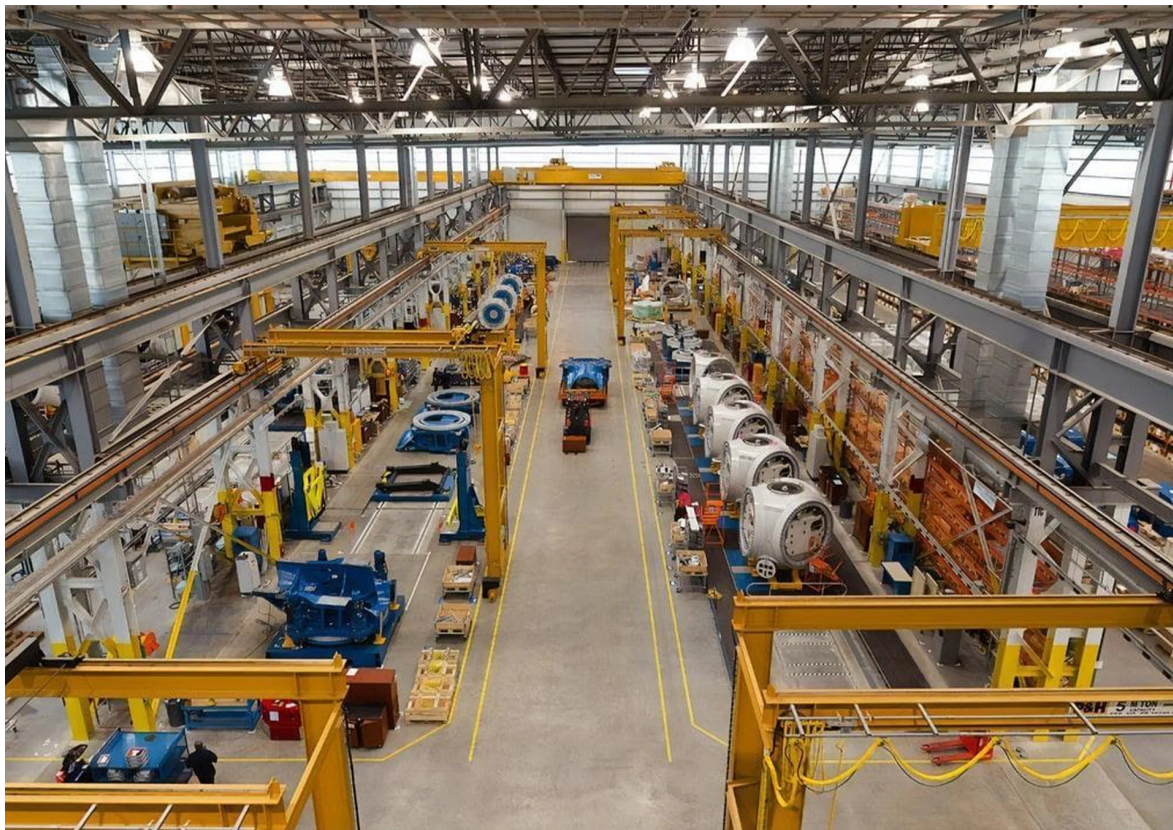
# POWER CABLE

## 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

## 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.

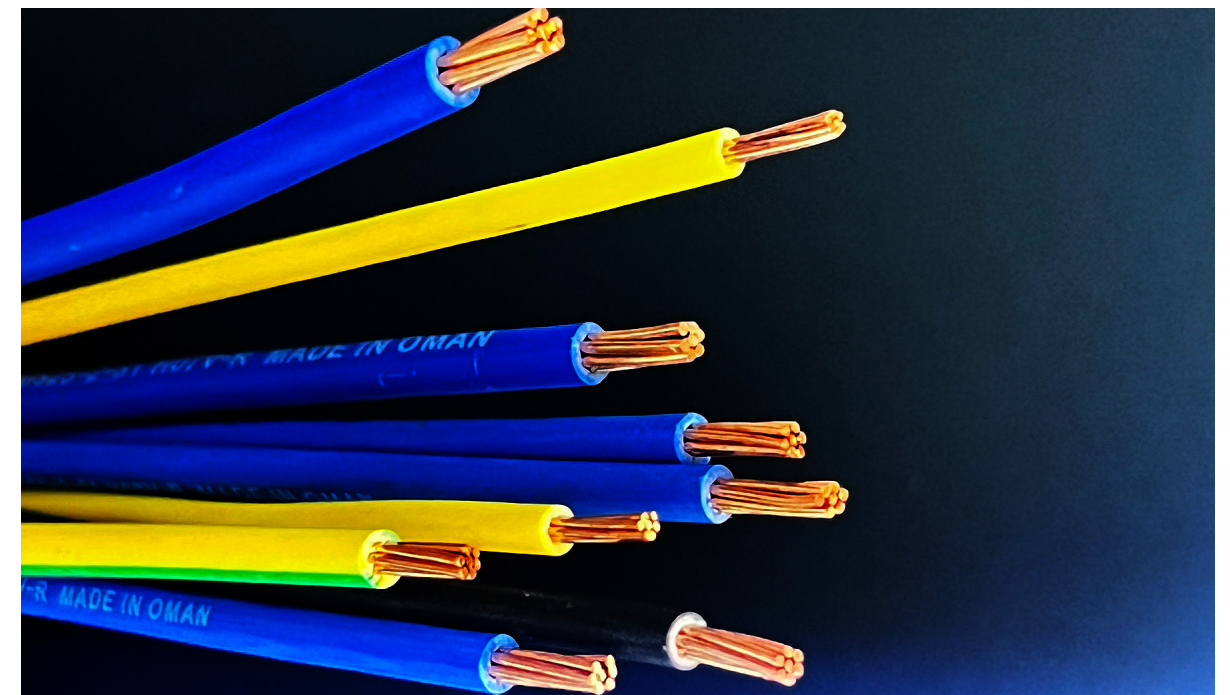


# TECHNICAL INFORMATION OF LSZH INSULATED WIRES

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:-

- |  |   |
|--|---|
| <b>1</b> Fire retardant and zero halogen                                     | Detailed properties of the above material are |
| <b>2</b> Low emission of smoke, toxic fumes and acid gases during combustion | ○ Halogen Content – Max 0.5%                  |
| <b>3</b> Similar mechanical and electrical properties to PVC                 | ○ pH value – Minimum 4.3                      |
| <b>4</b> Acceptable process-ability  | ○ Conductivity – Maximum 10 micro Siemens/mm  |
| <b>5</b> Low additional cost   |   |

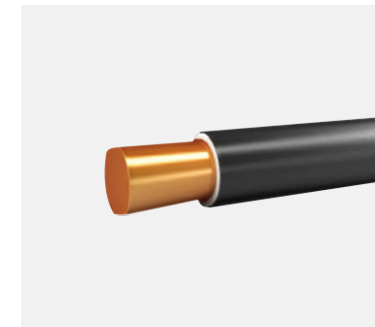


## COMPARISON OF CHEMICAL RESISTANCE PROPERTIES OF LSZH AND PVC

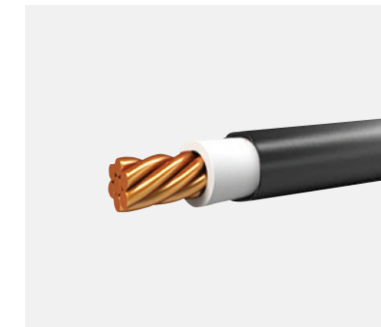
PROPERTIES	PVC	LSZH
Oxidation Resistance	E	E
Heat Resistance	G-E	G
Oil Resistance	F	P
Low-Temperature Flexibility	P-G	F-G
Weather, Sun Resistance	G-E	P
Ozone Resistance	E	E
Abrasion Resistance	F-G	F
Electrical Properties	F-G	F
Flame Resistance	G	E
Nuclear Radiation Resistance	F	G
Water Resistance	F-G	F
Acid Resistance	G-E	G
Alkali Resistance	G-E	G
Aliphatic Hydrocarbons Resistance	P	P
Aromatic Hydrocarbons Resistance	P-F	P
Halogenated Hydrocarbons Resistance	P-F	P
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 AREA (mm <sup>2</sup> )	APPROX. NUMBER OF WIRES (CLASS 5)	
	Cu	Al
0.5	16	
0.75	24	
1	32	
1.5	30	
2.5	50	
4	56	
6	84	
10	80	

NOMINAL CROSS-SECTIONAL AREA (mm <sup>2</sup> )	APPROX. NUMBER OF WIRES (CLASS 2)	
	Cu	Al
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

# Products Range

# 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 (mm <sup>2</sup> )	FLEXIBILITY CLASS	MINIMUM NUMBER OF WIRES AS PER IEC 60228/ BS EN 60228 NOS	MAXIMUM DC RESISTANCE FOR PLAIN COPPER CONDUCTOR AT 20 °C (Ω/KM)	MAXIMUM DC RESISTANCE FOR TINNED COPPER CONDUCTOR AT 20 °C (Ω/KM)
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 (ρ) : 1.7241x10<sup>-8</sup> (Ω.m)  
Purity % : 99.9

# SOLID CONDUCTOR PVC INSULATED BUILDING WIRES (H05V-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

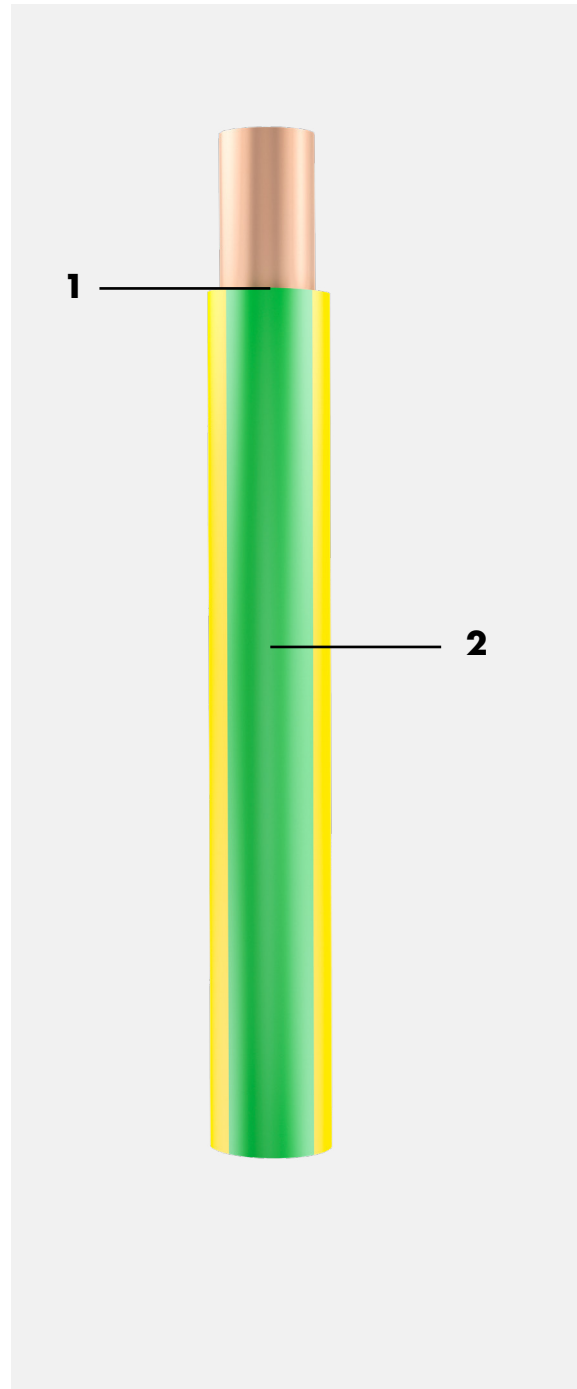
Single strand solid annealed plain copper conductor, extruded PVC insulation of PVC Type TI 1 or PVC Type C (for 70°C application), 500/300 V Wires to BS EN 50525-2-31 or IEC 60227-3.

### 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



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

## 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
mm <sup>2</sup>	mm	°C	mm	A
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

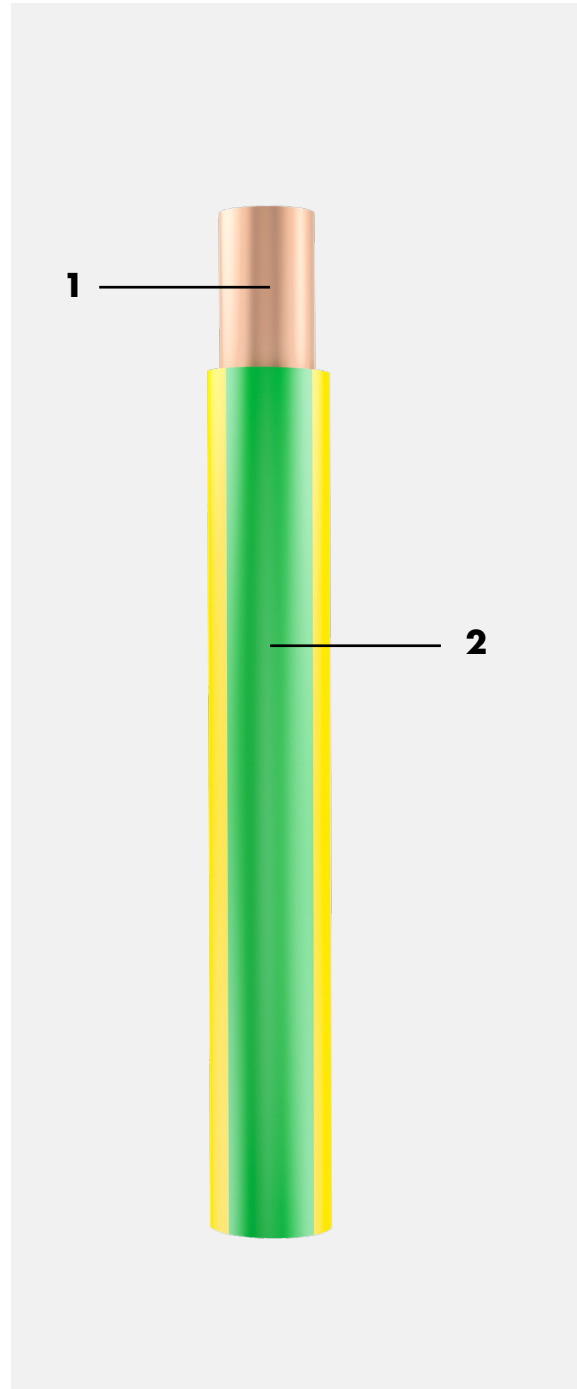
Extruded HR-PVC Type TI 3 or PVC Type E

## APPLICATION STANDARDS

BS EN 50525-2-31  
EC 60227-3



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



## 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
mm <sup>2</sup>	mm	°C	mm	A
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

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

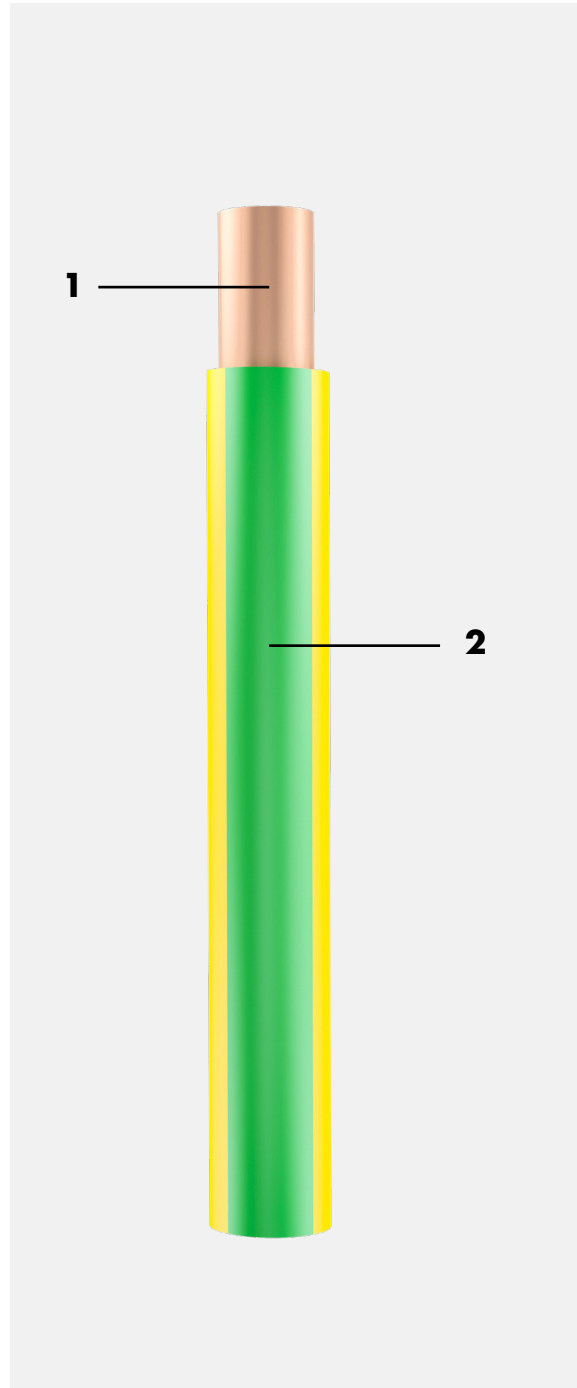
Extruded LSZH Type EI 5

## APPLICATION STANDARDS

BS EN 50525-3-41



BASEC is applicable to BS EN 50525-3-41 wires only



## 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
mm <sup>2</sup>	mm	°C	mm	A
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



On Perforated  
Tray



Minimum  
Bending Radius

# 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

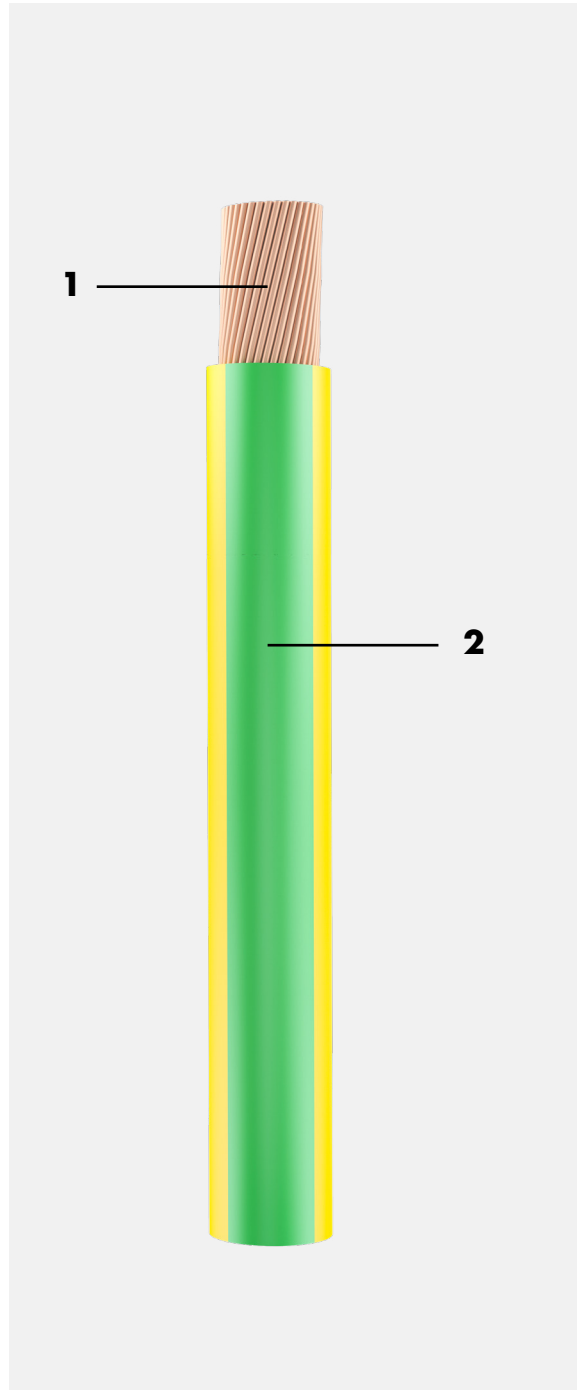
Extruded PVC Type TI 1 or PVC Type C

## APPLICATION STANDARDS

BS EN 50525-2-31  
IEC 60227-3



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



## 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
mm <sup>2</sup>	mm	°C	mm	A
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



Minimum  
Bending Radius

# 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

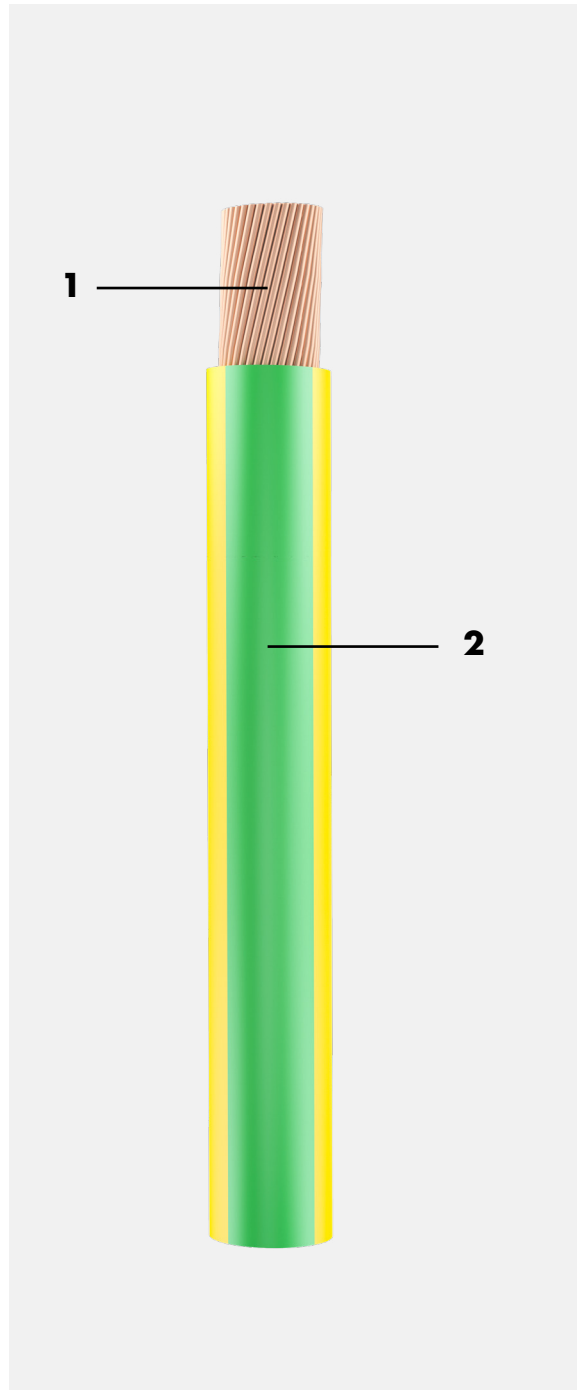
Extruded HR-PVC Type TI 3 or PVC Type E

## APPLICATION STANDARDS

BS EN 50525-2-31  
IEC 60227-3



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



## 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
mm <sup>2</sup>	mm	°C	mm	A
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



Conduit/  
Ducts



Fixed or Clipped  
Direct on Wall



On Perforated  
Tray



Minimum  
Bending Radius

# 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 EI 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

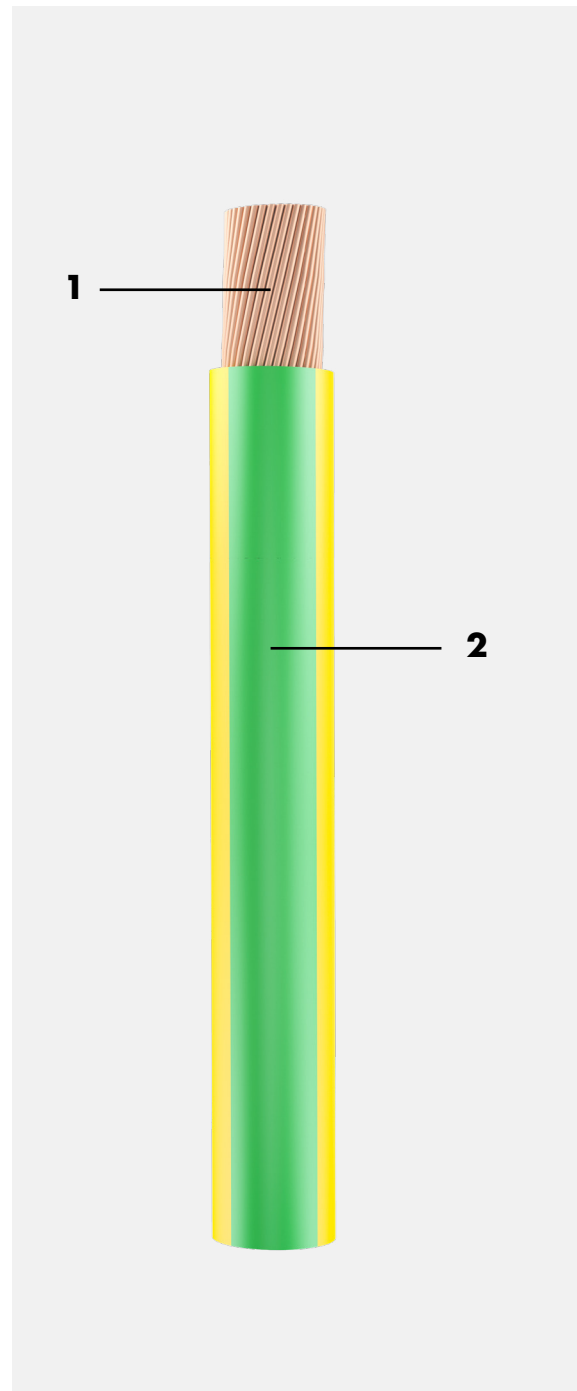
Extruded LSZH Type EI 5

## APPLICATION STANDARDS

BS EN 50525-3-41



BASEC is applicable to BS EN 50525-3-41 wires only



## 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
mm <sup>2</sup>	mm	°C	mm	A
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



Conduit/  
Ducts



Fixed or Clipped  
Direct on Wall



On Perforated  
Tray



Minimum  
Bending Radius

# 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

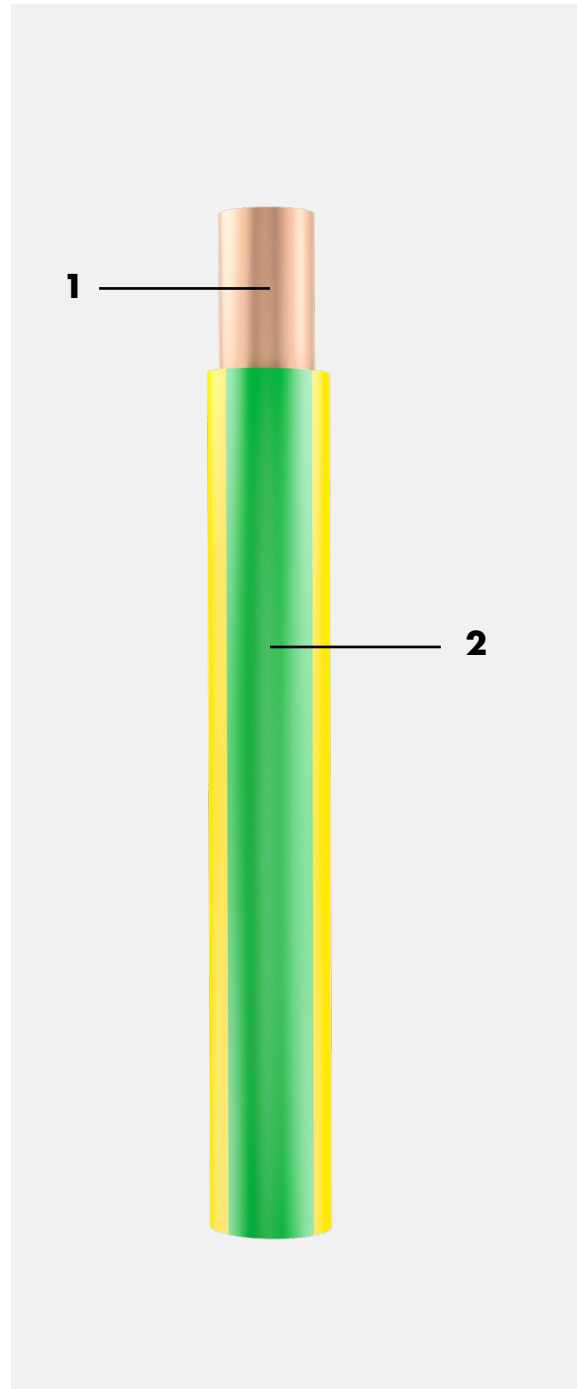
Extruded PVC Type TI 1 or PVC Type C

## APPLICATION STANDARDS

BS EN 50525-2-31  
IEC 60227-3



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



## 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:

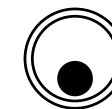
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm <sup>2</sup>	mm	°C	mm	A
1.5	0.7	70	3.2	15.5
2.5	0.8	70	3.9	21
4	0.8	70	4.4	28
6	0.8	70	5.0	36
10	1.0	70	6.4	50

(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



Minimum  
Bending Radius

# 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 T1 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

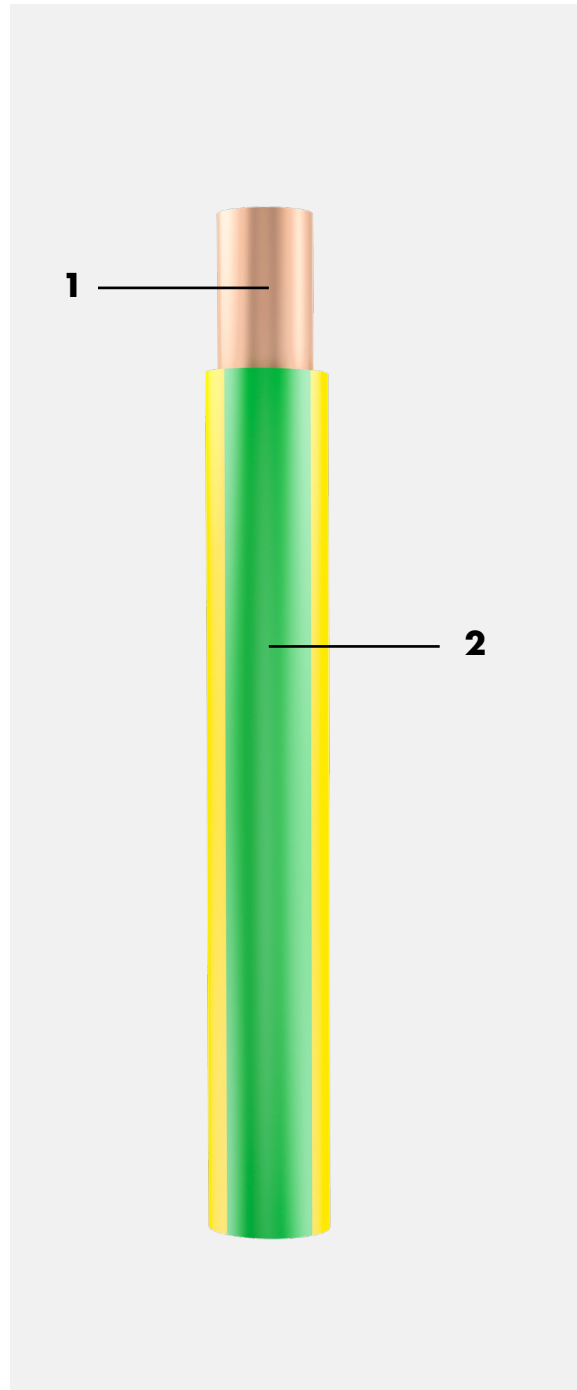
Extruded HR-PVC Type T1 3 or PVC Type E

## APPLICATION STANDARDS

BS EN 50525-2-31  
IEC 60227-3



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



## CORE COLOUR IDENTIFICATION



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 <sup>2</sup>	mm	°C	mm	A
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

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

## CABLE INSTALLATION



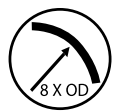
Conduit/  
Ducts



Fixed or Clipped  
Direct on Wall



On Perforated  
Tray



Minimum  
Bending Radius

# SOLID CONDUCTOR LSZH INSULATED BUILDING WIRES (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

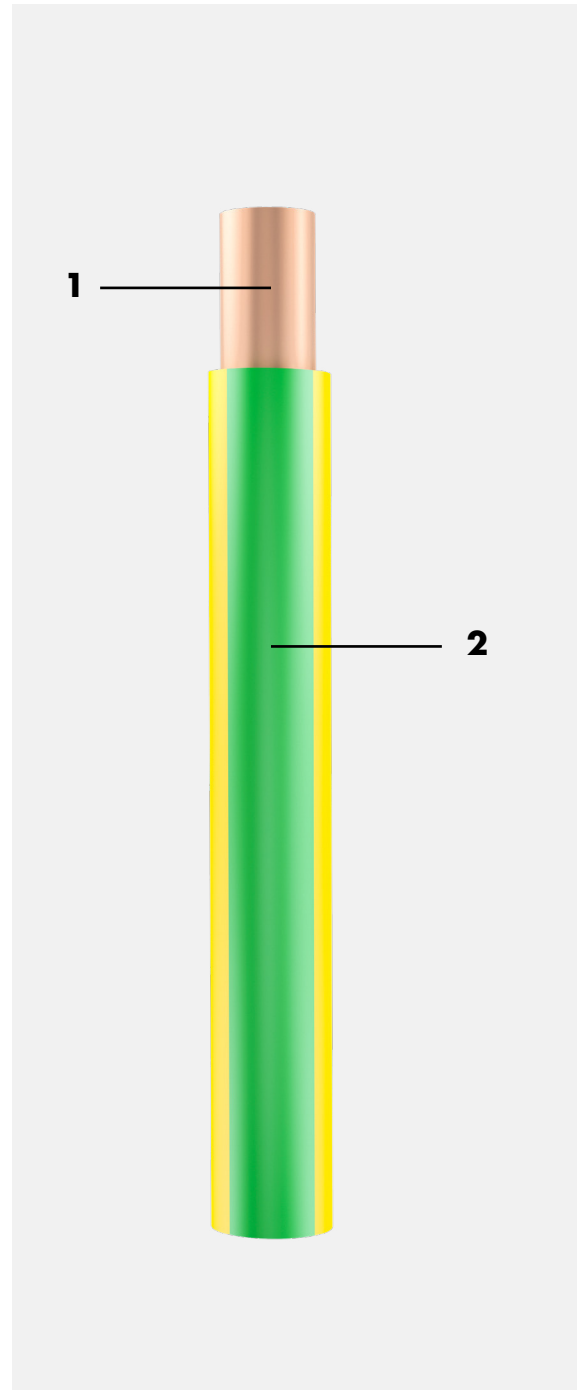
Extruded LSZH Type EI 5

## APPLICATION STANDARDS

BS EN 50525-3-41



BASEC is applicable to BS EN 50525-3-41 wires only



## 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
mm <sup>2</sup>	mm	°C	mm	A
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

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



# 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

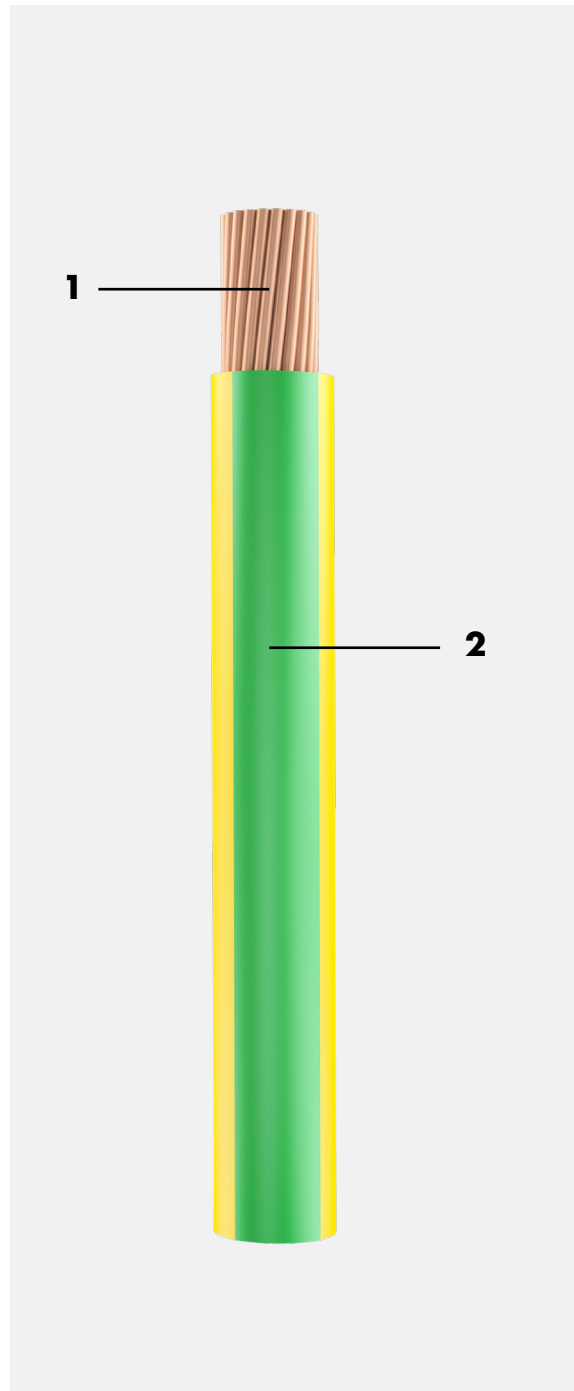
Extruded PVC Type TI 1 or PVC Type C

## APPLICATION STANDARDS

BS EN 50525-2-31  
IEC 60227-3



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



## 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

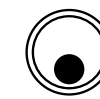
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm <sup>2</sup>	mm	°C	mm	A
1.5	0.7	70	3.3	15.5
2.5	0.8	70	4.0	21
4	0.8	70	4.6	28
6	0.8	70	5.2	36
10	1.0	70	6.7	50
16	1.0	70	7.8	68
25	1.2	70	9.7	89
35	1.2	70	10.9	110
50	1.4	70	12.8	134
70	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/  
Ducts



Fixed or Clipped  
Direct on Wall



On Perforated  
Tray



Minimum  
Bending Radius

# 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

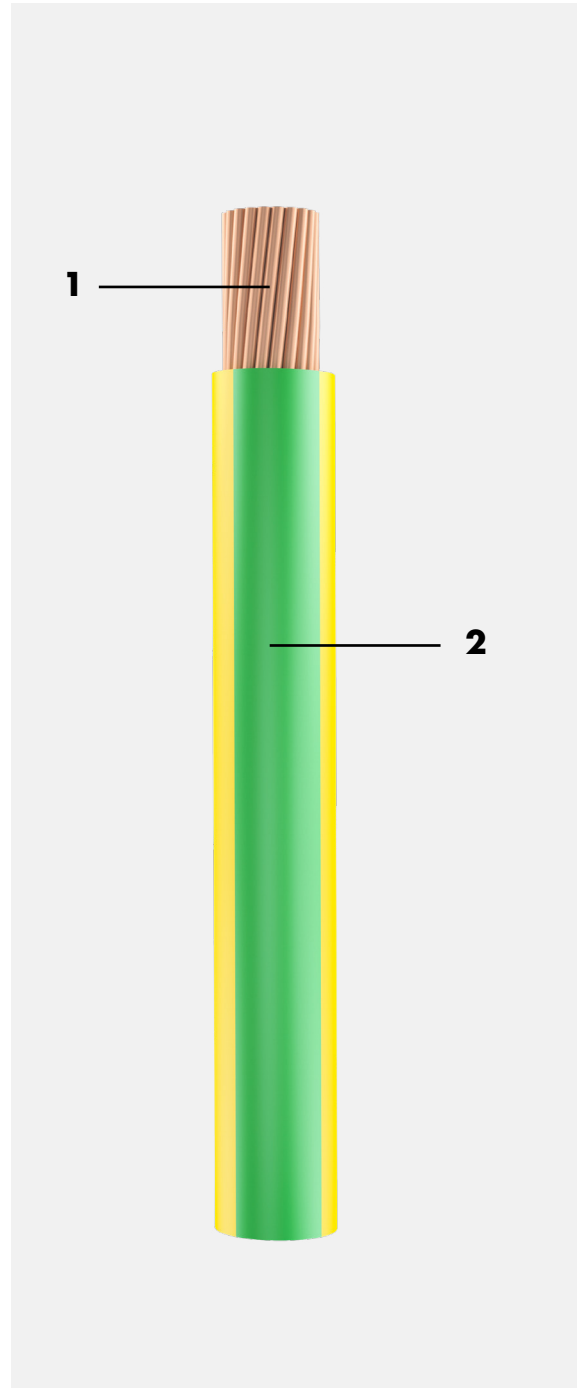
Extruded HR-PVC Type TI 3 or PVC Type E

## APPLICATION STANDARDS

BS EN 50525-2-31  
IEC 60227-3



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



## CORE COLOUR IDENTIFICATION



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 <sup>2</sup>	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

(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

# 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 EI 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

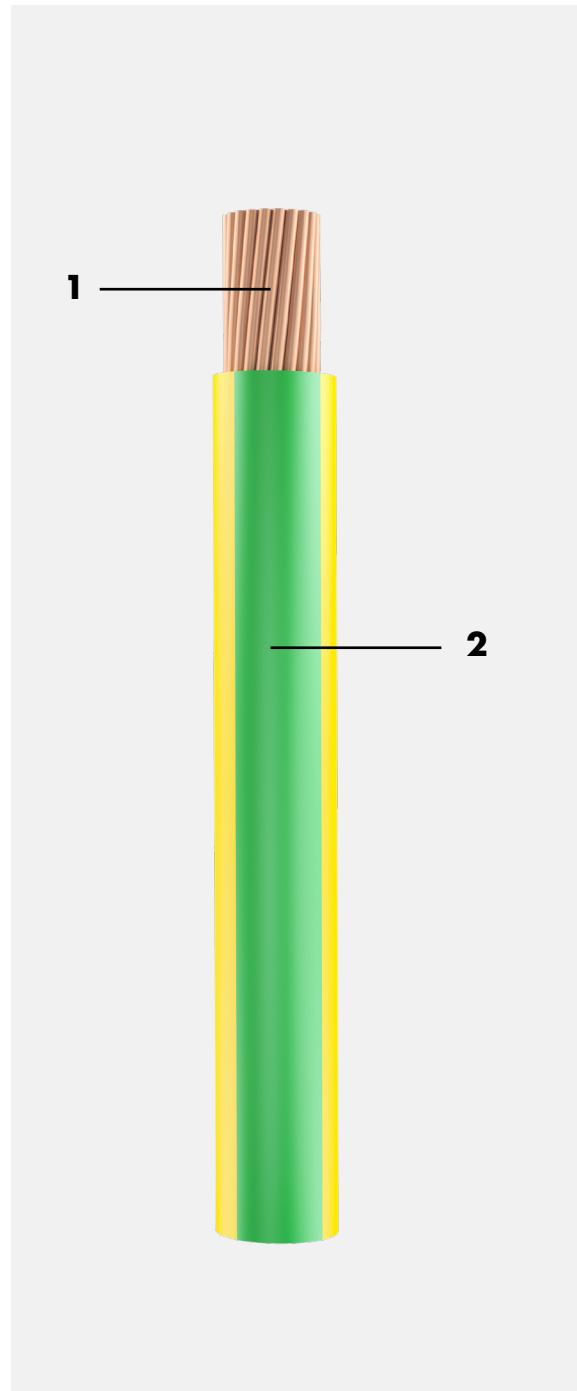
Extruded LSZH Type EI 5

## APPLICATION STANDARDS

BS EN 50525-3-41



BASEC is applicable to BS EN 50525-3-41 wires only



## 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
mm <sup>2</sup>	mm	°C	mm	A
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 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 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

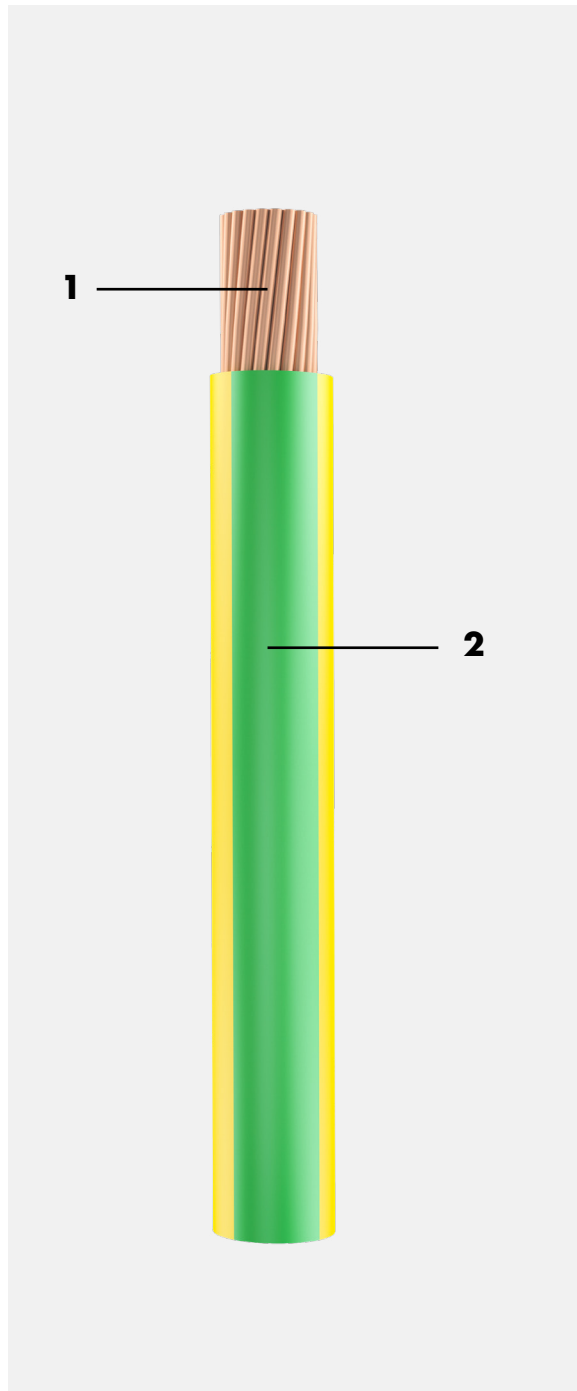
Extruded PVC Type TI 1 or PVC Type C

## APPLICATION STANDARDS

BS EN 50525-2-31  
IEC 60227-3



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



## CORE COLOUR IDENTIFICATION



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 <sup>2</sup>	mm	°C	mm	A
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

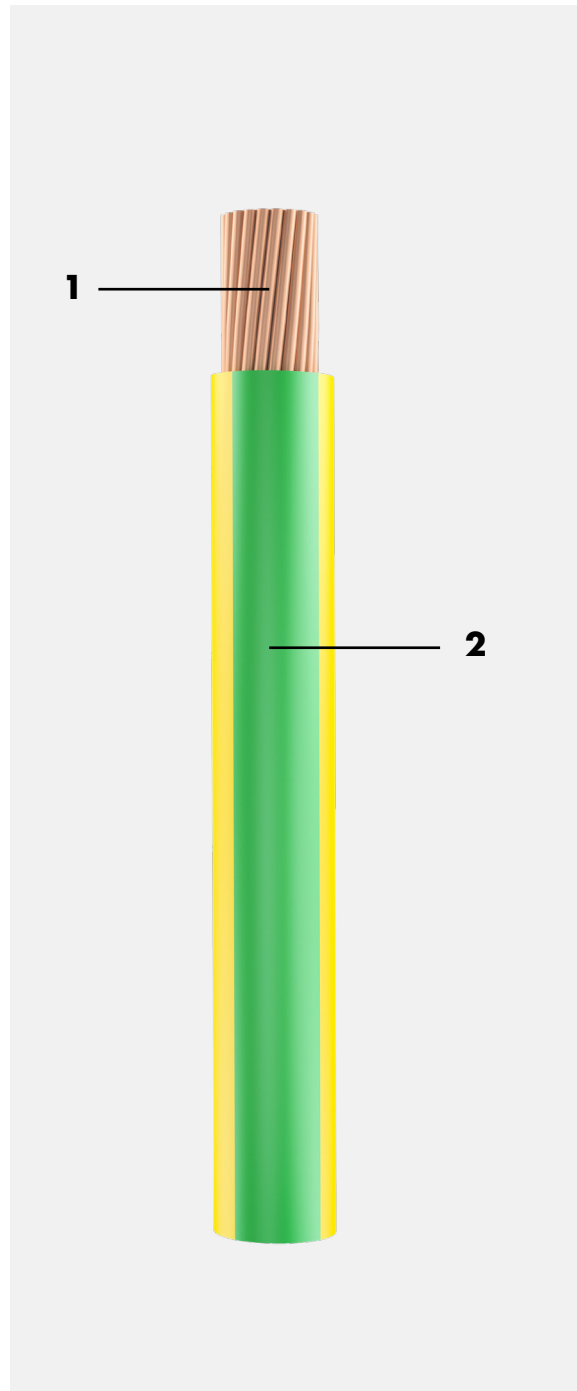
Extruded HR-PVC Type TI 3 or PVC Type E

## APPLICATION STANDARDS

BS EN 50525-2-31  
IEC 60227-3



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



## 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
mm <sup>2</sup>	mm	°C	mm	A
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



Conduit/  
Ducts



Fixed or Clipped  
Direct on Wall



On Perforated  
Tray



Minimum  
Bending Radius

# 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 EI 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

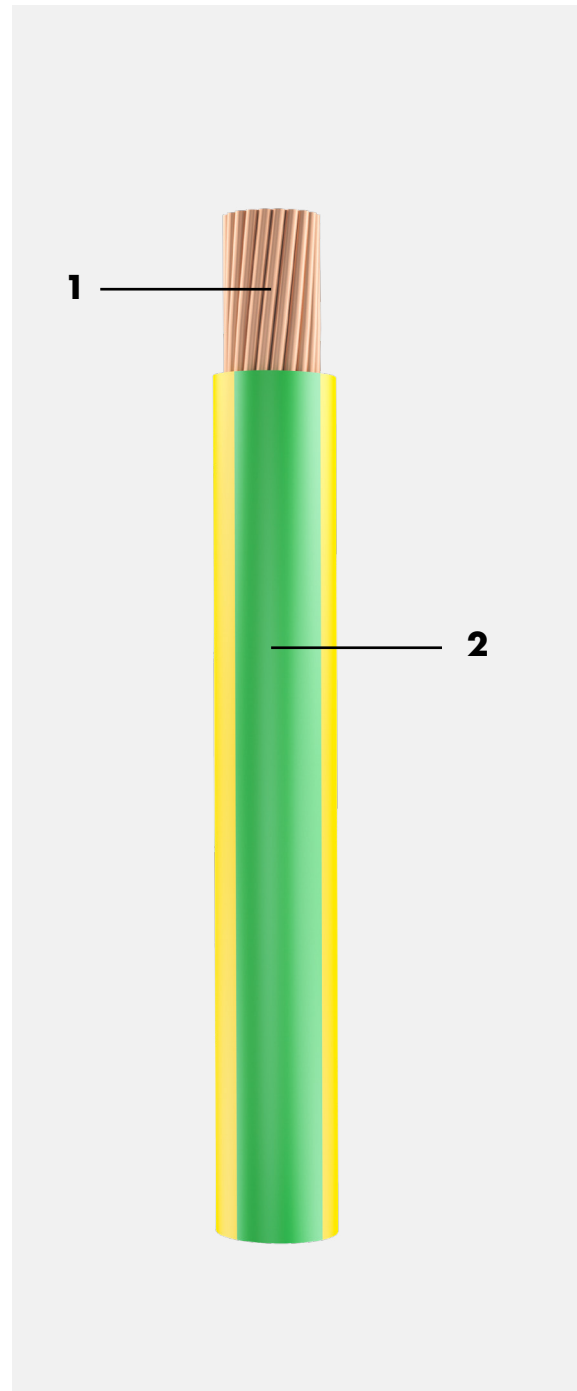
Extruded LSZH Type EI 5

## APPLICATION STANDARDS

BS EN 50525-3-41



BASEC is applicable to BS EN 50525-3-41 wires only



## 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
mm <sup>2</sup>	mm	°C	mm	A
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

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

## CABLE INSTALLATION



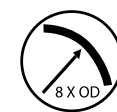
Conduit/  
Ducts



Fixed or Clipped  
Direct on Wall



On Perforated  
Tray



Minimum  
Bending Radius

# 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

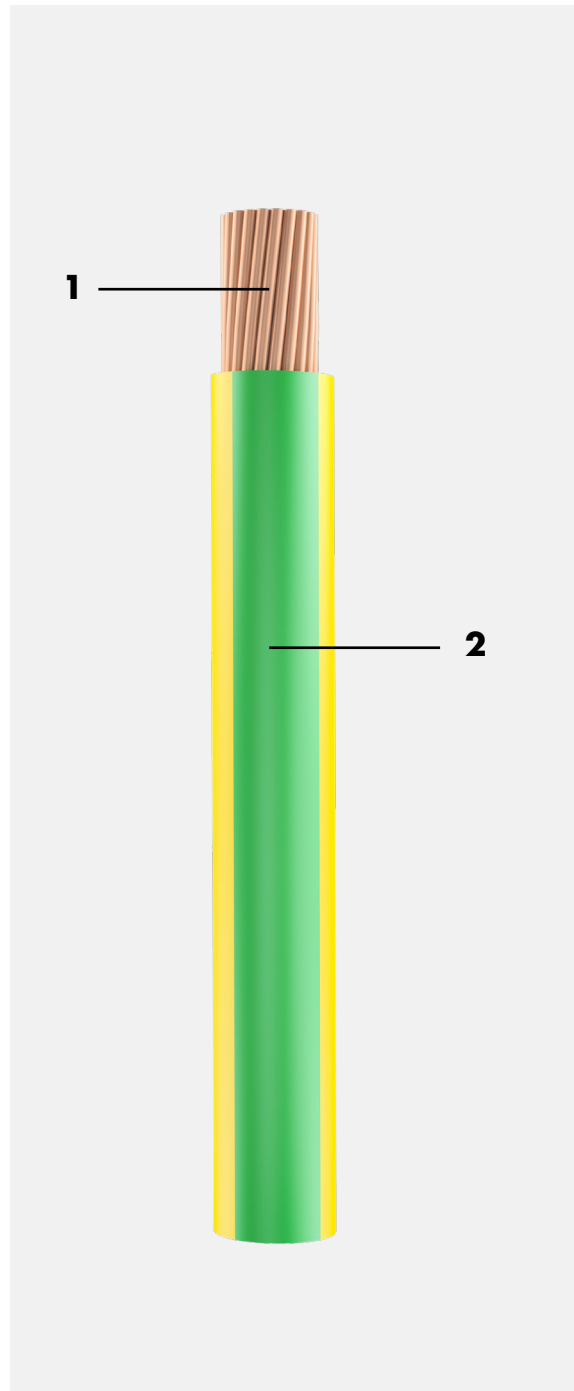
Annealed plain copper (multi stranded, class-2)

### 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
mm <sup>2</sup>	mm	°C	mm	A
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



Conduit/  
Ducts



Fixed or Clipped  
Direct on Wall



On Perforated  
Tray



Minimum  
Bending Radius

# 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

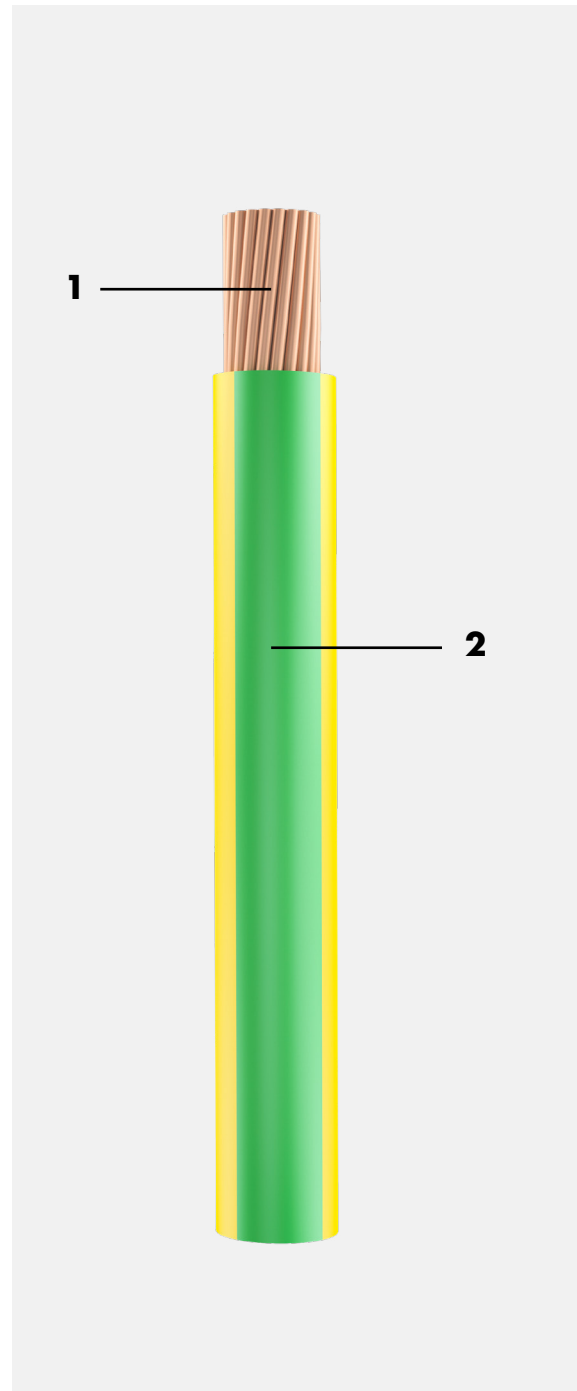
Annealed plain copper (multi stranded, class-2)

### 2. Insulation

Extruded XLPE

## APPLICATION STANDARDS

IEC 60502-1



## CORE COLOUR IDENTIFICATION



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 <sup>2</sup>	mm	°C	mm	A
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



Conduit/  
Ducts



Fixed or Clipped  
Direct on Wall



On Perforated  
Tray



Minimum  
Bending Radius



# 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 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, 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

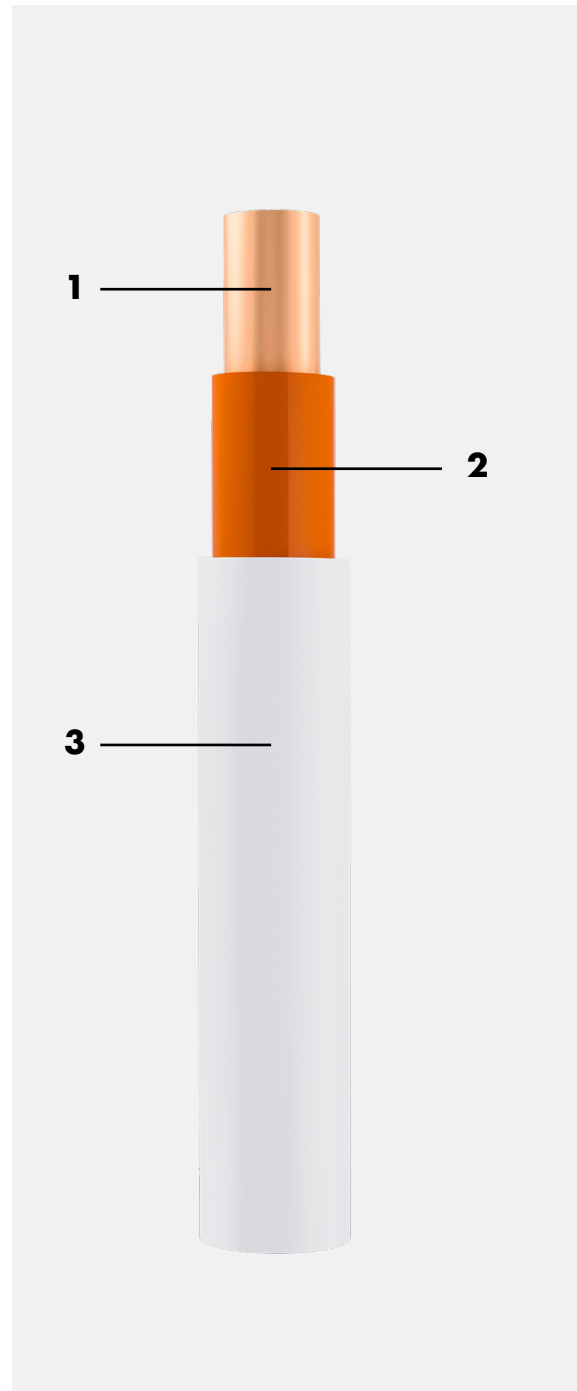
Extruded PVC Type 6

## APPLICATION STANDARDS

BS 6004



BASEC is applicable to BS 6004 wires only



## CORE COLOUR IDENTIFICATION



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 <sup>2</sup>	mm	°C	mm	mm	A
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



Conduit/  
Ducts



Fixed or Clipped  
Direct on Wall



On Perforated  
Tray



Minimum  
Bending Radius

# 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

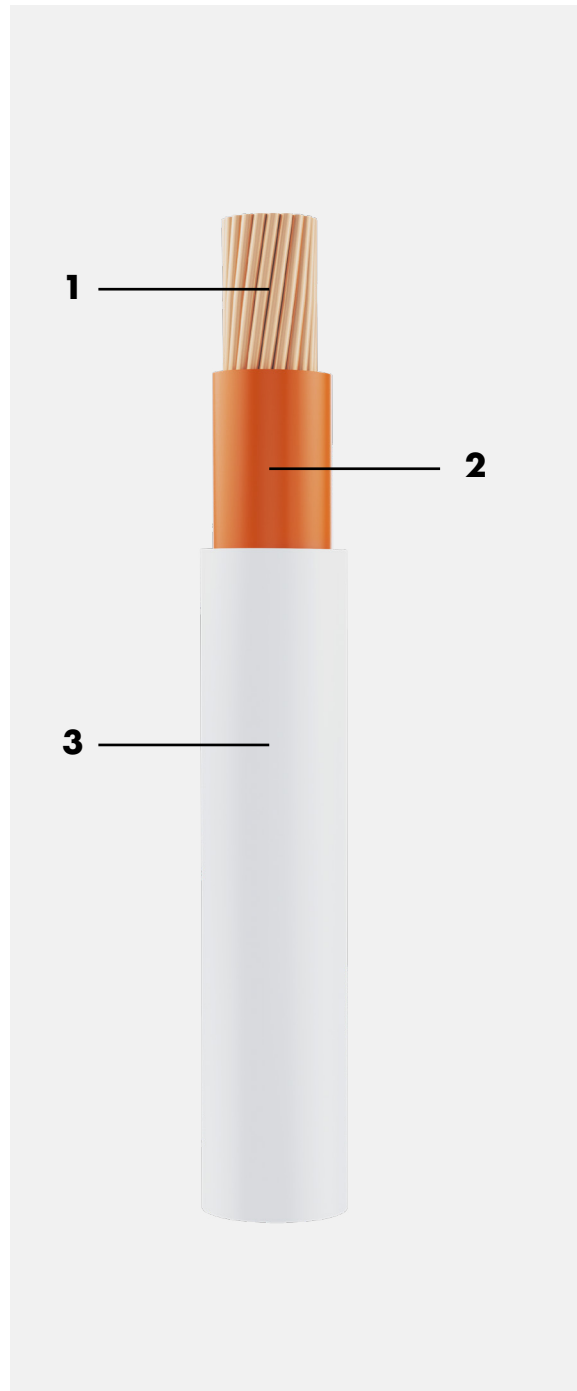
Extruded PVC Type 6

## APPLICATION STANDARDS

BS 6004



BASEC is applicable to BS 6004 wires only



## CORE COLOUR IDENTIFICATION



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 <sup>2</sup>	mm	°C	mm	mm	A
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



On Perforated  
Tray



Minimum  
Bending Radius

# 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

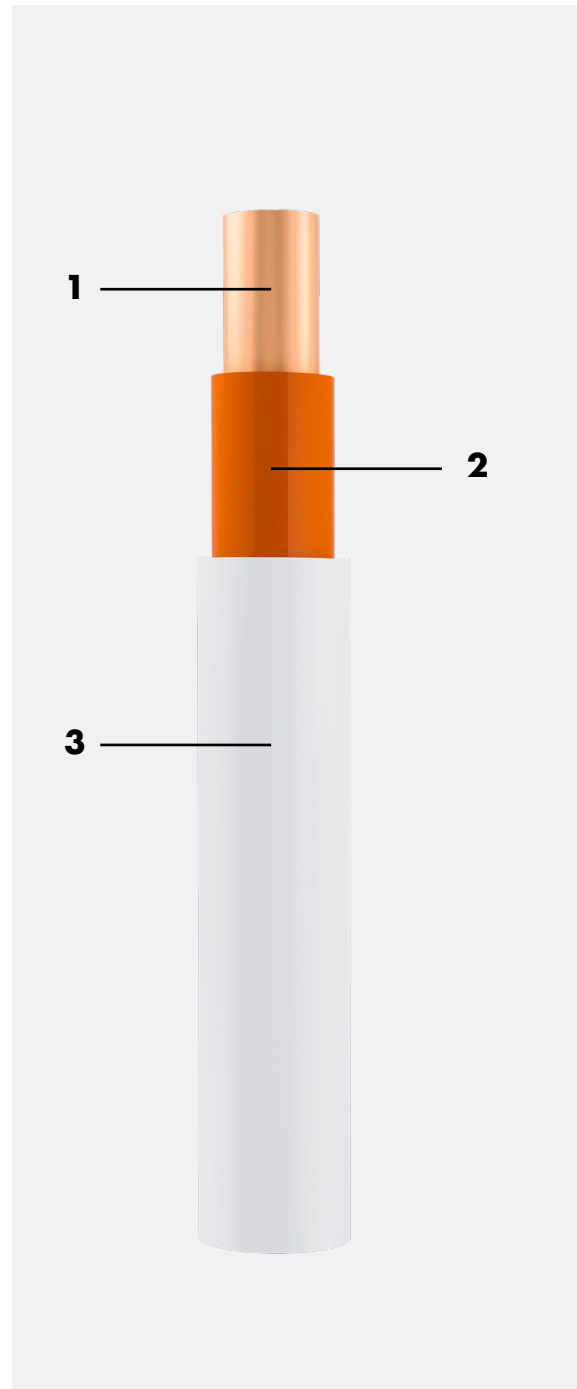
Extruded XLPE Type GP 8

#### 3. Sheath

Extruded LSZH Type LTS 4

### APPLICATION STANDARDS

BS 7211



### CORE COLOUR IDENTIFICATION



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 <sup>2</sup>	mm	°C	mm	mm	A
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 Perforated  
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

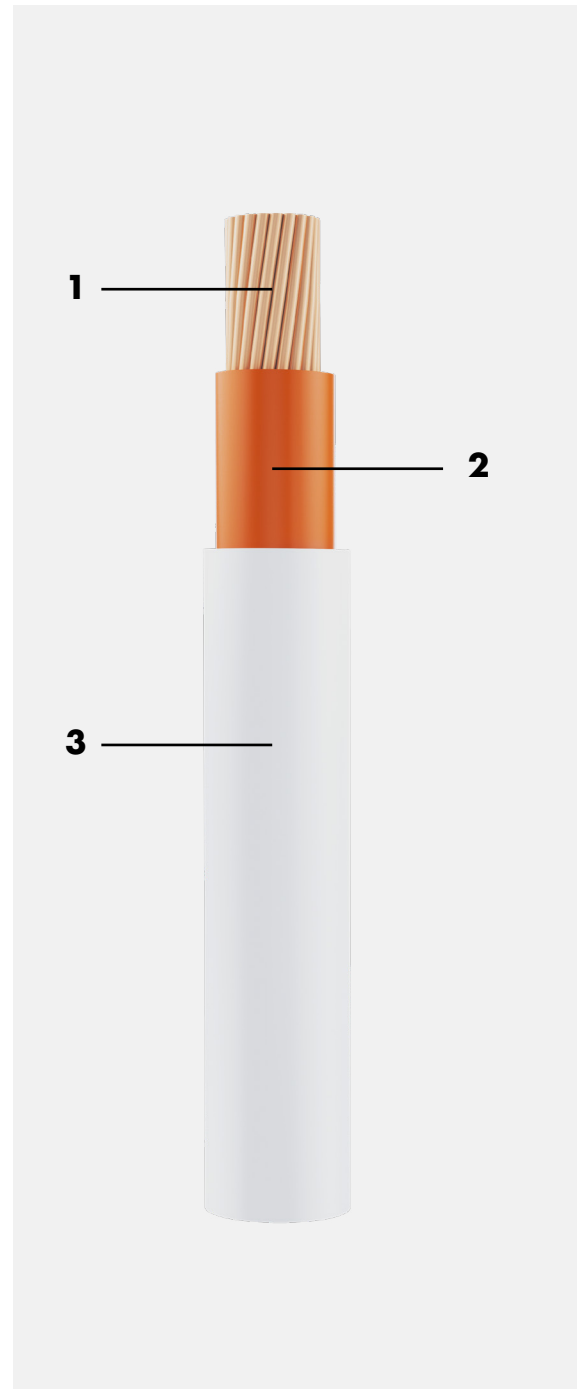
Extruded XLPE Type GP 8

### 3. Sheath

Extruded LSZH Type LTS 4

## APPLICATION STANDARDS

BS 7211



## CORE COLOUR IDENTIFICATION



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

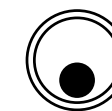
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING
mm <sup>2</sup>	mm	°C	mm	mm	A
1.5	0.7	90	0.8	5.2	20
2.5	0.7	90	0.8	5.6	28
4	0.7	90	0.9	6.4	37
6	0.7	90	0.9	7.1	48
10	0.7	90	0.9	8.1	66
16	0.7	90	0.9	9.2	88
25	0.9	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



On Perforated  
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 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 (single strand solid, class-1)

### 2. Insulation

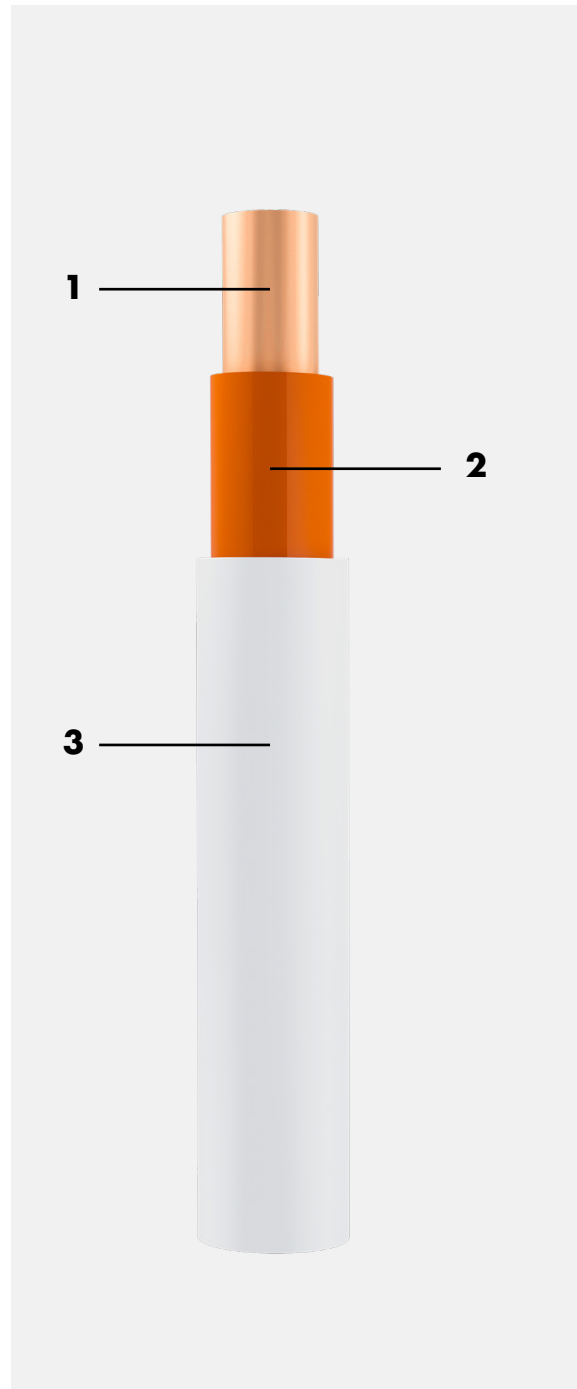
Extruded LSZH Type EI 5

### 3. Sheath

Extruded LSZH Type LTS 4

## APPLICATION STANDARDS

BS 7211



## CORE COLOUR IDENTIFICATION



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 <sup>2</sup>	mm	°C	mm	mm	A
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 Perforated  
Tray



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

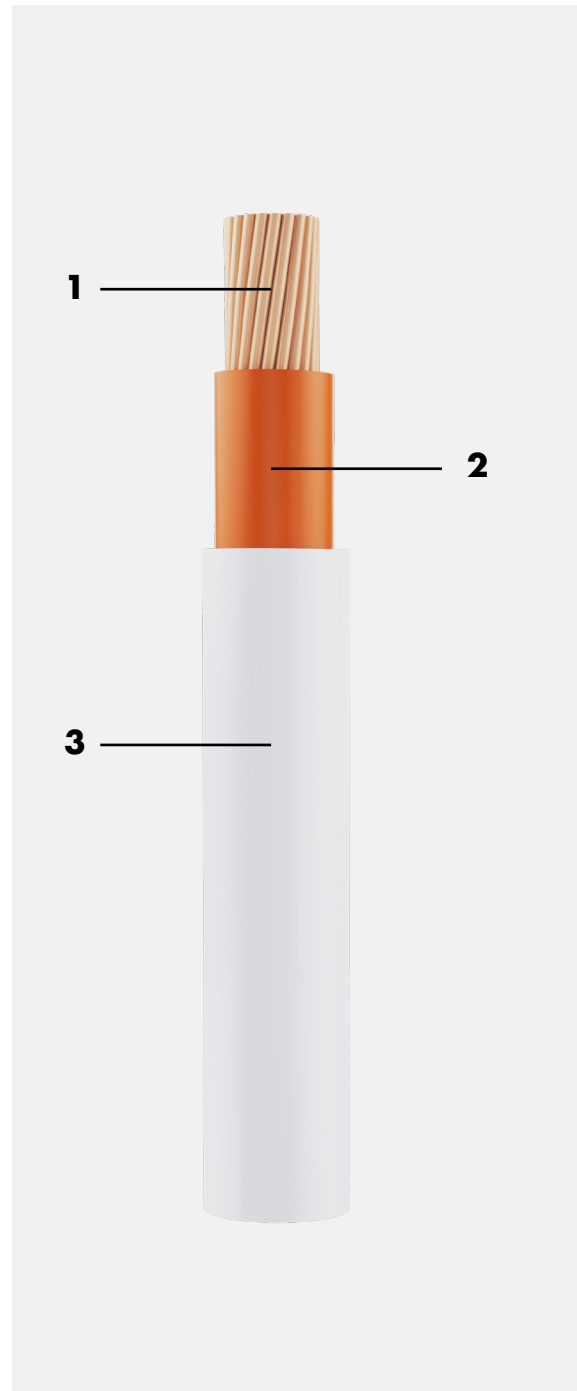
Extruded LSZH Type EI 5

### 3. Sheath

Extruded LSZH Type LTS 4

## APPLICATION STANDARDS

BS 7211



## CORE COLOUR IDENTIFICATION



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 <sup>2</sup>	mm	°C	mm	mm	A
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



On Perforated  
Tray



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.

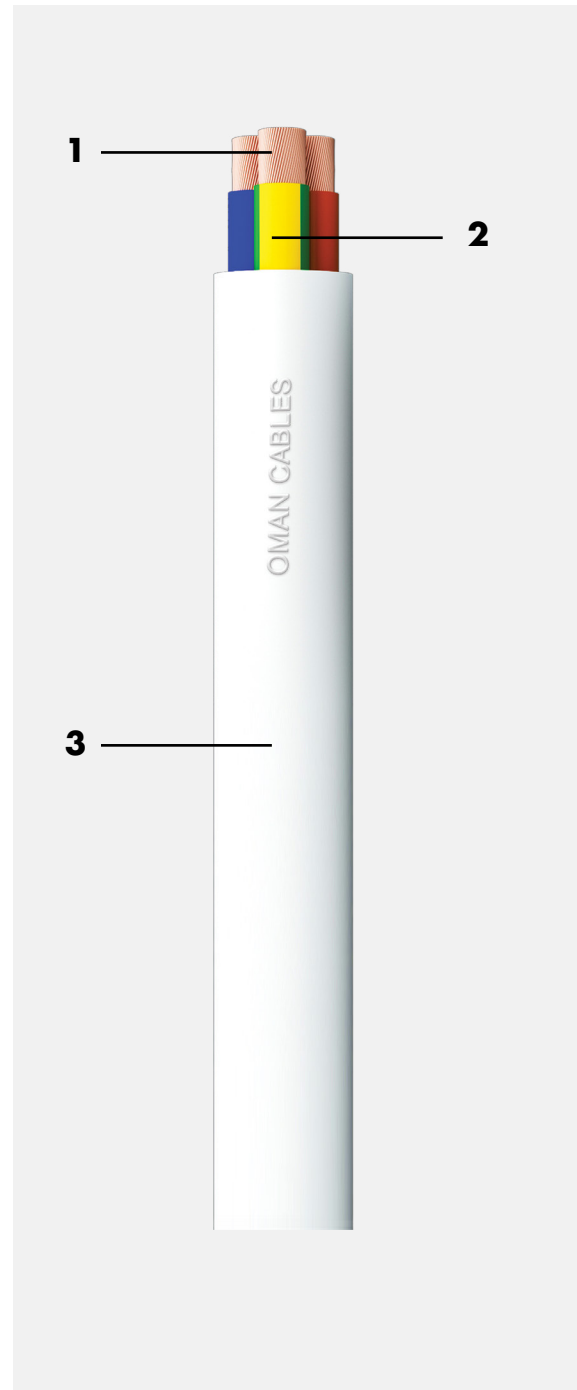
### CONSTRUCTION

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

Two Cores



Three Cores



Four Cores



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 <sup>2</sup>	mm	°C	mm	mm	mm	A
0.8	0.6	70	7.0	7.5	8.0	10
1.0	0.6	70	7.5	7.5	8.5	12
1.5	0.7	70	8.5	9.0	10.0	14
2.5	0.8	70	10.0	11.0	11.5	20
4.0	0.8	70	11.0	12.0	13.5	28
6.0	0.8	70	13.0	13.5	15.0	34
10.0	1.0	70	15.5	16.5	18.5	48

(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.

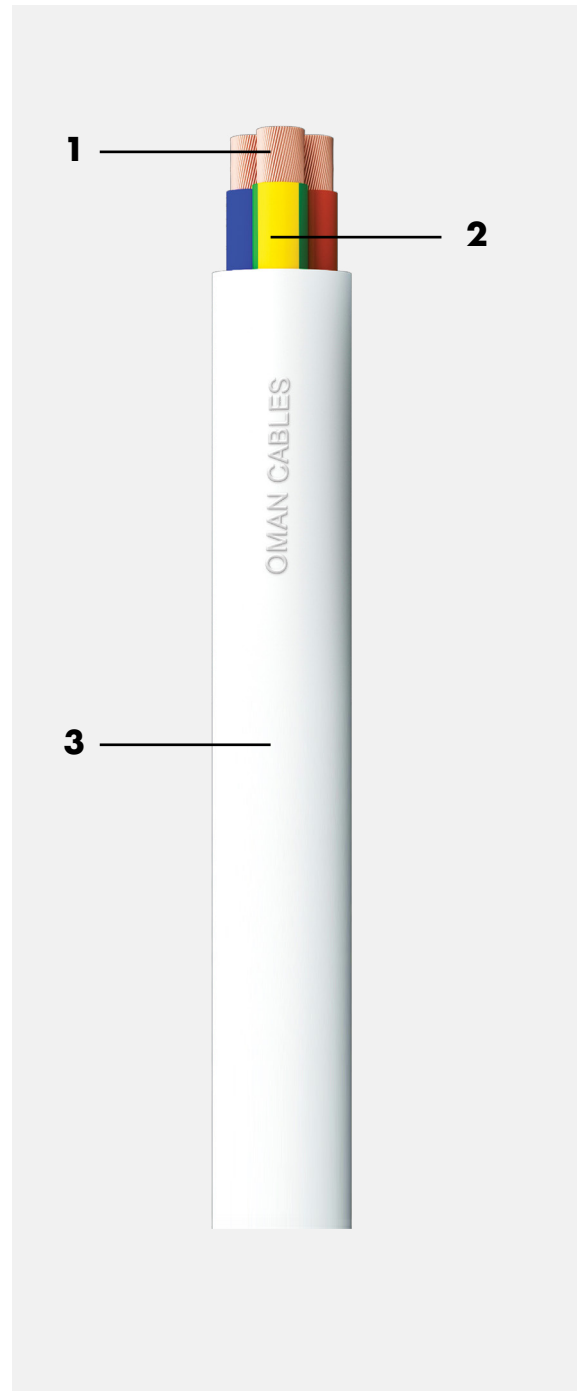
### CONSTRUCTION

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

Two Cores



Three Cores



Four Cores



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 <sup>2</sup>	mm	°C	mm	mm	mm	A
0.8	0.6	90	7.0	7.5	8.0	11.5
1.0	0.6	90	7.5	7.5	8.5	14.0
1.5	0.7	90	8.5	9.0	10.0	16.0
2.5	0.8	90	10.0	11.0	11.5	22.0
4.0	0.8	90	11.0	12.0	13.5	32.0
6.0	0.8	90	13.0	13.5	15.0	38.0
10.0	1.0	90	15.5	16.5	18.5	56.0

(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

# 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.

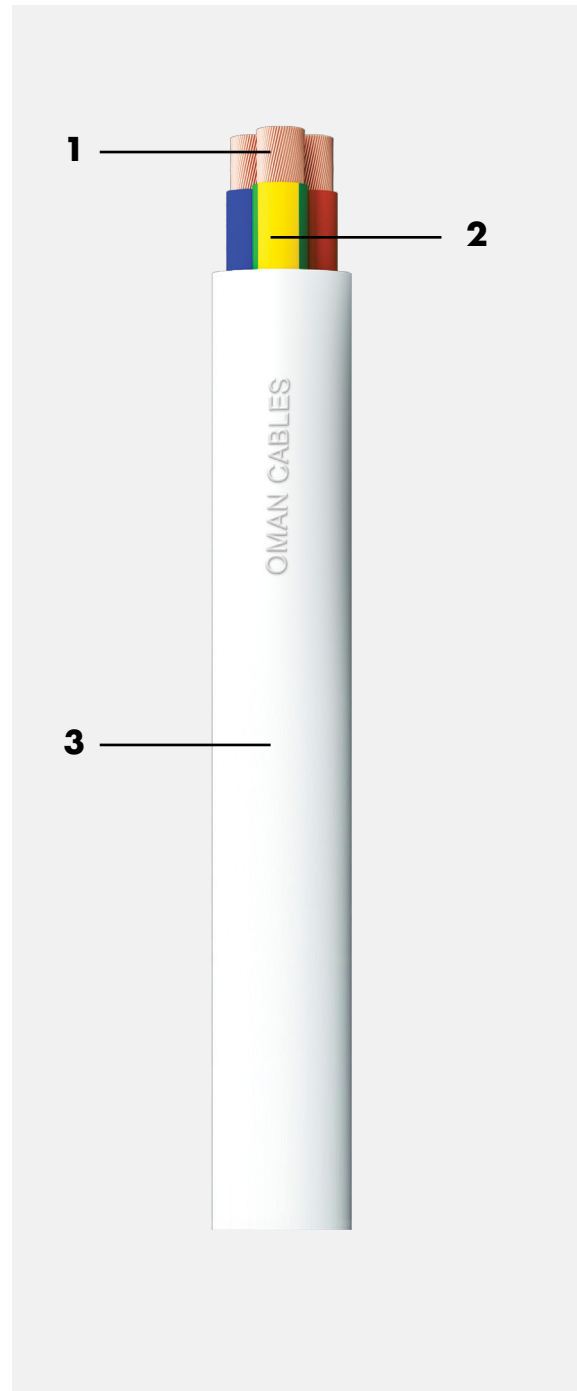
### CONSTRUCTION

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

Two Cores



Three Cores



Four Cores



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 <sup>2</sup>	mm	°C	mm	mm	mm	A
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  
Tray



Minimum Bending  
Radius 6XOD




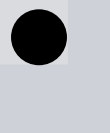
# General Tables





# 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 <sup>2</sup> 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 <sup>c</sup>	B
	Single-core or multicore cables: Fixed on (Clipped Direct), or spaced less than 0.3 x cable diameter from wooden or masonry wall <sup>c</sup>	C
	Single-core or multicore cables: On perforated tray run horizontally or vertically <sup>c,h</sup>	E or F

**C** Care is needed where the cable runs vertically and ventilation is restricted. The ambient temperature at the top of the vertical section can be much higher.

**H** De = the external diameter of a multicore cable:  
 - 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

NUMBER OF CIRCUITS OR MULTICORE CABLES													
Arrangement (cables touching)	1	2	3	4	5	6	7	8	9	12	16	20	To be used with current carrying capacities, Reference
Bunched in air, on a surface, embedded or enclosed	1.00	0.80	0.70	0.65	0.60	0.57	0.54	0.52	0.50	0.45	0.41	0.38	Methods A to F
Single layer on wall or floor	1.00	0.85	0.79	0.75	0.73	0.72	0.72	0.71	0.70	0.70	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.

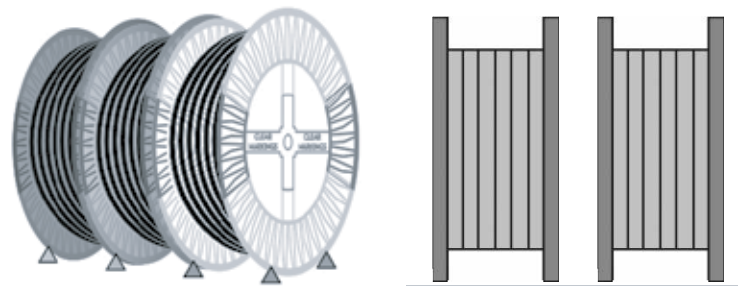
# Storage and Installation

# STORAGE

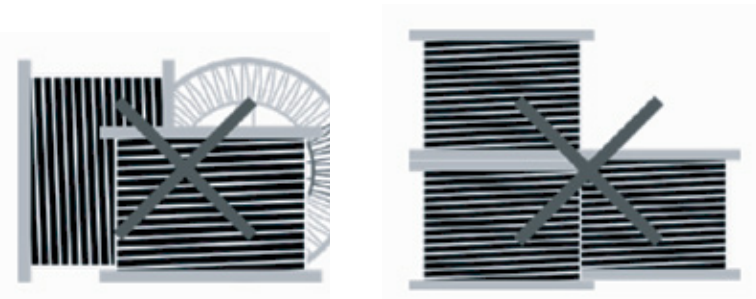
Cables should be stored with special care to prevent immediate as well as mid-term failures. The below recommendations are for both indoor and outdoor storage applications. Additional measures need to be considered for outdoor drum storage considering the surrounding environmental conditions and in accordance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

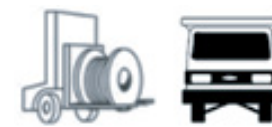


## NOT RECOMMENDED



# DRUM HANDLING INSTRUCTIONS

## 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



Always load with flanges on edge and check and block securely



Secure drums adequately before transportation

## RECOMMENDED



Do not lift by top flange, Cable or reel



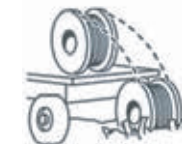
The reel flanges and mashes the cable



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

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



**China Loong Power Cable Co., Ltd.**

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District, Guangzhou,China(Mainland)

[www.china-wires.com](http://www.china-wires.com)