



OmanCables
الكابلات العمانية

**BUILDING
SUSTAINABLE
GROWTH**

BUILDING WIRES CATALOGUE



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Oman Cables Industry SAOG develops, manufactures and markets a totally integrated variety of electrical products, which include medium voltage power cables, low voltage power & control cables, instrumentation cables, pilot cables, overhead power transmission line conductors and building wires. Oman Cables also offers cables with special features and customized solutions.

Our cable and wire products provide a comprehensive range of construction material putting quality, compliance and a strong customer focus at the heart of operations.


MARKET SEGMENTS




Utilities
(Power & Water)




Building and
Construction
Industries




Oil & Gas and
Petrochemicals



Industrial, Mining
& Processing Plants



Transportation
& Infrastructure



Renewables

Being a leading cable supplier, we believe cables are fundamental to every project. By sharing our technical expertise and creating a highly customer-centric approach to how we operate, we can help our clients create cable connections that deliver the performance their projects demand.

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.

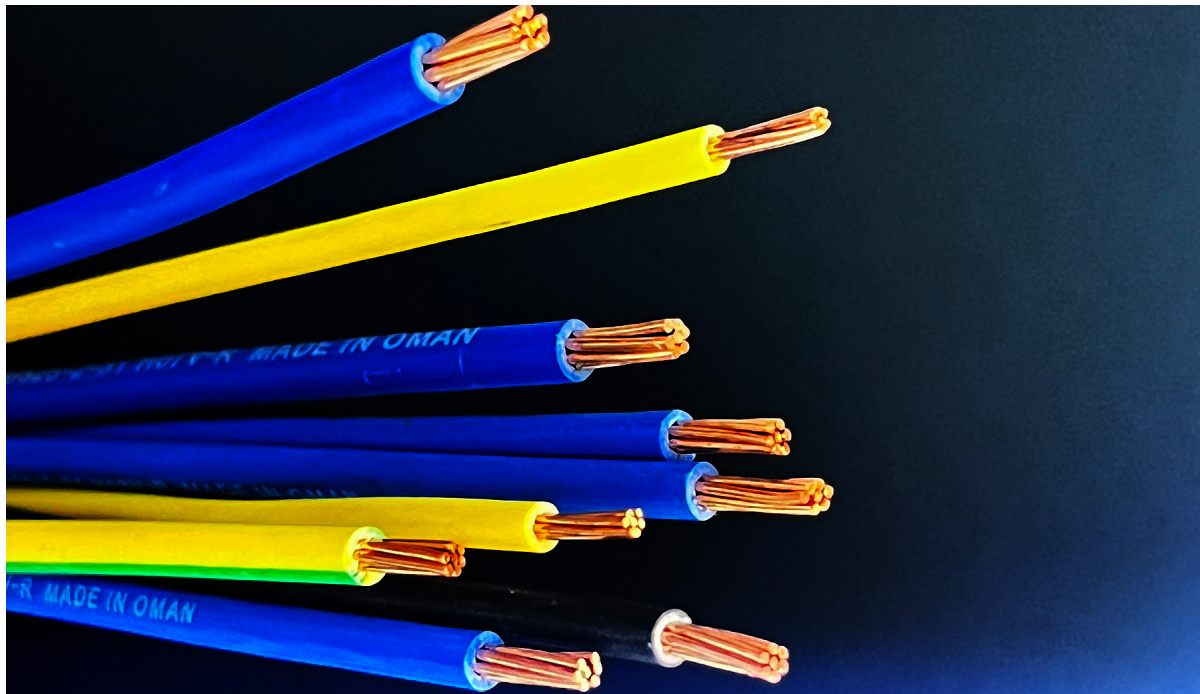


TECHNICAL INFORMATION OF LSZH INSULATED WIRES

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:-

- | | |
|--|---|
| 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 | ○ Halogen Content – Max 0.5% |
| 3 Similar mechanical and electrical properties to PVC | ○ pH value – Minimum 4.3 |
| 4 Acceptable process-ability | ○ Conductivity – Maximum 10 micro Siemens/mm |
| 5 Low additional cost | |

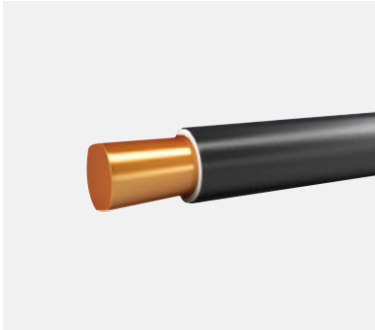


COMPARISON OF CHEMICAL RESISTANCE
PROPERTIES OF LSZH AND PVC

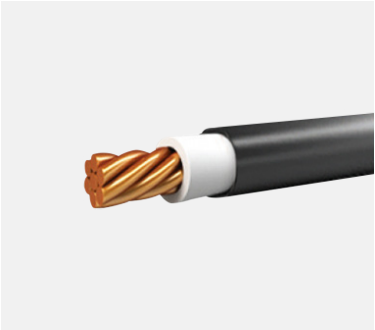
PROPERTIES	PVC	LSZH
Oxidation Resistance	E	E
Heat Resistance	G-E	G
Oil Resistance	F	P
Low-Temperature Flexibility	P-G	F-G
Weather, Sun Resistance	G-E	P
Ozone Resistance	E	E
Abrasion Resistance	F-G	F
Electrical Properties	F-G	F
Flame Resistance	G	E
Nuclear Radiation Resistance	F	G
Water Resistance	F-G	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 (mm²)	APPROX. NUMBER OF WIRES (CLASS 5)	
	Cu	
0.5	16	
0.75	24	
1	32	
1.5	30	
2.5	50	
4	56	
6	84	
10	80	

NOMINAL CROSS-SECTIONAL AREA (mm²)	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	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
(mm ²)		NOS	(Ω/KM)	(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) : 1.7241x10⁻⁸ (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.

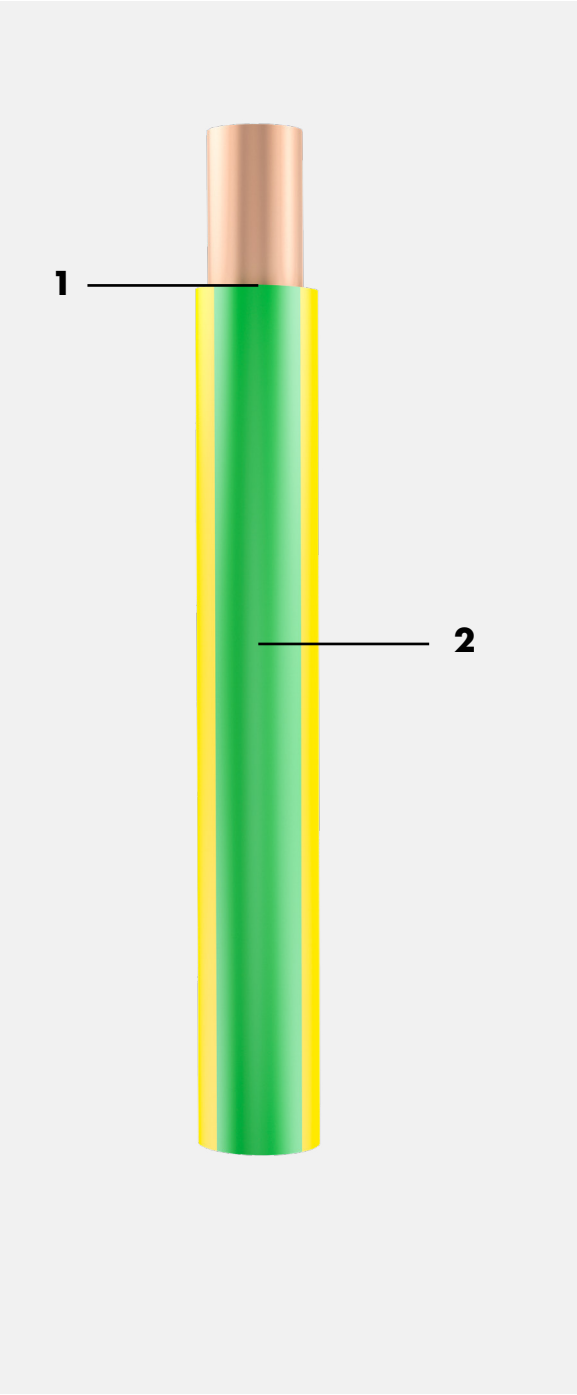
CONSTRUCTION

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



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 ²	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

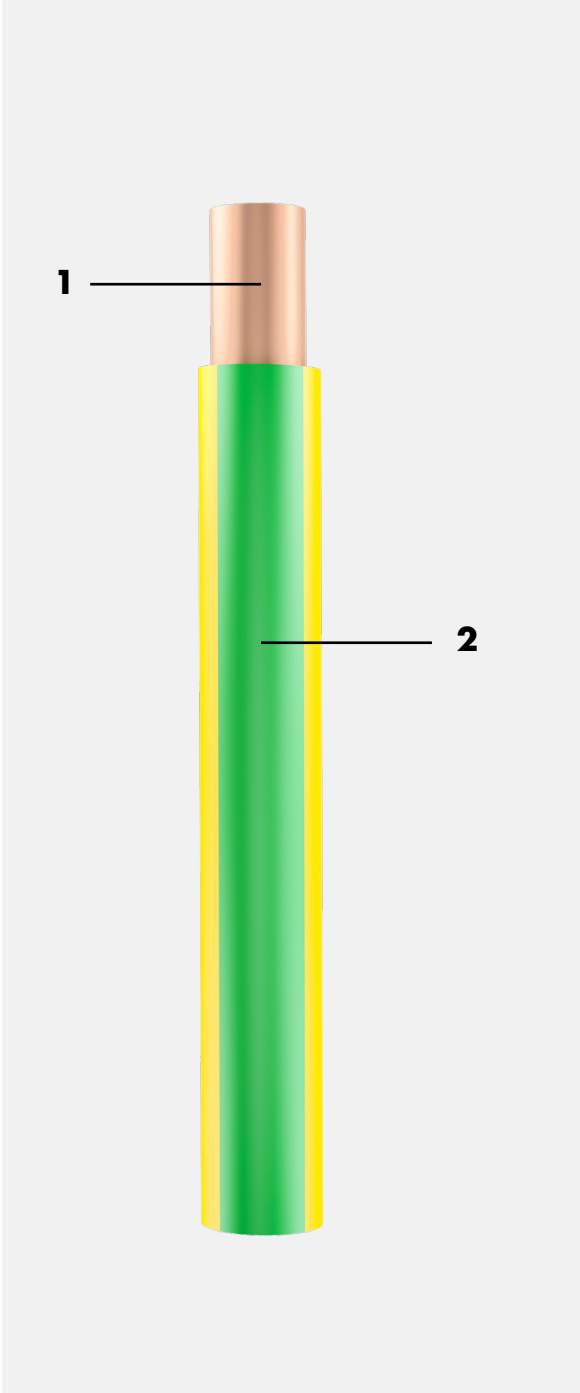
Extruded HR-PVC Type TI 3 or PVC Type E

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

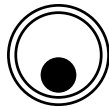
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	A
0.5	0.6	90	2.3	10
0.75	0.6	90	2.5	11.5
1	0.6	90	2.7	14

(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

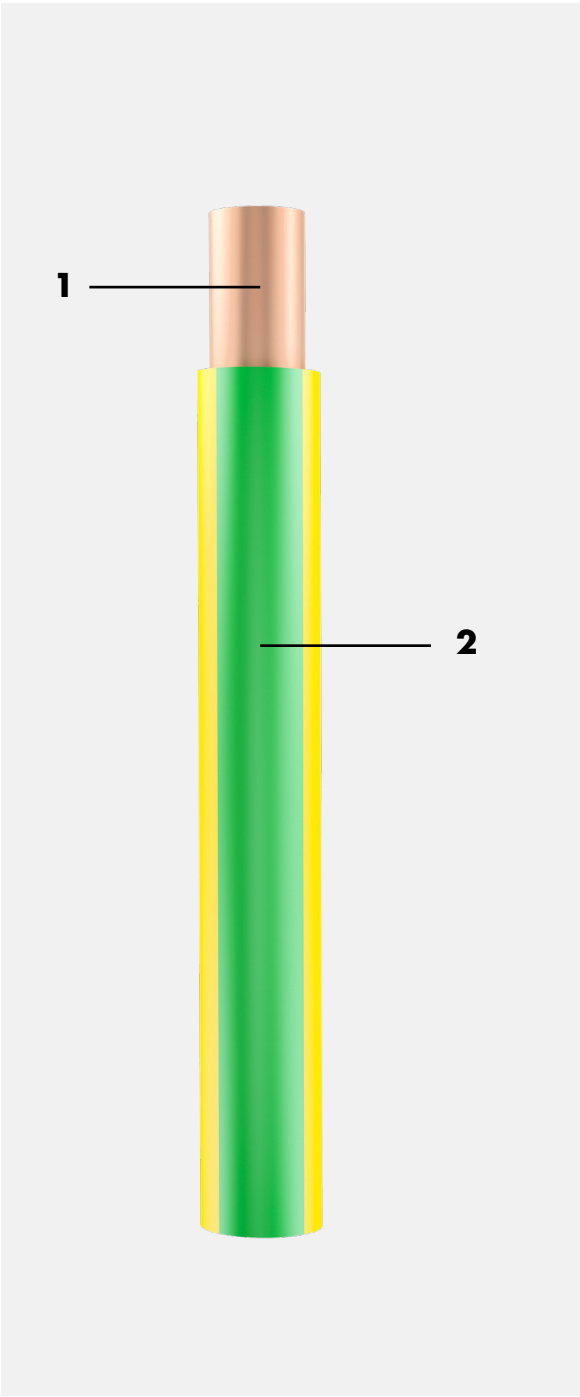
Extruded LSZH Type EI 5

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 ²	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

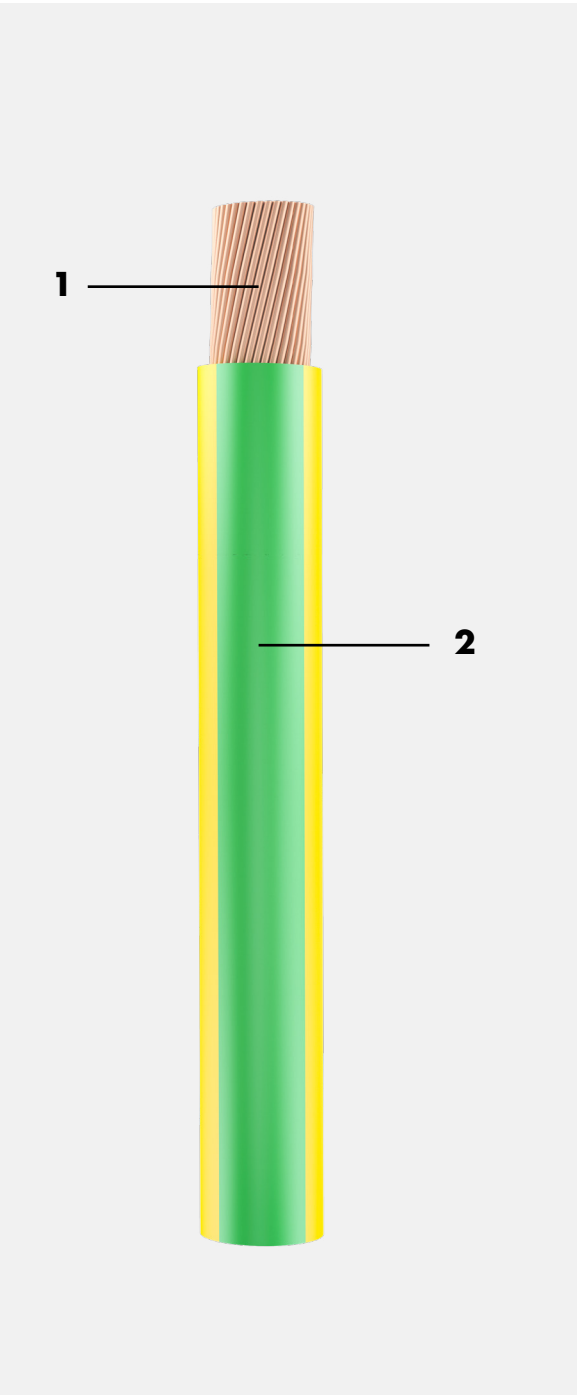
Extruded PVC Type TI 1 or PVC Type C

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:

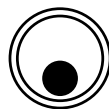
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	A
0.5	0.6	70	2.5	9
0.75	0.6	70	2.7	10
1	0.6	70	2.8	12

(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

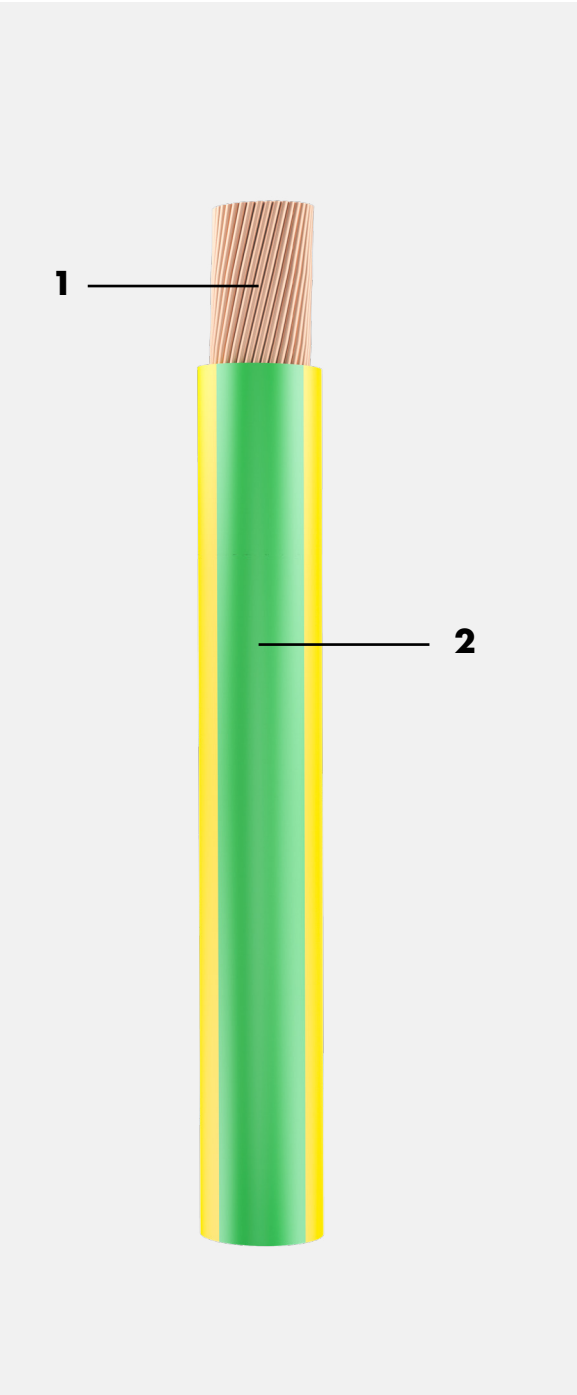
Extruded HR-PVC Type TI 3 or PVC Type E

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:

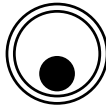
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	A
0.5	0.6	90	2.5	10
0.75	0.6	90	2.7	11.5
1	0.6	90	2.8	14

(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.

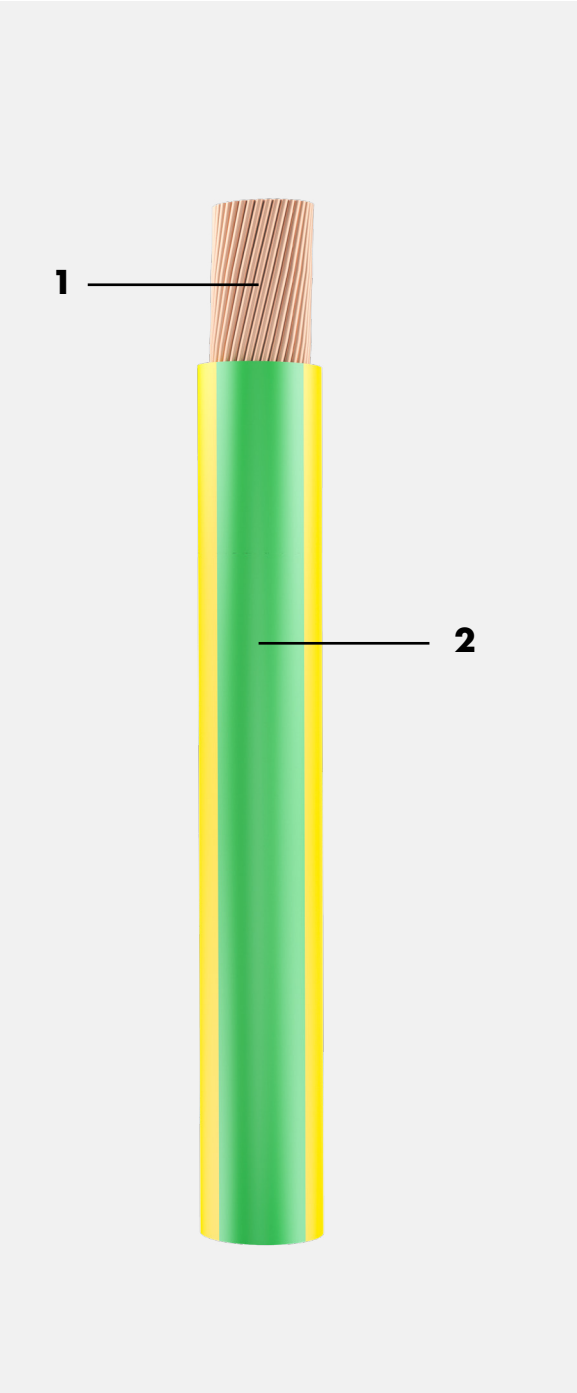
CONSTRUCTION

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



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 ²	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

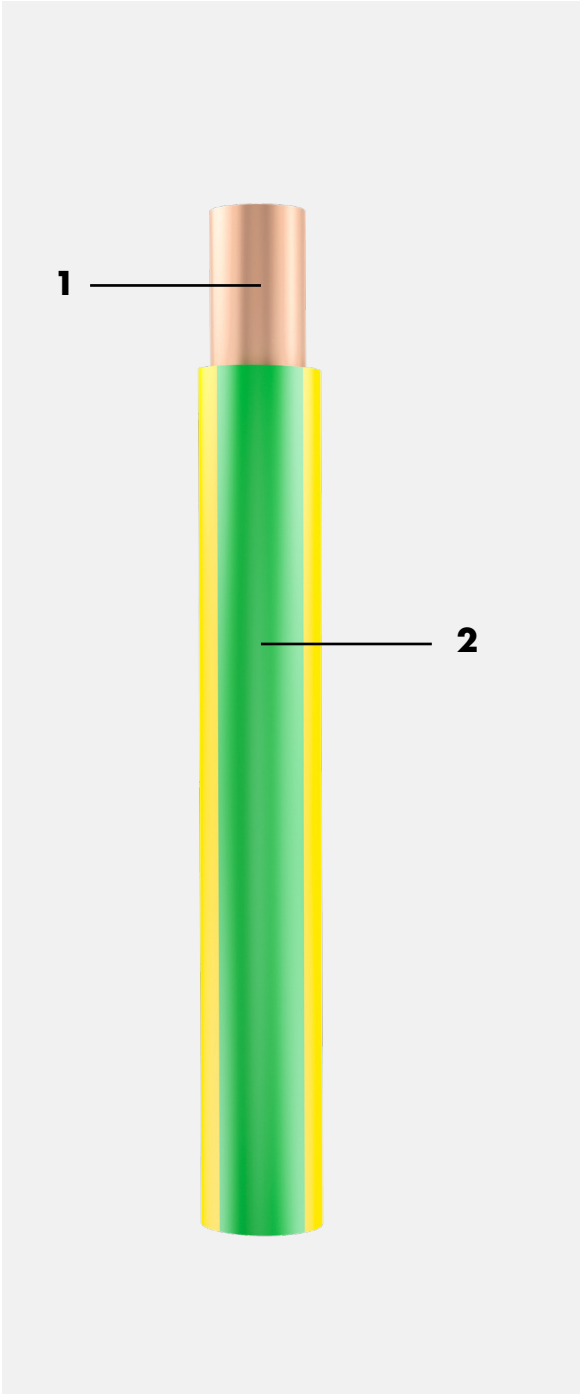
Annealed plain copper (single strand solid, class-1)

2. Insulation

Extruded PVC Type TI 1 or PVC Type C

APPLICATION STANDARDS

BS EN 50525-2-31
IEC 60227-3



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:

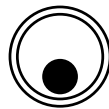
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	A
1.5	0.7	70	3.2	15.5
2.5	0.8	70	3.9	21
4	0.8	70	4.4	28
6	0.8	70	5.0	36
10	1.0	70	6.4	50

(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 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

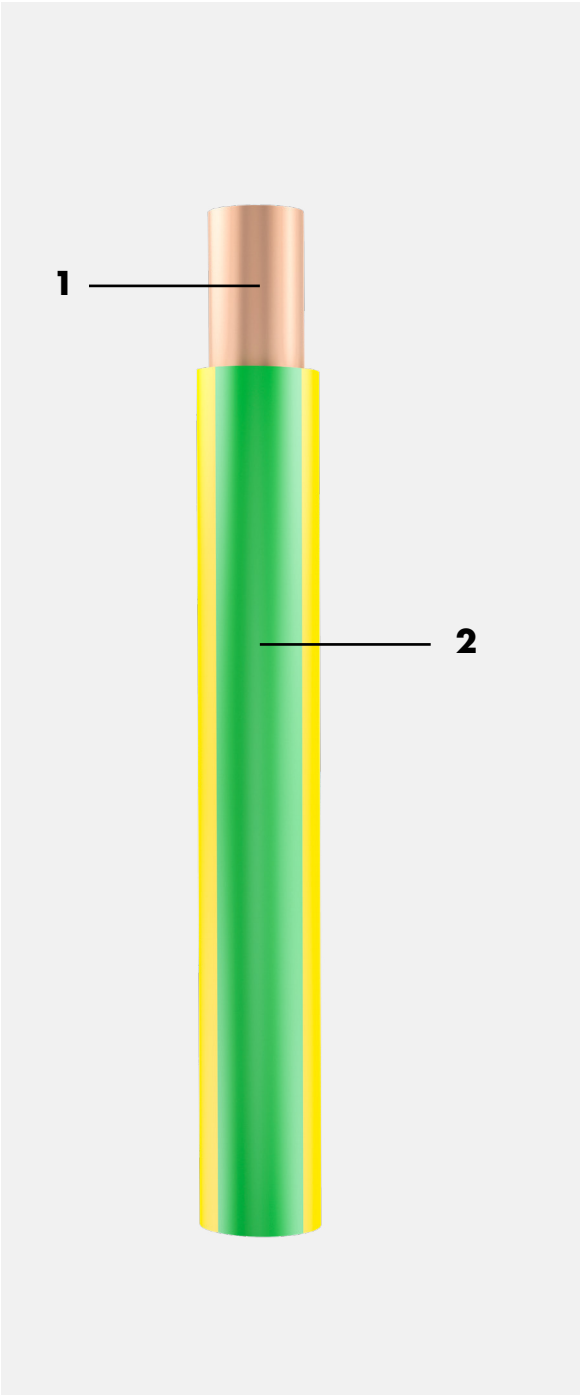
Extruded HR-PVC Type TI 3 or PVC Type E

APPLICATION STANDARDS

BS EN 50525-2-31
IEC 60227-3



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 ²	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.

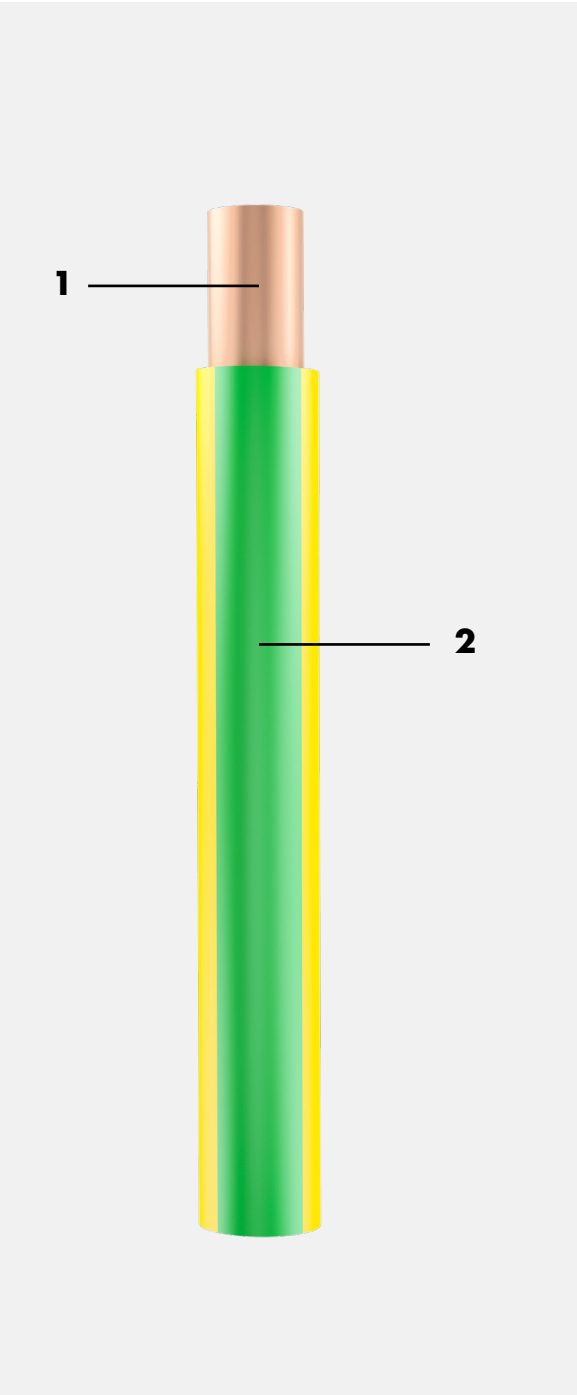
CONSTRUCTION

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



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 ²	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

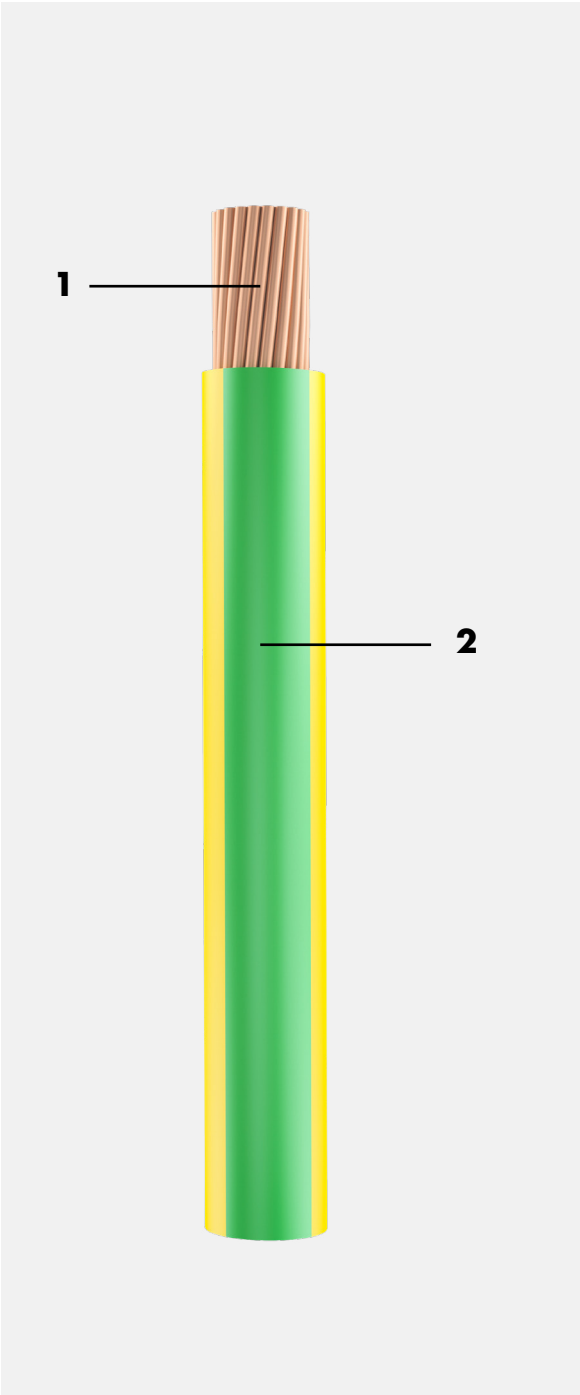
Annealed plain copper (multi stranded, class-2)

2. Insulation

Extruded PVC Type TI 1 or PVC Type C

APPLICATION STANDARDS

BS EN 50525-2-31
IEC 602227-3



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 ²	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.

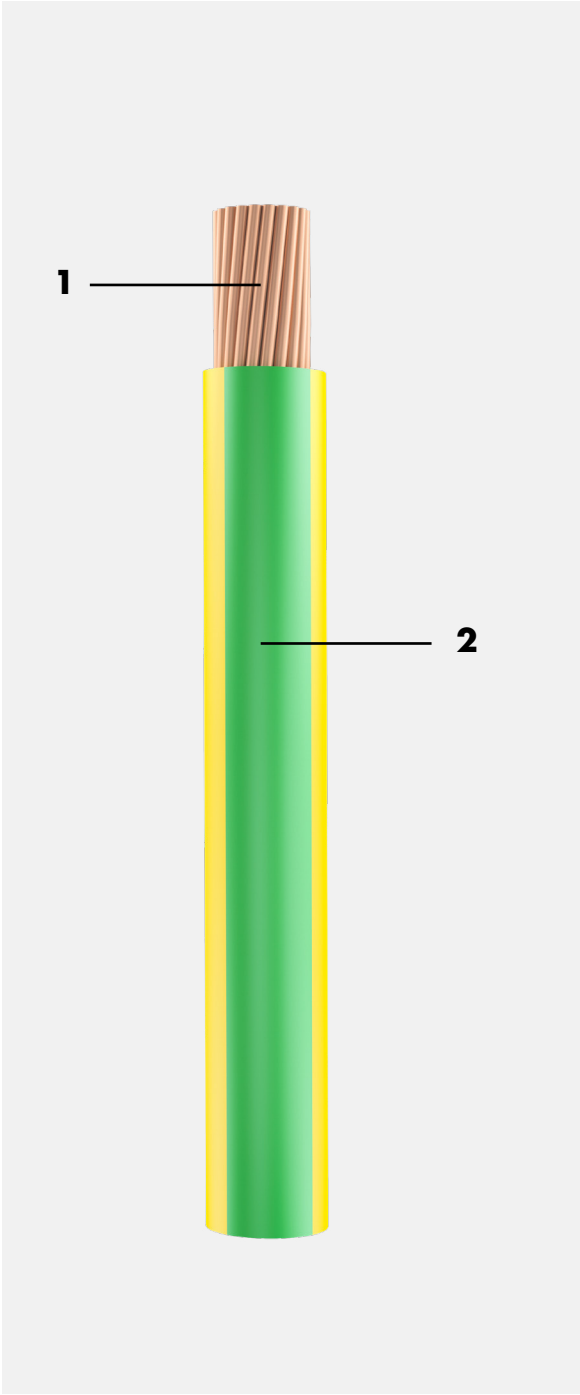
CONSTRUCTION

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



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 ²	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.

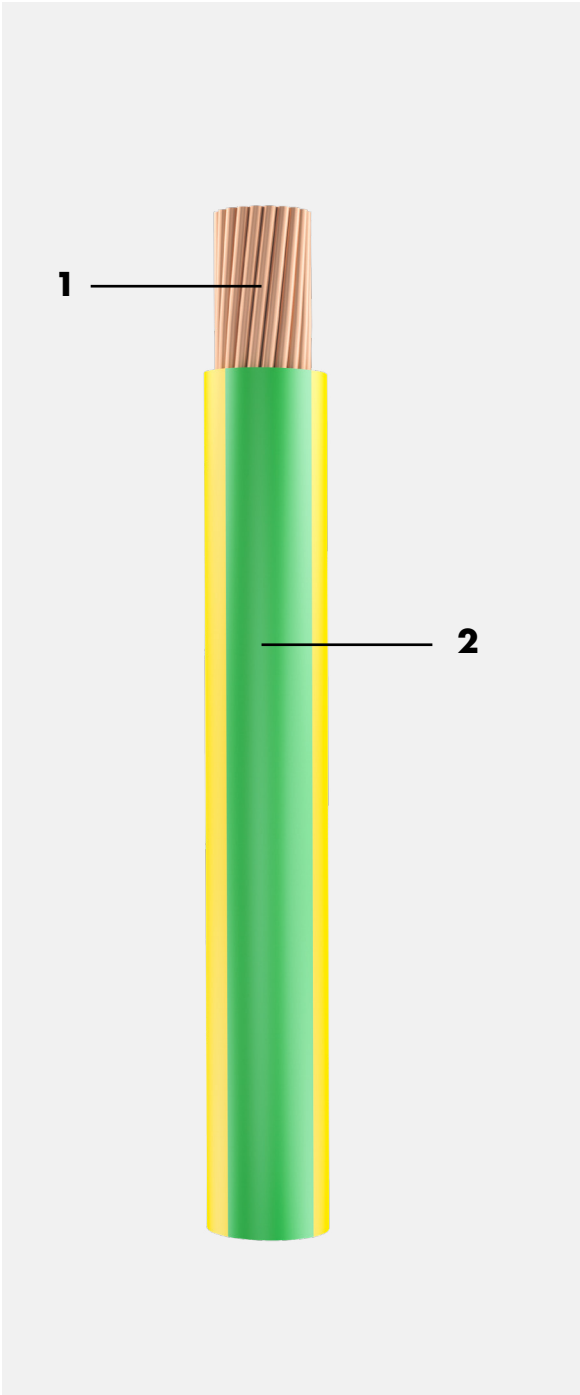
CONSTRUCTION

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



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 ²	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	38.2	666
630	2.8	90	45.5	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

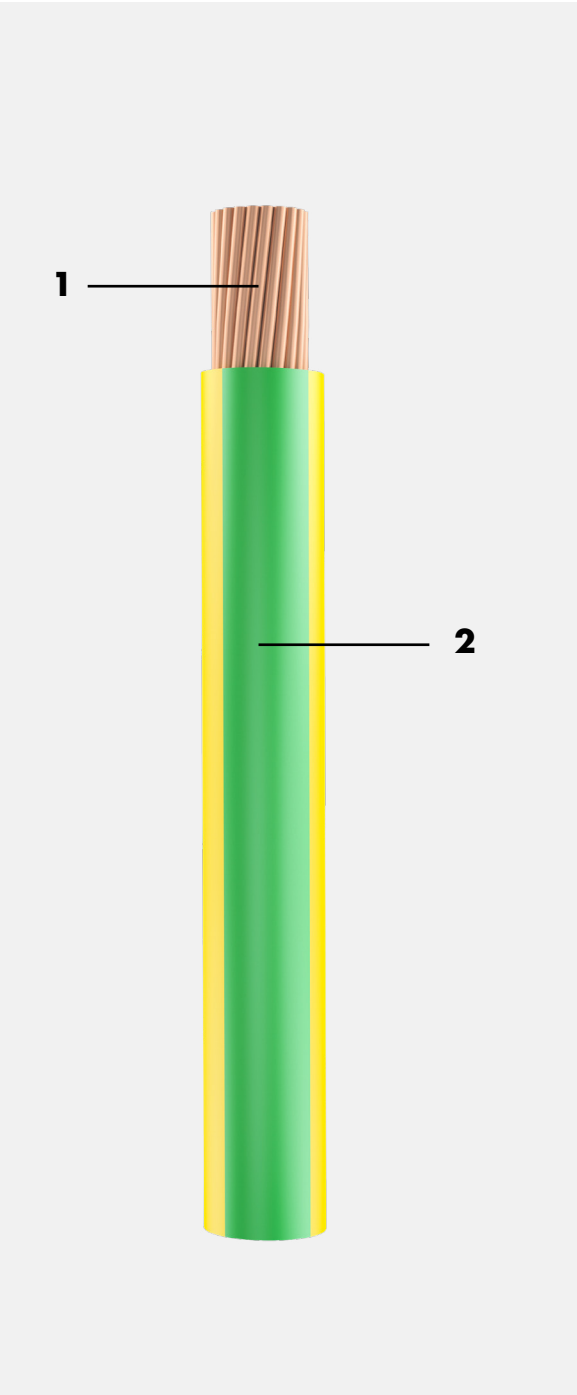
Extruded PVC Type TI 1 or PVC Type C

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 ²	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

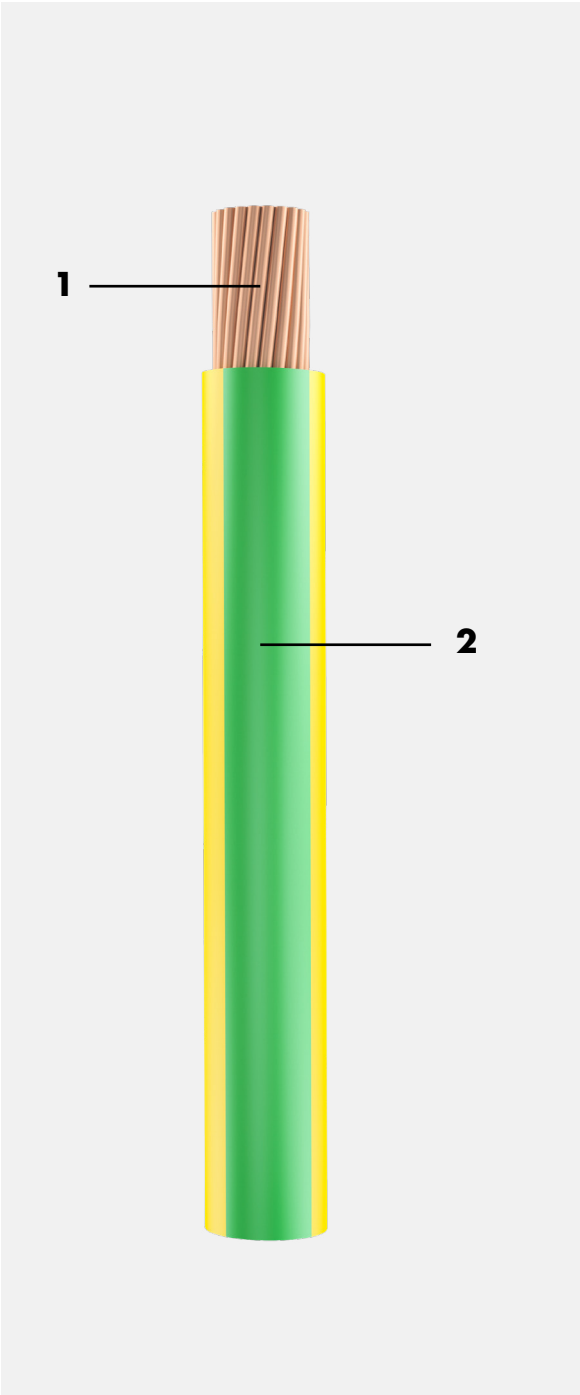
Annealed plain copper (multi stranded flexible, class-5)

2. Insulation

Extruded HR-PVC Type TI 3 or PVC Type E

APPLICATION STANDARDS

BS EN 50525-2-31
IEC 60227-3



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 ²	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.

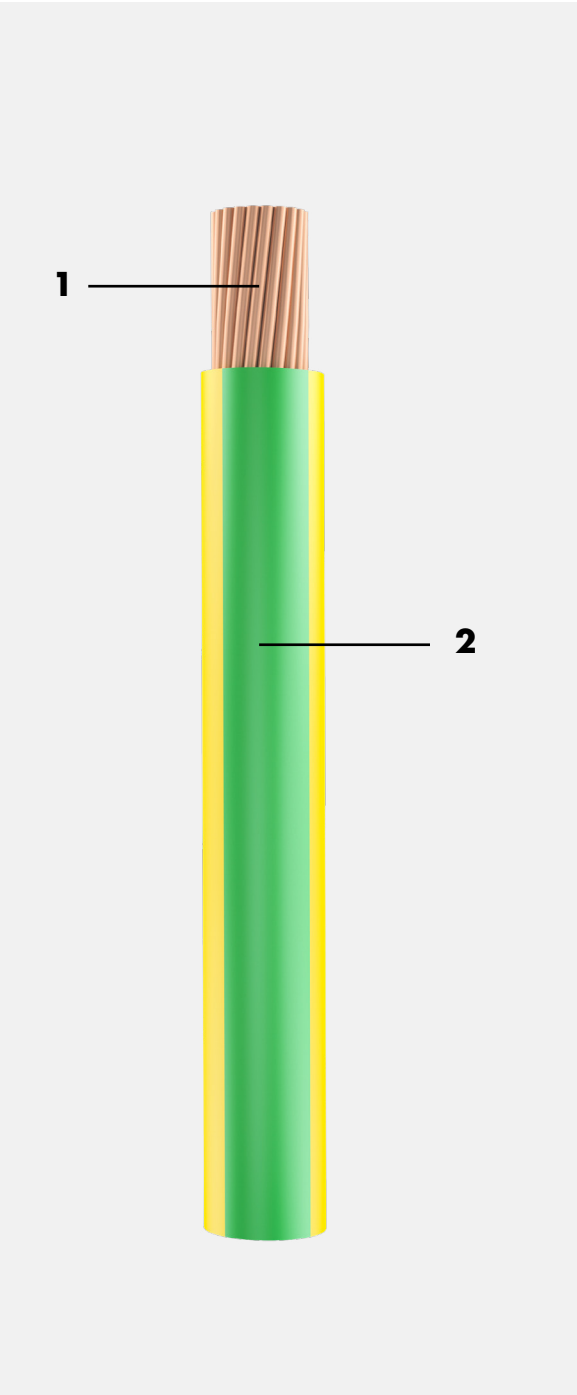
CONSTRUCTION

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



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

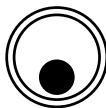
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	A
1.5	0.7	90	3.5	20
2.5	0.8	90	4.3	28
4	0.8	90	4.9	37
6	0.8	90	5.5	48
10	1.0	90	7.1	66

(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

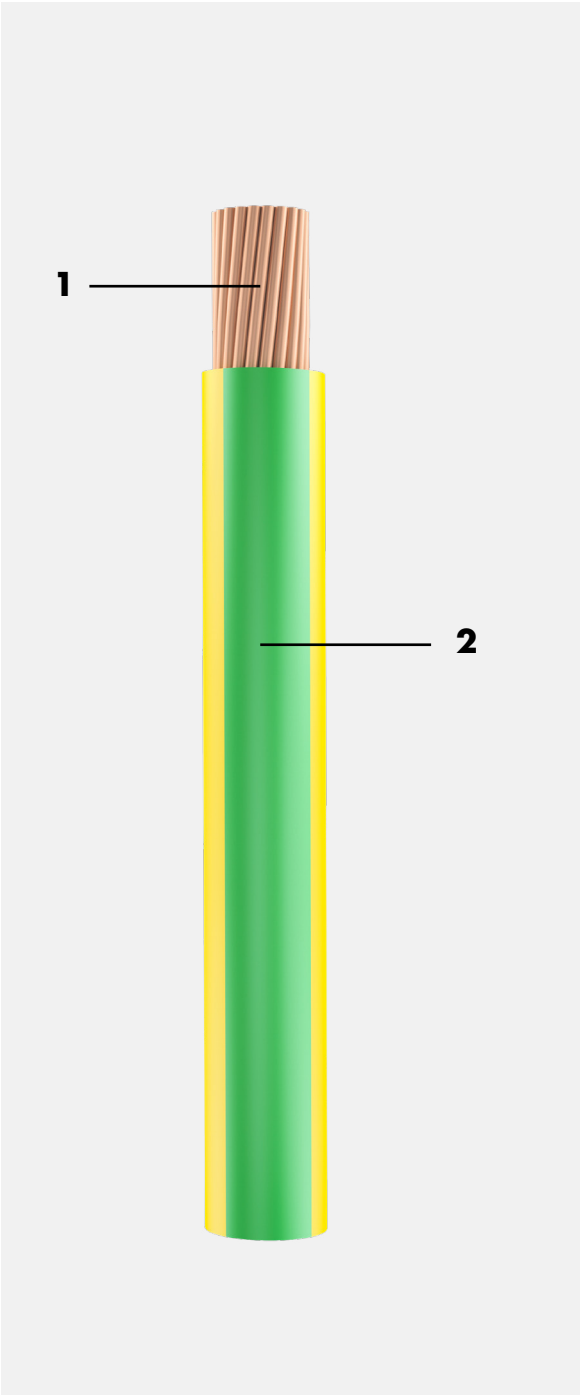
Annealed plain copper (multi stranded, class-2)

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 ²	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

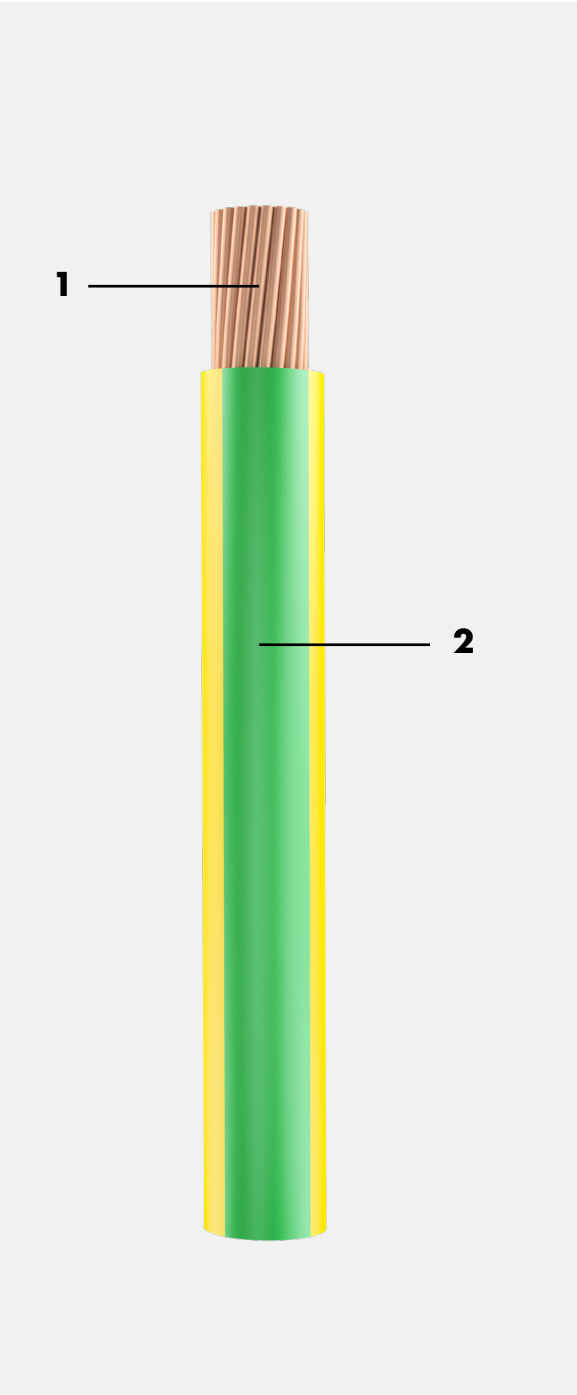
Annealed plain copper (multi stranded, class-2)

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 ²	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

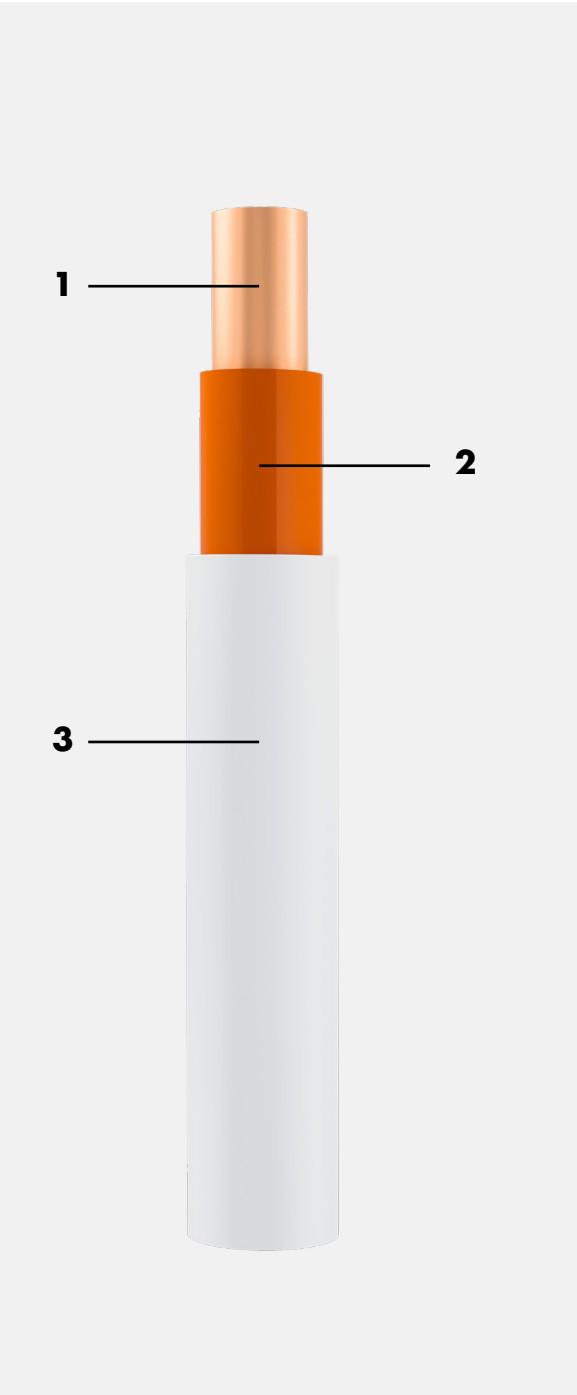
Extruded PVC Type TI 1

3. Sheath

Extruded PVC Type 6

APPLICATION STANDARDS

BS 6004



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

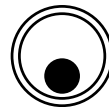
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	mm	A
1.0	0.6	70	0.8	4.5	12
1.5	0.7	70	0.8	5.0	15.5
2.5	0.8	70	0.8	5.7	21

(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

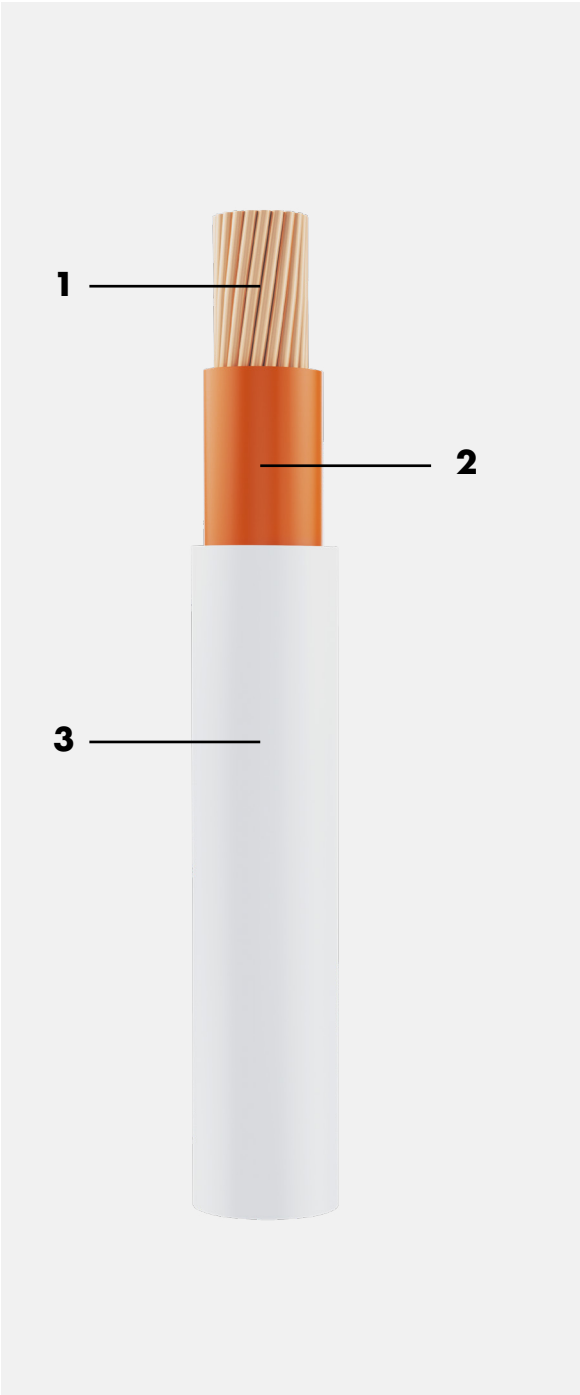
Extruded PVC Type 6

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

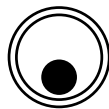
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	mm	A
4	0.8	70	0.9	6.7	28
6	0.9	70	0.9	7.3	36
10	1.0	70	0.9	8.8	50
16	1.0	70	1.0	10.1	68
25	1.2	70	1.1	12.1	89
35	1.2	70	1.1	13.5	110

(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

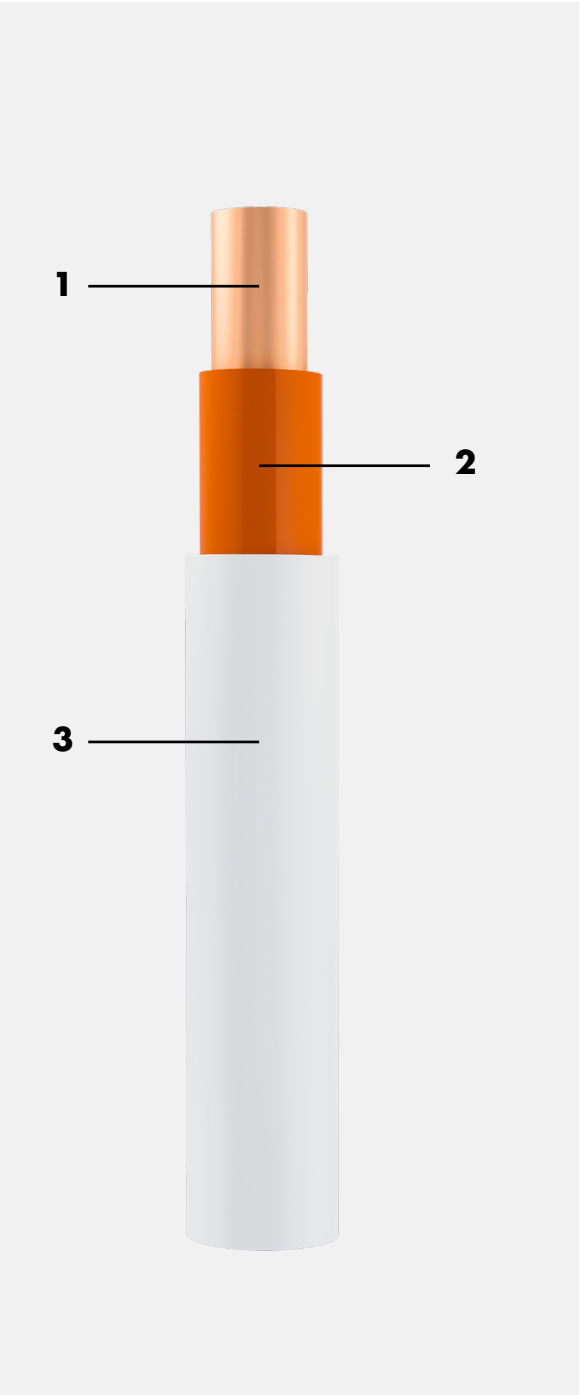
Extruded XLPE Type GP 8

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 ²	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

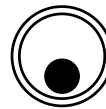
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	mm	A
1.5	0.7	90	0.8	5.2	20
2.5	0.7	90	0.8	5.6	28
4	0.7	90	0.9	6.4	37
6	0.7	90	0.9	7.1	48
10	0.7	90	0.9	8.1	66
16	0.7	90	0.9	9.2	88
25	0.9	90	1.0	11.4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



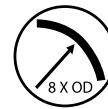
Conduit/
Ducts



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

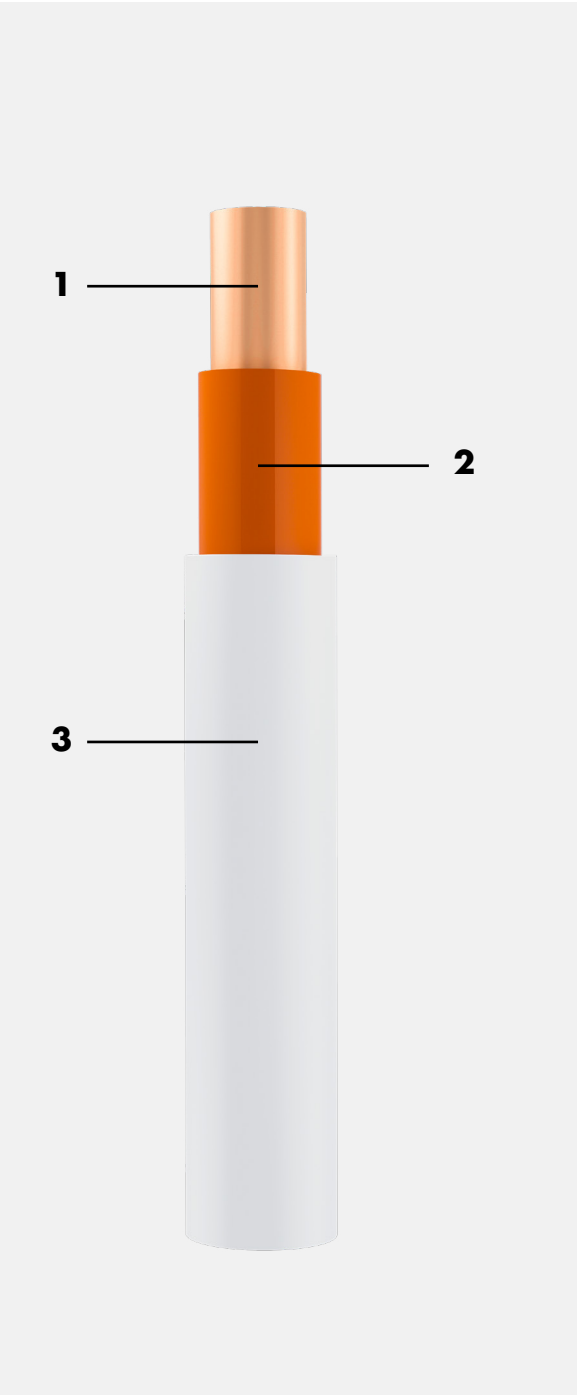
Extruded LSZH Type EI 5

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

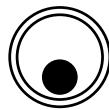
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	mm	A
1.0	0.7	90	0.8	4.8	15
1.5	0.7	90	0.8	5.0	20
2.5	0.7	90	0.8	5.5	28
4	0.7	90	0.9	6.3	37
6	0.7	90	0.9	6.8	48

(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

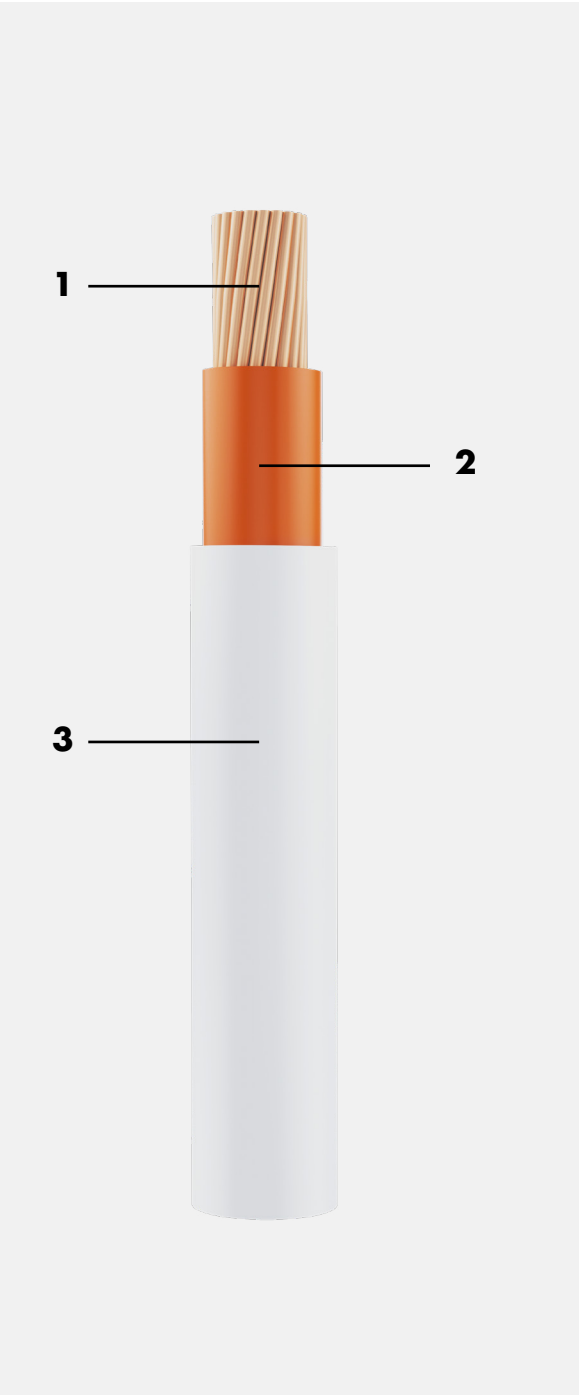
Extruded LSZH Type EI 5

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

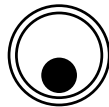
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OVERALL DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING
mm ²	mm	°C	mm	mm	A
1.5	0.7	90	0.8	5.2	20
2.5	0.7	90	0.8	5.6	28
4	0.7	90	0.9	6.4	37
6	0.7	90	0.9	7.1	48
10	0.7	90	0.9	8.1	66
16	0.7	90	0.9	9.2	88
25	0.9	90	1.0	11.4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

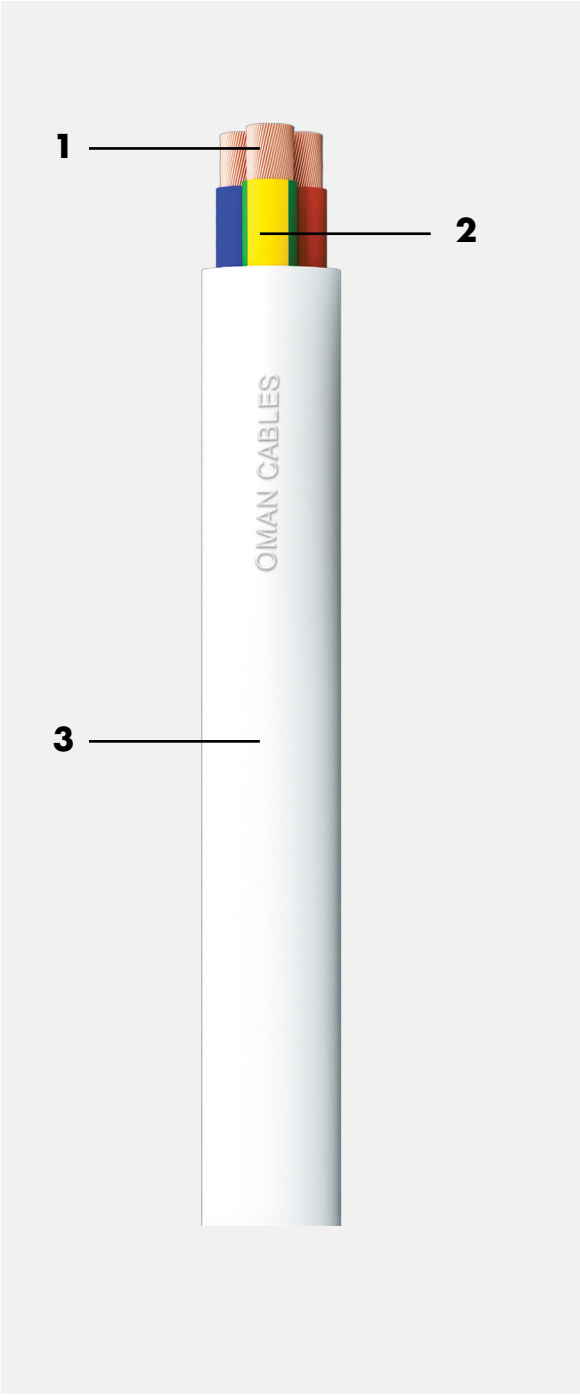
CONSTRUCTION

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

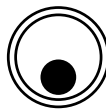
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	APPROX OVERALL DIAMETER FOR TWO CORE CABLE	APPROX OVERALL DIAMETER FOR THREE CORE CABLE	APPROX OVERALL DIAMETER FOR FOUR CORE CABLE	CURRENT RATING
mm ²	mm	°C	mm	mm	mm	A
0.75	0.6	70	7.0	7.5	8.0	10
1.0	0.6	70	7.5	7.5	8.5	12
1.5	0.7	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.

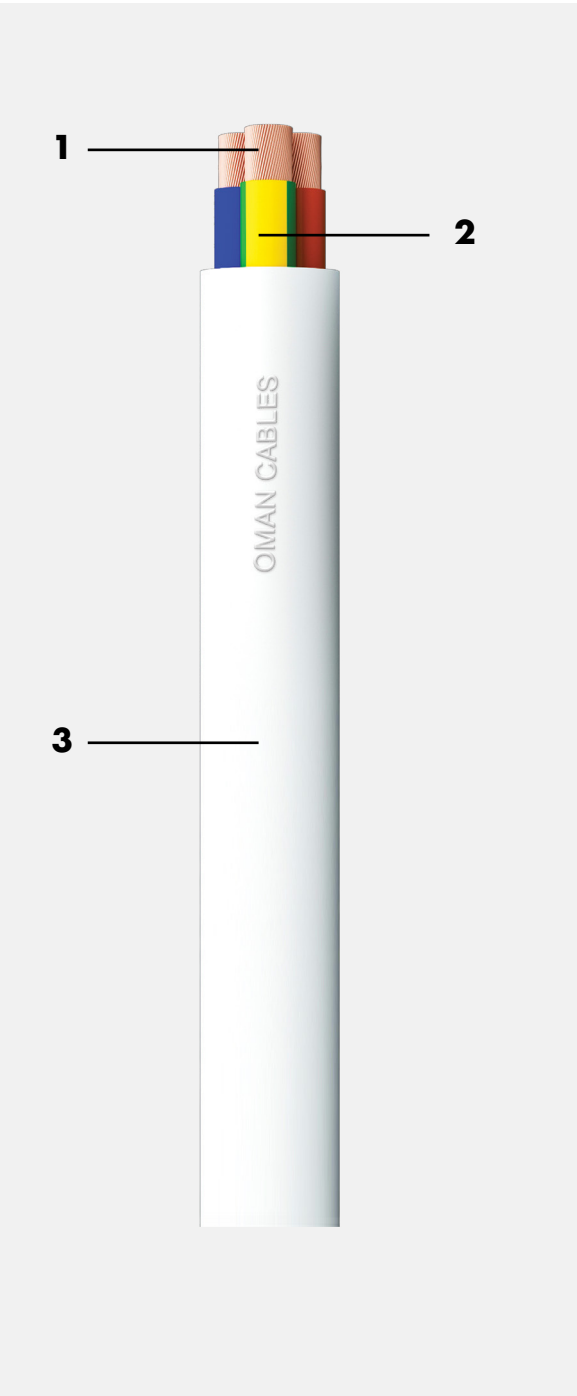
CONSTRUCTION

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



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	A
0.75	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.

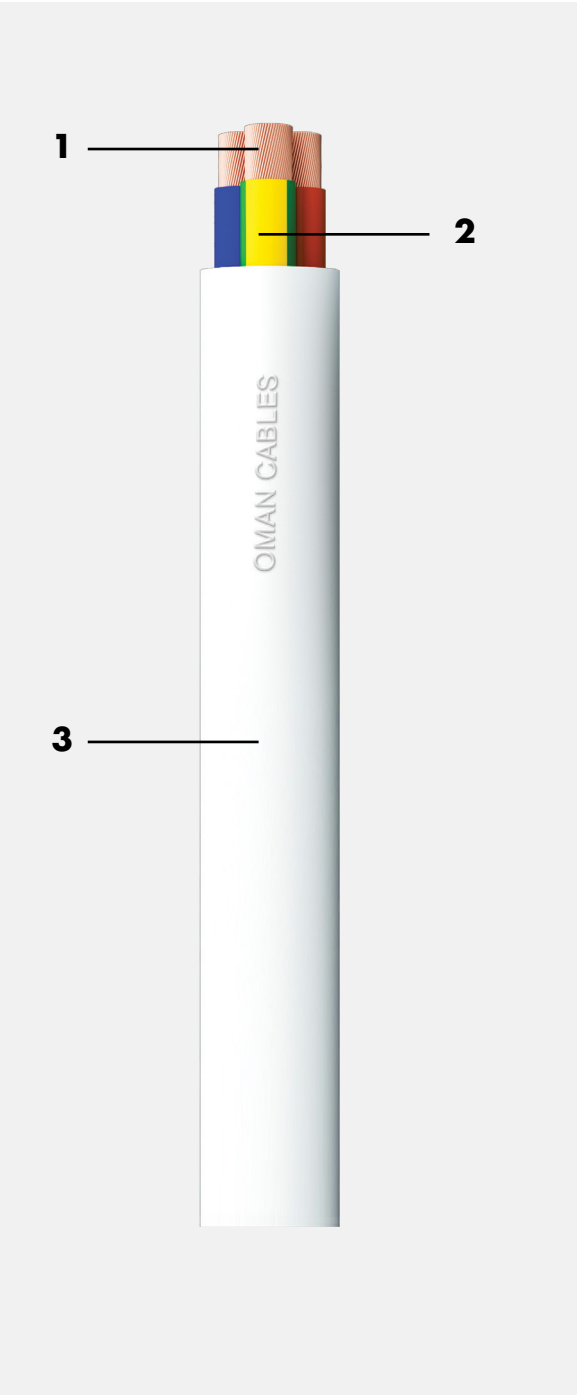
CONSTRUCTION

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

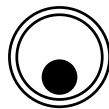
CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS	MAXIMUM OPERATING TEMPERATURE	APPROX OVERALL DIAMETER FOR TWO CORE CABLE	APPROX OVERALL DIAMETER FOR THREE CORE CABLE	APPROX OVERALL DIAMETER FOR FOUR CORE CABLE	CURRENT RATING
mm ²	mm	°C	mm	mm	mm	A
0.75	0.6	90	7.0	7.5	8.0	13
1.0	0.6	90	7.5	7.5	8.5	15
1.5	0.7	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

Conductor operating temperature: 70°C

Conductor operating temperature: 70°C

SINGLE CORE COPPER CONDUCTOR 70°C THERMOPLASTIC (PVC) INSULATED, UN-ARMoured, WITH OR WITHOUT SHEATH

Conductor operating temperature: 70°C

Conductor operating temperature: 70°C

Note: Spacing larger than one cable diameter will result in a larger voltage drop

Table 2: Current Carrying Capacity

Ambient temperature: 30 °C
Conductor operating temperature: 90 °C

Reference Method A (Enclosed In Conduit In Thermally Insulating Wall Etc.)				Reference Method B (Enclosed In Conduit On A Wall Or In Trunking Etc.)			Reference Method C (Clipped Direct)		Reference Method F (In Free Air Or On A Perforated Cable Tray Horizontal Or Vertical)		
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.	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, THREE-PHASE A.C. TREFOIL	Touching
1 (mm²)	2 (A)	3 (A)	4 (A)	5 (A)	6 (A)	7 (A)	8 (A)	9 (A)	10 (A)		
1	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	99	-	-	-	-	
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	990	904	1083	998	946		
630	-	-	900	764	1130	1033	1254	1151	1088		

Table - 2 A: Voltage Drop



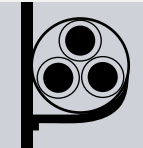
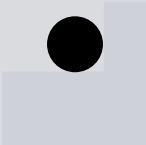
Conductor operating temperature: 90 °C

CONDUCTOR CROSSECTIONAL AREA	2 CABLES, D.C.	2 Cables, Single-Phase A.C.				3 Or 4 Cables, Three-Phase A.C.			
		REFERENCE METHODS A & B (ENCLOSED IN CONDUIT OR TRUNKING)		REFERENCE METHODS C & F (Clipped Direct, ON TRAY OR IN FREE AIR)		REFERENCE METHODS A & B (ENCLOSED IN CONDUIT OR CABLES TOUCHING CABLES SPACED * TRUNKING)		«REFERENCE METHODS C & F (Clipped Direct, ON TRY OR IN FREE AIR)»	
		CABLES TOUCHING		CABLES SPACED *		CABLES TOUCHING, TREFOIL		CABLES TOUCHING, FLAT	
1 (mm²)	2 (mV/A/m)	3 (mV/A/m)	4 (mV/A/m)	5 (mV/A/m)	6 (mV/A/m)	7 (mV/A/m)	8 (mV/A/m)	9 (mV/A/m)	
1	46	46	46	46	40	40	40	40	
1.5	31	31	31	31	27	27	27	27	
2.5	19	19	19	19	16	16	16	16	
4	12	12	12	12	10	10	10	10	
6	7.9	7.9	7.9	7.9	6.8	6.8	6.8	6.8	
10	4.7	4.7	4.7	4.7	4.0	4.0	4.0	4.0	
16	2.9	2.9	2.9	2.9	2.5	2.5	2.5	2.5	
25	1.85	1.90	1.85	1.85	1.65	1.60	1.60	1.65	
35	1.35	1.35	1.35	1.35	1.15	1.15	1.15	1.20	
50	0.99	1.05	1.00	1.0	0.90	0.87	0.87	0.89	
70	0.68	0.75	0.71	0.73	0.65	0.61	0.62	0.65	
95	0.49	0.58	0.52	0.56	0.50	0.45	0.46	0.49	
120	0.39	0.48	0.43	0.47	0.42	0.37	0.38	0.42	
150	0.32	0.43	0.36	0.41	0.37	0.31	0.32	0.37	
185	0.25	0.37	0.30	0.36	0.32	0.26	0.28	0.33	
240	0.190	0.33	0.25	0.31	0.29	0.22	0.24	0.29	
300	0.155	0.31	0.22	0.29	0.27	0.195	0.21	0.27	
400	0.120	0.29	0.20	0.27	0.25	0.175	0.195	0.26	
500	0.093	0.28	0.185	0.26	0.24	0.160	0.180	0.25	
630	0.072	0.27	0.175	0.25	0.23	0.150	0.170	0.24	

Note: Spacing larger than one cable diameter will result in a larger voltage drop

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/m²K	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	B
	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

- 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

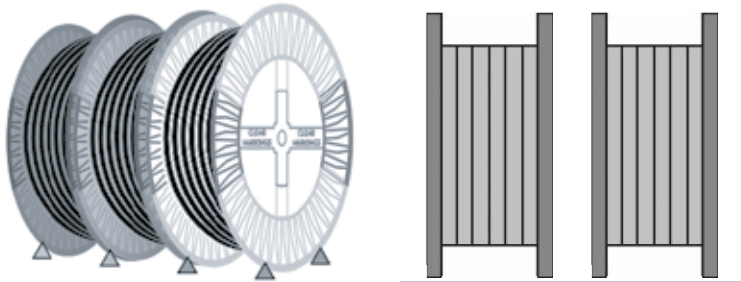
- NOTE 1: These factors are applicable to uniform groups of cables, equally loaded.
- NOTE 2: Where horizontal clearances between adjacent cables exceeds twice their overall diameter, no rating factor need be applied.
- NOTE 3: If a group consists of n single-core cables it may either be considered as n/2 circuits of two loaded conductors or n /3 circuits of three loaded conductors.

Storage and Installation

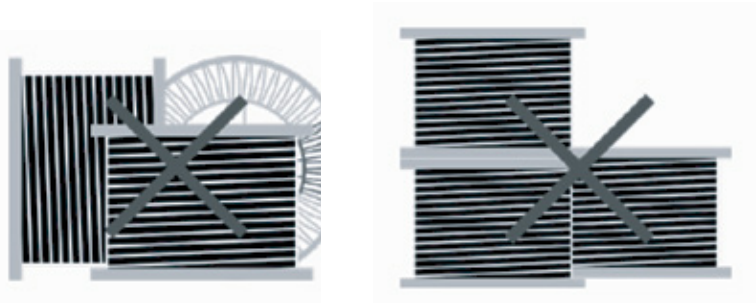
STORAGE

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.



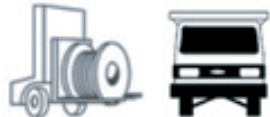
RECOMMENDED





NOT RECOMMENDED


DRUM HANDLING INSTRUCTIONS

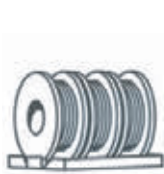
RECOMMENDED


- 

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.

QUALITY ASSURANCE

In order to ensure the best quality assurance system, it is extremely desirable to test and inspect the product at each stage of manufacturing including raw materials and finished product.

Oman Cables have the following Quality Assurance System:

- A. Raw Materials Inspection
- B. In-process inspection
- C. Finished product inspection

RAW MATERIALS INSPECTION:

All the raw materials are procured only from internationally approved companies known for their quality products and once the material is received with their product certification, Oman Cables quality team tests and inspects the same again. Only those materials which meet Oman Cables internal standards are released for production.

IN-PROCESS INSPECTION:

A team of highly experienced and qualified personnel dedicated to quality are on hand to inspect and test all in-process materials at every stage. In addition, they ensure that only materials that comply to the specified requirements are released for the following process.

FINISHED PRODUCT INSPECTION:

Oman Cables products before leaving the warehouse undergo the entire applicable test procedure according to the standards to which they are manufactured. Routine tests are carried out for conformity to the specifications on 100% of our cable drums. Sample tests and type tests are also carried out at regular intervals as per the applicable standards to conform to the product quality.

BUILDING A SUSTAINABLE GROWTH

Head Office and Factory
PO Box 25 Rusayl, Postal Code 124
Sultanate of Oman
Tel: + 968 2444 3100 Fax: + 968 2444 6096
E-mail: omancables@omancables.com
Website: www.omancables.com

UAE Office
PO Box 25864, Sharjah
United Arab Emirates
Tel: +971 6-5448445 Fax: +971 6 5447901
sharjah.office@omancables.com

Qatar Office
PO Box 24410, Salwa Road
Doha (Qatar)
Tel: +974 4468 8384 / + 974 4458 0482
Fax: +974 4468 7663
doha.office@omancables.com

Saudi Arabia Office
P.O. Box 26993,Riyadh 11496
Riyadh Kingdom of Saudi Arabia
Tel: +966 11 2068055 Fax: +966 11 2142730
riyadh.office@omancables.com

Egypt Office
egypt.office@omancables.com



Sultanate of Oman - Muscat. Plot #206, Road 2, P.O. Box: 25, Rusayl, P.C. 124
tel +968 2444 3100 | Fax +968 2444 6096

omancables.com