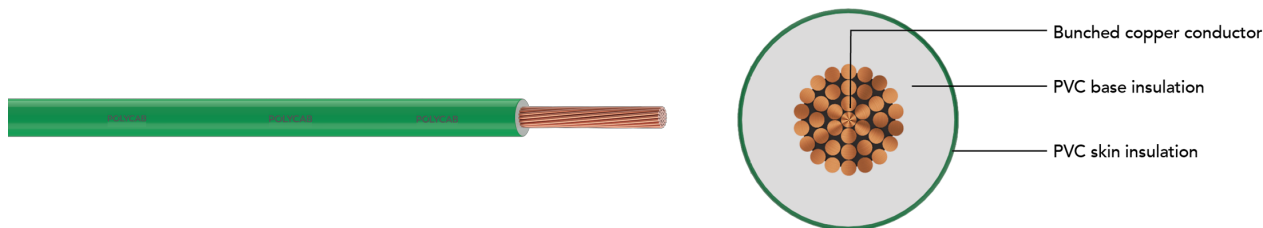


POLYCAB HR-FR-LSH-LF GREEN WIRE

Building wire, 1100 V AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB HR-FR-LSH-LF Green wire is highly eco-friendly & suitable for use in places where extra fire safety and heat resistance is required along with high flexibility. This is also suitable for indoor installation in industries, household appliances and building electrification.

CHARACTERISTICS

Voltage Rating

1100 V

Operation Temperature

Fixed: -15°C to 85°C

Bending Radius

Fixed installation 6 x Overall Diameter
Occasional 4 x Overall Diameter

CONSTRUCTION

- Annealed stranded or bunched copper conductor as per IS 8130, class 2 or class 5
- Insulated by specially developed in-house compound.

Core Identification

Red/Yellow/Blue/Black/Green/any customized colour

Electrical Property

- High insulation resistance
- Higher current carrying capacity
- Electrical energy saving

Mechanical & Physical Properties

- High Flexibility
- Free from hazardous substances
- Resistant to Termite & Rodent
- Resistant to moisture for use in wet area
- Resistant heat deformation
- Improved life expectancy
- Resistant to Acid & Alkali

Test Voltage

3000 V AC at (20±5) °C

OUTSTANDING FEATURES

- Higher current carrying capacity.
- High fire retardancy
- Low emission of toxic gases
- Low carbon emission, eco healthy
- Low volatile organic content – less contamination
- High conductivity electrolytic copper conductor

STANDARD FOLLOWS

IS 8130:2013

IS 5831:1984

IS 694:2010

COMPLIANCE

Conductor resistance test IS 8130

Flammability IEC 60332-1

Oxygen index ASTM D 2863

Temperature index ASTM D 2863

Halogen acid gas generation IEC 60754-1

Smoke density ASTM D 2843-19

Flame resistance ASTM D 2863

OUR ACCREDITATIONS



APPROVAL



WEIGHT AND DIMENSIONAL DATA

| Product Code | Nominal cross sectional area mm ² | Class of conductor | No. of wire/wire dia. No./mm | Nominal insulation thickness mm | Overall dia. (Approx.) mm |
|----------------------|---|--------------------|---------------------------------|------------------------------------|------------------------------|
| LDIS09CYUAYL001C.75S | 0.75 | 5 | 24/0.2 | 0.6 | 2.3 |
| LDIS09CYUAYL001C001S | 1 | 2 | 14/0.3 | 0.6 | 2.5 |
| LDIS09CYUAYL001C001S | 1 | 5 | 32/0.2 | 0.6 | 2.5 |
| LDIS09CYUAYL001C1.5S | 1.5 | 2 | 22/0.30 | 0.7 | 3.0 |
| LDIS09CYUAYL001C1.5S | 1.5 | 5 | 30/0.25 | 0.6 | 2.8 |
| LDIS09CYUAYL001C2.5S | 2.5 | 2 | 36/0.30 | 0.8 | 3.4 |
| LDIS09CYUAYL001C2.5S | 2.5 | 5 | 50/0.25 | 0.7 | 3.6 |
| LDIS09CYUAYL001C004S | 4 | 5 | 56/0.3 | 0.8 | 4.2 |
| LDIS09CYUAYL001C006S | 6 | 5 | 84/0.3 | 0.8 | 4.7 |
| LDIS09CYUAYL001C010S | 10 | 5 | 80/0.4 | 1 | 6.1 |
| LDIS09CYUAYL001C016S | 16 | 5 | 126/0.4 | 1 | 7.1 |

Electrical Characteristics

Current carrying capacity and Max. DC conductor resistance.

| Nominal cross sectional area mm ² | Class of conductor | Reference Method B (enclosed in conduit on a wall or in trunking etc.) Amp. | Reference Method C (clipped direct) Amp. | Maximum DC conductor resistance at 20°C Ω/km |
|---|--------------------|---|---|---|
| 0.75 | 5 | 8.0 | 8.54 | 26 |
| 1 | 2 | 13.5 | 14.64 | 18.1 |
| 1 | 5 | 12.7 | 13.9 | 19.5 |
| 1.5 | 2 | 17.1 | 19.52 | 12.1 |
| 1.5 | 5 | 16.2 | 18.5 | 13.3 |
| 2.5 | 2 | 23.2 | 26.84 | 7.41 |
| 2.5 | 5 | 22.0 | 25.5 | 7.98 |
| 4 | 5 | 31.2 | 34.8 | 4.95 |
| 6 | 5 | 37.2 | 44.4 | 3.3 |
| 10 | 5 | 50.4 | 61.2 | 1.91 |
| 16 | 5 | 68.4 | 81.6 | 1.21 |

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POLYCAB HR-FR-LSH-LF GREEN WIRE
Building wire, 1100 V AC



The ambient temperature is 40°C.
Conductor operating temperature 85°C.

De-Rating Factor

De-rating factor for various ambient temperature.

| | | | | | | | | | | |
|------------------|------|------|------|------|------|------|------|------|------|------|
| Air Temperature | 35°C | 40°C | 45°C | 50°C | 55°C | 60°C | 65°C | 70°C | 75°C | 80°C |
| De-Rating Factor | 1.05 | 1 | 0.94 | 0.88 | 0.82 | 0.75 | 0.67 | 0.58 | 0.47 | 0.33 |

POLYCAB