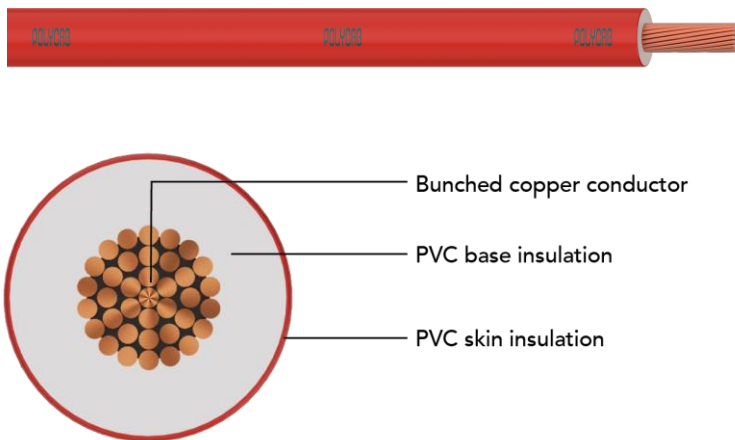


## POLYCAB FR-LSH

### Building wire, 1100 V AC



#### Salient Features:

- ✓ Optimised current carrying capacity
- ✓ Fire retardant and safe for protection
- ✓ Low emission of toxic gases
- ✓ Low carbon emission
- ✓ Low volatile organic content – less contamination
- ✓ High conductivity electrolytic copper conductor

#### Application

POLYCAB FR-LSH wire is eco-friendly & suitable for use where high flexibility is of prime importance. This is also suitable for indoor installation in industries, household appliances and building electrification.

#### Voltage Rating

1100 V

#### Operation Temperature

Fixed: -15°C to 70°C

#### Construction

- Annealed stranded or bunched copper conductor as per IS 8130, class 2 or class 5
- Insulated by PVC Type D with FR-LSH to IS 5831

#### Core Identification

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

#### Bending Radii

Fixed installation      6 x Overall Diameter  
Occasional                4 x Overall Diameter

#### 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
- High abrasion resistance
- Resistant to Acid & Alkali

#### Standard and References

IS 8130:2013

IS 5831:1984

IS 694:2010

#### Test Voltage

3000 V AC at (20±5) °C

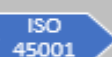
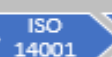
#### Compliance

|                             |                |
|-----------------------------|----------------|
| Conductor resistance test   | IS 8130        |
| Flammability                | IEC 60332-1    |
| Oxygen index                | ASTM D 2863    |
| Temperature index           | IEC 60332-1    |
| Halogen acid gas generation | IEC 60754-1    |
| Smoke density               | ASTM D 2843-19 |

#### Approvals



#### OUR ACCREDITATION



NABL

ABS

IRS

## POLYCAB FR-LSH

### Building wire, 1100 V AC

| Product code         | Nominal cross-sectional area | Class of conductor | No. of wire/wire dia. | Nominal insulation thickness | Overall dia. (Approx.) |
|----------------------|------------------------------|--------------------|-----------------------|------------------------------|------------------------|
|                      | mm <sup>2</sup>              |                    | No./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<br>mm <sup>2</sup> | Class of conductor | Reference Method B (enclosed in conduit on a wall or in trunking etc.) | Reference Method C (clipped direct) | Maximum DC conductor resistance at 20°C<br>Ω/km |
|---|--------------------|--|-------------------------------------|---|
|   |                    | Amp.   | Amp.                                |   |
| 0.75  | 5                  | 7  | 7.5                                 | 26  |
| 1   | 2                  | 11.6   | 12.6                                | 18.1  |
| 1   | 5                  | 11   | 12                                  | 19.5  |
| 1.5   | 2                  | 14.7   | 16.8                                | 12.1  |
| 1.5   | 5                  | 14   | 16                                  | 13.3  |
| 2.5   | 2                  | 20   | 23.1                                | 7.41  |
| 2.5   | 5                  | 19   | 22                                  | 7.98  |
| 4   | 5                  | 26   | 29                                  | 4.95  |
| 6   | 5                  | 31   | 37                                  | 3.3   |
| 10  | 5                  | 42   | 51                                  | 1.91  |
| 16  | 5                  | 57   | 68                                  | 1.21  |

The ambient temperature is 40°C.

Conductor operating temperature 70°C.

### De-Rating Factor

De-rating factor for various ambient temperature.

| Ambient Temperature | 35°C | 40°C | 45°C | 50°C | 55°C | 60°C | 65°C |
|---------------------|------|------|------|------|------|------|------|
| De-Rating Factor    | 1.08 | 1    | 0.91 | 0.82 | 0.7  | 0.57 | 0.4  |

#### OUR ACCREDITATION

