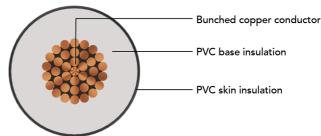
# **ETIRA FR Building wire, 1100 VAC**







Images not to scale. Follow table for dimensions

#### APPLICATION

ETIRA FR wire is suitable for use where high flexibility is of prime importance. 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 70°C

## **Bending Radii**

Fixed installation 6 x Overall Diameter Occasional 4 x Overall Diameter

## **CONSTRUCTION**

- Annealed bunched copper conductor as per IS 8130,
- Insulated by PVC Type D with FR compound to IS 5831.

#### **Core Identification**

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

# **Electrical Property**

- High insulation resistance
- · Higher current carrying capacity

#### **Test Voltage**

3000 V AC at (20±5) °C

#### **OUTSTANDING FEATURES**

- High Flexibility
- High surface lubrication suitable to conduit wiring
- Resistant to moisture for use in wet area
- High abrasion resistance
- Resistant to Acid & Alkali

## STANDARD FOLLOWS

IS 8130:2013 IS 5831:1984 IS 694:2010

#### **COMPLIANCE**

Conductor resistance test Flammability Oxygen index Temperature index

IS 8130 IEC 60332-1 **ASTM D 2863** IEC 60332-1

#### **OUR ACCREDITATIONS**













## **APPROVAL**



Document No.: 00184.Rev No.: 00 Date: 01-01-2024 / We reserve the rights to make technical changes.



#### **WEIGHT & DIMENSION:**

| Product code         | Nominal cross-<br>sectional area | No. of<br>wire/wire dia. | Nominal insulation thickness | Overall dia.<br>(Approx.) |  |
|----------------------|----------------------------------|--------------------------|------------------------------|---------------------------|--|
|                      | mm²                              | No./mm                   | mm                           | Mm                        |  |
| LDIS09CYUAYF001C.75S | 0.75                             | 24/0.21                  | 0.6                          | 2.25                      |  |
| LDIS09CYUAYF001C001S | 1                                | 32/0.21                  | 0.6                          | 2.4                       |  |
| LDIS09CYUAYF001C1.5S | 1.5                              | 30/0.26                  | 0.6                          | 2.86                      |  |
| LDIS09CYUAYF001C2.5S | 2.5                              | 50/0.26                  | 0.7                          | 3.48                      |  |
| LDIS09CYUAYF001C004S | 4                                | 56/0.31                  | 0.8                          | 3.95                      |  |
| LDIS09CYUAYF001C006S | 6                                | 84/0.31                  | 0.8                          | 4.48                      |  |

## **Electrical Characteristics**

Current carrying capacity and Max. DC conductor resistance.

| Nominal cross-<br>sectional area | Current carrying capacity Reference Method B (enclosed in conduit on a wall or in trunking etc.) | Current carrying<br>capacity Reference<br>Method C (clipped<br>direct) | Maximum DC<br>conductor resistance<br>at 20°C |
|----------------------------------|--|--|---|
| mm²                              | Amp.   | Amp.   | Ω/km  |
| 0.75                             | 7  | 7.5  | 26  |
| 1                                | 11   | 12   | 19.5  |
| 1.5                              | 14   | 16   | 13.3  |
| 2.5                              | 19   | 22   | 7.98  |
| 4                                | 26   | 29   | 4.95  |
| 6                                | 31   | 37   | 3.3   |

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  |

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