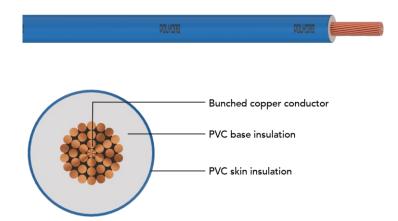


# POLYCAB FR-LF

# **Building wire, 1100 V AC**



### Salient Features:

- ✓ Optimised current carrying capacity.
- ✓ Fire retardant and safe for protection
- ✓ Low carbon emission
- ✓ Low volatile organic content less contamination
- ✓ High conductivity Energy saving

# **Application**

POLYCAB FR-LF 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-LF compound to IS 5831.

#### **Core Identification**

Red/Yellow/Blue/Black/Green/any customised 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
- High surface lubrication suitable to conduit wiring
- 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 **Approvals** 



















# **POLYCAB FR-LF**

# **Building wire, 1100 V AC**

Product code	Nominal cross- sectional area mm <sup>2</sup>	Class of conductor	No. of wire/wire dia. No./mm	Nominal insulation thickness mm	Overall dia. (Approx.)
LDIS09CYUAYF001C.75S	0.75	5	24/0.2	0.6	2.3
LDIS09CYUAYF001C001S	1	2	14/0.3	0.6	2.5
LDIS09CYUAYF001C001S	1	5	32/0.2	0.6	2.5
LDIS09CYUAYF001C1.5S	1.5	2	22/0.30	0.7	3.0
LDIS09CYUAYF001C1.5S	1.5	5	30/0.25	0.6	2.8
LDIS09CYUAYF001C2.5S	2.5	2	36/0.30	0.8	3.4
LDIS09CYUAYF001C2.5S	2.5	5	50/0.25	0.7	3.6
LDIS09CYUAYF001C004S	4	5	56/0.3	0.8	4.2
LDIS09CYUAYF001C006S	6	5	84/0.3	0.8	4.7
LDIS09CYUAYF001C010S	10	5	80/0.4	1	6.1
LDIS09CYUAYF001C016S	16	5	126/0.4	1	7.1

# **Electrical Characteristics**

Current carrying capacity and Max. DC conductor resistance.

Nominal cross- sectional area mm²	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	
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







