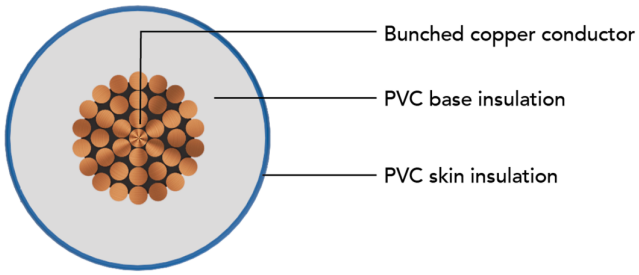
POLYCAB FR-LF
Building wire, 1100 V AC



Images not to scale. Follow table for dimensions

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.

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 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 customized colour

Electrical Property
• High insulation resistance
• Higher current carrying capacity
• Electrical energy saving

Test Voltage
3000 V AC at (20±5) °C

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

OUTSTANDING FEATURES

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

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 IEC 60332-1

OUR ACCREDITATIONS

NABL

APPROVAL

NOTES

POLYCAB FR-LF
Building wire, 1100 V AC

POLYCAB
IDEAS. CONNECTED.

WEIGHT AND DIMENSION DATA:

Product code	Nominal cross-sectional area	Class of conductor	No. of wire/wire dia.	Nominal insulation thickness	Overall dia. (Approx.)
	mm²		No./mm	mm	mm
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	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
mm²		Amp.	Amp.	Ω/km
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.

POLYCAB FR-LF
Building wire, 1100 V AC

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