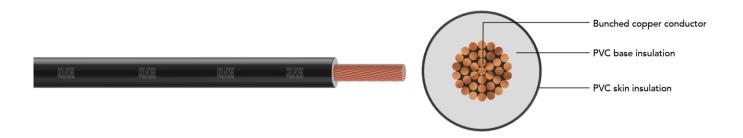


DATAR FR

Building wire, 1100 V AC



Application

DATAR 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.

Voltage Rating

1100 V

Operation Temperature

Fixed: -15°C to 70°C

Construction

- Annealed bunched copper conductor as per IS 8130, class 5.
- Insulated by PVC Type D with FR 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

Mechanical & Physical Properties

- 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 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
Approval















DATAR FR

Building wire, 1100 V AC

Product code	Nominal cross- sectional area	No. of wire/wire dia.	Nominal insulation thickness	Overall dia. (Approx.)
	mm²	No./mm	mm	mm
LDIS09CYUAYF001C.75S	0.75	24/0.2	0.6	2.32
LDIS09CYUAYF001C001S	1	32/0.2	0.6	2.49
LDIS09CYUAYF001C1.5S	1.5	30/0.25	0.7	2.96
LDIS09CYUAYF001C2.5S	2.5	50/0.25	0.8	3.62
LDIS09CYUAYF001C004S	4	56/0.3	0.8	4.16
LDIS09CYUAYF001C006S	6	84/0.3	0.8	4.73

Electrical Characteristics

Current carrying capacity and Max. DC conductor resistance.

Nominal cross- sectional area	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	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



