

POLYCAB HFFR-04XZ-K SC

Building wire, 1100 V AC



Application

POLYCAB HFFR-04XZ-K SC, Single core cable insulated with cross linked halogen free flame retardant compound having low smoke emission and corrosive gases when exposed to fire condition. This cable is designed to use in conduit and for fixed protected installation. This is also suitable to use high rise buildings, hospitals, and offices where Smoke emission and toxic fume create a potential risk to life as well as the lifesaving equipment.

Voltage Rating

1100 V

Operation Temperature

Fixed: -15°C to + 90° C

Construction

- Annealed bare or tinned bunched copper conductor as per IS 8130, class 5
- Insulated with cross linked halogen free flame retardant compound type HFI-XL 90 to IS 17048

Core Identification

Red/Black/Blue/Yellow/White/Grey/Green-Yellow

Bending Radius

Fixed 4 x Overall Diameter
Occasional 6 x Overall Diameter

Standard and References

IS 8130
IS 17048
IEC 60332-1-2

Test Voltage

3000V AC at room temperature

Compliance

Conductor resistance	IS 8130
Insulation resistance	IS 17048:2018
Oxygen Index	31% As per ASTM D2863
Smoke emission test	< 6% As Per ASTM D2843
Acid gas Generation	<0.0 As per IEC 60754-1
Test on vertical flame	Resist as per IEC 60332-1-2

Approvals



OUR ACCREDITATION



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Product Code	Nominal cross-sectional area mm ²	Class of conductor	Insulation thickness mm	Overall Diameter (Approx.) mm	Weight (Approx.)
LDIS09CLUALC001C0.5S	0.5	5	0.6	2.11	9
LDIS09CLUALC001C.75S	0.75	5	0.6	2.32	11
LDIS09CLUALC001C001S	1	2	0.7	2.67	15
LDIS09CLUALC001C001S	1	5	0.6	2.49	14
LDIS09CLUALC001C1.5S	1.5	2	0.7	3	21
LDIS09CLUALC001C1.5S	1.5	5	0.6	2.76	19
LDIS09CLUALC001C2.5S	2.5	2	0.8	3.62	32
LDIS09CLUALC001C2.5S	2.5	5	0.7	3.42	31
LDIS09CLUALC001C004S	4	5	0.8	4.07	45
LDIS09CLUALC001C006S	6	5	0.8	4.62	64
LDIS09CLUALC001C010S	10	5	1	5.92	106
LDIS09CLUALC001C016S	16	5	1	6.97	162

Electrical Characteristics

Current carrying capacity and maximum DC resistance

Nominal cross-sectional area mm ²	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 Ω/km
0.5	5	5	5	39
0.75	5	9	10	26
1	2	15.5	17	18.1
1	5	15	16	19.5
1.5	2	21	23	12.1
1.5	5	20	22	13.3
2.5	2	28	31	7.41
2.5	5	27	29	7.98
4	5	36	40	4.95
6	5	47	51	3.3
10	5	65	70	1.91
16	5	86	94	1.21

Air Ambient temperature: 40°C, Conductor operating temperature: 90°C

The above table is in accordance with BS 7671(Table 4E1A)

De-Rating Factor

De-rating factor for various ambient temperature.

Air Temperature	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C	80°C	85°C
De-Rating Factor	1.04	1.0	0.95	0.89	0.84	0.82	0.77	0.63	0.55	0.45	0.32

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