



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB HFFR-01ZZ-K/03XZZ-K flat, insulated and sheathed with halogen free flame retardant (HFFR) thermoplastic or cross-linked halogen free thermosetting compound confirming to IS 17048 is suitable to use in electric power and lighting for indoor use in AC single phase systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth

## CHARACTERISTICS

### Voltage Rating

1100 V

### Operation Temperature

Fixed: -15°C to 70°C

## CONSTRUCTION

- Bare or tinned bunched copper conductor as per IS 8130, class 5
- Insulated with halogen free flame retardant compound type HFI TP 70 or cross linked halogen free flame retardant compound (HFFR) type HFI-XL 70 to IS 17048
- Sheathed with halogen free flame retardant compound type HFS TP 70 or cross linked halogen free flame retardant compound (HFFR) type HFS-XL 70 to IS 17048

### Core Identification

Two core Red and Black

### Bending Radius

Fixed installation 6 x Overall diameter

Occasional 4 x Overall diameter

### Test Voltage

3000V AC at room temperature

## OUTSTANDING FEATURES

- Low Smoke
- Halogen Free
- Flame Retardant
- Highly Flexible

## STANDARD FOLLOWS

IS 8130:2013

IS 17048:2018

IEC 60332-1-2

## 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

Under fire condition - Resist as per EN 60332

## OUR ACCREDITATIONS



## APPROVAL



## NOTES

Sheathing with cross linked halogen free flame retardant HFS-XL 70 available on demand.

# POLYCAR HFFR-01ZZ-K / 03XZZ-K flat Industrial Cords, 1100 V AC

**POLYCAR**  
IDEAS. CONNECTED.

## Weight & Dimension Data

Product Code	Conductor size	Nominal insulation thickness	Overall dimension (Approx.)	Weight (Approx.)	
				kg/km	
	n x mm <sup>2</sup>	mm	mm	mm	kg/km
LDIS09CLUALS002C0.5S	2 x 0.5	0.6	6 x 3.9	46	
LDIS09CLUALS002C.75S	2 x 0.75	0.6	6.4 x 4.1	54	
LDIS09CLUALS002C001S	2 x 1	0.6	6.8 x 4.3	61	
LDIS09CLUALS002C1.5S	2 x 1.5	0.6	7.3 x 4.6	74	
LDIS09CLUALS002C2.5S	2 x 2.5	0.7	8.8 x 5.4	109	
LDIS09CLUALS002C004S	2 x 4	0.8	10.1 x 6.1	144	

## Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area	Current rating	Maximum DC conductor resistance at 20°C
mm <sup>2</sup>	Amp.	Ω/km
0.5	4	39
0.75	7	26
1	11	19.5
1.5	14	13.3
2.5	19	7.98
4	26	4.95

Air Ambient temperature: 40°C,

Conductor operating temperature: 70°C

The above table is in accordance with IS:3961(Part 5)

## De-Rating Factor

De-rating factor for 70°C thermoplastic or thermosetting insulated cable

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