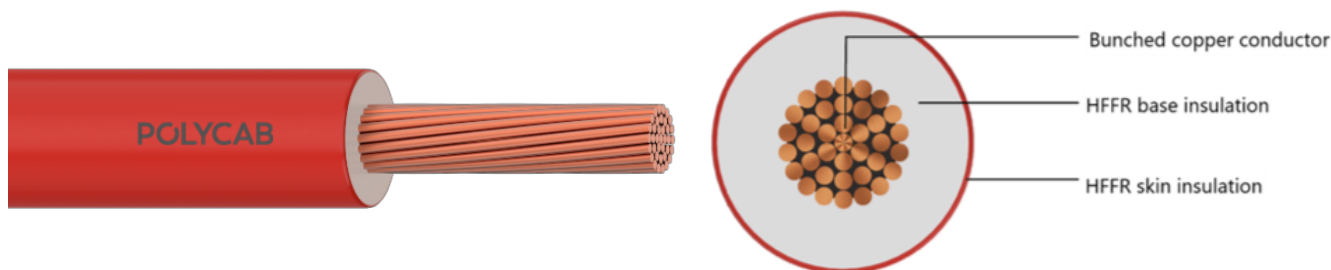


# POLYCAB HFFR- 04XZ-K SC

## Industrial cable, 1100 V AC



Images not to scale. Follow table for dimensions

### 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.

### CHARACTERISTICS

**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

#### Test Voltage

3000V AC at room temperature

### OUTSTANDING FEATURES

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

### STANDARD FOLLOWS

IS 8130  
IS 17048  
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  
Test on vertical flame Resist as per IEC 60332-1-2

### OUR ACCREDITATIONS



### APPROVAL



Weight & Dimension Data

Product Code	Nominal cross-sectional area mm <sup>2</sup>	Insulation thickness mm	Overall Diameter (Approx.) mm	Weight (Approx.)
LDIS09CLUALC001C0.5S	0.5	0.6	2.11	9
LDIS09CLUALC001C.75S	0.75	0.6	2.32	11
LDIS09CLUALC001C001S	1	0.6	2.49	14
LDIS09CLUALC001C1.5S	1.5	0.6	2.76	19
LDIS09CLUALC001C2.5S	2.5	0.7	3.42	31
LDIS09CLUALC001C004S	4	0.8	4.07	45
LDIS09CLUALC001C006S	6	0.8	4.62	64
LDIS09CLUALC001C010S	10	1	5.92	106
LDIS09CLUALC001C016S	16	1	6.97	162
LDIS09CLUALC001C025S	25	1.2	8.53	245
LDIS09CLUALC001C035S	35	1.2	9.71	338
LDIS09CLUALC001C050S	50	1.4	11.58	486
LDIS09CLUALC001C070S	70	1.4	13.25	672
LDIS09CLUALC001C095S	95	1.6	15.21	888
LDIS09CLUALC001C120S	120	1.6	16.81	1123
LDIS09CLUALC001C150S	150	1.8	18.77	1397
LDIS09CLUALC001C185S	185	2	20.75	1705
LDIS09CLUALC001C240S	240	2.2	23.70	2253
LDIS09CLUALC001C300S	300	2.4	27.07	2982

## Electrical Characteristics

### Current carrying capacity and maximum DC resistance

Nominal cross-sectional area	Reference method B (enclosed in conduit on a wall or in trunking etc)		Reference method C (clipped direct)		Reference method F (in free air or on a perforated cable tray etc horizontal or vertical etc.) Touching		Reference method G (in free air) spaced by one cable diameter		Maximum DC conductor resistance at 20°C
	2 cables single phase ac or dc	3 or 4 cables three phase ac	2 cables single phase ac or dc flat and touching	3 or 4 cables three phase ac flat and touching or trefoil	2 cables single phase ac or dc flat	3 cables three phase ac trefoil	2 cables, single phase ac or dc	3 cables three phase ac flat	
mm <sup>2</sup>	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Horizontal	Vertical	Ω/km
0.5	5	4	5	5	-	-	-	-	39
0.75	9	8	10	9	-	-	-	-	26
1	15	13	16	15	-	-	-	-	19.5
1.5	20	17	22	20	-	-	-	-	13.3
2.5	27	36	29	27	-	-	-	-	7.98
4	36	32	40	35	-	-	-	-	4.95
6	47	41	51	47	-	-	-	-	3.3
10	65	57	70	64	-	-	-	-	1.91
16	86	76	94	86	-	-	-	-	1.21
25	117	103	126	115	142	119	161	142	0.78
35	145	127	155	142	177	149	199	177	0.554
50	175	154	201	184	214	183	243	217	0.386
70	223	196	259	237	274	237	312	281	0.272
95	270	237	313	288	333	290	380	343	0.206
120	312	275	365	335	386	338	441	401	0.161
150	347	302	420	385	445	392	509	465	0.129
185	396	339	481	441	508	450	583	534	0.106
240	466	397	568	521	599	536	689	635	0.0801
300	532	454	656	601	691	621	796	735	0.0641

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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