



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB HFFR-04XZ-R SC, 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 stranded bare or tinned copper conductor as per IS 8130, class 2
- Insulated with cross linked halogen free flame retardant (HFFR) compound type HFI-XL 90 to IS 17048

**Core Identification**  
Red/Black/Blue/Yellow/White/Grey.

**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

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 as per IEC 60332-1-2

## OUR ACCREDITATIONS



## APPROVAL



**POLY CAB HFFR -04XZ-R SC  
Industrial cable, 1100 V AC**

**POLY CAB**  
IDEAS. CONNECTED.

**Weight & Dimension Data**

Product Code	Nominal cross sectional area mm <sup>2</sup>	Insulation thickness mm	Overall Diameter (Approx.) mm	Weight (Approx.)
LDIS09CLUALC001C001S	1	0.7	2.67	15
LDIS09CLUALC001C1.5S	1.5	0.7	3.00	21
LDIS09CLUALC001C2.5S	2.5	0.8	3.62	32
LDIS09CLUALC001C004S	4	0.8	4.19	49
LDIS09CLUALC001C006S	6	0.8	4.74	68
LDIS09CLUALC001C010S	10	1.0	6.07	113
LDIS09CLUALC001C016S	16	1.0	7.13	171
LDIS09CLUALC001C025S	25	1.2	8.85	269
LDIS09CLUALC001C035S	35	1.2	10.00	364
LDIS09CLUALC001C050S	50	1.4	11.25	452
LDIS09CLUALC001C070S	70	1.4	13.53	707
LDIS09CLUALC001C095S	95	1.6	15.72	960
LDIS09CLUALC001C120S	120	1.6	17.28	1198
LDIS09CLUALC001C150S	150	1.8	19.34	1498
LDIS09CLUALC001C185S	185	2.0	21.47	1847
LDIS09CLUALC001C240S	240	2.2	24.30	2387
LDIS09CLUALC001C300S	300	2.4	27.06	2979
LDIS09CLUALC001C400S	400	2.6	30.84	3930
LDIS09CLUALC001C500S	500	2.8	34.36	4926
LDIS09CLUALC001C630S	630	2.8	37.90	6154

### 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)	Reference Method F (in free air or on a perforated cable tray etc horizontal or vertical etc.)			Reference Method G (in free air)	Max. DC conductor resistance at 20°C			
			Touching							
			2 cables, single-phase a.c. or d.c.	3 or 4 cables, three-phase a.c.	2 cables single phase ac or dc flat and touching	3 or 4 cables three phase ac flat and touching or trefoil	3 cables, single-phase a.c. or d.c. flat	3 cables, three-phase a.c. flat		
mm <sup>2</sup>	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.		
1	15.5	14	17	16	-	-	-	13	18.1	
1.5	21	18	23	21	-	-	-	17	12.1	
2.5	28	38	31	28	-	-	-	24	7.41	
4	38	34	42	37	-	-	-	32	4.61	
6	49	44	54	49	-	-	-	41	3.08	
10	68	60	74	67	-	-	-	56	1.83	
16	91	80	99	90	-	-	-	74	1.15	
25	121	106	130	118	147	123	166	147	96	0.727
35	149	131	160	147	182	154	206	183	119	0.524
50	180	159	207	190	220	188	250	224	144	0.387
70	230	202	267	244	282	244	321	289	182	0.268
95	278	245	323	297	343	298	391	354	219	0.193
120	322	284	376	345	398	349	455	413	253	0.153
150	358	311	433	397	459	404	525	480	289	0.124
185	409	349	496	455	523	464	602	551	329	0.0991
240	480	410	586	537	618	552	711	654	386	0.0754
300	549	468	676	620	713	640	821	758	442	0.0601
400	622	531	790	722	855	749	987	917	-	0.047
500	713	606	901	823	986	861	1140	1064	-	0.0366

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630	819	695	1028	940	1141	990	1323	1239	-	0.0283
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The ambient temperature is 40°C.

Conductor operating temperature 90°C.

The above table is in accordance with Table 4E1A of BS 7671:2018

**De-Rating Factor**

De-rating factor for 90°C thermosetting insulated cable

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