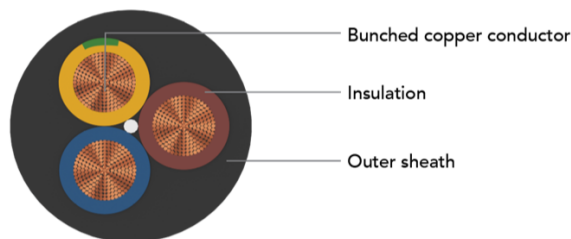


POLYCAB HFFR-01ZZ-K / 03XZZ-K

Industrial Cable, 1100 V AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB HFFR-01ZZ-K/03XZZ-K, insulated and sheathed with halogen free flame-retardant thermoplastic or cross linked halogen free flame retardant thermosetting compound confirming to IS 17048 is suitable to use in electric power and lighting for indoor use in AC single phase or three phase (earthed or unearthed) 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 type HFI-XL 70 (HFFR) to IS 17048
- Sheathed with halogen free flame retardant compound type HFS TP 70 or cross linked halogen free flame retardant compound type HFS-XL 70 (HFFR) to IS 17048

Core Identification

Two core: Red, Black

Three core: Green/Yellow, Red, Black or Red, Yellow, Blue

Four core: Green/Yellow, Red, Yellow, Blue or Red, Yellow, Blue, Black

Five core: Green/Yellow, Yellow, Blue, green, white or Red, yellow, Blue, Black, grey

Bending Radius

Fixed installation 6 x Overall diameter
Occasional 8 x Overall diameter

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 60332-1-2

OUR ACCREDITATIONS



APPROVAL



NOTES

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

Weight & Dimension Data

Product Code	Construction	Nominal insulation thickness	Overall diameter (Approx.)	Weight (Approx.)
	n x mm ²	mm	mm	kg/km
LDIS09CLUALS002C0.5S	2 x 0.5	0.6	6	54
LDIS09CLUALS002C.75S	2 x 0.75	0.6	6.4	64
LDIS09CLUALS002C001S	2 x 1	0.6	6.8	73
LDIS09CLUALS002C1.5S	2 x 1.5	0.6	7.3	90
LDIS09CLUALS002C2.5S	2 x 2.5	0.7	8.8	135
LDIS09CLUALS002C004S	2 x 4	0.8	10.7	222
LDIS09CLUALS002C006S	2 x 6	0.8	12	293
LDIS09CLUALS002C010S	2 x 10	1	14.8	461
LDIS09CLUALS002C016S	2 x 16	1	16.9	644
LDIS09CLUALS002C025S	2 x 25	1.2	20.5	954
LDIS09CLUALS002C035S	2 x 35	1.2	23	1260
LDIS09CLUALS002C050S	2 x 50	1.4	27	1767
LDIS09CLUALS002C070S	2 x 70	1.4	30.7	2371
LDIS09CLUALS002C095S	2 x 95	1.6	34.8	3089
LDIS09CLUALS002C120S	2 x 120	1.6	38.2	3824
LDIS09CLUALS002C150S	2 x 150	1.8	42.5	4744
LDIS09CLUALS002C185S	2 x 185	2	46.9	5781
LDIS09CLUALS002C240S	2 x 240	2.2	53.2	7545
LDIS09CLUALS002C300S	2 x 300	2.4	60.5	9893
LDIS09CLUALS003C0.5S	3 x 0.5	0.6	6.4	62
LDIS09CLUALS003C.75S	3 x 0.75	0.6	6.8	75
LDIS09CLUALS003C001S	3 x 1	0.6	7.2	87
LDIS09CLUALS003C1.5S	3 x 1.5	0.6	7.8	107
LDIS09CLUALS003C2.5S	3 x 2.5	0.7	9.4	163
LDIS09CLUALS003C004S	3 x 4	0.8	11.4	286
LDIS09CLUALS003C006S	3 x 6	0.8	12.8	381
LDIS09CLUALS003C010S	3 x 10	1	15.8	606
LDIS09CLUALS003C016S	3 x 16	1	18.3	868

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Product Code	Construction	Nominal insulation thickness	Overall diameter (Approx.)	Weight (Approx.)
	n x mm ²	mm	mm	kg/km
LDIS09CLUALS003C025S	3 x 25	1.2	21.8	1277
LDIS09CLUALS003C035S	3 x 35	1.2	24.6	1697
LDIS09CLUALS003C050S	3 x 50	1.4	29	2407
LDIS09CLUALS003C070S	3 x 70	1.4	32.8	3223
LDIS09CLUALS003C095S	3 x 95	1.6	37.5	4231
LDIS09CLUALS003C120S	3 x 120	1.6	41.3	5276
LDIS09CLUALS004C0.5S	4 x 0.5	0.6	6.9	74
LDIS09CLUALS004C.75S	4 x 0.75	0.6	7.4	90
LDIS09CLUALS004C001S	4 x 1	0.6	7.8	105
LDIS09CLUALS004C1.5S	4 x 1.5	0.6	8.7	137
LDIS09CLUALS004C2.5S	4 x 2.5	0.7	10.3	202
LDIS09CLUALS004C004S	4 x 4	0.8	12.6	372
LDIS09CLUALS004C006S	4 x 6	0.8	14	488
LDIS09CLUALS004C010S	4 x 10	1	17.5	790
LDIS09CLUALS004C016S	4 x 16	1	20.3	1134
LDIS09CLUALS004C025S	4 x 25	1.2	24.3	1672
LDIS09CLUALS004C035S	4 x 35	1.2	27.3	2225
LDIS09CLUALS004C050S	4 x 50	1.4	32.2	3156
LDIS09CLUALS004C070S	4 x 70	1.4	36.7	4253
LDIS09CLUALS004C095S	4 x 95	1.6	41.8	5581
LDIS09CLUALS004C120S	4 x 120	1.6	45.9	6933
LDIS09CLUALS004C150S	4 x 150	1.8	51	8600
LDIS09CLUALS004C185S	4 x 185	2	56.2	10478
LDIS09CLUALS004C240S	4 x 240	2.2	64	13738
LDIS09CLUALS004C300S	4 x 300	2.4	72.7	18030
LDIS09CLUALS005C0.5S	5 x 0.5	0.6	7.5	75
LDIS09CLUALS005C.75S	5 x 0.75	0.6	8.1	92
LDIS09CLUALS005C001S	5 x 1	0.6	8.7	112

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Product Code	Construction	Nominal insulation thickness	Overall diameter (Approx.)	Weight (Approx.)
	n x mm ²	mm	mm	kg/km
LDIS09CLUALS005C5.5S	5 x 1.5	0.6	9.5	141
LDIS09CLUALS005C2.5S	5 x 2.5	0.7	11.2	208
LDIS09CLUALS005C004S	5 x 4	0.8	13.8	318

Electrical characteristics

Current carrying capacity and maximum 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 E (free air or on a perforated cable tray etc, horizontal or vertical)		Max. DC conductor resistance at 20°C
	1 two-core cable* single-phase a.c. or d.c.	1 three-core cable* or 1 four-core cable, three-phase a.c.	1 two-core cable* single-phase a.c. or d.c.	1 three-core cable* or 1 four-core cable, three-phase a.c.	1 two-core cable* single-phase a.c. or d.c.	1 three-core cable* or 1 four-core cable, three-phase a.c.	
mm ²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
1	11	10	12	11	14	12	19.5
1.5	14	12	16	14	18	15	13.3
2.5	19	17	22	20	25	21	7.98
4	25	22	30	26	33	28	4.95
6	31	28	38	34	42	36	3.3
10	43	38	52	47	58	50	1.91
16	57	51	70	63	78	66	1.21
25	76	68	95	81	100	85	0.78
35	94	84	116	100	125	106	0.554
50	112	100	142	122	152	129	0.386
70	142	122	180	155	196	165	0.272
95	170	151	218	188	238	201	0.206
120	196	174	252	219	277	233	0.161
150	218	190	290	252	320	269	0.129
185	248	215	331	288	366	307	0.106
240	290	251	389	340	434	363	0.0801
300	332	286	447	392	500	419	0.0641

Air Ambient temperature: 40°C, Conductor operating temperature: 70°C
The above table is in accordance with BS 7671(Table 4D2A)

De-Rating Factor

De-rating factor for various ambient temperature other than 40°C.

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

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