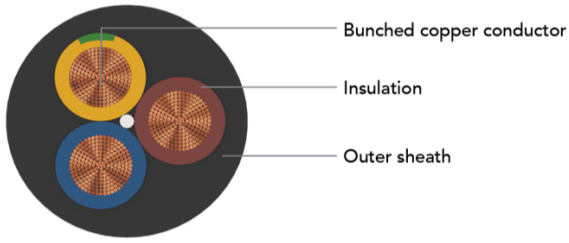
POLYCAB HFFR-04XZZ-K/04XZXZ -K
Industrial Cable, 1100 V AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB HFFR-04XZZ-K/04XZXZ-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 90°C

CONSTRUCTION

- Bare or tinned bunched copper conductor as per IS 8130, class 5
- Insulated with cross linked halogen free flame retardant compound HFI-XL 90 (HFFR) to IS 17048
- Sheathed with halogen free flame retardant compound HFS TP 90 or cross linked halogen free flame retardant HFS-XL 90 (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
- Heat Resistant

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

POLYCAB HFFR-04XZZ-K/04XZXZ -K
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Weight & Dimension Data

Product code	Construction	Nominal insulation thickness	Overall dia. (Approx.)	Weight (Approx.)
	n x mm²	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 dia. (Approx.)	Weight (Approx.)
	n x mm²	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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	n x mm²	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 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)		Maximum DC conductor resistance at 20°C
	1 two core cable single phase ac or dc	1 three or four core cable three phase ac	1 two core cable single phase ac or dc	1 three or four core cable three phase ac	1 two core cable single phase ac or dc	1 three or four core cable three phase ac	
mm²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
0.5	5	4	5	5	-	-	39
0.75	9	8	10	9	-	-	26
1	15	13	16	15	18	16	19.5
1.5	19	17	21	19	22	20	13.3
2.5	26	22	29	26	31	28	7.98
4	35	30	39	35	42	36	4.95
6	44	38	50	45	54	47	3.3
10	60	52	69	61	74	65	1.91
16	79	69	93	83	99	86	1.21
25	105	93	122	105	132	112	0.78
35	129	113	151	130	163	139	0.554
50	154	136	184	158	199	169	0.386
70	195	171	237	202	255	217	0.272
95	234	206	290	245	311	263	0.206
120	269	237	337	284	362	305	0.161
150	295	265	389	327	418	352	0.129

185	339	300	447	374	478	403	0.106
240	405	351	529	441	566	475	0.0801
300	470	402	612	508	654	548	0.0641

Ambient temperature: 40°C, Conductor operating temperature: 90°C
The above table is in accordance with BS 7671(Table 4E2A)

De-Rating Factor

De-rating factor for various ambient temperature.

Air Temperature	35°C to 50°C	55°C	60°C	65°C	70°C
De-Rating Factor	1	0.96	0.83	0.67	0.47