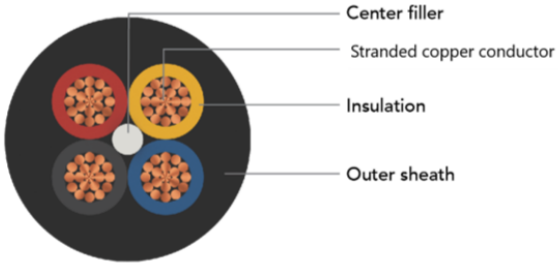
POLYCAB HFFR-04XZZ-R/04XZXZ-R
Industrial Cable, 1100 V AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB HFFR-04XZZ-R/04XZXZ-R, 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

- Stranded bare or tinned copper conductor as per IS 8130, class 2
- Insulated with Cross linked halogen free flame retardant compound type HFI-XL 90 (HFFR) to IS 17048
- Sheathed with Halogen free flame retardant compound type HFS TP 90 or cross linked Halogen free flame retardant compound type HFS-XL 90 (HFFR) to IS 17048

Core Identification
Two core Red, Black
Three core Red, Yellow, Blue
Four core Red, Yellow, Blue, Black
Five core Black with white numbering

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

NABL

APPROVAL

NOTES

Sheathing with cross linked halogen free flame retardant HFS XL 90 available on demand.

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POLYCAB
IDEAS. CONNECTED.

Weight & Dimension Data

Product Code	Conductor size	Nominal insulation thickness	Overall dia. (Approx.)	Weight (Approx.)
	n x mm²	mm	mm	kg/km
LDBS09CLUALS002C001S	2 x 1	0.6	7.32	91
LDBS09CLUALS002C1.5S	2 x 1.5	0.7	8.38	124
LDBS09CLUALS002C2.5S	2 x 2.5	0.8	9.82	176
LDBS09CLUALS002C004S	2 x 4	0.8	10.96	235
LDBS09CLUALS002C006S	2 x 6	0.8	12.24	307
LDBS09CLUALS002C010S	2 x 10	1	15.10	483
LDBS09CLUALS002C016S	2 x 16	1	17.20	671
LDBS09CLUALS002C025S	2 x 25	1.2	20.84	1015
LDBS09CLUALS002C035S	2 x 35	1.2	23.32	1322
LDBS09CLUALS002C050S	2 x 50	1.4	27.70	1874
LDBS09CLUALS003C001S	3 x 1	6	31.04	1663
LDBS09CLUALS003C1.5S	3 x 1.5	0.7	8.86	157
LDBS09CLUALS003C2.5S	3 x 2.5	0.8	10.40	224
LDBS09CLUALS003C004S	3 x 4	0.8	11.63	304
LDBS09CLUALS003C006S	3 x 6	0.8	13.00	400
LDBS09CLUALS003C010S	3 x 10	1	16.07	637
LDBS09CLUALS003C016S	3 x 16	1	18.54	906
LDBS09CLUALS003C025S	3 x 25	1.2	22.45	1378
LDBS09CLUALS003C035S	3 x 35	1.2	25.11	1802
LDBS09CLUALS003C050S	3 x 50	1.4	29.612	2540
LDBS09CLUALS003C070S	3 x 70	1.4	33.376	3366
LDBS09CLUALS003C095S	3 x 95	1.6	38.528	4535
LDBS09CLUALS003C120S	3 x 120	1.6	42.2056	5575
LDBS09CLUALS004C001S	4 x 1	6	34.4892	2169
LDBS09CLUALS004C1.5S	4 x 1.5	0.7	9.8358	202
LDBS09CLUALS004C2.5S	4 x 2.5	0.8	11.3362	284
LDBS09CLUALS004C004S	4 x 4	0.8	12.9156	396

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Product Code	Conductor size	Nominal insulation thickness	Overall dia. (Approx.)	Weight (Approx.)
	n x mm²	mm	mm	kg/km
LDBS09CLUALS004C006S	4 x 6	0.8	14.2224	513
LDBS09CLUALS004C010S	4 x 10	1	17.841	831
LDBS09CLUALS004C016S	4 x 16	1	20.382	1174
LDBS09CLUALS004C025S	4 x 25	1.2	24.9444	1805
LDBS09CLUALS004C035S	4 x 35	1.2	27.9032	2363
LDBS09CLUALS004C050S	4 x 50	1.4	32.919	3336
LDBS09CLUALS004C070S	4 x 70	1.4	37.312	4446
LDBS09CLUALS004C095S	4 x 95	1.6	42.836	5965
LDBS09CLUALS004C120S	4 x 120	1.6	46.9322	7338

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)		Maximum DC conductor resistance at 20°C
	1 two-core cable*, single-phase a.c. or d.c.	1 three- or four-core cable*, three-phase a.c.	1 two-core cable*, single-phase a.c. or d.c.	1 three- or four-core cable*, three-phase a.c.	1 two-core cable*, single-phase a.c. or d.c.	1 three- or four-core cable*, three-phase a.c.	
mm²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
1	17	15	19	14	21	18	18.1
1.5	22	19.5	24	22	26	23	12.1
2.5	30	26	33	30	36	32	7.41
4	40	35	45	40	49	42	4.61
6	51	44	58	52	63	54	3.08
10	69	60	80	71	86	75	1.83
16	91	80	107	96	115	100	1.15
25	119	105	138	119	149	127	0.727
35	146	128	171	147	185	158	0.524
50	175	154	209	179	225	192	0.387

70	221	194	269	229	289	246	0.268
95	265	233	328	278	352	298	0.193
120	305	268	382	322	410	346	0.153

Air Ambient temperature: 30°C
Conductor operating temperature: 90°C
The above table is in accordance with BS 7671(Table 4E2A)

De-Rating Factor

De-rating factor for 90°C thermosetting insulated cable

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