

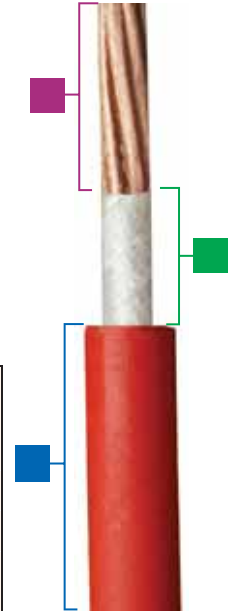


FLAMBICC 1

These are **single core fire resistant cables** with approval from Loss Prevention Certification Board (LPCB), UK for use in emergency safety circuits to maintain circuit integrity under fire conditions.

CONSTRUCTION

- **Copper conductor:** Plain annealed stranded class 2 conductor to BS EN 60228
- **Primary Insulation:** Mica Glass tape
- **Secondary Insulation:** Extruded XL-LSZH compound



CHARACTERISTICS

General:	Ducab FlamBICC 1 cables are designed for laying in conduit or in cable trunking where fire resistance is of paramount importance.
Approvals:	LPCB approved
Voltage grade:	600 / 1000 V
Fire resistance:	C-W-Z test as per BS 6387 for small sizes and IEC 60331-21 for large sizes which cannot fit in a conduit. Cables comply IEC 60331-21 fire test at increased temperature of 950°C which is higher than that specified by the standard.
Acid gas emission:	Less than 0.5% when tested to IEC 60754 & BS EN 50267
Low smoke emission:	As per IEC 61034 & BS EN 50268
Cable Operating temperature:	Maximum 90°C
Short circuit temperature	Maximum 250°C
Bending radius:	6 x Cable diameter

CORE IDENTIFICATIONS

Green/Yellow		Black	
Blue		Gray	
Red		White	
Brown			



TECHNICAL DATA

Technical data for Ducab **Fire Resistant Single Core Cables** with stranded copper conductors

600 / 1000 V

Nominal conductor area	Approximate overall diameter	Approximate cable weight	Maximum conductor resistance at 20°C	Current rating (1Ø AC)	Current rating (3Ø AC)	Voltage drop (1Ø AC)	Voltage drop (3Ø AC)
mm ²	mm	kg/km	Ohm/km	Amp	Amp	mV/A/m	mV/A/m
1.5	5.5	45	12.1	23	20	31	27
2.5	5.9	60	7.41	31	28	19	16
4	6.4	75	4.61	42	37	12	10
6	7	95	3.08	54	48	7.86	6.81
10	7.9	140	1.83	75	66	4.67	4.05
16	8.8	200	1.15	100	88	2.94	2.55
25	10.7	300	0.727	133	117	1.86	1.61
35	11.8	395	0.524	164	144	1.35	1.17
50	13.1	520	0.387	198	175	1	0.87
70	15	725	0.268	253	222	0.70	0.61
95	16.7	975	0.193	306	269	0.52	0.45
120	18.4	1210	0.153	354	312	0.42	0.37
150	20.5	1485	0.124	393	342	0.36	0.31
185	22.6	1850	0.0991	449	384	0.30	0.26
240	25.2	2400	0.0754	528	450	0.25	0.22
300	28.1	2990	0.0601	603	514	0.22	0.19
400	31	3765	0.047	683	584	0.20	0.17
500	34.6	4900	0.0366	783	666	0.18	0.16
630	39.4	6180	0.0283	900	764	0.17	0.15

Current rating based on installation "enclosed in conduit on a wall or in trunking" in line with BS 7671 (IEE Wiring Regulations)

Laying condition: 30°C ambient temperature & 90°C operating temperature. For other ambient temperatures appropriate rating factors should be applied.

TEMPERATURE RATING FACTORS

Ambient Temperature in °C	25	30	35	40	45	50	55	60
Rating factor	1.02	1	0.96	0.91	0.87	0.82	0.76	0.71

CORRECTION FACTORS FOR GROUPING

No of Tables in a group	2	3	4	5	6	7	8	9
Rating factor	0.8	0.7	0.65	0.6	0.57	0.54	0.52	0.5

