

DUCAB FLAMBICC 3

Ducab FlamBICC 3 cables are single and multicore Fire Resistant cables with insulation and sheath to meet C-W-Z test as per BS 6387 for small sizes and IEC 60331 for large sizes

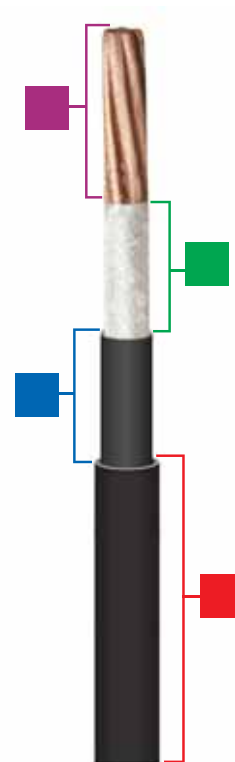
The single core cables are approved by Loss Prevention Certification Board (LPCB), UK for use in emergency safety circuits to maintain circuit integrity under fire conditions.

CONSTRUCTION

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

CHARACTERISTICS

General:	Ducab FlamBICC 3 cables are designed for laying in conduit or on trays where fire resistance is of paramount importance.
Approvals:	LPCB approved for single core cables
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

STANDARD:	SHEATH COLOUR:
 Black (Other colours as per request)	 Black (Other colours as per request)

TECHNICAL DATA

Technical data for DUCAB fire resistant Single Core Sheathed 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) Clipped direct	Current rating (3ø AC) In air	Voltage drop (1ø AC)	Voltage drop (3ø AC) In trefoil
mm ²	mm	kg/km	Ohm/km	Amp	Amp	mV/A/m	mV/A/m
1.5	5.5	45	12.1	25	--	31	27
2.5	5.9	60	7.41	34	--	19	16
4	6.4	75	4.61	46	--	12	10
6	7.0	95	3.08	59	--	7.9	6.8
10	7.9	140	1.83	81	--	4.7	4
16	8.8	200	1.15	109	--	2.9	2.5
25	10.7	300	0.727	143	135	1.85	1.6
35	11.8	395	0.524	176	169	1.35	1.15
50	13.1	520	0.387	228	207	1	0.87
70	15.0	725	0.268	293	268	0.71	0.61
95	16.7	975	0.193	355	328	0.52	0.45
120	18.4	1210	0.153	413	383	0.43	0.37
150	20.5	1485	0.124	476	444	0.36	0.31
185	22.6	1850	0.0991	545	510	0.3	0.26
240	25.2	2400	0.0754	644	607	0.25	0.22
300	28.1	2990	0.0601	743	703	0.22	0.195
400	31.0	3765	0.047	868	823	0.2	0.175
500	34.6	4900	0.0366	990	946	0.185	0.16
630	39.4	6180	0.0283	1130	1088	0.175	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	1.00	0.96	0.91	0.87	0.82	0.76	0.71