

CIRCUIT INTEGRITY ENERGY CABLE

Zero Halogen, Low Smoke (OHLS®) single core cable having enhanced circuit integrity when exposed to fire. Tested and approved by LPCB.

These cables are designed for drawing into trunking and conduit where a fire situation may pose a major hazard and the maintenance of circuit integrity is a requirement. To achieve optimum performance they should be installed in metal conduit.

Construction

Conductors: Stranded plain annealed copper wire conductor
Insulation: Mica-glass fire resistant tape covered by an extruded layer of cross-linked Zero Halogen, Low Smoke (OHLS®) insulating compound

Physical Characteristics

Voltage rating (Uo/U): 600/1000V.
Operating temp: -40°C to +90°C (The cable should not be flexed when either the ambient or cable temperature is below 0°C).
Min. bending radius: 8 x overall diameter

Standards Achieved

Circuit integrity: BS 6387 categories C, W & Z (when applied to a single cable)
 Exceeds IEC 60331 - 3 hours at 750°C - when the test temperature was increased to 950°C, equivalent to BS 6387 Category C. (This test was also satisfactorily applied to Sifer cable in an earthed metal conduit, as per LPCB guidance notes).
Flame propagation: BSEN 60332-1, BSEN 60332-3
Acid gas emission: IEC 60754-1, BSEN 50267-2-1.
Smoke emission: IEC 61034, BSEN 50268

LPCB
TESTED &
APPROVED

A full range of insulation colours is available including green/yellow.
 Sheathed versions also available. Details available upon request.

Nominal area of conductor mm ²	Insulation thickness mm	Mean diameter (upper limit) mm	Approx. weight of cable kg/km	Conductor resistance Max @20°C Ω/km
1.5	0.7	3.9	32	12.10
2.5	0.8	4.6	43	7.41
4	0.8	5.1	55	4.61
6	0.8	5.6	85	3.08
10	1.0	7.1	146	1.83
16	1.0	8.1	198	1.15
25	1.2	9.8	320	0.727
35	1.2	10.9	410	0.524
50	1.4	13.4	549	0.387
70	1.4	15.2	770	0.268
95	1.6	17.6	1140	0.193
120	1.6	19.3	1425	0.153
150	1.8	21.3	1720	0.124
185	2.0	23.7	2155	0.0991
240	2.2	26.8	2900	0.0754
300	2.4	29.7	3540	0.0601
400	2.6	33.3	4410	0.0470
500	2.8	37.2	5660	0.0366
630	2.8	41.3	7140	0.0283

