






FR CABLE

BSEN 50525-3-41/ BS 6387

Single core fire resistant cables for use in emergency safety circuits to maintain circuit integrity under fire conditions









CONSTRUCTION

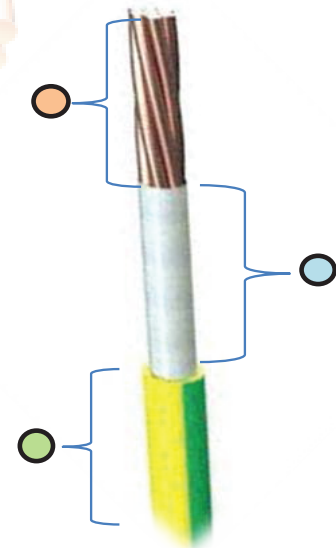
-  Copper conductor: Plain annealed stranded class 2 conductor to IEC 60228
-  Primary Insulation: Mica Glass tape
-  Secondary Insulation: Extruded XL-LSZH compound

CHARACTERISTICS

General	FR CABLE cables are designed for laying in conduit or in cable trunking where fire resistance is of paramount importance
Voltage Grade	600/1000 V
Fire Resistance	C-W-Z test as per BS 6387 for small size and IEC 60331-21 for Large size which can not fit in a conduit cable comply 60331-21 fire test at increased temp. of 950 ° C which is higher than that spacificed by the standard
Acid gas emission	Less than 0.5% when tested to IEC 60754
Low smoke emission	As per IEC 61034
Cable Operating temperature	Maximum 90°C
Short circuit temperature	Maximum 250°C
Bending radius	6 x Cable diameter

CORE IDENTIFICATIONS

Red		Gray	
Yellow		Brown	
Blue		White	
Black			
Y/G			





TECHNICAL DATA

BSEN 50525-3-41/BS 6387

Technical data for ADCABLE Fire Resistant Single Core Cable with stranded copper conductor 600/1000 V

Nominal conductor area	Thickness of insulation	Approximate overall diameter	Maximum conductor resistance at 20 °C	Current Rating (1Φ AC)	Current Rating (3Φ AC)	Voltage Drop (1Φ AC)	Voltage Drop (3Φ AC)
mm ²	mm	mm	Ohm/km	Amp	Amp	mV/A/m	mV/A/m
1.5	0.8	3.20	12.1	23	20	31.0	27
2.5	0.9	3.80	7.41	31	28	19.0	16
4	0.9	4.35	4.61	42	37	12.0	10
6	0.9	4.92	3.08	54	48	7.86	6.81
10	1.1	6.00	1.83	75	66	4.67	4.05
16	1.2	7.00	1.15	100	88	2.94	2.55
25	1.4	8.60	0.727	133	117	1.86	1.61
35	1.4	9.50	0.524	164	144	1.35	1.17
50	1.6	11.10	0.387	198	175	1.00	0.87
70	1.6	12.60	0.268	253	222	0.70	0.61
95	1.8	15.30	0.193	306	269	0.52	0.45
120	1.8	16.10	0.153	354	312	0.42	0.37
150	2.0	18.00	0.124	393	342	0.36	0.31
185	2.2	20.00	0.0991	449	384	0.30	0.26
240	2.4	22.70	0.0754	528	450	0.25	0.22
300	2.6	25.30	0.0601	603	514	0.22	0.19
400	2.8	27.90	0.0470	683	584	0.20	0.17

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	35	40	45	50	55	60
Rating factor	0.96	0.91	0.87	0.82	0.76	0.71

CORRECTION FACTOR FOR GROUPING

No. of Tables in a group	4	5	6	7	8	9
Rating factor	0.65	0.6	0.57	0.54	0.52	0.50