BYA-FiR

Single Core (Cu/Mica Tape/PVC-FR)

APPLICATION

These cables are designed for emergency lighting, fire alarms and essential equipment in fire situations where an uninterrupted power supply has to be guaranteed.

During fire, electric circuits and the associated lighting may be damaged. Power and data communications may be suspended. Human safety may depend on continued operation of lighting, elevators and escalators, fire fighting water pumps, fire alarm and ventilation fans.

STANDARD

BS 6004

IEC 60331-21 & BS 6387

VOLTAGE GRADE

U_o/U : 450/750V

COLOR

Insulated core : (Red or Other Colors available on request)

CONSTRUCTION

Conductor: Solid/ Stranded Circular/ Compacted, Plain annealed copper, Class 1 or Class-2 to IEC 60228

Fire barrier: Mica tape (Synthetic or Glass)

Insulation: Flame retardant (FR) PVC, TI1-FR to BS 7655

PHYSICAL DATA							ELECTRICAL DATA		
Nominal cross sectional area of conductor	Shape of Conductor	No. of strands & Diameter of wire	Thickness of Mica Tape	Nominal thickness of insulation	Approx. Overall diameter	Approx. weight of cable	Max. D.C resistance of conductor at 20 °C	Current carrying capacity in conduit at 35°C	Current Carrying Capacity in Air at 35°C
Core x mm^2	-	no./mm	mm	mm	mm	Kg/Km	W/Km	amps	amps
1 x 1.5	re	1/1.38	0.11	0.7	3.2	25	12.1	16	20
1 x 1.5	rm	7/0.52	0.11	0.7	3.2	26	12.1	16	20
1 x 2.5	re	1/1.78	0.11	0.8	3.8	38	7.41	22	28
1 x 2.5	rm	7/0.67	0.11	0.8	4.0	39	7.41	22	28
1 x 4	rm	7/0.85	0.11	0.8	4.5	56	4.61	30	37
1 x 6	rm	7/1.04	0.11	0.8	5.2	77	3.08	38	47
1 x 10	rm	7/1.35	0.11	1.0	6.5	125	1.83	52	63
1 x 16	rm	7/1.70	0.11	1.0	7.5	186	1.15	70	85
1 x 25	rm	7/2.14	0.11	1.2	9.3	290	0.727	91	110
1 x 35	rmc	min. 6	0.11	1.2	10.0	376	0.524	112	136
1 x 50	rmc	min. 6	0.11	1.4	11.6	524	0.387	136	164
1 x 70	rmc	min. 12	0.11	1.4	13.2	715	0.268	173	207
1 x 95	rmc	min. 15	0.11	1.6	15.7	970	0.193	216	253
1 x 120	rmc	min. 18	0.11	1.6	16.9	1200	0.153	244	291
1 x 150	rmc	min. 18	0.11	1.8	19.0	1517	0.124	-	333
1 x 185	rmc	min. 30	0.11	2.0	21.0	1858	0.0991	-	381
1 x 240	rmc	min. 34	0.11	2.2	24.1	2425	0.0754	-	452
1 x 300	rmc	min. 34	0.11	2.4	26.5	3003	0.0601	-	526
1 x 400	rmc	min. 53	0.11	2.6	30.1	4000	0.047	-	639
1 x 500	rmc	min. 53	0.11	2.8	33.3	4950	0.0366	-	752
1 x 630	rmc	min. 53	0.11	2.8	37.0	4185	0.0283	-	855

Current ratings are valid for cables laid under defined conditions at page no.163. For current ratings at deviated conditions, apply correction factor as given on page no.

Characteristics

Operating Temperature 70°C 90°C

Maximum Short Circuit 750°C

Fire Resistant IEC 60331 BS 6387

Flame Retardant IEC 60332-1-2

Lead free

Rigid

Flames don't Spread IEC 60332-3-24

Test 1.5-2.5kV

Installation condition

Home Use

Fire Fighting Use

Outdoor Installation

Open air

In Conduit

PARTEX™ Cables powering with safety