

CONSTRUCTION OF THE CABLE

CONDUCTORS	It is the current carrying component of the cable.
Material	stranded, high conductivity plain annealed copper wires as per class 2 in BS 60228 and IEC 60228
	Aluminium, stranded, compacted conductors
INSULATION	The rated voltage level of the cable depends on the dielectric strength and thickness of the insulation
Material	The insulation of standard wiring cables is PVC grade Type T1 1 of BS 7655 (formerly BS 6746) suitable for a
	maximum continuous conductor operating temperature of 70°C.

CHARACTERISTICS

Voltage Rating	450/750 Volts
Temperature Rating	-5°C to +70°C
Minimum Bending Radius	Fixed: 6 x overall diameter

STANDARDS

BS EN 50525-2-31	For PVC Insulated Wiring
BS EN 60228	For conductor
BS 7655	For Insulation
BS EN/IEC 60332-1	For Flame Retardant

CORE IDENTIFICATION

1 core	Red, Black, Yellow, Blue, Green/Yellow. (Other Color as per specified standard can also be manufactured)
---------------	--

APPLICATION

Domestic wiring cable. Can be installed in fixed installations in dry or damp premises clipped to surface, on trays or in free air where the risk of mechanical damage would not be an issue. Suitable for laying in conduit or trunking where mechanical protection is required.

	ITEM	No.	1	2	3	4	5
Sr #	Cu/PVC TO BS EN 50525-2-31	UNIT	1 x 1.5	1 x 2.5	1 x 4	1 x 6	1 x 10
1	Manufacturer		DUBAI CABLE COMPANY (PVT) LTD.				
2	Country of Origin		U.A.E				
3	Type of Cable		Cu/PVC				
4	Standard		BS EN 50525-2-31				
5	Nominal voltage rating	Volts	450/750				
6	Max. continuous current carrying capacity when laid						
	In air	Amps	15	21	28	36	50
7	Conductors :						
	Material		Plain Annealed Copper				
	No. of Cores	No.	1	1	1	1	1
	Nominal cross section	mm ²	1.5	2.5	4	6	10
8	Insulation of conductors :						
	Material		Extruded PVC				
	Minimum average thickness	mm	0.7	0.8	0.8	0.8	1
9	Approx. outer diameter of cable.	mm	3.2	3.8	4.4	4.9	6.3
10	Maximum DC Resistance of conductor at 20°C	Ohm/km	12.1	7.41	4.61	3.08	1.83
11	Maximum AC Resistance per core at 70°C(Approx)	Ohm/km	14.48	8.86	5.52	3.69	2.19
12	Maximum conductor operating temperature.	°C	70				
13	Voltage drop	mv/Amp/mt	25	15	9.5	6.4	3.8
14	Max. allowable tensile strength	Kgf	9	15	24	36	60
15	Minimum allowable bending radius	mm	10	12	14	15	19
16	Approx. weight of completed cable.	kg/km	23	35	50	70	120
17	Conditions of installations :						
18	Air temperature	°C	30				

	ITEM	No.	7	8	9	10	11	12
Sr #	Cu/XLPE/PVC/SWA/PVC - BS 5467	UNIT	1x 16	1 x 25	1 x 35	1 x 50	1 x 70	1 x 95
1	Manufacturer		DUBAI CABLE COMPANY (PVT) LTD.					
2	Country of Origin		U.A.E					
3	Type of Cable		Cu/PVC					
4	Standard		BS 50525-2-31					
5	Nominal voltage rating	Volts	450/750V					
6	Max. continuous current carrying capacity when laid							
	In air	Amps	68	89	110	134	171	207
7	Conductors :							
	Material		Plain Annealed Copper					
	No. of Cores	No.	1	1	1	1	1	1
	Nominal cross section	mm ²	16	25	35	50	70	95
8	Insulation of conductors :							
	Material		Extruded PVC					
	Minimum average thickness	mm	1	1.2	1.2	1.4	1.4	1.6
9	Approx. outer diameter of cable.	mm	7.1	8.8	9.9	11.4	13.1	15.3
10	Maximum DC Resistance of conductor at 20°C	Ohm/km	1.15	0.727	0.524	0.387	0.268	0.193
11	Maximum AC Resistance per core at 70°C(Approx)	Ohm/km	1.38	0.87	0.627	0.464	0.321	0.232
12	Maximum conductor operating temperature.	°C	70					
13	Voltage drop	mv/Amp/mt	2.4	1.55	1.1	0.85	0.61	0.48
14	Max. allowable tensile strength	Kgf	96	150	210	300	420	570
15	Minimum allowable bending radius	mm	22	27	30	46	53	62
16	Approx. weight of completed cable.	kg/km	180	280	370	500	700	970
17	Conditions of installations :							
18	Air temperature	°C	30					

	ITEM	No.	1	2	3	4	5
Sr #	Cu/PVC TO BS EN 50525-2-31	UNIT	1X120	1X150	1X185	1X240	1X300
1	Manufacturer		DUBAI CABLE COMPANY (PVT) LTD.				
2	Country of Origin		U.A.E				
3	Type of Cable		Cu/PVC				
4	Standard		BS EN 50525-2-31				
5	Nominal voltage rating	Volts	450/750				
6	Max. continuous current carrying capacity when laid						
	In air	Amps	239	262	296	346	394
7	Conductors :						
	Material		Plain Annealed Copper				
	No. of Cores	No.	1	1	1	1	1
	Nominal cross section	mm ²	120	150	185	240	300
8	Insulation of conductors :						
	Material		Extruded PVC				
	Minimum average thickness	mm	1.6	1.8	2	2.2	2.4
9	Approx. outer diameter of cable.	mm	16.7	18.6	20.7	23.6	26.3
10	Maximum DC Resistance of conductor at 20°C	Ohm/km	0.153	0.124	0.0991	0.0754	0.0601
11	Maximum AC Resistance per core at 70°C(Approx)	Ohm/km	0.185	0.149	0.12	0.0926	0.075
12	Maximum conductor operating temperature.	°C					
13	Voltage drop	mv/Amp/mt	0.41	0.36	0.32	0.29	0.27
14	Max. allowable tensile strength	Kgf	720	900	1110	1440	1800
15	Minimum allowable bending radius	mm	67	75	83	95	158
16	Approx. weight of completed cable.	kg/km	1190	1470	1840	2400	3010
17	Conditions of installations :						
18	Air temperature	°C	30				