(1) PVC Insulated, Copper Conductor, Non-Jacket, Single Core (IEC60227).

(A) Application

These cores are used for the purpose of lighting, internal, and industrial wiring. These cables are intended for drawing into trunk and conduit. They may also be used inside fixed, protected installations such as light fittings, appliances, switch gear, and control gear.

(B) Technical Data

Relevant Standard: IEC 60227.

Conductor: Plain annealed copper, class 1, 2, and 5 according to IEC 60228

Insulation: PVC rated @ 70 °C or 90 °C.

Maximum conductor temperature: 70 °C during operation.

Color code: Any colors are available to order.

Packing condition: 100 Yard on either:

•Shrink wrapped coil.

■ Plastic spool.

(C) Electrical Data

Conductor resistance (max.) According to IEC 60228 / BS 6360.

Rated voltage: Uo/U 450/750 V.

Test voltage Urms: 1500 V for radial insulation thickness $\leq 0.6 \text{ mm}$.

2000 V for radial insulation thickness > 0.6 mm.

Current rating: As listed in the following tables.



(D) Product Data (Standard Products)

	C	Conductor	Radial thickness	Overall	Cable	Current	
		Max. DC Resistance	of insulation	diameter	weight	rating in free air @ 30 °C	
	Cross Srea	@ 20 °C	(Nom.)	(Approx.)	(Approx.)		
		(Ω / km)	(mm)	(mm)	(kg/km)	(A)	
Solid	1 x 1.0	18.10	0.6	2.33	13.6	22	
	1 x 1.5	12.10	0.7	2.78	19.9	28	
	1 x 2.5	7.41	0.8	3.38	31.5	38	
	1 x 4.0	4.61	0.8	3.86	46.6	50	
	1 x 1.0	18.10	0.6	2.48	14.4	22	
	1 x 1.5	12.10	0.7	2.96	21.0	28	
	1 x 2.5	7.41	0.8	3.58	32.3	38	
Stranded	1 x 4.0	4.61	0.8	4.12	48	50	
	1 x 6.0	3.08	0.8	4.69	69	66	
	1 x 10	1.83	1.0	6.0	114	89	
	1 x 16	1.15	1.0	7.0	172	115	
	1 x 25	0.727	1.2	8.8	272	152	
	1 x 35	0.524	1.2	9.8	362	189	
Flexible	1 x 1.0	19.50	0.6	2.40	13.1	22	
	1 x 1.5	13.3	0.7	3.00	20.6	28	
	1 x 2.5	7.98	0.8	3.65	32.6	38	
	1 x 4.0	4.95	0.8	4.20	48	50	
	1 x 6.0	3.30	0.8	4.78	69	66	
	1 x 10	1.91	1.0	6.10	113	89	
	1 x 16	1.21	1.0	7.10	117	115	
	1 x 25	0.780	1.2	8.80	250	152	
	1 x 35	0.554	1.2	10.0	345	189	

Remark: Dimensions and weights are representative figures and may vary by ± 5 %.

Current rating correction factor for ambient temperature											
Ambient Temperature	35 °C	40 °C	45 °C	50 °C	55 °C	60 °C	65 °C				
Correction factor	0.94	0.87	0.79	0.71	0.61	0.50	0.35				