



-the nation's live wire-

## 600/1000V Cables for surface Wiring

### Single -Core, PVC-Insulated, PVC Sheathed 600/1000V Wires (VV)



**Specification:** BS 6004

**Construction:** Plain annealed-copper solid or stranded conductor with PVC Insulation and PVC sheath

**Colours of Core Identification:** Insulation: red, or black  
Sheath: grey

**Application:** general fixed wiring indoors or outdoors

Conductor		Radial thickness of insulation mm	Radial thickness of sheath mm	Overall diameter mm	Maximum DC resistance per km at 20°C ohm	Approximate mass per km kg	Standard unit length m
Nominal cross sectional area mm <sup>2</sup>	Number and nominal diameter of wires mm						
1.0	1/1.13	0.6	0.8	4.2	17.7	17	100
1.5	1/1.38	0.7	0.8	4.6	11.9	18	100
2.5	1/1.78	0.8	0.8	5.2	7.14	23	100
4	7/0.85	0.8	0.9	6.2	4.52	34	100
6	7/1.04	0.8	0.9	6.8	3.02	38	100
10	7/1.35	1.0	0.9	8.1	1.79	54	100
16	7/1.70	1.0	1.0	9.4	1.13	68	100
25	7/2.14	1.2	1.1	11.4	0.712	96	100
35	19/1.53	1.2	1.1	12.6	0.514	105	100
50	19/1.78	1.4	1.2	14.5	0.379	137	100
70	19/2.14	1.4	1.2	16.3	0.262	163	100
95	19/2.52	1.6	1.3	18.8	0.189	211	100

VV  
PVC insulation ———  
PVC sheath ———

### CURRENT - CARRYING CAPACITIES AND ASSOCIATED VOLTAGE DROPS FOR VV WIRE.

BS: 6004, BS: 6346 NIS:172

CABLE SIZE mm <sup>2</sup>	INSTALLATION METHOD/TYPE OF SUPPLY			
	CLIPPED DIRECT TO NON-METALLIC SURFACE SUSPENDED WITH A CATENARY WIRE OR ENCLOSED			
	2 CABLES, SINGLE-PHASE AC or DC		3 or 4 CABLES THREE PHASE AC	
	CURRENT RATING (Ampere)	VOLTAGE DROP per amp/metre (mv)	CURRENT RATING (Ampere)	VOLTAGE DROP per amp/metre (mv)
1.0	17	42	16	37
1.5	21	28	20	24
2.5	30	17	26	15
4	40	11	36	9.2
6	50	7.1	45	6.2
10	68	4.2	61	3.7
16	90	2.7	81	2.3
25	118	1.7	106	1.5
35	145	1.3	130	1.1
50	175	0.93	160	0.82
70	220	0.65	200	0.59
95	270	0.48	240	0.45

Conductor Operating Temperature: 70°C

Assumed Ambient Temperature: 35°C

Where the ambient temperature exceeds the value stated, the appropriate correction factor must be applied.

See footnote on Page 7 for correction factor for PVC insulated cables.