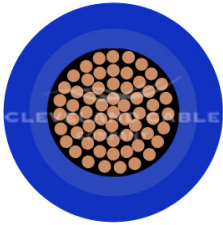


## 6381Y / BS6004 DC TELECOMS PVC CABLE



### APPLICATION

This is a flexible single core PVC Telecoms Cable. For use in DC power supplies on telecoms equipment and power applications where flexible cable is a requirement

### CABLE STANDARDS

**1.5mm<sup>2</sup> to 35mm<sup>2</sup>:**  
Generally to BS 6004

**50mm<sup>2</sup> and above:**  
BS EN/IEC 60502-1  
BS EN/IEC 60332-1-2

### CONSTRUCTION

**Conductor:** Flexible Copper Conductor  
**Insulation:** Poly Vinyl Chloride (PVC)  
**Sheath:** Poly Vinyl Chloride (PVC)  
**Sheath Colour:** All sizes available in  
 Blue
  Grey
  Green/Yellow

### CHARACTERISTICS

**Voltage Rating:**  
**1.5mm<sup>2</sup> to 35mm<sup>2</sup>:** 450/750 Volts  
**50mm<sup>2</sup> and above:** 600/1000 Volts

**Temperature Limits:** -15°C to +70°C

**Minimum Bending Radius:** As per cable manufacturer datasheet

Should not be installed at temperatures below 0°C or above +60°C

## 6381Y / BS6004 PVC TELECOMS CABLE - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM <sup>2</sup> )	STRANDING	WEIGHT (KG/KM)	OUTSIDE DIAMETER (MM)	BRASS A2	NYLON A2
6381Y1/5	1.5	30/0.25	38	4.91	20/16	16
6381Y2/5	2.5	50/0.25	49	5.35	20/16	16
6381Y4	4	50/0.25	71	6.25	20/16	16
6381Y6	6	84/0.30	101	7.6	20/16	16
6381Y10	10	80/0.40	152	8.56	20/16	16
6381Y16	16	126/0.40	215	9.75	20/16	16
6381Y25	25	196/0.40	307	11.5	20S	20
6381Y35	35	276/0.40	405	12.5	20S	20
6381Y50	50	396/0.40	580	15.1	20	20
6381Y70	70	360/0.50	769	16.95	20	25
6381Y95	95	475/0.50	1008	19.1	25	25
6381Y120	120	608/0.50	1282	21.6	25	25
6381Y150	150	756/0.50	1571	23.4	25	32
6381Y185	185	925/0.50	1895	25.5	32	32
6381Y240	240	1221/0.50	2435	28.5	32	32

## 6381Y / BS6004 PVC CABLE - CURRENT CARRYING CAPACITY (AMPERES)

CONDUCTOR CROSS - SECTIONAL AREA	REFERENCE METHOD A (ENCLOSED IN CONDUIT THERMALLY INSULATING WALL ETC)		REFERENCE METHOD B (ENCLOSED IN CONDUIT ON A WALL OR IN TRUNKING ETC)		REFERENCE METHOD C (CLIPPED DIRECT)		REFERENCE METHOD F (IN FREE AIR ON A PERFORATED CABLE TRAY HORIZONTAL / VERTICAL)				
	2 CABLES, SINGLE - PHASE AC OR DC	3 OR 4 CABLES, SINGLE - PHASE AC	2 CABLES, SINGLE - PHASE AC OR DC	OR 4 CABLES, THREE PHASE AC	2 CABLES, SINGLE - PHASE AC OR DC FLAT AND TOUCHING	3 OR 4 CABLES, THREE - PHASE AC FLAT AND TOUCHING OR TREFOIL	TOUCHING			SPACED BY ONE DIAMETER	
							2 CABLES, SINGLE - PHASE AC OR DC FLAT	3 CABLES, THREE - PHASE AC FLAT	3 CABLES, THREE - PHASE AC TREFOIL	2 CABLES, SINGLE PHASE AC OR DC OR 3 CABLES THREE - PHASE AC FLAT	HORIZONTAL
1	2	3	4	5	6	7	8	9	10	11	12
(MM <sup>2</sup> )	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
1.5	14.5	13.5	17.5	15.5	20	18	-	-	-	-	-
2.5	20	18	24	21	27	25	-	-	-	-	-
4	26	24	32	28	37	33	-	-	-	-	-
6	34	31	41	36	47	43	-	-	-	-	-
10	46	42	57	50	65	59	-	-	-	-	-
16	61	56	76	68	87	79	-	-	-	-	-
25	80	73	101	89	114	104	131	114	110	146	130
35	99	89	125	110	141	129	162	143	137	181	162
50	119	108	151	134	182	167	196	174	167	219	197
70	151	136	192	171	234	214	251	225	216	281	254
95	182	164	232	207	284	261	304	275	264	341	311
120	210	188	269	239	330	303	352	321	308	396	362
150	240	216	300	262	381	349	406	372	356	456	419
185	273	245	341	296	436	400	463	427	409	521	480
240	321	286	400	346	515	472	546	507	485	615	569

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS

## 6381Y / BS6004 PVC CABLE - CURRENT CARRYING CAPACITY (AMPERES)

NOMINAL CROSS SECTIONAL AREA (MM <sup>2</sup> )	TWO CORE CABLE DC	2 CABLES SINGLE-PHASE AC MV/A/M									3 OR 4 CABLES THREE-PHASE AC MV/A/M											
		REFERENCE METHODS A AND B (ENCLOSED IN CONDUIT OR TRUNKING)			REFERENCE METHODS C, F AND G (CLIPPED DIRECT, ON TRAY OR IN FREE AIR)						REFERENCE METHODS A AND B (ENCLOSED IN CONDUIT OR TRUNKING)	REFERENCE METHODS C, F AND G (CLIPPED DIRECT, ON TRAY OR IN FREE AIR)										
					CABLES TOUCHING			CABLES SPACED*				CABLES TOUCHING, TREFOIL			CABLES TOUCHING, FLAT			CABLES SPACED*, FLAT				
1	2	3			4			5			6	7			8			9				
(MM <sup>2</sup> )	(mVIA /m)	(mVIA /m)			(mVIA /m)			(mVIA /m)			(mVIA /m)	(mVIA /m)			(mVIA /m)			(mVIA /m)				
1.5	28.00	29.00			29.00			29.00			25.00	25.00			25.00			25.00				
2	18.00	18.00			18.00			18.00			15.00	15.00			15.00			15.00				
4	11.00	11.00			11.00			11.00			9.50	9.50			9.50			9.50				
6	7.30	7.30			7.30			7.30			6.40	6.40			6.40			6.40				
10	4.40	4.40			4.40			4.40			3.80	3.80			3.80			3.80				
16	2.80	2.80			2.80			2.80			2.40	2.40			2.40			2.40				
		R	X	Z	R	X	Z	R	X	Z	R	X	Z	R	X	Z	R	X	Z	R	X	Z
25	1.750	1.800	0.330	1.800	1.750	0.200	1.750	1.750	0.290	1.800	1.500	0.290	1.550	1.500	0.180	1.500	0.150	0.250	1.550	1.500	0.320	1.550
35	1.250	1.300	0.310	1.300	1.250	0.200	1.250	1.250	0.280	1.300	1.100	0.270	1.100	1.100	0.170	1.100	0.100	0.24	1.100	1.100	0.320	1.150
50	0.930	0.950	0.300	1.000	0.930	0.190	0.950	0.930	0.280	0.970	0.81	0.260	0.850	0.800	0.170	0.820	0.800	0.24	0.840	0.800	0.320	0.860
70	0.630	0.650	0.290	0.720	0.630	0.190	0.660	0.630	0.270	0.690	0.560	0.250	0.61	0.550	0.160	0.57	0.550	0.24	0.600	0.550	0.31	0.630
95	0.460	0.490	0.280	0.560	0.47	0.180	0.500	0.47	0.270	0.540	0.420	0.24	0.480	0.41	0.160	0.430	0.41	0.230	0.47	0.400	0.31	0.51
120	0.360	0.390	0.270	0.47	0.370	0.180	0.410	0.370	0.260	0.450	0.330	0.230	0.41	0.320	0.150	0.360	0.320	0.230	0.400	0.320	0.300	0.440
150	0.290	0.31	0.270	0.41	0.300	0.180	0.340	0.290	0.260	0.390	0.270	0.230	0.360	0.260	0.150	0.300	0.260	0.230	0.340	0.260	0.300	0.400
185	0.230	0.250	0.270	0.370	0.24	0.170	0.290	0.24	0.260	0.350	0.220	0.230	0.320	0.21	0.150	0.260	0.21	0.220	0.31	0.21	0.300	0.360
240	0.180	0.200	0.260	0.330	0.190	0.170	0.250	0.190	0.250	0.31	0.170	0.230	0.290	0.160	0.150	0.220	0.160	0.220	0.270	0.160	0.290	0.340

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS

CONDUCTOR OPERATING TEMPERATURE: 90°C

R = RESISTIVE COMPONENT  
X = REACTIVE COMPONENT  
Z = IMPEDANCE VALUE

\* SPACINGS LARGER THAN THOSE SPECIFIED IN METHOD 12 (SEE TABLE 4A OF THE 17TH EDITION OF IEE WIRING REGULATIONS) WILL RESULT IN LARGER VOLT DROP.

THE ABOVE IS IN ACCORDANCE WITH 17TH EDITION OF IEE WIRING REGULATIONS.

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