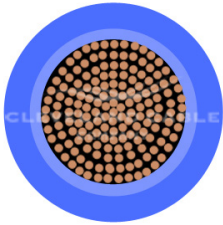


## 6381B / BS 7211 / IEC 60502-1 DC TELECOMS LSZH CABLE



### APPLICATION

This is a flexible single core LSZH 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 7211

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

Conductor Generally to BS EN 60228

### CONSTRUCTION

**Conductor:** Flexible Copper Conductor

**Insulation:** Cross Linked Polyethylene (XLPE)

**Sheath:** Low Smoke Zero Halogen (LSZH)

**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:** 0°C to +90°C

**Minimum Bending Radius:**

As per cable manufacturer datasheet

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

## 6381B / BS 7211 / IEC 60502-1 DC TELECOMS LSZH CABLE - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM <sup>2</sup> )	STRANDING (MM)	WEIGHT (KG/KM)	OVERALL DIAMETER (MM)	GLAND SIZE
6381B1/5	1.5	30/0.25	31	4.51	16
6381B2/5	2.5	50/0.25	42	4.95	16
6381B4	4	50/0.25	59	5.65	16
6381B6	6	84/0.30	82	6.8	20/16
6381B10	10	80/0.40	121	7.1	20S
6381B16	16	126/0.40	177	8.4	20S
6381B25	25	196/0.40	266	10.3	20
6381B35	35	276/0.40	365	11.5	20
6381B50	50	396/0.40	535	14.9	20
6381B70	70	360/0.50	723	16.3	25
6381B95	95	475/0.50	940	18.6	25
6381B120	120	608/0.50	1183	20.8	25
6381B150	150	756/0.50	1468	22.2	32
6381B185	185	925/0.50	1785	24.3	32
6381B240	240	1221/0.50	2310	27.8	32

## 6381B DC TELECOMS LSZH 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 OR VERTICAL)				
	2 CABLES, SINGLE - PHASE AC OR DC	3 OR 4 CABLES, SINGLE - PHASE AC	2 CABLES, SINGLE - PHASE AC OR DC	3 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.

## 6381B DC TELECOMS LSZH CABLE - VOLTAGE DROP

CROSS SECTIONAL AREA MM <sup>2</sup>	2 CABLES DC MV/A/M	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> )	(mV/A/m)	(mV/A/m)			(mV/A/m)			(mV/A/m)			(mV/A/m)			(mV/A/m)			(mV/A/m)			(mV/A/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	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	1.500	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	1.100	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			

CONDUCTOR OPERATING TEMPERATURE: 90°C

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

\* SPACINGS LARGER THAN THOSE SPECIFIED IN METHOD 12 WILL RESULT IN LARGER VOLT DROP.

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.