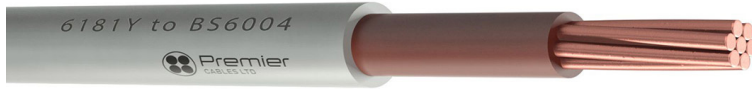


## 6181B Cable



### Application

Fixed installation in walls, on boards and in channels or embedded in plaster.  
Low smoke emission and corrosive gasses in case of fire.

### Standards

**BS 7211, IEC 60502-1, EN 60228**

**Flame Retardant according to EN 60332-1**

**Halogen free according to EN 60754-1/2, EN 61034**

### Characteristics

**Voltage Rating** U<sub>o</sub>/U

450/750V

0.6/1kV

**Test Voltage**

2.5kV

3.5kV

**Temperature Rating**

Maximum Operating temperature: +90°C

Maximum Short Circuit: +250°C

**Minimum Bending Radius**

Up to 25mm<sup>2</sup>: 8 x overall diameter

Above 25mm<sup>2</sup>: 12 x overall diameter



### Construction

**Conductor**

Class 1 Solid copper

Class 2 Stranded copper

**Insulation**

XLPE (Cross-Linked Polyethylene)

**Outer Sheath**

LSZH (Low-smoke zero halogen)

**Sheath Colour**

Grey



## Dimensions

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER OF CONDUCTOR mm	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF OVERSHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
1.5	1.38	0.7	0.8	4.4	31
2.5	1.76	0.7	0.8	4.8	41
4	2.5	0.7	0.9	5.7	63
6	3.1	0.7	0.9	6.3	83
10	3.85	0.7	0.9	7.1	125
16	4.8	0.7	0.9	8	183
25	5.85	0.9	1	9.7	276
35	6.9	0.9	1.1	10.9	374
50	8.1	1.1	1.4	13.1	520
70	9.7	1.1	1.4	14.7	715
95	11.4	1.1	1.8	17.2	995
120	12.65	1.2	1.8	18.7	1225
150	14.4	1.4	1.8	20.8	1510
185	15.75	1.6	2	23	1870
240	18.2	1.7	2	25.6	2425
300	20.5	2	2.2	28.9	3048



## Electrical Characteristics

### Current Carrying Capacity

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	REFERENCE METHOD A (ENCLOSED IN CONDUIT IN THERMALLY INSULATING WALL ETC) Amps		REFERENCE METHOD B (ENCLOSED IN CONDUIT IN THERMALLY INSULATING WALL OR IN TRUNKING ETC) Amps		REFERENCE METHOD C (CLIPPED DIRECT) Amps		REFERENCE METHOD F (IN FREE AIR OR ON A PERFORATED CABLE TRAY ETC HORIZONTAL OR VERTICAL ETC) Amps				
	2 Cables Single-Phase AC or DC	3 or 4 Cables Three-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	Horizontal	Vertical
1	14	13	17	15	19	17.5	-	-	-	-	-
1.5	19	17	23	20	25	23	-	-	-	-	-
2.5	26	23	31	28	34	31	-	-	-	-	-
4	35	31	42	37	46	41	-	-	-	-	-
6	45	40	54	48	59	54	-	-	-	-	-
10	61	54	75	66	81	74	-	-	-	-	-
16	81	73	100	88	109	99	-	-	-	-	-
25	106	95	133	117	143	130	161	141	135	182	161
35	131	117	164	144	176	161	200	176	169	226	201
50	158	141	198	175	228	209	242	216	207	275	246
70	200	179	253	222	293	268	310	279	268	353	318
95	241	216	306	269	355	326	377	342	328	430	389
120	278	249	354	312	413	379	437	400	383	500	454
150	318	285	393	342	476	436	504	464	444	577	527
185	362	324	449	384	545	500	575	533	510	661	605
240	424	380	528	450	644	590	679	634	607	781	719
300	486	435	603	514	743	681	783	736	703	902	833
400	-	-	683	584	868	793	940	868	823	1085	1008
500	-	-	783	666	990	904	1083	998	946	1253	1169
630	-	-	900	764	1130	1033	1254	1151	1088	1454	1362

Ambient temperature: 30°C

Conductor operating temperature: 90°C

The above table is in accordance with Table 4E1A of the 18th Edition of IEE Wiring Regulations BS7671 and IEC 60364-5-52.

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.