



6181B/6182B/6183B/6184B/6185B to BS 7211

Application and Description

These cables are designed for fixed wiring purposes in domestic and industrial power/lighting applications. They can be installed in trunking or conduit, or may be surface mounted when used for earthing. They are suitable for use in areas (such as public and government buildings) where smoke and toxic fumes may cause a threat to life and equipment. When mechanical protection is required, they can be embedded in concrete.

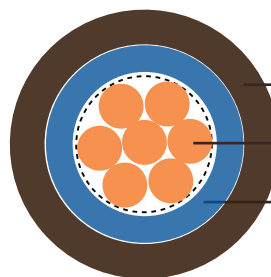


Cable Construction

- Bare copper made of strands conductor
- Stranding to IEC 60228 CL-1/2
- Thermosetting insulation, type EI 5 or type GP 8 insulation
- For 2 cores and above, the cores shall be laid up together. Centre filler may be used; the laid up cores may be covered by an optional extruded inner covering or separating tape
- LSOH type LTS4 sheath

Core Identification

- 2-core: brown and blue;
- 3-core: brown, black and grey;
- 4-core: blue, brown, black and grey;
- 5-core: greenlyellow, blue, brown, black and grey



- LSOH sheath
- Bare copper conductor
- XLPE insulation

6181B

Technical Characteristics

- Working voltage: 450/750 volts
- Operating temperature: -15° C to +90° C
- Insulation resistance: 10 MΩxkm
- Halogen free acc. to EN 50267-2-1 / IEC 60754-1
- Smoke density acc. to EN 50268-2 / IEC 61034-2
- Corrosivity of gases acc. to EN 50267-2-2, IEC 60754-2
- Flame retardancy acc. to EN 50265-2-1, IEC 60332-1



Cable Parameter

AWG (No of Strands/ Strand Diameter)	No. of Cores x Nominal Cross Sectional Area #xmm ²	Nominal Thickness of Insulation mm	Nominal Thickness of inner Covering mm	Nominal Thickness of Sheath mm	Nominal Overall Diameter lower limit mm	Nominal Overall Diameter upper limit mm
6181B						
18(solid)	1x1.0	0.7	-	0.8	3.9	4.8
18(7/26)	1x1.0	0.7	-	0.8	4	4.9
16(solid)	1x1.5	0.7	-	0.8	4.2	5
16(7/24)	1x1.5	0.7	-	0.8	4.3	5.2
14(solid)	1x2.5	0.7	-	0.8	4.6	5.5
14(7/22)	1x2.5	0.7	-	0.8	4.7	5.6
12(solid)	1x4	0.7	-	0.9	5.2	6.3
12(7/20)	1x4	0.7	-	0.9	5.3	6.4
10(solid)	1x6	0.7	-	0.9	5.7	6.8
10(7/18)	1x6	0.7	-	0.9	5.9	7.1
8(7/16)	1x10	0.7	-	0.9	6.7	8.1
6(7/14)	1x16	0.7	-	0.9	7.6	9.2
4(7/12)	1x25	0.9	-	1	9.7	11.4
2(7/10)	1x35	0.9	-	1.1	10.6	12.8
6182B						
18(solid)	2x1.0	0.7	0.4	1.2	7.1	9.5
18(7/26)	2x1.0	0.7	0.4	1.2	7.3	9.7
16(solid)	2x1.5	0.7	0.4	1.2	7.6	10.1
16(7/24)	2x1.5	0.7	0.4	1.2	7.8	10.3
14(solid)	2x2.5	0.7	0.4	1.2	8.4	11
14(7/22)	2x2.5	0.7	0.4	1.2	8.5	11.3
12(solid)	2x4	0.7	0.4	1.2	9.2	12.1
12(7/20)	2x4	0.7	0.4	1.2	9.5	12.4
10(solid)	2x6	0.7	0.4	1.2	10.2	13.2
10(7/18)	2x6	0.7	0.4	1.2	10.6	13.7
8(solid)	2x10	0.7	0.4	1.4	12.1	16
8(7/16)	2x10	0.7	0.6	1.4	12.7	16.7
6(7/14)	2x16	0.7	0.6	1.4	14.4	18.8
4(7/12)	2x25	0.9	0.8	1.4	17.7	23.2
2(7/10)	2x35	0.9	0.8	1.6	20	26



AWG (No of Strands/ Strand Diameter)	No. of Cores x Nominal Cross Sectional Area #xmm ²	Nominal Thickness of Insulation mm	Nominal Thickness of inner Covering mm	Nominal Thickness of Sheath mm	Nominal Overall Diameter lower limit mm	Nominal Overall Diameter upper limit mm
6183B						
18(solid)	3x1.0	0.7	0.4	1.2	7.5	10.0
18(7/26)	3x1.0	0.7	0.4	1.2	7.7	10.2
16(solid)	3x1.5	0.7	0.4	1.2	8.0	10.6
16(7/24)	3x1.5	0.7	0.4	1.2	8.2	10.9
14(solid)	3x2.5	0.7	0.4	1.2	8.8	11.6
14(7/22)	3x2.5	0.7	0.4	1.2	9.0	11.9
12(solid)	3x4	0.7	0.4	1.2	9.8	12.7
12(7/20)	3x4	0.7	0.4	1.2	10.1	13.1
10(solid)	3x6	0.7	0.4	1.2	11.2	14.4
10(7/18)	3x6	0.7	0.4	1.4	11.6	15.0
8(solid)	3x10	0.7	0.6	1.4	12.8	16.9
8(7/16)	3x10	0.7	0.6	1.4	13.5	17.7
6(7/14)	3x16	0.7	0.6	1.4	15.3	19.9
4(7/12)	3x25	0.9	0.8	1.4	18.9	24.6
2(7/10)	3x35	0.9	0.8	1.6	21.3	27.6
6184B						
18(solid)	4x1.0	0.7	0.4	1.2	8.1	10.7
18(7/26)	4x1.0	0.7	0.4	1.2	8.3	11.0
16(solid)	4x1.5	0.7	0.4	1.2	8.7	11.4
16(7/24)	4x1.5	0.7	0.4	1.2	8.9	11.7
14(solid)	4x2.5	0.7	0.4	1.2	9.6	12.6
14(7/22)	4x2.5	0.7	0.4	1.2	9.9	12.8
12(solid)	4x4	0.7	0.4	1.2	10.7	13.8
12(7/20)	4x4	0.7	0.4	1.2	11.0	14.2
10(solid)	4x6	0.7	0.4	1.4	12.2	16.1
10(7/18)	4x6	0.7	0.6	1.4	12.7	16.7
8(solid)	4x10	0.7	0.6	1.4	14.1	18.4
8(7/16)	4x10	0.7	0.6	1.4	14.8	19.2
6(7/14)	4x16	0.7	0.6	1.4	16.9	21.8
4(7/12)	4x25	0.9	0.8	1.6	21.2	27.5
2(7/10)	4x35	0.9	1.0	1.6	23.5	30.7



Industrial Cables to British Standard

AWG (No of Strands/ Strand Diameter)	No. of Cores x Nominal Cross Sectional Area #xmm ²	Nominal Thickness of Insulation mm	Nominal Thickness of inner Covering mm	Nominal Thickness of Sheath mm	Nominal Overall Diameter lower limit mm	Nominal Overall Diameter upper limit mm
6185B						
18(solid)	5x1.0	0.7	0.4	1.2	8.8	11.5
18(7/26)	5x1.0	0.7	0.4	1.2	9.0	11.9
16(solid)	5x1.5	0.7	0.4	1.2	9.4	12.3
16(7/24)	5x1.5	0.7	0.4	1.2	9.7	12.6
14(solid)	5x2.5	0.7	0.4	1.2	10.5	13.6
14(7/22)	5x2.5	0.7	0.4	1.2	10.7	13.9
12(solid)	5x4	0.7	0.4	1.4	12.0	15.9
12(7/20)	5x4	0.7	0.6	1.4	12.4	16.4
10(solid)	5x6	0.7	0.6	1.4	13.3	17.5
10(7/18)	5x6	0.7	0.6	1.4	13.8	18.1
8(solid)	5x10	0.7	0.6	1.4	15.4	20.0
8(7/16)	5x10	0.7	0.6	1.4	16.2	20.9
6(7/14)	5x16	0.7	0.8	1.4	18.5	24.2
4(7/12)	5x25	0.9	1.0	1.6	23.3	30.5
2(7/10)	5x35	0.9	1.0	1.6	25.9	33.6