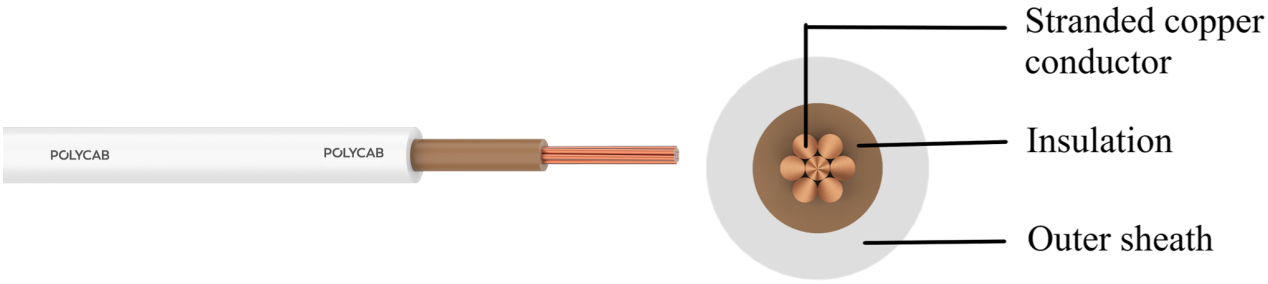
POLYCAB 6181B BS 7211 SC
Lighting and Appliances wire, 450/750 V AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB 6181B BS 7211 SC stranded copper conductor thermosetting material insulated and halogen free material sheathed single core cable fulfils the requirement as per BS 7211. These cables are produced lower level of smoke and corrosive gases under exposure to fore compared PVC insulated cable and can be used for lighting and domestic appliances.

CHARACTERISTICS

Voltage Rating
450/750 V

Operation Temperature
Max. Operating: 90° C
Short circuit temperature 250°C
Bending Radius
Fixed installation >8 x Overall Diameter
Occasional >6 x Overall Diameter

CONSTRUCTION

- Annealed solid or stranded copper conductor as per IEC 60228, class 1 or class 2
- Insulated with Cross linked compound Type GP 8 confirming to BS 7655-1.3 or EI 5 to BS EN 50363-5
- Sheathed with Halogen free material type LTS4 confirming to BS 7655-6.1

Core Identification
Brown or Blue

Test Voltage
2500V AC at (20±5) °C

OUTSTANDING FEATURES

- Low smoke emission
- Flame propagation

STANDARD FOLLOWS

IEC 60228
BS 7655-1.3/BS EN 50363-5
BS 7655-6.1
BS 7211:1998

COMPLIANCE

Conductor Resistance test - IEC 60228
Insulation Resistance test - BS 7211
Smoke emission - BS EN 61034
Flame propagation - BS EN 60332

APPROVAL

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WEIGHT & DIMENSION DATA :

Product Code	Nominal cross sectional area mm²	Class of conductor	Nominal insulation thickness mm	Overall Diameter (Approx.) mm	Weight (Approx.) kg/km
LDBS06CXUALC001C001S	1	1	0.7	4.10	26
LDBS06CXUALC001C1.5S	1.5	1	0.7	4.4	33
LDBS06CXUALC001C2.5S	2.5	1	0.7	4.8	45
LDBS06CXUALC001C004S	4	1	0.7	5.3	63
LDBS06CXUALC001C006S	6	1	0.7	6	87
LDBS06CXUALC002C001S	1	2	0.7	4.26	27
LDBS06CXUALC002C1.5S	1.5	2	0.7	4.59	35
LDBS06CXUALC002C2.5S	2.5	2	0.7	5.01	46
LDBS06CXUALC002C004S	4	2	0.7	5.78	67
LDBS06CXUALC002C006S	6	2	0.7	6.32	87
LDBS06CXUALC002C010S	10	2	0.7	7.25	131
LDBS06CXUALC002C016S	16	2	0.7	8.3	191
LDBS06CXUALC002C025S	25	2	0.9	10.22	297
LDBS06CXUALC002C035S	35	2	0.9	11.56	400

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Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area	Reference Method A (enclosed in conduit in 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 or on a perforated cable tray etc horizontal or vertical etc.)			Reference Method G (in free air)		Maximum DC Conductor resistance
					Spaced by one cable diameter		Touching			Spaced by one cable diameter		
	2 cables, single-phase a.c. or d.c.	3 or 4 cables, three-phase a.c.	2 cables, single-phase a.c. or d.c.	3 or 4 cables, three-phase a.c.	2 cables, single-phase a.c. or d.c. flat and touching	3 or 4 cables, three-phase a.c. flat and touching or trefoil	2 cables, single-phase a.c. or d.c. flat	3 cables, three-phase a.c. flat	3 cables, three-phase a.c. trefoil	2 cables, single-phase a.c. or d.c. or 3 cables three-phase a.c. flat		
										Horizontal	Vertical	
mm²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
1	14	13	17	15	19	17.5	–	–	–	–	–	18.1
1.5	19	17	23	20	25	23	–	–	–	–	–	12.1
2.5	26	23	31	28	34	31	–	–	–	–	–	7.41
4	35	31	42	37	46	41	–	–	–	–	–	4.61
6	45	40	54	48	59	54	–	–	–	–	–	3.08
10	61	54	75	66	81	74	–	–	–	–	–	1.83
16	81	73	100	88	109	99	–	–	–	–	–	1.15
25	106	95	133	117	143	130	161	141	135	182	161	0.727
35	131	117	164	144	176	161	200	176	169	226	201	0.524

Ambient temperature: 30°C
Conductor operating temperature: 90°C
The above table is in accordance with Table 4E1A of BS 7671:2018

De-Rating Factor

De-rating factor for 90°C thermosetting insulated cable

Air Temperature	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C	80°C	85°C
De-rating factor	0.95	0.91	0.86	0.82	0.76	0.7	0.64	0.57	0.50	0.4	0.28