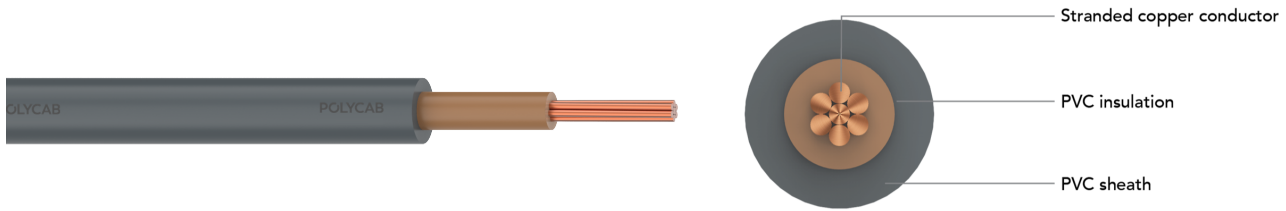


POLYCAB 6181Y BS 6004 SC

Lighting & Appliance wire, 300/500 V AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB 6181Y BS 6004 SC stranded copper conductor PVC insulated and PVC sheathed cable confirm the requirement as per BS 6004. These cables are intended to use for electric power and lighting application

CHARACTERISTICS

Voltage Rating

300/500 V

Operation Temperature

Fixed: -15°C to 70° C

Max. short circuit temp. 160°C

Bending Radius

Fixed installation - 8 x Overall Diameter

Occasional - 6 x Overall Diameter

OUTSTANDING FEATURES

- Flame Propagation
- Heat stability
- UV stability

STANDARD FOLLOWS

EN 60228

EN 50363-3

BS 7655-4.2

BS 6004:2000

COMPLIANCE

Conductor Resistance test - EN 60228

Insulation Resistance test - BS 6004

Flame propagation - EN 60332-1-2

CONSTRUCTION

- Annealed stranded or solid copper conductor as per EN 60228, class 2 or Class 1
- Insulated with PVC Type TI 1 to EN 50363-3
- Sheathed with PVC Type 6 to BS 7655-4.2

Core Identification

Brown or Blue

Test Voltage

2000V AC at (20±5) °C

OUR ACCREDITATIONS



APPROVAL



POLYCAB 6181Y BS 6004 SC

Lighting & Appliance wire, 300/500 V AC

WEIGHT & DIMENSION DATA :

| Product Code | Construction n x mm ² | Class of conductor | Nominal insulation thickness mm | Overall Diameter (Approx.) mm | Weight (Approx.) kg/km |
|----------------------|-------------------------------------|-----------------------|--|--|------------------------------|
| LDBS04CYUAYA001C001S | 1 x 1 | 1 | 0.6 | 3.9 | 26 |
| LDBS04CYUAYA001C1.5S | 1 x 1.5 | 1 | 0.7 | 4.4 | 35 |
| LDBS04CYUAYA001C2.5S | 1 x 2.5 | 1 | 0.8 | 5 | 50 |
| LDBS04CYUAYA001C004S | 1 x 4 | 2 | 0.8 | 5.98 | 72 |
| LDBS04CYUAYA001C006S | 1 x 6 | 2 | 0.8 | 6.52 | 94 |
| LDBS04CYUAYA001C010S | 1 x 10 | 2 | 1 | 7.85 | 145 |
| LDBS04CYUAYA001C016S | 1 x 16 | 2 | 1 | 9.1 | 213 |
| LDBS04CYUAYA001C025S | 1 x 25 | 2 | 1.2 | 11.02 | 325 |
| LDBS04CYUAYA001C035S | 1 x 35 | 2 | 1.2 | 12.16 | 426 |

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 horizontal or vertical etc.) | | | | | Maximum DC conductor resistance at 20°C |
|------------------------------|--|---------------------------------|--|---------------------------------|---|--|--|---------------------------------|------------------------------------|---|----------|---|
| | | | | | | | Touching | | | Spaced by one 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 | 11 | 10.5 | 13.5 | 12 | 15.5 | 14 | — | — | — | — | — | 18.1 |
| 1.5 | 14.5 | 13.5 | 17.5 | 15.5 | 20 | 18 | — | — | — | — | — | 12.1 |
| 2.5 | 20 | 18 | 24 | 21 | 27 | 25 | — | — | — | — | — | 7.41 |
| 4 | 26 | 24 | 32 | 28 | 37 | 33 | — | — | — | — | — | 4.61 |
| 6 | 34 | 31 | 41 | 36 | 47 | 43 | — | — | — | — | — | 3.08 |
| 10 | 46 | 42 | 57 | 50 | 65 | 59 | — | — | — | — | — | 1.83 |
| 16 | 61 | 59 | 76 | 68 | 87 | 79 | — | — | — | — | — | 1.15 |
| 25 | 80 | 73 | 101 | 89 | 114 | 104 | 131 | 114 | 110 | 146 | 130 | 0.727 |

POLYCAB 6181Y BS 6004 SC
Lighting & Appliance wire, 300/500 V AC



| | | | | | | | | | | | | |
|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 35 | 99 | 89 | 125 | 110 | 141 | 129 | 162 | 143 | 137 | 181 | 162 | 0.524 |
|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|

Ambient temperature: 30°C
Conductor operating temperature: 70°C
The above table is in accordance with Table 4D1A of BS 7671.

De-Rating Factor

De-rating factor for 70°C thermosetting or thermoplastic insulated cable.

| | | | | | |
|---------------------|------|------|------|------|------|
| Ambient Temperature | 35°C | 40°C | 45°C | 50°C | 55°C |
| De-rating factor | 0.91 | 0.82 | 0.71 | 0.58 | 0.41 |