Power & distribution cables

6181B / 6181Y / 6381B 450/750V BS 7211 / BS 6004



BS 7211 / BS 6004 · 300/500 V / 450/750 V · -25°C to +90°C · Min. bend 12 × OD

BS 7211 / BS 6004 | 300/500–450/750V

Application

6181B / 6181Y / 6381B 450/750V BS 7211 / BS 6004 manufactured to BS 7211 / BS 6004, rated 300/500 V / 450/750 V and -25°C to +90°C with a 12 × OD minimum bending radius for infrastructure & construction installations.

Typical uses: Power distribution & utility networks, Railways, tunnels & public infrastructure, Process instrumentation & oil/gas skids, Industrial automation & control cabinets, Renewable energy, marine & heavy industry

Construction





Cross-section, not to scale

1	**Conductor**	1×25 mm² Class 2 Stranded Annealed Cu (7/2.14 mm)
2	**Insulation & Core Identification**	BS 7211 GP8 thermosetting XLPE brown core insulation (25 mm² Class 2 Cu)
3	**Screen / Bedding / Armour Layer**	Double-insulated concentric non-hygroscopic interface between GP8 XLPE and LTS2 sheath
4	**Outer Protective Sheath**	White LTS2 Low Smoke Zero Halogen (LSZH) double-insulated outer sheath (OD 10.4 mm)

Technical data

Typical values

Nominal / reference voltage	300/500 V / 450/750 V	Conductor & core insulation	1×25 mm² Class 2 Stranded Annealed Cu (7/2.14 mm) · BS 7211 GP8 thermosetting XLPE brown core insulation (25 mm² Class 2 Cu)
Routine dielectric / continuity test	100% factory drum spark & continuity verified	Operating temperature range	-25°C to +90°C
Short-circuit / peak thermal limit	+160 °C to +250 °C (5 s conductor thermal limit)	Flame & fire performance	BS 7211 / BS 6004
Minimum bending radius	12 × OD	Screening / armour architecture	Double-insulated concentric non-hygroscopic interface between GP8 XLPE and LTS2 sheath
Outer sheath material & colour	White LTS2 Low Smoke Zero Halogen (LSZH) double-insulated outer sheath (OD 10.4 mm)	Standards	BS 7211 / BS 6004

Sizes

3 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Part designation	Configuration	Conductor & shield	Insulation / wall	Outer sheath	Outer diameter mm	Min. bend radius mm	Max. conductor resistance @ 20 °C Ω/km	Copper weight kg/km	Cable weight kg/km	Key electrical / optical rating
6181B / 6181Y / 6381B 450/750V BS 7211 / BS 6004 3 sizes										
☐ 6181B / 6181Y / 6381B 450/750V BS 7211 / BS 6004 (1×25 mm²)	1×25 mm²	Class 2 Stranded Plain Copper	BS 7211 GP8 thermosetting XLPE brown core insulation	LSZH Jacket	10.4	125	0.72	132.1	254	106 A
☐ 6181B / 6181Y / 6381B 450/750V BS 7211 / BS 6004 (1×35 mm²)	1×35 mm²	Class 2 Stranded Plain Copper	BS 7211 GP8 thermosetting XLPE brown core insulation	LSZH Jacket	12.3	148	0.52	184.1	354	131 A
☐ 6181B / 6181Y / 6381B 450/750V BS 7211 / BS 6004 (1×50 mm²)	1×50 mm²	Class 2 Stranded Plain Copper	BS 7211 GP8 thermosetting XLPE brown core insulation	LSZH Jacket	14.4	173	0.36	251.7	484	159 A

– Dimensions and weights are nominal manufacturing targets subject to standard production tolerances.

Standards and approvals

- ✓ BS 7211 / BS 6004 Compliant
- ✓ EN 10204 3.1 Factory Test Certificate
- ✓ CE, UKCA, RoHS 2 (2011/65/EU) & REACH

Certifications

Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone **+86 185 9591 3361**

Email **info@tebaoflex.com**

Web **tebaoflex.com/cables/6181b-6181y-6381b-450-750v-bs-7211-bs-6004**

Typical values for this cable type, based on Reference specification per BS 7211 / BS 6004 (6181B / 6181Y / 6381B 450/750V BS 7211 / BS 6004). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.