BS 6708 Type 830 11 kV excavator trailing cable

BS 6708 Type 830

6.35/11 kV Excavator Trailing Cable

BS 6708 Type 830 · 6.35/11 kV · Screened open-cast mining excavator & dragline cable



BS 6708 Type 830 | **6.35/11 kV EPR** | **Composite Phase Braid**

Application

BS 6708 Type 830 6.35/11 kV screened medium-voltage trailing cable for open-cast excavators, electric shovels and draglines, with Class 5 tinned copper phases, EPR insulation, composite copper/nylon phase braids, central earth and PCP sheath.

Typical uses: Underground Coal & Hard-Rock Mining, Open-Cast Excavators, Draglines & Shovels, Vertical Mine Shafts, Hoists & Boreholes, Tunneling, Mineral Processing & Slurry Plants

Construction





Cross-section, not to scale

1. Phase Conductors (3×120 mm²)
2. 6.35/11 kV EPR Insulation (7.5 mm)
3. Composite Phase Braid Screen
4. Central Earth Conductor (1×16 mm²)
5. Heavy-Duty Outer Sheath (PCP)

Technical data

Typical values

Rated voltage / transmission duty	6.35/11 kV (BS 6708 Type 830 / BS EN 60228)	**Core / conductor construction**	Phase Conductors (3×120 mm²) — IEC 60228 Class 5 flexible annealed tinned copper + semicon screen
Primary dielectric / buffering	6.35/11 kV EPR Insulation (7.5 mm) — Thick high-dielectric EPR phase insulation (Red, Yellow & Brown)	**Continuous operating temperature**	-25 to +90 °C (mining & industrial service)
Short-circuit / peak thermal rating	Verified thermal stability per BS 6708 Type 830 / BS EN 60228	**Storage & transport temperature**	−40...+80 °C on export wooden/steel drum
Outer protection / armouring	Heavy-Duty Outer Sheath (PCP) — Black tear-, oil- and weather-resistant polychloroprene rubber sheath	**Minimum bending radius**	10 × OD
Crush, impact & abrasion duty	Heavy-duty mining rock-cut, impact and tensile protection per BS 6708 Type 830 / BS EN 60228	**Flame retardancy & mine fire safety**	Self-extinguishing / flame-retardant mining jacket per BS 6708 Type 830 / BS EN 60228
Mine water, oil & chemical resistance	Resistant to acidic mine water, hydraulic oils and abrasion per BS 6708 Type 830 / BS EN 60228	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	BS 6708 Type 830 / BS EN 60228		

Sizes

3 standard constructions

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

Order designation	Configuration	Core / stranding	Outer Ø ≈ mm	Net weight ≈ kg/km	Tensile rating kN ≈	Min. bend R mm
BS 6708 Type 830 Construction Schedule (-25 to +90 °C) 3 sizes						
☐ **BS 6708 Type 830 3×95 + 1×16 mm²**	3 × 95 mm² + 1 × 16 mm² (E)	Class 5 tinned Cu	71.5	7,450	42.5	715
☐ **BS 6708 Type 830 3×120 + 1×16 mm²**	3 × 120 mm² + 1 × 16 mm² (E)	Class 5 tinned Cu	75.8	8,620	54.0	760
☐ **BS 6708 Type 830 3×150 + 1×25 mm²**	3 × 150 mm² + 1 × 25 mm² (E)	Class 5 tinned Cu	81.2	10,180	67.5	815

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per BS 6708 Type 830 / BS EN 60228.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3 × 95 mm² + 1 × 16 mm² (E)	0.21	6.35/11 kV (265 A)	-25 to +90 °C
3 × 120 mm² + 1 × 16 mm² (E)	0.16	6.35/11 kV (305 A)	-25 to +90 °C
3 × 150 mm² + 1 × 25 mm² (E)	0.13	6.35/11 kV (350 A)	-25 to +90 °C

– Every production length undergoes routine conductor DC resistance, high-voltage Spark/AC dielectric or OTDR continuity and dimensional verification.

Standards and approvals

- BS 6708 T830 Compliant
- EN 10204 3.1 Factory Test Certificate
- CE, 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/bs-6708-type-830-6-35-11kv-screened-open-cast-excavator-trailing-cable

Typical values for this cable type, based on BS 6708 Type 830 / BS EN 60228. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.