



British Coal MGM 109 / MGM 118 & PN-G-90006 Underground Mining Power Cables

MGM 118 Type 6110

Cable

British Coal MGM 118 / BS 6708 3.8/6.6 kV 3-core individually copper-screened SWA mining



MGM 118 Type 6110 · BS 6708

3.8/6.6 kV · Individually Cu-Screened

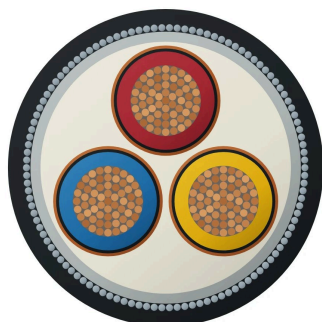
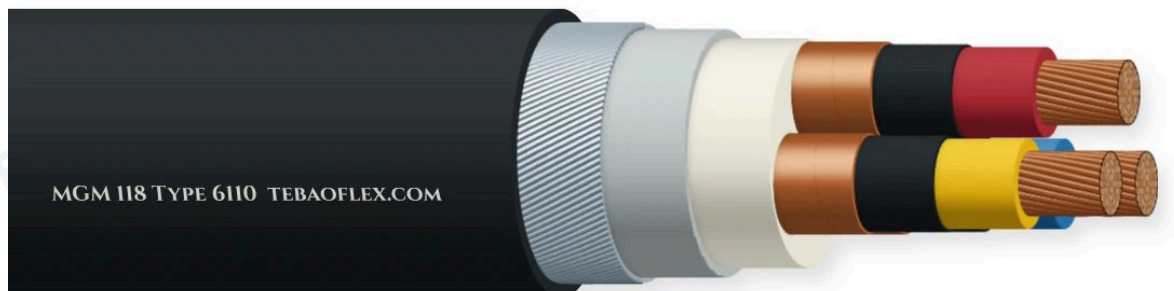
Single Wire Armour (SWA ≥ 75 %)

Application

MGM 118 Type 6110 Cable is a 3.8/6.6 kV 3-core individually copper-screened single-wire-armoured (SWA) medium-voltage mining feeder cable manufactured to British Coal Specification MGM 118 and BS 6708, combining Class 2 tinned copper conductors (25 mm² to

Typical uses: 6.6 kV longwall district transformer supply, Underground coal & mineral trunk roadways, Pit-bottom 6.6 kV flameproof HV switchboards, Surface-to-underground drift HV feeders

Construction



Cross-section, not to scale

1	Stranded tinned copper conductor	MGM 118 / BS EN 60228
2	Triple-extruded Semi-Con + GP5 HV-EPR	MGM 118 / BS 7655-1.2
3	Individual tinned copper tape phase	MGM 118 Type 6110
4	Extruded PVC inner bedding	MGM 118
5	Single Wire Armour (SWA ≥ 75 %)	MGM 118 / BS 6708
6	Mining flame-retardant PVC outer sheath	MGM 118 / BS 7655

Technical data

Typical values

Rated voltage U ₀ /U	3.8/6.6 kV AC (3800/6600 V)	AC dielectric test voltage	11,000 V AC for 5 minutes
Partial discharge (PD) limit	≤ 5 pC at 1.73 × U ₀ (6.6 kV)	Max. conductor operating temp.	+90 °C continuous · +250 °C short-circuit
Combined screen + armour conductance	≥ 75 % of the conductance of one phase	Operating temperature range	-15 °C to +90 °C (fixed installation)
Minimum installation temp.	0 °C	Min. bending radius	10 × overall diameter (D) for screened 6.6
Armour construction	Single layer of galvanized steel + tinned	Flame retardance	BS EN 60332-1-2 & British Coal MGM 118
Fault safety	Individual Cu core screens confine	Standards	British Coal Specification MGM 118 (Type

Sizes

6 standard constructions

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

Order designation	Cores × Size	Main cross-section	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard MGM 118 Type 6110 configurations 6 sizes						
☐ MGM 118 Type 6110 3C × 35 mm ² Cu-Scr SWA	3 × 35 mm ²	35.0 mm ²	42.4	1,240	3,420	424
☐ MGM 118 Type 6110 3C × 50 mm ² Cu-Scr SWA	3 × 50 mm ²	50.0 mm ²	45.8	1,690	4,080	458
☐ MGM 118 Type 6110 3C × 70 mm ² Cu-Scr SWA	3 × 70 mm ²	70.0 mm ²	49.6	2,360	4,940	496
☐ MGM 118 Type 6110 3C × 95 mm ² Cu-Scr SWA	3 × 95 mm ²	95.0 mm ²	54.2	3,180	6,020	542
☐ MGM 118 Type 6110 3C × 120 mm ² Cu-Scr SWA	3 × 120 mm ²	120.0 mm ²	58.0	3,980	7,120	580
☐ MGM 118 Type 6110 3C × 185 mm ² Cu-Scr SWA	3 × 185 mm ²	185.0 mm ²	66.4	6,080	9,680	664

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per British Coal MGM 118 / BS 6708 (Type 6110 3.8/6.6 kV Screened SWA).

Electrical & ampacity

6 sizes

Configuration	Max. DC R @ 20 °C Ω/km	I _z free air A	I _z tray / duct A	I _{sc} (1 s) kA	Voltage drop mV/A/m	Dielectric test V
3 × 35 mm ²	0.53	156	140	5.01	1.12	11,000
3 × 50 mm ²	0.39	192	173	7.15	0.82	11,000
3 × 70 mm ²	0.27	240	216	10.01	0.58	11,000
3 × 95 mm ²	0.20	288	259	13.59	0.43	11,000
3 × 120 mm ²	0.15	335	301	17.16	0.35	11,000
3 × 185 mm ²	0.10	432	389	26.46	0.24	11,000

– Conductor DC resistance at +20 °C per IEC 60228 and reference current ratings at 30 °C ambient per British Coal MGM 118 / BS 6708 (Type 6110 3.8/6.6 kV Screened SWA).

Standards and approvals

- ✓ British Coal MGM 118 Type 6110
- ✓ BS 6708
- ✓ CE / UKCA

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/mgm-118-type-6110-cable



Typical values for this cable type, based on British Coal MGM 118 / BS 6708 (Type 6110 3.8/6.6 kV Screened SWA). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.