



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

MGM 118 Type 6010 / 6020

Unscreened Armoured MV Feeder Cable

British Coal MGM 118 / BS 6708 3.8/6.6 kV Type 6010 (SWA) & Type 6020 (DWA) unscreened



MGM 118 Type 6010 & 6020

3.8/6.6 kV · 3-Core Unscreened

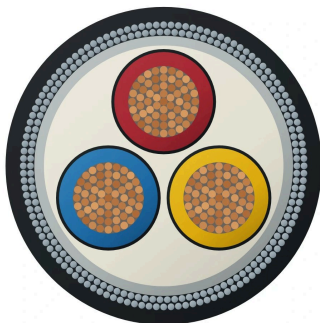
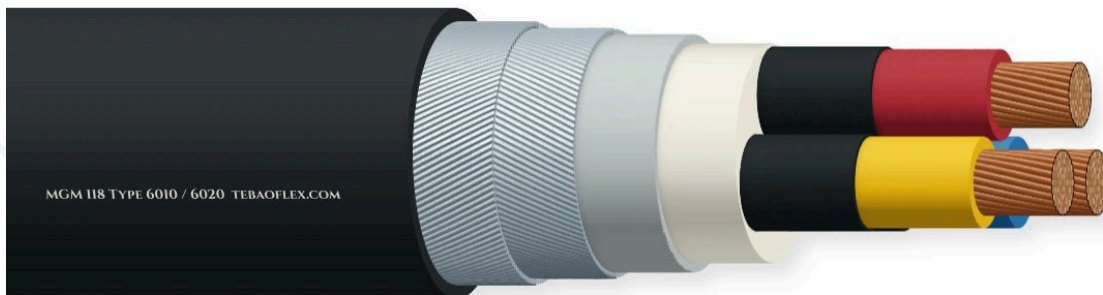
SWA (6010) / DWA (6020) ≥ 75 % Earth

Application

MGM 118 Type 6010 / 6020 Unscreened Armoured MV Feeder Cable is manufactured to British Coal Specification MGM 118 and BS 6708 for 3.8/6.6 kV underground mine roadway and shaft high-voltage distribution, featuring three Class 2 tinned copper conductors (25

Typical uses: 6.6 kV underground coal mine trunk roadways, Vertical mine shaft & drift HV feeders, 6.6 kV/3.3 kV or 6.6 kV/1.1 kV flameproof transwitch units, Main underground dewatering & booster stations

Construction



Cross-section, not to scale

1	Stranded tinned copper conductor	MGM 118 / BS EN 60228
2	6.6 kV EPR rubber insulation (90 °C)	MGM 118 / BS 7655-1.2
3	Extruded PVC inner bedding	MGM 118
4	SWA (Type 6010) or DWA (Type 6020) ≥	MGM 118 / BS 6708
5	Mining flame-retardant PVC outer sheath	MGM 118 / BS 7655

Technical data

Typical values

Rated voltage U0/U	3.8/6.6 kV AC (3800/6600 V)	AC dielectric test voltage	11,000 V AC for 5 minutes
Max. conductor operating temp.	+90 °C continuous · +250 °C short-circuit	Metallic 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 × D (Type 6010 SWA) · 12 × D (Type 6020)	Impact & crush protection	Single or double galvanized steel + copper
Flame retardance	BS EN 60332-1-2 & British Coal MGM 118	Water, oil & chemical resistance	Heavy mining PVC oversheath resists acidic
Standards	British Coal Specification MGM 118 (Types		

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 6010 / 6020 configurations 6 sizes						
☐ MGM 118 Type 6010 3C × 35 mm ² SWA	3 × 35 mm ² (Type 6010 SWA)	35.0 mm ²	40.2	1,120	3,180	482
☐ MGM 118 Type 6010 3C × 70 mm ² SWA (Cu/GSW)	3 × 70 mm ² (Type 6010 SWA)	70.0 mm ²	47.4	2,280	4,650	569
☐ MGM 118 Type 6010 3C × 120 mm ² SWA (Cu/GSW)	3 × 120 mm ² (Type 6010 SWA)	120.0 mm ²	55.8	3,920	6,840	670
☐ MGM 118 Type 6020 3C × 50 mm ² DWA (Cu/GSW)	3 × 50 mm ² (Type 6020 DWA)	50.0 mm ²	47.8	1,580	4,920	574
☐ MGM 118 Type 6020 3C × 95 mm ² DWA (Cu/GSW)	3 × 95 mm ² (Type 6020 DWA)	95.0 mm ²	56.6	3,040	7,280	679
☐ MGM 118 Type 6020 3C × 185 mm ² DWA (Cu/GSW)	3 × 185 mm ² (Type 6020 DWA)	185.0 mm ²	69.2	5,920	11,650	830

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per British Coal MGM 118 / BS 6708 (Type 6010 SWA & Type 6020 DWA 3.8/6.6 kV).

Electrical & ampacity

6 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Iz free air A	Iz tray / duct A	Isc (1 s) kA	Voltage drop mV/A/m	Dielectric test V
3 × 35 mm ² (Type 6010 SWA)	0.53	158	142	5.01	1.12	11,000
3 × 70 mm ² (Type 6010 SWA)	0.27	242	218	10.01	0.58	11,000
3 × 120 mm ² (Type 6010 SWA)	0.15	338	304	17.16	0.35	11,000
3 × 50 mm ² (Type 6020 DWA)	0.39	192	173	7.15	0.82	11,000
3 × 95 mm ² (Type 6020 DWA)	0.20	288	259	13.59	0.43	11,000
3 × 185 mm ² (Type 6020 DWA)	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 6010 SWA & Type 6020 DWA 3.8/6.6 kV).

Standards and approvals

- ✓ British Coal MGM 118
- ✓ 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-unscreened-armoured-mv-feeder-cable



Typical values for this cable type, based on British Coal MGM 118 / BS 6708 (Type 6010 SWA & Type 6020 DWA 3.8/6.6 kV). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.