

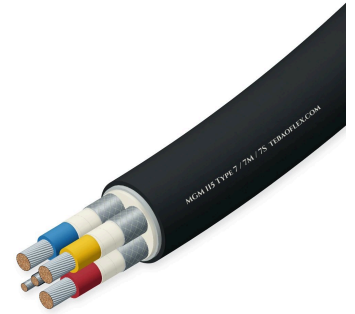


SANS 1520 / BS 6708 coal-cutter trailing cables

MGM 115 Type 7 / 7M / 7S

Central-Earth Coal-Cutter Cable

SANS 1520-1 / BS 6708 640/1100 V central-earth coal-cutter cable (Type 7 / 7M / 7S)



SANS 1520-1 / BS 6708

640/1100 V (1.1 kV)

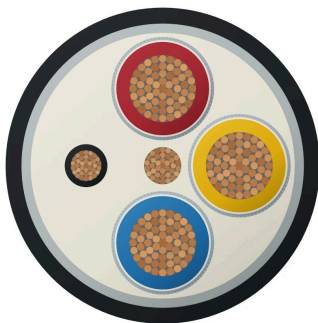
Central Earth · Type 7/7M/7S

Application

MGM 115 Type 7 / 7M / 7S is a 640/1100 V (0.64/1.1 kV) underground coal-cutter and continuous-miner trailing cable built to SANS 1520-1 and BS 6708 around a central copper earth conductor, surrounded by three individually screened EPR power cores and a

Typical uses: Underground longwall coal shearers, Continuous miners & roadheaders, BS 6708 & SANS 1520-1 collieries, Gate-end switchgear interconnect

Construction



Cross-section, not to scale

1	Central earth conductor	SANS 1520-1 / BS 6708
2	Phase & pilot conductors	IEC 60228 Class 5
3	EPR core insulation	SANS 1520-1 / BS 6708
4	Individual phase screen	BS 6708 Type 7
5	7M / 7S reinforcement layer	BS 6708 / SANS 1520-1
6	Outer sheath (HD-PCP)	SANS 1520-1 / BS 6708

Technical data

Typical values

Rated voltage U0/U	640/1100 V (0.64/1.1 kV)	AC routine test voltage	3.5 kV rms / 5 min on power cores; 1.5 kV
Central earth conductance	≥ 50 % of largest phase conductor	Individual phase screens	Tinned copper + nylon composite braid in
Max. conductor operating temp.	+90 °C	Max. short-circuit temperature	+250 °C (5 s)
Ambient temperature range	-25 °C to +60 °C	Axial neutral-axis earth	Central earth core experiences zero bending
Min. bending radius (fixed)	6 × D fixed · 8 × D flexing (10 × D for 7M)	Crush protection (Type 7M)	Galvanized steel wire strand braid armour
Oil & emulsion resistance	BS 7655 RS4 / DIN EN 60811-404	Flame retardancy	BS 6708 / SANS 1520-1 / IEC 60332-1-2
Abrasion & tear resistance	Heavy-duty polychloroprene outer jacket	Standards	SANS 1520-1 / BS 6708 (MGM 115 Type 7/7M/7S)

Sizes

10 standard constructions

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

Order designation	Configuration	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard MGM 115 Type 7 / 7M / 7S configurations 10 sizes						
☐ MGM 115 Type 7 3×25+1×16E+1×10P	3×25 + 16CE + 10P (Type 7)	25	36.5	1,050	1,980	219
☐ MGM 115 Type 7 3×35+1×25E+1×10P	3×35 + 25CE + 10P (Type 7)	35	40.2	1,420	2,480	241
☐ MGM 115 Type 7 3×50+1×25E+1×10P	3×50 + 25CE + 10P (Type 7)	50	44.8	1,870	3,150	269
☐ MGM 115 Type 7 3×70+1×35E+1×16P	3×70 + 35CE + 16P (Type 7)	70	49.8	2,610	4,080	299
☐ MGM 115 Type 7 3×95+1×50E+1×16P	3×95 + 50CE + 16P (Type 7)	95	55.2	3,510	5,210	331
☐ MGM 115 Type 7 3×120+1×70E+1×16P	3×120 + 70CE + 16P (Type 7)	120	59.8	4,460	6,350	359
☐ MGM 115 Type 7M 3×50+1×25E+1×10P	3×50 + 25CE + 10P (Type 7M)	50	48.2	1,870	3,890	289
☐ MGM 115 Type 7M 3×70+1×35E+1×16P	3×70 + 35CE + 16P (Type 7M)	70	53.4	2,610	4,920	320
☐ MGM 115 Type 7S 3×70+1×35E+1×16P	3×70 + 35CE + 16P (Type 7S)	70	52.0	2,890	4,560	312
☐ MGM 115 Type 7S 3×95+1×50E+1×16P	3×95 + 50CE + 16P (Type 7S)	95	57.5	3,840	5,780	345

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per SANS 1520-1 / BS 6708 (MGM 115).

Electrical & ampacity data

10 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Current rating in air (A)	Current rating installed (A)	Mutual C pF/m≈	AC test V rms
3×25 + 16CE + 10P (Type 7)	0.799	122	104	151	3,500
3×35 + 25CE + 10P (Type 7)	0.568	150	128	168	3,500
3×50 + 25CE + 10P (Type 7)	0.396	187	159	192	3,500
3×70 + 35CE + 16P (Type 7)	0.279	229	195	226	3,500
3×95 + 50CE + 16P (Type 7)	0.211	276	235	267	3,500
3×120 + 70CE + 16P (Type 7)	0.165	319	271	308	3,500
3×50 + 25CE + 10P (Type 7M)	0.396	187	159	192	3,500
3×70 + 35CE + 16P (Type 7M)	0.279	229	195	226	3,500
3×70 + 35CE + 16P (Type 7S)	0.279	229	195	226	3,500
3×95 + 50CE + 16P (Type 7S)	0.211	276	235	267	3,500

– Current ratings apply at +30 °C ambient in free air; apply standard derating factors for elevated ambient or drum layers.

Standards and approvals

- ✓ SANS 1520-1
- ✓ BS 6708
- ✓ EN 10204 3.1

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-115-central-earth-coal-cutter-cable



Typical values for this cable type, based on SANS 1520-1 / BS 6708 (MGM 115). Values for your order are confirmed in the quotation. Subject to change without notice.
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.