



SANS 1520 / BS 6708 coal-cutter trailing cables

MGM 115 Type 11 / 14 / 16

Elastomeric-Cradle Coal-Cutter Cable

SANS 1520-1 / BS 6708 640/1100 V & 1.9/3.3 kV elastomeric-cradle coal-cutter cable (Type



SANS 1520-1 / BS 6708

640/1100 V · 1.9/3.3 kV

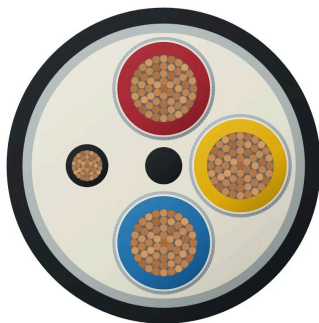
Elastomeric Cradle · Type 11/14/16

Application

MGM 115 Type 11 / 14 / 16 is an underground coal-cutter, continuous-miner, and shuttle-car flexible trailing cable manufactured to SANS 1520-1 and BS 6708 around a grooved central elastomeric cradle separator that cushions individually screened power

Typical uses: Underground room-and-pillar coal mines, Continuous miners & shuttle cars, Longwall shearers & roof bolters, SANS 1520 / BS 6708 collieries

Construction



Cross-section, not to scale

1	Phase, earth & pilot conductors	IEC 60228 Class 5
2	Central elastomeric cradle	SANS 1520-1 / BS 6708
3	Core insulation	SANS 1520-1 / BS 6708
4	Composite core screen (Type 14/16)	BS 6708 / SANS 1520-1
5	Reinforced outer sheath	SANS 1520-1 / BS 6708

Technical data

Typical values

Rated voltage U0/U	640/1100 V (0.64/1.1 kV) & 1.9/3.3 kV	AC routine test voltage	3.5 kV rms (1.1 kV) · 6.5 kV rms (3.3 kV)
Pilot core voltage rating	110 V / 250 V intrinsic safety pilot circuit	Screen earth-fault conductance	Composite tinned Cu + nylon braid per BS 6708
Max. conductor operating temp.	+90 °C	Max. short-circuit temperature	+250 °C (5 s)
Ambient temperature range	-25 °C to +60 °C	Crush cushioning	Profiled central elastomeric cradle absorbs
Min. bending radius (fixed)	6 × D fixed · 8 × D flexing	Max. dynamic tensile load	15 N/mm ² on copper conductors
Oil & mine water resistance	SANS 1520-1 / BS 7655 RS4 oil & water	Flame retardancy	SANS 1520-1 / IEC 60332-1-2 self-extinguishi
Tear & abrasion resistance	Extra-heavy-duty polychloroprene compound	Standards	SANS 1520-1 / BS 6708 (MGM 115 series)

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 11 / 14 / 16 configurations 10 sizes						
☐ MGM 115 Type 14 3×16+1×16E+1×10P	3×16 + 1×16E + 1×10P (Type 14)	16	34.5	790	1,680	207
☐ MGM 115 Type 14 3×25+1×16E+1×10P	3×25 + 1×16E + 1×10P (Type 14)	25	38.2	1,060	2,120	229
☐ MGM 115 Type 14 3×35+1×25E+1×10P	3×35 + 1×25E + 1×10P (Type 14)	35	42.0	1,430	2,650	252
☐ MGM 115 Type 14 3×50+1×25E+1×10P	3×50 + 1×25E + 1×10P (Type 14)	50	46.8	1,880	3,340	281
☐ MGM 115 Type 14 3×70+1×35E+1×10P	3×70 + 1×35E + 1×10P (Type 14)	70	52.0	2,580	4,290	312
☐ MGM 115 Type 14 3×95+1×50E+1×10P	3×95 + 1×50E + 1×10P (Type 14)	95	57.5	3,480	5,460	345
☐ MGM 115 Type 11 3×35+1×25E+2×6P	3×35 + 1×25E + 2×6P (Type 11)	35	43.2	1,460	2,760	259
☐ MGM 115 Type 11 3×50+1×25E+2×6P	3×50 + 1×25E + 2×6P (Type 11)	50	48.0	1,910	3,480	288
☐ MGM 115 Type 16 5×16+1×10P	5×16 + 1×10P (Type 16)	16	36.8	920	1,920	221
☐ MGM 115 Type 16 5×25+1×10P	5×25 + 1×10P (Type 16)	25	41.2	1,350	2,510	247

– 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}
3×16 + 1×16E + 1×10P (Type 14)	1.240	93	79	136	3,500
3×25 + 1×16E + 1×10P (Type 14)	0.799	122	104	151	3,500
3×35 + 1×25E + 1×10P (Type 14)	0.568	150	128	168	3,500
3×50 + 1×25E + 1×10P (Type 14)	0.396	187	159	192	3,500
3×70 + 1×35E + 1×10P (Type 14)	0.279	229	195	226	3,500
3×95 + 1×50E + 1×10P (Type 14)	0.211	276	235	267	3,500
3×35 + 1×25E + 2×6P (Type 11)	0.568	150	128	168	3,500
3×50 + 1×25E + 2×6P (Type 11)	0.396	187	159	192	3,500
5×16 + 1×10P (Type 16)	1.240	93	79	136	3,500
5×25 + 1×10P (Type 16)	0.799	122	104	151	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

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/mgm-115-elastomeric-cradle-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.