



Mining trailing & reeling cables

SANS Type 63 (1.9/3.3 kV)

SANS 1520-2 Type 63 1.9/3.3 kV Flexible Trailing Mining Cable

Medium-voltage 1.9/3.3 kV 3-core screened + pilot trailing & reeling cable (25–240 mm²)



SANS 1520-2 Type 63

1.9/3.3 kV · 25–240 mm²

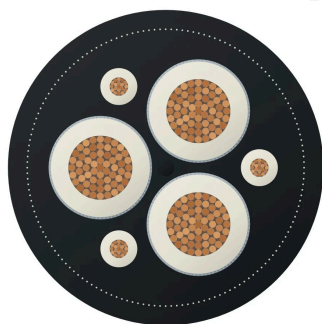
3 Screened + 1 Pilot

Application

South African SANS 1520-2 Type 63 medium-voltage flexible trailing and reeling cable (1.9/3.3 kV, 25–240 mm²) with three tinned-copper/nylon braid-screened EPR power cores, one unscreened pilot core and a braid-reinforced twin CR sheath.

Typical uses: 3.3 kV continuous miners & bolters, Longwall shearers & AFC drives, Underground 3.3 kV section feeders, Open-cast blast-hole drills & shovels, 3.3 kV dewatering & slurry pumps, Mobile in-pit crushing plants

Construction



Cross-section, not to scale

1	Power conductors (3)	SANS 1411-1
2	Power core insulation	SANS 1411-3
3	Individual phase screens (3)	1.6–4.1 kA 1s earth fault
4	Pilot core (1)	
5	Inner sheath	SANS 1411-3
6	Reinforcement braid	SANS 1520-2
7	Outer sheath	SANS 1520-2 · SANS 1411-3

Technical data

Typical values

Rated voltage U ₀ /U	1.9/3.3 kV AC (SANS 1520-2 Type 63 medium-voltage trailing & reeling cable)	Current rating (30 °C)	130 to 520 A laid out straight at 30 °C ambient
Individual phase screens	Composite tinned copper / nylon braid screen over each EPR power core (0.31 mm wires, 31 to 64 mm ²)	Pilot core	1 × unscreened EPR-insulated pilot core (10, 16 or 25 mm ²) laid up with power cores
Operating temperature range	–25 °C to +90 °C	Short-circuit & earth-fault rating (1 s)	Symmetrical phase S/C: 3.1 to 29.0 kA (1 s) · Earth-fault screen rating: 1.6 to 4.1 kA (1 s)
Min. bending radius	6 × OD (reeling and non-reeling service)	Max. tensile load	1.1 kN (25 mm ²) to 10.8 kN (240 mm ²)
Twin CR sheaths & reinforcement	CR polychloroprene inner sheath + 16-string open nylon braid + black CR polychloroprene outer sheath	Flame, oil & abrasion	Heavy-duty polychloroprene (CR) outer sheath resists flame, mineral oil, rock cuts and coal-face drag
Water, ozone & UV	EPR insulation and twin CR sheaths withstand wet underground headings and open-cast UV exposure	Standards	SANS 1520-2 · SANS 1411-1 · SANS 1411-3

Sizes

9 standard constructions

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

Designation 3P + 1Pilot	Power mm ²	Power Ø mm	Screen area mm ²	Pilot mm ²	Pilot Ø mm	Max. tension kN	Nominal OD mm	Mass kg/100m	Mass ≈ kg/km
☐ Type 63 · 3 × 25 + 1 × 10 mm ²	25	6.8	31	10	4.2	1.1	44.0	360	3,600
☐ Type 63 · 3 × 35 + 1 × 10 mm ²	35	8.5	33	10	4.2	1.6	48.0	420	4,200
☐ Type 63 · 3 × 50 + 1 × 10 mm ²	50	10.3	38	10	5.3	2.3	50.5	510	5,100
☐ Type 63 · 3 × 70 + 1 × 16 mm ²	70	11.9	42	16	5.3	3.2	56.0	640	6,400
☐ Type 63 · 3 × 95 + 1 × 16 mm ²	95	13.5	47	16	5.3	4.3	61.0	770	7,700
☐ Type 63 · 3 × 120 + 1 × 16 mm ²	120	15.5	50	16	5.3	5.4	63.0	850	8,500
☐ Type 63 · 3 × 150 + 1 × 25 mm ²	150	17.3	55	25	6.8	6.8	66.0	1,050	10,500
☐ Type 63 · 3 × 185 + 1 × 25 mm ²	185	20.2	60	25	6.8	8.3	72.0	1,140	11,400
☐ Type 63 · 3 × 240 + 1 × 25 mm ²	240	22.9	64	25	6.8	10.8	78.0	1,400	14,000

- Each power core is individually screened with a composite 0.31 mm tinned copper / nylon braid (31 to 64 mm² total metallic screen area).
- Cable mass is shown in both kg/100 m (South African catalogue convention) and kg/km.

Electrical & short-circuit

9 sizes

Designation Power cores	DC res. 20 °C Ω/km	DC res. 90 °C Ω/km	Reactance Ω/km	Impedance 90 °C Ω/km	Laid straight A (30 °C)	Sym. S/C (1 s) kA	Earth fault (1 s) kA
Type 63 · 3 × 25 mm ²	0.8590	1.100	0.122	1.110	130	3.1	1.6
Type 63 · 3 × 35 mm ²	0.6100	0.778	0.113	0.786	160	4.3	2.1
Type 63 · 3 × 50 mm ²	0.4240	0.542	0.107	0.552	200	6.1	3.1
Type 63 · 3 × 70 mm ²	0.2990	0.382	0.103	0.396	245	8.5	3.5
Type 63 · 3 × 95 mm ²	0.2270	0.290	0.090	0.304	295	11.6	4.1
Type 63 · 3 × 120 mm ²	0.1770	0.227	0.088	0.243	345	14.6	4.1
Type 63 · 3 × 150 mm ²	0.1430	0.183	0.085	0.202	390	18.3	4.1
Type 63 · 3 × 185 mm ²	0.1170	0.150	0.084	0.172	440	23.0	4.1
Type 63 · 3 × 240 mm ²	0.0882	0.115	0.083	0.142	520	29.0	4.1

- Current rating applies to cable laid out straight in free air at 30 °C ambient temperature.
- Short-circuit values are 1-second symmetrical phase fault and screen earth-fault capacities in kA.

Standards and approvals

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/type-63-cable-sans



Typical values for this cable type, based on SANS 1520-2 · SANS 1411-1 & -3. Values for your order are confirmed in the quotation. Subject to change without notice.
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.