

Mining trailing & reeling cables

SANS Type 41 (640/1,100 V)

SANS 1520-1 Type 41 Flexible Mining Trailing Cable (640/1,100 V)

640/1,100 V 3-core screened + pilot rubber trailing & reeling cable (2.5–25 mm²)



SANS 1520-1 Type 41

640/1,100 V · 2.5–25 mm²

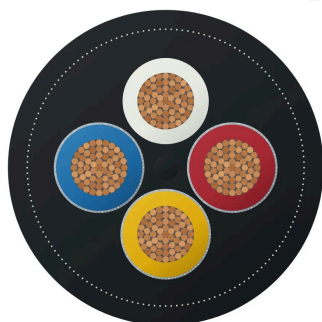
3 Screened + 1 Pilot

Application

South African SANS 1520-1 Type 41 flexible trailing and reeling cable (640/1,100 V, 2.5–25 mm²) with three tinned-copper/nylon braid-screened EPR power cores, one unscreened pilot core and a braid-reinforced twin CR sheath.

Typical uses: Portable underground face drills, Submersible mine dewatering pumps, Auxiliary ventilation fans, Roof bolters & utility vehicles, Gate-end box jumper feeders, Hazardous-area mobile apparatus

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)	
4	Pilot core (1)	
5	Inner sheath	SANS 1411-3
6	Anti-torsion reinforcement braid	SANS 1520-1
7	Outer sheath	SANS 1520-1 · SANS 1411-3

Technical data

Typical values

Rated voltage U0/U	640/1,100 V AC (SANS 1520-1 Type 41 portable apparatus trailing cable)	Current rating (30 °C)	34 to 130 A laid out straight · drum layer derated for 1, 2 and 3 layers
Individual phase screens	Composite tinned copper / nylon braid screen over each EPR power core (8 to 25 mm ²)	Pilot core	1 × unscreened EPR-insulated pilot core (2.5 to 16 mm ²) laid up in interstice
Operating temperature range	–25 °C to +90 °C	Max. conductor temperature	+90 °C continuous · +250 °C short-circuit (1 s)
Min. bending radius	6 × OD	Max. tensile load	0.15 kN (2.5 mm ²) to 1.10 kN (25 mm ²)
Sheath & reinforcement	CR polychloroprene inner sheath + 16-string open nylon braid + heavy-duty black CR outer sheath	Flame & oil resistance	Flame-retardant, oil-resistant and abrasion-resistant CR polychloroprene sheath per SANS 1411-3
Water, ozone & UV	EPR insulation and heavy-duty CR jacket resist underground mine water, ozone and surface UV	Standards	SANS 1520-1 · SANS 1411-1 · SANS 1411-3

Sizes

6 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/km
☐ Type 41 · 3 × 2.5 + 1 × 2.5 mm ²	2.5	2.1	8.0	2.5	2.1	0.15	20.0	712
☐ Type 41 · 3 × 4 + 1 × 4 mm ²	4.0	2.7	9.5	4.0	2.7	0.24	25.0	902
☐ Type 41 · 3 × 6 + 1 × 6 mm ²	6.0	3.3	10.4	6.0	3.3	0.36	26.0	1,103
☐ Type 41 · 3 × 10 + 1 × 10 mm ²	10.0	4.2	19.0	10.0	4.2	0.60	29.0	1,563
☐ Type 41 · 3 × 16 + 1 × 16 mm ²	16.0	5.3	22.0	16.0	5.3	0.95	33.0	2,105
☐ Type 41 · 3 × 25 + 1 × 16 mm ²	25.0	6.8	25.0	16.0	5.3	1.10	39.0	2,705

- Each power core is individually screened with a composite tinned copper / nylon braid (0.21 mm screen wires on 2.5–6 mm²; 0.31 mm on 10–25 mm²).
- Maximum tensile load applies to the three power conductors combined during reeling or trailing drag.

Electrical & drum ampacity

6 sizes

Designation Power cores	DC res. 20 °C Ω/km	DC res. 90 °C Ω/km	Reactance Ω/km	Impedance Ω/km	Laid straight A	1 drum layer A	2 drum layers A	3 drum layers A	Sym. S/C (1 s) kA	Earth fault (1 s) kA
Type 41 · 3 × 2.5 mm ²	8.210	10.47	0.132	10.47	34	29	22	15	0.31	0.4
Type 41 · 3 × 4 mm ²	5.500	7.01	0.123	7.01	45	38	29	20	0.49	0.5
Type 41 · 3 × 6 mm ²	3.660	4.67	0.115	4.67	57	48	37	25	0.73	0.7
Type 41 · 3 × 10 mm ²	2.110	2.69	0.108	2.69	77	65	50	34	1.20	0.6
Type 41 · 3 × 16 mm ²	1.340	1.71	0.103	1.71	100	85	65	45	2.00	1.0
Type 41 · 3 × 25 mm ²	0.859	1.10	0.100	1.10	130	110	84	58	3.10	1.6

- Current ratings based on 30 °C ambient air and 90 °C maximum conductor temperature per SANS 1520-1.
- Short-circuit ratings 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-41-cable-sans



Typical values for this cable type, based on SANS 1520-1 · 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.