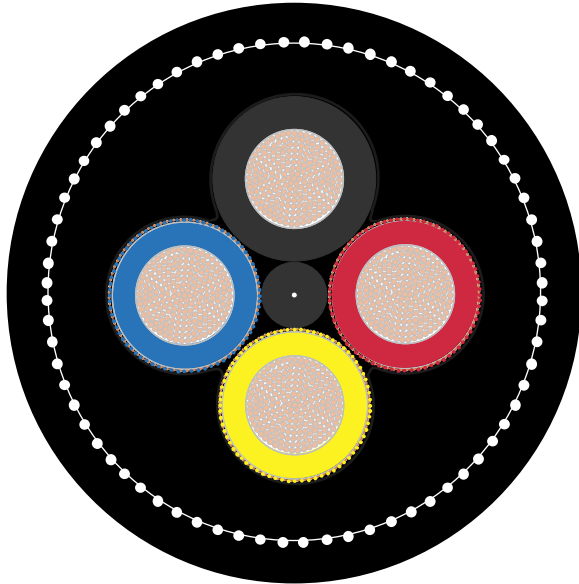


TYPE 41 640/1100 V

SANS 1520-1



Flexible copper screened mining cable



CONSTRUCTION

Conductors	Flexible class 5 comply to SANS 1411 - 1 from tinned annealed copper wires left lay
Insulation	Ethylene propylene thermosetting compound type RD 3 comply to SANS 1411-3.
Core of cable	Three tinned copper/nylon braid screened power cores and one unscreened pilot core laid up in the right hand lay around rubber (RD1) filler centre.
Inner sheath	Poly-chloroprene thermosetting compound type RS 6 comply to SANS 1411-3.
Re-enforcement	An open nylon braid . Minimum 16 of nylon strings.
Outer sheath	Poly-chloroprene thermosetting compound type RS 6 comply to SANS 1411-3 . Inner and outer sheath are bonded to provide proper torsional protection , black.
Marking	TF KABLE 3 Texoprene TR 41 (Size) (Voltage) CR SANS 1520-1 (Year)+metre marking

FEATURES

- Excellent flexibility
- Min. ambient temperature -25 °C , max. conductor temperature 90°C
- Marking for easy identification

APPLICATIONS

- Electrically driven machines, movable electric apparatus in hazardous areas. For small pumps, fans, drills 2.5 mm². For shuttle cars 16 mm². Types 16, 25 mm² suitable for reeling

Standard length cable packing 1000m on drums. Other forms of packing and delivery are available on request

TYPE 41 640/1100 V

SANS 1520-1



Power cores						Pilot cores			Lay ratio	Approx. cable diameter	Cable mass	Min. bending radius	Max. recommended tension
Conductor size	Max. wire diameter	Approx. wire diameter	Max. screen wire diameter	Braided screen filling factor	Approx. summarized screen cross-section for power core	Conductor sizes	Max. wire diameter	Approx. conductor diameter					
mm ²	mm	mm	mm	%	mm ²	mm ²	mm	mm	x PCD	mm	kg/km	mm	kN
2.5	0.26	2.1	0.21	80	8	2.5	0.26	2.1	8	20	0.712	120	0.15
4	0.31	2.7	0.21	80	9.5	4	0.31	2.7	8	25	0.902	150	0.24
6	0.31	3.3	0.21	80	10.4	6	0.31	3.3	8	26	1.103	160	0.36
10	0.41	4.2	0.31	80	19	10	0.41	4.2	8	29	1.563	180	0.60
16	0.41	5.3	0.31	80	22	16	0.41	5.3	8	33	2.105	200	0.95
25	0.41	6.8	0.31	80	25	16	0.41	5.3	8	39	2.705	240	1.1

Power cores				Current rating at 30 °C ambient				Short circuit rating	
Max. conductor DC resistance at 20 °C	Max. conductor DC resistance at 90 °C	Reactance	Impedance (Z) at 30 °C	Laid out straight	1 layer on drum	2 layers on drum	3 layers on drum	Symmetrical fault current	Earth fault current (screens)
Ω/km	Ω/km	Ω/km	Ω/km	A	A	A	A	kA for 1s	kA for 1s
5.50	7.01	0.123	7.01	45	38	29	20	0.49	0.5
3.66	4.67	0.115	4.67	57	48	37	25	0.73	0.7
2.11	2.69	0.108	2.69	77	65	50	34	1.2	0.6
1.34	1.71	0.103	1.71	100	85	65	45	2.0	1.0
0.859	1.10	0.100	1.10	130	110	84	58	3.1	1.6

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