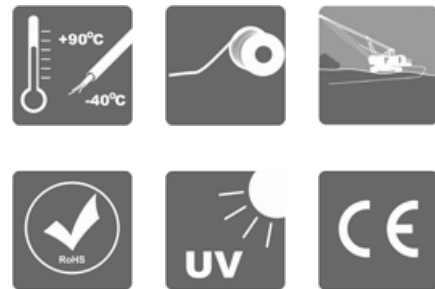
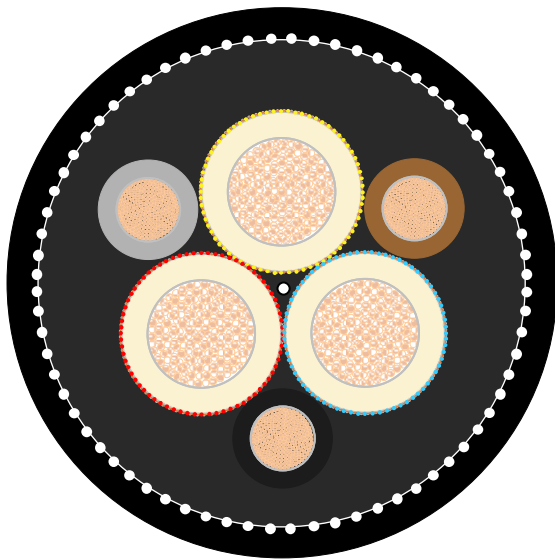


# TYPE 61B 0,64/1,1kV

SANS 1520-1

# POWERMITE

Flexible copper screened mining cables



## CONSTRUCTION

<b>Cable type</b>	Type 61B 0.64/1.1 kV
<b>Conductors</b>	Flexible class 5 comply to SANS 1411 - 1 from tinned annealed copper wires left lay with semi-conducting rubber screen .
<b>Insulation</b>	Ethylene propylene thermosetting compound type RD 3 comply to SANS 1411-3 and a strippable semi-conducting core screen (triple extruded)
<b>Core of cable</b>	Three tinned copper braided screened power cores and three unscreened pilot cores one in each interstice laid up in the right hand lay around semi-conductive rubber filler.
<b>Inner sheath</b>	Poly-chloroprene thermosetting compound type RS 6 comply to SANS 1411-3 .
<b>Re-enforcement</b>	An open nylon braid . Minimum 16 of nylon strings .
<b>Outer sheath</b>	Poly-chloroprene thermosetting compound type RS 6 comply to SANS 1411-3 .
<b>Colour of sheath</b>	Black .
<b>Tests</b>	SANS 1520-1.
<b>Marking</b>	TF KABLE 3 Texoprene TR 61B (Size) (Voltage) CR SANS 1520-1 (Year)+metre marking

## FEATURES

- Excellent flexibility
- Water resistant and flame retardant
- Operating temperature min. ambient temp . -25 °C , max. conductor temp. 90°C.
- UV ,sunlight , ozone ,oil, resistant
- Embossing marking as per order.

## APPLICATIONS

# TYPE 61B 0,64/1,1kV

SANS 1520-1



- Electrically driven machines , movable electric apparatus in hazardous areas .Not for reeling purposes.
- Other industrial applications .

**Standard length cable packing** : 500m on drums. Other forms of packing and delivery are available on request

Table 1

Physical Properties						
<b>Power cores</b>						
Conductor sizes (mm <sup>2</sup> )	35	50	70	95	120	150
Maximum wire diameter (mm)	0.41	0.41	0.51	0.51	0.51	0.51
Approx. conductor diameter (mm)	8.5	10.3	11.9	13.5	15.5	17.3
Maximum screen wire diameter (mm)	0.31	0.31	0.31	0.31	0.31	0.31
Braided screen filling factor (%)	80	80	80	80	80	80
Approx. summarized screen cross-section for power cores (weighing method) (mm <sup>2</sup> )	27	32	37	43	47	52
<b>Pilot cores</b>						
Conductor sizes (mm <sup>2</sup> )	6	6	16	16	16	16
Maximum wire diameter (mm)	0.31	0.31	0.41	0.41	0.41	0.41
Approx. conductor diameter (mm)	3.2	3.2	5.2	5.2	5.2	5.2
<b>Lay Ratio</b> (maximum) (x PCD)	12	12	12	12	12	12
<b>Cable diameter</b>						
Approx. (mm)	41	42.5	48	52.3	58	63.5
<b>Cable mass</b> (approx.) (kg/m)	3.1	3.6	4.8	5.7	7.1	8.5
<b>Minimum bending radius</b> (mm)	300	340	390	430	460	500
Maximum recommended tension (kN)	1.6	2.3	3.2	4.3	5.4	6.8

# TYPE 61B 0,64/1,1kV

SANS 1520-1

# POWERMITE

Table 2

Electrical Properties						
<b>Power cores</b>						
Maximum cond. DC resistance @ 20 <sup>0</sup> C (Ω/km)	0.576	0.401	0.283	0.214	0.167	0.135
Maximum cond. DC resistance @ 90 <sup>0</sup> C (Ω/km)	0.734	0.511	0.360	0.273	0.213	0.171
Reactance (Ω/km)	0.090	0.090	0.088	0.086	0.086	0.085
Impedance (Z) @ 90 <sup>0</sup> C (Ω/km)	0.740	0.519	0.371	0.287	0.230	0.191
<b>Sustained current rating @ 30<sup>0</sup>C ambient</b>						
Laid out straight (A)	160	200	245	295	345	390
<b>Short circuit rating :</b>						
Symmetrical fault current (kA for 1 sec)	4.3	6.1	8.5	11.6	14.6	18.3
Earth fault current (screens) (kA for 1 sec)	2.1	3.1	3.5	4.1	4.1	4.1

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