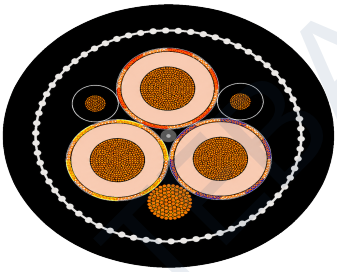
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

SANS TYPE 633 / 633-ECC 19/33 KV CABLE

Medium voltage screened reeling and section feeder cable



APPLICATION

Designed for electrically driven machines, movable electric apparatus in hazardous areas, portable electric apparatus and section feeders. Suitable for open-cast mining, medium sized draglines, shovels and drills, reeling purposes and other industrial applications.

CONSTRUCTION

Parameter	Value
Conductor	Class 5 flexible stranded tinned annealed copper
Insulation	EPR thermosetting compound with strippable semi-conducting core screen, triple extruded
Braid	Nylon / tinned copper wires
Pilot cores	Insulated with EPM
Lay	Each power core individually screened with tinned copper / textile braid and laid up with three insulated pilot cores
ECC variant	One pilot core replaced with tinned conductor
Inner sheath	CR polychloroprene rubber
Reinforcement braid	Open nylon braid, minimum 16 strings
Outer sheath	CR polychloroprene rubber, black

CABLE CHARACTERISTICS

Parameter	Value
Standard	SANS 1520-2; SANS 1411-1; SANS 1411-3
Rated voltage	19/33 kV
Temperature rating	-25 deg C to +90 deg C
Minimum bending radius	9 x overall diameter
Performance	UV resistant, sunlight resistant and oil resistant
Sheath colour	Black

TECHNICAL DATA

Complete nominal dimensional data. Source ordering codes have been omitted.

TYPE 633 DIMENSIONS									
Cond. size mm2	Power wire dia. mm	Power cond. dia. mm	Screen wire dia. mm	Pilot size mm2	Pilot wire dia. mm	Pilot cond. dia. mm	Max tension kN	Overall dia. mm	Weight kg/km
25	0.41	6.8	0.31	16	0.41	4.2	1.1	71.3	720
35	0.41	8.5	0.31	16	0.41	4.2	1.6	73.5	780
50	0.41	10.3	0.31	16	0.41	4.2	2.3	77.8	890
70	0.51	11.9	0.31	16	0.41	4.2	3.2	83.0	1030
95	0.51	13.5	0.31	16	0.41	4.2	4.3	87.8	1170
120	0.51	15.5	0.31	16	0.41	4.2	5.4	90.0	1270

TYPE 633-ECC DIMENSIONS			
Conductor size mm2	ECC size mm2	ECC max. wire dia. mm	Nominal weight kg/km
25	16	0.41	720
35	25	0.41	780
50	25	0.41	880
70	35	0.41	1040
95	50	0.41	1190
120	70	0.51	1310

NOTES

Nominal dimensions and weights are provided for cable selection. Actual cable dimensions may vary due to manufacturing tolerances.

TEBAOFLEX

TECHNICAL DATA

Complete nominal dimensional data. Source ordering codes have been omitted.

ELECTRICAL CHARACTERISTICS

Cond. size mm2	DC res. 20 deg C oh/km	DC res. 90 deg C oh/km	React. oh/km	Min screen res. oh/km	Min ECC res. oh/km	Current 30 deg C A	Cond. S/C kA 1s	Screen S/C kA 1s	ECC S/C kA 1s
25	0.795	1.05	0.155	1.6	0.7	105	3.1	1.6	3.6
35	0.565	0.749	0.144	1.2	0.5	130	4.3	2.1	5.0
50	0.393	0.521	0.136	0.8	0.5	160	6.1	3.1	5.0
70	0.277	0.368	0.131	0.7	0.4	195	8.5	3.5	7.5
95	0.210	0.279	0.125	0.6	0.3	230	11.6	4.1	9.0
120	0.164	0.218	0.119	0.6	0.23	260	14.6	4.1	11.5

SERVICE CONDITIONS

Parameter	Value
Voltage rating	19/33 kV
Ambient rating basis	Current rating at 30 deg C ambient
Short circuit rating	Values shown are kA for 1 second

CERTIFICATIONS