



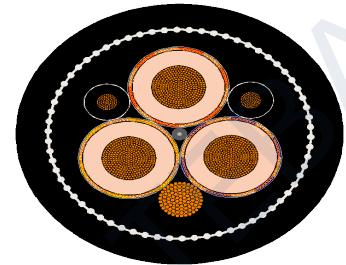
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

SANS TYPE 66 / 66-ECC 3.8/6.6 KV CABLE

Medium voltage screened mining and portable apparatus cable



APPLICATION

For mining machinery and portable apparatus in hazardous areas, including section feeders, medium sized draglines, shovels and drills.

CONSTRUCTION

Parameter	Value
Conductor	Class 5 flexible stranded tinned annealed copper
Insulation	EPR thermosetting compound
Braid	Nylon and tinned copper wires
Pilot cores	Three pilot cores insulated with EPM compound
Lay	Power cores individually screened with tinned copper and textile braid, laid up with three insulated pilot cores
ECC variant	One pilot core replaced with tinned conductor
Inner sheath	Polychloroprene rubber
Reinforcement	Open nylon braid, minimum 16 strings
Outer sheath	Polychloroprene rubber, black

CABLE CHARACTERISTICS

Parameter	Value
Standard	SANS 1520-2; SANS 1411-1; SANS 1411-3
Rated voltage	3.8/6.6 kV
Temperature rating	-25 deg C to +90 deg C
Minimum bending radius	6 x overall diameter
Performance	UV resistant; sunlight resistant; oil resistant

TECHNICAL DATA

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

TYPE 66 / 66-ECC DIMENSIONS										
Power size mm2	Power wire dia. mm	Max cond. dia. mm	Screen wire dia. mm	Screen cross-sec. mm2	Pilot size mm2	Pilot wire dia. mm	Max pilot dia. mm	Max tension kN	Overall dia. mm	Weight kg/km
25	0.41	6.8	0.31	28	10	0.41	4.2	1.1	50.1	380
35	0.41	8.5	0.31	29	10	0.41	4.2	1.6	51.7	420
50	0.41	10.3	0.31	32	10	0.41	4.2	2.3	55.3	510
70	0.51	11.9	0.31	35	16	0.41	5.3	3.2	59.8	620
95	0.51	13.5	0.31	39	16	0.41	5.3	4.3	64.6	740
120	0.51	15.5	0.31	41	16	0.41	5.3	5.4	68.8	870
150	0.51	17.3	0.31	44	25	0.41	6.8	6.8	73.1	1020
185	0.51	20.2	0.31	47	25	0.41	6.8	8.3	77.8	1170
240	0.51	22.9	0.31	50	25	0.41	6.8	10.8	83.1	1410

ECC DIMENSIONS			
Power size mm2	ECC size mm2	ECC max. wire dia. mm	Nominal weight kg/km
25	16	0.41	390
35	25	0.41	440
50	25	0.41	550
70	35	0.41	640
95	50	0.41	760
120	70	0.51	890
150	95	0.51	1050
185	95	0.51	1190
240	120	0.51	1450

TECHNICAL DATA

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

ELECTRICAL CHARACTERISTICS							
Power size mm2	DC res. 20 deg C oh/km	DC res. 90 deg C oh/km	React. oh/km	Imped. 90 deg C	Min screen res. oh/km	Screen+ECC res. oh/km	Current rating A
25	0.795	1.05	0.124	1.06	1.6	0.7	105
35	0.565	0.749	0.116	0.758	1.2	0.5	130
50	0.393	0.521	0.109	0.532	0.8	0.5	160
70	0.277	0.368	0.105	0.383	0.7	0.4	195
95	0.210	0.279	0.101	0.297	0.6	0.3	230
120	0.164	0.218	0.096	0.238	0.6	0.23	260
150	0.132	0.176	0.092	0.199	0.6	0.18	300
185	0.108	0.145	0.091	0.171	0.6	0.18	340
240	0.0817	0.110	0.087	0.140	0.6	0.15	400

SHORT CIRCUIT RATING			
Power size mm2	Symmetrical short circuit kA 1s	Earth fault screens kA 1s	Earth fault screens+ECC kA 1s
25	3.1	1.6	3.6
35	4.3	2.1	5.0
50	6.1	3.1	5.0
70	8.5	3.5	7.5
95	11.6	4.1	9.0
120	14.6	4.1	11.5
150	18.3	4.1	14.0
185	23	4.1	14.0
240	29	4.1	17.0

NOTES

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

CERTIFICATIONS



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