



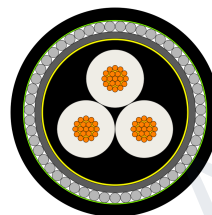
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

YKGYFoy n SWA ARMOURED MINING POWER CABLE

PVC insulated copper | 0.6/1 kV and 3.6/6 kV



Illustrative section

APPLICATION

PVC insulated, round galvanised steel wire armoured mining power cables. The 0.6/1 kV variant serves open-pit and underground equipment in methane-free seams, areas without explosion hazard, and class A coal-dust explosion hazard excavations. The 3.6/6 kV variant serves mine power transmission. Both suit shafts and inclined excavations up to 90 degrees.

KEY FEATURES

Parameter	0.6/1 kV	3.6/6 kV
Operating voltage	0.6/1 kV	3.6/6 kV
Test voltage	3.5 kV	11 kV
Conductor	Cu solid cl. 1 / stranded cl. 2	Compacted stranded Cu, cl. 2
Operating temperature	-30 C to 70 C	-30 C to 70 C
Minimum bending radius	10 x OD	10 x OD
Outer sheath	Yellow special PVC	Red special PVC

CABLE DESIGN

Parameter	0.6/1 kV	3.6/6 kV
Insulation	Special PVC	Special PVC
Core identification	Power: natural/red/blue; PE: natural	Natural; numbered 1, 2, 3
Core assembly	Power cores + protective elements	Power cores around PVC liner
Filler / inner sheath	PVC or rubber / PVC	PVC or rubber / PVC
Screen / separation	None specified	Copper tape / PVC sheath or tape
Armour	Round galvanised steel wires	Round galvanised steel wires
Flame performance	PN-EN 60332-1 / -3-24; OI >29	PN-EN 60332-1 / -3-24; OI >29

USE & HANDLING



MINING

Mine supply



SINGLE CABLE

PN-EN 60332-1



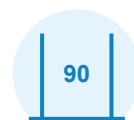
BUNCHED CABLE

IEC 60332-3



OXYGEN INDEX

>29



SHAFT

Up to 90 deg

INSTALLATION NOTES

0.6/1 kV: install at or above -5 C; use only in the stated mine environments.

Both ratings: shafts or excavations up to 90 degrees; bend radius 10 x OD.

3.6/6 kV: filler and inner sheath may form one component if materials match.

TECHNICAL DATA | 0.6/1 kV

CABLE RANGE AND DIMENSIONS

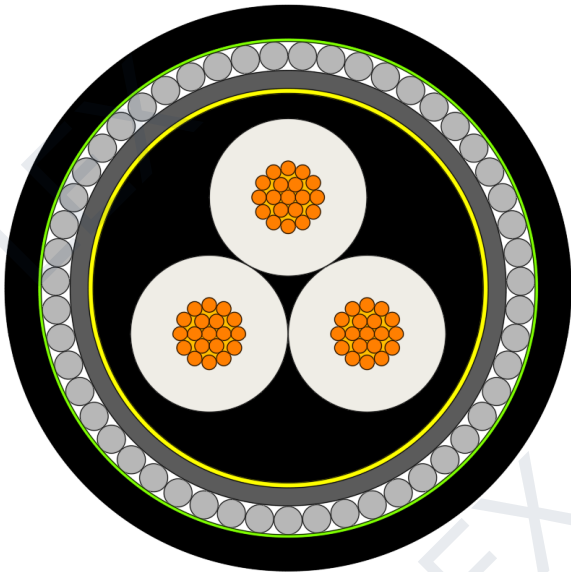
Section mm2	Cable construction	Max. outer diameter mm	Weight kg/km
10	3x10/6	25.9	1600
16	3x16/16	28.4	2040
25	3x25/16	32.6	2600
35	3x35/16	34.3	2990
50	3x50/16	37.9	3680
70	3x70/25	43.2	4780
95	3x95/25	48.6	5950
120	3x120/35	52.9	7140

POWER CONDUCTOR ELECTRICAL SPECIFICATIONS

Section mm2	Resistance ohm/km	Inductivity / reactance mH/km / ohm/km	Long-term / short circuit A / kA
10	1.83	0.31 / 0.098	64 / 1.15
16	1.15	0.30 / 0.092	86 / 1.84
25	0.727	0.30 / 0.092	113 / 2.88
35	0.524	0.29 / 0.090	139 / 4.03
50	0.387	0.28 / 0.088	173 / 5.75
70	0.268	0.26 / 0.085	212 / 8.05
95	0.193	0.26 / 0.084	257 / 10.93
120	0.153	0.26 / 0.083	294 / 13.80

Short-circuit capacity is for 1 s at maximum long-term conductor temperature.

CABLE CONSTRUCTION REFERENCE



1. Power conductor
2. PVC insulation
3. Core assembly and protective components
4. Filling sheath
5. PVC inner sheath
6. Round galvanized steel wire armour
7. Flame-retardant PVC outer sheath

Schematic section supplied for this datasheet.
Protective conductor detail varies by construction.

TECHNICAL DATA | 3.6/6 kV

CABLE RANGE AND DIMENSIONS

Section mm ²	Cable construction	Calculated OD mm	Weight kg/km
10	3x10/10	46.8	4715
16	3x16/10	49.6	5290
25	3x25/14	52.5	5963
35	3x35/16	53.9	6460
50	3x50/18	59.2	8315
70	3x70/18	64.5	9753
95	3x95/20	68.8	11178
120	3x120/22	71.3	12670
150	3x150/24	75.5	14455
185	3x185/27	84.5	18462

POWER CONDUCTOR ELECTRICAL SPECIFICATIONS

Section mm ²	Resistance ohm/km	Inductivity mH/km	Reactance ohm/km
10	1.83	0.400	0.126
16	1.15	0.372	0.117
25	0.727	0.349	0.110
35	0.524	0.338	0.106
50	0.387	0.317	0.100
70	0.268	0.299	0.094
95	0.193	0.286	0.090
120	0.153	0.278	0.087
150	0.124	0.268	0.084
185	0.0991	0.262	0.082

EARTH AND CURRENT RATINGS

Section mm ²	Earth cap. / Earth SC uF/km / A/km	Short circuit kA	Current A
10	0.11 / 0.35	1.15	68
16	0.11 / 0.37	1.84	87
25	0.12 / 0.40	2.88	113
35	0.13 / 0.41	4.03	137
50	0.13 / 0.43	5.75	164
70	0.14 / 0.45	8.05	202
95	0.15 / 0.47	10.93	245
120	0.15 / 0.49	13.8	281
150	0.15 / 0.50	17.25	319
185	0.16 / 0.51	21.28	369

Earth cap.: to-earth capacitance; Earth SC: to-earth short-circuit current.

CERTIFICATIONS



TEBAOFLEX CABLE