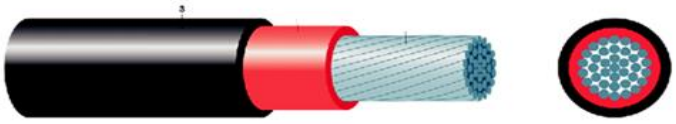
METSEC
CABLES LIMITED

PVC INSULATED ALUMINIUM CONDUCTOR SOFT DRAWN



APPLICATION

These cables have been designated for general purpose, including underground use where they are not likely to suffer mechanical damage.

CHARACTERISTICS

Voltage Rating (Uo/U)
1100V

Temperature Rating
+5˚C to +70˚C

Minimum Bending Radius
5 x overall diameter

CONSTRUCTION

Conductor
Plain circular stranded, aluminium conductors, per IEC:60228 class 2.

Insulation
Heat resistive PVC type 5 to BS6746 rated 85°C for continuous operation (PVC type 1 to BS6746 rated 70°C also available on request).

Sheath
PVC

Sheath
PVC

Sheath Colour
- Black

CABLE THIRD-PARTY ACCREDITATION

Cables are tested and accredited by Kenya Bureau and Standards (KEBS).

STANDARDS

KS EN KS-IEC 60228

Flame Retardant according to IEC/EN 60332-1-2

KEBS ISO 9001 Quality Management | ISO 14001 Environmental Management | ISO 45001 Occupational Health and Safety Management

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DIMENSION AND WEIGHT

Conductor		Insulation	Outer Sheath		Packaging	
Cross sectional area Nominal (mm2)	Minimum number of wires (No.)	Thickness Nominal (mm)	Thickness Nominal (mm)	Overall diameter Approx (mm)	Net weight Approx kg/km	Standard Package m±5%
16	7	1.0	1.4	10.6	132	1000/2000
25	7	1.2	1.4	12.3	186	500/1000
35	7	1.2	1.4	13.5	230	500/1000
50	7	1.4	1.4	15.3	291	500/1000
70	12	1.4	1.4	17.1	376	500/1000
95	15	1.6	1.5	19.6	504	500/1000
120	15	1.6	1.5	21.2	594	500/1000
150	15	1.8	1.6	23.6	726	500/1000
185	30	2.0	1.7	26.0	898	500
240	30	2.2	1.8	29.5	1140	500

CURRENT CARRYING CAPACITY

Conductor	Conductor Resistance			In ground					
Cross Sectional Area (mm2)	DC at 20°C Maximum ohm/km	AC at 85°C in flat formation Approx. ohm/km	AC at 85°C in trefoil formation Approx. ohm/km	In Ground			In Air		
				Direct laid Approx. (amps)	Direct laid Approx. (amps	In Duct Approx. (amps	Free Approx. Amps	Free Approx. Amps	In pipes Approx. Amps
16	1.91	2.41	2.41	82	79	61	80	65	52
25	1.20	1.51	1.51	106	101	79	105	86	68
35	0.868	1.096	1.096	127	121	94	130	105	83
50	0.641	0.809	0.809	150	143	113	158	128	100
70	0.443	0.560	0.560	185	176	139	201	162	125
95	0.320	0.404	0.405	222	211	168	249	201	153
120	0.253	0.320	0.320	253	240	192	291	234	176
150	0.206	0.261	0.261	283	269	216	332	268	199
185	0.164	0.208	0.209	322	304	246	386	312	229
240	0.125	0.159	0.160	375	353	287	461	372	270

Ampacity is based on: -

All values are calculated in accordance with IEC 60287
Ground temperature 35°C
Air ambient temperature 40°C
Depth of burial 0.5m
Thermal resistivity of soil 1.2Km/W
Spacing between cables in flat formation One cable diameter