

Traffic Signal Cable BS 6346 SWA PVC



Eland Product Group: A6T

APPLICATION

For the interconnection of traffic signal equipment or other applications requiring high core configurations with mechanical robustness.

CHARACTERISTICS

Voltage Rating U_o/U
0.6/1kV

Temperature Rating
Fixed: -15°C to +70°C

Short Circuit Temperature
+160°C

Minimum Bending Radius
6 x overall diameter

CONSTRUCTION

Conductor
Class 1 annealed copper conductor

Insulation
PVC (Polyvinyl Chloride)

Bedding
Polymeric compound with a tensile strength of not less than 4N/mm² and an elongation break of not less than 50%

Armour
Single layer of galvanized wires laid in a right direction

Sheath
PVC (Polyvinyl Chloride)

Sheath Colour
● Orange

STANDARDS

BS 6346, BS 50363

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

ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.





Core Identification

8 cores:

Centre Lay (Right Hand Lay): ● Brown
 Second Layer (Left Hand Lay): ● Yellow ● Green/Blue ● Red
 ○ White ● Blue ● Black ● Orange

12 cores:

Centre Lay (Right Hand Lay): ● Brown ● Yellow ● Green/Blue
 Second Layer (Left Hand Lay): ● Red ○ White ● Blue
 ● Black ● Orange ● Red/White
 ● Grey ● Red/Blue ● Violet

16 cores:

Centre Lay (Right Hand Lay): ● Brown ● Yellow
 ● Green/Blue ● Red ○ White
 Second Layer (Left Hand Lay): ● Blue ● Black ● Orange
 ● Grey ● Red/Blue ● Violet
 ● Brown/Red ● Yellow/Red
 ● Red/White

20 cores:

Centre Lay (Right Hand Lay): ● Brown ● Yellow
 ● Green/Blue ● Red ○ White
 ● Blue ● Black
 Second Layer (Left Hand Lay): ● Orange ● Red/White
 ● Grey ● Red/Blue ● Violet
 ● Brown/Red ● Yellow/Red
 ● Grey/Red ● Black/Red
 ● Red/Blue ● Violet
 ● Violet/Red ● Orange/Red
 ● Green/Red ● Blue/White

DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF BEDDING mm	DIAMETER OF STEEL WIRE mm	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A6T08010SWA	8	1	0.6	0.8	0.9	1.4	13.2	388
A6T08015SWA	8	1.5	0.6	0.8	0.9	1.4	13.4	451
A6T12010SWA	12	1	0.6	0.8	1.25	1.4	16.2	615
A6T12015SWA	12	1.5	0.6	0.8	1.25	1.5	17.4	729
A6T16010SWA	16	1	0.6	0.8	0.9	1.5	17.6	725
A6T16015SWA	16	1.5	0.6	0.8	1.25	1.6	18.9	864
A6T20010SWA	20	1	0.6	0.8	1.25	1.6	19	841
A6T20015SWA	20	1.5	0.6	0.8	1.25	1.6	20.2	997

CONDUCTORS

Class 1 Solid Conductors for Single Core and Multi-Core Cables

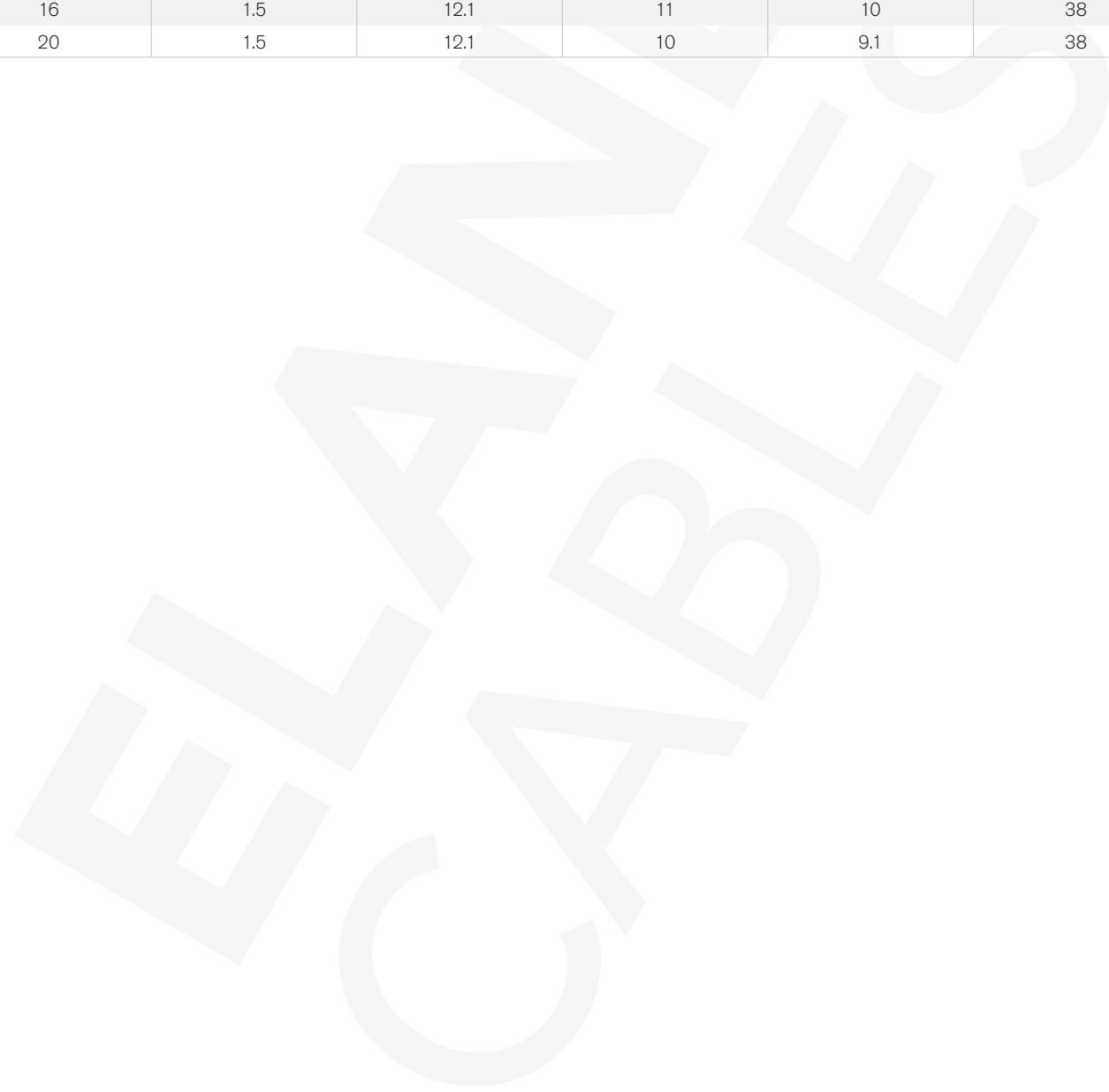
NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	
	Annealed Copper Conductor	
	Plain Wires	
1	18.1	
1.5	12.1	



ELECTRICAL CHARACTERISTICS

Current Carrying Capacity and Resistance Values

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM CONDUCTOR RESISTANCE AT 20°C ohms/km	CURRENT CARRYING CAPACITY Amps		VOLTAGE DROP mV/A/m
			In Air	Direct Burial	
8	1	18.1	12	10.5	25
12	1	18.1	10	8.7	25
16	1	18.1	9	8	25
20	1	18.1	8	7.1	25
8	1.5	12.1	15	13.5	38
12	1.5	12.1	13	11.7	38
16	1.5	12.1	11	10	38
20	1.5	12.1	10	9.1	38



The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.