Steel Wire Armoured (SWA) PVC Cable

Eland Product Group **A9S**

ELAND CABLES
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Application
Power and auxiliary control cables for power networks, underground, outdoors, indoors and in cable ducting.

Standards
BS5467, IEC 60502

Conductor
Class 2 plain stranded copper conductor to BS EN 60228:2005 (previously BS6360)

Insulation
XLPE (Cross-Linked Polyethylene)

Bedding
PVC (Polyvinyl Chloride)

Armouring
Single Core: AWA
(Aluminium Wire Armour)
Multi-Core: SWA (Steel Wire Armour)

Sheath
PVC (Polyvinyl Chloride)

Sheath Colour
Black

Voltage Rating
600/1000V

Temperature Rating
0°C to +90°C

Minimum Bending Radius
1.5mm² - 16mm²:
6 x overall diameter

25mm² and above:
8 x overall diameter

Core Identification
1 Core: Brown
2 Cores: Brown, Blue
3 Cores: Brown, Black, Grey
4 Cores: Blue, Brown, Black, Grey
5 Cores: Green/Yellow,
Blue, Brown, Black, Grey
Alternative core identification:
Black cores with White numbers

RoHS

Dimensions

XLPE/PVC/AWA/PVC (Copper) BS5467

Eland Part Number	No. of Cores x Nominal Cross Sectional Area # x mm²	Nominal Thickness of Insulation mm	Nominal Diameter mm		Nominal Weight kg/Km
			Under Armour	Overall	
Aluminium Wire Armoured (AWA) PVC Cable - 1 Core					
A9AWA1050	1 x 50	1.0	12.7	17.5	800
A9AWA1070	1 x 70	1.1	14.7	20.2	960
A9AWA1095	1 x 95	1.1	16.6	22.3	1240
A9AWA1120	1 x 120	1.2	18.5	24.2	1510
A9AWA1150	1 x 150	1.4	20.8	27.4	1900
A9AWA1185	1 x 185	1.6	23.2	30.0	2320
A9AWA1240	1 x 240	1.7	26.0	32.8	2930
A9AWA1300	1 x 300	1.8	28.6	35.6	3580
A9AWA1400	1 x 400	2.0	32.4	40.4	4600
A9AWA1500	1 x 500	2.2	36.0	44.2	5770
A9AWA1630	1 x 630	2.4	40.0	48.8	7250
A9AWA1800	1 x 800	2.6	45.6	55.4	9381
A9AWA11000	1 x 1000	2.8	50.6	60.6	11540

XLPE/PVC/SWA/PVC (Copper) BS5467

Eland Part Number	No. of Cores x Nominal Cross Sectional Area # x mm²	Nominal Thickness of Insulation mm	Nominal Diameter mm		Nominal Weight kg/Km
			Under Armour	Overall	
Steel Wire Armoured (SWA) PVC Cable - 2 Cores					
A9SWA2015	2 x 1.5	0.6	7.3	12.1	302
A9SWA2025	2 x 2.5	0.7	8.5	13.6	346
A9SWA2040	2 x 4.0	0.7	9.4	14.7	410
A9SWA2060	2 x 6.0	0.7	10.5	15.9	499
A9SWA210	2 x 10.0	0.7	12.3	18.0	648
A9SWA216	2 x 16.0	0.7	14.3	20.4	978
A9SWA225	2 x 25.0	0.9	14.7	20.4	1290
A9SWA235	2 x 35.0	0.9	16.8	23.3	1500
A9SWA250	2 x 50.0	1.0	19.0	25.8	1890
A9SWA270	2 x 70.0	1.1	22.0	29.0	2450
A9SWA295	2 x 95.0	1.1	25.1	33.1	3300
A9SWA2120	2 x 120.0	1.2	27.9	36.1	4020
A9SWA2150	2 x 150.0	1.4	30.9	39.3	4750
A9SWA2185	2 x 185.0	1.6	34.9	44.7	6180
A9SWA2240	2 x 240.0	1.7	39.0	49.0	7570
A9SWA2300	2 x 300.0	1.8	43.3	53.5	9180
A9SWA2400	2 x 400.0	2.0	48.4	59.0	10500
Steel Wire Armoured (SWA) PVC Cable - 3 Cores					
A9SWA3015	3 x 1.5	0.6	7.8	12.6	330
A9SWA3025	3 x 2.5	0.7	9.2	14.1	390
A9SWA3040	3 x 4.0	0.7	10.0	15.3	464
A9SWA3060	3 x 6.0	0.7	11.2	16.6	568
A9SWA310	3 x 10.0	0.7	13.1	19.5	866
A9SWA316	3 x 16.0	0.7	15.3	21.6	1152
A9SWA325	3 x 25.0	0.9	18.9	25.5	1800
A9SWA335	3 x 35.0	0.9	21.3	28.0	2230
A9SWA350	3 x 50.0	1.0	21.7	28.5	2490
A9SWA370	3 x 70.0	1.1	25.2	32.2	3290
A9SWA395	3 x 95.0	1.1	28.8	37.0	4440
A9SWA3120	3 x 120.0	1.2	32.0	40.4	5470
A9SWA3150	3 x 150.0	1.4	35.9	45.5	6930
A9SWA3185	3 x 185.0	1.6	40.0	49.8	8350
A9SWA3240	3 x 240.0	1.7	44.9	55.1	10400
A9SWA3300	3 x 300.0	1.8	49.8	60.2	12600
A9SWA3400	3 x 400.0	2.0	55.8	66.6	14600

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***E-mail*: inquiry@koai-tech.com**

Steel Wire Armoured (SWA) PVC Cable - 4 Cores					
A9SWA4015	4 x 1.5	0.6	8.5	13.5	365
A9SWA4025	4 x 2.5	0.7	9.9	15.0	438
A9SWA4040	4 x 4.0	0.7	11.0	16.4	532
A9SWA4060	4 x 6.0	0.7	12.3	18.7	764
A9SWA410	4 x 10.0	0.7	14.5	21.1	1013
A9SWA416	4 x 16.0	0.7	17.0	22.9	1360
A9SWA425	4 x 25.0	0.9	21.0	27.6	2160
A9SWA435	4 x 35.0	0.9	23.6	30.4	2690
A9SWA450	4 x 50.0	1.0	25.0	32.0	3130
A9SWA470	4 x 70.0	1.1	29.5	37.7	4500
A9SWA495	4 x 95.0	1.1	33.3	41.7	5600
A9SWA4120	4 x 120.0	1.2	37.5	47.1	7400
A9SWA4150	4 x 150.0	1.4	41.6	51.4	8780
A9SWA4185	4 x 185.0	1.6	46.4	56.6	10630
A9SWA4240	4 x 240.0	1.7	52.6	63.0	13390
A9SWA4300	4 x 300.0	1.8	58.0	68.8	16290
A9SWA4400	4 x 400.0	2.0	65.4	78.1	19800
Steel Wire Armoured (SWA) PVC Cable - 5 Cores					
A9SWA5015	5 x 1.5	0.6	9.7	14.3	410
A9SWA5025	5 x 2.5	0.7	11.7	16.3	470
A9SWA5040	5 x 4.0	0.7	13.0	17.8	710
A9SWA5060	5 x 6.0	0.7	14.5	20.0	876
A9SWA510	5 x 10.0	0.7	17.2	22.9	1165
A9SWA516	5 x 16.0	0.7	20.0	26.6	1742
A9SWA525	5 x 25.0	0.9	24.7	31.5	2323
A9SWA535	5 x 35.0	0.9	27.8	34.8	2932
A9SWA550	5 x 50.0	1.0	32.4	40.4	4192
A9SWA570	5 x 70.0	1.1	37.9	46.3	5336

Conductors

Class 2 stranded conductors for Single Core and Multi-Core cables

1	2	3	4	5	6	7	8
Nominal Cross Sectional Area mm²	Minimum Number of Wires in the Conductor						Maximum Resistance of Conductor at 20°C
	Circular		Circular Compacted		Shaped		Annealed Copper Conductor
	Cu	Al	Cu	Al	Cu	Al	Plain Wires ohms/Km
1.50	7	-	6	-	-	-	12.1000
2.50	7	-	6	-	-	-	7.4100
4.00	7	-	6	-	-	-	4.6100
6.00	7	-	6	-	-	-	3.0800
10.00	7	7	6	6	-	-	1.8300
16.00	7	7	6	6	-	-	1.1500
25.00	7	7	6	6	6	6	0.7270
35.00	7	7	6	6	6	6	0.5240
50.00	19	19	6	6	6	6	0.3870
70.00	19	19	12	12	12	12	0.2680
95.00	19	19	15	15	15	15	0.1930
120.00	37	37	18	15	18	15	0.1530
150.00	37	37	18	15	18	15	0.1240
185.00	37	37	30	30	30	30	0.0991
240.00	37	37	34	30	34	30	0.0754
300.00	61	61	34	30	34	30	0.0601
400.00	61	61	53	53	53	53	0.0470

Table in accordance with BS EN 60228:2005 (previously BS6360)

Yours Cable Partner ~ KT Cable and Connection Company Limited

Steel Wire Armoured (SWA) LSZH Cable

Eland Product Group **A9S**

ELAND CABLES
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Application
Power and auxiliary control cables for power networks, underground, outdoors, indoors and in cable ducting. For installation where fire, smoke emission and toxic fumes create a potential threat to life and equipment.

Standards
BS6724, IEC 60502

Conductor
Class 2 stranded plain annealed copper conductor to BS6360

Insulation
XLPE (Cross-Linked Polyethylene)

Bedding
LSZH (Low Smoke Zero Halogen)

Armouring
Single Core: AWA
(Aluminium Wire Armour)
Multi-Cores: SWA (Steel Wire Armour)

Sheath
LSZH (Low Smoke Zero Halogen)

Sheath Colour
Black

Voltage Rating
600/1000V

Temperature Rating
0°C to +90°C

Minimum Bending Radius
1.5mm² - 16mm²:
6 x overall diameter

25mm² and above:
8 x overall diameter

Core Identification
1 Core: Brown
2 Cores: Brown, Blue
3 Cores: Brown, Black, Grey
4 Cores: Blue, Brown, Black, Grey
5 Cores: Green/Yellow, Blue, Brown, Black, Grey
Alternative core identification:
Black cores with White numbers

RoHS

Dimensions

XLPE/LSZH/AWA/LSZH (Copper) BS6724

Eland Part Number	No. of Cores x Nominal Cross Sectional Area # x mm²	Nominal Thickness of Insulation mm	Nominal Diameter mm		Nominal Weight kg/Km
			Under Armour	Overall	
Aluminium Wire Armoured (AWA) PVC Cable - 1 Core					
A9AWA1050	1 x 50	1.0	12.7	17.5	800
A9AWA1070	1 x 70	1.1	14.7	20.2	960
A9AWA1095	1 x 95	1.1	16.6	22.3	1240
A9AWA1120	1 x 120	1.2	18.5	24.2	1510
A9AWA1150	1 x 150	1.4	20.8	27.4	1900
A9AWA1185	1 x 185	1.6	23.2	30.0	2320
A9AWA1240	1 x 240	1.7	26.0	32.8	2930
A9AWA1300	1 x 300	1.8	28.6	35.6	3580
A9AWA1400	1 x 400	2.0	32.4	40.4	4600
A9AWA1500	1 x 500	2.2	36.0	44.2	5770
A9AWA1630	1 x 630	2.4	40.0	48.8	7250
A9AWA1800	1 x 800	2.6	45.6	55.4	9381
A9AWA11000	1 x 1000	2.8	50.6	60.6	11540

XLPE/LSZH/SWA/LSZH (Copper) BS6724

Eland Part Number	No. of Cores x Nominal Cross Sectional Area # x mm²	Nominal Thickness of Insulation mm	Nominal Diameter mm		Nominal Weight kg/Km
			Under Armour	Overall	
Steel Wire Armoured (SWA) PVC Cable - 2 Cores					
A9SWA2015	2 x 1.5	0.6	7.3	12.1	302
A9SWA2025	2 x 2.5	0.7	8.5	13.6	346
A9SWA2040	2 x 4.0	0.7	9.4	14.7	410
A9SWA2060	2 x 6.0	0.7	10.5	15.9	499
A9SWA210	2 x 10.0	0.7	12.3	18.0	648
A9SWA216	2 x 16.0	0.7	14.3	20.4	978
A9SWA225	2 x 25.0	0.9	14.7	20.4	1290
A9SWA235	2 x 35.0	0.9	16.8	23.3	1500
A9SWA250	2 x 50.0	1.0	19.0	25.8	1890
A9SWA270	2 x 70.0	1.1	22.0	29.0	2450
A9SWA295	2 x 95.0	1.1	25.1	33.1	3300
A9SWA2120	2 x 120.0	1.2	27.9	36.1	4020
A9SWA2150	2 x 150.0	1.4	30.9	39.3	4750
A9SWA2185	2 x 185.0	1.6	34.9	44.7	6180
A9SWA2240	2 x 240.0	1.7	39.0	49.0	7570
A9SWA2300	2 x 300.0	1.8	43.3	53.5	9180
A9SWA2400	2 x 400.0	2.0	48.4	59.0	10500
Steel Wire Armoured (SWA) PVC Cable - 3 Cores					
A9SWA3015	3 x 1.5	0.6	7.8	12.6	330
A9SWA3025	3 x 2.5	0.7	9.2	14.1	390
A9SWA3040	3 x 4.0	0.7	10.0	15.3	464
A9SWA3060	3 x 6.0	0.7	11.2	16.6	568
A9SWA310	3 x 10.0	0.7	13.1	19.5	866
A9SWA316	3 x 16.0	0.7	15.3	21.6	1152
A9SWA325	3 x 25.0	0.9	18.9	25.5	1800
A9SWA335	3 x 35.0	0.9	21.3	28.0	2230
A9SWA350	3 x 50.0	1.0	21.7	28.5	2490
A9SWA370	3 x 70.0	1.1	25.2	32.2	3290
A9SWA395	3 x 95.0	1.1	28.8	37.0	4440
A9SWA3120	3 x 120.0	1.2	32.0	40.4	5470
A9SWA3150	3 x 150.0	1.4	35.9	45.5	6930
A9SWA3185	3 x 185.0	1.6	40.0	49.8	8350
A9SWA3240	3 x 240.0	1.7	44.9	55.1	10400
A9SWA3300	3 x 300.0	1.8	49.8	60.2	12600
A9SWA3400	3 x 400.0	2.0	55.8	66.6	14600

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Steel Wire Armoured (SWA) PVC Cable - 4 Cores					
A9SWA4015	4 x 1.5	0.6	8.5	13.5	365
A9SWA4025	4 x 2.5	0.7	9.9	15.0	438
A9SWA4040	4 x 4.0	0.7	11.0	16.4	532
A9SWA4060	4 x 6.0	0.7	12.3	18.7	764
A9SWA410	4 x 10.0	0.7	14.5	21.1	1013
A9SWA416	4 x 16.0	0.7	17.0	22.9	1360
A9SWA425	4 x 25.0	0.9	21.0	27.6	2160
A9SWA435	4 x 35.0	0.9	23.6	30.4	2690
A9SWA450	4 x 50.0	1.0	25.0	32.0	3130
A9SWA470	4 x 70.0	1.1	29.5	37.7	4500
A9SWA495	4 x 95.0	1.1	33.3	41.7	5600
A9SWA4120	4 x 120.0	1.2	37.5	47.1	7400
A9SWA4150	4 x 150.0	1.4	41.6	51.4	8780
A9SWA4185	4 x 185.0	1.6	46.4	56.6	10630
A9SWA4240	4 x 240.0	1.7	52.6	63.0	13390
A9SWA4300	4 x 300.0	1.8	58.0	68.8	16290
A9SWA4400	4 x 400.0	2.0	65.4	78.1	19800
Steel Wire Armoured (SWA) PVC Cable - 5 Cores					
A9SWA5015	5 x 1.5	0.6	9.7	14.3	410
A9SWA5025	5 x 2.5	0.7	11.7	16.3	470
A9SWA5040	5 x 4.0	0.7	13.0	17.8	710
A9SWA5060	5 x 6.0	0.7	14.5	20.0	876
A9SWA510	5 x 10.0	0.7	17.2	22.9	1165
A9SWA516	5 x 16.0	0.7	20.0	26.6	1742
A9SWA525	5 x 25.0	0.9	24.7	31.5	2323
A9SWA535	5 x 35.0	0.9	27.8	34.8	2932
A9SWA550	5 x 50.0	1.0	32.4	40.4	4192
A9SWA570	5 x 70.0	1.1	37.9	46.3	5336

Conductors

Class 2 stranded conductors for Single Core and Multi-Core cables

1	2	3	4	5	6	7	8
Nominal Cross Sectional Area mm²	**Minimum Number of Wires in the Conductor**						**Maximum Resistance of Conductor at 20°C**
	Circular		**Circular Compacted**		**Shaped**		**Annealed Copper Conductor**
	Cu	**Al**	**Cu**	**Al**	**Cu**	**Al**	**Plain Wires** ohms/Km
1.50	7	-	6	-	-	-	12.1000
2.50	7	-	6	-	-	-	7.4100
4.00	7	-	6	-	-	-	4.6100
6.00	7	-	6	-	-	-	3.0800
10.00	7	7	6	6	-	-	1.8300
16.00	7	7	6	6	-	-	1.1500
25.00	7	7	6	6	6	6	0.7270
35.00	7	7	6	6	6	6	0.5240
50.00	19	19	6	6	6	6	0.3870
70.00	19	19	12	12	12	12	0.2680
95.00	19	19	15	15	15	15	0.1930
120.00	37	37	18	15	18	15	0.1530
150.00	37	37	18	15	18	15	0.1240
185.00	37	37	30	30	30	30	0.0991
240.00	37	37	34	30	34	30	0.0754
300.00	61	61	34	30	34	30	0.0601
400.00	61	61	53	53	53	53	0.0470
500.00	61	61	53	53	53	53	0.0366
630.00	91	91	53	53	53	53	0.0283
800.00	91	91	53	53	-	-	0.0221
1000.00	91	91	53	53	-	-	0.0176

Table in accordance with BS EN 60228:2005 (previously BS6360)