

AS/NZS 5000.1 XLPE/SWA/PVC + Earth Armoured Cable 0.6/1KV



Eland Product Group: AS1

APPLICATION

Armoured power cables with reduced earth for use in mains, sub-mains and sub-circuits where enclosed in conduit, buried direct or in underground ducts for buildings and industrial plants where not subject to mechanical damage.

CHARACTERISTICS

Rated Voltage Uo/U
0.6/1kV

Temperature Rating
Maximum operating temperature +90°C

Minimum Bending Radius
8x overall diameter

CONSTRUCTION

Conductor
Plain annealed copper

Insulation
XLPE X-90 (Cross-linked polyethylene)

Bedding
PVC 5V-90 (Polyvinyl Chloride)

Armour
SWA (Galvanised Steel Wire Armour)

Outer Sheath
PVC 5V-90 (Polyvinyl Chloride)

Core Identification
 3 Cores + Earth: ● Red ○ White ● Blue ● Green/Yellow
 4 Cores + Earth: ● Red ○ White ● Blue ● Black ● Green/Yellow

Sheath Colour
● Orange

STANDARDS

AS/NZS 5000.1, AS/NZS 3008, AS/NZS 1125

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 Low Voltage Directive 2014/35/EU and 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™.





DIMENSIONS

ELAND PART NO.	NUMBER OF CORES	NOMINAL CROSS SECTIONAL AREA SIZE mm ²	CONDUCTOR strands / OD mm	NOMINAL INSULATION THICKNESS mm	NOMINAL AREA SIZE EARTH mm ²	NOMINAL EARTH CONDUCTOR INSULATION THICKNESS mm	NOMINAL ARMOUR DIAMETER mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
AS1304016OR	3+E	16	7/1.70	0.7	6	0.7	1.25	22.8	1285
AS1304025OR	3+E	25	7/2.14	0.9	6	0.7	1.6	26.7	1845
AS1304035OR	3+E	35	7/2.65	0.9	10	0.7	1.6	28.7	2315
AS1304050OR	3+E	50	19/1.89	1.0	16	0.7	1.6	32.0	2935
AS1304070OR	3+E	70	19/2.24	1.1	25	0.9	2.0	38.3	3880
AS1304095OR	3+E	95	19/2.65	1.1	25	0.9	2.0	43.1	5250
AS1304120OR	3+E	120	19/2.94	1.2	35	0.9	2.0	45.4	5765
AS1304150OR	3+E	150	19/3.28	1.4	50	1.0	2.5	51.4	7560
AS1304185OR	3+E	185	37/2.65	1.6	70	1.1	2.5	56.6	9220
AS1304240OR	3+E	240	37/2.94	1.7	95	1.1	2.5	63.3	11740
AS1305016OR	4+E	16	7/1.70	0.7	6	0.7	1.25	26.3	1725
AS1305025OR	4+E	25	7/2.14	0.9	6	0.7	1.6	29.6	2335
AS1305035OR	4+E	35	7/2.65	0.9	10	0.7	1.6	31.5	2605
AS1305050OR	4+E	50	19/1.89	1.0	16	0.7	1.6	36.5	3860
AS1305070OR	4+E	70	19/2.24	1.1	25	0.9	2.0	41.8	5135
AS1305095OR	4+E	95	19/2.65	1.1	25	0.9	2.0	45.8	5900
AS1305120OR	4+E	120	19/2.94	1.2	35	0.9	2.0	51.7	9090
AS1305150OR	4+E	150	19/3.28	1.4	50	1.0	2.5	56.9	10410
AS1305185OR	4+E	185	37/2.65	1.6	70	1.1	2.5	63.1	11600
AS1305240OR	4+E	240	37/2.94	1.7	95	1.1	2.5	70.1	14700

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTION AREA mm	CURRENT RATINGS A			MAXIMUM DC RESISTANCE AT 20 °C Ohm/km	MAXIMUM AC RESISTANCE AT 90 °C Ohm/km	REACTANCE Ohm/km	3 PHASE VOLTAGE DROP AT 90 °C mV/A
	In Air	Buried Direct	Buried In Ducts				
16	83	110	83	1.15	1.47	0.0805	2.55
25	110	145	110	0.727	0.927	0.0808	1.61
35	135	170	135	0.524	0.669	0.0786	1.17
50	170	205	160	0.387	0.494	0.0751	0.868
70	215	250	200	0.268	0.343	0.0741	0.609
95	265	300	240	0.193	0.248	0.0725	0.450
120	305	345	275	0.153	0.197	0.0713	0.366
150	350	385	310	0.124	0.160	0.0718	0.307
185	405	435	355	0.0991	0.129	0.0720	0.259
240	480	500	420	0.0754	0.0998	0.0709	0.216