

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



ELAND CABLES ©



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

## THE CABLE LAB®

AN ISO/IEC 17025 AND IECEE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.



## SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: [www.elandcables.com/company/about-us/esg-sustainability](http://www.elandcables.com/company/about-us/esg-sustainability)



## REGULATORY COMPLIANCE

This cable meets the requirements of the Low Voltage Directive 2014/35/EU, the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab®.





## DIMENSIONS

| ELAND PART NO. | NUMBER OF CORES | NOMINAL CROSS SECTIONAL AREA SIZE mm <sup>2</sup> | CONDUCTOR strands / OD mm | NOMINAL INSULATION THICKNESS mm | NOMINAL AREA SIZE EARTH mm <sup>2</sup> | 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                              |