

AS/NZS 5000.1 XLPE/PVC Unarmoured cable 0.6/1kV



Eland Product Group: AS1

APPLICATION

AS/NZS 5000.1 standard cables are used for mains, submains and subcircuit power distribution including those enclosed in conduit, buried direct or in underground ducts for buildings and industrial plants where not subject to mechanical damage. Also available with reduced Earth core

CHARACTERISTICS

Rated Voltage U₀/U
0.6/1kV

Temperature Rating
Maximum +90°C

Minimum Bending Radius
5x overall diameter

CONSTRUCTION

Conductor
Plain annealed copper

Insulation
XLPE X-90 (Cross-linked polyethylene)

Outer Sheath
PVC 5V-90 (Polyvinyl Chloride)

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

Sheath Colour
● Black

STANDARDS

AS/NZS 5000.1, AS/NZS 3008, AS/NZS 1125, SAA-173128-EA

THE CABLE LAB[®]

AN ISO/IEC 17025 AND IECCE 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



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 ²	CONDUCTOR Stranding / OD mm	NOMINAL INSULATION THICKNESS mm	NOMINAL AREA SIZE EARTH CONDUCTOR mm ²	NOMINAL EARTH CONDUCTOR INSULATION THICKNESS mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
AS1203010BK	3	10	7/1.35	0.7	-	-	1.4	15.3	435
AS1203016BK	3	16	7/1.70	0.7	-	-	1.4	17.6	625
AS1203025BK	3	25	7/2.14	0.9	-	-	1.4	21.5	950
AS1203E010BK	3+1	10	7/1.35	0.7	4	0.7	1.4	16.0	475
AS1203E016BK	3+1	16	7/1.70	0.7	6	0.7	1.4	18.3	690
AS1203E025BK	3+1	25	7/2.14	0.9	6	0.7	1.4	21.8	1020
AS1203E035BK	3+1	35	7/2.65	0.9	10	0.7	1.4	26.9	1400
AS1203E050BK	3+1	50	19/1.89	1.0	16	0.7	1.4	30.7	1900
AS1203E070BK	3+1	70	19/2.24	1.1	25	0.9	1.4	35.9	2600
AS1203E095BK	3+1	95	19/2.65	1.1	25	0.9	1.5	38.0	3050
AS1203E120BK	3+1	120	19/2.94	1.2	35	0.9	1.6	41.8	4200
AS1203E150BK	3+1	150	19/3.28	1.4	50	1.0	1.7	43.0	5250
AS1203E185BK	3+1	185	37/2.65	1.6	70	1.1	1.8	48.4	6620
AS1203E240BK	3+1	240	37/2.94	1.7	95	1.1	2.0	54.5	8720
AS1204010BK	4	10	7/1.35	0.7	-	-	1.4	16.7	550
AS1204016BK	4	16	7/1.70	0.7	-	-	1.4	19.2	800
AS1204025BK	4	25	7/2.14	0.9	-	-	1.4	23.6	1250
AS1204E010BK	4+1	10	7/1.35	0.7	4	0.7	1.4	16.0	475
AS1204E016BK	4+1	16	7/1.70	0.7	6	0.7	1.4	18.3	690
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AS1204E240BK	4+1	240	37/2.94	1.7	95	1.1	2.0	54.5	8720

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				
10	68	91	68	1.83	2.33	0.084	4.05
16	91	118	89	1.15	1.47	0.081	2.55
25	121	155	118	0.727	0.927	0.081	1.61
35	149	182	144	0.524	0.669	0.079	1.17
50	187	219	171	0.387	0.494	0.075	0.868
70	237	268	214	0.268	0.343	0.074	0.609
95	292	321	257	0.193	0.248	0.073	0.450
120	305	250	275	0.153	0.197	0.0713	0.366
150	350	280	310	0.124	0.16	0.0718	0.307
185	405	325	355	0.0991	0.129	0.072	0.259
240	480	385	420	0.0754	0.0998	0.0709	0.216