ELAND® CABLES

APL Overall Screened Armoured Instrumentation

Eland Product Group: ENA

APPLICATION

For interconnections between instruments, sensors and monitors. Overall screened with specially selected lay schemes in order to counter static and cross talk noises. A “clean” and accurate signal can therefore be expected to be transferred. APL Armouring is provided for increased mechanical protection.

CHARACTERISTICS

Voltage Rating
300/500V

Maximum Operating Temperature
+105°C

Minimum Bending Radius
9x Overall Diameter

CONSTRUCTION

Conductor
Class 4 Plain annealed bunched copper

Insulation
XLPE (Cross-Linked Polyethylene)

Individual Screen
Al/PET (Aluminium/Polyester Tape)

Drain Wire
Tinned copper

Overall Screen
Al/PET (Aluminium/Polyester Tape)

Drain Wire
Tinned copper

Bedding
PVC (Polyvinyl Chloride)

Armouring
APL (Aluminium Polyethylene Laminated) with bunched tinned copper drain wire

Sheath
PE (Polyethylene)

Core Identification
Pairs: ○ White ● Black, numbered
Triples: ○ White ● Black ● Red, numbered

Outer Sheath Colour
● Black

STANDARDS

SANS 1411 Part 4, SANS 1411 Part 2 Type B1, SANS 1411Part 7

Flame retardant to IEC 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.

UKAS ISO/IEC 17025 Testing laboratory accreditation 8578
bsi. ISO 9001 Quality Management FS 672069
ISO 14001 Environmental Management EMS 672067
ISO 45001 Occupational Health and Safety Management OHS 672066

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™.

bsi. RoHS Trusted KITEMARK™ KM 634267
RoHS
CE

DIMENSIONS

ELAND PART NO.	NO. OF PAIRS/TRIPLE	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
ENA01P05CAPEBK	1P	0.5	9.4	90
ENA01P10CAPEBK	1P	1	10.2	111
ENA01P15CAPEBK	1P	1.5	11	128
ENA02P05CAPEBK	2P	0.5	12.7	153
ENA02P10CAPEBK	2P	1	14.6	205
ENA02P15CAPEBK	2P	1.5	16.2	248
ENA04P05CAPEBK	4P	0.5	14.4	203
ENA04P10CAPEBK	4P	1	16.2	265
ENA04P15CAPEBK	4P	1.5	18.4	354
ENA08P05CAPEBK	8P	0.5	17.1	287
ENA08P10CAPEBK	8P	1	20.3	428
ENA08P15CAPEBK	8P	1.5	22.8	535
ENA12P05CAPEBK	12P	0.5	20	384
ENA12P10CAPEBK	12P	1	22.9	557
ENA12P15CAPEBK	12P	1.5	26.3	730
ENA16P05CAPEBK	16P	0.5	21.7	471
ENA16P10CAPEBK	16P	1	25.3	706
ENA16P15CAPEBK	16P	1.5	29.4	943
ENA24P05CAPEBK	24P	0.5	24.5	629
ENA24P10CAPEBK	24P	1	28.6	949
ENA24P15CAPEBK	24P	1.5	33	1256
ENA01T05CAPEBK	1T	0.5	9.7	100
ENA01T10CAPEBK	1T	1	10.5	126
ENA01T15CAPEBK	1T	1.5	11.4	148
ENA04T05CAPEBK	4T	0.5	15.6	244
ENA04T10CAPEBK	4T	1	18.4	357
ENA04T15CAPEBK	4T	1.5	20.6	442
ENA08T05CAPEBK	8T	0.5	19.8	392
ENA08T10CAPEBK	8T	1	22.5	554
ENA08T15CAPEBK	8T	1.5	26	726
ENA12T05CAPEBK	12T	0.5	23	512
ENA12T10CAPEBK	12T	1	26.7	773
ENA12T15CAPEBK	12T	1.5	31.4	1036
ENA16T05CAPEBK	16T	0.5	25.4	646
ENA16T10CAPEBK	16T	1	30	990
ENA24T05CAPEBK	24T	0.5	31.1	919

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm²	MAXIMUM DC RESISTANCE OF CONDUCTOR AT 20°C ohms/km		NOMINAL MUTUAL CAPACITANCE nF/km	NOMINAL GROUND CAPACITANCE nF/km	NOMINAL INDUCTANCE mH/km
	Single Pair/Triad & Multicore	Multi-Pair Triad			
0.5	39.0	39.6	100	200	0.707
1	19.5	19.8	120	240	0.629
1.5	13.3	13.5	120	240	0.645

UK T 020 7241 8787 | F 020 7241 8700 | sales@elandcables.com | www.elandcables.com
International T +44 20 7241 8740 | F +44 20 7241 8700 | international@elandcables.com

CAPACITANCE

NOMINAL CROSS SECTIONAL AREA mm²	CAPACITANCE pF/m	
	Nominal	Maximum
Core / Core Screened		
0.5	84	90
1.0	104	112
1.5	101	121
Core / Screen		
0.5	158	169
1.0	196	210
1.5	190	228
Core / Core No Screen		
0.5	53	56
1.0	63	66
1.5	61	70
Core / Screen OS only		
0.5	100	106
1.0	119	124
1.5	115	131