

# APL Individual & Overall Screened Armoured Instrumentation



Eland Product Group: ...

## APPLICATION

For interconnections between instruments, sensors and monitors. Individual and 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**  
Stranded annealed bunched copper

**Insulation**  
XLPE (Cross-Linked Polyethylene)

**Individual Screen**  
Al/PET (Aluminium/Polyester Tape)

**Overall Screen**  
Al/PET (Aluminium/Polyester Tape)

**Drain Wire (Individual and Collectively)**  
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 1411 Part 7

Flame retardant to IEC 60332-1

## 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.



8578

F5 672069

EMS 672067

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™.





## DIMENSIONS

ELAND PART NO.	NO. OF PAIRS/TRIPLE	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
ENA02P05IAPEBK	2P	0.5	13.4	177
ENA02P10IAPEBK	2P	1	14.9	224
ENA02P15IAPEBK	2P	1.5	16.5	267
ENA04P05IAPEBK	4P	0.5	14.8	234
ENA04P10IAPEBK	4P	1	16.5	297
ENA04P15IAPEBK	4P	1.5	19.2	388
ENA08P05IAPEBK	8P	0.5	18.5	378
ENA08P10IAPEBK	8P	1	20.9	496
ENA08P15IAPEBK	8P	1.5	23.9	627
ENA12P05IAPEBK	12P	0.5	20.7	465
ENA12P10IAPEBK	12P	1	24.4	682
ENA12P15IAPEBK	12P	1.5	27.5	839
ENA16P05IAPEBK	16P	0.5	23.6	591
ENA16P10IAPEBK	16P	1	27	845
ENA16P15IAPEBK	16P	1.5	31.4	1099
ENA24P05IAPEBK	24P	0.5	27.1	781
ENA24P10IAPEBK	24P	1	32	1196
ENA24P15IAPEBK	24P	1.5	36.8	1534
ENA04T05IAPEBK	4T	0.5	16	271
ENA04T10IAPEBK	4T	1	18.8	393
ENA04T15IAPEBK	4T	1.5	21	472
ENA08T05IAPEBK	8T	0.5	20.4	444
ENA08T10IAPEBK	8T	1	23.4	641
ENA08T15IAPEBK	8T	1.5	26.5	787
ENA12T05IAPEBK	12T	0.5	24	614
ENA12T10IAPEBK	12T	1	27.5	868
ENA12T15IAPEBK	12T	1.5	32	1126
ENA16T05IAPEBK	16T	0.5	26.1	747
ENA16T10IAPEBK	16T	1	30.7	1126
ENA24T05IAPEBK	24T	0.5	32	1070

## ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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

## CAPACITANCE

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CAPACITANCE pF/m	
	Nominal	Maximum
<b>Core / Core Screened</b>		
0.5	84	90
1.0	104	112
1.5	101	121
<b>Core / Screen</b>		
0.5	158	169
1.0	196	210
1.5	190	228
<b>Core / Core No Screen</b>		
0.5	53	56
1.0	63	66
1.5	61	70
<b>Core / Screen OS only</b>		
0.5	100	106
1.0	119	124
1.5	115	131

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.