

# NR/L2/SIG/30060 Axle Counter Cable



Eland Product Group: **A8A**

## APPLICATION

Axle Counter cable is used to connect the various elements of the AzLM Axle Counter System. It is suitable for installation in trackside cable troughing, buried duct route and installed in open air on the ballast and clipped to sleepers as required. Quad types XQS and XQZ are used to connect the EAK Junction box or termination to the EAK (Mushroom) and Multi Twisted pair types XPS and XPZ are used to connect EAK to the ACE (Axle Counter Evaluator) equipment.

## CONSTRUCTION

### Conductor

Class 1 solid tinned copper conductor according to BS EN 60228 (previously BS 6360)

### Insulation

PE (Polyethylene) Type 03 according to BS 6234

### Water Blocking Compound

Petroleum Jelly (XPS and XQS types only)

### Anti-Rodent Protection

FGT (Fibre Glass Woven Tape)

### Moisture Barrier

Aluminium/Polymer Laminate Tape

### Sheath

PE (Polyethylene) Type 03C according to BS 6234

## CABLE STANDARDS

NR/L2/SIG/30060

### Network Rail Certificate of Acceptance

No: PA05/03991



The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, construction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed.

## CHARACTERISTICS

### Temperature Rating

Fixed: -25°C to +85°C

### Minimum Bending Radius

Fixed: 10 x overall diameter

### Sheath Colour

● Black

## DIMENSIONS

### Type XPS Multi-Twisted-Pair Cables

NETWORK RAIL PART NO. / PADS	NO. OF PAIRS	NOMINAL DIAMETER OF CONDUCTOR mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
006/170007	2	0.9	13.8	215
006/170008	10	0.9	24.7	530
006/170009	12	0.9	26.4	584
006/170034	19	0.9	31.4	810
006/170035	24	0.9	34.5	982
006/170036	2	1.4	16.4	320
006/170037	10	1.4	31.4	910
006/170038	12	1.4	33.8	1016
006/170039	19	1.4	40.8	1460
006/170040	24	1.4	45	1787

### Type XPZ Multi-Twisted-Pair Cables

NETWORK RAIL ART NO. / PADS	NO OF PAIRS	NOMINAL DIAMETER OF CONDUCTOR mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
006/170023	2	0.9	13.8	200
006/170024	10	0.9	24.7	424
006/170025	12	0.9	26.4	468
006/170026	19	0.9	31.4	632
006/170027	24	0.9	34.5	746
006/170028	2	1.4	16.4	314
006/170029	10	1.4	31.4	807
006/170030	12	1.4	33.8	909
006/170031	19	1.4	40.8	1284
006/170032	24	1.4	45	1548

### Type XQS Star-Quad Cables

NETWORK RAIL PART NO. / PADS	QUAD	NOMINAL DIAMETER OF CONDUCTOR mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
006/170021	1	0.9	11.8	173
006/170050	1	1.4	13.8	225

### Type XQZ Star-Quad Cables

NETWORK RAIL PART NO. / PADS	QUAD	NOMINAL DIAMETER OF CONDUCTOR mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
006/170053	1	0.9	11.8	141
006/170033	1	1.4	13.8	204

## ELECTRICAL CHARACTERISTICS

NOMINAL DIAMETER OF CONDUCTOR mm	MAXIMUM ATTENUATION AT 40kHz dB	MAXIMUM MUTUAL CAPACITANCE nF/km (core to core)	NOMINAL CHARACTERISTIC IMPEDANCE AT 90kHz ohms/km
0.9	2.6	45	135
1.4	2	50	135

PAIR NO.	CORE COLOURS	
1	White	Blue
2	White	Orange
3	White	Green
4	White	Brown
5	White	Grey
6	Red	Blue
7	Red	Orange
8	Red	Green
9	Red	Brown
10	Red	Grey
11	Yellow	Blue
12	Yellow	Orange
13	Yellow	Green
14	Yellow	Brown
15	Yellow	Grey
16	Violet	Blue
17	Violet	Orange
18	Violet	Green
19	Violet	Brown
20	Violet	Grey
21	Turquoise	Blue
22	Turquoise	Orange
23	Turquoise	Green
24	Turquoise	Brown

### Type XQS and XQZ Star-Quad Cables

PAIR NO	CORE COLOURS	
	a-Core	b-Core
1	Orange	White
2	Green	Black

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.