

# NR/PS/TEL/00015 Copper Trainside LSZH Cable



Eland Product Group: **A8T**

## APPLICATION

Suitable for installation in trackside cable troughing, buried duct routes, tunnels and generally in areas where smoke and toxic fumes may cause a threat to life and equipment. The cables produce no corrosive gases when burnt which is particularly important where electronic equipment is installed.

## CONSTRUCTION

### Conductor

Class 1 solid copper conductor

### Insulation

PE (Polyethylene) Type 03 according to BS 6234

### Separator

Impregnated Paper and/or Non-Hygroscopic Tape

### Moisture Barrier

Aluminium/Polymer Laminate Tape

### Sheath

LSZH (Low Smoke Zero Halogen)

## CABLE STANDARDS

NR/PS/TEL/00015

### Network Rail Certificate of Acceptance

No: PA05/03862



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: 7.5 x overall diameter

### Sheath Colour

● Black

## DIMENSIONS

### 0.63mm Conductor

ELAND PART NO.	NETWORK RAIL PART NO. / PADS	NO. OF PAIRS	MAXIMUM OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A8T0263LSZH	006/168021	2	12.3	105
A8T0563LSZH	006/168022	5	13.8	158
A8T1063LSZH	006/168023	10	15.6	226
A8T2063LSZH	006/168024	20	18.1	332
A8T3063LSZH	006/168025	30	20.4	420
A8T5063LSZH	006/168026	50	24.2	618
A8T7563LSZH	006/168027	75	28.2	779
A8T10063LSZH	006/168028	100	31	1090

**0.90mm Conductor**

ELAND PART NO.	NETWORK RAIL PART NO. / PADS	NO. OF PAIRS	MAXIMUM OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A8T0209LSZH	006/168071	2	13.3	130
A8T0509LSZH	006/168072	5	15.6	219
A8T1009LSZH	006/168073	10	18.1	329
A8T2009LSZH	006/168074	20	21.9	520
A8T3009LSZH	006/168075	30	25.2	702
A8T5009LSZH	006/168076	50	30	1065
A8T7509LSZH	006/168077	75	35.8	1325
A8T1009LSZH	006/168078	100	39.1	1890

**ELECTRICAL CHARACTERISTICS**

	2 PAIR	5 PAIR	10 PAIR	20 PAIR	30 PAIR	50 PAIR	75 PAIR	100 PAIR
<b>0.63mm CONDUCTOR RESISTANCE (ohms/km)</b>								
Maximum Average at 20°C	58	58	58	58	58	58	58	58
Maximum at 20°C	60	60	60	60	60	60	60	60
<b>0.90mm CONDUCTOR RESISTANCE (ohms/km)</b>								
Maximum Average at 20°C	28	28	28	28	28	28	28	28
Maximum at 20°C	30	30	30	30	30	30	30	30
MINIMUM INSULATION RESISTANCE (Mohms/km)	1500	1500	1500	1500	1500	1500	1500	1500
<b>0.63mm MUTUAL CAPACITANCE (nF/km)</b>								
Maximum Average	70	70	70	70	67	67	67	67
Maximum for 99% pairs	79	79	79	79	75	75	75	75
<b>0.90mm MUTUAL CAPACITANCE (nF/km)</b>								
Maximum Average	79	79	79	79	75	75	75	75
Maximum for 99% pairs	85	85	85	85	81	81	81	81
CAPACITANCE UNBALANCE (Maximum pF/500m)	800	275	275	275	275	275	275	275
<b>0.63mm ATTENUATION (dB/km Maximum Average)</b>								
1.0kHz	-	-	-	1.4	1.4	1.4	1.4	1.4
2.4kHz	-	-	-	2.15	2.15	2.15	2.15	2.15
1.024MHz	-	-	-	18.7	18.7	18.7	18.7	18.7
<b>0.90mm ATTENUATION (dB/km Maximum Average)</b>								
1.0kHz	-	-	-	0.95	0.95	0.95	0.95	0.95
2.4kHz	-	-	-	1.46	1.46	1.46	1.46	1.46
1.024MHz	-	-	-	14.6	14.6	14.6	14.6	14.6
<b>NEXTA (dB Minimum)*</b>								
1kHz	-	-	-	70	70	70	70	70
1.024MHz (Within Units)	-	-	-	40	40	40	40	40
1.024MHz (Between Units)	-	-	-	47	47	47	47	47

\* NEXTA at 1.0kHz shall have an average value better than 75dB

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.