

# BS EN 50288-7 - RE-2X(st)H SWAH SWA / LSZH Cable



Eland Product Group: I

## APPLICATION

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications. For installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.

## CONSTRUCTION

### Conductor

0.5mm<sup>2</sup> - 0.75mm<sup>2</sup>: Class 5 flexible copper conductor  
1mm<sup>2</sup> and above: Class 2 stranded copper conductor

### Insulation

XLPE (Cross-Linked Polyethylene)

### Collective Screen

Al/PET (Aluminium/Polyester Tape)

### Inner Sheath

LSZH (Low Smoke Zero Halogen)

### Armour

SWA (Galvanised steel wires)

### Sheath

LSZH (Low Smoke Zero Halogen)

### Note

500V rated cables available on request

## CABLE STANDARDS

BS EN 50288-7, BS EN 50288-1  
Flame Retardant according to BS EN/IEC 60332-1-2,  
BS EN/IEC 60332-3-24



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

### Voltage Rating

300V

### Operating Temperature

Fixed: -40°C to +80°C  
Moved: 0°C to +50°C

### Minimum Bending Radius

Fixed: 12 x overall diameter

### Core Identification

Pairs: ○ White ● Black numbered  
Triples: ○ White ● Black ● Red

### Sheath Colour

● Blue ● Black

## DIMENSIONS

ELAND PART NO.	NO. OF PAIRS/TRIPLES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL OUTER DIAMETER mm
EN01P05AWUCXH**	1P	0.5	9
EN01P07AWUCXH**	1P	0.75	9.5
EN01P10AWUCXH**	1P	1	9.4
EN01P15AWUCXH**	1P	1.5	10.8
EN01T05AWUCXH**	1T	0.5	9.2
EN01T07AWUCXH**	1T	0.75	9.8
EN01T10AWUCXH**	1T	1	9.7

ELAND PART NO.	NO. OF PAIRS/TRIPLES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL OUTER DIAMETER mm
EN01T15AWUCXH**	1T	1.5	11.3
EN02P05AWUCXH**	2P(Q)	0.5	11.2
EN02P07AWUCXH**	2P(Q)	0.75	12.2
EN02P10AWUCXH**	2P(Q)	1	12
EN02P15AWUCXH**	2P(Q)	1.5	14.4
EN05P05AWUCXH**	5P	0.5	13.1
EN05P07AWUCXH**	5P	0.75	14.4
EN05P10AWUCXH**	5P	1	14.2
EN05P15AWUCXH**	5P	1.5	17.4
EN10P05AWUCXH**	10P	0.5	16.7
EN10P07AWUCXH**	10P	0.75	18.6
EN10P10AWUCXH**	10P	1	18.2
EN10P15AWUCXH**	10P	1.5	23.7
EN15P05AWUCXH**	15P	0.5	11.3
EN15P07AWUCXH**	15P	0.75	21.5
EN15P10AWUCXH**	15P	1	21
EN15P15AWUCXH**	15P	1.5	27.5
EN20P05AWUCXH**	20P	0.5	21.1
EN20P07AWUCXH**	20P	0.75	23.7
EN20P10AWUCXH**	20P	1	23.1
EN20P15AWUCXH**	20P	1.5	30.4

P = Pairs, Q = Quads, T = Triples

\* Designates the sheath colour. For each Eland Cables part number replace with the colour code as listed below. e.g. EN01P05AWUCXH BK = 0.5mm<sup>2</sup> Black

## CORE IDENTIFICATION

COLOUR	Blue	Black
CODE	BL	BK

## CONDUCTORS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MAXIMUM DC RESISTANCE OF CONDUCTOR AT 20°C ohms/km	
	Class 2	Class 5
0.5	36.36	39.39
0.75	24.8	26.8
1	18.3	19.7
1.5	12.42	13.43
2.5	7.56	8.05

## ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MUTUAL CAPACITANCE pF/m	MINIMUM INSULATION RESISTANCE AT 20°C Gohms/km	MAXIMUM L/R RATIO μH/ohms
0.5	250	>10	25
0.75	250	>10	25
1	250	>10	25
1.5	250	>10	40
2.5	250	>10	65

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.