

BS EN 50288-7 - RE-2X(st)H SWAH LSZH PiMF Cable



Eland Product Group: I

APPLICATION

and provide communication services in and around process plants (e.g. petrochemical industry etc.). Pairs are individually shielded for enhanced signal security to prevent cross-talk within cable. Suitable for direct burial applications. For installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.

CONSTRUCTION

Conductor

0.5mm² - 0.75mm²: Class 5 flexible copper conductor
1mm² and above: Class 2 stranded copper conductor

Insulation

XLPE (Cross-Linked Polyethylene)

Individual and 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 ² | NOMINAL OUTER DIAMETER mm |
|-----------------|----------------------|--|---------------------------|
| EN02P05AWICXH** | 2P | 0.5 | 11.9 |
| EN02P07AWICXH** | 2P | 0.75 | 12.9 |
| EN02P10AWICXH** | 2P | 1 | 12.7 |
| EN02P15AWICXH** | 2P | 1.5 | 15.2 |
| EN01T05AWICXH** | 1T | 0.5 | 12.3 |
| EN01T07AWICXH** | 1T | 0.75 | 13.4 |
| EN01T10AWICXH** | 1T | 1 | 13.2 |

| ELAND PART NO. | NO. OF PAIRS/TRIPLES | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL OUTER DIAMETER mm |
|-----------------|----------------------|---|------------------------------|
| EN01T15AWICXH** | 1T | 1.5 | 15.9 |
| EN05P05AWICXH** | 5P | 0.5 | 14 |
| EN05P07AWICXH** | 5P | 0.75 | 15.4 |
| EN05P10AWICXH** | 5P | 1 | 15.1 |
| EN05P15AWICXH** | 5P | 1.5 | 18.5 |
| EN10P05AWICXH** | 10P | 0.5 | 18 |
| EN10P07AWICXH** | 10P | 0.75 | 20.6 |
| EN10P10AWICXH** | 10P | 1 | 22 |
| EN10P15AWICXH** | 10P | 1.5 | 26.1 |
| EN15P05AWICXH** | 15P | 0.5 | 20.7 |
| EN15P07AWICXH** | 15P | 0.75 | 23.1 |
| EN15P10AWICXH** | 15P | 1 | 22.6 |
| EN15P15AWICXH** | 15P | 1.5 | 29.5 |
| EN20P05AWICXH** | 20P | 0.5 | 22.9 |
| EN20P07AWICXH** | 20P | 0.75 | 26.3 |
| EN20P10AWICXH** | 20P | 1 | 25.8 |
| EN20P15AWICXH** | 20P | 1.5 | 33.5 |
| EN30P05AWICXH** | 30P | 0.5 | 26.8 |
| EN30P07AWICXH** | 30P | 0.75 | 30.1 |
| EN30P10AWICXH** | 30P | 1 | 29.4 |
| EN30P15AWICXH** | 30P | 1.5 | 38.4 |

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. EN02P05AWICXH BK = 0.5mm² Black

CORE IDENTIFICATION

| COLOUR | Blue | Black |
|--------|------|-------|
| CODE | BL | BK |

CONDUCTORS

| NOMINAL CROSS SECTIONAL AREA mm ² | 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 ² | 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.