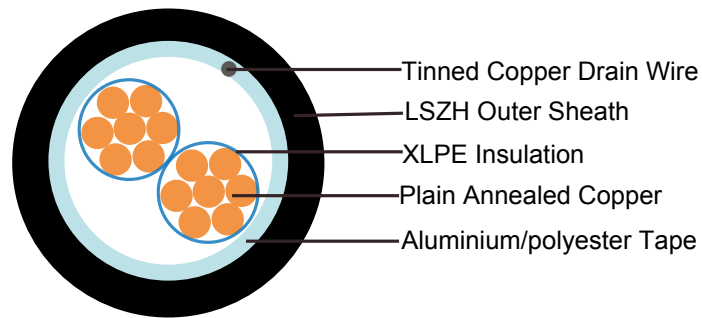
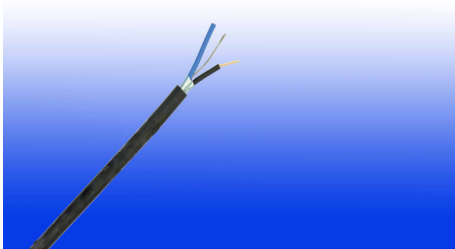


## XLPE Insulated, LSZH Sheathed & Overall Screened Instrumentation Cables (Multicore)

RE-2X(St)H 90°C / 500V



### APPLICATION

The LSZH sheathed cables are generally use for indoor installation and suitable for wet and damp areas. Generally, the cables are used within industrial process manufacturing plants for communication, data and voice transmission signals and services. Also used for the interconnection of electrical equipment and instruments, the LSZH sheath can reduce toxic smoke and fume emission.

### STANDARDS

Basic design to EN 50288-7

### FIRE PERFORMANCE

|                                                                             |                                                                                                                                                                          |
|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flame Retardance (Single Vertical Wire Test)                                | EN 60332-1-2; IEC 60332-1-2; BS EN 60332-1-2; VDE 0482-332-1; NBN C 30-004 (cat. F1); NF C32-070-2.1(C2); CEI 20-35/1-2; EN 50265-2-1*; DIN VDE 0482-265-2-1*            |
| Reduced Fire Propagation (Vertically-mounted bundled wires & cable test)*** | EN 60332-3-24 (cat. C); IEC 60332-3-24; BS EN 60332-3-24; VDE 0482-332-3; NBN C 30-004 (cat. F2); NF C32-070-2.2(C1); CEI 20-22/3-4; EN 50266-2-4*; DIN VDE 0482-266-2-4 |
| Halogen Free                                                                | IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1 ; BS 6425-1*                                                                                              |
| No Corrosive Gas Emission                                                   | IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2*                                                                                              |
| Minimum Smoke Emission                                                      | IEC 61034-1&2; EN 61034 -1&2; DIN VDE 0482-1034-1&2; CEI 20-37/3-1&2; EN 50268-1&2*; BS 7622-1&2*                                                                        |
| No Toxic gases                                                              | NES 02-713; NF C 20-454                                                                                                                                                  |
| Sunlight Resistance                                                         | UL 1581 section 1200                                                                                                                                                     |
| Oil Resistance**                                                            | ICEA S-73-532                                                                                                                                                            |

Note: Asterisk \* denotes superseded standard, \*\* denotes Test temperature +60°C, duration 4h. Retention: min 60% of tensile strength/min.60% of elongation, \*\*\* denotes optional.



### VOLTAGE RATING

500V

### CABLE CONSTRUCTION

**Conductor:** Annealed copper solid or plain copper stranded to IEC 60228 Class 2.

**Insulation:** Extruded cross-linked XLPE compound, EN 50290. 2-29.

**Overall Screen:** Aluminium/polyester tape with tinned copper drain wire, 0.5mm<sup>2</sup>

**Outer Sheath:** Thermoplastic LSZH compound type LTS3 as per BS 7655-6.1 (Thermosetting LSZH compound type SW2-SW4 as per BS 7655-2.6 can be offered.). UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

### COLOUR CODE

**Insulation:** Black numbered

**Outer Sheath:** Black, blue for intrinsically safe systems

### PHYSICAL AND THERMAL PROPERTIES

**Temperature Range During Operation (Fixed State):** -30°C – +90°C

**Temperature Range During Installation (Mobile State):** -5°C – +50°C

**Minimum Bending Radius:** 7.5 X Overall Diameter

### ELECTRICAL PROPERTIES

|                                  |                 |      |      |      |      |      |     |
|----------------------------------|-----------------|------|------|------|------|------|-----|
| Conductor Area Size              | mm <sup>2</sup> | 0.5  | 0.75 | 1.0  | 1.3  | 1.5  | 2.5 |
| Insulation thickness (nominal)   | mm              | 0.55 | 0.55 | 0.55 | 0.6  | 0.6  | 0.7 |
| Conductor resistance (20°C)      | Ω/km            | 36.7 | 25.0 | 18.5 | 14.2 | 12.3 | 7.4 |
| Insulation resistance (20°C)     | MΩ.km(Min.)     | 5000 |      |      |      |      |     |
| Mutual Capacitance (1 kHz)       | pF/m(Max.)      | 115  |      |      |      |      |     |
| Capacitance unbalance(1 kHz)     | pF/500 m (Max.) | 500  |      |      |      |      |     |
| L / R (ratio) (max.)             | μH/Ω            | 25   | 25   | 25   | 40   | 40   | 60  |
| Operating voltage                | V               | 500  |      |      |      |      |     |
| Test Voltage<br>U <sub>rms</sub> | Core to Core    | 2000 |      |      |      |      |     |
|                                  | Core to Screen  | 2000 |      |      |      |      |     |

### CONSTRUCTION PARAMETERS

| Caledonian Cable Code          | RE-2X(St)H                   |                              |                          |
|--------------------------------|------------------------------|------------------------------|--------------------------|
|                                | No. of Core x1xCross Section | Nominal Insulation Thickness | Nominal Sheath Thickness |
|                                | No.x1xmm <sup>2</sup>        | mm                           | mm                       |
| 0.5mm <sup>2</sup> , Multicore |                              |                              |                          |
| RE-2X(St)H 2C0.5               | 2x1x0.5                      | 0.55                         | 0.9                      |

| Caledonian Cable Code           | RE-2X(St)H                   |                              |                          |
|---------------------------------|------------------------------|------------------------------|--------------------------|
|                                 | No. of Core x1xCross Section | Nominal Insulation Thickness | Nominal Sheath Thickness |
|                                 | No.x1xmm <sup>2</sup>        | mm                           | mm                       |
| RE-2X(St)H 3C0.5                | 3x1x0.5                      | 0.55                         | 0.9                      |
| RE-2X(St)H 4C0.5                | 4x1x0.5                      | 0.55                         | 0.9                      |
| RE-2X(St)H 5C0.5                | 5x1x0.5                      | 0.55                         | 0.9                      |
| RE-2X(St)H 8C0.5                | 8x1x0.5                      | 0.55                         | 1.0                      |
| RE-2X(St)H 10C0.5               | 10x1x0.5                     | 0.55                         | 1.0                      |
| RE-2X(St)H 12C0.5               | 12x1x0.5                     | 0.55                         | 1.0                      |
| RE-2X(St)H 14C0.5               | 14x1x0.5                     | 0.55                         | 1.0                      |
| RE-2X(St)H 16C0.5               | 16x1x0.5                     | 0.55                         | 1.1                      |
| RE-2X(St)H 20C0.5               | 20x1x0.5                     | 0.55                         | 1.1                      |
| RE-2X(St)H 24C0.5               | 24x1x0.5                     | 0.55                         | 1.1                      |
| RE-2X(St)H 27C0.5               | 27x1x0.5                     | 0.55                         | 1.2                      |
| RE-2X(St)H 30C0.5               | 30x1x0.5                     | 0.55                         | 1.2                      |
| RE-2X(St)H 37C0.5               | 37x1x0.5                     | 0.55                         | 1.2                      |
| RE-2X(St)H 40C0.5               | 40x1x0.5                     | 0.55                         | 1.2                      |
| 0.75mm <sup>2</sup> , Multicore |                              |                              |                          |
| RE-2X(St)H 2C0.75               | 2x1x0.75                     | 0.55                         | 0.9                      |
| RE-2X(St)H 3C0.75               | 3x1x0.75                     | 0.55                         | 0.9                      |
| RE-2X(St)H 4C0.75               | 4x1x0.75                     | 0.55                         | 0.9                      |
| RE-2X(St)H 5C0.75               | 5x1x0.75                     | 0.55                         | 0.9                      |
| RE-2X(St)H 8C0.75               | 8x1x0.75                     | 0.55                         | 1.0                      |
| RE-2X(St)H 10C0.75              | 10x1x0.75                    | 0.55                         | 1.0                      |
| RE-2X(St)H 12C0.75              | 12x1x0.75                    | 0.55                         | 1.0                      |
| RE-2X(St)H 14C0.75              | 14x1x0.75                    | 0.55                         | 1.1                      |
| RE-2X(St)H 16C0.75              | 16x1x0.75                    | 0.55                         | 1.1                      |
| RE-2X(St)H 20C0.75              | 20x1x0.75                    | 0.55                         | 1.1                      |
| RE-2X(St)H 24C0.75              | 24x1x0.75                    | 0.55                         | 1.2                      |
| RE-2X(St)H 27C0.75              | 27x1x0.75                    | 0.55                         | 1.2                      |
| RE-2X(St)H 30C0.75              | 30x1x0.75                    | 0.55                         | 1.2                      |



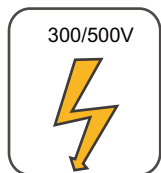
| Caledonian Cable Code          | RE-2X(St)H                   |                              |                          |
|--------------------------------|------------------------------|------------------------------|--------------------------|
|                                | No. of Core x1xCross Section | Nominal Insulation Thickness | Nominal Sheath Thickness |
|                                | No.x1xmm <sup>2</sup>        | mm                           | mm                       |
| RE-2X(St)H 37C0.75             | 37x1x0.75                    | 0.55                         | 1.2                      |
| RE-2X(St)H 40C0.75             | 40x1x0.75                    | 0.55                         | 1.3                      |
| 1.0mm <sup>2</sup> , Multicore |                              |                              |                          |
| RE-2X(St)H 2C1.0               | 2x1x1.0                      | 0.55                         | 0.9                      |
| RE-2X(St)H 3C1.0               | 3x1x1.0                      | 0.55                         | 0.9                      |
| RE-2X(St)H 4C1.0               | 4x1x1.0                      | 0.55                         | 0.9                      |
| RE-2X(St)H 5C1.0               | 5x1x1.0                      | 0.55                         | 0.9                      |
| RE-2X(St)H 8C1.0               | 8x1x1.0                      | 0.55                         | 1.0                      |
| RE-2X(St)H 10C1.0              | 10x1x1.0                     | 0.55                         | 1.0                      |
| RE-2X(St)H 12C1.0              | 12x1x1.0                     | 0.55                         | 1.0                      |
| RE-2X(St)H 14C1.0              | 14x1x1.0                     | 0.55                         | 1.1                      |
| RE-2X(St)H 16C1.0              | 16x1x1.0                     | 0.55                         | 1.1                      |
| RE-2X(St)H 20C1.0              | 20x1x1.0                     | 0.55                         | 1.1                      |
| RE-2X(St)H 24C1.0              | 24x1x1.0                     | 0.55                         | 1.2                      |
| RE-2X(St)H 27C1.0              | 27x1x1.0                     | 0.55                         | 1.2                      |
| RE-2X(St)H 30C1.0              | 30x1x1.0                     | 0.55                         | 1.2                      |
| RE-2X(St)H 37C1.0              | 37x1x1.0                     | 0.55                         | 1.2                      |
| RE-2X(St)H 40C1.0              | 40x1x1.0                     | 0.55                         | 1.3                      |
| 1.3mm <sup>2</sup> , Multicore |                              |                              |                          |
| RE-2X(St)H 2C1.3               | 2x1x1.3                      | 0.6                          | 0.9                      |
| RE-2X(St)H 3C1.3               | 3x1x1.3                      | 0.6                          | 0.9                      |
| RE-2X(St)H 4C1.3               | 4x1x1.3                      | 0.6                          | 0.9                      |
| RE-2X(St)H 5C1.3               | 5x1x1.3                      | 0.6                          | 1.0                      |
| RE-2X(St)H 8C1.3               | 8x1x1.3                      | 0.6                          | 1.0                      |
| RE-2X(St)H 10C1.3              | 10x1x1.3                     | 0.6                          | 1.1                      |
| RE-2X(St)H 12C1.3              | 12x1x1.3                     | 0.6                          | 1.1                      |
| RE-2X(St)H 14C1.3              | 14x1x1.3                     | 0.6                          | 1.1                      |
| RE-2X(St)H 16C1.3              | 16x1x1.3                     | 0.6                          | 1.1                      |

| Caledonian Cable Code          | RE-2X(St)H                   |                              |                          |
|--------------------------------|------------------------------|------------------------------|--------------------------|
|                                | No. of Core x1xCross Section | Nominal Insulation Thickness | Nominal Sheath Thickness |
|                                | No.x1xmm <sup>2</sup>        | mm                           | mm                       |
| RE-2X(St)H 20C1.3              | 20x1x1.3                     | 0.6                          | 1.2                      |
| RE-2X(St)H 24C1.3              | 24x1x1.3                     | 0.6                          | 1.2                      |
| RE-2X(St)H 27C1.3              | 27x1x1.3                     | 0.6                          | 1.3                      |
| RE-2X(St)H 30C1.3              | 30x1x1.3                     | 0.6                          | 1.3                      |
| RE-2X(St)H 37C1.3              | 37x1x1.3                     | 0.6                          | 1.3                      |
| RE-2X(St)H 40C1.3              | 40x1x1.3                     | 0.6                          | 1.4                      |
| 1.5mm <sup>2</sup> , Multicore |                              |                              |                          |
| RE-2X(St)H 2C1.5               | 2x1x1.5                      | 0.6                          | 0.9                      |
| RE-2X(St)H 3C1.5               | 3x1x1.5                      | 0.6                          | 0.9                      |
| RE-2X(St)H 4C1.5               | 4x1x1.5                      | 0.6                          | 0.9                      |
| RE-2X(St)H 5C1.5               | 5x1x1.5                      | 0.6                          | 1.0                      |
| RE-2X(St)H 8C1.5               | 8x1x1.5                      | 0.6                          | 1.0                      |
| RE-2X(St)H 10C1.5              | 10x1x1.5                     | 0.6                          | 1.1                      |
| RE-2X(St)H 12C1.5              | 12x1x1.5                     | 0.6                          | 1.1                      |
| RE-2X(St)H 14C1.5              | 14x1x1.5                     | 0.6                          | 1.1                      |
| RE-2X(St)H 16C1.5              | 16x1x1.5                     | 0.6                          | 1.1                      |
| RE-2X(St)H 20C1.5              | 20x1x1.5                     | 0.6                          | 1.2                      |
| RE-2X(St)H 24C1.5              | 24x1x1.5                     | 0.6                          | 1.3                      |
| RE-2X(St)H 27C1.5              | 27x1x1.5                     | 0.6                          | 1.3                      |
| RE-2X(St)H 30C1.5              | 30x1x1.5                     | 0.6                          | 1.3                      |
| RE-2X(St)H 37C1.5              | 37x1x1.5                     | 0.6                          | 1.4                      |
| RE-2X(St)H 40C1.5              | 40x1x1.5                     | 0.6                          | 1.4                      |
| 2.5mm <sup>2</sup> , Multicore |                              |                              |                          |
| RE-2X(St)H 2C2.5               | 2x1x2.5                      | 0.7                          | 0.9                      |
| RE-2X(St)H 3C2.5               | 3x1x2.5                      | 0.7                          | 1.0                      |
| RE-2X(St)H 4C2.5               | 4x1x2.5                      | 0.7                          | 1.0                      |
| RE-2X(St)H 5C2.5               | 5x1x2.5                      | 0.7                          | 1.0                      |
| RE-2X(St)H 8C2.5               | 8x1x2.5                      | 0.7                          | 1.1                      |



| Caledonian Cable Code | RE-2X(St)H                   |                              |                          |
|-----------------------|------------------------------|------------------------------|--------------------------|
|                       | No. of Core x1xCross Section | Nominal Insulation Thickness | Nominal Sheath Thickness |
|                       | No.x1xmm <sup>2</sup>        | mm                           | mm                       |
| RE-2X(St)H 10C2.5     | 10x1x2.5                     | 0.7                          | 1.2                      |
| RE-2X(St)H 12C2.5     | 12x1x2.5                     | 0.7                          | 1.2                      |
| RE-2X(St)H 14C2.5     | 14x1x2.5                     | 0.7                          | 1.2                      |
| RE-2X(St)H 16C2.5     | 16x1x2.5                     | 0.7                          | 1.3                      |
| RE-2X(St)H 20C2.5     | 20x1x2.5                     | 0.7                          | 1.3                      |
| RE-2X(St)H 24C2.5     | 24x1x2.5                     | 0.7                          | 1.4                      |
| RE-2X(St)H 27C2.5     | 27x1x2.5                     | 0.7                          | 1.4                      |
| RE-2X(St)H 30C2.5     | 30x1x2.5                     | 0.7                          | 1.5                      |
| RE-2X(St)H 37C2.5     | 37x1x2.5                     | 0.7                          | 1.5                      |
| RE-2X(St)H 40C2.5     | 40x1x2.5                     | 0.7                          | 1.6                      |

Note : Other conductor sizes & core configurations are available upon request.



300/500V

Rated Voltage



EN 50288-7

Standard



Flame Retardancy  
NF C32-070-2.1(C2)  
IEC60332-1-2/EN50265-2-1



Reduced Fire Propagation  
NF C32-070-2.2(C1)  
IEC60332-3-24  
EN50266-2-4



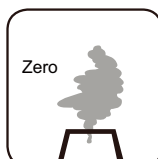
Low Toxicity  
NES 02-713/NF C 20-454



Low Corrosivity  
IEC60754-2  
EN50267-2-2/3  
NF C 32-074



Low Smoke Emission  
IEC 61034-1&2  
EN 50268-1&2/NF C32-073



Halogen Free  
IEC60754-1  
EN50267-2-1