

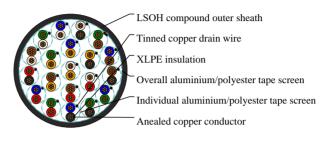
# Caledonian

BS 5308 Instrumentation Cables www.caledonian-cables.com marketing@caledonian-cables.com

#### BS5308 Part 1 / Type 1 (unarmoured cables) XLPE-IS-OS-LSOH

RE-2X(St)H PIMF 20P1.5





## **APPLICATIONS**

The unarmoured LSOH versions (Part 1 Type 1) are generally use for indoor installation and suitable for wet and damp areas. Generally 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 LSOH sheath can reduce toxic smoke and fume emission.

#### CABLE CONSTRUCTION

Conductor:Annealed or tinned copper, mulitistranded(Class 2) to BS6360 Insulation:XLPE (Cross Linked Polyethylene), or PE (optional) Pairing:Two insulated conductors uniformly twisted together with a lay not exceeding 100mm Individual screen:Aluminium/polyester tape is applied over each pair metallic side down in contactwith tinned copper drain wire, 0.5mm<sup>2</sup> Binder tape:PETP transparent tape Collective screen:Aluminium/polyester tape is applied over the laid up pairs metallic side down in contact with tinned copper drain wire, 0.5mm<sup>2</sup> Outer sheath:LSOH(Low Smoke Zero Halogen) sheath Flame retardant to IEC60332-3-22.Halogen free to IEC60754-1.Low smoke emission to IEC61034-1-2.

#### COLOUR CODE

Insulation: See technical information Outer Sheath: Black or blue

# PHYSICAL AND THERMAL PROPERTIES

Operating temperature: -20°C up to + 90°C( fixed installation) 0°C to +50°C(during operation ) Minimum bending radius: 5 x overall diameter

#### **Electrical Properties**

Conductor Area Size:1.5 mm<sup>2</sup> Conductor Stranding(No.xmm):7x0.53



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Conductor resistance(max):12.3 ohm/km Insulation resistance(min):5 Gohm/km Capacitance unbalance at 1kHz(pair to pair screen):250 pF/250m Max. Mutual Capacitance @ 1kHz for Non OS or OS cables(except 1 pair and 2 pairs):85 pF/m Max. Mutual Capacitance @ 1kHz IS/OS cables (include 1 pair and 2 pairs):120 pF/m Max. L/R Ratio for adjacent cores(Inductance/Resistance):40 µH/ohm Test voltage : Core to core:1000 V Core to screen:1000V Rated voltage max:300/500 V

## DIMENSION AND PARAMETERS

| No. of Pairs | Nominal Cross-<br>sectional Area | No. and Dia. of Wires | Nominal Insulation<br>Thickness | Nominal Sheath<br>Thickness |
|--------------|----------------------------------|-----------------------|---------------------------------|-----------------------------|
|              | mm²                              | no./mm                | mm                              | mm                          |
| 20           | 1.5                              | 7/0.53                | 0.6                             | 1.6                         |