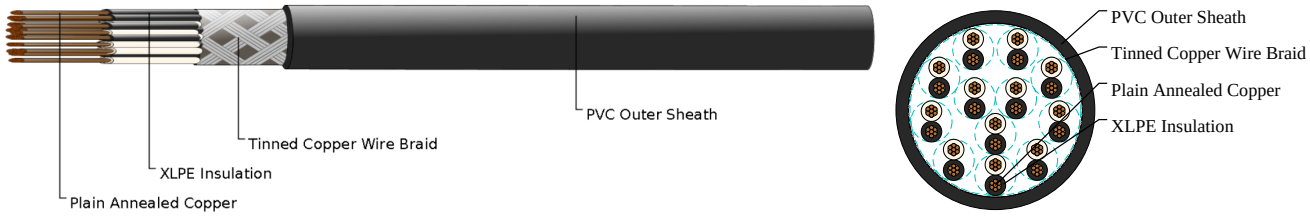
Caledonian

EN 50288-7 XLPE, PE & PVC Insulated PVC Sheathed Instrumentation Cables

www.caledonian-cables.com marketing@caledonian-cables.com

XLPE Insulated, PVC Sheathed, CWB Screened Instrumentation Cables (Multipair)

RE-2X(C)Y 90°C / 300V 12P0.75



APPLICATIONS

For transmission of analogue and digital signals in instrument and control systems; allowed for use in zone 1 and zone 2, group II, classified areas (IEC 79-14), not allowed for direct connection to low impedance sources, e.g. public mains electricity supply.Recommended for indoor and outerdoor installation, on racks, trays, in conduits, in dry and wet locations.Recommended for use as fire protection messure for people and important material assets.

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

VOLTAGE RATING

300V

CABLE CONSTRUCTION

Conductor: Annealed copper solid or plain copper stranded to IEC 60228 Class 2.
Insulation: Extruded cross-linked XLPE compound as per EN 50290-2-29.

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Pair:Two conductors twisted to form a pair.
Lay-up: Pairs laid up in layers of optimum pitch.
Overall Screen: Tinned copper wire braid.
Outer Sheath: Thermoplastic PVC compound as per EN 50290-2-22. UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.Compliance to fire performance standard (IEC 60332-1, IEC 60332-3, UL 1581, UL 1666 etc) depends on the oxygen index of the PVC compound and the overall cable design. LSPVC can also be provided upon request.

COLOUR CODE

Insulation: Black/White, continuously numbered on white core(1, 2..)for multipair
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
Sunlight Resistance: UL 1581 section 1200
Oil Resistance: ICEA S-73-532(Test temperature +60°C, duration 4h. Retention: min 60% of tensile strength/ min.60% of elongation)

Electrical Properties

Conductor Area Size:0.75 mm²
Insulation Thickness (Nominal) :0.38 mm
Conductor Resistance (20°C) :25 Ω/km
Insulation Resistance (20°C):5000 MΩ.km(Min.)
Mutual Capacitance (1 kHz):90 pF/m(Max.)
Capacitance unbalance(1 kHz):300 pF/500 m (Max.)
L / R (ratio) (max.):25 μH/Ω
Operating Voltage:300 V
Test Voltage Urms(Core to Core):1500 V
Test Voltage Urms(Core to Screen):1500 V

DIMENSION AND PARAMETERS

Caledonian Cable Code	No. of Pairs x 2 x Cross Section	Appr. Copper Weight
	No. × 2 × mm²	kg/km
RE-2X(C)Y 12P0.75	12x2x0.75	17.8

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EN 50288-7

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

Halogen Free
IEC 60754-1

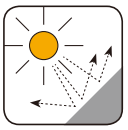
Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/NF C20-453

Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/NF C 20-902

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

Oil Resistant

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



Sunlight Resistance
UL 1581 section 1200