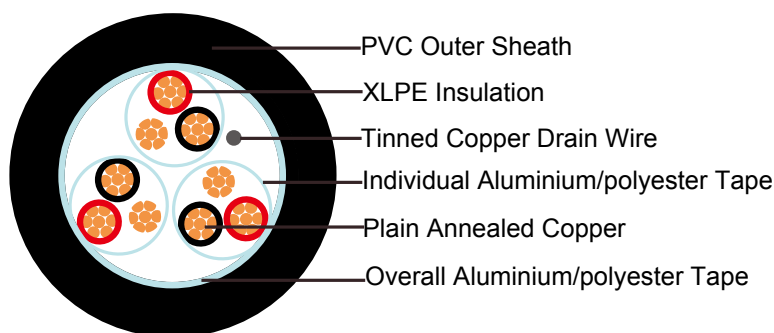




XLPE Insulated, PVC Sheathed, Individual & Overall Screened Instrumentation Cables (Multitriples)

RE-2X(St)Y-TiMF 90°C / 300 V



APPLICATION:

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 outdoor installation, on racks, trays, in conduits, in dry and wet locations.

Recommended for use as fire protection measure for people and important material assets.

STANDARDS

Basic design to EN50288-7

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

Note: Asterisk * denotes superseded standard, *** denotes optional.

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.

Triple: Three conductors twisted to form a triple.

Individual Screen: Aluminium/polyester tape is applied over each triple metallic side down in contact with tinned copper drain wire, 0.5mm².

Lay-up: TiMF laid up in layers of optimum pitch.

Overall Screen: Aluminium/polyester tape with tinned copper drain wire, 0.5mm².

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 / Red, continuously numbered on white core(1, 2..)for multitruples.

Outer Sheath: Black or 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	mm ²	0.5	0.75	1.0	1.3	1.5
Insulation thickness (nominal)	mm	0.35	0.38	0.4	0.45	0.45
Conductor resistance (20°C)	Ω/km	36.7	25	18.5	14.2	12.3
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				
Inductance	mH/km(Max.)	1				
L / R (ratio) (max.)	μH/Ω	25	25	25	40	40



Operating voltage Urms		V	300
Test Voltage	Core to Core	V	1500
	Core to Screen	V	1500

CONSTRUCTION PARAMETERS

Caledonian Cable Code	RE-2X(St)Y-TiMF		
	No. of Triples x3xCross Section	Nominal Insulation Thickness	Nominal Outer Sheath Thickness
	No.x3xmm ²	mm	mm
0.5mm ² , Multi-stripe			
RE-2X(St)Y-TiMF 2T0.5	2x3x0.5	0.35	1.0
RE-2X(St)Y-TiMF 4T0.5	4x3x0.5	0.35	1.0
RE-2X(St)Y-TiMF 5T0.5	5x3x0.5	0.35	1.1
RE-2X(St)Y-TiMF 6T0.5	6x3x0.5	0.35	1.1
RE-2X(St)Y-TiMF 8T0.5	8x3x0.5	0.35	1.1
RE-2X(St)Y-TiMF 10T0.5	10x3x0.5	0.35	1.2
RE-2X(St)Y-TiMF 12T0.5	12x3x0.5	0.35	1.2
RE-2X(St)Y-TiMF 16T0.5	16x3x0.5	0.35	1.3
RE-2X(St)Y-TiMF 20T0.5	20x3x0.5	0.35	1.4
RE-2X(St)Y-TiMF 24T0.5	24x3x0.5	0.35	1.5
0.75mm ² , Multi-stripe			
RE-2X(St)Y-TiMF 2T0.75	2x3x0.75	0.38	1.0
RE-2X(St)Y-TiMF 4T0.75	4x3x0.75	0.38	1.1
RE-2X(St)Y-TiMF 5T0.75	5x3x0.75	0.38	1.1
RE-2X(St)Y-TiMF 6T0.75	6x3x0.75	0.38	1.1
RE-2X(St)Y-TiMF 8T0.75	8x3x0.75	0.38	1.2
RE-2X(St)Y-TiMF 10T0.75	10x3x0.75	0.38	1.3
RE-2X(St)Y-TiMF 12T0.75	12x3x0.75	0.38	1.3
RE-2X(St)Y-TiMF 16T0.75	16x3x0.75	0.38	1.4
RE-2X(St)Y-TiMF 20T0.75	20x3x0.75	0.38	1.5
RE-2X(St)Y-TiMF 24T0.75	24x3x0.75	0.38	1.6
1.0mm ² , Multi-stripe			
RE-2X(St)Y-TiMF 2T1.0	2x3x1.0	0.4	1.0
RE-2X(St)Y-TiMF 4T1.0	4x3x1.0	0.4	1.1

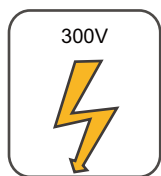


Caledonian Cable Code	RE-2X(St)Y-TiMF		
	No. of Triples x3xCross Section	Nominal Insulation Thickness	Nominal Outer Sheath Thickness
	No.x3xmm ²	mm	mm
RE-2X(St)Y-TiMF 5T1.0	5x3x1.0	0.4	1.1
RE-2X(St)Y-TiMF 6T1.0	6x3x1.0	0.4	1.2
RE-2X(St)Y-TiMF 8T1.0	8x3x1.0	0.4	1.2
RE-2X(St)Y-TiMF 10T1.0	10x3x1.0	0.4	1.3
RE-2X(St)Y-TiMF 12T1.0	12x3x1.0	0.4	1.3
RE-2X(St)Y-TiMF 16T1.0	16x3x1.0	0.4	1.4
RE-2X(St)Y-TiMF 20T1.0	20x3x1.0	0.4	1.5
RE-2X(St)Y-TiMF 24T1.0	24x3x1.0	0.4	1.6
1.3mm ² , Multi-stripe			
RE-2X(St)Y-TiMF 2T1.3	2x3x1.3	0.45	1.1
RE-2X(St)Y-TiMF 4T1.3	4x3x1.3	0.45	1.1
RE-2X(St)Y-TiMF 5T1.3	5x3x1.3	0.45	1.2
RE-2X(St)Y-TiMF 6T1.3	6x3x1.3	0.45	1.3
RE-2X(St)Y-TiMF 8T1.3	8x3x1.3	0.45	1.3
RE-2X(St)Y-TiMF 10T1.3	10x3x1.3	0.45	1.4
RE-2X(St)Y-TiMF 12T1.3	12x3x1.3	0.45	1.5
RE-2X(St)Y-TiMF 16T1.3	16x3x1.3	0.45	1.6
RE-2X(St)Y-TiMF 20T1.3	20x3x1.3	0.45	1.7
RE-2X(St)Y-TiMF 24T1.3	24x3x1.3	0.45	1.8
1.5mm ² , Multi-stripe			
RE-2X(St)Y-TiMF 2T1.5	2x3x1.5	0.45	1.1
RE-2X(St)Y-TiMF 4T1.5	4x3x1.5	0.45	1.2
RE-2X(St)Y-TiMF 5T1.5	5x3x1.5	0.45	1.2
RE-2X(St)Y-TiMF 6T1.5	6x3x1.5	0.45	1.3
RE-2X(St)Y-TiMF 8T1.5	8x3x1.5	0.45	1.4
RE-2X(St)Y-TiMF 10T1.5	10x3x1.5	0.45	1.5
RE-2X(St)Y-TiMF 12T1.5	12x3x1.5	0.45	1.5
RE-2X(St)Y-TiMF 16T1.5	16x3x1.5	0.45	1.6
RE-2X(St)Y-TiMF 20T1.5	20x3x1.5	0.45	1.7



Caledonian Cable Code	RE-2X(St)Y-TiMF		
	No. of Triples x3xCross Section	Nominal Insulation Thickness	Nominal Outer Sheath Thickness
	No.x3xmm ²	mm	mm
RE-2X(St)Y-TiMF 24T1.5	24x3x1.5	0.45	1.8

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



Rated Voltage



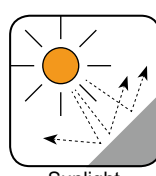
Standard



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



Sunlight
Resistance
UL 1581
section 1200



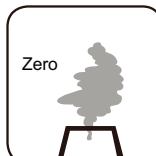
Low Toxicity
NES 02-713/NF C 20-454



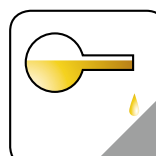
Low Corrosivity
IEC60754-2
EN50267-2-2/3
NF C 32-074



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



Halogen Free
IEC60754-1
EN50267-2-1



Oil Resistance
ICEA S-73-532