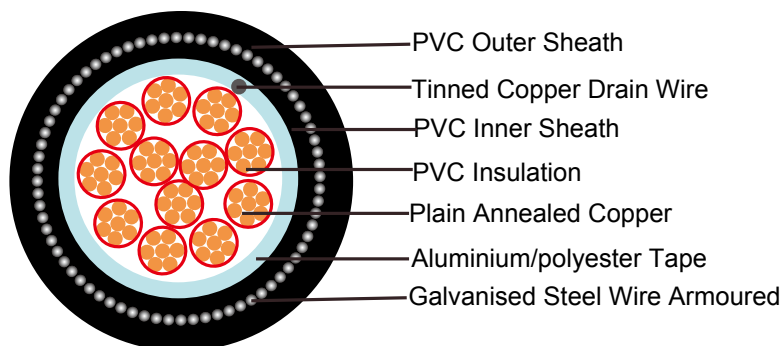




PVC Insulated, PVC Sheathed, Overall Screened & Armoured Instrumentation Cables (Multicore)

RE-Y(St)YSWAY 90°C / 500V



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; suitable for direct burial.

Recommended for use as fire protection measure 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

Note: Asterisk * denotes superseded standard, *** denotes optional.

VOLTAGE RATING

500V

CABLE CONSTRUCTION

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

Insulation: PVC compound as per EN 50290-2-21.

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

Inner Sheath: Thermoplastic PVC compound.

Armour: Galvanised steel wire.

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 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: 10 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	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					
Inductance	mH/km(Max.)	1					
L / R (ratio) (max.)	μH/Ω	25	25	25	40	40	60
Operating voltage	V	500					
Test Voltage U _{rms}	Core to Core	2000					
	Core to Screen	2000					



CONSTRUCTION PARAMETERS

Caledonian Cable Code	RE-Y(St)YSWAY					
	No. of Core x1xCross Section	Nominal Insulation Thick-ness	Nominal Inner Sheath Thick-ness	Nominal Overall Diameter Over Inner Sheath	Nominal Armour Wire Diameter	Nominal Outer Sheath Thick-ness
	No.x1xmm ²	mm	mm	mm	mm	mm
0.5mm ² , Multicore						
RE-Y(St)YSWAY 2C0.5	2x1x0.5	0.55	0.9	6.2	0.9	1.3
RE-Y(St)YSWAY 3C0.5	3x1x0.5	0.55	0.9	6.5	0.9	1.3
RE-Y(St)YSWAY 4C0.5	4x1x0.5	0.55	0.9	7.0	0.9	1.3
RE-Y(St)YSWAY 5C0.5	5x1x0.5	0.55	0.9	7.6	0.9	1.3
RE-Y(St)YSWAY 8C0.5	8x1x0.5	0.55	1.0	9.1	0.9	1.4
RE-Y(St)YSWAY 10C0.5	10x1x0.5	0.55	1.0	10.4	0.9	1.4
RE-Y(St)YSWAY 12C0.5	12x1x0.5	0.55	1.0	10.7	0.9	1.4
RE-Y(St)YSWAY 14C0.5	14x1x0.5	0.55	1.0	11.3	0.9	1.4
RE-Y(St)YSWAY 16C0.5	16x1x0.5	0.55	1.1	11.8	0.9	1.4
RE-Y(St)YSWAY 20C0.5	20x1x0.5	0.55	1.1	13.3	0.9	1.5
RE-Y(St)YSWAY 24C0.5	24x1x0.5	0.55	1.1	14.7	0.9	1.5
RE-Y(St)YSWAY 27C0.5	27x1x0.5	0.55	1.2	15.0	0.9	1.5
RE-Y(St)YSWAY 30C0.5	30x1x0.5	0.55	1.2	15.7	0.9	1.5
RE-Y(St)YSWAY 37C0.5	37x1x0.5	0.55	1.2	16.9	0.9	1.6
RE-Y(St)YSWAY 40C0.5	40x1x0.5	0.55	1.2	17.6	1.25	1.6
0.75mm ² , Multicore						
RE-Y(St)YSWAY 2C0.75	2x1x0.75	0.55	0.9	6.5	0.9	1.3
RE-Y(St)YSWAY 3C0.75	3x1x0.75	0.55	0.9	6.9	0.9	1.3
RE-Y(St)YSWAY 4C0.75	4x1x0.75	0.55	0.9	7.4	0.9	1.3
RE-Y(St)YSWAY 5C0.75	5x1x0.75	0.55	0.9	8.1	0.9	1.4
RE-Y(St)YSWAY 8C0.75	8x1x0.75	0.55	1.0	9.7	0.9	1.4
RE-Y(St)YSWAY 10C0.75	10x1x0.75	0.55	1.0	11.1	0.9	1.4
RE-Y(St)YSWAY 12C0.75	12x1x0.75	0.55	1.0	11.5	0.9	1.4
RE-Y(St)YSWAY 14C0.75	14x1x0.75	0.55	1.1	12.2	0.9	1.5
RE-Y(St)YSWAY 16C0.75	16x1x0.75	0.55	1.1	12.9	0.9	1.5
RE-Y(St)YSWAY 20C0.75	20x1x0.75	0.55	1.1	14.3	0.9	1.5
RE-Y(St)YSWAY 24C0.75	24x1x0.75	0.55	1.2	16.0	0.9	1.5
RE-Y(St)YSWAY 27C0.75	27x1x0.75	0.55	1.2	16.3	0.9	1.6
RE-Y(St)YSWAY 30C0.75	30x1x0.75	0.55	1.2	16.9	0.9	1.6



Caledonian Cable Code	RE-Y(St)YSWAY					
	No. of Core x1xCross Section	Nominal Insulation Thick-ness	Nominal Inner Sheath Thick-ness	Nominal Overall Diameter Over Inner Sheath	Nominal Armour Wire Diameter	Nominal Outer Sheath Thick-ness
	No.x1xmm ²	mm	mm	mm	mm	mm
RE-Y(St)YSWAY 37C0.75	37x1x0.75	0.55	1.2	18.2	1.25	1.6
RE-Y(St)YSWAY 40C0.75	40x1x0.75	0.55	1.3	19.1	1.25	1.6
1.0mm ² , Multicore						
RE-Y(St)YSWAY 2C1.0	2x1x1.0	0.55	0.9	6.9	0.9	1.3
RE-Y(St)YSWAY 3C1.0	3x1x1.0	0.55	0.9	7.3	0.9	1.3
RE-Y(St)YSWAY 4C1.0	4x1x1.0	0.55	0.9	7.9	0.9	1.4
RE-Y(St)YSWAY 5C1.0	5x1x1.0	0.55	0.9	8.6	0.9	1.4
RE-Y(St)YSWAY 8C1.0	8x1x1.0	0.55	1.0	10.3	0.9	1.4
RE-Y(St)YSWAY 10C1.0	10x1x1.0	0.55	1.0	11.9	0.9	1.4
RE-Y(St)YSWAY 12C1.0	12x1x1.0	0.55	1.0	12.2	0.9	1.5
RE-Y(St)YSWAY 14C1.0	14x1x1.0	0.55	1.1	13.0	0.9	1.5
RE-Y(St)YSWAY 16C1.0	16x1x1.0	0.55	1.1	13.7	0.9	1.5
RE-Y(St)YSWAY 20C1.0	20x1x1.0	0.55	1.1	15.2	0.9	1.5
RE-Y(St)YSWAY 24C1.0	24x1x1.0	0.55	1.2	17.0	0.9	1.6
RE-Y(St)YSWAY 27C1.0	27x1x1.0	0.55	1.2	17.4	1.25	1.6
RE-Y(St)YSWAY 30C1.0	30x1x1.0	0.55	1.2	18.0	1.25	1.6
RE-Y(St)YSWAY 37C1.0	37x1x1.0	0.55	1.2	19.6	1.25	1.6
RE-Y(St)YSWAY 40C1.0	40x1x1.0	0.55	1.3	20.4	1.25	1.7
1.3mm ² , Multicore						
RE-Y(St)YSWAY 2C1.3	2x1x1.3	0.6	0.9	7.4	0.9	1.3
RE-Y(St)YSWAY 3C1.3	3x1x1.3	0.6	0.9	7.9	0.9	1.3
RE-Y(St)YSWAY 4C1.3	4x1x1.3	0.6	0.9	8.5	0.9	1.4
RE-Y(St)YSWAY 5C1.3	5x1x1.3	0.6	1.0	9.5	0.9	1.4
RE-Y(St)YSWAY 8C1.3	8x1x1.3	0.6	1.0	11.2	0.9	1.4
RE-Y(St)YSWAY 10C1.3	10x1x1.3	0.6	1.1	13.2	0.9	1.5
RE-Y(St)YSWAY 12C1.3	12x1x1.3	0.6	1.1	13.6	0.9	1.5
RE-Y(St)YSWAY 14C1.3	14x1x1.3	0.6	1.1	14.3	0.9	1.5
RE-Y(St)YSWAY 16C1.3	16x1x1.3	0.6	1.1	15.0	0.9	1.5
RE-Y(St)YSWAY 20C1.3	20x1x1.3	0.6	1.2	16.9	0.9	1.6
RE-Y(St)YSWAY 24C1.3	24x1x1.3	0.6	1.2	18.7	1.25	1.6
RE-Y(St)YSWAY 27C1.3	27x1x1.3	0.6	1.3	19.3	1.25	1.6
RE-Y(St)YSWAY 30C1.3	30x1x1.3	0.6	1.3	20.0	1.25	1.6

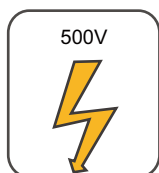


Caledonian Cable Code	RE-Y(St)YSWAY					
	No. of Core x1xCross Section	Nominal Insulation Thick-ness	Nominal Inner Sheath Thick-ness	Nominal Overall Diameter Over Inner Sheath	Nominal Armour Wire Diameter	Nominal Outer Sheath Thick-ness
	No.x1xmm ²	mm	mm	mm	mm	mm
RE-Y(St)YSWAY 37C1.3	37x1x1.3	0.6	1.3	21.6	1.25	1.7
RE-Y(St)YSWAY 40C1.3	40x1x1.3	0.6	1.4	22.7	1.25	1.7
1.5mm ² , Multicore						
RE-Y(St)YSWAY 2C1.5	2x1x1.5	0.6	0.9	7.7	0.9	1.3
RE-Y(St)YSWAY 3C1.5	3x1x1.5	0.6	0.9	8.1	0.9	1.4
RE-Y(St)YSWAY 4C1.5	4x1x1.5	0.6	0.9	8.8	0.9	1.4
RE-Y(St)YSWAY 5C1.5	5x1x1.5	0.6	1.0	9.8	0.9	1.4
RE-Y(St)YSWAY 8C1.5	8x1x1.5	0.6	1.0	11.6	0.9	1.4
RE-Y(St)YSWAY 10C1.5	10x1x1.5	0.6	1.1	13.7	0.9	1.5
RE-Y(St)YSWAY 12C1.5	12x1x1.5	0.6	1.1	14.1	0.9	1.5
RE-Y(St)YSWAY 14C1.5	14x1x1.5	0.6	1.1	14.8	0.9	1.5
RE-Y(St)YSWAY 16C1.5	16x1x1.5	0.6	1.1	15.6	0.9	1.5
RE-Y(St)YSWAY 20C1.5	20x1x1.5	0.6	1.2	17.6	1.25	1.6
RE-Y(St)YSWAY 24C1.5	24x1x1.5	0.6	1.3	19.6	1.25	1.6
RE-Y(St)YSWAY 27C1.5	27x1x1.5	0.6	1.3	20.1	1.25	1.6
RE-Y(St)YSWAY 30C1.5	30x1x1.5	0.6	1.3	20.8	1.25	1.7
RE-Y(St)YSWAY 37C1.5	37x1x1.5	0.6	1.4	22.6	1.25	1.7
RE-Y(St)YSWAY 40C1.5	40x1x1.5	0.6	1.4	23.6	1.25	1.7
2.5mm ² , Multicore						
RE-Y(St)YSWAY 2C2.5	2x1x2.5	0.7	0.9	8.9	0.9	1.4
RE-Y(St)YSWAY 3C2.5	3x1x2.5	0.7	1.0	9.7	0.9	1.4
RE-Y(St)YSWAY 4C2.5	4x1x2.5	0.7	1.0	10.5	0.9	1.4
RE-Y(St)YSWAY 5C2.5	5x1x2.5	0.7	1.0	11.9	0.9	1.4
RE-Y(St)YSWAY 8C2.5	8x1x2.5	0.7	1.1	13.9	0.9	1.5
RE-Y(St)YSWAY 10C2.5	10x1x2.5	0.7	1.2	16.3	0.9	1.6
RE-Y(St)YSWAY 12C2.5	12x1x2.5	0.7	1.2	16.9	0.9	1.6
RE-Y(St)YSWAY 14C2.5	14x1x2.5	0.7	1.2	17.7	1.25	1.6
RE-Y(St)YSWAY 16C2.5	16x1x2.5	0.7	1.3	18.9	1.25	1.6
RE-Y(St)YSWAY 20C2.5	20x1x2.5	0.7	1.3	21.1	1.25	1.7
RE-Y(St)YSWAY 24C2.5	24x1x2.5	0.7	1.4	23.6	1.25	1.7
RE-Y(St)YSWAY 27C2.5	27x1x2.5	0.7	1.4	24.1	1.25	1.8



Caledonian Cable Code	RE-Y(St)YSWAY					
	No. of Core x1xCross Section	Nominal Insulation Thick-ness	Nominal Inner Sheath Thick-ness	Nominal Overall Diameter Over Inner Sheath	Nominal Armour Wire Diameter	Nominal Outer Sheath Thick-ness
	No.x1xmm ²	mm	mm	mm	mm	mm
RE-Y(St)YSWAY 30C2.5	30x1x2.5	0.7	1.5	25.2	1.25	1.8
RE-Y(St)YSWAY 37C2.5	37x1x2.5	0.7	1.5	27.2	1.25	1.8
RE-Y(St)YSWAY 40C2.5	40x1x2.5	0.7	1.6	28.5	1.25	1.9

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



Rated Voltage



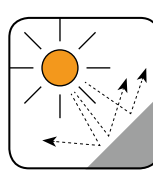
Standard



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



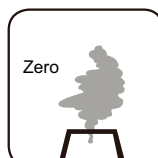
Low Toxicity
NES 02-713/NF C 20-454



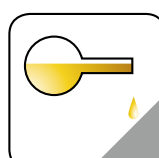
Low Corrosivity
IEC60754-2
EN50267-2-2/3
NF C 32-074



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