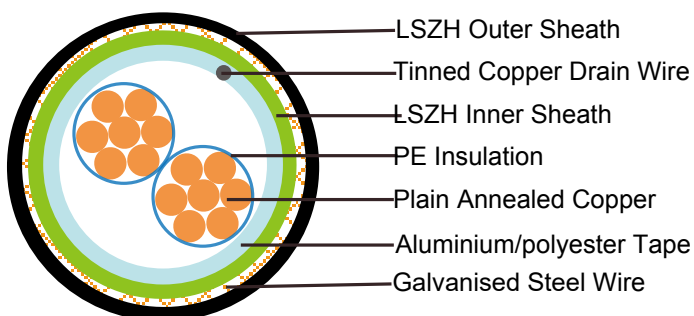




PE Insulated, LSZH Sheathed, Overall Screened & Armoured Instrumentation Cables (Multicore)

RE-2Y(St)HSAH 90°C / 500V



APPLICATION

The LSZH sheathed cables are generally use for indoor installation and suitable for wet and damp areas. The galvanized steel wire armour provides excellent protection. 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Note: Asterisk * denotes superseded standard, **Test temperature +60°C, duration 4h. Retention: min 60% of

tensile strength/min.60% of elongation.

VOLTAGE RATING

500V

CABLE CONSTRUCTION

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

Insulation: PE compound, EN 50290. 2-23.

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

Inner Sheath: LSZH compound

Armouring: Galvanised steel wire

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 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: 10 X Overall Diameter

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	36.0	24.5	18.1	13.9	12.1	7.4
Insulation resistance (20°C)		MΩ.km(Min.)	5000	5000	5000	5000	5000	5000
Mutual Capacitance (1 kHz)		pF/m(Max.)	115	115	115	115	115	115
Inductance		mH/km(Max.)	1	1	1	1	1	1
L / R (ratio) (max.)		μH/Ω	25	25	25	40	40	60
Operating voltage		V	500					
Test Voltage U _{rms}	Core to Core	V	2000					
	Core to Screen	V	2000					



CONSTRUCTION PARAMETERS

Caledonian Cable Code	RE-2Y(St)HSAWAH					
	No. of Cores 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-2Y(St)HSAWAH 2C0.5	2x1x0.5	0.55	0.9	6.2	0.9	1.3
RE-2Y(St)HSAWAH 3C0.5	3x1x0.5	0.55	0.9	6.5	0.9	1.3
RE-2Y(St)HSAWAH 4C0.5	4x1x0.5	0.55	0.9	7.0	0.9	1.3
RE-2Y(St)HSAWAH 5C0.5	5x1x0.5	0.55	0.9	7.6	0.9	1.3
RE-2Y(St)HSAWAH 8C0.5	8x1x0.5	0.55	1.0	9.1	0.9	1.4
RE-2Y(St)HSAWAH 10C0.5	10x1x0.5	0.55	1.0	10.4	0.9	1.4
RE-2Y(St)HSAWAH 12C0.5	12x1x0.5	0.55	1.0	10.7	0.9	1.4
RE-2Y(St)HSAWAH 14C0.5	14x1x0.5	0.55	1.0	11.3	0.9	1.4
RE-2Y(St)HSAWAH 16C0.5	16x1x0.5	0.55	1.1	11.8	0.9	1.4
RE-2Y(St)HSAWAH 20C0.5	20x1x0.5	0.55	1.1	13.3	0.9	1.5
RE-2Y(St)HSAWAH 24C0.5	24x1x0.5	0.55	1.1	14.7	0.9	1.5
RE-2Y(St)HSAWAH 27C0.5	27x1x0.5	0.55	1.2	15.0	0.9	1.5
RE-2Y(St)HSAWAH 30C0.5	30x1x0.5	0.55	1.2	15.7	0.9	1.5
RE-2Y(St)HSAWAH 37C0.5	37x1x0.5	0.55	1.2	16.9	0.9	1.6
RE-2Y(St)HSAWAH 40C0.5	40x1x0.5	0.55	1.2	17.6	1.25	1.6
0.75mm ² , Multicore						
RE-2Y(St)HSAWAH 2C0.75	2x1x0.75	0.55	0.9	6.5	0.9	1.3
RE-2Y(St)HSAWAH 3C0.75	3x1x0.75	0.55	0.9	6.9	0.9	1.3
RE-2Y(St)HSAWAH 4C0.75	4x1x0.75	0.55	0.9	7.4	0.9	1.3
RE-2Y(St)HSAWAH 5C0.75	5x1x0.75	0.55	0.9	8.1	0.9	1.4
RE-2Y(St)HSAWAH 8C0.75	8x1x0.75	0.55	1.0	9.7	0.9	1.4
RE-2Y(St)HSAWAH 10C0.75	10x1x0.75	0.55	1.0	11.1	0.9	1.4
RE-2Y(St)HSAWAH 12C0.75	12x1x0.75	0.55	1.0	11.5	0.9	1.4
RE-2Y(St)HSAWAH 14C0.75	14x1x0.75	0.55	1.1	12.2	0.9	1.5
RE-2Y(St)HSAWAH 16C0.75	16x1x0.75	0.55	1.1	12.9	0.9	1.5
RE-2Y(St)HSAWAH 20C0.75	20x1x0.75	0.55	1.1	14.3	0.9	1.5
RE-2Y(St)HSAWAH 24C0.75	24x1x0.75	0.55	1.2	16.0	0.9	1.5
RE-2Y(St)HSAWAH 27C0.75	27x1x0.75	0.55	1.2	16.3	0.9	1.6
RE-2Y(St)HSAWAH 30C0.75	30x1x0.75	0.55	1.2	16.9	0.9	1.6

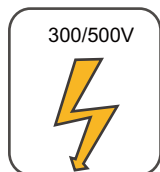
Caledonian Cable Code	RE-2Y(St)HSAWAH					
	No. of Cores x1xCross Section	Nominal Insulation Thick-ness	Nominal Inner Sheath Thick-ness	Nominal Overall Diameter Over Inner Sheath	Nominal Armour Wire Diameter	Nominal Outer Sheath Thick-ness
	No.x1xmm ²	mm	mm	mm	mm	mm
RE-2Y(St)HSAWAH 37C0.75	37x1x0.75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



Caledonian Cable Code	RE-2Y(St)HSAWAH					
	No. of Cores 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-2Y(St)HSAWAH 30C1.3	30x1x1.3	0.6	1.3	20.0	1.25	1.6
RE-2Y(St)HSAWAH 37C1.3	37x1x1.3	0.6	1.3	21.6	1.25	1.7
RE-2Y(St)HSAWAH 40C1.3	40x1x1.3	0.6	1.4	22.7	1.25	1.7
1.5mm ² , Multicore						
RE-2Y(St)HSAWAH 2C1.5	2x1x1.5	0.6	0.9	7.7	0.9	1.3
RE-2Y(St)HSAWAH 3C1.5	3x1x1.5	0.6	0.9	8.1	0.9	1.4
RE-2Y(St)HSAWAH 4C1.5	4x1x1.5	0.6	0.9	8.8	0.9	1.4
RE-2Y(St)HSAWAH 5C1.5	5x1x1.5	0.6	1.0	9.8	0.9	1.4
RE-2Y(St)HSAWAH 8C1.5	8x1x1.5	0.6	1.0	11.6	0.9	1.4
RE-2Y(St)HSAWAH 10C1.5	10x1x1.5	0.6	1.1	13.7	0.9	1.5
RE-2Y(St)HSAWAH 12C1.5	12x1x1.5	0.6	1.1	14.1	0.9	1.5
RE-2Y(St)HSAWAH 14C1.5	14x1x1.5	0.6	1.1	14.8	0.9	1.5
RE-2Y(St)HSAWAH 16C1.5	16x1x1.5	0.6	1.1	15.6	0.9	1.5
RE-2Y(St)HSAWAH 20C1.5	20x1x1.5	0.6	1.2	17.6	1.25	1.6
RE-2Y(St)HSAWAH 24C1.5	24x1x1.5	0.6	1.3	19.6	1.25	1.6
RE-2Y(St)HSAWAH 27C1.5	27x1x1.5	0.6	1.3	20.1	1.25	1.6
RE-2Y(St)HSAWAH 30C1.5	30x1x1.5	0.6	1.3	20.8	1.25	1.7
RE-2Y(St)HSAWAH 37C1.5	37x1x1.5	0.6	1.4	22.6	1.25	1.7
RE-2Y(St)HSAWAH 40C1.5	40x1x1.5	0.6	1.4	23.6	1.25	1.7
2.5mm ² , Multicore						
RE-2Y(St)HSAWAH 2C2.5	2x1x2.5	0.7	0.9	8.9	0.9	1.4
RE-2Y(St)HSAWAH 3C2.5	3x1x2.5	0.7	1.0	9.7	0.9	1.4
RE-2Y(St)HSAWAH 4C2.5	4x1x2.5	0.7	1.0	10.5	0.9	1.4
RE-2Y(St)HSAWAH 5C2.5	5x1x2.5	0.7	1.0	11.9	0.9	1.4
RE-2Y(St)HSAWAH 8C2.5	8x1x2.5	0.7	1.1	13.9	0.9	1.5
RE-2Y(St)HSAWAH 10C2.5	10x1x2.5	0.7	1.2	16.3	0.9	1.6
RE-2Y(St)HSAWAH 12C2.5	12x1x2.5	0.7	1.2	16.9	0.9	1.6
RE-2Y(St)HSAWAH 14C2.5	14x1x2.5	0.7	1.2	17.7	1.25	1.6
RE-2Y(St)HSAWAH 16C2.5	16x1x2.5	0.7	1.3	18.9	1.25	1.6
RE-2Y(St)HSAWAH 20C2.5	20x1x2.5	0.7	1.3	21.1	1.25	1.7

Caledonian Cable Code	RE-2Y(St)HSAWAH					
	No. of Cores 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-2Y(St)HSAWAH 24C2.5	24x1x2.5	0.7	1.4	23.6	1.25	1.7
RE-2Y(St)HSAWAH 27C2.5	27x1x2.5	0.7	1.4	24.1	1.25	1.8
RE-2Y(St)HSAWAH 30C2.5	30x1x2.5	0.7	1.5	25.2	1.25	1.8
RE-2Y(St)HSAWAH 37C2.5	37x1x2.5	0.7	1.5	27.2	1.25	1.8
RE-2Y(St)HSAWAH 40C2.5	40x1x2.5	0.7	1.6	28.5	1.25	1.9

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



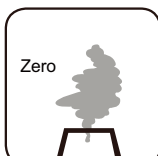
Low Toxicity
NES 02-713/NF C 20-454



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