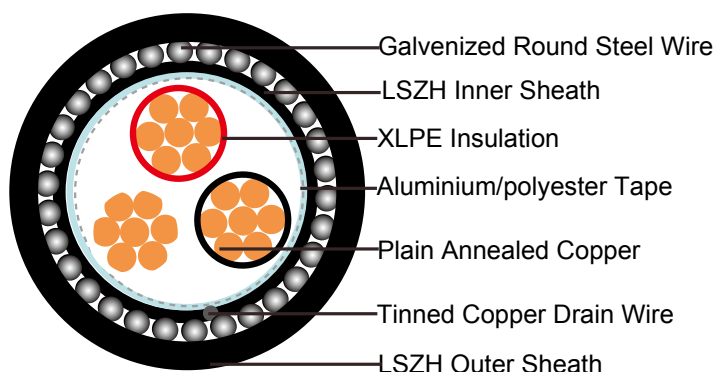
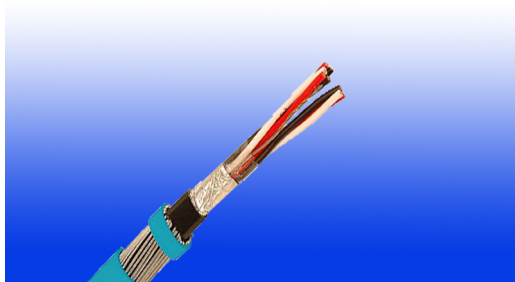




XLPE Insulated, LSZH Sheathed, Overall Screened & Armoured Instrumentation Cables (Single Triple)

RE-2X(St)HSAH 70°C / 300 V



APPLICATION:

These cables are used for transmission of analogue and digital signals in instrument and control systems at chemistry and petrochemistry industry plants, power plants, natural gas and petroleum plants, etc...

These cables are used in the environments which have no corrosive gases are emitted in the event of fire. In case of fire, these cables inhibit the propagation of the flames whereby the development of smoke is extremely low. Instrumentation cables are not allowed for direct connection to a low impedance sources, e.g. public mains electricity supply. With blue sheath it is suitable for intrinsically safe systems. These cables are not recommended for direct burial. They are for indoor and outdoor installation, in dry and wet locations; on racks, trays, in conduits.

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
Sunlight Resistance	UL 1581 section 1200
Oil Resistance	ICEA S-73-532**

Note: Asterisk * denotes superseded standard, ** denotes Test temperature +60°C, duration 4h. Retention: min 60% of tensile strength/min.60% of elongation, *** 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, EN 50290. 2-29.

Triple: Three conductors twisted to form a triple

Lay-up: Triples laid up in layers of optimum pitch

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

Inner sheath: LSZH compound

Armour: Galvanized round steel wire, EN 10257-1

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/White/Red.

Outer Sheath: Black or blue for intrinsically safe systems

PHYSICAL AND THERMAL PROPERTIES

Temperature Range During Operation (Fixed State): -30°C – +70°C

Temperature Range During Installation (Mobile State): -5°C – +50°C

Minimum Bending Radius: 7.5 X Overall Diameter

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				
L / R (ratio) (max.)		μH/Ω	25	25	25	40	40
Inductance		mH/km(Max.)	1				
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)HSAH					
	No. of Triples x3xCross 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.x3xmm ²	mm	mm	mm	mm	mm
RE-2X(St)HSAH 1T0.5	1x3x0.50	0.35	0.8	5.4	0.9	1.3
RE-2X(St)HSAH 1T0.75	1x3x0.75	0.38	0.9	6.1	0.9	1.3
RE-2X(St)HSAH 1T1.0	1x3x1.0	0.4	0.9	6.6	0.9	1.3
RE-2X(St)HSAH 1T1.3	1x3x1.3	0.45	0.9	7.2	0.9	1.3
RE-2X(St)HSAH 1T1.5	1x3x1.5	0.45	0.9	7.5	0.9	1.3

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	 Zero Halogen Free IEC60754-1 EN50267-2-1