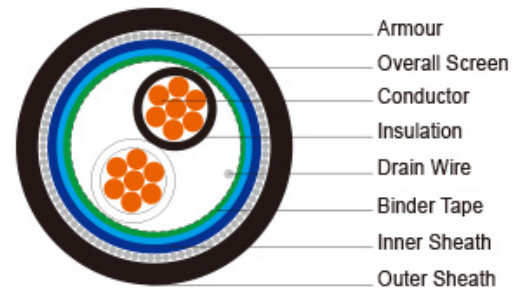


**XLPE Insulated, LSZH Sheathed & Overall Screened,
Armoured Instrumentation Cables (Single Pair)**



RE-2X(St)HSWAH 90°C / 300V

STANDARDS

Basic design to EN 50288-7

APPLICATION

Instrument cable minimizes noise and signal interference, delivering clean signals in harsh environments and general manufacturing operations. The armoured LSZH sheathed cables are generally used when the risk of mechanical damage is increased. 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.

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Note: Asterisk * denotes superseded standard, ** denotes Test temperature +60°C, duration 4h.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.
Pairs:	Two insulated conductors uniformly twisted together with a lay not exceeding 100mm
Binder tape:	PETP transparent tape
Overall Screen:	Aluminium/polyester tape is applied over the laid up pairs metallic side down in contact with tinned copper drain wire, 0.5mm ²
Inner Sheath:	LSZH compound
Armouring:	Galvanized steel wire armour
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, continuously numbered on white core(1, 2..)for multipair.
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:	6 X Overall Diameter

CONSTRUCTION PARAMETERS

Cable Code	RE-2X(St)HSAH							
	No. of Pairs x2xCross 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	Nominal Overall Diameter	Approx. Weight
	No.x2xmm2	mm2	mm	mm	mm	mm	mm	kg/km
RE- 2X(St)HSAH 1P0.5	1x2x0.50	0.35	0.8	5.2	0.9	1.3	9.6	179

RE- 2X(St)HSWAH 1P0.75	1x2x0.75	0.38	0.8	5.6	0.9	1.3	10.0	199
RE- 2X(St)HSWAH 1P1.0	1x2x1.0	0.40	0.9	6.3	0.9	1.3	10.7	220
RE- 2X(St)HSWAH 1P1.3	1x2x1.3	0.45	0.9	6.8	0.9	1.3	11.2	241
RE- 2X(St)HSWAH 1P1.5	1x2x1.5	0.45	0.9	7.1	0.9	1.3	11.5	259

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

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			