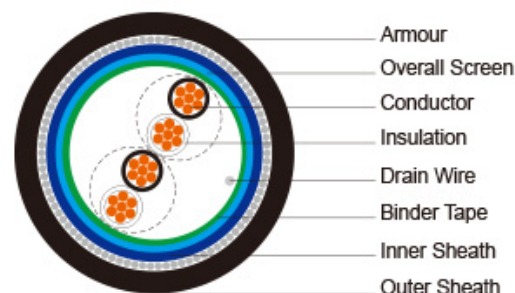


**XLPE Insulated, LSZH Sheathed & Overall Screened,
Armoured Instrumentation Cables (Multipair)**



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Note: Asterisk * denotes superseded standard, ** denotes Test temperature +60°C, duration 4h.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:	10 X Overall Diameter

CONSTRUCTION PARAMETERS

Cable Code	RE-2X(St)HSAWAH							
	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
0.5mm ² , Multipair								

RE- 2X(St)HSAWAH 2P0.5	2x2x0.5	0.35	0.9	7.6	0.9	1.3	12.0	269
RE- 2X(St)HSAWAH 4P0.5	3x2x0.5	0.35	0.9	8.8	0.9	1.4	13.4	325
RE- 2X(St)HSAWAH 5P0.5	4x2x0.5	0.35	1.0	9.8	0.9	1.4	14.4	375
RE- 2X(St)HSAWAH 6P0.5	5x2x0.5	0.35	1.0	10.6	0.9	1.4	15.2	423
RE- 2X(St)HSAWAH 8P0.5	8x2x0.5	0.35	1.0	11.3	0.9	1.4	15.9	473
RE- 2X(St)HSAWAH 10P0.5	10x2x0.5	0.35	1.1	12.9	0.9	1.5	17.7	521
RE- 2X(St)HSAWAH 12P0.5	12x2x0.5	0.35	1.1	13.5	0.9	1.5	18.3	592
RE- 2X(St)HSAWAH 16P0.5	16x2x0.5	0.35	1.1	15.2	0.9	1.5	20.0	823
RE- 2X(St)HSAWAH 20P0.5	20x2x0.5	0.35	1.2	16.9	0.9	1.6	21.9	920
RE- 2X(St)HSAWAH 24P0.5	24x2x0.5	0.35	1.2	18.3	1.25	1.6	24.0	1028
0.75mm ² , Multipair								
RE- 2X(St)HSAWAH 2P0.75	2x2x0.75	0.38	0.9	8.5	0.9	1.4	13.1	308
RE- 2X(St)HSAWAH 4P0.75	3x2x0.75	0.38	1.0	10.0	0.9	1.4	14.6	371
RE- 2X(St)HSAWAH 5P0.75	4x2x0.75	0.38	1.0	10.9	0.9	1.4	15.5	436

RE- 2X(St)HSWAH 6P0.75	5x2x0.75	0.38	1.0	11.8	0.9	1.4	16.4	495
RE- 2X(St)HSWAH 8P0.75	8x2x0.75	0.38	1.1	12.8	0.9	1.5	17.6	533
RE- 2X(St)HSWAH 10P0.75	10x2x0.75	0.38	1.1	14.5	0.9	1.5	19.3	637
RE- 2X(St)HSWAH 12P0.75	12x2x0.75	0.38	1.1	15.1	0.9	1.5	19.9	825
RE- 2X(St)HSWAH 16P0.75	16x2x0.75	0.38	1.2	17.3	0.9	1.6	22.3	965
RE- 2X(St)HSWAH 20P0.75	20x2x0.75	0.38	1.3	19.2	1.25	1.6	24.9	1116
RE- 2X(St)HSWAH 24P0.75	24x2x0.75	0.38	1.3	20.8	1.25	1.6	26.7	1257
1.0mm ² , Multipair								
RE- 2X(St)HSWAH 2P1.0	2x2x1.0	0.4	0.9	9.2	0.9	1.4	13.8	336
RE- 2X(St)HSWAH 4P1.0	3x2x1.0	0.4	1.0	10.9	0.9	1.4	15.5	436
RE- 2X(St)HSWAH 5P1.0	4x2x1.0	0.4	1.0	11.9	0.9	1.4	16.5	494
RE- 2X(St)HSWAH 6P1.0	5x2x1.0	0.4	1.0	13.0	0.9	1.4	17.6	550
RE- 2X(St)HSWAH 8P1.0	8x2x1.0	0.4	1.1	14.0	0.9	1.5	18.8	633
RE- 2X(St)HSWAH 10P1.0	10x2x1.0	0.4	1.1	15.9	0.9	1.5	20.7	859

RE- 2X(St)HSWAH 12P1.0	12x2x1.0	0.4	1.2	16.8	0.9	1.5	21.6	972
RE- 2X(St)HSWAH 16P1.0	16x2x1.0	0.4	1.2	19.0	1.25	1.6	24.7	1171
RE- 2X(St)HSWAH 20P1.0	20x2x1.0	0.4	1.3	21.1	1.25	1.7	27.0	1316
RE- 2X(St)HSWAH 24P1.0	24x2x1.0	0.4	1.4	23.1	1.25	1.7	29.0	1520
1.3mm ² , Multipair								
RE- 2X(St)HSWAH 2P1.3	2x2x1.3	0.45	1.0	10.4	0.9	1.4	15.0	382
RE- 2X(St)HSWAH 4P1.3	3x2x1.3	0.45	1.0	12.0	0.9	1.4	16.6	510
RE- 2X(St)HSWAH 5P1.3	4x2x1.3	0.45	1.1	13.4	0.9	1.5	18.2	595
RE- 2X(St)HSWAH 6P1.3	5x2x1.3	0.45	1.1	14.6	0.9	1.5	19.4	657
RE- 2X(St)HSWAH 8P1.3	8x2x1.3	0.45	1.2	15.7	0.9	1.5	20.5	869
RE- 2X(St)HSWAH 10P1.3	10x2x1.3	0.45	1.2	17.9	0.9	1.6	23.6	1011
RE- 2X(St)HSWAH 12P1.3	12x2x1.3	0.45	1.3	18.9	1.25	1.6	24.6	1110
RE- 2X(St)HSWAH 16P1.3	16x2x1.3	0.45	1.3	21.4	1.25	1.7	27.3	1361
RE- 2X(St)HSWAH 20P1.3	20x2x1.3	0.45	1.4	23.8	1.25	1.8	29.9	1599

RE- 2X(St)HSWAH 24P1.3	24x2x1.3	0.45	1.5	25.9	1.25	1.8	32.0	1960
1.5mm ² , Multipair								
RE- 2X(St)HSWAH 2P1.5	2x2x1.5	0.45	1.0	10.8	0.9	1.4	15.4	419
RE- 2X(St)HSWAH 4P1.5	3x2x1.5	0.45	1.1	12.7	0.9	1.5	17.5	544
RE- 2X(St)HSWAH 5P1.5	4x2x1.5	0.45	1.1	14.0	0.9	1.5	18.8	627
RE- 2X(St)HSWAH 6P1.5	5x2x1.5	0.45	1.2	15.2	0.9	1.5	20.0	833
RE- 2X(St)HSWAH 8P1.5	8x2x1.5	0.45	1.2	16.4	0.9	1.6	21.4	943
RE- 2X(St)HSWAH 10P1.5	10x2x1.5	0.45	1.3	18.8	1.25	1.6	24.5	1095
RE- 2X(St)HSWAH 12P1.5	12x2x1.5	0.45	1.3	19.7	1.25	1.7	25.6	1197
RE- 2X(St)HSWAH 16P1.5	16x2x1.5	0.45	1.4	22.5	1.25	1.7	28.4	1511
RE- 2X(St)HSWAH 20P1.5	20x2x1.5	0.45	1.5	25.0	1.25	1.8	31.1	1968
RE- 2X(St)HSWAH 24P1.5	24x2x1.5	0.45	1.5	27.1	1.25	1.8	33.2	2247

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.)					
	up to 4 pairs	90	90	90	102	102
	above 4 pairs	75	75	75	85	85
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			