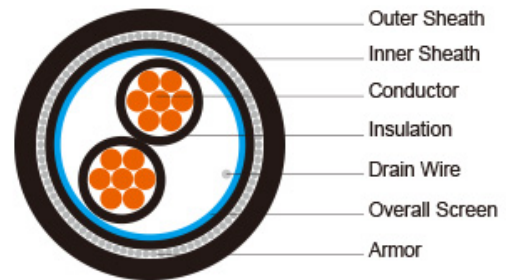


**XLPE Insulated, LSZH sheathed, overall screened  
& armoured Instrumentation cables (Multicore)**



RE-2X(st)HSWAH 90°C / 500V

<b>STANDARDS</b>	Basic design to EN 50288-7
<b>APPLICATION</b>	Instrument cable minimizes noise and signal interference, delivering clean signals in harsh environments and general manufacturing operations.
<b>FIRE PERFORMANCE</b>	
<b>Flame Retardance (Single Vertical Wire Test)</b>	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*
<b>Reduced Fire Propagation (Vertically-mounted bundled wires &amp; cable test)***</b>	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
<b>Halogen Free</b>	IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1 ; BS 6425-1*
<b>No Corrosive Gas Emission</b>	IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2*
<b>Minimum Smoke Emission</b>	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*
<b>No Toxic gases</b>	NES 02-713; NF C 20-454
<b>Sunlight Resistance</b>	UL 1581 section 1200
<b>Oil Resistance**</b>	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Note: Asterisk \* denotes superseded standard, \*\* denotes Test temperature +60°C, duration 4h.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.

<b>VOLTAGE RATING</b>	500V
<b>CABLE CONSTRUCTION</b>	
<b>Conductor:</b>	Annealed copper solid or plain copper stranded to IEC 60228 Class 2.
<b>Insulation:</b>	Extruded cross-linked XLPE compound, EN 50290. 2-29.
<b>Overall Screen:</b>	Aluminium/polyester tape with tinned copper drain wire, 0.5mm2

<b>Inner Sheath:</b>	LSZH compound
<b>Armouring:</b>	Galvanised steel wire
<b>Outer Sheath:</b>	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.
<b>COLOUR CODE</b>	
<b>Insulation:</b>	Black numbered
<b>Outer Sheath:</b>	Black or blue for intrinsically safe systems
<b>Physical AND THERMAL PROPERTIES</b>	
<b>Temperature Range During Operation (Fixed State):</b>	-30°C – +90°C
<b>Temperature Range During Installation (Mobile State):</b>	-5°C – +50°C
<b>Minimum Bending Radius:</b>	10 X Overall Diameter

**CONSTRUCTION PARAMETERS**

Cable Code	RE-2X(St)HSAWAH							
	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	Nominal Overall Diameter	Approx. Weight
	No.x1xmm <sup>2</sup>	mm	mm	mm	mm	mm	mm	kg/km
0.5mm <sup>2</sup> , Multicore								
RE- 2X(St)HSAWAH 2C0.5	2x1x0.5	0.55	0.9	6.2	0.9	1.3	10.6	210
RE- 2X(St)HSAWAH 3C0.5	3x1x0.5	0.55	0.9	6.5	0.9	1.3	10.9	230
RE- 2X(St)HSAWAH 4C0.5	4x1x0.5	0.55	0.9	7.0	0.9	1.3	11.4	253

RE- 2X(St)HSWAH 5C0.5	5x1x0.5	0.55	0.9	7.6	0.9	1.3	12.0	283
RE- 2X(St)HSWAH 8C0.5	8x1x0.5	0.55	1.0	9.1	0.9	1.4	13.7	344
RE- 2X(St)HSWAH 10C0.5	10x1x0.5	0.55	1.0	10.4	0.9	1.4	15.0	399
RE- 2X(St)HSWAH 12C0.5	12x1x0.5	0.55	1.0	10.7	0.9	1.4	15.3	442
RE- 2X(St)HSWAH 14C0.5	14x1x0.5	0.55	1.0	11.3	0.9	1.4	15.9	474
RE- 2X(St)HSWAH 16C0.5	16x1x0.5	0.55	1.1	11.8	0.9	1.4	16.4	505
RE- 2X(St)HSWAH 20C0.5	20x1x0.5	0.55	1.1	13.3	0.9	1.5	18.1	569
RE- 2X(St)HSWAH 24C0.5	24x1x0.5	0.55	1.1	14.7	0.9	1.5	19.5	642
RE- 2X(St)HSWAH 27C0.5	27x1x0.5	0.55	1.2	15.0	0.9	1.5	19.8	808
RE- 2X(St)HSWAH 30C0.5	30x1x0.5	0.55	1.2	15.7	0.9	1.5	20.5	848
RE- 2X(St)HSWAH 37C0.5	37x1x0.5	0.55	1.2	16.9	0.9	1.6	21.9	963
RE- 2X(St)HSWAH 40C0.5	40x1x0.5	0.55	1.2	17.6	1.25	1.6	23.3	1014
0.75mm <sup>2</sup> , Multicore								
RE- 2X(St)HSWAH 2C0.75	2x1x0.75	0.55	0.9	6.5	0.9	1.3	10.9	230

RE- 2X(St)HSWAH 3C0.75	3x1x0.75	0.55	0.9	6.9	0.9	1.3	11.3	247
RE- 2X(St)HSWAH 4C0.75	4x1x0.75	0.55	0.9	7.4	0.9	1.3	11.8	278
RE- 2X(St)HSWAH 5C0.75	5x1x0.75	0.55	0.9	8.1	0.9	1.4	12.7	322
RE- 2X(St)HSWAH 8C0.75	8x1x0.75	0.55	1.0	9.7	0.9	1.4	14.3	383
RE- 2X(St)HSWAH 10C0.75	10x1x0.75	0.55	1.0	11.1	0.9	1.4	15.7	461
RE- 2X(St)HSWAH 12C0.75	12x1x0.75	0.55	1.0	11.5	0.9	1.4	16.1	477
RE- 2X(St)HSWAH 14C0.75	14x1x0.75	0.55	1.1	12.2	0.9	1.5	17.0	527
RE- 2X(St)HSWAH 16C0.75	16x1x0.75	0.55	1.1	12.9	0.9	1.5	17.7	572
RE- 2X(St)HSWAH 20C0.75	20x1x0.75	0.55	1.1	14.3	0.9	1.5	19.1	669
RE- 2X(St)HSWAH 24C0.75	24x1x0.75	0.55	1.2	16.0	0.9	1.5	20.8	877
RE- 2X(St)HSWAH 27C0.75	27x1x0.75	0.55	1.2	16.3	0.9	1.6	21.3	929
RE- 2X(St)HSWAH 30C0.75	30x1x0.75	0.55	1.2	16.9	0.9	1.6	21.9	986
RE- 2X(St)HSWAH 37C0.75	37x1x0.75	0.55	1.2	18.2	1.25	1.6	23.9	1102

RE- 2X(St)HSWAH 40C0.75	40x1x0.75	0.55	1.3	19.1	1.25	1.6	24.8	1181
1.0mm <sup>2</sup> , Multicore								
RE- 2X(St)HSWAH 2C1.0	2x1x1.0	0.55	0.9	6.9	0.9	1.3	11.3	247
RE- 2X(St)HSWAH 3C1.0	3x1x1.0	0.55	0.9	7.3	0.9	1.3	11.7	270
RE- 2X(St)HSWAH 4C1.0	4x1x1.0	0.55	0.9	7.9	0.9	1.4	12.5	299
RE- 2X(St)HSWAH 5C1.0	5x1x1.0	0.55	0.9	8.6	0.9	1.4	13.2	342
RE- 2X(St)HSWAH 8C1.0	8x1x1.0	0.55	1.0	10.3	0.9	1.4	14.9	424
RE- 2X(St)HSWAH 10C1.0	10x1x1.0	0.55	1.0	11.9	0.9	1.4	16.5	514
RE- 2X(St)HSWAH 12C1.0	12x1x1.0	0.55	1.0	12.2	0.9	1.5	17.0	548
RE- 2X(St)HSWAH 14C1.0	14x1x1.0	0.55	1.1	13.0	0.9	1.5	17.8	590
RE- 2X(St)HSWAH 16C1.0	16x1x1.0	0.55	1.1	13.7	0.9	1.5	18.5	649
RE- 2X(St)HSWAH 20C1.0	20x1x1.0	0.55	1.1	15.2	0.9	1.5	20.0	864
RE- 2X(St)HSWAH 24C1.0	24x1x1.0	0.55	1.2	17.0	0.9	1.6	22.0	1005
RE- 2X(St)HSWAH 27C1.0	27x1x1.0	0.55	1.2	17.4	1.25	1.6	23.1	1058

RE- 2X(St)HSWAH 30C1.0	30x1x1.0	0.55	1.2	18.0	1.25	1.6	23.7	1113
RE- 2X(St)HSWAH 37C1.0	37x1x1.0	0.55	1.2	19.6	1.25	1.6	25.3	1271
RE- 2X(St)HSWAH 40C1.0	40x1x1.0	0.55	1.3	20.4	1.25	1.7	26.3	1351
1.3mm <sup>2</sup> , Multicore								
RE- 2X(St)HSWAH 2C1.3	2x1x1.3	0.6	0.9	7.4	0.9	1.3	11.8	275
RE- 2X(St)HSWAH 3C1.3	3x1x1.3	0.6	0.9	7.9	0.9	1.3	12.3	??
RE- 2X(St)HSWAH 4C1.3	4x1x1.3	0.6	0.9	8.5	0.9	1.4	13.1	340
RE- 2X(St)HSWAH 5C1.3	5x1x1.3	0.6	1.0	9.5	0.9	1.4	14.1	383
RE- 2X(St)HSWAH 8C1.3	8x1x1.3	0.6	1.0	11.2	0.9	1.4	15.8	483
RE- 2X(St)HSWAH 10C1.3	10x1x1.3	0.6	1.1	13.2	0.9	1.5	18.0	578
RE- 2X(St)HSWAH 12C1.3	12x1x1.3	0.6	1.1	13.6	0.9	1.5	18.4	633
RE- 2X(St)HSWAH 14C1.3	14x1x1.3	0.6	1.1	14.3	0.9	1.5	19.1	698
RE- 2X(St)HSWAH 16C1.3	16x1x1.3	0.6	1.1	15.0	0.9	1.5	19.8	870
RE- 2X(St)HSWAH 20C1.3	20x1x1.3	0.6	1.2	16.9	0.9	1.6	21.9	1014

RE- 2X(St)HSWAH 24C1.3	24x1x1.3	0.6	1.2	18.7	1.25	1.6	24.4	1163
RE- 2X(St)HSWAH 27C1.3	27x1x1.3	0.6	1.3	19.3	1.25	1.6	25.0	1227
RE- 2X(St)HSWAH 30C1.3	30x1x1.3	0.6	1.3	20.0	1.25	1.6	25.7	1305
RE- 2X(St)HSWAH 37C1.3	37x1x1.3	0.6	1.3	21.6	1.25	1.7	27.5	1504
RE- 2X(St)HSWAH 40C1.3	40x1x1.3	0.6	1.4	22.7	1.25	1.7	28.6	1584
1.5mm <sup>2</sup> , Multicore								
RE- 2X(St)HSWAH 2C1.5	2x1x1.5	0.6	0.9	7.7	0.9	1.3	12.1	279
RE- 2X(St)HSWAH 3C1.5	3x1x1.5	0.6	0.9	8.1	0.9	1.4	12.7	322
RE- 2X(St)HSWAH 4C1.5	4x1x1.5	0.6	0.9	8.8	0.9	1.4	13.4	347
RE- 2X(St)HSWAH 5C1.5	5x1x1.5	0.6	1.0	9.8	0.9	1.4	14.4	392
RE- 2X(St)HSWAH 8C1.5	8x1x1.5	0.6	1.0	11.6	0.9	1.4	16.2	518
RE- 2X(St)HSWAH 10C1.5	10x1x1.5	0.6	1.1	13.7	0.9	1.5	18.5	614
RE- 2X(St)HSWAH 12C1.5	12x1x1.5	0.6	1.1	14.1	0.9	1.5	18.9	670
RE- 2X(St)HSWAH 14C1.5	14x1x1.5	0.6	1.1	14.8	0.9	1.5	19.6	742

RE- 2X(St)HSWAH 16C1.5	16x1x1.5	0.6	1.1	15.6	0.9	1.5	20.4	925
RE- 2X(St)HSWAH 20C1.5	20x1x1.5	0.6	1.2	17.6	1.25	1.6	23.3	1062
RE- 2X(St)HSWAH 24C1.5	24x1x1.5	0.6	1.3	19.6	1.25	1.6	25.3	1218
RE- 2X(St)HSWAH 27C1.5	27x1x1.5	0.6	1.3	20.1	1.25	1.6	25.8	1289
RE- 2X(St)HSWAH 30C1.5	30x1x1.5	0.6	1.3	20.8	1.25	1.7	26.7	1418
RE- 2X(St)HSWAH 37C1.5	37x1x1.5	0.6	1.4	22.6	1.25	1.7	28.5	1586
RE- 2X(St)HSWAH 40C1.5	40x1x1.5	0.6	1.4	23.6	1.25	1.7	29.5	1687
2.5mm <sup>2</sup> , Multicore								
RE- 2X(St)HSWAH 2C2.5	2x1x2.5	0.7	0.9	8.9	0.9	1.4	13.5	364
RE- 2X(St)HSWAH 3C2.5	3x1x2.5	0.7	1.0	9.7	0.9	1.4	14.3	389
RE- 2X(St)HSWAH 4C2.5	4x1x2.5	0.7	1.0	10.5	0.9	1.4	15.1	430
RE- 2X(St)HSWAH 5C2.5	5x1x2.5	0.7	1.0	11.9	0.9	1.4	16.5	547
RE- 2X(St)HSWAH 8C2.5	8x1x2.5	0.7	1.1	13.9	0.9	1.5	18.7	684
RE- 2X(St)HSWAH 10C2.5	10x1x2.5	0.7	1.2	16.3	0.9	1.6	21.3	952



RE- 2X(St)HSWAH 12C2.5	12x1x2.5	0.7	1.2	16.9	0.9	1.6	21.9	1012
RE- 2X(St)HSWAH 14C2.5	14x1x2.5	0.7	1.2	17.7	1.25	1.6	23.4	1126
RE- 2X(St)HSWAH 16C2.5	16x1x2.5	0.7	1.3	18.9	1.25	1.6	24.6	1252
RE- 2X(St)HSWAH 20C2.5	20x1x2.5	0.7	1.3	21.1	1.25	1.7	27.0	1456
RE- 2X(St)HSWAH 24C2.5	24x1x2.5	0.7	1.4	23.6	1.25	1.7	29.5	1644
RE- 2X(St)HSWAH 27C2.5	27x1x2.5	0.7	1.4	24.1	1.25	1.8	30.2	1811
RE- 2X(St)HSWAH 30C2.5	30x1x2.5	0.7	1.5	25.2	1.25	1.8	31.3	2154
RE- 2X(St)HSWAH 37C2.5	37x1x2.5	0.7	1.5	27.2	1.25	1.8	33.3	2477
RE- 2X(St)HSWAH 40C2.5	40x1x2.5	0.7	1.6	28.5	1.25	1.9	34.8	2614

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

**Electrical PROPERTIES**

<b>Conductor Area Size</b>	mm <sup>2</sup>	0.5	0.75	1.0	1.3	1.5	2.5
<b>Insulation thickness (nominal)</b>	mm	0.55	0.55	0.55	0.6	0.6	0.7
<b>Conductor resistance (20°C)</b>	Ω/km	36.7	25.0	18.5	14.2	12.3	7.4
<b>Insulation resistance (20°C)</b>	MΩ.km(Min.)	5000					
<b>Mutual Capacitance (1 kHz)</b>	pF/m(Max.)	115					
<b>Capacitance unbalance(1 kHz)</b>	pF/500 m (Max.)	500					
<b>Inductance</b>	mH/km(Max.)	1					

<b>L / R (ratio) (max.)</b>		$\mu\text{H}/\Omega$	25	25	25	40	40	40
<b>Operating voltage</b>		V	500					
<b>Test Voltage Urms</b>	Core to Core	V	2000					
	Core to Screen	V	2000					