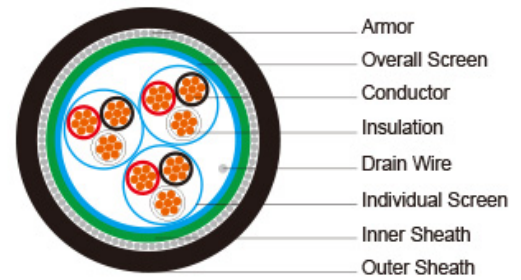


**XLPE Insulated, LSZH Sheathed, Individual & Overall Screened, Armoured Instrumentation Cables (Multitriples)**



RE-2X(St)HSWAH-TiMF 70°C / 300 V

**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.

**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Note: Asterisk \* denotes superseded standard, \*\* denotes Test temperature +60°C, duration 4h.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.

<b>Individual Screen:</b>	Aluminium/polyester tape is applied over each pair metallic side down in contact with tinned copper drain wire, 0.5mm <sup>2</sup>
<b>Pair:</b>	Two conductors twisted to form a pair
<b>Lay-up:</b>	Pairs laid up in layers of optimum pitch
<b>Separator:</b>	Polyester tape
<b>Overall Screen:</b>	Aluminium/polyester tape with tinned copper drain wire, 0.5mm <sup>2</sup>
<b>Inner sheath:</b>	HFFR compound, EN 50290-2-27
<b>Armour:</b>	Galvanized round steel wire, EN 10257-1
<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.

**COLOUR CODE**

<b>Insulation:</b>	Black / White / Red, continuously numbered on white core(1, 2..)for multitruples.
<b>Outer Sheath:</b>	Black or blue for intrinsically safe systems

**Physical AND THERMAL PROPERTIES**

<b>Temperature Range During Operation (Fixed State):</b>	-30°C – +70°C
<b>Temperature Range During Installation (Mobile State):</b>	-5°C – +50°C
<b>Minimum Bending Radius:</b>	7.5 X Overall Diameter

**CONSTRUCTION PARAMETERS**

Cable Code	RE-2X(St)HSAWAH							
	No. of Triples x3xCross Section	Nominal Insulation Thickness	Nominal Inner Sheath Thickness	Nominal Overall Diameter Over Inner Sheath	Nominal Armour Wire Diameter	Nominal Outer Sheath Thickness	Nominal Overall Diameter	Approx. Weight
	No.x3xmm <sup>2</sup>	mm	mm	mm	mm	mm	mm	kg/km
0.5mm <sup>2</sup> , Multi-stripe								

RE- 2X(St)HSWAH- TiMF 2T0.5	2x3x0.5	0.35	1.0	9.7	0.9	1.4	14.3	363
RE- 2X(St)HSWAH- TiMF 4T0.5	4x3x0.5	0.35	1.0	11.1	0.9	1.4	15.7	456
RE- 2X(St)HSWAH- TiMF 5T0.5	5x3x0.5	0.35	1.1	12.4	0.9	1.5	17.2	516
RE- 2X(St)HSWAH- TiMF 6T0.5	6x3x0.5	0.35	1.1	14.0	0.9	1.5	18.8	611
RE- 2X(St)HSWAH- TiMF 8T0.5	8x3x0.5	0.35	1.1	14.9	0.9	1.5	19.7	766
RE- 2X(St)HSWAH- TiMF 10T0.5	10x3x0.5	0.35	1.2	17.0	1.25	1.6	22.7	950
RE- 2X(St)HSWAH- TiMF 12T0.5	12x3x0.5	0.35	1.2	17.6	1.25	1.6	23.3	975
RE- 2X(St)HSWAH- TiMF 16T0.5	16x3x0.5	0.35	1.3	20.1	1.25	1.7	26.0	1169
RE- 2X(St)HSWAH- TiMF 20T0.5	20x3x0.5	0.35	1.4	22.3	1.25	1.7	28.2	1365
RE- 2X(St)HSWAH- TiMF 24T0.5	24x3x0.5	0.35	1.5	24.4	1.25	1.8	30.5	1604
0.75mm <sup>2</sup> , Multi-stripe								
RE- 2X(St)HSWAH- TiMF 2T0.75	2x3x0.75	0.38	1.0	10.6	0.9	1.4	15.2	408
RE- 2X(St)HSWAH- TiMF 4T0.75	4x3x0.75	0.38	1.1	12.4	0.9	1.5	17.2	521
RE- 2X(St)HSWAH- TiMF 5T0.75	5x3x0.75	0.38	1.1	13.7	0.9	1.5	18.5	590

RE- 2X(St)HSWAH- TiMF 6T0.75	6x3x0.75	0.38	1.1	15.4	0.9	1.5	20.2	819
RE- 2X(St)HSWAH- TiMF 8T0.75	8x3x0.75	0.38	1.2	16.7	0.9	1.6	21.7	941
RE- 2X(St)HSWAH- TiMF 10T0.75	10x3x0.75	0.38	1.3	19.0	1.25	1.6	24.7	1103
RE- 2X(St)HSWAH- TiMF 12T0.75	12x3x0.75	0.38	1.3	19.7	1.25	1.7	25.6	1176
RE- 2X(St)HSWAH- TiMF 16T0.75	16x3x0.75	0.38	1.4	22.5	1.25	1.7	28.4	1439
RE- 2X(St)HSWAH- TiMF 20T0.75	20x3x0.75	0.38	1.5	24.9	1.25	1.8	31.0	1804
RE- 2X(St)HSWAH- TiMF 24T0.75	24x3x0.75	0.38	1.6	27.2	1.25	1.9	33.5	2164
1.0mm <sup>2</sup> , Multi-stripe								
RE- 2X(St)HSWAH- TiMF 2T1.0	2x3x1	0.4	1.0	11.5	0.9	1.4	16.1	447
RE- 2X(St)HSWAH- TiMF 4T1.0	4x3x1	0.4	1.1	13.4	0.9	1.5	18.2	579
RE- 2X(St)HSWAH- TiMF 5T1.0	5x3x1	0.4	1.1	14.8	0.9	1.5	19.6	688
RE- 2X(St)HSWAH- TiMF 6T1.0	6x3x1	0.4	1.2	16.9	0.9	1.5	21.7	913
RE- 2X(St)HSWAH- TiMF 8T1.0	8x3x1	0.4	1.2	18.1	1.25	1.6	23.8	1033
RE- 2X(St)HSWAH- TiMF 10T1.0	10x3x1	0.4	1.3	20.7	1.25	1.7	26.6	1277

RE- 2X(St)HSWAH- TiMF 12T1.0	12x3x1	0.4	1.3	21.4	1.25	1.7	27.3	1380
RE- 2X(St)HSWAH- TiMF 16T1.0	16x3x1	0.4	1.4	24.4	1.25	1.7	30.3	1686
RE- 2X(St)HSWAH- TiMF 20T1.0	20x3x1	0.4	1.5	27.1	1.25	1.8	33.2	2200
RE- 2X(St)HSWAH- TiMF 24T1.0	24x3x1	0.4	1.6	29.6	1.6	1.9	36.6	2504
1.3mm2, Multi-stripe								
RE- 2X(St)HSWAH- TiMF 2T1.3	2x3x1,3	0.45	1.1	12.8	0.9	1.5	17.6	532
RE- 2X(St)HSWAH- TiMF 4T1.3	4x3x1,3	0.45	1.1	14.7	0.9	1.5	19.5	684
RE- 2X(St)HSWAH- TiMF 5T1.3	5x3x1,3	0.45	1.2	16.5	0.9	1.6	21.5	924
RE- 2X(St)HSWAH- TiMF 6T1.3	6x3x1,3	0.45	1.3	18.8	1.25	1.6	24.5	1089
RE- 2X(St)HSWAH- TiMF 8T1.3	8x3x1,3	0.45	1.3	20.1	1.25	1.7	26.0	1249
RE- 2X(St)HSWAH- TiMF 10T1.3	10x3x1,3	0.45	1.4	23.0	1.25	1.8	29.1	1482
RE- 2X(St)HSWAH- TiMF 12T1.3	12x3x1,3	0.45	1.5	24.0	1.25	1.8	30.1	1592
RE- 2X(St)HSWAH- TiMF 16T1.3	16x3x1,3	0.45	1.6	27.4	1.25	1.9	33.7	2222
RE- 2X(St)HSWAH- TiMF 20T1.3	20x3x1,3	0.45	1.7	30.4	1.6	2.0	37.6	2592

RE- 2X(St)HSWAH- TiMF 24T1.3	24x3x1,3	0.45	1.8	33.1	1.6	2.0	40.3	2957
1.5mm <sup>2</sup> , Multi-stripe								
RE- 2X(St)HSWAH- TiMF 2T1.5	2x3x1,5	0.45	1.1	13.2	0.9	1.5	18.0	531
RE- 2X(St)HSWAH- TiMF 4T1.5	4x3x1,5	0.45	1.2	15.4	0.9	1.5	20.2	817
RE- 2X(St)HSWAH- TiMF 5T1.5	5x3x1,5	0.45	1.2	17.1	1.25	1.6	22.8	998
RE- 2X(St)HSWAH- TiMF 6T1.5	6x3x1,5	0.45	1.3	19.5	1.25	1.6	25.2	1162
RE- 2X(St)HSWAH- TiMF 8T1.5	8x3x1,5	0.45	1.4	21.1	1.25	1.7	27.0	1304
RE- 2X(St)HSWAH- TiMF 10T1.5	10x3x1,5	0.45	1.5	24.1	1.25	1.8	30.2	1541
RE- 2X(St)HSWAH- TiMF 12T1.5	12x3x1,5	0.45	1.5	24.9	1.25	1.8	31.0	1952
RE- 2X(St)HSWAH- TiMF 16T1.5	16x3x1,5	0.45	1.6	28.4	1.6	1.9	35.4	2384
RE- 2X(St)HSWAH- TiMF 20T1.5	20x3x1,5	0.45	1.7	31.6	1.6	2.0	38.8	2795
RE- 2X(St)HSWAH- TiMF 24T1.5	24x3x1,5	0.45	1.8	34.4	1.6	2.1	41.8	3093

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
<b>Insulation thickness (nominal)</b>	mm	0.35	0.38	0.4	0.45	0.45
<b>Conductor resistance (20°C)</b>	Ω/km	36.7	25	18.5	14.2	12.3

<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>	μH/Ω	25	25	25	40	40
<b>Operating voltage Urms</b>	V	300				
<b>Test Voltage</b>	Core to Core	V	1500			
	Core to Screen	V	1500			