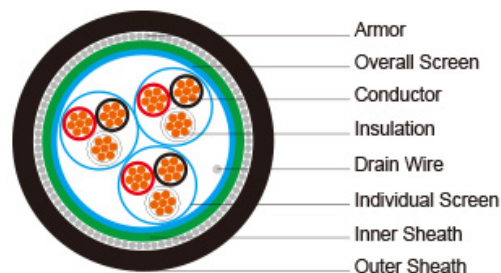


**PE Insulated, LSZH Sheathed, Individual & Overall Screened,  
Armoured Instrumentation Cables (Multitriples)**



RE-2Y(St)HSWAH-TiMF 70°C / 300 V

**STANDARDS**

Basic design to EN50288-7

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Note: Asterisk \* denotes superseded standard, \*\*Test temperature +60°C, duration 4h.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

**VOLTAGE RATING**

300V

**CABLE CONSTRUCTION**

**Conductor:**

Annealed copper solid or plain copper stranded to IEC 60228 Class 2.

**Insulation:**

PE compound, EN 50290. 2-23.

**Individual Screen:**

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>	10 X Overall Diameter

**CONSTRUCTION PARAMETERS**

Cable Code	RE-2Y(St)HSAH-TIMF							
	No. of Triples 3xCross Section	Nominal Insulation Thick- ness	Nomina l Inner Sheath Thick- ness	Nominal Overall Diamete r Over Inner Sheath	Nominal Armour Wire Diamete r	Nomina l Outer Sheath Thick- ness	Nominal OverallDiamete r	Approx . Weight
	No.x3xmm 2	mm	mm	mm	mm	mm	mm	kg/km
0.5mm <sup>2</sup> , Multitriple								

RE- 2Y(St)HSWAH -TiMF 2T0.5	2x3x0.5	0.35	1.0	9.7	0.9	1.4	14.3	363
RE- 2Y(St)HSWAH -TiMF 4T0.5	4x3x0.5	0.35	1.0	11.1	0.9	1.4	15.7	456
RE- 2Y(St)HSWAH -TiMF 5T0.5	5x3x0.5	0.35	1.1	12.4	0.9	1.5	17.2	517
RE- 2Y(St)HSWAH -TiMF 6T0.5	6x3x0.5	0.35	1.1	14.0	0.9	1.5	18.8	612
RE- 2Y(St)HSWAH -TiMF 8T0.5	8x3x0.5	0.35	1.1	14.9	0.9	1.5	19.7	800
RE- 2Y(St)HSWAH -TiMF 10T0.5	10x3x0.5	0.35	1.2	17.0	1.25	1.6	22.7	951
RE- 2Y(St)HSWAH -TiMF 12T0.5	12x3x0.5	0.35	1.2	17.6	1.25	1.6	23.3	978
RE- 2Y(St)HSWAH -TiMF 16T0.5	16x3x0.5	0.35	1.3	20.1	1.25	1.7	26.0	1201
RE- 2Y(St)HSWAH -TiMF 20T0.5	20x3x0.5	0.35	1.4	22.3	1.25	1.7	28.2	1394
RE- 2Y(St)HSWAH -TiMF 24T0.5	24x3x0.5	0.35	1.5	24.4	1.25	1.8	30.5	1607
0.75mm <sup>2</sup> , Multitriples								
RE- 2Y(St)HSWAH -TiMF 2T0.75	2x3x0.75	0.38	1.0	10.6	0.9	1.4	15.2	418
RE- 2Y(St)HSWAH -TiMF 4T0.75	4x3x0.75	0.38	1.1	12.4	0.9	1.5	17.2	521
RE- 2Y(St)HSWAH -TiMF 5T0.75	5x3x0.75	0.38	1.1	13.7	0.9	1.5	18.5	608

RE- 2Y(St)HSWAH -TiMF 6T0.75	6x3x0.75	0.38	1.1	15.4	0.9	1.5	20.2	820
RE- 2Y(St)HSWAH -TiMF 8T0.75	8x3x0.75	0.38	1.2	16.7	0.9	1.6	21.7	942
RE- 2Y(St)HSWAH -TiMF 10T0.75	10x3x0.75	0.38	1.3	19.0	1.25	1.6	24.7	1104
RE- 2Y(St)HSWAH -TiMF 12T0.75	12x3x0.75	0.38	1.3	19.7	1.25	1.7	25.6	1178
RE- 2Y(St)HSWAH -TiMF 16T0.75	16x3x0.75	0.38	1.4	22.5	1.25	1.7	28.4	1441
RE- 2Y(St)HSWAH -TiMF 20T0.75	20x3x0.75	0.38	1.5	24.9	1.25	1.8	31.0	1888
RE- 2Y(St)HSWAH -TiMF 24T0.75	24x3x0.75	0.38>	1.6	27.2	1.25	1.9	33.5	2168
1.0mm <sup>2</sup> , Multitriples								
RE- 2Y(St)HSWAH -TiMF 2T1.0	2x3x1	0.4	1.0	11.5	0.9	1.4	16.1	472
RE- 2Y(St)HSWAH -TiMF 4T1.0	4x3x1	0.4	1.1	13.4	0.9	1.5	18.2	597
RE- 2Y(St)HSWAH -TiMF 5T1.0	5x3x1	0.4	1.1	14.8	0.9	1.5	19.6	689
RE- 2Y(St)HSWAH -TiMF 6T1.0	6x3x1	0.4	1.2	16.9	0.9	1.5	21.7	940
RE- 2Y(St)HSWAH -TiMF 8T1.0	8x3x1	0.4	1.2	18.1	1.25	1.6	23.8	1035
RE- 2Y(St)HSWAH -TiMF 10T1.0	10x3x1	0.4	1.3	20.7	1.25	1.7	26.6	1279

RE- 2Y(St)HSWAH -TiMF 12T1.0	12x3x1	0.4	1.3	21.4	1.25	1.7	27.3	1383
RE- 2Y(St)HSWAH -TiMF 16T1.0	16x3x1	0.4	1.4	24.4	1.25	1.7	30.3	1689
RE- 2Y(St)HSWAH -TiMF 20T1.0	20x3x1	0.4	1.5	27.1	1.25	1.8	33.2	2204
RE- 2Y(St)HSWAH -TiMF 24T1.0	24x3x1	0.4	1.6	29.6	1.6	1.9	36.6	2509
1.3mm <sup>2</sup> , Multitriples								
RE- 2Y(St)HSWAH -TiMF 2T1.3	2x3x1,3	0.45	1.1	12.8	0.9	1.5	17.6	532
RE- 2Y(St)HSWAH -TiMF 4T1.3	4x3x1,3	0.45	1.1	14.7	0.9	1.5	19.5	685
RE- 2Y(St)HSWAH -TiMF 5T1.3	5x3x1,3	0.45	1.2	16.5	0.9	1.6	21.5	925
RE- 2Y(St)HSWAH -TiMF 6T1.3	6x3x1,3	0.45	1.3	18.8	1.25	1.6	24.5	1090
RE- 2Y(St)HSWAH -TiMF 8T1.3	8x3x1,3	0.45	1.3	20.1	1.25	1.7	26.0	1250
RE- 2Y(St)HSWAH -TiMF 10T1.3	10x3x1,3	0.45	1.4	23.0	1.25	1.8	29.1	1484
RE- 2Y(St)HSWAH -TiMF 12T1.3	12x3x1,3	0.45	1.5	24.0	1.25	1.8	30.1	1595
RE- 2Y(St)HSWAH -TiMF 16T1.3	16x3x1,3	0.45	1.6	27.4	1.25	1.9	33.7	2225
RE- 2Y(St)HSWAH -TiMF 20T1.3	20x3x1,3	0.45	1.7	30.4	1.6	2.0	37.6	2596

RE- 2Y(St)HSWAH -TiMF 24T1.3	24x3x1,3	0.45	1.8	33.1	1.6	2.0	40.3	2962
RE- 2Y(St)HSWAH -TiMF 2T1.5	2x3x1,5	0.45	1.1	13.2	0.9	1.5	18.0	561
RE- 2Y(St)HSWAH -TiMF 4T1.5	4x3x1,5	0.45	1.2	15.4	0.9	1.5	20.2	818
RE- 2Y(St)HSWAH -TiMF 5T1.5	5x3x1,5	0.45	1.2	17.1	1.25	1.6	22.8	999
RE- 2Y(St)HSWAH -TiMF 6T1.5	6x3x1,5	0.45	1.3	19.5	1.25	1.6	25.2	1164
RE- 2Y(St)HSWAH -TiMF 8T1.5	8x3x1,5	0.45	1.4	21.1	1.25	1.7	27.0	1354
RE- 2Y(St)HSWAH -TiMF 10T1.5	10x3x1,5	0.45	1.5	24.1	1.25	1.8	30.2	1596
RE- 2Y(St)HSWAH -TiMF 12T1.5	12x3x1,5	0.45	1.5	24.9	1.25	1.8	31.0	1953
RE- 2Y(St)HSWAH -TiMF 16T1.5	16x3x1,5	0.45	1.6	28.4	1.6	1.9	35.4	2388
RE- 2Y(St)HSWAH -TiMF 20T1.5	20x3x1,5	0.45	1.7	31.6	1.6	2.0	38.8	2800
RE- 2Y(St)HSWAH -TiMF 24T1.5	24x3x1,5	0.45	1.8	34.4	1.6	2.1	41.8	3100

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	0.4	0.4	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>Inductance</b>	mH/km(Max.)	1				
<b>Capacitance unbalance(1 kHz)</b>	pF/500 m (Max.)	500				
<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			