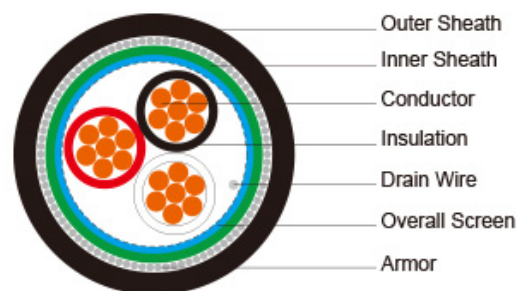


**PE Insulated, LSZH Sheathed, Overall Screened & Armoured Instrumentation Cables (Single Triple)**



RE-2Y(St)HSWAH 70°C / 300 V

**STANDARDS**

Basic design to EN50288-7

**APPLICATION:**

These cables are used for transmission of analogue and digital signals in instrument and control systems at chemistry and petr°Chemistry industry plants, power plants, natural gas and petroluem plants, etc...

These cables are used in the environments which have no corrosive gases are emitted in the event of fire. In case of fire, these cables inhibit the propagation of the flames whereby the development of smoke is extremely low. Instrumentation cables are not allowed for direct connection to a low impedance sources, e.g. public mains electricity supply.

With blue sheath it is suitable for intrinsically safe systems. These cables are not recommended for direct burial. They are for indoor and outdoor installation, in dry and wet l°Cations; on racks, trays, in conduits.

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Note: Asterisk \* denotes superseded standard, \*\*Test temperature +60°C, duration 4h.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

**VOLTAGE RATING**

300V

**CABLE CONSTRUCTION**

<b>Conductor:</b>	Annealed copper solid or plain copper stranded to IEC 60228 Class 2.
<b>Insulation:</b>	PE compound, EN 50290. 2-23.
<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>	LSZH 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							
	No. of Triples x3xCross 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.x3xmm <sup>2</sup>	mm	mm	mm	mm	mm	mm	kg/km

RE- 2Y(St)HSAWAH 1T0.5	1x3x0.50	0.35	0.8	5.4	0.9	1.3	9.8	200
RE- 2Y(St)HSAWAH 1T0.75	1x3x0.75	0.38	0.9	6.1	0.9	1.3	10.5	220
RE- 2Y(St)HSAWAH 1T1.0	1x3x1.0	0.4	0.9	6.6	0.9	1.3	11.0	244
RE- 2Y(St)HSAWAH 1T1.3	1x3x1.3	0.45	0.9	7.2	0.9	1.3	11.6	268
RE- 2Y(St)HSAWAH 1T1.5	1x3x1.5	0.45	0.9	7.5	0.9	1.3	11.9	277

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>L / R (ratio) (max.)</b>	μH/Ω	25	25	25	40	40
<b>Inductance</b>	mH/km(Max.)	1	1	1	1	1
<b>Operating voltage Urms</b>	V	300				
<b>Test Voltage</b>	Core to Core	V	1500			
	Core to Screen	V	1500			