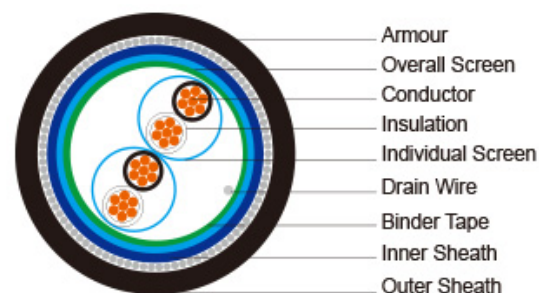


**XLPE Insulated, LSZH Sheathed, Individual and Overall
Screened & Armoured Instrumentation Cables (Multipair)**



RE-2X(st)HSAWH Pimf 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Note: Asterisk * denotes superseded standard, ** denotes Test temperature +60°C, duration 4h.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
Individual Screen:	Aluminium/polyester tape is applied over each pair metallic side down in contact with tinned copper drain wire, 0.5mm ²
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(Low Smoke Zero Halogen) sheath
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):	-20°C – +50°C
Minimum Bending Radius:	10 X Overall Diameter

CONSTRUCTION PARAMETERS

Cable Code	RE-2X(St)HSWAH PiMF							
	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
0.5mm2, Multipair								

RE-2X(St)HSAWAH PiMF 2P0.5	2x2x0.5	0.35	0.9	8.7	0.9	1.4	13.3	311
RE-2X(St)HSAWAH PiMF 4P0.5	3x2x0.5	0.35	1.0	10.2	0.9	1.4	14.8	373
RE-2X(St)HSAWAH PiMF 5P0.5	4x2x0.5	0.35	1.0	11.2	0.9	1.4	15.8	451
RE-2X(St)HSAWAH PiMF 6P0.5	5x2x0.5	0.35	1.0	12.1	0.9	1.6	16.9	483
RE-2X(St)HSAWAH PiMF 8P0.5	8x2x0.5	0.35	1.1	13.1	0.9	1.6	17.9	537
RE-2X(St)HSAWAH PiMF 10P0.5	10x2x0.5	0.35	1.2	15.1	0.9	1.5	19.9	781
RE-2X(St)HSAWAH PiMF 12P0.5	12x2x0.5	0.35	1.2	15.7	0.9	1.5	20.5	804
RE-2X(St)HSAWAH PiMF 16P0.5	16x2x0.5	0.35	1.2	17.8	1.25	1.6	23.5	968
RE-2X(St)HSAWAH PiMF 20P0.5	20x2x0.5	0.35	1.3	19.7	1.25	1.7	25.6	1143
RE-2X(St)HSAWAH PiMF 24P0.5	24x2x0.5	0.35	1.4	21.5	1.25	1.7	27.4	1264
0.75mm ² , Multipair								
RE-2X(St)HSAWAH PiMF 2P0.75	2x2x0.75	0.38	1.0	9.7	0.9	1.4	14.3	342
RE-2X(St)HSAWAH PiMF 4P0.75	3x2x0.75	0.38	1.0	11.2	0.9	1.4	15.8	439
RE-2X(St)HSAWAH PiMF 5P0.75	4x2x0.75	0.38	1.1	12.5	0.9	1.5	17.3	496
RE-2X(St)HSAWAH PiMF 6P0.75	5x2x0.75	0.38	1.1	13.6	0.9	1.5	18.4	578
RE-2X(St)HSAWAH PiMF 8P0.75	8x2x0.75	0.38	1.1	14.4	0.9	1.5	19.2	664
RE-2X(St)HSAWAH PiMF 10P0.75	10x2x0.75	0.38	1.2	16.6	1.25	1.6	22.3	876
RE-2X(St)HSAWAH PiMF 12P0.75	12x2x0.75	0.38	1.2	17.4	1.25	1.6	23.1	942
RE-2X(St)HSAWAH PiMF 16P0.75	16x2x0.75	0.38	1.3	19.8	1.25	1.7	25.7	1130
RE-2X(St)HSAWAH PiMF 20P0.75	20x2x0.75	0.38	1.4	22.0	1.25	1.7	27.9	1325

RE-2X(St)HSAWAH PiMF 24P0.75	24x2x0.75	0.38	1.5	24.0	1.25	1.8	30.1	1490
1.0mm ² , Multipair								
RE-2X(St)HSAWAH PiMF 2P1.0	2x2x1.0	0.4	1.0	10.4	0.9	1.4	15.0	382
RE-2X(St)HSAWAH PiMF 4P1.0	3x2x1.0	0.4	1.0	12.1	0.9	1.4	16.7	487
RE-2X(St)HSAWAH PiMF 5P1.0	4x2x1.0	0.4	1.1	13.5	0.9	1.5	18.3	566
RE-2X(St)HSAWAH PiMF 6P1.0	5x2x1.0	0.4	1.1	14.7	0.9	1.5	19.5	641
RE-2X(St)HSAWAH PiMF 8P1.0	8x2x1.0	0.4	1.2	15.8	0.9	1.5	20.6	718
RE-2X(St)HSAWAH PiMF 10P1.0	10x2x1.0	0.4	1.2	18.0	1.25	1.6	23.7	994
RE-2X(St)HSAWAH PiMF 12P1.0	12x2x1.0	0.4	1.3	19.0	1.25	1.7	24.7	1083
RE-2X(St)HSAWAH PiMF 16P1.0	16x2x1.0	0.4	1.3	21.5	1.25	1.7	27.4	1361
RE-2X(St)HSAWAH PiMF 20P1.0	20x2x1.0	0.4	1.4	23.9	1.25	1.7	29.8	1510
RE-2X(St)HSAWAH PiMF 24P1.0	24x2x1.0	0.4	1.5	26.1	1.25	1.8	32.2	1902
1.3mm ² , Multipair								
RE-2X(St)HSAWAH PiMF 2P1.3	2x2x1.3	0.45	1.0	11.4	0.9	1.4	16.0	452
RE-2X(St)HSAWAH PiMF 4P1.3	3x2x1.3	0.45	1.1	13.4	0.9	1.5	18.2	576
RE-2X(St)HSAWAH PiMF 5P1.3	4x2x1.3	0.45	1.1	14.8	0.9	1.5	19.6	647
RE-2X(St)HSAWAH PiMF 6P1.3	5x2x1.3	0.45	1.2	16.3	0.9	1.6	21.3	857
RE-2X(St)HSAWAH PiMF 8P1.3	8x2x1.3	0.45	1.3	17.6	1.25	1.6	23.3	980
RE-2X(St)HSAWAH PiMF 10P1.3	10x2x1.3	0.45	1.3	20.0	1.25	1.7	25.9	1195
RE-2X(St)HSAWAH PiMF 12P1.3	12x2x1.3	0.45	1.4	21.1	1.25	1.7	27.0	1256
RE-2X(St)HSAWAH PiMF 16P1.3	16x2x1.3	0.45	1.5	24.1	1.25	1.8	30.2	1562

RE-2X(St)HSAWAH PiMF 20P1.3	20x2x1.3	0.45	1.6	26.8	1.25	1.9	33.1	1958
RE-2X(St)HSAWAH PiMF 24P1.3	24x2x1.3	0.45	1.7	29.2	1.25	2.0	36.4	2251
1.5mm ² , Multipair								
RE-2X(St)HSAWAH PiMF 2P1.5	2x2x1.5	0.45	1.0	11.8	0.9	1.5	16.6	475
RE-2X(St)HSAWAH PiMF 4P1.5	3x2x1.5	0.45	1.1	13.9	0.9	1.5	18.7	599
RE-2X(St)HSAWAH PiMF 5P1.5	4x2x1.5	0.45	1.2	15.5	0.9	1.5	20.3	818
RE-2X(St)HSAWAH PiMF 6P1.5	5x2x1.5	0.45	1.2	16.9	1.25	1.6	22.6	940
RE-2X(St)HSAWAH PiMF 8P1.5	8x2x1.5	0.45	1.3	18.2	1.25	1.7	24.1	1037
RE-2X(St)HSAWAH PiMF 10P1.5	10x2x1.5	0.45	1.4	21.0	1.25	1.7	26.9	1273
RE-2X(St)HSAWAH PiMF 12P1.5	12x2x1.5	0.45	1.4	21.9	1.25	1.7	27.8	1353
RE-2X(St)HSAWAH PiMF 16P1.5	16x2x1.5	0.45	1.5	25.1	1.25	1.8	31.2	1932
RE-2X(St)HSAWAH PiMF 20P1.5	20x2x1.5	0.45	1.6	27.8	1.25	1.9	34.8	2224
RE-2X(St)HSAWAH PiMF 24P1.5	24x2x1.5	0.45	1.7	30.4	1.25	2.0	37.6	2541

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	0.4	0.4	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.)	115				
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