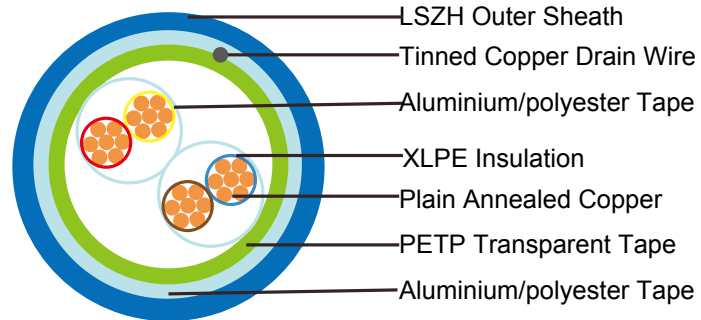


Flame Retardant Individual and Overall Screened Instrumentation Cables (Multipair)

RE-2X(St)H PiMF



APPLICATION

The unarmoured LSZH versions (Part 1 Type 1) cables are generally use for indoor installation and suitable for wet and damp areas. Generally 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.

STANDARDS

Basic design adapted to BS 5308 Part 1 Type 1

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

Note: Asterisk * denotes superseded standard.

VOLTAGE RATING

300/500V



CABLE CONSTRUCTION

Conductor: Annealed or tinned copper, sizes: 0.5mm² and 0.75mm² multistranded(Class 5), 0.5 mm², 1.0 mm² solid(Class 1), 1.5mm² or 2.5mm², multistranded(Class 2) to BS6360

Insulation: XLPE (Cross Linked Polyethylene), or PE (optional)

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, 0.5mm²

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, 0.5mm²

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 Colour: See technical information

Outer sheath: Black or blue

PHYSICAL AND THERMAL PROPERTIES

Maximum Operating temperature: -20°C - + 90°C(fixed installation)
0°C - +50°C(during operation)

Minimum bending radius: 5 x Overall Diameter

ELECTRICAL PROPERTIES

Conductor Area Size	mm ²	0.5	0.5	0.75	1.0	1.5
Conductor Stranding	No. x mm	1 x 0.8	16 x 0.2	24 x 0.2	1 x 1.13	7 x 0.53
Conductor resistance max	ohm/km	36.8	39.7	26.5	18.2	12.3
Insulation resistance min	Gohm/km	5	5	5	5	5
Capacitance unbalance at 1 kHz(pair to pair screen)	pF/250m	250				
Max. Mutual Capacitance @ 1 kHz for Non OS or OS cables (except one-pair and two-pairs)	pF/m	115	115	115	115	115
Max. Mutual Capacitance @ 1 kHz IS/OS cables (include 1 pair and 2 pair)	pF/m	75	75	75	75	75
Max. L/R Ratio for adjacent cores(Inductance/Resistance)	µH/ohm	25	25	25	25	40

Test voltage	Core to core	V	1000	1000	1000	1000	1000
	Core to screen	V	1000	1000	1000	1000	1000
Rated voltage max		V	300/500	300/500	300/500	300/500	300/500

CONSTRUCTION PARAMETERS

Number of Pairs	No./ Nominal Diameter of Strands	Nominal Conductor Cross-Section Area	Nominal Insulation Thickness	Nominal Sheath Thickness	Nominal Overall Diameter	Approx. Weight
	No./mm	mm ²	mm	mm	mm	kg/km
2	1/0.8	0.5	0.5	0.9	9.7	95
5	1/0.8	0.5	0.5	1.2	13	180
10	1/0.8	0.5	0.5	1.2	16.9	310
15	1/0.8	0.5	0.5	1.3	19.7	440
20	1/0.8	0.5	0.5	1.3	22.3	560
30	1/0.8	0.5	0.5	1.5	27.1	820
50	1/0.8	0.5	0.5	2	35	1370
2	16/0.2	0.5	0.6	1.1	11.2	110
5	16/0.2	0.5	0.6	1.2	14.5	250
10	16/0.2	0.5	0.6	1.3	19.3	480
15	16/0.2	0.5	0.6	1.5	22.6	570
20	16/0.2	0.5	0.6	1.5	25.7	780
30	16/0.2	0.5	0.6	1.7	31	1020
50	16/0.2	0.5	0.6	2.2	39.9	1680
2	1/1.13	1	0.6	1.1	11.9	200
5	1/1.13	1	0.6	1.2	15.4	290
10	1/1.13	1	0.6	1.3	20.5	580
15	1/1.13	1	0.6	1.5	24.1	780
20	1/1.13	1	0.6	1.7	27.7	1010
30	1/1.13	1	0.6	2	33.7	1430
50	1/1.13	1	0.6	2.2	42.5	2360
2	7/0.53	1.5	0.6	1.2	13.6	250
5	7/0.53	1.5	0.6	1.3	17.7	460
10	7/0.53	1.5	0.6	1.5	23.9	760
15	7/0.53	1.5	0.6	1.7	28	1020
20	7/0.53	1.5	0.6	2	31.7	1350