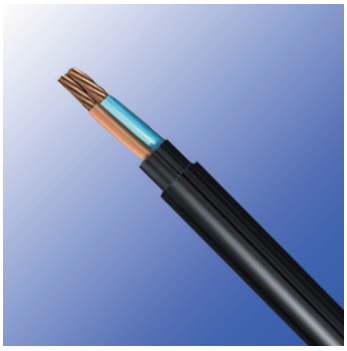
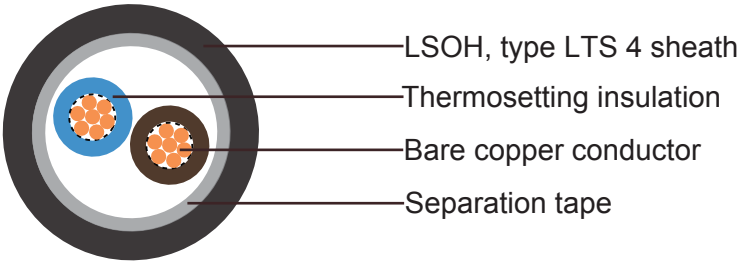
Thermosetting insulated, twin, 3-core, 4-core and 5-core circular sheathed cables

Application and Description

These cables are designed for fixed wiring purposes in domestic and industrial power/lighting applications. Can be used in trunking or conduit, or may be surface mounted when used for earthing. and generally in areas (such as public and government buildings) where smoke and toxic fumes may cause a threat to life and equipment. The cables produce no corrosive gasses when burnt which is particularly important where electronic equipment is installed.



Cable Construction



- Fine bare copper strands
- Strands to IEC 60228 Cl-1 or 2
- Thermosetting core insulation type EI5 or GP 8
- The cores shall be twisted together. A centre filler may be used.
- The twisted core shall be covered by an extruded inner covering or separating tape
- LSOH sheath, type LTS 4

Insulation Colour

Twin: brown and blue

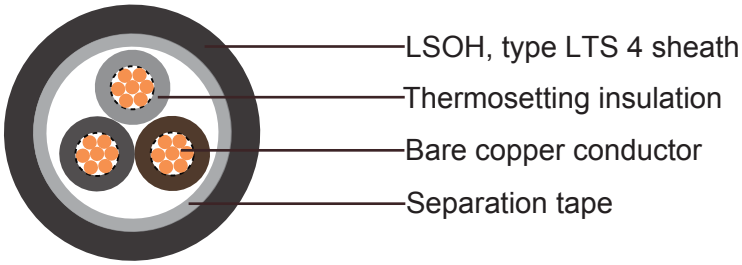
3-core: brown, black and grey

4-core: blue, brown, black and grey

5-core: green/yellow, blue, brown, black and grey

Technical Characteristics

- Working voltage: 450/750v
- Test voltage: 2500 volts
- Flexing bending radius: 15 x Ø
- Static bending radius: 10 x Ø
- Flexing temperature: -25° C to +90° C
- Short circuit temperature: +250° C
- Flame retardant: IEC 60332.1
- Insulation resistance: 10 MΩ x km
- Smoke density acc. to EN 50268 / IEC 61034
- Corrosiveness of combustion gases acc. to EN 50267-2-2, IEC 60754-2
- Flame test: flame-retardant acc. to EN 50265-2-1, IEC 60332.1



Cable Parameter

Two Cores

AWG	No. of Cores x Nominal Cross Sectional Area	Nominal thickness of insulation	Nominal thickness of inner covering	Nominal thickness of sheath	Nominal overall diameter	Nominal Weight	Minimum insulation resistance at 90 °C
	# x mm²	mm	mm	mm	mm	kg/km	MΩ·km
17	2 × 1.0	0.7	0.4	1.2	7.9-9.5	94	0.011
17(7/26)	2 × 1.0	0.7	0.4	1.2	8.1-9.7	110	0.011
16	2 × 1.5	0.7	0.4	1.2	8.4-10.1	121	0.011
16(7/24)	2 × 1.5	0.7	0.4	1.2	8.5-10.3	132	0.010
14	2 × 2.5	0.7	0.4	1.2	9.1-11.0	165	0.0092
14(7/22)	2 × 2.5	0.7	0.4	1.2	9.3-11.3	178	0.0084
12	2 × 4.0	0.7	0.4	1.2	10.0-12.1	212	0.0077
12(7/20)	2 × 4.0	0.7	0.4	1.2	10.3-12.4	232	0.0070
10	2 × 6.0	0.7	0.4	1.2	10.9-13.2	272	0.0065
10(7/18)	2 × 6.0	0.7	0.4	1.2	11.3-13.7	302	0.0059
8	2 × 10	0.7	0.4	1.4	12.9-15.5	446	0.0053
8(7/16)	2 × 10	0.7	0.6	1.4	13.8-16.7	490	0.0047
6(7/14)	2 × 16	0.7	0.6	1.4	15.6-18.8	674	0.0039
4(7/12)	2 × 25	0.9	0.8	1.4	19.2-23.2	1040	0.0039
2(7/10)	2 × 35	0.9	0.8	1.6	21.5-26.0	1130	0.0034

Three Cores

AWG	No. of Cores x Nominal Cross Sectional Area	Nominal thickness of insulation	Nominal thickness of inner covering	Nominal thickness of sheath	Nominal overall diameter	Nominal Weight	Minimum insulation resistance at 90 °C
	# x mm²	mm	mm	mm	mm	kg/km	MΩ·km
17	3 × 1.0	0.7	0.4	1.2	8.3-10.0	110	0.011
17(7/26)	3 × 1.0	0.7	0.4	1.2	8.8-10.2	128	0.011
16	3 × 1.5	0.7	0.4	1.2	8.8-10.6	143	0.011
16(7/24)	3 × 1.5	0.7	0.4	1.2	9.0-10.9	156	0.010
14	3 × 2.5	0.7	0.4	1.2	9.6-11.6	198	0.0092
14(7/22)	3 × 2.5	0.7	0.4	1.2	9.8-11.9	213	0.0084
12	3 × 4.0	0.7	0.4	1.2	10.5-12.7	260	0.0077
12(7/20)	3 × 4.0	0.7	0.4	1.2	10.8-13.1	282	0.0070
10	3 × 6.0	0.7	0.4	1.2	11.8-14.0	351	0.0065
10(7/18)	3 × 6.0	0.7	0.4	1.4	12.4-15.0	387	0.0059
8	3 × 10	0.7	0.6	1.4	14.0-16.9	557	0.0053
8(7/16)	3 × 10	0.7	0.6	1.4	14.6-17.5	607	0.0047
6(7/14)	3 × 16	0.7	0.6	1.4	16.5-19.9	850	0.0039
4(7/12)	3 × 25	0.9	0.8	1.4	20.4-24.7	1315	0.0039
2(7/10)	3 × 35	0.9	0.8	1.6	22.9-27.6	1562	0.0034

Four Cores

AWG	No. of Cores x Nominal Cross Sectional Area	Nominal thickness of insulation	Nominal thickness of inner covering	Nominal thickness of sheath	Nominal overall diameter	Nominal Weight	Minimum insulation resistance at 90 °C
	# x mm²	mm	mm	mm	mm	kg/km	MΩ·km
17	4 × 1.0	0.7	0.4	1.2	8.9-11.2	130	0.011
17(7/26)	4 × 1.0	0.7	0.4	1.2	9.5-11.5	150	0.011
16	4 × 1.5	0.7	0.4	1.2	9.5-11.4	170	0.011
16(7/24)	4 × 1.5	0.7	0.4	1.2	9.7-11.7	185	0.010
14	4 × 2.5	0.7	0.4	1.2	10.4-12.6	240	0.0092
14(7/22)	4 × 2.5	0.7	0.4	1.2	10.6-12.8	256	0.0084
12	4 × 4.0	0.7	0.4	1.2	11.4-13.8	330	0.0077
12(7/20)	4 × 4.0	0.7	0.4	1.2	11.6-14.0	344	0.0070
10	4 × 6.0	0.7	0.4	1.4	13.0-15.7	445	0.0065
10(7/18)	4 × 6.0	0.7	0.6	1.4	13.8-16.7	490	0.0059

AWG	No. of Cores x Nominal Cross Sectional Area	Nominal thickness of insulation	Nominal thickness of inner covering	Nominal thickness of sheath	Nominal overall diameter	Nominal Weight	Minimum insulation resistance at 90 °C
	# x mm²	mm	mm	mm	mm	kg/km	MΩ·km
8	4 × 10	0.7	0.6	1.4	15.2-18.4	687	0.0053
8(7/16)	4 × 10	0.7	0.6	1.4	15.9-19.2	747	0.0047
6(7/14)	4 × 16	0.7	0.6	1.4	18.0-21.8	1055	0.0039
4(7/12)	4 × 25	0.9	0.8	1.6	22.7-27.5	1670	0.0039
2(7/10)	4 × 35	0.9	1.0	1.6	25.4-30.7	2044	0.0034

Five Cores

AWG	No. of Cores x Nominal Cross Sectional Area	Nominal thickness of insulation	Nominal thickness of inner covering	Nominal thickness of sheath	Nominal overall diameter	Nominal Weight	Minimum insulation resistance at 90 °C
	# x mm²	mm	mm	mm	mm	kg/km	MΩ·km
17	5 × 1.0	0.7	0.4	1.2	9.6-11.5	157	0.011
17(7/26)	5 × 1.0	0.7	0.4	1.2	10.2-11.9	183	0.011
16	5 × 1.5	0.7	0.4	1.2	10.2-12.3	208	0.011
16(7/24)	5 × 1.5	0.7	0.4	1.2	10.5-12.6	227	0.010
14	5 × 2.5	0.7	0.4	1.2	11.2-13.6	295	0.0092
14(7/22)	5 × 2.5	0.7	0.4	1.2	11.5-13.9	317	0.0084
12	5 × 4.0	0.7	0.4	1.4	12.8-15.5	422	0.0077
12(7/20)	5 × 4.0	0.7	0.6	1.4	13.6-16.4	460	0.0070
10	5 × 6.0	0.7	0.6	1.4	14.5-17.5	551	0.0065
10(7/18)	5 × 6.0	0.7	0.6	1.4	15.0-18.1	610	0.0059
8	5 × 10	0.7	0.6	1.4	16.5-20.0	858	0.0053
8(7/16)	5 × 10	0.7	0.6	1.4	17.3-20.9	937	0.0047
6(7/14)	5 × 16	0.7	0.8	1.4	20.0-24.2	1328	0.0039
4(7/12)	5 × 25	0.9	1.0	1.6	25.2-30.5	1860	0.0039
2(7/10)	5 × 35	0.9	1.0	1.6	27.8-33.6	2500	0.0034