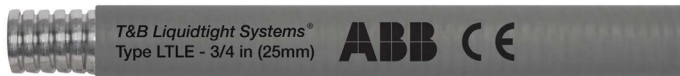

 TECHNICAL DATA SHEET

Type LTLE - Halogen Free Aluminum, CE Certified

Liquid-tight flexible metallic conduit

T&B Liquidtight Systems®



Aluminum Halogen Free, CE Certified Liquid-tight Flexible Metallic Conduits are designed for applications with light weight requirements where safety concerns exist regarding a material's reaction in a fire situation.

Certifications / Standards:



Features & Benefits:

- Designed to meet UL 360 ID/OD dimension requirements
- Full compliance to IEC 61386 requirements, CE Certified
- Trade sizes from 3/8" to 4" (12mm to 103mm)
- Coordinated performance with Series 52/53 Steel Fittings
- Ingress protection ratings aligned with industrial enclosures
- Smooth extruded jackets provide best performance with fittings

Applications:

- Halogen Free, industrial grade liquid-tight flexible metallic conduit
- Low smoke, low toxicity and flame retardant
- Enclosed public facilities, mass transit vehicles, tunnels, subways
- Sunlight (UV) resistant
- Used extensively in environments where flexibility is necessary for motion, vibration, bending and light weight is required
- Liquid-tight applications against water, moderate oils and chemicals
- For use in electrical circuits up to 1,000 V

Construction / Material / Finish:

- Aluminum core, corrosion resistant
- Zero halogen TPU (polyurethane) extruded smooth jacket
- Ink printed ratings and technical information
- Full range of trade sizes from 3/8" to 4" (12mm to 100mm)
 - 3/8" to 1-1/4", square lock design
 - 1-1/2" to 4", fully interlocked design
- Color: gray (standard)

Combustion & Flamability | Test | Value

- Vertical Burn - Jacket Material | UL 94 | V-0 rating: No flaming drips
- Vertical Burn - Jacket Material | UL 360 | Pass: No flaming drips
- Oxygen Index % | D2863 | 28.5
- Flame Spread Index | ASTM E162 | 25: No flaming drips
- Smoke Generation (flaming) | ASTM E662 (NFPA 258) | Ds 41@1.5 min./Ds 113@4.0 min.
- Smoke Generation (non-flaming) | ASTM E662 (NFPA 258) | Ds 4@1.5 min./Ds 19@4.0 min.
- Toxic Gas Generation | Bombardier SMP 800-C | Pass
- Toxicity Index | NES 713 | 3.9

Note: Test data is based on controlled laboratory conditions and does not reflect performance in actual fire conditions

Environment ratings:

Working Temperature:

- Gen: Dry: -40 to +80°C (-40 to +176°F)
Oil: -40 to +70°C (-40 to +158°F)
Wet: -40 to +60°C (-40 to +140°F)
- IEC/CE: Gen: -45 to +90°C (-49 to +194°F)

Chemical resistance guide:

- See publication TDS000117

Conforms to:

- IEC 61386-1, -23, Conduit systems for cable management
- EU DoC: EC-012-16-161
- CE (Conformité Européene, European Conformity)
- RoHS (Restriction of Hazardous Substances Directive)

Standards requirements:

Meets all UL 360 and CSA C22.2 No. 56 standard requirements including:

- ID and OD dimensions

Meets all IEC 61386-1, -23 standard requirements including:

- Compression strength - Code 2 Light; 320 N/50mm
- Impact strength - Code 3 Medium; 2 Joules
- Tensile strength - Code 3 Medium; 500 N/2 min.

Ingress protection:

- Provides "ingress integrity" between enclosures, fittings, conduits and seals when using LTLE conduits and series 5200AL liquid-tight fittings.
- Covers all trade sizes from 3/8" to 4" (12mm to 103mm)

System ingress rating:

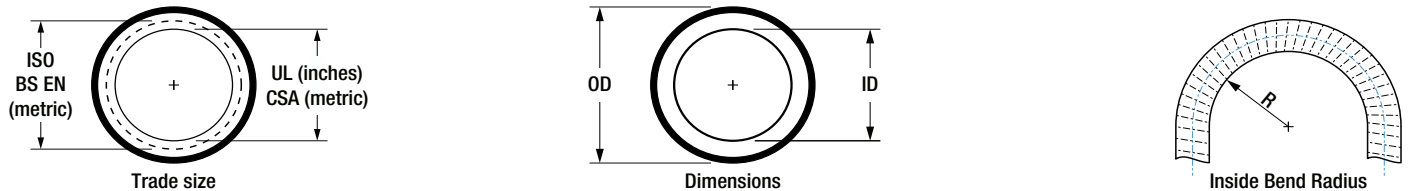
- Products tested and comply with UL 50/50E and CSA C22.2 No. 94 Type rating requirements
 - Indoor: Type 4, 12, 13
 - Outdoor: Type 3, 3R, 4
- NEMA 250: Type 3, 3R, 4, 12, 13

IEC system ingress rating:

- IP ingress protection per IEC 60529 requirements
- IEC ingress rating: IP66, IP67

Type LTLE - Halogen Free Aluminum, CE Certified
Product selection and dimensions

Product selection														
Trade size						Coil Length								
UL	CSA	ISO BS EN	Carton			Standard reel			Bulk reel			Weight		
Inches	mm	mm	Part No./GID	Feet	Meter	Part No./GID	Feet	Meter	Part No./GID	Feet	Meter	lbs/ft	kg/m	
3/8	12	16	LTLES01G-C	100	30	LTLES01G-K	500	150	-	-	-	0.11	0.16	
			7TAA012LROR0000			7TAA012LROR0010								
1/2	16	20	LTLES02G-C	100	30	LTLES02G-K	500	150	-	-	-	0.15	0.22	
			7TAA012LROR0001			7TAA012LROR0011								
3/4	21	25	LTLES03G-C	100	30	LTLES03G-K	500	150	-	-	-	0.20	0.30	
			7TAA012LROR0002			7TAA012LROR0012								
1	27	32	LTLES04G-C	100	30	LTLES04G-J	400	120	-	-	-	0.29	0.43	
			7TAA012LROR0003			7TAA012LROR0013								
1 1/4	35	40	LTLES05G-B	50	15	LTLES05G-E	200	60	-	-	-	0.40	0.60	
			7TAA012LROR0004			7TAA012LROR0014								
1 1/2	41	50	LTLES06G-B	50	15	LTLES06G-D	150	45	-	-	-	0.56	0.83	
			7TAA012LROR0005			7TAA012LROR0015								
2	53	70	LTLES07G-B	50	15	LTLES07G-C	100	30	-	-	-	0.73	1.09	
			7TAA012LROR0006			7TAA012LROR0016								
2 1/2	63	70	LTLES08G-A	25	8	-	-	-	-	-	-	1.04	1.55	
			7TAA012LROR0007			-								
3	78	80	LTLES09G-A	25	8	-	-	-	-	-	-	1.44	2.14	
			7TAA012LROR0008			-								
4	103	100	LTLES11G-A	25	8	-	-	-	-	-	-	1.92	2.86	
			7TAA012LROR0009			-								



Part number	Trade Size			Minimum inside bend radius				Inches				Millimeters			
	UL	CSA	ISO BS EN	Static		Dynamic		Inside (ID)		Outside (OD)		Inside (ID)		Outside (OD)	
	Inches	mm	mm	Inches	mm	Inches	mm	Min	Max	Min	Max	Min	Max	Min	Max
LTLES01G-*	3/8	12	16	2.0	51	4.0	102	0.484	0.504	0.690	0.710	12.3	12.8	17.5	18.0
LTLES02G-*	1/2	16	20	3.0	76	5.0	127	0.622	0.642	0.820	0.840	15.8	16.3	20.8	21.3
LTLES03G-*	3/4	21	25	4.2	107	6.0	152	0.820	0.840	1.030	1.050	20.8	21.3	26.2	26.7
LTLES04G-*	1	27	32	5.5	140	12.0	305	1.041	1.066	1.290	1.315	26.4	27.1	32.8	33.4
LTLES05G-*	1 1/4	35	40	7.0	178	15.0	381	1.380	1.410	1.630	1.660	35.1	35.8	41.4	42.2
LTLES06G-*	1 1/2	41	50	4.5	114	17.0	432	1.575	1.600	1.865	1.900	40.0	40.6	47.4	48.3
LTLES07G-*	2	53	63	6.0	152	22.0	559	2.020	2.045	2.340	2.375	51.3	51.9	59.4	60.3
LTLES08G-*	2 1/2	63	70	8.0	203	30.0	762	2.480	2.505	2.840	2.875	63.0	63.6	72.1	73.0
LTLES09G-*	3	78	80	10.0	254	36.0	914	3.070	3.100	3.460	3.500	78.0	78.7	87.9	88.8
LTLES11G-*	4	103	100	12.0	305	52.0	1,321	4.000	4.040	4.460	4.500	101.6	102.6	113.3	114.3

Note: Products must be installed in accordance with applicable national and local electrical codes

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