
 TECHNICAL DATA SHEET

Type LTAE - Aluminum, CE Certified

Liquid-tight flexible metallic conduit

T&B Liquidtight Systems®



Aluminum, CE Certified Liquid-tight Flexible Metallic Conduits provide excellent performance in corrosive environments and installations where lightweight wireway is required

Certifications / Standards:



Features & Benefits:

- Designed to meet UL 360 ID/OD dimension requirements
- Full compliance to IEC 61386-1, -23 requirements, CE Certified
- Trade sizes from 3/8" to 6" (12mm to 155mm)
- Coordinated performance with Series 5200AL Fittings
- NEMA & IP ingress protection ratings aligned with industrial enclosures
- Smooth extruded jackets provide best performance with fittings

Applications:

- Aluminum liquid-tight flexible metallic conduit for use in corrosive environments
- Applications with light weight requirements, 40-50% lighter than typical steel construction
- Used extensively in applications where flexibility is necessary for motion, vibration and bending
- Liquid-tight applications against water, oils, cutting fluids, mild acids
- For use in electrical circuits up to 1,000 V

Construction / Material / Finish:

- Aluminum Core
- PVC (Polyvinyl Chloride) extruded smooth jacket
- Flame retardant and sunlight UV resistant
- Ink jet printed ratings and technical information
- Full range of trade sizes from 3/8 to 6" (12 to 155mm)
- 3/8" to 1-1/4", square lock design
- 1-1/2" to 6", fully interlocked design
- Colors: Machine tool gray (standard), black (optional)

Environment ratings:

Working Temperature:

- Gen: Dry: -20 to +80°C (-4 to +176°F)
Oil: -20 to +70°C (-4 to +158°F)
Wet: -20 to +60°C (-4 to +140°F)
- IEC/CE: Gen: -15 to +60°C (+5 to +140°F)

Chemical resistance guide:

- See publication TDS000117

Conforms to:

- IEC 61386-1, -23, Conduit Systems for Cable Management
 - EU Doc: EC-012-16-162
- RoHS (Restriction of Hazardous Substance Directive)

Standards requirements:

Designed to 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 & seals when using LTAE Conduits and Series 5200/5300 Liquidtight Fittings
- Covers all trade sizes from 3/8" to 4" (12 .. 103mm)

System ingress ratings:

- 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

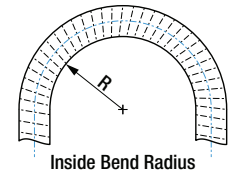
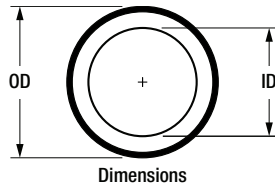
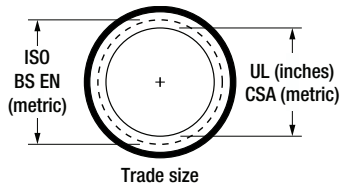
IEC system ingress rating:

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

Type LTAE - 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	LTAES01G-C	100	30	LTAES01G-K	500	150	LTAES01G-L	1,000	300	0.11	0.16
			7TAA012LB0R0000			7TAA012LB0R0012			7TAA012LB0R0019				
1/2	16	20	LTAES02G-C	100	30	LTAES02G-K	500	150	LTAES02G-L	1,000	300	0.15	0.22
			7TAA012LB0R0001			7TAA012LB0R0013			7TAA012LB0R0020				
3/4	21	25	LTAES03G-C	100	30	LTAES03G-K	500	150	LTAES03G-L	1,000	300	0.20	0.30
			7TAA012LB0R0002			7TAA012LB0R0014			7TAA012LB0R0021				
1	27	32	LTAES04G-C	100	30	LTAES04G-J	400	120				0.29	0.43
			7TAA012LB0R0003			7TAA012LB0R0015							
1 1/4	35	40	LTAES05G-B	50	15	LTAES05G-E	200	60				0.40	0.60
			7TAA012LB0R0004			7TAA012LB0R0016							
1 1/2	41	50	LTAES06G-B	50	15	LTAES06G-D	150	45				0.56	0.83
			7TAA012LB0R0005			7TAA012LB0R0017							
2	53	70	LTAES07G-B	50	15	LTAES07G-C	100	30				0.73	1.09
			7TAA012LB0R0006			7TAA012LB0R0018							
2 1/2	63	70	LTAES08G-A	25	8							1.04	1.55
			7TAA012LB0R0007										
3	78	80	LTAES09G-A	25	8							1.44	2.14
			7TAA012LB0R0008										
4	103	100	LTAES11G-A	25	8							1.92	2.86
			7TAA012LB0R0009										
5	129	-	LTAES12G-A	25	8							2.52	3.75
			7TAA012LB0R0010										
6	155	-	LTAES13G-A	25	8							3.16	4.70
			7TAA012LB0R0011										



Dimensions

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	Inches	mm	Min	Max	Min	Max	Min	Max	Min	Max
LTAES01G-*	3/8	12	16	2.0	51	-	-	0.484	0.504	0.690	0.710	12.3	12.8	17.5	18.0
LTAES02G-*	1/2	16	20	3.0	76	-	-	0.622	0.642	0.820	0.840	15.8	16.3	20.8	21.3
LTAES03G-*	3/4	21	25	4.2	107	-	-	0.820	0.840	1.030	1.050	20.8	21.3	26.2	26.7
LTAES04G-*	1	27	32	5.5	140	-	-	1.041	1.066	1.290	1.315	26.4	27.1	32.8	33.4
LTAES05G-*	1 1/4	35	40	7.0	178	-	-	1.380	1.410	1.630	1.660	35.1	35.8	41.4	42.2
LTAES06G-*	1 1/2	41	50	4.5	114	-	-	1.575	1.600	1.865	1.900	40.0	40.6	47.4	48.3
LTAES07G-*	2	53	63	6.0	152	-	-	2.020	2.045	2.340	2.375	51.3	51.9	59.4	60.3
LTAES08G-*	2 1/2	63	70	8.0	203	-	-	2.480	2.505	2.840	2.875	63.0	63.6	72.1	73.0
LTAES09G-*	3	78	80	10.0	254	-	-	3.070	3.100	3.460	3.500	78.0	78.7	87.9	88.8
LTAES11G-*	4	103	100	12.0	305	-	-	4.000	4.040	4.460	4.500	101.6	102.6	113.3	114.3
LTAES12G-*	5	129	-	17.5	445	-	-	4.975	5.035	5.505	5.565	126.4	127.9	139.8	141.4
LTAES13G-*	6	155	-	22.5	572	-	-	6.015	6.075	6.565	6.625	152.8	154.3	166.8	168.3

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

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