
 TECHNICAL DATA SHEET

Type LTOE - Oil Resistant, CE Certified

Liquid-tight flexible metallic conduit

T&B Liquidtight Systems®



Oil Resistant, CE Certified Liquid-tight Flexible Metallic Conduits that incorporate a high quality PVC jacket for severe exposure to oils and other materials

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 52/53 Steel Fittings
- Ingress protection ratings aligned with industrial enclosures
- Smooth extruded jackets provide best performance with fittings

Applications:

- Used extensively in the machine tool and other industrial environments where flexibility is necessary for motion, vibration and bending
- The inherent sunlight resistance of PVC enables this product to be used in outdoor applications
- Liquid-tight applications against water, oils, cutting fluids, mild acids
- For use in electrical circuits up to 1,000 V

Construction / Material / Finish:

- Hot-dipped Zinc Galvanized Steel Core
- PVC (Polyvinyl Chloride) extruded smooth jacket
- Flame retardent 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 2", square lock design with cord filler
- 2-1/2" to 6", fully interlocked design
- Colors: Machine tool gray (standard), black (optional)

Environment ratings:

Working Temperature:

- Gen: Dry: -30 to +80°C (-22 to +176°F)
Dry: -30 to +90°C (-22 to +194°F) intermittent
Oil: -30 to +70°C (-22 to +158°F)
Wet: -30 to +60°C (-22 to +140°F)
- IEC/CE: Gen: -25 to +90°C (-13 to +194°F)

Chemical resistance guide:

- See publication TDS000117

Conforms to:

- IEC 61386-1, -23, Conduit Systems for Cable Management
 - EU Doc: EC-012-16-159
- 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 4 Heavy; 1250 N/50mm
- Impact strength - Code 4 Heavy; 6 Joules
- Tensile strength - Code 3 Medium; 500 N/2 min.

Ingress protection:

- Provides "Ingress Integrity" between enclosures, fittings, conduits & seals when using LTOE 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

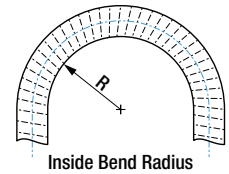
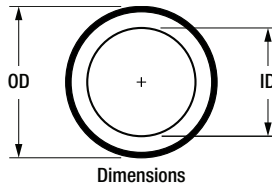
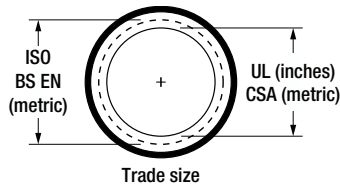
IEC system ingress rating:

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

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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	LTOES01G-C	100	30	LTOES01G-K	500	150	LTOES01G-L	1,000	300	0.20	0.30
			7TAA012LR0R0000			7TAA012LR0R0012			7TAA012LR0R0019				
1/2	16	20	LTOES02G-C	100	30	LTOES02G-K	500	150	LTOES02G-L	1,000	300	0.24	0.36
			7TAA012LR0R0001			7TAA012LR0R0013			7TAA012LR0R0020				
3/4	21	25	LTOES03G-C	100	30	LTOES03G-K	500	150	LTOES03G-L	1,000	300	0.33	0.49
			7TAA012LR0R0002			7TAA012LR0R0014			7TAA012LR0R0021				
1	27	32	LTOES04G-C	100	30	LTOES04G-J	400	120	-	-	-	0.53	0.79
			7TAA012LR0R0003			7TAA012LR0R0015							
1 1/4	35	40	LTOES05G-B	50	15	LTOES05G-E	200	60	-	-	-	0.68	1.01
			7TAA012LR0R0004			7TAA012LR0R0016							
1 1/2	41	50	LTOES06G-B	50	15	LTOES06G-D	150	45	-	-	-	0.88	1.31
			7TAA012LR0R0005			7TAA012LR0R0017							
2	53	70	LTOES07G-B	50	15	LTOES07G-C	100	30	-	-	-	1.02	1.52
			7TAA012LR0R0006			7TAA012LR0R0018							
2 1/2	63	70	LTOES08G-A	25	8	-	-	-	-	-	-	1.92	2.86
			7TAA012LR0R0007										
3	78	80	LTOES09G-A	25	8	-	-	-	-	-	-	2.52	3.75
			7TAA012LR0R0008										
4	103	100	LTOES11G-A	25	8	-	-	-	-	-	-	3.50	5.21
			7TAA012LR0R0009										
5	129	-	LTOES12G-A	25	8	-	-	-	-	-	-	4.68	6.96
			7TAA012LR0R0010										
6	155	-	LTOES13G-A	25	8	-	-	-	-	-	-	5.72	8.51
			7TAA012LR0R0011										



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	Inches	mm	Min	Max	Min	Max	Min	Max
LTOES01G-*	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
LTOES02G-*	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
LTOES03G-*	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
LTOES04G-*	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
LTOES05G-*	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
LTOES06G-*	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
LTOES07G-*	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
LTOES08G-*	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
LTOES09G-*	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
LTOES11G-*	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
LTOES12G-*	5	129	-	17.5	445	-	-	4.975	5.035	5.505	5.565	126.4	127.9	139.8	141.4
LTOES13G-*	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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