



FLEXIBLE ELECTRICAL CONDUIT



**electri-flex company**

Jacketed Metallic

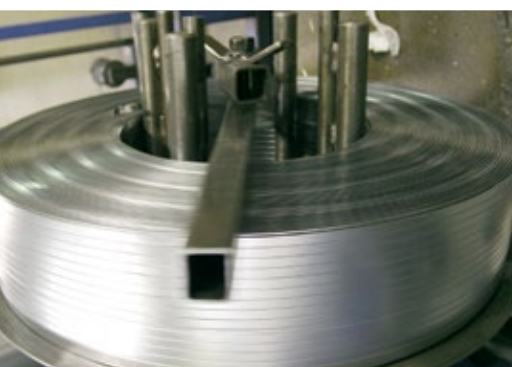
EMI / RFI Shielded

Unjacketed Metallic

Nonmetallic



# Leadership in flexible



Liquatite® by Electri-Flex has earned a global reputation for manufacturing innovation and product quality. The pages that follow detail the most diverse flexible electrical conduit line in the world, with respect to available sizes, types and colors. But Electri-Flex's real source of success has sprung from its partnership philosophy. This philosophy was best stated by H. W. "West" Kinander, Jr., former president and co-owner, shortly before his untimely death in 1991.

*"Quality, service, fair distributor margins and loyalty to one's business partners has been the theme since our company began. It will continue to be the benchmark by which our company will be judged. You have my word."*



—H. W. "West" Kinander, Jr.

# electrical conduit

## for over 60 years

### The Liguatite Line

The Liguatite line includes nearly 50 types of flexible electrical conduit for contractors, OEMs, industrial maintenance and repair (MRO), government, utility and export users. Most conduits are available as standard products, and Electri-Flex has the manufacturing capability to develop specialized products as they are needed by customers.

An innovator in the liquidtight conduit industry, Electri-Flex is also a leader in packaging improvements and manufacturing patents. The majority of production tools and methods used are unique in that they are developed and built by Electri-Flex in its own tool shop in Roselle, Illinois, USA.

### Quality Assurance

Quality control for Liguatite is performed by all levels of employment. To assure a high degree of quality assurance, Electri-Flex utilizes a vertically integrated manufacturing and production system, with each step performed in-house by a team of experts.

Our Quality Assurance Program offers testing procedures from the time raw materials are received at the facility to when the finished conduit is packaged and readied for shipping. Each foot of conduit produced passes through a series of gauges to determine diameters. Actual physical appearance is also checked.

A Quality Control Inspector randomly collects samples of each product at various stages of production. Testing covers such characteristics as tension strength, crush, flexibility and flammability. Further testing is also conducted during unannounced visits by both UL and CSA inspectors.

### Distribution and Representative Partners

Electri-Flex's representatives and distributors are the leaders in the markets they serve. The partners who have made Electri-Flex an industry leader share these qualities:

- **Representatives** — High degree of integrity and impeccable business reputation, knowledge of the product and the customer, carry compatible lines to make customer and distributor calls more productive, and day-to-day involvement by the principal of the company. For a representative in your area, please visit [www.electriflex.com](http://www.electriflex.com)
- **Distributors** — Industrially oriented, sound relations with customers, solid reputation in the community and quality sales people.

We choose only top-performing distributors who have the ability to grow with us in the electrical industry.

### Marketing Support

Making the best product doesn't create success without exceptional sales, service

and marketing programs that meet the needs of representatives and distributors. Our sales support services include:

- Rep warehouse locations across the United States
- On-site 64,000-square-foot distribution center
- Shipments of stocked items within one to three days from consigned stock locations
- Responsive sales and customer service departments
- Effective advertising support program that produces qualified leads
- Referrals on inquiries within a distributor's territory
- Special "off-sheet" price quotations
- Training seminars
- Liberal catalog and sample policy

### A Close-knit Family Business

Electri-Flex was founded and is still owned by the Kinander family. The cultural focus is on high-quality products and services, with a strong sense of loyalty to Electri-Flex and its partners. We are dedicated to keeping this spirit of quality and loyalty alive within each employee. Electri-Flex's employees, representatives, distributors and customer partners continue to create the success Electri-Flex has enjoyed for more than 60 years.

### Industry Affiliations

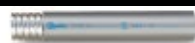


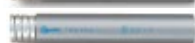






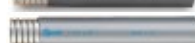


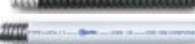





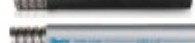














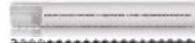



# Conduit Application Guide

	Conduit Type	Page	Flexibility				Metal Used	Plastic Used	High Mech. Strength	Listed for Direct Burial	Halogen-Free	Low Fire Hazard	Sunlight/UV Resistant	Accepts Standard Liquid-tight Fittings	Self-Extinguishing	EMI/RFI Shielding	Approval
			Continued Flexing	Small Bend Radius	Flexible	Pliable (Static)											
<b>JACKETED METALLIC</b>	TYPE LA	9			•		Steel	PVC	•	•			Best	•	•		UL SF CE
	TYPE LT	10		•	•		Steel	PVC					Good	•			CE
	TYPE EF	11		•	•		Steel	PVC					Good	•			CE
	TYPE ATLA	12			•		Steel	PVC	•	•			Best	•	•		UL SF CE
	TYPE AT	13		•	•		Steel	PVC					Best	•			CE
	TYPE ATX	14		•	•		Steel	TPR			•		Best	•			CE
	TYPE ALT	15			•		Aluminum	PVC					Good	•			CE
	TYPE ZHLA	16			•		Steel	PU	•	•	•	•	Best	•	•		UL SF CE
	TYPE CEA	17			•		Steel	PU			•	•	Best	•	•		CE
	TYPE ACEA	18			•		Aluminum	PU			•	•	Best	•	•		CE
	TYPE LOR	19		•	•		Steel	PVC					Best	•			CE
	TYPE CSA	20			•		Steel	PVC	•				Good	•	•		SF CE
	TYPE VJC	21		•	•		Steel	PVC						•			
	TYPE LAFG	22		•	•		Steel	PVC	•	•			Best	•	•		UL NSF/FDA CE
	TYPE LTFG	23		•	•		Steel	PVC					Good	•			NSF/FDA CE
	TYPE LSSFG	24			•		Stainless Steel	PVC	•				Good	•			NSF/FDA CE
	TYPE LTSS	25			•		Stainless Steel	PVC	•				Good	•			CE
	TYPE ZHSS	26			•		Stainless Steel	PU	•		•	•	Best	•	•		CE
	TYPE ATXSS	27			•		Stainless Steel	TPR	•		•		Good	•			CE
	TYPE ATSS	27			•		Stainless Steel	PVC	•				Best	•			CE
TYPE CBLA	28			•		Steel	PVC	•	•			Best	•	•		UL SF CE	
<b>EMI/RFI</b>	TYPE SLA	32			•		Steel	PVC	•	•	Available	Available	Best	•	•	•	UL CE
	TYPE EMS	33			•		Bronze	PVC			Available	Available	Best	•	•	•	CE
	TYPE EMCS	34			•		Bronze	PVC			Available	Available	Best	•	•	•	CE
<b>UNJACKETED METALLIC</b>	TYPE BR	37			•		Steel		•								UL SF CE
	TYPE ABR	38			•		Aluminum										UL SF CE
	TYPE ABRH	39			•		Aluminum		•								UL** SF CE
	TYPE USL	40		•	•		Steel										RA
	TYPE SL	41		•	•		Steel										
	TYPE UG	42				•	Steel										
<b>NONMETALLIC</b>	CORRLOK®	44	•	•	•			Nylon	•		•	•	Good		•		RA
	TYPE LNM-P	45	•		•			PVC					Best	FNMC-A	•		UL SF
	TYPE NM	46			•			PVC	•	•			Best	•	•		UL SF
	TYPE NMHT	47			•			PVC	•	•			Best	•	•		UL SF
	TYPE NMFG	48			•			PVC					Good	•			UL SF NSF, FDA
	TYPE NM2	49	•		•			PVC					Good	•	•		RA SF

\*Type BR is CSA certified in 3/8" only. Type ABR is CSA certified in 3/8" and 7/16" only. \*\*Type ABRH is UL listed in sizes 1/2" - 4" only. Shield-Flex, SLA, EMS, EMCS, HFSLA, HFEMS, HFEMCS, are trademarks of Electric-Flex Company, registered in the U.S. Patent and Trademark Office.

# Conduit Application Guide

		Temperature Range											General Chemical Resistance				
		°C	-60°	-40°	-20°	0°	50°	60°	75°	80°	90°	105°	150°	Oils	Acids		
		°F	-76°	-40°	-4°	32°	122°	140°	167°	176°	194°	221°	302°				
Conduit Type	Page																
<b>JACKETED METALLIC</b>		TYPE LA	9													•	•
		TYPE LT	10													•	•
		TYPE EF	11													•	•
		TYPE ATLA	12													•	•
		TYPE AT	13													•	•
		TYPE ATX	14													•	•
		TYPE ALT	15													•	•
		TYPE ZHLA	16													•	•
		TYPE CEA	17													•	•
		TYPE ACEA	18													•	•
		TYPE LOR	19													•	•
		TYPE CSA	20													•	•
		TYPE VJC	21													•	•
		TYPE LAFG	22													•	•
		TYPE LTFG	23													•	•
		TYPE LSSFG	24													•	•
		TYPE LTSS	25													•	•
		TYPE ZHSS	26													•	•
		TYPE ATXSS	27													•	•
		TYPE ATSS	27													•	•
	TYPE CBLA	28													•	•	
<b>EMI/RFI</b>		TYPE SLA	32												•	•	
		TYPE EMS	33												•	•	
		TYPE EMCS	34												•	•	
<b>UNJACKETED METALLIC</b>		TYPE BR	37														
		TYPE ABR	38														
		TYPE ABRH	39														
		TYPE USL	40														
		TYPE SL	41														
		TYPE UG	42														
<b>NONMETALLIC</b>		CORRLOK®	44													•	•
		TYPE LNM-P	45													•	•
		TYPE NM	46													•	•
		TYPE NMHT	47													•	•
		TYPE NMFG	48													•	•
		TYPE NM2	49													•	•

# Products for Every Market

**E**lectri-Flex offers flexible conduit for any application. The diversity of the Liquatite® product line allows us to serve the more than 20 major markets listed in this catalog as well as many other specialty markets.

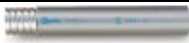












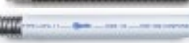





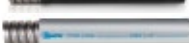














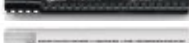

Electri-Flex conduits are manufactured with features and specifications that allow them to be used across multiple markets. Many products are tailor-made to specific markets, such as for food processing and pharmaceuticals, while others can be used across a wide variety of markets. Some markets include:

- Construction
- Data Center
- Defense
- Fixture/AC Whips
- Food Processing & Pharmaceuticals
- Healthcare
- Machine Tools (OEM)
- Mining, Oil & Gas Refineries
- Power Plants, Steel Mills & Utilities
- Rail/Transit
- Renewable Energy
- Robotics
- Security Cameras
- Ship Building & Aerospace
- Telecommunications & Cell Towers
- Wastewater

The following page provides an overview of the primary markets served by Electri-Flex. Use it to find the best conduit for these markets.



# Markets

			Market																						
			Aerospace	Cell Towers	Construction	Data Centers	Defense	Fixture/AC Whips	Food Processing	Healthcare	Machine Tools (OEM)	Mining	Oil & Gas Refineries	Pharmaceuticals	Power Plants	Rail/Transit	Renewable Energy	Robotics	Security	Ship Building	Steel Mills	Telecommunications	Utilities	Wastewater Treatment	
Conduit Type	Page																								
<b>JACKETED METALLIC</b>		TYPE LA	9	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•
		TYPE LT	10								•		•		•		•					•	•	•	
		TYPE EF	11		•	•						•													
		TYPE ATLA	12			•	•	•			•		•	•		•	•	•		•	•	•	•	•	•
		TYPE AT	13									•	•				•					•	•	•	
		TYPE ATX	14			•						•	•		•	•	•			•	•	•	•	•	
		TYPE ALT	15	•																•	•				•
		TYPE ZHLA	16			•	•	•			•		•	•		•	•	•		•	•	•	•	•	•
		TYPE CEA	17								•			•			•					•		•	
		TYPE ACEA	18								•						•								
		TYPE LOR	19									•		•								•		•	
		TYPE CSA	20									•	•			•						•		•	
		TYPE VJC	21									•							•	•					
		TYPE LAFG	22							•	•				•										
		TYPE LTFG	23							•	•				•										
		TYPE LSSFG	24							•	•				•										
		TYPE LTSS	25					•			•											•			•
		TYPE ZHSS	26					•			•		•	•		•					•	•			•
		TYPE ATXSS	27					•						•		•					•	•			•
		TYPE ATSS	27					•			•			•		•					•	•			•
	TYPE CBLA	28				•																			
<b>EMI/RFI</b>		TYPE SLA	32	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		TYPE EMS	33	•	•		•			•								•			•		•		
		TYPE EMCS	34	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
<b>UNJACKETED METALLIC</b>		TYPE BR	37			•		•												•			•	•	
		TYPE ABR	38			•		•												•				•	
		TYPE ABRH	39			•														•			•	•	
		TYPE USL	40																	•					
		TYPE SL	41																	•					
		TYPE UG	42																	•					
<b>NONMETALLIC</b>		CORRLOK®	44	•												•	•	•				•			
		TYPE LNM-P	45								•	•	•		•		•	•				•			
		TYPE NM	46		•	•	•		•		•				•	•	•	•		•	•	•	•	•	
		TYPE NMHT	47		•	•									•		•	•				•	•	•	
		TYPE NMFG	48							•					•										
	TYPE NM2	49								•							•	•				•			

# Jacketed Metallic

Electri-Flex offers the broadest variety of liquidtight flexible metal conduits, ranging from UL listed and CSA certified products to specialized conduits designed for extreme temperatures, non-halogen, low smoke, RFI shielding and food grade applications.

These conduits offer the advantages of a flexible sealed raceway coupled with the strength of a metal core. For more information on our Jacketed Metallic Conduits, see below for an overview or continue through this section.

Conduit Type		Page
	<b>TYPE LA</b>	9
	<b>TYPE LT</b>	10
	<b>TYPE EF</b>	11
	<b>TYPE ATLA</b>	12
	<b>TYPE AT</b>	13
	<b>TYPE ATX</b>	14
	<b>TYPE ALT</b>	15
	<b>TYPE ZHLA</b>	16
	<b>TYPE CEA</b>	17
	<b>TYPE ACEA</b>	18
	<b>TYPE LOR</b>	19
	<b>TYPE CSA</b>	20
	<b>TYPE VJC</b>	21
	<b>TYPE LAFG</b>	22
	<b>TYPE LTFG</b>	23
	<b>TYPE LSSFG</b>	24
	<b>TYPE LTSS</b>	25
	<b>TYPE ZHSS</b>	26
	<b>TYPE ATXSS</b>	27
	<b>TYPE ATSS</b>	27
	<b>TYPE CBLA</b>	28

## Distinctive Characteristics May Include:

- UL listed, CSA certified
- CE
- NSF Certified Component
- WEEE and RoHS Compliant
- Halogen-free
- Flame-resistant
- High impact and crush strength
- Resistant to many chemicals
- Sunlight-resistant
- Withstands extreme temperature ranges

## Applications / Vertical Markets:

- Passenger Rail Vehicle Wiring
- Industrial Control Equipment
- Machine Tools
- Textile Machinery
- Molding / Extrusion Equipment
- Fiber Optics
- Medical Equipment
- Food and Pharmaceutical Equipment
- Healthcare
- Data Centers
- Waste Water Treatment
- Utility



We can blend to any color preference for quick identification of circuits.

See page 29 for details.



# TYPE LA



## Markets:

- Aerospace
- Cell Towers
- Construction
- Data Centers
- Defense
- Fixture/AC Whips
- Food Processing
- Healthcare
- Machine Tools (OEM)
- Mining
- Oil & Gas Refineries
- Pharmaceuticals
- Power Plants
- Rail/Transit
- Renewable Energy
- Security
- Ship Building
- Steel Mills
- Telecom
- Utilities
- Wastewater Treatment

A flexible steel conduit which is both listed by Underwriters Laboratories Inc. and certified by Canadian Standards Association. It offers outstanding protection against wet, oily conditions and is permitted for use in exposed or concealed locations.

## Construction:

### Inner Core:

- Hot Dipped Galvanized Steel
- 3/8" – 1-1/4" Squarelock Profile with continuous bonding strip
- 1-1/2" – 4" Fully Interlocked Profile


### Liquidtight Jacket:

- Flexible PVC
- Resistant to Oils and Mild Acids
- Flame Retardant
- Sunlight Resistant (UV)

## Application:


This conduit is intended for installation in accordance with Article 350 of the NEC (ANSI/NFPA-70) and in section 14.5.4 of the ANSI/NFPA-79 Standard for Industrial Machinery:


- Listed and marked for Direct Burial and in Poured Concrete
- For containment of 1000 volt and lower potential circuits
- Suitable as a grounding conductor when used for circuits rated up to 20A for the 3/8 & 1/2 inch trade sizes and 60A for the 3/4 through 1-1/4 inch trade sizes in lengths six feet or less per NEC Article 250.118(7). Larger sizes require separate grounding conductor.
- Installations in hazardous (classified) locations:
  - Class I Div. 2: Article 501.10 (B)(2) & 501.30 (B)
  - Class II Div. 1: Article 502.1 (A)(2) & 502.30 (B) Div. 2: 502.10 (B)(2)
  - Class III Div. 1: Article 503.10 (A)(2) & 503.30 (B) Div. 2: 503.10 (A)(2)
- Installed under raised floors in Data Processing Areas Articles 645.5 (2)
- Electric Signs and Outline Lighting over 1000 volts Articles 600.7/600.32(A)(1)
- Permitted for Service Entrance wiring to six feet Article 230.43
- Used as Feeders and Services at Marinas and Boatyards Article 553.7(B)
- Wiring on Building Article 225.10
- Conductor Enclosures Adjacent to Motors over 1000 V Article 430.223
- Underground Service, Feeder, Branch Circuit, and Recreational Vehicle Site Feeder Circuit Conductors Article 551.80
- Elevators and Hoistways Article 620.21
- Pools and Fountains Article 680
- Bodies of water. Article 682
- Fire Pumps. Article 695


 Proudly made in the U.S.A.


## Product Information

### Certifications & Compliance

 Listed File # E29278. Conforms to Underwriters Laboratories Standard ANSI/UL-360 for Liquidtight Flexible Steel conduit.

 Certified File #LL18858. Conforms to CSA 22.2 No.56 for use per the Canadian Electrical Code C22.1 Section 12-1300. FT1

 WEEE and RoHS Compliant

 BS EN IEC 61386 Classification Code 444240650414

ARRA Certification

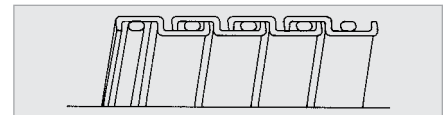
### Standard Colors

Machine Tool Gray and Black. Other colors available upon request.

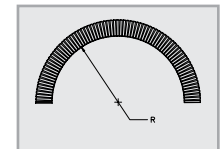
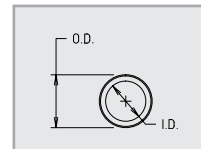
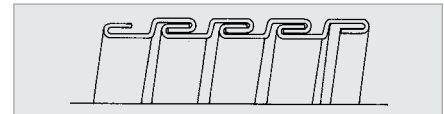
### Working Temperatures

-30°C to 80°C Dry / 60°C Wet / 70°C Oil

### Squarelock with Filler SIZES: 3/8" – 1-1/4"



### Interlock SIZES: 1-1/2" – 4"



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS		WEIGHT Lbs. per 100 Ft.	Carton (Ft.)	STANDARD LENGTH							
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Dynamic (IN.)			Part # (Gray)	Part # (Black)	Reel (Ft.)	Part # (Gray)	Part # (Black)	Reel (Ft.)	Part # (Gray)	Part # (Black)
3/8"	16	12	LA-10	0.484	0.504	0.690	0.710	2.0	4.0	29	100	20101	20801	500	20103	20803	1000	20104	20804
1/2"	20	16	LA-11	0.622	0.642	0.820	0.840	3.0	5.0	32	100	21101	21801	500	21103	21803	1000	21104	21804
3/4"	25	21	LA-12	0.820	0.840	1.030	1.050	4.2	6.0	53	100	22101	22801	500	22104	22804	1000	22110	22810
1"	32	27	LA-13	1.041	1.066	1.290	1.315	5.5	12.0	82	100	23102	23802	400	23104	23804			
1 1/4"	40	35	LA-14	1.380	1.410	1.630	1.660	7.0	15.0	102	50	24102	24802	200	24104	24804			
1 1/2"	50	41	LA-15	1.575	1.600	1.865	1.900	4.5	17.0	124	50	25102	25802	150	25104	25804			
2"	63	53	LA-16	2.020	2.045	2.340	2.375	6.0	22.0	145	50	26102	26802	100	26104	26804			
2 1/2"	70	63	LA-17	2.480	2.505	2.840	2.875	8.0	30.0	192	25	27102	27802	275	27105	27805			
3"	80	78	LA-18	3.070	3.100	3.460	3.500	10.0	36.0	252	25	28102	28802	175	28105	28805			
3 1/2"	90	91	LA-350	3.500	3.540	3.960	4.000	11.0	43.0	308	25	28502		175	28505				
4"	100	103	LA-19	4.000	4.040	4.460	4.500	12.0	52.0	350	25	29102	29502	100	29105	29505			

# TYPE LT



A general purpose flexible, non-UL spec grade liquidtight steel conduit designed for a variety of installations requiring motion, vibration and bending. It offers good mechanical and moisture protection to enclosed conductors.

## Construction:

### Inner Core:

- Corrosion Resistant Plated Steel
- 1/4" – 2" Squarelock Profile
- 2-1/2" – 6" Fully Interlocked Profile
- 5/16" – 2" Contain Nylon Cord Packing

### Liquidtight Jacket:

- Flexible PVC
- Resistant to Oils and Mild Acids

### Application:

- Machine Tools
- Industrial Environments
- Wet and Oily Locations
- Outdoor use due to the inherent UV resistance of PVC
- Compatible with standard liquidtight connectors



- Markets:**
- Machine Tools (OEM)
  - Oil & Gas Refineries
  - Power Plants
  - Renewable Energy
  - Steel Mills
  - Telecommunications
  - Utilities



Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

Manufactured to UL 360 Dimensions



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code  
443140650314

ARRA Certification

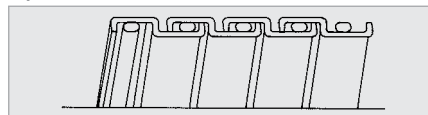
### Standard Colors

Machine Tool Gray and Black.

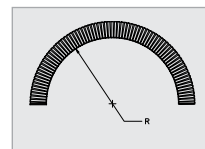
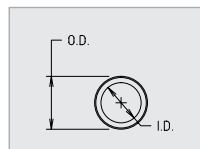
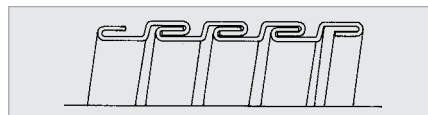
### Working Temperatures

-20°C to 80°C

Squarelock with Filler SIZES: 5/16" – 2"



Interlock SIZES: 2-1/2" – 6"



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS		WEIGHT	STANDARD LENGTH											
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Dynamic (IN.)		Lbs. per 100 Ft.	Carton (Ft.)	Part # (Gray)	Part # (Black)	Reel (Ft.)	Part # (Gray)	Part # (Black)	Reel (Ft.)	Part # (Gray)	Part # (Black)		
1/4"	10	8	LT-140	0.245	0.265	0.450	0.470	1.0		10	250	10002										
5/16"	12	10	LT-516	0.385	0.405	0.570	0.590	1.0		17	250	10012										
3/8"	16	12	LT-10	0.484	0.504	0.690	0.710	1.5	4.0	20	100	10101	10801	500	10103	10803	1000	10104	10804			
1/2"	20	16	LT-11	0.622	0.642	0.820	0.840	2.0	5.0	24	100	11101	11801	500	11103	11803	1000	11104	11804			
3/4"	25	21	LT-12	0.820	0.840	1.030	1.050	2.5	6.0	33	100	12102	12802	500	12104	12804	1000	12110	12810			
1"	32	27	LT-13	1.041	1.066	1.290	1.315	3.0	12.0	53	100	13102	13802	400	13104	13804						
1 1/4"	40	35	LT-14	1.380	1.410	1.630	1.660	3.5	15.0	68	50	14102	14802	200	14104	14804						
1 1/2"	50	41	LT-15	1.575	1.600	1.865	1.900	4.5	17.0	88	50	15102	15802	150	15104	15804						
2"	63	53	LT-16	2.020	2.045	2.340	2.375	5.5	22.0	102	50	16102	16802	100	16104	16804						
2 1/2"	70	63	LT-17	2.480	2.505	2.840	2.875	8.0	30.0	192	25	27102	27802	275	27105	27805						
3"	80	78	LT-18	3.070	3.100	3.460	3.500	10.0	36.0	252	25	28102	28802	175	28105	28805						
3 1/2"	90	91	LT-350	3.500	3.540	3.960	4.000	11.0	43.0	308	25	28502		175	28505							
4"	100	103	LT-19	4.000	4.040	4.460	4.500	12.0	52.0	350	25	29102	29502	100	29105	29505						
5"	125		LT-500	4.975	5.035	5.505	5.565	17.5		468	25	15502	15582									
6"	150		LT-600	6.015	6.075	6.565	6.625	22.5		572	25	16602	16682									



# TYPE EF



## Markets:

- Cell Towers
- Construction
- Machine Tools (OEM)

This non-UL flexible liquidtight conduit is a competitive grade version of our type LT designed for a variety of installations requiring motion, vibration and bending. It offers good mechanical and moisture protection to enclosed conductors.

## Construction:

### Inner Core:

- Corrosion Resistant Plated Steel
- 3/8" – 2" Squarelock Profile

### Liquidtight Jacket:

- Flexible PVC
- Resistant to Oils and Mild Acids

## Application:

- Machine Tools
- Industrial Environments
- Wet and Oily Locations
- Outdoor use due to the inherent UV resistance of PVC
- Compatible with standard liquidtight connectors



Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

Manufactured to UL 360 Dimensions

CE BS EN IEC 61386 Classification Code 443140650314

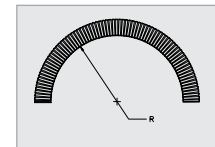
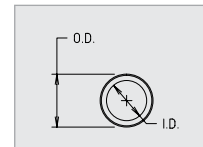
ARRA Certification

### Standard Colors

Machine Tool Gray and Black.

### Working Temperatures

-20°C to 80°C



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS		WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Dynamic (IN.)		Carton (Ft.)	Part #	Reel (Ft.)	Part #	Reel (Ft.)	Part #
3/8"	16	12	EF-10	0.484	0.504	0.690	0.710	1.5	4.0	20	100	80101	500	80103	1000	80104
1/2"	20	16	EF-11	0.622	0.642	0.820	0.840	2.0	5.0	24	100	80111	500	80113	1000	80114
3/4"	25	21	EF-12	0.820	0.840	1.030	1.050	2.5	6.0	31	100	80122	500	80124	1000	80127
1"	32	27	EF-13	1.041	1.066	1.290	1.315	3.0	12.0	43	100	80132	400	80137		
1 1/4"	40	35	EF-14	1.380	1.410	1.630	1.660	3.5	15.0	60	50	80142	200	80147		
1 1/2"	50	41	EF-15	1.575	1.600	1.865	1.900	4.5	17.0	78	50	80152	150	80154		
2"	63	53	EF-16	2.020	2.045	2.340	2.375	5.5	22.0	104	50	80162	100	80164		



Jacketed Metallic



# TYPE ATLA



- Markets:**
- Construction
  - Data Centers
  - Defense
  - Healthcare
  - Mining
  - Oil & Gas Refineries
  - Power Plants
  - Rail/Transit
  - Renewable Energy
  - Security
  - Ship Building
  - Steel Mills
  - Telecom
  - Utilities

A liquidtight flexible steel conduit designed specifically for extreme hot or cold environments. The flexible inner core is identical to that found in Type LA. The specially formulated PVC jacket remains flexible at low temperatures and resists aging at elevated temperatures. It is listed by Underwriters Laboratories Inc. and certified by Canadian Standards Association.

## Construction:

### Inner Core:

- Hot Dipped Galvanized Steel
- 3/8" – 1-1/4" Squarelock Profile with continuous bonding strip
- 1-1/2" – 4" Fully Interlocked Profile

### Liquidtight Jacket:

- Flexible PVC
- Resistant to Oils and Mild Acids
- Flame Retardant
- Sunlight Resistant (UV)

## Application:

Designed to be used with high temperature machine tool wiring. Ideal for outdoor installations in cold climates. This conduit is intended for installation in accordance with Article 350 of the NEC (ANSI/NFPA-70) and in section 14.5.4 of the ANSI/NFPA-79 Standard for Industrial Machinery:

- Permitted for use in exposed or concealed locations.
- Installations under raised floors in Data Processing Areas Article 645.5(E)(2)
- Listed and marked for direct burial and in poured concrete.
- For containment of 1000 volts and lower-potential circuits.
- Permitted for service entrance wiring to 6 feet. Article 230.43
- Sunlight-resistant
- Suitable as a grounding conductor when used for circuits rated up to 20A for the 3/8 & 1/2 inch grade sizes and 60A for the 3/4 through 1-1/4 inch trade sizes in lengths six feet or less per NEC Article 250.118(6). Larger sizes require separate grounding conductor.
- Installations in hazardous (classified) locations:
  - Class I Div. 2: Article 501.10 (B)(2) & 501.30(B)
  - Class II Div. 1: Article 502.10(A)(2) & 502.30(B) Div. 2: 502.10(B)(2)
  - Class III Div. 1: Article 503.10(A)(2) & 503.30(B) Div. 2: 503.10(A)(2)
- Use as Feeders and Services at Marinas and Boatyards. Article 553.7(B).
- Wiring on Building. Article 225.10.
- Conductor Enclosures Adjacent to Motors over 1000V. Article 430.223.
- Underground Service, Feeder, Branch Circuit, and Recreational Vehicle Site Feeder Circuit Conductors. Article 551.80.
- Elevators and Hoistways. Article 620.21.
- Pools and Fountains. Article 680.
- Bodies of water. Article 682.
- Fire pumps. Article 695
- Meets the same specifications as Type LA.



Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

Listed File # E29278. Conforms to Underwriters Laboratories Standard ANSI/UL-360 for Liquidtight Flexible Steel conduit

Certified File #LL18858. Conforms to CSA 22.2 No.56 for use per the Canadian Electrical Code C22.1 Section 12-1300. FT1

WEEE and RoHS Compliant

EN IEC 61386 Classification Code 445340650414 LVD 2006/G5/EC

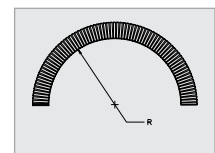
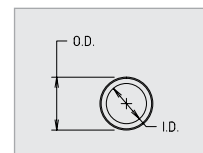
ARRA Certification

### Standard Colors

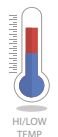
Machine Tool Gray. Other colors available upon request.

### Working Temperatures

U.L.: -55°C to 105°C Air / 60°C Wet / 70°C Oil  
CSA: -50°C to 105°C Dry/75°C Oil



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS		WEIGHT	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Dynamic (IN.)		Lbs. per 100 Ft.	Carton (Ft.)	Part # (Gray)	Reel (Ft.)	Part # (Gray)	Reel (Ft.)
3/8"	16	12	ATLA-10	0.484	0.504	0.690	0.710	2.0	4.0	29	100	80201	500	80203	1000	80204
1/2"	20	16	ATLA-11	0.622	0.642	0.820	0.840	3.0	5.0	32	100	80211	500	80213	1000	80214
3/4"	25	21	ATLA-12	0.820	0.840	1.030	1.050	4.2	6.0	53	100	80221	500	80224	1000	80225
1"	32	27	ATLA-13	1.041	1.066	1.290	1.315	5.5	12.0	82	100	80232	400	80234		
1 1/4"	40	35	ATLA-14	1.380	1.410	1.630	1.660	7.0	15.0	102	50	80242	200	80244		
1 1/2"	50	41	ATLA-15	1.575	1.600	1.865	1.900	4.5	17.0	124	50	80252	150	80254		
2"	63	53	ATLA-16	2.020	2.045	2.340	2.375	6.0	22.0	145	50	80262	100	80264		
2 1/2"	70	63	ATLA-17	2.480	2.505	2.840	2.875	8.0	30.0	192	25	80272				
3"	80	78	ATLA-18	3.070	3.100	3.460	3.500	10.0	36.0	252	25	80282				
3 1/2"	90	91	ATLA-350	3.500	3.540	3.960	4.000	11.0	43.0	308	25	80288				
4"	100	103	ATLA-19	4.000	4.040	4.460	4.500	12.0	52.0	350	25	80292				



# TYPE AT



## Markets:

- Mining
- Oil & Gas Refineries
- Renewable Energy
- Steel Mills
- Telecommunications
- Utilities

A flexible steel non-UL conduit that uses a jacketing material specifically designed for hot or cold environments.

## Construction:

### Inner Core:

- Corrosion Resistant Plated Steel
- 3/8" – 2" Squarelock Profile
- 2-1/2" – 6" Fully Interlocked Profile
- 3/8" – 2" Contain Nylon Cord Packing

### Liquidtight Jacket:

- Flexible PVC
- Resistant to Oils and Mild Acids
- High / Low Temperature Range

## Application:

- Machine Tools, Ovens, Foundries, Refrigeration
- Industrial Environments with High / Low Temperatures
- Wet and Oily Locations
- Outdoor use due to the inherent UV resistance of PVC
- Extreme Climatic Conditions
- Compatible with standard liquidtight connectors



Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

Manufactured to UL 360 Dimensions



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code  
444240650414

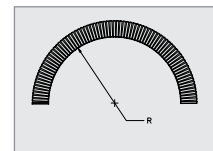
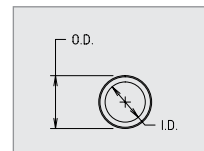
ARRA Certification

### Standard Colors

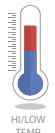
Machine Tool Gray.

### Working Temperatures

-55°C to 105°C Intermittent to 120°C



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS		WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Dynamic (IN.)		Carton (Ft.)	Part # (Gray)	Reel (Ft.)	Part # (Gray)	Reel (Ft.)	Part # (Gray)
3/8"	16	12	AT-10	0.484	0.504	0.690	0.710	1.5	4.0	20	100	30101	500	30103	1000	30104
1/2"	20	16	AT-11	0.622	0.642	0.820	0.840	2.0	5.0	24	100	31101	500	31103	1000	31104
3/4"	25	21	AT-12	0.820	0.840	1.030	1.050	2.5	6.0	33	100	32102	500	32104	1000	32110
1"	32	27	AT-13	1.041	1.066	1.290	1.315	3.0	12.0	53	100	33102	400	33104		
1 1/4"	40	35	AT-14	1.380	1.410	1.630	1.660	3.5	15.0	68	50	34102	200	34104		
1 1/2"	50	41	AT-15	1.575	1.600	1.865	1.900	4.5	17.0	88	50	35102	150	35104		
2"	63	53	AT-16	2.020	2.045	2.340	2.375	5.5	22.0	102	50	36102	100	36104		
2 1/2"	70	63	AT-17	2.480	2.505	2.840	2.875	8.0	30.0	192	25	37102	275	37105		
3"	80	78	AT-18	3.070	3.100	3.460	3.500	10.0	36.0	252	25	38102	175	38105		
3 1/2"	90	91	AT-350	3.500	3.540	3.960	4.000	11.0	43.0	308	25	38882	175	38885		
4"	100	103	AT-19	4.000	4.040	4.460	4.500	12.0	52.0	350	25	39102	100	39105		
5"	125		AT-500	4.975	5.035	5.505	5.565	17.5		468	25	35502				
6"	150		AT-600	6.015	6.075	6.565	6.625	22.5		572	25	36602				



# TYPE ATX



### Markets:

- Construction
- Mining
- Oil & Gas Refineries
- Power Plants
- Rail/Transit
- Renewable Energy
- Security
- Ship Building
- Steel Mills
- Telecommunications
- Utilities

A non-UL Liquidtight Flexible Steel conduit designed to withstand an extreme temperature range.

### Construction:

#### Inner Core:

- Corrosion Resistant Plated Steel
- 3/8" – 2" Squarelock Profile
- 2-1/2" – 6" Fully Interlocked Profile
- 3/8" – 2" Contain Nylon Cord Packing

#### Liquidtight Jacket:

- Flexible TPR (Thermoplastic Rubber)
- Resistant to Oils and Mild Acids
- Halogen-Free
- Extreme High / Low Temperature Range
- UV Stabilized
- Flame Rating of UL94-HB

### Application:

- Outdoor Equipment, Ovens, Foundries, Refrigeration
- Industrial Environments with High / Low Temperatures
- Wet and Oily Locations
- Extreme Climatic Conditions
- Compatible with standard liquidtight connectors\*



Proudly made in the U.S.A.

### Product Information

#### Certifications & Compliance

Manufactured to UL 360 Dimensions



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code  
445540650314

ARRA Certification

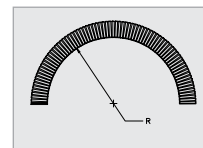
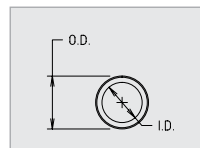
#### Standard Colors

Black. Other colors available upon request.

#### Working Temperatures

-60°C to 150°C Intermittent to 165°C

\*For applications at the maximum rated working temperature of 150°C, Electri-Flex recommends the use of Thomas&Betts 5300HT series of liquidtight connectors. The gland ring and insulated throat in these fittings are rated for 150°C.



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS		WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Dynamic (IN.)		Carton (Ft.)	Part # (Black)	Reel (Ft.)	Part # (Black)	Reel (Ft.)	Part # (Black)
3/8"	16	12	ATX-10	0.484	0.504	0.690	0.710	1.5	4.0	21	100	60201	500	60203	1000	60204
1/2"	20	16	ATX-11	0.622	0.642	0.820	0.840	2.0	5.0	27	100	61201	500	61203	1000	61204
3/4"	25	21	ATX-12	0.820	0.840	1.030	1.050	2.5	6.0	39	100	62202	500	62204	1000	62210
1"	32	27	ATX-13	1.041	1.066	1.290	1.315	3.0	12.0	56	100	63202	400	63204		
1 1/4"	40	35	ATX-14	1.380	1.410	1.630	1.660	3.5	15.0	73	50	64202	200	64204		
1 1/2"	50	41	ATX-15	1.575	1.600	1.865	1.900	4.5	17.0	104	50	65202	150	65204		
2"	63	53	ATX-16	2.020	2.045	2.340	2.375	5.5	22.0	136	50	66202	100	66204		
2 1/2"	70	63	ATX-17	2.480	2.505	2.840	2.875	8.0	30.0	188	25	67202				
3"	80	78	ATX-18	3.070	3.100	3.460	3.500	10.0	36.0	210	25	68202				
4"	100	103	ATX-19	4.000	4.040	4.460	4.500	12.0	52.0	332	25	69202				

# TYPE ALT



## Markets:

- Aerospace
- Security
- Ship Building
- Wastewater Treatment

This version of non-UL Liquidtight Flexible Conduit is similar to our standard Type LT but weighs considerably less due to the use of an aluminum inner core instead of steel.

## Construction:

### Inner Core:

- Corrosion Resistant Aluminum
- 3/8" – 1-1/4" Squarelock Profile
- 1-1/2" – 6" Fully Interlocked Profile

### Liquidtight Jacket:

- Flexible PVC
- Resistant to Oils and Mild Acids

## Application:

- Corrosive Environments
- Wet and Oily Locations
- Lightweight
- Compatible with standard liquidtight connectors



Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

Manufactured to UL 360 Dimensions



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code  
233140650314

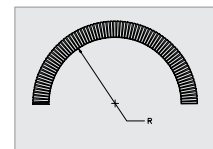
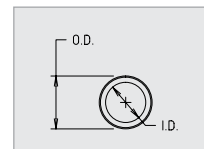
ARRA Certification

### Standard Colors

Machine Tool Gray.

### Working Temperatures

-20°C to 80°C



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)		Carton (Ft.)	Part # (Gray)	Reel (Ft.)	Part # (Gray)	Reel (Ft.)	Part # (Gray)
3/8"	16	12	ALT-10	0.484	0.504	0.690	0.710	2.0	11	100	40101	500	40103	1000	40104
1/2"	20	16	ALT-11	0.622	0.642	0.820	0.840	2.5	15	100	41101	500	41103	1000	41104
3/4"	25	21	ALT-12	0.820	0.840	1.030	1.050	3.0	20	100	42102	500	42104	1000	42110
1"	32	27	ALT-13	1.041	1.066	1.290	1.315	4.0	29	100	43102	400	43104		
1 1/4"	40	35	ALT-14	1.380	1.410	1.630	1.660	4.5	40	50	44102	200	44104		
1 1/2"	50	41	ALT-15	1.575	1.600	1.865	1.900	5.5	56	50	45102	150	45104		
2"	63	53	ALT-16	2.020	2.045	2.340	2.375	7.0	73	50	46102	100	46104		
2 1/2"	70	63	ALT-17	2.480	2.505	2.840	2.875	9.5	104	25	47102				
3"	80	78	ALT-18	3.070	3.100	3.460	3.500	11.5	144	25	48102				
3 1/2"	90	91	ALT-350	3.500	3.540	3.960	4.000	13.5	164	25	48502				
4"	100	103	ALT-19	4.000	4.040	4.460	4.500	14.0	192	25	49102				
5"	125		ALT-500	4.975	5.035	5.505	5.565	20.0	252	25	45502				
6"	150		ALT-600	6.015	6.075	6.565	6.625	22.5	316	25	46602				



# TYPE ZHLA



- Markets:**
- Construction
  - Data Centers
  - Defense
  - Healthcare
  - Mining
  - Oil & Gas Refineries
  - Power Plants
  - Rail/Transit
  - Renewable Energy
  - Security
  - Ship Building
  - Steel Mills
  - Telecom
  - Utilities

Non-halogen, low smoke and low flame spread make Type ZHLA a proven choice for applications where limiting toxic materials of combustion are an important issue. Since ZHLA is also UL listed and CSA Certified, it is ideal for field installation in confined, public areas such as subways, tunnels, etc.

**Construction:**

**Inner Core:**

- Hot Dipped Galvanized Steel
- 3/8" – 1-1/4" Squarelock Profile with continuous bonding strip
- 1-1/2" – 4" Fully Interlocked Profile

**Liquidtight Jacket:**

- Zero-Halogen Polyurethane
- Resistant to Ozone, Hydrocarbons, Chemicals and Oils
- Flame Retardant
- Low Smoke
- Low Toxicity
- Sunlight Resistant (UV)

**Application:**

- Meets the requirements of Bombardier SMP 800-C for Toxic Gas Generation.
- Meets the requirements of both ASTM E162 for Flame Spread and ASTM E662 for Smoke Generation.

This conduit is intended for installation in accordance with Article 350 of the NEC (ANSI/NFPA-70) and in section 14.5.4 of the ANSI/NFPA-79 Standard for Industrial Machinery:

- Listed and marked for Direct Burial and in Poured Concrete
- For containment of 1000 volt and lower potential circuits
- Suitable as a grounding conductor when used for circuits rated up to 20A for the 3/8 & 1/2 inch trade sizes and 60A for the 3/4 through 1-1/4 inch trade sizes in lengths six feet or less per NEC Article 250.118(7). Larger sizes require separate grounding conductor.
- Installations in hazardous (classified) locations:
  - Class I Div. 2: Article 501.10 (B)(2) & 501.30 (B)
  - Class II Div. 1: Article 502.1 (A)(2) & 502.30 (B) Div. 2: 502.10 (B)(2)
  - Class III Div. 1: Article 503.10 (A)(2) & 503.30 (B) Div. 2: 503.10 (A)(2)
- Installed under raised floors in Data Processing Areas Articles 645.5 (2)
- Electric Signs and Outline Lighting over 1000 volts Articles 600.7/600.32(A)(1)
- Permitted for Service Entrance wiring to six feet Article 230.43
- Used as Feeders and Services at Marinas and Boatyards Article 553.7(B).
- Wiring on Building Article 225.10



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**Product Information**

**Certifications & Compliance**

- Listed File # E29278. Conforms to Underwriters Laboratories Standard ANSI/UL-360 for Liquidtight Flexible Steel conduit.
- Certified File #LL18858. Conforms to CSA 22.2 No.56 for use per the Canadian Electrical Code C22.1 Section 12-1300. FT1
- WEEE and RoHS Compliant
- BS EN IEC 61386 Classification Code 445240650414
- ARRA Certification

**Standard Colors**

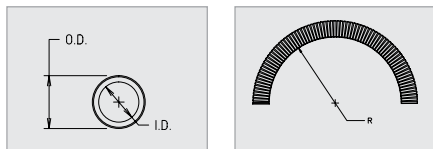
Black. Other colors available upon request.

**Working Temperatures**

U.L.: -40°C to 80°C Air / 60°C Wet / 70°C Oil  
CSA: -40°C to 60°C Dry / 60°C Oil

- Conductor Enclosures Adjacent to Motors over 1000 V Article 430.223
- Underground Service, Feeder, Branch Circuit, and Recreational Vehicle Site Feeder Circuit Conductors Article 551.80
- Elevators and Hoistways Article 620.21
- Pools and Fountains Article 680
- Bodies of water. Article 682
- Fire Pumps. Article 695

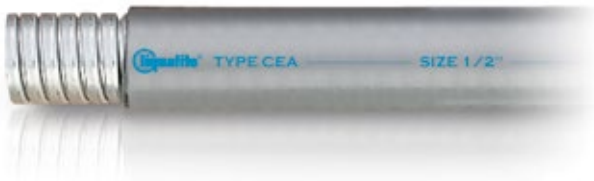
**Combustion and Flammability Properties: See chart on the next page.**



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)			Static (IN.)	Lbs. per 100 Ft.	Carton (Ft.)	Part # (Black)	Reel (Ft.)	Part # (Black)
3/8"	16	12	ZHLA-10	0.484	0.504	0.690	0.710	2.0	29	100	88101	500	88103	1000	88104
1/2"	20	16	ZHLA-11	0.622	0.642	0.820	0.840	3.0	32	100	88111	500	88113	1000	88114
3/4"	25	21	ZHLA-12	0.820	0.840	1.030	1.050	4.2	53	100	88121	500	88124	1000	88125
1"	32	27	ZHLA-13	1.041	1.066	1.290	1.315	5.5	82	100	88132	400	88134		
1 1/4"	40	35	ZHLA-14	1.380	1.410	1.630	1.660	7.0	102	50	88142	200	88144		
1 1/2"	50	41	ZHLA-15	1.575	1.600	1.865	1.900	4.5	124	50	88152	150	88154		
2"	63	53	ZHLA-16	2.020	2.045	2.340	2.375	6.0	145	50	88162	100	88164		
2 1/2"	70	63	ZHLA-17	2.480	2.505	2.840	2.875	8.0	192	25	88172				
3"	80	78	ZHLA-18	3.070	3.100	3.460	3.500	10.0	252	25	88182				
3 1/2"	90	91	ZHLA-350	3.500	3.540	3.960	4.000	11.0	308	25	88187				
4"	100	103	ZHLA-19	4.000	4.040	4.460	4.500	12.0	350	25	88192				



# TYPE CEA



## Markets:

- Healthcare
- Oil & Gas Refineries
- Rail/Transit
- Steel Mills
- Utilities

This non-UL liquidtight flexible steel conduit is designed for applications where safety concerns exist regarding a material's reaction in a fire situation.

## Construction:

### Inner Core:

- Corrosion-Resistant Plated Steel
- 3/8" – 2" Squarelock Profile
- 2-1/2" – 6" Fully Interlocked Profile
- 3/8" – 2" Contain Nylon Cord Packing

### Liquidtight Jacket:

- Zero-Halogen Polyurethane
- Resistant to Ozone, Hydrocarbons, Moderate Chemicals and Oils
- Flame Retardant
- Low Smoke
- Low Toxicity
- Sunlight Resistant (UV)

## Application:

- Meets the requirements of Bombardier SMP 800-C for Toxic Gas Generation.
- Meets the requirements of both ASTM E162 for Flame Spread and ASTM E662 for Smoke Generation.
- Mass Transit Vehicles
- Subways and Tunnels
- Enclosed Public Areas



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## Product Information

### Certifications & Compliance



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code 445340650314

ARRA Certification

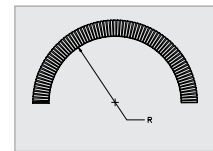
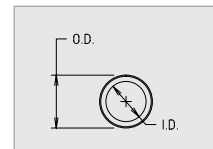
### Standard Colors

Gray and Black. Other colors available upon request.

### Working Temperatures

-40°C to 80°C

COMBUSTION & FLAMMABILITY PROPERTIES	TEST	VALUE
Vertical Burn (Material)	UL94	V-0 Rating; No Flaming Drips
Vertical Burn (Conduit)	UL360	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



\* Test data is based on controlled laboratory conditions and does not necessarily reflect performance in actual fire conditions. Additional product information available upon request.

US Trade Size	ISO (MM)	CSA (MM)	Type	Min Jacket Thickness	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH					
					Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)			Static (IN.)	Lbs. per 100 Ft.	Carton (Ft.)	Part # (Gray)	Part # (Black)	Reel (Ft.)
3/8"	16	12	CEA-10	0.030	0.484	0.504	0.690	0.710	1.5	20	100	888016	88801	1000		
1/2"	20	16	CEA-11	0.030	0.622	0.642	0.820	0.840	2.0	24	100	888116	88811	1000	888146	88814
3/4"	25	21	CEA-12	0.035	0.820	0.840	1.030	1.050	2.5	33	100	888216	88821	500	888246	88824
1"	32	27	CEA-13	0.035	1.041	1.066	1.290	1.315	3.0	53	100	888326	88832	400	888346	88834
1 1/4"	40	35	CEA-14	0.035	1.380	1.410	1.630	1.660	3.5	68	50	888426	88842	200	888446	
1 1/2"	50	41	CEA-15	0.040	1.575	1.600	1.865	1.900	4.5	88	50	888526	88852	150	888546	88854
2"	63	53	CEA-16	0.040	2.020	2.045	2.340	2.375	5.5	102	50	888626	88862	100	888646	88864
2 1/2"	70	63	CEA-17	0.050	2.480	2.505	2.840	2.875	8.0	168	25	888726	88872			
3"	80	78	CEA-18	0.050	3.070	3.100	3.460	3.500	10.0	252	25	888826	88882			
4"	100	103	CEA-19	0.060	4.000	4.040	4.460	4.500	12.0	344	25	888926	88892			
5"	125		CEA-500	0.099	4.975	5.035	5.505	5.565	17.5	468	25		88582			
6"	150		CEA-600	0.099	6.015	6.075	6.565	6.625	22.5	572	25					



Jacketed Metallic



# TYPE ACEA

**Markets:**

- Healthcare
- Rail/Transit



This non-UL liquidtight flexible aluminum conduit is designed for applications where safety concerns exist regarding a material's reaction in a fire situation and where weight is an issue.

## Construction:

### Inner Core:

- Corrosion-Resistant Aluminum
- 3/8" – 1-1/4" Squarelock Profile
- 1-1/2" – 4" Fully Interlocked Profile

### Liquidtight Jacket:

- Zero-Halogen Polyurethane
- Resistant to Ozone, Hydrocarbons, Moderate Chemicals and Oils
- Flame Retardant
- Low Smoke
- Low Toxicity
- Sunlight Resistant (UV)

## Application:

- Meets the requirements of Bombardier SMP 800-C for Toxic Gas Generation.
- Meets the requirements of both ASTM E162 for Flame Spread and ASTM E662 for Smoke Generation.
- Mass Transit Vehicles
- Subways and Tunnels
- Enclosed Public Areas
- Lightweight



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## Product Information

### Certifications & Compliance



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code 235240650314

ARRA Certification

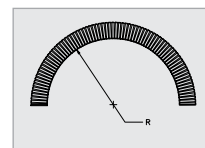
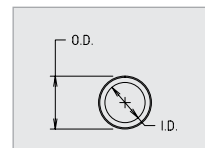
### Standard Colors

Gray and Black. Other colors available upon request.

### Working Temperatures

-40°C to 80°C

COMBUSTION & FLAMMABILITY PROPERTIES	TEST	VALUE
Vertical Burn (Material)	UL94	V-0 Rating; No Flaming Drips
Vertical Burn (Conduit)	UL360	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



\* Test data is based on controlled laboratory conditions and does not necessarily reflect performance in actual fire conditions. Additional product information available upon request.

US Trade Size	ISO (MM)	CSA (MM)	Type	Min Jacket Thickness	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH	
					Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)			Lbs. per 100 Ft.	Carton (Ft.)
3/8"	16	12	ACEA-10	0.030	0.484	0.504	0.690	0.710	1.5	11	100	87901
1/2"	20	16	ACEA-11	0.030	0.622	0.642	0.820	0.840	2.0	15	100	87911
3/4"	25	21	ACEA-12	0.035	0.820	0.840	1.030	1.050	2.5	20	100	87922
1"	32	27	ACEA-13	0.035	1.041	1.066	1.290	1.315	3.0	29	100	87932
1 1/4"	40	35	ACEA-14	0.035	1.380	1.410	1.630	1.660	3.5	40	50	87942
1 1/2"	50	41	ACEA-15	0.040	1.575	1.600	1.865	1.900	4.5	56	50	87952
2"	63	53	ACEA-16	0.040	2.020	2.045	2.340	2.375	5.5	73	50	87962
2 1/2"	70	63	ACEA-17	0.050	2.480	2.505	2.840	2.875	8.0	104	25	87972
3"	80	78	ACEA-18	0.050	3.070	3.100	3.460	3.500	10.0	144	25	87982
4"	100	103	ACEA-19	0.060	4.000	4.040	4.460	4.500	12.0	192	25	87992



# TYPE LOR

## Markets:

- Machine Tools (OEM)
- Oil & Gas Refineries
- Steel Mills
- Utilities



Jacketed Metallic



This product is offered as a non-UL, oil-resistant conduit that incorporates a high-quality PVC jacket.

## Construction:

### Inner Core:

- Corrosion-Resistant Plated Steel
- 1/4" – 2" Squarelock Profile
- 2-1/2" – 6" Fully Interlocked Profile
- 5/16" – 2" Contain Nylon Cord Packing

### Liquidtight Jacket:

- Flexible PVC (Uses the same material as Type LA)
- Resistant to Oils and Mild Acids
- Flame Retardant
- Sunlight Resistant (UV)

## Application:

- Machine Tools
- Industrial Environments
- Wet and Oily Locations
- Compatible with standard liquidtight connectors



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## Product Information

### Certifications & Compliance

Manufactured to UL 360 Dimensions



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code  
444240650314

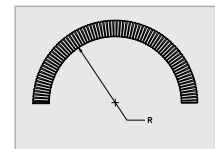
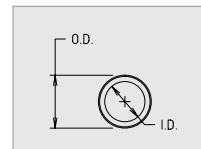
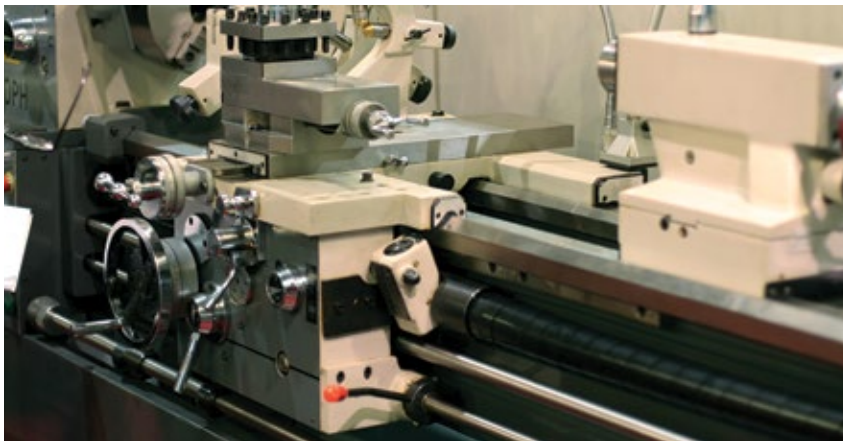
ARRA Certification

### Standard Colors

Machine Tool Gray and Black

### Working Temperatures

-30°C to 80°C Dry / 60°C Wet / 70°C Oil



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS		WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Dynamic (IN.)		Carton (Ft.)	Part # (Gray)	Reel (Ft.)	Part # (Gray)	Reel (Ft.)	Part # (Gray)
3/8"	16	12	LOR-10	0.484	0.504	0.690	0.710	1.5	4.0	20	100	50101	500	50103	1000	50104
1/2"	20	16	LOR-11	0.622	0.642	0.820	0.840	2.0	5.0	24	100	51101	500	51103	1000	51104
3/4"	25	21	LOR-12	0.820	0.840	1.030	1.050	2.5	6.0	33	100	52102	500	52104	1000	52110
1"	32	27	LOR-13	1.041	1.066	1.290	1.315	3.0	12.0	53	100	53102	400	53104		
1 1/4"	40	35	LOR-14	1.380	1.410	1.630	1.660	3.5	15.0	68	50	54102	200	54104		
1 1/2"	50	41	LOR-15	1.575	1.600	1.865	1.900	4.5	17.0	88	50	55102	150	55104		
2"	63	53	LOR-16	2.020	2.045	2.340	2.375	5.5	22.0	102	50	56102	100	56104		
2 1/2"	70	63	LOR-17	2.480	2.505	2.840	2.875	8.0	30.0	192	25	57102				
3"	80	78	LOR-18	3.070	3.100	3.460	3.500	10.0	36.0	252	25	58102				
3 1/2"	90	91	LOR-350	3.500	3.540	3.960	4.000	11.0	43.0	308	25	58882				
4"	100	103	LOR-19	4.000	4.040	4.460	4.500	12.0	52.0	350	25	59102				
5"	125		LOR-500	4.975	5.035	5.505	5.565	17.5		468	25	55502				
6"	150		LOR-600	6.015	6.075	6.565	6.625	22.5		572	25	56602				

# TYPE CSA

**Markets:**

- Mining
- Oil & Gas Refineries
- Power Plants
- Steel Mills
- Utilities



This flexible liquidtight steel conduit is certified by the Canadian Standards Association. Its design and function is similar to that of type LA, except that it cannot be used as a ground return path per the Canadian code.

## Construction:

### Inner Core:

- Hot Dipped Galvanized Steel
- 3/8" – 1-1/4" Squarelock Profile with continuous cord packing
- 1-1/2" – 4" Fully Interlocked Profile

### Liquidtight Jacket:

- Flexible PVC
- Resistant to Oils and Mild Acids
- FT-4 Flame Retardant Sunlight Resistant (UV)
- Sunlight Resistant (UV)

## Application:

This conduit is intended for use according to the Canadian Electrical Code (CEC CSA 22.1) as described in clause 12-1300 for dry, damp or wet locations.

Hazardous Locations areas where flexibility is necessary:

- Class II CSA 22.1 Clause 18-202(4)(b)
- Class III CSA 22.1 Clause 18-302(4)



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## Product Information

### Certifications & Compliance

Certified File #LL18858. Conforms to CSA Standard C22.2 No 56. Flame Test Rating FT-4 per CSA Standard C22.2 No 0.3.



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code 445240650414

ARRA Certification

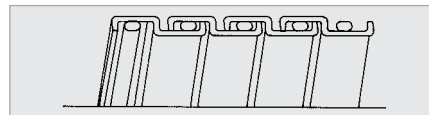
### Standard Colors

Black. Other colors available upon request.

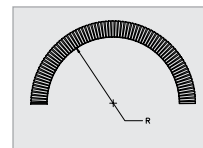
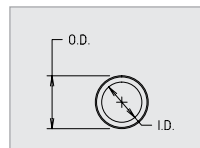
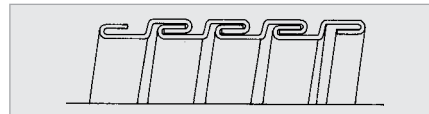
### Working Temperatures

-40°C to 75°C

Squarelock with Filler SIZES: 3/8" – 1-1/4"



Interlock SIZES: 1-1/2" – 4"



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS		WEIGHT	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Dynamic (IN.)		Lbs. per 100 Ft.	Carton (Ft.)	Part # (Black)	Reel (Ft.)	Part # (Black)	Reel (Ft.)
3/8"	16	12	CSA-10	0.484	0.504	0.690	0.710	2.0	4.0	29	100	70101	500	70103	1000	70104
1/2"	20	16	CSA-11	0.622	0.642	0.820	0.840	3.3	5.0	32	100	71101	500	71103	1000	71104
3/4"	25	21	CSA-12	0.820	0.840	1.030	1.050	4.3	6.0	53	100	72101	500	72104	1000	72110
1"	32	27	CSA-13	1.041	1.066	1.290	1.315	6.5	12.0	82	100	73102	400	73104		
1 1/4"	40	35	CSA-14	1.380	1.410	1.630	1.660	8.0	15.0	102	50	74102	200	74104		
1 1/2"	50	41	CSA-15	1.575	1.600	1.865	1.900	9.0	17.0	124	50	75102	150	75104		
2"	63	53	CSA-16	2.020	2.045	2.340	2.375	11.0	22.0	145	50	76102	100	76104		
2 1/2"	70	63	CSA-17	2.480	2.505	2.840	2.875	14.8	30.0	192	25	77102				
3"	80	78	CSA-18	3.070	3.100	3.460	3.500	17.5	36.0	252	25	78102				
4"	100	103	CSA-19	4.000	4.040	4.460	4.500	24.0	52.0	350	25	79102				



# TYPE VJC



Vacuum jacketed non-UL steel conduit for high-flex installations.

## Construction:

### Inner Core:

- Corrosion-Resistant Plated Steel
- 3/8" – 3" Squarelock Profile

### Liquidtight Jacket:

- Vacuum Jacketed Flexible PVC
- Resistant to Oils and Mild Acids

### Application:

- Tight Bends
- Dynamic Flexing
- Compatible with standard liquidtight connectors

### Markets:

- Machine Tools (OEM)
- Robotics
- Security

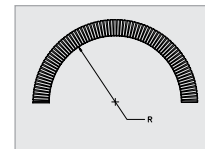
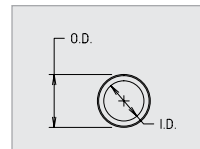
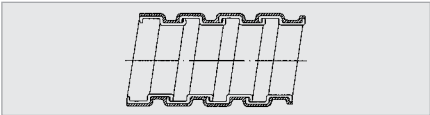
## Product Information

### Standard Colors

Black

### Working Temperatures

-20°C to 80°C



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS		WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH	
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Dynamic (IN.)		Carton (Ft.)	Part # (Black)
3/8"	16	12	VJC-10	0.492	0.516	0.657	0.681	1	5	14	100	89201
1/2"	20	16	VJC-11	0.622	0.646	0.799	0.823	1	6	16	100	89211
3/4"	25	21	VJC-12	0.815	0.839	0.996	1.020	2	8	20	100	89221
1"	32	27	VJC-13	1.043	1.067	1.240	1.264	3	10	35	100	89232
1 1/4"	40	35	VJC-14	1.378	1.402	1.642	1.673	3	12	38	50	89242
1 1/2"	50	41	VJC-15	1.575	1.598	1.850	1.890	3.5	14	44	50	89252
2"	63	53	VJC-16	2.008	2.031	2.307	2.346	4	16	66	50	89262
3"	80	78	VJC-18	3.071	3.094	3.425	3.465	6.5	25	93	25	89282



Jacketed Metallic



# TYPE LAFG

### Markets:

- Food Processing
- Healthcare
- Pharmaceuticals



A UL Listed flexible liquidtight steel conduit designed for a variety of installations regarding motion, vibration and bending on food processing equipment.

## Construction:

### Inner Core:

- Hot Dipped Galvanized Steel
- 3/8" – 1-1/4" Squarelock Profile with continuous bonding strip
- 1-1/2" – 4" Fully Interlocked Profile

### Liquidtight Jacket:

- Flexible PVC made from an FDA approved compound
- Formulated for "Splash Zone" food and beverage contact
- Meets FDA CFR21 and NSF 51/61 requirements
- Resistant to Oils and Mild Acids
- Flame Retarded
- Sunlight Resistant (UV)

## Application:

Type LAFG is a Certified Component for NSF/ANSI 169 special purpose food equipment. The following points are in addition to all of the NEC (ANSI/NFPA-70) Article 350 installation guidelines outlined for Type LA flexible liquidtight conduit:

- Smooth exterior for easy washdown
- Resistant to Sodium Hypochlorite (Bleach)
- Will not promote bacteria growth
- Intended for use with Standard Liquidtight Connectors

## Industries Served:

- Poultry Processing & Misc. Food Manufacturing (SIC 2015)
- Food Product Machinery Manufacturing (SIC 2011)
- Pharmaceutical Preparation Manufacturing (SIC 2834)
- Food Packaging, Canning and Bottling



Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

Listed File # E29278. Conforms to Underwriters Laboratories Standard ANSI/UL-360 for Liquidtight Flexible Steel conduit.



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code 444240650414

ARRA Certification



NSF Certified Component

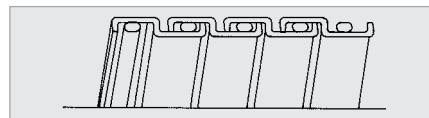
### Standard Colors

White. Other colors available upon request.

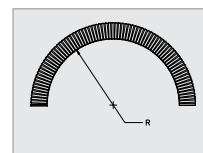
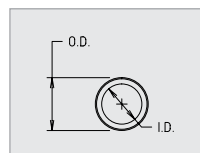
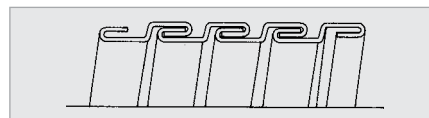
### Working Temperatures

-30°C to 80°C Dry / 60°C Wet / 70°C Oil

Squarelock with Filler SIZES: 3/8" - 1-1/4"



Interlock SIZES: 1-1/2" - 4"



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS		WEIGHT Lbs. per 100 Ft.	Carton (Ft.)	STANDARD LENGTH				
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Dynamic (IN.)			Part #	Reel (Ft.)	Part #	Reel (Ft.)	Part #
3/8"	16	12	LAFG-10	0.484	0.504	0.690	0.710	2.0	4.0	29	100	20901	500	20903	1000	20904
1/2"	20	16	LAFG-11	0.622	0.642	0.820	0.840	3.0	5.0	32	100	21901	500	21903	1000	21904
3/4"	25	21	LAFG-12	0.820	0.840	1.030	1.050	4.2	6.0	53	100	22901	500	22904	1000	22910
1"	32	27	LAFG-13	1.041	1.066	1.290	1.315	5.5	12.0	82	100	23902	400	23904		
1 1/4"	40	35	LAFG-14	1.380	1.410	1.630	1.660	7.0	15.0	102	50	24902	200	24904		
1 1/2"	50	41	LAFG-15	1.575	1.600	1.865	1.900	4.5	17.0	124	50	25902	150	25904		
2"	63	53	LAFG-16	2.020	2.045	2.340	2.375	6.0	22.0	145	50	26902	100	26904		
2 1/2"	70	63	LAFG-17	2.480	2.505	2.840	2.875	8.0	30.0	192	25		275			
3"	80	78	LAFG-18	3.070	3.100	3.460	3.500	10.0	36.0	252	25		175			
3 1/2"	90	91	LAFG-350	3.500	3.540	3.960	4.000	11.0	43.0	308	25		175			
4"	100	103	LAFG-19	4.000	4.040	4.460	4.500	12.0	52.0	350	25		100			



# TYPE LTFG

## Markets:

- Food Processing
- Healthcare
- Pharmaceuticals



A general-purpose, non-UL flexible liquidtight steel conduit designed for a variety of installations regarding motion, vibration and bending on food processing equipment.

## Construction:

### Inner Core:

- Corrosion-Resistant Plated Steel
- 1/4" – 2" Squarelock Profile
- 2-1/2" – 6" Fully Interlocked Profile
- 5/16" – 2" Contain Nylon Cord Packing

### Liquidtight Jacket:

- Flexible PVC made from an FDA approved compound
- Formulated for "Splash Zone" food and beverage contact
- Meets FDA CFR21 and NSF 51/61 requirements

## Application:

Type LTFG is a Certified Component for NSF/ANSI 169 special purpose food equipment

- Provides a liquidtight flexible protective wiring raceway
- Smooth exterior for easy washdown
- Resistant to Sodium Hypochlorite (Bleach)
- Will not promote bacteria growth
- Available in 3/8" through 2". Consult factory for larger sizes
- Intended for use with Standard Liquidtight Connectors

## Industries Served:

- Poultry Processing & Misc. Food Manufacturing (SIC 2015)
- Food Product Machinery Manufacturing (SIC 2011)
- Pharmaceutical Preparation Manufacturing (SIC 2834)
- Food Packaging, Canning and Bottling



Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

Manufactured to UL 360 Dimensions



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code  
444240650314



NSF Certified Component

ARRA Certification

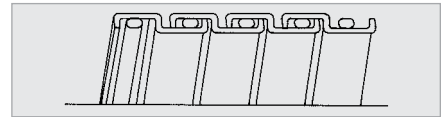
### Standard Colors

White. Clear jacketing available for a more aesthetically appealing appearance with stainless steel equipment. Other colors available upon request.

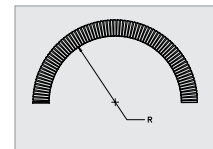
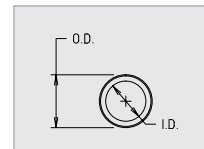
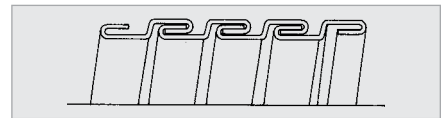
### Working Temperatures

-20°C to 60°C

### Squarelock with Filler SIZES: 5/16" - 2"



### Interlock SIZES: 2-1/2" - 6"



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS		WEIGHT Lbs. per 100 Ft.	Carton (Ft.)	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Dynamic (IN.)			Part #	Reel (Ft.)	Part #	Reel (Ft.)	Part #	
3/8"	16	12	LTFG-10	0.484	0.504	0.690	0.710	1.5	4.0	20	100	101019	500	101039	1000	101049	
1/2"	20	16	LTFG-11	0.622	0.642	0.820	0.840	2.0	5.0	24	100	111019	500	111039	1000	111049	
3/4"	25	21	LTFG-12	0.820	0.840	1.030	1.050	2.5	6.0	33	100	121029	500	121049	1000	121109	
1"	32	27	LTFG-13	1.041	1.066	1.290	1.315	3.0	12.0	53	100	131029	400	131049			
1 1/4"	40	35	LTFG-14	1.380	1.410	1.630	1.660	3.5	15.0	68	50	141029	200	141049			
1 1/2"	50	41	LTFG-15	1.575	1.600	1.865	1.900	4.5	17.0	88	50	151029	150	151049			
2"	63	53	LTFG-16	2.020	2.045	2.340	2.375	5.5	22.0	102	50	161029	100	161049			

# TYPE LSSFG

**Markets:**

- Food Processing
- Healthcare
- Pharmaceuticals



A flexible non-UL liquidtight stainless steel conduit designed for a variety of installations requiring motion, vibration and bending on food processing equipment. It offers excellent resistance to corrosion.

## Construction:

### Inner Core:

- Corrosion-Resistant continuous strip of 316L Stainless Steel.
- Also available in 304L Stainless Steel, special order only. Minimum order quantities may apply.

### Liquidtight Jacket:

- Flexible PVC made from an FDA approved compound
- Formulated for "Splash Zone" food and beverage contact
- Meets FDA CFR21 and NSF 51/61 requirements

## Application:

Type LSSFG is a Certified Component for NSF/ANSI 169 special purpose food equipment.

- Provides a liquidtight flexible protective wiring raceway.
- Smooth exterior for easy washdown
- Resistant to Sodium Hypochlorite (Bleach)
- Will not promote bacteria growth
- Available in 3/8" through 2". Consult factory for larger sizes
- Intended for use with Standard Liquidtight Connectors

## Industries Served:

- Poultry Processing & Misc. Food Manufacturing (SIC 2015)
- Food Product Machinery Manufacturing (SIC 2011)
- Pharmaceutical Preparation Manufacturing (SIC 2834)
- Food Packaging, Canning and Bottling



Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

Manufactured to UL 360 Dimensions



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code 444240650314

ARRA Certification



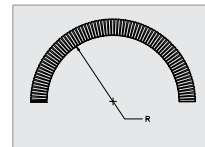
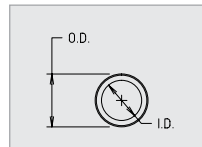
NSF Certified Component

### Standard Colors

Clear jacketing for a more aesthetically appealing appearance with stainless steel equipment. Other colors available upon request.

### Working Temperatures

-20°C to 60°C



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)		Coil (Ft.)	Part #	Reel (Ft.)	Part #	Reel (Ft.)	Part #
3/8"	16	12	LSSFG-10	0.484	0.504	0.690	0.710	2.0	23	100		500		1000	
1/2"	20	16	LSSFG-11	0.622	0.642	0.820	0.840	3.0	28	100		500		1000	
3/4"	25	21	LSSFG-12	0.820	0.840	1.030	1.050	4.2	38	100		500		1000	
1"	32	27	LSSFG-13	1.041	1.066	1.290	1.315	5.5	62	100		400			
1-1/4"	40	35	LSSFG-14	1.380	1.410	1.630	1.660	7.0	79	50		200			
1-1/2"	50	41	LSSFG-15	1.575	1.600	1.865	1.900	4.5	103	50		150			
2"	63	53	LSSFG-16	2.020	2.045	2.340	2.375	6.0	119	50		100			



# TYPE LTSS

## Markets:

- Defense
- Healthcare
- Ship Building
- Wastewater Treatment



A flexible non-UL liquidtight stainless steel conduit designed for a variety of installations requiring motion, vibration and bending. It offers excellent resistance to corrosion.

## Construction:

### Inner Core:

- Corrosion-Resistant continuous strip of 304L Stainless Steel.
- Also available in 316L Stainless Steel, special order only. Minimum order quantities may apply.

### Liquidtight Jacket:

- Flexible PVC
- Resistant to Oils and Mild Acids

## Application:

- Machine Tools
- Corrosive Environments
- Industrial Environments
- Wet and Oily Locations
- Outdoor use due to the inherent UV resistance of PVC
- Compatible with standard liquidtight connectors
- Also available in unjacketed stainless steel (p. 36)



Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

Manufactured to UL 360 Dimensions



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code  
443140650314

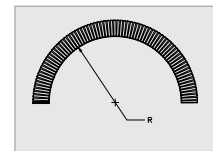
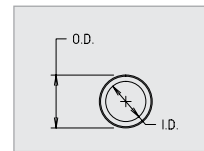
ARRA Certification

### Standard Colors

Clear jacketing. Other colors available upon request.

### Working Temperatures

-20°C to 80°C



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)			Static (IN.)	Lbs. per 100 Ft.	Coil (Ft.)	Part #	Reel (Ft.)	Part #
3/8"	16	12	LTSS-10	0.484	0.504	0.690	0.710	2.0	23	100		500		1000	
1/2"	20	16	LTSS-11	0.622	0.642	0.820	0.840	3.0	28	100		500		1000	
3/4"	25	21	LTSS-12	0.820	0.840	1.030	1.050	4.2	38	100		500		1000	
1"	32	27	LTSS-13	1.041	1.066	1.290	1.315	5.5	62	100		400			
1-1/4"	40	35	LTSS-14	1.380	1.410	1.630	1.660	7.0	79	50		200			
1-1/2"	50	41	LTSS-15	1.575	1.600	1.865	1.900	4.5	103	50		150			
2"	63	53	LTSS-16	2.020	2.045	2.340	2.375	6.0	119	50		100			
3"	80	78	LTSS-18	3.070	3.100	3.460	3.500	10.0	295	25		175			
4"	100	103	LTSS-19	4.000	4.040	4.460	4.500	12.0	410	25		100			
5"	125		LTSS-500	4.975	5.035	5.505	5.565	17.5	548	25					
6"	150		LTSS-600	6.015	6.075	6.565	6.625	22.5	670	25					



# TYPE ZHSS



### Markets:

- Defense
- Healthcare
- Mining
- Oil & Gas Refineries
- Power Plants
- Ship Building
- Steel Mills
- Wastewater Treatment

This non-UL liquidtight flexible stainless steel conduit is designed for applications where safety concerns exist regarding a material's reaction in a fire situation. It offers excellent resistance to corrosion.

### Construction:

#### Inner Core:

- Corrosion-Resistant continuous strip of 316L Stainless Steel.
- Also available in 304L Stainless Steel, special order only. Minimum order quantities may apply.

#### Liquidtight Jacket:

- Zero Halogen Polyurethane
- Resistant to Ozone, Hydrocarbons, Moderate Chemicals and Oils
- Flame Retardant
- Low Smoke
- Low Toxicity
- Sunlight Resistant (UV)

### Application:

- Corrosive Environments
- Meets the requirements of Bombardier SMP 800-C for Toxic Gas Generation.
- Meets the requirements of both ASTM E162 for Flame Spread and ASTM E662 for Smoke Generation.
- Industrial Environments
- Wet and Oily Locations
- Compatible with standard liquidtight connectors



Proudly made in the U.S.A.

### Product Information

#### Certifications & Compliance

Manufactured to UL 360 Dimensions



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code  
445240650314

ARRA Certification

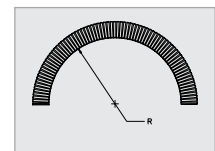
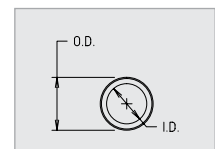
#### Standard Colors

Black. Other colors available upon request.

#### Working Temperatures

-40°C to 80°C

COMBUSTION & FLAMMABILITY PROPERTIES	TEST	VALUE
Vertical Burn (Material)	UL94	V-0 Rating; No Flaming Drips
Vertical Burn (Conduit)	UL360	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

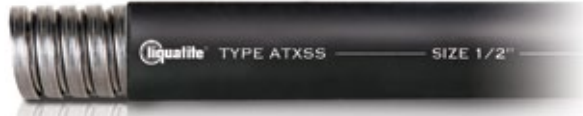


\* Test data is based on controlled laboratory conditions and does not necessarily reflect performance in actual fire conditions. Additional product information available upon request.

US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)			Static (IN.)	Lbs. per 100 Ft.	Coil (Ft.)	Part #	Reel (Ft.)	Part #
3/8"	16	12	ZHSS-10	0.484	0.504	0.690	0.710	2.0	23	100		500		1000	
1/2"	20	16	ZHSS-11	0.622	0.642	0.820	0.840	3.0	28	100		500		1000	
3/4"	25	21	ZHSS-12	0.820	0.840	1.030	1.050	4.2	38	100		500		1000	
1"	32	27	ZHSS-13	1.041	1.066	1.290	1.315	5.5	62	100		400			
1-1/4"	40	35	ZHSS-14	1.380	1.410	1.630	1.660	7.0	79	50		200			
1-1/2"	50	41	ZHSS-15	1.575	1.600	1.865	1.900	4.5	103	50		150			
2"	63	53	ZHSS-16	2.020	2.045	2.340	2.375	6.0	119	50		100			
3"	80	78	ZHSS-18	3.070	3.100	3.460	3.500	10.0	295	25		175			
4"	100	103	ZHSS-19	4.000	4.040	4.460	4.500	12.0	410	25		100			
5"	125		ZHSS-500	4.975	5.035	5.505	5.565	17.5	548	25					
6"	150		ZHSS-600	6.015	6.075	6.565	6.625	22.5	670	25					



# TYPE ATXSS



Proudly made in the U.S.A.

This non-UL liquidtight flexible stainless steel conduit is designed to withstand an extreme temperature range. It offers excellent resistance to corrosion.

## Construction:

### Inner Core:

- Corrosion-Resistant continuous strip of 304L Stainless Steel.
- Also available in 316L Stainless Steel, special order only. Minimum order quantities may apply.

### Liquidtight Jacket:

- Flexible TPR (Thermoplastic Rubber)
- Resistant to Oils and Mild Acids
- Halogen-Free
- Extreme High / Low Temperature Range
- UV Stabilized
- Flame Rating of UL94-HB

### Application:

- Corrosive Environments
- Outdoor Equipment, Ovens, Foundries, Refrigeration
- Industrial Environments with High / Low Temperatures
- Wet and Oily Locations
- Extreme Climatic Conditions
- Compatible with standard liquidtight connectors

### Markets:

- Defense
- Oil & Gas Refineries
- Power Plants
- Ship Building
- Steel Mills
- Wastewater Treatment

# TYPE ATSS



Proudly made in the U.S.A.

A flexible stainless steel non-UL conduit that uses a jacketing material specifically designed for hot or cold environments.

## Construction:

### Inner Core

- Corrosion-Resistant 316L Stainless Steel.
- Fully Interlocked Profile

### Liquidtight Jacket:

- Flexible PVC
- Resistant to Oils and Mild Acids
- High / Low Temperature Range

### Application:

- Machine Tools, Ovens, Foundries, Refrigeration
- Industrial Environments with High / Low Temperatures
- Corrosive Atmospheres
- Wet and Oily Locations
- Outdoor use due to the inherent UV resistance of PVC
- Extreme Climatic Conditions
- Compatible with standard liquidtight connectors

### Markets:

- Defense
- Healthcare
- Oil & Gas Refineries
- Power Plants
- Ship Building
- Steel Mills
- Wastewater Treatment

## TYPE ATXSS

US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS Static (IN.)	WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)			Coil (Ft.)	Part #	Reel (Ft.)	Part #	Reel (Ft.)	Part #
3/8"	16	12	ATXSS-10	0.484	0.504	0.690	0.710	2.0	23	100		500		1000	
1/2"	20	16	ATXSS-11	0.622	0.642	0.820	0.840	3.0	28	100		500		1000	
3/4"	25	21	ATXSS-12	0.82	0.840	1.030	1.050	4.2	38	100		500		1000	
1"	32	27	ATXSS-13	1.041	1.066	1.290	1.315	5.5	62	100		400			
1-1/4"	40	35	ATXSS-14	1.38	1.410	1.630	1.660	7.0	79	50		200			
1-1/2"	50	41	ATXSS-15	1.575	1.600	1.865	1.900	4.5	103	50		150			
2"	63	53	ATXSS-16	2.02	2.045	2.340	2.375	6.0	119	50		100			
3"	80	78	ATXSS-18	3.070	3.100	3.460	3.500	10.0	295	25		175			
4"	100	103	ATXSS-19	4.00	4.040	4.460	4.500	12.0	410	25		100			
5"	125		ATXSS-500	4.975	5.035	5.505	5.565	17.5	548	25					
6"	150		ATXSS-600	6.015	6.075	6.565	6.625	22.5	670	25					

Proudly made in the U.S.A.

### Product Information

#### Certifications & Compliance

Manufactured to UL 360 Dimensions

WEEE and RoHS Compliant

BS EN IEC 61386 Classification Code 445540650314

ARRA Certification

Standard Colors  
Black.

Working Temperatures  
-60°C to 150°C Intermittent to 165°C

## TYPE ATSS

US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS Static (IN.)	WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)			Coil (Ft.)	Part #	Reel (Ft.)	Part #	Reel (Ft.)	Part #
3/8"	16	12	ATSS-10	0.484	0.504	0.690	0.710	2.0	23	100		500		1000	
1/2"	20	16	ATSS-11	0.622	0.642	0.820	0.840	3.0	28	100		500		1000	
3/4"	25	21	ATSS-12	0.820	0.840	1.030	1.050	4.2	38	100		500		1000	
1"	32	27	ATSS-13	1.041	1.066	1.290	1.315	5.5	62	100		400			
1 1/4"	40	35	ATSS-14	1.380	1.410	1.630	1.660	7.0	79	50		200			
1 1/2"	50	41	ATSS-15	1.575	1.600	1.865	1.900	4.5	103	50		150			
2"	63	53	ATSS-16	2.020	2.045	2.340	2.375	6.0	119	50		100			
3"	80	78	ATSS-18	3.070	3.100	3.460	3.500	10.0	295	25		175			
4"	100	103	ATSS-19	4.000	4.040	4.460	4.500	12.0	410	25		100			

Proudly made in the U.S.A.

### Product Information

#### Certifications & Compliance

Manufactured to UL 360 Dimensions

WEEE and RoHS Compliant

BS EN IEC 61386 Classification Code 445340650314

ARRA Certification

Standard Colors  
Machine Tool Gray.

Working Temperatures  
-55°C to 105°C Intermittent to 120°C

# TYPE CBLA



Computer Blue LA (CBLA) is a liquidtight flexible steel conduit commonly used for computer room installations. The blue jacket color easily identifies circuitry for computer power wiring. It is listed by Underwriters Laboratories Inc. and certified by Canadian Standards Association.

## Construction:

### Inner Core:

- Hot Dipped Galvanized Steel
- 3/8" – 1-1/4" Squarelock Profile with continuous bonding strip
- 1-1/2" – 4" Fully Interlocked Profile

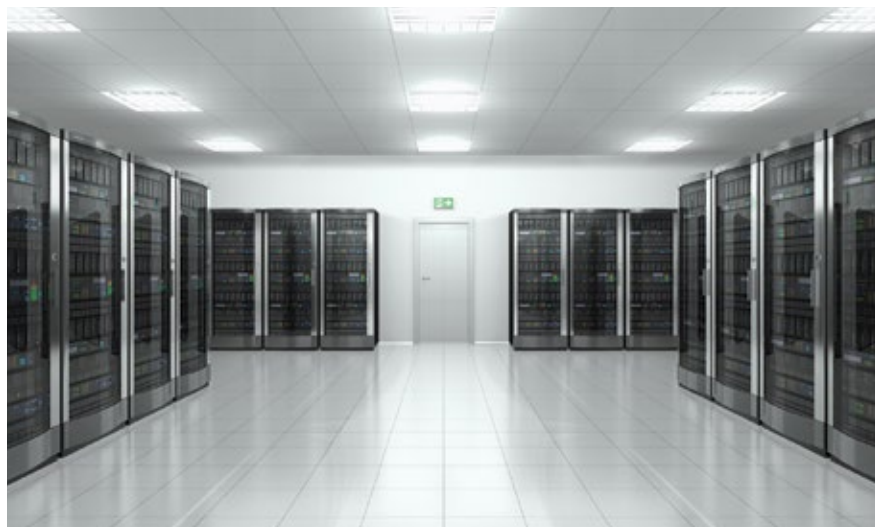
### Liquidtight Jacket:

- Flexible Blue PVC
- Resistant to Oils and Mild Acids
- Flame Retardant
- Sunlight Resistant (UV)

## Application:

This conduit is intended for installation in accordance with Article 350 of the NEC (ANSI/NFPA-70):

- Permitted for use in exposed or concealed locations.
- Installations under raised floors in Data Processing Areas. Article 645.5(E)(2)
- Listed and marked for direct burial and in poured concrete.
- Meets same specifications as Type LA.



Markets:  
• Data Centers



Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

**UL** Listed File # E29278. Conforms to Underwriters Laboratories Standard ANSI/UL-360 for Liquidtight Flexible Steel conduit.

**CSA** Certified File #LL18858. Conforms to CSA 22.2 No.56 for use per the Canadian Electrical Code C22.1 Section 12-1300. FT1

**WEEE and RoHS Compliant**

**CE** BS EN IEC 61386 Classification Code 444240650414

ARRA Certification

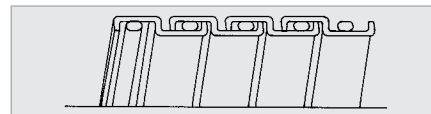
### Standard Colors

Computer Blue.

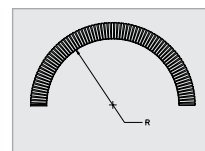
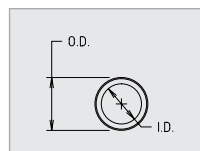
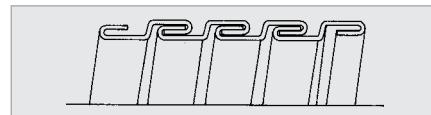
### Working Temperatures

-30°C to 80°C Dry / 60°C Wet / 70°C Oil

### Squarelock with Filler SIZES: 3/8" - 1-1/4"



### Interlock SIZES: 1-1/2" - 4"



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS		WEIGHT Lbs. per 100 Ft.	Carton (Ft.)	STANDARD LENGTH				
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Dynamic (IN.)			Part # (Blue)	Reel (Ft.)	Part # (Blue)	Reel (Ft.)	Part # (Blue)
3/8"	16	12	CBLA-10	0.484	0.504	0.690	0.710	2.0	4.0	29	100	201014	500	201034	1000	201044
1/2"	20	16	CBLA-11	0.622	0.642	0.820	0.840	3.0	5.0	32	100	211014	500	211034	1000	211044
3/4"	25	21	CBLA-12	0.820	0.840	1.030	1.050	4.2	6.0	53	100	221014	500	221044	1000	221104
1"	32	27	CBLA-13	1.041	1.066	1.290	1.315	5.5	12.0	82	100	231024	400	231044		
1 1/4"	40	35	CBLA-14	1.380	1.410	1.630	1.660	7.0	15.0	102	50	241024	200	241044		
1 1/2"	50	41	CBLA-15	1.575	1.600	1.865	1.900	4.5	17.0	124	50	251024	150	251044		
2"	63	53	CBLA-16	2.020	2.045	2.340	2.375	6.0	22.0	145	50	261024	100	261044		
2 1/2"	70	63	CBLA-17	2.480	2.505	2.840	2.875	8.0	30.0	192	25	271024	275	271054		
3"	80	78	CBLA-18	3.070	3.100	3.460	3.500	10.0	36.0	252	25	281024	175	281054		
3 1/2"	90	91	CBLA-350	3.500	3.540	3.960	4.000	11.0	43.0	308	25	285024	175	285054		
4"	100	103	CBLA-19	4.000	4.040	4.460	4.500	12.0	52.0	350	25	291024	100	291054		

# COLORED CONDUIT

for Custom Installations

The use of colored Type LA conduit saves time and money in maintenance and repair situations, and provides a visible warning to use caution in and around specific areas. They can provide for quick identification of circuits, such as emergency, fire, security and high voltage, as well as many other applications.

- See product pages for standard color
- Standard colors available in stock are for Type LA only.
- Custom colors are available:
  - Minimum order quantities apply
  - Stand put ups
  - Nonreturnable/ Noncancelable



## SUGGESTED APPLICATIONS

CONDUIT COLOR	SUGGESTED APPLICATIONS
Cream	Office Modular Partitions
Brown	Office Modular Partitions
Blue	Computer Rooms/Data Cables, Low Voltage Wiring
Green	Hospitals and Healthcare
Yellow	Caution Areas, Special Equipment, High Voltage Wiring, Earth Moving Equipment
Orange	Construction, Auto Repair, Fiber Optic Systems
Red	Fire Alarms, Security Systems, Emergency Circuits
White	Dairy Equipment, Food Processing Equipment







*\* Standard colors are Black and Gray. Other colors available upon request. We can blend to any color preference. Jacketed materials for extreme temperature and halogen-free applications are also available in colors.*

# EMI/RFI Shielded

Electri-Flex Company offers three types of flexible liquidtight conduits designed for wiring applications requiring shielding effectiveness from Electromagnetic and Radio Frequency Interference (EMI/RFI).

Shielded conduit provides exceptional shielding effectiveness from electromagnetic and radio frequency interference (EMI/RFI). Use it to protect sensitive electronic circuits from outside noise in such applications as communications, radar and data transmission. But shielded conduit doesn't just keep interference out, it also keeps emissions in, which is vital to meeting European CE standards - an important issue for OEMs. Additionally, shielding conduits provide a redundant EMI/RFI system protection when using shielded cables with EMI/RFI shielded enclosures.

All three are designed to accept industry standard liquidtight connectors and address the problems of assembly and grounding. Connectors of this type include a grounding ferrule, which contacts the internal metallic material of the conduit and the connector body. This produces a direct shield-to-drain or ground, simply by tightening the connector.

Conduit Type	Page
 <b>TYPE SLA</b>	32
 <b>TYPE EMS</b>	33
 <b>TYPE EMCS</b>	34
 <b>TYPE HFSLA</b>	35
 <b>TYPE HFEMS</b>	35
 <b>TYPE HFEMCS</b>	35



## SHIELD-FLEX

SHIELD-FLEX conduit allows for greater versatility than shielded cable in wiring configurations and retrofitting projects. With three levels of effectiveness to choose from, SHIELD-FLEX meets your needs.

### Distinctive Characteristics May Include:

- UL Listed (Type SLA)
- Accepts standard liquidtight fittings
- Withstands wide temperature ranges
- Three levels of EMI/RFI protection
- WEEE and RoHS Compliant
- Halogen-Free Also Available

### Markets We Serve:

- Medical
- Military
- Industrial
- Government/Defense
- Commercial
- Telecommunications
- Aerospace
- Public Transit
- Utilities

### Applications/Markets:

- Air Handling Equipment (HVAC)
- Test & Measurement Equipment
- Data Centers
- Variable Speed Drives
- Commercial-off-the-shelf (COTS) (CAGE Code: 09641)
- CE-European Standard
- Radio Broadband/Antenna
- Solar/Wind Energy
- Ship Building
- Medical Diagnostics Equipment
- Wireless Communication
- Healthcare/Medical

*Shield-Flex, SLA, EMS, EMCS, HFSLA, HFEMS & HFEMCS are trademarks of Electri-Flex Company, registered in the U.S. Patent and Trademark Office.*

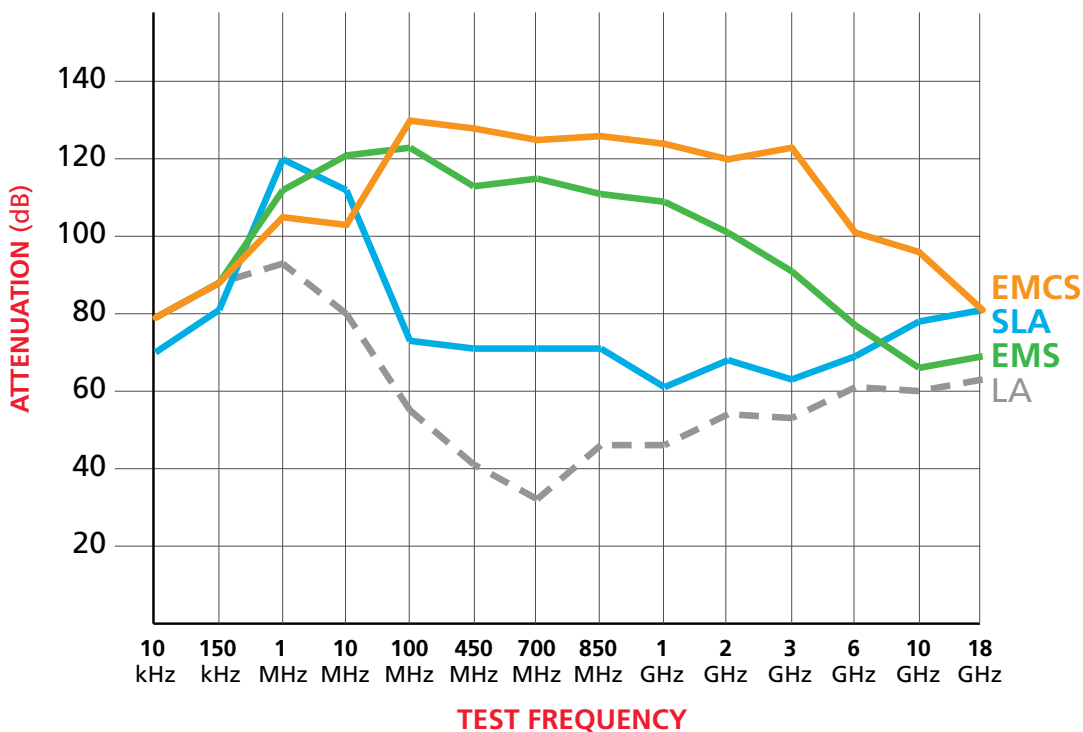
Shielded flexible conduits allow for greater versatility for wiring configurations and retrofitting than is experienced with shielded cable assemblies.

All three of these easy-to-install shielding conduits offer a “good–better–best” scenario as shown in the Shielding Effectiveness chart below. We use a combination of steel or bronze flexible cores coupled with a tinned copper braid to achieve not only the required EMI/RFI protection, but also the added protection from crushing, impact and abrasion. The outer jacketing material may be modified to accommodate a variety of environmental conditions, with materials ranging from standard PVC to halogen-free polyurethane to high/low temperature thermoplastics.



### Shielding Effectiveness

The graph below depicts a general comparative shielding effectiveness (attenuation in dBs) of all three types of SHIELD-FLEX conduit. The dotted line indicates a comparison to standard unshielded liquidtight flexible conduit Type LA. The spectrum of test frequency is from 10 kHz to 10 MHz Electric Field, to 100 MHz to 1 GHz Planewave Field and 2 GHz to 18 GHz Microwave Field. Tests were performed per MIL-STD-285 and in general accordance with IEEE 299. 1" trade size conduit was tested using standard liquidtight fittings from Thomas & Betts Series 5300. Results are based on controlled laboratory conditions and may vary in actual field installed conditions.



# TYPE SLA



**Markets:**

- Aerospace
- Cell Towers
- Data Centers
- Defense
- Healthcare
- Renewable Energy
- Ship Building
- Telecommunications

Type SLA is identical to standard UL Listed liquidtight flexible steel conduit (See Type LA) but is augmented with a tinned copper shielding braid located over the inner steel core and under its protective PVC jacket. The braid offers a minimum of 90% coverage. For a low-smoke, low-flame spread, zero-halogen version, ask for HFSLA (p. 35).

## Construction:

### Inner Core:

- Hot Dipped Galvanized Steel
- 3/8" – 1-1/4" Squarelock Profile with continuous bonding strip
- 1-1/2" – 2" Fully Interlocked Profile
- Shielded with a tinned copper braid

### Liquidtight Jacket:

- Flexible PVC
- Resistant to Oils and Mild Acids
- Flame Retardant
- Sunlight Resistant (UV)

## Application:

This conduit is intended for installation in accordance with Article 350 of the NEC (ANSI/NFPA-70)

- Suitable as an equipment grounding conductor per Article 250.118(7). Larger sizes require separate grounding conductor.
- Suitable for use in hazardous locations: Class I, Div. 2 and Classes II and III.
- Accepts Standard Metallic Liquidtight Fittings
- Designed for wiring applications requiring shielding effectiveness from Electromagnetic and Radio Frequency Interference (EMI/RFI)

Shield-Flex, SLA, and HFSLA are trademarks of Electri-Flex Company, registered in the U.S. Patent and Trademark Office.



Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

Listed File # E29278. Conforms to Underwriters Laboratories Standard ANSI/UL-360 for Liquidtight Flexible Steel conduit.

WEEE and RoHS Compliant

BS EN IEC 61386 Classification Code 444240650414

ARRA Certification

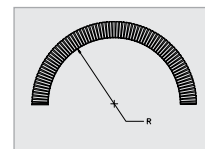
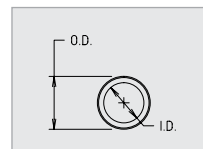
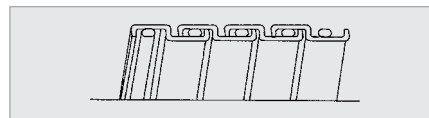
### Standard Colors

Black. Other colors and jacketing materials available upon request

### Working Temperatures

-30°C to 80°C Dry / 60°C Wet / 70°C Oil

Squarelock with Filler SIZES: 3/8" - 1-1/4"



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)			Static (IN.)	Lbs. per 100 Ft.	Carton (Ft.)	Part # (black)	Reel (Ft.)	Part # (black)
3/8"	16	12	SLA-10	0.484	0.504	0.690	0.710	2.0	29	100	78901	500	78903	1000	78904
1/2"	20	16	SLA-11	0.622	0.642	0.820	0.840	3.0	32	100	78911	500	78913	1000	78914
3/4"	25	21	SLA-12	0.820	0.840	1.030	1.050	4.2	53	100	78921	500	78924		
1"	32	27	SLA-13	1.041	1.066	1.290	1.315	5.5	82	100	78932	400	78934		
1 1/4"	40	35	SLA-14	1.380	1.410	1.630	1.660	7.0	102	50	78942	200	78944		
1 1/2"	50	41	SLA-15	1.575	1.600	1.865	1.900	4.5	124	50	78952	150	78954		
2"	63	53	SLA-16	2.020	2.045	2.340	2.375	6.0	145	50	78962	100	78964		





# TYPE EMS



## Markets:

- Aerospace
- Cell Towers
- Defense
- Healthcare
- Renewable Energy
- Ship Building
- Telecommunications

Type EMS has an inner core that is made from a fully interlocked bronze strip and does not contain a braided shield. For a low-smoke, low flame spread, zero-halogen version, ask for HFEMS (p. 35).

## Construction:

### Inner Core:

- Bronze
- 3/8" – 4" Fully Interlocked Profile

### Liquidtight Jacket:

- Flexible PVC
- Resistant to Oils and Mild Acids
- Flame Retardant
- Sunlight Resistant (UV)

## Application:

- Accepts Standard Metallic Liquidtight Fittings
- Designed for wiring applications requiring shielding effectiveness from Electromagnetic and Radio Frequency Interference (EMI/RFI)

Shield-Flex, EMS and HFEMS are trademarks of Electri-Flex Company, registered in the U.S. Patent and Trademark Office



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## Product Information

### Certifications & Compliance



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code 445340650314

ARRA Certification

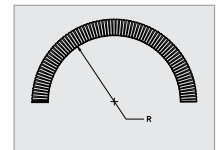
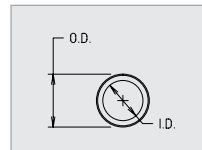
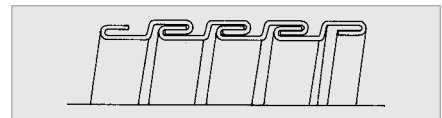
### Standard Colors

Gray. Other colors and jacketing materials available upon request

### Working Temperatures

-55°C to 105°C

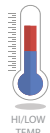
### Interlock



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH			
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)			Static (IN.)	Lbs. per 100 Ft.	Carton (Ft.)	Part # (Gray)
3/8"	16	12	EMS-10	0.484	0.504	0.690	0.710	3.0	27	100	78801	1000	78804
1/2"	20	16	EMS-11	0.622	0.642	0.820	0.840	3.0	35	100	78811	1000	78814
3/4"	25	21	EMS-12	0.820	0.840	1.030	1.050	4.0	43	100	78822	500	78824
1"	32	27	EMS-13	1.041	1.066	1.290	1.315	4.0	85	100	78832	400	78834
1 1/4"	40	35	EMS-14	1.380	1.410	1.630	1.660	4.5	101	50	78842	200	78844
1 1/2"	50	41	EMS-15	1.575	1.600	1.865	1.900	7.0	140	50	78852	150	78854
2"	63	53	EMS-16	2.020	2.045	2.340	2.375	9.5	180	50	78862	100	78864
2 1/2"	70	63	EMS-17	2.480	2.505	2.840	2.875	12.0	232	25	78872		
3"	80	78	EMS-18	3.070	3.100	3.460	3.500	13.5	320	25	78882		
4"	100	103	EMS-19	4.000	4.040	4.460	4.500	17.0	388	25	78892		



EMI/RFI Shielded



# TYPE EMCS

**Markets:**

- Aerospace
- Cell Towers
- Defense
- Healthcare
- Renewable Energy
- Ship Building
- Telecommunications



Type EMCS is a hybrid of SLA and EMS. It utilizes the same bronze core and PVC jacket as EMS, but gets further screening protection from a tinned copper braid as found in the SLA product. For a low-smoke, low flame spread, zero-halogen version, ask for HFEMCS (p. 35).

### Construction:

#### Inner Core:

- Bronze
- 3/8" – 2" Fully Interlocked Profile
- Shielded with a tinned copper braid

#### Liquidtight Jacket:

- Flexible PVC
- Resistant to Oils and Mild Acids
- Flame Retardant
- Sunlight Resistant (UV)

### Application:

- Accepts Standard Metallic Liquidtight Fittings
- Designed for wiring applications requiring shielding effectiveness from Electromagnetic and Radio Frequency Interference (EMI/RFI)

Shield-Flex, SLA, EMS, EMCS and HFEMCS are trademarks of Electri-Flex Company, registered in the U.S. Patent and Trademark Office.



Proudly made in the U.S.A.

### Product Information

#### Certifications & Compliance



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code 445340650314

ARRA Certification

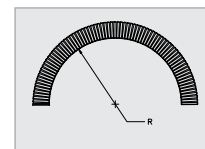
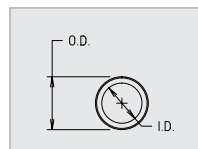
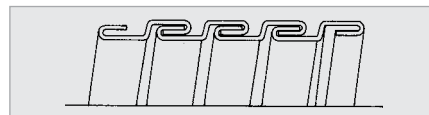
#### Standard Colors

Black. Other colors and jacketing materials available upon request

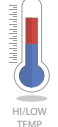
#### Working Temperatures

-55°C to 105°C

#### Interlock



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH			
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)		Lbs. per 100 Ft.	Carton (Ft.)	Part # (Black)	Reel (Ft.)
3/8"	16	12	EMCS-10	0.484	0.504	0.690	0.710	3.0	27	100	78701	500	78703
1/2"	20	16	EMCS-11	0.622	0.642	0.820	0.840	3.0	35	100	78711	500	78713
3/4"	25	21	EMCS-12	0.820	0.840	1.030	1.050	4.0	43	100	78722	500	78724
1"	32	27	EMCS-13	1.041	1.066	1.290	1.315	4.0	85	100	78732	400	78734
1 1/4"	40	35	EMCS-14	1.380	1.410	1.630	1.660	4.5	101	50	78742	200	78744
1 1/2"	50	41	EMCS-15	1.575	1.600	1.865	1.900	7.0	140	50	78752	150	78754
2"	63	53	EMCS-16	2.020	2.045	2.340	2.375	9.5	180	50	78762	100	78764



# HALOGEN-FREE (HF) SERIES



For a low-smoke, low-flame spread, zero-halogen version, ask for HFSLA, HFEMS or HFEMCS. It's ideal for field installation in confined, public areas such as subways, tunnels, etc.

There are many situations and areas where PVC is not allowed for electrical construction. The jacketing material used in the Halogen-Free Series virtually eliminates the release of acidic gases found in PVC products.

COMBUSTION & FLAMMABILITY	TEST	VALUE
Vertical Burn (Material)	UL94	V-0 Rating; No Flaming Drips
Vertical Burn (Conduit)	UL360	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

Test data is based on controlled laboratory conditions and does not necessarily reflect performance in actual fire conditions. Additional product information available upon request.








TYPE HFSLA				INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH					
US Trade Size	ISO (MM)	CSA (MM)	Type	Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Lbs. per 100 Ft.	Carton (Ft.)	Part # (black)	Reel (Ft.)	Part # (black)	Reel (Ft.)	Part # (black)
3/8"	16	12	HFSLA-10	0.484	0.504	0.690	0.710	2.0	29	100	789012	500	789032	1000	789042
1/2"	20	16	HFSLA-11	0.622	0.642	0.820	0.840	3.0	32	100	789128	500	789137	1000	789148
3/4"	25	21	HFSLA-12	0.820	0.840	1.030	1.050	4.2	53	100	789228	500	789247		
1"	32	27	HFSLA-13	1.041	1.066	1.290	1.315	5.5	82	100	789328	400	789347		
1 1/4"	40	35	HFSLA-14	1.380	1.410	1.630	1.660	7.0	102	50	789428	200	789447		
1 1/2"	50	41	HFSLA-15	1.575	1.600	1.865	1.900	4.5	124	50	789528	150	789547		
2"	63	53	HFSLA-16	2.020	2.045	2.340	2.375	6.0	145	50	789628	100	789647		

TYPE HFEMS				INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH					
US Trade Size	ISO (MM)	CSA (MM)	Type	Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Lbs. per 100 Ft.	Carton (Ft.)	Part # (Gray)	Reel (Ft.)	Part # (Gray)	Reel (Ft.)	Part # (Gray)
3/8"	16	12	HFEMS-10	0.484	0.504	0.690	0.710	3.0	27	100	78201	1000	78204		
1/2"	20	16	HFEMS-11	0.622	0.642	0.820	0.840	3.0	35	100	78211	1000	78214		
3/4"	25	21	HFEMS-12	0.820	0.840	1.030	1.050	4.0	43	100	78221	500	78224		
1"	32	27	HFEMS-13	1.041	1.066	1.290	1.315	4.0	85	100	78232	400	78234		
1 1/4"	40	35	HFEMS-14	1.380	1.410	1.630	1.660	4.5	101	50	78242	200	78244		
1 1/2"	50	41	HFEMS-15	1.575	1.600	1.865	1.900	7.0	140	50	78252	150	78254		
2"	63	53	HFEMS-16	2.020	2.045	2.340	2.375	9.5	180	50	78262	100	78264		
2 1/2"	70	63	HFEMS-17	2.480	2.505	2.840	2.875	12.0	232	25	78272				
3"	80	78	HFEMS-18	3.070	3.100	3.460	3.500	13.5	320	25	78282				
4"	100	103	HFEMS-19	4.000	4.040	4.460	4.500	17.0	388	25	78292				

TYPE HFEMCS				INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH					
US Trade Size	ISO (MM)	CSA (MM)	Type	Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)	Lbs. per 100 Ft.	Carton (Ft.)	Part # (black)	Reel (Ft.)	Part # (black)	Reel (Ft.)	Part # (black)
3/8"	16	12	HFEMCS-10	0.484	0.504	0.690	0.710	3.0	27	100	86001	500	86003		
1/2"	20	16	HFEMCS-11	0.622	0.642	0.820	0.840	3.0	35	100	86101	500	86103		
3/4"	25	21	HFEMCS-12	0.820	0.840	1.030	1.050	4.0	43	100	86201	500	86204		
1"	32	27	HFEMCS-13	1.041	1.066	1.290	1.315	4.0	85	100	86302	400	86304		
1 1/4"	40	35	HFEMCS-14	1.380	1.410	1.630	1.660	4.5	101	50	86402	200	86404		
1 1/2"	50	41	HFEMCS-15	1.575	1.600	1.865	1.900	7.0	140	50	86502	150	86504		
2"	63	53	HFEMCS-16	2.020	2.045	2.340	2.375	9.5	180	50	86602	100	86604		

# UNJACKETED METALLIC

This series of flexible metal conduits are free of nonmetallic materials and offer the highest physical protection to electrical wiring. Available in a wide range of sizes and types. For more information on our Unjacketed Metallic Conduits, see below for an overview or continue through this section.

Conduit Type		Page
	<b>TYPE BR</b>	37
	<b>TYPE ABR</b>	38
	<b>TYPE ABRH</b>	39
	<b>TYPE USL</b>	40
	<b>TYPE SL</b>	41
	<b>TYPE UG</b>	42
	<b>WHIPS</b>	43

### Distinctive Characteristics May Include:

- UL recognized, UL listed, CSA certified
- CE
- WEEE and RoHS Compliant
- High impact and crush strength
- Tight bends
- Wide range of sizes
- Non-combustible

### Applications:

- Commercial and Residential Construction
- Manufactured Wiring Systems
- High Temperature
- Plenum Ceilings
- Lighting Fixtures and Appliances
- Security



## Stainless Steel Interlock Conduit

### Features:

- Corrosion-Resistant
- Available in 304L or 316L Stainless Alloys
- Consult factory for sizes
- Made in USA

# TYPE BR



- Markets:**
- Construction
  - Fixture/AC Whips
  - Security
  - Utilities
  - Wastewater Treatment



“Blue Ribbon” (BR) This UL listed non-jacketed flexible steel conduit has many universal wiring applications. It is often referred to as “Greenfield” or “Reduced Wall Flex”.


## Construction:

- Hot Dipped Galvanized Steel
- Helically wound, formed strip
- Reduced Wall Steel Gauge

## Application:


This conduit is intended for installation as a metal raceway for wires and cable in accordance with the NEC (ANSI/NFPA-70), Article 348.


- Permitted to be used in exposed and concealed locations (Section 348.10)
- For containment of 1000 volt and lower potential circuits (Unless otherwise permitted)
- Grounding conductor requirement for flexible installations (Section 348.60)
- Suitable as an equipment grounding conductor (Section 250.118(5))
- Wiring in elevators, hoist ways and escalators. (Section 620.21)
- Limit on use of 3/8 inch trade size. (Section 348.20)
- Raceway connection to motors (Section 430.223)
- Cranes and hoists (Section 610.11)
- Manufactured Wiring Systems (Section 604.6(a))
- Suitable for use with listed connectors intended for FMC (Flexible Metal Conduit)
- Flexible metal conduit is also permitted for use on industrial machinery (ANSI/NFPA-79) (Section 14.5.4).

 Proudly made in the U.S.A.


## Product Information


### Certifications & Compliance

 Listed File #E53253 (sizes 3/8 through 3 inch). Conforms to Underwriters Laboratories Standard ANSI/UL-1 for Flexible Metal Conduit.

 Certified File #LL18858 (3/8 inch size only). Conforms to CSA 22.2 No. 56 for use per the Canadian electrical code C22.1 Section 12-1000.

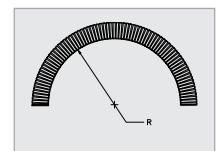
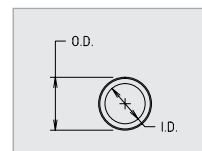
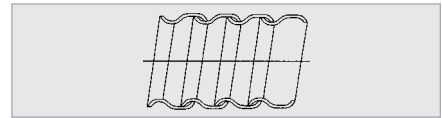
Meets federal specification A-A-55810 Type IV (Formerly WW-C-566c Type II).

 WEEE and RoHS Compliant

 BS EN IEC 61386 Classification Code 455740300314

ARRA Certification

### Types BR and ABR Strip Profile



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH									
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)			Static (IN.)	Lbs. per 100 Ft.	Coil (Ft.)	Part #	Coil (Ft.)	Part #	Coil (Ft.)	Part #	Coil (Ft.)	Part #
3/8"	16	12	BR-10	0.375	0.393	0.560	0.610	2.0	18	25	69308	50	69309	100	69301	250	69302	1000	69304
1/2"	20	16	BR-11	0.625	0.645	0.860	0.920	3.0	28	25	69318	50	69319	100	69311			1000	69312
3/4"	25	21	BR-12	0.812	0.835	1.045	1.105	4.0	33	25	39628	50	69329	100	69322			500	69324
1"	32	27	BR-13	1.000	1.040	1.300	1.380	5.0	52	25	69338	50	69332					400	69334
1 1/4"	40	35	BR-14	1.250	1.300	1.550	1.630	6.2	65			50	69342					400	69344
1 1/2"	50	41	BR-15	1.500	1.575	1.850	1.950	7.5	80	25	69352							300	69354
2"	63	53	BR-16	2.000	2.080	2.350	2.454	10.0	99	25	69362							150	69364
2 1/2"	70	63	BR-17	2.500	2.700	2.860	3.060	12.5	166	25	69372								
3"	80	78	BR-18	3.000	3.200	3.360	3.560	15.0	190	25	69382								
3 1/2"	90	91	BR-350	3.500		3.860	4.060	17.5	170	25	69387								
4"	100	103	BR-19	4.000		4.360	4.560	20.0	200	25	69392								



# TYPE ABR



**Markets:**

- Construction
- Fixture/AC Whips
- Security
- Wastewater Treatment

Aluminum "Blue Ribbon" (ABR) This UL listed non-jacketed flexible aluminum conduit has many universal wiring applications. It is often referred to as "Greenfield" or "Reduced Wall Flex".

**Construction:**

- High Strength Aluminum Alloy
- Helically wound, formed strip
- Reduced Wall Aluminum Gauge
- Approximately 1/3 the weight of RWS

**Application:**

This conduit is intended for installation as a metal raceway for wires and cable in accordance with the NEC (ANSI/NFPA-70). Article 348.

- Permitted to be used in exposed and concealed locations (Section 348.10)
- For containment of 1000 volt and lower potential circuits (Unless otherwise permitted)
- Grounding conductor requirement for flexible installations (Section 348.60)
- Suitable as an equipment grounding conductor (Section 250.118(5))
- Wiring in elevators, hoist ways and escalators. (Section 620.21)
- Limit on use of 3/8 inch trade size. (Section 348.20)
- Raceway connection to motors (Section 430.223)
- Cranes and hoists (Section 610.11)
- Manufactured Wiring Systems (Section 604.6(a))
- Suitable for use with listed connectors intended for FMC (Flexible Metal Conduit)
- Flexible metal conduit is also permitted for use on industrial machinery (ANSI/NFPA-79) (Section 14.5.4).



Proudly made in the U.S.A.

**Product Information**

**Certifications & Compliance**

**UL** Listed File #E53253 (sizes 3/8 & 1/2 through 3 inch). Conforms to Underwriters Laboratories

Standard ANSI/UL-1 for Flexible Metal Conduit.

**SP** Certified File #LL18858 (3/8 & 7/16 inch size only) Conforms to CSA 22.2 No. 56 for use per the Canadian electrical code C22.1 Section 12-1000.

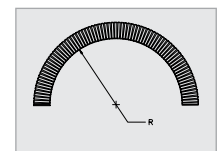
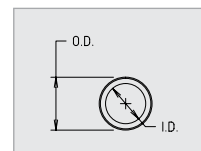
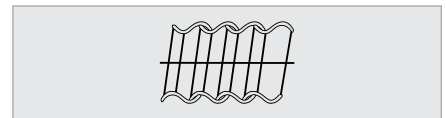
Meets Federal Specification A-A-55810 Type II. (Formerly WW-C-566c Type I)

**WEEE and RoHS Compliant**

**CE** BS EN IEC 61386 Classification Code 445740300213

ARRA Certification

*Types BR and ABR Strip Profile*



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH							
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)			Static (IN.)	Lbs. per 100 Ft.	Coil (Ft.)	Part #	Coil (Ft.)	Part #	Coil (Ft.)	Part #
3/8"	16	12	ABR-10	0.375	0.393	0.560	0.610	2.0	7.0	25	69408	50	69409	100	69401	1000	69404
7/16"		14	ABR-716	0.437	0.457		0.675	2.25	7.7	25		50		100	69400	1000	694043
1/2"	20	16	ABR-11	0.625	0.645	0.860	0.920	3.0	9.5	25	69418	50	69419	100	69411	1000	69414
3/4"	25	21	ABR-12	0.812	0.835	1.045	1.105	4.0	13.5	25	69428	50	69429	100	69422	500	69424
1"	32	27	ABR-13	1.000	1.040	1.300	1.380	5.0	18.0			50	69432			400	69434
1 1/4"	40	35	ABR-14	1.250	1.300	1.550	1.630	6.2	22.0			50	69442			400	69444
1 1/2"	50	41	ABR-15	1.500	1.575	1.850	1.950	7.5	26.0			25	69452			300	69454
2"	63	53	ABR-16	2.000	2.080	2.350	2.454	10.0	35.0			25	69462			150	69464
2 1/2"	70	63	ABR-17	2.500	2.700	2.860	3.060	12.5	57.0			25	69472				
3"	80	78	ABR-18	3.000	3.200	3.360	3.560	15.0	70.0			25	69482				
3 1/2"	90	91	ABR-350	3.500		3.860	4.060	17.5	58.0			25	69487				
4"	100	103	ABR-19	4.000		4.360	4.560	20.0	70.0			25	69492				



# TYPE ABRH



This CSA-certified, non-jacketed flexible aluminum conduit has many universal wiring applications. It is often referred to as "Heavy Wall Flex".

## Construction:

- High Strength Aluminum Alloy
- Helically wound, formed strip
- Heavy Gauge

## Application:

In addition to meeting the UL and NEC requirements noted for Type ABR, Reduced Wall Aluminum Conduit, ABRH is also:

- Intended as a metal raceway for wires and cable in accordance with Canadian Electrical Code (CEC) C22.1 Section 12-1000.
- Suitable for use with listed connectors intended for FMC (Flexible Metal Conduit)



## Markets:

- Construction
- Security
- Utilities
- Wastewater Treatment



Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

**UL** Listed File #E53253 (sizes 1/2 through 4 inch). Conforms to Underwriters Laboratories Standard ANSI/UL-1 for Flexible Metal Conduit.

**CSA** File # LL 18858 Conforms to CSA 22.2 No. 56 for use per the Canadian Electrical Code C22.1 Section 12-1000.

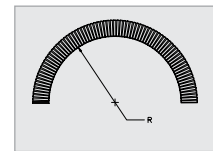
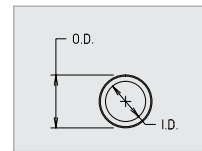
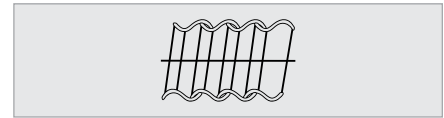
Meets Federal Specification A-A-55810 Type I.

**WEEE** and **RoHS** Compliant

**CE** BS EN IEC 61386 Classification Code 455740300213

ARRA Certification

### Types ABRH Strip Profile



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH					
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)		Lbs. per 100 Ft.	Coil (Ft.)	Part #	Reel (Ft.)	Part #	Reel (Ft.)
3/8"	16	12	ABRH-10	0.375	0.393	0.560	0.610	2.0	7	100	69701	500	69703	1000	69704
7/16"			ABRH-716	0.437	0.457		0.675	2.25	8	100	69707	500	69708	1000	69709
1/2"	20	16	ABRH-11	0.625	0.645	0.860	0.920	3.0	16	100	69711	500	69713	1000	69714
3/4"	25	21	ABRH-12	0.812	0.835	1.045	1.105	4.0	18	100	69722	500	69723	1000	69724
1"	32	27	ABRH-13	1.000	1.040	1.300	1.380	5.0	35	50	69732			400	69734
1 1/4"	40	35	ABRH-14	1.250	1.300	1.550	1.630	6.2	43	50	69742			400	69744
1 1/2"	50	41	ABRH-15	1.500	1.575	1.850	1.950	7.5	55	25	69752			100	69753
2"	63	53	ABRH-16	2.000	2.080	2.350	2.454	10.0	73	25	69762				
2 1/2"	70	63	ABRH-17	2.500	2.700	2.860	3.060	12.5	90	25	69772				
3"	80	78	ABRH-18	3.000	3.200	3.360	3.560	15.0	107	25	69782				
4"	100	103	ABRH-19	4.000		4.360	4.560	20.0	142	25	69792				



Unjacketed Metallic



# TYPE USL

Markets:  
• Security



This extra-flexible steel conduit is recognized by UL and CSA for use within listed and certified assemblies.

### Construction:

- Hot Dipped Galvanized Steel
- Helically wound, formed strip

### Application:

- Intended as a factory installed component
- Modular Office Partitions
- Showcase Lighting
- Range Hoods
- Mates with a variety of setscrew and clamp type connectors



Proudly made in the U.S.A.

### Product Information

**Certifications & Compliance**  
 UL Recognized File #E53253

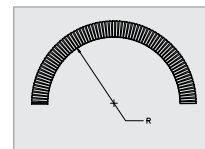
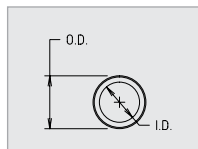
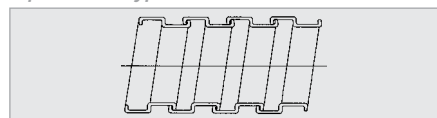
CSA Report # LO 4000-4875



WEEE and RoHS Compliant

ARRA Certification

### Squarelock - Type USL



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH Coil (Ft.)	Part # (Gray)
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)			
			USL-516	0.297	0.327	0.457	0.487	1 1/4	12	250	91402
			USL-380	0.360	0.390	0.520	0.550	1 1/4	15	250	92402
			USL-716	0.422	0.452	0.572	0.612	1 1/2	17	250	93402
3/8"	16	12	USL-120	0.485	0.515	0.645	0.675	1 1/2	19	250	94402
			USL-916	0.557	0.577	0.707	0.737	1 1/2	20	250	95402
1/2"	20	16	USL-580	0.622	0.642	0.732	0.765	2	24	100	96402
3/4"	25	21	USL-340	0.820	0.840	0.930	0.960	2	32	100	97402



# TYPE SL

Markets:  
• Security



Unjacketed Metallic



This non-UL, extra-flexible product, available in the smaller diameters, is designed for tight-spot installation and where continuous flexing is required of a steel wound hose.

### Construction:

- Electro-Galvanized Steel
- Helically wound, formed strip

### Application:

- Offers good mechanical protection to wiring in a variety of OEM applications.



Proudly made in the U.S.A.

### Product Information

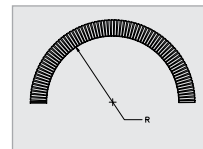
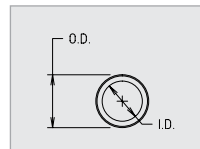
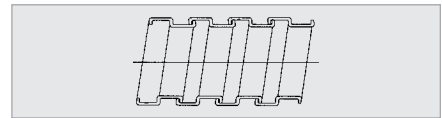
#### Certifications & Compliance



WEEE and RoHS Compliant

ARRA Certification

#### Squarelock



US Trade Size	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH Carton (Ft.)	Part # (Gray)
		Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)			
	SL-316	0.172	0.202	0.280	0.310	0.75	5	250	91202
	SL-140	0.235	0.265	0.328	0.358	0.75	6	250	92202
5/16"	SL-516	0.297	0.327	0.391	0.421	0.75	7	250	93202
	SL-380	0.360	0.390	0.485	0.515	1.00	8	250	94202
	SL-716	0.422	0.452	0.547	0.577	1.00	9	250	95202
3/8"	SL-10	0.493	0.512	0.617	0.637	1.00	10	250	96202
	SL-916	0.547	0.577	0.672	0.702	1.25	12	150	99206
1/2"	SL-11	0.622	0.642	0.747	0.767	1.50	15	150	97202
	SL-11M	0.650	0.670	0.775	0.795	1.50	15	150	972021
	SL-340	0.735	0.765	0.865	0.895	1.50	17	150	98202
3/4"	SL-12	0.827	0.847	0.957	0.977	2.00	18	100	98222
1"	SL-13	1.041	1.066	1.191	1.216	2.00	27	50	98232
	SL-13M	1.102	1.122	1.252	1.272	2.00	27	50	982321

# TYPE UG

Markets:  
• Security



A fully-interlocked, non-UL flexible steel conduit designed for high strength in “tight-spot” installations.

### Construction:

- Brite Tin Plated Steel
- Helically wound, interlocking formed strip
- Note: Electrical trade sizes do not apply to Type UG

### Application:

- The bright appearance of the finished product lends itself to installations where the conduit may be visible after the final assembly.
- Mates with a variety of setscrew and clamp type connectors.



Proudly made in the U.S.A.

### Product Information

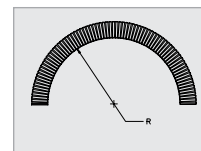
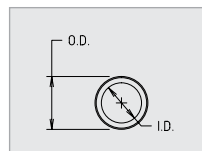
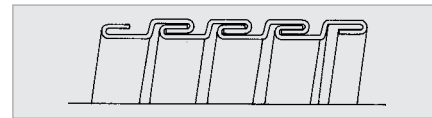
#### Certifications & Compliance



WEEE and RoHS Compliant

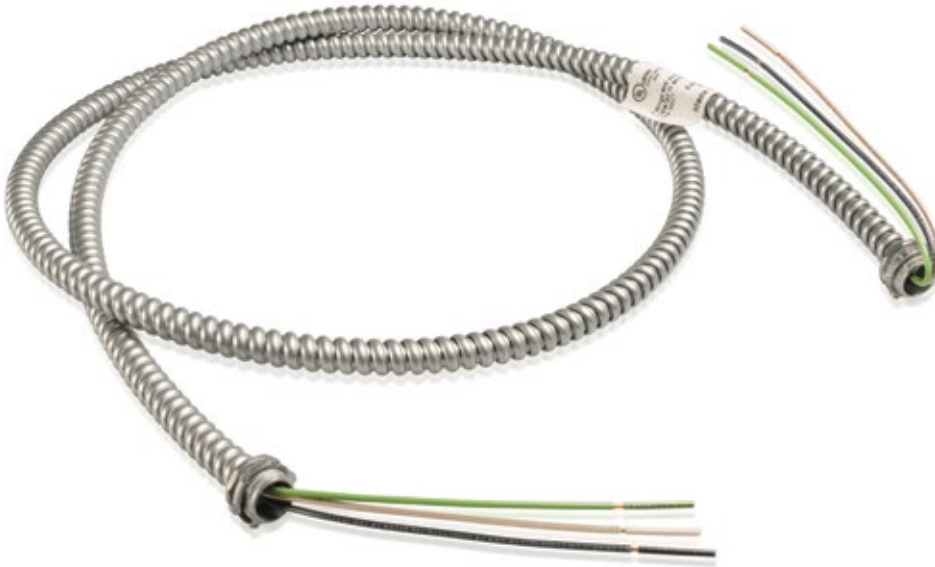
ARRA Certification

#### Interlock



Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH Coil (Ft.)	Part # (Gray)
	Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)			
UG-380	0.443	0.473	0.563	0.593	2.5	16	50	91101
UG-120	0.755	0.785	0.875	0.905	3.0	22	50	92101
UG-340	0.943	0.973	1.063	1.093	3.5	26	50	93101
UG-100	1.208	1.238	1.328	1.358	4.5	34	50	94101
UG-125	1.485	1.515	1.578	1.608	5.5	50	50	95101
UG-150	1.735	1.765	1.843	1.873	6.5	56	50	96101
UG-200	2.235	2.265	2.390	2.420	8.5	80	50	97101
UG-250	2.735	2.765	2.937	2.967	10.5	85	50	98101
UG-300	3.360	3.390	3.438	3.468	13.0	105	50	99101

# FLEXIBLE WHIPS



Used for lighting fixture installations as well as many other electrical equipment uses. These metallic whips consist of UL listed flexible metal conduit Type BR, stranded (stock) or solid THHN wire with 6" leads, and internal, zinc die-cast fittings with steel locknuts.



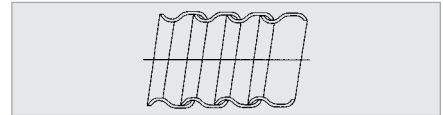
Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

Listed File #E105410

### Types BR and ABR Strip Profile



### Construction:

- Hot Dipped Galvanized Steel
- Helically wound, formed strip
- Reduced Wall Steel Gauge

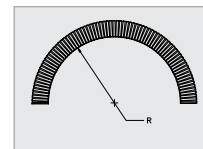
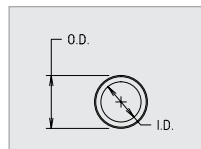
### Application:

Fixture Whips are made per NEC requirements unless otherwise specified and are UL listed under Wiring Assemblies (QQYZ) category.

- AWG 14 = 15 Amp
- AWG 12 = 20 Amp
- Additional configurations available upon request.
- Packaged in 25 piece cartons and 250 piece drums.
- For further information and NEC Code applications, see Type BR.

### Options Available:

- Aluminum Conduit Pre-Assembled Whips
- Liquatite Metallic Whips
- Solid and Stranded Conductors
- Snap-In Connectors
- Additional configurations available upon request
- Packaged in 25 piece cartons and 250 piece drums
- LED Luminaire Fixture Whips



PART NUMBER	TRADE SIZE	LENGTH	WIRE GAUGE & CONFIGURATION		QUANTITY
SW10122	3/8"	72"	12/2	BLK-WT	25, 250
SW10123	3/8"	72"	12/3	BLK-WT-GRN	25, 250
SW10142	3/8"	72"	14/2	BLK-WT	25, 250
SW10143	3/8"	72"	14/3	BLK-WT-GRN	25, 250
SW10144	3/8"	72"	14/4	BLK-WT-RED	25, 250
SW10182	3/8"	72"	18/2	BLK-WT	25, 250
SW10183	3/8"	72"	18/3	BLK-WT-GRN	25, 250



# NONMETALLIC

Nonmetallic flexible conduits are made without a metal core and are ideal for corrosive environments, high flexing applications and where weight might be an issue. Materials used are flexible and rigid PVC. For more information on our Nonmetallic Conduits, see below for an overview or continue through this section.

Conduit Type		Page
	<b>CORRLOK</b>	See Below
	<b>TYPE LMN-P</b>	45
	<b>TYPE NM</b>	46
	<b>TYPE NMHT</b>	47
	<b>TYPE NMFG</b>	48
	<b>TYPE NM2</b>	49
	<b>TYPE NMLT &amp; NMSC</b>	50
	<b>NONMETALLIC A/C WHIPS</b>	51

### Distinctive Characteristics May Include:

- UL recognized, UL listed, CSA certified
- NSF Certified
- WEEE and RoHS Compliant
- Flame- and sunlight-resistant
- High impact and crush strength
- Tight bends
- Wide temperature ranges

### Applications/Vertical Markets:

- Air Conditioning Hookups
- Machine Tools
- Cable Carriers
- Pools and Spas
- Outdoor Wiring
- Solar/Alternative Energy
- Robotics
- Power Trac
- Mining
- Oil & Gas
- Power Plants
- Cell Towers
- Construction
- Data Centers
- Food Processing/Pharmaceuticals
- Security
- Telecommunication
- Wastewater



The Corrlok System provides lightweight, liquidtight, flexible raceway alternatives that are easy to work with and stand up to tough environments.

For details, visit [www.electriflex.com](http://www.electriflex.com) and request the Corrlok catalog.

# TYPE LNM-P

## Markets:

- Machine Tools (OEM)
- Mining
- Oil & Gas Refineries
- Power Plants
- Robotics
- Steel Mills



This UL and CSA listed nonmetallic liquidtight conduit is ideally suited for continuous flexing situations. It is often specified in "Power Track" or cable carrier installations and on industrial robots. It does not contain a metal core which could fatigue from repeated flexing or vibration.

## Construction:

### Inner Core:

- Flexible PVC
- Nylon reinforcing braid

### Liquidtight Jacket:

- Flexible PVC
- Resistant to Oils and Mild Acids
- Flame Retardant
- Sunlight Resistant (UV)

## Application:

Type LNM-P is intended for installation in accordance with Article 356 of the NEC (ANSI/NFPA-70) for flexible liquidtight nonmetallic conduit (LFNC-A or FNMC-A).

- For containment of 1000 volt and lower potential circuits.
- Listed and marked for outdoor use
- Installations in hazardous (classified) locations:
  - Class I Div. 2 Article 501
  - Class II Div. 1&2 Article 502
  - Class III Div. 1&2 Article 503
- Electric signs and outdoor lighting over 1000 volts. Article 600.31(A)
- Wiring methods for pools and spas. Article 680

Conforms to the requirements of Section 14.5.5 of the electrical Standard for Industrial Machinery NFPA-79.

## Fittings:

Fittings for layered conduit are for that conduit only and are so identified by the marking "FNMC-A" or "LFNC-A" for liquidtight flexible nonmetallic conduit Type A. 1/2" straight examples include:

- Thomas & Betts (Steel) #3721 (Plastic) #6302
- Appleton Electric # STNM-50
- Kellems / Hubell # H050CNK

## Packaging:

Coiled in cartons or in random lengths (minimum 50 feet) on non-returnable Reels.



Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

Listed File # E79308  
Conforms to Underwriters Laboratories Standard ANSI/UL 1660 type A.

Conforms to CSA 22.2 No. 227.2 Type A

WEEE and RoHS Compliant  
ARRA Certification

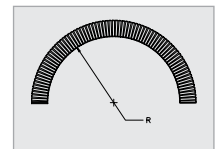
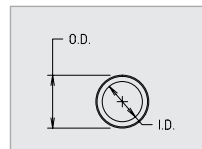
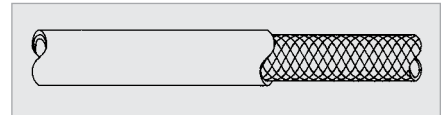
### Standard Colors

Safety Orange. Also available in Black and Gray.

### Working Temperatures

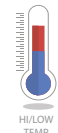
-55° to 105°C

### LNM-P



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH							
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)			Static (IN.)	Lbs. per 100 Ft.	Carton (Ft.)	Part #	Reel (Ft.)	Part #	Reel (Ft.)	Part #
3/8"	16	12	LNM-P 10	0.485	0.505	0.755	0.775	2.5	16	100	87001	250	87002	500	87003	1000	87004
1/2"	20	16	LNM-P 11	0.620	0.640	0.910	0.930	3.0	21	100	87101	200	87102	500	87103	1000	87104
3/4"	25	21	LNM-P 12	0.815	0.835	1.150	1.170	4.0	31	100	87201	175	87202	500	87204		
1"	32	27	LNM-P 13	1.030	1.055	1.415	1.440	6.0	42			100	87302	400	87304		
1 1/4"	40	35	LNM-P 14	1.370	1.395	1.800	1.825	7.0	61			100	87402	200	87404		
1 1/2"	50	41	LNM-P 15	1.585	1.620	2.045	2.080	8.0	79			50	87502	150	87503		
2"	63	53	LNM-P 16	2.045	2.080	0.605	2.640	9.0	120			50	87602	100	87603		

Nonmetallic



# TYPE NM



- Markets:**
- Cell Towers
  - Construction
  - Data Centers
  - Fixture/AC Whips
  - Healthcare
  - Power Plants
  - Rail/Transit
  - Renewable Energy
  - Security
  - Ship Building
  - Telecommunications
  - Utilities
  - Wastewater Treatment

A general purpose, UL and CSA listed, nonmetallic liquidtight conduit offering excellent protection to wiring from abrasion, sunlight, mild acids, alkaline and oils. Often used for air conditioning hook-ups and other outdoor applications.

**Construction:**

- Type NM is a helically wound integral Type B construction. It contains a spiral of rigid PVC reinforcement imbedded within the PVC wall.

**Application:**

Type NM is intended for installation in accordance with Article 356 of the NEC (ANSI/NFPA-70) for Flexible Liquidtight Nonmetallic Conduit (LFNC-B or FNMC-B).

- For containment of 1000 volt and lower potential circuits.
- Listed and marked for outdoor use.
- Listed and marked for direct burial and in poured concrete
- Installations in hazardous (classified) locations:
  - Class I Div. 2 Article 501
  - Class II Div. 1 & 2 Article 502
  - Class III Div. 1 & 2 Article 503
- Electric signs and outdoor lighting over 1000 volts. Article 600.32(A).
- Wiring methods for pools and spas. Article 680.

Conforms to the requirements of Section 14.5.5 of the electrical Standard for Industrial Machinery NFPA-79.

**Fittings:**

Suitable for use with nonmetallic fittings marked for FNMC-B or LFNC-B for liquidtight flexible nonmetallic conduit Type B or with standard metal liquidtight fittings. See NMLT connectors (p. 50) for further information.

Continuous lengths on reels available in 1/2" and 3/4" diameters only. Larger sizes available. Consult factory.



Proudly made in the U.S.A.

**Product Information**

**Certifications & Compliance**

Listed File # E79308  
Conforms to Underwriters Laboratories Standard ANSI/UL 1660 Type B.

Certified File #LL230485  
Conforms to CSA 22.2 No. 227.2 Type B.

WEEE and RoHS Compliant

ARRA Certification

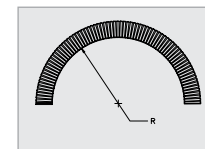
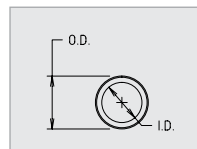
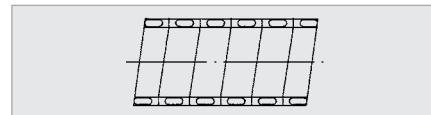
**Standard Colors**

Machine Tool Gray. Also available in black. Other colors available upon request.

**Working Temperatures**

-20°C to 80°C Dry / 60°C Wet / 70°C Oil  
For higher temperature version, see type NMHT (p. 47).

NM Type B



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT	STANDARD LENGTH			
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)		Lbs. per 100 Ft.	Carton (Ft.)	Part #	Reel (Ft.)
3/8"	16	12	NM-10	0.484	0.504	0.690	0.710	2.0	10	100	81001	1000	81004
1/2"	20	16	NM-11	0.622	0.642	0.820	0.840	3.25	11	100	81011	1000	81014
3/4"	25	21	NM-12	0.820	0.840	1.030	1.050	4.25	15	100	81022	500	81024
1"	32	27	NM-13	1.041	1.066	1.290	1.315	6.5	25	100	81032	400	81034
1 1/4"	40	35	NM-14	1.380	1.410	1.630	1.660	8.0	34	100	81042		
1 1/2"	50	41	NM-15	1.575	1.600	1.865	1.900	9.0	42	50	81052		
2"	63	53	NM-16	2.020	2.045	2.340	2.375	11.0	60	50	81062		

# TYPE NMHT



### Markets:

- Cell Towers
- Construction
- Power Plants
- Renewable Energy
- Telecommunications
- Utilities
- Wastewater Treatment



Nonmetallic

This version of Type NM is designed to withstand high temperature environments. NMHT can be used to contain conductors having insulation materials with higher temperature ratings.

### Construction:

- Type NM is a helically wound integral Type B construction. It contains a spiral of rigid PVC reinforcement imbedded within the PVC wall.

### Application:

Type NMHT is intended for installation in accordance with Article 356 of the NEC (ANSI/NFPA-70) for Flexible Liquidtight Nonmetallic Conduit (LFNC-B or FNMC-B).

- For containment of 1000 volt and lower potential circuits.
- Listed and marked for outdoor use.
- Listed and marked for direct burial and in poured concrete
- Installations in hazardous (classified) locations:
  - Class I Div. 2 Article 501
  - Class II Div. 1 & 2 Article 502
  - Class III Div. 1 & 2 Article 503
- Electric signs and outdoor lighting over 1000 volts. Article 600.32(A).
- Wiring methods for pools and spas. Article 680.
- Conforms to the requirements of section 14.5.5 of the Electrical Standard for Industrial Machinery NFPA-79.

### Fittings:

Suitable for use with nonmetallic fittings marked for FNMC-B or LFNC-B for liquidtight flexible nonmetallic conduit Type B or with standard metal liquidtight fittings. See NMLT connectors (p. 50) for further information.

Continuous lengths on reels available in 1/2" and 3/4" diameters only. Larger sizes available. Consult factory.



Proudly made in the U.S.A.

### Product Information

#### Certifications & Compliance

Listed File # E79308  
Conforms to Underwriters Laboratories Standard ANSI/UL 1660 Type B.

Certified File #LL230485  
Conforms to CSA 22.2 No. 227.2 Type B.

WEEE and RoHS Compliant

ARRA Certification

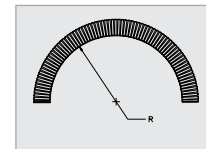
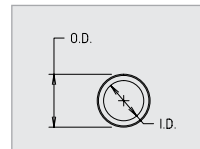
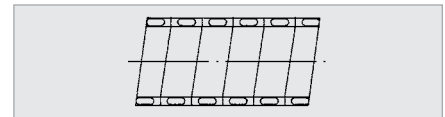
#### Standard Colors

Black. Other colors available upon request

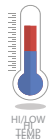
#### Working Temperatures

-20°C to 105°C Dry / 60°C Wet / 70°C Oil

#### NMHT Type B



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH	
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)		Carton (Ft.)	Part #
3/8"	16	12	NMHT-10	0.484	0.504	0.690	0.710	2.0	10	100	82101
1/2"	20	16	NMHT-11	0.622	0.642	0.820	0.840	3.25	11	100	82111
3/4"	25	21	NMHT-12	0.820	0.840	1.030	1.050	4.25	15	100	82122
1"	32	27	NMHT-13	1.041	1.066	1.290	1.315	6.5	25	100	82132
1 1/4"	40	35	NMHT-14	1.380	1.410	1.630	1.660	8.0	34	100	82142
1 1/2"	50	41	NMHT-15	1.575	1.600	1.865	1.900	9.0	42	50	82152
2"	63	53	NMHT-16	2.020	2.045	2.340	2.375	11.0	60	50	82162



# TYPE NMFG

**Markets:**

- Food Processing
- Pharmaceuticals



A Food Grade nonmetallic liquidtight conduit that offers excellent protection to wiring from abrasion, sunlight, mild acids, alkaline and oils. It is intended for food and beverage machinery applications.

### Construction:

- Type NMFG is a helically wound integral Type B construction. It contains a spiral of rigid PVC reinforcement imbedded within the PVC wall.
- The PVC used is an FDA approved compound.

### Application:

Type NMFG is intended for installation in accordance with Article 356 of the NEC (ANSI/NFPA-70) for Flexible Liquidtight Nonmetallic Conduit (LFNC-B or FNMC-B).

- This conduit can be used for "Splash Zone" food and beverage contact per FDA CFR21 and NSF 51/61 requirements. It is intended for a variety of wiring application on food processing equipment or clean rooms requiring motion, vibration and bending.
- Smooth exterior for easy wash down
- Resistant to Bleach (Sodium Hypochlorite)
- Will not promote bacteria growth

### Fittings:

Suitable for use with nonmetallic fittings marked for FNMC-B or LFNC-B for liquidtight flexible nonmetallic conduit Type B or with standard metal liquidtight fittings. See NMLT connectors (p. 50) for further information.



Proudly made in the U.S.A.

### Product Information

#### Certifications & Compliance

Listed File # E79308  
Conforms to Underwriters Laboratories Standard ANSI/UL 1660 Type B.

Certified File #LL230485  
Conforms to CSA 22.2 No. 227.2 Type B.

WEEE and RoHS Compliant

ARRA Certification

NSF Certified Component

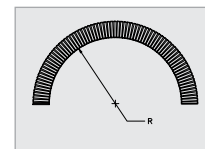
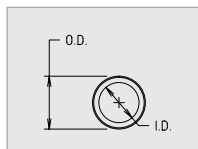
#### Standard Colors

White

#### Working Temperatures

-20°C to 80°C Dry / 60°C Wet / 70°C Oil

Nonmetallic



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH Carton (Ft.)	Part #
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)			
3/8"	16	12	NMFG-10	0.484	0.504	0.690	0.710	2.0	10	100	81701
1/2"	20	16	NMFG-11	0.622	0.642	0.820	0.840	3.25	11	100	81711
3/4"	25	21	NMFG-12	0.820	0.840	1.030	1.050	4.25	15	100	81712
1"	32	27	NMFG-13	1.041	1.066	1.290	1.315	6.5	25	100	81713
1 1/4"	40	35	NMFG-14	1.380	1.410	1.630	1.660	8.0	34	100	81714
1 1/2"	50	41	NMFG-15	1.575	1.600	1.865	1.900	9.0	42	50	81715
2"	63	53	NMFG-16	2.020	2.045	2.340	2.375	11.0	60	50	81716



# TYPE NM2



Type NM2 is an extra-flexible liquidtight nonmetallic tubing. This lightweight tubing cuts easily and installs quickly. It is ideal for wiring protection in tight quarters and for tight bends. The thin, flexible PVC skin allows for greater movement than Listed nonmetallic conduits.

## Construction:

- Type NM is a helically wound integral construction. It contains a spiral of rigid PVC reinforcement imbedded within the PVC wall.

## Application:

- Used as a UL Recognized component in OEM equipment
- Robotic wiring harnesses
- Laboratory Equipment
- Fiber Optics

## Fittings:

Intended for use with nonmetallic liquidtight fittings marked FNMC-B. See Type NMLT Connectors (p. 50) for further information.

## Markets:

- Machine Tools (OEM)
- Renewable Energy
- Robotics
- Telecommunications



Proudly made in the U.S.A.

## Product Information

### Certifications & Compliance

Conforms to CSA 22.2 No. 227.3 File# LL84707

UL Recognized File # E129972 UL1696

WEEE and RoHS Compliant

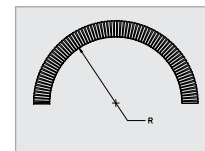
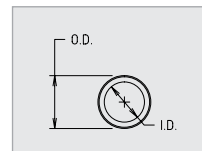
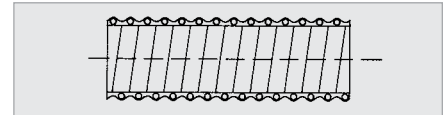
ARRA Certification

### Standard Colors

Black.

### Working Temperatures

-20°C to 70°C



US Trade Size	ISO (MM)	CSA (MM)	Type	INTERNAL DIAMETER		OUTER DIAMETER		INSIDE BEND RADIUS	WEIGHT Lbs. per 100 Ft.	STANDARD LENGTH	
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)		Carton (Ft.)	Part #
1/4"	10	8	NM2-140	0.385	0.405	0.560	0.575	0.6	5	100	82000
3/8"	16	12	NM2-10	0.484	0.504	0.690	0.710	0.7	6	100	82001
1/2"	20	16	NM2-11	0.622	0.642	0.820	0.840	0.9	8	100	82011
3/4"	25	21	NM2-12	0.820	0.840	1.030	1.050	1.1	10	100	82022
1"	32	27	NM2-13	1.041	1.066	1.290	1.315	1.3	15	100	82032
1 1/4"	40	35	NM2-14	1.380	1.410	1.630	1.660	1.7	20	100	82042
1 1/2"	50	41	NM2-15	1.575	1.600	1.865	1.900	1.9	26	50	82052
2"	63	53	NM2-16	2.020	2.045	2.340	2.375	2.4	36	50	82062



Nonmetallic



# TYPE NMLT & NMSC

- Markets:**
- Cell Towers
  - Construction
  - Data Centers
  - Fixture/AC Whips
  - Healthcare
  - Power Plants
  - Rail/Transit
  - Renewable Energy
  - Security
  - Ship Building
  - Telecommunications
  - Utilities
  - Wastewater Treatment



Type NMLT and NMSC nonmetallic connectors are intended to be used with liquidtight nonmetallic conduit Type B. (NM, NMHT, NMFG and NM2.) They are not to be used with Type A (LNM-P) conduit or steel conduit.

**Construction:**

- UL and cUL Listed
- "O" Ring and steel locknut included
- Angled connectors provide smooth "sweep" radius
- Standard NPT Threads
- Suitable for indoor/outdoor use
- NMLT made from Nylon 6. Flame rating 94V-2. 125° C
- NMLT-30 Series available in 45° angle configuration
- NMSC screw-on, one piece connectors made from UV rated PVC
- NEMA 4X

**Product Information**

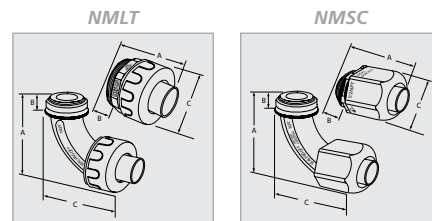
**Certifications & Compliance**

Listed File # E197675

CUL Listed # E197675

**Standard Colors**

Gray. For Black, add suffix B to catalog number.



NMLT								
Config	US Trade Size	ISO (MM)	CSA (MM)	Type	KO Size (IN)	A-Dimensions (IN)	B-Dimensions (IN)	C-Dimensions (IN)
Straight	3/8"	16	12	NMLT-10	1/2	2.000	0.540	1.400
Straight	1/2"	20	16	NMLT-11	1/2	2.000	0.540	1.400
Straight	3/4"	25	21	NMLT-12	3/4	2.200	0.635	1.700
Straight	1"	32	27	NMLT-13	1	2.280	0.740	2.000
Straight	1 1/4"	40	35	NMLT-14	1 1/4	2.440	0.760	2.400
Straight	1 1/2"	50	41	NMLT-15	1 1/2	2.700	0.800	2.670
Straight	2"	63	53	NMLT-16	2	2.990	0.850	3.280
90°	3/8"	16	12	NMLT-20	1/2	2.120	0.500	3.120
90°	1/2"	20	16	NMLT-21	1/2	2.120	0.500	3.120
90°	3/4"	25	21	NMLT-22	3/4	2.500	0.520	3.600
90°	1"	32	27	NMLT-23	1	3.125	0.700	4.125
90°	1 1/4"	40	35	NMLT-24	1 1/4	4.450	0.760	5.200
90°	1 1/2"	50	41	NMLT-25	1 1/2	4.750	0.800	5.200
90°	2"	63	53	NMLT-26	2	5.420	0.860	5.800
NMSC								
Config	US Trade Size	ISO (MM)	CSA (MM)	Type	KO Size (IN)	A-Dimensions (IN)	B-Dimensions (IN)	C-Dimensions (IN)
Straight	1/2"	50	41	NMSC-11	1/2	1.750	0.500	1.250
Straight	3/4"	63	53	NMSC-12	3/4	1.800	0.625	1.500
90°	1/2"	16	12	NMSC-21	1/2	1.875	0.500	3.125
90°	3/4"	20	16	NMSC-22	3/4	2.375	0.625	3.500



# NONMETALLIC A/C WHIPS



Commonly used in air conditioner, pool and sauna installations. Consists of UL listed flexible nonmetallic conduit, one nonmetallic straight connector and one nonmetallic 90° connector.

### Construction:

- Nonmetallic conduit Type NM is a helically wound integral Type B construction. It contains a spiral of rigid PVC reinforcement imbedded within the PVC wall.
- Corrosion, Oil and Sunlight Resistant

### Application:

Available in:

- 8 and 10 AWG Conductors
- Conduit sizes 1/2" and 3/4"
- 4 and 6 foot lengths

Packaged in standard cartons. For quantities of 500 or more, please consult factory.

Type NM is intended for installation in accordance with Article 356 of the NEC (ANSI/NFPA-70) for Flexible Liquidtight Nonmetallic Conduit (LFNC-B or FNMC-B).

- For containment of 1000 volt and lower potential circuits.
- Listed and marked for outdoor use.
- Wiring methods for pools and spas. Article 680.



Proudly made in the U.S.A.

### Product Information

#### Certifications & Compliance

Listed File # E105410

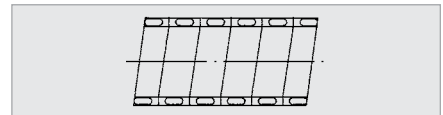
#### Standard Colors

Machine Tool Gray.

#### Working Temperatures

-20°C to 80°C Dry / 60°C Wet / 70°C Oil

#### NM Type B



DESCRIPTION	PART NUMBER	NUMBER, SIZE AND WIRE COLOR OF CONDUCTORS	STD. PACK QUANTITY
NM 11 1/2" x 48"	NMW1148311	3 # 10s BLK-RED-GRN	24
NM 11 1/2" x 72"	NMW1172311	3 # 10's BLK-RED-GRN	24
NM 12 3/4" x 48"	NMW1248381	2#8 BLK-RED; 1 #10 GRN	24
NM 12 3/4" x 72"	NMW1272381	2 # 8 BLK-RED; 1 #10 GRN	12

# ENGINEERING INFORMATION



## ELECTRI-FLEX VISE

The Electri-Flex cutting vise is recommended for accurate, straight cuts in the field. This lightweight cast iron vise can either be bench-mounted or carried in the tool box. The clamping mechanism securely holds the flexible conduit while the slots guide a hacksaw to ensure a clean, square cut. Suitable for conduit trade sizes 3/8" to 1-1/2". Works well on other tubing and materials too. Order P/N: 90030, weight 2.4 lbs.

## CUTTING FLEXIBLE CONDUITS

Proper cutting methods for flexible conduits are important to ensure a sealed connection when assembled with intended fittings. Furthermore, in case of flexible conduits containing steel, a clean, square cut is necessary for establishing a good connection for continuity of the ground.

## HAND CUTTING IN FIELD

When using a handheld hacksaw, care should be taken to make a square, clean cut. This can be easily achieved through the use of the cutting vise shown on this page. For best results, a blade having 24 to 32 teeth per inch with no-set is recommended. For larger sizes, apply reinforced tape around the circumference of the conduit and cut directly through the middle of the tape. This will reduce the possibility of flaring the ends while cutting.

## REPETITIVE PRODUCTION CUTTING

It has been our experience that in order to achieve the best results; a band saw having a blade with 24 to 32 teeth per inch at a speed of 300 to 350 feet per minute should be used. A no-set blade will produce the cleanest cut. Conduit should be held and supported in a safe manner. Abrasive cut-off wheels and chop saws are not recommended.

## Conduit Wire Fill Charts

Per National Electrical Code—Chapter 9, Table 4

Trade Size	Internal Diameter (In.)	Total Area 100% (sq. In.)	2 Wires 31% (sq. In.)	Over 2 Wires 40% (sq. In.)	1 Wire 53% (sq. In.)	Internal Diameter (In.)	Total Area 100% (sq. In.)	2 Wires 31% (sq. In.)	Over 2 Wires 40% (sq. In.)	1 Wire 53% (sq. In.)
	Flexible Metal Conduit—BR, ABR					Liquidtight Flexible Metal Conduit—LA, LT, EF, ATLA, AT, ATX, ALT, ZHLA, CEA, ACEA, LOR, CSA, VJC, LAFG, LTFG, LSSFG, LTSS, ZHSS, ATXSS, ATSS, CBLA				
3/8	0.384	0.116	0.036	0.046	0.061	0.494	0.192	0.060	0.077	0.102
1/2	0.635	0.317	0.098	0.127	0.168	0.632	0.314	0.097	0.126	0.166
3/4	0.824	0.533	0.165	0.213	0.282	0.830	0.541	0.168	0.216	0.287
1	1.020	0.817	0.253	0.327	0.433	1.054	0.872	0.270	0.349	0.462
1-1/4	1.275	1.277	0.396	0.511	0.677	1.395	1.528	0.474	0.611	0.810
1-1/2	1.538	1.857	0.576	0.743	0.984	1.588	1.979	0.613	0.792	1.049
2	2.040	3.269	1.013	1.308	1.733	2.033	3.245	1.006	1.298	1.720
2-1/2	2.500	4.909	1.522	1.964	2.602	2.493	4.879	1.512	1.952	2.586
3	3.000	7.069	2.191	2.828	3.747	3.085	7.475	2.317	2.990	3.962
3-1/2	3.500	9.621	2.983	3.848	5.099	3.520	9.731	3.017	3.892	5.157
4	4.000	12.566	3.895	5.026	6.660	4.020	12.692	3.935	5.077	6.727
	Flexible Nonmetallic Conduit Type A—LNM-P					Liquidtight Nonmetallic Conduit Type B—NM, NMHT, NMFG, NM2				
3/8	0.495	0.192	0.060	0.077	0.102	0.494	0.192	0.060	0.077	0.102
1/2	0.630	0.312	0.097	0.125	0.165	0.632	0.314	0.097	0.126	0.166
3/4	0.825	0.535	0.166	0.214	0.284	0.830	0.541	0.168	0.216	0.287
1	1.043	0.854	0.265	0.342	0.453	1.054	0.872	0.270	0.349	0.462
1-1/4	1.383	1.501	0.465	0.600	0.796	1.395	1.528	0.474	0.611	0.810
1-1/2	1.603	2.017	0.625	0.807	1.069	1.588	1.979	0.613	0.792	1.049
2	2.063	3.341	1.036	1.336	1.771	2.033	3.245	1.006	1.298	1.720
	NPT Threaded Fittings					NPT Threaded Fittings—Knock Out Diameter				
3/8	1/2					7/8				
1/2	1/2					7/8				
3/4	3/4					1-3/32				
1	1					1-23/64				
1-1/4	1-1/4					1-23/32				
1-1/2	1-1/2					2				
2	2					2-1/2				

# STANDARD DIMENSIONS

**TYPE LA • TYPE LT • TYPE EF • TYPE ATLA • TYPE AT • TYPE ATX • TYPE ALT • TYPE ZHLA • TYPE CEA • TYPE ACEA • TYPE LOR • TYPE CSA • TYPE VJC • TYPE LAFG • TYPE LTFG • TYPE LSSFG • TYPE LTSS • TYPE ZHSS • TYPE ATXSS • TYPE ATSS • TYPE CBLA • TYPE SLA • TYPE EMS • TYPE EMCS • TYPE NM • TYPE NMHT • TYPE NM2 • TYPE NMFG**

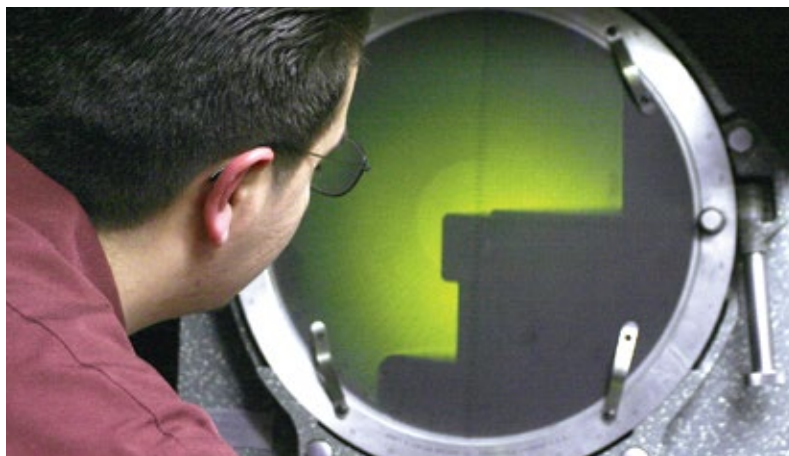
## STANDARD DIMENSIONS FOR LIQUIDTIGHT FLEXIBLE CONDUIT

Trade Size (In.)	Type	Diameter (in.)		Diameter (mm)	
		Inside Min/Max	Outside Min/Max	Inside Min/Max	Outside Min/Max
1/4	140	0.245/0.265	0.450/0.470	6.2/6.7	11.4/11.9
5/16	516	0.385/0.405	0.570/0.590	9.8/10.3	14.5/15.0
3/8	10	0.484/0.504	0.690/0.710	12.3/12.8	17.5/18.0
1/2	11	0.622/0.642	0.820/0.840	15.8/16.3	20.8/21.3
3/4	12	0.820/0.840	1.030/1.050	20.8/21.3	26.2/26.7
1	13	1.041/1.066	1.290/1.315	26.4/27.1	32.8/33.4
1-1/4	14	1.380/1.410	1.630/1.660	35.1/35.8	41.4/42.2
1-1/2	15	1.575/1.600	1.865/1.900	40.0/40.6	47.4/48.3
2	16	2.020/2.045	2.340/2.375	51.3/51.9	59.4/60.3
2-1/2	17	2.480/2.505	2.840/2.875	63.0/63.6	72.1/73.0
3	18	3.070/3.100	3.460/3.500	78.0/78.7	87.9/88.8
3-1/2	350	3.500/3.540	3.960/4.000	88.9/89.9	100.6/101.6
4	19	4.000/4.040	4.460/4.500	101.6/102.6	113.3/114.3
5	500	4.975/5.035	5.505/5.565	126.4/127.9	139.8/141.4
6	600	6.015/6.075	6.565/6.625	152.8/154.3	166.8/168.3

*This reference chart is applicable to the standard conduit types listed above. Please refer to individual product pages of this catalog for size ranges and dimensions for products not listed here.*

## COMMON CONVERSIONS

Length	Weight	Temperature
1 Foot = 0.305 Meters	1 Pound = 454 Grams	°C = Degrees Centigrade
1 Meter = 3.281 Feet	1 Pound = 0.454 Kilograms	°F = Degrees Fahrenheit
1 Inch = 25.4 Millimeters	1 Kilogram = 2.205 Pounds	°C = (°F — 32) ÷ 1.8
1 Millimeter = 0.039 Inches	1 Gram = 0.035 Ounces	°F = (°C x 1.8) + 32
1 Inch = 2.54 Centimeters	1 Ounce = 28.349 Grams	-
1 Centimeter = 0.394 Inches	-	-



### NEMA Guidelines Publication

NEMA (National Electrical Manufacturers Association) has developed and published an APPLICATION AND INSTALLATION GUIDELINES FOR FLEXIBLE AND LIQUIDTIGHT FLEXIBLE METAL AND NONMETALLIC CONDUITS. This publication, NEMA RV 3-2014, is available at this link: [www.nema.org/stds/rv3.cfm#download](http://www.nema.org/stds/rv3.cfm#download)

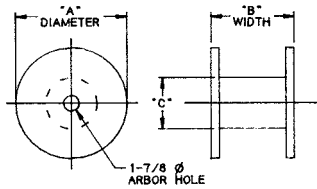
# REEL DIMENSIONS

Carton and reel lengths are approximate due to variations during the extrusion process.

Trade Size (in.)	Type	58"				42"					30"					32" Special			24"		
		LT LA EF	LT LA Ef	BR ABR	LNLM-P	LT	LA	EF	BR ABR	LNLM-P	LT	LA	EF	BR ABR	LNLM-P	LT LA EF	BR ABR	LNLM-P	LT LA EF		
3/8	10	6000	-	-	-	1000	1000	1000	2000	1000	-	-	-	1000	500	500	-	-	-		
1/2	11	4500	-	-	1000	1000	1000	1000	1000	500	-	-	-	-	-	500	-	-	-		
3/4	12	2500	1000	-	-	500	500	500	500	500	-	-	-	-	-	-	-	-	-		
1	13	1500	-	-	-	400	-	400	400	400	-	400	-	-	-	-	-	-	-		
1-1/4	14	1000	-	400	-	200	-	200	-	200	-	200	-	-	-	-	-	-	-		
1-1/2	15	750	-	300	-	-	-	-	-	-	150	150	150	-	-	-	-	-	-		
2	16	500	-	150	-	-	-	-	-	-	100	100	100	-	-	-	-	-	-		
2-1/2	17	275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
3	18	175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
3-1/2	350	175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4	19	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
5	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
6	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

## Approximate Reel Dimensions

"A"		"B"		"C"		Weight		Qty./Skid
(in)	(cm)	(in)	(cm)	(in)	(cm)	(lbs)	(kg)	
24	60.96	19.5	49.53	12	30.48	17	7.7	4
30	76.2	19.5	49.53	12	30.48	21	9.5	4
32 (Special)	81.28	19.5	49.53	14	35.56	23	10.4	4
42	106.68	20	50.8	24	60.96	70	31.8	1
58 (Jumbo)	147.32	36	91.44	28	71.12	208	94.3	1



### Lazy Louis Liquatite Reel Payout Stand

Safe and easy handling of conduit for contractor and high-rise work.

This rugged yet simple payout reel is worth its weight in gold. It easily handles reels (32" diameter and smaller) hassle-free, and can take loaded reels of 400 lbs. capacity.

The tough steel construction of the base, roller bearings and top plate make dispensing conduit fast and efficient, while the tubular shaft makes set up and handling a breeze. There's never a need of a hoist or a forklift to push the reels around. With the Lazy Louie you set up where you want to work and that's it.

Weight 11 lbs. P/N 90040



## Dimensions

Carton Type	Size: L x W x H in. (cm.)			Trade Size in.	ISO Size mm.	CSA Size mm.	Length Per Carton ft. (m.)
	L	W	H				
<b>Liquatite Types LA, LT, and EF</b>							
R1	14-3/8 (36.53)	7-3/4 (19.685)	15 (38.1)	1/4	10	8	250 (75)
				5/16	12	10	250 (75)
				3/8	16	12	100 (30)
R2	16-3/4 (42.55)	8 (20.32)	17-5/8 (44.77)	1/2	20	16	100 (30)
R3	20-3/8 (51.77)	8 (20.32)	20-3/4 (52.7)	3/4	25	21	100 (30)
R4	24-1/2 (62.23)	8-1/4 (20.96)	25-1/4 (64.135)	1	32	27	100 (30)
				1-1/4	40	35	50 (15)
R6	37 (93.98)	10-3/8 (26.37)	33-5/8 (85.41)	1-1/4	50	41	50 (15)
				2	63	53	50 (15)
				2-1/2	70	63	25 (8)
#3	52 (132.08)	8-1/2 (21.59)	52 (132.08)	3	80	78	25 (8)
3 & 4	60-1/4 (153.04)	6-1/2 (16.5)	60-1/4 (153.04)	3-1/2	90	91	25 (8)
				4	100	103	25 (8)
5 & 6	66 (167.64)	12-1/2 (31.75)	66 (167.64)	5	125	-	25 (8)
6	66 (167.64)	12-1/2 (31.75)	66 (167.64)	6	150	-	25 (8)
<b>Nonmetallic Type LNM-P</b>							
Small LNM-P	34-3/4 (88.27)	7 (17.78)	34-3/4 (88.27)	3/8	16	12	250 (75)
				1/2	20	16	200 (60)
				3/4	25	21	175 (50)
				1	32	27	100 (30)
				1-1/4	40	35	100 (30)
Large LNM-P	43 (109.22)	7-3/4 (19.7)	43 (109.22)	1-1/2	50	41	100 (30)
				2	63	53	50 (15)
<b>Nonmetallic Type NM and NM2</b>							
-	6 (15.24)	20 (50.8)	20 (50.8)	3/8	16	12	100 (30)
-	6 (15.24)	20 (50.8)	20 (50.8)	1/2	20	16	100 (30)
-	7 (17.78)	22 (55.88)	22 (55.88)	3/4	25	21	100 (30)
-	8 (20.32)	24 (60.96)	24 (60.96)	1	32	27	100 (30)
-	9 (22.86)	26 (66.04)	26 (66.04)	1-1/4	40	35	100 (30)
-	7 (17.78)	30 (76.2)	30 (76.2)	1-1/2	50	41	50 (15)
-	7 (17.78)	30 (76.2)	30 (76.2)	2	63	53	50 (15)

## Skids

Standard Skid Quantities: 48" x 40" x 5"					
Trade Size (in.)	Catalog Number	Flex	Liquatite	Nonmetallic	
		ABR, BR	EF, LA, LT	LNM-P	NM
3/8	10	60 coils	45 cartons	100	250
1/2	11	25 coils	45 cartons	100	200
3/4	12	25 coils	24 cartons	100	175
1	13	28 coils	20 cartons	100	100
1-1/4	14	28 coils	20 cartons	50	100
1-1/2	15	28 coils	5 cartons	50	50
2	16	28 coils	5 cartons	50	50
2-1/2	17	5 coils	5 cartons	25	-
3	18	5 coils	5 cartons	25	-
3-1/2	350	5 coils	5 cartons	25	-
4	19	4 coils	5 cartons	25	-

## Cartons

Trade Size (in.)	Catalog Number	Standard Carton Type	
		All	LNM-P
3/8	10	100	250
1/2	11	100	200
3/4	12	100	175
1	13	100	100
1-1/4	14	50	100
1-1/2	15	50	50
2	16	50	50
2-1/2	17	25	-
3	18	25	-
3-1/2	350	25	-
4	19	25	-
5	500	25	-
6	600	25	-

## Packaging, Disclaimer and Warranty

### DISCLAIMER

All specifications contained herein are subject to change without notice. Please refer to [www.electriflex.com](http://www.electriflex.com) for the most current product information.

Carton and reel lengths are approximate due to variations during the extrusion process.

### PRODUCT WARRANTY

The Electri-Flex Company manufactures its products to the specifications and standards as described in the most current Electri-Flex catalog and it warrants them to be free from defects in materials and workmanship.

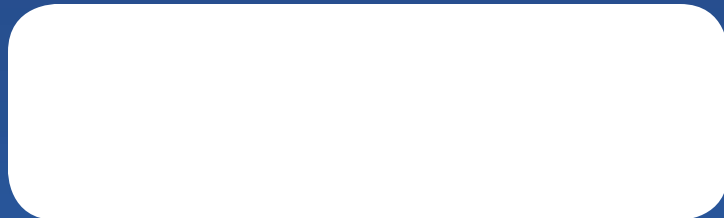
Electri-Flex will, in the case of product claim, be liable for only the price of the goods purchased. Remedies with respect to products sold by Electri-Flex will be limited only to the right of replacement, or to repayment of user's price of its product.





Family owned and operated since its inception and incorporation in 1955, Electri-Flex remains focused on the quality, service and partnership values that have resulted in its leadership position in the electrical industry. The company's innovations have included its premier Liquatite® line and other manufacturing patents, as well as numerous packaging improvements.

If you are seeking cost-effective, high-quality flexible conduit for any application, give us a call. Whatever your design challenge, we can provide a solution.



**electri-flex company**

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