liquatite®

FLEXIBLE ELECTRICAL CONDUIT

Jacketed Metallic

EMI / RFI Shielded

Unjacketed Metallic

Nonmetallic

electri-flex company

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 55 years

The Liquatite Line

The Liquatite line includes nearly 40 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.

Quality Assurance

Quality control for Liquatite 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 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
- **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.

Members of:

- NAED
- NEMRA
- NEMA

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
- Distributor Policy brochure
- 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.

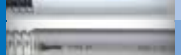
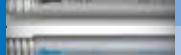
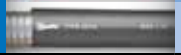
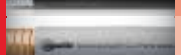
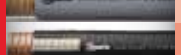
Electri-Flex's employees, representatives, distributors and customer partners continue to create the success Electri-Flex has enjoyed for more than 55 years.

Conduit Application Guide

	Conduit Type	Page	Flexibility: Continued Flexing	Flexibility: Small Bend Radius	Flexibility: Flexible	Flexibility: Pliable (Static)	Metal Used	Plastic Used	High Mech. Strength	Listed for Direct Burial	Halogen-Free	Low Fire Hazard	Accepts Standard Liquidtight Fittings	Self-Extinguish	EMI/RFI Shielding	Approval
Jacketed Metallic	TYPE LA	7			•		Steel	PVC	•	•			•	•		UL SA
	TYPE LT	8		•	•		Steel	PVC					•			JIC
	TYPE LTFG	9		•	•		Steel	PVC					•			NSF/FDA
	TYPE EF	10		•	•		Steel	PVC					•			JIC
	TYPE LOR	10		•	•		Steel	PVC					•			JIC
	TYPE CBLA	11			•		Steel	PVC	•	•			•	•		UL SA
	TYPE CSA	12			•		Steel	PVC	•				•	•		SA
	TYPE ATLA	13			•		Steel	PVC	•	•			•	•		UL SA
	TYPE AT	14		•	•		Steel	PVC					•			
	TYPE ATX	14		•	•		Steel	TPR			•		•			
	TYPE VJC	15	•	•	•		Steel	PVC					•			
	TYPE ALT	15			•		Aluminum	PVC					•			
	TYPE ZHLA	16			•		Steel	PU	•	•	•	•	•	•		UL
	TYPE CEA	17			•		Steel	PU			•	•	•	•		
	TYPE ACEA	18			•		Aluminum	PU			•	•	•	•		
EMI/RFI	TYPE SLA	22			•		Steel	PVC	•	•	Available	Available	•	•	•	UL
	TYPE EMS	23			•		Bronze	PVC			Available	Available	•	•	•	
	TYPE EMCS	23			•		Bronze	PVC			Available	Available	•	•	•	
Unjacketed Metallic	TYPE BR	25			•		Steel		•							UL SA 3/8
	TYPE ABR	26			•		Aluminum									UL SA 3/8
	TYPE ABRH	27			•		Aluminum		•							SA
	TYPE FSC	27			•		Steel		•							
	TYPE USL	28		•	•		Steel									
	TYPE UG	28			•	•	Steel									
	TYPE SL	29	•	•	•		Steel									
	TYPE PF	30				•	Steel									UL
Nonmetallic	CORRLOK®	32	•	•	•			Nylon	•		•	•		•		
	TYPE LNM-P	33	•		•			PVC					FNMC-A	•		UL c UL
	TYPE NM	34			•			PVC	•	•			•	•		UL SA
	TYPE NMHT	34			•			PVC	•	•			•	•		UL SA
	TYPE NM2	35	•		•			PVC					•	•		

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

Conduit Application Guide

		Conduit Type	Page	Temperature Range °C -60° -40° -20° 0° 50° 60° 75° 80° 90° 105° 150° / °F -76° -40° -4° 32° 122° 140° 167° 176° 194° 221° 302°	General Chemical Resistance: Oils	Acids
Jacketed Metallic		TYPE LA	7		•	•
		TYPE LT	8		•	•
		TYPE LTFG	9		•	•
		TYPE EF	10		•	•
		TYPE LOR	10		•	•
		TYPE CBLA	11		•	•
		TYPE CSA	12		•	•
		TYPE ATLA	13		•	•
		TYPE AT	14		•	•
		TYPE ATX	14		•	
		TYPE VJC	15		•	•
		TYPE ALT	15		•	•
		TYPE ZHLA	16		•	
		TYPE CEA	17		•	
		TYPE ACEA	18		•	
EMI / RFI		TYPE SLA	22		•	•
		TYPE EMS	23		•	•
		TYPE EMCS	23		•	•
Unjacketed Metallic		TYPE BR	25			
		TYPE ABR	26			
		TYPE ABRH	27			
		TYPE FSC	27			
		TYPE USL	28			
		TYPE UG	28			
		TYPE SL	29			
		TYPE PF	30			
Nonmetallic		CORRLOK®	32		•	
		TYPE LNM-P	33		•	•
		TYPE NM	34		•	•
		TYPE NMHT	34		•	•
		TYPE NM2	35		•	•

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.

Distinctive Characteristics Include:

- UL listed, CSA certified
- 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 19 for details.

TYPE **LA**

A flexible steel conduit that 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:

The flexible inner core is made from a spiral-wound strip of heavy-gauge, corrosion-resistant, hot-dipped galvanized steel. The 3/8 through 1-1/4 inch trade sizes are squarelock formed and include an integral bonding strip of copper that is enclosed within the convolutions throughout their entire length. The 1-1/2 through 4-inch trade sizes are designed with a fully interlocked strip.

The liquidtight jacketing material is of a high-quality, rugged, flame-retardant flexible PVC compound that resists oils, mild acids and exposure to sunlight. Refer to the Chemical Resistance Guide on our website for further information.

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 600 volt and lower potential circuits.
- Sunlight-resistant.
- Suitable as a grounding conductor when used for circuits rated up to 20A for the 3/8 and 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).
- 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)**
- Installed under raised floors in data processing areas. Articles 645.5(E)(2).
- Electric signs and outline lighting over 1,000 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 600V. 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.

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

RoHS and WEEE Compliant.

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

STANDARD COLORS:

Machine Tool Gray and Black. Other colors available upon request. Blue is commonly used for computer room installations. See Type CBLA.

WORKING TEMPERATURES:

-30°C to 80°C Dry/60°C Wet/70°C Oil

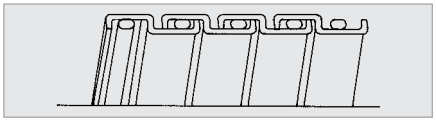
METAL USED: Steel

PLASTIC USED: PVC

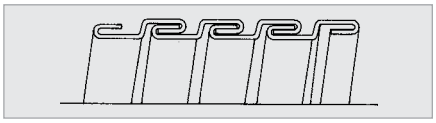
See the Chemical Resistance Guide on our website.

Made in the USA

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



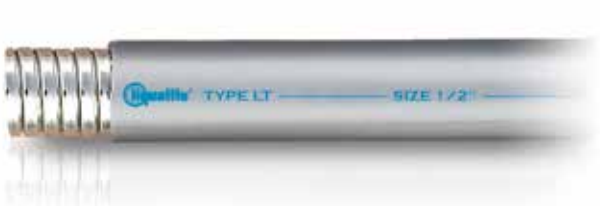
Interlock *SIZES: 1-1/2"—4"*



Trade Size (In.)	Type	Inside Bend Radius (In.)	Weight (Lbs.)/100 Ft.	Carton Footage		Reel Footage			
				Length	Part # Gray/Black	Length	Part # Gray/Black	Length	Part # Gray/Black
3/8	LA-10	2.0	29	100	20101/20801	500	20103/20803	1000	20104/20804
1/2	LA-11	3.0	32	100	21101/21801	500	21103/21803	1000	21104/21804
3/4	LA-12	4.2	53	100	22101/22801	500	22104/22804	1000	22110/22810
1	LA-13	5.5	82	100	23102/23802	400	23104/23804	-	-/-
1-1/4	LA-14	7.0	102	50	24102/24802	200	24104/24804	-	-/-
1-1/2	LA-15	4.5	124	50	25102/25802	150	25104/25804	-	-/-
2	LA-16	6.0	145	50	26102/26802	100	26104/26804	-	-/-
2-1/2	LA/LT-17	8.0	192	25	27102/27802	275	27105/27805	-	-/-
3	LA/LT-18	10.0	252	25	28102/28802	175	28105/28805	-	-/-
3-1/2	LA/LT-350	11.0	308	25	28502/-	175	28505/-	-	-/-
4	LA/LT-19	12.0	350	25	29102/29502	100	29105/29505	-	-/-

See page 37 for dimensions.

TYPE LT



A general-purpose, non-UL spec grade flexible 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:

The flexible inner core is made from a spiral-wound strip of corrosion-resistant plated steel. The 1/4 through 2 inch trade sizes are squarelocked formed and, with the exception of the 1/4 inch size, contain a nylon cord packing within the convolutions.

The larger sizes are constructed with a fully interlocked strip for added strength and to prevent unraveling.

A flexible yet durable PVC jacket is extruded over this core, creating a liquidtight conduit resistant to most oils, acids and vapors present in industrial environments.

Refer to the Chemical Resistance Guide on our website.

APPLICATION:

This conduit is used extensively in the machine tool and other industrial environments where flexibility is necessary for installation and maintenance, or where vibration and movement must be absorbed. The inherent sunlight resistance of PVC enables this product to be used in outdoor applications. Compatible with standard liquidtight connectors.

RoHS and WEEE Compliant.

JIC:

Manufactured in accordance with the dimensions and specifications as outlined by the Joint Industrial Council Standard for Mass Production Equipment and Machine Tools.

STANDARD COLORS:

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

WORKING TEMPERATURES:

-20°C to 80°C

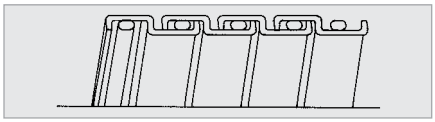
METAL USED: Steel

PLASTIC USED: PVC

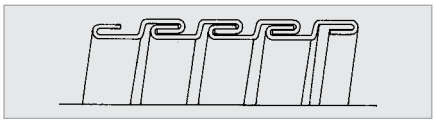
See the Chemical Resistance Guide on our website.

Made in the USA

Squarelock with Filler *SIZES: 5/16"—2"*



Interlock *SIZES: 2-1/2"—6"*



Trade Size (In.)	Type	Inside Bend Radius (In.)	Weight (Lbs.)/100 Ft.	Carton Footage		Reel Footage			
				Length	Part # Gray/Black	Length	Part # Gray/Black	Length	Part # Gray/Black
1/4	LT-140	1.0	10	250	10002/-	-	-	-	-
5/16	LT-516	1.0	17	250	10012/-	-	-	-	-
3/8	LT-10	1.5	20	100	10101/10801	500	10103/10803	1000	10104/10804
1/2	LT-11	2.0	24	100	11101/11801	500	11103/11803	1000	11104/11804
3/4	LT-12	2.5	33	100	12102/12802	500	12104/12804	1000	12110/12810
1	LT-13	3.0	53	100	13102/13802	400	13104/13804	-	-
1-1/4	LT-14	3.5	68	50	14102/14802	200	14104/14804	-	-
1-1/2	LT-15	4.5	88	50	15102/15802	150	15104/15804	-	-
2	LT-16	5.5	102	50	16102/16802	100	16104/16804	-	-
2-1/2	LA/LT-17	8.0	192	25	27102/27802	275	27105/27805	-	-
3	LA/LT-18	10.0	252	25	28102/28802	175	28105/28805	-	-
3-1/2	LA/LT-350	11.0	308	25	28502/-	175	28505/-	-	-
4	LA/LT-19	12.0	350	25	29102/29502	100	29105/29505	-	-
5	LT-500	17.5	468	25	15502/15582	-	-	-	-
6	LT-600	22.5	572	25	16602/16682	-	-	-	-

See page 37 for dimensions. Please note that sizes 2-1/2" through 4" are identical to the LA series detailed on page 7.

TYPE LTFG NEW

NSF

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

CONSTRUCTION:

The flexible inner core is made from continuously spiral-wound, corrosion-resistant plated steel and contains a nylon cord packing.

The outer flexible PVC jacket is made from an FDA-approved compound formulated for "Splash Zone" food and beverage contact per FDA CFR21 and NSF 51/61 requirements.

APPLICATION:

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

- Provides a liquidtight flexible protective wiring raceway
- Smooth exterior for easy washdown
- Will not promote bacteria growth
- Available in 3/8" through 2", consult factory for larger sizes.
- Intended for use with Standard Liquidtight Connectors
- FDA-approved compound

APPLICATIONS INCLUDE: Special purpose food equipment or devices, such as food processing, packaging, cooking, canning and bottling equipment; pharmaceutical manufacturers; meat and poultry packing facilities; and restaurants.

INDUSTRIES SERVED:

- Poultry Processing & Misc. Food Manufacturing (SIC 2015).
- Food Product Machinery Manufacturing (SIC 3556).
- Meat Packing Plants (SIC 2011).
- Pharmaceutical Preparation Manufacturing (SIC 2834).

RoHS and WEEE Compliant.

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

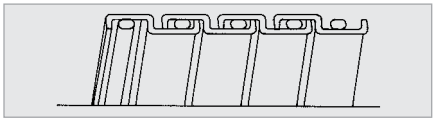
METAL USED: Steel

PLASTIC USED: PVC

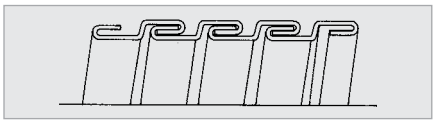
See the Chemical Resistance Guide on our website.

Made in the USA

Squarelock with Filler *SIZES: 5/16"—2"*



Interlock *SIZES: 2-1/2"—6"*



Trade Size (In.)	Type	Internal Diameter (In.)		Outer Diameter (In.)		Inside Bend Radius (In.)	Weight (Lbs.)/100 Ft.	Coil Length (Ft.)	Coil Part #	Reel Length (Ft.)
		Min.	Max.	Min.	Max.					
3/8	LTFG-10	0.484	0.504	0.690	0.710	1.5	20	100	101019	500/1000
1/2	LTFG-11	0.622	0.642	0.820	0.840	2.0	24	100	111019	500/1000
3/4	LTFG-12	0.820	0.840	1.030	1.050	2.5	33	100	121029	500/1000
1	LTFG-13	1.041	1.066	1.290	1.315	3.0	53	100	131029	400
1-1/4	LTFG-14	1.380	1.410	1.630	1.660	3.5	68	50	141029	200
1-1/2	LTFG-15	1.575	1.600	1.865	1.900	4.5	88	50	151029	150
2	LTFG-16	2.020	2.045	2.340	2.375	5.5	102	50	161029	100

See page 37 for dimensions. Please note that sizes 2-1/2" through 4" are identical to the LA series detailed on page 7.

TYPE **EF**

This non-UL flexible liquidtight conduit is a competitive-grade version of our Type LT. It conforms to JIC standards for dimensions and general construction.

CONSTRUCTION:
The flexible inner core is constructed from a helically formed strip of corrosion-resistant steel. A liquidtight PVC jacket is then extruded over the core.

APPLICATION:
Type EF is used for general installations requiring some movement and protection for contained conductors. Forms a liquidtight system when installed with standard connectors for use indoors or out.

STANDARD COLORS:
Machine Tool Gray

WORKING TEMPERATURES:
-20°C to 80°C

METAL USED: Steel

PLASTIC USED: PVC

See the Chemical Resistance Guide on our website.

Made in the USA

TYPE **LOR**

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

APPLICATION:
Type LOR is ideally used in situations where a UL listing or CSA certification is not a factor but where a flexible conduit must withstand exposure to many harsh chemicals, oils, UV, etc. Compatible with standard liquidtight connectors.

RoHS and WEEE Compliant.

STANDARD COLORS:
Machine Tool Gray. Other colors available upon request. Part numbers below designate gray jacket.

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

METAL USED: Steel

PLASTIC USED: PVC

See the Chemical Resistance Guide on our website.

NOTE: For a UL listed version consult factory for Type LA/LOR.

Made in the USA

Trade Size (In.)	Type	Inside Bend Radius (In.)	Wt. (Lbs.)/ 100 Ft.	Carton Footage		Reel Footage			
				Length	Part #	Length	Part #	Length	Part #
EF									
3/8	EF-10	1.5	20	100	80101	500	80103	1000	80104
1/2	EF-11	2.0	24	100	80111	500	80113	1000	80114
3/4	EF-12	2.5	31	100	80122	500	80124	1000	80127
1	EF-13	3.0	43	100	80132	400	80137	-	-
1-1/4	EF-14	3.5	60	50	80142	200	80147	-	-
1-1/2	EF-15	4.5	78	50	80152	150	80154	-	-
2	EF-16	5.5	104	50	80162	100	80164	-	-
LOR									
3/8	LOR-10	2.0	20	100	50101	500	50103	1000	50104
1/2	LOR-11	2.5	24	100	51101	500	51103	1000	51104
3/4	LOR-12	3.0	33	100	52102	500	52104	1000	52110
1	LOR-13	4.0	53	100	53102	400	53104	-	-
1-1/4	LOR-14	4.5	68	50	54102	200	54104	-	-
1-1/2	LOR-15	5.5	88	50	55102	150	55104	-	-
2	LOR-16	7.0	102	50	56102	100	56104	-	-
2-1/2	LOR-17	9.5	192	25	57102	-	-	-	-
3	LOR-18	11.5	252	25	58102	-	-	-	-
3-1/2	LOR-350	13.0	308	25	58882	-	-	-	-
4	LOR-19	14.0	350	25	59102	-	-	-	-
5	LOR-500	20.0	468	25	55502	-	-	-	-
6	LOR-600	22.5	572	25	56602	-	-	-	-

See page 37 for dimensions.

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:

CBLA has a flexible inner core made from a spiral-wound strip of heavy-gauge, hot-dipped galvanized steel. The 3/8 through 1-1/4 inch trade sizes contain an integral bonding strip of copper. The 1-1/2 inch and larger sizes are designed with a fully interlocked strip.

The jacketing material is a rugged flame-retardant flexible blue PVC. For installations that do not allow the use of PVC, see Type ZHLA on page 16.

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.
- Installed under raised floors in data processing areas. Article 645.5(E)(2).
- Listed and marked for direct burial and in poured concrete.
- Meets the same specifications as Type LA on page 7.

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

RoHS and WEEE Compliant.

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

WORKING TEMPERATURES:

-30°C to 80°C Dry/60°C Wet/70°C Oil

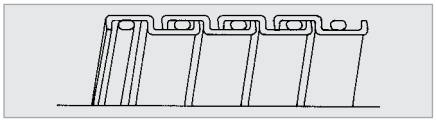
METAL USED: Steel

PLASTIC USED: PVC

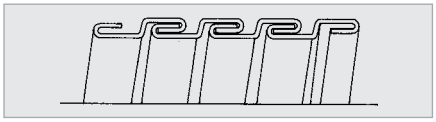
See the Chemical Resistance Guide on our website.

Made in the USA

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



Interlock *SIZES: 1-1/2"—4"*



Trade Size (In.)	Type	Inside Bend Radius (In.)	Wt. (Lbs.)/ 100 Ft.	Carton Footage		Reel Footage			
				Length	Part #	Length	Part #	Length	Part #
3/8	CBLA-10	2.0	29	100	201014	500	201034	1000	201044
1/2	CBLA-11	3.0	32	100	211014	500	211034	1000	211044
3/4	CBLA-12	4.2	53	100	221014	500	221044	1000	221104
1	CBLA-13	5.5	82	100	231024	400	231044	-	-
1-1/4	CBLA-14	7.0	102	50	241024	200	241044	-	-
1-1/2	CBLA-15	4.5	124	50	251024	150	251044	-	-
2	CBLA-16	6.0	145	50	261024	100	261044	-	-
2-1/2	CBLA-17	8.0	192	25	271024	275	271054	-	-
3	CBLA--18	10.0	252	25	281024	175	281054	-	-
3-1/2	CBLA-350	11.0	308	25	285024	175	285054	-	-
4	CBLA-19	12.0	350	25	291024	100	291054	-	-

See page 37 for dimensions.

TYPE **CSA**

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, and it offers a wider operating temperature range.

CONSTRUCTION:

The flexible inner core is made from a spiral-wound strip of heavy-gauge, corrosion-resistant, hot-dipped galvanized steel. The 3/8 through 1-1/4 inch trade sizes are cord-packed.

The durable PVC flame-retardant jacket is designed for good flexibility and impact resistant characteristics at low temperatures.

APPLICATION:

This conduit is intended for use according to the Canadian Electrical Code as described in clause 12-1300 for dry, damp or wet locations and in hazardous areas where flexibility is necessary per 18-202(4) (b) and 18-302(4) for both Class II and Class III locations.

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

RoHS and WEEE Compliant.

STANDARD COLORS: Black

WORKING TEMPERATURES:
-40°C to 75°C

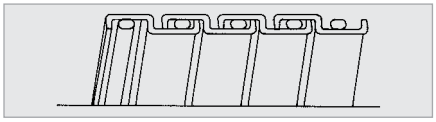
METAL USED: Steel

PLASTIC USED: PVC

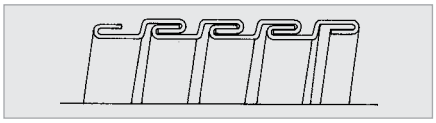
See the Chemical Resistance Guide on our website.

Made in the USA

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



Interlock *SIZES: 1-1/2"—4"*



Trade Size (In.)	CSA (mm)	Type	Inside Bend Radius (In.)	Wt. (Lbs.)/ 100 Ft.	Carton Footage		Reel Footage			
					Length	Part #	Length	Part #	Length	Part #
3/8	12	CSA-10	2.0	25	100	70101	500	70103	1000	70104
1/2	16	CSA-11	3.0	35	100	71101	500	71103	1000	71104
3/4	21	CSA-12	4.0	52	100	72101	500	72104	1000	72110
1	27	CSA-13	5.0	59	100	73102	400	73104	-	-
1-1/4	35	CSA-14	6.2	86	50	74102	200	74104	-	-
1-1/2	41	CSA-15	4.5	122	50	75102	150	75104	-	-
2	53	CSA-16	6.0	154	50	76102	100	76104	-	-
2-1/2	63	CSA-17	8.0	204	25	77102	-	-	-	-
3	78	CSA-18	10.0	264	25	78102	-	-	-	-
3-1/2	91	CSA- 350	-	-	-	-	-	-	-	-
4	103	CSA-19	12.0	368	25	79102	-	-	-	-

See page 37 for dimensions.

TYPE **ATLA**

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:

ATLA has a flexible inner core made from a spiral-wound strip of heavy gauge, hot-dipped galvanized steel. The 3/8 through 1-1/4 inch trade sizes contain an integral bonding strip of copper. The 1-1/2 inch and larger are designed with a fully interlocked strip.

The jacketing material is a rugged flame-retardant flexible PVC resistant to weathering, UV, oils and many chemicals. See the Chemical Resistance Guide on our website for further details.

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 600 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 and 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).
- 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 buildings. Article 225.10.
- Conductor enclosers adjacent to motors over 600V. 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 on page 7.

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

RoHS and WEEE Compliant.

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

STANDARD COLORS:

Machine Tool Gray. Other colors available upon request.

WORKING TEMPERATURES:

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

METAL USED: Steel

PLASTIC USED: PVC

See the Chemical Resistance Guide on our website.

Made in the USA

Trade Size (In.)	Type	Inside Bend Radius (In.)	Wt. (Lbs.)/ 100 Ft.	Carton Footage		Reel Footage			
				Length	Part #	Length	Part #	Length	Part #
3/8	ATLA-10	2.0	29	100	80201	500	80203	1000	80204
1/2	ATLA-11	3.0	32	100	80211	500	80213	1000	80214
3/4	ATLA-12	4.2	53	100	80221	500	80224	1000	80225
1	ATLA-13	5.5	82	100	80232	400	80234	-	-
1-1/4	ATLA-14	7.0	102	50	80242	200	80244	-	-
1-1/2	ATLA-15	4.5	124	50	80252	150	80254	-	-
2	ATLA-16	6.0	145	50	80262	100	80264	-	-
2-1/2	ATLA-17	8.0	192	25	80272	-	-	-	-
3	ATLA-18	10.0	252	25	80282	-	-	-	-
3-1/2	ATLA-350	11.0	308	25	80288	-	-	-	-
4	ATLA-19	12.0	350	25	80292	-	-	-	-

See page 37 for dimensions.

TYPE AT

Made in the USA

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

CONSTRUCTION:

The flexible inner steel core is identical to that found in Type LT. The specially formulated PVC jacket remains flexible at very low temperatures, unlike most plasticized PVC. It also displays slower aging characteristics at elevated temperatures

APPLICATION:

Type AT is well suited for exposure to extreme climatic conditions. It is also widely used on industrial process equipment such as annealing ovens, lumber kilns, foundries, refrigeration, etc. Uses standard liquidtight connectors.

RoHS and WEEE Compliant.

STANDARD COLORS: Machine Tool Gray

WORKING TEMPERATURES: -55°C to 105°C intermitting to 120°C

METAL USED: Steel **PLASTIC USED:** PVC

See the Chemical Resistance Guide on our website.

Note: For a UL listed and CSA certified version, see Type ATLA.

TYPE ATX

Made in the USA

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

CONSTRUCTION:

Utilizes the flexibility of our standard LT core, coupled with the advantage of a thermoplastic rubber jacket that is virtually unaffected by temperature extremes and that contains no halogens. The material has a flammability rating of UL 94-HB and is UV stabilized.

APPLICATION:

Used in situations where concerns of resistance to temperature exposure exist. These include heavy outdoor equipment, boilers and furnaces, and sub-zero areas.

RoHS and WEEE Compliant.

STANDARD COLORS: Black

WORKING TEMPERATURES: -60°C to 150°C intermitting 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.

METAL USED: Steel **PLASTIC USED:** TPR

See the Type ATX—Chemical Resistance Guide on our website.

Trade Size (In.)	Type	Inside Bend Radius (In.)	Wt. (Lbs.)/ 100 Ft.	Carton Footage		Reel Footage			
				Length	Part #	Length	Part #	Length	Part #
AT									
3/8	AT-10	1.5	20	100	30101	500	30103	1000	30104
1/2	AT-11	2.0	24	100	31101	500	31103	1000	31104
3/4	AT-12	2.5	33	100	32102	500	32104	1000	32810
1	AT-13	3.0	53	100	33102	400	33104	-	-
1-1/4	AT-14	3.5	68	50	34102	200	34104	-	-
1-1/2	AT-15	4.5	88	50	35102	150	35104	-	-
2	AT-16	5.5	102	50	36102	100	36104	-	-
2-1/2	AT-17	8.0	168	25	37102	275	37105	-	-
3	AT-18	10.0	252	25	38102	175	38105	-	-
3-1/2	AT-350	11.0	312	25	38882	175	38885	-	-
4	AT-19	12.0	344	25	39102	100	39105	-	-
5	AT-500	17.5	468	25	35502	-	-	-	-
6	AT-600	22.5	572	25	36602	-	-		-
ATX									
3/8	ATX-10	1.5	21	100	60201	500	60203	1000	60204
1/2	ATX-11	2.0	27	100	61201	500	61203	1000	61204
3/4	ATX-12	2.5	39	100	62202	500	62204	1000	62210
1	ATX-13	3.0	56	100	63202	400	63204	-	-
1-1/4	ATX-14	3.5	73	50	64202	200	64204	-	-
1-1/2	ATX-15	4.5	104	50	65202	150	65204	-	-
2	ATX-16	5.5	136	50	66202	100	66204	-	-
2-1/2	ATX-17	8.0	188	25	67202	-	-	-	-
3	ATX-18	10.0	210	25	68202	-	-	-	-
4	ATX-19	12.0	332	25	69202	-	-	-	-

See page 37 for dimensions.

TYPE **VJC**

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

CONSTRUCTION: A unique vacuum extrusion process allows this product to have a thin PVC jacket that does not restrict the great flexibility characteristics of the inner core. The core material is the same as Type SL (see page 29). VJC is designed with dimensions that will accept standard liquidtight connectors.

APPLICATION: VJC is suitable for use in both static applications where a tight bend diameter is needed and in dynamic use, such as machining centers and robotics.

For RoHS and WEEE Compliance, please consult factory.

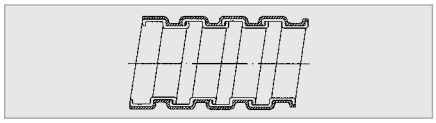
STANDARD COLORS: Black. Other colors available upon request.

WORKING TEMPERATURES: -20°C to 80°C

METAL USED: Steel

PLASTIC USED: PVC

See the Chemical Resistance Guide on our website.



TYPE **ALT**

Made in the USA

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.

APPLICATION: Type ALT is often used where weight or corrosive atmospheres are an issue. When comparing identical trade sizes, Type ALT weighs approximately 37% less than Type LT. Uses standard liquidtight connectors.

RoHS and WEEE Compliant.

STANDARD COLORS: Machine Tool Gray and Black. Other colors available upon request.

WORKING TEMPERATURES: -20°C to 80°C

METAL USED: Aluminum

PLASTIC USED: PVC

See the Chemical Resistance Guide on our website.

Trade Size			Diameter		Inside Bend Radius Static/ Dynamic (In.)	Wt. (Lbs.)/ 100 Ft.	Carton Footage		Reel Footage			
U.S. (In.)	Metric (mm)	Type	Inside Min/Max	Outside Over Jacket Min/Max			Length	Part #	Length	Part #	Length	Part #
VJC												
3/8	16	VJC-10	0.492/0.516	0.657/0.681	1.0/5.0	14	100	89201	-	-	-	-
1/2	-	VJC-11	0.622/0.646	0.799/0.823	1.0/6.0	16	100	89211	-	-	-	-
3/4	25	VJC-12	0.815/0.839	0.996/1.020	2.0/8.0	20	100	89221	-	-	-	-
1	-	VJC-13	1.043/1.067	1.240/1.264	3.0/10.0	35	100	89232	-	-	-	-
1-1/4	-	VJC-14	1.378/1.402	1.642/1.673	3.0/12	38	50	89242	-	-	-	-
1-1/2	-	VJC-15	1.575/1.598	1.850/1.890	3.5/14	44	50	89252	-	-	-	-
2	-	VJC-16	2.008/2.031	2.307/2.346	4.0/16	66	50	89262	-	-	-	-
3	-	VJC-18	3.071/3.094	3.425/3.465	6.5/25	93	25	89282	-	-	-	-
ALT												
3/8	-	ALT-10	-	-	2.0	11	100	40101	500	40103	1000	40104
1/2	-	ALT-11	-	-	2.5	15	100	41101	500	41103	1000	41104
3/4	-	ALT-12	-	-	3.0	20	100	42102	500	42104	1000	42110
1	-	ALT-13	-	-	4.0	29	100	43102	400	43104	-	-
1-1/4	-	ALT-14	-	-	4.5	40	50	44102	200	44104	-	-
1-1/2	-	ALT-15	-	-	5.5	56	50	45102	150	45104	-	-
2	-	ALT-16	-	-	7.0	73	50	46102	100	46104	-	-
2-1/2	-	ALT-17	-	-	9.5	104	25	47102	-	-	-	-
3	-	ALT-18	-	-	11.5	144	25	48102	-	-	-	-
3-1/2	-	ALT-350	-	-	13.5	164	25	48502	-	-	-	-
4	-	ALT-19	-	-	14.0	192	25	49102	-	-	-	-
5	-	ALT-500	-	-	20.0	252	25	45502	-	-	-	-
6	-	ALT-600	-	-	22.5	316	25	46602	-	-	-	-

See page 37 for dimensions.

TYPE ZHLA

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

CONSTRUCTION:

Type ZHLA has a flexible inner core made from a spiral-wound strip of heavy-gauge, hot-dipped galvanized steel. The 3/8 through 1-1/4 inch trade sizes contain an integral bonding strip of copper. The 1-1/2 inch and larger are designed with a fully interlocked strip.

The specially formulated thermoplastic black polyurethane jacket has excellent flame resistance and low smoke and toxicity generation characteristics. It is also resistant to ozone, hydrocarbons, moderate chemicals, oils and fuels.

APPLICATION:

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

- 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):

- 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 600 volts and lower potential circuits.
- Sunlight-resistant.
- Suitable as a grounding conductor when used for circuits rated up to 20A for the 3/8 and 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 Article 250.118(6).
- 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)**
- Elevators and hoistways. Article 620.21.
- Meets the same specifications as Type LA on Page 7.

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

RoHS and WEEE Compliant.

STANDARD COLORS: Black. Other colors available upon request.

WORKING TEMPERATURES:
-40°C to 80°C Air/60°C Wet/70°C Oil

METAL USED: Steel

PLASTIC USED: PU

See the Chemical Resistance Guide on our website.

Combustion and Flammability Properties: See chart on page 17.

Made in the USA

Trade Size (In.)	Type	Inside Bend Radius (In.)	Wt. (Lbs.)/ 100 Ft.	Carton Footage		Reel Footage			
				Length	Part #	Length	Part #	Length	Part #
3/8	ZHLA-10	2.0	29	100	88101	500	88103	1000	88104
1/2	ZHLA-11	3.0	32	100	88111	500	88113	1000	88114
3/4	ZHLA-12	4.2	53	100	88121	500	88124	1000	88125
1	ZHLA-13	5.5	82	100	88132	400	88134	-	-
1-1/4	ZHLA-14	7.0	102	50	88142	200	88144	-	-
1-1/2	ZHLA-15	4.5	124	50	88152	150	88154	-	-
2	ZHLA-16	6.0	145	50	88162	100	88164	-	-
2-1/2	ZHLA-17	8.0	192	25	88172	-	-	-	-
3	ZHLA-18	10.0	252	25	88182	-	-	-	-
3-1/2	ZHLA-350	11.0	308	25	88187	-	-	-	-
4	ZHLA-19	12.0	350	25	88192	-	-	-	-

See page 37 for dimensions.

TYPE **CEA**

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:

The flexible inner core of this product is made from a galvanized steel strip. As in Type LT, this core contains string packing between the helical convolutions in trade sizes 3/8 through 2 inch. The specially formulated thermoplastic polyurethane jacket has excellent flame retardation and low smoke and toxicity generation characteristics. Acidic gases such as hydrogen chloride, hydrogen fluoride and hydrogen bromide are virtually eliminated as products of combustion.

APPLICATION:

This product is ideally suited for installation in confined or enclosed areas where construction materials must have limited smoke, low flame spread and low toxic gas emissions in the event of fire. Such applications include mass transit vehicles where CEA is extensively used for wiring harnesses within and under passenger rail cars. Other applications include use in underground subway structures and tunnels.

RoHS and WEEE Compliant.

STANDARD COLORS:

Gray and Black. Other colors are available upon request. Part numbers above designate gray jacket.

WORKING TEMPERATURES:

-40°C to 80°C

METAL USED: Steel

PLASTIC USED: PU

See the Chemical Resistance Guide on our website.

Made in the USA

Trade Size (In.)	Type	Minimum Jacket Thickness	Inside Bend Radius (In.)	Weight (Lbs.)/100 Ft.	Carton Footage		Reel Footage	
					Length	Part # Gray/Black	Length	Part # Gray/Black
3/8	CEA-10	0.030	1.5	20	100	888016/88801	1000	-/-
1/2	CEA-11	0.030	2.0	24	100	888116/88811	1000	888146/88814
3/4	CEA-12	0.035	2.5	33	100	888216/88821	500	888246/88824
1	CEA-13	0.035	3.0	53	100	888326/88832	400	888346/88834
1-1/4	CEA-14	0.035	3.5	68	50	888426/88842	200	888446/88844
1-1/2	CEA-15	0.040	4.5	88	50	888526/88852	150	888546/88854
2	CEA-16	0.040	5.5	102	50	888626/88862	100	888646/88864
2-1/2	CEA-17	0.050	8.0	168	25	888726/88872	-	-/-
3	CEA-18	0.050	10.0	252	25	888826/88882	-	-/-
4	CEA-19	0.060	12.0	344	25	888926/88892	-	-/-
5	CEA-500	0.099	17.5	468	25	-/88582	-	-/-
6	CEA-600	0.099	22.5	572	25	-/-	-	-/-

See page 37 for dimensions.

TYPE ACEA, CEA AND ZHLA COMBUSTION & FLAMMABILITY PROPERTIES

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	20; No Flaming Drips
Flame Propagation	ASTM C542	Pass; No Flaming Drips
Smoke Generation (Flaming)	ASTM E662 (NFPA 258)	Ds 50@1.5 Min/Ds 102@4.0 Min
Smoke Generation (Non-Flaming)	ASTM E662 (NFPA258)	Ds 5@1.5 Min/Ds 26@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 ACEA

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:

The flexible inner core of this product is made from an aluminum alloy strip. This core contains string packing between the helical convolutions in trade sizes 3/8 through 1-1/4 inch. The specially formulated thermoplastic polyurethane jacket has excellent flame retardation and low smoke and toxicity generation characteristics. Acidic gases such as hydrogen chloride, hydrogen fluoride and hydrogen bromide are virtually eliminated as products of combustion.

APPLICATION:

This product is ideally suited for installation in confined or enclosed areas where construction materials must have limited smoke, low flame spread and low toxic gas emissions in the event of fire.

Such applications include mass transit vehicles where ACEA is extensively used for wiring harnesses within and under passenger rail cars. Other applications include use in underground subway structures and tunnels.

RoHS and WEEE Compliant.

STANDARD COLORS: Gray and Black. Other colors are available upon request. Part numbers above designate gray jacket.

WORKING TEMPERATURES:
-40°C to 80°C

METAL USED: Aluminum

PLASTIC USED: PU

See the Chemical Resistance Guide on our website.

Made in the USA

Trade Size (In.)	Type	Minimum Jacket Thickness	Inside Bend Radius (In.)	Weight (Lbs.)/100 Ft.	Carton Footage	
					Length	Part # Gray
3/8	ACEA-10	0.030	1.5	11	100	87901
1/2	ACEA-11	0.030	2.0	15	100	87911
3/4	ACEA-12	0.035	2.5	20	100	87922
1	ACEA-13	0.035	3.0	29	100	87932
1-1/4	ACEA-14	0.035	3.5	40	50	87942
1-1/2	ACEA-15	0.040	4.5	56	50	87952
2	ACEA-16	0.040	5.5	73	50	87962
2-1/2	ACEA-17	0.050	8.0	104	25	87972
3	ACEA-18	0.050	10.0	144	25	87982
4	ACEA-19	0.060	12.0	192	25	87992

See page 37 for dimensions.

TYPE ACEA, CEA AND ZHLA COMBUSTION & FLAMMABILITY PROPERTIES

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	20; No Flaming Drips
Flame Propagation	ASTM C542	Pass; No Flaming Drips
Smoke Generation (Flaming)	ASTM E662 (NFPA 258)	Ds 50@1.5 Min/Ds 102@4.0 Min
Smoke Generation (Non-Flaming)	ASTM E662 (NFPA258)	Ds 5@1.5 Min/Ds 26@4.0 Min
Toxic Gas Generation	BOMBARDIER SMP 800-C	Pass
Toxicity Index	NES 713	3.9

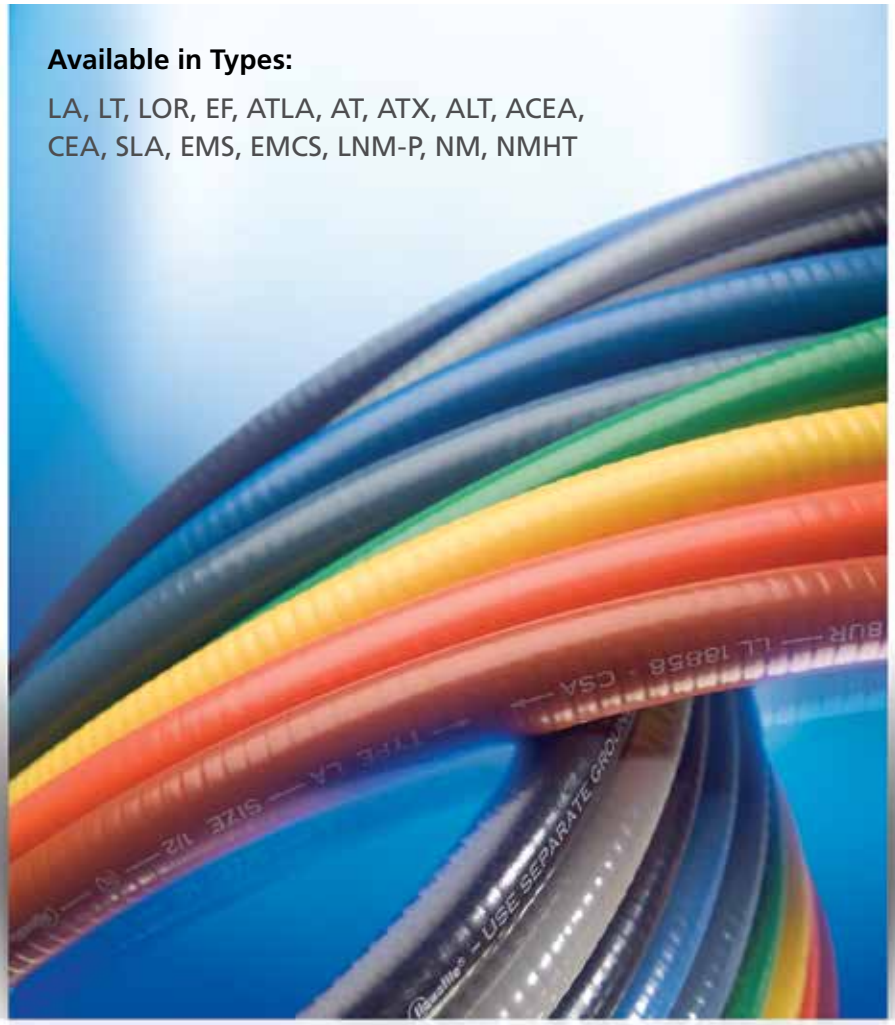
Test data is based on controlled laboratory conditions and does not necessarily reflect performance in actual fire conditions. Additional product information available upon request.

Colored **Conduit**

for **Custom Installations**

Made in the USA

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.



SUGGESTED APPLICATIONS:

Conduit Color	Suggested Application
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 Conduit

RECENTLY UPDATED

The 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).

These conduits are used to protect sensitive electronic circuits used in communications, radar and data transmission from outside interference, or "noise." The reverse situation is also an issue. Today's Original Equipment Manufacturers (OEMs) are finding that, if they wish to ship electrical equipment into the European community, they may need to be in compliance with CE standards that reduce the allowable amount of EMI/RFI emissions from electrical apparatus.

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.

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 Include:

- UL Listed (Type SLA)
- Accepts standard liquidtight fittings
- Withstands wide temperature ranges
- Three levels of EMI/RFI protection

Markets We Serve:

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

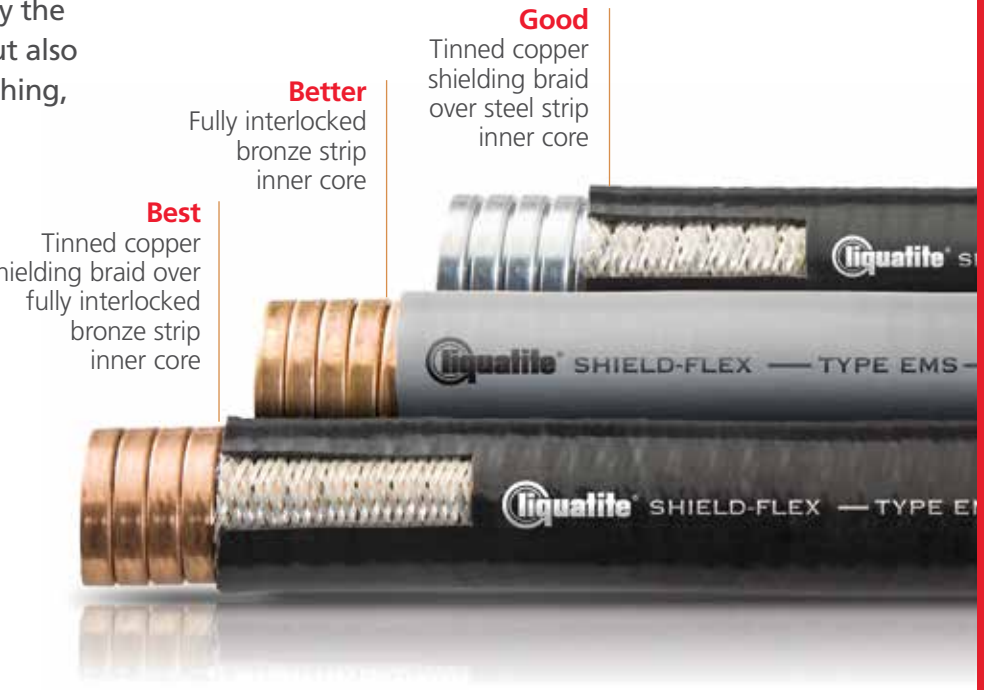
Applications/Vertial Markets:

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

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

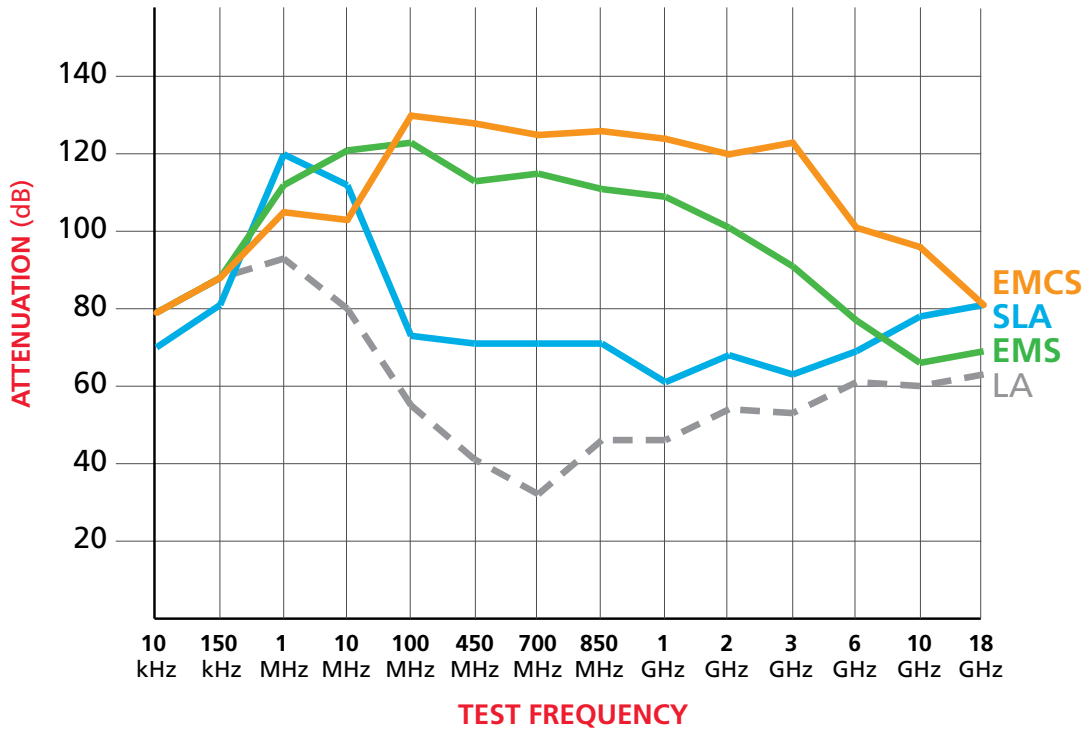
All three of these easy-to-install shielding conduits offer a "good–better–best" scenario as shown in the Shielding Effectiveness chart below. We use a combination of steel or bronze flexible cores coupled with a tinned copper braid to achieve not only the required EMI/RFI protection, but also the added 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**

Type SLA is identical to standard UL listed liquidtight flexible steel conduit, 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. Please see the Shielding Effectiveness chart on page 21.

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).
- Suitable for use in hazardous locations: Class I, Div. 2 and Classes II and III.
- PVC jacket is resistant to a wide variety of oils, acids, alkaline and ultraviolet light.
- Accepts standard metallic liquidtight fittings.

Ⓤ Listed File #E29278. Conforms to UL360 for liquidtight flexible steel conduit.

RoHS and WEEE Compliant.

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

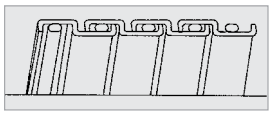
METAL USED: Steel

PLASTIC USED: PVC

See the Chemical Resistance Guide on our website.

For a low-smoke, low-flame spread, zero-halogen version, ask for **HFSLA.**

***Squarelock with Filler** sizes 3/8" — 1-1/4"*



Made in the USA

Trade Size (In.)	Type	Inside Bend Radius (In.)	Weight (Lbs.)/100 Ft.	Carton Footage		Reel Footage			
				Length	Part #	Length	Part #	Length	Part #
3/8	SLA-10	2.0	29	100	78901	500	78903	1000	78904
1/2	SLA-11	3.0	32	100	78911	500	78913	1000	78914
3/4	SLA-12	4.2	53	100	78921	500	78924	-	-
1	SLA-13	5.5	82	100	78932	400	78934	-	-
1-1/4	SLA-14	7.0	102	50	78942	200	78944	-	-
1-1/2	SLA-15	4.5	124	50	78952	150	78954	-	-
2	SLA-16	6.0	145	50	78962	100	78964	-	-

See page 37 for dimensions.

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 PROPERTIES	TEST	VALUE
HFSLA/HFEMS/HFEMCS		
Vertical Burn (Material)	UL94	V-O rating; no flaming drips
Vertical Burn (Conduit)	UL360	Pass; no flaming drips
Oxygen Index %	D2863	28.5
Flame Spread Index	ASTM E162	20; no flaming drips
Flame Propagation	ASTM C542 (NFPA-130)	Pass; no flaming drips
Smoke Generation (Flaming)	ASTM E662 (NFPA-258)	Ds 50@1.5 min/Ds 102@4.0 min
Smoke Generation (Non-flaming)	ASTM E662 (NFPA-258)	Ds 5@1.5 min/Ds 26@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 **EMS**

Type EMS has an inner core made from a fully interlocked bronze strip and does not contain a braided shield. Please see Shielding Effectiveness chart on page 21.

Accepts standard metallic liquidtight fittings.

RoHS and WEEE Compliant.

STANDARD COLORS:
Gray. Other colors and jacketing materials are available upon request.

WORKING TEMPERATURES: -55°C to 105°C

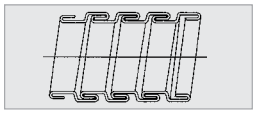
METAL USED: Bronze

PLASTIC USED: PVC

See the Chemical Resistance Guide on our website.

For a low-smoke, low-flame spread, zero-halogen version, ask for **HFEMS.**

Interlock



Made in the USA

TYPE **EMCS**

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. Please see the Shielding Effectiveness chart on page 21.

Accepts standard metallic liquidtight fittings.

RoHS and WEEE Compliant.

STANDARD COLORS:
Black. Other colors and jacketing materials available.

WORKING TEMPERATURES: -55°C to 105°C

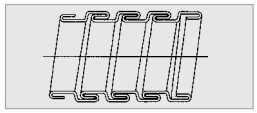
METAL USED: Bronze

PLASTIC USED: PVC

See the Chemical Resistance Guide on our website.

For a low-smoke, low-flame spread, zero-halogen version, ask for **HFEMCS.**

Interlock



Made in the USA

Trade Size (In.)	Type	Inside Bend Radius (In.)	Weight (Lbs.)/100 Ft.	Carton Footage		Reel Footage	
				Length	Part #	Length	Part #
EMS							
3/8	EMS-10	3.0	27	100	78801	1000	78804
1/2	EMS-11	3.0	35	100	78811	1000	78814
3/4	EMS-12	4.0	43	100	78822	500	78824
1	EMS-13	4.0	85	100	78832	400	78834
1-1/4	EMS-14	4.5	101	50	78842	200	78844
1-1/2	EMS-15	7.0	140	50	78852	150	78854
2	EMS-16	9.5	180	50	78862	100	78864
2-1/2	EMS-17	12	232	25	78872	-	-
3	EMS-18	13.5	320	25	78882	-	-
4	EMS-19	17.0	388	25	78892	-	-
EMCS							
3/8	EMCS-10	3.0	27	100	78701	500	78703
1/2	EMCS-11	3.0	35	100	78711	500	78713
3/4	EMCS-12	4.0	43	100	78722	500	78724
1	EMCS-13	4.0	85	100	78732	400	78734
1-1/4	EMCS-14	4.5	101	50	78742	200	78744
1-1/2	EMCS-15	7.0	140	50	78752	150	78754
2	EMCS-16	9.5	180	50	78762	100	78764

See page 37 for dimensions.

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.

Distinctive Characteristics Include:

- UL recognized, UL listed, CSA certified
- 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

Fixture Whips

Flexible Metal Pre-Assembled Whips

- Used for lighting fixture installation as well as many other electrical equipment uses.
- Reduces jobsite labor and material costs

See page 31 for details.

TYPE **BR**

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

CONSTRUCTION:

Type BR is formed from a highly corrosion-resistant, hot-dipped galvanized steel. Its profile and helical shape allow it to withstand substantial impact and crushing forces.

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

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.

- 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).

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

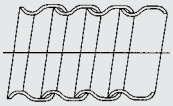
RoHS and WEEE Compliant.

CSA 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.

METAL USED: Steel

Made in the USA

Types BR and ABR Strip Profile



Trade Size (In.)	Type	Diameter (In.)		Inside Bend Radius (In.)	Wt. (Lbs.)/ 100 Ft.	Coil Footage								Reel Footage	
		Inner Min/Max	Outer Min/Max			Length	Part #	Length	Part #	Length	Part #	Length	Part #	Length	Part #
3/8	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	BR-11	0.625/0.645	0.860/0.920	3.0	28	25	69318	50	69319	100	69311	-	-	1000	69312
3/4	BR-12	0.812/0.835	1.045/1.105	4.0	33	25	69328	50	69329	100	69322	-	-	500	69324
1	BR-13	1.000/1.040	1.300/1.380	5.0	52	25	69338	50	69332	-	-	-	-	400	69334
1-1/4	BR-14	1.250/1.300	1.550/1.630	6.2	65	-	-	50	69342	-	-	-	-	400	69344
1-1/2	BR-15	1.500/1.575	1.850/1.950	7.5	80	25	69352	-	-	-	-	-	-	300	69354
2	BR-16	2.000/2.080	2.350/2.454	10.0	99	25	69362	-	-	-	-	-	-	150	69364
2-1/2	BR-17	2.500/2.700	2.860/3.060	12.5	166	25	69372	-	-	-	-	-	-	-	-
3	BR-18	3.000/3.200	3.360/3.560	15.0	190	25	69382	-	-	-	-	-	-	-	-
3-1/2	BR-350	3.500/-	3.860/4.060	17.5	170	25	69387	-	-	-	-	-	-	-	-
4	BR-19	4.000/-	4.360/4.560	20.0	200	25	69392	-	-	-	-	-	-	-	-

TYPE ABR

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

CONSTRUCTION:

Type ABR is formed using a high-strength aluminum alloy strip. The result is a conduit with similar characteristics to those of Type BR steel but at about 1/3 the weight.

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

APPLICATION:

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

- Suitable as an equipment grounding conductor (Section 250.118(5)).
- Wiring in elevators, hoist ways and escalators (Section 620.21).
- 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).

UL Listed File #E53253 (sizes 3/8 and 1/2 through 3 inch). Conforms to Underwriters Laboratories Standard ANSI/UL-1 for Flexible Metal Conduit.

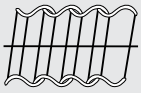
RoHS and WEEE Compliant.

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

METAL USED: Aluminum

Made in the USA

Types BR and ABR Strip Profile



Trade Size (In.)	Type	Diameter (In.)		Inside Bend Radius (In.)	Wt. (Lbs.)/ 100 Ft.	Coil Footage (Ft.)						Reel Footage (Ft.)	
		Inner Min/Max	Outer Min/Max			Length	Part #	Length	Part #	Length	Part #	Length	Part #
3/8	ABR-10	0.375/0.393	0.560/0.610	2.0	7	25	69408	50	69409	100	69401	1000	69404
7/16	ABR-716	0.437/0.457	-/0.675	2.25	7.7	25	-	50	-	100	69400	1000	694043
1/2	ABR-11	0.625/0.645	0.860/0.920	3.0	9.5	25	69418	50	69419	100	69411	1000	69414
3/4	ABR-12	0.812/0.835	1.045/1.105	4.0	13.5	25	69428	50	69429	100	69422	500	69424
1	ABR-13	1.000/1.040	1.300/1.380	5.0	18	-	-	50	69432	-	-	400	69434
1-1/4	ABR-14	1.250/1.300	1.550/1.630	6.2	22	-	-	50	69442	-	-	400	69444
1-1/2	ABR-15	1.500/1.575	1.850/1.950	7.5	26	-	-	25	69452	-	-	300	69454
2	ABR-16	2.000/2.080	2.350/2.454	10.0	35	-	-	25	69462	-	-	150	69464
2-1/2	ABR-17	2.500/2.700	2.860/3.060	12.5	57	-	-	25	69472	-	-	-	-
3	ABR-18	3.000/3.200	3.360/3.560	15.0	70	-	-	25	69482	-	-	-	-
3-1/2	ABR-350	3.500/-	3.860/4.060	17.5	58	-	-	25	69487	-	-	-	-
4	ABR-19	4.000/-	4.360/4.560	20.0	70	-	-	25	69492	-	-	-	-

TYPE ABRH NEW

This CSA-certified, non-jacketed flexible aluminum conduit has many universal wiring applications.

CONSTRUCTION:
Type ABRH is formed from a heavy-gauge aluminum strip. Its profile and helical shape allow it to withstand substantial impact and crushing forces.

Meets Federal Specification A-A-55810 Type I

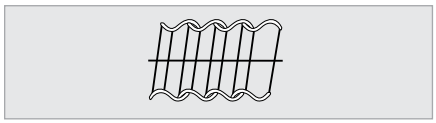
APPLICATION:
This conduit is intended as a metal raceway for wires and cable where CSA certification is required. Suitable for use with connectors intended for FMC (Flexible Metal Conduit).

RoHS and WEEE Compliant.

Certified File #LL18858 Conforms to CSA 22.2 No. 56 for use per the Canadian Electrical Code C22.1 Section 12-1000

METAL USED: Aluminum

Types ABRH Strip Profile



TYPE FSC NEW

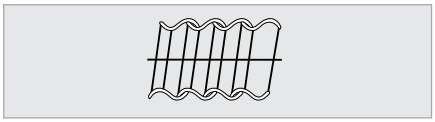
This non-UL, non-jacketed flexible steel conduit has many universal wiring applications

CONSTRUCTION:
Type FSC is formed from a corrosion resistant hot-dipped galvanized steel. Its profile and helical shape allow it to withstand substantial impact and crushing forces

APPLICATION:
This conduit as a metal raceway for wire and cable where UL Listing is not required. Suitable for use with connectors intended for FMC (Flexible Metal Conduit).

METAL USED: Steel

Types FSC Strip Profile



Trade Size (In.)	Type	Diameter (In.)		Inside Bend Radius (In.)	Weight (Lbs.)/100 Ft.	Coil Footage (Ft.)		Reel Footage (Ft.)	
		Inner Min/Max	Outer Min/Max			Length	Part #	Length	Part #
ABRH									
3/8	ABRH-10	0.375/0.393	0.560/0.610	2	7	100	ABRH-69701	500/1000	ABRH-69703/69704
7/16	ABRH-716	0.437/0.457	-/0.675	2.25	8	100	ABRH-69707	500/1000	ABRH-69708/69709
1/2	ABRH-11	0.625/0.645	0.860/0.920	3	16	100	ABRH-69711	500/1000	ABRH-69713/69714
3/4	ABRH-12	0.812/0.835	1.045/1.105	4	18	100	ABRH-69722	500/1000	ABRH-69723/69724
1	ABRH-13	1.000/1.040	1.300/1.380	5	35	50	ABRH-69732	400	ABRH-69734
1-1/4	ABRH-14	1.250/1.300	1.550/1.630	6.2	43	50	ABRH-69742	400	ABRH-69744
1-1/2	ABRH-15	1.500/1.575	1.850/1.950	7.5	55	25	ABRH-69752	100	ABRH-69753
2	ABRH-16	2.000/2.080	2.350/2.454	10	73	25	ABRH-69762	-	-
2-1/2	ABRH-17	2.500/2.700	2.860/3.060	12.5	90	25	ABRH-69772	-	-
3	ABRH-18	3.000/3.200	3.360/3.560	15	107	25	ABRH-69782	-	-
4	ABRH-19	4.000/-	4.360/4.560	20	142	25	ABRH-69792	-	-
FSC									
3/8	FSC-10	0.375/0.393	0.560/0.610	2	13	100	69501	1000	69504
1/2	FSC-11	0.625/0.645	0.860/0.920	3	19	100	69511	1000	69514
3/4	FSC-12	0.812/0.835	1.045/1.105	4	25	100	69522	500/1000	69523/69524
1	FSC-13	1.000/1.040	1.300/1.380	5	28	50	69532	-	-
1-1/4	FSC-14	1.250/1.300	1.550/1.630	6.2	38	50	69542	-	-
1-1/2	FSC-15	1.500/1.575	1.850/1.950	7.5	48	25	69552	-	-
2	FSC-16	2.000/2.080	2.350/2.454	10	100	25	69562	-	-
2-1/2	FSC-17	2.500/2.700	2.860/3.060	12.5	166	25	69572	-	-
3	FSC-18	3.000/3.200	3.360/3.560	15	190	25	69582	-	-
3-1/2	FSC-350	3.500/-	3.860/4.060	17.5	170	25	69587	-	-
4	FSC-19	4.000/-	4.360/4.560	20	200	25	69592	-	-

TYPE **USL**

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

CONSTRUCTION:
Helically formed from hot-dipped galvanized steel, Type USL offers good corrosion resistance and provides excellent mechanical protection to enclosed circuits. It is sized to be used with a variety of set-screw and clamp type connectors.

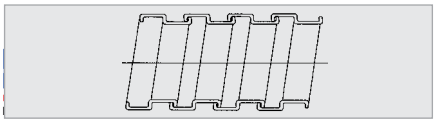
APPLICATION:
This product is intended as a factory-installed component of various assemblies. Typical uses include: modular office partitions, showcase lighting and range tops. For component applications within Canada, ask for **CSA Report #LO 4000-4875**.

UL Recognized File #E53253

RoHS and WEEE Compliant.

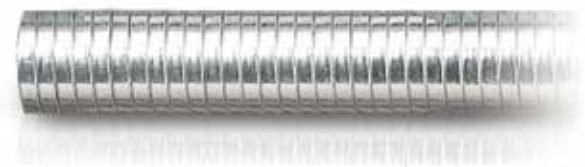
METAL USED: Steel

Squarelock—Type USL



Made in the USA

TYPE **UG**



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

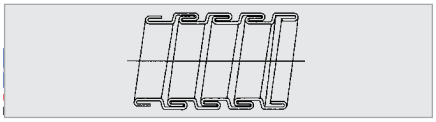
CONSTRUCTION:
This conduit is manufactured from a bright tin-plated steel strip that is fully interlocked at the edges, to produce a strong yet flexible product. The interlock feature does not allow the conduit to unravel if twisted, and permits the conduit to retain its shape when bent. This lightweight product is compatible with many set-screw and clamp type connectors.

APPLICATION:
The bright appearance of the finished product lends itself to installations where the conduit may be visible after the final assembly.

RoHS and WEEE Compliant.

METAL USED: Steel

Interlock



Made in the USA

Trade Size (In.)	Type	Diameter (In.) Inner Min/Max	Diameter (In.) Outer Min/Max	Min Inside Radius (In.)	Weight (Lbs.)/100 Ft.	Coil Footage (Ft.) Length	Coil Footage (Ft.) Part #
USL							
-	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	0.582/0.612	1-1/2	17	250	93402
3/8	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	USL-580	0.622/0.642	0.732/0.765	2	24	100	96402.
3/4	USL-340	0.820/0.840	0.930/0.960	2	32	100	97402
UG							
-	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

Note: *Electrical trade sizes do not apply to Type UG.*

TYPE **SL**

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:
Type SL is helically wound from a strip of electro-galvanized steel. It is sized to be used with a variety of set-screw and clamp type connectors.

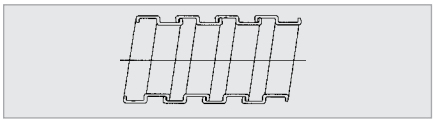
APPLICATION:
Offers good mechanical protection to wiring in a variety of OEM applications.

RoHS and WEEE Compliant.

METAL USED: Steel

Made in the USA

Squarelock



Trade Size		Type	Diameter (In.)		Min Inside Radius (In.)	Weight (Lbs.)/100 Ft.	Coil Footage (Ft.)	
U.S.	Metric		Inner Min/Max	Outer Min/Max			Length	Part #
-	-	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	16mm	SL-10	0.492/0.512	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
-	20mm	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	25mm	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
-	32mm	SL-13M	1.102/1.122	1.252/1.272	2.00	27	50	982321

TYPE **PF**

Plen-Flex® is a smoketight, liquidtight flexible metal tubing and is listed for use in plenums and other air-handling spaces. Often referred to as FMT.

Not available in coils or reels.
Maximum stick length of 6 feet.

CONSTRUCTION:

Plen-Flex is constructed from a steel strip that contains an extra coating of zinc galvanizing for added protection against corrosion. This strip is formed into a corrugated profile and is tightly interlocked to form a smoketight, airtight and liquidtight pliable tube that weighs about 40% less than FMC (Greenfield).

APPLICATION:

This tubing is used to wire drop-in lighting fixtures and other equipment found in plenum ceilings and other air-handling areas. Because it is smoke-tight when installed with Type PFC fittings and gasketed junction boxes, it would prevent smoke and other products of combustion from escaping out of the raceway and into air-handling areas in the event of an electrical fire.

There is also no plastic jacketing material that might give off toxic gases or burn. The fact that the system is liquidtight means that it will not allow the entrance of moisture from sprinkler systems into its interior. It is intended to be installed in accordance with Article 360 of the NEC (ANSI/NFPA-70).

- Listed for containment of 1000 volts and lower potential circuits.
- For use in dry locations.
- In accessible locations when protected from physical damage or concealed, such as above suspended ceilings. See Article 300.22(c).
- In branch circuits.
- Listed for grounding per Article 250.118(8).
- Limited to six foot lengths. Article 360.12(6).

Ⓤ Listed—File #E80694

Approved for use by the City of Chicago.

RoHS and WEEE Compliant.

METAL USED: Steel

Made in the USA

CONNECTOR

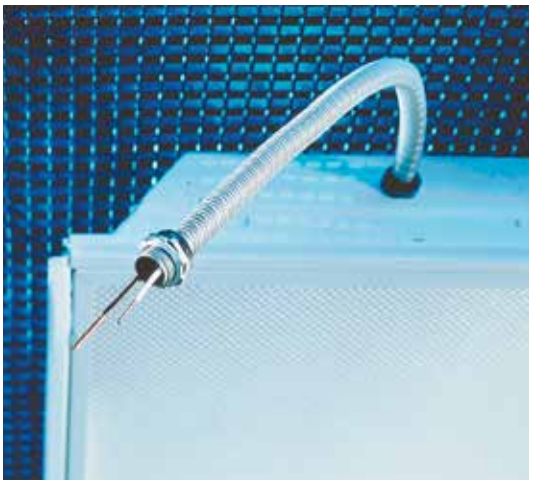
TYPE **PFC**

This patented one-piece zinc die-cast liquidtight connector is designed to screw into flexible metallic tubing (FMT). The end of the tubing embeds itself into the rubberized polymer gasket creating a smoke-tight seal as required by the NEC Article 360.40.

Ⓤ Listed—File #E80522

Approved for use by the City of Chicago.

Made in the USA

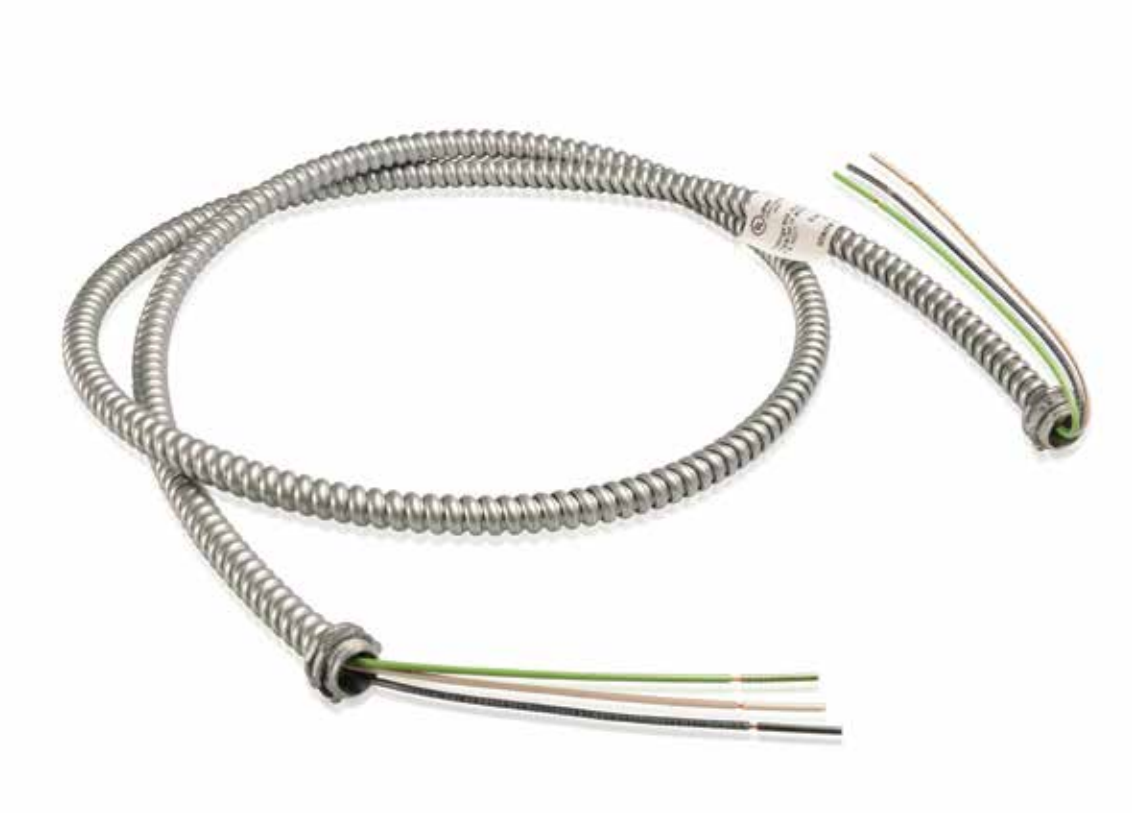


Trade Size (In.)	Type	Actual Inside Diameter (In.)	Wt. (Lbs.)/ 100 Ft.	Min. Radii For Flexing Use NEC 360.24(a) (In.)	Min. Radii For Fixed Bends NEC t360.24(b) (In.)	Lengths Available (Ft.)	Thread Size (NPT) (In.)	Part #	Quantity Per Carton
PF*									
3/8	PF-10	1/2	12	10	3-1/2	3, 4, 5, 6	-	-	Consult Factory
1/2	PF-11	5/8	13	12-1/2	4	3, 4, 5, 6	-	-	Consult Factory
PFC**									
3/8	PFC-10	-	-	-	-	-	1/2	910883	Consult Factory
1/2	PFC-11	-	-	-	-	-	1/2	910885	Consult Factory

** This item must use the Type PFC connector. ** This item is used with the Type PF flexible metallic tubing.*

Flexible **Whips** NEW

Flexible Metal Pre-assembled Whips



- Used for lighting fixture installation as well as many other electrical equipment uses.
- Reduces jobsite labor and material costs.

CONSTRUCTION:

- UL Listed flexible metal conduit.
- Stranded (stock) or solid THHN wire with 6" leads.
- Internal, zinc die-cast fittings with steel locknuts.
- Fixture whips are made per NEC requirements unless otherwise specified and are UL Listed under Wiring Assemblies (QQYX) category.
- AWG 14 = 15 Amp.
- AWG 12 = 20 Amp.

ALSO AVAILABLE:

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

RoHS and WEEE Compliant.

Trade Size (In.)	Length (In.)	Wire Gauge	Color Config.	Quantity	Part #
3/8	72	12/2	Black-White	25, 250	SW10122
3/8	72	12/3	Black-White-Green	25, 250	SW10123
3/8	72	14/2	Black-White	25, 250	SW10142
3/8	72	14/3	Black-White-Green	25, 250	SW10143
3/8	72	14/4	Black-White-Red-Green	25, 250	SW10144
3/8	72	18/2	Black-White	25, 250	SW10182
3/8	72	18/3	Black-White-Green	25, 250	SW10183

Nonmetallic

These 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
	CORRLOK	See Below
	TYPE LMN-P	33
	TYPE NM	34
	TYPE NMHT	34
	TYPE NM2	35

Distinctive Characteristics Include:

- UL recognized, UL listed, CSA certified
- 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

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 and request the Corrlok catalog.

TYPE **LNM-P**

This 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:

Type LNM-P consists of layered, Type A construction that incorporates a smooth seamless inner core of flexible PVC bonded to a covering of flexible PVC. Between these layers is a woven nylon mesh for added reinforcement. The PVC material is a high-quality, flame-retardant compound that resists oils, mild acids and exposure to sunlight.

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 600 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.

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

RoHS and WEEE Compliant.

c Ⓤ Conforms to CSA 22.2 No. 227.2 Type A

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.

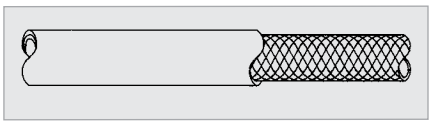
STANDARD COLORS: Safety Orange. Also available in Black and Gray.

WORKING TEMPERATURES:

-55° to 105°C

Made in the USA

LNM-P



Trade Size (In.)	Type	Inside Bend Radius (In.)	Wt. (Lbs.)/ 100 Ft.	Diameter		Carton Footage		Carton Footage		Reel Footage			
				Inner Min/Max.	Outer Man/Max	Length	Part #	Length	Part #	Length	Part #	Length	Part #
3/8	LNM-P 10	2.5	16	0.485/0.505	0.755/0.775	100	87001	250	87002	500	87003	1000	87004
1/2	LNM-P 11	3.0	21	0.620/0.640	0.910/0.930	100	87101	200	87102	500	87103	1000	87104
3/4	LNM-P 12	4.0	31	0.815/0.835	1.150/1.170	100	87201	175	87202	500	87204	-	-
1	LNM-P 13	6.0	42	1.030/1.055	1.415/1.440	-	-	100	87302	400	87304	-	-
1-1/4	LNM-P 14	7.0	61	1.370/1.395	1.800/1.825	-	-	100	87402	200	87404	-	-
1-1/2	LNM-P 15	8.0	79	1.585/1.620	2.045/2.080	-	-	50	87502	150	87503	-	-
2	LNM-P 16	9.0	120	2.045/2.080	2.605/2.640	-	-	50	87602	100	87603	-	-

TYPE **NM**

A general-purpose, nonmetallic liquidtight conduit offers excellent protection to wiring from abrasion, sunlight, mild acids, alkaline and oils. It is often used for air conditioning hookups 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 600 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 1,000 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.

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

RoHS and WEEE Compliant.

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

STANDARD COLORS: Machine Tool Gray. Also available in Black.

WORKING TEMPERATURES: -20°C to 80°C Dry / 60°C Wet / 70°C Oil. For higher temperature version, see Type NMHT.

PLASTIC USED: PVC

See the Chemical Resistance Guide on our website.

Made in the USA

Trade Size (In.)	Type	Inside Bend Radius (In.)	Wt. (Lbs.)/ 100 Ft.	Coil/Reel Footage	
				Length	Part #
3/8	NM -10	2.0	10	100/1000	81001/81004
1/2	NM -11	3.25	11	100/1000	81011/81014
3/4	NM -12	4.25	15	100/500	81022/81024
1	NM -13	6.5	25	100/400	81032/81034
1-1/4	NM -14	8.0	34	100/-	81042/-
1-1/2	NM -15	9.0	42	50/-	81052/-
2	NM -16	11.0	60	50/-	81062/-

See page 37 for dimensions.

TYPE **NMHT**

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 NMHT is made in the same manner as Type NM. It contains a rigid PVC spiral reinforcement within the wall of the conduit.

Listed File #E79308

RoHS and WEEE Compliant.

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

NM AND NMHT 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 for further information.

STANDARD COLORS: Black

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

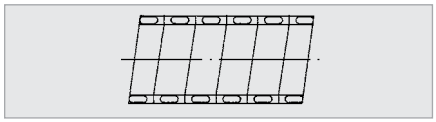
PLASTIC USED: PVC

See the Chemical Resistance Guide on our website.

***Note:** Also available on reels. Please consult factory.*

Made in the USA

NM and NMHT Type B



Trade Size (In.)	Type	Inside Bend Radius (In.)	Wt. (Lbs.)/ 100 Ft.	Coil Footage	
				Length	Part #
3/8	NMHT-10	2.0	10	100	82101
1/2	NMHT-11	3.25	11	100	82111
3/4	NMHT-12	4.25	15	100	82122
1	NMHT-13	6.5	25	100	82132
1-1/4	NMHT-14	8.0	34	100	82142
1-1/2	NMHT-15	9.0	42	50	82152
2	NMHT-16	11.0	60	50	82162

See page 37 for dimensions.

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 for many OEM applications. Used for wiring harnesses, laboratory equipment, fiber optics, etc.

CONSTRUCTION:
Co-extruded from both flexible and rigid PVC. The rigid spiral PVC reinforcement is embedded within the wall of the tubing.

Conforms to CSA 22.2 No. 227.3

RoHS and WEEE Compliant.

UL Recognized File #E174249

FITTINGS:
Intended for use with nonmetallic liquidtight fittings marked FNMC-B. See Type NMLT Connectors for further information.

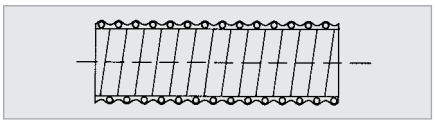
STANDARD COLORS: Black

WORKING TEMPERATURES: -20°C to 70°C

PLASTIC USED: PVC

See the Chemical Resistance Guide on our website.

Made in the USA



Trade Size (In.)	Type	Inside Bend Radius (In.)	Wt. (Lbs.)/ 100 Ft.	Coil Footage	
				Length	Part #
1/4	NM2-140	0.6	5	100	82000
3/8	NM2-10	0.7	6	100	82001
1/2	NM2-11	0.9	8	100	82011
3/4	NM2-12	1.1	10	100	82022
1	NM2-13	1.3	15	100	82032
1-1/4	NM2-14	1.7	20	100	82042
1-1/2	NM2-15	1.9	26	50	82052
2	NM2-16	2.4	36	50	82062

Trade Size (In.)	Type	Diameter	
		Inner Min./Max.	Outer Min./Max.
1/4	NM2-140	0.385/0.405	0.560/0.575

See page 37 for 3/8" – 2" dimensions.

CONNECTORS

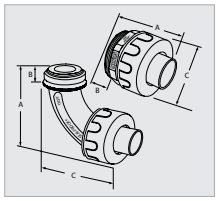
TYPE **NMLT**

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

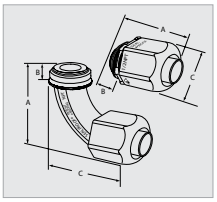
CONSTRUCTION:

- 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

STANDARD COLORS: Gray. For Black, add suffix B to catalog number.



NMLT



NMSC

Config.	Trade Size (In.)	Config.	KO Size	Dimensions		
				A	B	C
NMLT						
STRAIGHT	3/8	NMLT10	1/2	2.000	0.540	1.400
STRAIGHT	1/2	NMLT11	1/2	2.000	0.540	1.400
STRAIGHT	3/4	NMLT12	3/4	2.200	0.635	1.700
STRAIGHT	1	NMLT13	1	2.280	0.740	2.000
STRAIGHT	1-1/4	NMLT14	1-1/4	2.440	0.760	2.400
STRAIGHT	1-1/2	NMLT15	1-1/2	2.700	0.800	2.670
STRAIGHT	2	NMLT16	2	2.990	0.850	3.280
90°	3/8	NMLT20	1/2	2.120	0.500	3.120
90°	1/2	NMLT21	1/2	2.120	0.500	3.120
90°	3/4	NMLT22	3/4	2.500	0.520	3.600
90°	1	NMLT23	1	3.125	0.700	4.125
90°	1-1/4	NMLT24	1-1/4	4.450	0.760	5.200
90°	1-1/2	NMLT25	1-1/2	4.750	0.800	5.200
90°	2	NMLT26	2	5.420	0.860	5.800
NMSC						
STRAIGHT	1/2	NMSC-11	1/2	1.750	0.500	1.250
STRAIGHT	3/4	NMSC-12	3/4	1.800	0.625	1.500
90°	1/2	NMSC-21	1/2	1.875	0.500	3.125
90°	3/4	NMSC-22	3/4	2.375	0.625	3.500

Engineering Information

Conduit Cutting

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 #BLC-1, 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—LT, LOR, EF, LA, CSA, ALT, AT, ATLA, ATX, CEA, ZHLA, SLA, EMS, EMCS, ACEA				
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, 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—Fitting Thread (NPT)	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

LT — LOR — LTFG — EF — LA — CSA — ALT — AT — ATLA — ATX ACEA — CEA — ZHLA — SLA — EMS — EMCS — NM — NM2

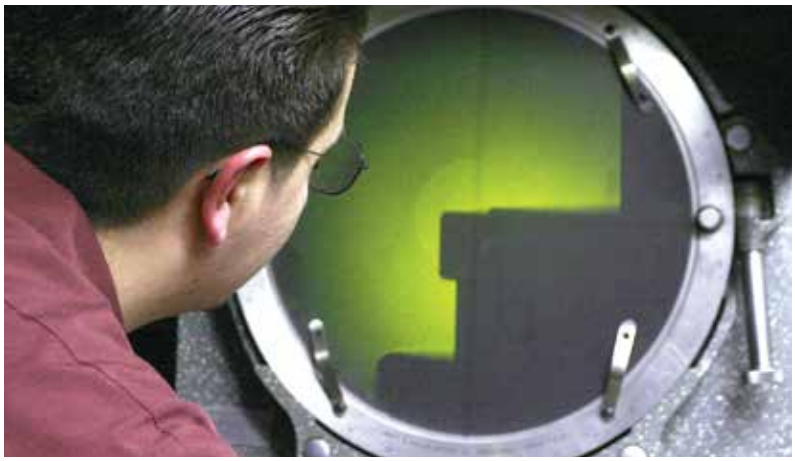
STANDARD DIMENSIONS FOR LIQUIDTIGHT FLEXIBLE CONDUIT

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

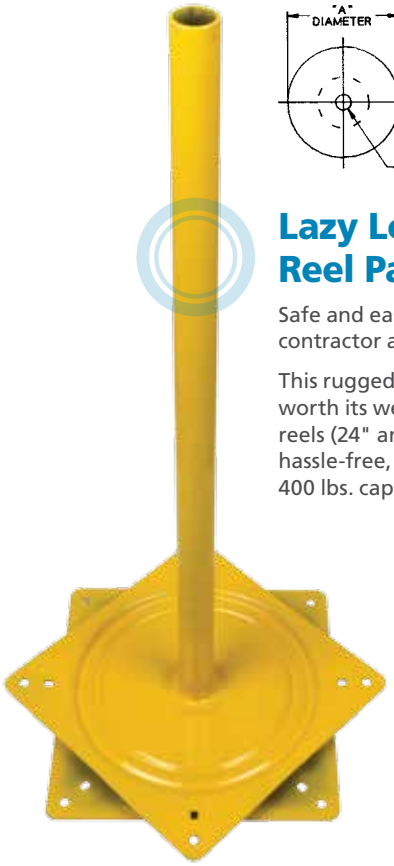
NEMA (National Electrical Manufacturers Association) has developed and published an APPLICATION AND INSTALLATION GUIDELINES FOR FLEXIBLE AND LIQUIDTIGHT FLEXIBLE METAL AND NONMETALLIC CONDUITS. This publication, NEMA RV 3-2010, is available at this link: www.nema.org/stds/rv3.cfm#download

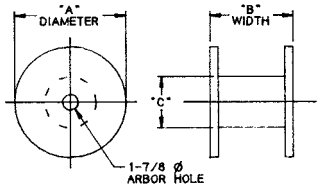
Reel Dimensions

Trade Size (in.)	Type	58"	42"			30"					32" Special			24"		
		LT LA EF	LT LA EF	BR ABR	LNM-P	LT	LA	EF	BR ABR	LNM-P	LT	LA	EF	BR ABR	LNM-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	150	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" (in.)	"B" (in.)	"C" (in.)	Weight (lbs.)	Qty./Skid
24	19.5	12	17	4
30	19.5	12	21	4
32 (Special)	19.5	14	23	4
42	20	24	70	1
58 (Jumbo)	36	28	208	1





Lazy Louie 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 (24" and 30" standard or 32" special) hassle-free, and can take loaded reels of 400 lbs. capacity.

Weight 11 lbs.

P/N 90040

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	-

Skids

STANDARD SKID QUANTITIES: 48" X 40" X 5"

Trade Size (in.)	Cat. No.	Flex	Liquatite	Nonmetallic	
		ABR, BR	EF, LA, LT	LNMP	NM
3/8	10	60 coils	45 Cartons	7 Cartons	60 Cartons
1/2	11	25 coils	45 Cartons	7 Cartons	60 Cartons
3/4	12	25 coils	24 Cartons	7 Cartons	48 Cartons
1	13	28 coils	20 Cartons	7 Cartons	30 Cartons
1-1/4	14	28 coils	20 Cartons	7 Cartons	16 Cartons
1-1/2	15	28 coils	5 Cartons	7 Cartons	16 Cartons
2	16	28 coils	5 Cartons	6 Cartons	16 Cartons
2-1/2	17	5 coils	5 Cartons	-	-
3	18	5 coils	5 Cartons	-	-
3-1/2	350	5 coils	5 Cartons	-	-
4	19	4 coils	5 Cartons	-	-

Dimensions

Carton Type	Size: h x d x w (in.)	Carton Product Size (in.)	Ftg. Per Carton
Liquatite Types LA, LT and EF			
R1	15 x 14-3/8 x 7-3/4	1/4	250
		5/16	250
		3/8	100
R2	17-5/8 x 16-3/4 x 8	1/2	100
R3	20-3/4 x 20-3/8 x 8	3/4	100
R4	25-1/4 x 24-1/2 x 8-1/4	1	100
		1-1/4	50
R6	33-5/8 x 37 x 10-3/8	1-1/2	50
		2	50
		2-1/2	25
#3	52 x 52 x 8-1/2	3	25
3 & 4	60-1/4 x 60-1/4 x 6-1/2	3-1/2	25
		4	25
5 & 6	66 x 66 x 12-1/2	5	25
		6	25
Nonmetallic Type LNM-P			
SMALL LNM-P	34-3/4 x 34-3/4 x 7	3/8	250
		1/2	200
		3/4	175
		1	100
		1-1/4	100
		1-1/2	50
Large LNMP	43 x 43 x 7-3/4	2	50
Nonmetallic Type NM and NM2			
-	20 x 6 x 20	3/8	100
-	20 x 6 x 20	1/2	100
-	22 x 7 x 22	3/4	100
-	24 x 8 x 24	1	100
-	26 x 9 x 26	1-1/4	100
-	30 x 7 x 30	1-1/2	50
-	30 x 7 x 30	2	50

Packaging, Disclaimer and Warranty

DISCLAIMER

All specifications contained herein are subject to change without notice. Please refer to **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.

AGENT:

Liquatite®

electri-flex company

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