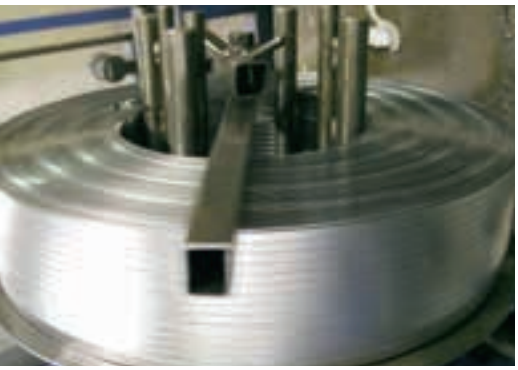
liquatite®

FLEXIBLE ELECTRICAL CONDUIT

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 60 years

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

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

Quality Assurance
Quality control for 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 both UL and CSA inspectors.

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

- **Representatives**—High degree of integrity and impeccable business reputation, knowledge of the product and the customer, carry compatible lines to make customer and distributor calls more productive, and day-to-day involvement by the principal of the company. For a representative in your area, please visit www.electriflex.com

- **Distributors**—Industrially oriented, sound relations with customers, solid reputation in the community and quality sales people.

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

Marketing Support
Making the best product doesn't create success without exceptional sales, service and marketing programs that meet the needs of representatives and distributors. Our sales support services include:

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

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

Industry Affiliations

Conduit **Application Guide**

	Conduit Type	Page	Flexibility: 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	Sunlight/ UV Resistant	Accepts Standard Liquid-tight Fittings	Self-Extin-guishing	EMI/RFI Shielding	Approval
JACKETED METALLIC	TYPE LA	9			•		Steel	PVC	•	•			Best	•	•		UL SA CE
	TYPE LT	10		•	•		Steel	PVC					Good	•			CE
	TYPE EF	11		•	•		Steel	PVC					Good	•			CE
	TYPE ATLA	12			•		Steel	PVC	•	•			Best	•	•		UL SA CE
	TYPE AT	13		•	•		Steel	PVC					Best	•			CE
	TYPE ATX	14		•	•		Steel	TPR			•		Best	•			CE
	TYPE ALT	15			•		Aluminum	PVC					Good	•			CE
	TYPE ZHLA	16			•		Steel	PU	•	•	•	•	Best	•	•		UL SA CE
	TYPE CEA	17			•		Steel	PU			•	•	Best	•	•		CE
	TYPE ACEA	18			•		Aluminum	PU			•	•	Best	•	•		CE
	TYPE LOR	19		•	•		Steel	PVC					Best	•			CE
	TYPE CSA	20			•		Steel	PVC	•				Good	•	•		SA CE
	TYPE VJC	21		•	•		Steel	PVC						•			
	TYPE LAFG	22		•	•		Steel	PVC	•	•			Best	•	•		UL NSF/FDA CE
	TYPE LTFG	23		•	•		Steel	PVC					Good	•			NSF/FDA CE
	TYPE LSSFG	24			•		Stainless Steel	PVC	•				Good	•			NSF/FDA CE
	TYPE LTSS	25			•		Stainless Steel	PVC	•				Good	•			CE
	TYPE ZHSS	26			•		Stainless Steel	PU	•		•	•	Best	•	•		CE
	TYPE ATXSS	27			•		Stainless Steel	TPR	•		•		Good	•			CE
	TYPE ATSS	27			•		Stainless Steel	PVC	•				Best	•			CE
	TYPE CBLA	28			•		Steel	PVC	•	•			Best	•	•		UL SA CE
EMI/RFI	TYPE SLA	32			•		Steel	PVC	•	•	Available	Available	Best	•	•	•	UL CE
	TYPE EMS	33			•		Bronze	PVC			Available	Available	Best	•	•	•	CE
	TYPE EMCS	34			•		Bronze	PVC			Available	Available	Best	•	•	•	CE
UNJACKETED METALLIC	TYPE BR	37			•		Steel		•								UL SA* CE
	TYPE ABR	38			•		Aluminum										UL SA* CE
	TYPE ABRH	39			•		Aluminum		•								UL** SA CE
	TYPE USL	40		•	•		Steel										RU
	TYPE SL	41		•	•		Steel										
	TYPE UG	42				•	Steel										
NONMETALLIC	CORRLOK®	44	•	•	•			Nylon	•		•	•	Good		•		RU
	TYPE LNM-P	45	•		•			PVC					Best	FNMC-A	•		c UL SA
	TYPE NM	46			•			PVC	•	•			Best	•	•		UL SA
	TYPE NMHT	47			•			PVC	•	•			Best	•	•		UL SA
	TYPE NMFG	48			•			PVC					Good	•			UL SA NSF, FDA
	TYPE NM2	49	•		•			PVC					Good	•	•		RU SA

*Type BR is CSA certified in 3/8" only. Type ABR is CSA certified in 3/8" and 7/16" only. **Type ABRH is UL listed in sizes 1/2" - 4" only.

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

Conduit **Application Guide**

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

Products for Every **Market**

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

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

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

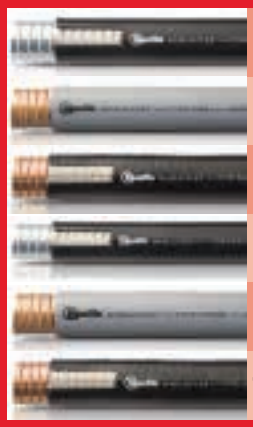
The following page provides an overview of the primary markets served by Electri-Flex. Use it to find the best conduit for these markets.

EMI/RFI **Shielded**

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

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

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



Conduit Type	Page
TYPE SLA	32
TYPE EMS	33
TYPE EMCS	34
TYPE HFSLA	35
TYPE HFEMS	35
TYPE HFEMCS	35

SHIELD-FLEX

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

Distinctive Characteristics May Include:

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

Markets We Serve:

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

Applications/Markets:

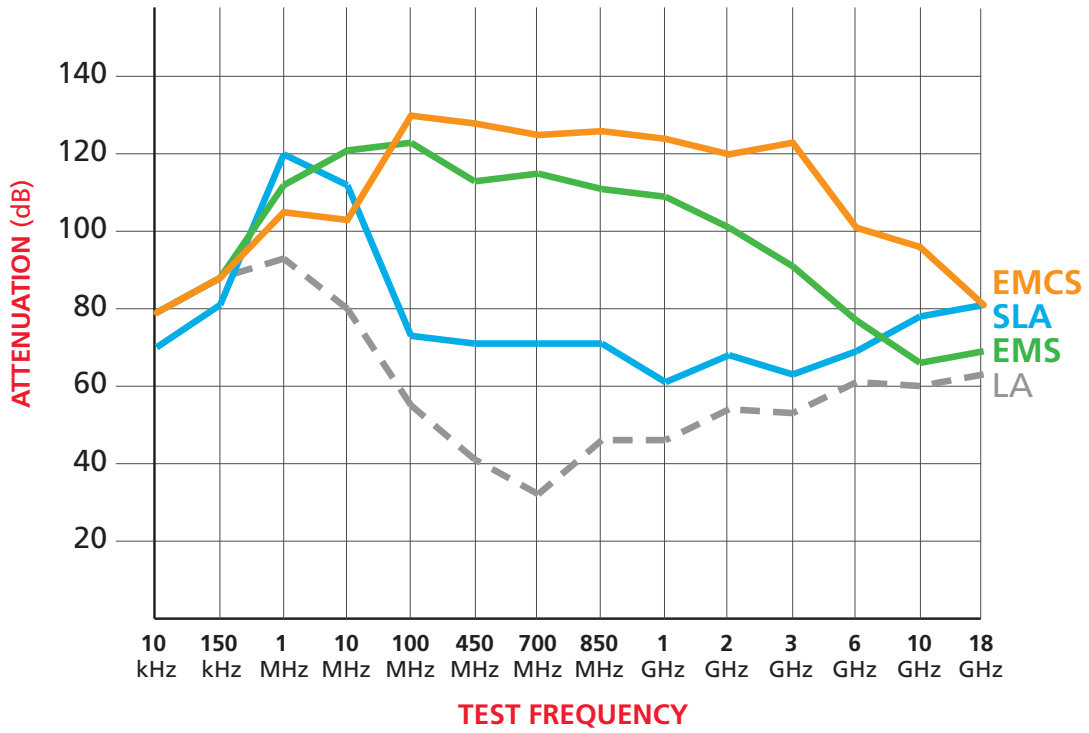
- Air Handling Equipment (HVAC)
- Test & Measurement Equipment
- Data Centers
- Variable Speed Drives
- Commercial-off-the-shelf (COTS) (CAGE Code: 09641)
- CE-European Standard
- Radio Broadband/Antenna
- Solar/Wind Energy
- Ship Building
- Medical Diagnostics Equipment
- Wireless Communication
- Healthcare/Medical

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

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

Shielding Effectiveness

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



TYPE EMCS

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

Proudly made in the U.S.A.

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

Construction:

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

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

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

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Product Information

Certifications & Compliance

WEEE and RoHS Compliant

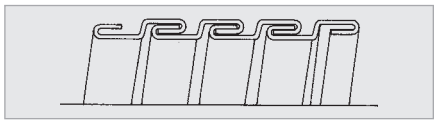
CE BS EN IEC 61386 Classification Code 445340650314

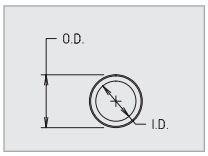
ARRA Certification

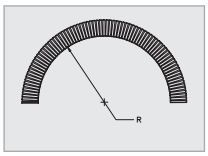
Standard Colors
Black. Other colors and jacketing materials available upon request

Working Temperatures
-55°C to 105°C

Interlock







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

OIL RESISTANT
SHIELDED
UV RESISTANT
HI/LOW TEMP

ENGINEERING **INFORMATION**

ELECTRI-FLEX VISE

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

CUTTING FLEXIBLE CONDUITS

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

HAND CUTTING IN FIELD

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

REPETITIVE PRODUCTION CUTTING

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

Conduit Wire Fill Charts

Per National Electrical Code—Chapter 9, Table 4

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

	NPT Threaded Fittings	NPT Threaded Fittings—Knock Out Diameter
3/8	1/2	7/8
1/2	1/2	7/8
3/4	3/4	1-3/32
1	1	1-23/64
1-1/4	1-1/4	1-23/32
1-1/2	1-1/2	2
2	2	2-1/2

Dimensions

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

Skids

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

Cartons

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

Packaging, Disclaimer and Warranty

DISCLAIMER

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

STANDARD **DIMENSIONS**

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

STANDARD DIMENSIONS FOR LIQUIDTIGHT FLEXIBLE CONDUIT

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

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

COMMON CONVERSIONS

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

NEMA Guidelines Publication

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

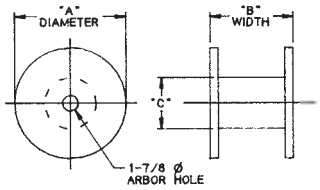
REEL **DIMENSIONS**

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

Trade Size (in.)	Type	58"	42"			30"					32" Special			24"		
		LT LA EF	LT LA Ef	BR ABR	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	100	100	-	-	-
2-1/2	17	275	-		-	-	-	-	-	-	-	-	-	-	-	-
3	18	175	-		-	-	-	-	-	-	-	-	-	-	-	-
3-1/2	350	175	-		-	-	-	-	-	-	-	-	-	-	-	-
4	19	100	-		-	-	-	-	-	-	-	-	-	-	-	-
5	500	-	-		-	-	-	-	-	-	-	-	-	-	-	-
6	600	-	-		-	-	-	-	-	-	-	-	-	-	-	-

Approximate Reel Dimensions

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



Lazy Louis Liquatite Reel Payout Stand

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

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

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

Weight 11 lbs. P/N 90040