



**ROYAL ELECTRIC SUPPLY  
COMPANY**

3233 W Hunting Park Avenue, Philadelphia PA 19132-1845  
(800) 79-ROYAL (215) 221-1200 fax (215) 221-1201  
advisors@royalelectric.com www.royalelectric.com

**WE GET IT**  
24/7 Emergency Material Access



# ALL PRODUCT CATALOG



Jacketed Metallic

EMI/RFI Shielded

Unjacketed Metallic

Nonmetallic

**electri-flex company**



Liquatite®, by Electri-Flex Company, has earned an international leadership reputation for quality, service, and product innovation. For nearly 60 years, Electri-Flex Company has served the electrical industry with the highest quality flexible electrical liquidtight conduit around. The Liquatite® line includes nearly 40 varieties of electrical conduits for

contractors, OEMs, industrial maintenance and repair (MRO), government, utility, and export users. Product categories include: Jacketed Metallic, EMI/RFI Shielded (Shield-Flex), Unjacketed Metallic and Nonmetallic, including the Corrlok® line of nylon conduit & connectors. Custom design and manufacturing capabilities are also available.

**JACKETED METALLIC**

## TYPE LA LIQUATITE® APPROVED



**Description:** A flexible conduit listed by both UL and CSA that offers outstanding protection against wet and oily conditions and is permitted for use in exposed or concealed locations. Other colors available upon request.

**Core:** Hot Dipped Galvanized Steel  
**Jacket:** PVC  
**Trade Size:** 3/8" - 4"  
**Temp. Range:** -30°C to 80°C Dry/ 60°C Wet/70°C Oil  
**Approvals:** UL listed; CSA certified

## TYPE LT INDUSTRIAL GRADE



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

**Core:** Steel  
**Jacket:** PVC  
**Trade Size:** 1/4" - 6"  
**Temp. Range:** -20°C to 80°C  
**Approvals:** JIC

## TYPE LTFG FOOD GRADE



**Description:** Designed with a specially formulated food grade jacket. The jacket is approved for "splash zone" food and beverage contact per FDA CFR21 and NSF 51/61 requirements.

**Common Applications:** Food manufacturing and processing plants, pharmaceutical manufacturers, meat and poultry packing facilities.

**Core:** Steel  
**Jacket:** FDA approved PVC  
**Trade Size:** 3/8" - 2"  
**Temp. Range:** -20°C to 60°C  
**Approvals:** FDA approved; NSF Certified

## TYPE EF GENERAL PURPOSE LIQUATITE®



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

**Core:** Steel  
**Jacket:** PVC  
**Trade Size:** 3/8" - 2"  
**Temp. Range:** -20°C to 80°C  
**Approvals:** JIC

## TYPE LOR OIL RESISTANT



**Description:** This product is offered as a non-UL, oil-resistant conduit that incorporates a high-quality PVC jacket. For a UL listed version, consult factory for Type LA/LOR.

**Core:** Steel  
**Jacket:** PVC  
**Trade Size:** 3/8" - 6"  
**Temp. Range:** -30°C to 80°C Dry/ 60°C Wet/70°C Oil  
**Approvals:** JIC

## TYPE CBLA COMPUTER WIRING



**Description:** Identical to type LA but designed with a blue jacket that easily identifies circuitry for computer wiring.

**Common Applications:** Computer rooms and data centers.

**Core:** Hot Dipped Galvanized Steel  
**Jacket:** PVC  
**Trade Size:** 3/8" - 4"  
**Temp. Range:** -30°C to 80°C Dry/ 60°C Wet/70°C Oil  
**Approvals:** UL listed; CSA certified

## TYPE CSA CANADIAN STANDARD



**Description:** This flexible liquidtight conduit is similar to Type LA, however it is specifically made per Canadian Code. This product is the standard product for Canadian applications requiring standard liquidtight conduit.

**Core:** Steel  
**Jacket:** PVC  
**Trade Size:** 3/8" - 4"  
**Temp. Range:** -40°C to 75°C  
**Approvals:** CSA certified

## TYPE ATLA ALL TEMPERATURE



**Description:** Designed specifically for hot or cold environments. Uses Type LA steel core with a PVC jacket that remains flexible at low temperatures and resists aging at elevated temperatures.

**Common Applications:** High temperature machine tool wiring, power plants, steel mills, oil refineries, and sub-zero areas.

**Core:** Hot Dipped Galvanized Steel  
**Jacket:** High/Low Temp PVC  
**Trade Size:** 3/8" - 4"  
**Temp. Range:** **UL:** -55°C to 105°C Air/60°C Wet/70°C Oil  
**CSA:** -50°C to 105°C Dry / 75°C Oil  
**Approvals:** UL listed; CSA certified

## TYPE AT ALL TEMPERATURE



**Description:** A flexible non-UL conduit that uses a jacketing material specifically designed for hot or cold environments. For a UL listed & CSA certified version, see Type ATLA.

**Common Applications:** Power plants, utilities, steel mills, annealing ovens, lumber kilns, and refrigeration.

**Core:** Steel  
**Jacket:** High/Low Temp PVC  
**Trade Size:** 3/8" - 6"  
**Temp. Range:** **UL:** -55°C to 105°C intermitting to 120°C

## TYPE ATX EXTREME TEMPERATURE



**Description:** A non-UL conduit designed with a thermoplastic rubber jacket which is virtually unaffected by temperature extremes and contains no halogens.

**Common Applications:** Boilers, furnaces, sub-zero areas, power plants, utilities, steel mills, and refrigeration.

**Core:** Steel  
**Jacket:** Thermoplastic Rubber  
**Trade Size:** 3/8" - 4"  
**Temp. Range:** -60°C to 150°C intermitting to 165°C



### TYPE VJC

EXTRA FLEXIBLE



**Description:** This conduit utilizes a vacuum extrusion process that does not restrict the flexibility of the inner steel core. The VJC product is a great fit for static or dynamic applications where either a tight bend diameter or additional flexibility is needed.

**Core:** Steel  
**Jacket:** PVC  
**Trade Size:** 3/8" - 3"  
**Temp. Range:** -20°C to 80°C

### TYPE ALT

ALUMINUM LIQUATITE®



**Description:** Similar to non-UL type LT but weighs considerably less due to the use of a corrosion resistant aluminum core instead of steel.

**Core:** Aluminum  
**Jacket:** PVC  
**Trade Size:** 3/8" - 6"  
**Temp. Range:** -20°C to 80°C

**Common Applications:** Aerospace applications, water treatment plants, water reclamation districts, refineries, pulp and paper mills, and marinas.

### TYPE ZHLA

HALOGEN-FREE



**Description:** This UL listed product is designed with a polyurethane jacket that is zero-halogen, low smoke, low flame spread and will eliminate the release of acidic gases found in PVC products.

**Core:** Hot Dipped Galvanized Steel  
**Jacket:** Polyurethane  
**Trade Size:** 3/8" - 4"  
**Temp. Range:** -40°C to 80°C Air/ 60°C Wet/70°C Oil  
**Approvals:** UL listed

**Common Applications:** Subways, tunnels, elevators, data centers, convention centers, stadiums, and hospitals.

### TYPE CEA

HALOGEN-FREE



**Description:** This non-UL liquidtight flexible conduit is designed for applications where safety concerns exist regarding a material's reaction in a fire situation. It retains the same characteristics and applications as the ZHLA product however it can be used in applications where UL listing is not necessary.

**Core:** Steel  
**Jacket:** Polyurethane  
**Trade Size:** 3/8" - 6"  
**Temp. Range:** -40°C to 80°C

### TYPE ACEA

HALOGEN-FREE ALUMINUM



**Description:** This non-UL liquidtight flexible aluminum conduit uses the same, zero halogen, polyurethane jacket as Type CEA but weighs considerably less due to the aluminum core.

**Core:** Aluminum  
**Jacket:** Polyurethane  
**Trade Size:** 3/8" - 4"  
**Temp. Range:** -40°C to 80°C

**Common Applications:** When weight, corrosion resistance, and the emission of toxic gases are all a concern.

### TYPE SLA

GOOD SHIELDING



**Description:** Type SLA is identical to standard UL listed liquidtight flexible steel conduit, but is augmented with a tinned copper shielding braid underneath its protective PVC jacket. The braid offers a minimum of 90% coverage. Also available with a Halogen-Free jacketing (HFSLA).

**Core:** Hot Dipped Galvanized Steel  
**Jacket:** PVC  
**Trade Size:** 3/8" - 2"  
**Temp. Range:** -30°C to 80°C Dry/ 60°C Wet/70°C Oil  
**Approvals:** UL listed

**Common Applications:** Military and defense industries, medical equipment and surrounding areas, shipbuilding, and in wireless communications.

### TYPE EMS

BETTER SHIELDING



**Description:** Type EMS has an inner core made from a fully interlocked bronze strip and does not contain a braided shield. The bronze is more conductive than the steel core of the SLA product and thus provides better shielding effectiveness. Also available with a Halogen-Free jacketing (HFEMS).

**Core:** Bronze  
**Jacket:** PVC  
**Trade Size:** 3/8" - 4"  
**Temp. Range:** -55°C to 105°C

### TYPE EMCS

BEST SHIELDING



**Description:** 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. Also available with a Halogen-Free jacketing (HFEMCS).

**Core:** Bronze  
**Jacket:** PVC  
**Trade Size:** 3/8" - 2"  
**Temp. Range:** UL: -55°C to 105°C

### TYPE BR

REDUCED WALL STEEL



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

**Metal Used:** Hot Dipped Galvanized Steel  
**Trade Size:** 3/8" - 4"  
**Approvals:** UL listed (3/8" - 3"); CSA certified (3/8" only)

### TYPE ABR

REDUCED WALL ALUMINUM



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

**Metal Used:** Aluminum  
**Trade Size:** 3/8" - 4"  
**Approvals:** UL listed (3/8" & 1/2" - 3"); CSA certified (3/8" & 7/16" only)

### TYPE ABRH

HEAVY WALL ALUMINUM



**Description:** This CSA certified flexible aluminum conduit has many universal wiring applications. It has a heavier aluminum wall than our standard ABR thus providing greater crush resistance and mechanical strength.

**Metal Used:** Aluminum  
**Trade Size:** 3/8" - 4"  
**Approvals:** CSA certified

### TYPE FSC

GENERAL PURPOSE FLEX



**Description:** This non-UL flexible steel conduit has many universal wiring applications. It is used when flexible steel conduit is necessary but the application does not require UL approval.

**Metal Used:** Steel  
**Trade Size:** 3/8" - 4"



## TYPE USL

EXTRA FLEXIBLE



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

**Common Applications:** Modular office partitions, showcase lighting, range tops, and anywhere that additional flexibility is needed.

**Metal Used:** Hot Dipped Galvanized Steel

**Size Range:** 5/16" - 3/4"

**Approvals:** UL & CSA Recognized

## TYPE UG

PLIABLE INTERLOCK



**Description:** A fully-interlocked, non-UL flexible steel conduit designed for high strength in "tight-spot" installations. This conduit will not unravel if twisted and retains its shape when bent.

**Common Applications:** The bright, tin-plated exterior makes this product great for display type applications or where the conduit will be visible after the final installation.

**Metal Used:** Steel

**Size Range:** 3/8" - 3"

## TYPE SL

EXTRA FLEXIBLE



**Description:** 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.

**Common Applications:** Offers good mechanical protection in a variety of OEM applications where extra flexibility is needed from an unjacketed product.

**Metal Used:** Steel

**Size Range:** 3/16" - 1"

## FLEXIBLE WHIPS



**Description:** Flexible metal pre-assembled whips, used for lighting fixture installation, as well as many other electrical equipment uses, are available from Electri-Flex. They come pre-wired with 12, 14, or 18 AWG wires and utilize UL listed conduit and connectors. **We also offer nonmetallic AC whips for air conditioner hook-up.** Please contact the factory or your agent for available options.

## TYPE LNM-P

TYPE A NONMETALLIC



**Description:** This nonmetallic, liquidtight conduit is manufactured from two layers of flexible PVC that are reinforced by a nylon mesh to add mechanical strength.

**Common Applications:** Continuous flexing applications, often specified in "Power Track" or cable carrier installations and on industrial robots.

**Plastic Used:** PVC

**Size Range:** 3/8" - 2"

**Temp. Range:** -20°C to 60°C

**Approvals:** UL listed; CSA certified

## TYPE NM

TYPE B NONMETALLIC



**Description:** A general purpose liquidtight conduit offering excellent protection to wiring from abrasion, sunlight, mild acids, alkaline and oils. For a higher temperature version, see Type NMHT.

**Common Applications:** It is often used for air conditioning hookups and other outdoor applications.

**Plastic Used:** PVC

**Size Range:** 3/8" - 2"

**Temp. Range:** -20°C to 80°C Dry / 60°C Wet / 70°C Oil

**Approvals:** UL listed; CSA certified

## TYPE NMHT

HIGH TEMP



**Description:** 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.

**Plastic Used:** High Temp PV

**Size Range:** 3/8" - 2"

**Temp. Range:** -20°C to 105°C Dry / 60°C Wet / 70°C Oil

**Approvals:** UL listed; CSA certified

## TYPE NM2

EXTRA FLEXIBLE



**Description:** Type NM2 is an extra-flexible, liquidtight tubing that cuts easily and installs quickly. The thin PVC skin allows for greater movement and the spiral of rigid PVC adds a level of mechanical strength making it an ideal product for many OEM applications.

**Plastic Used:** PVC

**Size Range:** 1/4" - 2"

**Temp. Range:** -20°C to 70°C

**Approvals:** UL Recognized

## NMLT AND NMSC CONNECTORS



**Description:** Type NMLT and NMSC nonmetallic connectors are intended to be used with liquidtight nonmetallic conduit Type B; Electri-Flex Types NM, NMHT and NM2. Available in straight and 90° fittings. The NMLT fitting is a two piece compression fitting and the NMSC is a one piece screw on connector.

**Material Used:** NMLT is Nylon 6; NMSC is PVC

**Size Range:** NMLT is available in 3/8" - 2";

NMSC available in 1/2" & 3/4"

**Approvals:** UL & CSA listed

## CORRLOK® CL, CLL, CLR, CLFR

NYLON CORRUGATED



**Type CORRLOK®:** The Corrllok system is a line of nylon corrugated conduit and connectors. **Type CL** offers the best mechanical strength and protection of the Corrllok conduits. **Type CLR** is an extremely flexible conduit, ideally suited for robotic equipment and is ideal in continuous flexing applications. **Type CLL** is a lightweight version of Type CL. **Type CLFR** is a flame retardant version of Type CL. Please contact the factory or your local Electri-Flex Agent for additional information regarding our line of fittings and accessories that we carry for the Corrllok System.

5/16" - 1" only





# Conduit Application Guide

Conduit Type	Flexibility				Metal Used	Plastic Used	High Mech. Strength	Listed for Direct Burial	Halogen-Free	Low Fire Hazard	Accepts Standard Lug/tight Fittings	Self-Extinguishing	EMI/RFI Shielding	Approval
	Continued Flexing	Small Bend Radius	Flexible	Pliable (Static)										
<b>JACKETED METALLIC</b> TYPE LA			•		Steel	PVC	•	•			•	•		UL SF
TYPE LT		•	•		Steel	PVC					•			JIC
TYPE LTFG		•	•		Steel	PVC					•			NSF/FDA
TYPE EF		•	•		Steel	PVC					•			JIC
TYPE LOR		•	•		Steel	PVC					•			JIC
TYPE CBLA			•		Steel	PVC	•	•			•	•		UL SF
TYPE CSA			•		Steel	PVC	•				•	•		SF
TYPE ATLA			•		Steel	PVC	•	•			•	•		UL SF
TYPE AT		•	•		Steel	PVC					•			
TYPE ATX		•	•		Steel	TPR			•		•			
TYPE VJC	•	•	•		Steel	PVC					•			
TYPE ALT			•		Aluminum	PVC					•			
TYPE ZHLA			•		Steel	PU	•	•	•	•	•	•		UL
TYPE CEA			•		Steel	PU			•	•	•	•		
TYPE ACEA			•		Aluminum	PU			•	•	•	•		
<b>EMI/RFI</b> TYPE SLA			•		Steel	PVC	•	•	Available	Available	•	•	•	UL
TYPE EMS			•		Bronze	PVC			Available	Available	•	•	•	
TYPE EMCS			•		Bronze	PVC			Available	Available	•	•	•	
<b>UNJACKETED METALLIC</b> TYPE BR			•		Steel		•							UL SF*
TYPE ABR			•		Aluminum									UL SF*
TYPE ABRH			•		Aluminum		•							SF
TYPE FSC			•		Steel		•							
TYPE USL		•	•		Steel									RU
TYPE UG				•	Steel									
TYPE SL	•	•	•		Steel									
TYPE PF				•	Steel									UL
<b>NONMETALLIC</b> CORRLOK®	•	•	•			Nylon	•		•	•		•		RU
TYPE LNM-P	•		•			PVC					FNMC-A	•		UL SF
TYPE NM			•			PVC	•	•			•	•		UL SF
TYPE NMHT			•			PVC	•	•			•	•		UL SF
TYPE NM2	•		•			PVC					•	•		RU

\*Types BR and ABR are CSA certified in 3/8" only.

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