



## Technical Specifications

### LIQUID-TUFF™

# UL Hi-Low Temperature Liquidtight Flexible Steel Conduit, Type LFMC

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## Scope

This specification covers AFC Cable Systems, Inc. UL Listed LIQUID-TUFF™ Hi-Low Liquidtight Flexible Steel Conduit designed for use as a raceway for power, control and communication cables in accordance with Article 350 of the National Electrical Code. The product is Underwriters Laboratories Inc. (UL) Listed for 105°C (221°F) in a dry location, 60°C (140°F) in a wet location and 70°C (158°F) in an oily location. It is also UL Listed in all trade sizes for direct burial, outdoor use and sunlight resistance. THE LIQUID-TUFF™ HI-LOW IS UL LISTED FOR -55°C (-67°F) LOW TEMPERATURE APPLICATIONS. This Liquidtight Flexible Steel Conduit is manufactured and tested in accordance with Underwriters Laboratories Inc. Standard UL 360. The product carries the UL Listing Mark.

## Construction

The Type Hi-Low Liquidtight Flexible Steel Conduit shall be formed from a zinc coated galvanized low carbon steel strip having a uniform width and thickness. The construction shall be in accordance with UL 360. The finished Type Hi-Low LFMC dimensions shall be in accordance with Table 5.1 of UL 360 which is summarized in Table 3.

## Jacket – PVC

A rugged moisture, oil and sunlight resistant polyvinyl chloride (PVC) jacket shall be applied directly over the flexible metal conduit with a wall thickness in accordance with Table 4.1 of UL 360 which is summarized in Table 2.

## Grounding

Permanent circuit ground protection is provided through the continuous copper bonding strip built into the conduit core in sizes 3/8" through 1¼". A separate grounding conductor is required by the NEC® for trade sizes 1½" and larger.

## Markings

The surface of the outer jacket shall be clearly marked with a legible print legend in compliance with UL 360.

## Performance Tests

In accordance with UL 360, the completed LIQUID-TUFF™ Hi-Low Liquidtight Flexible Steel Conduit shall meet all of the performance requirements outlined in Appendix A.

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## Reference Standards

UL 360	Standard for Liquidtight Flexible Steel Conduit
File Reference(s):	UL E26540
NEC® Articles:	250.118(6), 350, 390.15, 501.10(B)(2), 502.10(A)(2), 503.10(A)(2), 511.7(A)(1), 645.5(D)(2), 680.21, 680.42, 695.6(E) and 695.14(E)

Department of Defense Adopted UL 360 on October 1, 1987

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**Table 2**  
**Jacket Thickness**

Conduit Trade Trade Size	Metric Designator	Minimum Acceptable Average Thickness of Jacket, (inches)
3/8	12	0.030
1/2	16	0.030
3/4	21	0.035
1	27	0.035
1¼	35	0.035
1½	41	0.040
2	53	0.040
2½	63	0.050
3	78	0.050
3½	91	0.060
4	103	0.060

#### Appendix A

##### UL Performance Tests

Resistance and High Current  
 Fault Current  
 Impact  
 Tension  
 Crushing  
 Pipe Stiffness  
 Flexibility  
 Low Temperature Flexibility  
 Zinc Coating  
 Vertical Flame  
 Physical Properties  
 Deformation  
 Mechanical Water Absorption  
 Moisture Penetration  
 Sunlight Resistance  
 Test for Secureness of Fittings  
 Test for Durability of Ink Printing

**Table 3**  
**Conduit Diameters**  
**Acceptable Internal and External Diameters**

Conduit Size Trade Size, In.	Metric Designator	Internal Diameter, In.		Over Conduit, In.		Over Jacket, In.	
		Min.	Max.	Min.	Max.	Min.	Max.
3/8	12	0.484	0.504	0.594	0.614	0.690	0.710
1/2	16	0.622	0.642	0.732	0.765	0.820	0.840
3/4	21	0.820	0.840	0.930	0.960	1.030	1.050
1	27	1.041	1.066	1.201	1.226	1.290	1.315
1¼	35	1.380	1.410	1.540	1.570	1.630	1.660
1½	41	1.575	1.600	1.735	1.770	1.865	1.900
2	53	2.020	2.045	2.180	2.215	2.340	2.375
2½	63	2.480	2.505	2.640	2.675	2.840	2.875
3	78	3.070	3.100	3.295	3.335	3.460	3.500
3½	91	3.500	3.540	3.720	3.789	3.960	4.000
4	103	4.000	4.040	4.220	4.280	4.460	4.500