

LIQUID-TUFF™

Non-UL Oil Resistant/High Temperature Liquidtight Flexible Steel Conduit

Description

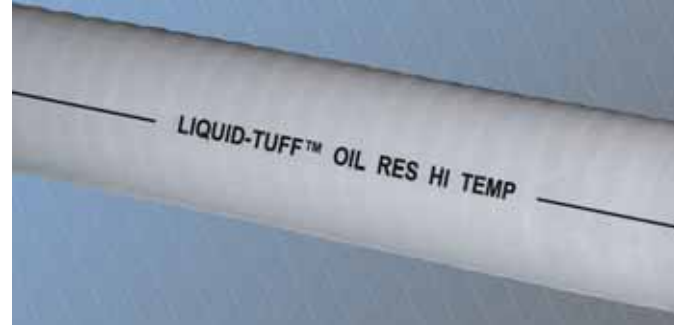
- High-quality PVC jacket for oil resistance and high temperatures – Grey
- Hot dipped zinc galvanized low carbon steel core
- Excellent flexibility
- Non-UL liquidtight electrical raceway

Temperature Rating

- 105°C/221°F Dry
- 60°C/140°F Wet
- 70°C/158°F Oil resistant
- -26°C

Applications

- Oily and harsh chemical environments
- UV resistant
- Excellent flexibility
- Industrial applications
- Indoor or outdoor locations
- Provides mechanical protection for conductors



References & Ratings

- Non-UL
- Separate grounding conductor required in all sizes

Ordering Information

Product Dimensions/Bend Radius

Product Code	Trade Size (inches)	Trade Size (mm)	Coil Length (feet)	Reel Length (feet)	Approx. Weight/100 feet (pounds)	External Diameter (inches)		Internal Diameter (min/max) inches	Bend Radius (inches)
						Over Conduit (min/max)	Over Jacket (min/max)		
5901-30-00	3/8	12	100'	—	22	0.594/0.614	0.690/0.710	0.484/0.504	2
5901-45-00	3/8	12	—	500'	22	0.594/0.614	0.690/0.710	0.484/0.504	2
5901-60-00	3/8	12	—	1000'	22	0.594/0.614	0.690/0.710	0.484/0.504	2
5902-30-00	1/2	16	100'	—	26	0.732/0.765	0.820/0.840	0.622/0.642	3.25
5902-45-00	1/2	16	—	500'	26	0.732/0.765	0.820/0.840	0.622/0.642	3.25
5902-60-00	1/2	16	—	1000'	26	0.732/0.765	0.820/0.840	0.622/0.642	3.25
5903-30-00	3/4	21	100'	—	34	0.930/0.960	1.030/1.050	0.820/0.840	4.25
5903-45-00	3/4	21	—	500'	34	0.930/0.960	1.030/1.050	0.820/0.840	4.25
5903-60-00	3/4	21	—	1000'	34	0.930/0.960	1.030/1.050	0.820/0.840	4.25
5904-30-00	1	27	100'	—	46	1.201/1.226	1.290/1.315	1.041/1.066	6.5
5904-41-00	1	27	—	400'	46	1.201/1.226	1.290/1.315	1.041/1.066	6.5
5905-24-00	1¼	35	50'	—	62	1.540/1.570	1.630/1.660	1.380/1.410	8
5905-40-00	1¼	35	—	200'	62	1.540/1.570	1.630/1.660	1.380/1.410	8
5906-24-00	1½	41	50'	—	91	1.735/1.770	1.865/1.900	1.575/1.600	9
5907-24-00	2	53	50'	—	120	2.180/2.215	2.340/2.375	2.020/2.045	11.12
5908-22-00	2½	63	25'	—	122	2.640/2.675	2.840/2.875	2.480/2.505	14.62
5909-22-00	3	78	25'	—	148	3.295/3.335	3.460/3.500	3.070/3.100	17.5
5910-22-00	3½	91	25'	—	202	3.720/3.789	3.960/4.000	3.500/3.540	20
5911-22-00	4	103	25'	—	255	4.220/4.280	4.460/4.500	4.000/4.040	24

NOTE: All dimensions and weights are subject to normal manufacturing tolerances.

Not for grounding.

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Scope

This specification covers AFC Cable Systems, Inc. LIQUID-TUFF™ Non-UL Oil Resistant/High Temperature Liquidtight Flexible Steel Conduit designed for use in high temperature oily applications. The product is intended for use at 105°C (221°F) in a dry location, 60°C (140°F) in a wet location, 70°C (158°F) in an oily location and at -26°C (-15°F) in a low temperature application. The product is rated for outdoor and sunlight resistant use in dark colors.

The product is designed to be used for specific applications where Underwriters Laboratories Inc. (UL) or other agency approvals are not required.

Construction

Non-UL Oil Resistant/High Temperature Liquidtight Flexible Steel Conduit shall be formed from a zinc coated galvanized low carbon steel strip having a uniform width and thickness. The convolutions of the interlock shall be filled with a fibrous material designed to promote flexibility.

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 2. Jacket: Grey

Grounding

A separate grounding conductor is required for all trade sizes.

Markings

The surface of the outer jacket shall be clearly marked with the applicable legible print legend.

Performance Tests

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

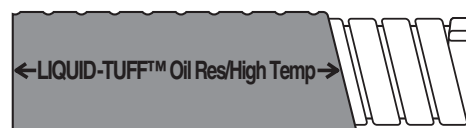


Table 2
Jacket Thickness

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

The finished product dimensions shall be in accordance with Table 3.

Appendix A

Performance Tests

Flexibility
Low Temperature Flexibility
Zinc Coating
Vertical Flame
Physical Properties
Mechanical Water Absorption
Moisture Penetration
Sunlight Resistance