

# Titan® - HC

Liquid-Tight Flexible Metal Conduit

Hot/Cold Liquid-Tight Flexible Metal Conduit.  
UL/CSA Listed. Oil-Resistant. Sunlight-Resistant.  
Temperature Rated -40°C to 105°C.



## APPLICATIONS

Titan® Type HC Liquidtight Flexible Metal Conduit is suitable of the following installations:

- For extreme temperature environments
- For the installation and protection of electrical conductors in circuits of 600 Volts nominal, or less
- Where the conditions of installation, operation, or maintenance require flexibility or protection from liquids, vapors, solids, or weather
- Used in industrial and commercial applications for conveyors, blowers, cranes, air conditioners, machine tooling and lubrication equipment
- Applications requiring movement, crossover connections, or tight bends
- Exposed or concealed locations
- For flexible connections to swimming pool, spa, and hot tub motors per 2011 NEC® 680.21(A)(3) & 680.42(A)(1)
- Electric signs and outline lighting supply and secondary-circuit per 2011 NEC® 600.31 (1000 Volts or less) & NEC® 600.32 (over 1000 Volts)

## STANDARDS & REFERENCES

- NEC® Type designation - Type LFMC (Liquidtight Flexible Metal Conduit)
- ANSI / NFPA-70, NEC Article 350
- UL Listed to Underwriters Laboratories Standard ANSI / UL-360 for Liquidtight Flexible Steel Conduit
- CSA Listed to CSA 22.2 No.56 for use per the Canadian Electrical Code C22.1 Section 12-1300

## CONSTRUCTION

Titan® Type HC is manufactured with a spiral wound strip of heavy gauge, corrosion-resistant, hot-dipped galvanized steel. For 3/8" through 1-1/4" trade sizes, the core is constructed with a square locked steel strip with an integral copper-bonding strip enclosed within the steel convolutions. A rugged, flame retardant, flexible PVC jacket is extruded over the steel core. The jacket provides protection from liquids, oil, certain chemicals, temperature, extreme weather and sunlight.

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Trade Size (Inches)	Approximate Weight (lbs/100 ft)	Inner Diameter Min./Max. (inches)	Outer Diameter Min./Max. (inches)	Approx. Inside Bend Diameter (Inches)	Standard Coil Length (feet)	Standard Reel Length (feet)
3/8	27	0.484 / 0.504	0.690 / 0.710	4	100	600
1/2	31	0.622 / 0.642	0.820 / 0.840	6.5	100	1000
3/4	40	0.820 / 0.840	1.030 / 1.050	8.5	100	1000
1	76	1.041 / 1.066	1.290 / 1.315	13	100	400
1-1/4	102	1.380 / 1.410	1.630 / 1.660	16	50	250
1-1/2	103	1.575 / 1.600	1.865 / 1.900	18	50	150
2	145	2.020 / 2.045	2.340 / 2.375	22.25	50	100
2-1/2	197	2.480 / 2.505	2.840 / 2.875	29.25	25	-
3	265	3.070 / 3.100	3.460 / 3.500	35	25	-
3-1/2	300	3.500 / 3.540	3.960 / 4.000	40	25	-
4	333	4.000 / 4.040	4.460 / 4.500	48	25	-

## FEATURES

- The thermoplastic jacket and conduit is rated for extreme hot and cold temperature environments
- A protective thermoplastic outer jacket which seals out water, liquids, abrasives, alcohol, coolants, corrosive fumes and gases, dirt, grease, mineral acids, nonconcentrated fixed alkalines, petroleum oils, salt air and spray, and weather
- Smooth metal interior for easy wiring pulling
- UV sunlight resistant jacket
- Rated for temperature range of -40°C to 105°C, 60°C Oil (-40°F to +221°F, 140°F Oil)
- Accepts standard metallic liquidtight fittings
- Rated for direct burial applications including concrete encasement

## ADDITIONAL APPLICATIONS

- For Hazardous Locations in accordance with the following:
  - Class I, Div. 2 - NEC® 501.10(B)(2) & 501.30(B)
  - Class II, Div. 1 and 2 - NEC® 502.10(A)(2) & 502.30(B) and NEC® 502.10(B)(2)
  - Class III, Div. 1 and 2 - NEC® 503.10(A)(2) & 503.30(B) and NEC® 503.10(A)(2)
- Permitted for equipment grounding in sizes 3/8" through 1-1/4" in lengths not exceeding 6 feet per NEC® 250.118(6)
- Floating building feeders and services per NEC® 553.7(B)
- Boatyards & Marinas in accordance with NEC® 555.13
- Cranes & Hoists in accordance with NEC® 610.11(C)
- For Elevator, Dumbwaiters, Escalators, Moving Walks, Wheel Chair Lifts & Stairway Chair Lifts in accordance with NEC® 620.21 (where expressly permitted)
- Under raised floors in data processing areas per NEC® 645.5(D) & 645.5(D)(2)
- Service entrance in lengths up to six feet per NEC® 230.43(15)



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## ONLINE CERTIFICATIONS AND TOOLS

- [UL Online Certifications Directory \( www.ul.com \)](http://www.ul.com)
- [CSA Online Certifications Directory \( www.csa.ca \)](http://www.csa.ca)
- [UL Guide Information - Flexible Metal Conduit, Liquidtight \(DXHR\)](#)
- [CSA Product Information - Conduit Flexible Metal, Liquidtight Conduit \(1812-03\)](#)



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