

## THHN/THWN-2 Unscreened Cable



### Description

THHN/THWN-2 unscreened cables are specifically manufactured for petrochemical, oil & gas industries, where resistance to aliphatic and aromatic hydrocarbons is essential. These cables are suitable for installation in Class I, Division 2 hazardous locations, defined as "areas where flammable gases or vapours may be present under abnormal conditions, but are not normally encountered during standard operations". THHN references the Nylon-coated conductor wire, THWN-2 the 90°C PVC insulation layer

THHN/THWN-2 Cable have copper conductors insulated with flame-retardant PVC and a nylon binder tape. The cables have a UV-resistant PVC outer sheath. THHN/THWN-2 cables are approved for use in wet or dry locations and are engineered to meet the rigorous demands of the oil industry,. They are suitable for installation in trays, wireways, ducts, conduits, aerial applications with proper support, and are fully approved for direct burial.

### Key Features



**Voltage Rating**  
600 Volts



**Minimum Bending Radius**  
Fixed: 6 x overall diameter  
Flexing: 8 x overall diameter



**Temperature Limits**  
Maximum operating temperature: +90°C

### Standards

- UL 1277
- ICEA S-73-532
- UL 83

### Construction

- Conductor:** Copper Conductor
- Insulation:** Flame Retardant Nylon / Polyvinyl Chloride (PVC-FR Nylon)
- Ripcord:** Nylon
- Outer Sheath:** UV resistant Polyvinyl Chloride compound (PVC)
- Sheath Colour:** Black

### QA Lab

#### Cleveland Cable Test & Training Lab

Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.



### CPR

Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.



### Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.



#### ecovadis

Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

#### ecovadis

## THHN/THWN-2 Unscreened Cable - Dimensions

Reference	AWG Stranding	No Of Cores	Sheath Thickness (mm)	Overall Diameter(mm)	Weight(Kg/Km)
THHN/THWN2CUPVC2X1 0AWG	10	2	1.15	6.40 X 10.60	170
THHN/THWN2CUPVC2X1 2AWG	12	2	1.15	5.80 X 9.20	115
THHN/THWN2CUPVC2X1 4AWG	14	2	1.15	5.30 X 8.00	90
THHN/THWN2CUPVC3X1 0AWG	10	3	1.15	11.40	240
THHN/THWN2CUPVC3X1 2AWG	12	3	1.15	9.60	160
THHN/THWN2CUPVC3X1 4AWG	14	3	1.15	8.55	115
THHN/THWN2CUPVC4X1 0AWG	10	4	1.15	12.45	300
THHN/THWN2CUPVC4X1 2AWG	12	4	1.15	10.40	190
THHN/THWN2CUPVC4X1 4AWG	14	4	1.15	9.25	135
THHN/THWN2CUPVC5X1 0AWG	10	5	1.15	14.40	395
THHN/THWN2CUPVC5X1 0AWG	12	5	1.15	11.40	250
THHN/THWN2CUPVC5X1 0AWG	14	5	1.15	10.75	175
THHN/THWN2CUPVC6X1 0AWG	10	6	1.15	15.70	485
THHN/THWN2CUPVC6X1 2AWG	12	6	1.15	12.40	295
THHN/THWN2CUPVC6X1 4AWG	14	6	1.15	11.00	205
THHN/THWN2CUPVC7X1 0AWG	10	7	1.15	16.60	520
THHN/THWN2CUPVC7X1 2AWG	12	7	1.15	13.00	325
THHN/THWN2CUPVC7X1 4AWG	14	7	1.15	11.40	230
THHN/THWN2CUPVC8X1 0AWG	10	8	1.15	17.00	595
THHN/THWN2CUPVC8X1 2AWG	12	8	1.15	14.20	380
THHN/THWN2CUPVC8X1 4AWG	14	8	1.15	11.85	260
THHN/THWN2CUPVC9X1 0AWG	10	9	1.15	18.30	675
THHN/THWN2CUPVC9X1 2AWG	12	9	1.55	15.30	445



Reference	AWG Stranding	No Of Cores	Sheath Thickness (mm)	Overall Diameter(mm)	Weight(Kg/Km)
THHN/THWN2CUPVC9X1 4AWG	14	9	1.15	12.75	295
THHN/THWN2CUPVC10X 10AWG	10	10	1.55	20.0	730
THHN/THWN2CUPVC12X 10AWG	12	10	1.55	16.30	490
THHN/THWN2CUPVC10X 14AWG	14	10	1.55	14.40	350
THHN/THWN2CUPVC12X 10AWG	10	12	1.55	20.50	855
THHN/THWN2CUPVC12X 12AWG	12	12	1.55	17.05	565
THHN/THWN2CUPVC12X 14AWG	14	12	1.55	15.05	399
THHN/THWN2CUPVC15X 10AWG	10	15	2.05	23.20	1165
THHN/THWN2CUPVC15X 12AWG	12	15	1.55	18.4	700
THHN/THWN2CUPVC15X 14AWG	14	15	1.55	16.20	490
THHN/THWN2CUPVC19X 10AWG	10	19	2.05	25.05	1365
THHN/THWN2CUPVC19X 12AWG	12	19	1.55	19.90	855
THHN/THWN2CUPVC19X 14AWG	14	19	1.55	17.50	595
THHN/THWN2CUPVC20X 10AWG	10	20	2.05	26.00	1425
THHN/THWN2CUPVC20X 10AWG	12	20	1.55	20.50	870
THHN/THWN2CUPVC20X 10AWG	14	20	1.55	18.0	620
THHN/THWN2CUPVC25X 10AWG	10	25	2.05	29.00	1755
THHN/THWN2CUPVC25X 12AWG	12	25	2.05	24.0	1160
THHN/THWN2CUPVC25X 14AWG	14	25	1.55	20.15	775
THHN/THWN2CUPVC30X 10AWG	10	30	2.05	31.00	2075
THHN/THWN2CUPVC30X 12AWG	12	30	2.05	25.65	1365
THHN/THWN2CUPVC30X 14AWG	14	30	2.05	22.55	950
THHN/THWN2CUPVC37X 10AWG	10	37	2.05	33.45	2525
THHN/THWN2CUPVC37X 12AWG	12	37	2.05	27.60	1650



Reference	AWG Stranding	No Of Cores	Sheath Thickness (mm)	Overall Diameter(mm)	Weight(Kg/Km)
THHN/THWN2CUPVC37X 14AWG	14	37	2.05	24.25	1155
THHN/THWN2CUPVC40X 10AWG	10	40	2.05	34.95	2715
THHN/THWN2CUPVC40X 12AWG	12	40	2.05	28.70	1815
THHN/THWN2CUPVC40X 14AWG	14	40	2.05	25.20	1245
THHN/THWN2CUPVC45X 10AWG	10	45	2.05	36.95	3040
THHN/THWN2CUPVC45X 12AWG	12	45	2.05	30.30	2025
THHN/THWN2CUPVC45X 14AWG	14	45	2.05	26.55	1385
THHN/THWN2CUPVC50X 10AWG	10	50	2.05	31.35	3355
THHN/THWN2CUPVC50X 12AWG	12	50	2.05	31.50	2230
THHN/THWN2CUPVC50X 14AWG	14	50	2.05	27.55	1450

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