

Fleximax

Millimetric THHN/THWN Copper Conductor

Prysmian
Group



Description

Fleximax THHN/THWN-2 millimetric is a copper core of twisted Class 5 conductor; insulated with thermoplastic polyvinyl chloride (PVC) with a thermoplastic nylon outer jacket.

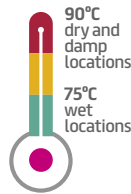
Standard Specifications

The Fleximax THHN/THWN-2 conductors are built based on the following:

- Standards: **ASTM B3, B172. IEC 60228 and UL 83.**
- Certificate: **CIDET #04947.**

Features

- The Fleximax THHN/THWN-2 conductor is manufactured from 1.5 mm² to 240 mm² in Class 5 conductors.
- Designed to operate at 90°C maximum temperature in dry, damp and wet locations at 600 V maximum voltage.
- The nylon jacket provides mechanical protection and resistance against petroleum derivatives, chemical agents and oils (GRI and GRII).
- Due to the nylon's jacket low friction coefficient, the conductors require low pull tension and provides ease of installation.
- The Fleximax THHN/THWN-2 conductor is



VW-1 certified (Vertical flame capable) it does not propagate flame due to the PVC/nylon insulation system.

- The lead-free PVC insulation is ecologically friendly and has low smoke emissions per unit length.
- The conductor complies with RoHS (*Restriction of Hazardous Substances*) regulation.

Applications

- Due to its smaller external diameter, high current capacity and its ease of installation, the Fleximax THHN/THWN-2 millimetric conductor is ideal for fixed electrical installations in residential, commercial and industrial buildings: power and lighting feeders, wiring of electrical connections and for the circuits' branches.
- Due to the nylon protective jacket it is capable to be installed in petrochemical plants, gas stations and where oil is present. Its high insulation operating temperature (90°C) makes it suitable for industrial applications connecting motors, control panels, as well as internal wiring of machine tools and household appliances.
- The 50 mm² gauge and larger sizes can be installed in cable trays (pans or baskets) covered or exposed to sunlight. Also, the conductors can be installed directly exposed on support messenger.



PRYSMIAN GROUP

Central America & Caribbean
Kilometer 11 General Cañas Highway, Heredia, Costa Rica
Customer Service Hub: + (506) 2298-4800
info.centroamerica@prysmiangroup.com
www.generalcable.com

Fleximax

Millimetric THHN/THWN Copper Conductor

Technical Information

Nominal dimensions and features

The conductor operating amperage is defined by the installation conditions and operating temperatures identified in TABLE B.52.5 of IEC 60364-5-52 latest version

Gauge	Insulation Thickness		Jacket Thickness		External Diameter		Weight	DC Max. @ 20°C Resistance
	mm ²	in	mm	in	mm	in		
1,50	0,015	0,381	0,004	0,102	0,108	2,743	17,77	13,30
2,50	0,015	0,381	0,004	0,102	0,124	3,149	26,92	7,98
4	0,015	0,381	0,004	0,102	0,144	3,657	40,65	4,95
6	0,020	0,508	0,004	0,102	0,174	4,419	60,25	3,30
10	0,030	0,762	0,005	0,127	0,233	5,918	104,37	1,91
16	0,030	0,762	0,005	0,127	0,299	7,594	163,14	1,21
25	0,040	1,016	0,006	0,152	0,377	9,586	252,32	0,78
35	0,040	1,016	0,006	0,152	0,427	10,845	366,90	0,554
50	0,050	1,270	0,007	0,178	0,473	12,021	504,97	0,386
70	0,050	1,270	0,007	0,178	0,538	13,654	718,60	0,272
95	0,050	1,270	0,007	0,178	0,605	15,363	965,30	0,206
120	0,060	1,524	0,008	0,203	0,691	17,540	1222,46	0,161
150	0,060	1,524	0,008	0,203	0,753	19,120	1496,92	0,129
185	0,060	1,524	0,008	0,203	0,808	20,519	1756,34	0,105
240	0,060	1,524	0,008	0,203	0,919	23,343	2402,77	0,0801

Note: The values given may vary according to the manufacturing tolerances



PRYSMIAN GROUP

Central America & Caribbean

Kilometer 11 General Cañas Highway, Heredia, Costa Rica

Customer Service Hub: + (506) 2298-4800

info.centroamerica@prysmiangroup.com

www.generalcable.com