



Company: _____

Job: _____ #Item: _____

Notes: _____

THHN / THWN-2 Thermoplastic Insulated Wire



SCOPE AND DEFINITIONS

This standard specifies requirements for 600 V thermoplastic insulated single conductor wires and cables

APPLICATION

Are often used in wiring circuits for machine tool wiring and the internal wiring of appliances in dry or wet locations

CONDUCTORS

Solid or stranded bare copper per ASTM-B3, ASTM-B8, and ASTM-B787 (19 STR)

INSULATION

- Color-coded Polyvinyl Chloride (PVC)
- Flame retardant QMTT2 compound (UL83)
- Heat and moisture resistant

NYLON JACKET

- Types THHN, THWN, THWN-2 (specific to application, all THHN dual rated as THWN-2)

TYPE AND RATE

- **THHN** - Indicates a single conductor having flame retardant and heat-resistant thermoplastic insulation with a jacket of extruded nylon where the wire is rated 90°C, *dry only*
- **THWN-2** - Same as THWN except the wire is rated 90°C *wet or dry*

SERVICE DESCRIPTION

- Flame Retardant : FV-2/VW-1, FT4 (vertical tray), CT USE (*.FT4, CT USE – 1/0AWG and larger)
- Oil Resistance : PR I / PR II
- Sunlight resistance
- Cold bend / Cold Impact at -40°

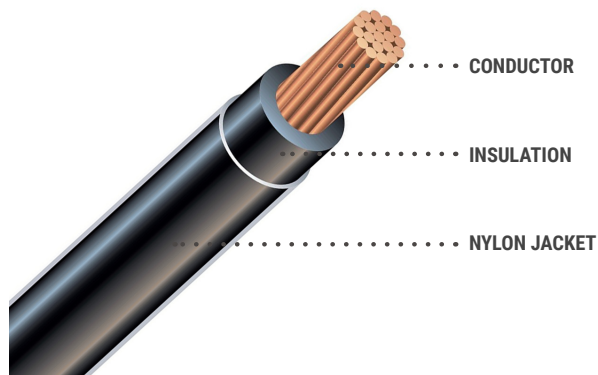
STANDARDS

- ASTM B8
- ASTM B3
- UL 83 - THHN/THWN-2
- UL 2556 VW-1
- UL 1581
- RoHS

COLORS AVAILABLE

**Consult availability*

- Blue
- Black
- Red
- White
- Brown
- Orange
- Green
- Yellow



ELECTRICAL CONDUIT AND WIRES



CATEGORY

**ELECTRICAL
CONDUIT & WIRES**

AMMO ITEM #

THHN / THWN-2

SIZE OF PRODUCT

AMMO#	CROSS-SECTIONAL AREA	NUMBER OF STRADS	NOMINAL DIAMETER OF CONDUCTOR	INSULATION THICKNESS	NYLON JACKET THICKNESS	OVERALL DIAMETER	APPROX NET WEIGHT
	mm ²	EA	mm	mm	mm	mm	1,000 / lbs
14AWG SOL	2.08	1	1.63	0.38	0.10	2.59	15
12AWG SOL	3.31	1	2.05	0.38	0.10	3.01	23
10AWG SOL	5.26	1	2.59	0.51	0.10	3.81	36
14AWG	2.08	19	1.85	0.38	0.10	2.81	16
12AWG	3.31	19	2.32	0.38	0.10	3.28	24
10AWG	5.26	19	2.95	0.51	0.10	4.17	38
8AWG	8.37	19	3.71	0.76	0.13	5.49	63
6AWG	13.30	19	4.67	0.76	0.13	6.45	95
4AWG	21.20	19	5.89	1.02	0.15	8.23	152
3AWG	26.70	19	6.60	1.02	0.15	8.94	189
2AWG	33.60	19	7.42	1.02	0.15	9.76	234
1AWG	42.40	19	8.43	1.27	0.18	11.33	299
1/0AWG	53.50	19	9.45	1.27	0.18	12.35	372
2/0AWG	67.40	19	10.62	1.27	0.18	13.52	462
3/0AWG	85.00	19	11.94	1.27	0.18	14.84	575
4/0AWG	107.00	19	13.41	1.27	0.18	16.31	718
250KCMIL	127.00	37	14.60	1.52	0.20	18.04	851
300KCMIL	152.00	37	16.00	1.52	0.20	19.44	1012
350KCMIL	177.00	37	17.30	1.52	0.20	20.74	1174
400KCMIL	203.00	37	18.49	1.52	0.20	21.93	1334
450KCMIL	228.00	37	19.61	1.52	0.20	23.05	1543
500KCMIL	253.00	37	20.65	1.52	0.20	24.09	1655

ELECTRICAL CONDUIT AND WIRES

400 MARTIN LUTHER KING JR WAY, BRIDGETON, NJ 08302
PHONE : (718).338.1851 FAX : (718).228.1851
orders@ammoelectric.comwww.ammoelectric.com