

SIMpull THHN®

600 Volts. Copper Conductor
 Thermoplastic Insulation/SIM Nylon Sheath
 Heat, Moisture, Gasoline, and Oil Resistant¹
 Also Rated MTW and THWN-2
 SIM Technology® for Easier Pulling



APPLICATIONS

Southwire SIMpull THHN® or THWN-2 conductors are primarily used in conduit and cable trays for services, feeders, and branch circuits in commercial or industrial applications as specified in the National Electrical Code. When used as Type THHN, or T90 Nylon conductor is suitable for use in dry locations at temperatures not to exceed 90 °C. When used as Type THWN-2 or TWN75, conductor is suitable for use in wet or dry locations at temperatures not to exceed 90 °C or not to exceed 75 °C when exposed to oil. When used as Type MTW, conductor is suitable for use in wet locations or when exposed to oil at temperatures not to exceed 60 °C or dry locations at temperatures not to exceed 90 °C (with ampacity limited to that for 75 °C conductor temperature per NFPA 79). Conductor temperatures not to exceed 105 °C in dry locations when rated AWM and used as appliance wiring material or when used as T90 Nylon. Voltage for all applications is 600 volts. This cable should be installed without application of pulling lubricant.

SPECIFICATIONS

Southwire SIMpull THHN® or THWN-2 or MTW (also AWM) meet or exceed:

- All applicable ASTM specifications
- UL Standard 83, 1581, and 1063(MTW)
- T90 Nylon/TWN75 sizes through 500 kcmil Standard C22.2 No. 75-08
- NOM-ANCE 90° C
- Federal Specification A-A-59544
- National Electrical Code, NFPA 70, 2011 Edition
- VW-1 - Sizes 14 through 1 AWG
- CT Use - UL 1685, Sizes 1/0 AWG and larger
- FT1 - Sizes through 500 kcmil
- RoHS/REACH Compliant
- Sunlight Resistant - Marked and listed in all colors sizes 2 AWG and larger
- NEMA WC 70 Construction Requirements

CONSTRUCTION

Southwire SIMpull THHN® or THWN-2 or MTW copper conductors are annealed (soft) copper, unilay compressed strand, insulated with a tough heat and moisture resistant polyvinyl chloride (PVC), over which a SIM (SLIKQWIK® Infused Membrane) nylon (polyamide) or UL Recognized equal jacket is applied. Available in black, white, red, blue, purple, green, yellow, brown, orange, and gray. Some colors standard, some subject to economic order quantity. THWN sizes 14 - 10 AWG. THWN-2 sizes 8 AWG and larger.

¹ Oil and gasoline resistant II as defined by Underwriters Laboratories.

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Conductor		Insulation Thickness (mils)	Jacket Thickness (mils)	Nominal O.D. (mils)	Approx. Net Weight Per 1000 ft. (lbs)	Allowable Ampacities +			Standard Package
Size (AWG or kcmil)	Num. Strands					60 °C	75 °C	90 °C	
14	1	15	4	102	15	15	15	DNF	
12	1	15	4	119	23	20	20	DQF	
10	1	20	4	150	36	20	20	30	DNF
14	19	15	4	109	16	15	15	15	DNG
12	19	15	4	128	24	20	20	20	DQF
10	19	20	4	161	38	30	30	30	F
8	19	30	5	213	63	40	50	55	E
6	19	30	5	249	95	55	65	75	C
4	19	40	6	318	152	70	85	95	BC
3	19	40	6	346	189	85	100	115	C
2	19	40	6	378	234	95	115	130	B
1	19	50	7	435	299	110	130	145	B
1/0	19	50	7	474	372	125	150	170	B
2/0	19	50	7	518	462	145	175	195	B
3/0	19	50	7	568	575	165	200	225	B
4/0	19	50	7	624	718	195	230	260	B
250	37	60	8	678	851	215	255	290	B
300	37	60	8	730	1012	240	285	320	B
350	37	60	8	777	1174	260	320	350	B
400	37	60	8	821	1334	280	335	380	B
500	37	60	8	902	1655	320	380	430	B
600	61	70	9	998	1987	350	420	475	C
750	61	70	9	1126	2464	400	175	535	C
1000	61	70	9	1275	3257	455	545	615	C

**Sizes 14 - 10 AWG not available with patented SIM Technology® No Lube® jacket. Sizes 8 and larger available with patented SIM Technology®. + Allowable ampacities shown are for general uses as specified by the National Electrical Code, 2011 Edition, section 310.15 unless the equipment is marked for use at higher temperatures the conductor ampacity shall be limited to the following. 60 °C - When terminated to equipment for circuits rated 100 amperes or less or marked for size 14 through 1 AWG conductors. MTW wet locations or when exposed to oil or coolant. 75 °C - When terminated to

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equipment for circuits rated over 100 amperes or marked for conductors larger than size 1 AWG. THWN-2 when exposed to oil or coolant. MTW dry locations. 90 °C - THHN dry locations. THWN-2; wet or dry locations. For ampacity derating purposes. For derating purposes use Article 315 of the National Electrical Code.