

SIMpull CoilPAK™ Wire Payoff THHN/THWN-2 Copper

Work smarter with the SIMpull CoilPAK™ Wire Payoff by reducing the physical effort associated with material handling, setup, and pulling compared to traditional spools, increasing both safety and productivity on the job. Copper 600 Volt THHN/THWN-2



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Solid soft drawn annealed bare copper per ASTM B3 or combination-unilay Class C stranded soft drawn annealed bare copper per ASTM B787
2. **Insulation:** Heat and moisture resistant PVC insulation in various colors
3. **Sheath:** Nylon jacket utilizing SIMpull® Technology
4. For information about our SIMpull CoilPAK™ Wire Payoff please visit us at: [SIMpull CoilPAK™ Wire Payoff](#)

APPLICATIONS AND FEATURES:

The SIMpull CoilPAK™ Wire Payoff provides greater versatility and efficiency to branch circuit installations, eliminating the need for handling bulky spools and all the setup and energy that go along with them. SIMpull CoilPAK™ Wire Payoffs increase both safety and productivity by reducing the physical effort associated with material handling, pulling wire out of the package, and pulling wire through conduit. SIMpull CoilPAK™ THHN/THWN-2 copper conductors are primarily used in conduit for branch circuits in commercial or industrial applications as specified in the National Electrical Code® and other applicable codes and standards. Voltage for all applications is 600 volts. SIMpull CoilPAK™ THHN/THWN-2 copper conductors are designed to be installed without the application of a pulling lubricant. These conductors have multiple ratings depending upon the product application. Allowable temperatures are as follows:

- THHN or T90 Nylon- Dry locations not to exceed 90°C
- THWN-2- Wet or dry locations not to exceed 90° C or locations not to exceed 75°C when exposed to oil
- TWN75- Wet locations not to exceed 75°C
- MTW- Wet locations or when exposed to oil at temperatures not to exceed 60°C or dry locations not to exceed 90°C (with ampacity limited to that for 75°C conductor temperature per NFPA 79)
- AWM- Dry locations not to exceed 105°C only when rated and used as appliance wiring material

SPECIFICATIONS:





- ASTM B3 Soft or Annealed Copper Wire
- ASTM B787 19 Wire Combination Unilay-Stranded Copper Conductors
- UL 83 Thermoplastic Insulated Wires and Cables
- NMX-J-010-ANCE Thermoplastic insulated wires and cables
- NOM-063-SCFI Electrical Products – Conductors – Safety Requirements
- NEMA 70901-2-2024 Make It American Compliance with Domestic Preference Requirements Pt. 2 Wire & Cable

Table 1 – Weights and Measurements

| Cond. Size | Cond. Number | Strand Count | Diameter Over Conductor | Insul. Thickness | Insulation Color | Jacket Thickness | Approx. OD | Copper Weight | Approx. Weight |
|------------|--------------|----------------|-------------------------|------------------|------------------|------------------|------------|---------------|----------------|
| AWG/Kcmil | | No. of Strands | inch | mil | | mil | inch | lb/1000ft | lb/1000ft |
| 12 | 1 | Solid | 0.080 | 16 | RD | 5 | 0.122 | 19 | 23 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

Table 2 – Electrical and Engineering Data

| Cond. Size | Cond. Number | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity At 75°C | Allowable Ampacity At 90°C |
|------------|--------------|--------------------|------------------|----------------------|----------------------|----------------------------|----------------------------|----------------------------|
| AWG/Kcmil | | inch | lb | Ω/1000ft | Ω/1000ft | Ω/1000ft | Amp | Amp |
| 12 | 1 | 0.5 | 52 | 1.662 | 2.002 | 0.054 | 25 | 30 |

* Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections 310.15 and 110.14(C) for additional requirements.

* Inductive Reactance is based on non-ferrous conduit with one diameter spacing center-to-center.

Table 3 - One Conductor Stock Code Colors (/ means stripe. Blue/White: Blue with White Stripe)

| Size (Strand) | Cond. Number | Blue | Black | Brown | Green | Green/Yellow | Gray | Gray/Brown | Gray/Orange | Gray/Purple | Gray/Yellow |
|---------------|--------------|----------|----------|----------|----------|--------------|----------|------------|-------------|-------------|-------------|
| 14 (Solid) | 1 | 58028705 | 58028505 | 58028805 | 58029105 | | 58028905 | | | | |
| 14 (19) | 1 | 58017105 | 58017005 | 58017205 | 58017605 | | 58017305 | | | | |
| 12 (Solid) | 1 | 58026705 | 58026505 | 58026805 | 58027105 | 58456605 | 58026905 | 58027705 | 58027805 | 58026305 | 58027905 |
| 12 (19) | 1 | 58018405 | 58018205 | 58018505 | 58019505 | 58386305 | 58018605 | 58018705 | 58018905 | 58018805 | 58019005 |
| 10 (Solid) | 1 | 58020405 | 58020305 | 58020505 | 58021105 | 58021205 | 58020605 | 58022605 | 58020805 | | 58021005 |
| 10 (19) | 1 | 58022205 | 58022105 | 58022305 | 58025105 | 58456705 | 58025005 | 58020705 | 58025705 | 58022705 | 58025905 |

Table 3 Cont. - One Conductor Stock Code Colors (/ means stripe. Blue/White: Blue with White Stripe)

| Size (Strand) | Cond. Number | Orange | Purple | Pink | Red | Tan | White | White/Blue | White/Black | White/Red | Yellow |
|---------------|--------------|----------|----------|----------|----------|----------|----------|------------|-------------|-----------|----------|
| 14 (Solid) | 1 | 58029205 | 58028605 | | 58029305 | | 58029405 | | | | 58029505 |
| 14 (19) | 1 | 58017705 | 58017805 | 58193305 | 58017905 | | 58018005 | | | | 58018105 |
| 12 (Solid) | 1 | 58027205 | 58026405 | 58193105 | 58027305 | | 58027505 | 58028105 | 58028005 | 58028305 | 58027605 |
| 12 (19) | 1 | 58019605 | 58019705 | 58193205 | 58019805 | | 58019905 | 58019305 | 58019205 | 58019405 | 58020005 |
| 10 (Solid) | 1 | 58021305 | 58020205 | | 58021405 | | 58021505 | 58021805 | 58021605 | 58021905 | 58022005 |
| 10 (19) | 1 | 58025205 | 58025305 | 58193005 | 58025405 | 59805002 | 58025505 | 58026105 | 58026005 | 58026205 | 58025605 |





Table 4 - Multi Conductor Stock Code Colors (/ means stripe. Blue/White: Blue with White Stripe)

| Size (Strand) | Cond. Number | Blue, White/Blue | Black, Red | Black, White/Black | Brown, Gray/Brown | Orange, Gray/Orange | Red, White/Red | Yellow, Gray/Yellow | Brown, Orange, Yellow | Black, Red, Green | Black, White, Green | Brown, Orange, Yellow, Green | Purple, Gray/Purple |
|---------------|--------------|------------------|------------|--------------------|-------------------|---------------------|----------------|---------------------|-----------------------|-------------------|---------------------|------------------------------|---------------------|
| 12(Solid) | 2 | 58614501 | | 58619401 | 58619501 | 58614701 | 58614401 | 58614801 | | | | | 139369 |
| 12(19) | 2 | 58609701 | | 58609501 | 58612001 | 58610001 | 58609601 | 58610101 | | | | | |
| 10(Solid) | 2 | 58105005 | | 58029705 | 58920505 | 58920705 | 58105505 | 58920605 | | | | | |
| 10(19) | 2 | 58725401 | 59306201 | 58725101 | 58725701 | 58725501 | 58725201 | 58725601 | | | | | |
| 14(Solid) | 3 | | | | | | | | | | 59318001 | | |
| 14(19) | 3 | | | | | | | | | | 59318101 | | |
| 12(Solid) | 3 | | | | | | | | | | 58389701 | | |
| 12(19) | 3 | | | | | | | | | | 58453301 | | |
| 10(19) | 3 | | | | | | | | 58114302 | 59799501 | | | |
| 12(19) | 4 | | | | | | | | | | | 58139402 | |
| 10(19) | 4 | | | | | | | | | | | 58138504 | |

Table 5 - MINI One Conductor Stock Code Colors (/ means stripe. Blue/White: Blue with White Stripe)

| Size (Strand) | Cond. Number | Blue | Black | Brown | Green | Green/Yellow | Gray |
|---------------|--------------|----------|----------|----------|----------|--------------|----------|
| 12 (Solid) | 1 | 58026704 | 58026504 | 58026804 | 58027104 | 58456604 | 58026904 |
| 12 (19) | 1 | 58018404 | 58018204 | 58018504 | 58019504 | 58386304 | 58018604 |

Table 5 Cont. - MINI One Conductor Stock Code Colors (/ means stripe. Blue/White: Blue with White Stripe)

| Size (Strand) | Cond. Number | Orange | Purple | Pink | Red | White | White/Blue | White/Black | White/Red | Yellow |
|---------------|--------------|----------|----------|----------|----------|----------|------------|-------------|-----------|----------|
| 12 (Solid) | 1 | 58027204 | | | 58027304 | 58027504 | 58028104 | 58028004 | 58028304 | 58027604 |
| 12 (19) | 1 | 58019604 | 58019704 | 58193204 | 58019804 | 58019904 | 58019304 | 58019204 | 58019404 | 58020004 |

Table 6 - MINI Multi Conductor Stock Code Colors (/ means stripe. Blue/White: Blue with White Stripe)

| Size (Strand) | Cond. Number | Blue, White/Blue | Black, White/Black | Brown, Gray/Brown | Orange, Gray/Orange | Red, White/Red | Yellow, Gray/Yellow | Black, White, Green |
|---------------|--------------|------------------|--------------------|-------------------|---------------------|----------------|---------------------|---------------------|
| 12 (Solid) | 2 | 58614504 | 58619404 | | | 58614404 | | |
| 12 (19) | 2 | 58609704 | 58609504 | 58612004 | 58610004 | 58609604 | 58610104 | |
| 12 (Solid) | 3 | | | | | | | 58389703 |
| 12 (19) | 3 | | | | | | | 58453303 |

Award Winning Patent
Pending Building Wire
Selector

Wire Strippers and
Cutters

