

## SIMpull Barrel™ Cable Drum THHN/THWN-2 Copper

The SIMpull Barrel™ Cable Drum Cable Drum is ideal for job sites with longer runs and home-run pulls. Designed to simplify branch circuit installations, the SIMpull BARREL™ Cable Drum contains up to 7 paralleled conductors per BARREL, increasing productivity and reducing the potential for injury while avoiding broken spools, excess material handling, and scrap. Easy payoff directly out of the package, requiring less setup and effort to pull vs conventional wire-pulling methods. 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 Barrel™ Cable Drum please visit us at: [SIMpull Barrel™](#)

### APPLICATIONS AND FEATURES:





The SIMpull BARREL™ Cable Drum reduces the physical effort associated with material handling, setup, and pulling when compared to conventional wire pulling methods. Designed to simplify branch circuit installations, the SIMpull BARREL™ Cable Drum contains up to 7 paralleled conductors per BARREL (homerun), increasing productivity and reducing the potential for injury while avoiding broken spools, excess material handling and scrap. SIMpull BARREL™ 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 BARREL™ 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

**FEATURES**

- Easier pulling with SIMpull NoLube® wire jacket.
- Stationary package design to further reduce pulling tension.
- Designed to help lower potential for lifting/handling/pulling injuries.
- Patented parallel construction to reduce material handling and setup.
- Avoid broken spools and spool over-turn.

**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

**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/<br>Kcmil |              | No. of Strands | inch                    | mil              |                  | mil              | inch       | lb/1000ft     | lb/1000ft      |
| 10            | 2            | 19             | 0.117                   | 20               | RD, WE/RD        | 5                | 0.326      | 64            | 76             |

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/<br>Kcmil |              | inch               | lb               | Ω/1000ft             | Ω/1000ft             | Ω/1000ft                   | Amp                        | Amp                        |
| 10            | 2            | 1.3                | 166              | 1.040                | 1.253                | 0.050                      | 35                         | 40                         |

\* 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     | Blue/Brown | Black    | Brown    | Green    | Gray     | Gray/Brown | Gray/Orange | Gray/Yellow |
|---------------|--------------|----------|------------|----------|----------|----------|----------|------------|-------------|-------------|
| 12 (Solid)    | 1            | 58026701 |            | 58026501 | 58026801 | 58027101 | 58026901 |            |             |             |
| 12 (19)       | 1            | 58018401 |            | 58018201 | 58018501 | 58019501 | 58018601 |            |             |             |
| 10 (Solid)    | 1            | 58020401 |            | 58020301 | 58020501 | 58021101 |          | 58022601   | 58020801    | 58021001    |
| 10 (19)       | 1            | 58022201 | 65312201   | 58022101 | 58022301 |          | 58025001 | 58020701   | 58025701    | 58025901    |

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

| Size (Strand) | Cond. Number | Orange   | Purple   | Pink     | Red      | Red/Yellow | White    | White/Blue | White/Black | White/Red | Yellow   |
|---------------|--------------|----------|----------|----------|----------|------------|----------|------------|-------------|-----------|----------|
| 14 (Solid)    | 1            |          |          |          |          |            | 58029405 |            |             |           |          |
| 14 (19)       | 1            |          | 58017801 |          |          |            |          |            |             |           |          |
| 12 (Solid)    | 1            | 58027201 | 58026401 | 58193101 | 58027301 |            |          | 58028158   | 58028058    | 58028358  | 58027601 |
| 12 (19)       | 1            | 58019601 | 58019701 |          | 58019801 |            | 58019901 |            |             |           | 58020001 |
| 10 (Solid)    | 1            | 58021301 |          |          | 58021401 |            |          | 58021801   | 58021601    | 58021901  | 58022001 |
| 10 (19)       | 1            | 58025201 | 58025301 |          | 58025401 | 59917901   | 58025501 | 58026107   | 58026007    | 58026207  |          |

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

| Size (Strand) | Cond. Number | Black, White | Blue, White/Blue | Black, White/Black | Brown, Gray/Brown | Orange, Gray/Orange | Red, White/Red | Yellow, Gray/Yellow |
|---------------|--------------|--------------|------------------|--------------------|-------------------|---------------------|----------------|---------------------|
| 12 (Solid)    | 2            |              | 58614502         | 58619402           | 58110302          | 58110502            | 58614402       | 58111002            |
| 12 (19)       | 2            |              | 58111202         | 58260302           | 58612002          | 58610002            | 58111802       | 58610102            |
| 10 (Solid)    | 2            |              | 58105002         | 58029702           |                   |                     | 58105502       |                     |
| 10 (19)       | 2            |              |                  | 58725102           | 58725702          | 58725502            | 58109903       | 58725602            |
| 8 (19)        | 2            | 58526001     |                  |                    |                   |                     |                |                     |

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

| Size (Strand) | Cond. Number | Blue, White/Blue, Green | Black, White/Black, Green | Brown, Gray/Brown, Green | Brown, Orange, Yellow | Orange, Gray/Orange, Green | Purple, Gray/Purple, Green | Red, White/Red, Green |
|---------------|--------------|-------------------------|---------------------------|--------------------------|-----------------------|----------------------------|----------------------------|-----------------------|
| 12 (Solid)    | 3            | 58536102                | 58536002                  | 58536202                 |                       | 58536302                   |                            | 58536502              |
| 12 (19)       | 3            |                         | 58536702                  |                          | 58724302              |                            |                            |                       |
| 10 (Solid)    | 3            | 58449901                | 58317001                  | 58379601                 |                       | 58379701                   |                            | 58449801              |
| 10 (19)       | 3            | 58620501                | 58318301                  | 58710901                 | 58114301              | 58711001                   | 67188501                   | 58620401              |
| 8 (19)        | 3            |                         |                           |                          | 58524803              |                            |                            |                       |





**Table 6 - Four and Five Conductor Stock Code Colors ( / means stripe. Blue/White: Blue with White Stripe)**

| Size (Strand) | Cond. Number | Black, Red, Blue, White | Black, White, Red, Blue | Brown, Orange, Yellow, GN | Brown, Orange, Yellow, Gray | Black, Red, Blue, White, Green | Brown, Orange, Yellow, Gray, Green |
|---------------|--------------|-------------------------|-------------------------|---------------------------|-----------------------------|--------------------------------|------------------------------------|
| 12 (Solid)    | 4            |                         |                         | 58150601                  |                             |                                |                                    |
| 12 (19)       | 4            | 58103401                |                         | 58139401                  |                             |                                |                                    |
| 10 (Solid)    | 4            |                         |                         | 58150701                  |                             |                                |                                    |
| 10 (19)       | 4            | 58031101                |                         | 58138501                  | 58115501                    |                                |                                    |
| 8 (19)        | 4            |                         | 58384801                |                           |                             |                                |                                    |
| 12 (Solid)    | 5            |                         |                         |                           |                             | 58103901                       |                                    |
| 12 (19)       | 5            |                         |                         |                           |                             | 58104001                       | 58117401                           |
| 10 (Solid)    | 5            |                         |                         |                           |                             | 58103701                       | 58116701                           |
| 10 (19)       | 5            |                         |                         |                           |                             | 58103801                       |                                    |

**Table 7 - Six and Seven Conductor Stock Code Colors ( / means stripe. Blue/White: Blue with White Stripe)**

| Size (Strand) | Cond. Number | Black, Red, Blue, White/Black, White/Red, White/Blue | Black, Red, Blue, White/Black, White/Red, White/Blue, Green | Brown, Orange, Yellow, Gray/Brown, Gray/OE, Gray/Yellow | Brown, Orange, Yellow, Gray/Brown, Gray/OE, Gray/Yellow, Green | Red, Red, Red, Red, Red, Red |
|---------------|--------------|--|---|---|--|------------------------------|
| 14 (19)       | 6            |  |   |   |  | 58735001                     |
| 12 (Solid)    | 6            | 58120301   |   | 58120401  |  |                              |
| 12 (19)       | 6            | 58120801   |   |   |  |                              |
| 10 (Solid)    | 6            | 58119601   |   | 58119701  |  |                              |
| 10 (19)       | 6            | 58120101   |   | 58120001  |  |                              |
| 12 (Solid)    | 7            |  | 58104601  |   | 58118501   |                              |
| 12 (19)       | 7            |  | 58118701  |   | 58104701   |                              |
| 10 (Solid)    | 7            |  | 58104401  |   | 58118001   |                              |
| 10 (19)       | 7            |  | 58118301  |   | 58104501   |                              |

Award Winning Patent  
Pending Building Wire  
Selector

