



SIMpull Barrel™ Cable Drum THHN/THWN-2 Copper

The SIMpull Barrel™ 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
- T90- 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
- NMJ-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

Stock Number	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
580285010	14	1	Solid	0.064	16	BK	5	0.106	12	15
580171010	14	1	19	0.073	20	BE	5	0.444	50	64
587349010	14	4	19	0.073	20	RD, RD, RD, RD	5	0.444	50	64
588835010	14	5	19	0.073	20	RD, RD, RD, RD, RD	5	0.555	63	80
587350010	14	6	19	0.073	20	RD, RD, RD, RD, RD, RD	5	0.666	76	96
586144020	12	2	Solid	0.080	15	RD, WE/RD	5	0.245	39	47
580297020	10	2	Solid	0.101	20	BK, BK/WE	5	0.303	61	72
587251020	10	2	19	0.117	20	BK, WE/BK	5	0.326	64	76
580264010	12	1	Solid	0.080	15	PE	5	0.368	59	70
585366020	12	3	Solid	0.080	15	YW, GY/YW, GN	5	0.368	59	70
580312010	12	4	Solid	0.080	20	BK, RD, BE, WE	5	0.491	79	94
581039010	12	5	Solid	0.080	20	BK, RD, BE, WE, GN	5	0.614	98	117
581204010	12	6	Solid	0.080	15	BN, OE, YW, GY/BN, GY/OE, GY/YW	5	0.712	115	135
581046010	12	7	Solid	0.080	20	BK, RD, BE, WE/BK, WE/RD, WE/BE, GN	5	0.859	138	164
581118020	12	2	19	0.090	15	RD, WE/RD	5	0.260	40	48
580182010	12	1	19	0.090	20	BK	5	0.390	60	72
585367020	12	3	19	0.090	20	BK, WE/BK, GN	5	0.390	60	72
581394010	12	4	19	0.090	20	BN, OE, YW, GN	5	0.390	60	72
581040010	12	5	19	0.090	20	BK, RD, BE, WE, GN	5	0.650	100	121
581206010	12	6	19	0.090	20	BN, OE, YW, GY/BN, GY/OE, GY/YW	5	0.780	121	145
581047010	12	7	19	0.090	20	BN, OE, YW, GY/BN, GY/OE, GY/YW, GN	5	0.910	141	170
580201010	10	1	Solid	0.101	25	GY/PE	5	0.307	61	73
583170010	10	3	Solid	0.101	20	BK, WE/BK, GN	5	0.449	94	110
580310010	10	4	Solid	0.101	25	BK, RD, BE, WE	5	0.599	125	147
581167010	10	5	Solid	0.101	20	BN, OE, YW, GY, GN	5	0.749	157	183
581197010	10	6	Solid	0.101	20	BN, OE, YW, GY/BN, GY/OE, GY/YW	5	0.899	188	220
581044010	10	7	Solid	0.101	25	BK, RD, BE, WE/BK, WE/RD, WE/BE, GN	5	1.063	214	254
585464010	10	1	19	0.117	21	GN	5	0.165	32	38
581143010	10	3	19	0.117	25	BN, OE, YW	5	0.489	96	115
581385010	10	4	19	0.117	25	BN, OE, YW, GN	5	0.489	96	115
581038010	10	5	19	0.117	25	BK, RD, BE, WE, GN	5	0.815	160	192
581200010	10	6	19	0.117	25	BN, OE, YW, GY/BN, GY/OE, GY/YW	5	0.978	192	230
581045010	10	7	19	0.117	25	BN, OE, YW, GY/BN, GY/OE, GY/YW, GN	5	1.141	224	269
585260010	8	2	19	0.143	35	BE, WE	5	0.430	101	126
585248030	8	3	19	0.143	35	BN, OE, YW	5	0.645	152	189





Stock Number	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
58384801◇	8	4	19	0.143	35	BK, WE, RD, BE	5	0.852	203	250

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

Stock Number	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
580285010	14	1	0.4	32	2.631	3.170	0.058	20	25
580171010	14	1	1.8	105	2.631	3.170	0.058	20	25
587349010	14	4	1.8	105	2.631	3.170	0.058	16	20
588835010	14	5	2.2	131	2.631	3.170	0.058	16	20
587350010	14	6	2.7	157	2.631	3.170	0.058	16	20
586144020	12	2	1.0	104	1.662	2.002	0.054	25	30
580297020	10	2	1.2	166	1.040	1.253	0.050	35	40
587251020	10	2	1.3	166	1.040	1.253	0.050	35	40
580264010	12	1	1.5	156	1.662	2.002	0.054	25	30
585366020	12	3	1.5	156	1.662	2.002	0.054	25	30
580312010	12	4	2.0	167	1.662	2.002	0.054	20	24
581039010	12	5	2.5	208	1.662	2.002	0.054	20	24
581204010	12	6	2.8	250	1.662	2.002	0.054	20	24
581046010	12	7	3.4	292	1.662	2.002	0.054	17	21
581118020	12	2	1.0	104	1.662	2.002	0.054	25	30
580182010	12	1	1.6	156	1.662	2.002	0.054	25	30
585367020	12	3	1.6	156	1.662	2.002	0.054	25	30
581394010	12	4	1.6	156	1.662	2.002	0.054	25	30
581040010	12	5	2.6	208	1.662	2.002	0.054	20	24
581206010	12	6	3.1	250	1.662	2.002	0.054	20	24
581047010	12	7	3.6	292	1.662	2.002	0.054	17	21
580201010	10	1	1.2	166	1.040	1.253	0.050	35	40
583170010	10	3	1.8	249	1.040	1.253	0.050	35	40
580310010	10	4	2.4	265	1.040	1.253	0.050	28	32
581167010	10	5	3.0	332	1.040	1.253	0.050	28	32
581197010	10	6	3.6	398	1.040	1.253	0.050	28	32
581044010	10	7	5.3	465	1.040	1.253	0.050	24	28
585464010	10	1	0.7	83	1.040	1.253	0.050	35	40
581143010	10	3	2.0	249	1.040	1.253	0.050	35	40
581385010	10	4	2.0	249	1.040	1.253	0.050	35	40
581038010	10	5	3.3	332	1.040	1.253	0.050	28	32
581200010	10	6	3.9	398	1.040	1.253	0.050	28	32
581045010	10	7	5.7	465	1.040	1.253	0.050	24	28
585260010	8	2	1.7	264	0.653	0.786	0.052	50	55
585248030	8	3	2.6	396	0.653	0.786	0.052	50	55
583848010	8	4	3.4	422	0.653	0.786	0.052	40	44

* 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

