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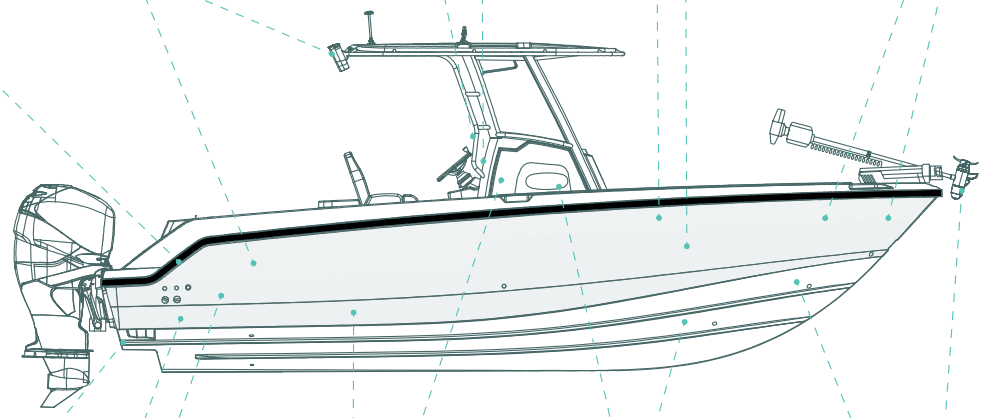

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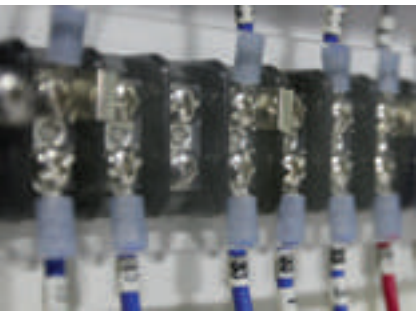

What makes Ancor different:

Founder's Vision

For over 40 years Ancor has been the industry leader for quality tinned copper Marine Grade® wire and cable. Ancor's comprehensive product line includes everything required to complete a wiring project. This includes Marine Grade® wire and cable, terminals and connectors, wire management products, and hand tools. Ancor designs products to the highest standards that meet UL, ABYC, NMMA and USCG standards.

Selection

Over 1,500 electrical products are designed to work together as a system

Fast Delivery

Products stocked in multiple global locations ensures rapid order fulfillment

Worldwide Access to Product

A distribution network in over 45 countries provides access to products when they are needed

Information

24-hour access to product information, selection tools, and technical articles online at ancorproducts.com

Industry Standards

Industry involvement ensures products meet ABYC, NMMA, and Coast Guard standards

Quality

Product quality is managed in a manner consistent with international standards

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WIRE & CABLE

Primary Wire

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Manufactured from tinned copper stranding for maximum protection against corrosion and electrolysis. Ultra flexible (Type 3) stranding resists fatigue due to vibration and flexing.

Battery Cable & Assemblies

10

Premium, fine stranded UL1426 tinned copper battery cable for maximum conductivity and flexibility. All assemblies come with tinned copper lugs to avoid corrosion and extend life.

Multiconductor Cables

12

Duplex and triplex wire in a variety of gauge and spool sizes; including UL 1426 tinned duplex boat cable in flat and round configurations.

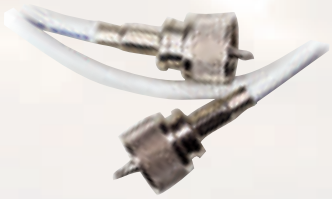
Specialty Cable

14

Ancor offers a broad range of cable for specialty applications to meet all of your marine and mobile wiring needs.

WIRE & CABLE

Coax Cable & Assemblies



16

Premium tinned copper features signal loss ratios of up to 50% less than other coaxial cables. All assemblies come with Ancor adhesive lined heat shrink to seal out moisture, provide strain relief and fight corrosion.

Trailer Cable & Assemblies

17

Made from our standard Ancor primary wire made specifically for trailer wiring. Assemblies with molded connectors for a wide range of applications.

NMEA 2000 Cables & Connectors

18

Ancor now carries NMEA 2000 cables and connectors for creating or expanding an NMEA 2000 network quickly and easily. Couplers are color coded to make identifying the power cable or connector easy.
Premium quality. Universal fit.

Wire and cable are the backbone of every electrical system and properly selected wire will ensure a safe and reliable system.

Ancor Marine Grade® Wire & Cable

- Ancor Marine Grade® wire and cable is manufactured from tinned copper stranding for maximum protection against corrosion and electrolysis. Ultra flexible (Type 3) stranding resists fatigue due to vibration and flexing.
- Ancor's proprietary premium vinyl insulation stays flexible even in extreme cold (-40°F / -40°C) and resists salt water, battery acid, oil, gasoline and ultra-violet radiation. Exclusive insulation is rated at 600 volts, 221°F / 105°C dry and 167°F / 75°C wet, and is resistant to heat and abrasion.
- Exceeds all UL 1426, US Coast Guard Charter boat (CFR Title 46) and ABYC standards.
- See pages 61–65 for ABYC wiring guidelines and technical data.

Primary Wire 18–14 AWG

18 AWG (0.8 mm²)

Color	Ft	Part #
Black	35	180003
	100	100010
	250	100025
	500	100050
	1000	100099
Red	35	180803
	100	100810
	250	100825
	500	100850
	1000	100899
Yellow	35	181003
	100	101010
	250	101025
	500	101050
	1000	101099
Green	35	180303
	100	100310
	250	100325
	500	100350
	1000	100399
White	35	180903
	100	100910
	250	100925
	500	100950
	1000	100999
Dk Blue	35	180103
	100	100110
	250	100125
	500	100150
	1000	100199
Brown	35	180203
	100	100210
	250	100225
	500	100250A
	1000	100299
Orange	35	180503
	100	100510
	250	100525
	500	100550
	1000	100599
Pink	35	180603
	100	100610
	250	100625
	500	100650
	1000	100699

18 AWG (0.8 mm²)

Color	Ft	Part #
Purple	35	180703
	100	100710
	250	100725
	500	100750
	1000	100799
Grey	35	180403
	100	100410
	250	100425
	500	100450
	1000	100499

16 AWG (1 mm²)

Color	Ft	Part #
Black	25	182003
	100	102010
	250	102025
	500	102050
	1000	102099
Red	25	182803
	100	102810
	250	102825
	500	102850
	1000	102899
Yellow	25	183003
	100	103010
	250	103025
	500	103050
	1000	103099
Green	25	182303
	100	102310
	250	102325AA
	500	102350
	1000	102399
White	25	182903
	100	102910
	250	102925
	500	102950
	1000	102999
Dk Blue	25	182103
	100	102110
	250	102125
	500	102150
	1000	102199

16 AWG (1 mm²)

Color	Ft	Part #
Brown	25	182203
	100	102210
	250	102225
	500	102250
	1000	102299
Orange	25	182503
	100	102510
	250	102525
	500	102550
	1000	102599
Pink	25	182603
	100	102610
	250	102625
	500	102650
Purple	25	182703
	100	102710
	250	102725
	500	102750
	1000	102799
Grey	25	182403
	100	102410
	250	102425
	500	102450
	1000	102499
Tan	100	101810
	250	101825
	500	101850
Lt Blue	100	101910
	250	101925
	500	101950

14 AWG (2 mm²)

Color	Ft	Part #
Black	18	184003
	100	104010
	250	104025
	500	104050
	1000	104099
Red	18	184803
	100	104810
	250	104825
	500	104850
	1000	104899

14 AWG (2 mm²)

Color	Ft	Part #
Yellow	18	185003
	100	105010
	250	105025
	500	105050
	1000	105099
Green	18	184303
	100	104310
	250	104325
	500	104350
	1000	104399
White	18	184903
	100	104910
	250	104925
	500	104950
	1000	104999
Dk Blue	18	184103
	100	104110
	250	104125
	500	104150
	1000	104199
Brown	18	184203
	100	104210
	250	104225
	500	104250
	1000	104299
Orange	18	184503
	100	104510
	250	104525
	500	104550
	1000	104599
Pink	18	184603
	100	104610
	250	104625
	500	104650
Purple	18	184703
	100	104710
	250	104725
	500	104750
Grey	18	184403
	100	104410
	250	104425
	500	104450
	1000	104499
Tan	100	103810
	250	103825
	500	103850
Lt Blue	100	103910
	250	103925
	500	103950

Primary Wire 12–6 AWG

12 AWG (3 mm²)

Color	Ft	Part #
Black	12	186003
	25	106002
	100	106010
	250	106025
	400	106040
	1000	106099
Red	12	186803
	25	106802
	100	106810
	250	106825
	400	106840
	1000	106899
Yellow	12	187003
	25	107002
	100	107010
	250	107025
	400	107040
	1000	107099
Green	12	186303
	25	106302
	100	106310
	250	106325
	400	106340
	1000	106399
White	12	186903
	25	106902
	100	106910
	250	106925
	400	106940
	1000	106999
Dk Blue	25	106102
	100	106110
	250	106125
	400	106140
	1000	106199
Brown	25	106202
	100	106210
	250	106225
	400	106240
	1000	106299
Orange	25	106502
	100	106510
	250	106525
	400	106540
	1000	106599
Pink	25	106602
	100	106610
	250	106625
	400	106640
Purple	25	106702
	100	106710
	250	106725
	400	106740
Grey	1000	106499
Tan	100	105810
	250	105825
	400	105840

10 AWG (5 mm²)

Color	Ft	Part #
Black	8	188003
	25	108002
	100	108010
	250	108025
	500	108050
	1000	108099
Red	8	188803
	25	108802
	100	108810
	250	108825
	500	108850
	1000	108899
Yellow	25	109002
	100	109010
	250	109025
	500	109050
	1000	109099
Green	25	108302
	100	108310
	250	108325
	500	108350
	1000	108399
White	25	108902
	100	108910
	250	108925
	500	108950
	1000	108999
Dk Blue	25	108102
	100	108110
	250	108125
	500	108150
	1000	108199
Brown	25	108202
	100	108210
	250	108225
	500	108250
	1000	108299
Orange	25	108502
	100	108510
	250	108525
	500	108550
	1000	108599
Grey	1000	108499
Green w/ Yellow Stripe	25	109302
	100	109310
	250	109325
	500	109350
	1000	109399

8 AWG (8 mm²)

Color	Ft	Part #
Black	25	111002
	50	111005
	100	111010
	250	111025
	500	111050
	1000	111099
Red	25	111502
	50	111505
	100	111510
	250	111525
	500	111550
	1000	111599
Yellow	25	111902
	50	111905
	100	111910
	250	111925
	500	111950
	1000	111999
Green	25	111302
	50	111305
	100	111310
	250	111325
	500	111350
	1000	111399
White	25	111702
	50	111705
	100	111710
	250	111725
	500	111750
	1000	111799

6 AWG (13 mm²)

Color	Ft	Part #
Black	25	112002
	50	112005
	100	112010
	250	112025
	500	112050
	750	112075
Red	25	112502
	50	112505
	100	112510
	250	112525
	500	112550
	750	112575
Yellow	25	112902
	50	112905
	100	112910
	250	112925
	500	112950
	750	112975
Green	25	112302
	50	112305
	100	112310
	250	112325
	500	112350
	750	112375
White	25	112702
	50	112705
	100	112710
	250	112725
	500	112750
	750	112775

TECH TIP

Wire Flexibility Explained

Wire flexibility is influenced by two major factors: wire strand size and jacket hardness.

Wire strand size has the largest impact on overall wire flexibility. As individual wire strand size decreases, wire flexibility increases. For boat cable, UL 1426 requires at least 19 individual strands for cables 16 AWG and larger. Ancor wire uses type 3 stranding which consists of individual 30 AWG (0.010") strands, regardless of the wire gauge. Ancor's 16 AWG wire consists of 26 individual strands, while the 4/0 AWG wire consists of 2,109 individual strands.

Jacket hardness is most commonly measured by durometer, with lower measurements reflecting a more flexible material. Ancor wire measures 7 points lower than competitive product (on a scale of 1-100), resulting in a more flexible product.

Battery Cable 4–4/0 AWG

4 AWG (21 mm²)

Color	Ft	Part #
Black	25	113002
	50	113005
	100	113010
	250	113025
	500	113050
Red	25	113502
	50	113505
	100	113510
	250	113525
	500	113550
Yellow	25	113902
	50	113905
	100	113910
	250	113925
	500	113950

2 AWG (34 mm²)

Color	Ft	Part #
Black	25	114002
	50	114005
	100	114010
	250	114025
	400	114040
Red	25	114502
	50	114505
	100	114510
	250	114525
	400	114540
Yellow	25	114902
	50	114905
	100	114910
	250	114925
	400	114940

1 AWG (42 mm²)

Color	Ft	Part #
Black	25	115002
	50	115005
	100	115010
	300	115030
Red	25	115502
	50	115505
	100	115510
	300	115530
Yellow	25	115902
	50	115905
	100	115910
	300	115930

1/0 AWG (53 mm²)

Color	Ft	Part #
Black	25	116002
	50	116005
	100	116010
	250	116025
Red	25	116502
	50	116505
	100	116510
	250	116525
Yellow	25	116902
	50	116905
	100	116910
	250	116925

2/0 AWG (68 mm²)

Color	Ft	Part #
Black	25	117002
	50	117005
	100	117010
	200	117020
Red	25	117502
	50	117505
	100	117510
	200	117520
Yellow	25	117902
	50	117905
	100	117910
	200	117920

3/0 AWG (85 mm²)

Color	Ft	Part #
Black	25	118002
	50	118005
	100	118010
	150	118015
Red	25	118502
	50	118505
	100	118510
	150	118515
Yellow	25	118902
	50	118905
	100	118910
	150	118915

4/0 AWG (107 mm²)

Color	Ft	Part #
Black	25	119002
	50	119005
	100	119010
	250	119025
Red	25	119502
	50	119505
	100	119510
	250	119525
Yellow	25	119902
	50	119905
	100	119910
	250	119925

Related Products

Battery Terminals
page 32

Lugs
page 30

Heat Shrink Tubing
page 36

Premium Electrical Tape
page 38

Cutting & Crimping Tools
pages 48–51

18–4/0 AWG Wire and Cable Specifications

Wire Size		Nominal O.D.		Wire Diameter	Minimum Bend Radius		Stranding No. of 30 AWG	Cir. Mil Area	Ohms per 1000'	mm²	Wt. per 1000'	
18 AWG	.08 mm²	7/64"	2.8 mm	1.0 mm	7/8"	2.3 cm	16	1600	6.48	.08	12 lbs	5.4 kg
16 AWG	1 mm²	1/8"	3.2 mm	1.5 mm	31/32"	2.5 cm	26	2600	4.00	1.31	16 lbs	7.3 kg
14 AWG	2 mm²	9/64"	3.6 mm	2.0 mm	1-3/32"	2.8 cm	41	4100	2.53	2.08	23 lbs	10.4 kg
12 AWG	3 mm²	5/32"	4.0 mm	2.6 mm	1-1/4"	3.2 cm	65	6500	1.75	3.31	31 lbs	14 kg
10 AWG	5 mm²	7/32"	5.6 mm	3.3 mm	1-29/64"	3.7 cm	105	10,500	1.00	5.26	44 lbs	20 kg
8 AWG	8 mm²	5/16"	7.9 mm	4.3 mm	2-1/32"	5.2 cm	168	16,800	0.62	8.37	86 lbs	39 kg
6 AWG	13 mm²	11/32"	8.7 mm	5.5 mm	2-35/64"	6.5 cm	266	26,600	0.40	13.30	118 lbs	53.5 kg
4 AWG	21 mm²	13/32"	10.3 mm	7.0 mm	3-3/32"	7.9 cm	420	42,000	0.24	21.15	178 lbs	81 kg
2 AWG	34 mm²	15/32"	11.9 mm	8.0 mm	3-1/2"	8.9 cm	665	66,500	0.16	33.62	277 lbs	126 kg
1 AWG	42 mm²	17/32"	13.5 mm	9.0 mm	4-9/64"	10.4 cm	836	83,690	0.13	42.38	350 lbs	159 kg
1/0 AWG	53 mm²	9/16"	14.3 mm	10.5 mm	4-1/2"	11.4 cm	1064	105,600	0.10	53.49	437 lbs	198 kg
2/0 AWG	68 mm²	5/8"	15.9 mm	12.0 mm	4-59/64"	12.4 cm	1330	133,000	0.08	67.43	549 lbs	249 kg
3/0 AWG	85 mm²	11/16"	17.5 mm	13.0 mm	5-23/64"	13.7 cm	1665	167,800	0.06	85.01	675 lbs	306 kg
4/0 AWG	107 mm²	13/16"	20.6 mm	14.0 mm	5-7/8"	15.0 cm	2109	211,600	0.05	107.20	837 lbs	380 kg

Premium Battery Cable Assemblies

UL1426 Tinned Boat Cable

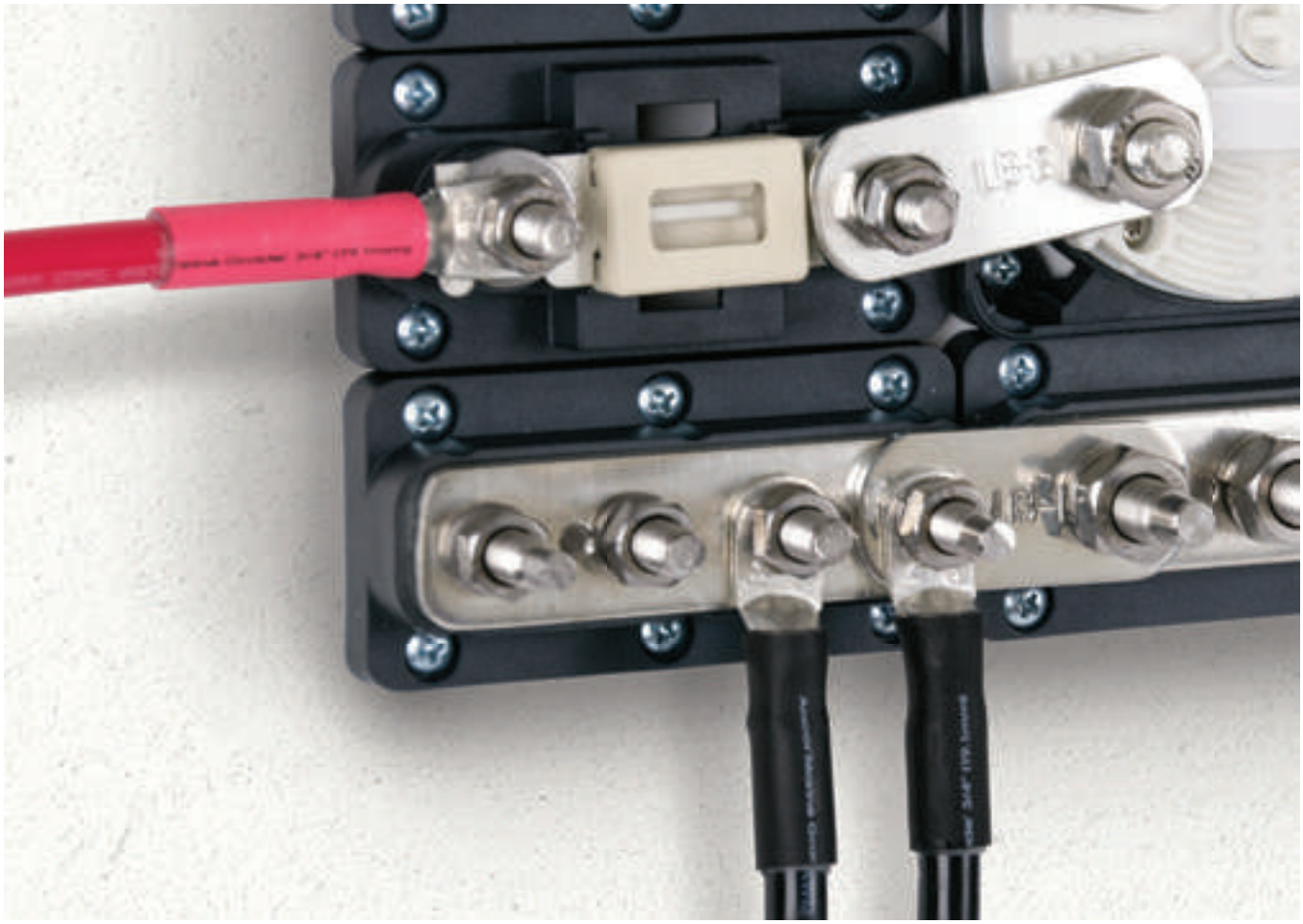
- Premium, fine stranded UL 1426 tinned copper battery cable for maximum conductivity and flexibility
- Flame retardant, UV inhibited cable rated at 600V and 221°F / 105°C
- Tinned copper lugs to avoid corrosion and extend life
- 3:1 heat shrink tubing over the electrical connection to seal out moisture and provide strain relief

Color	Length		Stud Size		Part #
4 AWG (21 mm²)					
Black	18"	45.7 cm	5/16"	7.93 mm	**189130**
	32"	81.2 cm	5/16"	7.93 mm	**189134**
	48"	121.9 cm	5/16"	7.93 mm	**189136**
Red	18"	45.7 cm	3/8"	9.5 mm	**189131**
	32"	81.2 cm	3/8"	9.5 mm	**189135**
	48"	121.9 cm	3/8"	9.5 mm	**189137**

Color	Length		Stud Size		Part #
2 AWG (34 mm²)					
Black	18"	45.7 cm	5/16"	7.93 mm	**189140**
	32"	81.2 cm	5/16"	7.93 mm	**189144**
	48"	121.9 cm	5/16"	7.93 mm	**189146**
Red	18"	45.7 cm	3/8"	9.5 mm	**189141**
	32"	81.2 cm	3/8"	9.5 mm	**189145**
	48"	121.9 cm	3/8"	9.5 mm	**189147**

For continuous current draws up to:	Use battery cable assemblies
136 amps	4 AWG
178 amps	2 AWG

Technical Data



Safety Duplex Cable

UL 1426 Tinned Boat Cable

Conductor colors: red and yellow

Flat Cable

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
18/2 AWG (2x0.8 mm²)			
100'	**124910**	3/16"x9/32" 5x7 mm	49 lbs 22.2 kg
250'	**124925**		
500'	**124950**		
1000'	**124999**		
16/2 AWG (2x1 mm²)			
25'	**124702**	3/16"x5/16" 5x8 mm	51 lbs 23.1 kg
100'	**124710**		
250'	**124725**		
500'	**124750**		
1000'	**124799**		
14/2 AWG (2x2 mm²)			
25'	**124502**	7/32"x11/32" 6x9 mm	65 lbs 29.5 kg
100'	**124510**		
250'	**124525**		
500'	**124550**		
1000'	**124599**		

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
12/2 AWG (2x3 mm²)			
25'	**124302**	7/32"x3/8" 6x10 mm	82 lbs 37.3 kg
100'	**124310**		
250'	**124325**		
500'	**124350**		
10/2 AWG (2x5 mm²)			
25'	**124102**	1/4"x15/32" 6x12 mm	128 lbs 58.2 kg
100'	**124110**		
250'	**124125**		
400'	**124140**		
800'	**124180**		
8/2 AWG (2x8 mm²)			
50'	**123905**	11/32"x5/8" 9x16 mm	230 lbs 104.5 kg
100'	**123910**		
500'	**123950**		
6/2 AWG (2x13 mm²)			
50'	**123705**	13/32"x3/4" 10x19 mm	364 lbs 165.5 kg
100'	**123710**		

Round Cable

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
16/2 AWG (2x1 mm²)			
100'	**126710**	5/16" 8 mm	49 lbs 22.2 kg
250'	**126725**		
500'	**126750**		
14/2 AWG (2x2 mm²)			
100'	**126510**	11/32" 9 mm	63 lbs 28.6 kg
250'	**126525**		
500'	**126550**		

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
12/2 AWG (2x3 mm²)			
100'	**126310**	13/32" 10 mm	80 lbs 36.3 kg
250'	**126325**		
500'	**126350**		

Duplex Cable

Conductor colors: black and red

Flat Cable

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
18/2 AWG (2x0.8 mm²)			
100'	**121910**	3/16"x9/32" 5x7 mm	49 lbs 22.2 kg
250'	**121925**		
500'	**121950**		
16/2 AWG (2x1 mm²)			
100'	**121710**	3/16"x5/16" 5x8 mm	51 lbs 23.1 kg
250'	**121725**		
500'	**121750**		
1000'	**121799**		
14/2 AWG (2x2 mm²)			
100'	**121510**	7/32"x11/32" 6x9 mm	65 lbs 29.5 kg
250'	**121525**		
500'	**121550**		
1000'	**121599**		

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
12/2 AWG (2x3 mm²)			
100'	**121310**	7/32"x3/8" 6x10 mm	82 lbs 37.3 kg
250'	**121325**		
500'	**121350**		
10/2 AWG (2x5 mm²)			
100'	**121110**	1/4"x15/32" 6x12 mm	128 lbs 58.2 kg
250'	**121125**		
400'	**121140**		
800'	**121180**		
8/2 AWG (2x8 mm²)			
50'	**120905**	11/32"x5/8" 9x16 mm	230 lbs 104.5 kg
100'	**120910**		
250'	**120925**		
6/2 AWG (2x13 mm²)			
50'	**120705**	13/32"x3/4" 10x19 mm	364 lbs 165.5 kg
100'	**120710**		

Triplex Cable

Conductor colors: black, green and white

Flat Cable

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
16/3 AWG (3x1 mm²)			
100'	**131710**	3/16"x15/32" 5x12 mm	75 lbs 34 kg
250'	**131725**		
500'	**131750**		
1000'	**131799**		
14/3 AWG (3x2 mm²)			
100'	**131510**	7/32"x1/2" 6x13 mm	96 lbs 43.6 kg
250'	**131525**		
500'	**131550**		
900'	**131590**		
12/3 AWG (3x3 mm²)			
25'	**131302**	7/32"x17/32" 6x14 mm	125 lbs 56.8 kg
100'	**131310**		
250'	**131325**		
700'	**131370**		

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
10/3 AWG (3x5 mm²)			
100'	**131110**	1/4"x21/32" 6x17 mm	186 lbs 84.5 kg
300'	**131130**		
500'	**131150**		
8/3 AWG (3x8 mm²)			
25'	**130902**	3/8"x1" 10x25 mm	287 lbs 130.4 kg
50'	**130905**		
100'	**130910**		
6/3 AWG (3x13 mm²)			
50'	**130705**	7/16"x1-3/16" 11x30 mm	470 lbs 213.6 kg
100'	**130710**		

Round Cable

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
16/3 AWG (3x1 mm²)			
100'	**133710**	11/32" 9 mm	75 lbs 34 kg
250'	**133725**		
14/3 AWG (3x2 mm²)			
100'	**133510**	13/32" 10 mm	96 lbs 43.6 kg
250'	**133525**		
900'	**133590**		

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
12/3 AWG (3x3 mm²)			
100'	**133310**	7/16" 11 mm	125 lbs 56.8 kg
250'	**133325**		

Related Products

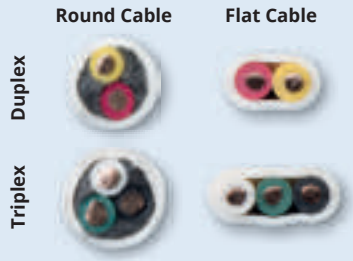
Cutting & Stripping Tools
pages 49–51

Wire Seals
page 44

TECH TIP

Round versus Flat Duplex/Triplex

Duplex and triplex cable have many different advantages to help installers. The grouped wires save time and effort by having to run only one group instead of multiple individual wires and also provides extra protection for the wire itself. But they have different advantages based on the shape too. Round cable for instance is easier to install through bulk heads, walls, panels or holes, while flat cable is easier to route long distances since it can be moved through a smaller space.



Technical Data

Specialty Cable

Bonded Cable

Tinned Copper

Color conductors: red and black

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
8/2 AWG (2x8 mm²)			
25'	**121802**	5/8"x5/16" 15.9x7.9 mm	172 lbs 78.0 kg
100'	**121810**		
250'	**121825**		
6/2 AWG (2x13 mm²)			
25'	**121602A**	11/16"x11/32" 17.5x8.7 mm	236 lbs 107.0 kg
100'	**121610**		
250'	**121625**		

Twisted Pairs w/ Shield

Premium Tinned Copper

Color conductors: red and black

- For all metal boats and around sensitive electronics
- 93% tinned copper shield for maximum EMI and RFI rejection
- 2-3" lay for interference cancellation

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
14/2 AWG (2x2 mm²)			
100'	**141410**	.330" 8.4 mm	73.2 lbs 33.3 kg
250'	**141425**		

Flat Ribbon Bonded Cable

Premium Tinned Bonded Copper

Conductor colors: red and black

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
16/2 AWG (2x1 mm²)			
100'	**153110**	1/8"x1/4" 3.2x6.4 mm	32 lbs 14.5 kg
250'	**153125**		
500'	**153150**		

Round Mast

UL 1426 Tinned Boat Cable

Color conductors: black, blue, green, brown and red

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
14/5 AWG (5x2 mm²)			
100'	**155010**	1/2" 12.7 mm	160 lbs 79.5 kg
500'	**155050**		

Round Instrument Cable

100% Mylar Foil Shield & Drain Wire

UL 1426 Tinned Boat Cable

Color conductors: red, black and bare

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
20/3 AWG (3x0.5 mm²)			
100'	**153010**	7/32" 5.6 mm	30 lbs 13.6 kg
500'	**153050**		

Round Signal

100% Mylar Foil Shield and Drain Tinned Boat Cable

Conductor colors: black, red, green, blue, brown, orange, purple and yellow

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
20/8 AWG (8x0.5 mm²)			
100'	**158010**	5/16" 7.9 mm	63 lbs 28.6 kg
250'	**158025**		

Signal Cable

Tinned Boat Cable

Conductor colors: red and black

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
20/2 AWG (2x0.5 mm²)			
25'	**189303**	5/32"x1/4" 4x6.4 mm	18 lbs 8.1 kg
100'	**122010**		
250'	**122025**		
500'	**122050**		

Bilge Pump Cable

Premium Tinned Copper

Color conductors: black, brown and red
Insulation: grey

- Conductors specifically for bilge pumps
- Oil resistant
- SJTOW-A water resistant jacket

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
16/3 AWG (3x1 mm²)			
100'	**156610**	.348" 8.85 mm	78 lbs 35.5 kg
250'	**156625**		
14/3 AWG (3x2 mm²)			
100'	**156410**	.377" 9.6 mm	99 lbs 45.0 kg
250'	**156425**		
500'	**156450**		

Super Flex Audio Cable

Premium Tinned Copper

- Super flexible, easy to run
- Clear jacket to blend into the environment
- Drawn copper, unidirectional lay for ultimate in sound quality
- Tinned copper for corrosion resistance in the marine environment

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
18/2 AWG (2x0.8 mm²)			
100'	**142810**	.265" 6.7 mm	29 lbs 13 kg
16/2 AWG (2x1 mm²)			
100'	**142610**	.319" 8.1 mm	51 lbs 23.1 kg
250'	**142625**		
500'	**142650**		
14/2 AWG (2x2 mm²)			
100'	**142410**	.345" 8.8 mm	65 lbs 29.5 kg
250'	**142425**		
1000'	**142499**		

GTO 15 High Voltage Cable (15000V)

Color conductors: white

- Coupler output to antenna

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
14 AWG (2 mm²)			
25'	**150102**	1/4" 6.4 mm	38 lbs 17.2 kg
100'	**150110**		

Flat Ribbon Bonded RGB Cable

Tinned Copper

Conductor colors: red, light blue, green, and white

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
18/4 AWG (4x0.08 mm²)			
100'	**160010**	3/32"x3/8" 2.3x9.3 mm	48 lbs 21.8 kg
1000'	**160099**		
16/4 AWG (4x1 mm²)			
100'	**160110**	1/8"x15/32" 2.6x10.5 mm	64 lbs 29.0 kg
1000'	**160199**		
14/4 AWG (4x2 mm²)			
100'	**160210**	7/64"x15/32" 3.0x11.9 mm	92 lbs 41.7 kg
1000'	**160299**		

RGB + Speaker Cable

Tinned Copper

18 AWG conductors for RGB lighting: yellow, red, blue, green

16 AWG conductors for speaker connections: black and red

- Saves time by running only one cable
- Meets ABYC standards

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
18/4 AWG (4x0.08 mm²) + **16/2 AWG** (2x1 mm2)			
25'	**170002**	.352" 8.9 mm	69.9 lbs 31.7 kg
100'	**170010**		
250'	**170025**		

Technical Data

Shore Power Cord

Conductor colors: black, white, green (and red 100319 only)

- High visibility yellow jacket is weather and sunlight resistant
- Ultra flexible insulation is abrasion resistant for "hard service" applications
- 600 volt rated for extra heavy-duty service
- 16/3 is 300 volt cable
- Temp rating: 140°F / 60°C

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
10/3 STOW			
100'	**153710**	21/32" 17 mm	284 lbs 129 kg
250'	**153725**		
10/3 STW			
250'	**SPC103**	21/32" 17 mm	284 lbs 129 kg

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
6/3 STW			
per/ft**	**100320F**	31/32" 24.4 mm	540 lbs 254.4 kg
6/4 STW			
per/ft**	**100319F**	1-5/64" 27.4 mm	695 lbs 316 kg

SPC103, 100320F and 100319F are not tinned wire

**50 ft minimum

Coaxial Cable & Assemblies

Coaxial Cable

Premium Tinned Copper

- Features signal loss ratios of up to 50% less than other coaxial cables
- Tinned copper center conductor as well as tinned copper outer braid for corrosion resistance and easy soldering
- 96% braid for best signal strength and least interference with UV inhibited white jacket for longest life

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
RG 58CU			
100'	**150510**	3/16" 4.8 mm	26 lbs 11.8 kg
250'	**150525**		
RG 59U			
250'	**151025**	1/4" 6.4 mm	36 lbs 16.3 kg
500'	**151050**		
RG 8X			
100'	**151510**	1/4" 6.4 mm	40 lbs 18.1 kg
250'	**151525**		
500'	**151550**		
1000'	**151560**		
RG 213			
100'	**151710**	13/32" 10.3 mm	110 lbs 50 kg
250'	**151725**		
500'	**151750**		

Coaxial Cable Assemblies

Premium Tinned Copper

- All assemblies come with Ancor adhesive lined heat shrink to seal out moisture, provide strain relief and fight corrosion
- 96% tinned copper braid for optimum protection against signal loss
- 100% tinned copper center conductor and braid
- No solder or special tools required
- Special low loss SAT NAV extensions

Wire Type	RG58C/U	RG59U	RG8X	RG213
Insulation Material	PVC*	PVC	PVC	PVC*
Nominal O.D.	3/16" 4.8 mm	1/4" 6.4 mm	1/4" 6.4 mm	13/32" 10.3 mm
AWG	20	23	16	13
Conductor Stranding	19/33	Solid**	19/29	7/21
Braid Coverage	96%	96%	96%	96%
Wt. per 1000'	26 lbs 11.8 kg	36 lbs 16.3 kg	40 lbs 18.1 kg	110 lbs 50 kg
Impedance (Ohms)	50	75	50	50
Capacitance/Ft.	30.8 pF	20.5 pF	26.0 pF	30.8pF
Attenuation/100'				
@50MHz	3.3db	2.4db	2.5db	1.3db
@100MHz	4.9db	3.4db	3.7db	1.9db
@1000MHz	21.5db	12.0db	13.5db	8.0db
Velocity of Propagation	66%	66%	78%	66%

* non-contaminating insulation ** copperweld

Ends Description		Wire Length	Part #
RG58CU	Two ends assembled	3'	**189800**
RG8X	One end assembled	50'	**189849**

TECH TIP

Ancor Recommends

- RG 58CU for interconnecting electronic equipment
- RG 59U for TVs and some SAT NAVs
- RG 213 for VHF runs more than 50 feet
- RG 8X for VHF runs less than 50 feet

Trailer Cable & Assemblies

Flat Ribbon Bonded Trailer Cable

Premium Tinned Bonded Copper

Conductor colors: brown, green, white, and yellow

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
16/4 AWG (4x1 mm²)			
100'	**154510**	1/8"x1/2" 3.2x12.7 mm	29.2 lbs 13.2 kg
250'	**154525**		

Flat Trailer Cable

Tinned Boat Cable

Conductor colors: yellow, white, green, and brown

Spool Length	Part #	Nominal O.D.	Wt. per 1000'
16/4 AWG (4x1 mm²)			
100'	**154010**	3/16"x9/16" 4x14 mm	105 lbs 47.7 kg
300'	**154030**		

Trailer Assemblies

- Molded trailer connectors are made with 16 gauge wire
- Color coding in accordance with SAE recommended practices
- Male Connector = Trailer Side / Female Connector = Vehicle Side
- 4-contact connectors are molded with an EasyGrip® for fast and easy disconnect
- Loops can be cut to the desired length for splicing into an existing wire assembly

2-wire

male female

length	style	part #
12"	loop	**249102**

4-wire

male female

length	style	part #
12"	loop	**249101**

Technical Data

NMEA 2000® Cables and Connectors

Premium Quality. Universal Fit.

Ancor NMEA 2000 approved cables and connectors simplify creating or expanding an NMEA 2000 network. Couplers are color coded to make identifying the power cable or connector easy once installed as part of an NMEA 2000 network. The color coded couplers connect to the corresponding Ancor cables and connectors creating an easy to identify network.

- NMEA 2000 Approved, 100% universal and compatible with other manufacturers' products
- NMEA micro-size

NMEA 2000 Power Cable With Tee

For power connection to an NMEA 2000 network.

The tee is color coded red to make identifying the power cable easy once installed as part of an NMEA 2000 network. The yellow couplers connect to the corresponding Ancor backbone cables and tees creating a simplified, color coded network installation.

- Includes a tee for direct connection to backbone cables
- Large 18 AWG power conductors to reduce voltage drop, provide better reliability and meet the requirements of ABYC and the USCG for minimum size power conductors

Part #	270000	3.3 ft	1 m

Ancor NMEA 2000 Color Key:

- = power connection
- = power isolation
- = backbone connection
- = inline termination
- = drop connection

Backbone vs Drop Cables

NMEA 2000 Backbone Cables

For connection to an NMEA 2000 tee connector.

The yellow couplers connect to the corresponding Ancor tees creating a simplified, color coded network installation.

- Large 18 AWG power conductors to reduce voltage drop and provide better reliability for critical backbone cables

Part #	270001	1.6 ft	.5 m
Part #	270002	6.5 ft	2 m
Part #	270005	16 ft	5 m
Part #	270010	32 ft	10 m

NMEA 2000® Install Guide

NMEA 2000 Drop Cables

For connection between an NMEA 2000 device and tee connector.

The black couplers connect to the corresponding Ancor tees creating a simplified, color coded network installation. The drop cables are smaller in diameter and more flexible than backbone cables for easy connection to NMEA 2000 devices.

- Super flexible 22 AWG power conductors for ease of installation and wire routing

Part #	270300	1.6 ft	.5 m
Part #	270301	3.3 ft	1 m
Part #	270302	6.5 ft	2 m
Part #	270305	16 ft	5 m

APPROVED

NMEA 2000 Tee Connectors

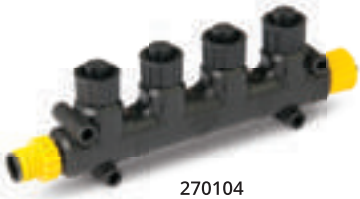
For connection between NMEA 2000 drop cables and backbone cables.

The yellow couplers connect to the corresponding Ancor tees and backbone cables, creating a simplified, color coded network installation. The connectors are offered in four configurations for maximum installation flexibility. The two way and four way tee connectors allow for multiple drop cables to be connected without additional backbone cable.

Part #	270101	Single Tee Connector
Part #	270103	2 Way Tee Connector
Part #	270104	4 Way Tee Connector


270101


270103


270104

APPROVED

NMEA 2000 Terminators

For proper termination of an NMEA 2000 network.

The yellow couplers connect to the corresponding Ancor tees, creating a simplified, color coded network installation. One male and one female terminator is required for each NMEA 2000 network.

Part #	270105	Female
Part #	270106	Male


270105


270106

NMEA 2000 Inline Terminator

For proper termination of a network in a single piece, space saving design.

The inline terminator connects between a backbone cable and a drop cable, while still maintaining proper termination for the end of the network.

Part # 270114

NMEA 2000 Blanking Caps

Cover unused couplers.

Protects unused tee connectors from dust and water. 2-pack.

Part #	270111	Female
Part #	270112	Male


270111 270112

APPROVED

NMEA 2000 90° Elbow Connector

Makes cable routing easier.

The connector is installed between two cables to reduce stress on the cables and create a compact installation.

Part # 270108

NMEA 2000 Field Serviceable Connectors

For termination of bare NMEA cable.

Securely terminate bulk cable, or replace a broken end.

Part #	270109	Female
Part #	270110	Male


270109


270110

NMEA 2000 Through Bulkhead Adaptor

Use for transitions through bulk heads or panels.

Simplifies installation when routing through a waterproof bulkhead or panel. Creates a connectoin point for removable equipment such as a computer interface.

Part # 270107

NMEA 2000 Power Isolator

Isolating power within a NMEA 2000 network.

The power isolator connects between NMEA 2000 tees and backbone cables while isolating the power supply within the network.

Part # 270113

Technical Data

NMEA 2000® Starter Kits

APPROVED

NMEA 2000 Single Device Starter Kit

Kit include all components needed to create a single device NMEA 2000 network.

Kit includes:

- (1) Power Cable with Tee, 3.3 ft (1m), part # 270000
- (1) Male Terminator, part # 270106
- (1) Female Terminator, part # 270105
- (1) Single Tee Connector, part # 270101
- (1) Drop Cable, 6.5 ft (2m), part # 270302

Part # 270201

APPROVED

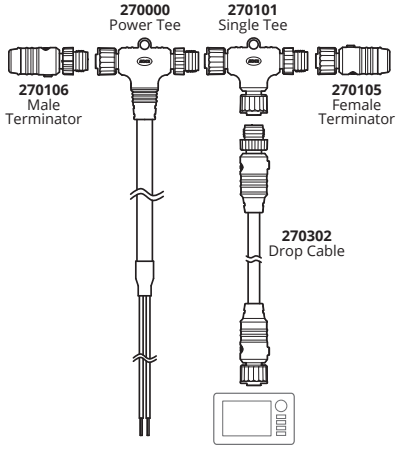
NMEA 2000 Dual Device Starter Kit

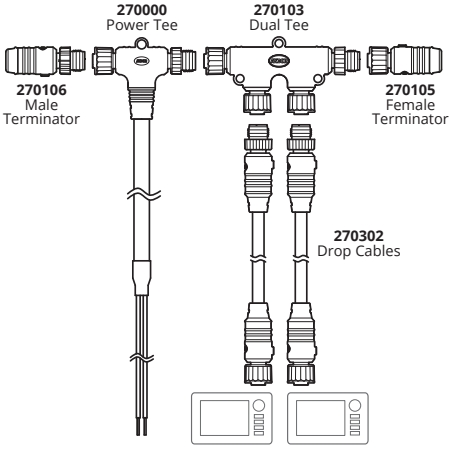
Kit include all components needed to create a dual device NMEA 2000 network.

Kit includes:

- (1) Power Cable with Tee, 3.3 ft (1m), part # 270000
- (1) Male Terminator, part # 270106
- (1) Female Terminator, part # 270105
- (1) Dual Tee Connector, part # 270103
- (2) Drop Cable, 6.5 ft (2m), part # 270302

Part # 270202





NMEA 2000®
Install Guide

APPROVED

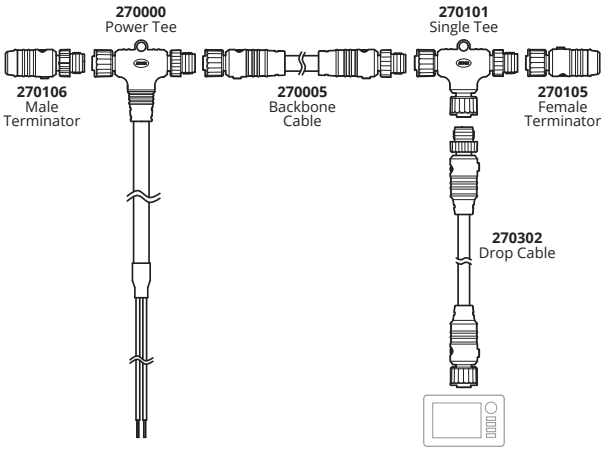
NMEA 2000® Single Device Backbone Starter Kit

Basic starter kit for adding a new NMEA 2000 network to your boat.

Kit includes:

- (1) Power Cable with Tee, 3.3 ft (1m), part # 270000
- (1) Male Terminator, part # 270106
- (1) Female Terminator, part # 270105
- (1) Single Tee Connector, part # 270101
- (1) Drop Cable, 1.64 ft (.5m), part # 270300
- (1) Backbone Cable, 16.4 ft (5m), part # 270005

Part # 270203



Technical Data

TECH TIP

Approved vs Certified

NMEA Components—cables and connectors must pass NMEA approval to guarantee that they are manufactured to standards which allow them to be universally used with any manufacturers approved components and certified devices.

NMEA Devices—must be certified to run the universal NMEA 2000 communications protocols to be used universally between different manufacturers devices.

TERMINALS & LUGS

Adhesive Lined Heat Shrink Terminals

24

Includes a heat activated adhesive built into the sleeve of the tubing for improved seal and strain relief.

Nylon Insulated Terminals

27

Marine Grade® Nylon terminals are designed for harsh boating applications. Nylon insulators are ideal for crimping and will not split.

Vinyl Insulated Terminals

29

Ideal for non-waterproof applications.

TERMINALS & LUGS

Tinned Copper Lugs

30

Ancor Marine Grade® lugs are made from heavy-duty annealed tinned copper for maximum current flow and corrosion resistance.

Heavy-duty Butt Connectors

30

Use with larger gauge cable for proper connection.

Battery Terminals, Covers & Clips

32

Provides proper connections to batteries for maximum conductivity.

Electrical systems rely on Ancor terminals and lugs to securely connect a vessels' electrical system so current-carrying loads swiftly move from the source of power to the loads.

Adhesive Lined Heat Shrink Terminals

- Heat activated adhesive built into the sleeve of the heat shrink tubing
- Shrinks to form a water tight seal and ultimate vibration and strain relief
- Tinned for corrosion resistance
- Pure copper for maximum current flow
- Brazed seam for maximum strength
- UL listed and CSA recognized
- Shrinks at 275°F / 135°C

Heat Shrink Ring Terminals

- UL 486A

AWG	Screw Size		Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	#8	4 mm	3	310203
			25	310225
			100	310299
	#10	4.8 mm	3	310303
			25	310325
			100	310399
	1/4"	6.4 mm	3	310403
			25	310425
			100	310499
	5/16"	7.9 mm	3	310503
			25	310525
			100	310599
	3/8"	9.5 mm	3	310603
			25	310625
			100	310699
16–14 1–2 mm²	#8	4 mm	3	311203
			25	311225
			100	311299
	#10	4.8 mm	3	311303
			25	311325
			100	311399
	1/4"	6.4 mm	3	311403
			25	311425
			100	311499
	5/16"	7.9 mm	3	311503
			25	311525
			100	311599
	3/8"	9.5 mm	3	311603
			25	311625
			100	311699

AWG	Screw Size		Qty/ Pkg	Part #
12–10 3–5 mm²	#8	4 mm	3	312203
			25	312225
			100	312299
	#10	4.8 mm	3	312303
			25	312325
			100	312399
	1/4"	6.4 mm	3	312403
			25	312425
			100	312499
	5/16"	7.9 mm	3	312503
			25	312525
			100	312599
	3/8"	9.5 mm	3	312603
			25	312625
			100	312699
8 8 mm²	#10	4.8 mm	3	321303
			25	321325
	1/4"	6.4 mm	3	321403
			25	321425
	5/16"	7.9 mm	3	321503
			25	321525
	3/8"	9.5 mm	3	321603
			25	321625
	1/2"	12.7 mm	3	321703
			25	321725

Heat Shrink Snap Plugs

AWG	Gender	Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	Female	3	318803
		25	318825
		100	318899
	Male	3	318903
		25	318925
		100	318999
16–14 1–2 mm²	Female	3	319803
		25	319825
		100	319899
	Male	3	319903
		25	319925
		100	319999

Heat Shrink Spade Terminals

- UL 486A

AWG	Screw Size		Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	#8	4 mm	3	313203
			25	313225
			100	313299
16–14 1–2 mm²	#8	4 mm	3	314203
			25	314225
			100	314299
	#10	4.8 mm	3	314303
			25	314325
			100	314399
12–10 3–5 mm²	#8	4 mm	3	315203
			25	315225
			100	315299
	#10	4.8 mm	3	315303
			25	315325
			100	315399

Related Products

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Declaration of Conformity

Heat Shrink Butt Connectors

- UL 486C

AWG	Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	3	**309003**
	25	**309025**
	100	**309099**
	500	**309002**
16–14 1–2 mm²	3	**309103**
	25	**309125**
	100	**309199**
	500	**309102**
12–10 3–5 mm²	3	**309203**
	25	**309225**
	100	**309299**
	500	**309202**
8 8 mm²	3	**309303**
	25	**309325**
	500	**309302**

Heat Shrink Butt Connector Packs

- Reusable jar is clear for easy identification and has a flip lid for ease of use
- Reusable compact case (6.625"L x 3.125"W x 1.375"D) fits easily in most storage areas

AWG	Qty/ Pkg	Pkg	Part #
22–18 0.3–0.8 mm²	250	jar	**309001**
16–14 1–2 mm²	250	jar	**309101**
12–10 3–5 mm²	200	jar	**309201**
Assorted (50) 22-18, (150) 16-14, (50) 12-10 AWG	250	jar	**309000**
Assorted (25) each	75	case	**220011**

309000

220011

Heat Shrink Step-Down/Multi-Wire Connectors

- 4:1 shrink ratio tubing to ensure a watertight seal between wires
- Flared barrel with uniform copper wall ensures an easy and proper mechanical crimp
- Crimp indicator on barrel for proper placement of installation tool
- Clear heat shrink tubing ensures crimp accuracy
- Colored stripes on the barrel indicate which crimp die to use, regardless of application

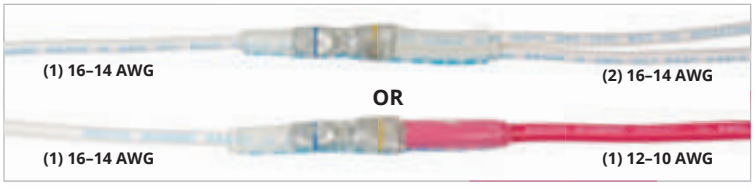
AWG	Tubing Color	Pkg Qty	Part #	Barrel End 1	Barrel End 2
24–22 0.2–0.3 mm²	Clear tube w/ white dashes	3	**320003**	(1) 24-22 AWG	(1) 22-18 AWG or (2) 24-22 AWG
		25	**320025**		
22–18 0.3–0.8 mm²	Clear tube w/ red dashes	3	**320103**	(1) 22-18 AWG	(1) 16-14 AWG or (2) 22-18 AWG
		25	**320125**		
16–14 1–2 mm²	Clear tube w/ blue dashes	3	**320203**	(1) 16-14 AWG	(1) 12-10 AWG or (2) 16-14 AWG
		25	**320225**		
12–10 3–5 mm²	Clear tube w/ yellow dashes	3	**320303**	(1) 12-10 AWG	(1) 8 AWG or (2) 12-10 AWG
		25	**320325**		

Kit

AWG	Qty/ Pkg	Pkg	Part #
Assorted (5) 24–22 AWG, (10) 22–18 AWG, (10) 16–14 AWG, (5) 12–10 AWG	30	jar	**320000**

320000

16–14 AWG Step-Down Connector Example



Related Products

Crimping Tools pages 49–51

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Heat Shrink Disconnects

AWG	Tab Size	Gender	Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	.110	Female	100	**326899**
	.187	Female	100	**336899**
	.250	Female	3	**316803**
			25	**316825**
			100	**316899**
	.250	Male	3	**316903**
			25	**316925**
			100	**316999**
16–14 1–2 mm²	.110	Female	100	**327899**
	.187	Female	100	**337899**
	.250	Female	3	**317803**
			25	**317825**
			100	**317899**
	.250	Male	3	**317903**
			25	**317925**
			100	**317999**
12–10 3–5 mm²	.250	Female	3	**320803**
			25	**320825**
			100	**320899**
	.250	Male	3	**320903**
			25	**320925**
			100	**320999**

Heat Shrink Flag Disconnects

- 90° angle simplifies wire routing and connections
- .250 (6.4mm) tab size

AWG	Gender	Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	Female	3	**356803**
		25	**356825**
16–14 1–2 mm²	Female	3	**357803**
		25	**357825**

SPK1614

SPK2218

Universal Speaker Connector Kits

Ancor's universal speaker connector kits include all the connectors required to install speakers regardless of manufacturer. Heat shrink disconnects provide a sealed connection for the harsh marine environment.

AWG	Qty/ Pkg	Pkg	Part #
22–18 0.3–0.8 mm²	6	clam	**SPK2218**
16–14 1–2 mm²	6	clam	**SPK1614**

AWG	Qty/ Pkg	Pkg	Part #
Assorted	90	case	**SPKKIT**

SPKKIT

6 pc Kits include:

- (2) .250 tab
  (2) .187 tab
  (2) .110 tab

90 pc Kit includes:

- 22–18 AWG:
  (10) .110 tab
  (10) .187 tab
  (10) .250 tab
- 16–14 AWG:
  (20) .110 tab
  (20) .187 tab
  (20) .250 tab
- Reusable compact case

Related Products

Crimping Tools
pages 49–51

Heat Tools
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Marine Grade® Terminals

- Ancor's Marine Grade® terminals differ from automotive terminals by being designed for the harsh marine environment
- Tinned copper gives the least electrical resistance but the most corrosion protection
- Nylon insulators are easy to crimp and will not split
- Barrels are designed to tightly grip the wire with the least effort

Nylon Ring Terminals

- Nylon insulated with insulation grip
- Double crimp, funnel entry
- UL 486A

AWG	Screw Size		Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	#6	3.6 mm	6	**230201**
			25	**210201**
	#8	4 mm	6	**230202**
			25	**210202**
			100	**220202**
	#10	4.8 mm	6	**230203**
			25	**210203**
			100	**220203**
	1/4"	6.4 mm	5	**230204**
			25	**210204**
	5/16"	7.9 mm	5	**230205**
			25	**210205**
	3/8"	9.5 mm	5	**230206**
			25	**210206**
16–14 1–2 mm²	#6	3.6 mm	6	**230211**
			25	**210211**
	#8	4 mm	6	**230212**
			25	**210212**
			100	**220212**
	#10	4.8 mm	6	**230213**
			25	**210213**
			100	**220213**
			500	**222213**
	1/4"	6.4 mm	5	**230214**
			25	**210214**
			100	**220214**
	5/16"	7.9 mm	5	**230215**
			25	**210215**
			100	**220215**
	3/8"	9.5 mm	5	**230216**
			25	**210216**
			100	**220216**

AWG	Screw Size		Qty/ Pkg	Part #
12–10 3–5 mm²	#6	3.6 mm	5	**230221**
			25	**210221**
	#8	4 mm	5	**230222**
			25	**210222**
			100	**220222**
	#10	4.8 mm	5	**230223**
			25	**210223**
			100	**220223**
	1/4"	6.4 mm	4	**230224**
			25	**210224**
			100	**220224**
	5/16"	7.9 mm	4	**230225**
			25	**210225**
			100	**220225**
	3/8"	9.5 mm	4	**230226**
			25	**210226**
			100	**220226**
	1/2"	12.7 mm	3	**230227**
			25	**210227**
8 8 mm²	#10	4.8 mm	2	**230233**
			25	**210233**
			100	**222233**
	1/4"	6.4 mm	2	**230234**
			25	**210234**
			100	**222234**
	5/16"	7.9 mm	2	**230235**
			25	**210235**
			100	**222235**
	3/8"	9.5 mm	2	**230236**
			25	**210236**
			100	**222236**
	1/2"	12.7 mm	1	**230237**
			25	**210237**

AWG	Screw Size		Qty/ Pkg	Part #
6 13 mm²	#10	4.8 mm	1	**230243**
			25	**210243**
	1/4"	6.4 mm	1	**230244**
			25	**210244**
	5/16"	7.9 mm	1	**230245**
			25	**210245**
	3/8"	9.5 mm	1	**230246**
			25	**210246**
	1/2"	12.7 mm	1	**230247**
			25	**210247**

Declaration of Conformity

Related Products

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Nylon Flanged Spades

- Nylon insulated with insulation grip
- Double crimp, funnel entry
- UL 486A

AWG	Screw Size		Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	#6	3.6 mm	6	**230301**
			25	**210301**
	#8	4 mm	6	**230302**
			25	**210302**
	#10	4.8 mm	6	**230303**
			25	**210303**
16–14 1–2 mm²	#6	3.6 mm	6	**230311**
			25	**210311**
	#8	4 mm	6	**230312**
			25	**210312**
			100	**220312**
	#10	4.8 mm	6	**230313**
			25	**210313**
			100	**220313**
12–10 3–5 mm²	#8	4 mm	5	**230322**
			25	**210322**
	#10	4.8 mm	5	**230323**
			25	**210323**
			100	**220323**

Nylon Single Crimp Butt Connectors

- Nylon insulated seamless
- UL 486C

AWG	Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	7	**230100**
	25	**210100**
	100	**220100**
	500	**222100**
16–14 1–2 mm²	7	**230110**
	25	**210110**
	100	**220110**
	500	**222110**
12–10 3–5 mm²	5	**230120**
	25	**210120**
	100	**220120**
	500	**222120**

Nylon Double Crimp Butt Connectors

- Nylon insulated with insulation grip
- Funnel entry
- UL 486C

AWG	Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	3	**230161**
	25	**210161**
	100	**220161**
	500	**222161**
16–14 1–2 mm²	3	**230162**
	25	**210162**
	100	**220162**
	500	**222162**
12–10 3–5 mm²	2	**230163**
	25	**210163**
	100	**220163**
	500	**222163**

Nylon Fully Insulated Disconnects

- .250 (6.4 mm) tab size
- Nylon insulated with insulation grip
- Double crimp, funnel entry
- UL 310

AWG	Gender	Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	Female	4	**231408**
		25	**211408**
		100	**221408**
	Male	4	**231409**
		25	**211409**
		100	**221409**
16–14 1–2 mm²	Female	4	**231418**
		25	**211418**
		100	**221418**
	Male	4	**231419**
		25	**211419**
		100	**221419**
12–10 3–5 mm²	Female	3	**231428**
		25	**211428**
		100	**221428**
	Male	3	**231429**
		25	**211429**
		100	**221429**

Nylon Disconnects

- .250 (6.4 mm) tab size
- Nylon insulated with insulation grip
- Double crimp, funnel entry
- UL 310

AWG	Gender	Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	Female	4	**230808**
		25	**210808**
		100	**220808**
	Male	4	**230809**
		25	**210809**
		100	**220809**
16–14 1–2 mm²	Female	4	**230818**
		25	**210818**
		100	**220818**
	Male	4	**230819**
		25	**210819**
		100	**220819**
12–10 3–5 mm²	Female	4	**230828**
		25	**210828**
		100	**220828**
	Male	4	**230829**
		25	**210829**
		100	**220829**

Nylon Flag Disconnects

- .250 (6.4 mm) tab size
- Nylon insulated with insulation grip

AWG	Gender	Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	Female	4	**231601**
		25	**211601**
16–14 1–2 mm²	Female	4	**231611**
		25	**211611**
12–10 3–5 mm²	Female	3	**231621**
		25	**211621**

Nylon Multi-Stack Connectors

- .250 (6.4mm) tab size
- Nylon insulated with insulation grip
- Double crimp, funnel entry
- UL 310

AWG	Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	3	**230602**
	25	**210602A**
	100	**220602**
16–14 1–2 mm²	3	**230612**
	25	**210612**
	100	**220612**
12–10 3–5 mm²	3	**230622**
	25	**210622**
	100	**220622**

Nylon 3-Way Connectors

- Nylon insulated with insulation grip
- Double crimp, funnel entry

AWG	Qty/ Pkg	Part #
16–14 1–2 mm²	1	**230510**
	25	**210510**
12–10 3–5 mm²	1	**230520**
	25	**210520**

Nylon Snap Plugs

- Nylon insulated with insulation grip
- Double crimp, funnel entry

AWG	Gender	Qty/ Pkg	Part #
22–18 0.3–0.8 mm²	Female	4	**230709**
		25	**210709**
	Male	4	**230708**
		25	**210708**
16–14 1–2 mm²	Female	4	**230719**
		25	**210719**
		100	**220719**
	Male	4	**230718**
		25	**210718**
		100	**220718**

Vinyl Step Down Butt Connectors

- Vinyl insulated
- UL 486C

AWG	Qty/ Pkg	Part #
16–14 to 22–18 1–2 to 0.3–0.8 mm²	3	**230164**
	25	**210164**
12–10 to 16–14 3–5 to 1–2 mm²	3	**230165**
	25	**210165**
8 to 12–10 8 to 3–5 mm²	3	**230166**
	25	**210166**

Vinyl Butt Connectors

- Vinyl insulated
- UL 486C

AWG	Qty/ Pkg	Part #
8 8 mm²	2	**230130**
	25	**210130**
6 13 mm²	1	**230140**
	25	**210140**
4 21 mm²	1	**230150**
	25	**210150**

Double Male-Female Adapter

- .250 (6.4mm) tab size

Qty/ Pkg	Part #
5	**230613**
25	**210613**

Declaration of Conformity

Related Products

Crimping Tools
pages 49–51

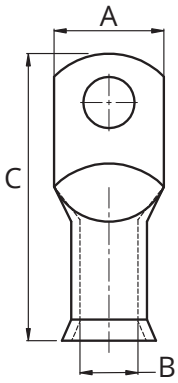
Tinned Copper Lugs

- Ancor Marine Grade® lugs are manufactured from heavy-duty annealed tinned copper, providing for maximum current flow
- 100% tin plated copper resists corrosion from salt and moisture
- Seamless barrel design allows for maximum strength when crimped
- Closed end design seals out moisture so cables stay dry and corrosion free
- UL 486A

AWG	Screw Size		Qty/ Pkg	Part #
8 8 mm²	#10	4.8 mm	2	**252233**
			25	**242233**
			100	**244233**
	1/4"	6.4 mm	2	**252234**
			25	**242234**
			100	**244234**
	5/16"	7.9 mm	2	**252235**
			25	**242235**
			100	**244235**
	3/8"	9.5 mm	2	**252236**
			25	**242236**
			100	**244236**
	1/2"	12.7 mm	2	**252237**
			10	**242237**
6 13 mm²	#10	4.8 mm	2	**252243**
			25	**242243**
	1/4"	6.4 mm	2	**252244**
			25	**242244**
			100	**244244**
	5/16"	7.9 mm	2	**252245**
			25	**242245**
			100	**244245**
	3/8"	9.5 mm	2	**252246**
			25	**242246**
			100	**244246**
	1/2"	12.7 mm	2	**252247**
			10	**242247**
	5/16" & 3/8"	7.9 & 9.5 mm	1/1	**252241**

AWG	Screw Size		Qty/ Pkg	Part #
4 21 mm²	#10	4.8 mm	2	**252253**
			25	**242253**
	1/4"	6.4 mm	2	**252254**
			25	**242254**
			100	**244254**
	5/16"	7.9 mm	2	**252255**
			25	**242255**
			100	**244255**
	3/8"	9.5 mm	2	**252256**
			25	**242256**
			100	**244256**
	1/2"	12.7 mm	2	**252257**
			10	**242257**
	5/16" & 3/8"	7.9 & 9.5 mm	1/1	**252251**
2 34 mm²	1/4"	6.4 mm	2	**252264**
			25	**242264**
	5/16"	7.9 mm	2	**252265**
			25	**242265**
			100	**244265**
	3/8"	9.5 mm	2	**252266**
			25	**242266**
			100	**244266**
	1/2"	12.7 mm	2	**252267**
			10	**242267**
	5/16" & 3/8"	7.9 & 9.5 mm	1/1	**252261**
1 42 mm²	1/4"	6.4 mm	2	**252274**
			25	**242274**
	5/16"	7.9 mm	2	**252275**
			25	**242275**
			100	**244275**
	3/8"	9.5 mm	2	**252276**
			25	**242276**
			100	**244276**
	1/2"	12.7 mm	2	**252277**
			10	**242277**

AWG	Screw Size		Qty/ Pkg	Part #
1/0 53 mm²	1/4"	6.4 mm	2	**252284**
			25	**242284**
	5/16"	7.9 mm	2	**252285**
			25	**242285**
			100	**244285**
	3/8"	9.5 mm	2	**252286**
			25	**242286**
			100	**244286**
	1/2"	12.7 mm	2	**252287**
			10	**242287**
2/0 68 mm²	1/4"	6.4 mm	2	**252294**
			25	**242294**
	5/16"	7.9 mm	2	**252295**
			25	**242295**
			100	**244295**
	3/8"	9.5 mm	2	**252296**
			25	**242296**
			100	**244296**
	1/2"	12.7 mm	2	**252297**
			10	**242297**
3/0 85 mm²	5/16"	7.9 mm	2	**252715**
			10	**242715**
	3/8"	9.5 mm	2	**252716**
			10	**242716**
	1/2"	12.7 mm	2	**252717**
			10	**242717**
4/0 107 mm²	5/16"	7.9 mm	2	**252725**
			10	**242725**
			100	**244725**
	3/8"	9.5 mm	2	**252726**
			10	**242726**
			100	**244726**
	1/2"	12.7 mm	2	**252727**
			10	**242727**



Lug Dimensions

AWG	A	B	C
8	0.465"	0.190"	1.313"
6	0.540"	0.232"	1.512"
4	0.545"	0.280"	1.606"
2	0.650"	0.336"	1.622"–1.772"
1	0.645"	0.360"	1.718"–1.845"
1/0	0.725"	0.410"	1.845"

AWG	A	B	C
2/0	0.825"	0.460"	2.236"–2.268"
3/0	0.910"	0.510"	2.323"
4/0	1.015"	0.560"	2.563"

Related Products

Crimping Tools
pages 49–51

90° Tinned Copper Lugs

90° bend for ease of wire routing

AWG	Screw Size		Qty/ Pkg	Part #
6 13 mm²	5/16"	7.9 mm	2	**262245**
	3/8"	9.5 mm	2	**262246**
4 21 mm²	5/16"	7.9 mm	2	**262255**
	3/8"	9.5 mm	2	**262256**
2 34 mm²	5/16"	7.9 mm	2	**262265**
	3/8"	9.5 mm	2	**262266**
1 42 mm²	5/16"	7.9 mm	2	**262275**
	3/8"	9.5 mm	2	**262276**
1/0 53 mm²	5/16"	7.9 mm	2	**262285**
	3/8"	9.5 mm	2	**262286**
2/0 68 mm²	5/16"	7.9 mm	2	**262295**
	3/8"	9.5 mm	2	**262296**
3/0 85 mm²	5/16"	7.9 mm	2	**262715**
	3/8"	9.5 mm	2	**262716**
4/0 107 mm²	5/16"	7.9 mm	2	**262725**
	3/8"	9.5 mm	2	**262726**

Declaration of Conformity

Heavy-duty Butt Connectors

100% Tinned Copper

AWG		Qty/ Pkg	Part #
8	8 mm²	2	**252130**
		25	**242130**
6	13 mm²	2	**252140**
		25	**242140**
4	21 mm²	2	**252150**
		25	**242150**
2	34 mm²	2	**252160**
		25	**242160**
1	42 mm²	2	**252170**
		25	**242170**
1/0	53 mm²	2	**252180**
		25	**242180**
2/0	68 mm²	2	**252190**
		25	**242190**

Tinned Brass Battery Terminals

Description	Positive/ Negative	Stud Size	Qty/ Pkg	Part #
Wing Nut Style Yellow Brass Nut	Negative	5/16" (8 mm)	1	**260010**
	Positive	3/8" (10 mm)	1	**260012**
	Pos/Neg	5/16" & 3/8" (8 & 10 mm)	1/1	**260322**

Lead Battery Terminals

Description	Positive/ Negative	Stud Size	Qty/ Pkg	Part #
Wing Nut Style Yellow Brass Nut	Negative	5/16" (8 mm)	1	**260100**
	Positive	3/8" (10 mm)	1	**260200**
	Pos/Neg	5/16" & 3/8" (8 & 10 mm)	1/1	**260325**

Battery Terminal Boots

Description	Size	Color	Qty/ Pkg	Part #
Wing Nut Style	4 & 2 (19 & 32 mm^2)	Black/Red	1/1	**260350**
Right Angle	8–2 (8-32 mm^2)	Red	1	**260381**

Spec Sheet

Battery Clips

Color	Size	Qty/ Pkg	Part #
Red/Black	10A	1/1	**260505**

Battery Terminal Cleaner

- High impact construction
- Wide, easy grip
- Excellent for hard-to-reach batteries

Part # 700103

Dielectric Silicone Compound

- Fights oxidation to improve conductivity
- Penetrates aluminum oxide to maintain current paths
- Temperature rated at 40° to 500°F / 4°C to 260°C
- 1/3 oz tube

Part # 700115

Spec Sheet

WIRE MANAGEMENT

Adhesive Lined Heat Shrink Tubing

36

Ancor uses crosslinked polyolefin material for its superior strength and burn resistance. A heat activated adhesive lining creates an impervious seal and provides strain relief.

Repair & Electrical Tape

38

A wide range of repair tape and electrical tape in multiple colors.

Cable Ties

39

Ancor offers a wide variety of materials, sizes and styles including the innovative Self-Cutting Cable Tie which is now available in a mounting version.

Wire Seals

44

Overlapping clamping spines allow for superior pull-out resistance and protection. Strain relief fittings are resistant to salt water, acids, oil, and are not corrosive for marine applications.

WIRE MANAGEMENT

Cable Clamps

43

Stainless steel and Nylon cable clamps are corrosion resistant for marine applications. They absorb shock and vibrations; reducing unwanted noise.

Grommets

44

Provides abrasion resistance for wires passing through panel holes. Flexible construction makes installation simple.

Split Loom & Spiral Wrap

44

Allows flexible routing of cable harnesses and provides abrasion resistance for wire and cable.

Wire Management Kits

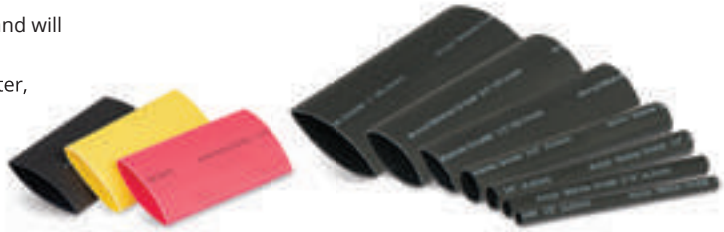
45

Ancor offers a wide variety of preassembled kits for all of your wire management projects.

Wire management is integral in making sure that wires and connections are kept organized and protected per ABYC

Adhesive Lined Heat Shrink Tubing (ALT)

- Cross Linked polyolefin tubing is much stronger than PVC tubing and will not burn like PVC
- Heat activated adhesive lining provides impervious seal to salt water, oil, acids, and sunlight as well as providing strain relief
- Highest shrink ratio - shrinks to 1/3 original size
- Shrinks at 257°F / 125°C
- Operating temperature range of -40°F to 230°F / -40°C to 110°C



Wire Range	ALT Dia	Color	Length		Qty/ Pkg	Part #
<18 AWG <0.8 mm²	**<1/8"** <3.2 mm	Black	3"	7.6 cm	3	**301103**
			6"	15.2 cm	10	**301106**
			12"	30.5 cm	10	**301124**
			48"	122 cm	1	**301148**
20–12 AWG 0.5–3 mm²	**3/16"** 4.8 mm	Black	3"	7.6 cm	3	**302103**
			6"	15.2 cm	10	**302106**
			12"	30.5 cm	10	**302124**
			48"	122 cm	1	**302148**
		Red	3"	7.6 cm	3	**302603**
			6"	15.2 cm	10	**302606**
			12"	30.5 cm	10	**302624**
			48"	122 cm	1	**302648**
16-10 AWG 1–5 mm²	**1/4"** 6.4 mm	Black	3"	7.6 cm	3	**303103**
			6"	15.2 cm	10	**303106**
			12"	30.5 cm	10	**303124**
			48"	122 cm	1	**303148**
		Black/Red	3"	7.6 cm	1/1	**303602**
		Red	3"	7.6 cm	3	**303603**
			6"	15.2 cm	5	**303606**
			12"	30.5 cm	10	**303624**
			48"	122 cm	1	**303648**
12–8 AWG 3–8 mm²	**3/8"** 9.5 mm	Black	3"	7.6 cm	3	**304103**
			6"	15.2 cm	5	**304106**
			12"	30.5 cm	5	**304124**
			48"	122 cm	1	**304148**
		Black/Red	3"	7.6 cm	1/1	**304602**
		Red	3"	7.6 cm	3	**304603**
			6"	15.2 cm	5	**304606**
			12"	30.5 cm	5	**304624**
			48"	122 cm	1	**304648**
8–4 AWG 8–19 mm²	**1/2"** 12.7 mm	Black	3"	7.6 cm	3	**305103**
			6"	15.2 cm	5	**305106**
			12"	30.5 cm	5	**305124**
			48"	122 cm	1	**305148**
		Black/Red	3"	7.6 cm	1/1	**305602**
		Red	3"	7.6 cm	3	**305603**
			6"	15.2 cm	5	**305606**
			12"	30.5 cm	5	**305624**
			48"	122 cm	1	**305648**

Wire Range	ALT Dia	Color	Length		Qty/ Pkg	Part #
8–2/0 AWG 13–62 mm²	**3/4"** 19 mm	Black	3"	7.6 cm	3	**306103**
			6"	15.2 cm	4	**306106**
			12"	30.5 cm	4	**306124**
			48"	122 cm	1	**306148**
		Black/Red	3"	7.6 cm	1/1	**306602**
		Red	3"	7.6 cm	3	**306603**
			6"	15.2 cm	4	**306606**
			12"	30.5 cm	4	**306624**
			48"	122 cm	1	**306648**
		Yellow	3"	7.6 cm	3	**306903**
			6"	15.2 cm	4	**306906**
			12"	30.5 cm	4	**306924**
			48"	122 cm	1	**306948**
2–4/0 AWG 32–103 mm²	**1"** 25.4 mm	Black	3"	7.6 cm	3	**307103**
			6"	15.2 cm	3	**307106**
			12"	30.5 cm	3	**307124**
			48"	122 cm	1	**307148**
		Black/Red	3"	7.6 cm	1/1	**307602**
		Red	3"	7.6 cm	3	**307603**
			6"	15.2 cm	3	**307606**
			12"	30.5 cm	3	**307624**
			48"	122 cm	1	**307648**
		Yellow	3"	7.6 cm	3	**307903**
			6"	15.2 cm	4	**307906**
			12"	30.5 cm	4	**307924**
			48"	122 cm	1	**307948**

Kits

Wire Range	ALT Dia	Color	Length		Qty/ Pkg	Part #
20–2/0 AWG .5–62 mm²	**3/16"–3/4"** 4.8–19 mm	Black	3"	7.6 cm	8	**301503**
			6"	15.2 cm	8	**301506**
12–8 AWG 3–8 mm²	**3/8"** 9.5 mm	Assorted (yw, wh, bl, gr, rd)	3"	30.5 cm	5	**304503**
			6"	122 cm	5	**304506**
8–2/0 AWG 8–62 mm²	**3/4"** 19 mm	Assorted (yw, wh, bl, gr)	3"	7.6 cm	4	**306503**

Adhesive Lined Tubing Specifications (3:1 ratio)

Size		Shrinks to		Wire Range (AWG)	
1/8"	3.2 mm	1/32"	0.8 mm	<18	< 0.8 mm²
3/16"	4.8 mm	1/16"	1.6 mm	20–12	0.5–3 mm²
1/4"	6.4 mm	5/64"	2 mm	16–10	1–5 mm²
3/8"	9.5 mm	1/8"	3.2 mm	12–8	3–8 mm²
1/2"	12.7 mm	5/32"	4 mm	8–4	8–19 mm²
3/4"	19 mm	1/4"	6.4 mm	8–2/0	13–62 mm²
1"	25.4 mm	5/16"	7.9 mm	2–4/0	32–103 mm²

Related Products

Nylon terminals page 27

Heat Tools page 52

Adhesive Lined Heavy Wall Battery Cable Tubing (BCT)

- 3:1 ratio
- Shrinks at 257°F / 125°C
- UL 224

326202

327202

BCT Dia.	BCT Color	Length		Qty/ Pkg	Part #
3/4" 19 mm	Black	3"	7.6 cm	3	**326103**
		6"	15.2 cm	3	**326106**
		12"	30.5 cm	3	**326124**
		48"	122 cm	1	**326148**
	Black/Red	3"	7.6 cm	1/1	**326202**
	Red	3"	7.6 cm	3	**326603**
		6"	15.2 cm	3	**326606**
		12"	30.5 cm	3	**326624**
		48"	122 cm	1	**326648**

BCT Dia.	BCT Color	Length		Qty/ Pkg	Part #
1" 25 mm	Black	3"	7.6 cm	2	**327103**
		6"	15.2 cm	2	**327106**
		12"	30.5 cm	2	**327124**
		48"	122 cm	1	**327148**
	Black/Red	3"	7.6 cm	1/1	**327202**
	Red	3"	7.6 cm	2	**327603**
		6"	15.2 cm	2	**327606**
		12"	30.5 cm	2	**327624**
		48"	122 cm	1	**327648**

Adhesive Lined Heavy Wall Tubing Specifications (3:1 ratio)

Size		Shrinks to		Wire Range (AWG)	
3/4"	19 mm	1/4"	6 mm	8–2/0	13–62 mm²
1"	25 mm	3/8"	9 mm	2–4/0	32–103 mm²

TECH TIP

Properly Shrinking Heat Shrink Tubing

To properly shrink heat shrink tubing, start by selecting a heat source that will apply the appropriate temperature. Heat shrink tubing will state the shrink temperature, while heat tools are rated based on flame temperatures. Once a heat tool is selected, apply heat gradually to avoid shrinking the tubing inconsistently or burning the tubing. Additionally, continually moving the heat source along the length of the tube will reduce the likelihood of burning the tubing during installation.

Related Products

Lugs page 30

Heat Tools page 52

Repair Tape

Repair tape fuses only to itself when applied under tension. No sticky residue remains on wrapped surfaces.

- Operates and remains flexible from -60°F to 500°F / -51°C to 260°C
- Stretches up to 300% its original length with 60 ppi tear strength
- A permanent air and water tight seal
- Excellent UV resistance
- Begins to bond immediately on contact with itself

Color	Length	Part #	Pkg Qty
Black	1"x10'	**341010**	1/roll
Clear	1"x10'	**343010**	1/roll
Red	1"x10'	**346010**	1/roll
White	1"x10'	**347010**	1/roll

Premium Electrical Tape

Quality electrical tape designed for general purpose electrical applications.

- Made from low-lead 7-mil PVC material
- For applications up to 600V
- Temp rating up to 176°F / 80°C
- UV and moisture resistant

Color	Length	Part #	Pkg Qty
Black	3/4"x66'	**331066**	1/roll
Red	3/4"x66'	**336066**	1/roll
White	3/4"x66'	**337066**	1/roll
Assorted (1 ea of black, red, white, green & yellow)	1/2"x20'	**339066**	5/roll

Cable Ties

Ancor offers a wide variety of materials, styles, and sizing options.

With a unique design and high-quality construction, Ancor cable ties provide a great solution for bundling wire, cable, hoses, cords, and countless other applications.

Standard Cable Ties

Length	Color	Unit Qty	Part #	UL	Bundle Dia Max	Tensile Strength
4"	natural	25	199200	yes	13/16"	18 lbs
		100	199201	yes	13/16"	18 lbs
	UVB*	25	199202	yes	13/16"	18 lbs
		100	199203	yes	13/16"	18 lbs
6"	natural	25	199246	yes	1-3/8"	45 lbs
		100	199247	yes	1-3/8"	45 lbs
	UVB*	25	199248	yes	1-3/8"	45 lbs
		100	199249	yes	1-3/8"	45 lbs
8"	natural	25	199204	yes	2"	75 lbs
		100	199205	yes	2"	75 lbs
	UVB*	25	199206	yes	2"	75 lbs
		100	199207	yes	2"	75 lbs
11"	natural	25	199208	yes	3"	75 lbs
		100	199209	yes	3"	75 lbs
	UVB*	25	199210	yes	3"	75 lbs
		100	199211	yes	3"	75 lbs
14"	natural	25	199212	yes	4"	75 lbs
		100	199213	yes	4"	75 lbs
	UVB*	25	199214	yes	4"	75 lbs
		100	199215	yes	4"	75 lbs

* UV Resistant

LEARN MORE
Cable Ties Video

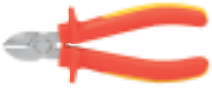
Visit Ancor Products on YouTube.com

Heavy-duty Cable Ties

Length	Color	Unit Qty	Part #	UL	Bundle Dia Max	Tensile Strength
15"	UVB*	25	199259	yes	4"	175 lbs
		100	199260	yes	4"	175 lbs
17"	natural	10	199216	yes	4-9/10"	175 lbs
	UVB*	10	199217	yes	4-9/10"	175 lbs
24"	natural	10	199218	yes	7"	175 lbs
	UVB*	10	199219	yes	7"	175 lbs
36"	natural	10	199220	yes	10-3/10"	175 lbs
	UVB*	10	199221	yes	10-3/10"	175 lbs
48"	natural	10	199222	yes	14-3/10"	175 lbs
	UVB*	10	199223	yes	14-3/10"	175 lbs

* UV Resistant

Related Products



Diagonal Cutting Pliers page 53

Mounting Bases page 40

Mounting Cable Ties

Length	Color	Unit Qty	Part #	UL	Bundle Dia Max	Tensile Strength
4"	UVB*	25	**199245**	yes	3/4"	18 lbs
6"	natural	25	**199250**	yes	1-3/8"	30 lbs
		100	**199251**	yes	1-3/8"	30 lbs
	UVB*	25	**199252**	yes	1-3/8"	30 lbs
		100	**199253**	yes	1-3/8"	30 lbs
8"	natural	25	**199226**	yes	2"	50 lbs
		100	**199227**	yes	2"	50 lbs
	UVB*	25	**199228**	yes	2"	50 lbs
		100	**199229**	yes	2"	50 lbs
14"	natural	25	**199230**	yes	4"	50 lbs
	UVB*	25	**199257**	yes	4"	50 lbs
		100	**199258**	yes	4"	50 lbs

* UV Resistant

LEARN MORE
Cable Ties Video

Visit Ancor Products on YouTube.com

199224 199261 199225

Cable Tie Kits

Length	Description	Unit Qty	Part #	UL	Bundle Dia Max	Tensile Strength
8"	assorted colors	24	**199224**	yes	2"	75 lbs
4", 6", 8"	natural/UVB*	25	**199261**	yes	13/16", 2"	18, 75 lbs
4", 6", 8"	natural color	500	**199225**	yes	13/16", 1-1/2", 2"	18, 45, 75 lbs

* UV Resistant
▲DoubleLock™ on 6" and 8" ties only

Low Profile/Hose Cable Ties

- Reduced head height and contour design conforms to the shape of the wire bundle or hose
- Round design and side tail entry creates a round shape optimal for hoses
- Trimmed tail retracts into cavity leaving a clean, low profile installation
- Tamper-proof pawl is inaccessible after installation
- 50 lbs tensile strength exceeds industry standards

Length	Color	Unit Qty	Part #	Tensile Strength
8"	UVB*	20/bag	**199324**	50 lbs
		100/bag	**199325**	50 lbs
11"	UVB*	20/bag	**199328**	50 lbs
		100/bag	**199329**	50 lbs

* UV Resistant

Screw Mounting Bases

- #8 bases, 7/10" x 1/2"
- #10 bases, 1" x 5/8"

Description	Unit Qty	Part #
#8 screw, natural	25	**199231**
	100	**199232**
#10 screw, natural	25	**199262**
	100	**199263**

199262

Adhesive Lined Mounting Bases

- 1" x 1"

Description	Unit Qty	Part #
Natural	5	**199233**
	25	**199234**
UVB*	5	**199235**
	25	**199236**

* UV Resistant

199233

199235

Self-cutting Cable Ties

Save time and frustration using the latest innovation from Ancor, a self-cutting cable tie. Simply lock and twist to finish the job, with no need for additional tools! Integrated stainless steel blade leaves a clean flush cut, which improves appearance and eliminates the sharp tail while maintaining a tensile strength above industry standards.

Standard Self-cutting Cable Ties

Length	Color	Unit Qty	Part #	Tensile Strength
4"	Natural	50/bag	199333	35 lbs
		500/bag	199334	35 lbs
	UVB*	50/bag	199336	35 lbs
		500/bag	199337	35 lbs
6"	Natural	50/bag	199339	35 lbs
		500/bag	199340	35 lbs
	UVB*	50/bag	199342	35 lbs
		500/bag	199343	35 lbs
8"	Natural	20/bag	199274	50 lbs
		50/bag	199275	50 lbs
		500/bag	199267	50 lbs
	UVB*	20/bag	199276	50 lbs
		50/bag	199277	50 lbs
		500/bag	199264	50 lbs
11"	Natural	20/bag	199278	50 lbs
		50/bag	199279	50 lbs
		500/bag	199268	50 lbs
	UVB*	20/bag	199280	50 lbs
		50/bag	199281	50 lbs
		500/bag	199265	50 lbs
14"	Natural	20/bag	199282	50 lbs
		50/bag	199283	50 lbs
		500/bag	199269	50 lbs
	UVB*	20/bag	199284	50 lbs
		50/bag	199285	50 lbs
		500/bag	199266	50 lbs

* UV Resistant

LEARN MORE
Cable Ties Video

Visit Ancor Products on YouTube.com

Self Cutting Cable Ties
IBBI INNOVATION
Award Winner
2016

TECH TIP

Wire Bundling Per ABYC Guidelines

ABYC states: "Conductors shall be supported throughout their length or shall be secured at least every 18 inches (455mm) by one of the following methods:

- By means of non-metallic clamps sized to hold the conductors firmly in place. The material shall be resistant to oil, gasoline, and water and shall not break or crack within a temperature range of 30°F (-34°C) to 250°F (121°C)

All of Ancor's cable ties are resistant to oil, gasoline, and water and are rated for use within the ABYC specified range.

Heavy-duty Self-cutting Cable Ties

Length	Color	Unit Qty	Part #	Tensile Strength
15"	Natural	20/bag	199320	120 lbs
		100/bag	199321	120 lbs
	UVB*	20/bag	199318	120 lbs
		100/bag	199319	120 lbs
17"	Natural	10/bag	199323	120 lbs
	UVB*	10/bag	199322	120 lbs

* UV Resistant

Sell Sheet

Related Products

Mounting Bases
page 40

Sell Sheet

Mounting Self-cutting Cable Ties

Length	Color	Unit Qty	Part #	Tensile Strength
8"	Natural	20/bag	**199309**	50 lbs
		50/bag	**199310**	50 lbs
		500/bag	**199311**	50 lbs
	UVB*	20/bag	**199300**	50 lbs
		50/bag	**199301**	50 lbs
		500/bag	**199302**	50 lbs
11"	Natural	20/bag	**199312**	50 lbs
		50/bag	**199313**	50 lbs
		500/bag	**199314**	50 lbs
	UVB*	20/bag	**199303**	50 lbs
		50/bag	**199304**	50 lbs
		500/bag	**199305**	50 lbs
14"	Natural	20/bag	**199315**	50 lbs
		50/bag	**199316**	50 lbs
		500/bag	**199317**	50 lbs
	UVB*	20/bag	**199306**	50 lbs
		50/bag	**199307**	50 lbs
		500/bag	**199308**	50 lbs

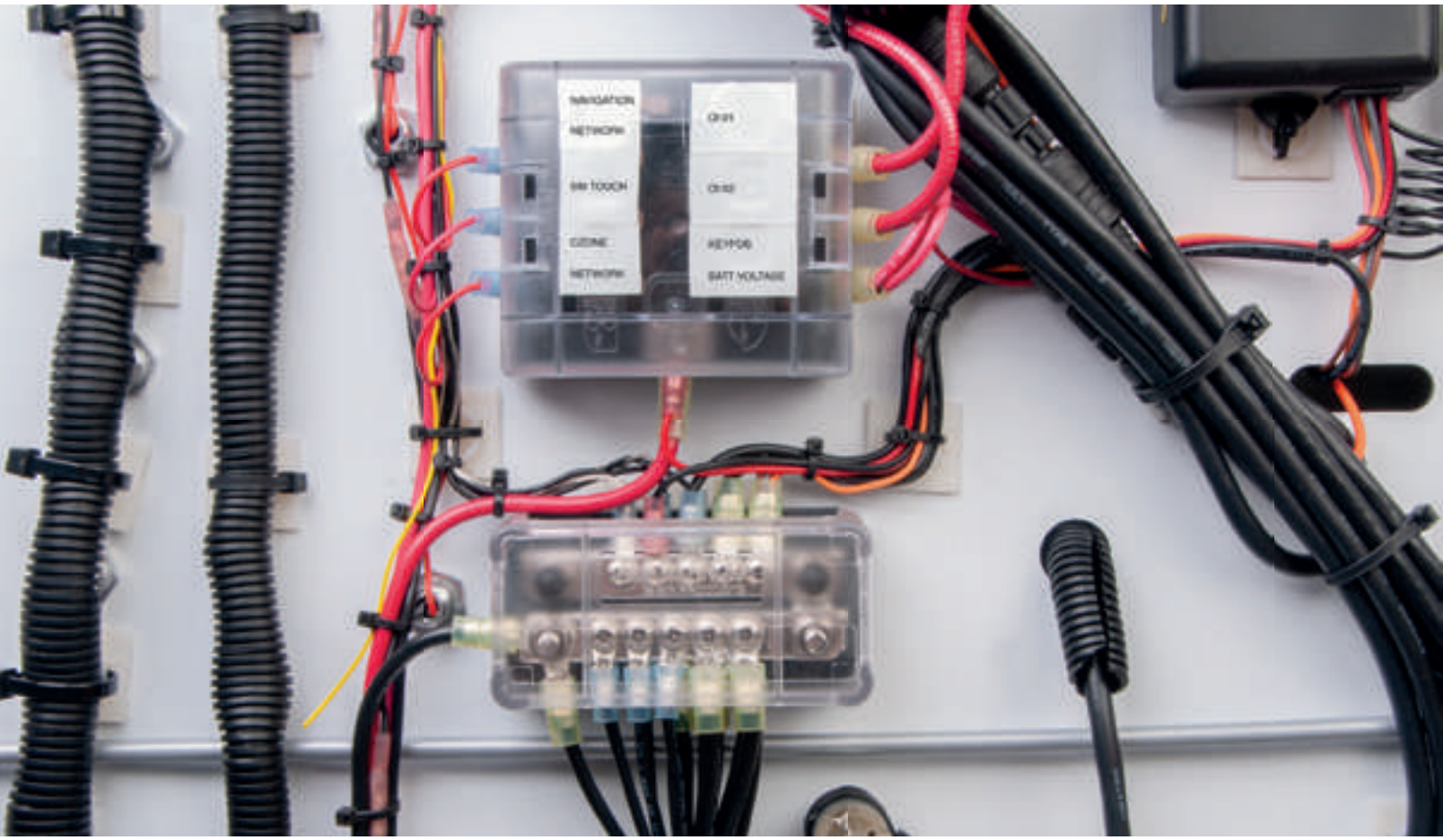
* UV Resistant

TECH TIP

Cable Ties and Moisture

To prevent brittleness and cracking, a certain amount of moisture is incorporated into the Nylon 6/6 material that makes cable ties. Over time, this added moisture can evaporate; especially in dry conditions with low relative humidity. The following steps will help cable ties maintain their pliability and tensile strength:

- Cable ties should be stored in the manufacturer's original packaging until ready for use.
- Partial cable tie bags should be closed or sealed if at all possible. Several drops of water can be added to the bag to provide moisture.
- Cable ties should not be stored in an unheated warehouse or similar location.
- Cable ties inventory should be rotated frequently and used within one year of purchase.



Stainless Steel Cushion Clamps

- Prevents corrosion
- Resistant to oils, acids, salt water
- Temperatures range from -50° to 300°F / -46°C to 149°C
- Absorbs shock and vibration
- Reduces unwanted noise
- 1/4" clearance mounting hole
- 304 stainless steel

Nominal I.D.		Qty/ Pkg	Part #	Band Thickness	Width w/ Cushion		Screw Size	
3/16"	5 mm	10	**403182**	0.04	3/8"	10 mm	#8	4 mm
1/4"	6 mm	10	**403252**	0.04	3/8"	10 mm	#8	4 mm
5/16"	8 mm	10	**403312**	0.04	3/8"	10 mm	#8	4 mm
3/8"	10 mm	10	**403372**	0.04	3/8"	10 mm	#8	4 mm
1/2"	13 mm	10	**403502**	0.06	1/2"	13 mm	#10	5 mm
9/16"	14 mm	10	**403562**	0.06	1/2"	13 mm	#10	5 mm
5/8"	16 mm	10	**403622**	0.06	1/2"	13 mm	#10	5 mm
3/4"	19 mm	10	**403752**	0.06	1/2"	13 mm	#10	5 mm
7/8"	22 mm	10	**403872**	0.06	1/2"	13 mm	#10	5 mm
1"	25 mm	10	**403892**	0.06	1/2"	13 mm	#10	5 mm
1-1/4"	32 mm	10	**403902**	0.06	1/2"	13 mm	#10	5 mm
1-1/2"	38 mm	10	**404152**	0.06	1/2"	13 mm	#10	5 mm
1-3/4"	44 mm	10	**404172**	0.06	1/2"	13 mm	#10	5 mm
2"	51 mm	10	**404202**	0.06	1/2"	13 mm	#10	5 mm
2-1/2"	64 mm	10	**404252**	0.06	1/2"	13 mm	#10	5 mm
3"	76 mm	10	**404302**	0.06	1/2"	13 mm	#10	5 mm
3-1/2"	89 mm	10	**404352**	0.06	1/2"	13 mm	#10	5 mm

#8 = 0.167" / #10 = 0.203"

TECH TIP

Wire Bundling per ABYC Guidelines

ABYC states: Conductors shall be supported throughout their length or shall be secured at least every 18 inches (455mm) by one of the following methods:

- By means of non-metallic clamps sized to hold the conductors firmly in place. The material shall be resistant to oil, gasoline, and water and shall not break or crack within a temperature range of 30°F to 250°F (-34°C to 121°C)
- By means of metal clamps lined with an insulating material resistant to the effects of oil, gasoline, and water

All of Ancor's cable clamps are resistant to oil, gasoline, and water and are rated for use within the ABYC specified range. Stainless steel cushion clamps are designed to perform within a wider temperature range and provide additional shock, vibration and noise protection compared to nylon cable clamps.

Nylon Cable Clamps

- Made from nylon for maximum strength
- Resistant to solvents, oils, acids and moisture
- Absorbs shock and vibration; reduces unwanted noise

Nominal I.D.		Color	Qty/ Pkg	Part #
1/8"	3 mm	Natural	25	**401122**
3/16"	5 mm	Natural	25	**401182**
1/4"	6 mm	Natural	6	**401251**
			25	**401252**
			100	**401255**
		UV Black	25	**402252**
5/16"	7 mm	Natural	25	**401312**
		UV Black	25	**402312**
3/8"	9 mm	Natural	25	**401372**
			100	**401375**
		UV Black	25	**402372**
7/16"	11 mm	Natural	25	**401432**
1/2"	12 mm	Natural	25	**401502**
		UV Black	25	**402502**

Nominal I.D.		Color	Qty/ Pkg	Part #
5/8"	15 mm	Natural	25	**401622**
		UV Black	25	**402622**
3/4"	19 mm	Natural	25	**401752**
		UV Black	25	**402752**
1"	25 mm	Natural	25	**401892**
		UV Black	25	**402892**
1-1/4"	32 mm	Natural	25	**401912**
1-1/2"	38 mm	Natural	25	**401932**

Kit

- (9) of each 1/8", 3/16", 1/4", 5/16", 3/8" & 1/2"

Nominal I.D.		Color	Qty/ Pkg	Part #
1/8"–1/2"	3–12 mm	Natural	54	**400000**

Wire Seals

- Made of Nylon 6/6 flame resistant, self extinguishing Buna-N form seal
- All seals exceed NEMA Type 4X and Type 6 specs
- Overlapping clamping spines allow for superior pull-out protection and resistance
- Strain relief fittings are resistant to salt water, acids, alkalis, alcohol, oils and are non-corrosive for use in the marine environment
- Good underwater to 300 feet / 91.4 m (150 PSIG) provided there is a liquid tight seal between body and housing
- Provide low cost cable entries into panels and junction boxes
- UL 94 v-0

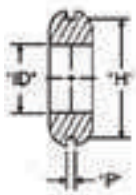
Sell Sheet

Description	For Use with	Thread Size	Cable Range		Clearance Hole	Body Length	Thread Length	Qty/ Pkg	Part #
Round Cable	18–10 AWG	3/8" NPT	.08"–.24"	2–6 mm	.68"	.87"	.59"	1	**764998**
Round Cable	10-2 AWG	1/2" NPT	.20"-.47"	5–12 mm	.83"	1.06"	.51"	1	**765000**
Round or Flat Cable	4–1, 14/3-12/3 & 12/2–10/2 AWG	1/2" NPT	.24"-.55"	6–14 mm	.83"	1.10"	.51"	1	**765002**
Round Cable	1–3/0 AWG	3/4" NPT	.51"-.71"	13–18 mm	1.05"	1.22"	.51"	1	**765004**
Round Cable	4/0 AWG	1" NPT	.71"-.98"	18–25 mm	1.35"	1.53"	.75"	1	**765006**
Flat Cable	14/3-12/3 & 10/2	1/2" NPT	.31"-.56"	8–14 mm	.83"	1.10"	.51"	1	**765010**
Flat Cable	12/3	3/4" NPT	.31"-.56"	8–14 mm	1.05"	1.22"	.51"	1	**765012**

Grommets

- Provide instant abrasion resistance to wires passing through panel holes
- Flexible black vinyl makes installation simple

Hole Size		Inside Diameter		Panel Width		Qty/ Pkg	Part #
3/8"	10 mm	1/4"	6 mm	3/32"	2 mm	5	**760375**
1/2"	13 mm	3/8"	10 mm	3/32"	2 mm	5	**760500**
1/4–3/4" Assortment Combo Pack (10 each of 1/4", 5/16", and 3/8", 5 each of 1/2", 11/16", and 3/4")						45	**750000**



Spiral Wrap & Split Loom

- Permits flexible routing of cable harnesses
- Provides abrasion protection for wire and cable
- Allows lead outs at any point for greatest ease of installation
- Split loom temperature range is -40°F to 275°F / -40°C to 135°C

TECH TIP

Wire Bundling per ABYC Guidelines

ABYC states: "Conductors that may be exposed to physical damage shall be protected by loom, conduit, tape, raceways, or other equivalent protection. When AC and DC conductors are run together, the AC conductors shall be sheathed, bundled, or otherwise kept separate from the DC conductors. Loom used to cover conductors shall be self-extinguishing. The base product (or resin) shall be classified as V-2 or better, in accordance with UL 94, Tests For Flammability Of Plastic Materials."

Marine Grade® Spiral Wrap

Diameter		Ft/Pkg	Part #	Bundle Range Min	Bundle Range Max
1/4"	6 mm	10'	**452251**	3/16" 4.8 mm	2" 5 cm
3/8"	10 mm	10'	**452381**	5/16" 8 mm	3" 7.6 cm
		100'	**452385**		
1/2"	13 mm	10'	**452501**	25/64" 10 mm	4" 10.2 cm
		100'	**452505**		
3/4"	19 mm	10'	**452751**	3/4" 19 mm	5" 12.7 cm
		100'	**452755**		
1"	25 mm	5'	**452900**	1" 25 mm	7" 17.8 cm
		100'	**452905**		

Self-extinguishing Split Loom

Diameter		Ft/Pkg	Part #
3/8"	10 mm	10'	**453382**
		100'	**453386**
1/2"	13 mm	10'	**453502**
		100'	**453506**
3/4"	19 mm	10'	**453752**
		100'	**453756**
1"	25 mm	5'	**453901**
		100'	**453906**

Wire Management Kits

160 Piece Heat Shrink Connectors and Terminals Kit

Butt Connectors

- (10) 22-18 AWG, (20) 16-14 AWG, (10) 12-10 AWG

Ring Terminals

- (15) 22-18 AWG #10, (15) 16-14 AWG #8, (15) 16-14 AWG #10, (15) 16-14 AWG 1/4", (10) 12-10 AWG #10, (10) 12-10 AWG 1/4", (10) 12-10 AWG 3/8"

Disconnects

- (20) 16-14 AWG female, (10) 16-14 AWG male

Part # 320101

440 Piece Nylon Connectors and Terminals Kit

Butt Connectors

- (40) 22-18 AWG, (75) 16-14 AWG, (40) 12-10 AWG

Ring Terminals

- (25) 22-18 AWG #8, (25) 16-14 AWG #8, (50) 16-14 AWG #10, (25) 12-10 AWG #8, (25) 12-10 AWG #10

Disconnects

- (50) 16-14 AWG fully insulated female, (30) 16-14 AWG fully insulated male, (25) 16-14 AWG female, (30) 16-14 AWG male

Part # 250101

100 Piece Tinned Copper Lug Kit

- (10) 8 AWG, 5/16", (10) 8 AWG, 3/8"
- (10) 6 AWG, 5/16", (10) 6 AWG, 3/8"
- (10) 4 AWG, 5/16", (10) 4 AWG, 3/8"
- (10) 2 AWG, 5/16", (10) 2 AWG, 3/8"
- (5) 1/0 AWG, 5/16", (5) 1/0 AWG, 3/8"
- (5) 2/0 AWG, 5/16", (5) 2/0 AWG, 3/8"

Part # 255101

47 Piece Adhesive Lined Heat Shrink Tubing Kit

Black

- (10) 3/16" x 6"
- (10) 1/4" x 6"
- (10) 3/8" x 6"
- (5) 1/2" x 6"
- (3) 3/4" x 3"
- (3) 1" x 3"

Red

- (3) 3/4" x 3"
- (3) 1" x 3"

Part # 330101

Promotional Storage Rack

Part # P33407

Individual Empty Trays

Part #	P33406	6 compartment
Part #	P33412	12 compartment

Premium Connector Kit

- Nylon insulated with insulation grip
- Double crimp, funnel entry
- Kit includes assorted butt connectors, ring terminals, spade terminals, and disconnects (18–10 AWG)

Part # 220003 120 pcs

TOOLS & TESTERS

Cut/Strip/Crimp Tools

48

Ancor offers a broad range of wire management and termination tools for all of your wiring projects.

Crimpers

50

Ancor offers other speciality tools to provide users with everything needed for any project.

TOOLS & TESTERS

Pliers and Screwdrivers

53

Insulted pliers and screw drivers for added safety when working on an electrical project.

Heat Tools

52

Ancor offers a range of heat tools, including the new dual setting heat gun, that are perfect for multiple projects from heat shrink tubing to paint stripping.

Digital Multimeters

54

Multimeters to suit any electrical testing requirements.

Every installation requires quality tools and testing devices to ensure quick projects and larger refits can be accomplished accurately and to ABYC standards.

Wire & Cable Cutter

- Steel forged blades easily cut 22 AWG to 2/0 AWG copper wire and cable
- Contoured cushion grips for comfort and ease of use
- Length: 9.25" (23.5 cm)

Part # 703005

Heavy-duty Wire & Cable Cutter

- Steel forged blades easily cut up to 350MCM (2 sizes larger than 4/0 AWG) copper wire and cable
- Strong fiberglass handles with thermoplastic rubber grips for comfort and slip resistance
- Length: 17.5" (44.4 cm)

Part # 703006

Heavy-duty Wire Scissors

- Corrosion resistant stainless steel blades
- Ergonomic overmolded handles for comfort and safety
- Cut wire up to 6 AWG (13 mm^2)
- Includes safety holster with belt clip
- Length: 5.9" (15 cm)

Part # 703007

Cut/Strip Tool

- Precision ground cutter and stripping stations
- Strips wire from 24 AWG to 10 AWG (0.5 to 2.6 mm^2)
- Length: 6.6" (16.7 cm)

Part # 702008

Cut/Strip/Crimp Tool

- Precision ground cutters and stripping station
- Capacity: Crimps 22 AWG to 10 AWG / 0.3 to 5 mm^2 insulated and non-insulated terminals, connectors and spark plug terminals in special cavities
- Strips insulation from 22 AWG to 10 AWG / 0.3 to 5 mm^2 solid and stranded wires
- Cuts (4) 40/2 mm, (6) 32/4 mm, (8) 32/4.8 mm, (10) 32/6.4 mm and 10–24/6.4 mm bolts
- Length: 8.6" (20.3 cm)

Part # 702007

Premium Battery Cable Stripper

- Punctures the cable's insulation, breaks the insulation free and pulls the cut insulation from the wire in one efficient motion
- Strips 8 AWG through 400 MCM cable
- Heavy-duty construction
- Length: 5.3" (13.0 cm)

Part # 703075

Compact Automatic Wire Stripper

- Compact design perfect for use in tight spaces
- Strips without damage or marking of conductors
- Strips and cuts wire from 20 AWG to 10 AWG (0.05-5.0mm^2)
- Length: 6.3" (16 cm)

Part # 702031

Automatic Wire Stripper

- Automatically adjusts to different wire sizes
- Strips without damage or marking of conductors, slim jaw for easy access, steel side cutter
- Strips and cuts wire from 24 AWG to 12 AWG / 0.02-5.0mm^2
- Wire stop adjusts length of strip from 3/8" to 1/2" (9.5 to 12.7 mm)
- Length: 6.7" (17.0 cm)

Part # 702030

Universal Wire Stripper

- Two different cutting methods to cut either small guage wire or large gauge battery cable
- Wire stripping from 20 AWG to 10 AWG (0.05-5.0mm^2)
- Battery cable stripping from 8 AWG to 4/0 AWG (8 to 107mm^2)
- Length: 5.7" (14.5 cm)

Part # 702032

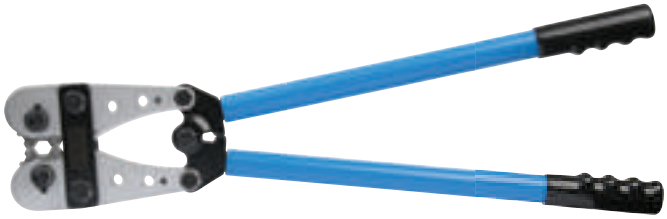
Wire Strip Crimp Tool

- Strips 26 AWG to 10 AWG stranded wire
- Automatic jaw-load wire stripper self-adjusts to strip wire
- Crimps 22 AWG to 10 AWG insulated terminals
- Length: 8.1" (20.6 cm)

Part # 702033

LEARN MORE
Universal Wire Stripper Video

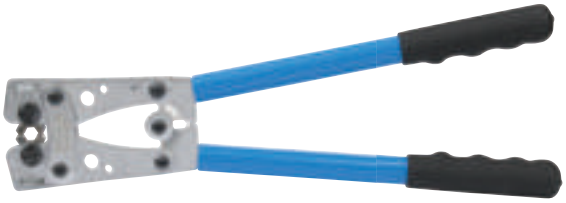
Visit Ancor Products on YouTube.com



8 to 4/0 AWG Heavy-duty Hex Lug & Terminal Crimper

- Uses revolving dies to create a hex style crimp for 8 AWG to 4/0 AWG
- Length: 24.4" (62 cm)

Part # 703040



8 to 1/0 AWG Hex Lug & Terminal Crimper

- Uses revolving dies to create a hex style crimp for 8 AWG to 1/0 AWG
- For portable use
- Length: 15.4" (39 cm)

Part # 703050

22 to 8 AWG Single Crimp Ratcheting Crimper

- Ideal for crimping heat shrink terminals
- Can also be used with vinyl and nylon insulated terminals and connectors
- Must be fully closed before tool allows itself to open ensuring a proper crimp
- Includes lever to release jaws mid-cycle in the event of an incorrectly placed terminal
- Ratcheting operation with ergonomic handle to prevent hand fatigue
- 4 color-coded cavities for different wire sizes
- Length: 10.9" (27.6 cm)

Part # 703010

26 to 10 AWG Double Crimp Ratcheting Crimper

- Ideal for crimping nylon and vinyl terminals
- Double crimp mechanism crimps stranding and insulation portion of Ancor connectors in one motion for superior strain relief of vinyl and nylon terminals
- Must be fully closed before tool allows itself to open ensuring a proper crimp
- Includes lever to release jaws mid-cycle in the event of an incorrectly placed terminal
- Ratcheting operation with ergonomic handle to prevent hand fatigue
- 4 color-coded cavities for different wire sizes
- Length: 10.9" (27.6 cm)

Part # 703030

LEARN MORE
Ratcheting Crimp Tools Video

Visit Ancor Products on YouTube.com

TECH TIP

Tool Selection per ABYC Guidelines

ABYC recommends that the tool used to crimp connectors be manufactured by the same brand as the connectors themselves. The reason behind this is that the barrel and insulation thickness varies by connector manufacturer. Therefore having a crimping tool designed for specific connectors ensures a secure and safe crimp.

Angled 22 to 8 AWG Single Crimp Ratcheting Crimper

- For crimping heat shrink terminals
- Angled head design is ideal for use in tight spaces
- Self-releasing mechanism ensures a proper crimp
- Ratcheting operation and ergonomic handels prevent fatigue
- Length: 9.5" (24 cm)

Part # 703015

Angled 26 to 10 AWG Double Crimp Ratcheting Crimper

- For crimping nylon and vinyl terminals
- Angled head design is ideal for use in tight spaces
- Self-releasing mechanism ensures a proper crimp
- Ratcheting operation and ergonomic handels prevent fatigue
- Length: 9.5" (24 cm)

Part # 703035

LEARN MORE
Single vs Double Crimp Video

Visit Ancor Products on YouTube.com

Flag Terminal Die Sets

- Works with all Ancor ratcheting crimpers; 703010, 703015, 703030, 703035

Part # 703041 22–18 & 16–14 AWG
Part # 703042 12–10 AWG

703041

703042

Mini Fish Tape

- Durable, high-impact housing
- Low-memory 15 ft tape does not curl during extension—perfect for non-conduit situations
- Compact, rugged design can be stored in tool belt or box
- Feed under carpet, behind walls or through panels
- Perfect for short runs, installing speakers, instrument clusters or other common electrical uses

Part # 703112

Mini Pocket Butane Torch

- Piezo electronic ignition system
- Flame temperature up to 2500°F / 1300°C
- Windproof and waterproof flame
- Pocket size allows the unit to fit easily into any tool kit
- Powered by disposable cigarette lighter or refillable butane fuel cell (included)

Part # 703024

Pro Torch

- Up to 90 minutes of time on each filling
- Flame temperature up to 2500°F / 1300°C
- Adjustable flame control
- Compact size with ergonomic grip
- Includes removable solder tip and removable base for added flexibility
- Refillable

Part # 703060

120V Two Setting Heat Gun

- Two settings—Low: 572°F / 300°C, 10 CFM / 17 CMH and High: 1,000°F / 538°C, 17 CFM / 29 CMH (cubic meters per hour)
- 6.5' cord, 120V AC
- Great for heat shrink tubing and connectors, stripping paint and more
- Lightweight, under two pounds
- Stands on end for hands free operation
- Includes three nozzles and carrying case

Part # 703023

Three nozzles for a variety of applications

Carrying case included

Stands on end for hands free operation

Operators Manual

Micro Therm Heat Gun

- Features Piezo electronic ignition system, providing flame less heat, safe to use around chemicals or by wire bundles when using deflector
- Powered by refillable cell
- Flame temperature up to 1300°F / 650°C
- Ideal for work in the bilge where open flame should not be used
- Refillable

Part # 702027

7 Pc Insulated Screwdriver Set

- Kit includes:
  - (1) 1/8" x 3" Slotted
  - (1) 7/32" x 5" Slotted
  - (1) 1/4" x 6" Slotted
  - (1) Test probe
  - (1) #0 x 3" Phillips
  - (1) #1 x 3" Phillips
  - (1) #2 x 4" Phillips
- Insulated to 1000V
- Includes convenient storage/carrying case

Part # 711000

6" Long Nose Pliers

- Insulated to 1000V
- Ideal for use in tight spaces
- Chrome Vanadium
- Length: 6" (15.2 cm)

Part # 710010

7" Combination Pliers

- Insulated to 1000V
- Combines both gripping jaws and wire cutter
- Chrome Vanadium
- Length: 7" (17.8 cm)

Part # 710020

6" Bent Nose Pliers

- Insulated to 1000V
- Ideal for use in tight spaces
- Chrome Vanadium
- Length: 6" (15.2 cm)

Part # 710030

6" Diagonal Cutting Pliers

- Insulated to 1000V
- Ergonomic cutter for wire or cable ties
- Chrome Vanadium
- Length: 6" (15.2 cm)

Part # 710040

8 Function Digital Multimeter

- Auto ranging capability allows the meter to automatically determine the resolution based on the application
- Clear LCD display
- Lightweight, ergonomic design
- Comfortable protective cover, with test lead hanging groove
- Loud buzzer sound
- Batteries: two AAA Batteries (not included)
- Continuity ✓, Diode Test ✓

703072

5 YEAR WARRANTY CAT II 250V

Specifications	Range	Accuracy
DC Voltage (V)	200.0mV, 2000mV/2.000V, 20.00V, 200.0V, 250V	200.0mV, 20.00V, 200.0V, 250V (0.7% + 3) 2000mV/2.000V (0.5% + 2)
AC Voltage (V)	200.0mV, 2000mV/2.000V, 20.00V, 200.0V, 250V	200.0mV, 20.00V (1.0% + 2) 2000mV/2.000V (0.7% + 3) 200.0V, 250V (1.2% + 3)
DC Current (A)	200.0µA, 2000µA, 20.00mA, 200.0mA, 2.000A, 10.00A	200.0µA, 2000µA, 20.00mA, 200.0mA (1.0% + 2) 2.000A, 10.00A (1.2% + 5)
AC Current (A)	200.0µA, 2000µA, 20.00mA, 200.0mA, 2.000A, 10.00A	200.0µA, 2000µA, 20.00mA, 200.0mA (1.2% + 3) 2.000A, 10.00A (1.5% + 5)
Resistance (Ω)	200.0 2000/2.000k, 20.00k, 200.0k, 20.00M, 200.0M	200 (1.0% + 2) 2000/2.000k, 20.00k, 200.0k (0.8% + 2) 20.00M (1.2% + 3) 200.0M (5.0% + 10)
Capacitance (F)	2.000nF, 20.00nF, 200.0nF, 2.000µF, 20.00µF, 200.0µF, 2.000mF	2.000nF (REL Mode: 5.0% + 5) 20.00nF, 200.0nF, 2.000µF, 20.00µF, 200.0µF (4.0% + 8), 2.000mF (10%)
Overload Protection	250V rms	
CAT Rating	CAT II 250V	

True RMS 12 Function Digital Multimeter

- Auto ranging capability allows the meter to automatically determine the resolution based on the application
- Clear LCD display
- Comfortable protective cover, with test lead hanging groove
- High voltage warning
- Auto power off functionality to save battery life
- Batteries: two AAA Batteries (not included)
- Continuity ✓, Diode Test ✓, NCV ✓

703073

5 YEAR WARRANTY CAT III 600V

Specifications	Range	Accuracy
DC Voltage (V)	600.0mV, 6000mV/6.000V, 60.00V, 600.0V	600.0mV, 60.00V, 600.0V (0.7% + 3) 6000mV/6.000V (0.5% + 2)
AC Voltage (V)	600.0mV, 6000mV/6.000V, 60.00V, 600.0V	600.0mV, 60.00V (1.0% + 2) 6000mV/6.000V (0.7% + 3) 600.0V (1.2% + 3)
DC Current (A)	600.0µA, 6000µA, 60.00mA, 600.0mA, 6.000A, 10.00A	600.0µA, 6000µA, 60.00mA, 600.0mA (1.0% + 3) 6.000A, 10.00A (1.2% + 5)
AC Current (A)	600.0µA, 6000µA, 60.00mA, 600.0mA, 6.000A, 10.00A	600µA, 6000µA, 60.00mA, 600.0mA (1.2% + 3) 6.000A, 10.00A (1.5% + 5)
Resistance (Ω)	600.0, 6000/6.000k, 60.00k, 600.0k, 60.00M	600 (1.0% + 2) 6000/6.000k, 60.00k, 600.0k (0.8% + 2) 60.00M (2.0% + 5)
Capacitance (F)	9.999nF, 99.99nF, 999.9nF, 9.999µF, 99.99µF, 999.9µF, 9.999mF	9.999nF (REL Mode: 4.0% +10) 99.99nF, 999.9nF, 9.999µF, 99.99µF, 999.9µF (4.0% + 5), 9.999mF (10%)
Frequency (Hz)	10.00Hz–1.000MHz	10.00Hz–1.000MHz (0.1% + 5)
Temperature (°F)	-40°F to 1832°F	-40 to 104°F (5%) 104°F to 932°F (1.5% + 5) 932°F to 1832°F (2.5% + 5)
Temperature (°C)	-40°C to 1000°C	-40 to 40°C (4°C) 40°C to 500°C (1.0% + 4) 500°C to 1000°C (2.0% + 4)
Overload Protection	600V rms	
CAT Rating	CAT III 600V	

True RMS 12 Function Digital Snap-Around Meter

- Easy to read backlit OLED screen
- Non-contact AC voltage testing
- Provides accurate readings for both pure sine wave and modified sine wave electrical circuits
- Zeroing function
- Flashlight for use in dark compartments
- Includes convenient carrying case
- Batteries: three AAA Batteries (not included)
- Continuity ✓, Diode Test ✓, NCV ✓

Specifications	Range	Accuracy
DC Voltage (V)	600.0mV, 6000mV, 6.000V, 60.00V, 600.0V, 1000V	600.0mV (1.0% + 8) 6000mV/6.000V (0.8% + 1) 60V, 600V (0.8% + 3) 1000V (1.0% + 3)
AC Voltage (V)	6.000V, 60.00V, 600.0V 750V	6.000V, 60.00V, 600.0V (1.2% + 5) 750V (1.5% + 5)
DC Current (A)	60.00A, 600.0A	60.00A, 600.0A (2.5% + 5)
AC Current (A)	60.00A, 600.0A	60.00A, 600.0A (2.5% + 5)
Resistance (Ω)	600.0, 6000/6.000k, 60.00k, 600.0k, 6.000M, 60.00M	600.0, 6.000M (1.2% + 2) 6000/6.000k, 60.00k, 600.0k (1.0% + 2) 60.00M (1.5% + 5)
Capacitance (F)	60.00nF, 600.0nF, 6.000µF, 60.00µF, 600.0µF, 6.000mF	60.00nF (4.0% + 25) 600.0nF, 6.000µF, 60.00µF, 600.0µF (4.0% + 5) 6.000mF (10%)
Frequency (Hz)	10.00Hz–1.000MHz	10.00Hz–1.000MHz (0.1% + 4)
Temperature (°F)	-40°F to 1832°F	-40°F to 104°F (3.0% + 10) 104°F to 752°F (3.0% + 10) 752°F to 1832°F (2.0% + 10)
Temperature (°C)	-40°C to 1000°C	-40°C to 40°C (3.0% + 5) 40°C to 400°C (3.0% + 5) 400°C to 1000°C (2.0% + 5)
Overload Protection	1000V DC, 750V AC	
CAT Rating	CAT II 1000V, CAT III 600V	

703079

5 YEAR WARRANTY

CAT II 1000V

CAT III 600V

TECH TIP

Measuring AC Current

Typically, a standard multimeter is accurate and reliable when measuring DC current. However, the same cannot be said for AC current. This is because AC current travels in the shape of a true or modified sine wave. When current is non-linear, you'll need a meter that can measure the current with the highest level of accuracy. This is achievable through Root Mean Square (RMS). True RMS is an advanced calculation used by digital multimeters which provides accurate values of AC levels. It doesn't matter if the current is distorted. A true RMS multimeter adjusts itself accordingly to deliver accurate results.

DISPLAYS

Heat Shrink Terminal, Connector & Tubing Displays

58

Ancor's most popular consumer packages of adhesive lined heat shrink tubing, heat shrink terminals, and butt connectors.

DISPLAYS

Marine Grade® Tinned Wire Displays

59

This compact counter top display consists of 60 spools of the 12 most common wire sizes and colors. All wire is Premium UL 1426 Tinned Copper Primary Wire.

Tinned Copper Lug Displays

58

24 sizes of heavy-duty tinned copper lugs, 8 AWG to 4/0. Includes combo packs, battery terminals, and heavy-duty lug crimper.

NMEA 2000 Display

60

Simple drop in NMEA 2000 store set. Kit includes everything needed to build a new NMEA network or expand on an existing network.

Ancor product displays can quickly and effectively increase sales by providing an assortment of products to customers in an easy to shop layout

Heat Shrink Terminal, Connector & Tubing Display

Part # DR2230

Part #	Description	Qty/ Pkg	# of Pkgs
309003	22-18 AWG Heat Shrink Butt	3	3
309103	16–14 AWG Heat Shrink Butt	3	3
309125	16–14 AWG Heat Shrink Butt	25	3
309203	12–10 AWG Heat Shrink Butt	3	3
300000	22–10 AWG Heat Shrink Butt	10	3
310203	22–18 #8 Heat Shrink Ring	3	3
310303	22–18 #10 Heat Shrink Ring	3	3
320003	24–22/24–18 Step-Down, Heat Shrink Butt	3	3
320103	22–18/22–14 Step-Down, Heat Shrink Butt	3	3
320203	16–14/16–10 Step-Down, Heat Shrink Butt	3	3
320303	12–10/12–8 Step-Down, Heat Shrink Butt	3	3
311203	16–14 #8 Heat Shrink Ring	3	3
311303	16–14 #10 Heat Shrink Ring	3	3
311503	16–14 5/16" Heat Shrink Ring	3	3
311603	16–14 3/8" Heat Shrink Ring	3	3
SPK2218	22–18 AWG Heat Shrink, Speaker Connector Kit	6	3
SPK1614	16–14 AWG Heat Shrink, Speaker Connector Kit	6	3
312203	12–10 #8 Heat Shrink Ring	3	3
312303	12–10 #10 Heat Shrink Ring	3	3
312503	12–10 5/16" Heat Shrink Ring	3	3
312603	12–10 3/8" Heat Shrink Ring	3	3
304503	3/8" x 3"Heat Shrink Tubing Assortment	5	3
301103	1/8" x 3" Heat Shrink Tubing, Black	3	3
302103	3/16" x 3" Heat Shrink Tubing, Black	3	3
303103	1/4" x 3" Heat Shrink Tubing, Black	3	3
304103	3/8" x 3" Heat Shrink Tubing, Black	3	3
305103	1/2" x 3" Heat Shrink Tubing, Black	3	3
306103	3/4" x 3" Heat Shrink Tubing, Black	3	3
301503	3/16"-3/4" x 3" Heat Shrink Tubing Asst, Black	8	3

Tinned Copper Lug Display

Part # DR2425

Part #	Description	Qty/ Pkg	# of Pkgs
252233	#8 #10 Tinned Lug	2	2
252234	#8 1/4" Tinned Lug	2	2
252235	#8 5/16" Tinned Lug	2	2
252236	#8 3/8" Tinned Lug	2	2
252243	#6 #10 Tinned Lug	2	2
252244	#6 1/4" Tinned Lug	2	2
252245	#6 5/16" Tinned Lug	2	2
252246	#6 3/8" Tinned Lug	2	2
252254	#4 1/4" Tinned Lug	2	2
252255	#4 5/16" Tinned Lug	2	2
252256	#4 3/8" Tinned Lug	2	2
252265	#2 5/16" Tinned Lug	2	2
252266	#2 3/8" Tinned Lug	2	2
252275	#1 5/16" Tinned Lug	2	2
252276	#1 3/8" Tinned Lug	2	2
252285	#1/0 5/16" Tinned Lug	2	2
252286	#1/0 3/8" Tinned Lug	2	2
252295	#2/0 5/16" Tinned Lug	2	2
252296	#2/0 3/8" Tinned Lug	2	2
252726	#4/0 3/8" Tinned Lug	1/1	2
252241	#6 5/16" & 3/8" Combo Pack	1/1	2
252251	#4 5/16" & 3/8" Combo Pack	1/1	2
252261	#2 5/16" & 3/8" Combo Pack	1/1	2
260325	Battery Terminal, Wing Nut, 5/16" & 3/8" Combo	1/1	2

All displays come with matching header, hooks, planogram and re-order tags.

Marine Grade® Tinned Wire Display

Part # DR2218

Part #	Description	# of Pkgs
180003	35' 18 AWG (0.8mm²), Black	2
180803	35' 18 AWG (0.8mm²), Red	2
182003	25' 16 AWG (1mm²), Black	2
182803	25' 16 AWG (1mm²), Red	2
182303	25' 16 AWG (1mm²), Green	2
182903	25' 16 AWG (1mm²), White	2
184003	18' 14 AWG (2mm²), Black	2
184803	18' 14 AWG (2mm²), Red	2
184303	18' 14 AWG (2mm²), Green	2
184903	18' 14 AWG (2mm²), White	2
186003	12' 12 AWG (3mm²), Black	2
186803	12' 12 AWG (3mm²), Red	2

All displays come with matching header, hooks, planogram and re-order tags.

NMEA 2000 Planogram Assortment

Part # 270400

Simple drop in NMEA 2000 store set. Kit includes everything needed to build a new NMEA network or expand on an existing network.

Part #	Description	# of Pkgs
270000	NMEA 2000 Power Cable With Tee - 1m	1
270010	NMEA 2000 Backbone Cable - 10m	1
270101	NMEA 2000 Single Tee Connector	1
270105	NMEA 2000 Female Terminator	1
270106	NMEA 2000 Male Terminator	1
270109	NMEA 2000 Field Servicable Connector, Female	1
270110	NMEA 2000 Field Servicable Connector, Male	1
270201	NMEA 2000 Single Device Starter Kit	1
270301	NMEA 2000 Drop Cable - 1 Meter	1
270305	NMEA 2000 Drop Cable - 5 Meter	1

All displays come with matching header and planogram.

Countertop Display Replacement Headers

Part # ANCSHRINK

Part # ANCTERM

Part # ANCWIRE

Part # ANCLUG

Part # ANCNMEA

Wire & Cable Technical Data

Using the wrong type of wire can cost you more in the long run. Insist on Marine Grade® Boat Cable by Ancor. It is UL approved for the corrosive marine environment and charter boat service. Marine Grade Boat Cable is specially designed to exceed all test standards for cold bend, moisture and oil resistance, heat shock and flammability. This ensures the safest, easiest to install, longest lasting and ultimately the least expensive electrical system you can buy. Only Ancor offers a complete line of Marine Grade Boat Cable for every need.

"Can I use 'regular wire' for my boat?" The answer to this common question is a qualified "yes." However, caution is advised and the installer must understand the circumstances in which SAE (Society of Automotive Engineering) J378, J1127 or J1128 wire can, and can not be used. Keep in mind that these wires are designed for "surface vehicles," not for the special requirements of the marine industry. Even if tinned copper, they should not be run in bilge spaces or other areas subject to moisture from spray or dripping. They should not be run in engines spaces, unless marked "oil resistant" and "75°C". They should not be used in applications where subjected to vibration or frequent flexing and must never be used for 110 volt applications. For safety, use only wire which is marked with size, type and temperature rating.

Most importantly, SAE wire is up to 12% smaller than AWG Boat Cable which means that, in many applications, larger gauge wire must be used to stay within the voltage drop limits recommended by experts. The wire charts found in "Chapman's Piloting" and other publications are all for "AWG" wire like Ancor, not "SAE" type wire.

ABYC Recommended Usages

Color	Item	Use
Red	DC Positive Conductor	Positive Mains
Black or Yellow	DC Negative Conductor	Return, Negative Mains
Green or Green w/ Yellow Stripe	DC Grounding Conductor	Bonding System Bonding Wires (if insulated)
Light Blue	Oil Pressure	Oil Pressure Sender to Gauge
Dark Blue	Cabin & Instrument Lights	Fuse or Switch to Lights
Brown	Generator Armature	Generator Armature to Regulator
	Alternator Charge Light	Generator Terminal/Alternator Auxiliary Terminal to Light to Regulator
	Pumps	Fuse or Switch to Pumps
Grey	Navigation Lights	Fuse or Switch to Lights
	Tachometer	Tachometer Sender to Gauge
Orange	Accessory Feed	Ammeter to Alternator or Generator Output and Accessory Fuses or Switches
	Common Feed	Distribution Panel to Accessory Switch
Pink	Fuel Gauge	Fuel Gauge Sender to Gauge
Purple	Ignition	Ignition Switch to Coil & Electrical Instruments
	Instrument Feed	Distribution Panel to Electric Instruments
Brown w/ Yellow Stripe	Bilge Blowers	Fuse or Switch to Blower
Yellow w/ Red Stripe	Starting Circuit	Starting Switch to Solenoid
Tan	Water Temperature	Water Temperature Sender to Gauge
Green/Stripe (G/x) (except G/Y)	Tilt Down and/or Trim In	Tilt and/or Trim Circuits
Blue/Stripe (Bl/x)	Tilt Up and/or Trim Out	Tilt and/or Trim Circuits

Conductors Sized (AWG) for 3% Voltage Drop

Use 3% voltage drop for any "critical application" affecting the safety of the vessel or its passengers: bilge pumps, navigation lights, electronics, etc....

Length (feet): Determined by measuring the length of the conductor from the positive (+) power source connection to the electrical device and back to the negative (-) power source connection. Note that the power source connection may be either the battery, panelboard or switchboard.

Current (amps): Determined by adding the total amps on a circuit.

Conductor sizes not covered in the following tables may be calculated by using the following formula:

$$CM = \frac{K \times I \times L}{E}$$

After calculating the Circular Mil Area (CM), use the temperature rating chart to determine the proper conductor size (National Fire Protection Agency and Coast Guard require that the next larger conductor be used when the calculated CM area falls between the two conductor sizes).

CM = Circular Mil Area of Conductors

K = 10.75 (Constant representing the mil-foot resistance of copper)

I = Current - amps

L = Length - feet

E = Voltage drop at load (drop x working voltage)

TECH TIP

ABYC Recommends...

"Conductors used for panelboard or switchboard main feeders, bilge blowers, electronic equipment, navigation lights, and other circuits where voltage drop must be kept to a minimum, shall be sized for a voltage drop not to exceed three percent. " *ABYC 11.16.1.2.7.*

3% Voltage Drop at 12 Volts

		Current (Amps)												
Length		5	10	15	20	25	30	40	50	60	70	80	90	100
10'	3 m	18	14	12	10	10	8	6	6	6	6	6	4	4
15'	5 m	16	12	10	10	8	8	6	6	4	4	4	2	2
20'	6 m	14	10	10	8	6	6	6	4	4	2	2	2	2
25'	8 m	12	10	8	6	6	6	4	4	2	2	2	1	1
30'	9 m	12	10	8	6	4	4	4	2	2	2	2	1	1
40'	12 m	10	8	6	6	4	4	2	2	1	1/0	1/0	2/0	2/0
50'	15 m	10	6	6	4	4	2	2	1	1/0	2/0	3/0	4/0	4/0
60'	18 m	10	6	6	4	2	2	1	1/0	2/0	3/0	3/0	4/0	4/0
70'	21 m	8	6	4	2	2	1	1/0	2/0	3/0	3/0	4/0	4/0	
80'	24 m	8	6	4	2	2	1	1/0	2/0	3/0	4/0	4/0		
90'	27 m	8	4	2	2	1	1/0	2/0	3/0	4/0	4/0			
100'	30 m	6	4	2	2	1	1/0	2/0	3/0	4/0				
110'	33 m	6	4	2	2	1	1/0	2/0	3/0	4/0				
120'	36 m	6	4	2	1	1/0	2/0	3/0	4/0					
130'	40 m	6	2	2	1	1/0	2/0	3/0	4/0					
140'	43 m	6	2	2	1/0	2/0	3/0	4/0						
150'	46 m	6	2	1	1/0	2/0	3/0	4/0						
160'	49 m	6	2	1	1/0	2/0	3/0	4/0						
170'	52 m	6	2	1	2/0	3/0	3/0	4/0						

3% Voltage Drop at 24 Volts

		Current (Amps)												
Length		5	10	15	20	25	30	40	50	60	70	80	90	100
10'	3 m	18	18	16	14	12	12	10	10	10	8	8	8	6
15'	5 m	18	16	14	12	12	10	10	8	8	6	6	6	6
20'	6 m	18	14	12	10	10	10	8	6	6	6	6	4	4
25'	8 m	16	12	12	10	10	8	6	6	6	4	4	4	4
30'	9 m	16	12	10	10	8	8	6	6	4	4	4	2	2
40'	12 m	14	10	10	8	6	6	6	4	4	2	2	2	2
50'	15 m	12	10	8	6	6	6	4	4	2	2	2	1	1
60'	18 m	12	10	8	6	6	4	4	2	2	1	1	1/0	1/0
70'	21 m	12	8	6	6	4	4	2	2	1	1	1/0	1/0	2/0
80'	24 m	10	8	6	6	4	4	2	2	1	1/0	1/0	2/0	2/0
90'	27 m	10	8	6	4	4	2	2	1	1/0	1/0	2/0	2/0	3/0
100'	30 m	10	6	6	4	4	2	2	1	1/0	2/0	2/0	3/0	3/0
110'	33 m	10	6	6	4	2	2	1	1/0	1/0	2/0	3/0	3/0	4/0
120'	36 m	10	6	4	4	2	2	1	1/0	2/0	3/0	3/0	4/0	4/0
130'	40 m	8	6	4	2	2	2	1	1/0	2/0	3/0	3/0	4/0	4/0
140'	43 m	8	6	4	2	2	1	1/0	2/0	3/0	3/0	4/0	4/0	
150'	46 m	8	6	4	2	2	1	1/0	2/0	3/0	3/0	4/0	4/0	
160'	49 m	8	6	4	2	2	1	1/0	2/0	3/0	4/0	4/0	4/0	
170'	52 m	8	6	2	2	1	1	2/0	3/0	3/0	4/0	4/0		

3% Voltage Drop at 32 Volts

		Current (Amps)												
Length		5	10	15	20	25	30	40	50	60	70	80	90	100
10'	3 m	18	18	16	16	14	14	12	12	10	10	10	8	8
15'	5 m	18	16	14	14	12	12	10	10	8	8	8	6	6
20'	6 m	18	16	12	12	12	10	10	8	8	6	6	6	6
25'	8 m	18	14	12	12	10	10	8	8	6	6	6	6	4
30'	9 m	16	14	10	10	10	8	8	6	6	6	4	4	4
40'	12 m	16	12	10	10	8	8	6	6	4	4	4	2	2
50'	15 m	14	12	8	8	8	6	6	4	4	2	2	2	2
60'	18 m	14	10	8	8	6	6	4	4	2	2	2	2	1
70'	21 m	12	10	6	6	6	6	4	2	2	2	1	1	0
80'	24 m	12	10	6	6	6	4	4	2	2	1	1	0	0
90'	27 m	12	8	6	6	6	4	2	2	2	1	1/0	1/0	2/0
100'	30 m	12	8	6	6	4	4	2	2	1	1/0	1/0	2/0	2/0
110'	33 m	10	8	6	6	4	4	2	2	1	1/0	1/0	2/0	2/0
120'	36 m	10	8	6	4	4	2	2	1	1/0	1/0	2/0	2/0	3/0
130'	40 m	10	8	6	4	4	2	2	1	1/0	2/0	2/0	3/0	3/0
140'	43 m	10	6	6	4	2	2	1	1/0	1/0	2/0	3/0	3/0	3/0
150'	46 m	10	6	6	4	2	1	1	1/0	2/0	2/0	3/0	3/0	4/0
160'	49 m	10	6	4	4	2	1	1	1/0	2/0	3/0	3/0	4/0	4/0
170'	52 m	8	6	4	2	2	1	1	1/0	2/0	3/0	3/0	4/0	4/0

Conductors Sized (AWG) for 10% Voltage Drop

Use 10% voltage drop for any "non-critical" applications: windlass, cabin lights, etc....

For Example...

Q: A bilge pump draws 10 amps. The positive run is 11 feet from the power panel, including the float switch. The negative run is only 10 feet. What size is the wire?

A: Use the formula to reach the correct answer:

$$CM = \frac{10.75 \times 10 \text{ (amps)} \times 21 \text{ (total length of run)}}{0.36 \text{ (3\% of 12V)}} = 6{,}271$$

Ancor cable specifications show that 12 AWG wire has a CM area of 6,500 and is the correct choice. However, SAE wire has a CM area of only 5,833. Under NFPA and USCG regulations, 10 SAE wire must be used.

10% Voltage Drop at 12 Volts

		Current (Amps)												
Length		5	10	15	20	25	30	40	50	60	70	80	90	100
10'	3 m	18	18	18	16	16	14	14	12	12	10	10	10	10
15'	5 m	18	18	16	14	14	12	12	10	10	8	8	8	8
20'	6 m	18	16	14	14	12	12	10	10	8	8	8	6	6
25'	8 m	18	16	14	12	12	10	10	8	8	6	6	6	6
30'	9 m	18	14	12	12	10	10	8	8	6	6	6	6	4
40'	12 m	16	14	12	10	10	8	8	6	6	6	4	4	4
50'	15 m	16	12	10	10	8	8	6	6	4	4	4	2	2
60'	18 m	14	12	10	8	8	6	6	4	4	2	2	2	2
70'	21 m	14	10	8	8	6	6	6	4	2	2	2	2	1
80'	24 m	14	10	8	8	6	6	4	4	2	2	2	1	1
90'	27 m	12	10	8	6	6	6	4	2	2	2	1	1	1/0
100'	30 m	12	10	8	6	6	4	4	2	2	1	1	1/0	1/0
110'	33 m	12	8	8	6	6	4	2	2	2	1	1/0	1/0	1/0
120'	36 m	12	8	6	6	4	4	2	2	1	1	1/0	1/0	2/0
130'	40 m	12	8	6	6	4	4	2	2	1	1/0	1/0	2/0	2/0
140'	43 m	10	8	6	6	4	2	2	1	1	1/0	2/0	2/0	2/0
150'	46 m	10	8	6	4	4	2	2	1	1/0	1/0	2/0	2/0	3/0
160'	49 m	10	8	6	4	4	2	2	1	1/0	2/0	2/0	3/0	3/0
170'	52 m	10	6	6	4	2	2	2	1	1/0	2/0	2/0	3/0	3/0

10% Voltage Drop at 24 Volts

		Current (Amps)												
Length		5	10	15	20	25	30	40	50	60	70	80	90	100
10'	3 m	18	18	18	18	18	18	16	16	14	14	14	12	12
15'	5 m	18	18	18	18	16	16	14	14	12	12	12	10	10
20'	6 m	18	18	18	16	16	14	14	12	12	10	10	10	10
25'	8 m	18	18	16	16	14	14	12	12	10	10	10	8	8
30'	9 m	18	18	16	14	14	12	12	10	10	8	8	8	8
40'	12 m	18	16	14	14	12	12	10	10	8	8	8	6	6
50'	15 m	18	16	14	12	12	10	10	8	8	6	6	6	6
60'	18 m	18	14	12	12	10	10	8	8	6	6	6	6	4
70'	21 m	16	14	12	10	10	8	8	6	6	6	6	4	4
80'	24 m	16	14	12	10	10	8	8	6	6	6	4	4	4
90'	27 m	16	12	10	10	8	8	6	6	6	4	4	4	2
100'	30 m	16	12	10	10	8	8	6	6	4	4	4	2	2
110'	33 m	14	12	10	8	8	8	6	6	4	4	2	2	2
120'	36 m	14	12	10	8	8	6	6	4	4	2	2	2	2
130'	40 m	14	12	10	8	8	6	6	4	4	2	2	2	2
140'	43 m	14	10	8	8	6	6	6	4	2	2	2	2	1
150'	46 m	14	10	8	8	6	6	4	4	2	2	2	2	1
160'	49 m	14	10	8	8	6	6	4	4	2	2	2	1	1
170'	52 m	12	10	8	6	6	6	4	2	2	2	2	1	1

10% Voltage Drop at 32 Volts

		Current (Amps)												
Length		5	10	15	20	25	30	40	50	60	70	80	90	100
10'	3 m	18	18	18	18	18	18	18	16	16	14	14	14	14
15'	5 m	18	18	18	18	18	18	16	14	14	14	12	12	12
20'	6 m	18	18	18	18	16	16	14	14	12	12	12	10	10
25'	8 m	18	18	18	16	16	14	14	12	12	10	10	10	10
30'	9 m	18	18	18	16	14	14	12	14	10	10	10	10	8
40'	12 m	18	18	16	14	14	12	12	10	10	8	8	8	8
50'	15 m	18	16	14	14	12	12	10	10	8	8	8	6	6
60'	18 m	18	16	14	12	12	10	10	8	8	8	6	6	6
70'	21 m	18	14	14	12	10	10	8	8	8	6	6	6	6
80'	24 m	18	14	12	12	10	10	8	8	6	6	6	6	4
90'	27 m	18	14	12	10	10	10	8	6	6	6	6	4	4
100'	30 m	16	14	12	10	10	8	8	6	6	6	4	4	4
110'	33 m	16	14	12	10	10	8	8	6	6	6	4	4	4
120'	36 m	16	12	10	10	8	8	6	6	6	4	4	4	2
130'	40 m	16	12	10	10	8	8	6	6	6	4	4	2	2
140'	43 m	14	12	10	8	8	8	6	6	4	4	2	2	2
150'	46 m	14	12	10	8	8	6	6	6	4	4	2	2	2
160'	49 m	14	12	10	8	8	6	6	4	4	2	2	2	2
170'	52 m	14	12	10	8	8	6	6	4	4	2	2	2	2

TECH TIP

ABYC Recommends...

"Conductors used for lighting, other than navigation lights, and other circuits where voltage drop is not critical, shall be sized for a voltage drop not to exceed 10 percent." *ABYC 11.16.1.2.7.*

18–4/0 AWG Wire and Cable Specifications

AWG	mm²	AWG CM area	SAE CM area	Ampacity Engine Space Outside	Ampacity Engine Space Inside
18	0.8	1,600	1,537	20	17
16	1	2,600	2,336	25	21
14	2	4,100	3,702	35	30
12	3	6,500	5,833	45	38
10	5	10,500	9,343	60	51
8	8	16,800	14,810	80	68
6	13	26,600	24,538	120	102
4	21	42,000	37,360	160	136
2	34	66,500	62,450	210	178
1	42	83,690	77,790	245	208
1/0	53	105,600	98,980	285	242
2/0	68	133,100	125,100	330	280
3/0	85	167,800	158,600	385	327
4/0	107	211,600	205,500	445	378

Temperature Rating of Conductor Insulation

The Law

The Code of Federal Regulations (CFR) 183.425 Conductors

(b) Except for intermittent surges each conductor must not carry a current greater than that specified for the conductor's gauge and temperature rating.

(c) For conductors in engine spaces, amperages must be corrected by the appropriate correction factor in Note 1.

Due to engine heat, the ambient temperature in engine spaces is usually higher than in other spaces of the boat. Wiring in and passing through engine spaces must be able to operate at these higher ambient temperatures. The ampacity values are based on an ambient temperature of 86°F / 30°C which is considered reasonable for use on boats except in engine spaces. The correction factors in Note 1 converts the ampacities to acceptable values in an ambient temperature of 122°F / 50°C. This higher temperature has been selected as satisfactory for engine spaces. Note 1 is supplied to eliminate the need for calculating the corrections. The values are already corrected.

Conductor Size AWG	Ampacity Outside of Engine Space	Ampacity Inside of Engine Space (Note 1)
18	20	17
16	25	21
14	35	30
12	45	38
10	60	51
8	80	68
6	120	102
4	160	136
3	180	153
2	210	178
1	245	208
1/0	285	242
2/0	330	280
3/0	385	327
4/0	445	378

*De-rating for engine space is 0.85 for 221°F / 105°C rated wire.

Allowable Amperage of Conductors of 50 Volts or More

The current values shown in this chart and also on the wire and cable specifications chart do not consider voltage drop for conductors under 50 volts. The values shown on the ampacity table are the maximum safe amperages which the conductor can carry on a continuous basis. They do not apply to intermittent starting loads such as motor start currents. Since all Ancor Boat Cable is 105°C insulated, only that temperature rating is shown.

Due to the higher ambient temperatures in engine spaces and the heat retention of large wire bundles, a "correction factor" must be used to de rate the wire by increasing conductor size. This chart takes into consideration these factors and should be used to select conductor sizes for circuits over 50 volts. Note that for electrical systems under 50 volts, voltage drop is the controlling factor and the tables on 62 and 63 should be used.

Conductor Size	2 Conductors 221°F (105°C) Engine Space		3 Conductors 221°F (105°C) Engine Space		4–6 Conductors 221°F (105°C) Engine Space		7–24 Conductors 221°F (105°C) Engine Space	
AWG	Outside	Inside	Outside	Inside	Outside	Inside	Outside	Inside
18	20	17.0	14.0	11.9	12.0	10.2	10.0	8.5
16	25	21.3	17.5	14.9	15.0	12.8	12.5	10.6
14	35	29.8	24.5	20.8	21.0	17.9	17.5	14.9
12	45	38.3	31.5	26.8	27.0	23.0	22.5	19.1
10	60	51.0	42.0	35.7	36.0	30.6	30.0	25.5
8	80	68.0	56.0	47.6	48.0	40.8	40.0	34.0
6	120	102.0	84.0	71.4	72.0	61.2	60.0	51.0
4	160	136.0	112.0	95.2	96.0	81.6	80.0	68.0
3	180	153.0	126.0	107.1	108.0	91.8	90.0	76.5
2	210	178.5	147.0	125.0	126.0	107.1	105.0	89.3
1	245	208.3	171.5	145.8	147.0	125.0	122.5	104.1
1/0	285	242.3	199.5	169.6	171.0	145.4	142.5	121.1
2/0	330	280.5	231.0	196.4	198.0	168.3	165.0	140.3
3/0	385	327.3	269.5	229.1	231.0	196.4	192.5	163.6
4/0	445	378.3	311.5	264.8	267.0	227.0	222.5	189.1

Number of current carrying conductors:	Correction Factor
3	0.70
4 to 6	0.60
7 to 24	0.50
25 and above	0.40

This table is supplied to eliminate the need for calculating the corrections for multi-conductor cable bundles in the temperature rating chart. The values are already corrected.

Note: These tables only apply for 221°F (105°C) wire and other premium wire and should not be used for lesser grades of wire and cable.

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* There is NO LIMIT on conductors in a bundle under 50 volts.

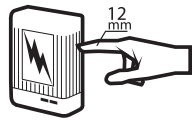
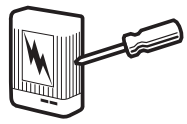
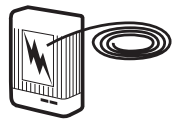
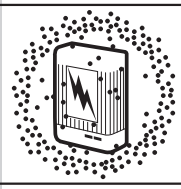
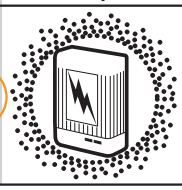
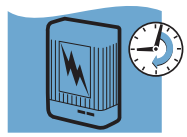
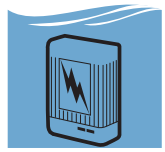
Ingress Protection (IP) Ratings Guide

Example:
An IP65 rating can be determined using the adjacent table and example:

- The first number of the rating example, 6, in the gray column means the enclosure is dust tight
- The second number of the rating example, 5, in the blue column means the enclosure is protected against jets of water

The IP rating system was established by the International Electrotechnical Commission (IEC), an organization for international standards and conformity assessment. The IEC collaborates closely with the International Organization for Standardization (ISO). A complete description of the IP ratings and associated tests is found in IEC Publication 529. Although these ratings were initially developed as a way to classify enclosures, they now provide a convenient, practical way to compare levels of sealing. Many electrical products have an Ingress Protection (IP) rating which identifies the environmental factors needing consideration prior to the product's installation.

This is important when deciding when to mount products in a dry and clean environment versus a wet and/or dusty environment. The IP rating indicates the degree of protection provided. The numbers following IP represent levels of sealing and can range from no protection to full protection against dust and water. The table provides a description of the protection at each level.

	SOLIDS	WATER
1	 Protected against a solid object greater than 50 mm such as a hand.	 Protected against vertically falling drops of water. Limited ingress permitted.
2	 Protected against a solid object greater than 12 mm such as a finger.	 Protected against vertically falling drops of water with enclosure tilted up to 15 degrees from the vertical. Limited ingress permitted.
3	 Protected against a solid object greater than 2.5 mm such as a screwdriver.	 Protected against sprays of water up to 60 degrees from the vertical. Limited ingress permitted for three minutes.
4	 Protected against a solid object greater than 1 mm such as a wire.	 Protected against water splashed from all directions. Limited ingress permitted.
5	 Dust Protected. Limited ingress of dust permitted. Will not interfere with operation of the equipment. Two to eight hours.	 Protected against jets of water. Limited ingress permitted.
6	 Dust tight. No Ingress of dust. Two to eight hours.	 Water from heavy seas or water projected in powerful jets shall not enter the enclosure in harmful quantities.
7		 Protection against the effects of immersion in water between 15 cm and 1 m for 30 minutes.
8		 Protection against the effects of immersion in water under pressure for long periods.

Rating Example:

IP65

INGRESS PROTECTION

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