

Arctic Ultraflex Blue® Premier Arctic Grade Wire

ARCTIC ULTRAFLEX BLUE®

Arctic Ultraflex Blue®

Arctic Ultraflex Blue® continues to be the premier **arctic grade** wire rated and proven to work in extreme temperature ranges of -55°C to 105°C. This highly flexible wire combines finely stranded copper construction with a durable jacket material that resists the abuses of oil and gasoline, sunlight, saltwater, acids, and chemicals.

Arctic Ultraflex Blue® is highly abrasion resistant and can be used in most 600 VOLT applications. UL Listed as AWM (Appliance Wiring Material).

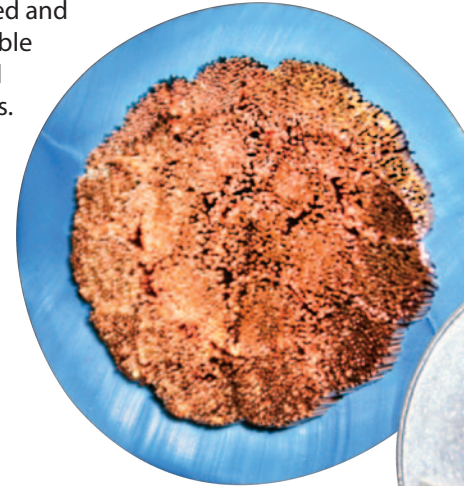
Arctic Ultraflex Blue® has numerous applications, including those approved under NEC article 400 and associated articles.

Applications

- UL 508A Industrial control panels
- Internal appliance and equipment wiring
- Inverter cables and wiring
- Industrial machines and robotics
- Construction equipment, forklifts, golf carts
- Marine, RV and automotive wiring
- Medium and heavy-duty trucks and trailers
- Load banks, motor leads, welding cable
- Batteries and chargers
- Power hookup cable



-55°C TO 105°C



Arctic Ultraflex Blue®

500 MCM - 5054/30
UL Class K Stranding
per conductor





Typical Legend

E196955  AWM 500MCM OIL RESISTANT 600V VW-1
 ... ARCTIC ULTRAFLEX BLUE® -55°C TO 105°C ...
 CSA 234608 TEW 105°C 600V FT1

Insulation Properties

Properties	Test Method	Performance
Specific Gravity (±.02)	ASTM D-792	1.30
Durometer Shore "A" (±.02) INST./15 seconds	ASTM D-2240	77/65
Tensile Strength (60 mil)	ASTM D-412	2000
Elongation (%)	ASTM D-412	300
Brittle Point (C)	ASTM D-746	-55°C
Oxygen Index %	ASTM D-2863	25.0
Oil Aged 18 Hours @ 121°C		
% Retention of Tensiles	UL Standard	129%
% Retention of Elongation	UL Standard	72%
Air Aged 7 Days @ 136°C		
% Retention of Tensiles	ASTM D412-80	109%
% Retention of Elongation	ASTM D412-80	100%
Oil Aged 7 Days @ 60°C		
% Retention of Tensiles	ASTM D412-80	124%
% Retention of Elongation	ASTM D412-80	89%
VW-1 Flame Test	UL Standard	Pass
Product Cold Bend Test	UL Standard	Pass
Voltage Rating	UL Standard	600

Class K Copper Stranded Construction Specifications

Size	Class K Copper Strand Qty/AWG	Class K Copper Strand Style	Nominal Conductor Outside Diameter	Insulation Thickness	Minimum Finished Outside Diameter	Ampacity* 30°C (86°F)	Ampacity* 40°C (104°F)
18 AWG	16/30	Tinned	.047"	.030"	.105"	n/a	n/a
16 AWG	26/30	Tinned	.059"	.030"	.118"	26	24
14 AWG	41/30	Tinned	.074"	.030"	.130"	38	36
12 AWG	65/30	Tinned	.093"	.030"	.150"	44	41
10 AWG	105/30	Tinned	.118"	.030"	.180"	60	56
8 AWG	168/30	Bare	.150"	.045"	.240"	85	81
6 AWG	266/30	Bare	.190"	.060"	.310"	115	106
4 AWG	420/30	Bare	.240"	.060"	.360"	150	142
2 AWG	665/30	Bare	.310"	.060"	.430"	205	193
1 AWG	836/30	Bare	.335"	.080"	.495"	240	223
1/0 AWG	1064/30	Bare	.390"	.080"	.550"	285	264
2/0 AWG	1330/30	Bare	.435"	.080"	.600"	325	304
3/0 AWG	1672/30	Bare	.490"	.080"	.650"	380	355
4/0 AWG	2109/30	Bare	.530"	.085"	.710"	440	411
250 MCM	2451/30	Bare	.685"	.095"	.875"	495	461
350 MCM	3458/30	Bare	.820"	.095"	1.010"	620	512
500 MCM	5054/30	Bare	.995"	.110"	1.220"	760	710

*Ampacities of 600V and 1000V 105°C AWM wires in air. **Note:** Ampacities based on single conductor in free air, 30°C (86°F) or 40°C (104°F) ambient temperature as specified, 105°C (221°F) conductor temperature, per table 310-17 of the NEC (adjusted for 105°C). Free air ratings assume a one-cable diameter spacing between adjacent conductors.

Polar Wire Products is the exclusive manufacturer
 of **Arctic Ultraflex Blue**®
 Premium Arctic Grade Wire



Arctic Ultraflex Blue® Single Conductor Wire

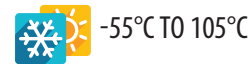
ARCTIC ULTRAFLEX BLUE®

Arctic Ultraflex Blue®

**Outstanding Flexibility
and Proven Performance
in Extreme Cold to -55°C**



- 100% copper flexible fine strand conductors are tinned for corrosion resistance and conductivity
- Ultraflexible, highly abrasion resistant jacket withstands water, salt, oil and gas, chemicals, sunlight
- Tested and proven in the harsh environment of Alaska's Arctic North Slope



**Large spools and
bulk quantities available**



Single Conductor Wire 10 – 18 AWG

Arctic Ultraflex Blue® Finely Stranded Class K Tinned Copper

AWG	Stocked Wire Color	5000' Spool Part Number	2500' Spool Part Number	500' Spool Part Number	100' Spool Part Number	Clamshell Package Part Number	Length
18	● Black	AUF-18BLK	-	AUF-18BLK-500	AUF-18BLK-100	BP-18BLK	35'
18	● Blue	AUF-18BLU	-	AUF-18BLU-500	AUF-18BLU-100	BP-18BLU	35'
18	● Brown	AUF-18BRN	-	AUF-18BRN-500	AUF-18BRN-100	BP-18BRN	35'
18	● Green	AUF-18GRN	-	AUF-18GRN-500	AUF-18GRN-100	BP-18GRN	35'
18	● Gray	AUF-18GRY	-	AUF-18GRY-500	AUF-18GRY-100	BP-18GRY	35'
18	● Orange	AUF-18ORG	-	AUF-18ORG-500	AUF-18ORG-100	BP-18ORG	35'
18	● Red	AUF-18RED	-	AUF-18RED-500	AUF-18RED-100	BP-18RED	35'
18	○ White	AUF-18WHT	-	AUF-18WHT-500	AUF-18WHT-100	BP-18WHT	35'
18	● Yellow	AUF-18YEL	-	AUF-18YEL-500	AUF-18YEL-100	BP-18YEL	35'
16	● Black	AUF-16BLK	-	AUF-16BLK-500	AUF-16BLK-100	BP-16BLK	30'
16	● Blue	AUF-16BLU	-	AUF-16BLU-500	AUF-16BLU-100	BP-16BLU	30'
16	● Brown	AUF-16BRN	-	AUF-16BRN-500	AUF-16BRN-100	BP-16BRN	30'
16	● Green	AUF-16GRN	-	AUF-16GRN-500	AUF-16GRN-100	BP-16GRN	30'
16	● Gray	AUF-16GRY	-	AUF-16GRY-500	AUF-16GRY-100	BP-16GRY	30'
16	● Orange	AUF-16ORG	-	AUF-16ORG-500	AUF-16ORG-100	BP-16ORG	30'
16	● Red	AUF-16RED	-	AUF-16RED-500	AUF-16RED-100	BP-16RED	30'
16	○ White	AUF-16WHT	-	AUF-16WHT-500	AUF-16WHT-100	BP-16WHT	30'
16	● Yellow	AUF-16YEL	-	AUF-16YEL-500	AUF-16YEL-100	BP-16YEL	30'
14	● Black	AUF-14BLK	-	AUF-14BLK-500	AUF-14BLK-100	BP-14BLK	20'
14	● Blue	AUF-14BLU	-	AUF-14BLU-500	AUF-14BLU-100	BP-14BLU	20'
14	● Brown	AUF-14BRN	-	AUF-14BRN-500	AUF-14BRN-100	BP-14BRN	20'
14	● Green	AUF-14GRN	-	AUF-14GRN-500	AUF-14GRN-100	BP-14GRN	20'
14	● Gray	AUF-14GRY	-	AUF-14GRY-500	AUF-14GRY-100	BP-14GRY	20'
14	● Orange	AUF-14ORG	-	AUF-14ORG-500	AUF-14ORG-100	BP-14ORG	20'
14	● Purple	AUF-14PUR	-	AUF-14PUR-500	AUF-14PUR-100	BP-14PUR	20'
14	● Red	AUF-14RED	-	AUF-14RED-500	AUF-14RED-100	BP-14RED	20'
14	○ White	AUF-14WHT	-	AUF-14WHT-500	AUF-14WHT-100	BP-14WHT	20'
14	● Yellow	AUF-14YEL	-	AUF-14YEL-500	AUF-14YEL-100	BP-14YEL	20'
12	● Black	-	AUF-12BLK	AUF-12BLK-500	AUF-12BLK-100	BP-12BLK	15'
12	● Blue	-	AUF-12BLU	AUF-12BLU-500	AUF-12BLU-100	BP-12BLU	15'
12	● Brown	-	AUF-12BRN	AUF-12BRN-500	AUF-12BRN-100	BP-12BRN	15'
12	● Green	-	AUF-12GRN	AUF-12GRN-500	AUF-12GRN-100	BP-12GRN	15'
12	● Gray	-	AUF-12GRY	AUF-12GRY-500	AUF-12GRY-100	BP-12GRY	15'
12	● Orange	-	AUF-12ORG	AUF-12ORG-500	AUF-12ORG-100	BP-12ORG	15'
12	● Purple	-	AUF-12PUR	AUF-12PUR-500	AUF-12PUR-100	BP-12PUR	15'
12	● Red	-	AUF-12RED	AUF-12RED-500	AUF-12RED-100	BP-12RED	15'
12	○ White	-	AUF-12WHT	AUF-12WHT-500	AUF-12WHT-100	BP-12WHT	15'
12	● Yellow	-	AUF-12YEL	AUF-12YEL-500	AUF-12YEL-100	BP-12YEL	15'
10	● Black	-	AUF-10BLK	AUF-10BLK-500	AUF-10BLK-100	BP-10BLK	10'
10	● Blue	-	AUF-10BLU	AUF-10BLU-500	AUF-10BLU-100	BP-10BLU	10'
10	● Brown	-	AUF-10BRN	AUF-10BRN-500	AUF-10BRN-100	BP-10BRN	10'
10	● Green	-	AUF-10GRN	AUF-10GRN-500	AUF-10GRN-100	BP-10GRN	10'
10	● Gray	-	AUF-10GRY	AUF-10GRY-500	AUF-10GRY-100	BP-10GRY	10'
10	● Orange	-	AUF-10ORG	AUF-10ORG-500	AUF-10ORG-100	BP-10ORG	10'
10	● Red	-	AUF-10RED	AUF-10RED-500	AUF-10RED-100	BP-10RED	10'
10	○ White	-	AUF-10WHT	AUF-10WHT-500	AUF-10WHT-100	BP-10WHT	10'
10	● Yellow	-	AUF-10YEL	AUF-10YEL-500	AUF-10YEL-100	BP-10YEL	10'

Bulk quantities available upon request



Red and Black 14, 16, and 18 AWG are also stocked in 1000' spools, other colors on request

ARCTIC ULTRAFLEX BLUE®

Arctic Ultraflex Blue® Single Conductor Wire

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E196955 9A AWM 8 AWG OIL RESISTANT 600V UU-1 ... ARCTIC ULTRAFLEX BLUE™ -55°C TO 105°C ... CSA 234608 TEW 105°C 600V FT1

8 AWG

E196955 9A AWM 8 AWG OIL RESISTANT 600V UU-1 ... ARCTIC ULTRAFLEX BLUE™ -55°C TO 105°C ... CSA 234608 TEW 105°C 600V FT1

8 AWG

E196955 9A AWM 6 AWG OIL RESISTANT 600V UU-1 ... ARCTIC ULTRAFLEX BLUE™ -55°C TO 105°C ... CSA 234608 TEW 105°C 600V FT1

6 AWG

E196955 9A AWM 6 AWG OIL RESISTANT 600V UU-1 ... ARCTIC ULTRAFLEX BLUE™ -55°C TO 105°C ... CSA 234608 TEW 105°C 600V FT1

6 AWG

E196955 9A AWM 4 AWG OIL RESISTANT 600V VW-1 ... ARCTIC ULTRAFLEX BLUE™ -55°C TO 105°C ... CSA 234608 TEW 105°C 600V FT1

4 AWG

E196955 9A AWM 4 AWG OIL RESISTANT 600V VW-1 ... ARCTIC ULTRAFLEX BLUE™ -55°C TO 105°C ... CSA 234608 TEW 105°C 600V FT1

4 AWG

E196955 9A AWM 2 AWG OIL RESISTANT 600V VW-1 ... ARCTIC ULTRAFLEX BLUE™ -55°C TO 105°C ... CSA 234608 TEW 105°C 600V FT1

2 AWG

E196955 9A AWM 1/0 AWG OIL RESISTANT 600V VW-1 ... ARCTIC ULTRAFLEX BLUE™ -55°C TO 105°C ... CSA 234608 TEW 105°C 600V FT1

1/0 AWG

E196955 9A AWM 2/0 AWG OIL RESISTANT 600V VW-1 ... ARCTIC ULTRAFLEX BLUE™ -55°C TO 105°C ... CSA 234608 TEW 105°C 600V FT1

2/0 AWG

E196955 9A AWM 4/0 AWG OIL RESISTANT 600V VW-1 ... ARCTIC ULTRAFLEX BLUE™ -55°C TO 105°C ... CSA 234608 TEW 105°C 600V FT1

4/0 AWG

E196955 9A AWM 250 MCM AWG OIL RESISTANT 600V VW-1 ... ARCTIC ULTRAFLEX BLUE™ -55°C TO 105°C ... CSA 234608 TEW 105°C 600V FT1

250 MCM

E196955 9A AWM 500 MCM AWG OIL RESISTANT 600V VW-1 ... ARCTIC ULTRAFLEX BLUE™ -55°C TO 105°C ... CSA 234608 TEW 105°C 600V FT1

500 MCM

Single Conductor Wire 8 AWG – 500 MCM

ARCTIC ULTRAFLEX BLUE®

Arctic Ultraflex Blue® Wire Colors

8 AWG through 500 MCM is sold by the foot—coiled in lengths up to 100', and spooled in lengths over 100'.

Part Number	Size	Stocked Wire Color
AUF-8BLK	8 AWG	● Black
AUF-8BLU	8 AWG	● Blue
AUF-8RED	8 AWG	● Red
AUF-8WHT	8 AWG	○ White
AUF-8GRN	8 AWG	● Green
AUF-8GRN/YEL	8 AWG	● Green/Yellow Stripe
AUF-6BLK	6 AWG	● Black
AUF-6BLU	6 AWG	● Blue
AUF-6RED	6 AWG	● Red
AUF-6WHT	6 AWG	○ White
AUF-6GRN	6 AWG	● Green
AUF-6GRN/ORG	6 AWG	● Green/Orange Stripe
AUF-4BLK	4 AWG	● Black
AUF-4BLU	4 AWG	● Blue
AUF-4RED	4 AWG	● Red
AUF-4WHT	4 AWG	○ White
AUF-4GRN	4 AWG	● Green
AUF-4GRN/YEL	4 AWG	● Green/Yellow Stripe
AUF-2BLK	2 AWG	● Black
AUF-2BLU	2 AWG	● Blue
AUF-2RED	2 AWG	● Red
AUF-2WHT	2 AWG	○ White
AUF-2GRN	2 AWG	● Green
AUF-2GRN/ORG	2 AWG	● Green/Orange Stripe
AUF-2GRN/YEL	2 AWG	● Green/Yellow Stripe
AUF-1BLK	1 AWG	● Black
AUF-1RED	1 AWG	● Red
AUF-1OBLK	1/0 AWG	● Black
AUF-1OBLU	1/0 AWG	● Blue
AUF-1ORED	1/0 AWG	● Red
AUF-2OBLK	2/0 AWG	● Black
AUF-2OBLU	2/0 AWG	● Blue
AUF-2ORED	2/0 AWG	● Red
AUF-3OBLK	3/0 AWG	● Black
AUF-3ORED	3/0 AWG	● Red
AUF-4OBLK	4/0 AWG	● Black
AUF-4OBLU	4/0 AWG	● Blue
AUF-4ORED	4/0 AWG	● Red
AUF-250MCM	250 MCM	● Blue
AUF-500MCMBLK	500 MCM	● Black
AUF-500MCMBLU	500 MCM	● Blue



-55°C TO 105°C

Custom colors and striping available on request — minimums apply

WIRE STRANDING COMPARISON CHART

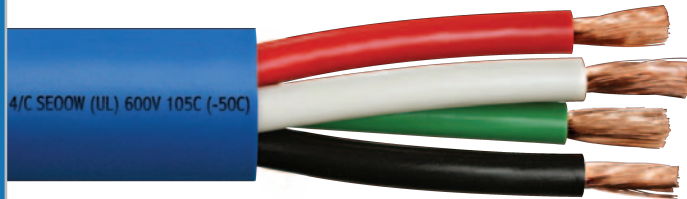
Polar Wire Standard

Class B Stranding		Class C Stranding		Class G Stranding		Class H Stranding		Class I Stranding		Class K Stranding		Class M Stranding		Locomotive Cable	
Stranding	OD	Stranding	OD	Stranding	OD	Stranding	OD	Stranding	OD	Stranding	OD	Stranding	OD	Stranding	OD
2/0 / 19	.4205	2/0 / 37	.3750	1/0 / 133	.4240	1/0 / 259	.4240	N/A	-	N/A	-	1/0 / 2646	.4310	1/0 / 275	.4200
3/0 / 19	.4700	3/0 / 37	.4700	2/0 / 133	.4740	2/0 / 259	.4770	1/0 / 266	.4320	1/0 / 1064	.3900	N/A	-	2/0 / 325	.4600
4/0 / 19	.5280	4/0 / 37	.5300	3/0 / 133	.5330	3/0 / 259	.5330	2/0 / 342	.4700	2/0 / 1330	.4350	2/0 / 3325	.4600	N/A	-
250 MCM / 37	.5720	250 MCM / 61	.5760	N/A	-	N/A	-	3/0 / 418	.5450	3/0 / 1672	.4900	3/0 / 4256	.5750	3/0 / 450	.5650
350 MCM / 37	.6850	350 MCM / 61	.6813	250 MCM / 259	.6500	250 MCM / 427	.6530	250 MCM / 637	.6800	4/0 / 2109	.5300	4/0 / 5320	.6450	262.6 MCM / 650	.6500
400 MCM / 37	.8250	400 MCM / 61	.7290	300 MCM / 259	.7140	300 MCM / 427	.7160	300 MCM / 735	.7218	250 MCM / 2451	.6850	250 MCM / 6384	.6480	313.1 MCM / 775	.7100
500 MCM / 37	.8100	500 MCM / 61	.8145	350 MCM / 259	.7730	350 MCM / 427	.7720	350 MCM / 882	.8830	300 MCM / 2989	.7700	300 MCM / 7581	.8108	N/A	-
N/A	-	N/A	-	400 MCM / 259	.8260	400 MCM / 427	.8260	400 MCM / 980	.8380	350 MCM / 3458	.8200	350 MCM / 8806	.8822	373.7 MCM / 925	1.140
700 MCM / 61	.9640	700 MCM / 91	.9647	500 MCM / 259	.9220	500 MCM / 427	.9230	500 MCM / 1225	.9400	450 MCM / 4522	1.008	450 MCM / 11396	.9400	535.3 MCM / 1325	1.320
750 MCM / 61	.9980	750 MCM / 91	.9988	550 MCM / 427	.9230	550 MCM / 703	.9230	550 MCM / 1372	.9910	500 MCM / 5054	1.022	500 MCM / 12691	.9970	N/A	-
N/A	-	N/A	-	600 MCM / 427	.9690	600 MCM / 703	1.022	600 MCM / 1470	1.101	550 MCM / 5453	1.099	550 MCM / 13664	1.198	646.4 MCM / 1600	1.450
1000 MCM / 61	1.160	1000 MCM / 91	1.208	750 MCM / 427	1.131	750 MCM / 703	1.320	650 MCM / 1596	1.089	600 MCM / 5985	1.160	600 MCM / 14945	1.280	N/A	-

Arctic Ultraflex Blue® Power Cord

ARCTIC ULTRAFLEX BLUE®

Arctic Ultraflex Blue® Power Cord (-50° to 105°C)



Features

- Flexible, tough TPE jacket
- Works under temperature extremes of -50°C to 105°C
- Color coded conductors for easy identification
- Excellent abrasion and cut resistance
- Ozone, sunlight, and water resistant with high dielectric insulation
- Water and mold resistant non-wicking polypropylene fillers
- Lightweight, long lasting, easy to carry and handle
- All components are recyclable and non-hazardous for environmental landfill disposal



-55°C TO 105°C

Applications

- Suitable for and approved for submersion in water
- Special uses requiring flexibility and mechanical toughness, high environmental resistance and flame retardance
- Motor control, stage equipment and lighting
- Pendant push button remote controls
- Industrial control and robotic systems
- Machine and power tools
- Portable power
- Dockside power applications
- Mining and outdoor applications



Industry Approvals

- Federal and Military use under Federal Spec. JC-580B
- UL Listed SE00W 600V and SJEOOW 300V for NEC Article 400
- CSA Certified ST00W or SJTOOW (TPE) -50°C to 105°C
- P-241-3-MSHA approval for flame resistance and mining applications



600V Power Cord 18 – 4 AWG

Part Number	Gauge/Number of Conductors	Stranding Quantity/AWG	Nominal Outside Diameter	Amps**
AUF-182*	18/2	16/30	.345"	10
AUF-183*	18/3	16/30	.365"	10
AUF-184	18/4	16/30	.395"	7
AUF-185	18/5	16/30	.465"	5.6
AUF-162	16/2	26/30	.370"	13
AUF-163	16/3	26/30	.390"	13
AUF-164	16/4	26/30	.420"	10
AUF-165*	16/5	26/30	.495"	8
AUF-142*	14/2	41/30	.505"	18
AUF-143	14/3	41/30	.525"	18
AUF-144	14/4	41/30	.575"	15
AUF-145*	14/5	41/30	.652"	12
AUF-122*	12/2	65/30	.570"	25
AUF-123	12/3	65/30	.595"	25
AUF-124	12/4	65/30	.645"	20
AUF-125	12/5	65/30	.710"	16
AUF-102*	10/2	104/30	.655"	30
AUF-103	10/3	104/30	.662"	30
AUF-104	10/4	104/30	.705"	25
AUF-105*	10/5	104/30	.771"	20
AUF-84	8/4	7x24/30	.925"	35
AUF-64	6/4	7x37/30	1.038"	45
AUF-44*	4/4	7x60/30	1.232"	60

300V Junior Power Cord 18 – 12 AWG

Part Number	Conductor AWG/Qty	Stranding Qty/AWG	Nominal Outside Diameter	Amps**
AUF-183J	18/3	16/30	.310"	10
AUF-163J	16/3	26/30	.330"	13
AUF-143J	14/3	41/30	.370"	18
AUF-123J	12/3	65/30	.435"	25

***Special order only (minimums apply)**

**Ampacity based on NEC Table 400.5 (A) and CEC Table 12

Note: The ampacity chart is provided for engineering information only. Polar Wire Products, Inc. cannot recommend or express the use of these ampacities since the exact application may need approval from the authority having local jurisdiction. This information is subject to engineering changes. Cold temperature rating is -50°C.

Jacket Color Blue

Conductors 18 through 10 AWG Stranded Bare Copper

Conductor Colors
 2/C – black, white
 3/C – black, white, green
 4/C – black, white, red, green
 5/C – black, white, red, green, orange

Typical Legend
Arctic Ultraflex Blue® E224869
 16 AWG (1.31mm²) 2/C SE00W (UL) 600V 105C (-50C) -- CSA 265576 SE00W 600V 105C (-50C) FT2 WATER RESISTANT



Arctic Ultraflex Blue Extreme Power Cord was originally developed for use in the University of Wisconsin-Madison IceCube Project in Antarctica. NSF photo.

Extreme Power Cord (-70° to 105°C)

ARCTIC ULTRAFLEX BLUE®

Extreme Power Cord 8 – 2 AWG

Extreme Power Cord is available by special order only (minimums apply)

Part Number	Gauge/Number of Conductors	Stranding Quantity/AWG	Nominal Outside Diameter	Amps**
AUFX-83*	8/3	96/28	.700"	40
AUFX-84*	8/4	96/28	.783"	35
AUFX-85*	8/5	96/28	.850"	28
AUFX-63*	6/3	96/26	.818"	55
AUFX-64*	6/4	96/26	.892"	45
AUFX-65*	6/5	96/26	.992"	36
AUFX-43*	4/3	96/24	.911"	70
AUFX-44*	4/4	96/24	1.014"	60
AUFX-45*	4/5	96/24	1.203"	48
AUFX-23*	2/3	7x7/.0223	1.158"	95
AUFX-24*	2/4	7x7/.0223	1.267"	80
AUFX-25*	2/5	7x7/.0223	1.389"	64

*Special order only (minimums apply)

**Ampacity based on NEC Table 400.5 (A)

Note: Sizes 8/3 up to 2/5 are non-UL constructions made with wall thicknesses in accordance with industry standards and MSHA Approved.

Note: The ampacity chart is provided for engineering information only. Polar Wire Products, Inc. cannot recommend or express the use of these ampacities since the exact application may need approval from the authority having local jurisdiction. This information is subject to engineering changes. Cold temperature rating is -70°C.

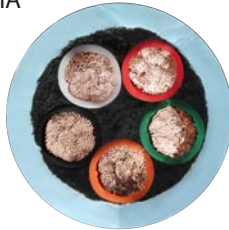
Jacket Color Light Blue

Conductors 8 through 2 AWG Stranded Bare Copper

Conductor Colors
 3/C - black, white, red
 4/C - black, white, red, green
 5/C - black, white, red, green, orange

Typical Legend **Arctic Ultraflex Blue®** 2-5 SEOOW 600V 105°C (-70°C) WATER-RESISTANT P-241-3-MSHA

-70°C TO 105°C



Features

- Flexible, tough jacket
- Works well in temperature extremes of -70°C to 105°C
- Color coded conductors for easy identification
- Excellent abrasion and cut resistance
- Ozone, sunlight, and water resistant with high dielectric insulation
- Water and mold resistant non-wicking polypropylene fillers
- Lightweight, long lasting, easy to carry and handle
- All components are recyclable and non-hazardous for environmental landfill disposal

Applications

- Uses requiring flexibility and mechanical toughness, high environmental resistance and flame retardance
- Suitable and approved for submersion in water
- On and offshore drilling
- Construction, industry, research
- Mining and outdoor applications
- Docksides power applications
- Industrial control and robotic systems and equipment
- Motor control, lighting, push button remote controls
- Machine and power tools
- Portable power, mobile power
- Extreme power cording



Industry Approvals

- Federal and Military use under Federal Spec. JC-580B
- Manufactured to UL SEOOW 600V and CSA Certified STOOW (TPE) standards
- MSHA approval for flame resistance and mining applications



Arctic Ultraflex Blue® Extension Cords

ARCTIC ULTRAFLEX BLUE®

Arctic Ultraflex Blue®

Designed for unbeatable performance in the most demanding conditions

Tough, durable Polar Wire **Extension Cords** are designed for ease of handling and superior performance in cold weather applications. The SEOOW-designated **Arctic Ultraflex Blue®** jacket remains flexible to -50°C and won't become stiff or crack, even in extreme temperatures. **Arctic Ultraflex Blue®** has excellent abrasion resistance and withstands oils, greases, gas, salt, sunlight, and chemicals. Clear NEMA 5-15 and 5-20 molded ends with steel retention rings light to provide instant power verification. Polar Wire extension cords are available in a variety of length and gauge configurations, or specify custom sizes and colors to suit your needs.

- Our rugged cords **OUTPERFORM** and **OUTLAST** the imitators
- Proven dependable in the worst winter weather
- Industrial grade, contractor quality
- Heavy duty molded-in blades fit tightly so water won't penetrate
- **Arctic Ultraflex Blue®** power cords are exceptionally easy to handle—won't tangle or kink

PROUDLY MADE
IN THE USA



Typical Cord Legend

Arctic Ultraflex Blue® E224869
W 12 AWG (3.31mm²) 3/C SEOOW (UL)
600V 105C (-50C) -- CSA 265576 SEOOW
600V 105C (-50C) FT2 WATER-RESISTANT

Features

- Superior flexibility to -50°C (-58°F)
- Class K fine stranded copper construction
- Resists oil, grease, chemicals, abrasion, sunlight and weather
- Clear NEMA 5-15 and 5-20 molded ends light when energized
- Steel retention rings provide extra security and strain relief
- Reinforced blades and pins
- UL and CSA Approved
- Flame retardant (VW-1)
- Environmentally safe
- Made in the USA



CLOSEOUT!

LIMITED TO STOCK ON HAND

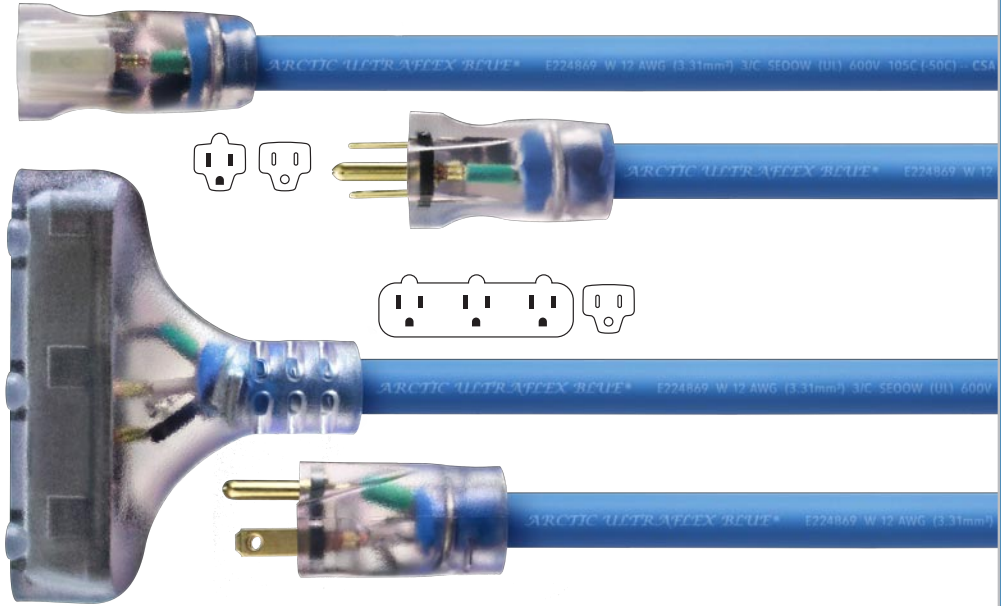
Arctic Ultraflex Blue®
is used extensively on Alaska's
Arctic North Slope

NEMA 5-15 Extension Cords

Single Outlet NEMA 5-15

Part Number	AWG	Length
AUF-PC12-10	12	10'
AUF-PC12-25	12	25'
AUF-PC12-50	12	50'
AUF-PC12-100	12	100'
AUF-PC14-10*	14	10'
AUF-PC14-25*	14	25'
AUF-PC14-50*	14	50'
AUF-PC14-100*	14	100'
AUF-PC16-10	16	10'
AUF-PC16-25*	16	25'
AUF-PC16-50*	16	50'

*Special order (minimums apply)



Triple Outlet NEMA 5-15

Part Number	AWG	Length
AUF-PCT12-3	12	3'
AUF-PCT12-10	12	10'
AUF-PCT12-25	12	25'
AUF-PCT12-50	12	50'
AUF-PCT12-100	12	100'

NEMA 5-20 Extension Cords

Single Outlet NEMA 5-20

Part Number	AWG	Length
AUF-PC10-25	10	25'
AUF-PC10-50	10	50'
AUF-PC10-100	10	100'

-50°C TO 105°C



CLOSEOUT!

LIMITED TO STOCK ON HAND



Multi-Conductor Boat Cable

Round and Flat Triplex Boat Cable

Polar Wire's exclusive UL Listed premium multi-conductor **Boat Cable** is designed for outstanding performance and corrosion protection in harsh marine environments.

100% copper Class K stranding provides exceptional flexibility, eases installation and reduces fatigue from vibration and flexing.

Features

- UL listed Tinned Copper Boat Cable
- 10, 12, 14, and 16 AWG **Triplex** with black, white, and green conductor colors
- 6, 8, 10, 12, 14, 16, and 18 AWG **DC Duplex** with red/black or red/yellow conductors
- Ultra-flexible Class K fine stranding
- Tinned for protection against corrosion and electrolysis
- Designed specifically for easier handling and installation in cramped spaces
- Opt for round cable for best all-direction bending ability, or choose the space saving flat profile for tight spaces and stacking
- Flat profile is constructed without fillers to facilitate jacket removal and wire stripping
- Resists saltwater, oil and gasoline, heat, sunlight, abrasion
- 600 volts up to 221°F (105°C) dry, 167°F (75°C) wet
- Flexible in cold conditions
- Manufactured by Polar Wire in the USA



Marine grade **Triplex Boat Cable** is configured in round and flat profiles with black, white, and green conductors and white TPE outer jacket. 100% copper Class K fine stranded conductors are ultra flexible and tinned for maximum corrosion resistance and long performance. Construction meets and exceeds UL 1426, CSA, and ABYC standards.

Rated for 600 volts, 105°C dry, 75°C wet. Durable jackets resist salt water, oil, gas, sunlight, heat, and abrasion.

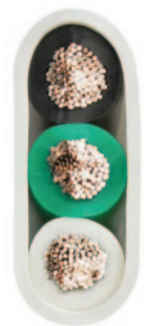


Typical Legend

POLAR WIRE BOAT CABLE E321438 (UL) 10 AWG 3/COND VW-1 600V 105C DRY 75C WET OIL RESISTANT BC5W2 MADE IN USA RoHS COMPLIANT — CSA TEW 105C OR AWM I A/B 105C 600V FT1 265576

Flat Black/White/Green Triplex

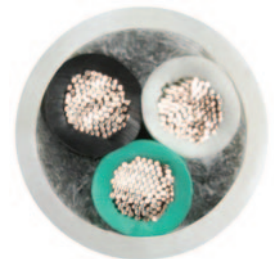
Part Number 100' Spool	Part Number 500' Spool	Conductor AWG/Qty
BLACK, WHITE, AND GREEN CONDUCTORS		
BCF163-100	BCF163-500	16/3
BCF143-100	BCF143-500	14/3
BCF123-100	BCF123-500	12/3
BCF103-100	BCF103-500	10/3



10 AWG FLAT

Round Black/White/Green Triplex

Part Number 100' Spool	Part Number 500' Spool	Conductor AWG/Qty
BLACK, WHITE, AND GREEN CONDUCTORS		
BCR163-100	BCR163-500	16/3
BCR143-100	BCR143-500	14/3
BCR123-100	BCR123-500	12/3
BCR103-100	BCR103-500	10/3



10 AWG ROUND



TO 105°C DRY, 75°C WET



Round and Flat DC Duplex Boat Cable

Marine grade **DC Duplex Boat Cable** is constructed with 100% copper ultra flexible Class K fine stranding, tinned for maximum corrosion resistance and long performance. **DC Duplex** is configured in flat and round profiles with ABYC recommended red insulated (DC positive) and yellow insulated (DC negative) conductors, or in flat profile with red and black conductors. White TPE outer jacket. Construction meets and exceeds UL 1426, CSA, and ABYC standards.

Rated 600 volts, 105°C dry, 75°C wet. Resists vibration and flexing fatigue, oil, gas, salt water, sun, heat, and abrasion. Manufactured in the USA by Polar Wire.

Typical Legend

POLAR WIRE BOAT CABLE E321438
(UL) 8 AWG 2/COND VW-1 600V 105C
DRY 75C WET OIL RESISTANT BC5W2
MADE IN USA RoHS COMPLIANT —
CSA TEW 105C OR AWM
I A/B 105C 600V
FT1 265576



Flat Red/Black DC Duplex

Part Number 100' Spool	Part Number 500' Spool	Conductor AWG/Qty
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RED AND BLACK CONDUCTORS

BCF182RB-100	BCF182RB-500	18/2
BCF162RB-100	BCF162RB-500	16/2
BCF142RB-100	BCF142RB-500	14/2
BCF122RB-100	BCF122RB-500	12/2
BCF102RB-100	BCF102RB-500	10/2
BCF82RB-100	-	8/2
BCF62RB-100	-	6/2



8 AWG FLAT

Flat Safety Yellow/Red DC Duplex

Part Number 100' Spool	Part Number 500' Spool	Conductor AWG/Qty
---------------------------	---------------------------	----------------------

YELLOW AND RED CONDUCTORS

BCF182YR-100	BCF182YR-500	18/2
BCF162YR-100	BCF162YR-500	16/2
BCF142YR-100	BCF142YR-500	14/2
BCF122YR-100	BCF122YR-500	12/2
BCF102YR-100	BCF102YR-500	10/2
BCF82YR-100	-	8/2
BCF62YR-100	-	6/2



10 AWG FLAT

Round Safety Yellow/Red DC Duplex

Part Number 100' Spool	Part Number 500' Spool	Conductor AWG/Qty
---------------------------	---------------------------	----------------------

YELLOW AND RED CONDUCTORS

BCR182YR-100	BCR182YR-500	18/2
BCR162YR-100	BCR162YR-500	16/2
BCR142YR-100	BCR142YR-500	14/2
BCR122YR-100	BCR122YR-500	12/2
BCR102YR-100	BCR102YR-500	10/2



10 AWG ROUND

TO 105°C DRY, 75°C WET



Arctic Ultraflex Blue® Twin and Multi-Conductor Trailer Cable

WIRE AND CABLE

Arctic Ultraflex Blue® Twin Trailer Cable

Arctic Ultraflex Blue® Trailer Cable is manufactured exclusively by Polar Wire Products using our arctic grade jacket material that is ultra flexible, lightweight, abrasion resistant and chemical, oil, gas and water resistant. Conductors are Class K fine stranded 100% copper, tinned for corrosion resistance. Designed to perform in extreme cold weather, Polar Wire Trailer Cable stays flexible in extreme temperatures of -55° to 105°C.

Arctic Ultraflex Blue® Twin Trailer Cable features red and black tinned conductors and is available in sizes 18 through 10 AWG.

Features

- Finely stranded 100% Copper
- Tinned for corrosion resistance
- Flexible to -55°C (-67°F)
- 600 Volt rated
- Industry standard colors
- Exceeds SAE standards
- Resists acids, chemicals, oil, gas, sunlight, salt, water

Applications

- Trailer wiring
- DC power needs
- Solar panel and tracker wiring
- Renewable energy projects
- Robotics and related equipment



Typical Legend

ARCTIC ULTRAFLEX 14 AWG POWER & CONTROL TRAY CABLE TYPE TC 600V SUN RES



AUF-TC182



AUF-TC162



AUF-TC142



AUF-TC122



AUF-TC102



AUF-TC122

Twin Trailer

Gray outer jacket



-55°C TO 105°C

Part Number	Conductor Size	Qty	Colors
AUF-TC182	18 AWG	2	Black, Red
AUF-TC162	16 AWG	2	Black, Red
AUF-TC142	14 AWG	2	Black, Red
AUF-TC122	12 AWG	2	Black, Red
AUF-TC102	10 AWG	2	Black, Red



*Custom colors and configurations available — minimums may apply
Contact us for special orders and lead times*

Arctic Ultraflex Blue® Multi-Conductor Trailer Cable

Arctic Ultraflex Blue® Multi-Conductor Trailer Cable is made with 100% copper conductors in 4 and 7 conductor configurations. Class K fine stranded conductors are tinned to resist corrosion (AUF-TC101214-7 is bare copper).

Multi-Conductor Trailer Cable is designed for superior flexibility and long performance in extreme temperatures of -55° to 105°C. 600 Volts. Available by the foot.

Features

- Finely stranded 100% Copper
- Tinned (except AUF-TC1014-7)
- Flexible to -55°C (-67°F)
- Industry standard colors
- Exceeds SAE standards
- Resists acids, chemicals, oil and gas, sunlight, salt, water

Applications

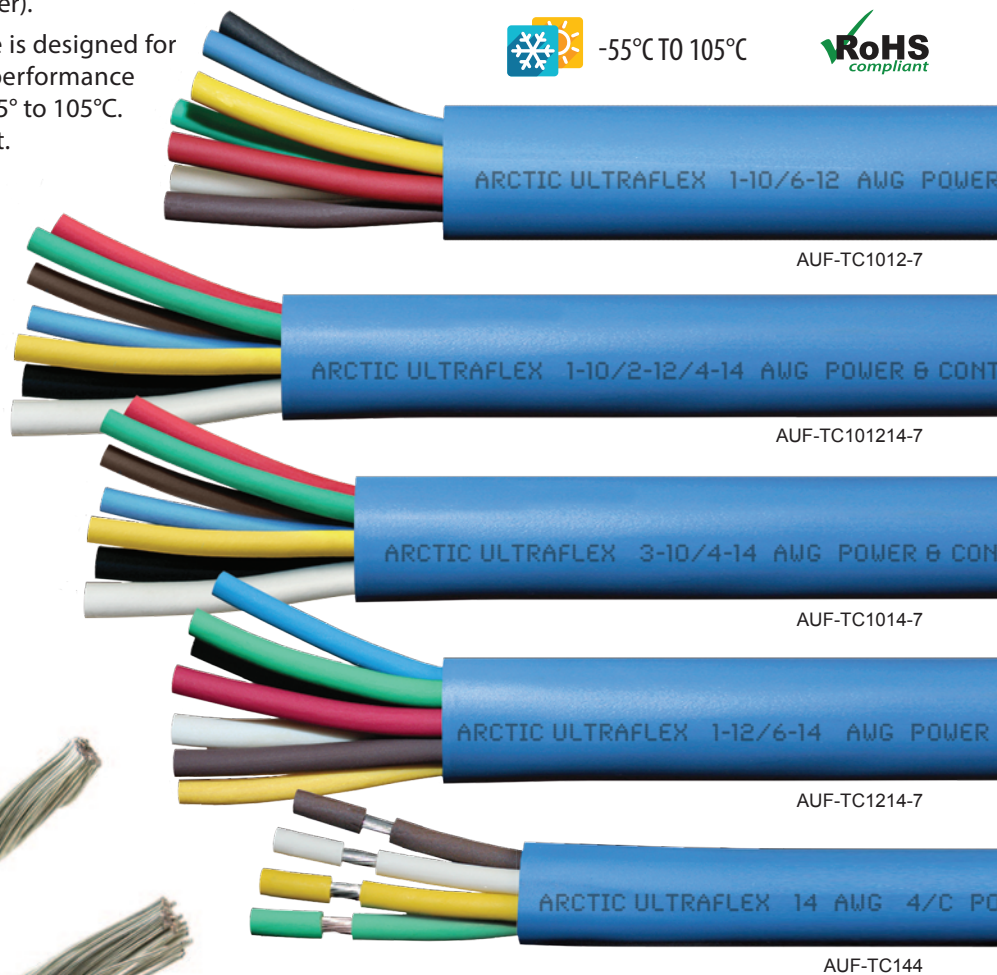
- Trailer wiring, DC power needs
- Solar panel and tracker wiring
- Renewable energy projects
- Robotics and related equipment

Typical Legend

ARCTIC ULTRAFLEX 1-12/6-14 AWG POWER & CONTROL TRAY CABLE TYPE TC 600V SUN RES



-55°C TO 105°C



AUF-TC1012-7



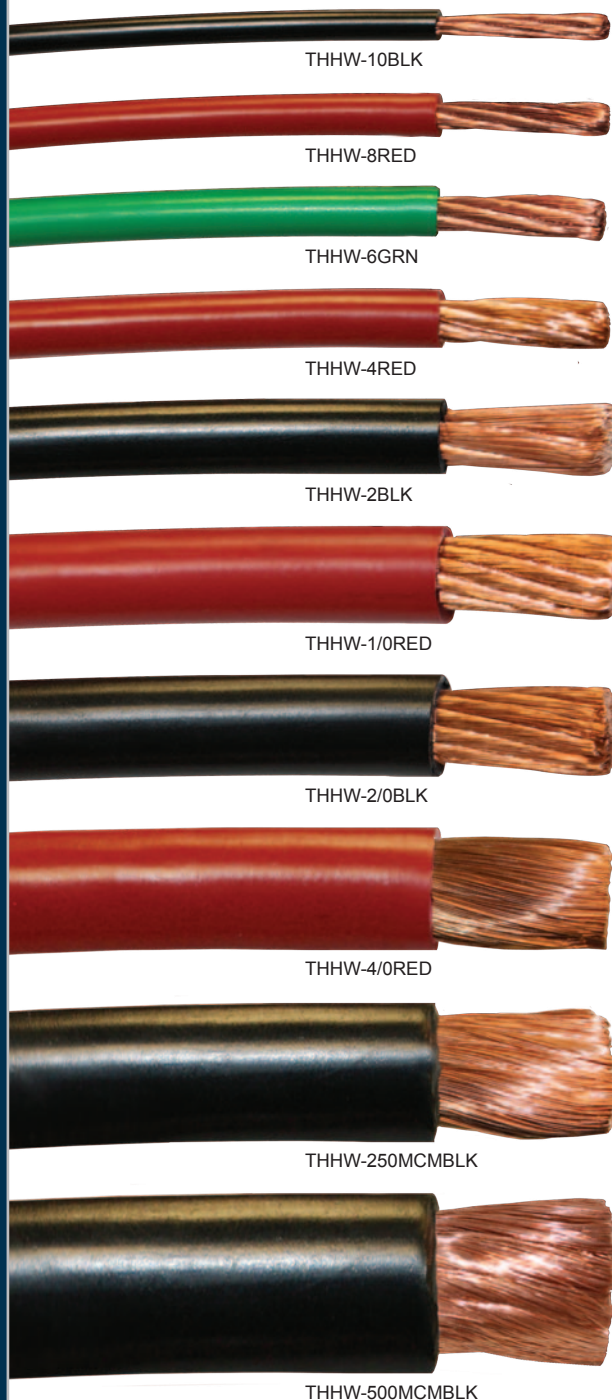
Multi-Conductor Trailer

Blue outer jacket

Part Number	Qty	Conductors	
		Size	Color
AUF-TC1012-7	1	10 AWG	White
	6	12 AWG	Black, Red, Blue, Green, Yellow, Brown
AUF-TC101214-7	1	10 AWG	White
	2	12 AWG	Black, Red
	4	14 AWG	Blue, Green, Yellow, Brown
AUF-TC1014-7 (Bare Copper)	3	10 AWG	White, Black, Red
	4	14 AWG	Black, Red, Blue, Green, Yellow, Brown
AUF-TC1214-7	1	12 AWG	White
	6	14 AWG	Black, Red, Blue, Green, Yellow, Brown
AUF-TC144	4	14 AWG	White, Green, Yellow, Brown

Multipurpose Flexible Wire

THHW / TEW / MTW / AWM / BC-5W2 / SAE TYPE SGT



Flexible Wire Ratings and Certifications:

Flexible Building Wire

An excellent oil, heat, acid, and moisture resistance Class K Flexing Service Wire constructed with 30 AWG stranding for superior flexibility. Conductors are soft annealed 100% copper with no aluminum, constructed to ASTM Specification B172. Extra-flexible extruded, high dielectric PVC insulation.

- Rated for -40°F to 221°F (-40°C to 105°C)
- UL Listed and CSA Certified

Fine Strand Battery Cable

More flexible than standard battery cable even in very cold temperatures. Cables made with Multi-Listed Flexible Wire withstand persistent vibration and flexing for reliability and longevity. Ideal for battery and starter cables, ground cables, and jumper cables.

- Fine strand annealed 100% copper conductor with a tough oil, heat, acid, and water resistant PVC jacket
- Meets and exceeds SAE standards, marine ratings

Flexible Welding Cable

30 AWG Class K fine stranded annealed copper conductors provide excellent conductivity and flexibility, reducing operator fatigue and improving efficiency. The tough, extra-flexible, high dielectric PVC jacket resists abrasion, oils, acids, heat, flame, and moisture, and performs reliably in severe cold temperatures and high heat conditions.

- Rated for -40°F to 221°F (-40°C to 105°C)
- Meets UL VW-1 and CSA FT1 flame test requirements.

Single Conductor Marine Boat Cable

BC-5W2 Boat Cable rated for 600 Volts. This flexible wire resists vibration and flexing fatigue, withstands salt water, oil, and fuel exposure, and stays pliable in cold down to -40°F to 221°F (-40°C to 105°C). Its 30 AWG Class K fine 100% copper stranding and highly flexible jacket eases installation in the constricted spaces and tight corners typical of boats.

- Meets or exceeds ABYC standards
- Meets UL VW-1 and CSA FT1 flame test requirements



Additional colors available by special order —minimums may apply

Multipurpose, Multiple Listed Flexible Wire

Features

- Excellent oil, heat, acid, and moisture resistance
- Class K Flexing Service Wire constructed with 30 AWG stranding for superior flexibility and conductivity
- Soft annealed bare copper made to ASTM Specification B172 with extra-flexible extruded, high dielectric polyvinyl chloride (PVC) insulation
- Rated for -40°F to 221°F (-40°C to 105°C)

Applications

- Multipurpose use in NEC Article 310 and NFPA Standard 79 applications
- Internal appliance wiring, electronic circuits, instrument panels, switchboards, fluorescent ballasts, recreational vehicles, boat cable, renewable energy systems
- Motor and transformer leads, battery cables, hookup wire, welding leads, jumper cables



Industry Approvals

- Meets UL VW-1 and CSA FT1 flame test requirements
- UL Listed and Approved for 600V
- Meets or exceeds UL, ABYC and SAE standards
- NEC types Machine Tool Wire and THHW
- 1/0 to 750 MCM are CT (Cable Tray) approved
- UL AWM styles 1232, 1284, 1338
- 6 AWG also UL1337, 1 to 4/0 also UL1338
- CSA Certified. TEW FT-1 for 6 to 4/0 AWG, AWM I A/B FT-1 for 250 to 750 MCM



Typical Legend

E321440 2 AWG (33.62mm²) 600 VOLT (UL) TYPE MTW VW-1 OR THHW OR BOAT CABLE BC-5W2 OR AWM STYLES 1232/1284/1338/10269 . . . CSA 234608 TEW 105°C 600V FT1 OR AWM I A/B 600 VOLT 105°C 600V FT1 . . . FOR SAE TYPE SGT

Class K Finely Stranded Multipurpose Flexible Wire THHW / TEW / MTW / AWM / BC-5W2 / SAE TYPE SGT

Part Number	Color	AWG	MM2	Bare Copper Stranding Qty/AWG	Nominal OD	Wall Thickness	UL Style	Ampacity** Dry	Ampacity** Wet
THHW-10BLK	● Black	10	5.26	105/30	.178"	.030"	1015	105	90
THHW-8BLK	● Black	8	8.37	168/30	.239"	.045"	1028	105	90
THHW-8RED	● Red	8	8.37	168/30	.239"	.045"	1028	105	90
THHW-6BLK	● Black	6	13.30	259/30	.326"	.060"	1232	105	95
THHW-6RED	● Red	6	13.30	259/30	.326"	.060"	1232	105	95
THHW-6GRN	● Green	6	13.30	259/30	.326"	.060"	1232	105	95
THHW-4BLK	● Black	4	21.15	420/30	.378"	.060"	1232	140	125
THHW-4RED	● Red	4	21.15	420/30	.378"	.060"	1232	140	125
THHW-2BLK	● Black	2	33.61	665/30	.485"	.060"	1232	190	170
THHW-2RED	● Red	2	33.61	665/30	.485"	.060"	1232	190	170
THHW-1BLK*	● Black	1	42.40	836/30	.550"	.080"	1232	220	195
THHW-1RED*	● Red	1	42.40	836/30	.550"	.080"	1232	220	195
THHW-1/0BLK	● Black	1/0	53.50	1064/30	.625"	.080"	1232	260	230
THHW-1/0RED	● Red	1/0	53.50	1064/30	.625"	.080"	1232	260	230
THHW-2/0BLK	● Black	2/0	67.40	1323/30	.650"	.080"	1232	300	265
THHW-2/0RED	● Red	2/0	67.40	1323/30	.650"	.080"	1232	300	265
THHW-3/0BLK*	● Black	3/0	85.00	1666/30	.710"	.080"	1232	350	310
THHW-3/0RED*	● Red	3/0	85.00	1666/30	.710"	.080"	1232	350	310
THHW-4/0BLK	● Black	4/0	107.0	2107/30	.805"	.080"	1232	405	360
THHW-4/0RED	● Red	4/0	107.0	2107/30	.805"	.080"	1232	405	360
THHW-250MCMBLK	● Black	250 MCM	127.0	2499/30	.880"	.095"	1284	455	405
THHW-500MCMBLK	● Black	500 MCM	253.0	5054/30	1.160"	.095"	1284	700	620
THHW-750MCMBLK*	● Black	750 MCM	380.0	7448/30	1.380"	.110"	1284	885	785

* Available by special order. Additional colors available upon request. Minimums may apply.

** 105°C ampacities adapted from ICEA P-54-440 /NEMA WC51-1986 R1991. The ampacities provided are for informational purposes only. Acceptance of these values by any governing body is the responsibility of the end user. Ampacities are based on a single conductor, in free air, at 30°C ambient air temperature.

Some sizes available in tinned copper by special order — minimums apply

DLO Wire

Type TC Direct Burial Cable

Diesel Locomotive Wire (DLO) RHH/RHW-2

Features

- Stranded tinned annealed copper conductor per AAR 589
- Premium-grade 90°C EP Insulation
- Black heavy-duty CPE Jacket
- -40°C to 90°C wet or dry
- Excellent impact and abrasion resistance
- Resists oils, acids, alkalis, heat, flame
- Flexible tinned copper stranding
- 2000 Volt as RHH/RHW-2
- 1000 Volt as CSA RW90

Applications

- Diesel electric locomotives
- Telecom power supply
- Oil and gas drilling rigs
- Mining and earth-moving equipment
- Shipyards and dockside power
- Motor leads, arc welder leads
- Where flexible power leads must be installed in conduit or raceways

Industry Approvals

- Made to UL and CSA Standards
- MSHA Accepted (P-136-29)
- UL Listed as RHH/RHW-2 per UL 44
- CSA Certified as Type RW90 1 kV per C22.2 No.38
- Meets FT-4, VW-1 Flame Tests
- CT Rated 1/0 and larger
- RoHS Compliant

2000V as UL RHH/RHW-2, 1000V as CSA RW90

Black outer jacket

Part Number	AWG or MCM	Conductor Stranding Qty/AWG	Nom. Insulation Thickness	Nom. Outside Diameter	Current Amps (1)*	Current Amps (2)*
DLO-10	10	27/24	.045"	0.26"	40	55
DLO-8	8	37/24	.060"	0.34"	55	80
DLO-6	6	61/24	.060"	0.40"	75	105
DLO-4	4	105/24	.060"	0.46"	95	140
DLO-2	2	154/24	.060"	0.52"	130	190
DLO-1	1	224/24	.080"	0.65"	150	220
DLO-1/0	1/0	280/24	.080"	0.69"	170	260
DLO-2/0	2/0	329/24	.080"	0.73"	195	300
DLO-3/0	3/0	145/24	.080"	0.81"	225	350
DLO-4/0	4/0	551/24	.080"	0.87"	260	405
DLO-262	262.6	646/24	.095"	1.00"	296	467
DLO-313	313.3	777/24	.095"	1.06"	326	522
DLO-373	373.7	925/24	.095"	1.10"	362	52
DLO-444	444.4	1110/24	.095"	1.23"	400	652
DLO-535	535.3	1332/24	.120"	1.34"	445	728
DLO-646	646.4	1600/24	.120"	1.45"	493	815
DLO-777	777.7	1924/24	.120"	1.50"	910	904

*(1) Ampacities based on 90°C Conductor and 30°C Ambient temperature based on Table 310.16 of the NEC for not more than three current-carrying conductors in raceway, cable or earth.
*(2) Ampacities based on single-conductor in free air, in accordance with NEC Table 310.17.

Typical Legend

313.1 KCMIL (152.0mm²) TYPE RHH OR RHW-2 2KV (-40C) PR II SUN RES FOR CT USE FT4/IEEE 1202 (UL) E18321 --- CSA LL825 RW90 300 KCMIL EP 1KV (-40C) EP/CPE TC FT4 --- EPR/CPE 2KV DIESEL LOCOMOTIVE CABLE P-07-KA090026-MSHA --- RoHS 2013 2325 350 12114FT.



-40°C TO 90°C WET OR DRY



Type TC Direct Burial Cable

Type TC Direct Burial Power and Control Cable is a 600V cable with three 100% copper conductors and ground tray cable. Inner insulation jackets are UL Listed THHN/THWN heat stabilized PVC/nylon insulation. Its tough PVC outer jacket resists mechanical damage, heat, flame, moisture, chemicals, sunlight, and corrosion. Designed for burial without conduit and rated for temperatures from -25°C to 90°C.

Features

- 100% bare annealed copper Class B compressed stranded conductors and ground wire
- UL Listed flame and moisture resistant jacket
- Ripcord under jacket eases stripping
- Rated for 600 Volts
- Made in the USA



Applications

- Approved for cable tray, raceway, direct burial, and aerial installations with messenger wire
- Complies with NEC Articles 318, 340, 501, 725
- Approved for tray use in Class 1, Div 2 hazardous locations and Class 1 control circuits as permitted in NEC Articles 318, 501
- 4 AWG is UL Listed for exposed runs (TC-ER) per NEC 336.10
- Use at temperatures up to 75°C wet or 90° dry

Industry Approvals

- ASTM
- UL 1277
- ICEA S-58-679 - Control Cable Conductor Identification Method 4
- UL 1685 - UL CT Flame Exposure Test (70,000 Btu/hr)
- ICEA T-29-520 - Vertical Cable Tray Flame Test (210,000 Btu/hr)
- ICEA 8-95-658 (NEMA WC 70) construction requirements
- IEEE 1202/FT4
- RoHS Compliant



Typical Legend

6 AWG 3 CDRS W/GND TYPE TC-ER THHN-THWN-2 CDRS 90C 600V SUN RES DIR BUR (UL) E153913

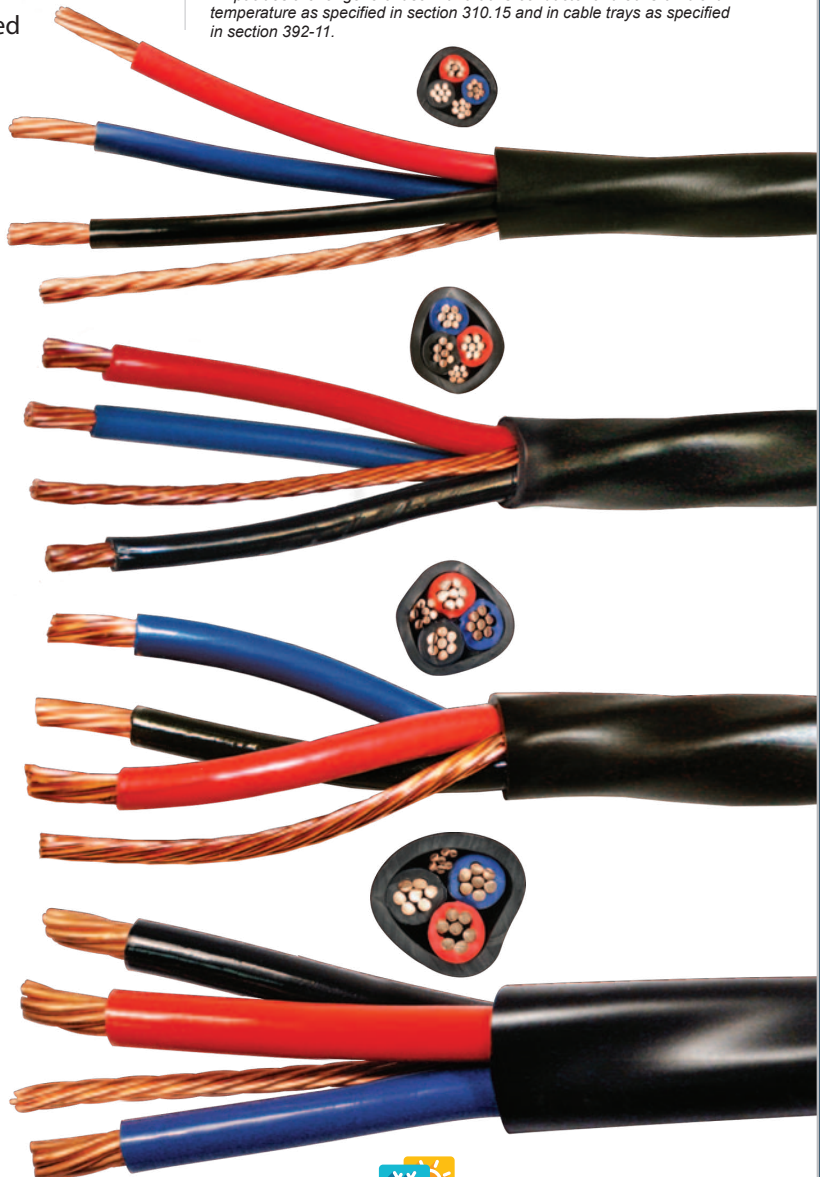
Type TC Direct Burial

Black outer jacket

Available by special order only (minimums apply)

Part Number	AWG/Conductors	Ampacity	
		75°C	90°C
THHN-103	10/3 with ground tray cable	35	40
THHN-83	8/3 with ground tray cable	50	55
THHN-63	6/3 with ground tray cable	65	75
THHN-43	4/3 with ground tray cable	85	95

NOTE: Ampacities based on Table 310.16 of the NEC, 2011 Edition. Ampacities are for general use with a 90°C conductor and 30°C ambient temperature as specified in section 310.15 and in cable trays as specified in section 392-11.



-25°C TO 75°C WET, 90°C DRY

Arctic Superflex Blue® Double Conductor Wire

ARCTIC SUPERFLEX BLUE®

Arctic Superflex Blue®

Arctic Superflex Blue® has been tested and used successfully for nearly three decades in the harsh environment of Alaska's Arctic North Slope. Flexibility is achieved by combining finely stranded 100% copper conductors with a jacket resistant to oil and gasoline, acids, chemicals, salt water and sunlight. **Arctic Superflex Blue®** cables are highly abrasion resistant and can be used in most 600 volt applications.



Arctic Superflex Blue®

Part Number	Wire Gauge	Stranding per Conductor
ASF-8X2	8 AWG	168/30
ASF-6X2	6 AWG	266/30
ASF-4X2	4 AWG	420/30
ASF-2X2	2 AWG	665/30
ASF-1/0X2	1/0 AWG	1064/30
ASF-3/0X2	3/0 AWG	1672/30

**PROUDLY MADE
IN THE USA**



Polar Wire Products, Inc.
is the exclusive manufacturer of
Arctic Superflex Blue®

*Polarity stripe
extruded into jacket*

Double Conductor Wire

Thermoplastic Elastomer Jacket

- Same jacket as **Arctic Ultraflex Blue**[®]
- Cold weather flexibility to -67°F (-55°C)
- High temperature performance to 221°F (105°C)
- Chemical, abrasion, water, and sunlight resistant
- Parallel bonded construction
- Polarity stripe extruded into jacket
- Tangle resistant and easy to handle

Copper Stranding

- Flexible Class K fine stranded 100% copper
- Built to the same UL/AWG specifications as **Arctic Ultraflex Blue**[®]
- **Exceeds** SAE standards

Applications

- Battery and jumper cables
- Wind and solar power systems
- Outboard motor leads
- Tow truck booster systems
- ATV and RV power cables
- Uninterrupted power supply systems (UPS)



-55°C TO 105°C

Size and Colors

- Available 8 AWG through 3/0 AWG
- Other sizes, custom colors and striping available on request—minimums apply

Typical Legend

1/0 AWG 2/C ARCTIC SUPERFLEX BLUE
-55C TO 105C VW-1 600 VOLTS OIL RESISTANT



Arctic Superflex Blue[®]
1/0 AWG
1064/30 UL Class K
strands per conductor

**Custom colors
and striping
available**



We use Arctic Superflex Blue[®] double conductor cable exclusively in our stock and custom jumper cable systems.

- Stays flexible to -55°C
- 100% COPPER conductors—Absolutely NO ALUMINUM!
- Considerably more copper than standard auto jumper cables
- Highly abrasion and chemical resistant wire insulation
- Extruded polarity stripe for safety identification

