### **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 COND	UCTORS		
BCF163-100	BCF163-500	16/3		
BCF143-100	BCF143-500	14/3		
BCF123-100	BCF123-500	12/3		
BCF103-100	BCF103-500	10/3		



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



TO 105°C DRY, 75°C WET



10 AWG FLAT





CABLE E321438 (UL) 10 AWG 3/COND

POLAR WIRE BOAT CABLE E321438 (UL) 10 AWG 3/COND

### 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







### Flat Red/Black DC Duplex

Part Number 100' Spool		Part Number 500' Spool	Conductor AWG/Qty	
	RED AND BLACK CO	ONDUCTORS		
	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	Conducto AWG/Qty
YELLOW AND RED	CONDUCTORS	
BCR182YR-100	BCR182YR-500	18/2
BCR162YR-100	BCR162YR-500	0 16/2
BCR142YR-100	BCR142YR-500	0 14/2
BCR122YR-100	BCR122YR-500	0 12/2
BCR102YR-100	BCR102YR-500	0 10/2



10 AWG ROUND



# Arctic Ultraflex Blue® Twin and Multi-Conductor Trailer 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**<sup>®</sup> **Twin Trailer Cable** features red and black tinned conductors and is available in sizes 18 through 10 AWG.

CTIC ULTRAFLEX 18 AWG 2/C POWER 6 CONTRO

AUF-TC182

ARCTIC ULTRAFLEX 16 AWG 2/C POWER 6 CONTROL

AUF-TC162

ARCTIC ULTRAFLEX 14 AWG 2/C POWER 6 CONTROL

AUF-TC142

ARCTIC ULTRAFLEX 12 AWG 2/C POWER 6 CONTRO

AUF-TC122

RCTIC ULTRAFLEX 10 AWG 2/C POWER & CONTROL

AUF-TC102

Twin Trailer		Gray outer jack		
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	

-55°C TO 105°C



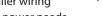
Custom colors and configurations available — minimums may apply Contact us for special orders and lead times

### **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**





- 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-TC122

### **Arctic Ultraflex Blue® Multi-Conductor Trailer Cable**



### 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 persistant 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

IN THE USA

Part Number	Color	AWG	MM2	Bare Copper Stranding Qty/AWG	Nominal OD	Wall Thickness	UL Style	Ampacity** Dry	Ampacity** Wet
THHW-10BLK	<ul><li>Black</li></ul>	10	5.26	105/30	.178"	.030"	1015	105	90
THHW-8BLK	<ul><li>Black</li></ul>	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	<ul><li>Black</li></ul>	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	<ul><li>Green</li></ul>	6	13.30	259/30	.326"	.060"	1232	105	95
THHW-4BLK	<ul><li>Black</li></ul>	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 THHW-4/0RED	<ul><li>Black</li><li>Red</li></ul>	4/0 4/0	107.0 107.0	2107/30 2107/30	.805" .805"	.080" .080"	1232 1232	405 405	360 360
	_								
THHW-250MCMBLK THHW-500MCMBLK	<ul><li>Black</li><li>Black</li></ul>	250 MCM 500 MCM	127.0 253.0	2499/30 5054/30	.880" 1.160"	.095" .095"	1284 1284	455 700	405 620
THHW-750MCMBLK*	Black	750 MCM	380.0	7448/30	1.380"	.110"	1284	885	785

<sup>\*</sup> Available by special order. Additional colors available upon request. Minimums may apply.

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

<sup>\*\* 105°</sup>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.



# 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, alkalies, 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

<sup>\*(1)</sup> 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.





EPR/CPE 2KV DIESEL LOCOMOTIVE CABLE P-07-KA090026-MSHA --- RoHS 2013











Black outer jacket

90°C

40

55

75

Ampacity 75°C

35

50

### Type TC Direct Burial Cable

Available by special order only (minimums apply)

10/3 with ground tray cable

8/3 with ground tray cable

6/3 with ground tray cable

AWG/Conductors

Type TC Direct Burial

Part Number

THHN-103

THHN-83

THHN-63

**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

## PROUDLY MADE IN THE USA

### **Typical Legend**

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

