

Flexible Power Cable • DLO

2000 Volts • 90°C

Diesel Locomotive Cable • Low Smoke (Sizes 2/0 and higher) • EP/CPE • RHH, RHW-2

Conductor

Flexible-stranded,
tin-coated annealed
copper

Jacket

Flame retardant,
oil and sunlight
resistant
Chlorinated
Polyethylene (CPE)

See below
for jacket
color options
(Special order)

Separator

Suitable separator tape
provides easy stripping
of insulation

Insulation

Ethylene-Propylene rubber
(EPR)



Application

AmerCable's 2000V Diesel Locomotive Cable (DLO) is a single conductor portable power cable suitable for use in applications needing great flexibility, excellent wearability and good flex life. Applications include locomotive and car equipment, motor and generator leads, battery leads, shipyards, telecommunications power, heavy earth moving equipment, renewable energy and other heavy duty flexing applications.

Features

- A two layer composite of flame retardant, oil and sunlight resistant Chlorinated Polyethylene (CPE) outer layer and Ethylene-Propylene rubber (EPR) inner layer. The composite design provides significant diameter reductions compared to designs using full thickness jackets.
- Suitable for continuous operating temperatures of 90°C, wet or dry
- Rated RHH, RHW-2; 2/0 – 1111 kcmil listed and marked “for CT use”
- UL listed as Sunlight Resistant
- UL listed as Marine Shipboard Cable (4/0 and larger) – Special order only
- Insulation and jacket meet hazardous waste regulations, per Code of Federal Regulations 40 Section 261 (40CFR261) for characteristic lead content
- Flame Resistance: FT-4/IEEE1202 for 2/0 – 1111 kcmil and UL VW-1
- Meets smoke release and other requirements of Vertical Cable Tray Test UL 1685 and is marked “ST-1” for 2/0 – 1111 kcmil
- Extremely flexible stranding used for increased flexibility and ease of installation



37-119 • Single Conductor Portable Power Cable • DLO

Part No. 37-119-	Size AWG/ kcmil	Minimum Wires per Conductor	Nominal Insulation Thickness in.	Nominal Jacket Thickness in.	Nominal Outside Diameter in.	Approx. Weight lbs. per 1,000 ft.	*Ampacity 90°C
201	14	19	0.045	0.015	0.214	31	35
202	12	19	0.045	0.015	0.233	41	40
203	10	37	0.045	0.015	0.257	58	55
204	8	168	0.055	0.030	0.349	77	80
205	6	61	0.055	0.030	0.365	124	105
207	4	133	0.055	0.030	0.460	203	140
209	2	259	0.055	0.030	0.534	265	190
210	1	224	0.065	0.045	0.623	415	220
211	1/0	266	0.065	0.045	0.668	489	260
212	2/0	323	0.065	0.045	0.689	562	300
213	3/0	418	0.065	0.045	0.771	757	350
214	4/0	532	0.065	0.045	0.822	894	405
215	262	646	0.075	0.065	0.957	1091	467
216	313	777	0.075	0.065	1.008	1245	522
217	373	925	0.075	0.065	1.074	1486	591
218	444	1110	0.075	0.065	1.143	1749	652
219	535	1332	0.090	0.065	1.257	2099	728
220	646	1591	0.090	0.065	1.361	2464	815
221	777	1924	0.090	0.065	1.439	2899	904
222	929	2318	0.090	0.065	1.685	3501	1005
223	1111	2745	0.130	0.065	1.850	4166	1119

* **Ampacity** – Calculated with at 90°C conductor temperature and 30°C ambient air, per 2008 NEC, Table 310.17

• Cable diameters are subject to +/-5% manufacturing tolerance



LSTHOF-150

Attributes	Values
No. of Cond.	3
Ampacity (50C)	180
Approx LBS/MFT	0.00
AWG Size	3/0
Cond. Material	Bare Copper
Conductor Stranding	760/.014
Insul. Material	Ethylene Propylene Rubber (EPR)
Jacket Material	Halogen-Free (LSZH) Cross-Linked Polyolefin (XLPO)
Max O.D. (in)	1.820
Metal Tubes	S
Mil-Spec	M24643/3
No. of Strands	760
Nylon Tubes	8B
Strand Size	0.0140

TRI NCC 209™

Recently developed by TRI for the U.S. Navy to fight cathodic delamination (premature bond failure) of submarine connectors, TRI's NCC 209™'s metal pretreatment system is ideal for use in harsh environments such as industrial, subsea and down-hole operations. NCC 209™ firmly adheres rubbers to metals so they can survive chemical exposure and high-pressure, extreme temperature conditions.

In independent third part testing, the new NCC 209™ out performs all other NCC systems in standard overmolds with peel strengths well beyond any previously seen. The result is a bond that can survive the harshest corrosive environments over an extended service life.

NEW OVERMOLD SYSTEM

- New NCC (Non-Conductive Coating) for both Navy and commercial applications
- Reduces exposure to harmful VOC's and hazardous materials
- Reduces the number of failure points that exist in the currently approved overmold systems
- Increased reliability, reduced costs, improved application methods

NCC 209 SPECIFICATIONS

- 2 component modified epoxy
- Thickness is 35 mils + or -10 mils
- Max temperature in process is 130C
- Standard undercut request is 10 mils
- Indefinite shelf life if stored correctly
- Cleaning and prep standard solvents are acceptable

COMPARING OLD NCC STACK TO NEW TRI NCC 209™

Castable Polyurethane PR-1547 or EN-1556	Castable Polyurethane PR-1547 or EN-1556	TRI-109-2 Castable Hydrophobic Polyurethane
Primer PR-420 or AD-1146	Primer PR-420 or AD-1146	NCC 209™
Seal Coat		
Ceramic Layer		
Metal Matching Layer		
Metal Substrate	Metal Substrate	Metal Substrate



TRI NCC 209™

A Product of TRI Applied Tech

TRI Next Generation NCC provides:

- Improved cathodic protection
- Ease of processing
- Applicable to NLOS locations
- Lower cost
- Higher density (less porosity)



M-24231 Plug Sleeves Coated with NCC 209™



tri-appliedtech.com

TO LEARN IF TRI NCC 209™
CAN HELP YOU WITH YOUR
APPLICATION, CONTACT:

VINCE NEWTON

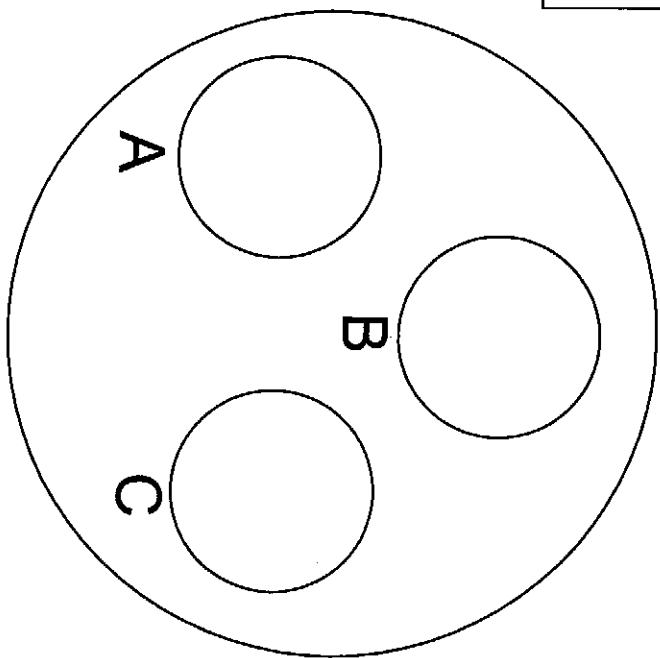
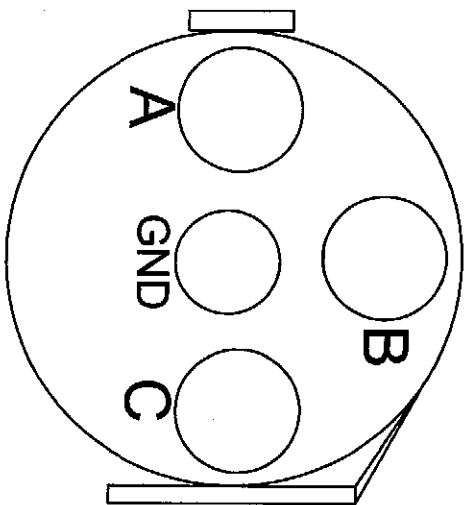
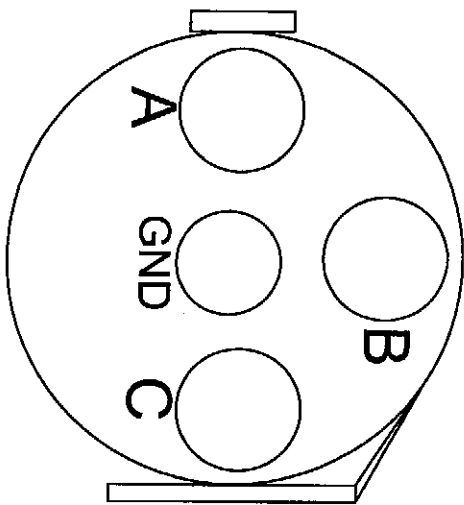
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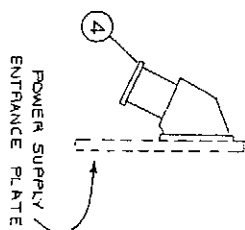
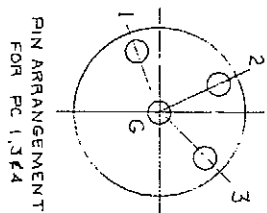
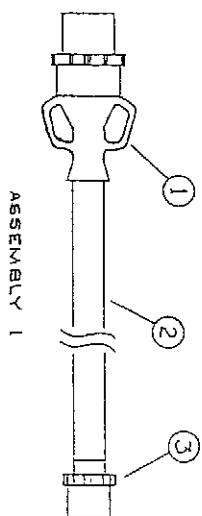
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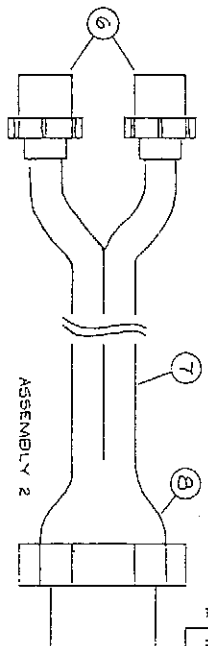
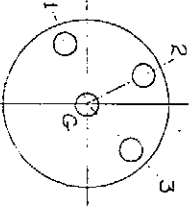
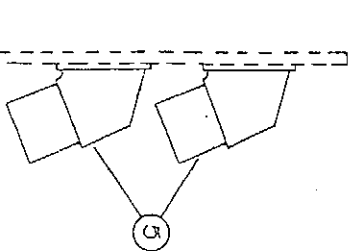
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DOCKSIDE SERVICE TO POWER SUPPLY

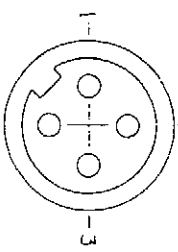


POWER SUPPLY TO SHIP

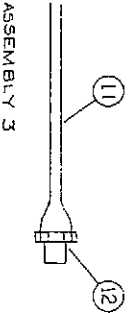


PIN ARRANGEMENT FOR PC 5 J6

(NOT USED)



PIN ARRANGEMENT FOR PC 9 J10



LIST OF MATERIAL

PC	QTY	DESCRIPTION	PLAN OR CAT. NO.	COMMENTS
1	1	400 AMP PLUG (MALE)	DS440AMP	RUSSELL STOLL MAX-GARD MIDLAND ROSS CORP.
2	160	CABLE - #1-3, 3X #7 GND	V3206	IT T
3	1	200 AMP CONN. (FEMALE)	DS2404FP	RUSSELL STOLL MAX-GARD MIDLAND ROSS CORP.
4	1	200 AMP MOTOR PLUG (MALE)	DS2404MRA	RUSSELL STOLL MAX-GARD MIDLAND ROSS CORP.
5	2	200 AMP RECEPT (FEMALE)	DS2416FRA	RUSSELL STOLL MAX-GARD MIDLAND ROSS CORP.
6	2	200 AMP PLUG (MALE)	DS2416MP	RUSSELL STOLL MAX-GARD MIDLAND ROSS CORP.
7	150	CABLE - THOF-150	MIL-C-915 E	NOTE 2
8	1	MOLDED CONN. TRI. OUTBOARD	DWG NO. AX8982 PART NO. X8982-1	NOTE 2
9	1	RECEPT, 4P, (MALE) WITH 12' PIGTAIL	E2004-1502	CAN-LOK EMPIRE PRODUCTS INC.
10	1	CONN., 4P, (FEMALE) FIELD ATTACHABLE	E2004-2502	CAN-LOK EMPIRE PRODUCTS INC.
11	75	CABLE - THOF-3	MIL-C-915 E	NOTE 3
12	1	MATING CONN. FOR TRI. SENSING	SYN. 713 M24231-1-001	NOTE 3

* NON-DEVIATION MATERIAL (INTERFACE REQUIREMENT)

NOTES

1. QUANTITIES ARE FOR ONE POWER SUPPLY.
2. PC 7 & 8 ARE PURCHASED AS AN ASSEMBLY FROM JOY MANUFACTURING CO., NEW PHILADELPHIA, OHIO TO PLAN NO. AX8982, PART NO. X8982-1 CONNECTOR ASSEMBLY OUTBOARD, PLATING - 340AMP, 120V, 400HZ, 3Ø
3. PC 11 & 12 ARE PURCHASED AS AN ASSEMBLY FROM GENERAL DYNAMICS/ELECTRIC BOAT DIVISION, GROSSETT, CONN. CONTACT INDUSTRIAL SALES.

BANGOR POWER SUPPLY

PORTABLE CABLE REQUIREMENTS

REV A ELIMINATE NEUTRAL PIN # CONDUCTOR FROM ASSY. 1

PURCHASE REQUISITION SUPPORT SKETCH NO. 443-FT105-900 ENGR/TECH *W.B. King / Z.P. Callio*

DATE - 4/14/80