

# VERTITECK® TECK90

TRXLPE/PVC/GSIA/PVC, Power, Unshielded, Armored  
5 kV, CSA TECK90, 90 Mils, Three Conductor



### Features (cont'd.):

- Lighter than mine shaft cable with conventional steel wire armor (SWA)
- More flexible than SWA cables, resulting in easier handling during installation
- Terminations and connections to electrical cabinets are similar to standard TECK90 cables
- Meets cold bend and impact tests at -40°C

### Product Construction:

#### Conductor:

- 1/0 AWG thru 500 kcmil bare copper compact strand

#### Strand Shield:

- A thermoset semi-conducting strand shield is extruded over the conductor

#### Insulation:

- Tree-Retardant Cross-linked Polyethylene (TRXLPE), Type RW90
- Color-coded: printed numbers

#### Ground (Bonding) Conductor:

- The conductor consists of one uninsulated stranded bare copper conductor

#### Inner Jacket:

- Lead-free, flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC), black

#### Armor:

- Galvanized Steel Interlocked Armor (GSIA)

#### Jacket:

- Lead-free, ACID-FLAME-CHECK ✓✓ AG14 flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC), orange

### Options:

- Galvanized Steel Interlocked Armor (GSIA)

### Applications:

- For exposed and concealed wiring in dry, damp or wet locations
- For use in ventilated, non-ventilated and ladder-type cable trays in dry, damp, or wet locations
- For direct earth burial (with protection as required by inspection authority)
- For wiring in all hazardous locations when used with certified HL cable glands
- Cost-effective alternative to installation in conduit
- Typical vertical installations include mine shafts, tall commercial buildings, inclined tunnels and vertical cable trays  
(Note that the overall jacket is required for all damp and wet locations and for all corrosive environments: CE Code Part 1, Rules 12-708 and 22-200)

### Features:

- Rated at 90°C wet or dry
- The jacket under the armor (inner jacket) is designed with longitudinal raised ribs. The armor is then applied and bites into these ribs to provide a solidly locked construction. This feature enables the cable to be self-supporting (core will not slip) during vertical installation when cable weight is supported by the copper conductors

### Compliances:

#### Industry Compliances:

- CSA Standard C22.2 No. 131 and No. 174

#### Flame Test Compliances:

- CSA FT1 and FT4
- IEEE 383 (70,000 BTU/hr)
- UL 1581 (70,000 BTU/hr)
- IEEE 1202 (70,000 BTU/hr) CSA FT4
- ICEA T-30-520 (70,000 BTU/hr)

#### Other Compliances:

- Hazardous Location Rating: HL
- EPA 40 CFR, Part 261 for leachable lead content per TCLP method
- OSHA Acceptable
- RoHS Compliant

### Packaging:

- For Canadian customers, lengths are provided on returnable wood or steel reels that require a deposit. Extra charges apply for lagging, pulling eyes, paralleling and plexing
- For U.S. customers, material cut to length and shipped on non-returnable wood reels, while lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit. Extra charges apply for cuts less than 1000 ft., lagging, pulling eyes, paralleling and plexing

CATALOG NUMBER	NO. OF COND.	COND. SIZE (AWG/kcmil)	GROUND WIRE SIZE (AWG)	NOMINAL DIAMETER (OVER)						COPPER WEIGHT		NET WEIGHT W/STEEL ARMOR		AMPACITY** (30°C AMBIENT)	MAXIMUM SELF-SUPPORTING LENGTH***(m)
				INSULATION		ARMOR		CABLE		LBS/1000 FT	kg/km	LBS/1000 FT	kg/km		
				INCHES	mm	INCHES	mm	INCHES	mm						
<b>1/0 AWG THRU 500 kcmil—THREE CONDUCTOR—UNSHIELDED, 90 MILS INS. (2.29 mm)—5 kV</b>															
17497.055100*	3	1/0	6	0.56	14.2	1.77	45.0	1.87	47.5	1082	1610	2700	4020	170	200
17497.055200*	3	2/0	6	0.60	15.2	1.86	47.3	1.96	49.8	1343	1999	3060	4550	195	221
17497.055300*	3	3/0	4	0.65	16.4	1.97	50.0	2.07	52.6	1720	2560	3550	5280	225	240
17497.055400*	3	4/0	4	0.70	17.8	2.08	52.9	2.18	55.4	2315	3445	4290	6380	260	249
17497.056000*	3	250	4	0.75	19.1	2.25	57.2	2.35	59.7	2469	3674	4990	7430	290	251
17497.056200*	3	350	3	0.85	21.8	2.46	62.5	2.59	65.8	3476	5173	6340	9430	350	278
17497.056500*	3	500	2	0.98	24.9	2.72	69.1	2.85	72.4	4837	7198	8130	12100	430	230

Dimensions and weight are nominal; subject to industry tolerances.

\*Non-stock item; minimum runs apply. Please consult Customer Service for price and delivery.

\*\*Ampacity is based on CE Code Part 1, Table 2 (three conductors in raceway [conduit]) and Rule 4-004.

\*\*\*Maximum self-supporting lengths are based on safety factor of 5 and a tensile strength of 37,000 psi for soft drawn copper. Higher safety factors or lower tensile strength values may be required to address more stringent safety regulations.

