

## ROME HL TECK 90 MINUS 40C, FT4, 600 VOLTS

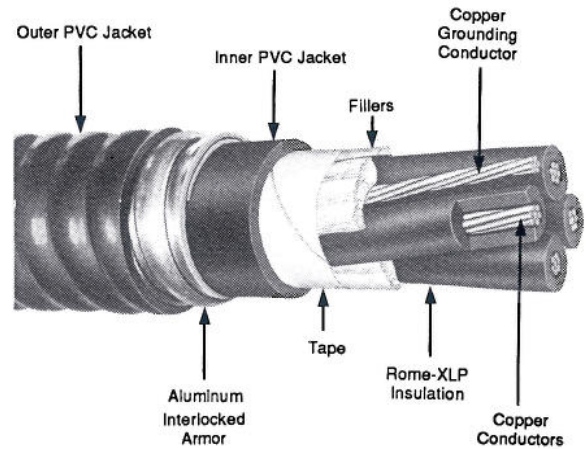
10 AWG Multiconductor RW90 (.030" XLPE Insulation)  
 No. 12 AWG Grounding Conductor  
 Inner PVC Jacket, Aluminum Armor, Outer PVC Jacket

**APPLICATION:** As flame retardant multiconductor control, signal or power cables rated 600 volts, 90C in wet or dry locations. Widely used in the pulp and paper, petroleum, petrochemical, mining industries where cables with outstanding resistance to mechanical abuse, chemical attack and high reliability are required. Suitable for use in direct burial, open wiring, ventilated flexible cableways, and in non-ventilated, ventilated or ladder type cable trays. Inner and outer PVC jacket have low flame spread properties along with excellent low temperature properties.

**STANDARDS:**

1. Listed as TECK 90 MINUS 40C per CSA Std C22.2 No. 131.
2. Passes FT-4 70000 BTU/Hr cable tray flame test of CSA Std C22.2 No. 0.3.
3. Complies with Acid Gas Evolution Test of Ontario Hydro Provisional Spec L-891SM-77. Less than 14% acid gas evolution.
4. HL approved for use in hazardous locations per CSA Std C22.2 No. 174.

**CONSTRUCTION:** Stranded uncoated concentric copper conductors, 30 mils Rome-XLP crosslinked polyethylene insulation, color coded. Two or more conductors twisted with one No. 12 AWG 7-strand bare copper grounding conductor and suitable fillers, tape, PVC inner jacket, aluminum interlocked armor, PVC outer jacket, surface printed.



No. of Condrs.	Inner Jacket Thickness		Diameters						Weight		Connectors	
			Inner Jacket		Armor		Outer Jacket					
	Mils	mm	In.	mm	In.	mm	In.	mm	lb/k ft.	kg/km	T & B	Crouse-Hinds
2	45	1.14	.475	12.1	.640	16.3	.745	18.9	295	439	10464	0100220
3	45	1.14	.502	12.8	.667	16.9	.772	19.6	345	513	10465	0100220
4	60	1.52	.580	14.7	.745	18.9	.850	21.6	405	603	10465	0100220
5	60	1.52	.630	16.0	.795	20.2	.900	22.9	480	714	10467	0100222
6	60	1.52	.650	16.5	.850	21.6	.955	24.3	545	811	10467	0100222
7	60	1.52	.650	16.5	.850	21.6	.955	24.3	590	878	10467	0100222
8	60	1.52	.740	18.8	.905	23.0	1.01	25.7	680	1012	10467	0100222
9	60	1.52	.795	20.2	1.02	25.9	1.12	28.4	735	1094	10468	0100223
10	80	2.03	.910	23.1	1.13	28.7	1.23	31.2	805	1198	10469	0100224
11	80	2.03	.910	23.1	1.13	28.7	1.23	31.2	840	1250	10469	0100224
12	80	2.03	.935	23.7	1.16	29.5	1.26	32.0	945	1406	10469	0100224
13	80	2.03	.950	24.1	1.17	29.7	1.28	32.5	990	1473	10469	0100224
14	80	2.03	.985	25.0	1.20	30.5	1.31	33.3	1050	1563	10469	0100224
15	80	2.03	1.04	26.4	1.26	32.0	1.36	34.5	1090	1622	10470	0100225
16	80	2.03	1.04	26.4	1.26	32.0	1.36	34.5	1150	1711	10470	0100225
17	80	2.03	1.09	27.7	1.31	33.3	1.42	36.1	1210	1801	10470	0100225
18	80	2.03	1.09	27.7	1.31	33.3	1.42	36.1	1250	1860	10470	0100225
19	80	2.03	1.09	27.7	1.31	33.3	1.42	36.1	1290	1920	10470	0100225
20	80	2.03	1.15	29.2	1.37	34.8	1.47	37.3	1350	2009	10470	0100225
25	80	2.03	1.27	32.2	1.49	37.8	1.60	40.6	1590	2366	10550	0100225
30	80	2.03	1.35	34.3	1.57	39.9	1.68	42.7	1880	2798	10471	0100226
40	80	2.03	1.51	38.4	1.73	43.9	1.84	46.7	2390	3557	10472	0100227
50	110	2.79	1.78	45.2	2.01	51.0	2.12	53.8	2850	4241	10551	0100568

- NOTES:**
1. Cable weight based upon aluminum armor. Galvanized steel armor available upon request.
  2. Standard color coding is; black, white (2/C); black, red, blue (3/C); black, red, blue, white (4/C); printed numbers (5/C and up).
  3. Also available with 1KV voltage rating.

Information on this sheet subject to change without notice.

Specification

ROME HL TECK 90 MINUS 40°C, FT4, 600 VOLTS

10AWG Multiconductor RW90 (.030" XLPE Insulation)

**1. SCOPE**

- 1.1 This specification describes multiconductor 10 AWG Rome TECK 90 MINUS 40°C cable with Rome-XLP crosslinked polyethylene insulation, PVC inner jacket, aluminum interlocked armor, and PVC outer jacket. The cables may be used in circuits not exceeding 600 volts at temperatures of 90°C in wet or dry locations. Cables are intended for use indoors or outdoors in open wiring, ventilated flexible cableways, cable trays and direct burial installations in commercial or industrial applications.

**2. STANDARDS**

- 2.1 The following standards shall form a part of this specification to the extent specified herein:
- 2.1.1 CSA Std C22.2 No. 131 TECK 90 MINUS 40°C cable.
  - 2.1.2 CSA Std C22.2 No. 0.3 Clause 4.11.4 FT-4 flame test.
  - 2.1.3 Ontario Hydro Provisional Spec L891SM-77.
  - 2.1.4 CSA Std C22.2 No. 174 Cables and Cable Glands for Use In Hazardous Locations.
  - 2.1.5 CSA Std C22.2 No. 38 Thermoset Insulated Wires and Cables.

**3. CONDUCTORS**

- 3.1 Shall be 10 AWG Class B concentric stranded annealed uncoated copper conforming to CSA C22.2 No. 131. A nonhygroscopic separator may be used over the conductor at the option of the manufacturer.

**4. INSULATION**

- 4.1 Shall be Rome-XLP crosslinked polyethylene meeting the requirements of CSA C22.2 No. 38 for Type RW90. Average thickness of insulation shall be 30 mils. Minimum thickness at any point shall be not less than 90% of the specified average thickness.

**5. CIRCUIT IDENTIFICATION**

- 5.1 Conductors shall be colored; black, white (2/C); black, red, blue (3/C); black, red, blue, white (4/C). Cables with more than four conductors shall have circuit identification consisting of printed numbers.

**6. ASSEMBLY**

- 6.1 Insulated circuit conductors shall be cabled together with a 12 AWG 7-strand uncoated copper grounding conductor and nonhygroscopic fillers where necessary. Maximum length of lay shall be as specified in Table 3 of CSA C22.2 No. 131. A suitable nonhygroscopic tape may be applied over the assembly.

**7. INNER PVC JACKET**

- 7.1 Shall be PVC meeting the requirements of C22.2 No. 131 including requirements for low temperature classification of -40°C. Thickness of jacket shall be as specified in Table 6 of C22.2 No. 131.

**8. INTERLOCKED ARMOR**

- 8.1 An aluminum alloy interlocked armor shall be applied over the inner PVC jacket meeting the requirements of C22.2 No. 131, Clause 4.11.

**9. OUTER JACKET**

- 9.1 Cables shall be covered with a black PVC jacket meeting the requirements of C22.2 No. 131 including requirements for low temperature classification of -40°C. Thickness of covering shall not be less than 40 mils.

**10. IDENTIFICATION**

- 10.1 Cables shall be surface ink printed with a legend identifying the manufacturer, number of conductors, size, voltage rating, TECK 90 MINUS 40°C, XLPE, FT4, HL and length markings in meters.

**11. TESTS**

- 11.1 Completed cable shall be capable of compliance with the FT4 flame test of C22.2 No. 0.3, HL requirements of C22.2 No. 174 and the acid gas evolution test of OH L891SM-77 in addition to the requirements for Type TECK 90 Minus 40°C cable in C22.2 No. 131.