

HL TECK 90 MINUS 40 C, FT4, 600 VOLTS (14 AWG)

14 AWG Multiconductor RW90 (.030" XLPE Insulation)

No. 14 AWG Grounding Conductor

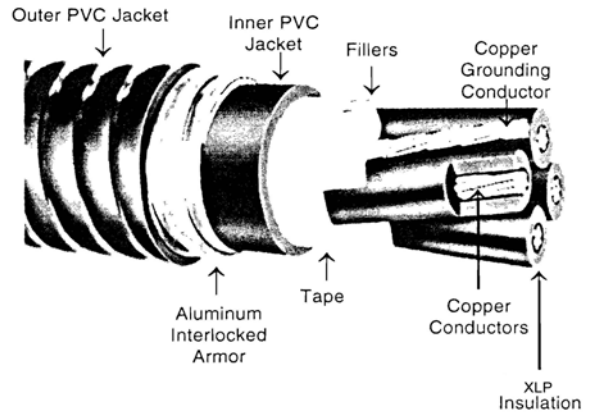
Inner PVC Jacket, Aluminum Armor, Outer PVC Jacket

APPLICATION: As flame retardant multiconductor control, signal or power cables rated 600 volts, 90°C 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 acid gas evolution and low flame spread properties along with excellent low temperature properties.

STANDARDS:

1. Listed as TECK 90 MINUS 40°C 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 XLP crosslinked polyethylene insulation, color coded. Two or more conductors twisted with one No. 14 AWG 7-strand bare copper grounding conductor and suitable fillers, tape, PVC inner jacket, aluminum interlocked armor, PVC outer jacket, surface printed.



USAWC Part #	No. of Condrs.	Inner Jacket Thickness		Diameters						Weight lbs/1000 ft.	
				Inner Jacket		Armor		Outer Jacket			
		Mils	mm	In.	mm	In.	mm	In.	mm	Net	Copper
14-02WGTECK90	2	45	1.14	.385	9.78	.550	14.6	.655	16.6	210	39
14-03WGTECK90	3	45	1.14	.405	10.3	.570	14.5	.677	17.2	230	52
14-04WGTECK90	4	45	1.14	.443	11.3	.607	15.4	.713	18.1	270	68
14-05WGTECK90	5	45	1.14	.482	12.2	.647	16.4	.752	19.1	300	81
14-06WGTECK90	6	45	1.14	.525	13.3	.690	17.5	.795	20.2	330	95
14-07WGTECK90	7	45	1.14	.525	13.3	.690	17.5	.795	20.2	350	104
14-08WGTECK90	8	60	1.52	.597	15.2	.762	19.4	.867	22.0	405	117
14-09WGTECK90	9	60	1.52	.638	16.2	.803	20.4	.908	23.1	435	130
14-10WGTECK90	10	60	1.52	.692	17.6	.857	21.8	.962	24.4	505	149
14-11WGTECK90	11	60	1.52	.692	17.6	.857	21.8	.962	24.4	525	156
14-12WGTECK90	12	60	1.52	.715	18.2	.879	22.3	.984	25.0	545	176
14-13WGTECK90	13	60	1.52	.725	18.4	.890	22.6	1.00	25.4	570	182
14-14WGTECK90	14	60	1.52	.750	19.0	.915	23.2	1.02	25.9	640	195
14-15WGTECK90	15	60	1.52	.789	20.0	1.01	25.6	1.12	28.4	660	217
14-16WGTECK90	16	60	1.52	.789	20.0	1.01	25.6	1.12	28.4	690	221
14-17WGTECK90	17	60	1.52	.830	21.1	1.05	26.7	1.16	29.5	720	234
14-18WGTECK90	18	60	1.52	.830	21.1	1.05	26.7	1.16	29.5	750	247
14-19WGTECK90	19	60	1.52	.830	21.1	1.05	26.7	1.16	29.5	770	260
14-20WGTECK90	20	80	2.03	.913	23.2	1.13	28.7	1.24	31.5	790	285
14-25WGTECK90	25	80	2.03	1.01	25.6	1.23	31.2	1.33	33.8	960	337
14-30WGTECK90	30	80	2.03	1.07	27.2	1.29	32.8	1.39	35.3	1110	402
14-40WGTECK90	40	80	2.03	1.19	30.2	1.41	35.8	1.52	38.6	1330	531
14-50WGTECK90	50	80	2.03	1.34	34.0	1.56	39.6	1.67	42.4	1530	661

Specification

HL TECK 90 MINUS 40°C, FT4, 600 VOLTS

14AWG Multiconductor RW90 (.030" XLPE Insulation)

1. SCOPE

- 1.1 This specification describes multiconductor 14AWG TECK 90 MINUS 40°C cable with 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 L891 SM-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 14 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 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 14 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 acid gas evolution test of OH L891-SM77 in addition to the requirements for Type TECK 90 MINUS 40C cable in C22.2 No. 131.

HL TECK 90 MINUS 40 C, FT4, 600 VOLTS (12AWG)

12AWG Multiconductor RW90 (.030 XLPE Insulation)

No. 14 AWG Grounding Conductor

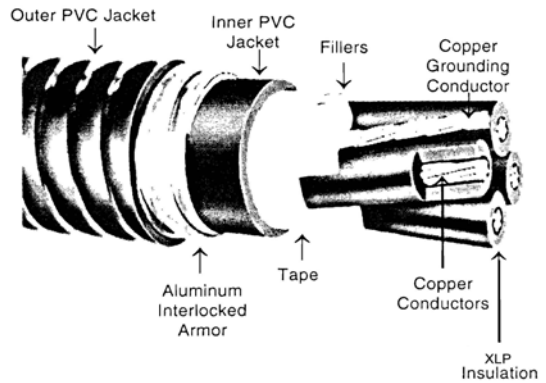
Inner PVC Jacket, Aluminum Armor, Outer PVC Jacket

APPLICATION: As flame retardant multiconductor control, signal or power cables rated 600 volts, 90°C 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 acid gas evolution and low flame spread properties along with excellent low temperature properties.

STANDARDS:

1. Listed as TECK 90 MINUS 40°C 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-891 SM-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 XLP crosslinked polyethylene insulation, color coded. Two or more conductors twisted with one No. 14 AWG 7-strand bare copper grounding conductor and suitable fillers, tape, PVC innerjacket, aluminum interlocked armor, PVC outer jacket, surface printed.



USAWC Part #	No. of Condrs.	Inner Jacket Thickness		Diameters						Weight lbs/1000 ft	
				Inner Jacket		Armor		Outer Jacket			
		Mils	mm	In.	mm	In.	mm	In.	mm	Net	Copper
12-02WGTECK90	2	45	1.14	.425	10.8	.590	15.0	.695	17.6	245	55
12-03WGTECK90	3	45	1.14	.450	11.4	.615	15.6	.720	18.3	280	75
12-04WGTECK90	4	45	1.14	.490	12.4	.655	16.6	.760	19.3	325	96
12-05WGTECK90	5	60	1.52	.567	14.4	.735	18.7	.840	21.3	375	116
12-06WGTECK90	6	60	1.52	.615	15.6	.780	19.8	.884	22.4	445	137
12-07WGTECK90	7	60	1.52	.615	15.6	.780	19.8	.884	22.4	470	157
12-08WGTECK90	8	60	1.52	.665	16.9	.830	21.1	.933	23.7	515	177
12-09WGTECK90	9	60	1.52	.710	18.0	.875	22.2	.980	24.9	550	202
12-10WGTECK90	10	60	1.52	.770	19.6	.990	25.1	1.10	27.9	630	219
12-11WGTECK90	11	60	1.52	.770	19.6	.990	25.1	1.10	27.9	660	244
12-12WGTECK90	12	60	1.52	.795	20.2	1.02	25.9	1.12	28.4	700	261
12-13WGTECK90	13	60	1.52	.810	20.6	1.03	26.2	1.14	29.0	730	286
12-14WGTECK90	14	60	1.52	.838	21.3	1.06	26.9	1.16	29.5	770	307
12-15WGTECK90	15	80	2.03	.923	23.4	1.14	29.0	1.25	31.8	810	322
12-16WGTECK90	16	80	2.03	.923	23.4	1.14	29.0	1.25	31.8	840	349
12-17WGTECK90	17	80	2.03	.970	24.6	1.19	30.2	1.30	33.0	930	370
12-18WGTECK90	18	80	2.03	.970	24.6	1.19	30.2	1.30	33.0	960	391
12-19WGTECK90	19	80	2.03	.970	24.6	1.19	30.2	1.30	33.0	990	412
12-20WGTECK90	20	80	2.03	1.02	25.9	1.24	31.5	1.34	34.0	1020	424
12-25WGTECK90	25	80	2.03	1.13	28.7	1.35	34.3	1.46	37.1	1195	527
12-30WGTECK90	30	80	2.03	1.20	30.5	1.42	36.1	1.52	38.6	1390	630
12-40WGTECK90	40	80	2.03	1.34	34.0	1.56	39.6	1.66	42.2	1710	837
12-50WGTECK90	50	80	2.03	1.51	38.4	1.73	43.9	1.84	46.7	2050	1044

Specification

HL TECK 90 MINUS 40°C, FT4, 600 VOLTS

12AWG Multiconductor RW90 (.030" XLPE Insulation)

1. SCOPE

- 1.1 This specification describes multiconductor 12AWG TECK 90 MINUS 40°C cable with -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 L891 SM-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 Conductors shall be 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 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 14 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 L891 SM-77 in addition to the requirements for Type TECK 90 MINUS 40°C cable in C22.2 No. 131.

HL TECK 90 MINUS 40 C, FT4, 600 VOLTS (10 AWG)

10 AWG Multiconductor RW90 (.030" XLPE Insulations)

No. 12 AWG Grounding Conductor

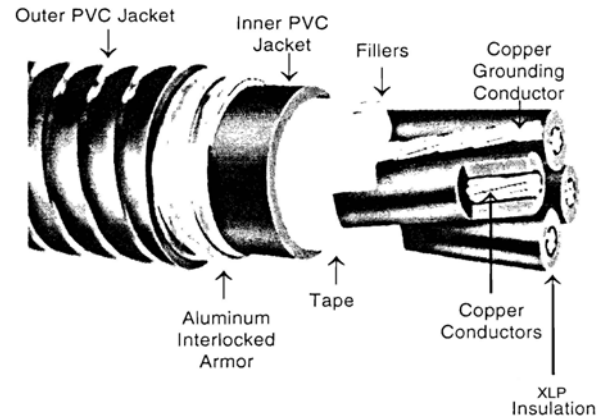
Inner PVC Jacket, Aluminum Armor, Outer PVC Jacket

APPLICATION: As flame retardant multiconductor control, signal or power cables rated 600 volts, 90°C 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 40°C 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-891 SM-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 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 innerjacket, aluminum interlocked armor, PVC outer jacket, surface printed.



USAWC Part #	No. of Condrs.	Inner Jacket Thickness		Diameters						Weight lbs/1000 ft	
				Inner Jacket		Armor		Outer Jacket			
		Mils	mm	In.	mm	In.	mm	In.	mm	Net	Copper
10-02WGTECK90	2	45	1.14	.475	12.1	.640	16.3	.745	18.9	295	87
10-03WGTECK90	3	45	1.14	.502	12.8	.667	16.9	.772	19.6	345	119
10-04WGTECK90	4	60	1.52	.580	14.7	.745	18.9	.850	21.6	405	150
10-05WGTECK90	5	60	1.52	.630	16.0	.795	20.2	.900	22.9	480	184
10-06WGTECK90	6	60	1.52	.650	16.5	.850	21.6	.955	24.3	545	217
10-07WGTECK90	7	60	1.52	.650	16.5	.850	21.6	.955	24.3	590	248
10-08WGTECK90	8	60	1.52	.740	18.8	.905	23.0	1.01	25.7	680	282
10-09WGTECK90	9	60	1.52	.795	20.2	1.02	25.9	1.12	28.4	735	309
10-10WGTECK90	10	80	2.03	.910	23.1	1.13	28.7	1.23	31.2	805	348
10-11WGTECK90	11	80	2.03	.910	23.1	1.13	28.7	1.23	31.2	840	373
10-12WGTECK90	12	80	2.03	.935	23.7	1.16	29.5	1.26	32.0	945	414
10-13WGTECK90	13	80	2.03	.950	24.1	1.17	29.7	1.28	32.5	990	437
10-14WGTECK90	14	80	2.03	.985	25.0	1.20	30.5	1.31	33.3	1050	469
10-15WGTECK90	15	80	2.03	1.04	26.4	1.26	32.0	1.36	34.5	1090	512
10-16WGTECK90	16	80	2.03	1.04	26.4	1.26	32.0	1.36	34.5	1150	533
10-17WGTECK90	17	80	2.03	1.09	27.7	1.31	33.3	1.42	36.1	1210	565
10-18WGTECK90	18	80	2.03	1.09	27.7	1.31	33.3	1.42	36.1	1250	597
10-19WGTECK90	19	80	2.03	1.09	27.7	1.31	33.3	1.42	36.1	1290	629
10-20WGTECK90	20	80	2.03	1.15	29.2	1.37	34.8	1.47	37.3	1350	675
10-25WGTECK90	25	80	2.03	1.27	32.2	1.49	37.8	1.60	40.6	1590	835
10-30WGTECK90	30	80	2.03	1.35	34.3	1.57	39.9	1.68	42.7	1880	998
10-40WGTECK90	40	80	2.03	1.51	38.4	1.73	43.9	1.84	46.7	2390	1321
10-50WGTECK90	50	110	2.79	1.78	45.2	2.01	51.0	2.12	53.8	2850	1648

Specification
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 TECK 90 MINUS 40°C cable with 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 L891 SM-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 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 L891 SM-77 in addition to the requirements for Type TECK 90 Minus 40°C cable in C22.2 No. 131.