

Southwire Company One Southwire Drive Carrollton, GA 30119, USA (770) 832-4000

> DATE: 1-17-2013 CS # 2012086 Revision 2, EKG

# **PRODUCT SPECIFICATION**

TYPE: Flexible Locomotive & Car Equipment Cable (DLO) 2000 Volt, 90 ℃ Heat Resisting Ethylene Propylene Rubber Insulation (EPR) Chlorosulfonated Polyethylene Jacket (CSPE) (Hypalon) UL Listed Type RHH or RHW-2 2KV per UL 44 CSA Listed Type RW90 EP 1KV FT-1 per C22.2 No.38 MSHA Approved P-7K-MSHA

**SIZE:** 2/0 - 4/0 AWG – One Conductor

#### I. SCOPE:

This specification covers the minimum construction requirements for single conductor electric cables for use in wiring Locomotive and Car Equipment or similar applications requiring a UL Listed Type RHH/RHW-2 flexible stranded power cable.

These cables are rated at 2000 Volts for use at conductor temperatures up to  $90 \,^{\circ}$ C in wet or dry locations.

The construction consists of flexible stranded, tin-coated copper conductors insulated with clean stripping Ethylene Propylene Rubber (EPR) insulation and jacketed with Chlorosulfonated Polyethylene (CSPE).

These cables pass the Cold Bend Test at  $-40^{\circ}$ C and may be flexed at temperatures  $-25^{\circ}$ C and warmer.

## II. CONSTRUCTION DATA:

SIZE (AWG)	STRAND	CONDUCTOR O.D. (INCHES)	INSULATION MIN. AVG. WALL (MILS)	OUT INSULATIO MIN. AVG. WALL (MILS)		NOMINAL WEIGHT (LBS/MFT)	DENSITY (LBS/IN <sup>3</sup> )
2/0	324	0.420	80	45	0.676	532	0.125
4/0	532	0.537	80	65	0.833	822	0.125

## A. CONDUCTOR:

Tin-coated annealed copper per ASTM B-33 and B-174.



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## B. INSULATION:

Ethylene Propylene Rubber (EPR) conforming to UL 1581 for Class 28 Table 50.42, UL 44 requirements for RHW and RHW-2, ASTM D-2270 and ICEA S-95-658 Class E-1. It shall be suitable for conductor temperatures up to 90 °C in wet or dry locations for continuous use, 130 °C for emergency overloads, and 250 °C for short circuits.

## C. JACKET:

Chlorosulfonated Polyethylene (CSPE) conforming to ICEA S-95-658 Par. 4.1.11 and UL 1581 Table 50.1.

## D. SAMPLE PRINT LEGEND:

2/0 AWG TYPE RHH OR RHW-2 2 KV (-40 (D)C) SUN RES FOR CT USE FT4/IEEE 1202 (UL) E18321 ---A.I.W. CORP. ---(CSA LOGO) LL8825 RW90 EP 1 KV (-40 (D)C) EP/JKT OIL RES TC FT4 --- EPR/HYP 2KV DIESEL LOCOMOTIVE CABLE P-7K-136047-1-MSHA SEQUENTIAL FOOTAGE MARKS