

# **PRODUCT SPECIFICATION 14145.1**

TYPE:Ethylene Propylene Rubber InsulatedThermoset Black Chlorinated Polyethylene JacketedUL Type SOOW 90°C, 600 VoltsCSA Type SOOW, 90°C, 600 Volts, FT1

SIZE: 14/3 & 16/3 - Composite

#### I. SCOPE:

This specification describes a UL Type SOOW composite flexible cord rated for use at 90°C in dry locations and at voltages up to 600 volts. The cord may also be used where continuously immersed in oil or water at conductor temperatures up to 60°C.

Construction consists of flexible stranded, uncoated copper conductors insulated with color coded water and oil resistant grade thermoset rubber. The insulated conductors are cabled round, wrapped and jacketed overall with thermosetting chlorinated polyethylene.

#### II. CONSTRUCTION:

#### A. CONDUCTORS:

Extra-flexible, bunch stranded, bare annealed copper conforming to UL requirements.

#### **B. SEPARATOR:**

A paper separator shall be applied between the conductor and the insulation to aid strippability.

#### C. INSULATION:

Thermosetting Ethylene Propylene Rubber (EPR) conforming to UL Standard 62.





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### D. COLOR CODE:

The insulation shall be colored as follows: #14 AWG: Black, White, Green #16 AWG: Yellow, Red, Purple

# E. CABLE ASSEMBLY:

The applicable number of insulated conductors are cabled together with jute fillers, as necessary, and with a suitable lay. A paper tape is applied longitudinally over the cabled assembly.

# F. JACKET:

Black, thermosetting, chlorinated polyethylene rubber (CPE) conforming to UL 62 requirements. This material provides excellent resistance to abrasion, sunlight, oil, chemicals, and chlorinated water.

# G. MARKING:

The jacket surface is printed as follows:

"MILLER ELECTRIC MFG. CO. P/N 199782 14 AWG 3/C – 16 AWG 3/C SOOW 90°C 600 V. (UL) (CSA LOGO) FT1"

# H. TEST: Physical and electrical tests per UL Standards 62 and 1581.

| DETAILS OF CONSTRUCTION |                  |             |                                    |                             |                                 |
|-------------------------|------------------|-------------|------------------------------------|-----------------------------|---------------------------------|
|                         |                  |             |                                    | OVERALL JACKET              |                                 |
| SIZE (AWG)              | NO. OF<br>CONDS. | STRANDING   | INSUL. MIN.<br>AVG. WALL<br>(MILS) | MIN. AVG.<br>WALL<br>(MILS) | MAXIMUM<br>DIAMETER<br>(INCHES) |
| 14                      | 3                | 41 X .0100" | 45                                 | 80                          | .630                            |
| 16                      | 3                | 26 X .0100" | 37                                 |                             |                                 |