ELECTRICAL
MECHANICAL
INSULATION

CANUSA EMI

FLAME RETARDANT

3:1 STANDARD SHRINK RATIO

Heavy Wall Crosslinked Polyolefin End Caps CCAP-FR




# CCAP-FR

Heat Shrinkable End Caps provide a simple yet effective method for sealing cable ends, pipe conduit, or other similar objects where maximum flame retardancy is required

## Features

- **Superior resistance to weathering, moisture contamination and adverse environmental conditions**
- **Rated from 600/1000V, 90°C continuous use**
- **Flame retardant**
- **Resistant to common fluids and solvents**
- **Optional Adhesive Liner provides complete environmental protection and insulation**
- **Heat indicating lines**
- **Valved end cap available for pressurized applications.**
- **Continuous operating temperature: -55°C to 110°C**
- **Shrink temperature: 120°C**

# CCAP-FR

Heavy Wall Crosslinked Polyolefin End Caps

# Technical Data

## Physical

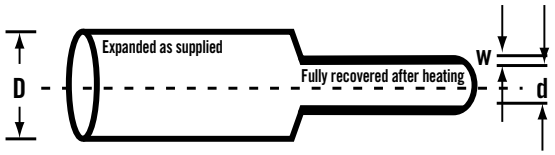
| Property | Test Method | Typical Performance |
|---|---|---|
| Tensile Strength | ASTM D412, ISO 37 | 2100 psi (14.5 MPa) |
| Elongation | ASTM D412, ISO 37 | 550% |
| Specific gravity | ASTM D792 | 1.1 |
| Elongation after heat aging (168 hrs at 150°C) | ASTM D2671 | 500% |
| Heat Shock (4hrs at 225°C) | ASTM D2671 | No cracking or flowing |
| Low temperature flexibility (4 hrs at -55°C) | ASTM D2671 | No cracking |
| Hardness (Shore D) | ASTM D2240 | 50D |
| **Seal Integrity** | | |
| Room Temperature (23°C) | 168hrs/40 | No leaks |
| Temp. Cycling (-40°C to 60°C) | 50 cycles/15psi | No leaks |
| Burst Pressure | | 100 psi (0.70 MPa) |
| Adhesive softening point | ASTM E28 | 92°C +/- 5°C |
| Adhesive peel strength (300mm/min at 23°C) | ASTM D1000 (mod.) | |
| - to steel, alum, P.E. | | 35 pli |
| - to PVC | | 20 pli |
| Adhesive Lap Shear (1in./min at 23°C) | ASTM D1002 | 130 psi (0.91 MPa) |
| Adhesive Blocking (30°C) | ASTM D1146 | No blocking |
| Water Penetration | STM-706 | No penetration after 236 hrs. (min) of continuous immersion. |
| **Electrical** | | |
| Dielectric Strength | ASTM D149 | 500 V/Mil (20 kV/mm) |
| Dielectric Voltage Withstand 2500 V, 60 Hz., 1 min. | UL 486D | No Breakdown |
| Volume Resistivity | ASTM D257 | $10^{16}$ ohm-cm |
| **Chemical** | | |
| Fluid Resistance | MIL-DTL-23053 | Good to Excellent |
| Copper Corrosion | ASTM D2671 | No Corrosion |
| Water Absorption | ASTM D570 | 0.1% |
| Fungus Resistance | ASTM G21 | No Growth |

*Seal Integrity: Not intended for pressurized environments

# Dimensions

| ORDER REF. NO. METRIC | ORDER REF. NO. IMPERIAL | NOMINAL LENGTH (1) EXPANDED AA mm | AA IN | NOMINAL LENGTH (2) RECOVERED BB mm | BB IN | EXPANDED INTERNAL DIAMETER (MIN) D mm | D IN | RECOVERED INTERNAL DIAMETER (MAX) d mm | d IN | RECOVERED WALL THICKNESS (NOM) w mm | w IN | GENERAL USE DIAMETER mm | GENERAL USE DIAMETER IN | CABLE RANGE AWG/MCM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| XXXX | YYYY | | | | | | | | | | | | | |
| 0089 | 0350 | 76.2 | 3.0 | 63.5 | 2.5 | 8.9 | 0.35 | 3.0 | 0.12 | 1.8 | 0.07 | 3.5-8 | 0.15-0.30 | #14-#10 |
| 0127 | 0500 | 76.2 | 3.0 | 63.5 | 2.5 | 13.0 | 0.51 | 4.1 | 0.16 | 2.4 | 0.09 | 4.5-11.0 | 0.20-0.45 | #8-#6 |
| 0191 | 0750 | 88.9 | 3.5 | 63.5 | 2.5 | 19.0 | 0.75 | 6.1 | 0.24 | 2.4 | 0.09 | 6.0-16.5 | 0.24-0.65 | #6-#2 |
| 0279 | 1100 | 101.6 | 4.0 | 76.2 | 3.0 | 27.9 | 1.10 | 8.9 | 0.35 | 3.0 | 0.12 | 10.0-24.0 | 0.40-0.95 | #1-3/0 |
| 0381 | 1500 | 114.3 | 4.5 | 82.5 | 3.25 | 38.1 | 1.50 | 11.9 | 0.47 | 4.1 | 0.16 | 13.0-35.0 | 0.55-1.4 | 2/0-350 |
| 0508 | 2000 | 114.3 | 4.5 | 88.9 | 3.5 | 50.8 | 2.00 | 16.0 | 0.63 | 4.1 | 0.16 | 17.5-44.0 | 0.7-1.75 | 250-500 |
| 0685 | 2700 | 127.0 | 5.0 | 101.6 | 4.0 | 68.1 | 2.70 | 22.1 | 0.87 | 4.1 | 0.16 | 24.0-59.0 | 0.95-2.3 | 600-1000 |
| 0899 | 3500 | 127.0 | 5.0 | 114.3 | 4.5 | 89.9 | 3.50 | 30.0 | 1.18 | 4.1 | 0.16 | 33.0-80.0 | 1.3-3.3 | 800-1250 |
| 1194 | 4700 | 165.1 | 6.5 | 139.7 | 5.5 | 119.4 | 4.70 | 39.9 | 1.57 | 4.2 | 0.17 | 44.0-104.0 | 1.7-4.1 | 1500-2500 |

Note: (1) Length measured from shoulder to open end of cap
(2) Recovery dimension +/-0.25”




# Ordering

Refer to the table to select the size which will shrink snugly over the component to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

### To Order in Metric Units:

Order Ref. No. — Options

CCAP-FR - XXXX - CC - OO - AA - M

Color — Length

### To Order in Imperial Units:

Order Ref. No. — Options

CCAP-FR - YYYY - CC - OO - BB - I

Color — Length

### Standard Colors (CC)

| Order Code | Color |
|---|---|
| BK | BLACK |

* For additional colors please see price list.

### Options (OO)

| | Lined | Unlined | Valved |
|---|---|---|---|
| Unprinted | 00 | 01 | 02 |
| Printed | 03 | 04 | 05 |

Standards: Rated for 600/1000V, 90°C continuous use.

*Note:* Non-standard colors, sizes and lengths available subject to factory quotation. REV 1

## CANUSA-EMI

### There’s no end to what we cover

CANUSA-EMI is a global company providing electrical and mechanical insulation solutions for a variety of industries and applications. Starting from products created by extensive developmental research at Shaw Industries (incorporated 1955), CANUSA-EMI is a recognized world leader in the provisioning of high quality heat shrink products.


**EUROPE**
CANUSA SYSTEMS LIMITED
Bergstrand House
Broadley Industrial Park
Roborough, Plymouth, U.K. PL6 7EZ
Tel: 44 (0) 1752-209880
Fax: 44 (0) 1752-209850

**U.S.A.**
CANUSA - EMI
P.O. Box 498830
Cincinnati, Ohio 45249
Tel: 1-800-422-6872
Tel: (513) 683-7800
Fax: (513) 683-7809

**CANADA/INTERNATIONAL**
CANUSA - EMI
25 Bethridge Road
Toronto, Ontario M9W 1M7
Tel: 1-800-845-6808
Tel: (416) 743-7111
Fax: (416) 743-7199

**WORLDWIDE WEB:** www.canusa-emi.com