



ELECTRICAL  
MECHANICAL  
INSULATION

**CSNUSA**  
EMI



Paper Insulated/  
Lead Cable End Cap

**CPIL**



# CPIL

End Cap Kit designed specifically for use  
with Paper Insulated/Lead Cables(PILC)

## Features

- Oil blocking tape sealant prevents leakage
- Superior resistance to weathering and moisture contamination
- Designed for 600 V or dead cable applications
- Heat Indicating Lines
- Thermoplastic Adhesive Liner provides complete environmental protection and insulation
- Flame retardant option available
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C



## Technical Data

### Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM D412	2100 psi (14.5MPa)
Elongation	ASTM D412	600%
Elongation after heat aging (168 hrs at 150°C)	ASTM D2671	500%
Longitudinal Change on Recovery	ASTM D2671	+1% , -10%
Specific gravity	ASTM D792	1.10
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
Flammability	MIL-DTL-81765	Flame Retardant (CCAP-FR only)

### Seal Integrity

Room Temperature 23°C	168hrs/40	No leaks
Temp. Cycling	50 cycles/15psi	No leaks
Burst Pressure		100 psi
Adhesive softening point	ASTM E28	92°C +/- 5°C
Adhesive peel strength (300mm/min at 23°C) - to steel, alum, P.E. - to PVC	ASTM D1000	35 pli 20 pli
Adhesive Lap Shear (1in./min at 23°C)	ASTM D1002	130 psi
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 (168 hrs at 150°C)	UL 486D	No Breakdown
Volume Resistivity	ASTM D257	10 <sup>14</sup> 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

## 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.

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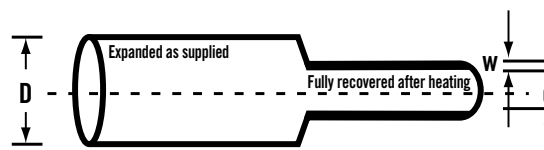
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## Dimensions

ORDER REF. NO. METRIC IMPERIAL	NOMINAL				EXPANDED		RECOVERED				GENERAL USE DIAMETER		CABLE RANGE			
	LENGTH EXPANDED		LENGTH RECOVERED		INTERNAL DIAMETER (MIN)		INTERNAL DIAMETER (MAX)		WALL THICKNESS (NOM)							
XXXX YYYY	mm	IN	mm	IN	mm	D	IN	mm	d	IN	mm	w	IN	mm	IN	AWG/MCM
0102 0400	76.2	3.0	63.50	2.50	10.2	0.40		3.8	0.15		2.0	0.080		4.5-8.5	.18-.34	#8 - #1
0191 0750	88.9	3.5	63.50	2.50	19.1	0.75		5.6	0.22		2.0	0.080		6.0-16.5	.24-.65	#2 - 4/0
0279 1100	101.6	4.0	76.20	3.00	27.9	1.10		10.2	0.40		2.0	0.080		11.5-25	.45-1.0	2/0-500
0330 1300	101.6	4.0	76.20	3.00	33.0	1.30		10.2	0.40		2.0	0.080		11.5-30.0	.45-1.2	300-1000
0381 1500	114.3	4.5	82.55	3.25	38.1	1.50		12.7	0.50		2.0	0.080		14.0-35.0	.55-1.2	500-1500
0432 1700	114.3	4.5	82.55	3.25	43.2	1.70		12.7	0.50		2.0	0.080		14.0-40.0	.55-1.6	650-1750
0521 2050	114.3	4.5	88.90	3.50	52.1	2.05		19.1	0.75		2.0	0.080		21.0-45.0	.82-1.8	900-2500
0699 2750	127.0	5.0	101.60	4.00	69.9	2.75		25.4	1.00		2.0	0.080		30.0-63.0	1.2-2.5	2000-2500
0889 3500	127.0	5.0	114.30	4.50	88.9	3.50		30.0	1.18		2.4	0.095		33.0-83.8	1.3-3.3	
1194 4700	165.1	6.5	139.70	5.50	119.4	4.70		39.9	1.57		2.7	0.105		40.6-114.3	1.6-4.5	



## Ordering

Select the appropriate CPIL End Cap Kit based on your cable conductor size/diameter. Check the cable dimensions to be sure they conform to the selected kit size.

### To Order in Metric Units:

Order Ref. No.  
CPIL - XXXX

### To Order in Imperial Units:

Order Ref. No.  
CPIL - YYYY

Contents: Each kit includes 3 pieces of oil blocking tape and one end cap

Note: Custom sized kits are available upon request.