# **RAUCKMAN** Utility Products

# **Single-Insulator Disconnect Cover**

Avian and Wildlife Outage Mitigation

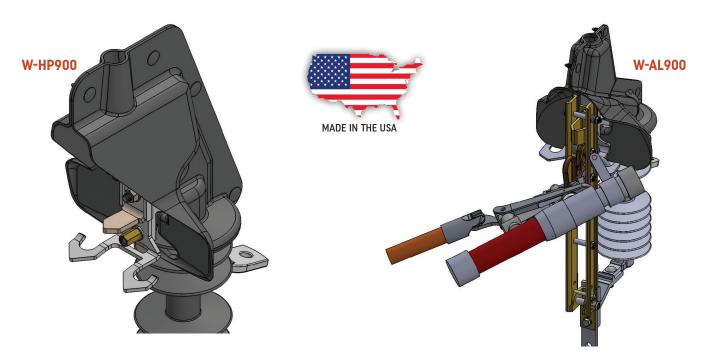
# **Increase System Reliability - Minimize Avian Interaction**

Rauckman Covers for Single Insulator Disconnects help electric utilities minimize outages caused by animal interaction. The benefits are not simply the minimizing of outages, but also the mitigation of Avian interactions. Single Insulator Disconnects have increased in popularity due to convenience and economics. These devices are sometimes referred to as vertical or cutout disconnects. The Rauckman cover is easily installed and covers the energized components on the top of new or in-place switches.

Single Insulator Disconnects incorporate load-break hooks to allow the use of a portable load-break tool. These tools are typically landed on these hooks from an appreciable distance so it is critical that a cover does not hinder this process. Rauckman's covers are field tested to ensure that the cover does not interfere with the use of these portable load-break tools.



Model W-AL900 installed on an Aluma-Form 900 Amp Single-Insulator Disconnect Switch



## **ORDERING INFORMATION**

Catalog No.	Description	Single-II	Weight		
	Description	Voltage (kV)	BIL (kV)	Current (A)	Each (lbs.)
W-AL900	Cover for Aluma-Form Disconnect	15 and 27	110 and 125	600 and 900	1.3
W-HP900	Cover for Hubbell Power Systems Disconnect	15 and 27	110 and 125	600 and 900	1.1

Specifications Subject to Change Without Notice.

## **MATERIAL CHARACTERISTICS**

The heart and soul of Rauckman's cover is a unique material that was jointly developed by Rauckman and a large U.S. compounder of specialty thermoplastics. The development process took over two years and resulted in Rauckman's **RUPP0009**, a material specifically formulated and compounded for the rigorous requirements of an energized application on an electric utility system.

#### ACCELERATED WEATHERING TEST - ASTM G154

Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials.

After over 1,000 hours of accelerated weathering there is no discernible change in the material's appearance.



**Mechanical Characteristics** 

Notched 1/8" (3.2 mm) Section:

Un-notched 1/8" (3.2 mm) Section:

Impact Strength, Izod

Tensile Strength:

**Tensile Modulus:** 

**Flexural Strength:** 

**Flexural Modulus:** 

**Tensile Elongation:** 

NEW

Þ

1,049 Hrs

10.0 ft-lbs/in

No Break

1500 psi

> 10.0%

1600 psi

0.04 x 10<sup>6</sup> psi

0.05 x 10<sup>6</sup> psi

ASTM D256

ASTM D4812

ASTM D638

ASTM D638

ASTM D638

ASTM D790

ASTM D790

#### DIELECTRIC STRENGTH - ASTM D149

Standard Test Method for Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Power Frequencies.

N	New Sample				
	Specimen Thickness:	0.094" (94 mil			
	Puncture Voltage:	52.8 kV			
	Volts / mil:	562 Volt / mil			

mil)	Specimen Thickness:
	Puncture Voltage:

## After 1,049 Hours of UV - ASTM 154

- 0.094" (94 mil)
- Volts / mil:
- 53.1 kV
- 570 Volt / mil

### ELECTRICAL EROSION (TRACKING) – ASTM D2303

	New Sample			After 1,049 Hours of UV - ASTM 154		
Standard Test Methods for Liquid-Contaminant, Inclined-Plane Tracking and Erosion of Insulating	Voltage (kV) 4.00	Duration 60 min	Notes No Change	Voltage (kV) 4.00	Duration 60 min	Notes No Change
	4.25 4.50	60 min 60 min	No Change No Change	4.25 4.50	60 min 60 min	No Change No Change
Materials.	4.75	60 min	Slight Discoloration	4.75	60 min	Slight Discoloration
	*5.00	60 min	Discoloration / No Erosion	*5.00	60 min	Discoloration / No Erosion
				*5.00 kV for 60 minutes is upper limit of ASTM D2303		

#### FLAMMABILITY - UL 94

Standard for Safety of Flammability of Plastic Materials for Parts in Devices and Appliances.

# **CLASSIFICATION: HB**

#### Rauckman Utility Products, LLC.

33 Empire Drive Belleville, IL 62220 phone: 618-234-0001 fax: 618-234-0003 www.rauckmanutility.com

#### **Classification Criterion**

#### 3.0 mm to 13.0 mm Thickness

- Slower than 40 mm/minute or ...
- Combustion ceases prematurely

#### < 3.0 mm Thickness

- Slower than 75 mm/minute or ...
- Combustion ceases prematurely



Specifications Subject to Change Without Notice.