

balmoral<sup>®</sup> engineering

### **Product Catalogue**

**Revision 10** 



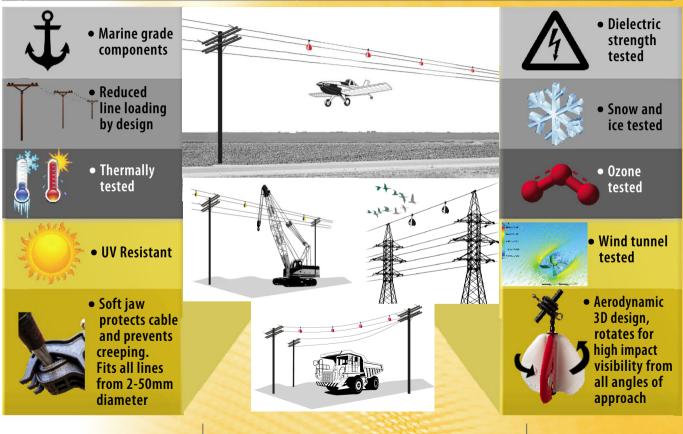
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WARNING MARKERS



ROTAMARKA

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#### WARNING MARKERS





Section 1 Page 3

**Recommended Products** 

Warning Marl Example :: WM	ker - Part Numb 1-CS-B-1A-RW B C D E	B-1 C-1	Product type: WM (Warr Line attachment: CS (Cl: Hot Stick Attachment: B or Eye Ring)	am Shell) (Bushing/Flag/Bear	ing/Unit Jt/Mini) W (Red/White, Orange,
<b>Standard Size</b> WM-CS-B-1A-RW WM-CS-E-1A-RW WM-CS-E-1C-RW	WM-CS-B-1A-BW WM-CS-E-1A-BW WM-CS-E-1C-BW	WM-CS-B-1A-BY WM-CS-E-1A-BY WM-CS-E-1C-BY	Bayonet, Bushing Eye Ring, Bushing Eye Ring, Bearing	Mini Size WM-CS-E-1E-RW   Eye Ring, Be WM-CS-E-1E-BW   Eye Ring, Be WM-CS-E-1E-BY   Eye Ring, Be	earing
			-		- 10
		O	•	9	00





Balmoral Engineering :: Revision 10 Section 2 Page 1

• Weather

resistant

• LV & HV options

available

• Rigid guards or

cater for most

requirements

Suitable for use on

Power Lines & Wires

mechanical protection

and electrical insulation

as visual warning,

flexible style hose

#### LINE GUARDS

• Unique striped safety feature



- Stamped & rated to comply with Australian and International Standards
- Robust design and construction backed by decades of engineering to ensure the highest quality & safety standards
- Eyelet in bell housing allows locking by cable ties & complies with WHS requirements





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1400



**Balmoral Engineering :: Revision 10** Section 2 Page 2

**Recommended Products** 



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#### LINE GUARDS

**Recommended Products** 

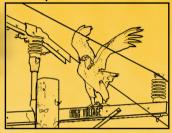




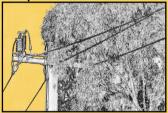
Class 2 15KV Balmoral Engineering :: Revision 10 Section 2 Page 4



Wildlife protection



**Tree protection** 



**Personal protection** 

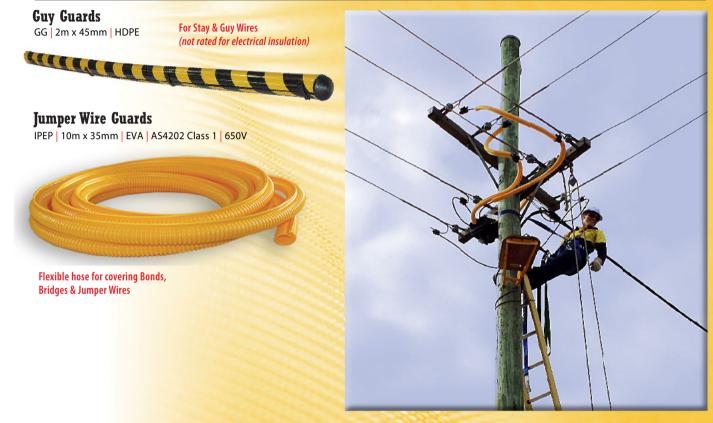


**\*Both phases covered** 



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#### LINE GUARDS



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#### LV HV Testing Services Available

- Manufactured without the use of solvents & hazardous chemicals utilising a proprietary aqueous dipping process
- Acid resistant
- Ozone resistant
- Low temperature resistant
- Comprehensive range of classes, colours, lengths and sizes, including half sizes
- Various cuff styles available including straight, contour and bell
- Arc flash certified

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Class

Colour

00

Beige

0

Red

White

Yellow

3

Green

Orange

#### **GLOVES & SLEEVES**

Proof Test

Voltage AC/DC

2,500 / 10,000

5,000 / 20,000

10,000 / 40,000

20,000 / 50,000

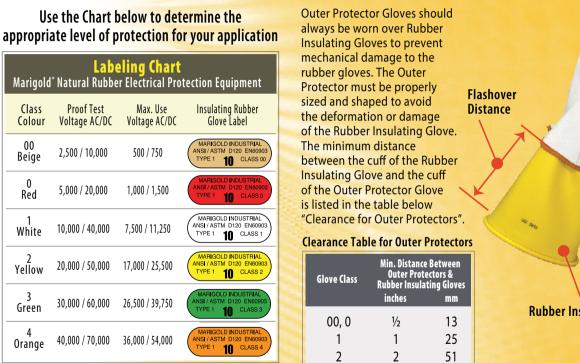
30,000 / 60,000

40,000 / 70,000



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#### LV HV Testing Services Available



Outer Protector Cuff

**Rubber Insulating Glove Cuff** 

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3

4

76 102

3

4

+61294824000



#### **GLOVES & SLEEVES**



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#### LV HV Testing Services Available

1						
1-		Glove Length	Glove Siz	e Nominal Hand C	ircumference	
2-		280 mm (11 inch)	7	7 inches		
-		360 mm (14 inch)	8	8 inches	203 mm	
5-		400 mm (16 inch)	81/2	8½ inches	216 mm	
6-		460 mm (18 inch)	9	9 inches	229 mm	
2-		400 mm (10 mcm)	9½	9½ inches	241 mm	
*-			10	10 inches	254 mm	Townson Street
2			10½	10½ inches	267 mm	
			11	11 inches	279 mm	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
.1			Tolerand	e = +/-13  mm		
			* Allow ar	extra half inch if cotton i	nners are to be used	
14-			01 T4			A STATE OF A
15-		Rubber Insulatir	ig Glove Ite	m Number Lege	nd	A second s
16 17 18 18 18 18 18 18 18 18 18 18 18 18 18			Example	A B C D E F		How to measure
19-			A - Glove t	ype: RIG (Rubber Insul	ating Glove)	Measure around your hand
n-			B - Class: 0	0/0/1/2/3/4		above the V of the thumb.
n-	and the second se		C - Length	: 11/14/16/18 (inches)		This gives you the circumference in inches.
			D - Colour:	R/Y/YB/BY (Red, Yello Black, Bla	w, Yellow under ack under Yellow}	
			E - Cuff: S/	C/B (Straight/Contour,	/Bell)	Charles and the second s
		Mar Andrew Andre	F - Size: 7/	8/8H/9/9H/10/10H/11	$(H = \frac{1}{2} \text{ sizes})$	ALL CONTRACTOR OF A

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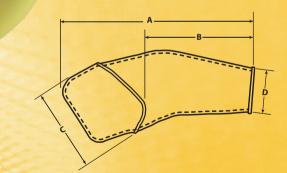
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#### LV HV Testing Services Available

Extra Curved Arm Sleeve						
A in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)			
Small 24.25 (616)	15.13 (384)	12.5 (317)	5.75 (146)			
Regular 26.5 (673)	15.5 (394)	12.25 (311)	5.25 (140)			
Large 27.75 (705)	16 (406)	12.87 (328)	6.87 (175)			
Extra Large 29.5 (749)	17.5 (445)	12.87 (327)	7 (178)			





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**GLOVES & SLEEVES** 



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**Class 2 - 17KV Bell Cuff** 16 inch

 RIG216YBB8
 Size 8\*

 RIG216YBB8H
 Size 8½\*

 RIG216YBB9H
 Size 9

 RIG216YBB9H
 Size 9½

 RIG216YBB9H
 Size 9½

 RIG216YBB10
 Size 10

 RIG216YBB10H
 Size 10½

 RIG216YBB10H
 Size 10½

 RIG216YBB10H
 Size 10½

 RIG216YBB11
 Size 11\*



 Class 2 - 17KV

 Straight Cuff

 16 inch

 RIG216YBS8
 Size 8

 RIG216YBS8H
 Size 8½

 RIG216YBS9H
 Size 9

 RIG216YBS9H
 Size 9½

 RIG216YBS9H
 Size 10½

 RIG216YBS9H
 Size 10½

RIG216YBS11 | Size 11



Class 2 - 17KV Contour Cuff 18 inch

 RIG218YBC8
 Size 8\*

 RIG218YBC8H
 Size 8½\*

 RIG218YBC9H
 Size 9

 RIG218YBC9H
 Size 9½

 RIG218YBC9H
 Size 10½

 RIG218YBC1H
 Size 10½

 RIG218YBC1H
 Size 10½

 RIG218YBC1H
 Size 10½

 RIG218YBC1H
 Size 11\*



# Class 3 - 26.5KV Bell Cuff 16 inch RIG316YBB8 Size 8\* RIG316YBB8H Size 8½\* RIG316YBB8H Size 8½\* RIG316YBB9 Size 9

 RIG316YBB9
 Size 9

 RIG316YBB9H
 Size 9½

 RIG316YBB10
 Size 10

 RIG316YBB10H
 Size 10½

 RIG316YBB10H
 Size 10½

 RIG316YBB10H
 Size 11½



 Class 3 - 26.5KV

 Straight Cuff

 16 inch

 RIG316YBS8
 Size 8

 RIG316YBS8H
 Size 8½

 RIG316YBS9H
 Size 9

 RIG316YBS9H
 Size 9½

 RIG316YBS9H
 Size 10½

 RIG316YBS1H
 Size 10½

 RIG316YBS1H
 Size 10½

 RIG316YBS1H
 Size 10½

 RIG316YBS1H
 Size 10½



#### Class 3 - 26.5KV Contour Cuff 18 inch

 RIG318YBC8
 | Size 8\*

 RIG318YBC9H
 | Size 8½\*

 RIG318YBC9H
 | Size 9½

 RIG318YBC9H
 | Size 9½

 RIG318YBC9H
 | Size 10½

 RIG318YBC1H
 | Size 10½

 RIG318YBC1H
 | Size 10½

 RIG318YBC1H
 | Size 10½

 RIG318YBC1H
 | Size 11\*

**\*Special Order** 



#### **GLOVES & SLEEVES**



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**Class 4 - 36KV Bell Cuff** 18 inch RIG418YBB9 Size 9

RIG418YBB9H | Size 9½ RIG418YBB10 | Size 10 RIG418YBB10H | Size 10<sup>1</sup>/<sub>2</sub> RIG418YBB11 | Size 11\*



#### LV HV Testing Services Available

**Class 4 - 36KV Straight Cuff** 18 inch

RIG418YBS9 Size 9 RIG418YBS9H | Size 9½ RIG418YBS10 | Size 10 RIG418YBS10H | Size 10½ RIG418YBS11 | Size 11



#### **Class 4 - 36KV Contour Cuff** 18 inch

RIG418YBC9 Size 9 RIG418YBC9H | Size 9½ RIG418YBC10 | Size 10 RIG418YBC10H | Size 101/2 RIG418YBC11 | Size 11\*

RIS2RYECL Large

**Class 2 - 17KV** Extra Curved RIS2RYECS Small RIS2RYECR | Regular

Class 3 - 26.5KV **Extra Curved** RIS3RYECS Small RIS3RYECR Regular RIS3RYECL Large

**Class 4 - 36KV Extra Curved** RIS4RYECS Small RIS4RYECR Regular RIS4RYECL Large



Also available in selected sizes

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#### **GLOVES & SLEEVES**



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**2 Pocket Treated Canvas** 

Velcro Close - Webbing Loops

LV GLOVES ONLY

LV Glove Bag

Hard Base Breathable

Solid <sup>Walls</sup>

#### **GLOVES & SLEEVES**

26012 390x210x45



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LV HV Testing Services Available



Slimline front pocket suitable for leather storage

LV Glove Bag 3 Pocket Loomstate Canvas Velcro Close - Webbing Loop



Slimline front pocket suitable for leather storage

LV Clove Bag 3 Pocket Treated Canvas Velcro Close - Plastic Snap Hook 26025 | 380x220x80 26025 | 380x220x80

LV Glove Bag

Victovia

**1 Pocket Loomstate Canvas** 

Velcro Close - Webbing Loop

26023 400x220x75

Slimline front pocket suitable for leather storage



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HV Glove & Sleeve Bag 3 Pocket Loomstate Canvas Velcro Close - Metal Snap Hook

26035 700x200x250

Slimline front pocket suitable for leather storage +61 2 9482 4000





#### **Ground Mats EPDM**

1.

 1.
 181A-1
 1mx1mx6mm
 Class A
 650V
 Cut-out

 181A-2
 1.2mx1mx6mm
 Class A
 650V
 Plain



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#### LV HV Testing Services Available

3. 181A-3 1.5mx1mx6mm Class A 650V Slots 181A-4 900x900x6mm Class A 650V Plain

#### **Recommended Products**

#### **Equipotential Mats**

• | 181EP-1 | 770x770mm | C/W Bag



Ground Mats 1mx1mx6mm EPDM

 181A\*
 Class A
 650V

 1810\*
 Class 0
 1000V

 1811\*
 Class 1
 5KV

 1812\*
 Class 2
 17KV

 1813\*
 Class 3
 26.5KV

 1814\*
 Class 4
 36KV

Custom cut-outs available MOQ's apply

> • AS2978 \* IEC61111

Ground Mats 10mx1mx6mm EPDM Cut-to-length

181A-ROLL• | Class A | 650V 1810-ROLL\* | Class 0 | 1000V 1811-ROLL\* | Class 1 | 5KV 1812-ROLL\* | Class 2 | 17KV 1813-ROLL\* | Class 3 | 26.5KV 1814-ROLL\* | Class 4 | 36kV

• AS2978 Minimum 900mm cut size \* IEC61111 Minimum 600mm cut size

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#### Substation & Switchboard Kits



Available Fasteners: (Magnetic, Eyelet, Clamps)

**Street Light Column Kits** 



LV HV Testing Services Available

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14001 (23002) (INS-S) (INS-L) (26004)

1 x Velcro Strap, 1 x Bag

1 x Velcro Strap, 1 x Bag

4 x Clamps, 1 x Bag

1 x magnetic Column Cover (pair), 2 x small Inserts, 2 x large Inserts, 1 x Bag

2 x small plain Drapes, 2 x medium plain Drapes, 1 x large plain Drape,

4 x small magnetic Drapes, 2 x large magnetic Drapes, 1 x Ground Mat,

4 x small magnetic Drapes, 2 x large magnetic Drapes, 1 x Ground Mat,

4 x small magnetic Drapes, 2 x large magnetic Drapes, 1 x Bag

2 x small clear magnetic Drapes, 2 x large clear magnetic Drapes,

4 x small magnetic Drapes, 2 x large magnetic Drapes, 1 x Bag, 4 x Clamps

1 x Ground Mat, 1 x Velcro Strap, 1 x Bag, 4 x Clamps

14002 (23002) (INS-S) (INS-L) (181A) (25006) (26031)

Custom kits available upon application, MOQ's apply

- 1 x magnetic Column Cover (pair), 2 x small Inserts, 2 x large inserts,
- 1 x Ground Mat, 1 x Velcro Strap, 1 x Bag
- 14003 (23002) (INS-S) (26004)
  - 1 x magnetic Column Cover (pair), 2 x small Inserts, 1 x Bag

Custom kits available upon application, MOQ's apply

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#### LV HV Testing Services Available

#### **Recommended Products**

#### Substation & Switchboard Drapes EPDM 650V

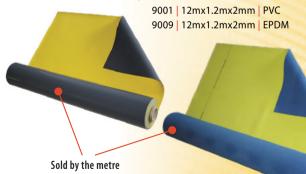
1mx100mm	plain
600x300mm	plain
300x300mm	plain
300x225mm	eyelets
450x300mm	eyelets
600x450mm	eyelets
900x600mm	eyelets
.8mx900mm	eyelets
	300x300mm 300x225mm 450x300mm 600x450mm 900x600mm

#### Substation & Switchboard Drapes PVC 650V



- 8008 | 850x850mm | magnetic
- 9007 | 600x450mm | plain
- 9008 | 400x300mm | plain
- 9019 | 1.2mx900mm | plain
- 10005 | 600x450mm | eyelets/mag
- 10006 | 1.2mx600mm | eyelets/mag
- 10020 | 900x900mm | eyelets
- 10021 | 2mx600mm | magnetic

#### Substation & Switchboard Drapes 650V Cut-to-length



#### Cable End Covers PVC 650V

19001 | 180x110mm 19002 | 245x190mm 19003 | 230x110mm

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#### **RESCUE KITS**

- Pole Top Kits and components
- Low Voltage Switchboard Rescue Kits and components
- Latest comfort style Linesman Safety Harnesses/Belts, leading brands
- Customised kits and accessories to meet local and national industry standards



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#### **RESCUE KITS**

#### Pole Top Rescue Kit (NSW - ASP - C/W Bag)

11006 | 1x Bag, 1x CPR card, 1x Anchor Strap 1x Body Belt & Pole Strap, 1x Knife, 1x Rope, 1x Rubber Gloves



#### Pole Top Rescue Kit (NSW - ASP - C/W Box)

11019 | 1x Box, 1x CPR card, 1x Body Belt & Pole Strap, 1x Knife,1x Rope, 1x Rubber Gloves, 1x Anchor Strap



#### Pole Top Rescue Kit (NSW - CSP)

11020 1x Bag, 1x CPR card, 1x Twin Pole Strap, 1x Knife, 1x Rope, 1x Rubber Gloves, 1x Anchor Strap



#### Pole Top Rescue Kit (QLD)

11007 | 1x Bag, 1x CPR card, 1x Body Belt, 1x Knife, 1x Parrot Beak Cutters, 1x Pole strap, 1x Rope, 1x Tool Pouch, 1x Rubber Gloves



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#### Pole Top Rescue Kit (VIC & TAS)

11003 1x Bag, 1x CPR card, 1x Anchor Strap, 1x Body Belt and Pole Strap, 1x Pliers, 1x Rope, 1x Parrot Beak Cutters, 1x Riggers Gloves, 1x Webbing Cutter **Optional item:** Rubber Gloves RIG014YS11

#### **Pole Top Rescue Kit (WA)**

11009 1x Bag, 1x CPR card, 1x Safety Knife, 1x Parrot Beak Cutter, 1x Pole Strap, 1x Rope, 1x Snap Hook, 1x Crook Optional item:

Half Harness (BB-HAR)

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#### **TOOLS & EQUIPMENT**



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#### **TOOLS & EQUIPMENT**

#### **Test Meter Bags**

26038 | 360x280x240 PVC Velcro 26010 | 300x90x150 PVC Velcro 26026 | 200x120x240 PVC Velcro



# **Tool Bags** 26018 350x150x250 15 Internal Pockets 26022 380x290 2 External Pockets 26028 9 Pocket Webbing Belt 1. 2. 3.

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#### **Rubber Goods Cleaner**

RBG-D72 | 72 wipes RBG-35LR | 1 Quart Spray

Approved for use on Mats & Covers, Gloves & Sleeves



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#### POLE MARKERS & CAPS

#### **Recommended Products**

#### **Pole Markers**

#### **\*Special Order Only**

- Designed to last 15 years +
- Excellent UV resistance
- Increases visibility of poles for both day and night conditions
- Textured surface to reduce adhesion of unwanted signs and labels
- Easy to install, Tek Screws or Band-It Strapping can be used.

Item No.	Size	Base Material	Base Colour	Reflector Quantity	Reflector Colour
PM6060GW	600x600mm	Polyethylene	Grey	6	White
PM6060GY	600x600mm	Polyethylene	Grey	6	Yellow
PM7060BY	700x600mm	Polyethylene	Black	8	Yellow
PM6030GW	600x300mm	Polyethylene	Grey	6	White
PM5030BY	500x300mm	Polyethylene	Black	6	Yellow

Custom sizes available on request subject to MOQ







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#### **POLE MARKERS & CAPS**



#### **Pole Caps**

- Designed to last 30 years +
- Excellent UV resistance
- Natural insulating properties
- Flexible/pliable material can bend and stretch to uneven pole sizes and shapes
- A range of sizes and shapes available
- Easy to install, Tek screws can be used

Item No.	Size	Base Material	Base Colour	Comments
PC130B	130x45mm	LDPE	Black	
PC150G	150x45mm	LDPE	Grey	
PC200B	200x100mm	LDPE	Black	
PC200G	200x100mm	LDPE	Grey	Comes with Bird Diverter
PC216Y	216x170mm	LDPE	Yellow	Comes with Velcro strap and is rated electrically

Custom sizes available subject to MOQ



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#### WILDLIFE PROTECTION

- Designed to cover over Crossarm mounted Insulators to help protect Birds and Critters from bridging between phases.
- Fach unit should be installed on each Insulator/Phase on the Crossarm.
- Electrical faults induced by Birds and Critters can be deadly to the animals and potentially cause expensive outages.
- Two types, offset and centre depending on Insulator configuration.
- Excellent weathering resistance, time tested product.
- Easily snap clips together to form a sturdy installation

#### **WPC-01**

Wildlife Protection Cover, 450x133, Black, Offset

#### WPC-C1 Wildlife Protection Cover. 450x130, Black, Centre

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Electrically Tested to 25KV

Class 3

# Wildlife protection

Can be used with Panther Tails to extend barrier



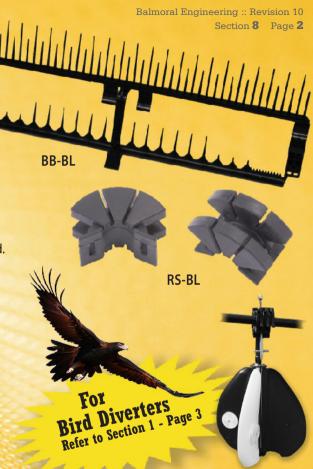
#### WILDLIFE PROTECTION

#### **Bird Blocker**

- Designed to be installed on Power Lines anywhere along the span or near the cross arm to prevent birds from landing or settling on the lines.
- Suits most cable sizes.
- Will keep vertical orientation and face upwards.
- UV stabilised with good electrical insulation properties.
- Rubber stoppers used on either side of the Bird Blocker to fix in place on the line.
- Can install multiple Bird Blockers "in series" along the line. Where this is done, use rubber stoppers for every 10 Bird Blockers installed.

Item No.	Size	Base Material	Base Colour	Suits Cable Size
BB-BL	500x153mm	HDPE	Black	5mmØ-240mm <sup>2</sup>
RS-BL	35x26mm	EPDM	Black	5mmØ-240mm <sup>2</sup>

Parameter	Results (BB-B)		
Withstand voltage	15KV for 1 minute		
Heat resistance	No cracking or other damage at 60 degrees C		
Cold resistance	No cracking or other damage at 20 degrees C		
Crushing test	30N for 1 minute		





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