

# WILDLIFE MITIGATION SOLUTIONS

Relocate | Protect | Divert | Prevent

# STANDARD TERMS AND CONDITIONS OF BUSINESS

## 1. APPLICATION OF CONDITIONS

These terms and conditions shall govern, and control all offers and sales by PREFORMEDLINE PRODUCTS (SOUTH AFRICA) (PTY) LTD. (herein called "PLP"). Unless expressly accepted in writing signed at its head office in Pietermaritzburg by an authorised signatory, any qualification of these conditions in a customer's order or enquiry, or anything contrary to or conflicting with any of these conditions shall be treated as inapplicable and of no effect.

## 2. ACCEPTANCE

Any tender or quotation by PLP only applies for thirty days from date thereof; and no order shall bind PLP until the customer shall receive written confirmation thereof from PLP, duly signed on behalf of PLP.

## 3. PRICES

All prices are nett, F.O.R. Works at Pietermaritzburg and subject to change without notice. Value Added Tax (VAT) is not included and will be added-on where applicable.

## 4. FINANCIAL RESPONSIBILITY

The customer's financial responsibility is at all times subject to approval of PLP's credit department and PLP at any time may require payment in advance for a satisfactory security or guarantee that invoices will be paid promptly when due. If the customer fails to comply with any term of payment, PLP reserves the right to withhold further deliveries or to terminate the agreement and any unpaid amount thereupon shall become due immediately.

## 5. TERMS OF PAYMENT

Unless otherwise specifically agreed between PLP and the customer in writing, The customer shall pay PLP immediately on presentation of an invoice before delivery, without deduction or set-off, and payments shall not be withheld or deferred on the basis of any claims as alleged by the customer against PLP.

## 6. DELIVERY

The PLP will use its best endeavours to deliver the products by the time fixed for delivery, but if from any cause other than the wilful default of PLP delivery is delayed, PLP will not be responsible for any loss or damage thereby caused to the customer. Failure of one delivery shall not vitiate the contract as to others. No responsibility is accepted for delays due to loss in manufacturing or for damage and/or other delays due to Act of God, War, Fire, Civil Commotion, Accidents, and for other causes beyond PLP's control. Offers of delivery from stock are subject to the fitting being unsold on receipt of order.

## 7. DELIVERY CHARGES

Unless otherwise agreed in writing or stated in the confirmation of the order, delivery charges are for the customer's account.

## 8. WARRANTY

PLP warrants that all products manufactured and /or supplied by PLP are free from defects in material and workmanship under normal and proper usage for a period of one year from the date of delivery. Products must be installed and maintained to PLP's recommended procedures, and subject to the provisions of clause 9 below that in the event of breach of this warranty, PLP's liability will be limited to the freer replacement only of the products provided such defect is proved to be directly attributable to defective materials or workmanship and subject to a claim being received by PLP in writing within 14 (Fourteen) days of such defect. This warranty is exclusive and in lieu of all other warranties, whether express, implied or otherwise arising by operation of law, trade, or course of dealing. In addition, the remedies set forth herein are the sole and exclusive remedies. PLP shall not be liable for any consequential or incidental damages of any kind.

## 9. LIABILITY

The liability of PLP for any loss or damage, including special, general, direct or consequential, in respect of any claim arising out of any contract entered into with a customer in connection with the manufacture and /or the sale and/or the supply and/or the delivery of our products, whether such claim shall be for breach of any statutory duty or for any delict (including the negligence of our employees or servants) shall not exceed the sale price of the relevant products sold to the customer. In addition, under no circumstance will PLP be liable for any costs associated with fires and wildfires including costs for clean-up efforts.

## 10. PACKING

All goods are packed in PLP's standard corrugated cartons, wooden crates and/or suitable alternatives at PLP's discretion.

## 11. LOSS OR DAMAGE IN TRANSIT

PLP is not responsible for this risk. In the case where PLP has accepted transit risk in terms of clause 1 of these conditions, transit loss or damage must be reported by the customer or consignee immediately in writing to the carrier, and also to PLP. Documentary evidence, as prescribed by the CARRIERS must be given by the consignee to PLP within seven days of receipt of the consignment in question.

## 12. TESTING AND INSPECTION

When testing and inspection is specified by customers and agreed to by PLP, PLP shall test/inspect at its Works in a suitable area designated by PLP.

## 13. DEVIATION IN QUANTITIES MANUFACTURED

Products manufactured are subject to a deviation of plus minus 10% in quantity.

## 14. STANDARD PACKS

PLP reserves the right to supply in increments its standard packs.

## 15. CANCELLATION

The customer shall not be entitled to cancel or repudiate any order or refuse to accept delivery of any order and/or claim damages or set-off as a consequence of late or short delivery.

# STANDARD TERMS AND CONDITIONS OF BUSINESS

## 16. RETURNS

No product shall be returned without PLP's prior written authorization. Only non-obsolete standard items in original cartons may be returned. Carriage must be prepaid. Requests for return must be instituted within 90 days of original delivery and returns will be subject to factory inspection before acceptance and credit authorization. PLP reserves the right to apply a minimum servicing charge of 10% of the invoice amount..

## 17. SPECIFICATIONS

PLP reserves the right to change specifications without prior notice.

## 18. OWNERSHIP AND RISK

Notwithstanding the delivery of any product to a customer, ownership of the product shall not pass to the customer until PLP has received payment in full of the contract price of the said product. Risk in the product shall pass to the customer on delivery.

## 19. COSTS

Should PLP incur legal costs regarding litigation with the customer or for the collection of any amount due by the customer, the customer shall pay such costs on the attorney-and-client scale as well as collection costs calculated at 10% (TEN PERCENT) of each and every payment made.

## 20. CONFIDENTIALITY

The customer agrees that all information furnished by or obtained from PLP in connection with the sale of goods hereunder will be confidential, and the Buyer agrees not to disclose any such information to any other person, or use such information for any purpose, other than performing this contract.

## 21. MISCELLANEOUS

The failure of either party to insist upon performance of any term or condition herein or to exercise any right or privilege shall not thereafter waive the future performance of such term, condition, right of privilege or of any other terms, conditions, rights or privileges, whether of the same or similar type. The rights herein and the construction of these Terms and Conditions shall be governed by the laws of the Republic of South Africa, without giving effect to principles of conflict of laws, invalid or unenforceable, the remaining provisions shall not be affected thereby, but shall remain in full force and effect. The paragraph headings herein are solely for the convenience of and reference by the parties and do not constitute any part of these Terms and Conditions. The customer may not assign its rights or delegate its obligations hereunder without PLP's prior written consent.

## 22. FOREIGN LAW

Save for these terms and conditions being governed by the laws of the Republic of South Africa, PLP complies with the Foreign Corrupt Practices Act (FCPA) Customer agrees that it will comply with all relevant laws, and will comply with all laws regarding bribery including, but not limited to, FCPA.

## 23. PATENT

PLP shall defend the customer against any claim of infringement and shall pay any resulting damages finally awarded, provided that (a) the customer promptly notifies PLP in writing of any claim, and (b) PLP has sole control of the defence and all related settlement negotiations. This obligation does not apply to claims arising out of combinations of goods with goods provided by others, or to claims resulting from compliance of goods with the customer's design or specifications, or which the customer assumes and shall hold PLP harmless for any claims thereof.

## ABOUT PLP

PLP (Preformed Line Products) protects the world's most critical connections by creating stronger and more reliable networks. Our precision-engineered solutions are trusted by energy and communications providers worldwide to perform better and last longer. With offices and manufacturing facilities in over 20 countries, PLP works as a united global corporation, delivering high-quality products and unparalleled service to customers around the world.







## SALES CONTACTS



**WILDLIFE MITIGATION SOLUTIONS  
SALES**

## CUSTOMER SUPPORT

**PLP SOUTH AFRICA CUSTOMER & TECHNICAL  
SUPPORT**

Tel: 033 397 5800

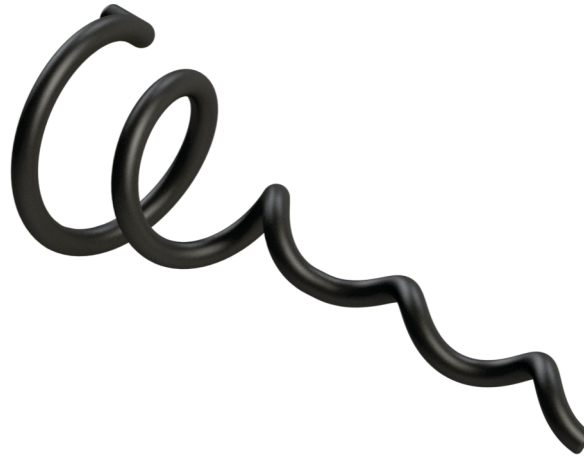
Fax: 033 387 7094

Email: [sales.sa@plp.com](mailto:sales.sa@plp.com)

## CONTENTS

### WILDLIFE MITIGATION SOLUTIONS

BIRD FLIGHT DIVERTER .....	6
DOUBLE LOOP BIRD FLIGHT DIVERTER .....	8
SWAN FLIGHT DIVERTER .....	10
RAPTOR PROTECTOR .....	12
VIPER LIVE BIRD FLAPPER .....	15
OVERHEAD WARNING LIGHT .....	17
CONDUCTOR WARNING LIGHT WITH VIPER CLAMP.....	19
STAY WARNING LIGHT .....	21
SMALL AIRCRAFT WARNING DEVICE .....	23
AIRCRAFT WARNING DEVICE .....	26
AIRCRAFT WARNING DEVICE .....	28
BIRD GUARD .....	30



## BIRD FLIGHT DIVERTER

The **Bird Flight Diverter** is designed to make overhead lines visible to birds and provides an economic means of reducing the hazard to both lines and birds. For low and medium voltage construction (up to 40kV) it is applied to the phase conductors (bare or jacketed). For high voltages it is used on the earth wire. The Bird Flight Diverter is designed to make overhead lines and guyed structures visible to birds and provides an economical means of reducing the hazard to both lines and birds.

### FEATURES AND BENEFITS

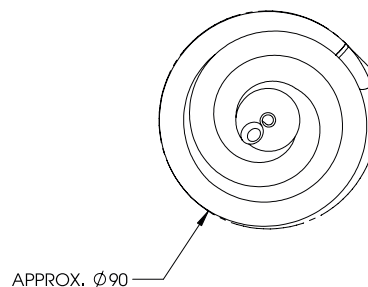
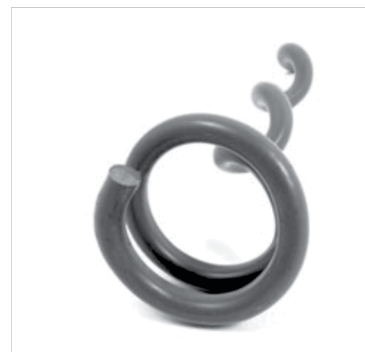
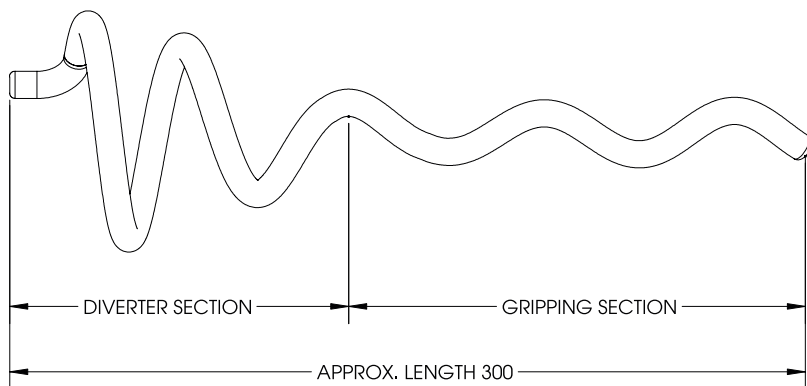
- Manufactured from gray or yellow high impact PVC with UV protection, aluminum, or galvanized steel
- Additional colour/voltage options available ( Contact PLP)
- Lightweight
- Easy and quickly installed by hand
- Positive grip on the conductor ensures the Bird-Flight Diverter remains in the applied location
- Long service life without deterioration of material properties
- Minimal wind resistance

# Bird Flight Diverter

## Specifications

Cat.No.	Conductor Range(mm)
BFD 249-349P/*	6.3 - 8.9
BFD 350-449P/*	9.0 - 11.4
BFD 450-599P/*	11.5 - 15.2
BFD 600 -749P/*	15.3 - 19.0

Add suffix B, W or G for colour Black, White or Grey respectively  
 Approx. weight: 70 grams





## DOUBLE LOOP BIRD FLIGHT DIVERTER

The **Bird Flight Diverter** is designed to make overhead lines visible to birds and provides an economic means of reducing the hazard to both lines and birds. For low and medium voltage construction (up to 40kV) it is applied to the phase conductors (bare or jacketed). For high voltages it is used on the earth wire.

### FEATURES AND BENEFITS

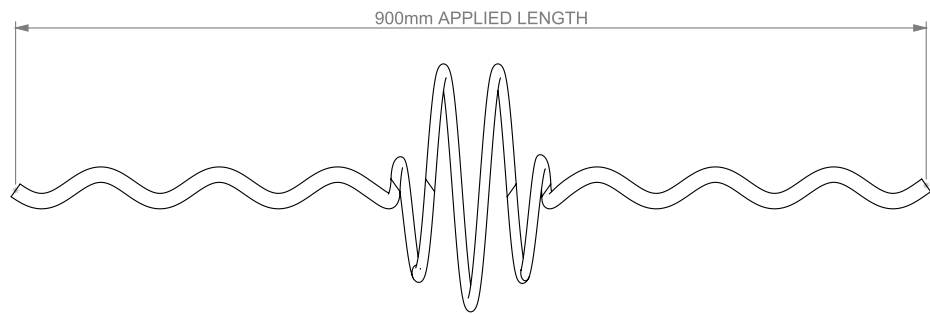
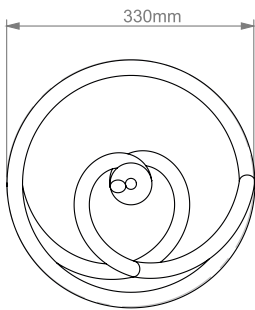
- The fitting is light in weight
- Offers little wind resistance and is easily and quickly applied.
- The positive grip of the fitting on the conductor ensures that it remains in the applied position and cannot move along the span under vibration.
- Bird Flight Diverters are supplied right hand lay for both right hand and left hand lay bare conductors and insulated cables
- Manufactured from rigid solid high impact polyvinyl chloride, possessing excellent chemical and strength properties which will retain good physical characteristics within the range of extreme temperatures.

# Double Loop Bird Flight Diverter

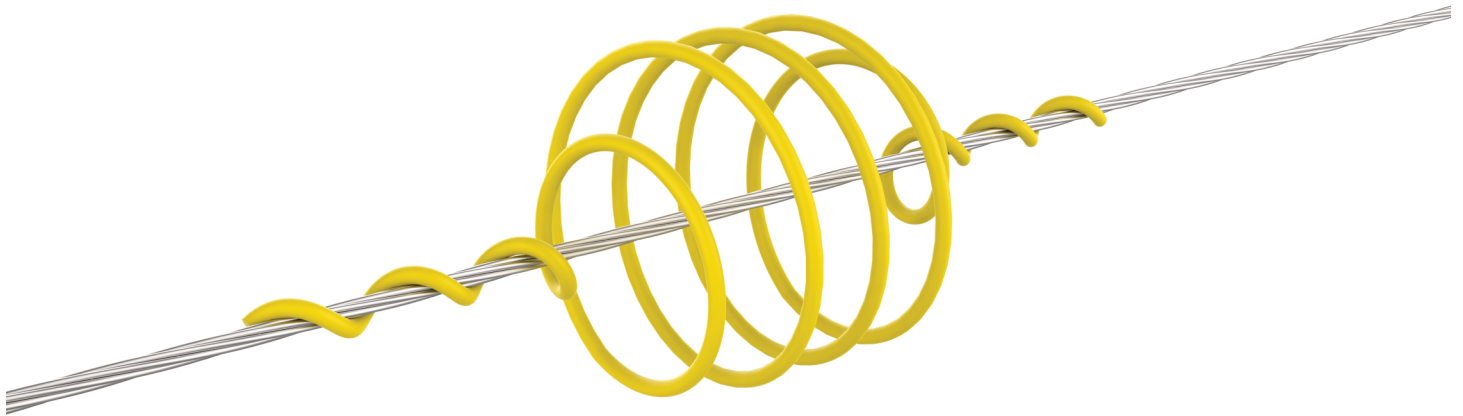
## Specifications

Cat.No.	Conductor Range(mm)
BFD 0914/LD2*	9.0 - 15
BFD 1519/LD2*	15 - 20.5
BFD 2125/LD2*	20.6 - 25.0
BFD 2530/LD2*	

Add suffix B, W or G for colour Black, White or Grey respectively







## SWAN-FLIGHT™ DIVERTER

The **SWAN-FLIGHT Diverter (SFD)** is designed for use on conductor/strand to create greater visibility for avian flight paths on overhead lines and tower down guys. For construction up to 230 kV, the SFD can be applied to phase conductors (bare or jacketed). For EHV, it is typically installed on the shield wire. The diverter section increases the visible profile of the cable to a degree necessary to alert wildlife, but avoids an undesirably bulky outline and increased loading on the line.

### FEATURES AND BENEFITS

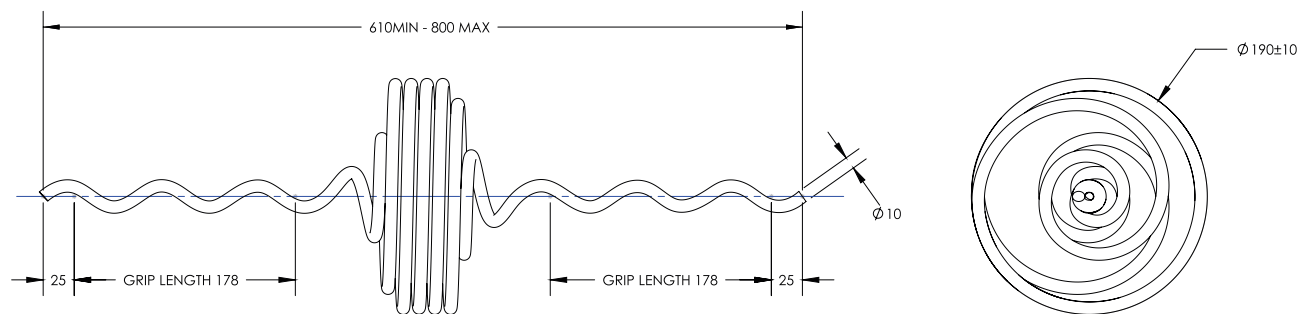
- Increases visibility where large, slow-moving bird flight paths are present
- Lightweight, economical, and easily applied
- Positive grip prevents product from moving along the span
- Long service life without deterioration of material properties
- Minimal wind resistance
- Manufactured from gray or yellow rigid, high-impact PVC with UV protection
- Applicable for voltages below 230 kV
- Semi-conductive version available for 230 kV applications
- Meets **UL 94 V-0** flammability requirements

# Swan Flight Diverter

## Specifications

Cat.No.	Conductor Range(mm)
DUL-BFD 249-330/*	6.3 - 8.83
DUL-BFD 350-449/*	8.89 - 11.4
DUL-BFD 450-598/*	11.5 - 15.2
DUL-BFD 599-770/*	15.21 - 19.56
DUL-BFD 771-1095W	

Add suffix B, W or G for colour Black, White or Grey respectively





## RAPTOR PROTECTOR

The **RAPTOR PROTECTOR** is intended to permanently cover up energised conductors at support points solely for the purpose of preventing accidental contact with the conductors by birds, as they perch on the support points of the structure. IT SHOULD NOT BE CONSIDERED AS A COMPLETELY INSULATED COVERING AND SHOULD NOT BE USED AS A COVER UP DEVICE TO PROTECT HUMANS FROM ELECTRICAL SHOCK.

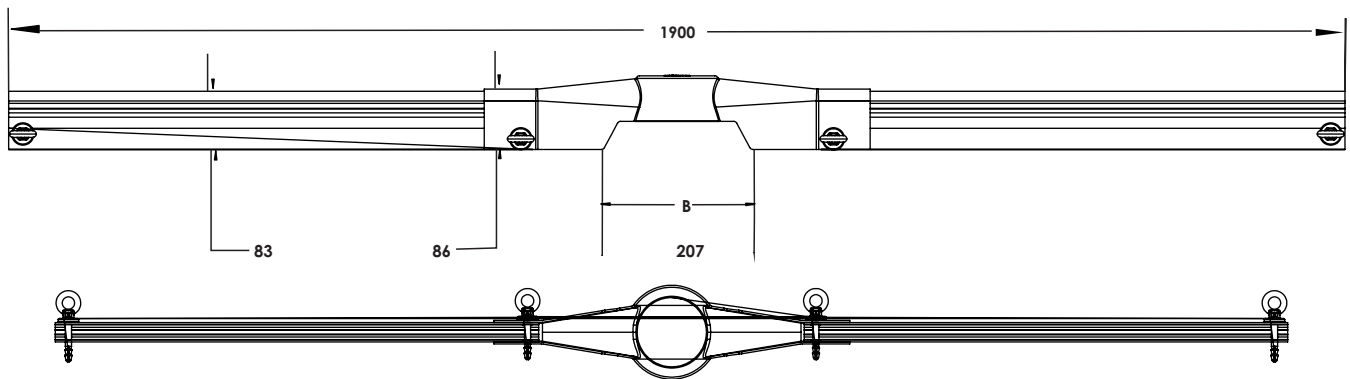
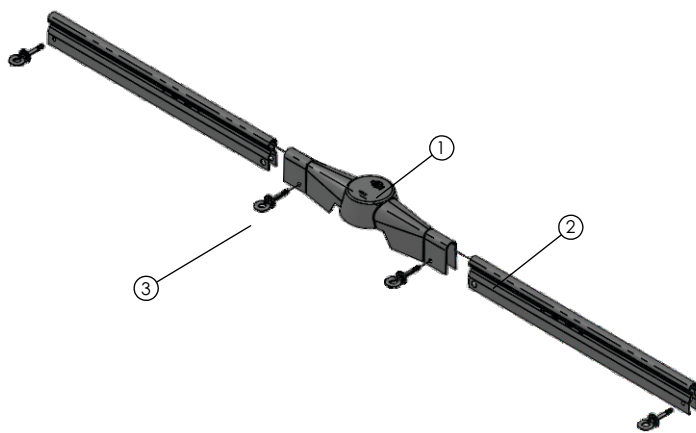
### FEATURES AND BENEFITS

- Manufactured from linear low density polyethylene.
- Fully UV stabilised.
- Low temperature impact resistance.
- Environmental stress crack resistance.
- Installs in seconds by hand or hot stick.
- Lightweight
- Low profile and minimised wind loading.

# Raptor Protector

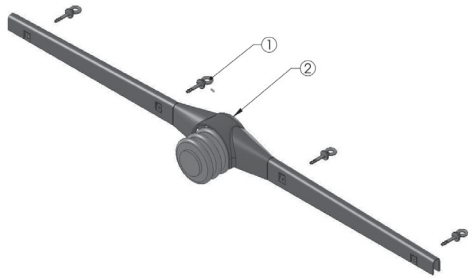
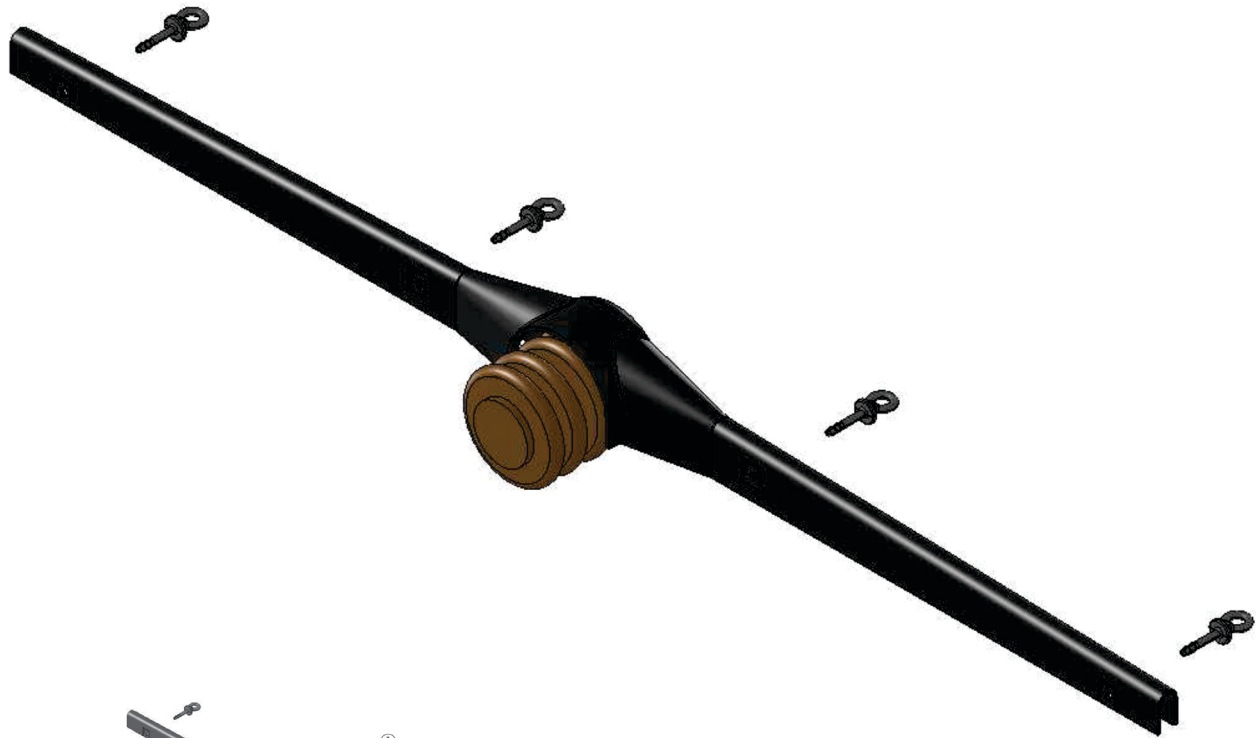
## Specifications

Item No.	Part Number	Description	QTY
1	RPL03-1	RPL03 Centre Section	1
2	RPL03-2	RPL03 End Section	2
3	RPL-PIN	Raptor Pin	4

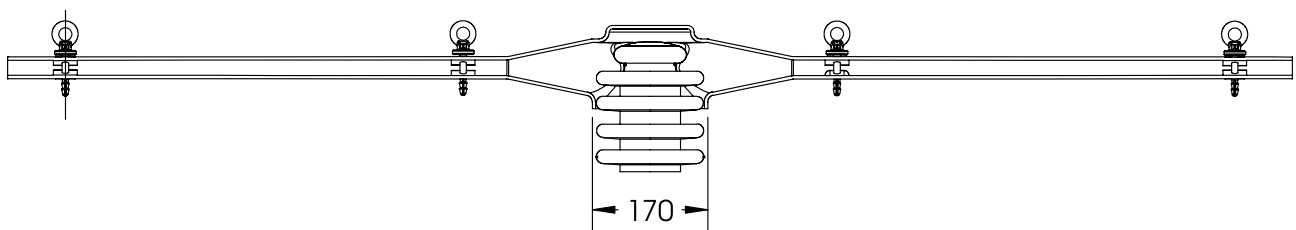
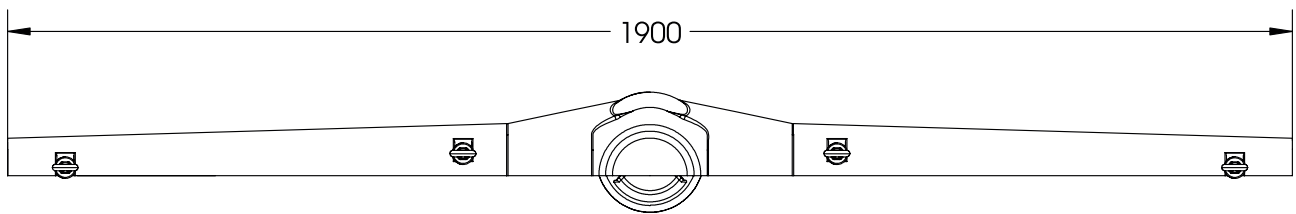




# Raptor Protector Assembly-Horizontally Mounted Insulator



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	RPC-0820	Raptor Protector	1
2	RPL-PIN	Raptor Pin	4





## VIPER LIVE BIRD FLAPPER

The **Bird Flapper** is designed to make overhead lines visible to birds and provides a cost beneficial means of reducing the hazard to both lines and birds. For low and medium voltage construction (up to 40kV) it is applied to the phase conductors (bare or jacketed). For High voltages it is used on the earth wire.

### FEATURES AND BENEFITS

- Conductor diameter range 0-40mm
- Flapper 10 spoke double annular ring with single axis rotation.
- Standard disconnect hook or similar used to install and remove, no special tools required.
- Downward force operation for installation and removal.
- Weight is approx 175g

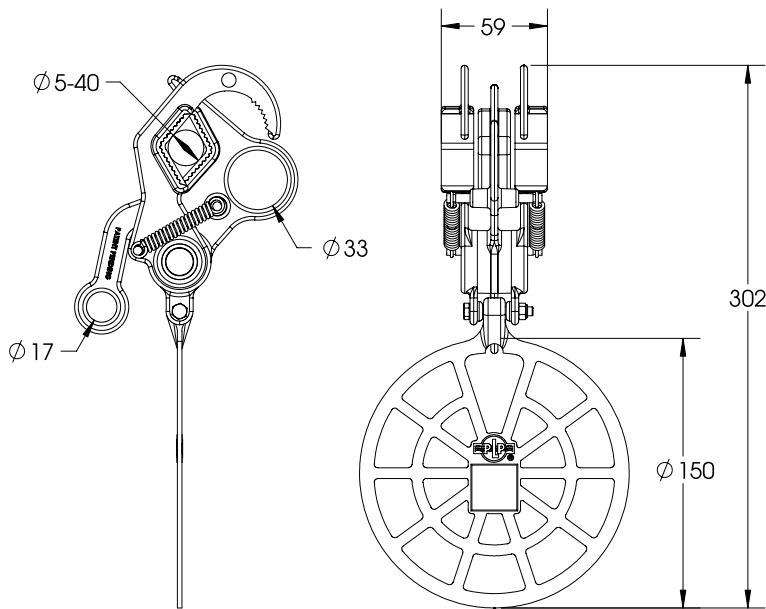


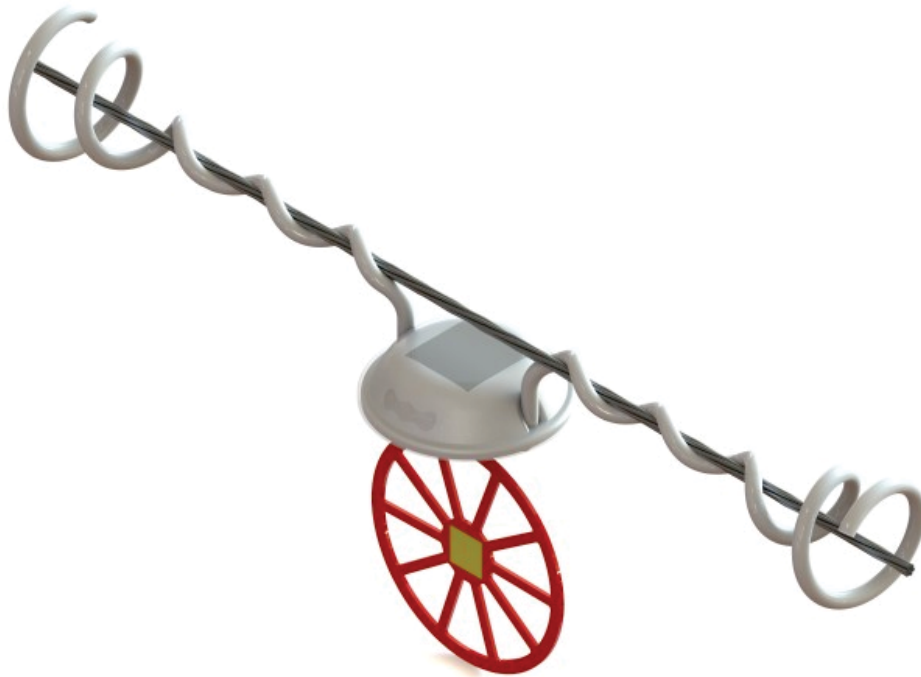
# Viper Live Bird Flapper

## Specifications

Part Number	Flapper Colour
BFL-YEL	Yellow
BFL-BLK	Black
BFL-RED	Red

Other colours are available on request





## OVERHEAD WARNING LIGHT

The **OVERHEAD WARNING LIGHT** is a simple and easily applied product that in both light and dark by combining tried and tested PVC coil designed diverters with a flapper unit with retro-reflective decal and a robust solar powered LED unit which flashes in dark inductions. The Unit is designed such that the flapper and LED can swing under the line to increase visibility.

### FEATURES AND BENEFITS

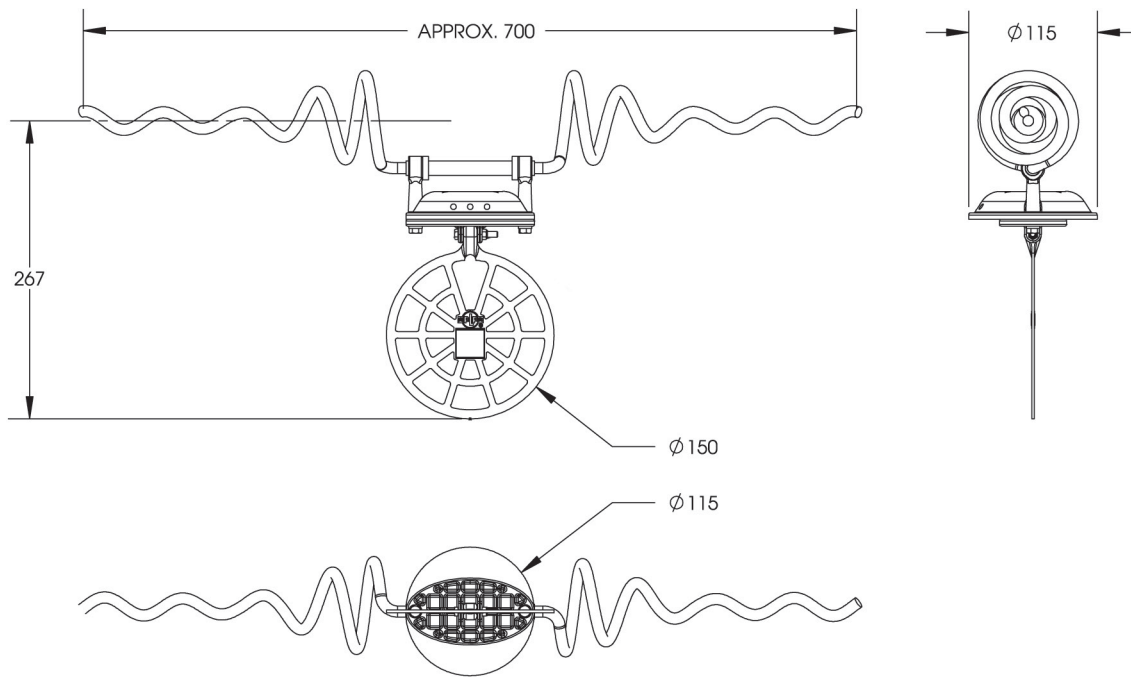
- Increased conductor profile to provide enhanced cable visibility where migratory bird flight paths are present.
- Economical and easy to apply.
- Lightweight
- Long service life without deterioration of material properties.
- Manufacture from high impact PVC.
- All components are UV stabilised.
- LED versions offer visibility for avian species flying at dusk, dawn and night..

# Overhead Warning Light

## Specifications

Part Number	Diameter Range(mm)
OWL 0914	9.08 - 14.2
OWL 1519	14.3 - 20.5
OWL 2125	20.6 - 25.0

LED colours and combinations available on request





## CONDUCTOR WARNING LIGHT WITH VIPER CLAMP ATTACHMENT

The **BFLL-ORB** is a simple and easily applied product that in both light and dark by combining tried and tested PVC coil designed diverters with a flapper unit with retro-reflective decal and a robust solar powered LED unit which flashes in dark inductions.

### FEATURES AND BENEFITS

- Replaceable solar LED unit. Minimum expected LED function: 5years
- LED Warning Light only effective after day light hours.
- Patented pending solar bird flight diverter design
- Weight: 500grams
- All plastic components UV Stabilised
- Clamp Body: Glass Filled Nylon, Neoprene Lined
- Fasteners and Springs: Stainless Steel

# Conductor Warning Light with Viper Clamp Attachment

## Specifications

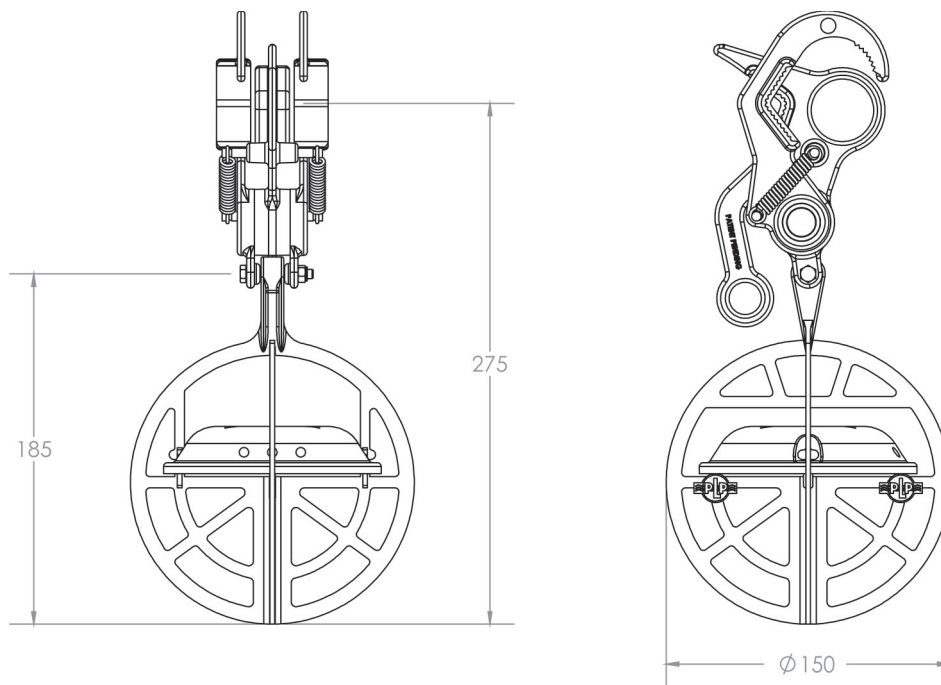
Part Number	Diameter Range(mm)
BFLL-ORB	5 - 40

E.G. Part number: BFLL-ORB Y RR

Bird Flight Diverter with Yellow Flapper and Red LED Lights on both sides

Flapper colours (PLEASE SPECIFY): Black (B), white (W), grey (G), red (R), yellow (Y)

LED Colour (PLEASE SPECIFY): Red (R), blue (B), white (W), green (G), orange (O)





## STAY WARNING LIGHT

The **LED-ORB** is a simple and easily applied product that in both light and dark by combining tried and tested PVC coil designed diverters with a flapper unit with retro-reflective decal and a robust solar powered LED unit which flashes in dark inductions.

### FEATURES AND BENEFITS

- Replaceable solar LED unit. Minimum expected LED function: 5years
- LED Warning Light only effective after day light hours.
- Patented pending solar bird flight diverter design
- Weight: 500grams
- All plastic components UV Stabilised



# Stay Warning Light

## Specifications

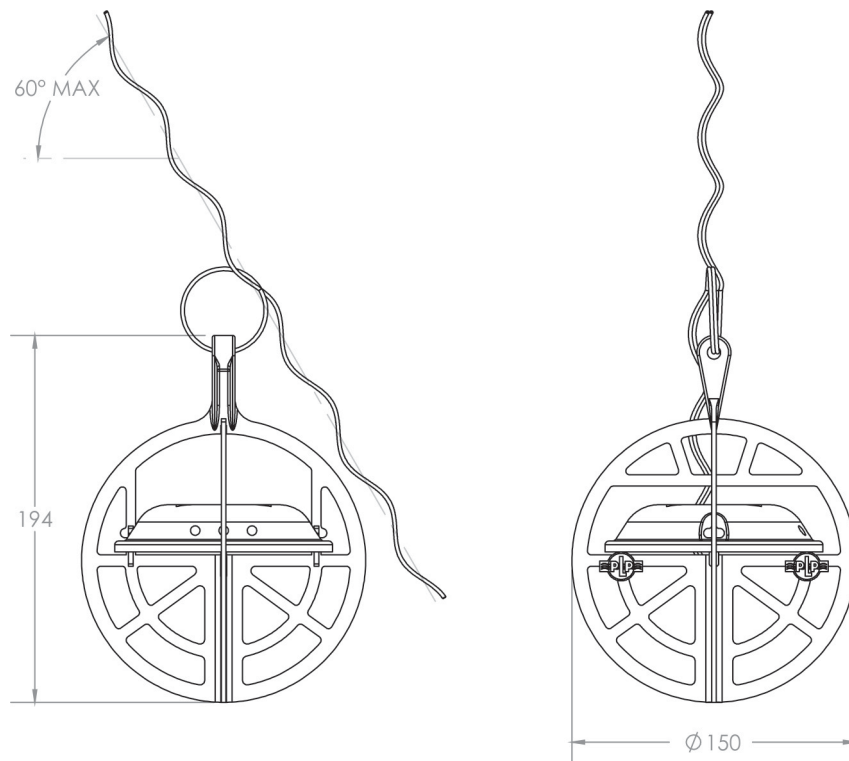
Part Number	Conductor Size Dia.(mm)
LED-ORB 144	Single wire: 3.6
LED-ORB 249	Single wire: 6.3
LED-ORB 316/357	Single wire: 8.02- 9.07
LED-ORB 358/405	Single wire: 9.1 - 10.2
LED-ORB 406/459	Single wire: 10.3 - 11.7
LED-ORB 521/588	Single wire: 13.2 - 14.9
LED-ORB 741/782	Single wire: 18.8 - 19.9
LED-ORB 856/968	Single wire: 21.7 - 24.5
LED-ORB 1260	Guy Strand: 32 O.D.

E.G. Part number: LED-ORB 472 R RR

Bird Flight Diverter for 12mm Conductor with Red LED Lights on Both Sides

Flapper colours (PLEASE SPECIFY): Black (B), white (W), grey (G), red (R), yellow (Y)

LED Colour (PLEASE SPECIFY): Red (R), blue (B), white (W), green (G), orange (O)





## SMALL AIRCRAFT WARNING DEVICE

The **AIRCRAFT Warning Device (Sphere)** is designed to make overhead lines visible to aircraft and provide a cost beneficial means of reducing the hazard to both lines and air traffic. This product is different to the Aircraft Warning Flapper by virtue of its configuration being spherical.

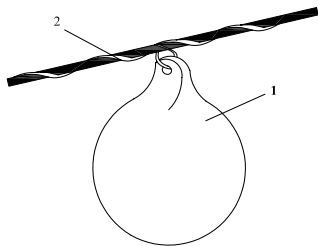
### FEATURES AND BENEFITS

- The sphere increases the visibility profile of the cable or conductor to a degree necessary to ensure safety, in compliance with the current ICAO annex 14 Chapter
- The sphere measures 220 mm in diameter
- Orange or white colour available
- Mass Fitting: 0.9kg

# Small Aircraft Warning Device

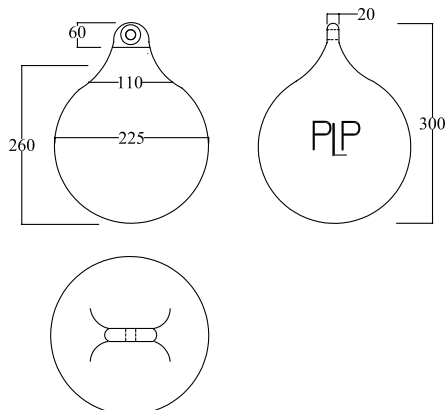
## Specifications

Part Number	Conductor Size Dia.(mm)
AWD 300-190/215	4.8 - 5.4
AWD 300- 216/244	5.5 - 6.19
AWD 300 245/277	6.2 - 7.0
AWD 300-278/315	7.06 - 8.0
AWD 300 316/357	8.1 - 9.1
AWD 300 358/405	9.2 - 10.2
AWD 300 406/459	10.3 - 11.6
AWD 300 460/520	11.7 - 13.2
AWD 300 521/588	13.23 - 14.9.
AWD 300 668/755	16.9 - 19.2
AWD 300 756/858	19.3 - 21.8
AWD 300 1001/1060	24.4 - 26.9
AWD 300 406/459PD	10.3 - 11.6
AWD 300 521/588PD	13.23 - 14.9



1. **Sphere:** Rotomoulded LLDPE  
Weather/Pollution resistant UV  
Stabilized

2. **Tie:** Stainless Steel





## AIRCRAFT WARNING DEVICE (SPHERE)

The **AIRCRAFT Warning Device (Sphere)** is designed to make overhead lines visible to aircraft and provide a cost beneficial means of reducing the hazard to both lines and air traffic. This device is applied to the earthwire of Transmission systems.

### FEATURES AND BENEFITS

- The sphere increases the visibility profile of the cable or conductor to a degree necessary to ensure safety, in compliance with the current ICAO annex 14 Chapter 6.2.8.
- The sphere measures 600 mm in diameter
- Orange, white or orange and white colour available
- Mass Fitting: 3.7kg

# Aircraft Warning Device (Sphere)

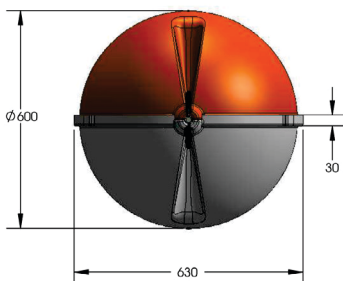
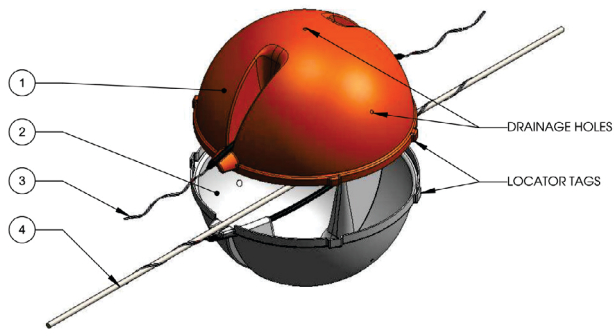
## Specifications

Part Number	Conductor Size Dia.(mm)
AWD 600-258/289	6.6 - 7.3
AWD 600-290/325	7.4 - 8.2
AWD 600-326/364	8.3 - 9.2
AWD 600-365/409	9.3 - 10.4
AWD 600-410/460	10.5 - 11.7
AWD 600-461/516	11.8 - 13.1
AWD 600-517/577	13.2 - 14.6
AWD 600-578/653	14.7 - 16.6
AWD 600-654/739	16.7 - 18.8
AWD 600-740/837	18.9 - 21.3
AWD 600-838/947	21.4 - 24.0
AWD 600-948/988	24.1 - 25.1

Please add colour code suffix to the part number as follows:

"O" – Orange; "W" – White;

"OW" – Orange & White.



ITEM NO.	DESCRIPTION	MATERIAL	QTY
1	LLDPE Aircraft Warning Sphere (top)	LLDPE	1
2	LLDPE Aircraft Warning Sphere (bottom)	LLDPE	1
3	Helical Tie	ALU CLAD STEEL	2



## AIRCRAFT WARNING DEVICE (SPHERE)

The **AIRCRAFT Warning Device (Sphere)** is designed to make overhead lines visible to aircraft and provide a cost beneficial means of reducing the hazard to both lines and air traffic. This device is applied to the earthwire of Transmission systems.

### FEATURES AND BENEFITS

- The sphere increases the visibility profile of the cable or conductor to a degree necessary to ensure safety, in compliance with the current ICAO annex 14 Chapter 6.2.8.
- Helical tie material Stainless Steel
- Bush material Copper
- Mass: 3.2kg



# Aircraft Warning Device (Sphere)

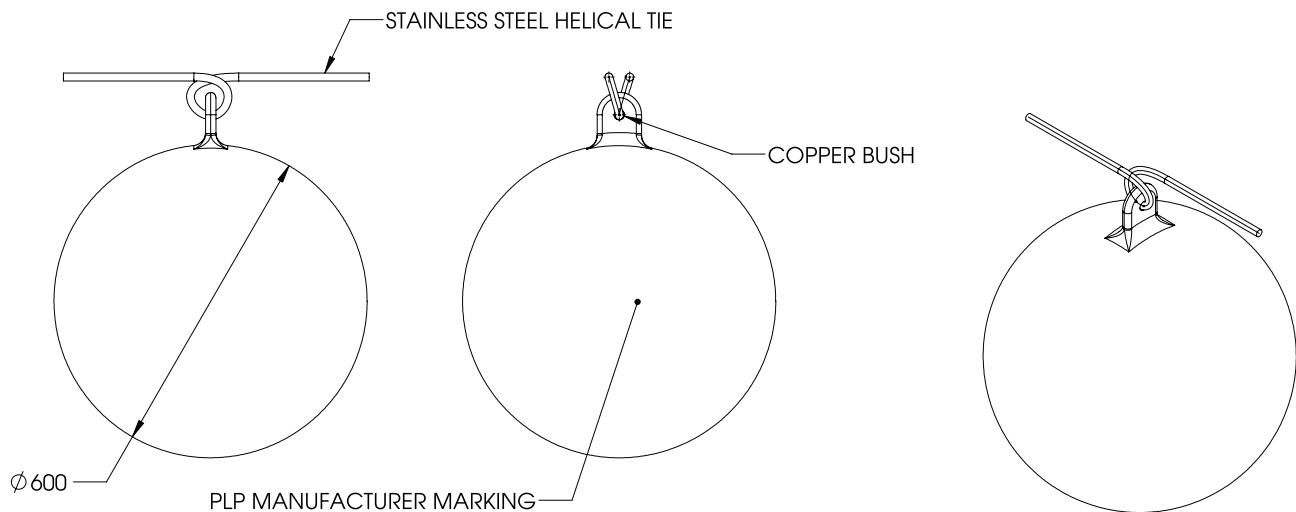
## Specifications

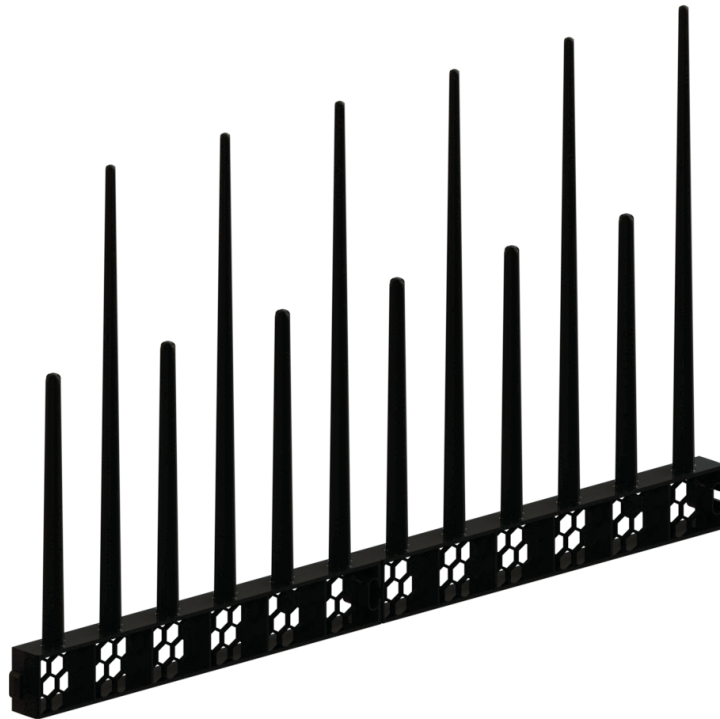
Part Number	Conductor Size Dia.(mm)
AWD 20-278/315	7.0 - 8.0
AWD 20-316/357	8.0 - 9.1
AWD 20-358/405	9.2 - 10.2
AWD 20-406/459	10.3 - 11.6
AWD 20-460/520	11.7 - 13.2
AWD 20-521/588	13.23 - 14.9
AWD 20-668/755	16.9 - 19.2
AWD 20-756/858	19.2 - 21.8
AWD 20-856/968	21.7 - 24.6
AWD 20-969/1096	24.7 - 27.8
AWD 20-1097/1240	27.9 - 31.4
AWD 20-1241/1400	31.5 - 35.5
AWD 20-1401/1512	35 - 38.4

Please add colour code suffix to the part number as follows:

"O" – Orange; "W" – White;

"OW" – Orange & White.





## BIRD GUARD

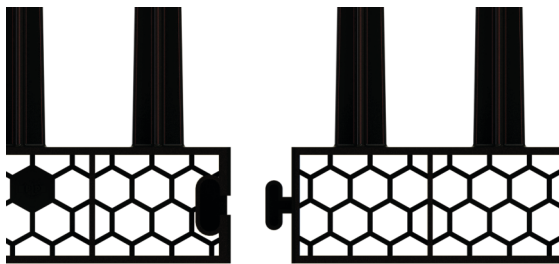
The **BIRD GUARD (BG 1000)** is designed to prevent smaller birds from roosting on critical parts of the tower, and to reduce bird related faults. Its design & quality of material allows the Bird Guard to withstand the long periods of harsh weather conditions. The Bird Guard is applicable to the entire grid where lattice towers are used.

### Features and Benefits

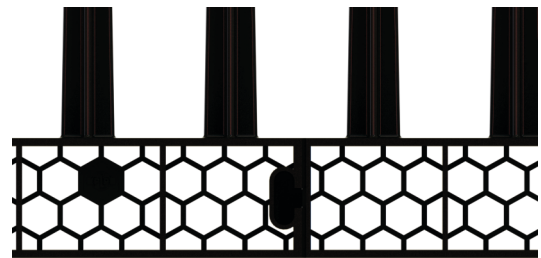
- Material: UV Stabilized Polypropylene - Long life span
- Approx Length: 1m
- Approx Mass: 1.3kg
- Interlocking and scalable
- Honeycomb base reduces mass whilst maintaining strength and provides alternative mounting capability
- Designed for rigid installation
- Tapered edges prevents harm to birds



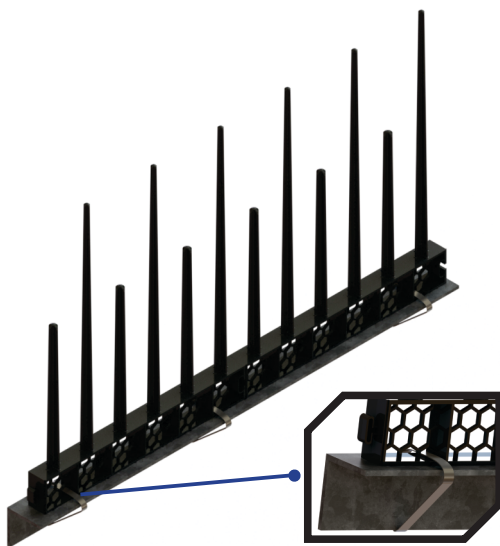
BG 1000 is made out of two pieces of BG 500



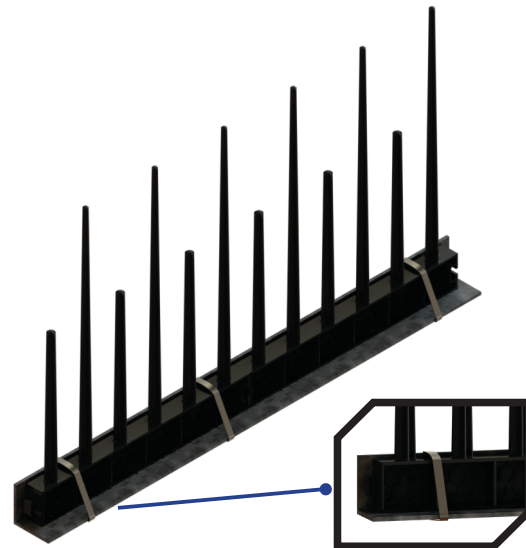
Location for the slot end of the one BG 500 & the tab of the other BG 500.



The two BG 500 pieces must be securely locked in place



Configuration 1



Configuration 2

### Specifications

Catalog Numbers	Description	Material	Quantity
BG 1000	1m Bird Guard	UV Stabilised Polypropylene	1
	Fastening strap	Stainless Steel	-

**NOTES:**

Fastening Straps Are Sold Separately









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