

# HELIPORT LIGHTS

## LXS HELIPORT LIGHTED WINDSOCK

UV resistant tested fabric sock

Led obstruction light

CET System  
technology  
available

Structure:

- Frangible
- Collapsible
- Fixed

LED Internal  
Lighting

The internal lights of the sock and the obstruction light are powered by the innovative CET (Contactless Energy Transmission) system, for the wireless transfer of energy from the fixed to the mobile rotating part of the sock.

- Contactless power supply available
- Internal and external lighting compliant to regulations



## TECHNICAL SPECIFICATIONS

### SOCK FEATURES

- Colour:
  - Unicolour Red
  - Unicolour Orange
  - Unicolour White
  - Two-tone Red and White
- Material: Polyester or Nylon
- Throat opening: from  $\varnothing 250\text{mm}$  to  $\varnothing 900\text{mm}$
- Length: according to throat diameter
  - Designed to be visible up to 200m distance
  - 360° complete rotation

### MECHANICAL FEATURES

- Pole material:
  - Aluminium
  - Glass Reinforced Polyester (GRP)
  - Stainless Steel
- Windsock height: from 2m to 6m
- Pole structure type:
  - Fixed
  - Frangible
  - Collapsible
  - Frangible + Collapsible
- Sock frame material: Stainless Steel
- Degree of protection: IP66

### ELECTRICAL FEATURES

- Power supply: 24VDC or 230 Vac
- Power consumption: 20W
- LED feeded at constant current
- CET (Contactless Energy Transmission) available

### OBSTRUCTION LIGHT OPTICAL FEATURES

- Horizontal emission: 360°
- Vertical emission: as per ICAO rule L810 Type A or Type B

### WINDSOCK OPTIONS

- Pole painting
- Power supply 110/220 Vac
- IR light compatible with NVG
- Lower temperature compatibility (-50°C)

### TEMPERATURE

- Operating temperature: -20°C to +50°C

### COMPLIANCE

- ICAO Annex 14 Vol. II Heliports - par. 5.1.1
- ICAO Annex 14 Vol. I Visual Aids - par. 5.1.1
- FAA AC 150 / 5345 - 27
- EASA Chapter F - Heliport Windsock Visual Aids
- PTS - VPT - DSN EASA

# HELIDECK LIGHTS

## LXS HELIPORT LIGHTED WINDSOCK PRODUCT CONFIGURATION

PRODUCT CODE	SOCK DIMENSION	SOCK MATERIAL	SOCK COLOUR	LIGHTING	STRUCTURE TYPE	POLE MATERIAL	POLE PAINTING	WINDSOCK HEIGHT
MAV								

**SOCK DIMENSIONS**

- 0 = Custom
- 2 = Ø 250mm (l =1,2m)
- 3 = Ø 300mm (l =1,2m)
- 4 = Ø 450mm (l =2,5m)
- 6 = Ø 600mm (l =2,4m)
- 9 = Ø 900mm (l =3,75m)

**SOCK MATERIAL**

- N = Nylon
- P = Polyester

**SOCK COLOUR**

- 0 = Custom
- S = Red
- T = Red/White
- U = White
- W = Orange

**LIGHT**

- 0 = Custom
- 1 = Obstacle Light
- 2 = Internal Light
- 3 = Internal + Obstacle Lights

**STRUCTURE TYPE**

- 0 = Not provided
- 1 = Fixed
- 2 = Frangible
- 3 = Collapsible
- 4 = Frangible & Collapsible

**POLE MATERIAL**

- A = Steel
- G = GRP
- S = Stainless Steel

**POLE PAINTING\***

- Y = Yes
- N = No

**WINDSOCK HEIGHT (L)\*\***

- 25 = 2,5m
- 30 = 3m
- 35 = 3,5m
- XY = Custom

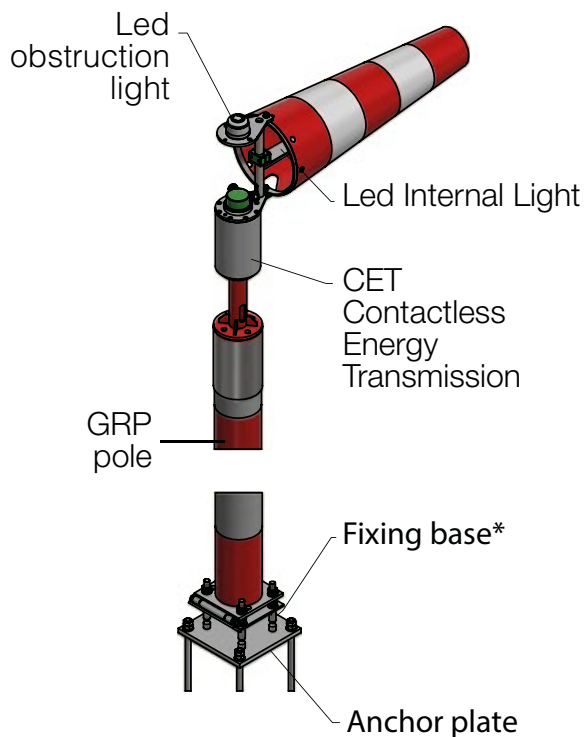
\*Painted with red/white alternate bands

\*\* To wind sock centerline

# HELIPORT LIGHTS

## LXS HELIPORT LIGHTED WINDSOCK STRUCTURE TYPE

### GRP



#### 1) Frangible\*

Frangibility, in case of impact, 4 specially design frangible bolts will bring the entire structure down to the ground.



#### 2) Collapsible\*

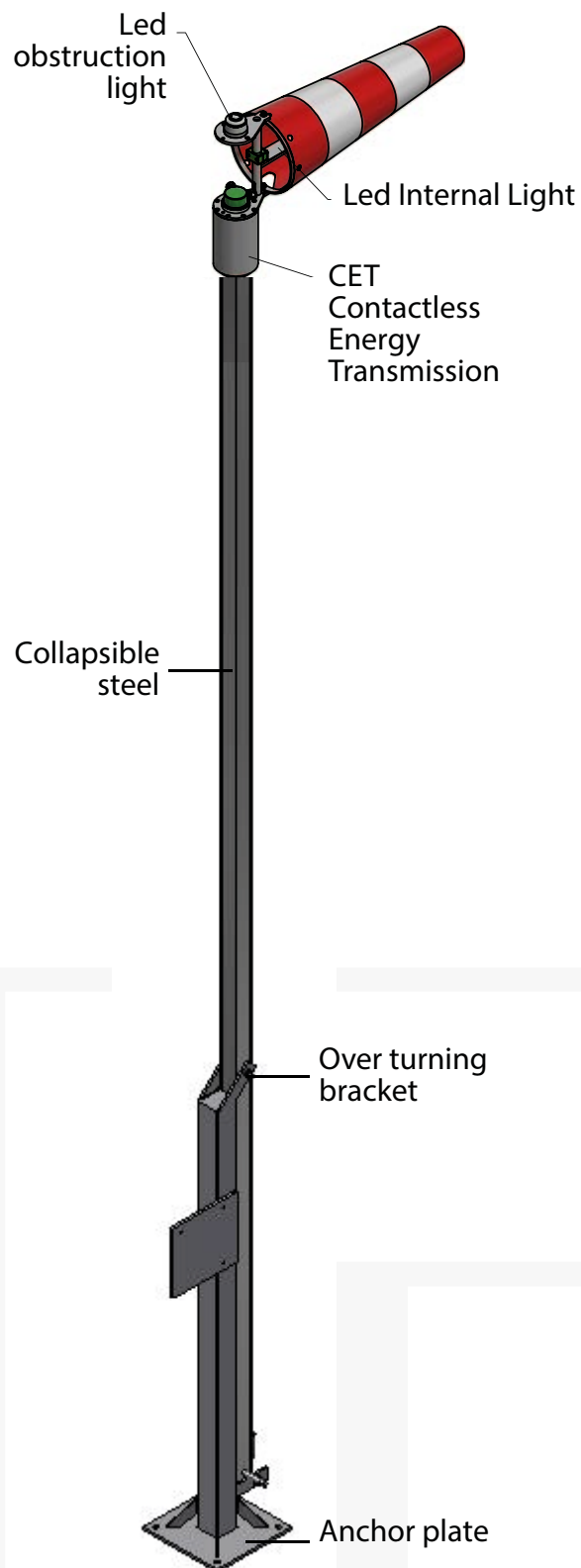
The structure can be can be overturned at ground level by means of a hinge for maintenance and checks.



#### 3) Frangible + Collapsible\*

Commnbination of hinge and frangible bolts improves the global safety of the system.

### STEEL



# HELIPORT LIGHTS

## LXS HELIPORT LIGHTED WINDSOCK LIGHTING



### Style I-A



#### Externally lighted:

External Lighting with projectors placed over the windsock, in a way that the sock is lighted in all positions.

This solution needs a lot of power.



### Style I-B



#### Internally lighted:

1) Internal lighting by reflectors chasing the windsock.

The reflector reduces the wind flow, necessary to inflate the sock. The problem is significant in medium and bigger sized windsocks.



### Style I-B



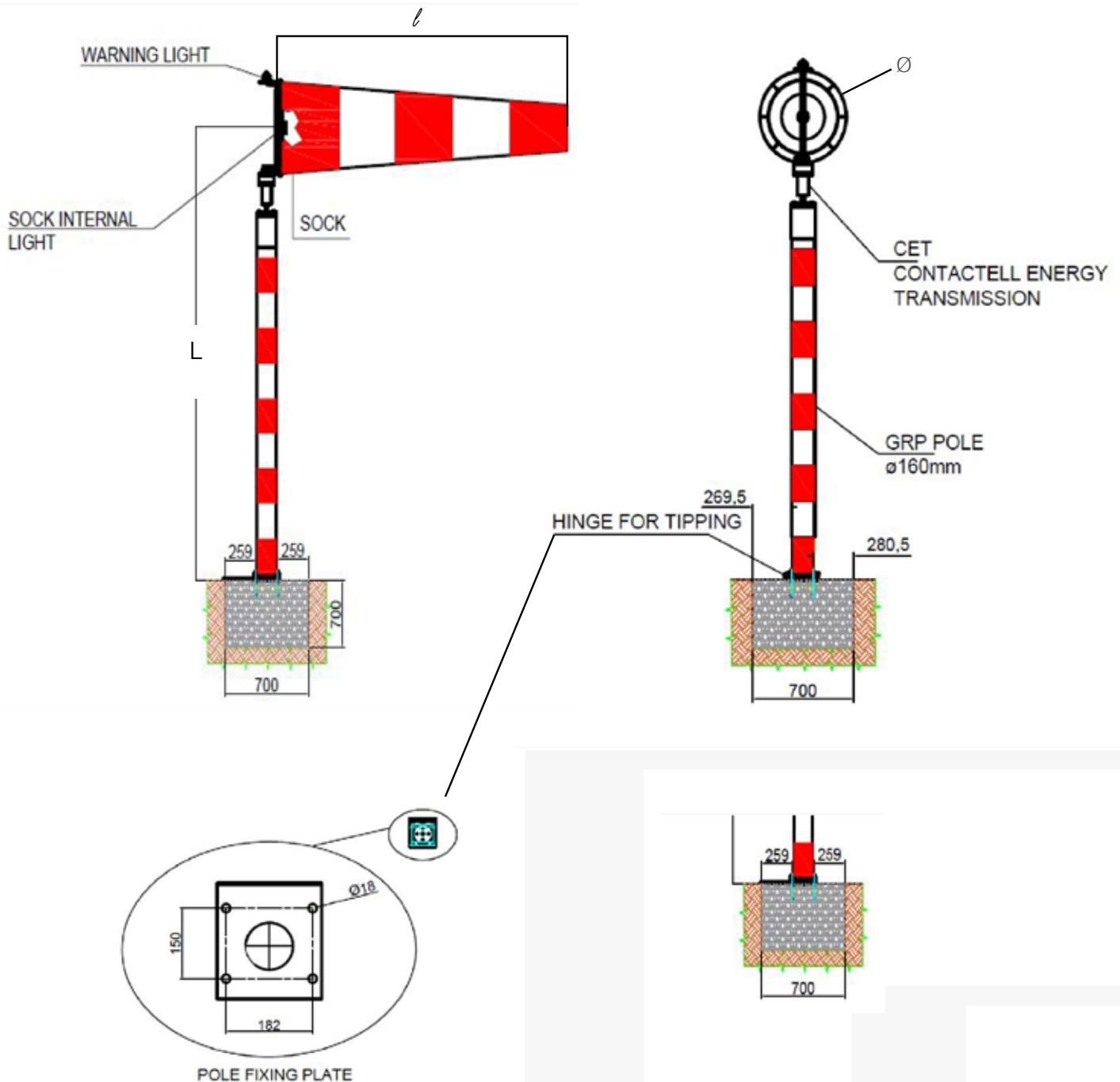
#### Internally lighted:

2) This solution has the advantage to illuminate only the sock from the inside, avoiding unnecessary energy consumption. The lamp illuminates the sock from the inside. The power is transferred from the fixed part to the mobile basket through an innovative Contactless Energy Transmission - CET.

# HELIPORT LIGHTS

## LXS HELIPORT LIGHTED WINDSOCK TECHNICAL DRAWINGS

### GRP POLE

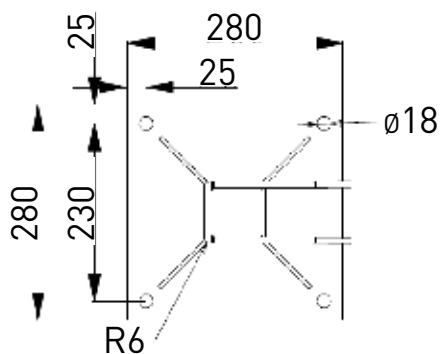
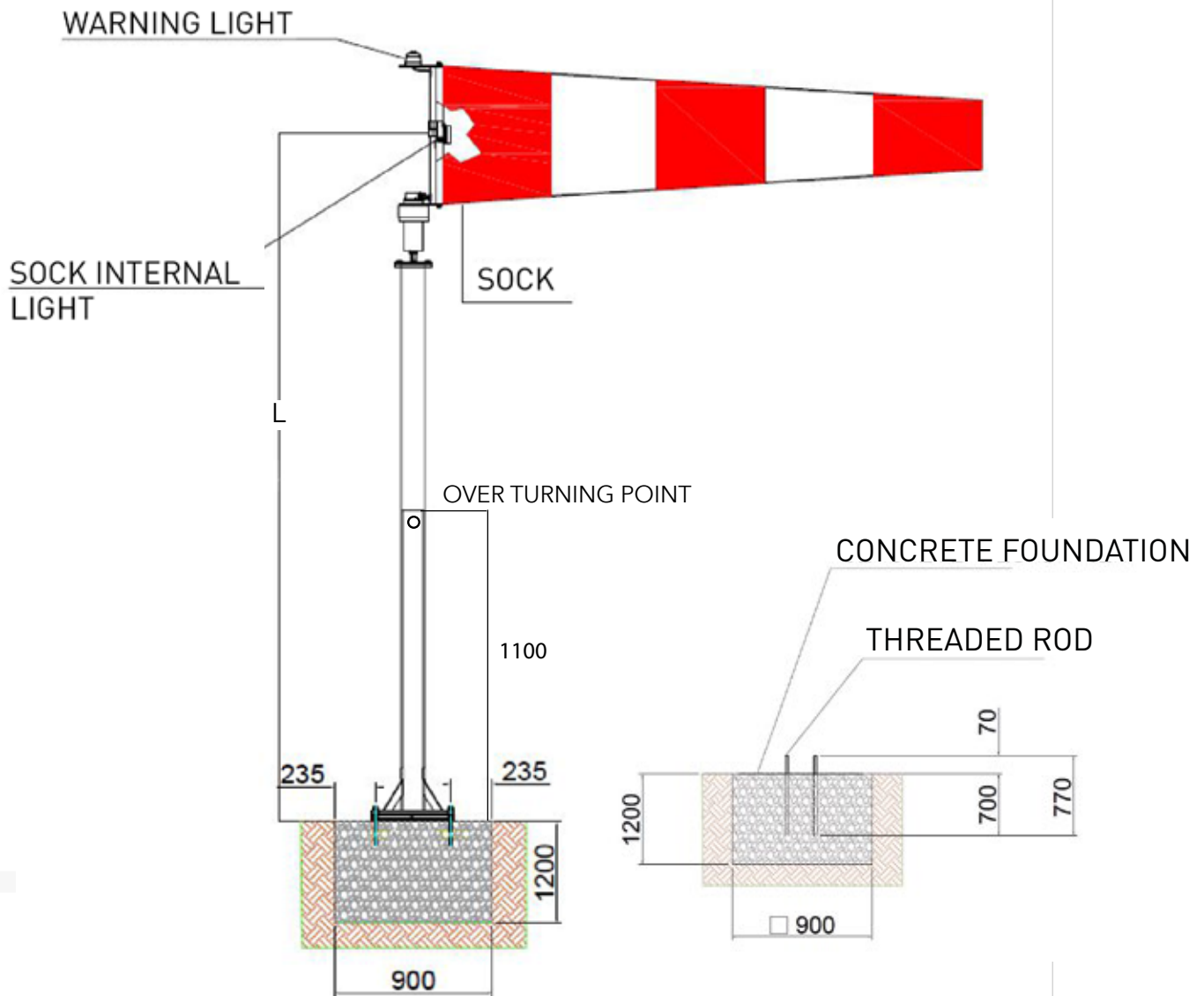


The represented concrete foundation is indicative.  
It must be calculated based on the type of soil.  
The foundation is not required if the fixing is over a steel support.

# HELIPORT LIGHTS

## LXS HELIPORT LIGHTED WINDSOCK TECHNICAL DRAWING

### STEEL / SS POLE

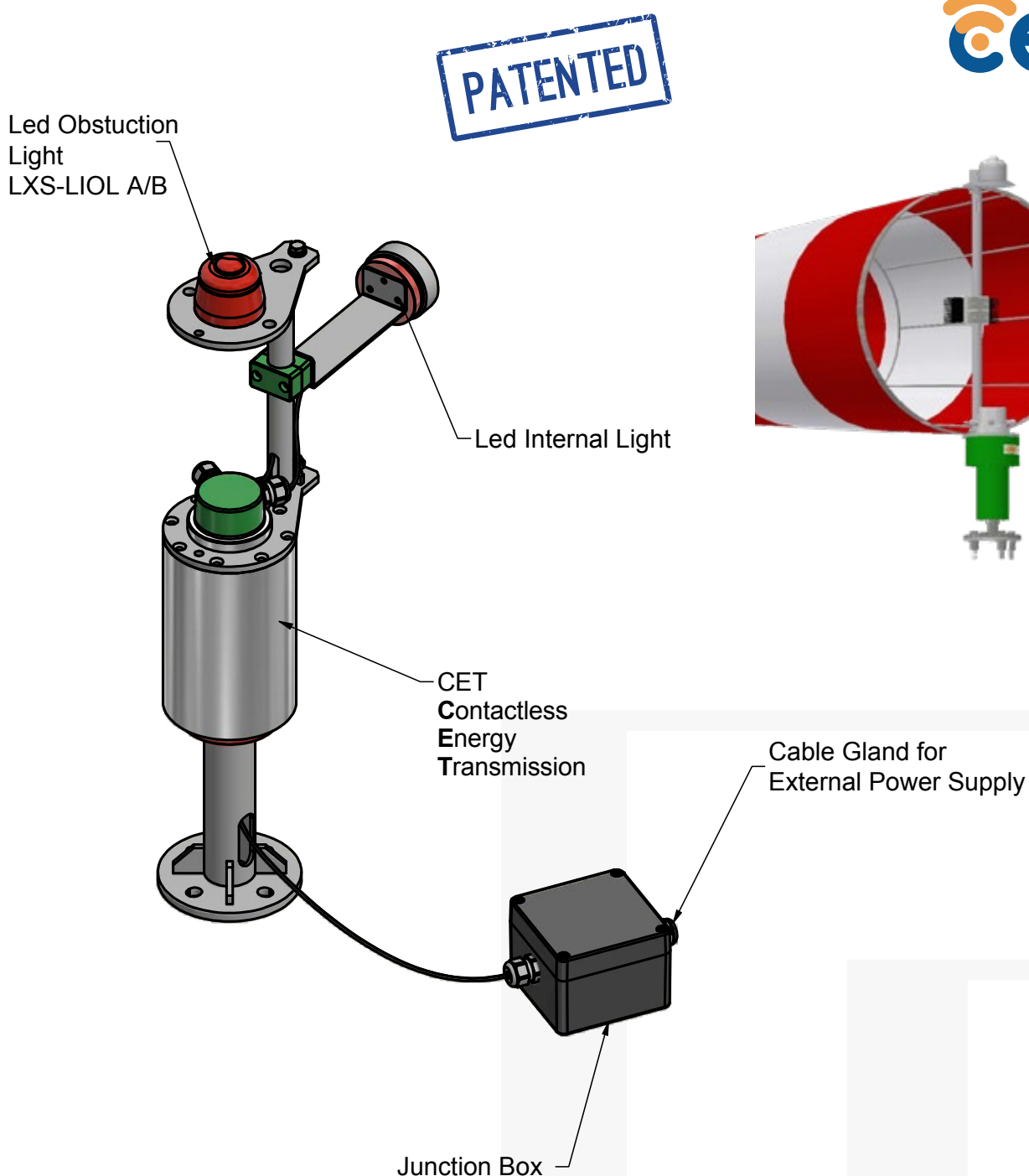


The represented concrete foundation is indicative. It must be calculated based on the type of soil. The foundation is not required if the fixing is over a steel support.

# HELIPORT LIGHTS

## LXS HELIPORT LIGHTED WINDSOCK CET CONTACTLESS ENERGY TRANSMISSION

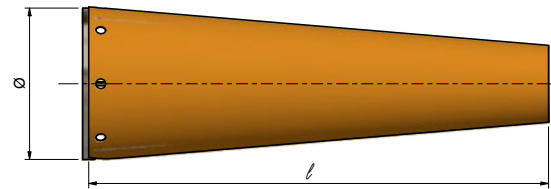
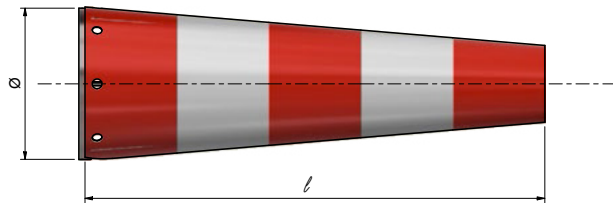
A power supply of the windsock through traditional cabling represents an obstacle and a danger because of the possible twists of electrical conductors. The innovative **Contactless Energy Transmission - CET** introduces a new way to power supply windsocks. Thanks to bearings, the device can rotate freely, according to the wind flow.



# HELIPORT LIGHTS

## LXS HELIPORT LIGHTED WINDSOCK TYPE OF SOCK

The choice of the sock is essential for the duration of the entire system and the global reduction of maintenance, with consequent decrease in management costs.



The regulations do not generally specify the type of material to be used for the windsock, but only the requirements to be met (resistance to atmospheric agents, clearly visible colours, etc.).

On the basis of the required application, we have developed two solutions for the windsock:

- **100% Nylon Windsock**, with PU treatment, water repellent and resistant. This solution is particularly suitable in applications where the sock must be illuminated, thanks to the brilliance (photosensitivity) of the fabric lighted from the inside of the sock. Colour fastness up to 1 year in STD conditions.
- **100% Polyester Windsock**, with outdoor treatment and resistance of colour to UV-A tested and certified for more than 5 years. This solution is particularly suitable for applications where very good colour fastness is more important than a high level internal illumination.

**The windsock is available at the following colours:**



White



Red



Orange



White&Red

The windsock's fabric must satisfy the following requirements:

- Visibility and minimum alteration of colours over time
- Mechanical resistance to wind and tear
- Water resistance
- UV rays' resistance

The superior quality of our socks is tested by means of an UV light generator under continuous operations. To find an equivalence between the emission values of the generator and the real solar radiation, the UV Index geographical reference data were taken into consideration. Specifically, 103 hours of continuous radiation correspond to one year of sun exposure in the city of Rome.