Warning Spheres
For Making Overhead Conductors Clearly Visible

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Warning Spheres
Best Solution for Large Distance and Long Term Visibility

General

Warning Spheres are installed on overhead conductors to alert low flying airplanes and helicopters of the obstacle.

They are generally placed near airports and on elevated spans crossing rivers, lakes, fjords, valleys, roads, railways, construction sites and pipelines. Other locations are: near military bases, police stations, hospitals, helicopter routes and other low flying areas. Warning Spheres are attached on the uppermost conductors, shieldwires or on the top of power line towers.

Key Data

PFISTERER has been developing Warning Spheres since 1964 to provide markers that can guarantee long term color stability and reliable performance.

The warning device consist of two hemispheres attached to the overhead conductor by two bolted clamps. The key element of the Warning Sphere is UV and ozone resistant material polyethylene. A special installation mechanism allows a single linesman to easily install the Warning Sphere.

Moreover a properly designed clamp structure avoids deformation of the sphere material due to tightening of the bolts.

Due to the application of a stainless steel safety plate, clamp loosing is impossible.

The high rigidity of the spheres prevents acoustic noises including rattle between the two hemispheres and vibration fatigue problems, for the whole life time of the overhead conductor on which they are installed.

The PFISTERER Warning Spheres fulfill the requirements of the International Civil Aviation Organization (ICAO) guidelines for marking obstacles.
Features

- The diameter of the sphere is 600 mm
- The Warning Sphere can be delivered in three different type of UV and ozone resistant colors (red, orange and white). The visibility of the Warning Sphere is enhanced by the choice of colours that contrast with the natural background
- Two-colour spheres or alternating white and orange or red spheres can be used when the natural background colour changes with seasons, to guarantee constant visibility
- The jaws are made of aluminium and feature a grooved channel, which makes slipping impossible
- The Warning Spheres can be used for transmission and distribution lines of any voltage without any adjustment of the insulating distances
- The Warning Spheres are made of polyethylene
- For aluminium based conductors and OPGW shield wires we recommend to install the Warning Spheres over armour rods
- Drain holes prevent accumulation of rain or condensed water inside the spheres
- Reduction of transport and storing costs due to intelligent stacking is possible
## Material Information

- **Conductor Range**
  - Ø 9.3 - 10.4
  - Ø 10.4 - 11.9
  - Ø 11.9 - 13.2
  - Ø 13.2 - 14.5
  - Ø 14.5 - 15.8
  - Ø 15.8 - 17.1
  - Ø 17.1 - 18.4
  - Ø 18.4 - 19.7
  - Ø 19.7 - 21.0
  - Ø 21.0 - 22.3
  - Ø 22.3 - 23.6
  - Ø 23.6 - 24.9
  - Ø 24.9 - 26.2
  - Ø 26.2 - 27.5
  - Ø 27.5 - 28.8
  - Ø 28.8 - 30.1
  - Ø 30.1 - 31.4
  - Ø 31.4 - 32.7
  - Ø 32.7 - 34.0
  - Ø 34.0 - 35.3
  - Ø 35.3 - 36.6
  - Ø 36.6 - 37.9
  - Ø 37.9 - 39.2
  - Ø 39.2 - 40.5
  - Ø 40.5 - 41.8
  - Ø 41.8 - 43.1
  - Ø 43.1 - 44.4
  - Ø 44.4 - 45.7
  - Ø 45.7 - 47.0
  - Ø 47.0 - 48.3
  - Ø 48.3 - 49.6
  - Ø 49.6 - 50.9
  - Ø 50.9 - 52.2
  - Ø 52.2 - 53.5
  - Ø 53.5 - 54.8

- **Materials**
  - Jaw: aluminium alloy with grooved channel
  - Hemisphere: coloured polyethylene
  - Plates: steel – hot dip galvanised
  - Screws: steel – hot dip galvanised
  - Safety plate: stainless steel

- **Clamp option**
  - Component code:
    - S: Stainless steel bolts

- **Orders with clamp option**
  - Orders for clamp option must be indicated with the component code of the desired option at the end of the relevant part number.

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**Order Information**

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