

# Vía láctea

Pergola

1990

## THE VIA LACTEA PERGOLA LUMINAIRE

The double Vía Láctea street lamp includes two highly watertight HF 2x65W AC type luminaires designed for the installation of two 58W type T26 linear fluorescent tubes. HF magnetic power supply equipment is supplied with the luminaires.

### BODY

The body is made of self-extinguishing polycarbonate, as per UNE 53.315-75, coextruded in a single piece. The upper part is opaque grey. A guide way in the upper part allows the stainless steel fixing elements to be moved.

### SIDE COVERS

The side covers are made from self-extinguishing polycarbonate, as per UNE 53.315-75. One of the covers allows access to the inside of the main body, to maintain the reflector and connections. It incorporates a polyamide stuffing box for wiring entry. It is closed by means of two polyamide wing nuts and watertightness is ensured by means of an EPDM gasket. The other cover is fixed to the frame and there is a premarked drill hole if an extra entrance point is needed.

### REFLECTOR

The reflector is made from polished anodised aluminium and supports the lampholder, the auxiliary equipment and the starter holders. The starter holder fits into the grooves inside the main body that allow the tray to be moved when changing the lamps.

### THE STRUCTURE OF THE PERGOLA

#### SUPPORTING COLUMN WITH LUMINAIRE

The column consists of:

- A rectangular base with inspection cover, made from metal tube S-275 JR with a cross-section of 150x100x3mm and a height of 0.88m. Hot galvanised finish.
- A forked support with the arms manufactured from steel tubes S-275 JR with a cross-section of 50x100x3mm, a height of 2.97m and a span of 1.2m. Hot galvanised finish.
- Screen: The screen is made from steel tube S-275 JR with a cross section of 175x108x3mm and a height of 3.4m. It includes: welded side covers, double "L" profile to reinforce the joint with the column and a double lower window to house the luminaires. Hot galvanised finish. There are four welded strips inside that are used to support and fix the luminaires. It is attached to the column by means of stainless steel screws

#### SUPPORTING COLUMNS

The supporting columns are similar to the supporting columns with luminaire but do not include the inspection cover at the base or the screen.

#### SIDE BEAMS

The side beams are made from metal tube S-275 JR with a cross-section of 50x100x3mm and a length of 4.97m. Hot galvanised finish. They support the slatwork system and are attached at their ends to the supporting column and to the sides of the screens by means of stainless steel screws

#### SLATWORK FRAMES

The rectangular slatwork frames are made from 5mm thick steel sheet S-275 JR with a maximum size of 3.52x0.59m. Hot galvanised finish. They house and secure the wooden slatwork and are attached to the beams by means of stainless steel screws.

#### WOODEN SLATWORK

The rectangular wooden slatwork units are made from pinewood slats with a cross-section of 40x45mm. They consist of two 3.31 metre side slats and thirty three 0.5 metre intermediate slats. They have been heat treated in an autoclave.

#### DECORATIVE COVERS

The covers consist of two hot galvanised steel sheet parts S-275 JR located at the bottom of the column for ornamental purposes.

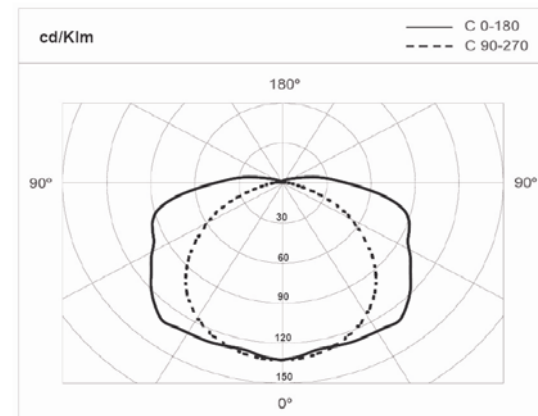


|    |   |   |   |
|----|---|---|---|
| IP |  |  |  |
| 66 |   |   |   |

|       |   |        |
|-------|---|--------|
| CLASS |  | WEIGHT |
| I     |   | 2,8kg  |

|       |                   |                |
|-------|-------------------|----------------|
| code  | Lamp              |                |
| VIA02 | 2x(2x58W) T26 G13 | 230 V<br>50 Hz |

|                     |        |
|---------------------|--------|
| RENDIMIENTO (nL)    | 50,68% |
| FHS <sub>INST</sub> | 5,70%  |



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## S-275 JR MECHANICAL PROPERTIES

Yield strength limit 275 N/mm<sup>2</sup>  
 Breaking strength 410-450 N/mm<sup>2</sup>  
 Resilience 27 J  
 Minimum elongation 20 %

## S-275-JR CHEMICAL COMPOSITION

Carbon (C) 0,24 %  
 Manganese (Mn) 1,60 %  
 Phosphorus (P) 0,055 %  
 Sulphur (S) 0,055 %  
 Nitrogen (N) 0,011 %

## RED PINE STRIPS

### MATERIAL

The Red Pine wood comes from Central Sweden. This wood has been classified Grade V according to the General Classification Standards for Swedish Sawn Timber applicable to Red Pine and Spruce, as established by the Timber Classification Committee in 1958.

This wood has been obtained in compliance with all legal and environmental standards of the country of origin, thus ensuring forest sustainability and preventing ecological impact. This wood does not come from primary forests.

### COLOUR

The sapwood is pale yellow in colour and the heartwood is reddish.

### PHYSICAL PROPERTIES

Grain size fine or medium  
 Density 500 - 520 - 540 Kg/m<sup>3</sup>  
 Contraction not nervous

### Contraction ratios: total (unit)

|            | (Spain)      | (Rest)                 |
|------------|--------------|------------------------|
| Volumetric | 12,9% (0,34) | 12 - 15% (0,35 - 0,50) |
| Tangential | 6,8% (0,21)  | (0,20 - 0,35)          |
| Radial     | 3,8% (0,12)  | (0,11 - 0,20)          |

### MECHANICAL PROPERTIES

|                   | (Spain)    | (Rest)                         |
|-------------------|------------|--------------------------------|
| Static bending    | 90 - 110   | 79 - 100N/mm <sup>2</sup>      |
| Elasticity        | 8600-10000 | 10800 - 13000N/mm <sup>2</sup> |
| Axial compression | 42 - 47    | 45 - 55N/mm <sup>2</sup>       |
| Sideways comp.    | 9,2        | - N/mm <sup>2</sup>            |
| Cutting hardness  | 10 - 11    | 7,2 - 11,2N/mm <sup>2</sup>    |
| Dynamic bending   | 2,25       | 4,0 - 7,0J/cm <sup>2</sup>     |

### PROTECTIVE TREATMENT

Treated with the Xylazel IMPRALIT KDS autoclave to protect the wood. This ensures that the wood is protected from Class 1 to Class 4 risks, described in the UNE EN 335-1:2007 and UNE EN 335-2:2007 standards, for a 10-year period.

The column is anchored on site with a reinforced concrete block and 4 anchor bolts, 22cm below pavement level. The foundations must leave the electrical connection aperture unobstructed.

### BOLTS

Expansion anchor with unique wedge design suitable for applications in concrete

### GEOMETRICAL CHARACTERISTICS:

Length (mm): 170  
 Metric (mm): 20  
 Finish Smooth

### MATERIALS:

Galvanised steel carbon  
 Yield stress (MPa): 64  
 Ultimate stress (MPa): 80

### FOUNDATION PIT

#### MATERIAL:

Concrete HM-20  
 Typical resistance: 20 MPa

#### TERRAIN TYPE:

Terrain type II (according to UNE-EN40-3-1).  
 Allowable pressure: 1 Kg/cm<sup>2</sup>

