

VLS-46

Adjustable LED sector light
15 -19 NM by night
1.6 - 3.0 NM by day

The VLS-46 is ideal for harbours with narrow or difficult approaches. The modular design allows up to seven projectors to be placed side by side. This can be used to create unique sector angles, flash patterns and intensities.

The VLS-46 has been designed to take advantage of the latest LED technology. The key features include:

- **Peak intensity from 14,800cd**
- **Large vertical divergence for visibility by all types of vessels**
- **Only one tower is required, compared with range lights. This reduces the installation and maintenance cost by half**
- **Each projector can be individually adjusted to the width required for the application, within the limits defined in this brochure and product manual**
- **Energy-efficient LED technology is ideal for solar-powered sites**
- **Maintenance free design (no moving parts) will save money and time**
- **Lightweight marine-grade aluminium construction makes the unit light and easy to handle**



Functionality and Features VLS-46

About the VLS-46

The VLS-46 sector light brings a new solution to an old problem.

In the past, safe passage was achieved by having two leading lights lined up on top of each other to inform the mariner they were in a safe passage. If the lights were directly aligned above each other, the mariner knew they were on the centre line of their approach. However, adverse marine conditions often pushed the mariner off the centre line to an unknown and hazardous location.

With the VLS-46, the mariner will have precise red, white, green or yellow-coloured sectors (or a combination of two coloured flashes) to guide them through the channel safely.

Variants

There are two variants of projector (5° and 10°), which shine a horizontal beam that can be adjusted in width (horizontal divergence).

- 5° is the narrow-angle projector and can be adjusted between 0.5° and 5°
- 10° is the wide-angle projector and can be adjusted between 1° and 10°.



How it works

Each sector light can be made up of one to seven projectors. The projectors are set up with their own beam widths, intensity and flash characters.

Alignment Options:

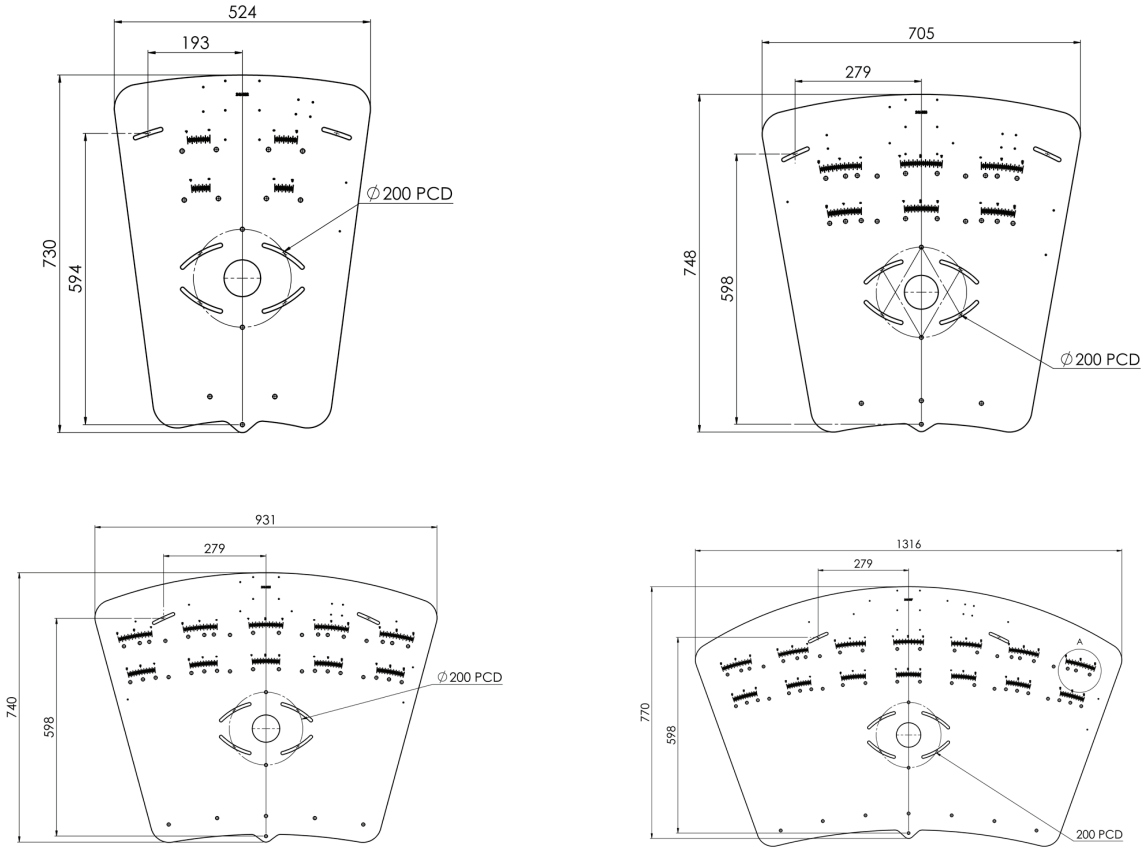
- 1 Edge to edge for traditional sector light applications.
- 2 Projectors set to the same angle to increase the range of the sector.
- 3 Overlapping and alternating beams to simulate oscillating boundaries.
- 4 Parallel beams to mark a channel that has a constant width.

Common application

Parallel channel marking can be achieved with 4 projects installed in two separate locations. This is ideal for channels that do not decrease in widths as the vessel approached the sector light.



Technical Specification VLS-46



Item	Weight
5° Projector	2.4kg
10° Projector	2.3kg
2 Projector mount plate	5.9kg
3 Projector mount plate	8.3kg
5 Projector mount plate	13.2kg

Optical Performance

Maximum intensity

5° Projector	9000cd	8300cd	12300cd	14800cd
10° Projector	2300cd	2140cd	3030cd	3480cd

Vertical divergence	5° Projector:	3.6° @ 50 %
	10° Projector:	7.2° @ 50 %

Accuracy	5° Projector:	0.017°
	10° Projector:	0.034° to 0.058°

Horizontal adjustment	5° Projector:	0.5° to 5°
	10° Projector:	1° to 10°

Schmitt-Clausen Correction	Selectable effective intensity or peak intensity
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Day/Night control	Automatic, via day/night sensor
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Flash character	Fully programmable (incl. presets)
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Material

Housing	Anodised marine-grade aluminium
Lens	Acrylic and glass

Environmental

Degree of Protection	IP67
Temperature	-30°C to 50°C
Salt	Continuous exposure to salt water and spray
Accerlation and Shock	5G in all directions
Wind	100KT

Electrical performance

Power up to	3.3W	4.6W	3.0W	4.6W
Depend on external temperature, effective intensity correction and flash character				
Reverse polarity protection	Yes			
Input/Output	Hard-wire sync, alarm, RS-232, hard-wire on/off control, day/night output			
Cable length	1.5m to 5.0m maximum			

Order Overview VLS-46

Option matrix

Remote-02	Infrared remote
174-041	Gun sight alignment tool
DP	Data port

Product code

Code	Note
VLS-46Z-D-Cc-G-BPY	
Z	Standard (no charcater) or U for Ultra
D	Divergence
C	Colour (R, W, Y, G)
c	Quantity oif projectors in that colour (1-7)
G	No character or GS for GPS option
BPY	Base plate (BP2, 3, 5, 7)

Product code example: VLS-46-5-R1-W1-G1-BP3

Standard sector light, 5°, 1 red projector, 1 white and 1 green, on a 3 projector base plate