HELLA ®

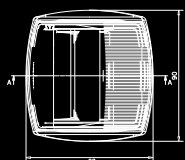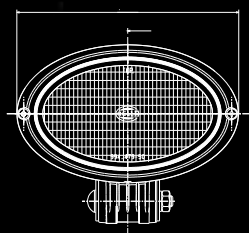# Hella marine

Vision and Innovation

Product Catalogue

Navigation Lamps   **Deck Floodlights**   **Interior Lights**   **Accessories**
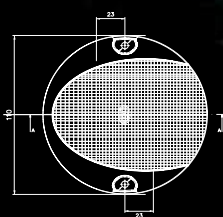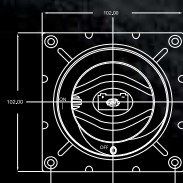
www.hellamarine.com

Hella marine

Vision and Innovation

**Welcome to the Hella marine catalogue, your guide to our marine
lighting products engineered for safety, reliability and high performance.**

For over 80 years, Hella marine has been a leading lighting manufacturer. Today
highly advanced LED and bulb technologies are applied to produce Navigation
Lamps, Deck Floodlights, Search Lamps, Interior and Exterior Lamps and Boat
Trailer lighting.

www.hellamarine.com

info@hellamarine.com

About Hella marine

Hella marine is a worldwide marine lighting specialist represented in over 40
countries. The range was first created in 1925 by Hella KG in Germany and
relocated to Austria in 1993.
Today Hella marine is headquartered in New Zealand - a country with a rich
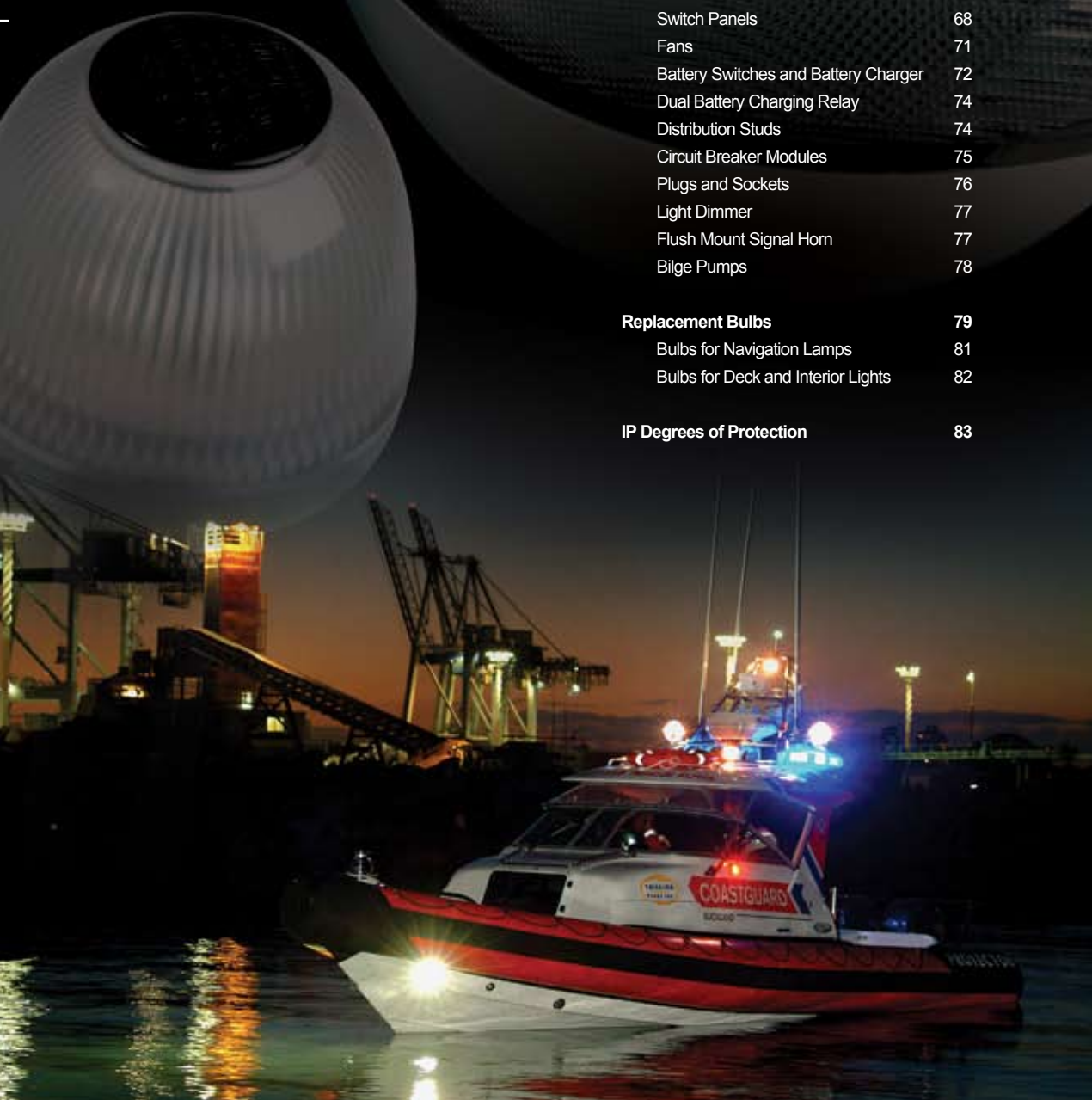maritime history of boat building and yacht racing success.

Hella New Zealand was founded in 1973 to manufacture, market and distribute
products. Today our company designs and manufactures innovative lighting
solutions for the marine, commercial transport and automotive sectors using
advanced LED technology.

Over a decade of LED expertise is now being channelled into sophisticated
navigation and lighting systems. With these products, Hella marine is a supplier
to yacht and powerboat manufacturers, marine re-sellers and commercial fleets
around the world.

Hella New Zealand is certified to ISO 9001:2000.

Contents

Index by Product Description

Index by Product Description

Hella marine HELLA

Hella marine navigation lamps comply with the International Regulations for Prevention of Collisions at Sea (IMO COLREG 72).

This IMO compliance, together with supplementary national requirements, is listed with each navigation lamp series throughout the catalogue.

Main approval types.

IMO
COL REG 72

Complies with IMO (International Maritime Organization) requirements under the International Regulations for the Prevention of Collisions at Sea. (IMO COLREG 72) IMO COLREG 72 forms the international basis for legal navigation lighting on vessels.

BSH

Approved by the German BSH (Bundesamt für Seeschifffahrt und Hydrographie) and carry BSH type approval numbers.
BSH was formerly called DHI (Deutsches Hydrographisches Institut).

RINA

Approved by the Italian RINA (Registro Italiano Navale) authority.
Approved lamps carry a RINA type approval number.

USCG

Complies with USCG (United States Coast Guard) requirements.
Lamps carry a marking for minimum visible distance in nautical miles, eg USCG 2 NM.
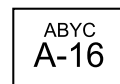
ABYC
A-16

Complies with ABYC (Amercian Boat and Yacht Council) Navigation Lamp Standard A-16.

For vessels less than 50 metres in length overall, IMO COLREG 72 describes the following minimum visible distances for navigation lamps.
Supplementary national approvals may also apply. Distances are in Nautical Miles.

Vessels less than 12 metres in length:
      White, Red, Green All Round lamps, 2 miles
      Masthead lamp, 2 miles
      Port and Starboard lamps, 1 mile
      Stern lamp, 2 miles
      Tri-colour lamp, 2 miles. (Sailing vessels under sail only)

Vessels less than 20 metres in length:
      White, Red, Green All Round lamps, 2 miles
      Masthead lamp, 3 miles
      Port and Starboard lamps, 2 miles
      Stern lamp, 2 miles
      Tri-colour lamp, 2 miles. (Sailing vessels under sail only)

Vessels less than 50 metres in length:
      White, Red, Green All Round lamps, 2 miles
      Masthead lamp, 5 miles
      Port and Starboard lamps, 2 miles
      Stern lamp, 2 miles

Definitions

IMO COLREG definitions for navigation lighting.

"All Round Lamp"
A light showing an unbroken arc over the horizon of 360 degrees.

All Round Lamps may output white light, red light or green light.

"Side Lights"
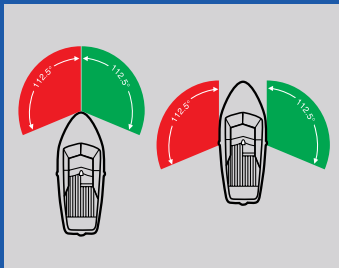A green light on the starboard side (Starboard lamp) and a red light on the port side (Port lamp) each showing an unbroken light over an arc of the horizon of 112.5 degrees and fixed to show the light from right ahead to 22.5 degrees (2 points) abaft the beam.
On a vessel less than 20 metres in length sidelights may be combined into one lamp (a 'Bi-colour' Lamp) carried on the fore and aft centre line of the vessel.
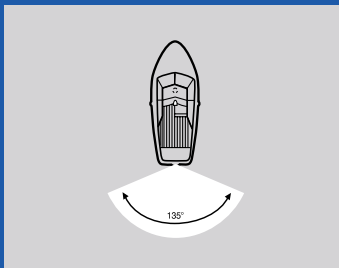
"Stern Lamp"
A white light placed as close as practicable to the stern showing an unbroken light over an arc of the horizon of 135 degrees and so fixed to show the light from right aft for 67.5 degrees (6 points) on both sides of the vessel.
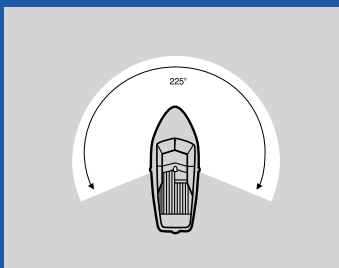
"Masthead Lamp"
A white light placed over the fore and aft centre line of the vessel showing an unbroken light over an arc of the horizon of 225 degrees and fixed to show the light from right ahead to 22.5 degrees (2 points) abaft the beam on both sides of the vessel.
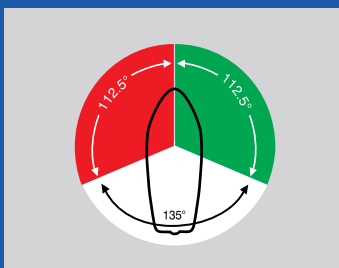
"Tri-colour Lamp"
On a sailing vessel less than 20 metres in length under sail, the sidelights and stern light may be combined into one lamp positioned on top of the mast. When the sailing vessel is under power, the tri-colour lamp must be switched off and the navigation lamp rules for power driven vessels apply.

Hella marine (HELLA)

IMO COLREG 72 Lights and Visibility - Powerboats

**IMO COLREG requirements for navigation lighting on powerboats
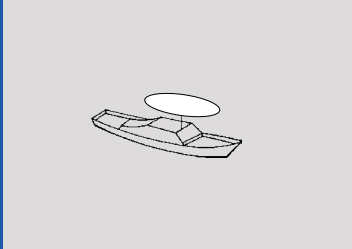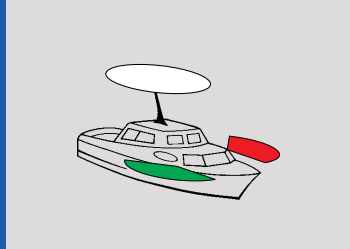less than 50m LOA (Length Overall).**

Note - Sailboats under motor adopt the rules for Powerboats.
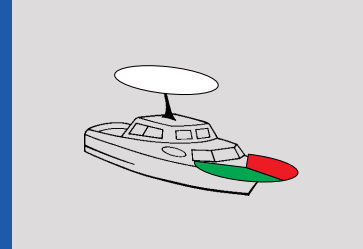
Powerboats up to 7m. Max 7 knots

1 All Round White lamp

**Powerboats up to 12m where Masthead
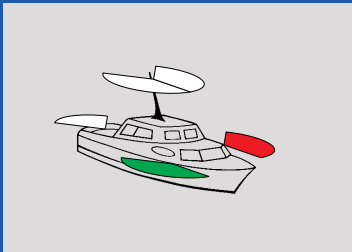and Stern lamps cannot be mounted**

1 All Round White lamp
1 Port lamp
1 Starboard lamp

**Powerboats up to 12m where Masthead
and Stern lamps cannot be mounted**

1 All Round White lamp
1 Bi-colour lamp

Powerboats up to 20m

1 Masthead lamp
1 Port lamp
1 Starboard lamp
1 Stern lamp

Powerboats up to 20m
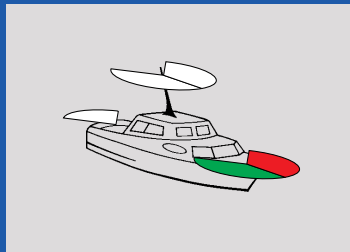
1 Masthead lamp
1 Bi-colour lamp
1 Stern lamp

Powerboats up to 50m
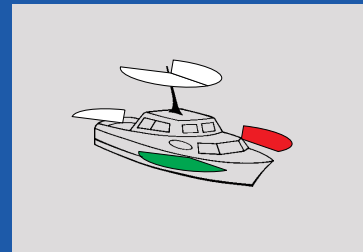
1 Masthead lamp
1 Port lamp
1 Starboard lamp
1 Stern lamp

**Sailboats and Powerboats less than
50m at anchor**
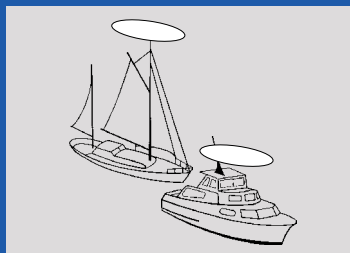
1 All Round White lamp

**Sailboats and Powerboats more than
12m grounded**

1 All Round White lamp
2 All Round Red lamps
mounted above one another

**Sailboats and Powerboats more than
12m not under command**

In addition to Port, Starboard and Stern lamps
2 All Round Red lamps
mounted above one another

**Sailboats and Powerboats more than
12m manoeuvring with difficulty**

In addition to Port, Starboard and Stern lamps
1 All Round Red lamp
1 All Round White lamp
1 All Round Red lamp
mounted above one another

Hella marine HELLA®

IMO COLREG 72 Lights and Visibility - Sailboats

IMO COLREG requirements for navigation lighting on sailboats less than 50m LOA (Length Overall).

Note - Sailboats under motor adopt the rules for Powerboats.

Sailboats up to 20m under sail

1 Port lamp
1 Starboard lamp
1 Stern lamp

Sailboats up to 20m under sail
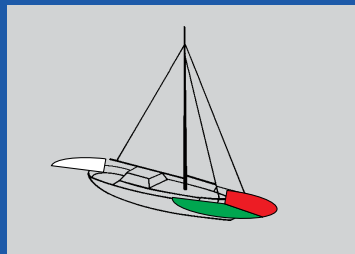
1 Bi-colour lamp
1 Stern lamp

Sailboats more than 20m under sail
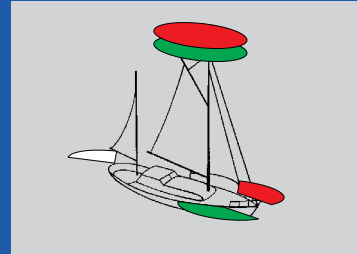
1 All Round Red lamp Above
1 All Round Green lamp
1 Port lamp
1 Starboard lamp
or 1 Bi-colour lamp
1 Stern lamp

Sailboats up to 20m under sail
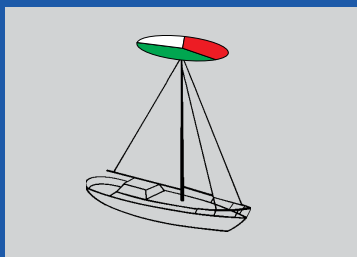
1 Tri-colour lamp

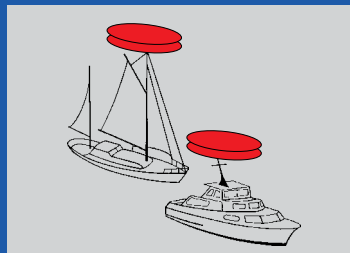**Sailboats and Powerboats less than 50m at anchor**
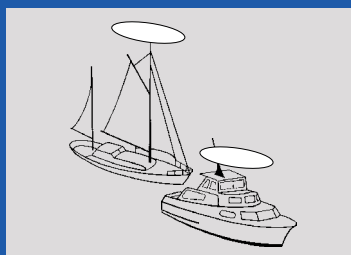
1 All Round White lamp

Sailboats and Powerboats more than 12m grounded
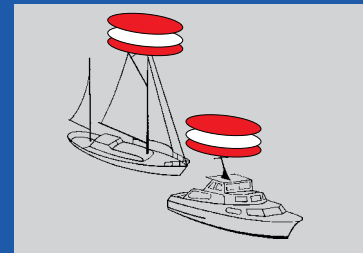

1 All Round White lamp
2 All Round Red lamps
mounted above one another

Sailboats and Powerboats more than 12m not under command
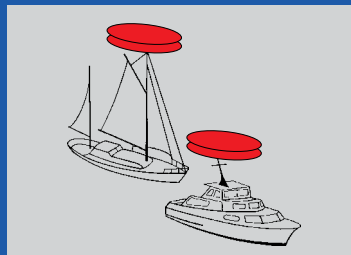
In addition to Port, Starboard and Stern lamps
2 All Round Red lamps
mounted above one another

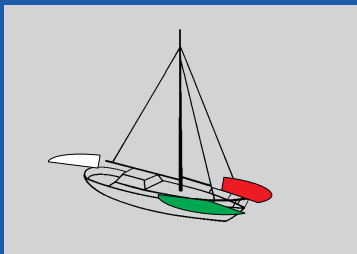**Sailboats and Powerboats more than 12m manoeuvring with difficulty**

In addition to Port, Starboard and Stern lamps
1 All Round Red lamp
1 All Round White lamp
1 All Round Red lamp
mounted above one another

LED Lighting Technology

LED Lighting Technology

Hella marine LED (Light Emitting Diode) navigation lamps provide power saving, highly visible and ultra durable lighting for reliability and safety at sea.

Benefits of LED lighting technology;

Ultra Low Power Consumption.
Combining efficient LED light sources with advanced optic technology, Hella marine LED products deliver more light output per watt than traditional bulb lamps and thus provide considerable power saving.
Hella marine NaviLED®PRO navigation lamps use less than 10% of the power required to run a 25W incandescent bulb navigation lamp certified to the same visible distance.

No bulbs, No maintenance. Ultra long service life.
Hella marine LED technology has no filaments to break, thus making the LED lamps extremely shock and vibration resistant for reliable illumination and safety.
Our engineering team has developed a unique range of highly demanding tests to lift product reliability to new standards.

Safe and highly visible.
Advanced LED navigation lamp optics deliver optimal horizontal and vertical light distribution according to international standards. They provide enhanced visibility compared to bulb navigation lamps. Cut-off angles are ultra precise, clearly indicating a vessel's movement and heading.

Fully sealed for life.
Each Hella marine LED lamp is a completely sealed opto electronic device. Proven design, precision engineering, and the use of high impact acrylic materials ensures superior resistance to water, impact, UV and general wear and tear.

Pre-wired with marine cable.
Hella marine LED lamps are pre-wired with quality marine specification tinned cable. The cable is completely sealed to the lamp body providing time saving at installation and reliable electrical connection.

LED *Multivolt*

MultivoltTM technology for durability and safety.
Advanced MultivoltTM circuitry provides a uniform level of intensity for reliable and safe illumination across a range of DC inputs such as 8-28 volts or 9-33 volts.
MultivoltTM LED lamps can be connected to 12 or 24 volt systems without modification, providing full light performance and automatic compensation for low battery voltages and voltage drop over long cables and connections.
Hella marine MultivoltTM LED lamps are also reverse polarity, spike and over voltage protected for enhanced durability even under severe voltage fluctuations.

CE

Electromagnetic Compatibility (EMC)
All Hella marine LED products are electronic devices. Their electrical circuits contain components that suppress possible interference, both emission as well as susceptibility to immissions, to the limits prescribed in international standards.