

## International Standards

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.**

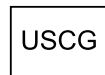
Complies with IMO (International Maritime Organization) requirements under the International Regulations for the Prevention of Collisions at Sea. (IMO COLREG 72) IMO COLREG 72 forms the international basis for legal navigation lighting on vessels.



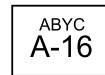
Approved by the German BSH (Bundesamt für Seeschifffahrt und Hydrographie) and carry BSH type approval numbers. BSH was formerly called DHI (Deutsches Hydrographisches Institut).



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



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



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



Approved by the Australian NMSC (National Maritime Safety Committee). NMSC adopts IMO COLREG 72 navigation lamp requirements.



Complies with Maritime New Zealand requirements. Maritime New Zealand adopts IMO COLREG 72 navigation lamp requirements.

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



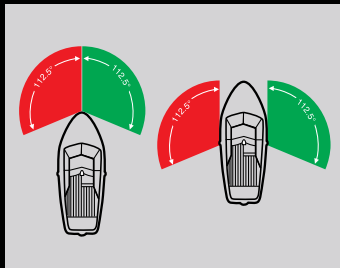
## Definitions

## IMO COLREG definitions for navigation lighting.

**“All Round Lamp”**

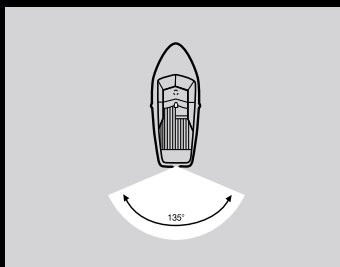
A light showing an unbroken arc over the horizon of 360 degrees.

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.

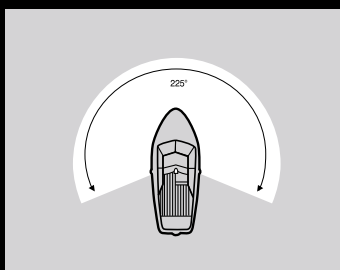
On a vessel less than 20 metres in length sidelights may be combined into one lamp (a ‘Bi-colour’ Lamp) carried on the fore and aft centre line of the vessel.

**“Stern Lamp”**

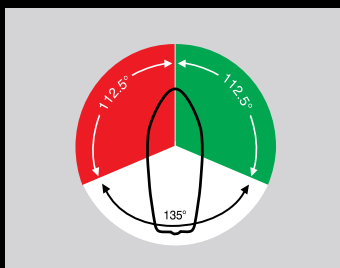
A white light placed as close as practicable to the stern showing an unbroken light over an arc of the horizon of 135 degrees and so fixed to show the light from right aft for 67.5 degrees (6 points) on both sides of the vessel.

**“Towing Lamp”**

A yellow light placed in a vertical position above the stern lamp 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”**

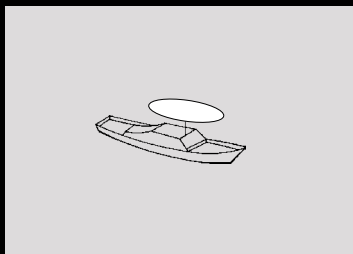
On a sailing vessel less than 20 metres in length under sail, the sidelights and stern light may be combined into one lamp positioned on top of the mast. When the sailing vessel is under power, the tri-colour lamp must be switched off and the navigation lamp rules for power driven vessels apply.

# IMO COLREG 72 Lights and Visibility - Powerboats

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

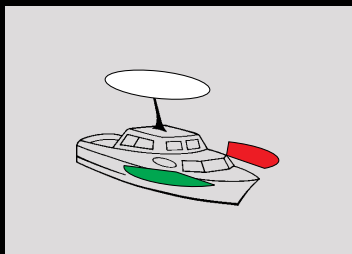
Note - Sailboats under motor adopt the rules for Powerboats.

**Powerboats up to 7m. Max 7 knots**



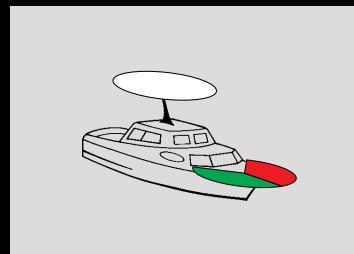
1 All Round White lamp

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



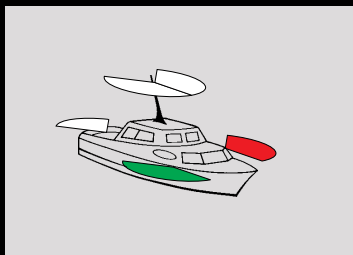
1 All Round White lamp  
1 Port lamp  
1 Starboard lamp

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



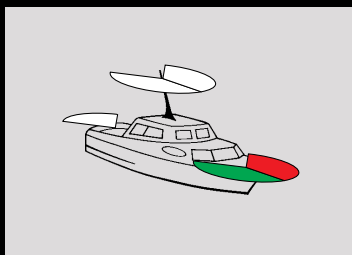
1 All Round White lamp  
1 Bi-colour lamp

**Powerboats up to 20m**



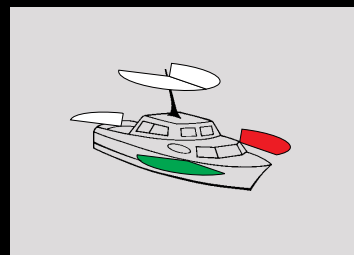
1 Masthead lamp  
1 Port lamp  
1 Starboard lamp  
1 Stern lamp

**Powerboats up to 20m**



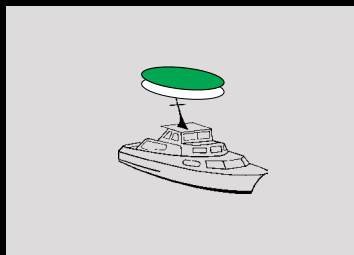
1 Masthead lamp  
1 Bi-colour lamp  
1 Stern lamp

**Powerboats up to 50m**



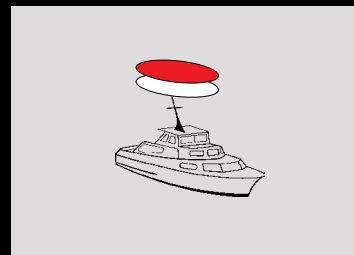
1 Masthead lamp  
1 Port lamp  
1 Starboard lamp  
1 Stern lamp

**A vessel less than 50m engaged in trawling**



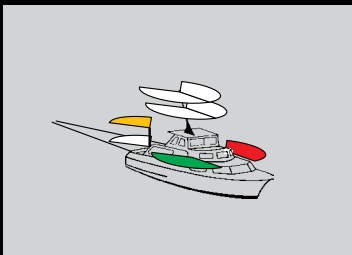
1 All Round Green lamp  
1 All Round White lamp  
mounted above one another

**A vessel less than 50m engaged in fishing, other than trawling**



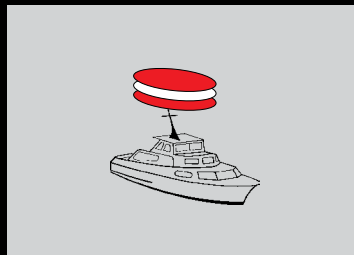
1 All Round Red lamp  
1 All Round White lamp  
mounted above one another

**Powerboats towing with a tow length of less than 200m**



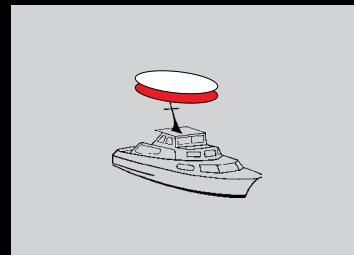
In addition to Port, Starboard and Stern lamps  
1 Towing lamp mounted above the stern lamp  
2 Masthead lamps in a vertical line  
(When the tow length exceeds 200m, three Masthead lamps in a vertical line)

**A vessel engaged in diving operations**



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

**A vessel engaged in pilotage duty**



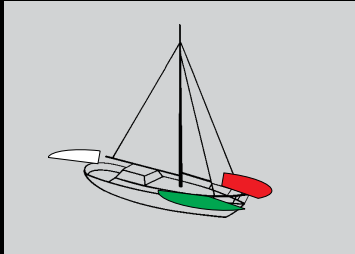
In addition to Port, Starboard, Masthead and Stern lamps  
1 All Round White lamp  
1 All Round Red lamp  
mounted above one another

# IMO COLREG 72 Lights and Visibility - Sailboats

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

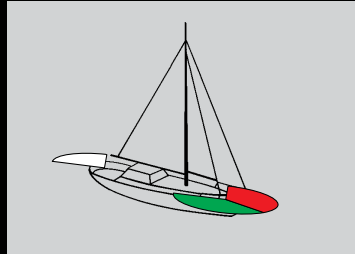
Note - Sailboats under motor adopt the rules for Powerboats.

Sailboats up to 20m under sail



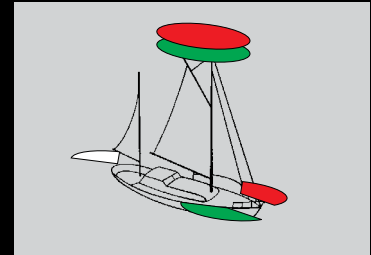
- 1 Port lamp
- 1 Starboard lamp
- 1 Stern lamp

Sailboats up to 20m under sail



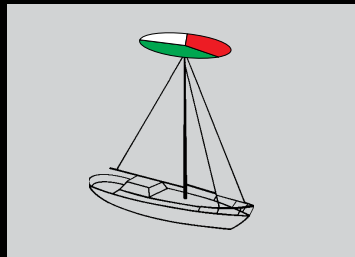
- 1 Bi-colour lamp
- 1 Stern lamp

Sailboats more than 20m under sail



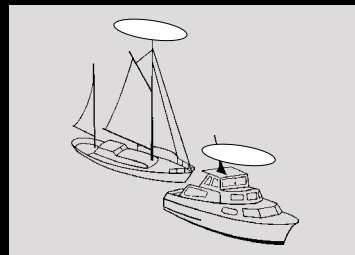
- 1 All Round Red lamp Above
- 1 All Round Green lamp
- 1 Port lamp
- 1 Starboard lamp
- or 1 Bi-colour lamp
- 1 Stern lamp

Sailboats up to 20m under sail



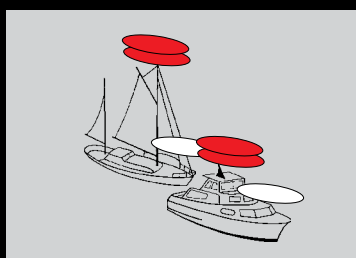
- 1 Tri-colour lamp

Sailboats and Powerboats less than 50m at anchor



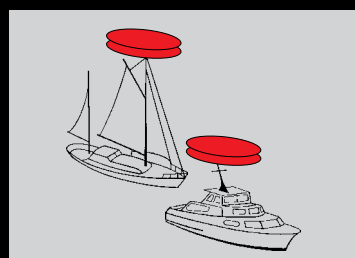
- 1 All Round White lamp

Sailboats and Powerboats more than 12m grounded



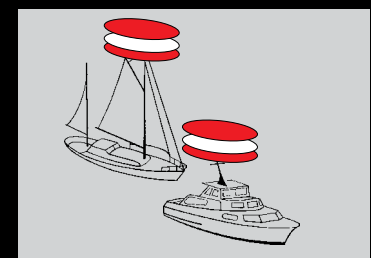
- 1 All Round White lamp
- 2 All Round Red lamps mounted above one another

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