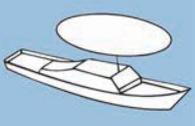
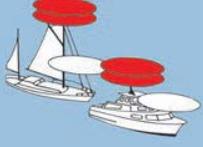
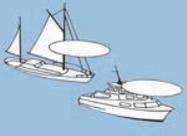
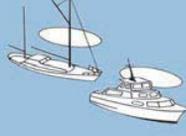
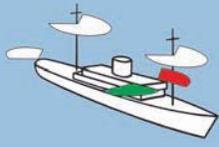
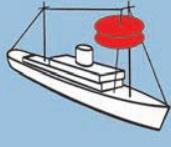
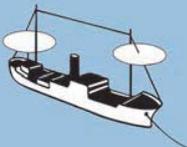
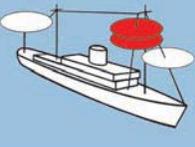


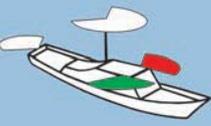
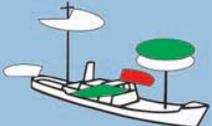
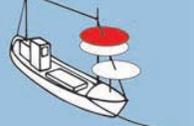
Navigation Lights User Guide

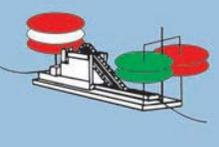
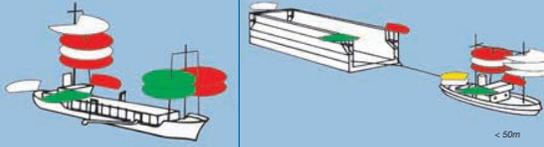
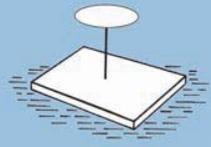
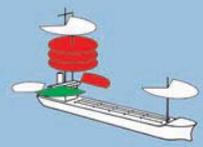
The information shown is based on the International Regulations Preventing Collisions at Sea 1972 (IMO).
(No responsibility is accepted for any errors or omissions in information given.)

Powercraft underway, less than 7 m L.O.A. max. speed 7 knots including yacht under power		Sailing vessels less than 20 m L.O.A.	
			
1 Allround white	1 Tricolour sailing light	1 Port 1 Starboard 1 Stern	1 Bi-colour 1 Stern
Sailing vessels more than 20 m L.O.A.		Sailing vessels less than 20 m L.O.A.	
Motor driven vessels up to 50 m L.O.A.		Motor driven vessels up to 50 m L.O.A.	
			
1 Allround red 1 Allround green 1 Port 1 Starboard 1 Stern	1 Masthead 1 Port 1 Starboard 1 Stern	1 Masthead 1 Bi-colour 1 Stern	1 Masthead 1 Port 1 Starboard 1 Stern
Powercraft underway, less than 12 m L.O.A. when Masthead- & stern can't be mounted		Motor driven vessels 12 m up to 20 m L.O.A.	
			
1 Allround white 1 Bi-colour	1 Allround white 1 Port 1 Starboard	1 Masthead 1 Bi-colour 1 Stern	1 Masthead 1 Port 1 Starboard 1 Stern
Vessel at anchor, aground or at pier (jetty)			Restricted in manoeuvrability Sailing and power boats more than 12 m L.O.A.
less than 50 m at	from 12 m aground	less than 50 m at pier	
			
1 Allround white	1 Allround white 2 Allround red in vertical line	1 Allround white showing on outboard side	normal signaling light plus 2 Allround red 1 Allround white

Vessels of more than 50 m in length
(Vessels less than 50 m in length only need 1 masthead and 1 anchor light)

<p>under way</p> 	<p>not under command</p> 	<p>restricted in manoeuvrability</p> 	<p>at anchor</p> 	<p>aground</p> 
<p>2 Masthead 1 Port 1 Starboard 1 Stern</p>	<p>2 Allround red</p>	<p>2 Masthead 1 Port 1 Starboard 2 Allround red 1 Allround white 1 Stern</p>	<p>2 Allround white</p>	<p>2 Allround red 2 Allround white</p>

<p>Pilot vessels on duty</p> 	<p>Police vessels on duty</p> 	<p>Motor driven up to 12 m in length</p> 	<p>Fishing vessels on duty</p> <p>under way</p> 	<p>under way, no speed</p> 
<p>1 Allround white 1 Allround red 1 Port 1 Starboard 1 Stern</p>	<p>1 Flashinglight 1 Masthead 1 Port 1 Starboard 1 Stern</p>	<p>1 Masthead 1 Port 1 Starboard 1 Stern</p>	<p>1 Allround green 1 Allround white 1 Masthead 1 Port 1 Starboard 1 Stern</p>	<p>1 Allround red 2 Allround white</p>

<p>Dredging and underwater works</p> 	<p>Towing and pushing vessels under way</p>  <p style="text-align: center; font-size: small;">< 50m</p>	<p>Floating accessories</p> 	<p>Vessels restricted by their draught</p> 
<p>4 Allround red 1 Allround white 2 Allround green</p>	<p>3 Masthead 2 Allround red 1 Allround white 2 Port / Backbord</p> <p>2 Starboard 2 Stern 1 Stern yellow</p>	<p>1 Allround white</p>	<p>3 Allround red 2 Masthead 1 Port 1 Starboard 1 Stern</p>

<p>Not under command Sailing and power boats more than 12 m L.O.A.</p> 	<p>Mine - sweeping vessels</p> 
<p>4 normal signaling light plus 2 Allround red in vertical line</p>	<p>3 Allround green 2 Masthead 1 Port 1 Starboard 1 Stern</p>

Visibility requirements

Required visibility in nautical miles						
Type of navigation light	Angle	Type of boat/vessel	BOATS < 12m / 39ft	BOATS < 20m / 65ft	BOATS < 50m / 164ft	BOATS > 50m / 164ft
STAR-BOARD	112,5°	sailing and power driven	1 nm	2 nm	2 nm	3 nm
PORT	112,5°	sailing and power driven	1 nm	2 nm	2 nm	3 nm
STERN	135°	sailing and power driven	2 nm	2 nm	2 nm	3 nm
MASTHEAD	225°	power driven only !	2 nm	3 nm	5 nm	6 nm
ALL-ROUND	360°	sailing and power driven	2 nm	2 nm	2 nm	3 nm
BICOLOUR	112,5°/112,5°	sailing and power driven	1 nm	2 nm		
TRICOLOUR	112,5°/112,5°/135°	sailing only !	1-2 nm	2 nm		

Visibility of aqua signal navigation lights in nautical miles						
Type of navigation light	Angle	Type of boat/vessel	Series 20, 25	Series 32, 40, 41, 42, 50	Series 55	Series 70, 70M, 70D
STAR-BOARD	112,5°	sailing and power driven	1 nm	2 nm	2 nm	3 nm
PORT	112,5°	sailing and power driven	1 nm	2 nm	2 nm	3 nm
STERN	135°	sailing and power driven	2 nm	2 nm	2 nm	3 nm
MASTHEAD	225°	power driven only !	2 nm	3 nm	5 nm	6 nm
ALL-ROUND	360°	sailing and power driven	2 nm	2 nm	2 nm	3 nm
BICOLOUR	112,5°/112,5°	sailing and power driven	1 nm	2 nm		
TRICOLOUR	112,5°/112,5°/135°	sailing only !	1-2 nm	2 nm		

Please refer to the table above to see what the definition of the IMO COLREGS 1972 is with regards to the relation between the requested visibility per type of navigation light and the length and type of boat or vessel where applied.

In example: According to IMO COLREGS 1972 aqua signal Series 32, 40, 41, 42, 50 can be used on boats < 50m / 164ft with only one exception which is the Masthead light since this one has to have 5 nm visibility instead of 3 nm.

For regulations in various countries please refer to the detailed approval list in this catalogue