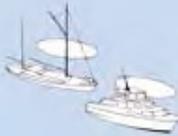
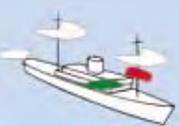
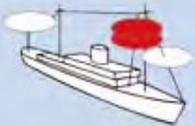
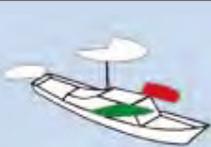
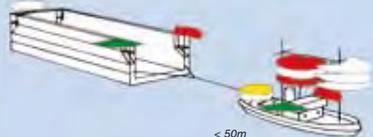


## NAVIGATION LIGHTS USER GUIDE

### 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. <i>(*may also be performed)</i>	
			
1 All-round white	1 Tricolor sailing light	*1 All-round red *1 All-round green 1 Port 1 Starboard 1 Stern	*1 All-round red *1 All-round green 1 Bicolor side lantern 1 Stern
Sailing vessels more than 20 m L.O.A.		Powercraft underway, less than 20 m L.O.A. <i>(*may also be performed)</i>	
			
*1 All-round red *1 All-round green 1 Port 1 Starboard 1 Stern	1 Masthead 1 Port 1 Starboard 1 Stern	1 Masthead 1 Bicolor 1 Stern	1 Masthead 1 Port 1 Starboard 1 Stern
Powercraft underway, less than 12 m L.O.A. when masthead and stern can't be mounted. Motor driven vessels 12 m up to 20 m L.O.A.		Motor driven vessels 12 m up to 20 m L.O.A.	
			
1 All-round white 1 Bicolor	1 All-round white 1 Port 1 Starboard	1 Masthead 1 Bicolor 1 Stern	1 Masthead 1 Port 1 Starboard 1 Stern
Motor driven and sailing boats at anchor, aground or at pier			Motor driven and sailing boats restricted in manoeuvrability more than 12 m LOA
Less than 50 m at anchor	From 12 m aground	Less than 50 m at pier	
			
1 All-round white	1 All-round white 2 All-round red in vertical line	1 All-round white showing out on boardside	In addition to prescribed navigation light: 2 All-round red 1 All-round white

Vessels up to 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 All-round red</p>	<p>2 Masthead 1 Port 1 Starboard 2 All-round red 1 All-round white 1 Stern</p>	<p>2 All-round white</p>	<p>2 All-round red 2 All-round white</p>		
Pilot vessels on duty		Police vessels on duty	Motor driven vessels up to 12 m LOA		Fishing vessels on duty	
			<p>under way</p> 	<p>under way, no speed</p> 		
<p>1 All-round white 1 All-round 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 All-round green 1 All-round white 1 Masthead 1 Port 1 Starboard 1 Stern</p>	<p>1 All-round red 2 All-round white</p>		
Dredging and underwater work		Towing and pushing vessels in operation		Floating accessories	Vessels restricted by their draught	
		 <p style="text-align: center;"><i>&lt; 50m</i></p>				
<p>4 All-round red 1 All-round white 2 All-round green</p>	<p>4 All-round red 2 All-round green 1 All-round white 2 Masthead 1 Port 1 Starboard</p>	<p>3 Masthead 2 All-round red 1 All-round white 2 Port</p>	<p>1 All-round white</p>	<p>3 All-round red 2 Masthead 1 Port 1 Starboard 1 Stern</p>		
Motor driven and sailing boats not under command more than 12 m L.O.A.	Mine sweeping vessels					
						
<p>In addition to starboard, port and stern lights: 2 All-round red in vertical line</p>	<p>3 All-round Green 2 Masthead 1 Port 1 Starboard 1 Stern</p>					

## VISIBILITY REQUIREMENTS

Required visibility in nautical miles (nm)						
Type of navigation light	Angle	Type of boat	Boats < 12 m / 39 ft	Boats < 20 m / 65 ft	Boats < 50 m / 164 ft	Boats > 50 m / 164 ft
Starboard	112,5°	Sailing and motor boats	1 nm	2 nm	2 nm	3 nm
Port	112,5°	Sailing and motor boats	1 nm	2 nm	2 nm	3 nm
Stern	135°	Sailing and motor boats	2 nm	2 nm	2 nm	3 nm
Masthead	225°	Motor boats	2 nm	3 nm	5 nm	6 nm
All-round	360°	Sailing and motor boats	2 nm	2 nm	2 nm	3 nm
Bicolor	112,5° / 112,5°	Sailing and motor boats	1 nm	2 nm		
Tricolor	112,5° / 112,5° / 135°	Sailing boat	1-2 nm	2 nm		

Visibility of aqua signal navigation lights in nautical miles (nm)						
Type of navigation lights	Angle	Type of boat	Series 20, 25	Series 32, 34, 40, 41, 42, 43, 50	Series 55	Series 70, 70M, 70D
Starboard	112,5°	Sailing and motor boats	1 nm	2 nm	2 nm	3 nm
Port	112,5°	Sailing and motor boats	1 nm	2 nm	2 nm	3 nm
Stern	135°	Sailing and motor boats	2 nm	2 nm	2 nm	3 nm
Masthead	225°	Motor boats	2 nm	3 nm	5 nm	6 nm
All-round	360°	Sailing and motor boats	2 nm	2 nm	2 nm	3 nm
Bicolor	112,5° / 112,5°	Sailing and motor boats	1 nm	2 nm		
Tricolor	112,5° / 112,5° / 135°	Sailing boat	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.

For example:  
According to IMO COLREGS 1972 aqua signal series 32, 40, 41, 42, 43 and 50 can be used on boats < 50 m / 164 ft. 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.