

# THE SERIES OF NAVIGATION SIGNAL LIGHTS

Models and function explanation of navigation signal lights



P: Engineering plastic  
 B,C and D: Steel  
 S: Stainless steel

design code

10:No.1 double-deck  
 1:No.1 single  
 20:No.2 double-deck  
 2:No.2 single  
 3:No.3 single

1:Starboard light  
 2:Port light  
 3:Masthead light  
 4:Strenlight  
 5:Head light  
 6:All-round light  
 7:Signal Light  
 8:Anchor light

H: Navigation

X: Signal light

C: Marine

## SIGNAL LIGHTS CONTROLLER, NAVIGATION LIGHTS CONTROLLER

### The main purpose

The navigation lights controller is a can be used to control navigation (signal) lights for night work equipment, and navigation (signal) lamp operating status monitoring and control. Internally by the microcontroller and peripheral components constitute, switching status of each lamp can transmit via the communication interface to drive the implementation of board, Control of each lamp is turned on and off, the controller can control 20-way navigation lights and navigation lights display 20 Road opening and closing state.

Controller installation is divided into two, one is a separate wall-mounted control box (including all control functions). Another can be mounted by an operating table and a control panel can be installed in all of the console device is installed inside the mounting plates, can cooperate with a variety of console

### The basic parameters

- Protection class: IP22;
- Voltage rating: DC24V, AC220V;
- Classification: Wall-mounted, Embedded;

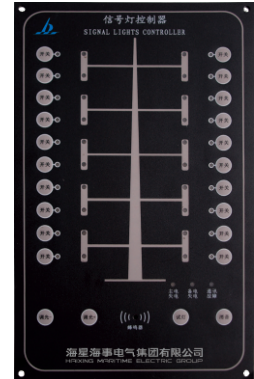
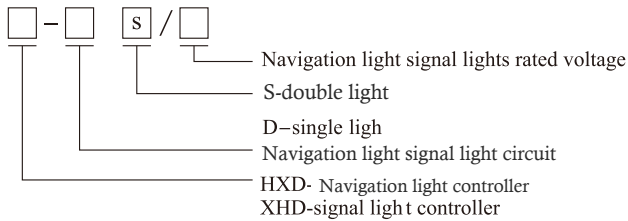
### Environmental conditions

- The controller can work under the following conditions.
- Air temperature:  $-10^{\circ}\text{C} \sim +45^{\circ}\text{C}$ ;
- Working temperature:  $-25^{\circ}\text{C} \sim +45^{\circ}\text{C}$ ;
- Maritime climate adaptation, and accompanied by a slight salt spray mist and mold the environment.
- Adaptation ship shock and vibration generated by the normal operation of the long-term.

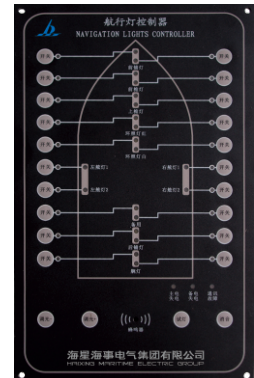
### Tilt and swing

- Rolling:  $\pm 22.5^{\circ}$  Pitch:  $\pm 10^{\circ}$
- Heel:  $\pm 22.5^{\circ}$  Trim:  $\pm 10^{\circ}$

### Type Description



Signal lights controller



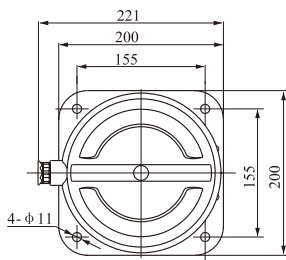
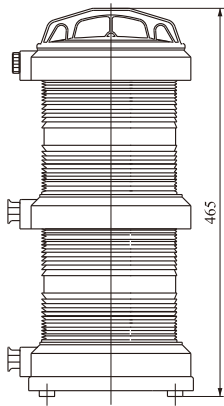
Navigation lights controller



**CXH-101P**

patent No: 201330055418.9

## DOUBLE-DECK NAVIGATION SIGNAL LIGHT



### The scope of application

Applied to the ships with the length 50m or above 50m as lamp signal liaison when night navigation.

### Products characteristic:

1. The shell is made of high-strength engineering plastic PA+GF, the lampshade adopts injection of PC, lens hood adopts good quality stainless steel.
2. The signal lights have the whole seal structure, it is waterproof under the bad environment.
3. The connection of the signal light's lamp holder and the base adopt plug-in type, can replace the up and down bulb as open the cover.
4. The signal lights adopt the signal light's bulb which conform to the ship norm, and the average life is not less than 700h.
5. The signal lights can work normally under the temperature  $-30^{\circ}\text{C} \sim 55^{\circ}\text{C}$

### Production authentication:

1. Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.
2. Passed the authentication of CE.
3. Approved by Germanischer Lloyd "GL".
4. Approved by MED/EC.

### Adopt standard

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the International standard IEC60598-1-2008.
3. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.

Voltage	24V	110V	220V
Power	2*60W	2*60W	2*65W
luminous intensity	60cd		
Lamp holder	P28S		
Protection class	IP56		
Cable outside Diameter	$\phi 9$		

Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1 - 101P	3n.m	112.5°	Green	4.15kg
port light	CXH2 - 101P	3n.m	112.5°	Red	4.15kg
masthead light	CXH3 - 101P	6n.m	225°	white	4.15kg
stern light	CXH4 - 101P	3n.m	135°	white yellow	4.17kg
all-round light	CXH6 - 101P	3n.m	360°	Red/Green/White	4.0kg



**SINGLE-BECK NAVIGATION SIGNAL LIGHT**

**The scope of application**

Applied to the ships with the length 50m or above 50m as lamp signal liaison when night navigation.

**Products characteristic:**

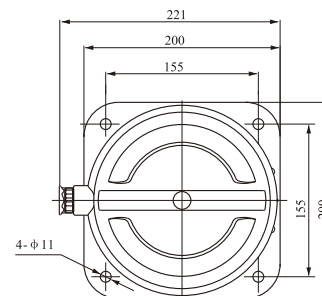
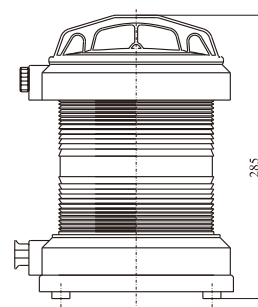
1. The shell is made of high-strength engineering plastic PA+GF, the lampshade adopts injection of PC, lens hood adopts good quality stainless steel.
2. The signal lights have the whole seal structure, it is waterproof under the bad environment.
3. The signal lights choose the special signal bulb which conform to the ship criterion, it can replace the bulb as open the up cover.
4. The signal lights adopt the signal light's bulb which conform to the ship norm, and the average life is not lower than 700h.
5. The signal lights can work normally under the temperature -30°C ~ 55°C

**Production authentication:**

1. Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.
2. Passed the authentication of CE.
3. Approved by Germanischer Lloyd "GL".
4. Approved by MED/EC.

**Adopt standard**

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA,1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the International standard IEC60598-1-2008.
3. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.



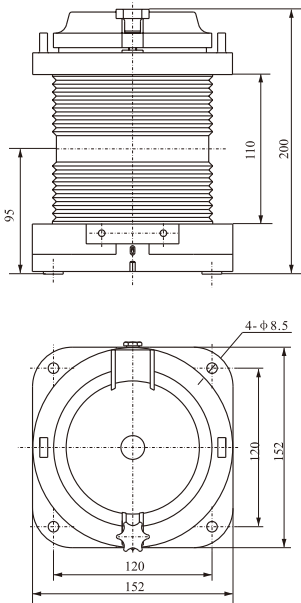
Voltage	24V	110V	220V
Power	60W	60W	65W
luminous intensity	60cd		
Lamp holder	P28S		
Protection class	IP56		
Cable outside Diameter	φ 9		

Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1 - 11P	3n.m	112.5°	Green	3.2kg
port light	CXH2 - 11P	3n.m	112.5°	Red	3.2kg
masthead light	CXH3 - 11P	6n.m	225°	white	3.2kg
stern light	CXH4 - 11P	3n.m	135°	white yellow	3.2kg
all-round light	CXH6 - 11P	3n.m	360°	Red/Green/White	3.2kg

# CXH-21P

patent No: ZL2003 3012 1972.9

## DNAVIGATION SIGNAL LIGHT



### The scope of application

Applied to the ships with the length 12m or above 12m (< 50m) as lamp signal liaison when night navigation.

### Products characteristic:

1. The shell is made of high-strength engineering plastic PA+GF, the lampshade adopts injection of PC, lens hood adopts good quality stainless steel.
2. The signal lights have the whole seal structure, it is waterproof under the bad environment.
3. The signal lights choose the special signal bulb which conform to the ship criterion, it can replace the bulb as open the up cover.
4. The signal lights can work normally under the temperature  $-30^{\circ}\text{C} \sim 55^{\circ}\text{C}$

### Production authentication:

1. Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.
2. Passed the authentication of CE.

### Adopt standard

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the International standard IEC60598-1-2008.
3. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.

Voltage	12V	24V
Power	25W	25W
luminous intensity	40cd	60cd
Lamp holder	BAY15d	
Protection class	IP56	
Cable outside Diameter	$\phi 9$	

Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1 - 21P	2n.m	112.5°	Green	1.2kg
port light	CXH2 - 21P	2n.m	112.5°	Red	1.2kg
masthead light	CXH3 - 21P	5n.m	225°	white	1.2kg
stern light	CXH4 - 21P	2n.m	135°	white yellow	1.2kg
all-round light	CXH6 - 21P	2n.m	360°	Red/Green/White	1.2kg



**DOUBLE-DECK NAVIGATION SIGNAL LIGHT**

**CXH-102PL**

**The scope of application**

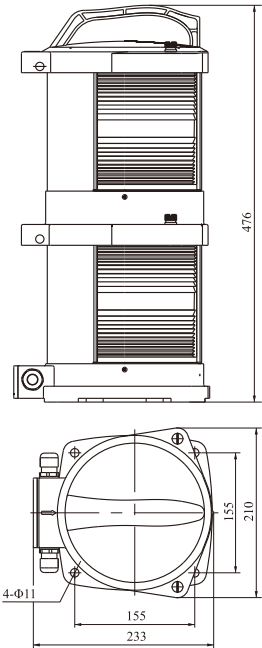
Applied to the ships with the length 50m or above as lamp signal liaison when night navigation at night.

**Products characteristic**

1. The shell is made of high-strength engineering plastic pa+gf, the lampshade adopts injection of pc, lens hood adopts good quality mould pressing of stainless steel.
2. The navigation Lights has Whole sealing structure, It has water-proof function Under the condition of bad environment;
3. The navigation Lights uses exclusive LED illuminant which accords with ship rules and regulations, More energy efficient, longer working life.
4. The navigation lights can regular work under the temperature of -30°C ~ 55°C.

**Standard adopted**

GB/T 3028, MSC 253(8) resolution, THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.



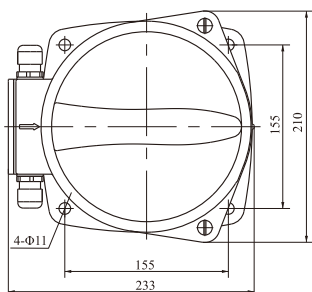
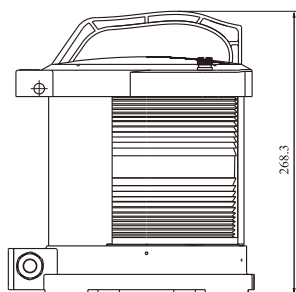
Rated voltager	AC100-240V 50/60Hz, DC24V
Protection class	IP66
Cable outside Diameter	φ 10 ~ φ 12
Illuminant	LED

Name / Type	Visibility	Level arc	Color	Power	Weight
CXH1-102PL Starboard light	3n.m	112.5°	Green	2*6W	6.2kg
CXH2-102PL Port light	3n.m	112.5°	Red	2*6W	6.2kg
CXH3-102PL Masthead light	6n.m	225°	white	2*8W	6.2kg
CXH4-102PL Stem light	3n.m	135°	white yellow	2*6W	6.2kg
CXH6-102PL All-round light	3n.m	360°	Red/Green/White	2*6W	6kg



**CXH-12PL**

patent No: 201630058159.9

**SINGLE-DECK NAVIGATION SIGNAL LIGHT**

**The scope of application**

Applied to the ships with the length 50m or above as lamp signal liaison when night navigation at night.

**Products characteristic**

1. The shell is made of high-strength engineering plastic pa+gf, the lampshade adopts injection of pc, lens hood adopts good quality mould pressing of stainless steel.
2. The navigation Lights has Whole sealing structure, It has water-proof function Under the condition of bad environment;
3. The navigation Lights uses exclusive LED illuminant which accords with ship rules and regulations, More energy efficient, longer working life.
4. The navigation lights can regular work under the temperature of  $-30^{\circ}\text{C} \sim 55^{\circ}\text{C}$ .

**Standard adopted**

GB/T 3028, MSC 253(8) resolution, THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.

Rated voltage	AC100-240V 50Hz/60Hz, DC24
Protection class	IP66
Cable outside Diameter	$\phi 10 \sim \phi 12$
Illuminant	LED

Name / Type	Visibility	Level arc	Color	Power	Weight
CXH1-12PL Starboard light	3n.m	112.5°	Green	6W	3kg
CXH2-12PL Port light	3n.m	112.5°	Red	6W	3kg
CXH3-12PL Masthead light	6n.m	225°	white	8W	3kg
CXH4-12PL Stem light	3n.m	135°	white yellow	6W	3kg
CXH6-12PL All-round light	3n.m	360°	Red/Green/White	6W	2.8kg



## DOUBLE-DECK NAVIGATION SIGNAL LIGHT

# CXH-10P

### The scope of application

Applied to the ships with the length 50m or above 50m as lamp signal liaison when night navigation.

### Products characteristic:

1. The light is convenient to install and replace the bulb with a leakage hole at the bottom.
2. The shell is made of engineering plastic, corrosion resistance, impact resistance.
3. The shade is made of polycarbonate, UV resistance and non-discolouring color.

### Production authentication:

Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.

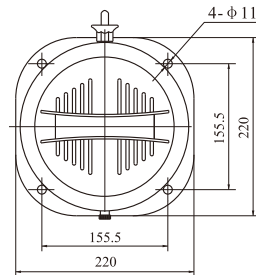
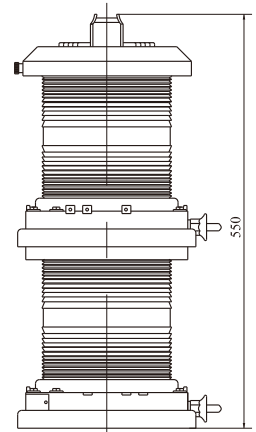
### Adopt standard

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the International standard IEC60598-1-2008.
3. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.



Voltage	24V	110V	220V
Power	2*60W	2*65W	2*65W
Lamp holder	B22d		
Protection class	IP56		
Cable outside Diameter	φ 12~ φ 13		

Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1 - 10P	3n.m	112.5°	Green	3.8kg
port light	CXH2 - 10P	3n.m	112.5°	Red	3.8kg
masthead light	CXH3 - 10P	6n.m	225°	white	3.7kg
stern light	CXH4 - 10P	3n.m	135°	white yellow	3.7kg
all-round light	CXH6 - 10P	3n.m	360°	Red/Green/White	3.6kg





# CXH-1P

## SINGLE-BECK NAVIGATION SIGNAL LIGHT



### The scope of application

Applied to the ships with the length 50m or above 50m as lamp signal liaison when night navigation.

### Products characteristic:

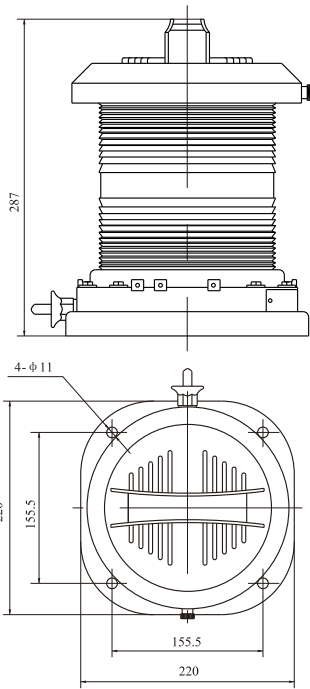
1. The light is convenient to install and replace the bulb with a leakage hole at the bottom.
2. The shell is made of engineering plastic, corrosion resistance, impact resistance.
3. The shade is made of polycarbonate, UV resistance and non-discolouring color.

### Production authentication:

Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.

### Adopt standard

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the International standard IEC60598-1-2008.
3. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.



Voltage	24V	110V	220V
Power	60W	65W	65W
Lamp holder	B22d		
Protection class	IP56		
Cable outside Diameter	φ 12~ φ 13		

Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1 - 1P	3n.m	112.5°	Green	2.6kg
port light	CXH2 - 1P	3n.m	112.5°	Red	2.6kg
masthead light	CXH3 - 1P	6n.m	225°	white	2.5kg
stern light	CXH4 - 1P	3n.m	135°	white yellow	2.7kg
all-round light	CXH6 - 1P	3n.m	360°	Red/Green/White	2.2kg



**SINGLE-BECK NAVIGATION SIGNAL LIGHT**
**The scope of application**

Applied to the ships with the length 12m or above 12m (< 50m) as lamp signal liaison when night navigation.

**Products characteristic:**

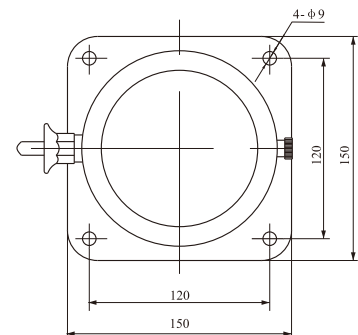
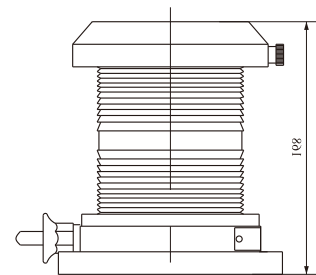
1. The light is convenient to install and replace the bulb with a leakage hole at the bottom;
2. The shell is made of engineering plastic, corrosion resistance, impact resistance;
3. The shade is made of polycarbonate, UV resistance and non-discolouring color.

**Production authentication:**

Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.

**Adopt standard**

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA,1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the International standard IEC60598-1-2008.
3. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.



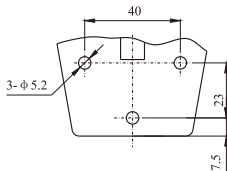
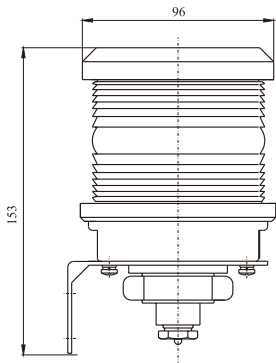
Voltage	24V
Power	30W
Lamp holder	B15d
Protection class	IP56
Cable outside Diameter	φ 10~ φ 12

Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1 - 2P	2n.m	112.5°	Green	2.6kg
port light	CXH2 - 2P	2n.m	112.5°	Red	2.6kg
masthead light	CXH3 - 2P	5n.m	225°	white	2.5kg
stern light	CXH4 - 2P	2n.m	135°	white yellow	2.7kg
all-round light	CXH6 - 2P	2n.m	360°	Red/Green/White	2.2kg

# CXH-3P

patent No: ZL200920199527.6

## NAVIGATION SIGNAL LIGHT



### The scope of application

Fit for the ships with the length less than 12M as lamp signal when night navigation.

### Products characteristic:

1. The shell is made of high-strength engineering plastic PA+GF, the lampshade adopts injection of PC, lens hood adopts good quality stainless steel.
2. The signal lights have the whole seal structure, it is waterproof under the bad environment.
3. The signal lights choose the special signal bulb which conform to the ship criterion, it can replace the bulb as open the up cover.
4. The signal lights can work normally under the temperature  $-30^{\circ}\text{C} \sim 55^{\circ}\text{C}$

### Production authentication:

Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.

### Adopt standard

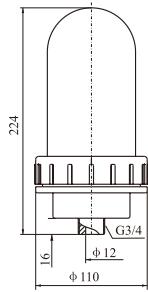
1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA,1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the International standard IEC60598-1-2008.
3. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.

Type	CXH1-3P	CXH2-3P	CXH3-3P	CXH4-3P	CXH6-3P
Voltage	12V		24V		12V 24V
Power	15W		15W		25W 25W
luminous intensity	30cd		30cd		40cd 60cd
Lamp holder	BAY15d				
Protection class	IP56				
Cable outside Diameter	$\phi 9$				

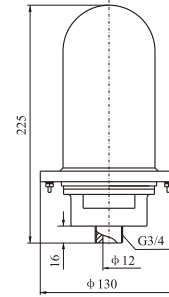
Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1 - 3P	1n.m	112.5°	Green	0.53kg
port light	CXH2 - 3P	1n.m	112.5°	Red	0.53kg
masthead light	CXH3 - 3P	2n.m	225°	white	0.53kg
stern light	CXH4 - 3P	2n.m	135°	white yellow	0.53kg
all-round light	CXH6 - 3P	2n.m	360°	Red/Green/White	0.53kg



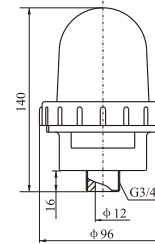
# HEAD LIGHT CXH5-



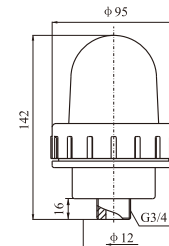
**CXH5-1B**



**CXH5-1**



**CXH5-2**



**CXH5-2A**

**The scope of application**

Applied to the ships as lamp signal when night navigation.

**Products characteristic**

1. Screw-type connecting flange, it is convenient to install and replace the bulb.
2. The lampshade adopts good quality Pyrex glass, and it has good function of pervious to light.

**Production authentication**

Approved by the CCS(China Classification Society), approved by ZY of China Fishery Inspection.

**Adopt standard**

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the National standard of marine electric signal light's technical condition GB/T 3028-2012.

Type	CXH5-1	CXH5-1B	CXH5-2	CXH5-2A
Visibility	3n.m	3n.m	2n.m	2n.m
Level arc	360°	360°	360°	360°
Material	aluminium	Plastic	aluminium	Plastic
Weight	0.9kg	1.73kg	0.4kg	0.5kg
Voltage	24V, 110V, 220V		24V	
Power	60W		30W	
Color	white, Red, Green, yellow, blue, purple		white, Red, Green, blue	
Cable outside diameter	φ 12		φ 12	
Lamp holder	E27		B15d	
Protection class	IP56			



# CXH7-21P

## PANAMA CANAL STEERING LIGHT



### The scope of application

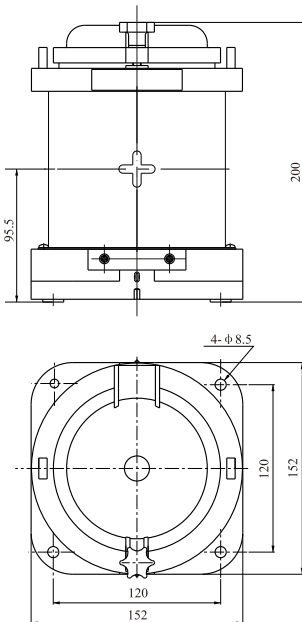
Applied to confirm the bow direction on voyage, and is suitable for regulation signal recognition in particular canal.

### Product characteristics

1. The shell is made of high-strength engineering plastic PA+GF, the lampshade adopts injection of PC, lens hood adopts good quality stainless steel.
2. Light hole of “+” type to make the light more focused.
3. The signal light has the whole seal structure; it is waterproof under bad environment.
4. Plug type is used to connect the lamp holder and the base, in which way it can replace the bulb when open the top cover.
5. The signal light can work normally under the temperature of  $-30^{\circ}\text{C} \sim 55^{\circ}\text{C}$ .

### Adopt standard

1. Conform to “The international regulations for preventing collision at sea, 1972” and “Grade entry norms for steel ships”.
2. Conform to GB/T3028 “Marine electric signal lights” and “The request that Panama Canal asks for ships”.



Rated Voltage	12V	24V
Power	25W	
Lamp holder	BAY15d	
Visibility	2n.m	
Environmental temperature	$-30^{\circ}\text{C} \sim 55^{\circ}\text{C}$	
Cable outside Diameter	$\phi 9$	
Protection class	IP56	
Color	Blue	
Weight	1.2kg	



**ANCHOR LIGHT** **CXH8-1**

**The scope of application**

Applied to the ships as for navigation lamp signal or use for anchor and take the ground as lamp signal.

**Products characteristic:**

1. The shell is made of good quality steel, lampshade adopts good quality glass.
2. The shell structure has good seal performance, and it is convenient to install and disassemble.

**Production authentication:**

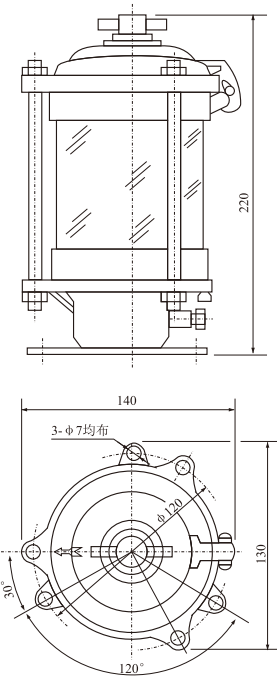
Approved by the CCS(China Classification Society).

**Adopt standard**

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS
2. Conform to GB/T 3028-2012 standard.

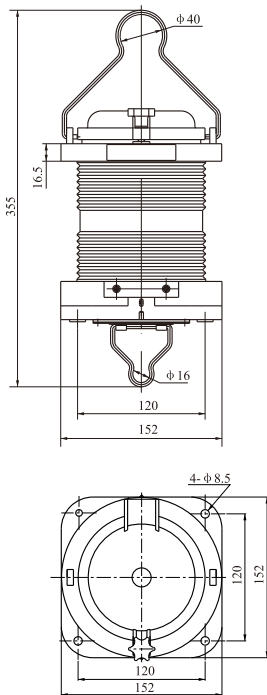


Type	CXH8-1
Voltage	220V, 110V
Power	40W
Visibility	3n.m
Level arc	360°
Lamp holder	E27
Color	白 white
Protection class	IP55
Cable outside Diameter	φ 10- φ 12
Material	steel
Weight	1.7kg



# CXH9-21P

## EMERGENCY LIGHT



### The scope of application

Applied to ships for light signal identification when night navigation, hang-type installation.

### Product characteristics

1. The shell is made of high-strength engineering plastic PA+GF, the lampshade adopts injection of PC, lens hood adopts good quality stainless steel.
2. The signal light has the whole seal structure and it is waterproof under bad environment.
3. Plug type is used to connect the lamp holder and the base, in which way it can replace the bulb when open the top cover.
4. The signal light can work normally under the temperature of  $-30^{\circ}\text{C} \sim 55^{\circ}\text{C}$ .

### Adopt standard

“The international regulations for preventing collision at sea, 1972” and “Grade entry norms for steel ships”、GB/T3028、MSC 253(8)

Rated voltage	12V	24V
Power	25W	
Lamp holder	BAY15d	
Visibility	2n.m	
Environmental temperature	$-30^{\circ}\text{C} \sim 55^{\circ}\text{C}$	
Cable outside Diameter	$\phi 9$	
Protection class	IP56	
Color	Red/Green/White	
Weight	1.2kg	



**AFTERANGEL LIGHT**

**The scope of application**

Applied to the ships as lamp signal an nights and identification when the formation navigation of ships.

**Products characteristic:**

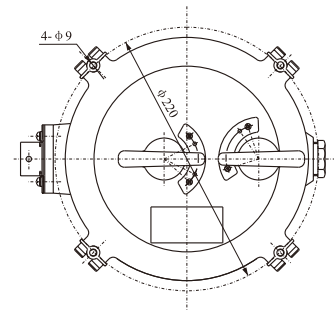
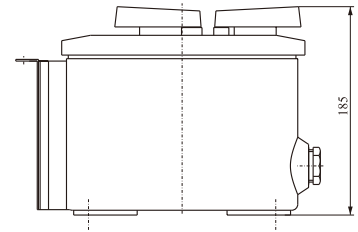
1. The shell is made of good quality cast brass or cast aluminium (the material is according to the customer's requirement), type CXH10-1B is with the brass material.
2. The structure is firm, fine seal performance, and can prevent from the sea water immerging effectively.
3. It can change the visnal angle and adjust the light intensity according to the navigation requirement.
4. Equipped the special ship signal bulb.

**Production authentication:**

Approved by the CCS (China Classification Society).

**Adopt standard**

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.



Type	CXH10-1	CXH10-1B
Voltage	220V	
Power	2*25W	
Visibility	2n.m	
Lamp holder	E27	
Horizontal	10°	
vertical optical angle	30°	
Protection class	IP55	
Cable outside Diameter	φ 10	
Material	Aluminium	brass
Weight	5.3kg	9.3kg





# CXH11

## SUEZ SIGNAL LIGHT



### The scope of application

Applied to the ships with the length 50m or above 50m as lamp signal liaison when night navigation, and for the signal identification for navigation and for rules of Suez Canal

### Products characteristic

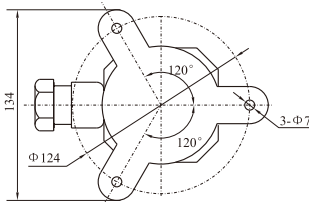
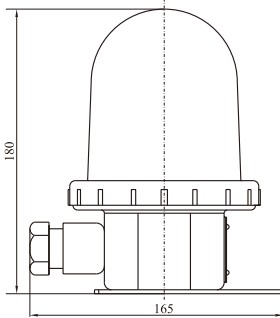
1. The shell is made of good quality stainless steel, has the feature of corrosion-resisting, shock resistance etc.
2. Lampshade is made of good quality Pyrex, and has good diactinism.

### Production authentication

Approved by the CCS(China Classification Society).

### Adopt standard

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS
2. Conform to the standard GB/T3028 of marine electric signal light's technical condition.



Voltage	110V, 220V
Power	60W
Visibility	3n.m
Lamp holder	E27
Protection class	IP56
Cable outside Diameter	φ 14- φ 16
Color	white, red, green
Weight	1.7kg



**The scope of application**

It can be used as starboard light, masthead light, stern light and all-round light in small boats for navigation lamp signal.

**Products characteristic**

With wave-proof structure.

**Production authentication**

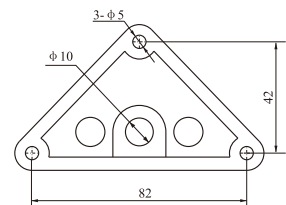
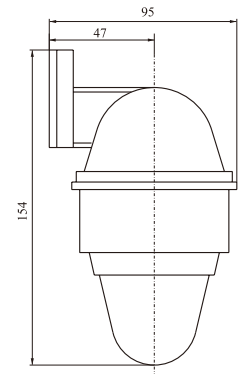
Approved by the CCS(China Classification Society).

**Adopt standard**

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS
2. Conform to the standard GB/T3028 of marine electric signal light's technical condition.



Voltage	24V
Power	25W
Visibility	3n.m
Lamp holder	B15d
Protection class	IP56
Cable outside Diameter	φ 10
Color	white, red, green
Material	plastic
Weight	0.4kg



# CXH13

## FLAGPOLE LIGHT



### The scope of application

Applied to the identification of bow signal when the navigation of ships.

### Products characteristic

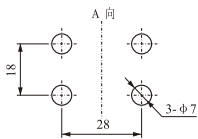
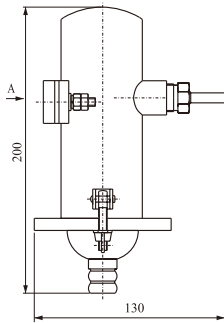
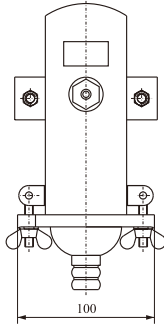
1. The shell is made of good quality cast brass.
2. The structure is firm, good seal performance, and can prevent from the sea water immerging effectively.
3. Equipped the special ship signal bulb.

### Production authentication

Approved by the CCS (China Classification Society).

### Adopt standard

Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA,1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.



Voltage	220V
Power	25W
Lamp holder	E27
Protection class	IP55
Cable outside Diameter	φ 12
Material	brass
Weight	1.3kg



FLASHING SIGNAL LIGHT

**The scope of application**

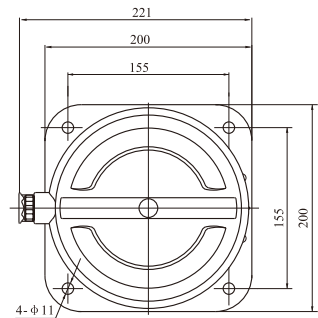
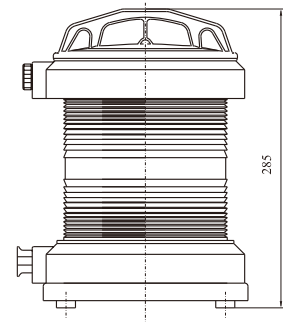
Applied to the ships for flicker signal usage.

**Product characteristic**

1. The shell is made of high-strength engineering plastic PA+GF, the lampshade adopts injection of PC, lens hood adopts good quality mould pressing of stainless steel.
2. The navigation Lights has Whole sealing structure, It has water-proof function Under the condition of bad environment;
3. The navigation Lights uses exclusive LED illuminant which accords with ship rules and regulations, More energy efficient, longer working life, you can replace illuminant tuhen unscrew upper cover.
4. The navigation lights can work under the temperature of  $-30^{\circ}\text{C} \sim 55^{\circ}\text{C}$ .

**Standards**

MSC 253(8)resolution, THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.



Rated voltage	AC220V 50Hz / 60Hz, DC24V
Power	8W
Illuminant	LED (red, green, white)
	3n.m
Protection class	IP56
Cable outside Diameter	$\Phi 12-\Phi 13$
Weight	3.5Kg
Installation way	Fixed
Flash frequency	150 Beats / min



# CXH-17

## SIGNAL LIGHT



### The scope of application

Applied to ships with the length 50m or above 50m as lamp signal when night navigation.

### Products characteristic

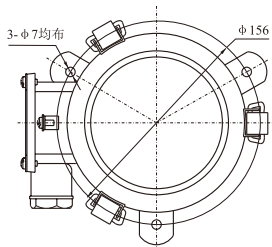
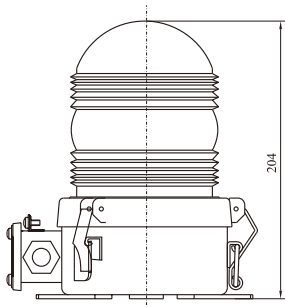
1. The shell adopts good quality stainless steel, good quality glass lampshade.
2. Agraiffe-type impacted structure, it is convenient to install and remove, replace the bulb, has fine water-proof function.

### Production authentication

Approved by the CCS(China Classification Society).

### Adopt standard

Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.



Voltage	24V	110V	220V
Power	60W	65W	65W
Lamp holder	B22d		
Visibility	>3n.m		
Protection class	IP56		
Cable outside Diameter	φ 14— φ 16		
Material	stainless steel		
Color	white, red, green, yellow, purple		
Weight	2.3kg		



**SIGNAL LIGHT CXH17-L**
**Application scope**

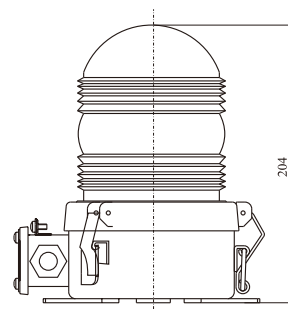
Applied to the ships with the length 50m or above 50m as lamp signal liaison when navigation at night.

**Product characteristics**

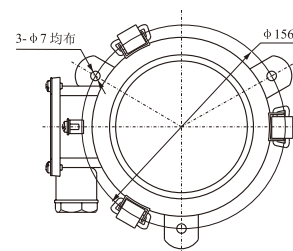
1. The shell adopts good quality stainless steel. And lampshade adopts toughened glass with good light transmittance.
2. The hasp-type structure is very convenient for installing and dismantling, with good waterproofness.
3. Good quality LED lamp, high lighting effect and long life of 50,000 hours.
4. The LED starter has stabled components, to assure that the circuit has a long life time, and it has the protection for the short circuit and over load, to assure that the LED light work for long term.

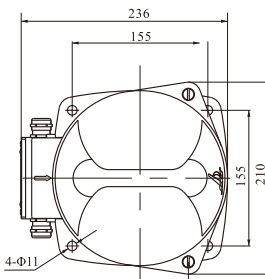
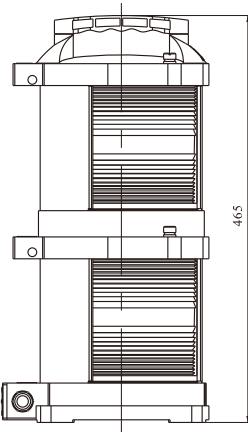
**Standards**

MSC 253(8)resolution, THE INTERNATIONAL REGULATIONS FOR PREVENTIONS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.



Rated voltage	DC24V/AC100V~240V 50/60HZ
Power	6W
Illuminant	LED (red, yellow, green, white)
Visibility	3n.m
Protection class	IP56
Cable outside Diameter	Φ14-Φ16
Weight	2.7Kg
Installation way	Fixed type



**CXH-102L**
**DOUBLE-DECK NAVIGATION SIGNAL LIGHT**

**The scope of application**

Applied to the ships with the length of 50m pr above as lamp signal liasion when night navigation.

**Products characteristic**

1. The shell is made of casting brass, the surface is processed with powder coating, which has a good mechanical and chemical functin.
2. The navigation lights has a whole sealed structure, which has water-proof function under the bas condition of environment.
3. The lights use the high quality and efficiency led lamp, which has over 50000 hours life time.
4. The navigation light works properly under the tempreture of -30°C~50°C.

**Standard adopted**

GB/T3028、MSC253(8) resolution, <the international regulations for preventings collision at sea, 1972 and grade entry norms for steel ships>

Rated voltage	AC100-240V 50Hz/60Hz, DC24V
Illuminant	LED
Cable outside Diameter	Φ10-Φ13
Protection class	IP66
Material	casting brass + PC lamp shade

Name / Type	Visibility	Level arc	Color	Power	Weight
CXH1-102L Starboard light	3n.m	112.5°	Green	2*6W	12kg
CXH2-102L Port light	3n.m	112.5°	Red	2*6W	12kg
CXH3-102L Masthead light	6n.m	225°	White	2*8W	12kg
CXH4-102L Stern light	3n.m	135°	white/yellow	2*6W	12kg
CXH6-102L All-round light	3n.m	360°	Red/Green/White	2*6W	11.8kg



**SINGLE-DECK NAVIGATION SIGNAL LIGHT**

**CXH-12L**



**The scope of application**

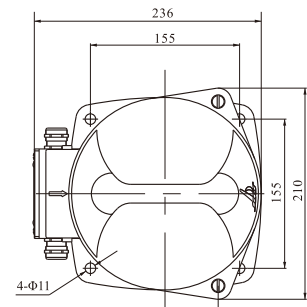
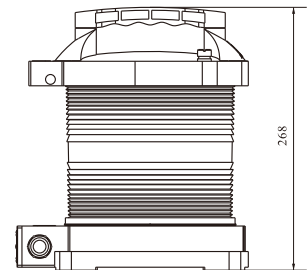
Applied to the ships with the length of 50m pr above as lamp signal liasion when night navigation.

**Products characteristic**

1. The shell is made of casting brass, the surface is processed with powder coating, which has a good mechanical and chemical functin.
2. The navigation lights has a whole sealed structure, which has water-proof function under the bas condition of environment.
3. The lights use the high quality and efficiency led lamp, which has over 50000 hours life time.
4. The navigation light works properly under the temprature of -30℃~50℃.

**Standard adopted**

GB/T3028、MSC253(8) resolution, <the international regulations for preventings collision at sea, 1972 and grade entry norms for steel ships>



Rated voltage	AC100-240V 50Hz/60Hz, DC24V
Illuminant	LED
Cable outside Diameter	Φ10-Φ13
Protection class	IP66
Material	casting brass + PC lamp shade

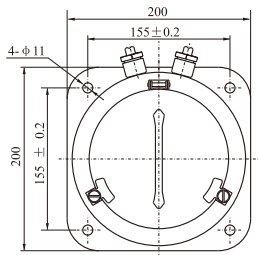
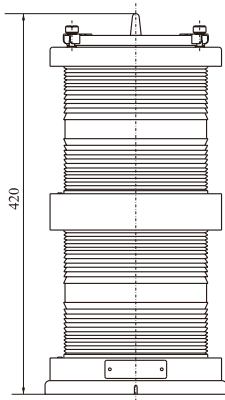
Name / Type	Visibility	Level arc	Color	Power	Weight
CXH1-12L Starboard light	3n.m	112.5°	Green	6W	7kg
CXH2-12L Port light	3n.m	112.5°	Red	6W	7kg
CXH3-12L Masthead light	6n.m	225°	White	8W	7kg
CXH4-12L Stern light	3n.m	135°	white/yellow	6W	7kg
CXH6-12L All-round light	3n.m	360°	Red/Green/White	6W	6.8kg





# CXH-10S

## DOUBLE-DECK STAINLESS STEEL NAVIGATION SIGNAL LIGHT



### The scope of application

Applied to the ships with the length 50m or above 50m as lamp signal liaison when night navigation.

### Products characteristic:

1. The shell adopts good quality stainless steel plate. The surface is painted the special mold-powder, has the feature of corrosion resisting and shock resistance.
2. The signal lights have the whole seal structure, it is waterproof under the bad environment.
3. It is more convenient to replace the bulb because of the intergrated design for the up and down layer.
4. The lampshade adopts PC material, chroma stable and ultraviolet radiation resistance and down lanphholder.

### Production authentication:

Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.

### Adopt standard

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA,1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.

Voltage	24V	110V	220V
Power	2*60W	2*60W	2*65W
luminous intensity	60cd		
Lamp holder	P28S		
Protection class	IP56		
Cable outside Diameter	φ 11		

Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1 - 10S	3n.m	112.5°	Green	4.3kg
port light	CXH2 - 10S	3n.m	112.5°	Red	4.3kg
masthead light	CXH3 - 10S	6n.m	225°	white	4.1kg
stern light	CXH4 - 10S	3n.m	135°	white yellow	4.2kg
all-round light	CXH6 - 10S	3n.m	360°	Red/Green/White	4.0kg



**SINGLE-DECK STAINLESS STEEL NAVIGATION SIGNAL LIGHT**
**The scope of application**

Applied to the ships with the length 50m or above 50m as lamp signal liaison when night navigation.

**Products characteristic:**

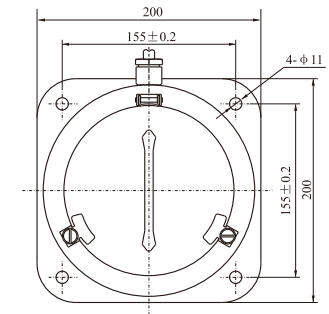
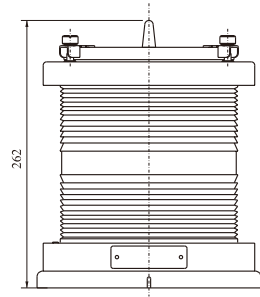
1. The shell adopts good quality stainless steel plate. The surface is painted the special mold-powder, has the feature of corrosion resisting and shock resistance.
2. The signal lights have the whole seal structure, it is waterproof under the bad environment.
3. It is convenient to replace the bulb due to the quick-open cover.
4. The lampshade adopts PC material, chroma stable and ultraviolet radiation resistance.

**Production authentication:**

Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.

**Adopt standard**

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.



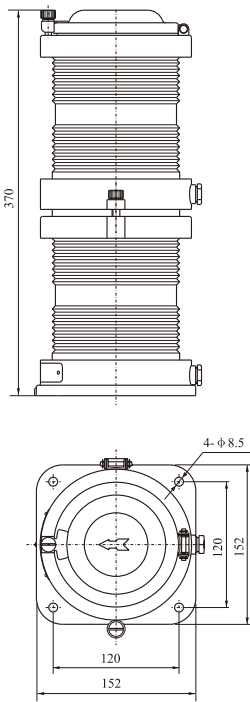
Voltage	24V	110V	220V
Power	60W	60W	65W
luminous intensity	60cd		
Lamp holder	P28S		
Protection class	IP56		
Cable outside Diameter	φ 11		

Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1 - 1S	3n.m	112.5°	Green	2.2kg
port light	CXH2 - 1S	3n.m	112.5°	Red	2.2kg
masthead light	CXH3 - 1S	6n.m	225°	white	2.1kg
stern light	CXH4 - 1S	3n.m	135°	white yellow	2.3kg
all-round light	CXH6 - 1S	3n.m	360°	Red/Green/White	2.0kg



# CXH-20S

## DOUBLE-DECK STAINLESS STEEL NAVIGATION SIGNAL LIGHT



### The scope of application

Applied to the ships with the length 12m or above 12m (<50m) as lamp signal liaison when night navigation.

### Products characteristic:

1. It is convenient to install and replace the bulb, there are automatic leakage holes at the bottom.
2. The shell adopts stainless steel material, the surface is painted the special mold-powder, has the feature of corrosion-resisting and shock resistance.
3. The lampshade adopts PC material, it has the feature of ultraviolet radiation resistance and non-discolouring.

### Production authentication:

Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.

### Adopt standard

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.

Voltage	24V
Power	2*30W
Lamp holder	B15d
Protection class	IP56
Cable outside Diameter	φ 8

Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1-20S	2n.m	112.5°	Green	2.3kg
port light	CXH2-20S	2n.m	112.5°	Red	2.3kg
masthead light	CXH3-20S	5n.m	225°	white	2.3kg
stern light	CXH4-20S	2n.m	135°	white yellow	2.3kg
all-round light	CXH6-20S	2n.m	360°	Red/Green/White	2.0kg



**SINGLE-DECK STAINLESS STEEL NAVIGATION SIGNAL LIGHT**
**The scope of application**

Applied to the ships with the length 12m or above 12m (<50m) as lamp signal liaison when night navigation.

**Products characteristic:**

1. It is convenient to install and replace the bulb, there are automatic leakage holes at the bottom.
2. The shell adopts stainless steel material, the surface is painted the special mold-powder, has the feature of corrosion-resisting and shock resistance.
3. The lampshade adopts PC material, it has the feature of ultraviolet radiation resistance and non-discolouring.

**Production authentication:**

Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.

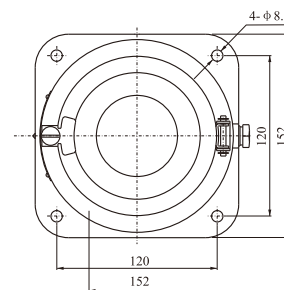
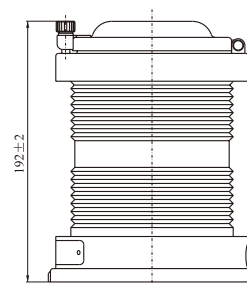
**Adopt standard**

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.



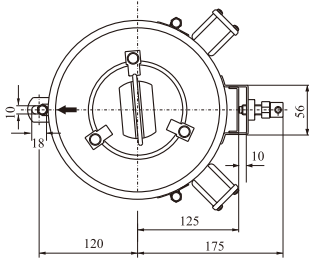
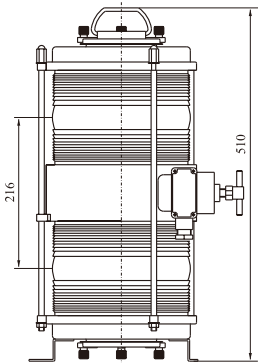
Voltage	24V
Power	30W
Lamp holder	B15d
Protection class	IP56
Cable outside Diameter	φ 8

Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1 - 2S	2n.m	112.5°	Green	1.5kg
port light	CXH2 - 2S	2n.m	112.5°	Red	1.5kg
masthead light	CXH3 - 2S	5n.m	225°	white	1.4kg
stern light	CXH4 - 2S	2n.m	135°	white yellow	1.4kg
all-round light	CXH6 - 2S	2n.m	360°	Red/Green/White	1.3kg



# CXH-10B

## DOUBLE-DECK NAVIGATION SIGNAL LIGHT



### The scope of application

Applied to the ships with the length 50m or above 50m as lamp signal liaison when night navigation.

### Products characteristic:

1. It is convenient to install and replace the bulb, there are automatic leakage holes at the bottom.
2. The shell is made of steel, the surface is painted the special mold-powder, has the feature of corrosion-resisting and shock resistance.
3. The lampshade adopts PC material, it has the feature of ultraviolet radiation resistance and non-discolouring.

### Production authentication:

Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.

### Adopt standard

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.

Voltage	24V	110V	220V
Power	2*60W	2*65W	2*65W
Lamp holder	B22d		
Protection class	IP55		
Cable outside Diameter	φ 14- φ 16		

Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1- 10B	3n.m	112.5°	Green	9.0kg
port light	CXH2- 10B	3n.m	112.5°	Red	9.0kg
masthead light	CXH3- 10B	6n.m	225°	white	9.0kg
stern light	CXH4- 10B	3n.m	135°	white yellow	9.0kg
all-round light	CXH6- 10B	3n.m	360°	Red/Green/White	9.0kg



## SINGLE-DECK NAVIGATION SIGNAL LIGHT

# CXH-1D

### The scope of application

Applied to the ships with the length 50m or above 50m as lamp signal liaison when night navigation.

### Products characteristic:

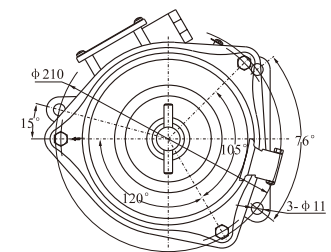
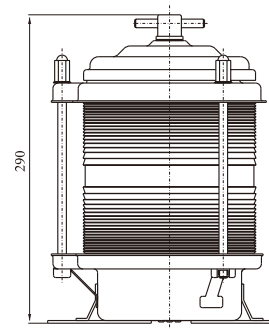
1. It is convenient to install and replace the bulb, there are automatic leakage holes at the bottom.
2. The shell is made of steel, the surface is painted the special mold-powder, has the feature of corrosion-resisting and shock resistance.
3. The lampshade adopts PC material, it has the feature of ultraviolet radiation resistance and non-discolouring.

### Production authentication:

Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.

### Adopt standard

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.



Voltage	24V	110V	220V
Power	60W	65W	65W
Lamp holder	B22d		
Protection class	IP55		
Cable outside Diameter	φ 14- φ 16		

Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1 - 1D	3n.m	112.5°	Green	4.9kg
port light	CXH2 - 1D	3n.m	112.5°	Red	4.9kg
masthead light	CXH3 - 1D	6n.m	225°	white	4.9kg
stern light	CXH4 - 1D	3n.m	135°	white yellow	4.9kg
all-round light	CXH6 - 1D	3n.m	360°	Red/Green/White	4.9kg

# CXH-2C

## SINGLE-DECK NAVIGATION SIGNAL LIGHT



### The scope of application

Applied to the ships with the length 12m or above 12m (< 50m) as lamp signal liaison when night navigation.

### Products characteristic:

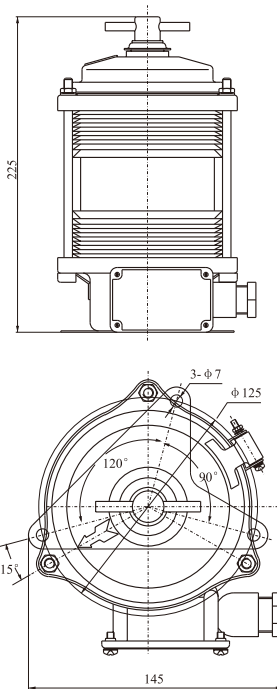
1. It is convenient to install and replace the bulb, there are automatic leakage holes at the bottom.
2. The shell is made of steel, the surface is painted the special mold-powder, has the feature of corrosion-resisting and shock resistance.
3. The lampshade adopts PC material, it has the feature of ultraviolet radiation resistance and non-discolouring.

### Production authentication:

Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.

### Adopt standard

1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.



Voltage	24V
Power	30W
Lamp holder	B15d
Protection class	IP55
Cable outside Diameter	φ 10- φ 12

Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1 - 2C	2n.m	112.5°	Green	1.8kg
port light	CXH2 - 2C	2n.m	112.5°	Red	1.8kg
masthead light	CXH3 - 2C	5n.m	225°	white	1.8kg
stern light	CXH4 - 2C	2n.m	135°	white yellow	1.8kg
all-round light	CXH6 - 2C	2n.m	360°	Red/Green/White	1.8kg



**SINGLE-DECK NAVIGATION SIGNAL LIGHT**
**The scope of application**

Applied to the ships with the length less than 12m as lamp signal liaison when night navigation.

**Products characteristic:**

1. It is convenient to install and replace the bulb, and there are automatic leakage holes at the bottom.
2. The shell is made of steel, the surface is painted the special mold-powder, has the feature of corrosion-resisting and shock resistance.
3. The lampshade adopts good quality glass, and it has good function of illumination.

**Production authentication:**

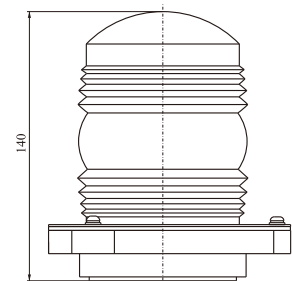
Approved by CCS (China Classification Society), and ZY of China Fishery Inspection.

**Adopt standard**

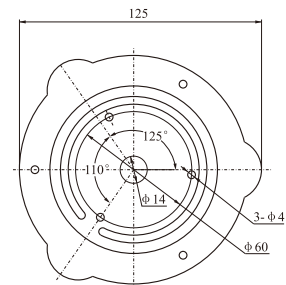
1. Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.
2. Conform to the standard of marine electric signal light's technical condition GB/T 3028-2012.



Voltage	12V, 24V
Power	25W
Lamp holder	B15d
Protection class	IP55
Cable outside Diameter	φ 14



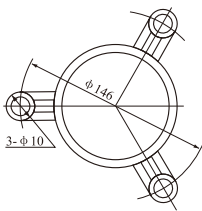
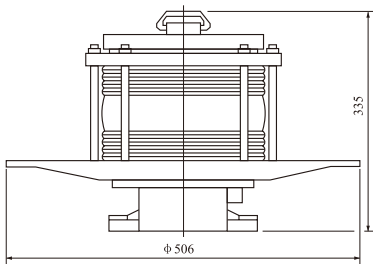
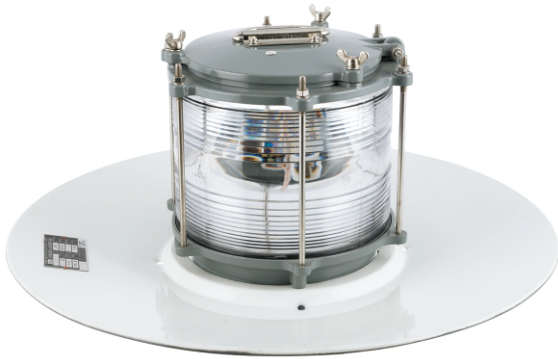
Name	Type	Visibility	Level arc	Color	Weight
starboard light	CXH1-3	1n.m	112.5°	Green	1.05kg
port light	CXH2-3	1n.m	112.5°	Red	1.05kg
masthead light	CXH3-3	2n.m	225°	white	1.0kg
stern light	CXH4-3	2n.m	135°	white yellow	1.05kg
all-round light	CXH6-3	2n.m	360°	Red/Green/White	0.85kg





# CXD7, CXD7-B

## MORSE SIGNAL LIGHT



### The scope of application

Applied to identification of the Morse signal light communication of ships.

### Products characteristic:

1. The shell is made of good quality cast aluminum or cast brass (type of CXD7-B), lampshade adopts injection of PC, the structure is firm.
2. The lamp adopts the seal structure, and has fine waterproof.
3. Equipped the special ship signal bulb, but the light without bulb.

### Production authentication:

Approved by the CCS(China Classification Society).

### Adopt standard

Conform to THE INTERNATIONAL REGULATIONS FOR PREVENTINGS COLLISION AT SEA, 1972 and GRADE ENTRY NORMS FOR STEEL SHIPS.

Type	CXD7	CXD7-B
Voltage	110V, 220V	
Power	3*25W	
Visibility	> 5n.m	
Lamp holder	B22d	
Horizontal	360°	
Protection class	IP56	
Cable outside Diameter	φ 14- φ 16	
Lens Color	white	
Material	Aluminium	Brass
Weight	4.9kg	8.4kg



## CXD8, CXD8-CDX

### DAYLIGHT SIGNAL LIGHT / CHARGER

**The scope of application** Applied to daylight signal communication between the ships.

**Products characteristic**

1. With good quality cast aluminum shell and mechanical flash device.
2. Light, convenient to operate and bring.

**Production authentication** The product approved by the CCS(China Classification Society).

**Adopt standard** Conform to MS.C.95(72) DECISION and JISF8456-1996.

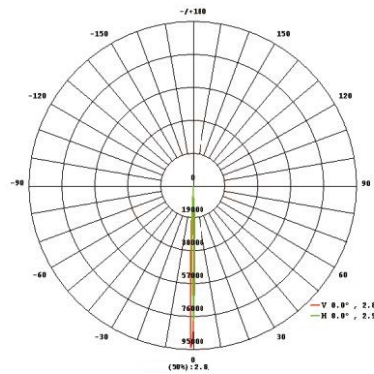


**CXD8 Daylight Signal Light**

- Voltage: 24V
- Power: 60W
- Light pillar angle: 6°
- Light intensity: 60,000cd
- Telescope magnification: 4
- Telescope visual angle: 3°
- Visibility: 2n.m
- Lamp holder: G6.35
- Plug: 25M - 4A Four pin
- Protection class: IP44
- Cable outside diameter: Φ9.5
- Weight: 2.6kg

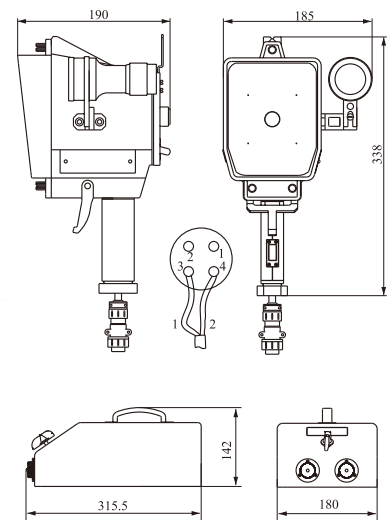
**CXD8-CDX Charger**

- Input: AC110V/60Hz, AC220V/50Hz/60Hz
- Output: AC24V / DC24V
- Capacity: 7Ah
- Temperature: -25°C ~ 45°C
- Socket: 25M-4B Four pin, 25M-3B Three pin
- Protection class: IP56 weight: 3.6kg
- Mark the voltage and frequency when order
- Note: Lamps with 5 m long cable, wire 2\* 1.0



CXD8

CXD8-CDX



## CLD4B

### MEDICAL SURGICAL LIGHT

Type:

Power: 5\*25W

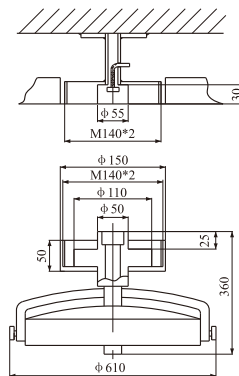
Voltage: 24V 220V

Lamp holder: BA25d/19

Protection class: IP20

Weight: 19.0kg

Installation: Ceiling-type



## DQL

## DIVING NAVIGATION LIGHT

**The scope of application**

Used for the conventional powered submarine, nuclear-powered submarine to prevent collision as the lighting signal, formation sailing signal, anchor signal, applied to dive under the water 400m.

**Products characteristic**

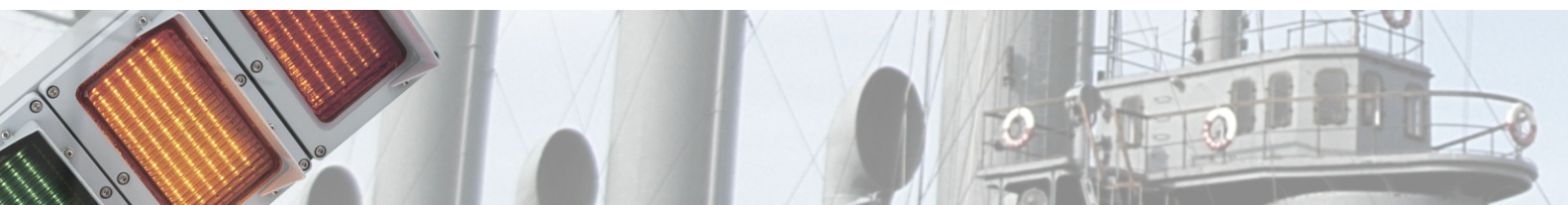
1. The shell, shell ring and cover are all made of silicon brass, it has big compressive strength, strong corrosion resistance ability and good heat dissipation performance.
2. The material of seal is rubber, it has good function of oil-resistance, pressure-resistance, mildew-proof and antiseptic-resistance, can prolong using life-span.
3. Diving navigation light can endure 6Mpa pressure, can dive under the water 400m.
4. It uses good LED lamp, with high light efficiency, the working life can be over 50,000 hours.
5. The LED starter has stabled components, to assure that the circuit has a long life time, and it has the protection for the short circuit and over load, to assure that the LED light work for long term.

**Standard adopted**

CB518-2005 DIVING NAVIGATION LIGHT

Rated voltage	AC100V~220V 50Hz/60Hz
Power	6W
Illuminant	LED
Cable outside Diameter	φ 20
Protection class	PI58
	brass/toughened glass

Type & Name	Visibility	Level arc	Color	Weight
DQ1L Starboard light	3n.m	112.5°	Green	14.2kg
DQ2L Port light	3n.m	112.5°	Red	14.2kg
DQ3L Masthead light	6n.m	225°	Tansparent	14kg
DQ4L Stern light	3n.m	135°	White/Yellow	14kg
DQ5L Diving range light	3n.m	10°	Tansparent	19kg
DQ6L Anchor light	3n.m	360°	Red/Green/White/Yellow	13.6kg



DIVING NAVIGATION LIGHT



**DQ1L**

patent No:  
 ZL200820088857.3



**DQ2L**

patent No:  
 ZL200820088858.8



**DQ3L**

patent No:  
 ZL200820088859.2

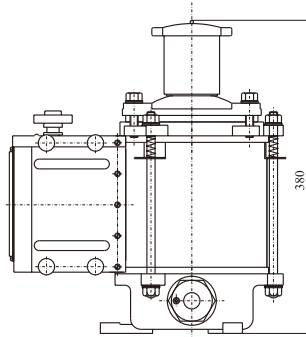
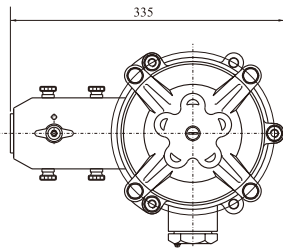
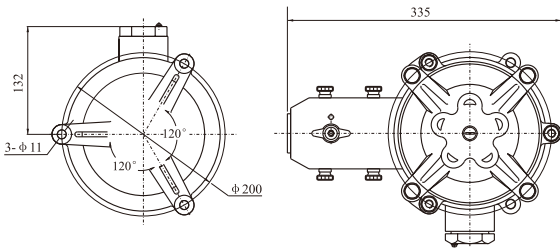
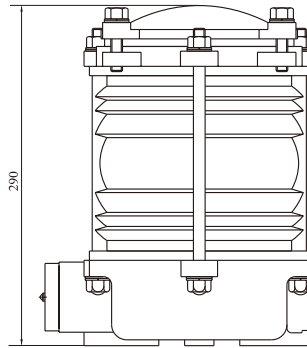
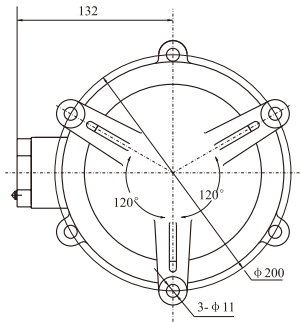


**DQ4L**

patent No:  
 ZL200820088860.5



**DQ6L**



**DQ5L**

patent No:  
 ZL200820088862.4



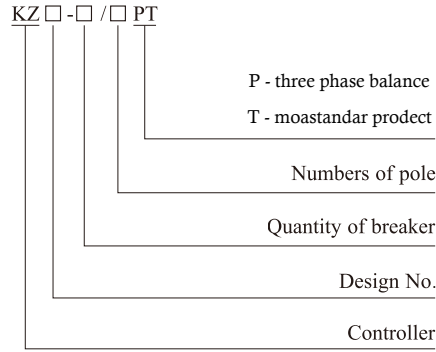
KZ

SHIP SURFACE LIGHTING CONTROL SYSTEM

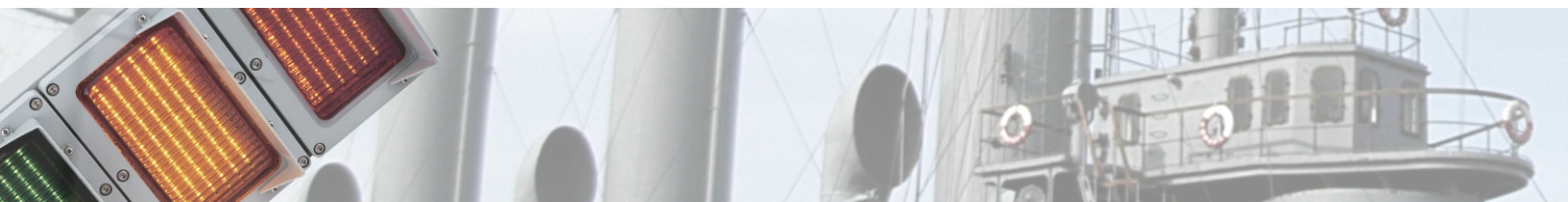


Control box

KZ series controller box is widely applied to power distribution and lighting system vesse and olean platform of 50Hz/60Hz AC690V and DC220V below with protection class of casing is ranged from IP23 IP44 IP56. The casing is made of cold rolled stainless steel or plastic (powder) coating steel surface, mounting type can be wan-type and recessed type. It can be choose Schneider, ABB breaker according to the customer's request.

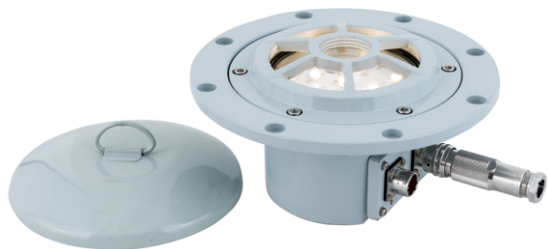


Controller



**CXDJ**

**PLATFORM BOUNDARY LIGHT**



CXDJ-1L



CXDJ-2L

**The scope of application**

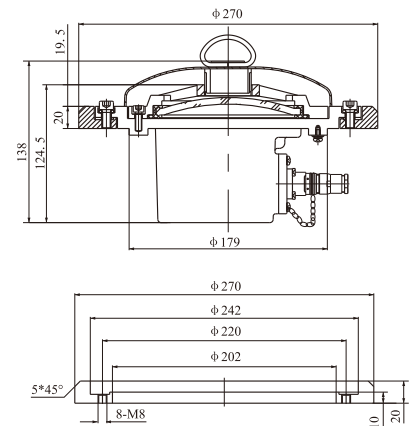
Platform boundary lights provide the boundary lighting marking of helicopter LZ platform landing area.

**Products characteristic**

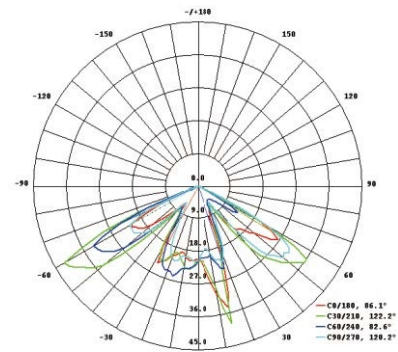
1. The body uses the good quality casting brass, protection net pressure bearing 2MPa, glass lampshade 1MPa.
2. Recessed-type, flange is welded with warship hull, up-cover can open to replace the bulb.
3. Sealed body, it is well water proof.
4. Incoming wire can use cable connector.
5. It adopts good LED lamp, with high light efficiency, the working life can be over 50,000 hours.
6. The LED starter has stabled components, to assure that the circuit has a long life time, and it has the protection for the short circuit and over load, to assure that the LED light work for long term.

**Standard adopted**

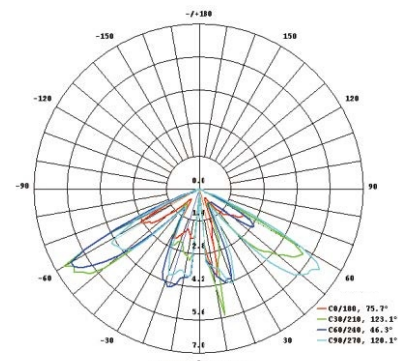
GB7000.1, GB 7000.7, GB/T13306, GJB4000, GJB534B, GJB145A.



Type	CXDJ-1L	CXDJ-2L
Rated Voltage	AC220V 50Hz/60Hz	
Power	12W	
Illuminant	LED	
Visibility	1.5m	
Cable outside Diameter	φ 9- φ 11	
Protection class	IP56	
Material	Cast brass	
Color	White	Red, Yellow, Green
Weight	(Include the flange)	

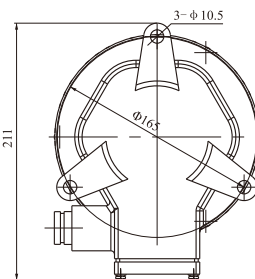
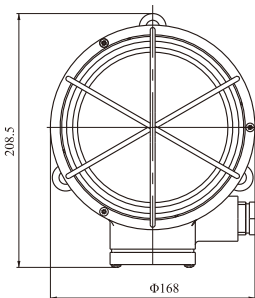
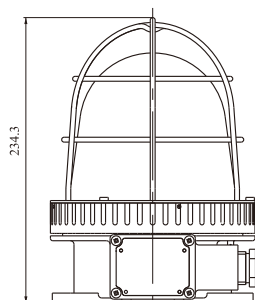
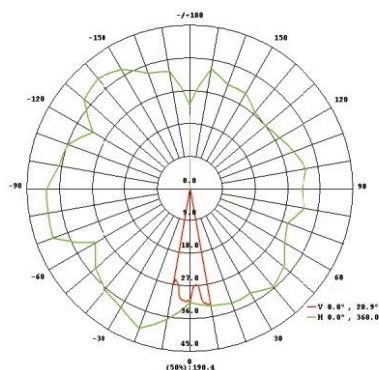


CXDJ-1



CXDJ-2



**CXDJ-3L**
**SUPERSTRUCTURE OBSTRUCTION LIGHT**

**The scope of application**

Indicate the superstructure outline position for helicopterist, when at night or under low visibility.

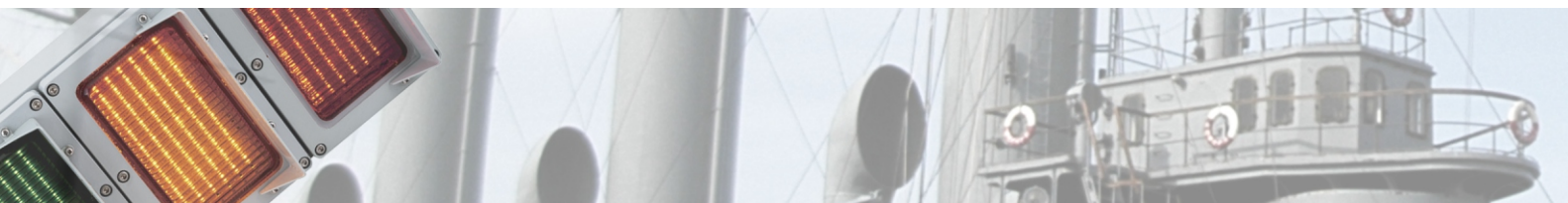
**Products characteristic**

1. The body use the good quality casting brass.
2. The light is based-install, upper-cover can open to replace the bulb.
3. Sealed body, it is well water proof.
4. It adopts good LED lamp, with high light efficiency, the working life can be over 50,000 hours.
5. The LED starter has stabled components, to assure that the circuit has a long life time, and it has the protection for the short circuit and over load, to assure that the LED light work for long term.

**Standard adopted**

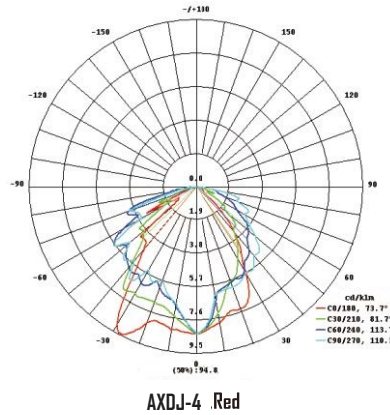
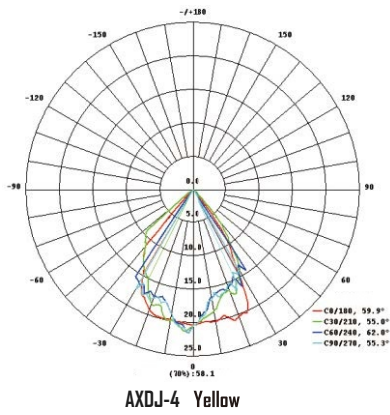
GB7000.1, GB 7000.7, GB/T13306, GJB4000, GJB534B, GJB145A.

Rated voltage	AC 100V ~ 240V 50Hz/60Hz
Power	12W
Illuminant	LED
Visibility	>3n.m
Cable outside Diameter	ø9 - ø11
Protection class	P56
Material	Cast brass
Color	Red
Weight	5.5kg



**CXDJ-4L**

**LZ SIGNAL LIGHT**



**The scope of application**

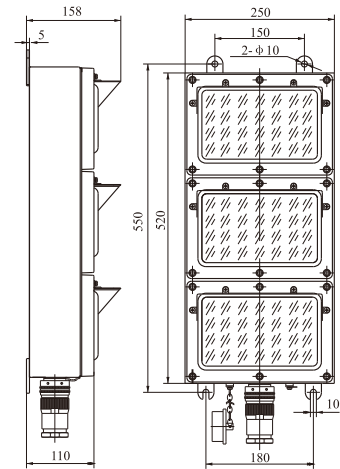
This light can send red, yellow and green, lighting signal separately, it issues the instruction for helicopter action inside and outside the hangar.

**Product characteristic**

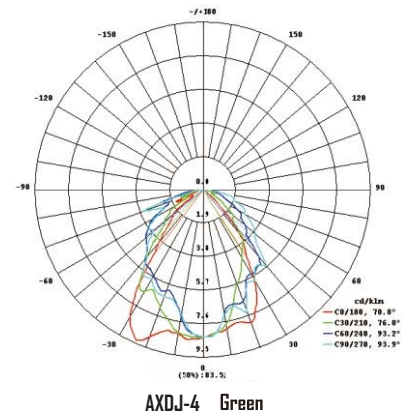
1. The body main parts are made of stainless steel.
2. Wall-type installation
3. Sealed body, it is well water proof.
4. Incoming wire can use cable connector.
5. It adopts good LED lamp, with high light efficiency, the working life can be over 50,000 hours.
6. The LED starter has stabled components, to assure that the circuit has a long life time, and it has the protection for the short circuit and over load, to assure that the LED light work for long term.

**Standard adopted**

GB7000.1, GB 7000.7, GB/T13306, GJB4000, GJB534B, GJB145A.



Rated voltage	AC100V~220V 50Hz/60Hz
Power	Primary 3*18W, sapre 3*18W
Illuminant	LED
Visibility	>1.5n.m
Cable outside Diameter	ø9 - ø21
Protection class	IP56
Weight	21kg





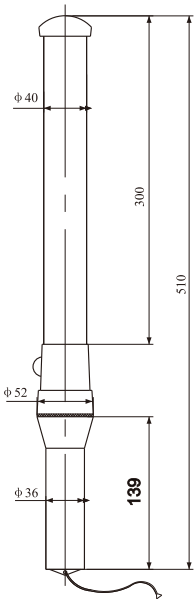
**CXDJ-5L**
**INDICATOR LIGHT**

**The scope of application**

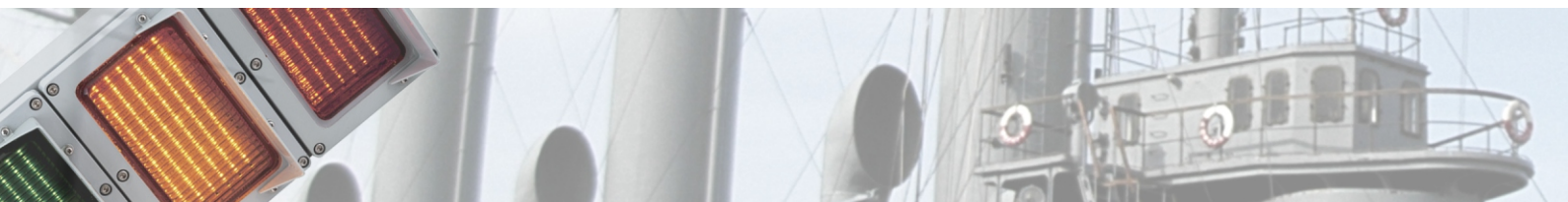
Fit for the commander to indicate to land and to carry out the task when at night or low visibility on LZ platform

**Products characteristic**

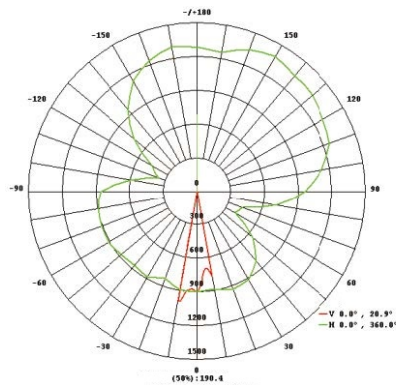
1. It is handheld
2. The shell is made of engineering plastic, light weight, and strong resistance to impact.
3. Light wand is with 2 LED power sources, one is red, and the other green, it should be with 3pcs DC1.2V battery, dry battery and charging battery are both acceptable, the light wand without the battery if no requirement
4. To ensure the brightness and using time, we suggest use the charging battery which is provided by our company, and it should be charged at least 6 hours for one time.



Rated Voltage	DC3.6V
Illuminant	LED
Visibility	>200m
Protection class	IP56
Material	Engineering plastic
Color	Red, Green
Weight	0.4kg



**MOTHERSHIP IDENTIFICATION LIGHT**



**The scope of application**

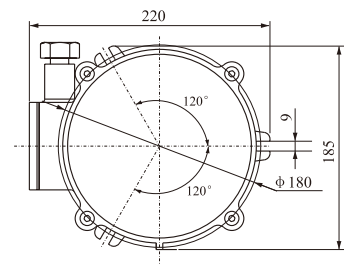
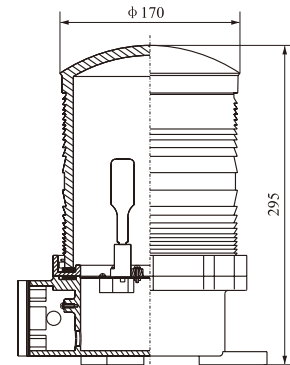
Provide light signal for helicopter to identify the mothership when at night or under low visibility.

**Products characteristic:**

1. The body use the good quality casting brass, and pyroceram glass lampshade.
2. Sealed body, it is well water proof.
3. Equip the special marine signal bulb.
4. Visual angle: horizontal 360° vertical 15°.
5. External cable core:  $5 \times 1 \text{ mm}^2$ .
6. Incoming wire type is cable gland.

**Adopt standard**

According to the GJB 534B-2009 《General requirements for helicopter facilities of non-aviation ships》.



oltage	AC220V/50Hz
Power	2*300W
lamp holder	GY9.5
Illuminant	Halogen lamp
Visibility	>10n.m
Cable outside Diameter	$\phi 10.5 - \phi 13$
Protection class	IP56
material	Cast brass
Color	white
Weight	8.5kg



**CXDJ-8L**

patent No: ZL201220603838.6

**VERTICAL LANDING LIGHT**

**The scope of application**

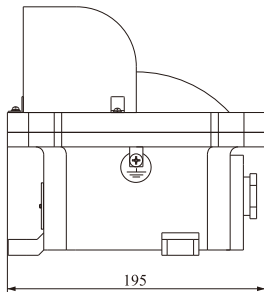
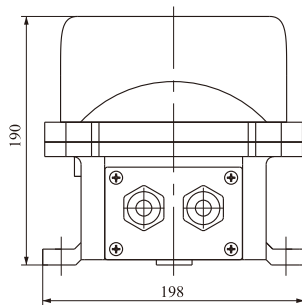
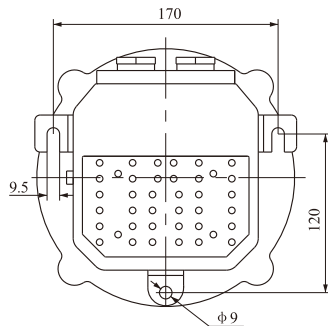
The light is a part of assisted landing light system for vessel helicopter; it is installed on the end of marking line. It provides azimuth information when driver approaches.

**Product characteristics**

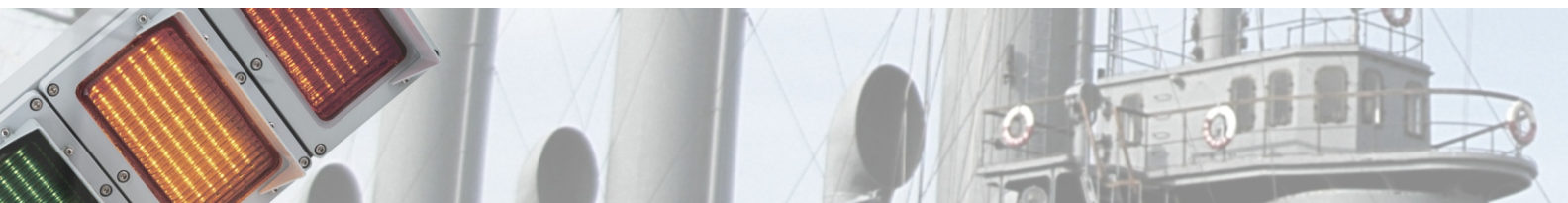
1. The shell is made of brass, with spraying plastics on the surface.
2. The lampshade adopts toughened glass, with good machinery and chemical function.
3. Installation method: Base type bolt connection.
4. It adopts good LED lamp, with high light efficiency, the working life can be over 50000 hours.
5. The LED starter has components with stable performance to assure it a long life time; constant current design to protect from short circuit and over load, thus to make sure the LED can work stably for a long time.

**Adopt standard**

GJB534B-2009, GJB4000-2000, GJB5A-95, GB7000.1-2007.



Rated voltage	AC100A~240V 50Hz/60Hz
Power	8W
Illuminant	LED
Visibility	>1.5n.m
Cable outside Diameter	ø9 - ø11
Protection class	IP66
Material	Cast brass
Color	red
Weight	6.8kg



**CARRIER LANDING APPROACH GUIDING LIGHT** **CXDJ-9L**



**The scope of application**

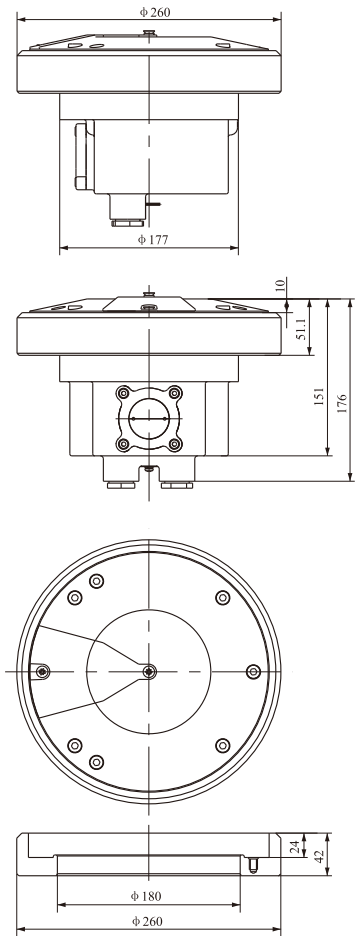
This light is applied to night and low visible day time when helicopter pilot landing approach, it provides correct direction to make sure helicopter land safely.

**Product characteristics**

1. The shell is made of stainless steel, with spraying plastics on the surface.
2. The lampshade adopts toughened glass, with good machinery and chemical function.
3. Installation method: flush type. The light adopts embedded flange platewelding with vessel body.
4. The shell adopts sealing structure, with the function of strong waterproof.
5. It adopts good LED lamp, with high light efficiency, the working life can be over 50000 hours.
6. The LED starter has components with stable performance to assure it a long life time; constant current design to protect from short circuit and over load, thus to make sure the LED can work stably for a long time.

**Adopt standard**

Conform to GJB 534B-2009 "General requirements for vessel helicopter deck



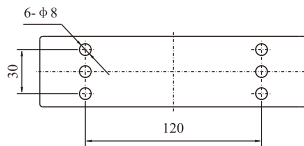
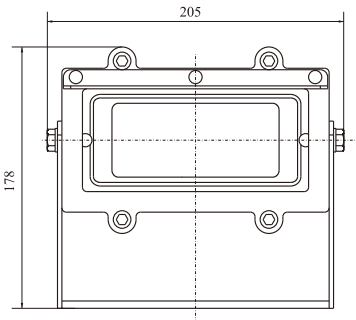
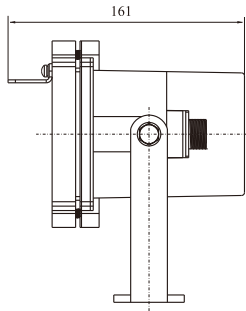
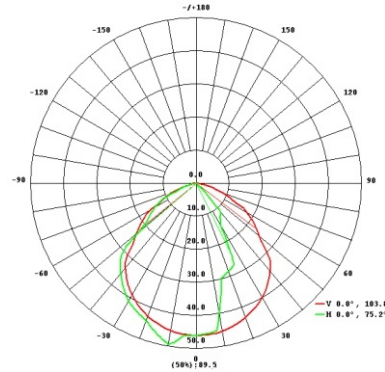
Rated voltage	AC220V 50Hz / 60Hz
Power	10W
Illuminant	LED
Visibility	>1.5n.m
Vertica	30°
horizontal view angle	30°
Cable outside Diameter	$\phi 9 - \phi 11$
Protection class	IP56
Material	Stainless steel
Color	White
Weight	15.5kg (Include mounting flange)



LED

TG22-JL

SUPERSTRUCTURE BACK WALL FLOODLIGHT



**The scope of application**

This light is applied to all kinds of ships loaded with helicopters, and used in dropping zone of helicopter platform, to lighten the back wall surface of hangar.

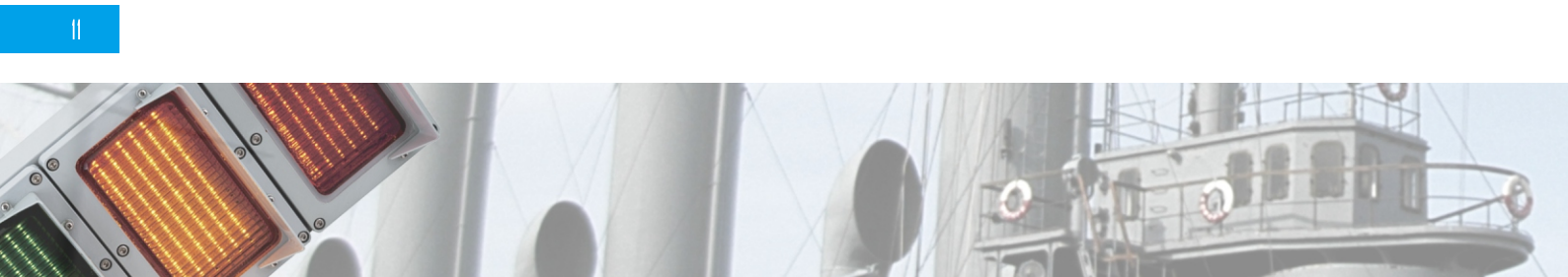
**Products characteristic**

1. The body uses the good quality casting brass, and toughened glass, have excellent transparent property to sunlight and good mechanical property.
2. The light can rotate vertically; also can adjust the pitch angle.
3. Use the good quality silicon rubber sealing, has good water proof property.
4. Incoming wire can use cable connector or cable gland (based on clients' requirement)
5. It adopts good LED lamp, with high light efficiency, the working life can be over 50,000 hours.
6. The LED starter has stabled components, to assure that the circuit has a long life time, and it has the protection for the short circuit and over load, to assure that the LED light work for long term.

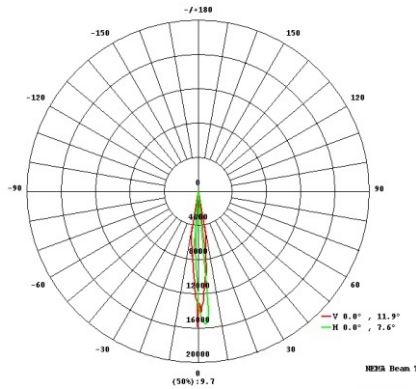
**Standard adopted**

GB7000.1, GB 7000.7, GB/T13306, GJB4000, GJB534B, GJB145A.

Rated voltage	AC 100A ~ 240V 50Hz/60Hz
Power	8W
Illuminant	LED
Visibility	>1.5n.m
Cable outside Diameter	ø9 - ø11
Protection class	IP56
Material	Cast brass
Color	White
Weight	5.4kg



OVERHEAD FLOODLIGHT **TG23-JL**



**The scope of application**

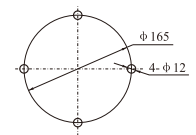
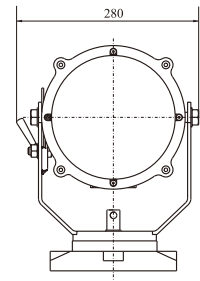
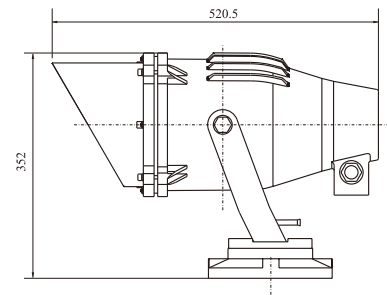
Suitable for helicopter platform lighting to ensure the helicopter work safely on the platform when at night or under low visibility.

**Products characteristic**

1. The body uses the good quality casting brass, and toughened glass, has excellent transparent property to sunlight and good mechanical property.
2. The light is based-installation.
3. The light can rotate  $\pm 180^\circ$  horizontally, also can adjust within  $-60^\circ \sim +20^\circ$  vertically.
4. Use the good quality silicon rubber sealing, has good water proof property.
5. It adopts good LED lamp, with high light efficiency, the working life can be over 50,000 hours.
6. The LED starter has stabled components, to assure that the circuit has a long life time, and it has the protection for the short circuit and over load, to assure that the LED light work for long term.

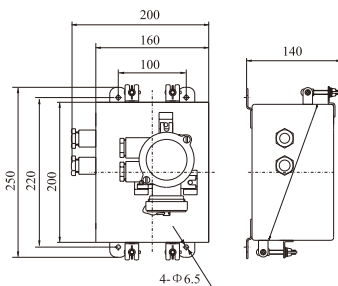
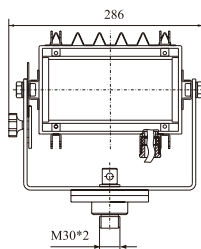
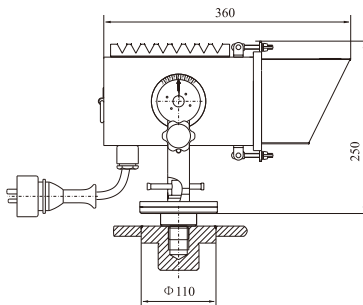
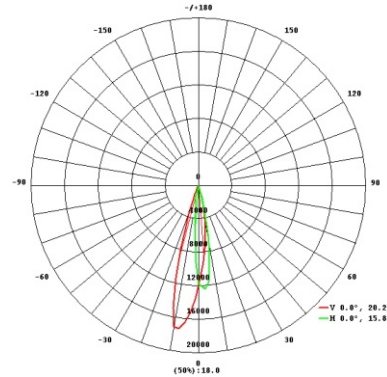
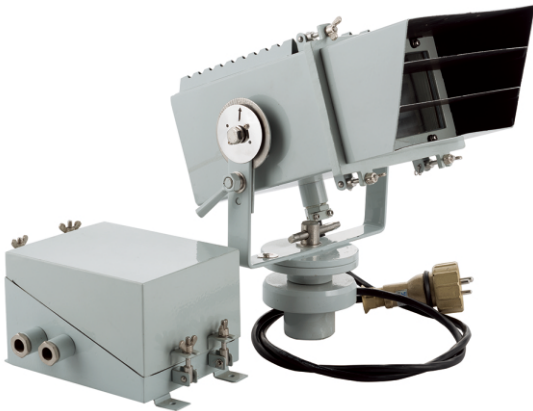
**Standard adopted**

GB7000.1, GB 7000.7, GB/T13306, GJB4000, GJB534B, GJB145A.



Rated voltage	AC220V 50Hz/60Hz
Power	30W
Illuminant	LED
Cable outside Diameter	$\phi 9 - \phi 11$
Protection class	IP56
Material	Cast brass
Color	White, Yellow
Weight	20kg



**TG31-JL**
**DECK SURFACE FLOODLIGHT**

**The scope of application**

The scope of application: The light can provide the lighting for helicopterist to take off and land when at night or under low visibility.

**Products characteristic**

1. The body is made of welded stainless steel, and it has good mechanical strength and corrosion resistance property.
2. Lampshade is made of toughened glass, it has excellent transparent property to sunlight and good mechanical property.
3. Rubber seal, has good water proof property.
4. The light can rotate 180° horizontally, also can adjust within -30° ~ +30° vertically.
5. It adopts good LED lamp, with high light efficiency, the working life can be over 50,000 hours.
6. The LED starter has stabled components, to assure that the circuit has a long life time, and it has the protection for the short circuit and over load, to assure that the LED light work for long term.

**Standard adopted**

GB7000.1, GB 7000.7, GB/T13306, GJB4000, GJB534B, GJB145A.

Rated voltage	AC 100V ~ 240V 50Hz/60Hz
Power	12W
Illuminant	LED
Cable outside Diameter	ø9 - ø11
Protection class	IP56
Material	Tainless steel
Color	White
Weight	13.5kg

