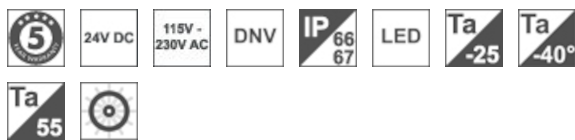




Series 75

Enduring LED navigational lights, with integrated countdown system



Description

Aqua Signal's Series 75 are LED navigation lights for vessels $\geq 20\text{m}$ in length. Long product lifetime has been an essential priority when designing this product family of marine lanterns. A smart, tamper proof countdown system will also give the user an indication when it's time to replace the lanterns. Even at an ambient temperature at 45°C the lifetime is 100 000 hours (Main or Spare). Series 75 is available in Single version (Series 75), Double version (Series 75D), Single Arctic version (Series 75 Arctic) and Double Arctic version (Series 75D Arctic). Arctic versions are intended for use in low temperature areas, and includes a heating foil, on the inside of the glass lens.

Long product lifetime

The Series 75 is designed to last for 100.000 hours at an ambient temperature of 45°C . That's twice the lifetime of most competing products. To achieve this kind of longevity the design must be sturdy and all components must be of high quality. This includes a high-quality LED driver, driver technology, and the use of materials that can withstand rough weather and varying temperatures, such as seawater resistant aluminium, polycarbonate and hardened tempered borosilicate glass.

The system lifetime of the LED light source and driver is 11 years given a continuous runtime, 24 hours a day at an ambient temperature of 45°C .

Integrated countdown system

Having a lantern come to end of life or fail while you're at sea is something you don't want to risk. This is why the Series 75 is equipped with a countdown system that will let you know when it's time to replace the navigation light. To make the system tamper proof, the timer is integrated in each lantern while the message is communicated and displayed in the control panel. The system reflects the use of the lantern, whether it is exposed to cold temperatures and harsh weather or conditions with less wear and tear. This system provides added safety for the vessel.

Excellent EMC characteristics

(DNV-GL EMC Class B (bridge open deck))

There are strict requirements for electromagnetic compatibility (EMC) for lanterns that should be installed close to VHF antenna. Our lanterns Series 75 have very low emission level and were tested and comply with the emission and immunity requirements of the IEC 60945.

A flexible choice



Authorized Distributor:
Pacific Marine & Industrial
www.pacificmarine.net
info@pacificmarine.net

Series 75 is designed to work with the Aqua Signal Navigation light control panel, but they offer a lot of flexibility because they can be operated with third party panels (Compatibility must be confirmed by control panel supplier). For vessels above 20 meters, a dual installation is required (for Masthead, starboard, port and stern). To be according to COLREG). The products are easy to install, only four bolts to fasten and the internal connection box offers a lot of space for connection wires. It can be installed upside-down for all variants, with exception of Port, Starboard and Masthead due to visibility angles in COLREG requirements.

Technical specifications

Application

For vessels ≥ 20 meter in length

Temperature range

Ambient Temperature: Standard version: -25°C to $+55^{\circ}\text{C}$ Arctic version: -40°C to $+55^{\circ}\text{C}$ Voltage: 115V-230V AC or 24V DC Frequency: 50/60 Hz

Lifetime

2 x 100.000 hours at $T_a 45^{\circ}\text{C}$ (Main and spare)

Housing

Polycarbonate housing and housing cover. Borosilicate glass. Top cover: Seawater resistant aluminium Stainless screws and nuts (Hexagon nuts M6)

Cable Gland

Single: 1 x M25 x 1.5, Double: 2 x M25 x 1.5 Polyamide, for outer cable $\varnothing 10,00-17,00$ mm (Standard), $\varnothing 8,00-12,00$ mm (Reducer ring) Up to 400 m cable run

Quality

The products have gone through a series of tests including: EMC characteristics: DNV-GL EMC Class B (Bridge and Open Deck according to IEC60092) Shock tests (up to 15g, 3-Axes) Vibration testing (2.3g) Climatic testing (-40°C up to $+55^{\circ}\text{C}$) Salt mist spray tests (level 6 at 1000 hours) Tests for IP rating (IP66/IP67)

Dimensions

Dimension: 248 mm x 187 mm x 222 mm (LxWxH) Weight of Single 24V version: 2,25 kg Weight of Single 115-230V version: 2,5 kg Weight of Double 24V version: 2,5 kg Weight of Double 115V-230V version: 3,0 kg

Installation

Large junction box and easy access to terminals Minimum cable cross-section: 1.5 mm² Maximum cable cross-section: 2.5 mm² Maximum cable length must not exceed 400 meters Only four bolts to fasten Same dimensions as Series 65 and Series 70/70M Can be installed upside-down

Certificate

Wheelmark (MED Certificate)

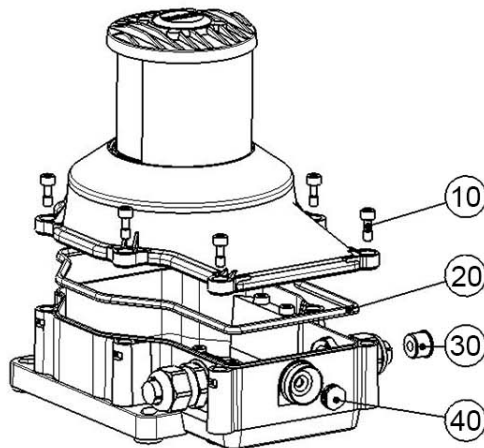
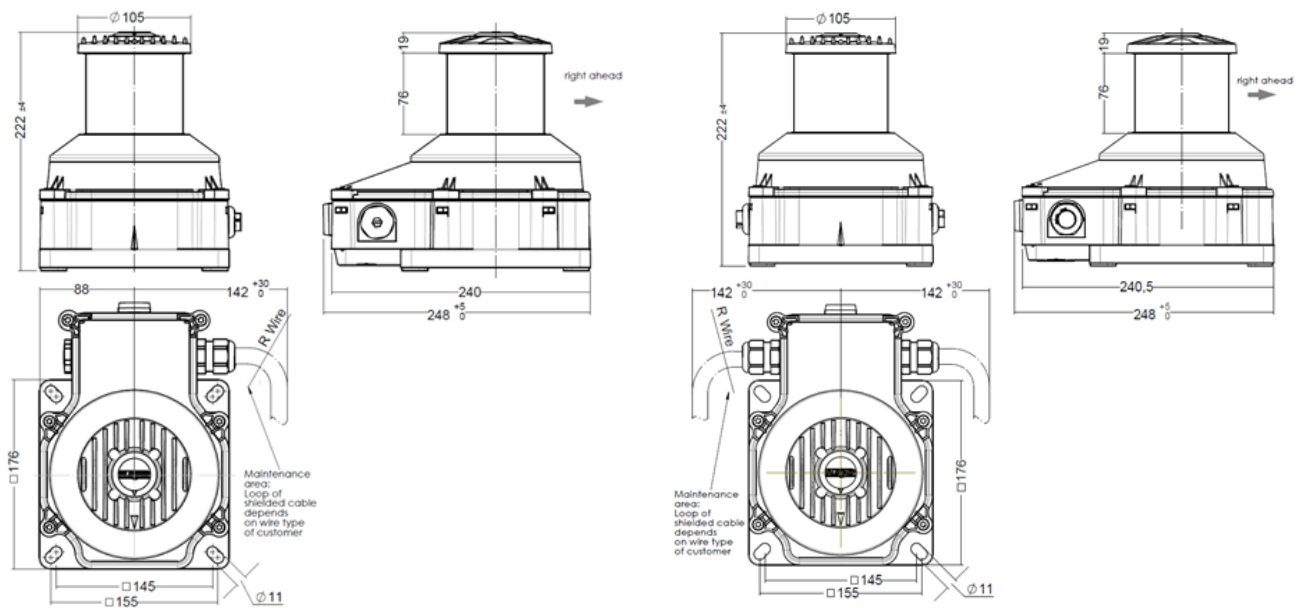
Approvals

EN 14744 (20015 – including AC 2006) Inland and Seagoing vessels - Navigational lights standards IEC 60945 Ed. 4.0, 2002 including Corr.1, 2008 Maritime navigation and radio equipment standards, including EMC COLREG 72, Annex I/14 International regulations for preventing collisions at sea MSC.253(83) Performance standards for navigational lights and control panels and associated equipment.



Authorized Distributor:
Pacific Marine & Industrial
www.pacificmarine.net
info@pacificmarine.net

Illustrations



Spare Parts		
Pos.		Spare part no.
10	Screws stainless steel;6 pcs.	E-2366502100
20	Gasket for housing,silicone;1 pc.	E-2367501100
30	Reduction insert for connection cable;2 pcs.	8100478700
40	Pressure equalisation with bush M20, polyamide;1 pc.	9840217200



Images

