LOPOLIGHT

Part numbers:
300-101, 300-102,
300-105, 300-106,
300-108, 300-109,
300-111, 300-112,
300-114, 300-115,
300-131

Dear Customer,

Thank you for purchasing Lopolight's unique navigation lights.
The Lopolight products are covered by a 5-year limited warranty. This warranty covers direct exchange of the malfunctioning product and is given under the assumption that the lights have been operated within the specifications of lights.

Mechanical mounting:

Please consult the attached assembly drawing.
The bolts used for attaching the light onto the vessel should be with a cylindrical head such as a M6 unbrako (DIN 912) A4 in appropriate length – these bolts are not supplied with the light.
Mounting on dissimilar materials should only be done with a suitable corrosion barrier between the light and the vessel.

Alignment to vessel centreline and sidescreens:

In order to comply with regulations it is necessary to align the light carefully along the centreline of the vessel, the 0 line marked on the light should be used for this. For sidelights there is a demand for sidescreens in the COLREGs these should be observed. For all other lights it is desirable that the design of the fitting/vessel assists with cutting off the light beam at the appropriate angles (135° for stern light and 225° for masthead lights).

Electrical connection:

The light has a space for connecting the ships cable into the light. This space is placed at the bottom or the rear of the light.
This cable mounting space is IP68 waterproof under the assumption that the supply cable diameter is between 9mm and 12mm and that the supplied O-ring between Lopolight and cable assembly bay is mounted correctly. Please consult the attached assembly drawing for further details.
Make sure polarity is correct Red for 10-32VDC and black for GND for doubled light there is another pair of leads these are either Red or White for the 10-32VDC and Black or Blue for GND.
The light will only function if the polarity is correct. (you will not damage the Lopolight by accidentally wiring the polarity wrong – it will just not work).
The navigations light should not be grounded.

Troubleshooting:

If the light does not function:
- Check that you have a voltage between 10 and 32 volts.
- Check that the polarity is right.

End of life signalling:

Your Lopolight product has a microprocessor inside that ensures that the light has the same intensity over its 50.000 hour lifetime.
In addition the light will signal to you when it is getting to the end of its useful life.

The following signals can be observed when turning on the light:

(a) All OK: 5 seconds after turning on it will go dark for 0,1 second and turn on again. This is just a check for you to assure that the clock function is working.
(b) Less than 2000 hours left: The dark period is extended to **2 seconds**: **You should change the light at your next service within the next 12 months.**
(c) Light expired: The dark period is extended to 5 **seconds**: **You should change the light immediately.**

Monitoring and Control from bridge:

Instead of the visual control implied in the above section on "end of life signalling" Lopolight offers a monitoring module built to class (LR) specifications for bridge panel applications. Each monitoring module (Lopolight part number 400-018) monitors one light for the messages sent by the light over the power wire and will trigger the alarm in the case of situation (b) and (c). In addition to this the monitoring module will alarm if the power is cut or shortened or if the light has a partial failure.

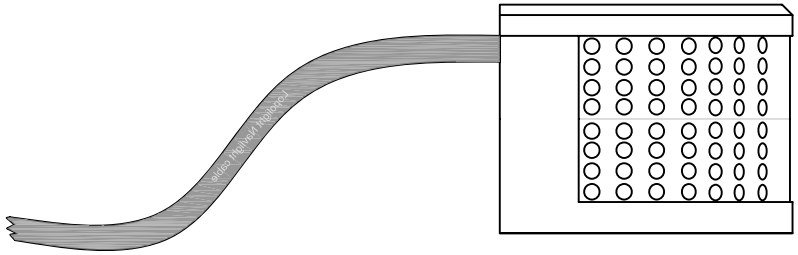
Conformity to standards:

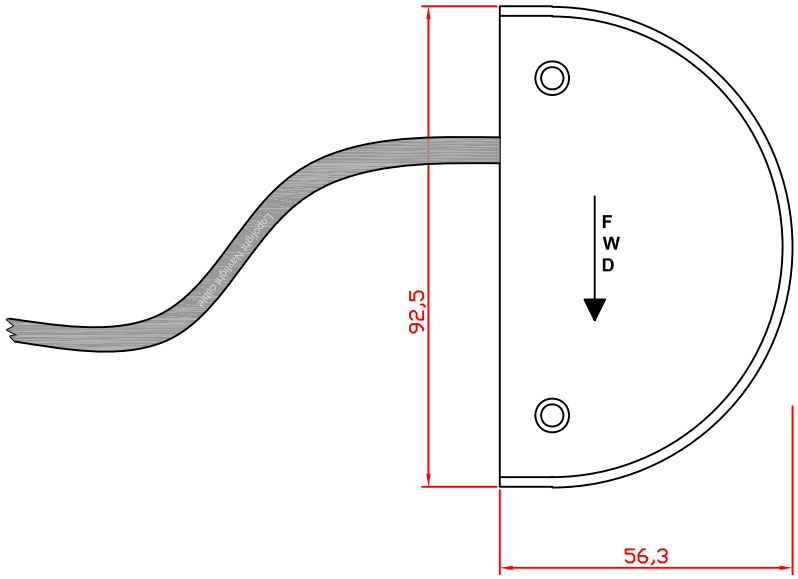
The light in this package comply with the following standards:
Navigation light functions and qualities: EN-14744, UL-1104, Colreg-72.

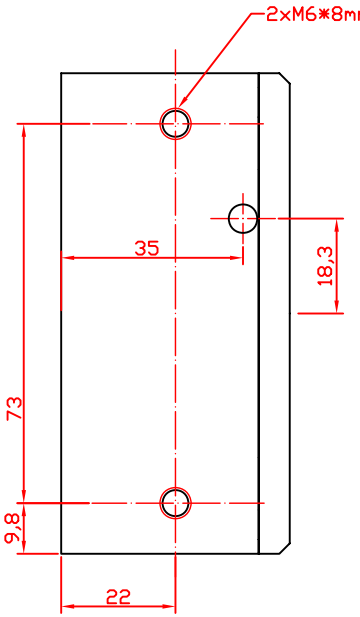
EMC, Conducted Emissions:	IEC 60945
EMC, Radiated Emissions:	IEC 60945
EMC, Conducted RF Immunity:	IEC 60945
Vibration:	EN-14744
Solar radiation:	EN-14744
Temperature range:	EN-14744: energized: -25° to +55°C
	Products will work energized: -35° to +75°C*
	*(based on tests in -40° to +80°C for 200 hours in controlled climate chamber)
Waterproof:	IEC 60945 and better than IP68

Approvals:

According to the above mentioned standards, recognized by the following major national maritime authorities:
M.E.D. (Wheelmark), QQ-MED-15/09-01i
MCA (UK), QQ-TAN-03/05-01R6
USCG (USA), approved 09-2005 under 111.075 by recognized laboratory QinetiQ
DMA (DK), 199942520
RINA (Italy), ELE054806CS
BSH(Ger) 4615/6010418/06 - Rheinschifffahrt D.06.418







Assembly drawing
Vert. mounting
3nm Port

Drawing no.: 700-021	Rev.: 2	Drawing date: 08-10-06	Sign.: phh		
		Revision date: 021009	Sign.: PHH		
Scale: --	Format: A3	Tol.: DS 2768 Fine			
Material: Aluminium 6082, min. 25 my anodizing					
Article no.: P/N: 300-102					
	Supply: 10-32 VDC				
Remark: File name: 700-021.2 (port 3nm).dwg					

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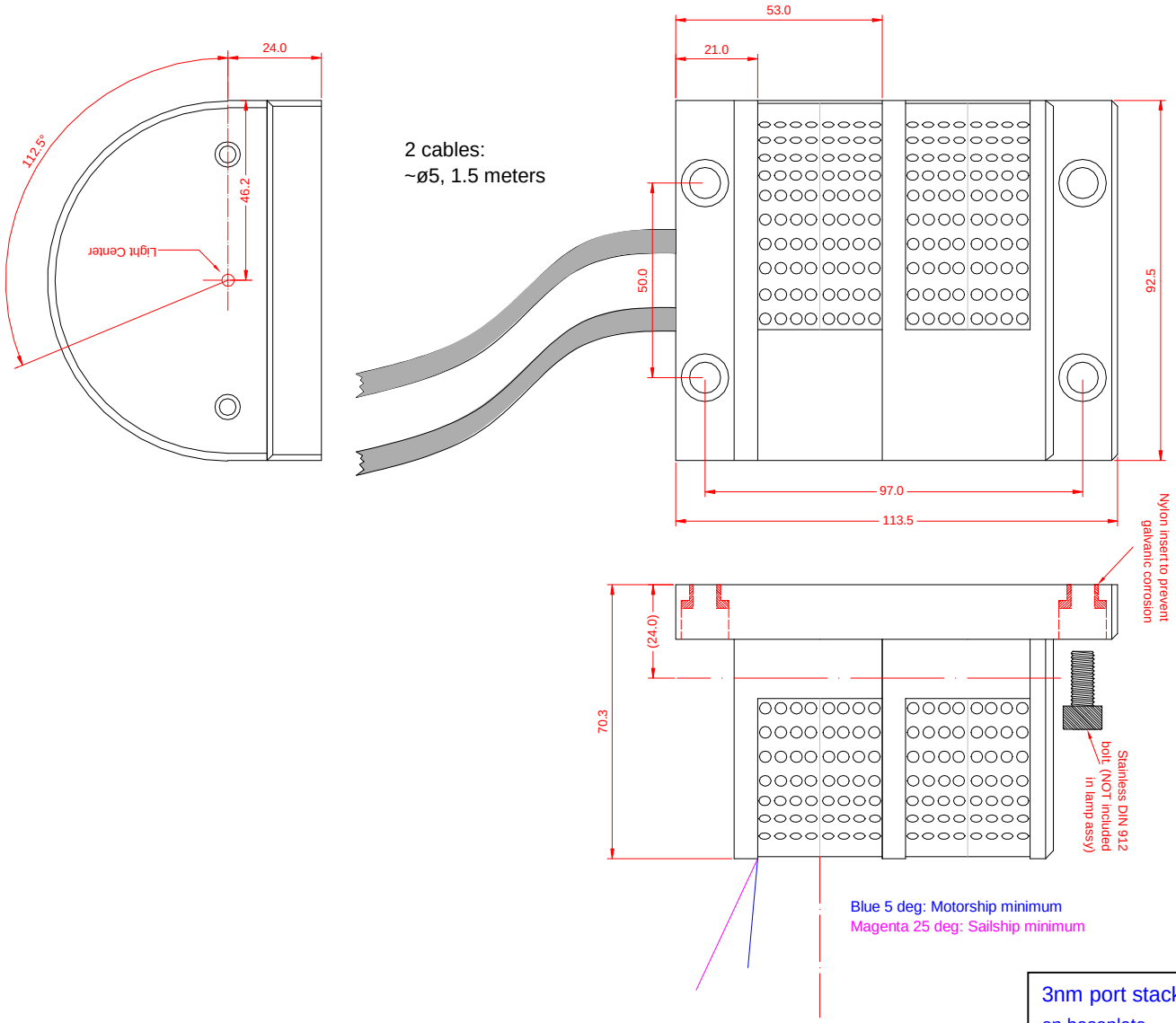

3nm port stacked vertical mount
on baseplate

Drawing no.: 700-296	Rev.: 1	Drawing date: 200409	Sign.: phh		
		Revision date: 200409	Sign.: PHH		
Scale: --	Format: A3	Tol.: DS 2768	Fine		
Material: Aluminium 6082, min. 25 my anodizing					
Article no.: P/N 300-102ST					
Remark: File name: 700-296.1(3nm port sidelights on backplate).dwg					

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