



## DATASHEET

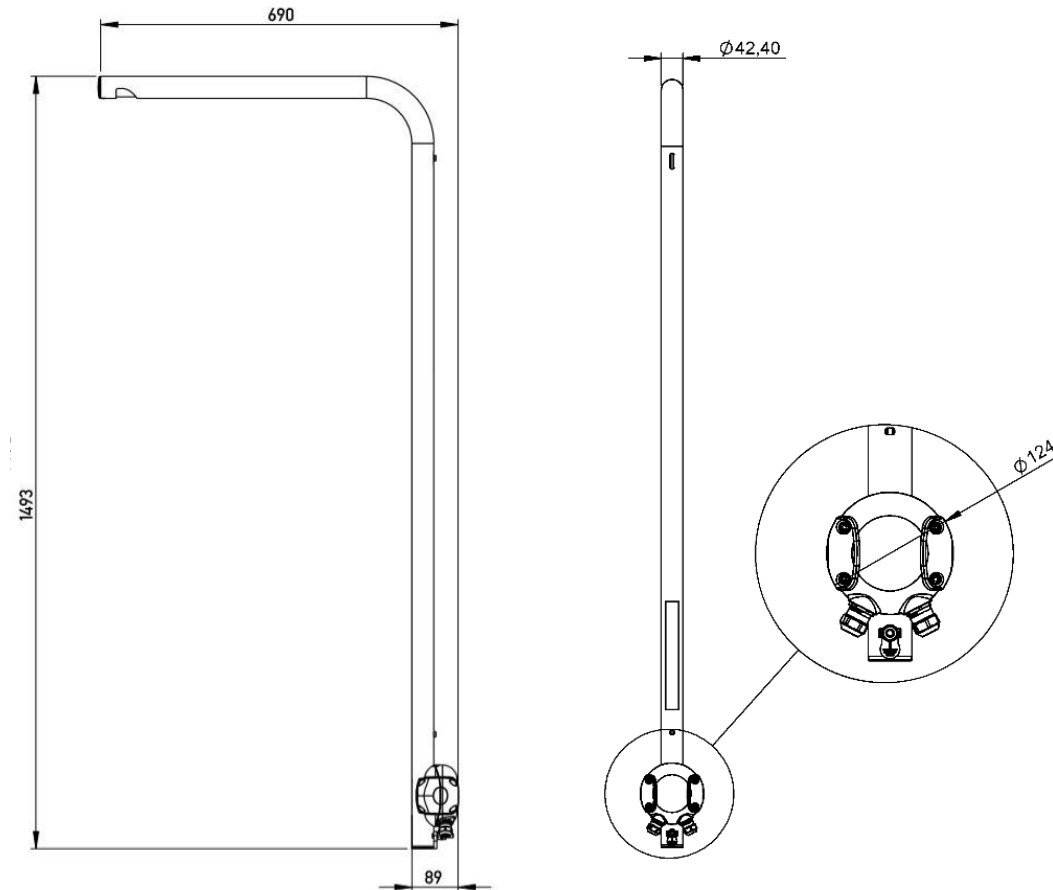
# SEAMARK ID SIGN LIGHT 1000

- **Maintenance-free LED technology for the uniform illumination of ID signs (sign board sold separately)**
- **Smart photocell, levelling sensor, water ingress detection, optical feedback and LED monitoring**
- **Standard NAI bus interface for power supply and communication**
- **Adjustable intensity pre-sets by NAI bus**

The SeaMark NAI ID Sign Light 1000 is designed for the uniform illumination of ID signs up to 1500 mm high by 2200 mm wide to satisfy IALA recommendation O-139. The ruggedized stainless-steel design integrates the optical head, mechanical support and optionally 96 hours of battery backup into a single device.

A smart photocell ensures accurate day to night switching by distinguishing between the light produced by the ID Sign Light and ambient light. An autonomous fall-back solution is implemented so that in the case of interrupted bus communication, the light is switched on when the ambient light level falls below a minimum, pre-set, configurable level. A levelling sensor assures accurate installation whilst water ingress detection, optical feedback and LED monitoring allow for detailed monitoring and optimised maintenance.

## Dimensions & Weight



Diameter of junction Box	124 mm
Diameter of stainless-steel enclosure	42 mm
Height	1495 mm (± 100 mm)
Width (arm extension) <sup>A</sup>	722 mm (± 50 mm)
Weight	5.9 kg
Maximum associated sign board dimensions	2200 x 1500 mm

<sup>A</sup> Subject to detailed optical design based on light simulation of the sign board

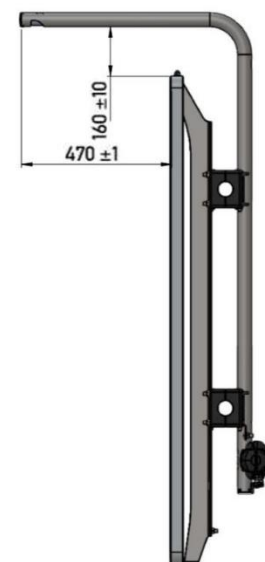
## Material

Tube	Stainless Steel 316L/ 1.4404
Housing Junction Box	LEXAN™ Resin EXL5689
Housing Optical Head	Makrolon® AL2647
Gasket	THERMOLAST® K TC3GPZ

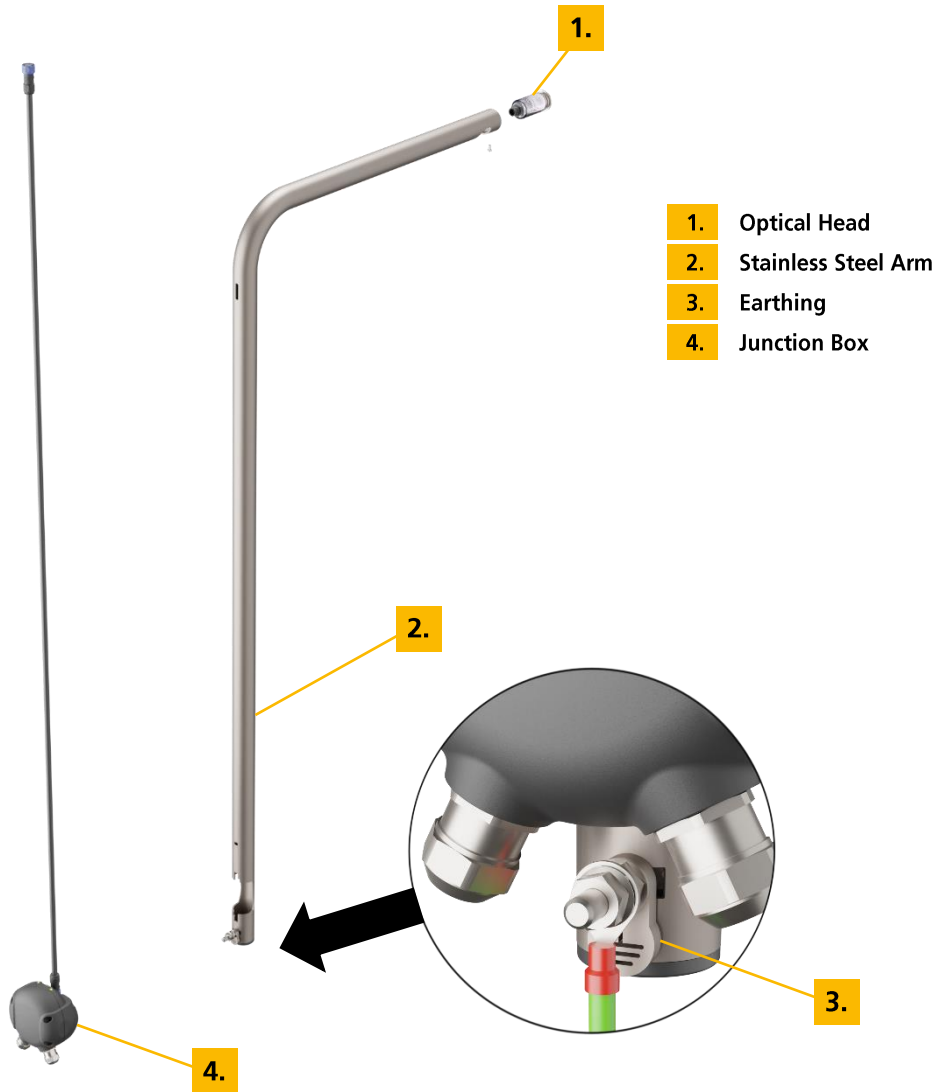
## Optical System

Light colour	3000 k (White)
Uniformity Ratio	1:10
Illuminance	min. 25 lx
Radiance lamp group (acc. To EN 62471:2008)	RG1
Irradiance lamp group (acc. To EN 62471:2008)	RG0

The ID sign light is installed above or below the area to be illuminated (up to 1500 mm high by 2200 mm wide). The following drawings show the installation data including the position and optimum distance.



## Components

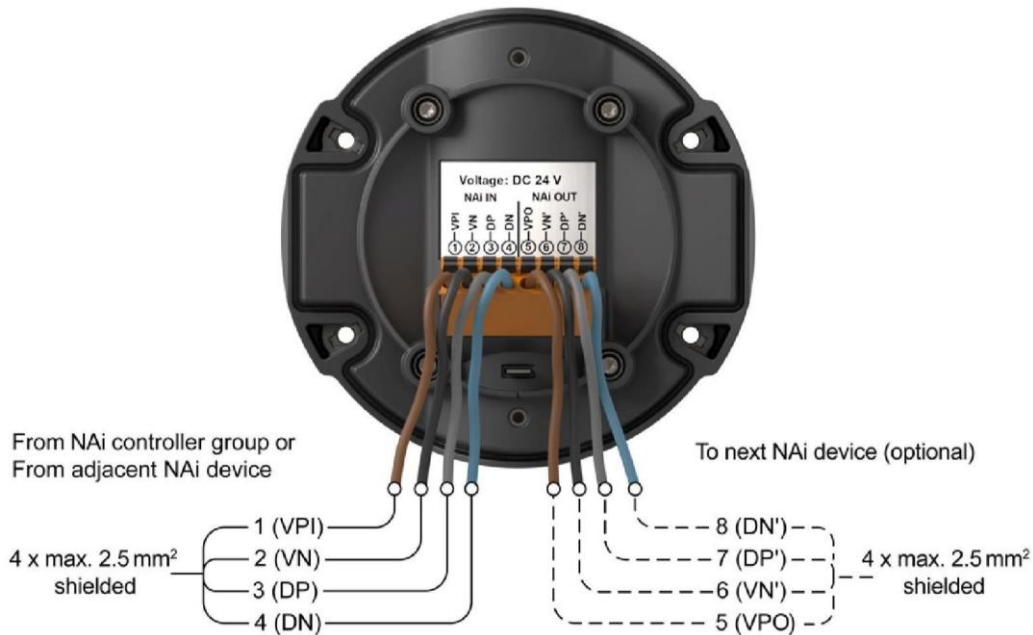


Note: All housing components including the cable glands satisfy the IP67 degree of protection requirements according to IEC 60529. During connection and assembly, ensure that no moisture or dirt penetrates into the open socket.

	Size	For cable diameter	Key width
EMC Cable Gland	M20 x 1.5	8.0 – 15.0 mm	24 mm

## Electrical Connection

Electrical connection	Spring terminal block, max. 2.5 mm <sup>2</sup>
Operating voltage $V_{IN}$	DC 24.0 V (-25 % / +25 %)
Power consumption (Peak, $V_{IN} = DC 24 V$ )	1.6 W



1	VPI	Power supply input (Positive)
2	VN	Power supply input (Negative)
3	DP	NAi data (Positive)
4	DN	NAi data (Negative)
5	VPO	Power supply output (Positive – to next device)
6	VN'	Power supply output (Negative – to next device)
7	DP'	NAi data (Positive – to next device)
8	DN'	NAi data (Negative – to next device)

## Environmental Conditions

Ambient temperature (operation)	-25 °C to 55 °C
Ambient temperature (storage / transport)	-40 °C to 70 °C
Humidity (operation / storage / transport)	95 % r.h. up to 45 °C 70 % r.h. for T > 45 °C
Atmospheric pressure (operation / storage / transport)	80 kPa to 108 kPa
Degree of protection (acc. to IEC 60529)	IP67
Luminaire classification (acc. to EN 60598-1:2018)	Rough service luminaire
Impact protection (acc. to IEC 62262-1:2018)	IK08
Wind zone classification (acc. to IEC 61400-1 Ed. 4)	I
Lightning protection zone (acc. to IEC 62305-4:2010)	LPZ0 <sub>b</sub>

## Electrical Safety and Health

Protection class	Class III
Overvoltage protection	Class III
Pollution degree	3

## Reliability

IALA Category	1 <sup>B</sup> (assumed MTTR of 96 h)
Minimum LED lifetime	100 000 h

<sup>B</sup> IALA Recommendation O-130-Categorisation and Availability Objectives for Short Range AtoN

## Compliance

Electromagnetic Compatibility	EN 60945:2002, category "exposed" EN 61547:2009 EN 61000-6-2:2005 EN 61000-6-4:2007 + A1:2011 EN 55015:2013 EN 62479:2011
Environmental	EN 60945:2002, category "exposed" IEC 61892-1:2019 EN 60598-1:2015 + A1:2008
Product Safety	EN 60598-1:2015 + A1:2018 EN 60598-2-5 :2015
Health	EN 62471:2008
Mechanical	EN 60945:2002, category "exposed" EN 60598-1:2015 + A1:2018 EN 60598-2-5:2015 IEC 61892-1:2019 IEC 61892-3:2019

## Ordering Information

Item Number	Product ID	Option Name	Details
30 29 47 00	IDSL-NAI-1000	SeaMark NAI ID Sign Light for ±1000 mm letters	No UPS