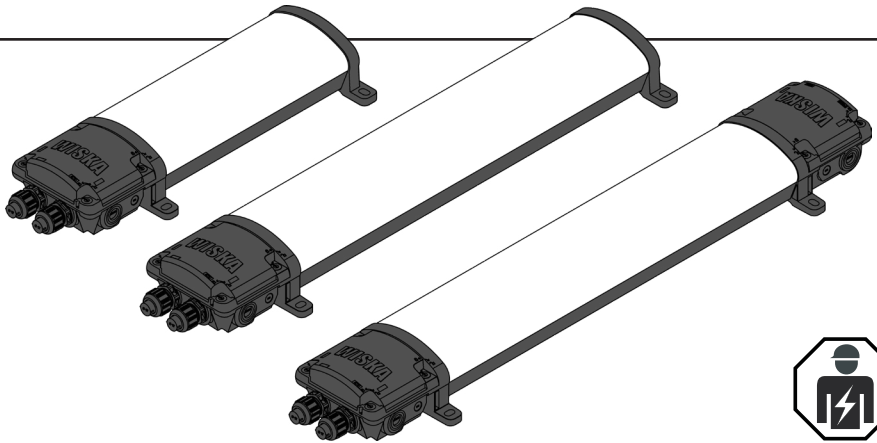


Betriebsanleitung
Instruction manual



Vielzweckleuchte
Multipurpose Luminaire

4010

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1. Safety instructions



DANGER

Probable result: Immediate death or serious injury.



WARNING

Possible result: Death or serious injury.



CAUTION

Possible result: Slight to moderate injury to persons.

ATTENTION

Possible consequence: Material damage and malfunctions.

General



Installation and repairs may only be carried out by a qualified electrician / electrical skilled person.



Electrical voltage: Injury due to open live parts and components.



Unlocking: Switch off the power before starting work and secure it against being switched on again.


- Avoid moisture on all electrical components.
- Only use devices according to their IP protection class. Otherwise, the device may be damaged.
- Avoid dropping or jolting. This may damage the unit.
- Observe the tightening torques specified by the manufacturer.

Electrical Voltage

- Read these instructions carefully. Install the device as described in the operating instructions.
- Make sure that electrical connections and connecting cables comply with all relevant regulations.
- Observe the load limits of sockets or extension cables. There is a risk of fire or electric shock.
- Never repair damaged power cables! They can endanger lives. Disconnect the device from the mains and have it repaired.
- Ask a professional to install all cables and accessories so they would function reliably.
- Observe safety regulations for electricians: Before starting any installation or maintenance work, disconnect the power supply, secure it against being switched on again, check that no voltage is present, earth and short-circuit it, and cover adjacent live parts.
- Do not install equipment outdoors when it is raining.

There is a danger of electric shock!

- Observe minimum distance to other objects and required free space.
- Consider national and local installation requirements and classification rules. In some countries, lighting may only be installed by registered installers.
- Tighten clamping screws in electrical connections as specified by the manufacturer.
- Observe the symbols for connecting the cables in accordance with national directives:

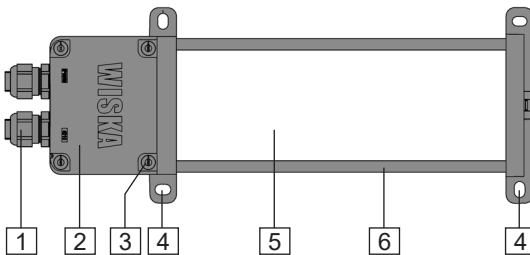
N = Neutral, L = Phase,  = Earth

2. Description and intended use

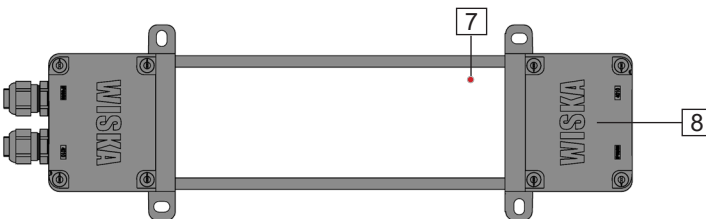
The Multi-Purpose Luminaire 4010 is used for illumination on ships. The model comprises of a housing with up to three built-in LED modules and an isolated connector box for the power supply. It comes either as a long or a short variant with or without emergency light function. The emergency light can be powered by a backup battery inside the luminaire or external power supply. The model provides a second cable gland for looping the cable through. The power supply is either 230V AC or 24 V DC. The mounting feet are built-in and are equipped with oblong holes in both directions for a precise alignment.

[Front view]

Standard luminaire



Luminaire with Battery Backup Emergency Light (Type E02)



- | | |
|--------------------------------|-------------------------------|
| 1: Cable gland | 5: Diffuser |
| 2: Connection box cover | 6: Housing with light source |
| 3: Connection box cover screws | 7: Battery Backup Status LED* |
| 4: Mounting brackets (4) | 8: Battery enclosure |

* two-color LED for status indication (red, green) with the states fast and slow flashing, double flashing, permanent red or permanent green or off.

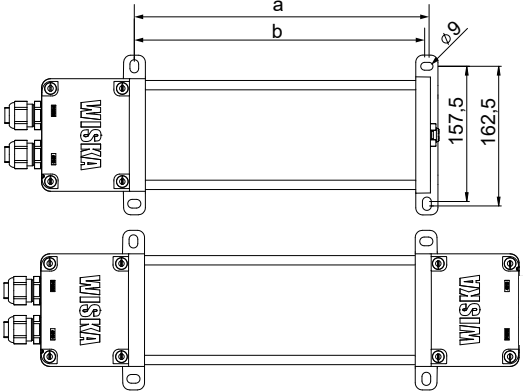
Intended Use

The luminaire is intended for lighting in indoor/ outdoor applications according to its IP degree. Any mobile use or use for a ship's position signaling is not permitted.

3. Transport and assembly

Transport and storage only permitted in original packaging.

3.1 Mounting the luminaire

i	Required materials: 4x M8 screws and washers, stainless steel Required tools: folding rule, drilling machine, screw driver									
1	<p>Mark the positions of the mounting holes.</p>  <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Version / Hole distance</th> <th>a [mm]</th> <th>b [mm]</th> </tr> </thead> <tbody> <tr> <td>Short version</td> <td>331,5</td> <td>326,5</td> </tr> <tr> <td>Long version</td> <td>611,5</td> <td>606,5</td> </tr> </tbody> </table> <p style="text-align: right;">[unit:mm]</p>	Version / Hole distance	a [mm]	b [mm]	Short version	331,5	326,5	Long version	611,5	606,5
Version / Hole distance	a [mm]	b [mm]								
Short version	331,5	326,5								
Long version	611,5	606,5								
i	The mounting holes are oblonged holes for precise adjustment.									
2	Drill 4 holes in the wall or the ceiling.									
3	Fix the lamp with 4 screws.									
4	✓									

3.2 Electrical connection



Electrical connections should only be handled by a qualified electrician.



DANGER Electric shock hazard

Only insert and remove connectors and cables when the power is switched off.

Notes:

- Make sure that a light switch is installed in the electrical supply line.
- Observe the permissible bending radius as specified in the cable manufacturer's data sheet.
- Reduce the tensile force on cables, e.g. through cable ties.
- The PE conductor is required.
- Heat shrink tubing must not be used.

i

Required cable:

- Wire cross section: max. 2.5 mm² (AWG 14)
- Cable diameter 9-17 mm
- Phase (L/+), Neutral (N/-), Protective Earth (PE) conductors required.
- 24 V DC + / - conductors required
- Required materials: Cable end sleeves for flexible conductors, a seal is required.
- Required tools: Stripping pliers, screw driver with a 3.5 mm blade, wrench

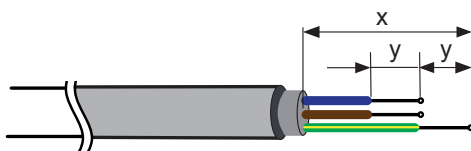
1

Prepare the connection cable.

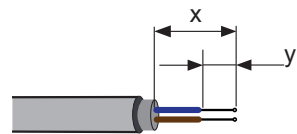
Note: The PE conductor must be 8 mm longer than other conductors. In case of strong tension on the cable the PE conductor is the last conductor torn out of the terminal.

Wiring one luminaire: Dismantle $x=60$ mm. Strip each conductor $y=10$ mm off.
 Loop wiring: Dismantle $x=70$ mm. Shorten the L and N conductor by 10 mm each. Strip each conductor $y=10$ mm off.

When using a shielded cable, the shield must also be stripped 10 mm.
 Flexible conductors only: Attach the cable end sleeves.

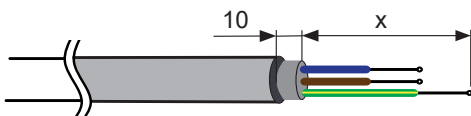


230 V AC connection or



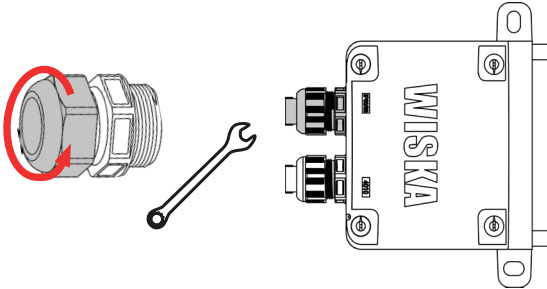
24 V DC connection

Shielded cable:
 only for EMC version (G01)



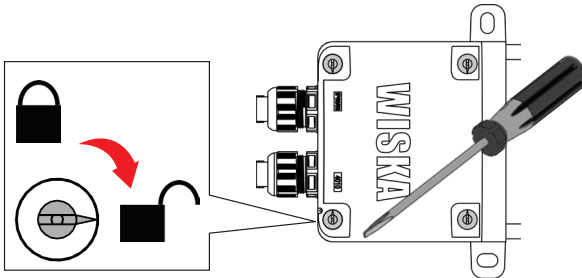
2

Loosen the cable gland's cap nut.



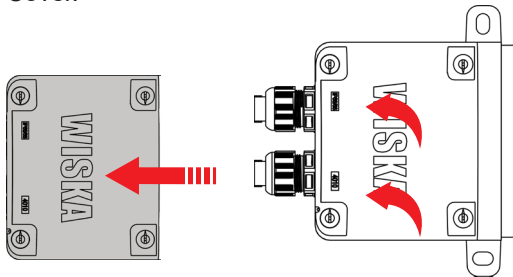
3

Turn the 4 connection box cover screws with a screw driver to open the cover.



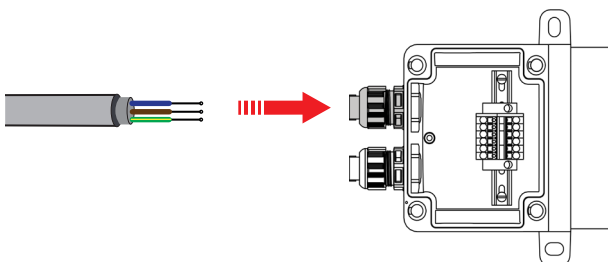
4

Lift the Cover.



5

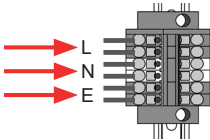
Feed the cable through the cable gland into the connection box.



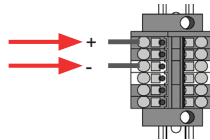
6

Insert the conductors in the push-in terminals according to the purchased model: 230 V or with battery backup emergency light or 24 V version. Observe the polarity!

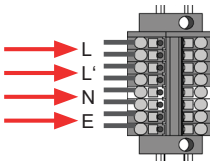
230 V version



24 V DC version

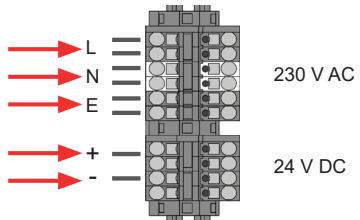


230 V with battery backup version



L = switched
L' = unswitched

230 V with external 24 V backup ver.



Make sure the connectors are fixed.

7

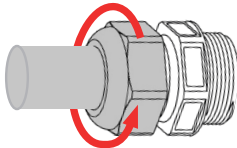
Fasten the cap nut of the cable gland with 4 Nm*.

* The torque is a guide value. Refer to the cable's data to use the specific torque.



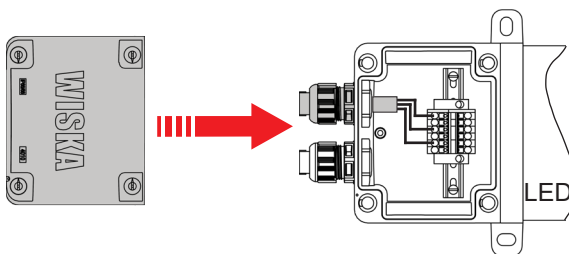
Attention

The torques must not exceed to avoid cable damage.



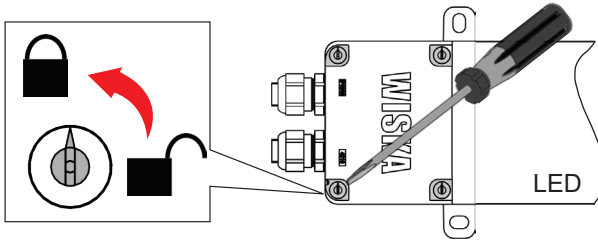
8

Close the cover



9

Turn the 4 connection box cover screws with a screw driver to close the cover.



i

Model 4010 Variant E02 (Battery backup) only: The Battery backup emergency light variant is equipped with a second connection box without cable glands. The battery pack for emergency light is located here. Connect the battery pack after installation of the luminaire. Follow the steps 10-13 only for Model 4010 Variant E02 (Battery backup).

10

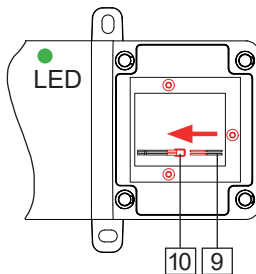
The backup battery is not connected at the time of delivery. Do not connect the battery unless the on-board power supply is set up to prevent operation from the battery for that long.

Connecting the Backup Battery:

- Open the cover of the battery enclosure:
 - Turn the 4 connection box cover screws with a screw driver (like in step 3).
 - Lift the cover (like in step 4).

11

Connect the battery cable (9) to the LED connector (10).



12

Close the cover of the battery enclosure:

- Close the cover (like in step 8).
- Turn the 4 connection box cover screws with a screw driver (like in step 9).

13

Check whether the Battery Backup Status LED lights up.

14



4. Maintenance

Observe applicable national regulations in the country of deployment.

Check the following points:

- Clean surfaces with a clean and damp cloth.
- Compliance with permissible temperatures.
- Light test.
- Cracks.
- Damages to the seals and the diffusor/housing.
- Battery backup emergency light only: Check the Status indicator.
If the status LED
 - lights green, the operation is in standard mode.
 - lights red, the luminaire is defect and must be replaced.
 - flashes red, the backup battery must be replaced.
 - is off, the luminaire is battery powered (emergency function).

5. Replacement of emergency backup battery (E02 version)

The luminaire is equipped with a non-replaceable light source. It is not possible to replace any parts. The luminaire will be replaced in case of any damage or malfunction.

Backup battery emergency light version only: The battery may be replaced if it is defective.



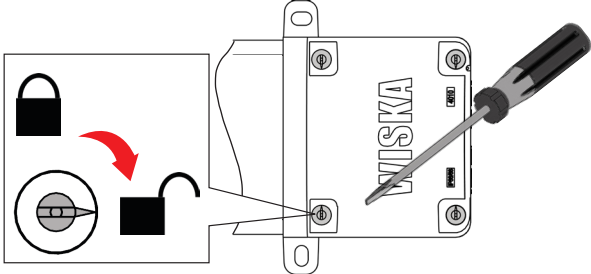
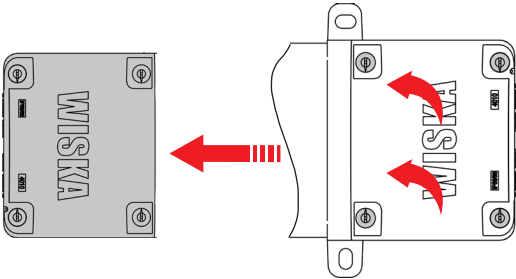
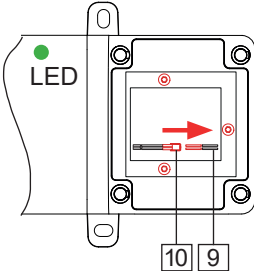
Electrical connections should only be handled by a qualified electrician.



DANGER

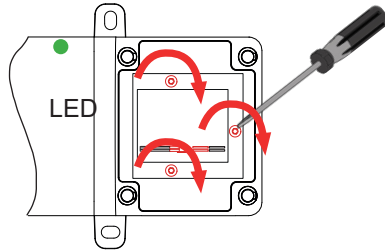
Electric shock hazard

Only insert and remove the battery when the power is switched off.

i	<p>Only applicable for the backup battery emergency light type E02.</p>
1	<p>Turn the 4 connection box cover screws with a screw driver to open the cover.</p> 
2	<p>Lift the cover</p> 
3	<p>Disconnect the battery cable (9) from the LED connector (10).</p> 

4

Loosen the 3 screws on the carrier plate to detach the battery.

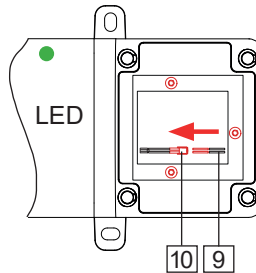


5

Fasten the carrier plate with the new battery using the 3 screws.

6

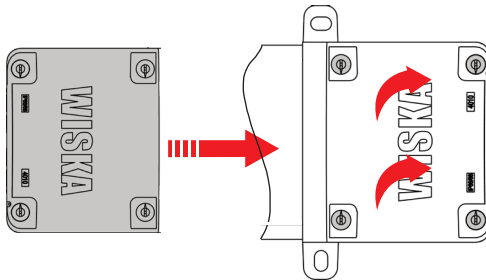
Connect the battery cable (9) to the LED connector (10).

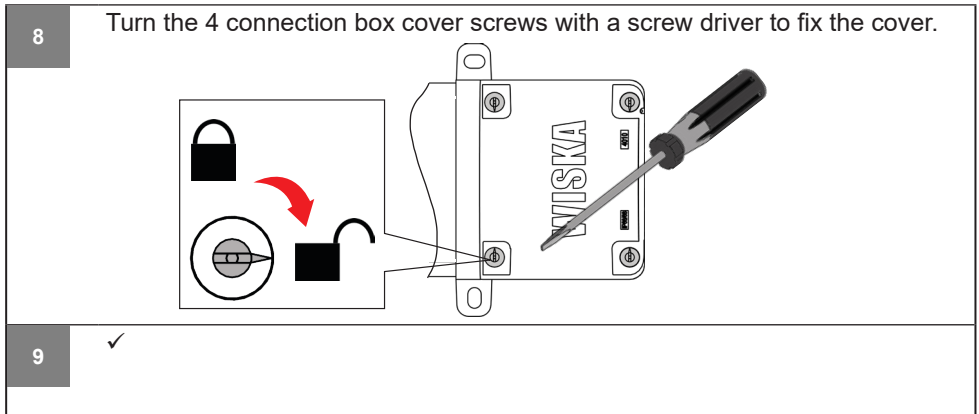


7

Close the cover.

Note: A new cover is included with the battery.





6. Disposal

Waste Electrical and Electronic Equipment

(Applicable in the European Union and other European countries with separate collection systems)

The electrical appliances of WISKA Hoppmann GmbH are professional electrical appliances, which are also called business-to-business (B2B) appliances. We take back old electrical appliances in accordance with national WEEE law, i.e., in Germany § 19 ElektroG, and dispose of them properly. Please contact us before shipping your old WISKA electrical appliances at contact@wiska.de.

Components, such as cable glands, do not fall under the law.

Do not mix or dispose of old electrical equipment from WISKA Hoppmann GmbH with other commercial waste.

7. Technical Data

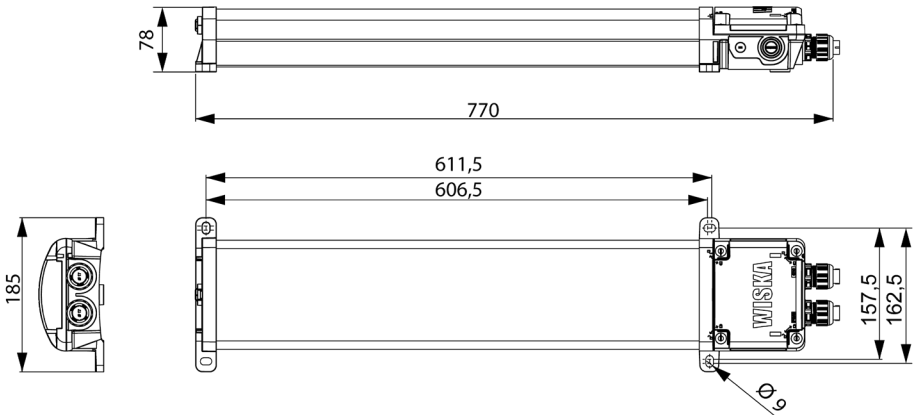
7.1 Specifications

Specification	4010-1x8 / 4010-2x8 / 4010-3x8 230 /24 V versions	4010-1x16 / 4010-2x16 / 4010-3x16 230 V version
Material	Polycarbonate Plastic	
Wattage	8 W (1x8) 16 W (2x8) 24 W (3x8)	16 W (1x16) 32 W (2x16) 48 W (3x16)
Nominal voltage	230 V AC 50/60 Hz (4010-...-230-2-CC models) 24 V DC (4010-...-24-2-CC models)	
Cable wire cross section	Max. 2.5 mm ² , loop through possible	
Protection degree	IP66 / IP67	
IK Code	IK10	
Temp. range	-25° to 50° C	
Operational areas	Indoor / Outdoor	
Protection class	1	
Emergency internal backup battery	Models 4010-2x8 (E02) / 4010-2x16 (E02) 400 Lumen	
External powered emergency light	24 V DC (E01) 300 Lumen (2x8) / 600 Lumen (2x16)	
Mounting	Surface: Wall, Ceiling	
Coverage angle	Wide beam	
Lamp	LED	
Luminous flux	1200 Lumen (4010-1x8) 2400 Lumen (4010-2x8 / 4010-1x16) 3600 Lumen (4010-3x8) 4800 Lumen (4010-2x16) 7200 Lumen (4010-3x16)	
Colour temperature	4000 K	
Colour rendering index	≥ 80	
Rated lifetime	L70/B10 @Ta +45°C	
System lifetime	100000 h / 50000 h (4010 1x8W 230 V)	

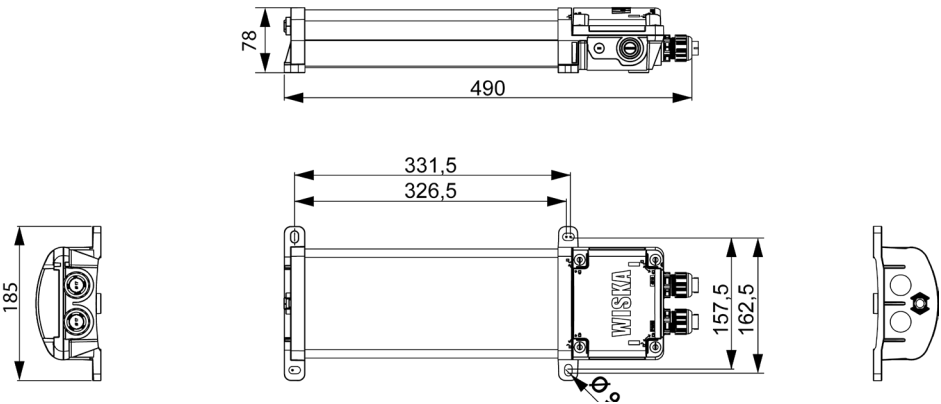
Measurements	4010-...x8	4010-...x16	Emergency light (E02, 230 V)	
	(230 /24 V)	(230 /24 V)	4010-2x8	4010-2x16
Dimensions (mm)	490x185x78	770x185x78	592x185x78	872x185x78
Weight	1.5 kg	2.2 kg	1.8 kg	2.5 kg

7.2 Dimensions

Without Battery backup emergency light

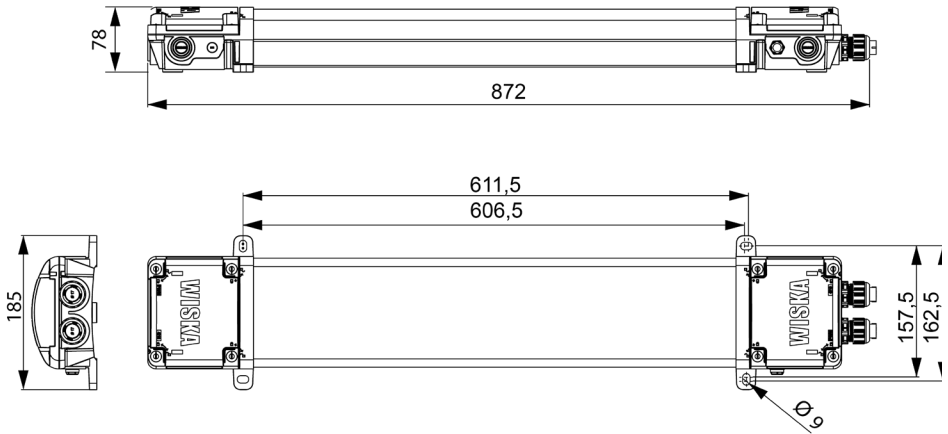


4010-...x16 Standard luminaire

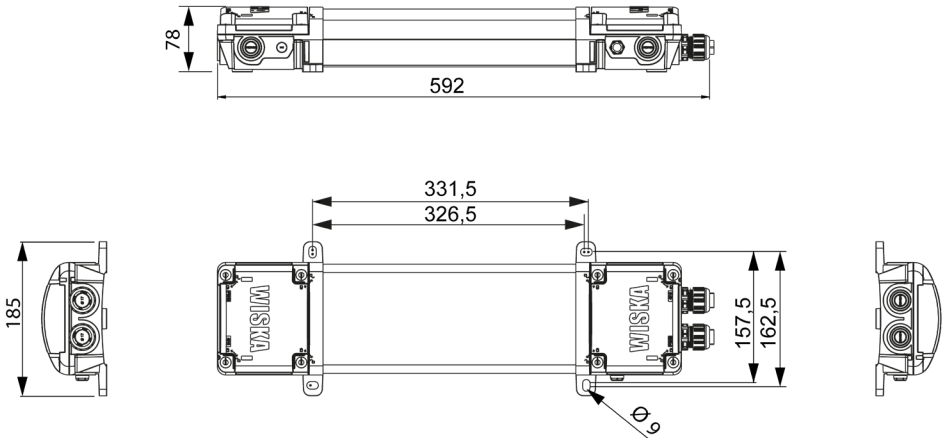


4010-...x8 Standard luminaire

With Battery backup emergency light



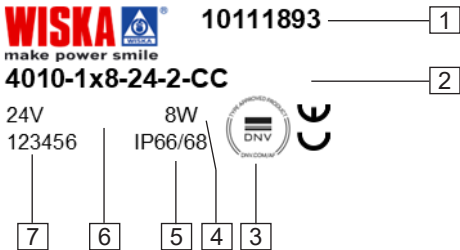
4010-2x16 backup battery emergency light (E02)



4010-2x8 backup battery emergency light (E02)

7.3 Product identification

The type label has a three-row design and includes the following:



Pos.	Designation
1	Article number
2	Article Type
3	Maritime certificate
4	Wattage
5	IP Protection
6	Power supply data
7	Serial number

7.4 Scope of delivery

The luminaire features the housing, the connector and the brackets.

Accessories / Spare parts

Only use original WISKA accessories and spare parts. Accessories and spare parts (e.g., lock nuts, plugs, seals) can be obtained from WISKA Service.

Spare parts

SP-4010 Notlichtbatterie LiFePO4 (Article No.: 22001357)

8. Certificates / Declarations

8.1 DNV Certificate



Certificate No:
TAE00004NT

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Light Fitting

with type designation(s)
Multi-purpose luminaire 4010

Issued to
WISKA Hoppmann GmbH
Kaltenkirchen, Germany

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Vibration class	B
Degree of protection	C(IP66/68)
Temp. class	D
Voltage (V)	230VAC/24VDC
Suitable for Hazardous areas	No

Issued at Høvik on 2023-03-24

This Certificate is valid until 2028-03-23.

DNV local unit: **Hamburg – CMC North/East**

Approval Engineer: **Uwe Supke**



for DNV

Digitally Signed By: Alonso Pontes, Marta
Location: DNV Høvik

Marta Alonso Pontes
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: TA 251

Revision: 2022-12

www.dnv.com

Page 1 of 2

8.2 CE Declaration of Conformity



EU DECLARATION OF CONFORMITY



WISKA Hoppmann GmbH
Kisdorfer Weg 28
24568 Kaltenkirchen
Germany



KCE3-23001-0

Declares under its sole responsibility that:

Product designation:	Luminaire
Type designation:	4010
Description:	Luminaire for electrical installation

corresponds to all the relevant provisions of the directives listed below and valid harmonized and / or international and national standards - including all applicable changes at this time of issuing this document.

Regulation	Standard
2014/35/EU Electrical apparatus (Low voltage directive)	EN 60598-1:2021
	EN 60598-2-5:2015
	EN 60529:1991 + A1:2000 + A2:2013
	EN 61000-4-2:2009
	EN IEC 61000-4-3:2020
2014/30/EU Electromagnetic compatibility (EMC)	EN 61000-4-4:2012
	EN 61000-4-5:2014 + A1:2017; Corrigendum 1
	EN 61000-4-6:2014
	EN IEC 55015:2019 + A11:2020
2011/65/EU Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)	EN IEC 63000:2018

WISKA Hoppmann GmbH
Kaltenkirchen, Germany

Head of Engineering & Design

2023-05-22

8.3 UKCA SDofC

DECLARATION OF CONFORMITY



WISKA Hoppmann GmbH
Kisdorfer Weg 28
24568 Kaltenkirchen
Germany

Authorised Representative:
WISKA UK Ltd.
Unit 7, Hurling Way
St. Columb Major Business Park
St. Columb Major, Cornwall
TR9 6SX
GREAT BRITAIN



KGB3-23001-0

Declares under its sole responsibility that:

Product designation:	Luminaire
Type designation:	4010
Description:	Luminaire for electrical installation

corresponds to all the relevant provisions of the directives listed below and valid harmonized and / or international and national standards - including all applicable changes at this time of issuing this document.

Regulation	Standard
SI 2016 No. 1101 The Electrical Equipment (Safety) Regulations 2016	EN 60598-1:2021 EN 60598-2-5:2015 EN 60529:1991 + A1:2000 + A2:2013 EN 61000-4-2:2009 EN IEC 61000-4-3:2020
SI 2016 No. 1091 The Electromagnetic Compatibility Regulations 2016	EN 61000-4-4:2012 EN 61000-4-5:2014 + A1:2017; Corrigendum 1 EN 61000-4-6:2014 EN IEC 55015:2019 + A11:2020
S.I. 2012 No. 3032 The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012	EN IEC 63000:2018

2023-06-22

WISKA Hoppmann GmbH
Kaltenkirchen, Germany

Head of Engineering & Design

WISKA UK Ltd
St. Columb Major, Great Britain

Authorised Representative



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www.wiska.com

Subject to change without prior notice

Art. No 50109478001