

ILED® Aquarius Bi-Colour Perimeter

User Manual



Contents

1.	Safety	3
2.	Warranty	3
2.1	General.....	3
3.	Type plate	4
4.	Product Description	4
5.	Specifications	5
5.1	General.....	5
5.2	Dimensions	5
6.	Installation	6
6.1	Preparation	6
6.2	Assembly	6
6.3	Connections	7
7.	Use	7
7.1	Commission.....	7
7.2	Insulation test	7
8.	Maintenance	7
9.	Recycling	7
10.	Contact details	8
11.	EC Declaration of Conformity	9

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1. Safety

To ensure that the product is used safely and to optimize its useful life, the following instructions must be observed.

- Only qualified personnel may install the product.
- Observe the locally applicable safety standards and safety regulations.
- During assembling, make sure the light fitting is not subjected to mechanical stress.
If excessive tension is applied to the mounting feet during or after installation, such as when it is mounted on an uneven surface, the mounting feet's spot welds can be broken off from the light fitting.
- Use all the mounting holes when installing the light fitting.
- Ensure that the cable gland used is suitable for the dimensions and type of cable to be connected. This is necessary, otherwise the IP protection cannot be guaranteed.
- Ensure that the cable gland used has an IP level of IP66, IP67 or IP68 in conformance with EN 60529.
- When using metal glands, use an earthing plate and lock nut on the inside of the junction box.
- Ensure there is a reliable connection to the earthing system, both with the external earthing point and with the connection in the light fitting junction box.
- Never open the light fitting's housing.
- Do not clean the light fitting using pressurized steam or a high-pressure water jet. This will avoid damage that is not covered by the warranty.

2. Warranty

2.1 General

The guarantee on the ILED® Bi-Colour Perimeter series is only applicable when the light fitting is used within the operational limits.

Operational limits are:


- The minimum and maximum ambient temperature for the ILED® Signalisation fittings are -40° C and +55°C
- The light fitting must be installed by a qualified person and in compliance with the installation instructions.
- Damage caused by incorrect installation, accidents or external influences such as lightning strike and harmonic distortion in accordance with EN 50055 are not covered by the guarantee.
- The lighting level of the light fitting depends on the temperature and is therefore not covered by the guarantee.

If an ILED® Bi-Colour Perimeter Light fitting fails within the warranty period, IMT B.V. will supply a new fitting with a comparable specification free of charge. Before the guarantee can be confirmed, a defective light fitting must be sent to IMT B.V. at the user's expense for inspection. After this inspection the user will be informed of the result(s). See invoice for individual guarantee agreements.


3. Type plate

The standard light fitting has a type plate:

Version Green/Yellow

CE		IMT bv PASCALWEG 10A 4104 BG CULEMBORG THE NETHERLANDS		
TYPE	ILED Bi-Colour Peri			
VERSION	Green/Yellow	Hz	50/60	
Tamb.	-40°C/55°C	VOLTAGE	95-255Vac	
SERIAL NO.	.....	CURRENT	Max 90-40mA	
		POWER	Max 10W	
YEAR OF CONSTRUCTION	.....	IP	66	
DO NOT OPEN WHEN ENERGIZED				

Version Green/Blue

CE		IMT bv PASCALWEG 10A 4104 BG CULEMBORG THE NETHERLANDS		
TYPE	ILED Bi-Colour Peri			
VERSION	Green/Blue	Hz	50/60	
Tamb.	-40°C/55°C	VOLTAGE	95-255Vac	
SERIAL NO.	.....	CURRENT	Max 180-80mA	
		POWER	Max 20W	
YEAR OF CONSTRUCTION	.....	IP	66	
DO NOT OPEN WHEN ENERGIZED				

4. Product Description

All ILED® Bi-Colour Perimeter light fittings are designed for use in demanding surroundings.



The various ILED® Signalisation light fittings:

- Are sealed for life
- Are vibration-proof
- Are based on ILED® technology
- explosion-safe model ATEX category 2 suitable for use in Zone 1 & 21¹

¹ There is a high risk of an explosive gas mixture being present during normal operating conditions (10 to 1,000 hours per year).

5. Specifications

5.1 General

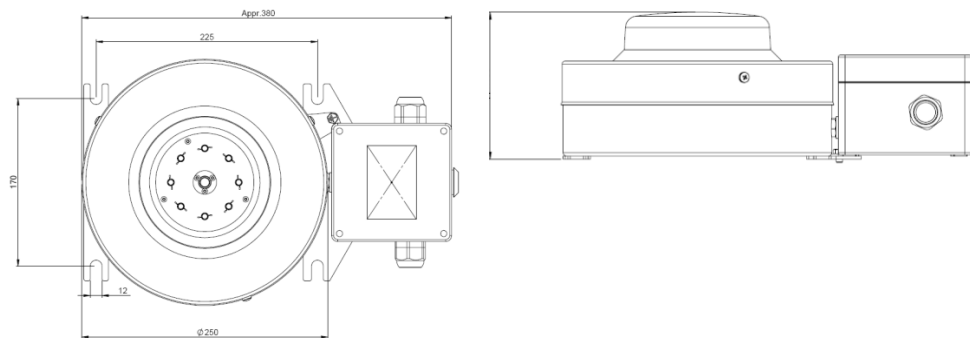
Housing	: Stainless steel 316L (AISI)
Lens	: Hardened glass
Colour	: Perimeter Green, Yellow and Blue , according to other ICAO editions
Mechanical protection	: IP66
Voltage Multi-Voltage	: 95-255Vac 50/60Hz
Burning position	: Universal
(Re)ignition	: Immediate
Power factor	: >0,96
Connection	: Fitted as standard with a junction box, type E012129, suitable for a single-phase connection.

Options

The following options are available for all the ILED® Bi-Colour Perimeter light fittings:

- Junction boxes in other sizes.

5.2 Dimensions



6. Installation

6.1 Preparation

1. Check whether the light fitting is to be installed in an environment that meets the ambient temperatures. This data is included on the light fitting type plate.



WARNING

Installation of a light fitting in an environment that does not meet the specified conditions may result in a dangerous situation.



WARNING

Installation of a light fitting in an environment that does not meet the specified ambient temperatures may have a negative effect on the useful life of the light fitting.

2. Choose the correct type of protection for the light fitting. When doing so, ensure:
 - a. The choice of cut-out current for the safety device is suitable for the expected nominal current. This depends on the number of light fittings that are connected.
 - b. The safety device's cut-out power is suitable for the maximum short-circuit current that the mains power supply can provide.

6.2 Assembly

1. Remove the light fitting from the packaging.
2. Inspect the light fitting for mechanical damage.



WARNING

Installation of a light fitting in an environment that does not meet the specified conditions may result in a dangerous situation.



WARNING

Installation of a light fitting in an environment that does not meet the specified ambient temperatures may have a negative effect on the useful life of the light fitting.

3. Mount the light fitting to the construction.
 - Ensure there is a reliable connection to the earthing system, both with the external earthing point and with the connection in the light fitting junction box.
 - Ensure that the cable gland is suitable for the dimensions of the type of cable that will be connected and has an IP level of IP66, IP67 or IP68 in conformance with EN 60529, and in case of an explosion proof lighting fixture, is Ex-e certified according to IEC 60079-7. This is necessary to ensure the IP protection, and to be suitable for a hazardous environment.



WARNING

During assembly, make sure the light fitting is not subjected to mechanical stress.

4. Route the connection cable correctly through the cable gland. Pay special attention to make sure the cable gland is suitable for the dimensions and type of cable to be connected. This is necessary, otherwise the IP protection cannot be guaranteed. An M20 cable gland is suitable for a cable diameter of 5.5 - 13 mm and an M25 cable gland is suitable for a cable diameter of 8 - 17 mm.



WARNING

If metal cable glands or blind plugs are used, an earthing plate must be used in the junction box.



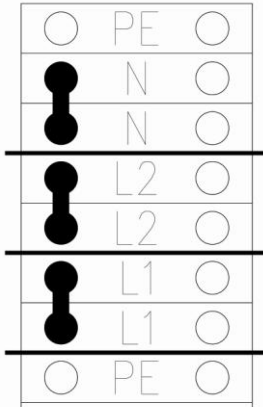
WARNING

If other cable glands or blind plugs are used, they must at least meet the requirements of ATEX Ex II 2 G Ex e II in accordance with EN 60079-0:2006 and EN 60079-7:2007 or meet the requirements of ATEX Ex II 2 D Ex tD A21 IP66 in accordance with EN 61241-0 and EN 61241-1. Threaded holes in the junction box are M20 x 1.5 or M25 x 1.5.

5. Cut the cable to the required length.
6. Connect the cable to the terminals. The standard terminals in the junction box are suitable as a standard for a core diameter of 0.22 - 4 mm².
7. Check the connections that have been made.
8. Close the junction box

6.3 Connections

As standard, there is a terminal block in the junction box of the ILED® Bi-Colour Perimeter which is suitable for a 1-phase connection as shown in the diagram.



The Following connections can be made:

- L1 and N Power connection for Green
- L2 and N Power connection for Yellow/Blue



WARNING
Never ignite both colours at the same time.

7. Use

7.1 Commissioning

The light fitting can be used as soon as the installation has been completed.

7.2 Insulation test

Installations in which ILED® Bi-Colour Perimeter fittings are installed can be tested by means of an insulation test. For this test, apply a maximum of 500 VDC between earth and phase or neutral wire.



WARNING
Never apply more than 500 VDC between a phase and a neutral wire.

All the light fittings are subjected to a dielectric test during manufacture. In addition, the light fittings have also been subjected to an endurance test.

8. Maintenance

The light fittings are 'sealed for life' and, therefore, cannot be opened. Consequently a visual inspection for correct operation is sufficient.



WARNING
Opening the light fitting invalidates any warranty claim.

9. Recycling

For recycling the light fitting, agreements have been made with local authorities within the context of the WEEE directive.

Contact your local partner (see 'Contact details'). Your local partner will take care of further processing

10. Contact details

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THE NETHERLANDS
Phone : +31 (0)88 - 12 69 100
Fax : +31 (0)88 - 12 69 101
E-mail : sales@imt.eu

For an up-to-date overview of all national and international contacts, visit our website: www.imt.eu.

11. EC Declaration of Conformity

The undersigned, representing the company

IMT B.V.

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The Netherlands
Phone :+31 (0) 88 - 12 69 100

herewith declares that the product, **ILED® Signalisation lighting**, identified as Ex II 2 G Ex e mb II T4, Ex II 2 D Ex tD A21 IP66 T100° C, complies with the terms of the EU directive(s), including all applicable supplements.

2004/108/EC	Electromagnetic Compatibility.
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And with the provisions of the following standards and/or technical specifications.

Standard	Issue	Title
EN 61547	2009	Equipment for general lighting purposes. EMC immunity requirements
EN 61000-3-2	2006	Limits for harmonic current emissions (equipment input current up to and including 16A per phase),

Culemborg, 1-12-2010



IMT B.V.
R.L.L.M.G. Mignot Managing director



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