

ILED Aquarius Illuminated Windssock

CAP 437 Helidecks
Offshore Wind Farms
Petro-Chem Industries



a xylem brand

ILED Aquarius Illuminated Windsock

Overview

The ILED Aquarius Illuminated Windsock provides pilots with an indication of the wind direction as specified by IMO Modu Code, CAA CAP 437 and ICAO Annex 14. These regulations require the presence of at least one windsock, which if the helideck is intended for use at night, must be illuminated. Utilising Tideland's ILED technology, the windsock is illuminated internally, thereby minimising glare and thus increasing safety.

The ILED Aquarius Illuminated Windsock is just one of the products in Tideland's complete range of ILED helideck signalisation and lighting solutions, which includes the CIRCLE-H and Helideck Status Light (Wave-Off) Systems as well as perimeter lights, obstruction warning lights and floodlights.

The ILED Aquarius Illuminated Windsock is manufactured out of corrosion resistant materials. All exposed material, with the exception of the lighting fixture itself, is Stainless steel AISI 316L. For the lighting fixture aluminium was chosen because of its excellent thermal conductivity, ensuring that the LEDs have the longest possible service life. The alloy used is extremely corrosion resistant and recommended for offshore use.

Also available as an optional extra is an integral Red obstruction light - which also uses Tideland's ILED technology. Available as either certified to ATEX Zone 1, or as an industrial Safe Area version. The windsock system is also ideal for onshore installations such as petro-chemical works, helipads and airports. As with all Tideland products, the ILED Aquarius Illuminated Windsock is designed to require an absolute minimum of maintenance.

Tideland's sealed unit philosophy, which keeps all contaminants and corrosive influences away from sensitive electronics, combined with the ATEX/IECEX Ex e certification means that only a periodic visual inspection is required. Whilst smart design and the use of the highest grade materials and components enables excellent heat management that ensures the longest possible operating life.

An example of the smart design that sets the windsock apart from all others is the unique reflector mechanism, which completely removes the need to use moving electrical parts - such parts being highly prone to failure, especially in the corrosive environment encountered offshore. The innovative design and use of extremely durable materials result in increased operational safety and a lower total cost of ownership.



Technical Details

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Model	ILED Aquarius Windsock
Light Source	LED
System Power	± 35 W (without top light)
Light Colour	White
Ambient Temperature	-40 °C up to +55 °C
(Re)ignition	Immediate
Voltage Range	90 – 250 Vac
Power Factor/Cos φ	>0.90
IP Rating	IP66
IEC Protection Classes	Class 1
Lens	Toughened borosilicate glass
Housing	Marine Grade Aluminium Anodized
Construction Height	2.58 m
Base pole Height	1.67 m
Windsock Size	Ø 50 cm, length 150 cm
Weight of Construction	45 kg
Mounting Flange Size	Ø 220 mm
Mounting Holes	8 x 18, Ø 180 mm
Standard Version	Standard Ex e junction box 1x M20 entry (stainless steel) Terminals suitable for max. 4 mm ²

Certificate Details

Model	ILED Aquarius Windsock
ATEX Classification	Group II, Category 2, Gas and Dust
Area Classification	Category 2 (Zone 1 and 21)
Certificate (ATEX)	SIRA 11ATEX3101X & SIRA 11ATEX5239U
Certificate (IECEX)	IECEX SIR 11.0046X & IECEX SIR 11.0103U
Fixture	
Marking (ATEX)	II 2GD Ex e IIC T4 Gb Ex tb IIIC T135°C IP66 Db Ta = -40°C to +55°C
Marking (IECEX)	Ex e IIC T4 Gb Ex tb III C T135°C IP66 Db Ta = -40°C to +55°C
Power Supply	
Marking(ATEX)	II 2GD Ex e mb IIC T4 Gb Ex tb IIIC T135°C Db IP66 Ta = -40°C to +55°C
Marking (IECEX)	Ex e mb IIC T4 Gb Ex tb III C T135°C Db IP66 Ta = 40°C to +55°C
ABS Approval	14-LD1100054-PDA
CE	Yes

Optional

Voltage Range	24 Vdc ± 10% - 35 W
Top Obstruction Light (Red)	5 W, type A & B acc. to ICAO annex 14 and Group A acc. to CAP 168 & CAP 437
Construction Height (incl. top light)	2.80 m
Dividable Base Pole	Height 2 x 83.5 cm
Mounting	Weldable flange, Ø 220 mm, 8 x M16
Windsock Colour Options	Red/White, Orange
Cable	On request

Characteristics

- ILED High life expectancy with low maintenance
- Light fitting is "sealed unit"
- Shock and vibration resistant
- Patented construction
- According to ICAO Annex 14, CAA CAP 437 & 168 and IMO Modu Code 2009, helideck as per § 13.3.2



Unique Reflector Mechanism



ILED Obstruction Light



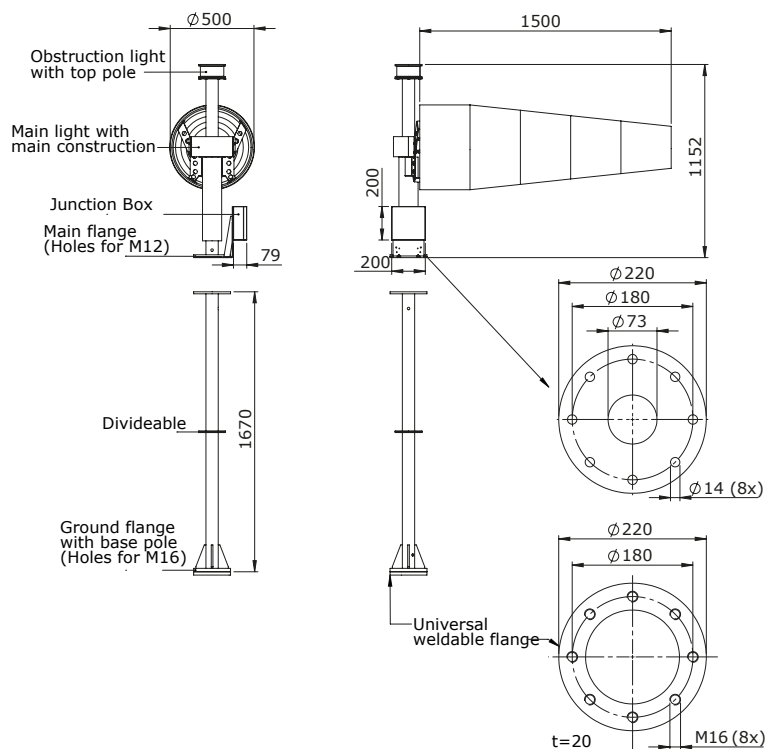
Interchangeable Windsock



Fully Stainless Steel

Technical Drawings

ILED Aquarius Windsock



Article Code	Version	Wattage	Voltage	Connection	Weight
107.002	ILED – Ex	35 W	24V	Ex e stainless steel AISI 316L junction box	31 kg
107.003	ILED – Safe Area	35 W	24V	Stainless steel AISI 316L junction box	31 kg
107.004	ILED – Ex	35 W	90 – 250 Vac	Ex e stainless steel AISI 316L junction box	31 kg
107.005	ILED – Safe Area	35 W	90 – 250 Vac	Stainless steel AISI 316L junction box	31 kg
107.008	ILED – Ex	40 W	24 Vdc	with obstruction light	39 kg
107.009	ILED – Ex	40 W	90-255 Vac	with obstruction light	39 kg
107.010	ILED – Safe Area	40 W	24 Vdc	with obstruction light	39 kg
107.011	ILED – Safe Area	40 W	90-250 Vac	with obstruction light	39 kg

Spares

Article Code	Version	Description	Dimensions	Weight
107.006	ILED Basepole	Stainless Steel AISI 316L + flange	2 x 83.5 cm – divisible	17 kg
107.019	ILED Spare Windsock	Red/White Striped	Ø 50 cm, Length 150 cm, Ø 25 cm	--
107.027	ILED Spare Windsock	Orange	Ø 50 cm, Length 150 cm, Ø 25 cm	--

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