

<b>TEPEX</b> d.o.o. tel. 049 222 900 fax. 049 426 450 e-mail: tepex@tepex.hr www.tepex.hr	<b>USER MANUAL FOR EXPLOSION PROTECTED  BULKHEAD LIGHT FITTING TYPE 0403.24/LED</b>	
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### 1. MANUFACTURER

TEP Ex d.o.o.  
Prilaz dr. Franje Tuđmana 6 HR-49210 ZABOK  
Telephone: +385 49 222 900  
Internet: www.tepex.hr

### 2. GENERAL SAFETY INFORMATIONS



#### **WARNING!**

**The user manual contains basic information about the product. Mounting, installation, usage and maintenance should be carried out under this user manual to provide and ensure safe operation within the nominal characteristics. This user manual complement national Regulation and Standards. The responsible person shall ensure their implementation. Failure off implement this user manual can reduce explosion protection and endanger people, property and the environment. Any improper and illegal actions as well as non-compliance with the provisions of this user manual excludes all responsibility by manufacturer side.**

#### **Before installation/commissioning:**

- Carefully read all instructions,
- Execute proper training of responsible personnel,
- Check that the contents of these instructions is fully understandable by the responsible personnel,
- Make sure that all the requirements and national Regulations as well as all special security measures are applied.

#### **In lack of understanding:**

- Contact the manufacturer.

#### **During operation:**

- Ensure that this user manual and other work instructions are available to the responsible staff at all times,
- Check the implementation of these instructions and all other safety user's instructions.

### 3. PURPOSE

Explosion protected bulkhead light fitting, type 0403.24 / LED is intended for general lighting in industrial areas with potentially explosive atmosphere Zones 1, 2, 21, 22 in accordance with EN 60079-10-1/-2: 2009.  
The quality of the materials ensures compliance with standard functionality in standard industrial atmosphere. For special requirements please contact the manufacturer.

### 4. PRODUCT COMPLIENCE


The product complies with the ATEX Directive 94/9 EC and standard:

- EN IEC 60079-0:2018,
- EN IEC 60079-7:2015/A1:2018,
- EN 60079-18:2015/A1:2017,
- EN 60079-31:2014.

The product has been developed, manufactured and tested according to the existing state of technique accordance with the standards EN 9001:2008 and EN ISO / IEC 80079-34:2011.

- The product is in compliance with the ATEX Directive 2014/34/EU.
- The product is in compliance with the LVD Directive 2014/35 EU.
- The product is in compliance with the RoHS Directive 2011/65 EU.
- The product is in compliance with EMC Directive 2014/30/EU.

### 5. DEGREE OF PROTECTION AND TECHNICAL DATA

Certificate:	FIDI 19 ATEX 0059
Category and explosion protection:	 II 2G Ex eb mb IIC T6 Gb II 2D Ex tb IIIC T80°C Db
Ambient temperature:	-30°C ≥ +50°C
Mechanical protection:	IP66
Resistance to shock:	IK 08
Class of protection:	I (PE - protective earthing)
Rated voltage U <sub>n</sub> :	230 V AC, 50/60 Hz 48 V – 230 V AC/DC – FOR AUTONOME POWER SUPPLY (ONLY ON SPECIAL REQUEST)
Rated power P <sub>n</sub> :	17 W
Rated current I <sub>n</sub> :	80 mA
Power factor:	>0,95
LED light source:	ACRICH2 17W SMJD-3V16W1P3-H with OVP, OCP, OTP protection
OVP protection:	IEC 61000-4-5, EN 62031 3kV/1min impulse overvoltage 8/20µs 6kV/3kA
OCP protection:	2,5AT
OTP protection:	T <sub>smax</sub> =80°C, resettable
Light fitting luminous flux:	1575 lm
LED source luminous flux:	1750 lm
System efficacy:	93 lm/W
Light colour:	2700 K
Refractive index(CRI):	>80
Estimated service life:	50 000 working hours T <sub>amb</sub> = 25°C L90/B10
Connection terminal:	CMC 1-2, 0,5-4mm <sup>2</sup> for connection of phase and neutral Conductor, Single-core, stranded Terminal for internal and external grounding, max 2 x 6 mm <sup>2</sup> sol(r), sol(s), f Possible through-wiring max. 16A for 2.5mm <sup>2</sup> wiring
Cable entries:	2xISO25
Ex e cable gland and plug:	One Ex e II 2G / II 2D cable glands, and one Ex e II 2G / II 2D plug M25x1,5 are integral parts of lamps
Tightening torques values:	Screws M5x25 / 10 for fixing the protective grid: 4 Nm Pinch Nut of the Ex e cable glands: 2.5 Nm Body of the Ex e glands and plug: 3.5 Nm
Basic measures:	355x192x63 mm (LxWxH)
Installation on the surface:	two sheet metal brackets attached with screw kit M6

Pipe mounting:	sheet metal bracket attached with screw kit M6 with one clamp R2” possible rotated for 90°
Weight:	cca 4 kg

## 6. TYPE

Bulkhead light fitting type 0403.24/LED

## 7. INSTALLATION AND PUTTING INTO OPERATION

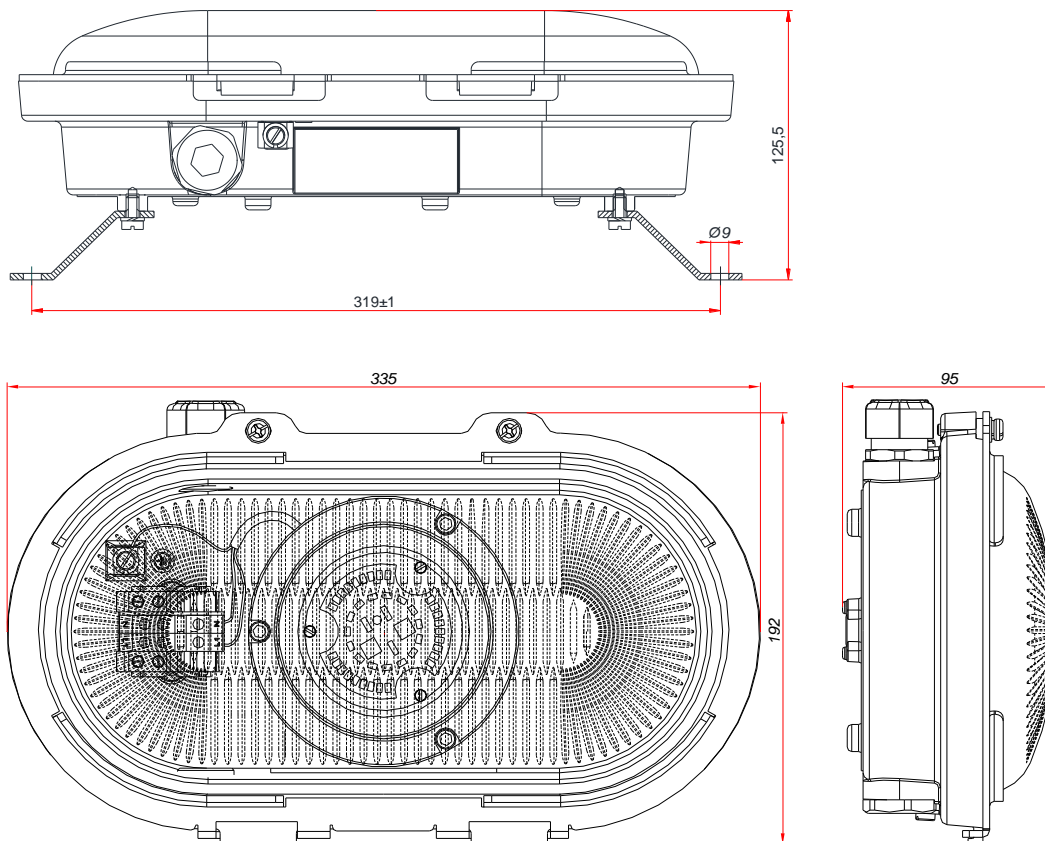
Installation and putting into operation have to be done according to technical and certification data on warning label on lamp, this user manual, national regulations and laws. Only with that, explosion-proof protection of bulkhead light fitting is ensured with EC-type examination certificate.

Installation of lamp (on wall or ceiling) is done with two steel brackets with M6 screws which are delivered with lamp.

Opening of Ex e enclosure is done by unscrewing two screws M5x25/10. Special attention must be dedicated to selection of inner gasket sealing ring of Ex e cable glands according to diameter of connecting cable. Pressure nut and intermediate gland must be tightened with nominal torque. Unused cable entries must be closed with plug. The electric connecting is performing by connecting power supply cable (L, NE, PE) on the connection terminals and terminal for internal grounding.

The closing of the Ex e enclosure should be done by a reverse sequence of action.

## 8. DIMENSIONS



## 9. INSPECTION, MAINTENANCE, REPAIR AND OVERHAUL

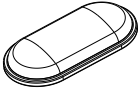






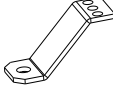

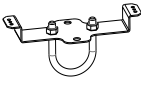
Inspections are carried out in accordance with IEC 60079-17, general and special conditions of manufacturer and users Regulations and includes supervision of parts on which the explosion protection depends, especially:

- that the housing, all part of housing, protective glass and gasket are without rupture and damage,
- that the housing is completely closed with set of protective glass
- that the cable gland, plug, connecting terminals, screws of protective grid are tightened with nominal torque.

All the repairs must be performed by the manufacturer or the manufacturer's authorized personal using the original parts according to the product documentation, all in accordance with EN 60079-19:2011.

If repair or any other procedure are performed on the product by unauthorized person, all producer responsibility for the product and the warranty and the manufacturer's Declaration of conformity becomes invalid.

## 10. SPARE PARTS AND ACCESSORIES

SKICA	OPIS	OZNAKA ZA NARUDŽBU	SKICA	OPIS	OZNAKA ZA NARUDŽBU
	Protective glass 0403.24/LED	0403.24/LED 10-110		II 2G Ex e II cable gland M25	SPU 25
	Protective grid 0403.24/LED	0403.24/LED 20-120		II 2G Ex e II plug M25	SPC 25
	LED module LEDEx 01	LEDEx 01		Terminal set 0403.24/LED	0403.24/LED 10-130
	Gasket 0403.24/LED	0403.24/LED 10-140		Bracket for wall 0403.24/LED	0403.24/LED 10-160
	M25 metal cable gland for unarmored cable	0403.24/LED 10-150		Bracket for pipe R2" 0403.24/LED	0403.24/LED 10-170

## 11. RESPONSIBILITY AND AUTHORIZATION

This instruction is the basic information about the product. It is complementing with the corresponding national laws and regulations.

Production, use, certification and supervision are determined at the national level:

- Regulations concerning equipment and protective systems intended for use in potentially explosive atmospheres EU directive ATEX 2014/34/EU
- Regulations on minimum requirements for safety and health protection of workers and technical inspection of facilities, equipment, installations and equipment in hazardous areas EU directive 1999/92/EC (ATEX 137).

The responsible person shall ensure their implementation at the working facility.

## 12. STORAGE AND TRANSPORT

Transportation and storage of the light fitting is only allowed in the original cardboard box.

## 13. MANUFACTURER'S WARRANTY

The manufacturer provides a Warranty on the product for a period of one year under the provisions of this User manual and the corresponded regulations and laws. This statement has the force of Warranty sheet.

## 14. MARKING

Explosion protected bulkhead light fitting, type 0403.24 / LED is marked with the external and the inner label with technical data:

