

TOSA-EX2/21

Technical conditions of the luminaires installation

ENG

6.5.2026/ rev.3
www.vyrtych.com

TOSA-EX2/21**TÜV 25 ATEX 9256X, TÜV 25 ATEX 9255X**

⊕ II 3G Ex nR IIC T6/T5 Gc

⊕ II 2D Ex tb IIIC T85°C/T95°C Db

IECEX TUR 25.0015X

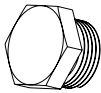
Ex nR IIC T6/T5 Gc

Ex tb IIIC T85°C/T95°C Db

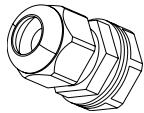
IP66, class I

The explosion proof light fittings meet the standards according to the EU instructions 2014/34/EU. They can be used in areas with danger of explosion according to the following chart:

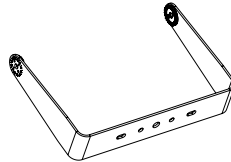
Area with danger of explosive	Marking of external influences	Classification of area	
		Marking	Complutory regulation
Danger of explosion of inflammable dust	BE3N1	ZONE 21, 22	ČSN EN 60079-14 ČSN EN 60079-10-2
Danger of explosion of inflammable gas and vapors	BE3N2	ZONE 2	ČSN EN 60079-14 ČSN EN 60079-10-1

Standard equipment:

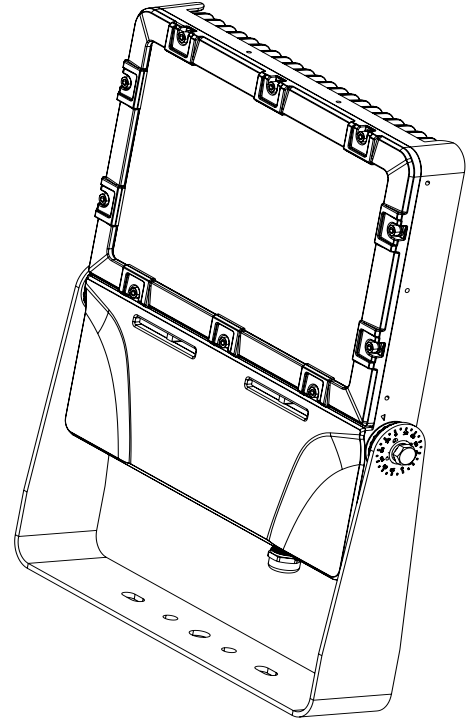
1x EX brass nickel-plated plug M25x1,5



1x EX brass nickel-plated cable gland M25x1,5



1x Adjustable bracket

**Ambient temperature:**

Type	Ta	Temperature class	Maximum surface temperature
TOSA-EX2/21-F-B01-γγγ-23400-εεε-ζζ-λλ	-40°C - +65°C	T5	95°C
	-40°C - +55°C	T6	80°C
TOSA-EX2/21-F-B01-γγγ-29700-εεε-ζζ-λλ	-40°C - +60°C	T5	95°C
	-40°C - +50°C	T6	80°C
TOSA-EX2/21-F-B01-γγγ-35100-εεε-ζζ-λλ	-40°C - +50°C	T5	95°C

This product comply with:

See EU Declaration of conformity

Basic parameters:

Basic parameters	TOSA-EX2/21-F-B01-γγγ-23400-εεε-ζζ-λλ	TOSA-EX2/21-F-B01-γγγ-29700-εεε-ζζ-λλ	TOSA-EX2/21-F-B01-γγγ-35100-εεε-ζζ-λλ
Input voltage	100-277V, 50/60Hz		
Outlook dimensions	567x473x174mm		
Weight	13±0,3kg		
Storing temperature	-40°C - 70°C		
Number of luminaires on B10 circuit breaker	7	4	2
Number of luminaires on B16 circuit breaker	12	7	3
Number of luminaires on C10 circuit breaker	13	8	3
Number of luminaires on C16 circuit breaker	20	12	5

The number of luminaires listed in the table refers to a supply voltage of 230V/50Hz

Designation of the luminaires:**1. Name of the luminaire**

TOSA-EX2/21-F-B01-γγγ-δδδδδ-εεε-ζζ-λλ

- TOSA – name of the luminaire
- EX2/21 – certified luminaire for Zone 2/21
- F – internal designation of the type of enclosure nR
- B01 – approximate dimensions of the luminaire 420x440mm
- γγγ – CCT/ CRI
- δδδδδ – designation of the luminous flux of the LED source
- εεε – type of connection
- ζζ – accessories
- λλ – type of optical system

2. Designation of operating voltage, frequency, insulation class, luminaire power, designation of the allowable ambient temperature range and luminaire IP protection rating**3. Designation of the certificate**

- TÜV – abbreviation of the certification body that issued the certificate
- 25 – year of certificate issue
- ATEX/ IECEx – abbreviation of the certificate type
- xxxX/ .xxxX – certificate number

4. Luminaire protection marking against the risk of explosion from flammable gases and vapors**5. Luminaire protection marking against the risk of dust explosion****6. Item number****7. Product number of the luminaire****8. Notified body number****9. Internal number**

VYRTYCH
Židněves 116, 294 06 Březno, Czech Republic

TOSA-EX2/21-F-B01-γγγ-δδδδδ-εεε-ζζ-λλ ①
100-277V, 50/60Hz, class I, 150W, -40°C ≤ t_a ≤ +50°C, IP66 ② ⑨ ⑩
ATEX: ③ IECEx: ③ TÜV 25 ATEX 9256X ③
⊕ II 3G Ex nR IIC T6/T5 Gc ④ Ex nR IIC T6/T5 Gc ③ TÜV 25 ATEX 9255X
⊕ II 2D Ex tb IIIC T80°C/T95°C Db ⑤ Ex tb IIIC T85°C/T95°C Db IECEx TUR 25.0015X

Art.n.: XX XXX ⑥ Product type: W0071F44200-840AA0LM660000S ⑦

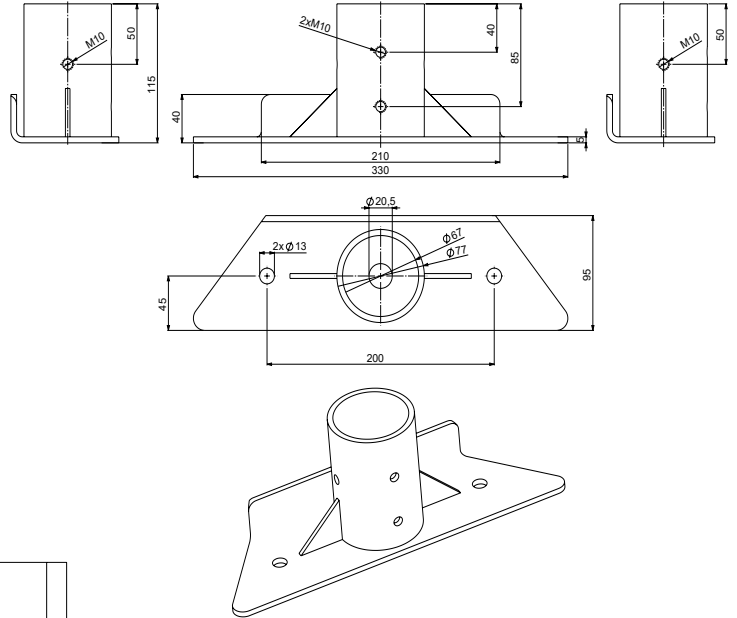
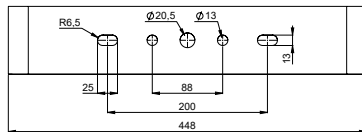
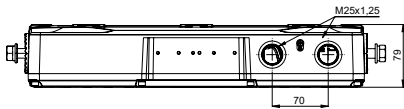
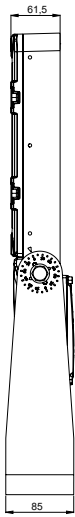
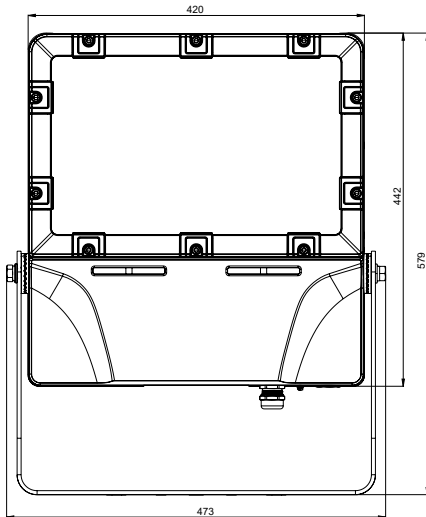
WARNING – DO NOT OPEN WHEN ENERGIZED
WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT
WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS
USE HEAT RESISTANT CABLES AND GLANDS (RATED 100°C)

Made in the Czech Republic

CE ⑧ 1026

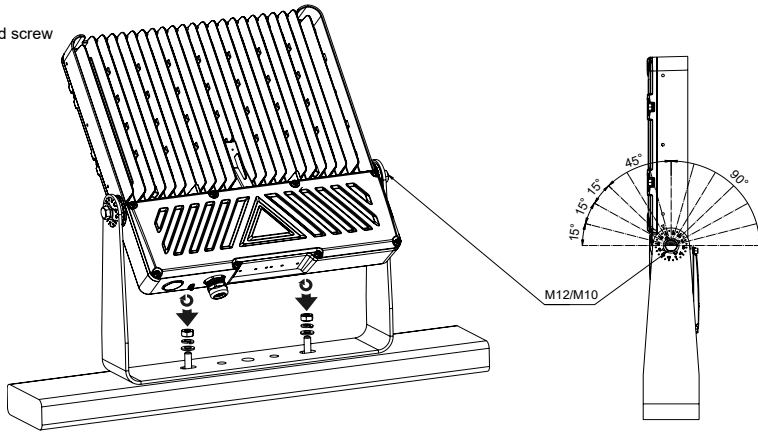
Dimensions of the luminaire:

Dimensions of the slipfitter adapter (Ø60mm):



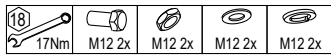
Installation of the luminaire:

Installation of the luminaire using an adjustable bracket - recommended screw size M10/M12 (standard equipment):

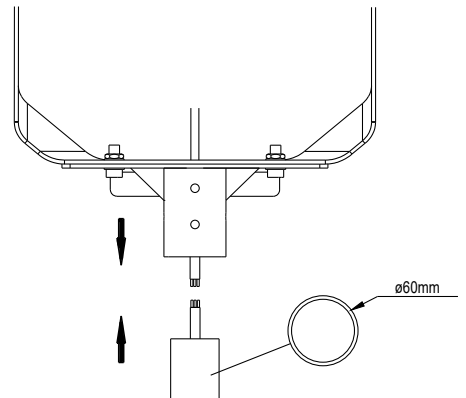
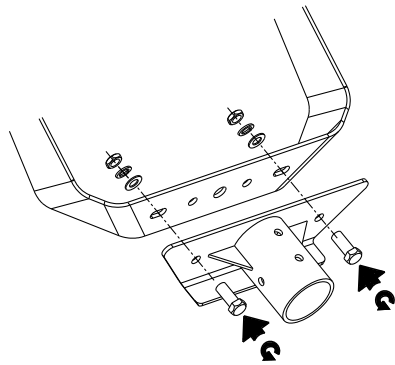


Installation of the luminaire on the pole:

1



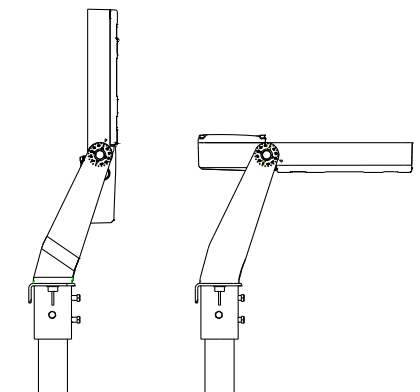
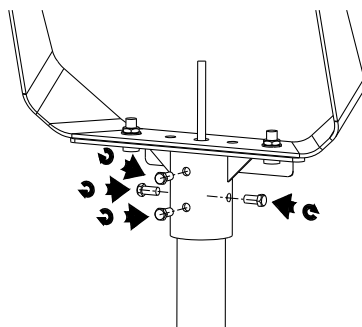
2



3

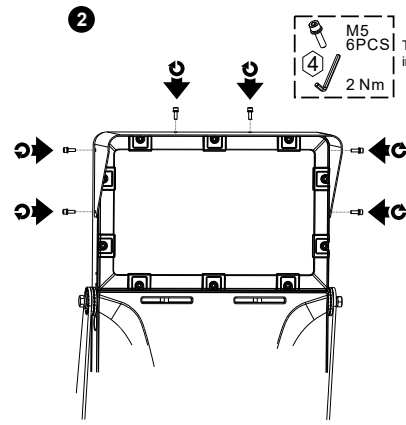
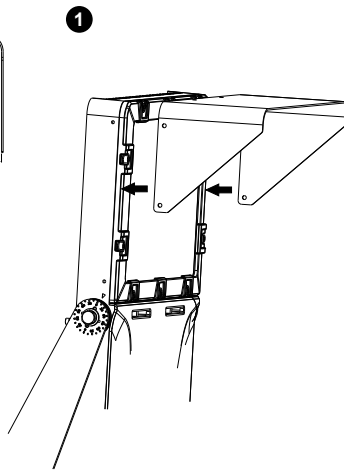
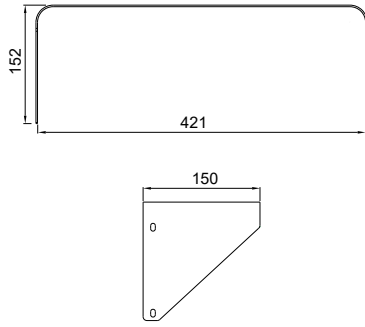


4



Mounting of the accessories:

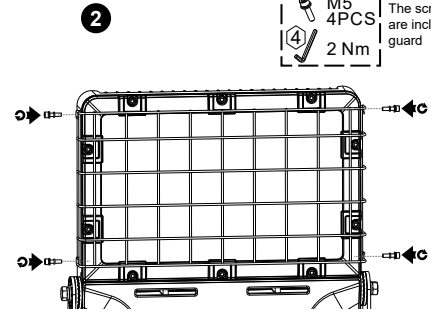
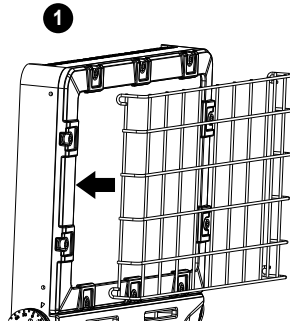
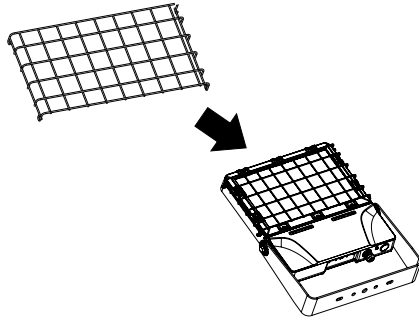
63762 - Glare shield:



M5
6PCS
2 Nm

The screws and washers are included with the shield

63761 - Wire guard:

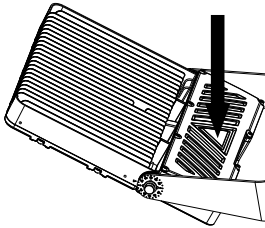


M5
4PCS
2 Nm

The screws and washers are included with the wire guard

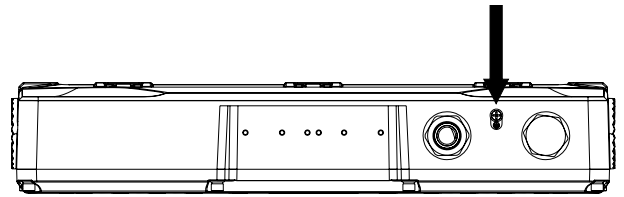
Connection of the luminaire:

1. Attach the luminaire to the mounting surface using the mounting bracket and screws.
2. Open the connection compartment of the luminaire.



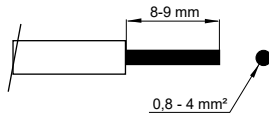
Position of external interconnection:

Cross section - 4mm²
Tightening torque - 4Nm



3. Pass the power cable through the gland (included with the fixture) and connect it to the free terminal in the following way:

GRN = protective conductor
N = neutral conductor
L = phase conductor



If you have any doubts regarding the wiring, please contact the technical support of VYRTYCH a.s.

4. Close the connection compartment and tighten the screws with a tightening torque of 3,3Nm. Before closing the cover, check that the seal is properly seated in the groove.
5. Tighten the cable gland M25x1,5 with the tightening torque according to the table below.
6. Adjust the required angle of the luminaire using the mounting bracket joint. Tighten the securing screw with a torque of 16Nm.

Note:

In case of looping, use a cable gland instead of a plug according to the table. The cable gland for looping is not included in the package.

Cable gland	Clamping range		
	S1+S2+S3	S1+S2	S1
BIMED EBU2MBNS M25x1,5	∅ 10 mm - 12 mm (25Nm)	∅ 12 mm - 14,5 mm (20Nm)	∅ 14,5 mm - 18 mm (18Nm)

Restricted-breathing enclosure test procedure (nR):

The test is not required after installing the luminaire. If there are no changes in the sealing structure and the sealing is not damaged after the connection compartment is opened, changing the sealing is not required. For installing purpose, fix and dismantle the cover of the connection compartment according to the instructions, required torque is 3,3Nm. In other cases the test of the restricted-breathing (nR) must be performed if the "nR" enclosure is opened by the end user.

1. Prepare a calibrated differential pressure gauge, air hoses, a vacuum pump, and other equipment necessary for testing the restricted-breathing enclosure.
2. Connect the air pipe which matches the cable gland to the cable gland and tighten it according to table of the clamping range. Connect the air pipe to the differential pressure gauge.
3. Another holes in the housing must be sealed by blind plug or plug.
4. Use vacuum-pumping equipment to pump negative pressure to 300Pa + max.10% (300-330Pa) and time it with a timer.
5. Observe the change in the pointer reading of the differential pressure gauge. When the timer reaches 180s (3 minutes), record the reading of the differential pressure gauge pointer. If the value is not lower than 150Pa, it is qualified, otherwise, it is unqualified and contact the manufacturer VYRTYCH a.s.

Specific conditons of use:

1. The end user must use certified cable glands with the appropriate type of protection. Cable glands with a minimum IP66 rating and a minimum operating temperature of 100°C must be used.
2. When installing power cables, the requirements for clearances and insulation distances must be observed in accordance with the applicable safety standards of the relevant industry.
3. Danger of electrostatic charging – clean only with a damp cloth.
4. The end user must not open the light source compartment.
5. When the "nR" enclosure is open by the end user, the estricted-breathing enclosure must be verified according to the "Restricted-breathing enclosure test procedure" in this manual.
6. For different models, the "**Ambient temperature**" table with the specified ambient temperature ranges, as shown above, should be considered.

When installing and operating luminaires in explosion-hazardous areas, it is necessary to follow the relevant safety measures according to national installation regulations and standards. The TOSA-EX2/21 luminaires are aluminum, dustproof and waterproof luminaires designed for lighting areas with explosion hazards.



WARNING!!!

The luminaire is intended for fixed installation.

Do not open under voltage.

Replace broken protective cover.

The luminaire can be installed only by authorized person.

When installing luminaire, observe the ESD safety using appropriate tools.

The changing of light source, gasket and other repairs of this luminaire can do only producer, its contractual service technician or a similarly qualified person with authorization from producer and only with original spare parts.

Do not install the luminaire on a surface prone to damage or deformation.

Under no circumstances should the fixture be covered with thermal insulation or similar materials.

The luminaire is suitable for both indoor and outdoor use. Please do not touch the luminaire during operation.

When the luminaire is on, do not look directly at the LED light source.

The minimum height of installation is 2 meters for this luminaire. For heating dissipation, please do not install less than this height.

The luminaire can only be cleaned with a damp cloth. Regular cleaning intervals must be observed.

If the mounting instructions are not observed the producer cannot be responsible for incidental damages incurred.



The producer is included in the system for the collection of electrical equipment and electronic waste in accordance with applicable regulations and decrees, and is part of the packaging return and recycling system of the company EKO-KOM (EK-F06070058).

Basic instructions:

For users of luminaires

For users of emergency luminaires

For DALI system users



After clicking on the QR code, you will be redirected to the relevant website.