

### Technical conditions for mounting series AQUA-70-Ex-LED

In case of any erving on light fitting in premises with danger of explosion, the national safety rules and regulation for prevention of accidents are to be observed. The light fittings must not be installed simultaneously in premises with danger of explosion of inflammable dust and inflammable gas and vapors. The light fittings are not suitable for zone 0 hazardous area.

#### Mounting instructions:

1. Remove protective foil from the tube.
2. Attach the luminaire to plastic or metal mounting bracket (allowed three mounting possibilities). The screws on mounting bracket tighten with torque 2Nm.
3. Fasten the luminaire on the base by means of one of allowed fastening possibilities.
4. Remove 2 pcs. of hexagonal screws on the plug.
5. Take out covering profile above terminal block.
6. Pull the power cable through the cable gland. Tighten bushings to a state of partial deformation of the rubber sealing washers, tightening torque 2,5Nm. Supply cable must have an outer diameter in the range (see. Table no.1 List of cable glands, which is a necessary condition for correct function of cable gland.
7. Connect supply cable into the feeding terminal block as follows:

| AQUA-70-Ex-LED |                        |
|----------------|------------------------|
| on terminal L1 | - phase conductor      |
| on terminal N  | - neutral conductor    |
| on terminal Ⓢ  | - protective conductor |

Look out for the right wire stripping (9 – 10 mm) and conductor engagement into the terminal block. The terminal block is adjusted for the connection of conductors with diameter up to 4 mm². In case of the through wiring connection, observe the possible maximum number of light fittings.

8. Put on covering profile back and put aluminum profile into tube.
9. Put plug in the tube. Attend to correct positions of terminal block holders on bolts of the plug. In case of version with disconnecter attend to correct touch of the disconnecting plate on the surface.
10. Fix hexagonal screws on plug with tightening torque 3-4Nm.
11. After screws fixation check correct position of O-ring inside of PC tube.

#### Warning for the mounting of AQUA-70-Ex-LED light fittings:

The fitting can be installed only by authorized person.

Producer included in recycling system provided by EKO-KOM Company. (EK-F06070058)

The light source in this lighting fixture can be replaced only producer or its contractual service technique or a similarly qualified person.

WARNING - potential danger of electrostatic charging

WARNING - the lighting fixture must be installed in the position, which does not allow the touch of persons and parts of the fixture

WARNING - the lighting for fixed installation

WARNING - Do not open when energized!

WARNING - Do not open when an explosive atmosphere may be present.

WARNING - Any change or replacements of components of the light fittings, which can influence the protection before the danger of explosion are forbidden.

WARNING - The operation with cracked cover is forbidden, replace the damaged cover immediately!!!

In AQUA-70-Ex-LED light fittings, you can use through-wiring connection supplied by the producer of the light fittings.

When the mounting instructions are not observed, the producer can't be responsible for incidental damages incurred.

Lighting fixtures are not allowed to be used in atmospheres with appearance of vibrations, aggressive chemical substances and smear.

Such conditions decrease lifetime of plastic parts.

The luminaire can be fastened with several possible methods with plastic or metal sheet mounting bracket:

- directly on the base (no included) (picture 1)
- with mounting bracket and a cable suspension (no included) (picture 2)
- with mounting bracket and a suspension bracket M5 (no included) (picture 3)

#### Maintenance:

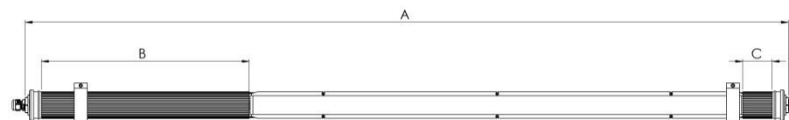
WARNING – the fixture should be cleaned with damp duster only. It is necessary to keep periodic cleaning intervals of lighting fixture.

Table no.1: Table sealing areas for different types of cable glands

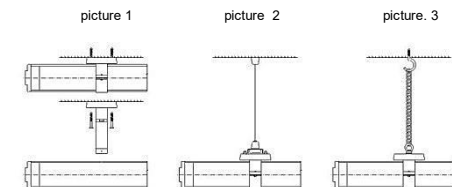
| Cable glands                   | Diameter of the cable for cable glands M20x1,5 |
|--------------------------------|------------------------------------------------|
| OBO V-TEC Ex                   | Ø7-12mm                                        |
| CEAG CHG 960 92.. P...         | Ø5,5-13mm                                      |
| WISKA ESKE/1 (S)(-L)(-*)(-RDE) | Ø7-13mm                                        |
| ELFIT UNI                      | Ø7-12mm                                        |

Table 2: Basic dimensions

| Luminaire               | A (mm) | B (mm) | C (mm) |
|-------------------------|--------|--------|--------|
| AQUA-70-Ex-LED-4000-118 | 1149   | 425    | 65     |
| AQUA-70-Ex-LED-8000-136 | 1709   | 425    | 65     |



#### Possibilities of installation luminaire:



#### Allowed mounting positions of luminaire:

1) Ceiling mounting



2) Wall mounting - horizontal



3) Wall mounting - vertical



\*In this mounting position must be placed LED driver underside of the luminaire.

#### Application of light fittings:

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:

| Prostor s nebezpečím výbuchu            | Označení vnějších vlivů | Klasifikace prostor |                                      |
|-----------------------------------------|-------------------------|---------------------|--------------------------------------|
|                                         |                         | Označení            | Zřizovací předpis                    |
| Nebezpečí výbuchu hořlavých prachů      | BE3N1                   | ZÓNA 21, ZÓNA 22    | ČSN EN 60079-14<br>ČSN EN 60079-10-2 |
| Nebezpečí výbuchu hořlavých plynů a par | BE3N2                   | ZÓNA 1, ZÓNA 2      | ČSN EN 60079-14<br>ČSN EN 60079-10-1 |

#### Technical data:

Admissible range of operating temperature AQUA-70-Ex-LED-4000-118-4K

-20°C to +50°C

Admissible range of operating temperature AQUA-70-Ex-LED-8000-136-4K

-20°C to +50°C

Protection level: IP66/68 15m

Insulation class: I

Rated voltage and frequency:

for ballasts BAREL HFX LED:

110-254V, 50/60Hz AC  
220-250V, 0Hz DC

#### The fixtures are certified by FTZÚ, AO 210, Ostrava – Radvanice:

- 1) Certificate of type FTZÚ 17 ATEX 0052X from date 21. 9. 2017
- 2) Supplement No. 1 to certificate FTZÚ 17 ATEX 0052X from date 29. 1. 2021

#### Marking lights:

- Ⓢ II 2G Ex eb mb op is IIC T4 Gb – without off-load switch
- Ⓢ II 2G Ex db eb mb op is IIC T4 Gb – with off-load switch
- Ⓢ II 2D Ex tb op is IIC T62°C Db

#### Maximum admissible number of AQUA-70-Ex-LED light fittings with through wiring connection for circuit breaker B10:

|                                  |    |
|----------------------------------|----|
| AQUA-70-Ex-LED-4000/8000-118/136 | 15 |
|----------------------------------|----|