

LORD-EX1/21

Technical conditions for mounting luminaire ENG

29.01.2026/ rev.1
www.vyrtych.cz

LORD-EX1/21

FTZÚ 25 ATEX 0070X

II 2G Ex eb mb IIC T4 Gb

II 2D Ex tb IIIC T85°C Db

IECEX FTZÚ 25.0023X

Ex eb mb IIC T4 Gb

Ex tb IIIC T85°C Db

IP66/ IP67, insulation class I

These luminaires comply with the requirements of Government Regulation No. 116/2016 Coll., as amended (Directive 2014/34/EU). They are intended for use in explosive atmospheres as specified in the following table:

Hazardous area	Designation of external influences	Classification of areas	
		Designation	Establishing regulation
Danger of explosion of inflammable dusts	BE3N1	ZONE 21, ZONE 22	ČSN EN 60079-14 / EN 60079-14 ČSN EN 60079-10-2/ EN 60079-10-2
Danger of explosion of inflammable gases and vapours	BE3N2	ZONE 1, ZONE 2	ČSN EN 60079-14/ EN 60079-14 ČSN EN IEC 60079-10-1/ EN IEC 60079-10-1

Permissible operating temperature range:

Type	Driver ⁽¹⁾	Ta	W	IP	Temperature class	Max. surface temperature
LORD-EX1/21-I-L03-YYY-1900-0D2-ζζ-μμ	Barel HFX LED BG2; 110-240 V 50/60 Hz, 220-240V DC	-40°C - +60°C	20	66/67	T4	85 °C
LORD-EX1/21-I-L06-YYY-2200/2750/4000-0ND/0D2-ζζ-μμ	Barel HFX LED BG2; 220-240 V 50/60 Hz, 220-240 V DC	-40°C - +60°C	14/19/27	66/67		
LORD-EX1/21-I-L12-YYY-4000/5500/8000-0ND/0D2-ζζ-μμ		-40°C - +60°C	29/35/51	66/67		
LORD-EX1/21-I-L12-YYY-11500-0ND/0D2-ζζ-μμ		-40°C - +50°C	77	66/67		
LORD-EX1/21-I-L14-YYY-5400/6800/9800-0ND/0D2-ζζ-μμ		-40°C - +60°C	34/42/64	66/67		
LORD-EX1/21-I-L14-YYY-14000-0ND/0D2-ζζ-μμ		-40°C - +45°C	100	66/67		
LORD-EX1/21-I-L06-YYY-2200/2750-NM3A/NA3D2-ζζ-μμ	Barel HFXE LED BG2; 220-240 V 50/60 Hz, 220-240 V DC	0°C - +45°C	14/19	66/67		
LORD-EX1/21-I-L06-YYY-4000-NM3A/NA3D2-ζζ-μμ		0°C - +40°C	27	66/67		
LORD-EX1/21-I-L12-YYY-4000/5500/8000-NM3A/NA3D2-ζζ-μμ		0°C - +45°C	29/35/51	66/67		
LORD-EX1/21-I-L12-YYY-11500-NM3A/NA3D2-ζζ-μμ		0°C - +35°C	77	66/67		
LORD-EX1/21-I-L14-YYY-5400-NM3A/NA3D2-ζζ-μμ		0°C - +50°C	34	66/67		
LORD-EX1/21-I-L14-YYY-6800-NM3A/NA3D2-ζζ-μμ		0°C - +45°C	42	66/67		
LORD-EX1/21-I-L14-YYY-9800-NM3A/NA3D2-ζζ-μμ		0°C - +40°C	64	66		
LORD-EX1/21-I-L14-YYY-14000-NM3A/NA3D2-ζζ-μμ		0°C - +35°C	100	66		

⁽¹⁾ Driver, nominal voltage and frequency at which the ambient temperature was measured.

Nominal voltage and frequency:

for LED drivers BAREL HFX BG2 and BAREL HFXE BG2 LED:

110 V 50/60 Hz, 110 V DC

110-240 V 50/60 Hz, 220-240 V DC

220-240 V 50/60 Hz, 220-240 V DC

When using a driver at 110 V, 50/60 Hz, and 110 V DC, the ambient temperature will decrease by 5 °C.

LORD-EX1/21-I-Lββ-YYY-δδδδδ-εεεε-ζζ-μμ -

IP66 - according to the standards ČSN EN 60079-0
IP67 - according to the standards ČSN EN 60529

Luminaire marking:



Židněves 116, 294 06 Březno, Czech Republic

① LORD-EX1/21-I-Lββ-YYY-δδδδδ-εεεε-ζζ-μμ

② 220-240V, 50/60Hz, 220-240V DC, class I, 52W

③ -40°C ≤ ta ≤ +60°C, IP66/ IP67

④ FTZÚ 25 ATEX xxxX/ IECEX FTZÚ 25.xxxxX

⑤ II 2G Ex eb mb IIC Tx Gb/ Ex eb mb IIC Tx Gb

⑥ II 2D Ex tb IIIC Txx°C Db/ Ex tb IIIC Txx°C Db

⑦ art.n.: 63 849 ⑧ Product Type: V031312080-84D20GC660000E

123456

⑩







Luminaire marking:

1. Name of the luminaire

LORD - name of the luminaire

EX1/21 - luminaire certified for zone 1/21

I - internal marking

Lββ - luminaire length

YYY - CRI/ CCT

δδδδδ - designation of the luminous flux of the LED source

εεεε - connection type

ζζ - internal marking

μμ - luminaire cover marking

2. Designation of the operating voltage, frequency, insulation class of the luminaire power

3. Designation of the allowable ambient temperature range, and luminaire IP

4. Certificate designation

- FTZÚ - abbreviation of the certification authority that issued the certificate

- 25 - year of issuance of the certificate

- ATEX / IECEX - abbreviation of certificate type

- 0000X / 25.0000X - certificate number

5. Luminaire protection marking against the risk of explosion from flammable gases and vapors

6. Luminaire protection marking against the risk of dust explosion

7. Item number

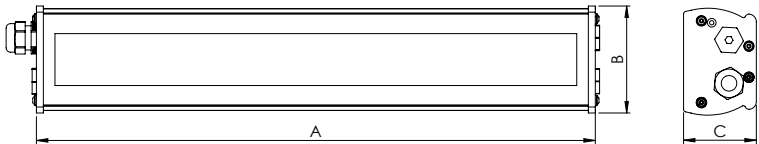
8. Luminaire product number

9. Notified body number

10. Lin code

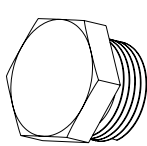
Luminaire dimensions:

Type	A (mm)	B (mm)	C (mm)
LORD-EX1/21-I-L03-γγγ-δδδ00-εεεε-ζζ-μμμ	368	125	85
LORD-EX1/21-I-L06-γγγ-δδδ00-εεεε-ζζ-μμμ	648	125	85
LORD-EX1/21-I-L12-γγγ-δδδ00-εεεε-ζζ-μμμ	1208	125	85
LORD-EX1/21-I-L14-γγγ-δδδ00-εεεε-ζζ-μμμ	1490	125	85

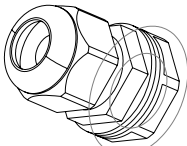


⚠ The placement of mounting clips depends on the length of the luminaire. The recommended distance between the clips and the edge of the luminaire is 50 mm to 150 mm.

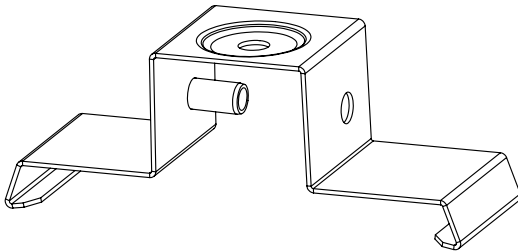
Standard equipment:



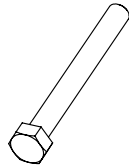
3x Ex plastic cable plug M20



2x Ex plastic cable gland M20



2x mounting clip



2x screw M5x45



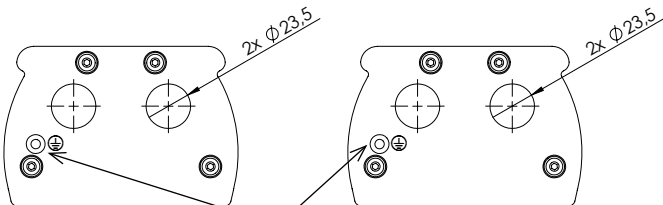
2x flat washer M5



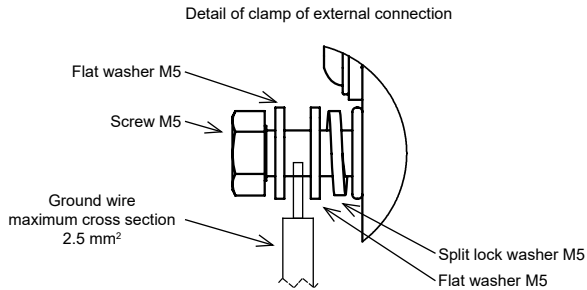
2x split lock washer M5

When using your own cable glands, they must comply with the required type of seal, IP protection rating, temperature range (the same as for the glands we supply), and other technical parameters. Always carry out the installation according to the installation instructions provided by the gland manufacturer. In case of any doubts, please contact technical support at: podpora@vyrtych.cz.

Clamp of external connection:



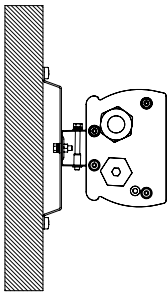
Clamp of external connection



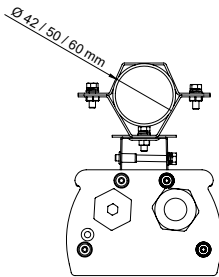
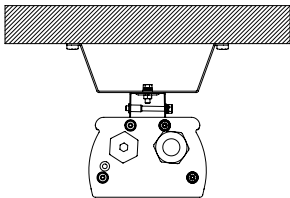
The luminaire is normally equipped with 4x openings Ø 23.5 mm. The wall thickness of the luminaire is 8 mm.

Types of mounting:

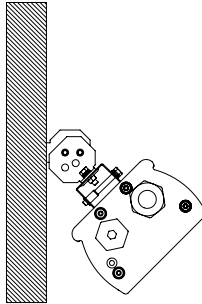
With mounting bracket directly to the supporting surface



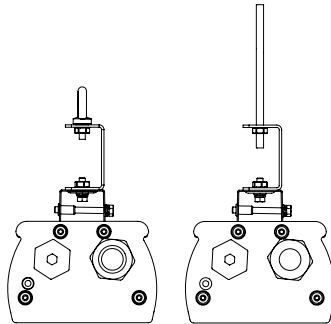
With a tube bracket



With an adjustable bracket to the supporting surface

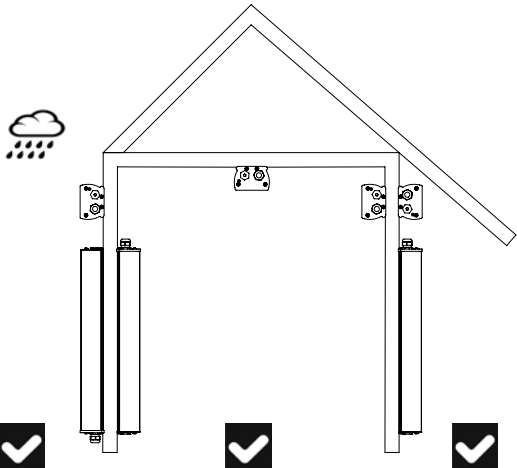


With a mounting U-profile on an M6 eye screw or threaded rod

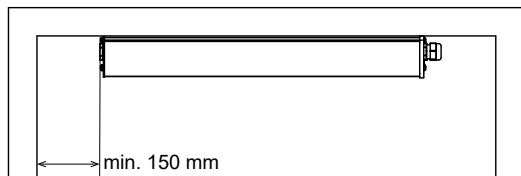
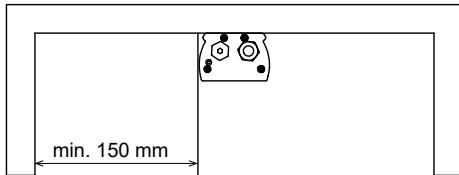


Picture 1
Conditions of outdoor assembly

The light fixture can be installed in both covered and uncovered outdoors areas.

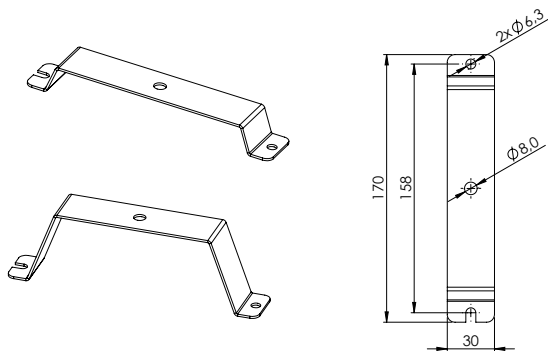


Minimum distance of the light fixture from the wall



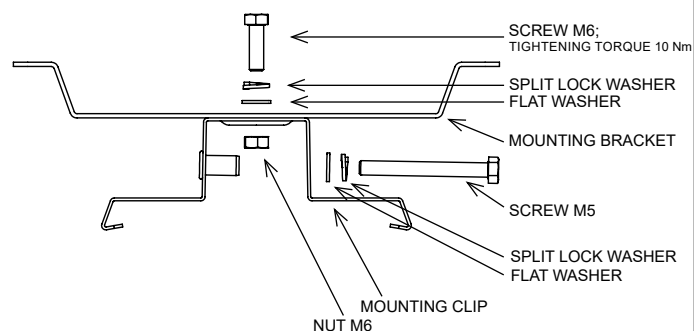
Mounting procedure using mounting brackets directly to the supporting surface:

1

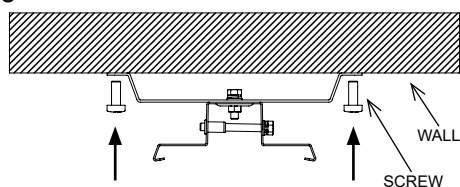


60081 - Mounting bracket **AISI304** - height 15 mm / 60082 - Mounting bracket **AISI304** - height 50 mm
66924 - Mounting bracket **AISI316** - height 15 mm / 66925 - Mounting bracket **AISI316** - height 50 mm

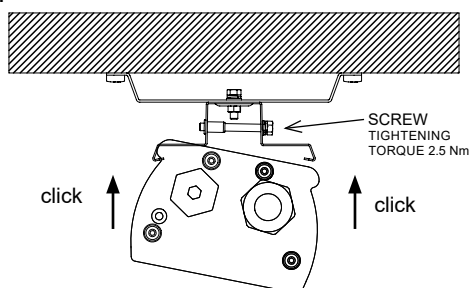
2



3

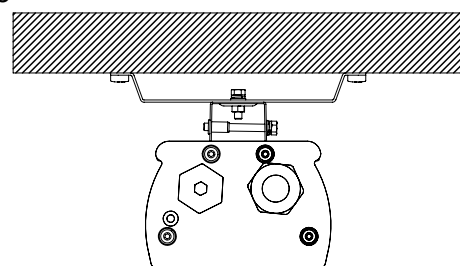


4



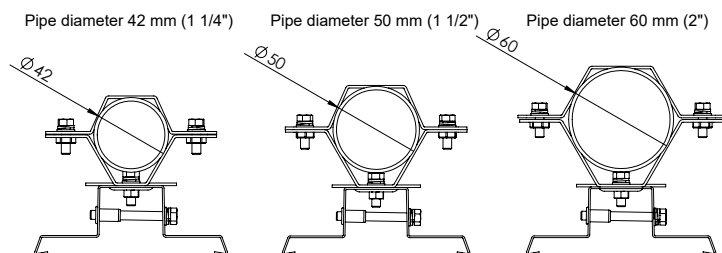
After clicking the luminaire into the mounting clip, it is **NECESSARY** to secure the luminaire with a screw.

5



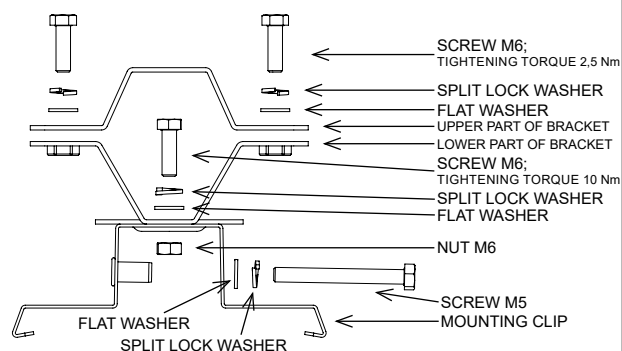
Mounting procedure using a tube bracket:

1

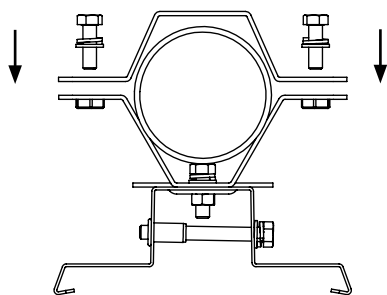


60091 - Accessory set bracket for Ø 42 mm **AISI304** / 60090 - Ø 50 mm / 60089 - Ø 60 mm
66391 - Accessory set bracket for Ø 42 mm **AISI316** / 66930 - Ø 50 mm / 66929 - Ø 60 mm

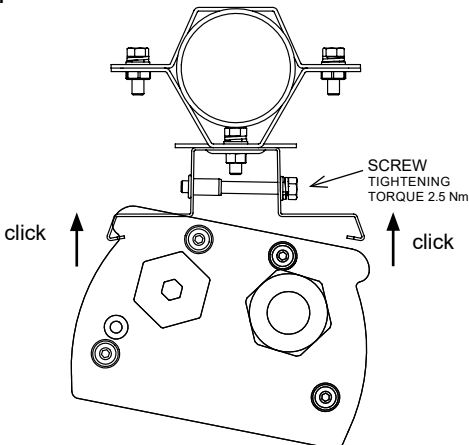
2



3

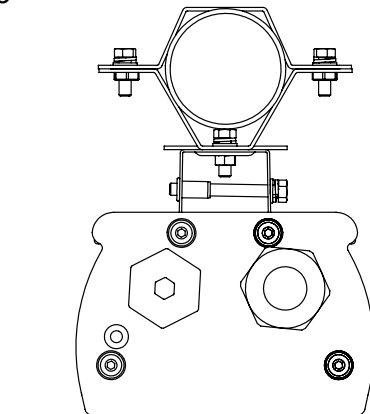


4



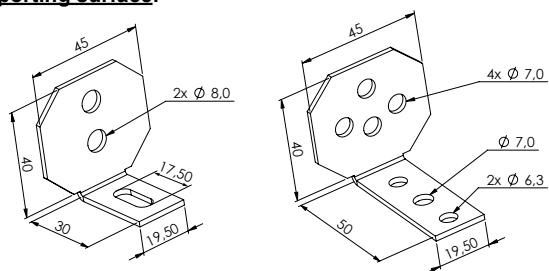
After clicking the luminaire into the mounting clip, it is **NECESSARY** to secure the luminaire with a screw.

5



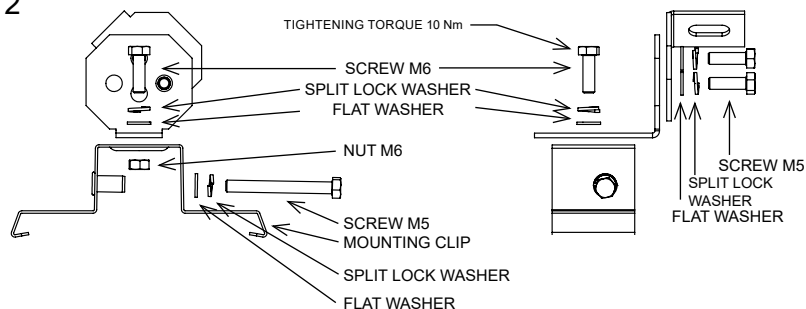
Mounting procedure using an adjustable bracket to the supporting surface:

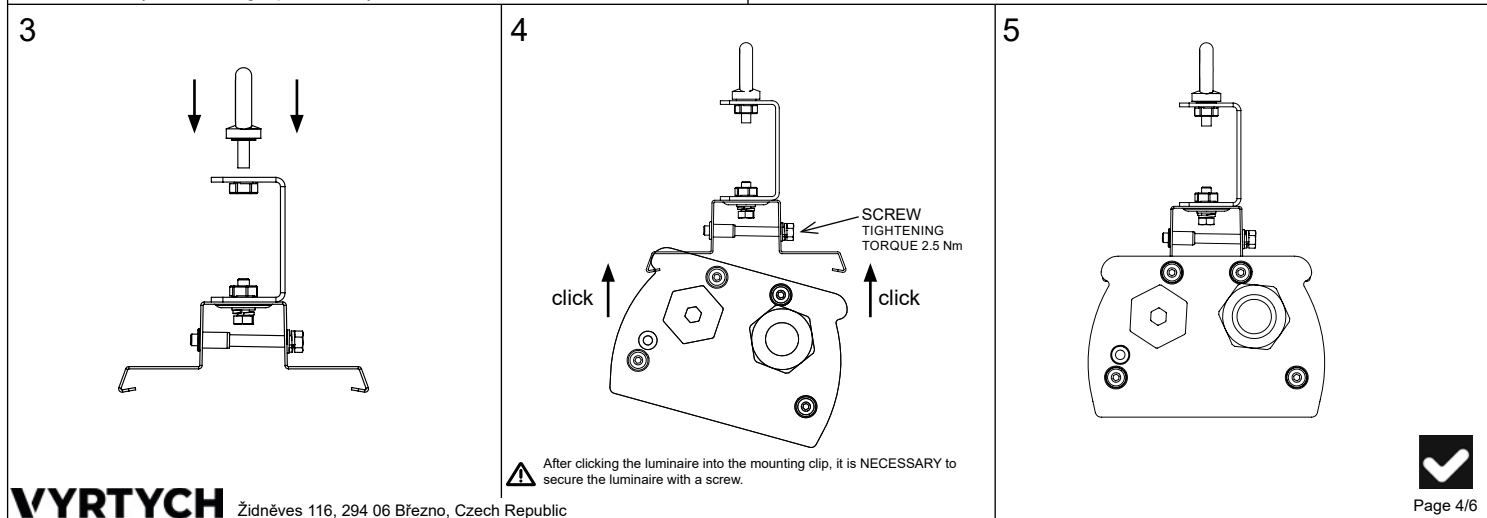
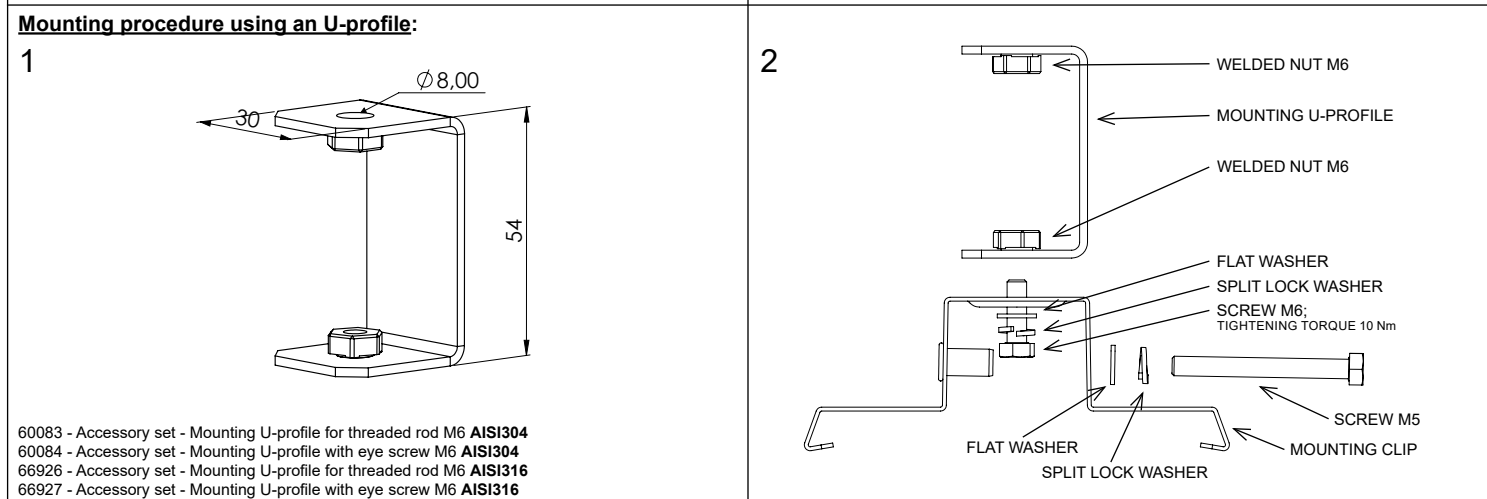
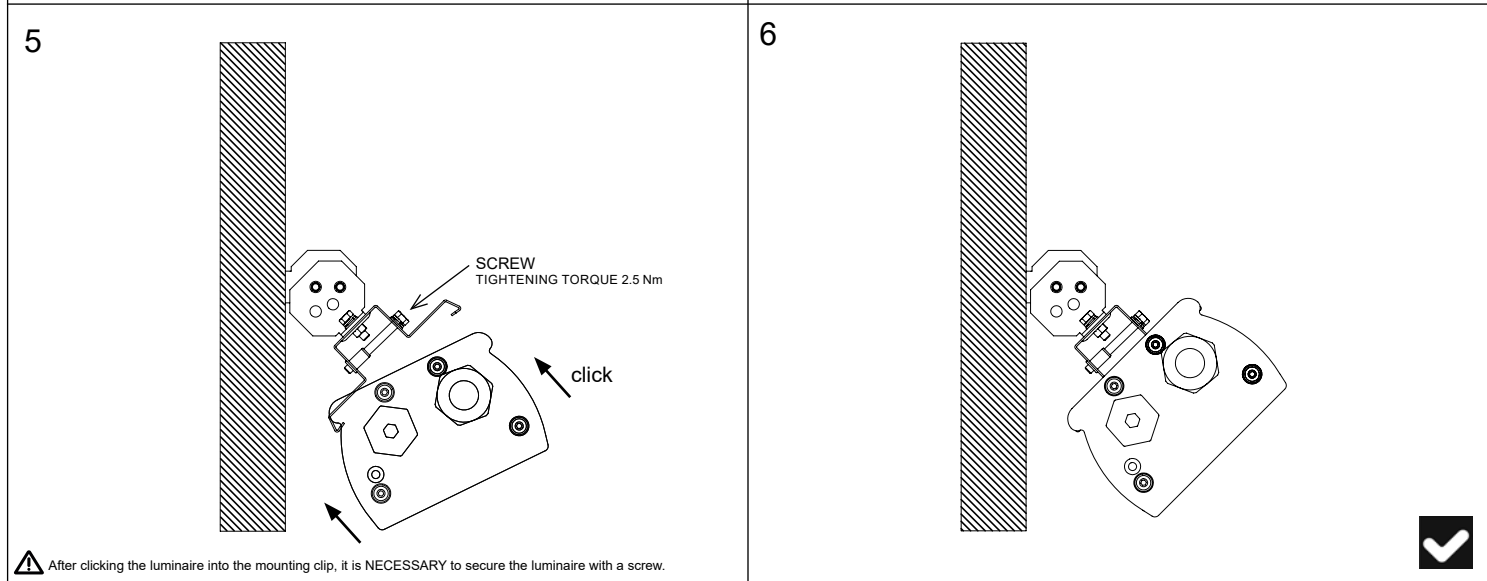
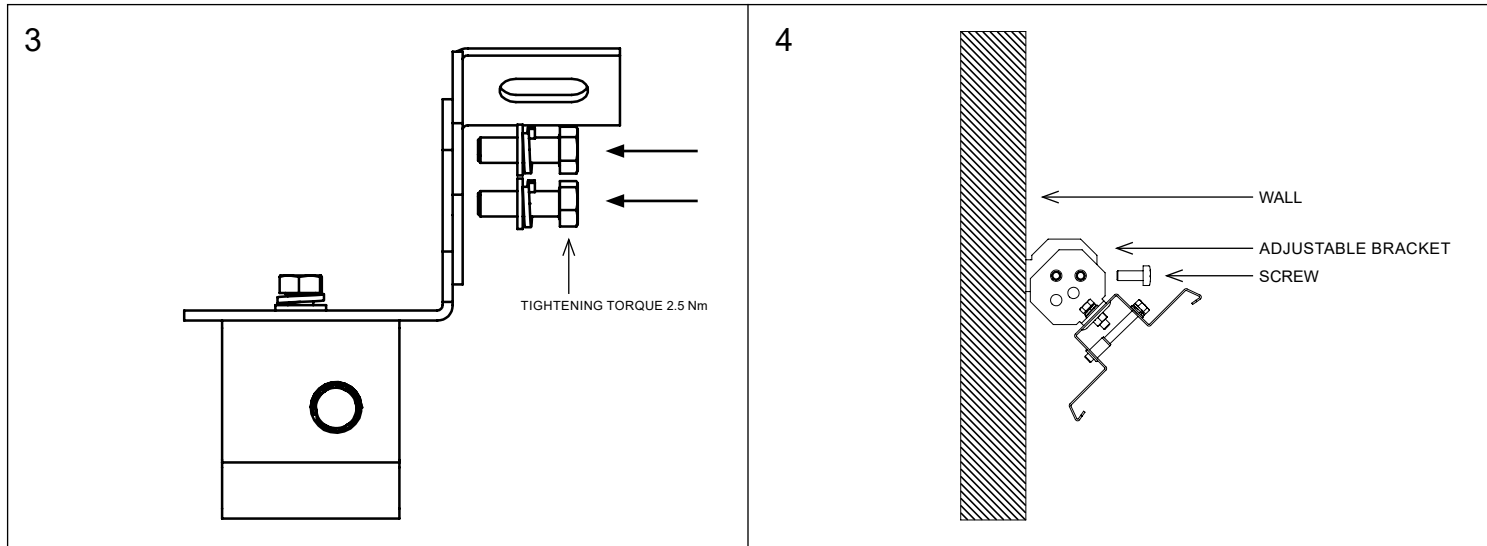
1



60085 - Accessory set with an adjustable bracket **AISI304**
66928 - Accessory set with an adjustable bracket **AISI316**

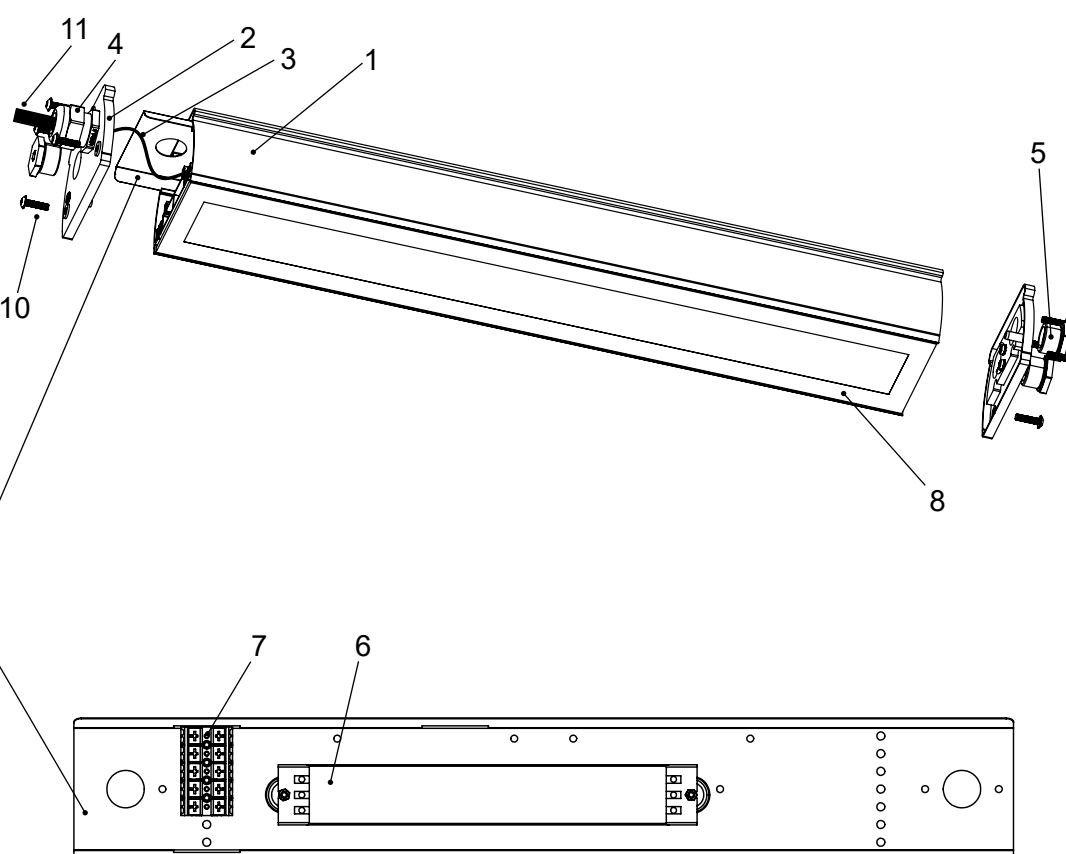
2





Luminaire construction

	Luminaire components
1	Luminaire housing
2	Luminaire side cover
3	Safety cable
4	Ex cable gland
5	Ex cable plug
6	Ex LED driver
7	Ex thermal block
8	Diffuser
9	Metal reflector
10	Screws M5
11	Supply cable



Installation instructions:

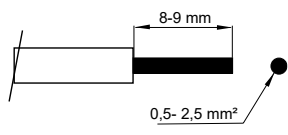
1. Remove the side cover (2) of the luminaire. The cover will hang on the safety cable and protective wire.

2. Install the cable gland (3) and the cable plug (4) on the luminaire. Tighten to the luminaire with a torque of 2.7 Nm.

3. Feed the supply cable (11) through the cable gland. Properly tighten the cable glands until the sealing rubber washer is slightly deformed; tightening torque 2.0 Nm.

Cable gland	Sealing area	Tightening torque of the cable gland	Minimum operating temperature of the cable gland
M20x1,5	7 - 13 mm	2.0 Nm	-30°C+60°C

4. Pull the metal reflector (9) out a bit. Plug the power cable into the free part of the supply terminal block (6) as follows:

CLAMP	TYPE OF LUMINAIRE					STRIPPING THE WIRE 
	0ND	0D2	NM3A	NA3D2	ND3D2	
L1	phase wire	phase wire	charging phase wire	charging phase wire	charging phase wire	
L2	-	-	switched phase wire	switched phase wire	switched phase wire	
DA+	-	DALI +	-	DALI +	DALI +	
DA-	-	DALI -	-	DALI -	DALI -	
N	neutral wire	neutral wire	neutral wire	neutral wire	neutral wire	
⊕	protective wire	protective wire	protective wire	protective wire	protective wire	

0ND - ON/OFF driver 0D2 - DALI2 driver NM3A - Emergency unit 3H Autotest + ON/OFF driver NA3D2 - Emergency unit 3H Autotest + DALI2 driver ND3D2 - Emergency unit 3H DALI + DALI2 driver

5. Insert the reflector (9) back.

6. Replace the removed side cover (2) and secure it with M5 screws (10); tightening torque 3.0 Nm.

Maximum number of lights connected to a circuit breaker: Maximal short circuit current must not be higher than 10kA.

	B10A	B16A	C10A	C16A
LORD-EX1/21-I-Lββ-γγγ-δδδ00-εεεε-ζζζ-μμμ	15	24	25	40

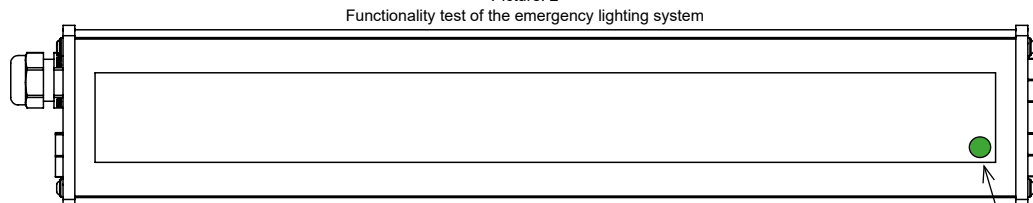
Functionality Test of the Emergency Lighting System:

To ensure proper operation of the luminaire, the enclosed emergency lighting test record must be followed. Disconnect the luminaire from the mains. The LED module in the emergency circuit must light up. The LED indicator will turn off. If the emergency light goes out before the rated autonomy period has elapsed, even though the battery is fully charged, the battery must be replaced.

Note: The battery reaches full capacity after approximately three charge/discharge cycles.

Picture. 2

Functionality test of the emergency lighting system



Signalling LED diode

VYRTYCH Židnéves 116, 294 06 Březno, Czech Republic

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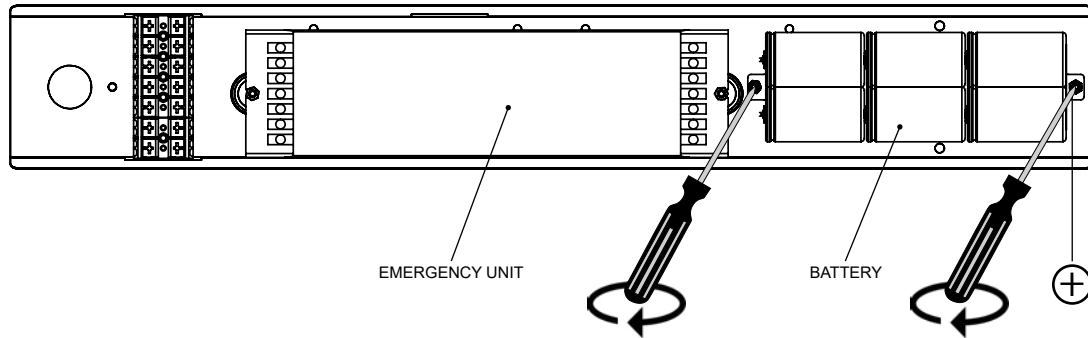
Battery replacement:

Battery replacement is necessary once the luminaire no longer meets the requirements of its rated operating duration. Replace the battery in a non-explosion-hazardous environment.

1. Disconnect the luminaire from the power supply to prevent electric shock.
2. Remove the side cover of the luminaire. The cover will hang on the safety cable and protective wire.
3. Pull the metal reflector out a bit and disconnect the power cable from the terminal block.
4. Slide the reflector out of the luminaire.
5. In a non-explosion-hazardous environment, disconnect and remove the old battery. Use a Phillips screwdriver to unscrew the two screws holding the battery (see picture 3).
6. Mount the new battery (mark installation date).
7. Connect the battery to the emergency unit.
8. Reinsert the reflector into the luminaire.
9. Reconnect the power cable to the terminal block.
10. Replace the removed side cover and secure it with M5 screws; tightening torque 3.0 Nm.
11. Reconnect to power and verify emergency operation.
12. Confirm that battery charging is indicated properly.

WARNING: Use only batteries of the same type and parameters as indicated on the battery label!!!

Picture. 3
Release the clips using a flat-head screwdriver



During the installation and operation of luminaires in explosive atmospheres, it is essential to follow the relevant safety measures in accordance with national regulations and standards. LORD-Ex1/21 luminaires are aluminium, dust-tight, and water-tight fixtures designed for illuminating areas with a risk of explosion.

Connection of the luminaire to the electrical network may only be carried out by a person with the appropriate qualification, in accordance with the valid regulation on electrical competence. When installing the luminaire, ESD safety precautions must be observed using appropriate tools and equipment.

The light source, seals, cable glands, or plugs in this luminaire may only be replaced by the manufacturer, its authorized service technician, or a similarly qualified person. Any modification or replacement of components that affect explosion protection is strictly prohibited. Repairs may only be performed by qualified personnel and only using original spare parts.



WARNING!!!

Potential risk of electrostatic charging.

The luminaire must be installed in such a way that accidental contact with people and parts of the luminaire is prevented.

This luminaire is intended for fixed installation only.

Clean the luminaire using a damp cloth only. Regular cleaning intervals must be observed.

Do not open while under voltage.

Replace any cracked protective cover immediately.

The battery inside the luminaire may only be replaced with a battery of the same type and specifications!!

The manufacturer is not liable for any damage resulting from failure to follow the installation instructions.



The manufacturer is registered in the take-back system for electrical and electronic equipment and waste according to applicable regulations, and also participates in the packaging take-back and recycling system operated by EKO-KOM. (EK-F06070058).

Accessories to order:

In luminaire data sheet.

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.