

Installation and Operating Instructions

0093.156.00

Lumistar Luminaire USL08LED-Ex, UL-listed

UL+UL T6

• General safety instructions:

- Please read this manual and the data sheet completely before you start working. When installing the luminaire, it is important that it is completely explosion-proof sealed before it is switched on.
- After installation, all unused openings must be sealed with the plugs provided.
- The plugs meet at least the requirements of Class I, Division 1 & 2, Group C & D in hazardous areas.
- Only use supply lines that are approved for at least 90°C (194°F).
- Before unscrewing a flange from the sight glass, make sure that the vessel is empty and depressurized, that the plant is switched off and remains switched off and safe during work on the sight glass.
- To reduce the risk of fire and explosion, do not install the luminaire where the marked operating temperature (T-Code) exceeds the ignition temperature of the hazardous atmosphere(s).
- These luminaires should be installed by qualified technicians using suitable wiring methods for explosion-hazardous areas and in strict accordance with the National Electrical Code and all local requirements.
- To avoid the risk of electric shock, disable/disconnect the power supply before opening. During the operation keep the luminaire closed at any time.
- Do not open under power.
- Do not disconnect under power.

• Mechanical assembly on a sight glass:

- Clean the area around the sight glass so that the sealing surfaces do not become dirty.
- Remove the mating flange. Turn the nuts only half a turn counterclockwise at a time. Go step by step from the first nut to the opposite one, etc., so that the flange does not warp.
- If the glass disc is stuck to the base flange, secure it there. If the glass disk sticks to the mating flange, remove it.
- Mount the mating flange according to the manufacturer's instructions.
- Avoid any warping of the flange and pull tighten the nuts with the correct torque.
The values depend on the diameter and on the sight glass material. They are in the associated data sheet.
- After mounting the sight glass, you must carefully check tightness. Always observe all standards and regulations for work on pressure vessels.

• Threads for mounting parts:

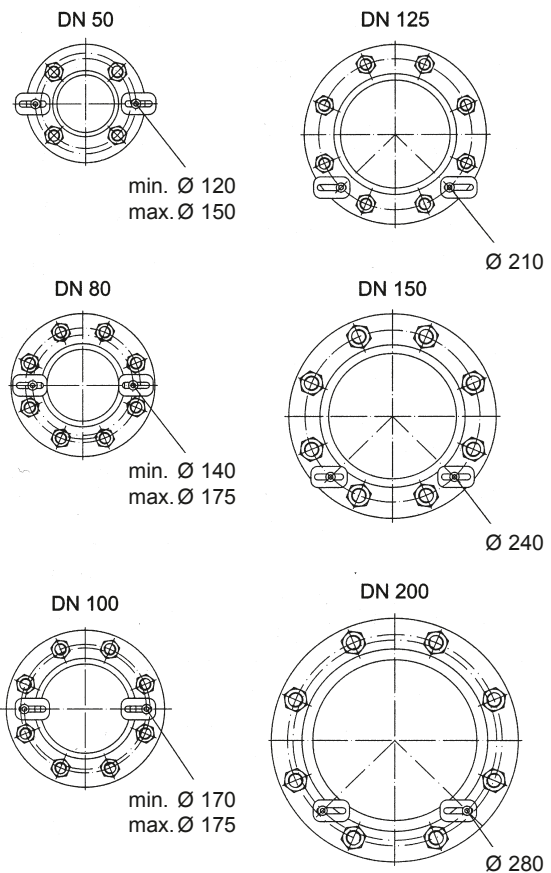
- Mark the positions for the threaded holes, according to the adjoining drawing.
- The lateral distance between the M8 threaded holes depends on the sight glass diameter. It results automatically if the threads are machined according to the drawing.
- The core hole diameter is 6.8 mm. Is the mating flange ≤ 20 mm, the threads should be drilled throughout the flange. Mating flanges > 20 mm receive threads with a depth of 15 mm and a core hole drilling of 18 mm depth.



Lumistar luminaire USL08LED-Ex

Fixing with straight mounting brackets, for use on lighting port only:

Fixing with angle mounting brackets, for use with combined light and sight port:



Positions for the threaded holes

• Assembly of the mounting parts:

- Caution: Do not look into the light source - danger of visual impairment.
- First install the mating flange of the sight glass before mounting the mounting parts.
- The mounting parts can be moved in their slotted holes to adjust the distance to the width of the luminaire.
- Mount the mounting parts with the enclosed screws, washers and lock washers according to the sketch (see drawing).
- The washer is important. It supports the spring washer so that it remains under tension above the slotted hole in every position.
- Mount the luminaire, using the two remaining screws and lock washers, between the mounting parts.

• Electrical connection:

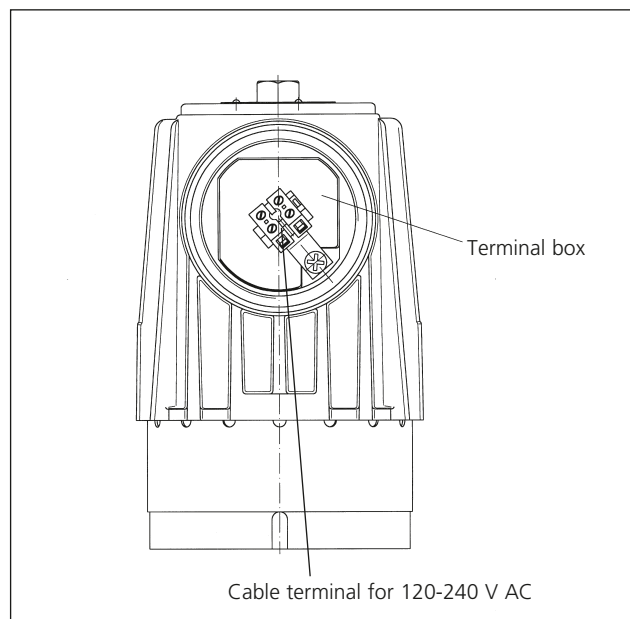
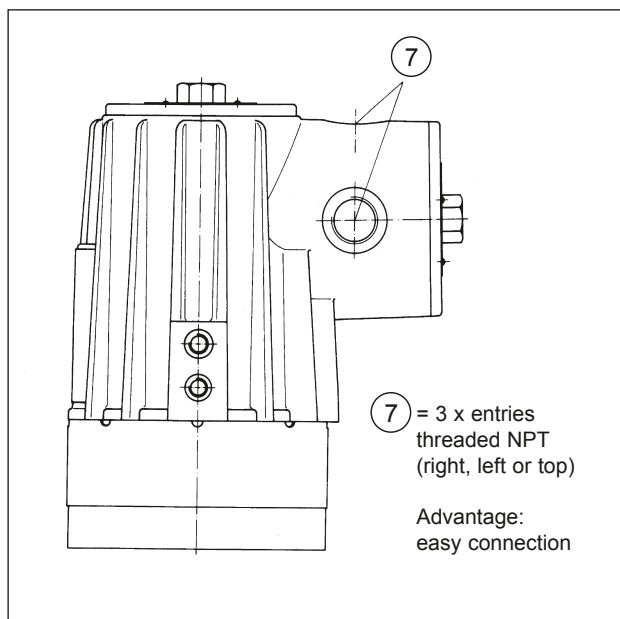
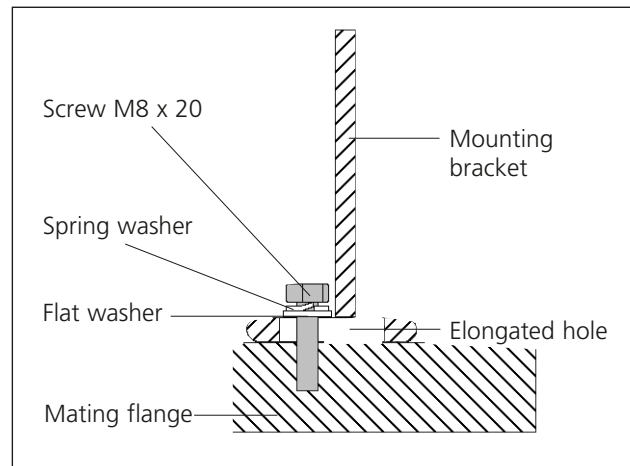
- First complete the mechanical assembly.
- The luminaire is earthed via the cable protection tube.

• Wiring:

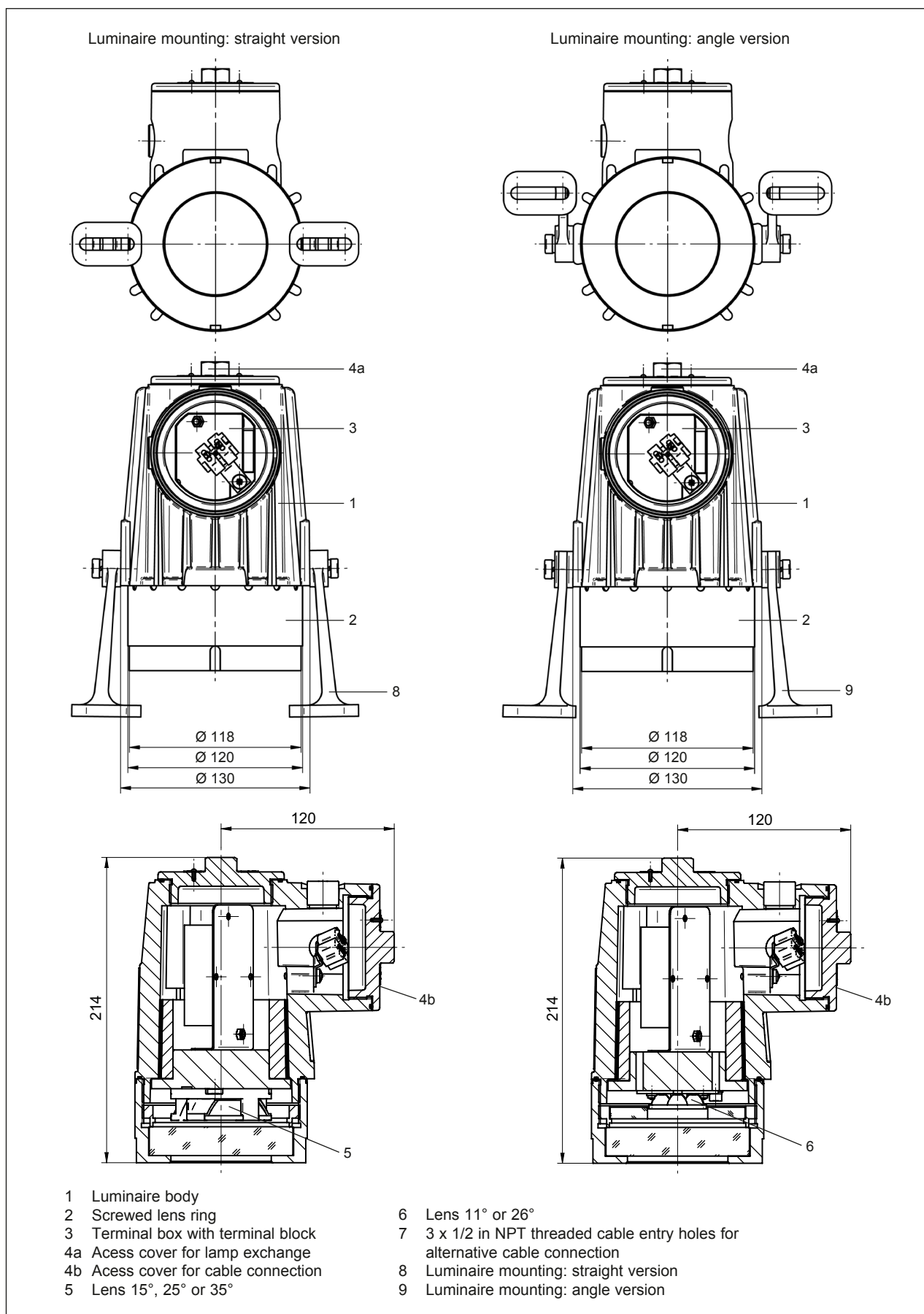
- Unscrew cover **W** from the terminal compartment.
- Attach the cable protection tube to one or two of the three openings and screw in at least five full threads.
- Close the remaining opening(s) with the explosion-proof plugs **P**.
- Moisten the threads for plug **P** first with solid lubricant (e.g. AEMA-SOL 6B).
- Insert the cable and connect the lead wires to both terminals in the terminal compartment.
- Check cover seal for damage and replace if necessary, then screw in cover **W** and tighten.

• Caution:

Never switch on the lamp before it has been fully and permanently explosion-proof sealed (not even for functional testing).



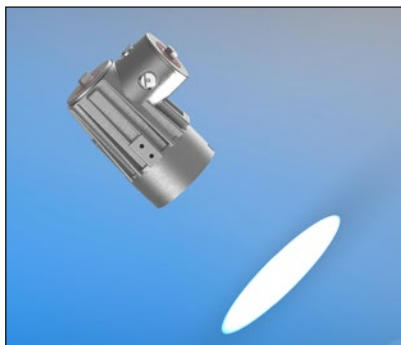
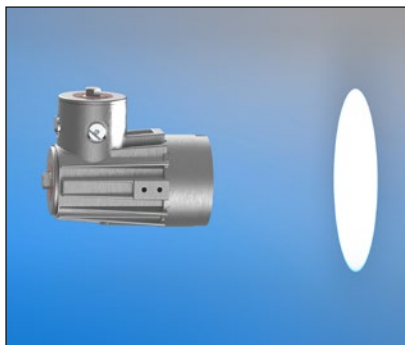
• Dimensions and components of Lumiglas luminaires USL08LED-Ex:



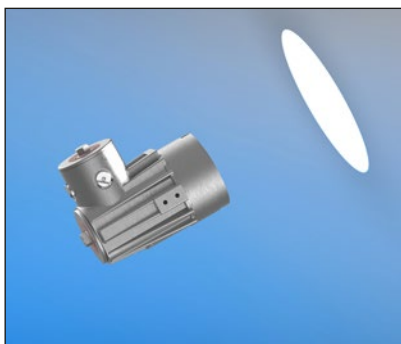
• **Caution:**

Mount this luminaire at any angle between the glass lens facing down and the glass lens facing horizontally. Do not mount this luminaire with the lens facing at any angle above the horizontal.

PERMITTED:



NOT PERMITTED:



• **Replacement parts/accessories:**

Warning:

Do not use any non OEM-parts.

Item	Part No.
Housing cover (part 4a/4b)	0823.092.00
Threaded lens ring (part 2)	1350.044.00
Glass disc	1775.168.00
Threaded ring (for part 2)	L5692.036.00
O-ring gasket (silicon), d = 90 x 2.5 (for part 4a/4b)	0862.065.00
O-ring gasket (silicon), d = 110 x 3 (for part 2)	0862.072.00
Lens 15°	L3511.011.00
Lens 25°	L3511.012.00
Lens 35°	L3511.013.00
LED module Cree 15°	LS#3858.063.00
LED module Cree 25°	LS#3858.064.00
LED module Cree 35°	LS#3858.065.00
LED module 7-LED 11°	LS#3858.066.00
LED module 7-LED 26°	LS#3858.067.00
Luminaire mounting: straight version	L0354.005.00
Luminaire mounting: angle version	L0354.006.00

• **Changing the lens:**

Lift the lens with your index finger and press the nose away with your thumb.

