

Lumiglas® Explosion-Proof Light

Model USL08LED-EX UL 844 Listed Class I, Div 1&2, Groups C&D; Div 2, Groups A&B

For fitting to sight/light ports and specific area lighting Approved for wet conditions (UL 1571)

Application

This powerful light can be used for combination light/sight port (single port version) or separate light and sight port (dual port version) and also to illuminate the internals of visual flow indicators, pipelines, systems mixers and other vessels and reactors which are normally closed.

The USL08LED-EX is excellent for specific area lighting such as instruments, control panels, valve manifolds, walkways, etc. These sturdy lights are constructed of corrosion-resistant aluminum alloy and are moisture-proof as well as explosion-proof (hazardous locations) so they are equally well suited for use in demanding installations indoors and out.

Protection

UL 844 listed for Class I, Div 1&2, Groups C&D; Div 2, Groups A&B.
Approved for wet conditions, UL 1571
Dust and waterjet tight, IP65 acc. to EN60529/DIN VDE 0470, Part 1.

Temperature Operating Conditions

Temperature range (operating temperature) is referenced to 50 °C ambient.

Operating Cautions

- Independent of the vessel internal pressure/vacuum.
- Under no circumstances may the light fitting replace the cover flange or the complete sightglass assembly or be used directly to cover a container opening.
- Do not look into light - danger of impaired eyesight.

Test Certificate

+ listed Cat No. USL08LED-EX: 9N77

Operating Voltage

120 - 240 VAC LED module COB LED, 20 W

120 - 240 VAC LED module 7 LED, 20 W

Beam Angle

- COB LED version : 15°, 25° and 35° lenses available
- 7 LED version: 11° and 26° lenses available
- Simple lens replacement



Lumiglas USL08LED-EX mounted on a circular sight port DN 28120



Lumiglas USL08LED-EX with sanitary clamp connection

USL08LED-EX Installation Instructions

Mounting Brackets

Straight mounting brackets are for use on single sight ports from 3" to 6". Angle (offset) brackets are available for 6" and larger for single light/sight port combinations. Brackets are adaptable to various types of mounting configurations for area lighting.

General (See detailed instruction manual)

The light is typically bolted by twin brackets to the sight glass assembly, i.e. to the cover flange of a bolt-on circular sight glass, circular weld-on assembly (type DIN28120), visual flow indicator, or mounted for area illumination.

The Lumiglas USL08LED-EX can be used for the following sight glass sizes and larger:

- Bolt-on circular sight window
- 2" Circular weld-on sight window
- 3" Visual flow indicator
- 2" Weld-neck type MV, DN80
- Specific area lighting

Also available are sanitary clamp connections for sizes 1" and larger which use the Metaglas® MetaClamp® technology.

Simple Electrical Connection via Junction Box

- The luminaire is wired internally and ready for operation. For cable entry from the outside, the terminal box has three openings with 1/2" NPT threads (right, left, top).
- The unused openings must be closed with two dummy plugs (included with luminaire).
- A cable gland is not part of the luminaire, as the connection is usually made with conduit.

Electrical Connection Installation

1. Disconnect main power supply.
2. Remove side entrance cover.
3. Attach power leads to terminal block.
4. Replace cover insuring gasket (o-ring) is in place. Tighten.
5. Connect power.

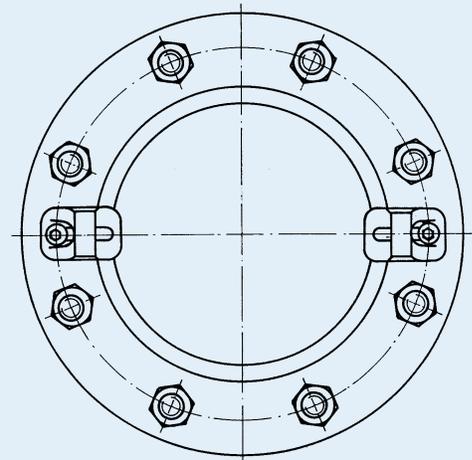
Connections to be in accordance with National Electric Code® Requirements

Parts, Construction and Materials

Straight mounting brackets are for use on single sight ports from 3" to 6". Angle (offset) brackets are available for 6" and larger for single light/sight port combinations. Brackets are adaptable to various types of mounting configurations for area lighting.

- **Luminaire body:** Corrosion resistant die cast aluminum, G-Al Si 10 Mg, GK-AlSi10Mg
- **Threaded Lens Cover:** Unit of aluminum ring, glass, seal o-ring
- **Brackets:** Die cast Aluminum, G-AlSi10Mg
- **Weight:** 8.9 lbs. (4 Kg)
- **Gaskets:** Silicone rubber o-rings

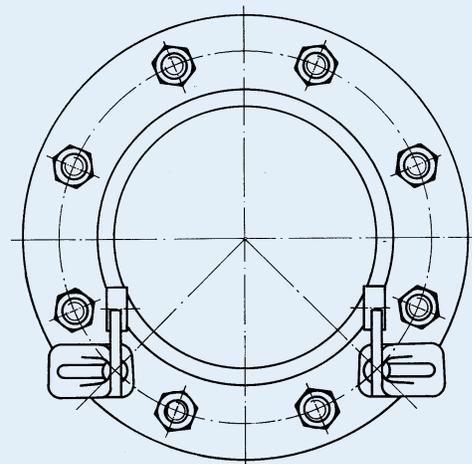
Mounting Configuration for 3" - 6" Sight Ports Straight Brackets



Single Sight Port Light Only

Lumiglas USL08LED-EX light port installation on hinged bracket (straight). Suitable for 3" - 6" sizes. Separate view port must be used.

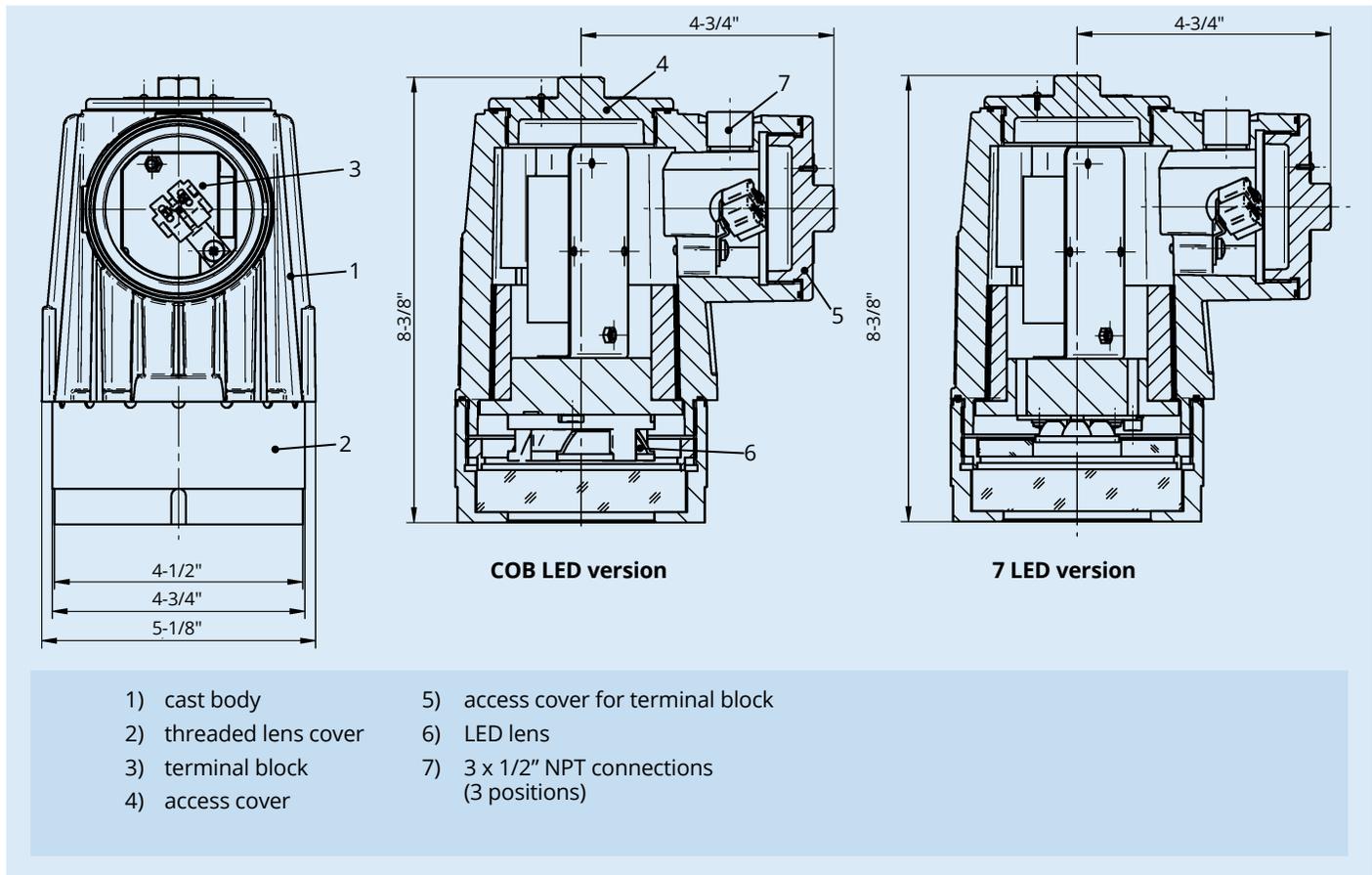
Mounting Configuration for 6" and larger Sight Ports Angle (offset) Brackets



Combination View / Light Single Sight Port

Lumiglas USL08LED-EX installation on a combined light/sight port.

Dimensions and Connection Data for USL08LED-EX



- | | |
|------------------------|--|
| 1) cast body | 5) access cover for terminal block |
| 2) threaded lens cover | 6) LED lens |
| 3) terminal block | 7) 3 x 1/2" NPT connections
(3 positions) |
| 4) access cover | |

USL08LED-EX LED Module	Voltage/Wattage	Beam Angle	Part Number*	Luminous Flux (lm)	Color Temp.	Temperature Class (50° Max Ambient)	
						Groups A, B	Groups C, D
COB-LED	120-240V/20W	15°	08EX-B3KA <u>N</u> NNN	2200	6200	T2A	T6
COB-LED	120-240V/20W	25°	08EX-B3KB <u>N</u> NNN	2200	6200	T2A	T6
COB-LED	120-240V/20W	35°	08EX-B3KC <u>N</u> NNN	2000	6200	T2A	T6
7-LED	120-240V/20W	11°	08EX-B3KD <u>N</u> NNN	1600	5700	T2A	T6
7-LED	120-240V/20W	26°	08EX-B3KE <u>N</u> NNN	1500	5700	T2A	T6

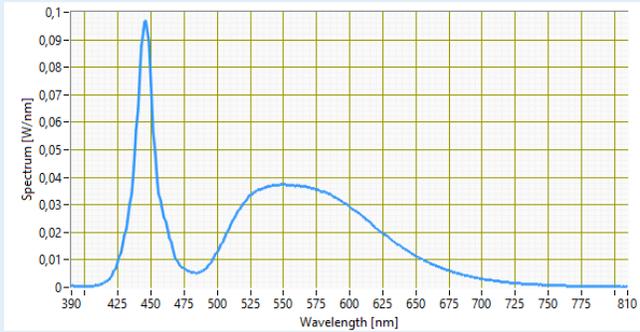
* Part numbers listed do not include bracket.

The underlined character in the part number can be changed to reflect the bracket type: "N" for No Bracket, "B" for Straight Bracket and "C" for Angle Bracket

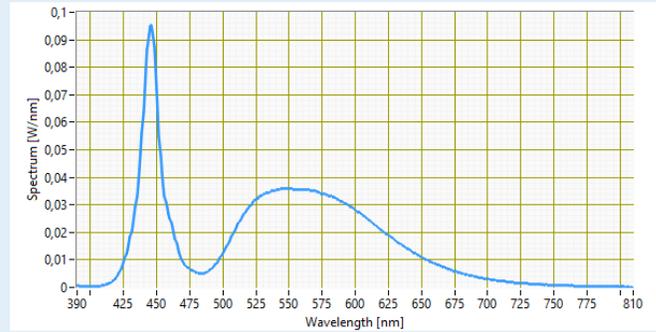
Mounting Bracket and beam angle must be specified when ordering.

Approximate Light Distributions

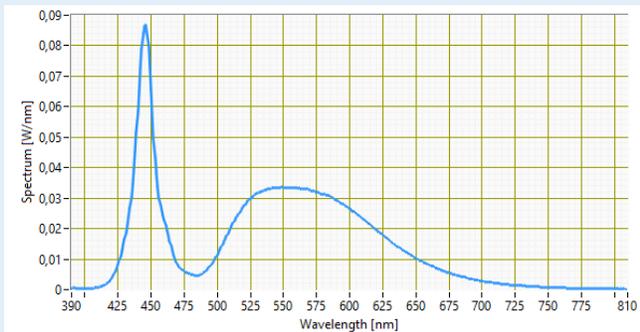
15° COB LED



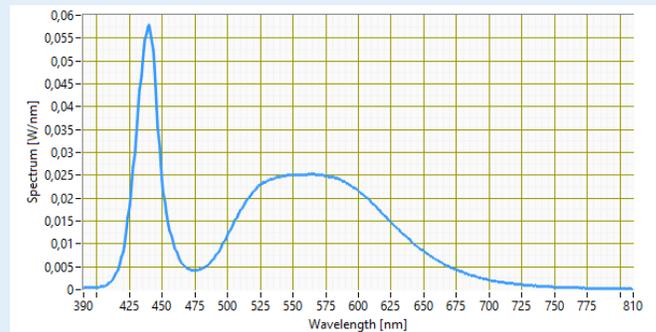
25° COB LED



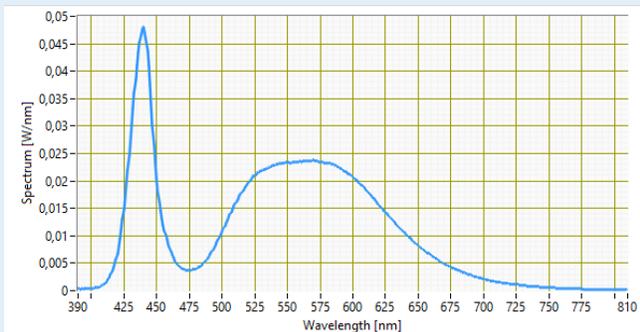
35° COB LED



11° 7 LED



26° 7 LED



Manufactured by
F.H.Papenmeier GmbH & Co. KG
 Talweg 2, D-58239
 Schwerte, Germany