

**Lumiglas Luminaire Series USL 05-EX II 2G EEx d II C T3 ... T6**  
- for use with sightglass fittings -  
**II 2D IP67 T195°C ... T80°C**

**ISO 9001**

DATA SHEET 02-0200 09/07

**Application:**

This super-compact luminaire can be used for integral light/sight port (single flange version) or separate light and sight ports (dual flange version) to illuminate the internals of through-flow indicators, pipelines, laboratory mixers and other vessels and reactors which are normally closed. This model is intended for use in all Ex Hazardous Areas. The unit is suitable for food processing. The luminaire must never be inserted into a vessel wall as a sealing element, i.e. without appropriate sightglass disc and fitting.

**Sightglass Styles and Size:**

This powerful, super-compact luminaire is designed to give glare free illumination in combination with circular sightglasses of the following styles:

- bolted circular flanges acc. DIN 28120/28121 or similar styles
- circular screwed flanges acc. DIN 11 851
- visual flow indicators (tubular or opposed flat glass disc)
- sanitary clamp connection, 1" and larger

**Size:**

The luminaire is suitable for sightglasses DN 25 and larger.

**Ambient Condition Operating Range:**

This unit is approved for operation at ambient temperatures up to 60°C. Certificates: PTB Nr. Ex- 85/2152, 85/2153, 86/2056, 87/2052, 87/2163, 87/2164. The unit is independent of internal vessel pressure or vacuum.

**Protection:**

Dust and waterjet tight to IP 65 and EN 60598, certificate available.

**Ignition protection class:**

EEx d "flame proof enclosure" acc. DIN EN 50 018/VDE 0171.

**Temperature class:**

up to T6 (depending on power intake)

**Explosion class:**

IIC (includes groups IIA & IIB)

**Electric data, lamp sockets and lamps**

According to PTB conformity certificate, AC or DC depending on lamp type, please see table overleaf

**Power supply:**

- with built-in transformer
  - supply 120 V; halogen lamp 12V/5 W
  - supply 220 or 240 V; halogen lamp 12V/5 W
- without built-in transformer
  - supply 12 V      halogen lamp 5W or 10W
  - minispot halogen reflector lamp 20W
  - supply 24 V      minispot halogen reflector lamp 20W

**Additions:**

- installation set: hinged bracket made of stainless steel  
                         adapter/upstand flange made of aluminium
- special claw spanner for opening/tightening of the lens ring

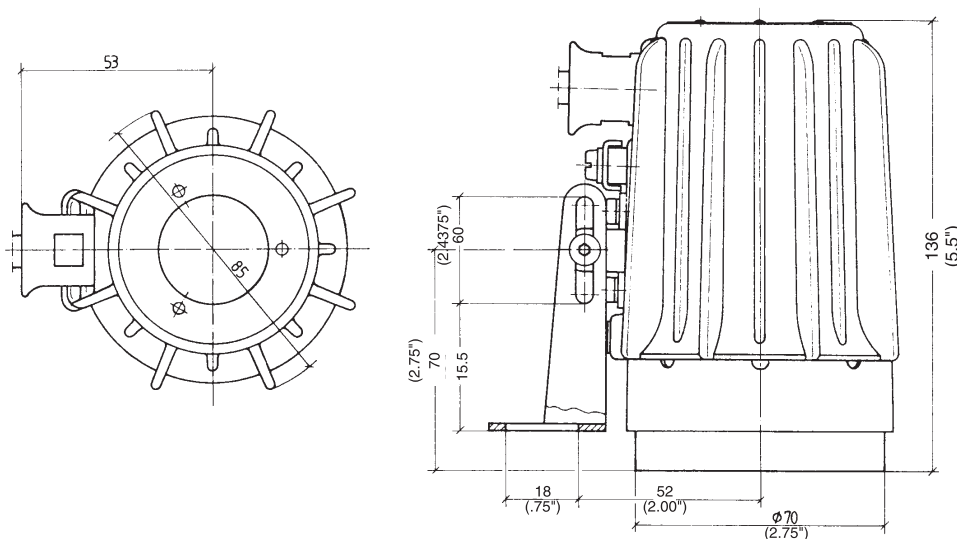


Lumiglas luminaire USL 05-EX on hinged bracket fastening



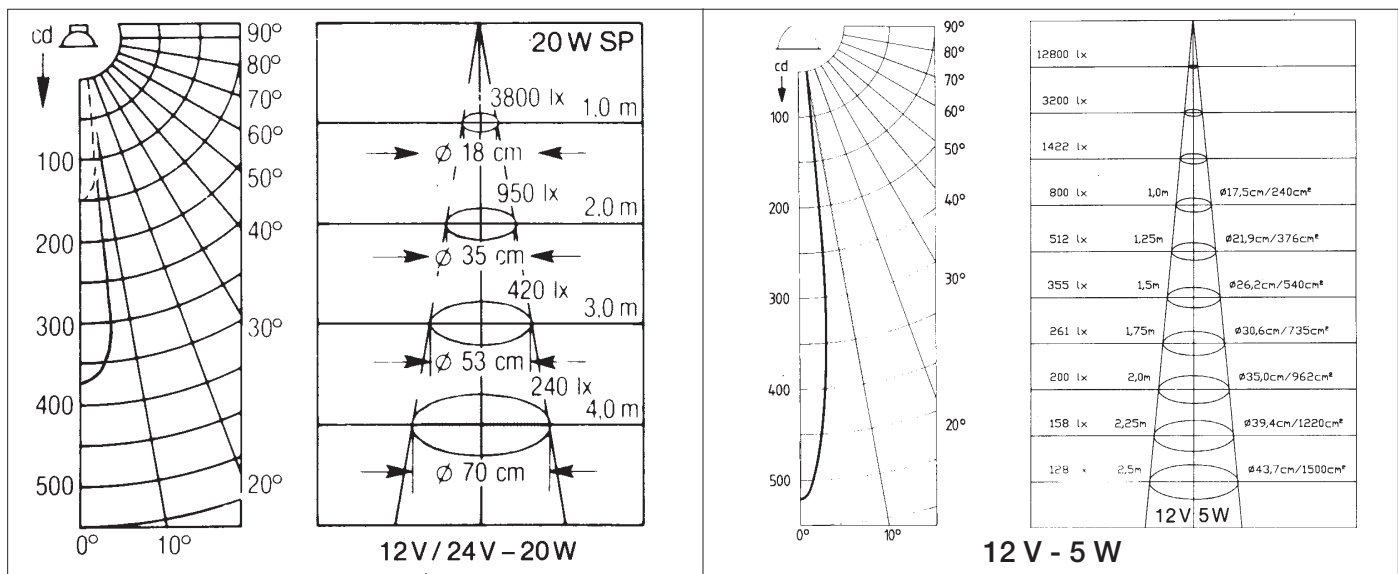
Lumiglas luminaire USL 05-EX, tilted back to give access to lens unit

## Dimensions and Connection Data for Lumiglas Luminaire type USL 05-EX



### Parts, Construction and Materials:

- Luminaire body: Corrosion resistant die cast aluminium, G-Al Si 10 Mg
- Cable gland: Pressure tight resin cast (potted) cable tail, 6.5 ft., Siemens 4GMH4G-J 3 x 1,5 mm<sup>2</sup>
- Ground terminals: Connected inside housing; extra ground terminal outside on housing
- Lens: Bonded unit of aluminium ring and glass, Viton sealing
- Fastenings: See under "Accessories"
- Weight: 1.5 lb. ( 2 lb.z with built-in transformer)



Light spreading (cd) and illumination grade (lx)

Item	Lumiglas luminaire model USL05-Ex	net V	integral transformer	Halogen Lamp			temperature class at max. ambient temp.			
				Socket	Voltage	part no.	G 40°C	D 40°C	G 60°C	D 60°C
1	(12 V) 5 W	12~	-	G4	12 V/5 W	05E0-A1ANAN0N	T6	T80°C	T4	T130°C
2	(120 V/12 V) 5 W	120~	with	G4	12 V/5 W	05E0-A3ANAN0N	T6	T80°C	T4	T130°C
3	(230 V/12 V) 5 W	230~	with	G4	12 V/5 W	05E0-A4ANAN0N	T6	T80°C	T4	T130°C
4	(12 V) 20 W	12~	-	G4	12 V/20 W	05E0-A1CNAN0N	T4	T130°C	T3	T195°C
5	(244 V) 20 W	24~	-	G4	24 V/20 W	05E0-A2CNAN0N	T4	T130°C	T3	T195°C

### Ordering Information:

Please state for example: Lumiglas luminaire USL 05-EX, type SL - H5d 240/12V  
All dimensions in mm unless stated otherwise Subject to change without prior notice

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