



ISO 9001

DATA SHEET 02-0280 10/14

## **Lumiglas Light/Sight Glass Fittings ESKS or SKS**

- hinged sightglass frame with or without luminaire -

## **Application:**

ESKS integral light/sight glass fittings have a quick release closure, so that they are a combination of charge/access port and light/sight glass. The integrated luminaire illuminates the internal of boilers, tanks, bunkers, silos, mixers and other vessels in all non hazardous areas.

SKS type sight glass ports are of the same design, except they have no luminaire. Both types are suitable for food processing. Usually these fittings come with a weld flange, but for flat vessel walls they can also be installed with a bolt-on flange.

### **Safety Precautions:**

The fitting must never be opened before the pressure inside the vessel is reduced to zero! Do not look directly into the light - may damage eyesight.

#### Protection:

When correctly fitted, dust and waterjet proof to IP 65, EN 60 529 / DIN VDE 0470 T1.

## **Ambient Condition Operating Range:**

The assembly is rated for vacuum service

and is resistant to: 0.5 bar type SKS/ESKS 225

1.0 bar type SKS/ESKS 150

max. vessel temp: 150°C with soda lime glass

200°C with borosilicate glass

ambient temp: max. 80°C at the cable gland

When ambient temp.  $< 40^{\circ}\text{C}$  heat resistant

cable e.g. Sinotherm 110 J05GG-F 3G

1.5 mm<sup>2</sup> must be used

#### **Electrical Data:**

power supply 24 V or 120 V, halogen lamp 50 or 100 W, 2-pin socket GY 6.35. LED also available.

Transformers can be supplied separately.

Combination with sight glass wiper SW I type is possible

## Mechanical fitting:

The fitting comes assembled. Before welding, the sight glass frame and the hinge assembly should be removed from the base flange. Check desired position, i.e. direction of swing. The lug and hinged assembly holes are not identically spread. The weld flange must be welded into the vessel wall free of distortion; bolt-on flanges require an entirely flat vessel wall.

- 1 Lumistar luminaire (only with ESKS)
- 2 luminaire frame with sight glass
- 3 weld flange (resp. bolt-on flange with drilled holes)
- 4 closure knob
- 5 closure lug
- 6 hinged assembly
- 7 fastening ring (only with SKS)

### Lamp Change:

Since the fitting must be opened for lamp change, reduce pressure in the vessel to zero, and put vessel out of operation. Check vessel for pressure and temperature before opening a sight glass fitting!

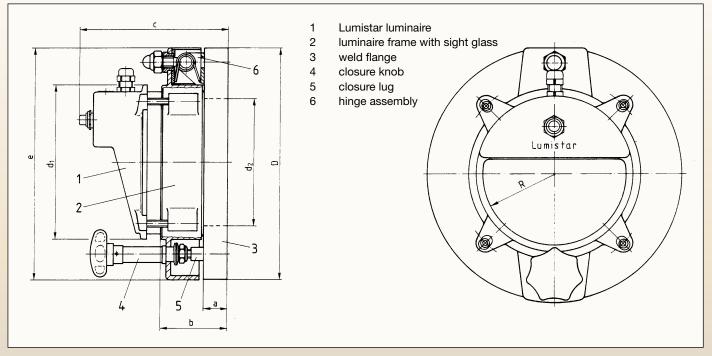


Lumiglas light sight glass fitting ESKS



Lumiglas sight glass fitting SKS

# Dimensions and electrical data of Lumiglas light/sight glass fittings ESKS and SKS



## Parts, Construction and Materials:

- Luminaire body: Corrosion resistant die cast aluminium, painted RAL 9007
- Weld flange: steel RSt 37.2 oder stainless steel, e.g. 1.4541 or 1.4571
- Sight glass disc: toughtened (tempered) soda-lime or borosilicate
- Seals: silicone rubber
- Lock: galvanized or painted steel; star handle: plastic

**Ordering Information:** e.g.: Lumiglas light/sight glass fitting type 150, 24 V, 100 W, weld flange 1.4571, max. temp 200°C **Special design:** Upon request all metal parts getting in contact with the product can be realised in stainless steel (304L)

Туре		ESKS 150	SKS 150	ESKS 225	SKS 225
Dimensions	а	25	25	25	25
	b	71	71	80	80
	С	185.5	90	167	100
	d1	165	165	235	235
	е	250	250	335	335
	d2	136	136	205	205
	D	250	250	335	335
	R	70	70	104	104
Voltage		24 V / 120 V	no luminaire, just sight glass	24 V / 120 V	no luminaire, just sight glass
Power intake		max. 100 W		max. 100 W	

#### Lamp Change:

Before opening the port, vessel operation must be stopped and vessel must not be under pressure or temperature:

- Switch off and disconnect luminaire
- Unscrew the fastening screws from the luminaire housing and remove luminaire 1 from frame 2
- Remove reflector and withdraw defective lamp

- Replace halogen lamp with lamp of same type and size, use protective paper to ensure bare fingers do not touch the glass, insert into 2-pin socket hole and push in gently but firmly
- Refit reflector, fasten luminaire 1 on frame 2 with fastening screws
- Switch power to 'ON' and check for proper function

All dimensions in mm unless stated otherwise Subject to change without prior notice



