

**Lumiglas Light/Sightglass Units Series ESKS or SKS**

- hinged sightglass with or without luminaire -

**ISO 9001**

DATA SHEET 02-0280 12/03

**Application:**

ESKS integral light/sightglass units 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 sightglass ports are of the same design, except without luminaire. Both types are suitable for food processing. Standard units come with a weld flange, but for flat vessel walls they can also be installed with a bolt-on flange.

**Safety Precautions:**

Warning: The unit must never be opened before the pressure inside the vessel is reduced to zero !

**Protection:**

When correctly fitted, dust and waterjet proof to IP 65, EN 60598.

**Ambient Condition Operating Range:**

The unit is vacuum proof and resistant to:

pressure up to	8 psi, type SKS/ESKS 225
	15 psi 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

**Electrical Data:**

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

**Transformer:**

Transformer can be supplied separately.

**Combinations:**

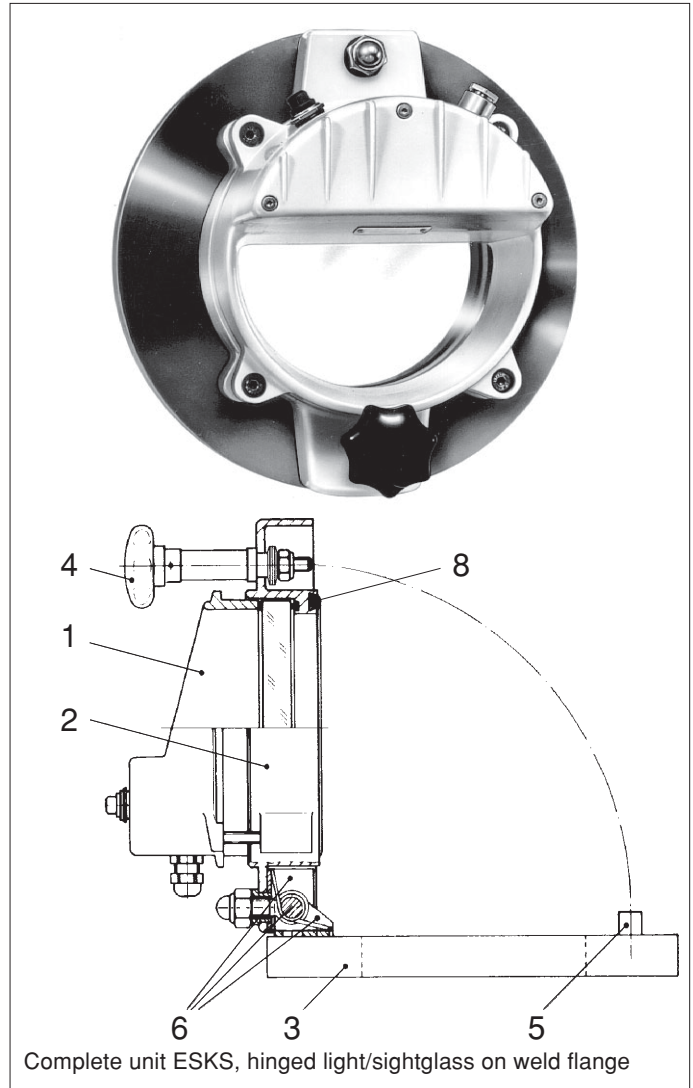
ESKS and SKS units can be combined with SW I type wipers (see data sheet 02.01).

**Mechanical fitting:** The unit comes pre-assembled. Before welding, the sightglass frame and the hinge assembly should be removed from the base flange. Check desired position, i.e. direction of swing. The lug and hinge 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.

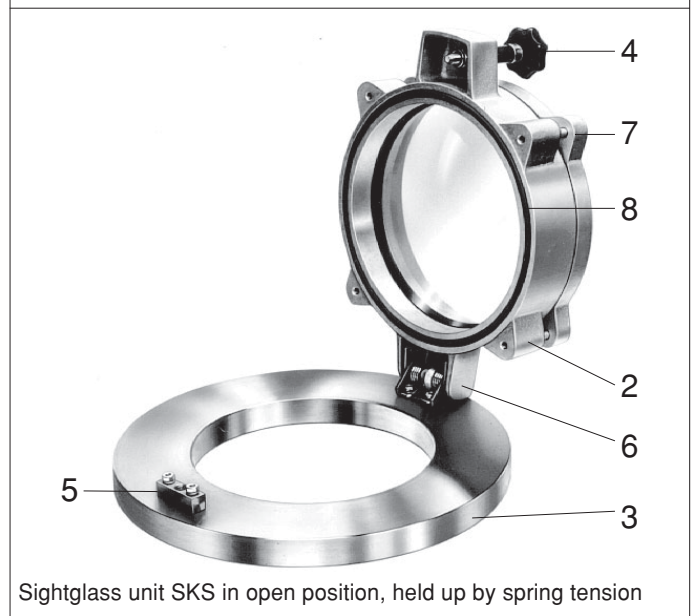
- 1 Lumiglas luminaire (only with ESKS)
- 2 sightglass frame
- 3 weld flange (resp. bolt-on flange with drilled holes)
- 4 closure knob
- 5 closure lug
- 6 hinge assembly
- 7 fastening ring (only with SKS)
- 8 o-ring seal

**Lamp Change:**

Caution: Since the unit 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 sightglass fitting! See overleaf for lamp change instructions.

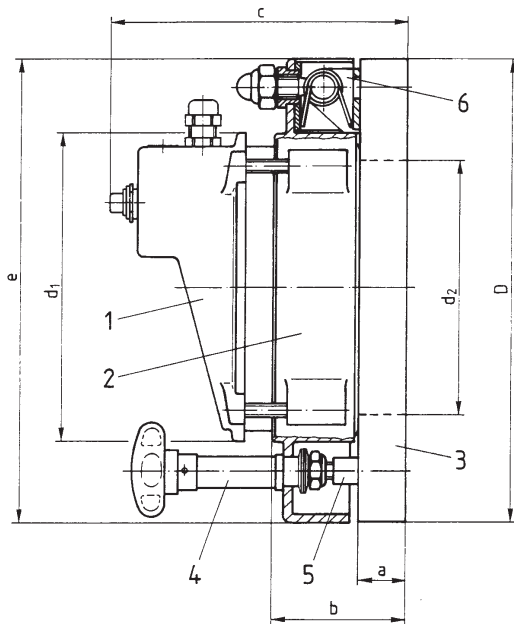


Complete unit ESKS, hinged light/sightglass on weld flange

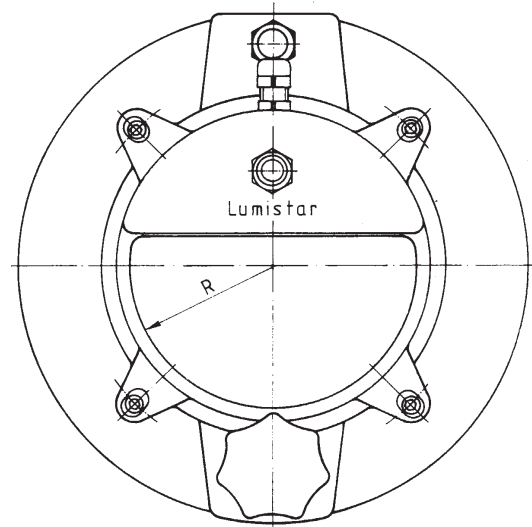


Sightglass unit SKS in open position, held up by spring tension

# Dimensions and electrical data of Lumiglas light/sightglass units type ESKS and SKS



- 1 Lumiglas luminaire
- 2 sightglass frame
- 3 weld flange
- 4 closure knob
- 5 closure lug
- 6 hinge assembly



### Parts, Construction and Materials:

- Luminaire body: Corrosion resistant die cast aluminium, painted alum.-grey (RAL 9007)
- Sightglass frame (wetted): Corrosion resistant aluminum (stainless steel optional)
- Weld flange (wetted): Carbon steel or stainless steel, e.g. 304, 321, 316
- Sightglass disc: Tempered soda-lime or borosilicate glass
- Seals: Silicone rubber
- Lock: Galvanized or painted steel; knurled knob - plastic

All dimensions in mm unless stated otherwise

Subject to change without prior notice

### Ordering Information:

Please state e.g.: Lumiglas Light/Sightglass Unit, type ESKS 150, 24V, 100W, weld flange SS 304 , max. temp 200°C

Type		ESKS 150	SKS 150	ESKS 225	SKS 225
Dimensions	a	25	25	25	25
	b	71	71	80	80
	c	185.5 (7-5/16")	90 (3-9/16")	167 (6-5/8")	100 (4")
	d 1	165	165	235	235
	e	250	250	335	335
	d 2	136 (5-3/8")	136 (5-3/8")	205 (8-1/16")	205 (8-1/16")
	D	250 (10")	250 (10")	335 (13")	335 (13")
	R	70 (2-3/4")	70 (2-3/4")	104 (4")	104 (4")
Voltage		24 V, 120V	no luminaire, just sightglass	24 V, 120V	no luminaire, just sightglass
Power intake		max. 100 W		max. 100 W	

### Instructions for Lamp Change

Note: 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 cloth/paper to ensure bare fingers do not touch the glass, insert into 2-pin socket hole and gently but firmly push in
- refit reflector, fasten luminaire 1 on frame 2 with fastening screws
- switch power to ON and check for proper function

ISO 9001 QA CERTIFICATE  
 GERMAN MANUFACTURER:  
 F.H. PAPPENMEIER AWARDED QA APPROVAL CERTIFICATE



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