

# SIGHT GLASSES, LIGHT FITTINGS





Double glazed sightglass with or without heating element



Double glazed sightglass similar to DIN 28120, DN 150, PN 16, with integrated heating element, 24 V, 50 W.

# Sightglass type: double glazed silimar to DIN 28120

For use with nominal pressures of PN 6 / PN 10 / PN 16

#### Application:

- For cases where undesired condensation and product deposits on the inner side of the glass discs have to be avoided.
- The sightglasses contain two independent glass discs built into an intermediate ring. The heating element is built into the intermediate ring.
- The sightglasses are delivered to be welded into or onto a vessel wall.
- Dimensions to DIN 28120, except the height.

# **Maximum allowed temperatures:**

- 280 °C with glass discs in borosilicate to DIN 7080
- 150 °C with glass discs in sodium silicate to DIN 8902
- Above indicated temperatures may change depending on the quality of the gaskets.

### **Nominal diameters:**

• DN 50 - DN 200 (free view from 80 mm to 225 mm).

#### **Materials:**

• Base flange: Boilerplate, stainless steels, Titanium, Hastelloy etc.

• Gaskets: KLINGERsil C 4400, Silicone, PTFE etc.

• Sightglass discs: Sodium silicate to DIN 8902

Borosilicate to DIN 7080

Intermediate ring: Boilerplate, stainless steels, Titanium, Hastelloy etc.
Cover flange: Boilerplate, stainless steels, Titanium, Hastelloy etc.

• Tightening bolts: 8.8, A2, A4

#### Electricla data:

• Supply voltage: 24 V (AC or DC)

• Nominal rating: 50 / 75 / 100 W (not regulated)

#### **Further applications:**

- **Spoiling** with cooling liquids e.g. to prevent non allowed elevated glass temperatures.
- **Leak control**, e.g. by spoiling with inert gases and concentration monitoring or measuring pressure differences

#### **Options**

- Also available without heating element.
- Security verison.

## **Possible combinations:**

• Above sightglasses may be combined with our sightglass light fittings of the series CHEMLUX\*, EdelLUX\*, fibroLUX\*, miniLUX\* or metaLUX\*. With integrated heating element, the use is restricted to safe area applications.

#### **Certificates:**

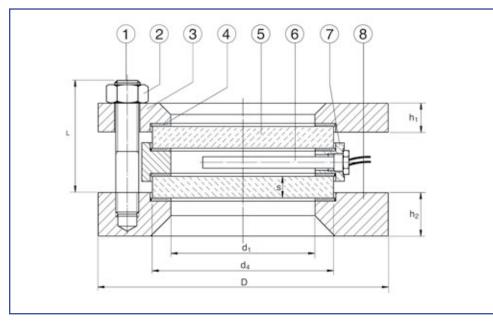
 $\bullet$  Against extra charge, material certificates to EN 10204 3.1 / 3.1 AD-W2, as well as glass certificates to EN 10204 2.2 and FDA certificate for gaskets may be supplied. Please formulate your needs already when demanding our quotation.



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Nominal diameter (DN)	Pressure rating (PN)	Viewing diameter d1	Glass discs		Base flange and cover flange				Bolts or studs / nuts			
			d4	s	D	k	h1	h2	L	Number	Size	Tightening torque (Nm)
50	6	80	100	10	165	125		30	65	4	M16	
	10			15			16		65			28
	16			15					75			32
80	6	100	125	15	200	160	18	30	75	4 8 8	M16	
	10			15			20		75			20
	16			20			20		95			23
100	6	125	150	15	220	180	18	30	75	8	M16	
	10			20			22		90			26
	16			25			22		100			30
125	6	150	175	20	250	210	18	30	85	8	M16	
	10			20			25		90			32
	16			25			25		100			34
150	6	175	200	20	285	240	18	36	85	8	M20	
	10			25			30		110			47
	16			30			30		120			54
200	6	225	250	25	340	295	20	36	100	8	M20	
	10	225		30			35		125			63



Assembly and construction							
1	Bolts or studs						
2	Nuts						
3	Cover flange						
4	Gaskets						
5	Glass discs						
6	Heating element						
7	Intermediate ring						
8	Base flange						

## **Mounting:**

After having correctly welded the base flange (pos. 8) onto or into the vessel wall, the gaskets (pos. 4), the glass discs (pos. 5), the intermediate ring (pos. 7) as well as the cover flange (pos. 3) are positioned one after the other and then the nuts (pos. 2) progressively tightened against the bolts or nuts (pos. 1). The above indicated tightening torque values (in Nm) have to be strictly respected. The nuts have to be tightened over cross. Additional information may be taken from the DIN specification 28120. The heating element (pos. 6) (50, 75 or 100 W) has to be screwed into the intermediate ring (pos. 7) and to be connected via a temperature regulation device to 24 V AC or DC supply.

1) All dimensions in mm.

2) Subjects to changes without preliminary notice.