# Sightglass light fittings for use in hazardous areas Series R 50 deH, R 100 deH, 100 deH The power package

The high performance explosion-proof types R 50 deH, R 100 deH and 100 deH represent, within their temperature classification, the most powerful sightglass light fittings presently available in Europe. Using these light fittings, new levels of extremely brilliant process illumination may be achieved. Efficient manufacturing techniques coupled with extensive component stocks, result in an interesting pricevalue ratio and short delivery times.



In hazardous areas for the illumination of large vessels, tanks, columns, silos, reactors or closed containers with light absorbing linings or contents, for TV-monitoring applications or any situation where high lighting levels are required. ATEX equipment protection level (EPL): Gb (zones 1 and 2) and Db (zones 21 and 22).

Operating conditions:

The light fittings are completely **independent** of the vessel internal pressure or vacuum. They are also **admitted** for use in food food

processing applications.

Electrical data:

Supply: 24 V, AC or DC Power ratings: See table overleaf

Enclosure protection degree: IP67, dust tight and protected against the effects of temporary immer-

sion to EN 60529 / DIN VDE 0470 part 1

Construction and materials:

Housing of corrosion resistant cast aluminium alloy (Anticorodal, <1% Mg). The housings may, on request and at extra charge, be painted with a two component acryl based colour. Cable glands M 20 x 1.5, internal connection suitable for wires up to 2.5 mm<sup>2</sup>. An additional external earth terminal of 4 mm<sup>2</sup> is provided. Built-in special reflector with halogen bulb to produce a concentrated ("spot") or a wide ("flood") beam as required. Standard version: "Spot".

Fixation systems:

The following well proven standard fixation systems are available:

- Tension spring fixation ... Z

- Flange fixation ... F

- Tilting hinge fixation ... Sch

Foot ring fixation ... N

Please refer overleaf for dimensions

Mounting:

On sightglasses to DIN 28120 / 28121 or similar:

Nominal diameter (DN)		50		80		100		125		150		200	
Sightglass to DIN 28120 (A)		Α		Α		Α		Α		Α		Α	
Sightglass to DIN 28121 (B)			В		В		В		В		В		В
Туре	Fixation												
R 50 deH / R 100 deH	N	•	•	•	•	•	•						
	Z					•		•		•			
	Sch					•		•		•		•	
100 deH	N			•	•	•	•	•	•	•	•		•
	Z									•		•	
	Sch							•		•		•	

- On screwed ("dairy" type) sightglasses similar to DIN 11851:
  On special grooved collar nuts. (On enquiry please state the nominal diameter [DN]). (Only types R 50 deH / R 100 deH with foot ring fixation "N")
- On sightflow indicators:

With the tilting hinge fixation "Sch", the foot ring fixation "N" or with specific adaptation by the customer.

Additional equipment: Remarks:

Please refer to possibilities overleaf

The light fittings may be **installed in any position without restriction**. There is **no prescription** as to the quality or materials of the supply cable.



High performance sightglass light fitting type

R 100 deHSch, 100 W, Ex d e IIC T3 Gb, Ex t IIIC

T195°C Db IP67, Ex II 2 G + D, on a basket centrifuge

High performance sightglass light fitting type 100 deHN, 100 W, 24 V, Ex d e IIC T4 Gb, Ex t IIIC T130°C Db IP67, Ex II 2 G + D, foot ring fixation on sightglass to DN 28120, PN 10, DN 125

# Survey on standard types Additional equipment Technical data Dimensions

Type designation	R 50 deH	R100deH	100 deH			
Nominal rating (W)	50	100	100			
Terminal voltage(V)	12 / 24	24	24			
Bulb	Halogen					
Socket	GY 6.35					
Weight 1) (kg)	3,6	3,6	6,7			
Ignition protection type to EN 60079-0 / 60079-1 / 60079-7 / 60079-31	Ex d e IIC Gb Ex t IIIC Db IP67					
Explosion groups	IIC / IIIC					
Temperature class	T4 /	T3 /	T4 /			
G / D <sup>2)</sup>	T130°C	T195°C	T130°C			
ATEX	Ex II 2 G + D					

- $^{1)}$  The indicated weight refers to the light fitting only . The weight of the fixations "Z", "F" and "Sch" is 0.3 kg each.
- <sup>2)</sup>  $T_a = -20$ °C / + 40°C ( $T_a$  up to + 60°C on request)



# Vibration absorbers (silent blocks)

Vibrations from the surrounding plant can have a deleterious effect on the lifetime even of halogen bulbs. Vibration absorbers made from chemically and thermally resistant silicone are offered for use with the tension spring fixation ...Z (Not available for type 100 deH).



## Transport handle

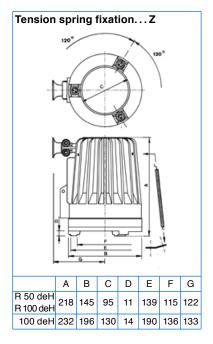
This ergonomic and insulated handle makes transport around the plant easy, and also facilitates the use of the light fitting for inspection inside a vessel on a trailing lead (for types R 50 deH / R 100 deH).

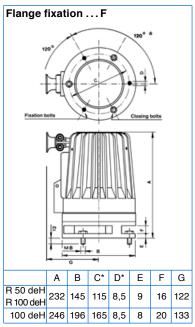


### Paint finish

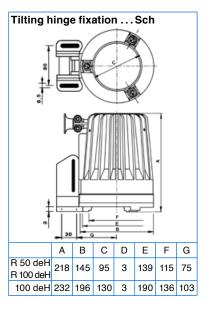
The special two component acrylic paint finish protects against corrosion in excessively agressive environments, and may satisfy customers special aesthetic requirements. RAL 9001 is standard, other colours on demand.

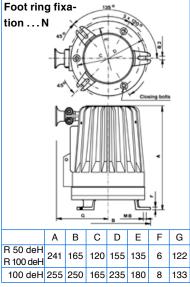
Branch office / exclusive agent:





\* Other non standard flanges on request





Non standard fixation systems on request

Do you wish for more information about our wide range of light fittings for use in hazardous and safe areas, about our range of circular sightglasses to DIN 28120/28121, screwed sightglasses similar to DIN 11851, rectangular or Dended sightglasses, pipeline flow indicators, centrally or sideways operated wipers, hinged sightglasses, spraying devices, camera systems for hazardous areas or our complete sight and lightglass units VETROLUX®? Are you interested in other types, special versions or different protection degrees? If yes, please contact us, our branch office or our local agents — it is our business! You will find the necessary indications about our sales network on the Internet.