LED lights

LED lights for flow and container sight glasses

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LED lights for Ex and non-Ex areas in many different versions

USAGE

Sight glass lamps serve as a safe process observation tool in closed containers such as tanks, reactors, or pipelines. They combine high optical clarity with powerful lighting to make processes such as fermentation, filtration, or cleaning visually controllable.

The lamps are available for explosive (Ex) and non-explosive areas, mostly in modern LED technology. Robust housings made of stainless steel or aluminum ensure durability. Semi-crescent lamps provide combined lighting and viewing solutions and can be supplemented with a sight glass wiper (type SGW).

For hygiene-critical areas, such as in dairies or biotechnology, special variants for screwed sight glasses (type 327) are available, which can be integrated into DIN 11851 fittings. Universal plug-in and folding lamps fit onto round sight glass fittings according to DIN 28120 or similar standards.

Depending on the model, sight glass lamps can achieve up to 2,300 lumens (equivalent to 10–100 W halogen). Operating voltages of 24 V DC/AC or 230 V AC allow for flexible integration. The ambient temperature can reach a maximum of 50°C, depending on the respective sight glass. Protection types up to IP68 offer maximum resistance against dust and moisture.

Housings are made of corrosion-resistant aluminum or stainless steel cast or deep-drawn stainless steel, suitable for aggressive and hygienic environments. Main application areas include chemical, pharmaceutical, and food industries, biogas, environmental, as well as oil and gas facilities. The lamps are designed for continuous operation and can optionally be equipped with push-button control, timer automation, or wipers.

INSTALLATION NOTE

Before installation, it must be ensured that the sight glass lamp is suitable for the specific application – particularly regarding pressure range, temperature, explosion protection, and hygiene requirements. Installation may only be carried out by qualified personnel in accordance with the applicable safety regulations.

The assembly usually takes place directly on a suitable sight glass fitting, e.g., according to DIN 28120 or as a screwed sight glass with a DIN 11851 connection. Care should be taken to ensure a stress-free and tight connection between the lamp and the sight glass. When using semi-circle lamps or plug-in lamps, the correct positioning for optimal illumination and visual inspection must be ensured.

Before the electrical connection, the power supply must be switched off. The electrical connection must be made according to the enclosed circuit diagram and local regulations. The permissible operating voltage (e.g., 24 V DC/AC or 230 V AC) as well as the environmental conditions (e.g., temperature range, humidity) must be strictly followed.

For lamps with additional features such as a sight glass wiper or push-button control, the corresponding connections must be integrated properly. After installation, a functional check should be carried out.

To ensure a permanently clear view and optimal function, regular cleaning and adherence to the manufacturer's maintenance instructions are recommended.

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