

LID43.03

LED light emitter

Data Sheet

Function:	LED light emitter for LS42 d.c. light and LS43/44 alternating light sensors	
Mechanical design:	Metal housing with printed circuit board	
Connection:	3-pole M8 connector	
Dimensions/Weight:	ØxH Ø99mm x 22mm	Weight: 0.5 kg

Application

The LED light emitter may be used as a d.c. light emitter (jumper on J6) for d.c. light sensor LS42 or as an alternating light emitter (2kHz; jumper on J5, factory setting) for alternating light sensors LS43 and LS44 respectively.

View



Functional description

The LED light emitter is supplied with a controlled 24VDC supply voltage. Using the installed electronics, the LEDs are activated.

With the internal light control, temperature and ageing impacts are largely compensated.

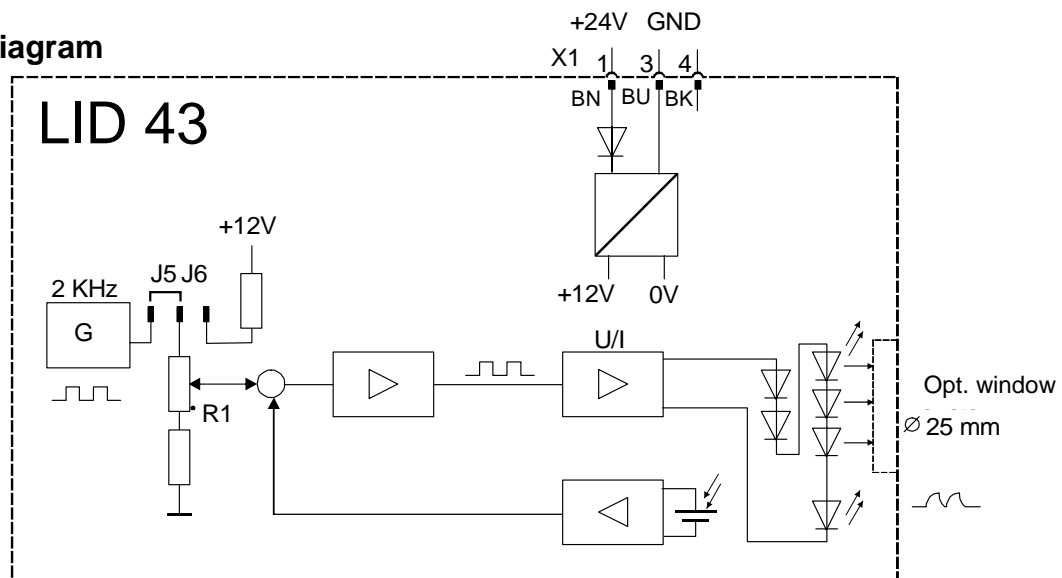
The reference value for the type of light (i.e., d.c. light or alternating light) is internally selected by placing the internal jumper (J6 or J5). J5 is factory-set (alternating light emitter). The reference value (luminous flux) can be modified using the internal potentiometer R1 (accommodated behind the cover, accessible from outside) to adjust the factory setting by a factor between 0.6 and 2.

The light emission window has a diameter of approx. 20mm.

The angle of the LED light emitter should be aligned vertically with respect to the measuring receiver; deviations of +/- 3 degrees are permissible.

When using measuring and reference receivers (LS43 and LS44), the angular position of the reference receiver must not deviate more than +/- 10 degrees from the perpendicular line of the LED light emitter!

Block diagram



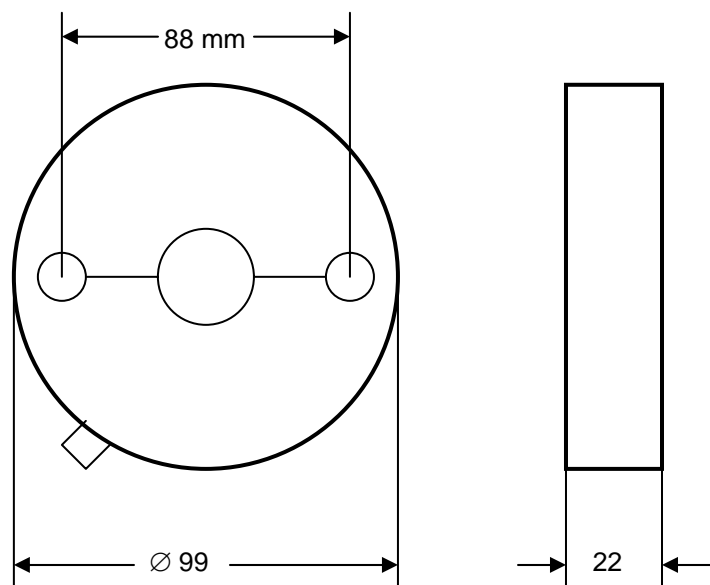
Technical data

Supply voltage :	24VDC controlled (min. 21V to max. 28V, reverse voltage protection)
Supply current :	approx. 30mA (for 24VDC)
Usable light emission aperture :	approx. \varnothing 20mm
Internal operating frequency :	for d.c. light : 0Hz; jumper on J6 for alternating light : 2kHz; jumper on J5
Ambient temperature :	0°C to +50°C
Storage temperature :	-15°C to +70°C
Type of protection :	IP 65
Max. connection cross-section :	M8 plug 3x0.25 mm ²
Max. cable length :	100m
Accessories :	connecting cable with plug

Dimension drawing

See also LID43.03/A

Fastening screws
2xM4x30 , DIN 7984 , A2P



Type code

