



LSV

Features

- Active control of artificial lighting
- 0-10Vdc or/ and on/off output
- Maximum energy efficiency
- Three measurement ranges:
0-500lux
0-1000lux
0-20000lux
- Optimise light levels
- Precalibrated in Lux for ease of installation
- Special calibration on request

Technical Data

Power Supply	24Vac/dc current consumption max.10mA at 24Vdc
Sensor	photodiode
Measuring range	0-500Lux/1000lux/20000lux Other ranges optional as 0-100lux
Output	0-10Vdc (linearised) or/and potential-free normally-open contact 24V with adjustable switching threshold
Ambient temp.	0/+50 degree
Electrical connect.	0.14...1,5mm ² via terminal screws on circuit board
Measuring error	< +/- 10% of final value
Temperature drift	< +/- 5% of final value / 10K
Enclosure	plastic, Busch-Jaeger Reflex Si (RAL 9010)
Installation	in in-wall flush box dia 55mm
Electrical connect	0,14-2,5mm ² via plug terminals on PCB
Protection class	III according to EN 60 730
Protection type	IP20 according to IEC529
Standards compatibility	CE conformity, electromagnetic according to EN 61326+A1+A2 EMC directive 89/336/EWG

Application

The LSV is an internal light level transmitter designed for use in the active control of artificial lighting.

The LSV is made to optimise light levels and to achieve maximum energy.

The LSV is build and dseigned for outdoor facilities.

The high levels of lux is used for sunshade systems.

The light level increases or decreases automatically via control equipment depending on the level of light alternative swicth off/ on depenping on lux value.

Design Features

The LSV transmitters use photo-diode cells to detect light levels in a selection of lux ranges, providing a linear 0-10Vdc or on/off

Ordering Codes

LSV 500	Surface Light Level 0-10Vdc 0-500lux
LSV 1000	Surface Light Level 0-10Vdc 0-1000lux
LSV 20KL	Surface Light Level 0-10Vdc 0-20000lux
LSV 500S	Surface Light Level 0-10Vdc and on/off 0-500lux
LSV 1000S	Surface Light Level 0-10Vdc and on/off 0-1000lux
LSV 20KLS	Surface Light Level 0-10Vdc and on/off 0-20000lux

Other options on request



Surface Light Level Transmitter

LSV

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Installation and Connection Details

All connections to BEMS controllers, data recorders etc. should be made using screened cable.

Normally, the screen should be earthed at one end only (usually the controller end) to avoid earth hum loops which can create noise.

Low voltage signal and supply cables should be routed separately from high voltage or mains cabling.

Separate conduit or cable tray should be used.

Where possible, the controller's earth should be connected to a FUNCTIONAL EARTH, rather than the mains safety earth.

This will provide better immunity to high frequency noise.

Most modern buildings have a separate earth for this purpose.

Operational Data

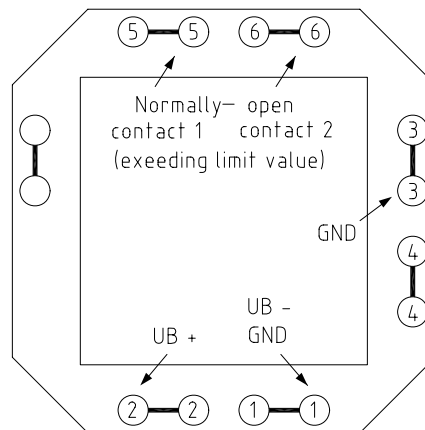
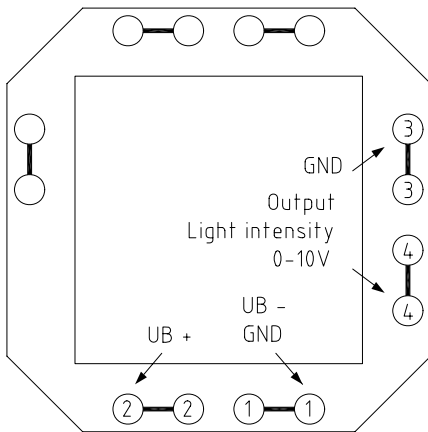
Typical Daylight Conditions:

Dusk	15-20lux
Average daylight	2000lux
Bright sunlight	20000+lux

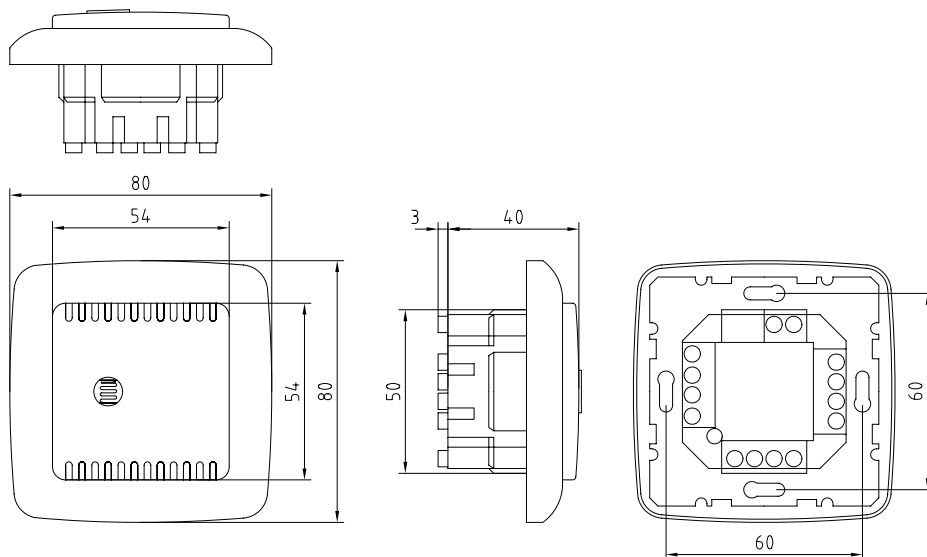
Service Illuminations:

Minimum for outdoor areas	25lux
Exterior walkways & car parks	50lux
Industrial circulation areas, stores etc	150lux
Minimum task lighting	200lux
General offices & retail areas	500lux
Fine task, machine operation, precision ass.	1500lux

Connecting Diagram



Dimensions



GND terminals (1) and (3) are connected on the circuit board