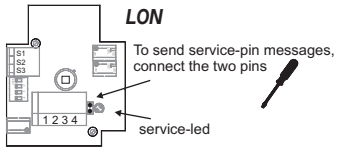
Ceiling light sensor
LDF...

Thermokon Sensortechnik GmbH

Mounting Advice



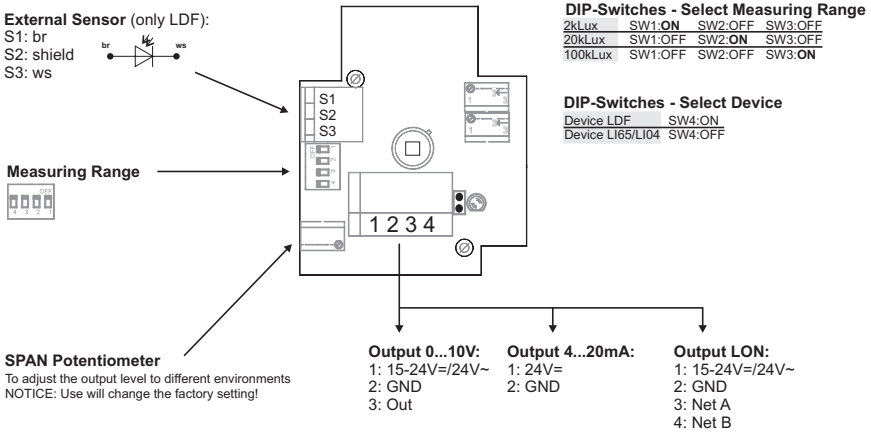
The cable sensor is fixed on intermediate ceilings by means of screws. For mounting, cable sensor and electronics can be separated. Tightening material is not included in delivery range.

Please also note the general remarks in our INFOBLATT THK.

Optional Accessories

(D+S) 1 set (each 2 pcs.) raw plugs and screws

Terminal Connection Plan



DIP-Switches - Select Measuring Range

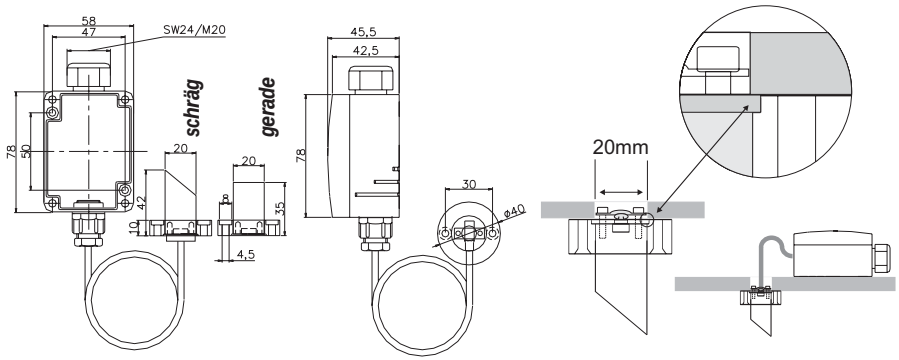
2kLux	SW1:**ON**	SW2:OFF	SW3:OFF
20kLux	SW1:OFF	SW2:**ON**	SW3:OFF
100kLux	SW1:OFF	SW2:OFF	SW3:**ON**

DIP-Switches - Select Device

Device LDF	SW4:ON
Device LI65/LI04	SW4:OFF

Dimensions (mm)

LDF LRA/LRV/LON



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18400...

Ceiling-Light Sensor LDF

Ceiling light sensor
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CE

Application

Sensor for light measurement in rooms and offices, specially constructed for installations in ceilings with prism for light control . Designed for locking-on control and display systems. The sensor has an integrated colour filter (green filter), which is adapted to the sensitivity of human eyes.

Types Available

Model	*Type*	*Method of measurement (output)*
LDF	LRA	active, 4...20mA
	LRV	active, 0...10V
	LON	active, FTT10

Subject to technical alteration - Issue date 03.02.03

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Norms and Standards

Product safety:	EN60730-1 Automatic electr. control devices for domestic use and similar applications
EMV:	EN60730-1 (2000) Interference resistance EN60730-1 (2000) Emitted interference
CE-Conformity:	89/336/EWG Electromagnetic compatibility

Technical Data

Type LRA:

Measuring element:	BPW21
Sensitivity of sensor[1]:	LRA1: 0...2kLux LRA2: 0...20kLux
Accuracy[2]:	Typ. +/-5% of measuring range
Prism for light control:	Acrylic glass, straight or diagonal version
Operating voltage:	15-24V=
Power consumption:	max. 20mA
Load:	<500 Ohm
Sensor wire L:	1m shielded(standard), max. length 2m
Clamp:	2pole (two-wire), terminal strip max. 1,5mm²
Housing:	(78mm) Polyamide, colour white
Tmax[3]:	<70°C
Protection:	Connection head IP65
Cable entry:	Single entry, M20 wire conductor with max. D=8mm

Type LRV:

Measuring element:	BPW21
Sensitivity of sensor[1]:	LRV1: 0...2kLux LRV2: 0...20kLux
Accuracy[2]:	Typ. +/-5% of measuring range
Prism for light control:	Acrylic glass, straight or diagonal version
Operating voltage:	15-24V=/24V~
Power consumption:	max. 15mA/24V=
Load:	min. 5kOhm
Sensor wire L:	1m shield (standard), max. length 2m
Clamp:	3pole (three-wire), terminal strip max. 1,5mm²
Housing:	(78mm) Polyamide, colour white
Tmax[3]:	<70°C
Protection:	Connection head IP65
Cable entry:	Single entry, M20 for wire conductor with max. D=8mm

Type LON:

Measuring element:	BPW21
Sensitivity of sensor[1]:	LRL1: 0...2kLux LRL2: 0...20kLux
Accuracy[2]:	Typ. +/-5% of measuring range
Prism for light control:	Acrylic glass, straight or diagonal version
Operating voltage:	15-24V=/24V~
Power consumption:	max. 30mA/24V=
Sensor wire L:	1m shielded (standard), max. length 2m
Clamp:	4pole (four-wire), terminal strip max. 1,5mm²
Housing:	(78mm) Polyamide, colour white
Tmax[3]:	<70°C
Protection :	Connection head IP65
Cable entry:	Single entry, M20 for wire conductor with max. D=8mm Double entry, M20 for 2-wire conductor with max. D=7mm

[1] Sensitivity of sensor without prism. Adjustable by means of DIP-switch on the transducer.
[2] Accuracy of transducer without prism. Manufacturer's calibration is made in the 2kLux range. Operating voltage 24V= and 21°C (+/-5K) ambient temperature. Please take care that the transducer should generally be operated in the measuring range centre, as increased deviations could occur on the measuring range end points. In addition the ambient temperature of the transducer electroncis should be kept constant.
[3] Maximum permissible ambient temperature housing, humidity (without dew permeation) <80%r.F.

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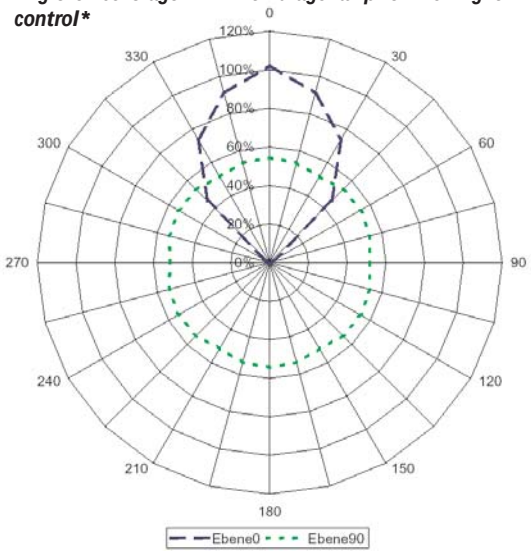
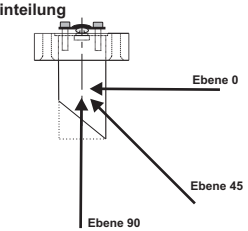
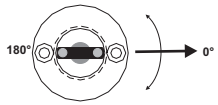
Angle of coverage LDF with diagonal prism for light control*



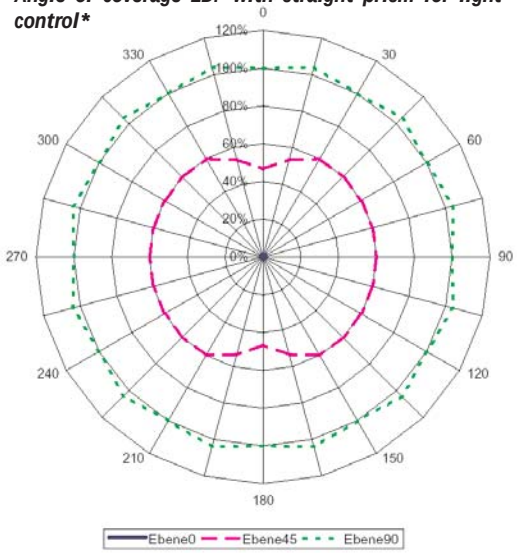
Ebeneneinteilung



Richtungseinteilung



Angle of coverage LDF with straight prism for light control*



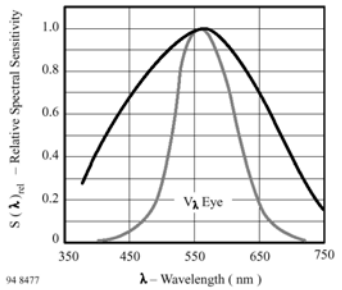


Figure 5. Relative Spectral Sensitivity vs. Wavelength

[*] Display of coverage angle only as approximate value. Depending on the installation situation, the indication of real values can deviate. .