

## LED-Steep roof light fitting for Ex-Zone 1/21 Series e821...



### Applications:

Hazardous areas of Zones 1 (gas) and 21 (dust), e.g. cleanrooms, paint shops and spray booths.

### Design:

**Housing:** Sheet steel, powder coated in light grey (RAL 7035), silicone foam gasket.

**Glass cover:** Impact resistant safety glass pane, frameless / hinged.

**Central locking system:** Operated by a 5mm allen key, internal hinges on the opposite side.

**Reflector:** Hinged; white painted sheet steel; detachable, carrying the encapsulated LED-modules and glare limitation modules.

**Connection:** 3 poles up to 4mm<sup>2</sup>.

**Cable entries:** 3 x M25 x 1,5 (2 glands - one of them is plugged and 1 screw plug).

**Standard:** Facing downwards or forwards.

**Mechanical installation:**

Mounting accessories see spare parts/ accessories.

### Technical Data:

**LED:** Line modules appr. 6,500K, CRI > 80, lifetime L<sub>80</sub> > 100.000h, L<sub>90</sub> > 80.000h at 25°C ambient temperature, lifetime L<sub>80</sub> > 100.000h at max. ambient temperature

**ECG:** 220-240V AC/DC, 0 or 50/60Hz, overvoltage, overload and short circuit protection

### Options:

- 4,500K, light colour 845
- for connection to group or central battery (light fittings of version ZB only) or emergency mains respectively
- with monitoring module for monitoring the individual light fitting
- housing made from stainless steel, painted

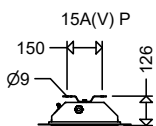
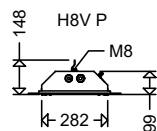
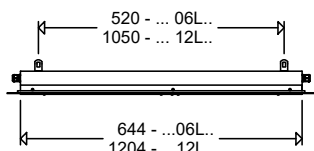
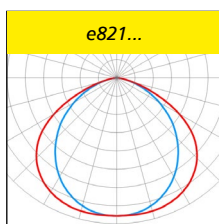
- prepared for 5-core cable looping system
- with through wiring system
- Installation in thermally insulated ceilings (acc. to EN60598)
- for higher ambient temperatures up to +65°C depending on version



STAINLESS STEEL  
corrosion resistant

### Note:

This light fitting is not suitable for application in areas with permanent high humidity in combination with only short periods of operation, such as sewage or stormwater retention tanks or water treatment plants.



### Product highlights:

- extremely flat and robust design
- innovative LED encapsulation with high transmission rate
- perfect protection of the LED from mechanical or electrostatic damages with at the same time homogeneous illumination with glare limitation modules, no individual light points visible, comfortable perception of light, excellent glare limitation
- high colour rendering index CRI > 80, according to the workplace guide lines suitable for nearly all plant locations
- comfortable central locking system with internal hinges
- separate, frame for recessed installation or a swivel arm mounting system can easily be installed at a later stage, (frame for recessed installation not suitable for stainless steel version)
- ECG and reflector with LED-modules **replacable by qualified personnel on-site**
- Suitability for paint booths LABS-tested according to VDMA 24364-C2-L



Article no.	Type	Power consumption [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Ta max [°C]	Substitute for *	Weight [kg] (without packing material)
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## e821...



### Looping the cable on one side:

All light fittings of series e821... have got 2 cable entries on one small side of the housing for cable looping instead of the through wiring system. (3-pole looping standard, 5-pole looping at additional cost)

### EC-Type Examination Certificate:

IBExU 20 ATEX 1017

### Other approvals:

IECEx IBE 19.0032

**Ignition protection:** eb

### Marking:

II 2 G Ex eb mb q IIC T4 Gb (Zone1)

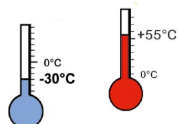
II 2 D Ex tb III C T80°C Db (Zone 21)

**Rated voltage:** 220-240V AC/DC, 0 or 50/60Hz.

### Permissible ambient temperature:

-30°C up to +55°C

The values given are for versions with through wiring.



**Properties, limitations and details for controlling LED-light fittings:**

See "Technical Supplement"

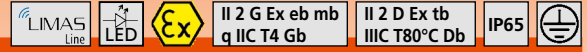
All data are correct at the time of printing. Actual technical data can be found under [www.schuch.de](http://www.schuch.de).

82100 0001	<b>e821 06L22</b>	15	2.100	140	55	2 x 18W	7,7
82100 0002	<b>e821 06L42</b>	28	4.110	147	55	2 x 36W	7,9
82100 0003	<b>e821 06L60</b>	40	5.600	140	55	2 x 58W	7,9
82100 0050	<b>e821 12L42</b>	28	4.260	152	55	2 x 36W	13,6
82100 0051	<b>e821 12L60</b>	40	5.900	148	55	2 x 58W	14,0
82100 0052	<b>e821 12L85</b>	54	8.350	155	55	> 2 x 58W	14,0
82100 0053	<b>e821 12L120</b>	79	11.470	145	55	> 3 x 58W	14,0

\* The given information is for rough orientation only. In each individual case a lighting calculation is necessary.

Article no.	Type	Power consumption [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Ta max [°C]	Substitute for *	Weight [kg] (without packing material)
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## e821... DIMD



### dimable via DALI interface

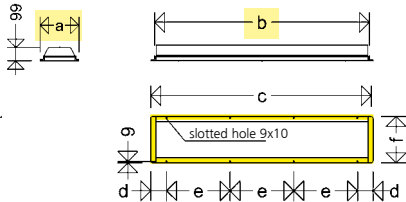
**Design:**  
Same as standard version, but with DALI2-compatible ECG and 2 additional clamping points, marked with DA; the polarity does not matter:  
Compatible with LIMAS Line Light Management System.

**Note:**  
The conducting wires to the control input must be mains voltage stable and can be integrated in the connection cable.

82100 0005	<b>e821 06L42 DIMD</b>	28	4.110	147	55	2 x 36W	7,9
82100 0006	<b>e821 06L60 DIMD</b>	40	5.600	140	55	2 x 58W	7,9
82100 0054	<b>e821 12L42 DIMD</b>	28	4.260	152	55	2 x 36W	13,6
82100 0055	<b>e821 12L60 DIMD</b>	40	5.900	148	55	2 x 58W	14,0
82100 0056	<b>e821 12L85 DIMD</b>	54	8.350	155	55	> 2 x 58W	14,0
82100 0057	<b>e821 12L120 DIMD</b>	79	11.470	145	55	> 3 x 58W	14,0

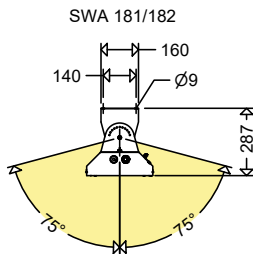
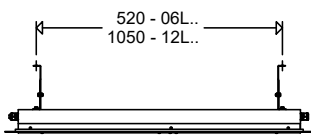
\* The given information is for rough orientation only. In each individual case a lighting calculation is necessary.

### Installation dimensions



Type	a	b	c	d	e	f
<b>EB 82. 06L</b>	302	660	710	55	300	348
<b>EB 82. 12L</b>	302	1224	1270	125	340	348

**Attention:** When planning the opening for recess installation please allow additional clearance for the cable glands.



Swivel range 150°

Further accessories as well as carrier rail systems and through wiring systems are available.

## Frame for Recessed Installation

**retrofit possible!**

Light fittings of series e821... can be equipped with a frame even at a later stage.

Mounting by means of M5 bolts to the long sides of the housing (see drawing).

Article No.	Type	
18091 0020	<b>EB 82. 06L</b>	frame for narrow housing, e821 06L, nD822 06L
18091 0021	<b>EB 82. 12L</b>	frame for narrow housing, e821 12L, nD822 12L

## Swivel Arm Mounting System

**retrofit possible!**

Light fittings of series e821... can be equipped with a swivel arm mounting system at any time.  
The swivel arms are fixed to the suspen-

sion points at the upper side of the housing. Swivel range: ± 75° (see dimensions in diagram).

Article No.	Type	
18092 0001	<b>SWA 181/182</b>	for all wattages consisting of: 2 swivel arms with bolts M8

## Accessories / Spare Parts

Article No.	Type	
<b>Spare glasses</b>		
82101 9001	<b>821 06L</b>	spare glass for e821 06L, nD822 06L
82101 9002	<b>821 12L</b>	spare glass for e821 12L, nD822 12L
<b>Cable entries/cable glands</b>		
90117 9006	<b>2537 G</b>	ex-protected gland of size M25 x 1,5 with nut
90119 9001	<b>2539 G</b>	ex-protected gland of size M25 x 1,5 with nut and plug
90118 9006	<b>2538 G</b>	ex-protected plug of size M25 x 1,5 with nut
<b>Mounting material</b>		
90001 0002	<b>H8V P</b>	2 suspension eyes, stainless steel
90000 0002	<b>15A P</b>	2 ceiling brackets, hot galvanized steel
90032 0002	<b>15AV P</b>	2 ceiling brackets, stainless steel
26000 0005	<b>WD 45 P</b>	2 wall/ceiling angle, steel