

# ExeLED 1

## LED-Light Fitting for Ex-Zone 1/2/1

### Series e865...

#### Applications:

Hazardous locations of zones 1/2 (gas) and 21/22 (dust).

#### Design:

**Housing:** Glass fibre reinforced polyester resin.

**Cover:** Injected polycarbonate, frosted (F), silicone gasket.

**Closure:** Stainless steel clips (KE), two of them as safety clip (KES), to be opened with screwdriver only.

**Reflector:** Sheet Steel, painted, carrying the encapsulated LED-modules, clipped into the cover, removable as a unit.

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

**Cable entries:** 3 entries M25 x 1.5, (2 glands - one of them is plugged)

**Standard:** Facing downwards or forwards.

**Mechanical installation:**

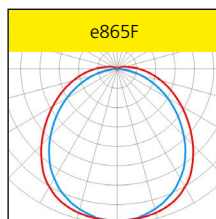
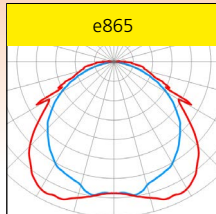
Mounting accessories see spare parts/ accessories.

#### Technical Data:

**LED:** Line modules appr. 6,500 K, CRI > 80, service life L<sub>80</sub> > 100,000 h at max. ambient temperature, L<sub>90</sub> > 85,000 h (06L...) at 25 °C ambient temperature, L<sub>90</sub> > 80,000 h (12L...) at 25 °C ambient temperature  
**ECG:** 220-240 V AC/DC, 0 or 50/60 Hz, overvoltage, overload and short circuit protection

#### Options:

- 4,500K; light colour (845)
- through-wiring (DV)
- for higher ambient temperatures temperatures (H70), up to +70 °C
- only for explosive dust areas zone 21
- for connection to central emergency supply systems (ZB)
- for connection to central emergency supply systems with integrated monitoring module



#### Product highlights:

- the light fittings are suitable for use in food areas IFS
- innovative encapsulation with high transmission rate
- LED-Modules protected from mechanical or electrostatic damages by sandwich design of reflector and cover
- homogeneous illumination by using frosted diffusers no individual light points visible, comfortable perception of light, brilliant glare limitation
- high colour rendering index CRI > 80, according to the workplace guide lines suitable for nearly all plant locations
- FastFix mounting, system for variable mounting distances and easy installation (retaining clips HK865 P) without opening the fitting
- sustainable, control gear and reflector with LED-modules replaceable by qualified personnel on-site
- the light fittings are suitable for use in food areas (IFS/HACCP), see chapter 9.1 in the „Technical Supplement“

| Article no. | Type | Connected load [W] | Luminous flux [lm] | Luminous efficacy [lm/W] | Cover frosted | Cover clear | Ta max [°C] | Substitute for * | Weight [kg] (without packing material) |
|-------------|------|--------------------|--------------------|--------------------------|---------------|-------------|-------------|------------------|----------------------------------------|
| e865...     |      |                    |                    |                          |               |             |             |                  |                                        |

e865...



II 2 G Ex eb mb  
q IIC T4 Gb

II 2 D Ex tb  
IIIC T80°C Db

IP66



#### EU-Type Examination Certificate:

ATEX: IBEExU 16 ATEX 1008X

#### Other approvals:

IECEx: IECEx IBE 16.0010X

Ignition protection: eb

#### Marking:

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

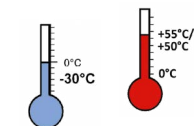
II 2 D Ex tb IIIC T80°C Db (Zone 21)

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

#### Permissible ambient temperature:

-30 °C up to see article table

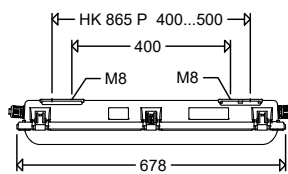
The values apply to versions with through-wiring.



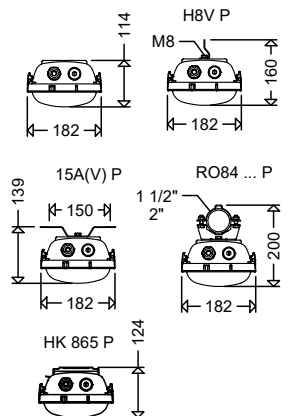
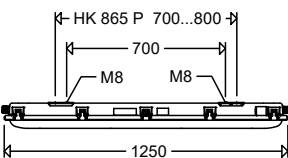
#### Note:

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.

#### e865 06L...



#### e865 12L...



Pole mount with pipe clamps RO84 ....P

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).

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

|            |             |    |       |     |   |   |    |           |     |
|------------|-------------|----|-------|-----|---|---|----|-----------|-----|
| 86500 0050 | e865F 06L22 | 15 | 2.170 | 145 | • | • | 55 | 2 x 18W   | 4,6 |
| 86500 0051 | e865F 06L42 | 28 | 4.120 | 147 | • | • | 55 | 2 x 36W   | 4,7 |
| 86500 0052 | e865F 06L60 | 40 | 5.700 | 143 | • | • | 50 | 2 x 58W   | 4,7 |
| 86500 0001 | e865F 12L42 | 28 | 4.360 | 156 | • | • | 55 | 2 x 36W   | 6,7 |
| 86500 0002 | e865F 12L60 | 40 | 6.020 | 151 | • | • | 55 | 2 x 58W   | 6,7 |
| 86500 0003 | e865F 12L85 | 54 | 8.620 | 160 | • | • | 50 | > 2 x 58W | 7,0 |

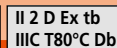
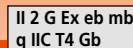


#### Looping the cable on one side:

All light fittings of series e865... have got 2 cable entries on one small side of the housing for cable looping instead of the through-wiring system.

| Article no. | Type | Connected load [W] | Luminous flux [lm] | Luminous efficacy [lm/W] | Cover frosted | Cover clear | Ta max [°C] | Substitute for * | Weight [kg] (without packing material) |
|-------------|------|--------------------|--------------------|--------------------------|---------------|-------------|-------------|------------------|----------------------------------------|
|-------------|------|--------------------|--------------------|--------------------------|---------------|-------------|-------------|------------------|----------------------------------------|

## e865... DIMD



dimmable via DALI interface

#### Design:

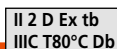
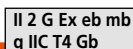
Same as standard version, but with DALI2 compatible ECG and 2 additional clamping points, marked with DA. Compatible with LIMAS Line BASIC/PRO Light Management System.

#### Note:

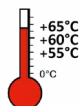
The conducting wires to the control input must be mains voltage stable and can be integrated in the connection cable.

|            |                  |    |       |     |   |  |    |           |     |
|------------|------------------|----|-------|-----|---|--|----|-----------|-----|
| 86500 0952 | e865F 06L42 DIMD | 28 | 4.120 | 147 | • |  | 55 | 2 x 36W   | 4,7 |
| 86500 0953 | e865F 06L60 DIMD | 40 | 5.700 | 143 | • |  | 50 | 2 x 58W   | 4,7 |
| 86500 0914 | e865F 12L42 DIMD | 28 | 4.360 | 156 | • |  | 55 | 2 x 36W   | 6,7 |
| 86500 0913 | e865F 12L60 DIMD | 40 | 6.020 | 151 | • |  | 55 | 2 x 58W   | 6,7 |
| 86500 0903 | e865F 12L85 DIMD | 54 | 8.620 | 160 | • |  | 50 | > 2 x 58W | 7,0 |

## e865... H..

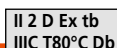
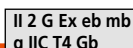


for high temperature <sup>1)</sup>

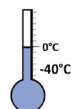


|            |                 |    |       |     |   |  |    |         |     |
|------------|-----------------|----|-------|-----|---|--|----|---------|-----|
| 86500 0053 | e865F 06L22 H65 | 15 | 2.170 | 145 | • |  | 65 | 2 x 18W | 4,6 |
| 86500 0054 | e865F 06L42 H60 | 28 | 4.120 | 147 | • |  | 60 | 2 x 36W | 4,7 |
| 86500 0055 | e865F 06L60 H55 | 40 | 5.700 | 143 | • |  | 55 | 2 x 58W | 4,7 |
| 86500 0910 | e865F 12L42 H65 | 28 | 4.360 | 156 | • |  | 65 | 2 x 36W | 6,7 |
| 86500 0902 | e865F 12L60 H65 | 40 | 6.020 | 151 | • |  | 65 | 2 x 58W | 6,7 |

## e865... T40



for low ambient temperatures down to -40 °C



|            |                 |    |       |     |   |  |    |         |     |
|------------|-----------------|----|-------|-----|---|--|----|---------|-----|
| 86500 0065 | e865F 06L22 T40 | 15 | 2.170 | 145 | • |  | 55 | 2 x 18W | 4,6 |
| 86500 0066 | e865F 06L42 T40 | 28 | 4.120 | 147 | • |  | 55 | 2 x 36W | 4,7 |
| 86500 0023 | e865F 12L42 T40 | 28 | 4.360 | 156 | • |  | 55 | 2 x 36W | 6,7 |
| 86500 0024 | e865F 12L60 T40 | 40 | 6.020 | 151 | • |  | 55 | 2 x 58W | 6,7 |

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

<sup>1)</sup> through-wiring or looping the cable is not permissible.

**Fasteners**KE/KES VE10  
KES PKE/KES G2 VE10  
KES G2 P**Pipe clamps**2 pipe clamps 1 ½",  
stainless steel, with  
support2 pipe clamps 2",  
stainless steel, with  
support**Accessories / Spare Parts**

| Article No.              | Type                  |                                                                                                                                                            |
|--------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Spare diffusers</b>   |                       |                                                                                                                                                            |
| 86601 9001               | <b>ABD 8654F</b>      | cover, frosted PC diffuser, for e864 12 ..., e865 12..., nD866 12..., nD867 12 ...                                                                         |
| 86601 9014               | <b>ABD 8652F</b>      | cover, frosted PC diffuser, for e864 06 ..., e865 06 ..., nD866 06 ..., nD867 06 ...                                                                       |
| 86601 9000               | <b>ABD 8654</b>       | cover, diffuser PC clear, for e864 12 ..., e865 12 ..., nD866 12 ..., nD867 12 ...                                                                         |
| <b>Fasteners</b>         |                       |                                                                                                                                                            |
| 90055 9004               | <b>KE/KES VE10</b>    | stainless steel, incl. 2 safety clips (packing unit 10 pcs.)<br>see picture on the left, for e 865 12L.. until year of manufacture 2020                    |
| 90055 9005               | <b>KES P</b>          | 1 pair of safety clips stainless steel for e865 12L.. until year of manufacture 2020                                                                       |
| 90055 9007               | <b>KE/KES G2 VE10</b> | stainless steel, incl. 2 safety clips (packing unit 10 pcs.)<br>see picture on the left, for e 865 12L.. from year of manufacture 2020 and for e 865 06L.. |
| 90055 9006               | <b>KES G2 P</b>       | 1 pair of safety clips stainless steel for e865 12L.. from year of manufacture 2020 and for e865 06L..                                                     |
| <b>Glands/breather</b>   |                       |                                                                                                                                                            |
| 90117 9006               | <b>2537 G</b>         | ex-protected plastic cable gland M25 x 1,5 with nut                                                                                                        |
| 90118 9006               | <b>2538 G</b>         | ex-protected plastic plug M25 x 1,5 with nut                                                                                                               |
| 90119 9001               | <b>2539 G</b>         | ex-protected plastic cable gland M25 x 1,5 with blanking plug and locknut                                                                                  |
| 90259 9000               | <b>KS25 G EX</b>      | ex-breather M25 x 1,5                                                                                                                                      |
| <b>Mounting material</b> |                       |                                                                                                                                                            |
| 86501 9003               | <b>HK 865 P</b>       | 2 retaining clips for variable mounting in indoor areas                                                                                                    |
| 90001 0002               | <b>H8V P</b>          | 2 suspensions eyes with bolts, stainless steel                                                                                                             |
| 90000 0002               | <b>DS 15A P</b>       | 2 ceiling brackets, hot galvanized steel                                                                                                                   |
| 90032 0002               | <b>DS 15AV P</b>      | 2 ceiling brackets, stainless steel                                                                                                                        |
| 90037 0004               | <b>RO84 112 A P</b>   | 2 pipe clamps 1 ½", stainless steel, with support also for pole mounting                                                                                   |
| 90038 0004               | <b>RO84 2 A P</b>     | 2 pipe clamps 2", stainless steel, with support also for pole mounting                                                                                     |
| 26000 0008               | <b>WW 26 L P</b>      | 2 wall mounting angles, hot galvanized steel                                                                                                               |
| 26000 0002               | <b>WW 26 30 P</b>     | 2 wall mounting angles 30°, hot galvanized steel                                                                                                           |
| 26000 0003               | <b>WW 26 45 P</b>     | 2 wall mounting angles 45°, hot galvanized steel                                                                                                           |