

Small LED-Light Fittings for Ex-Zone 1/21 Series e855...



Applications:

Hazardous areas in Zones 1/2 (gas) and 21/22 (dust) as standard illumination for small rooms and above doors, i.e. as information or escape route lighting with pictograms.

Design:

Housing: Glass fibre reinforced polyester resin.

Diffuser: Clear polycarbonate, frosted, detachable, silicone gasket.

Reflector: Sheet steel, painted white,

detachable, carrying the encapsulated LED-modules and protection cover.

Central locking system: Operated by a hexagonal box spanner 13mm.

Connection: Prepared for looping the mains cable. Terminal L1+N+PE; up to 2,5mm².

Cable entries: 2 entries M25 x 1.5 at one of the front side (2 cable glands, 1 with blanking plug).

Mounting: Side fixing brackets allow direct mounting on to walls or ceilings.

Technical Data:

LED: Line modules appr. 6,500K, CRI > 80, service life L₈₀ > 100.000h at max. ambient temperature, L₉₀ > 95.000h at 25°C ambient temperature

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

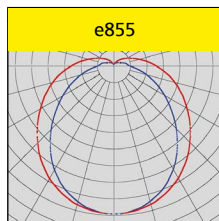
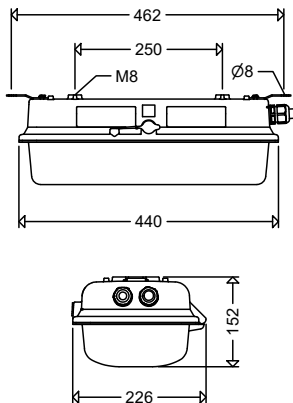
Options:

- 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

- Control gear with dimming function via DALI2-compatible interface, suitable for the LIMAS Line BASIC/PRO Light Management System (DIMD)
- preparation for a 5-core looping

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 robust construction of housing and diffuser
- comfortable central locking mechanism for easy maintenance
- innovative encapsulation with high transmission rate
- LED protecting cover against ESD and mechanical damage
- homogeneous illumination due to frosted covers on the reflector for glare limitation, 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
- sustainable, control gear and reflector with LED-modules replaceable by qualified personnel on-site



Article no.	Type	Connected load [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Suitable for pictogram	Ta max [°C]	Substitute for *	Weight [kg] (without packing material)
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e855...



II 2 G Ex eb mb
op is q II C T4 Gb

II 2 G Ex db eb mb
op is q II C T4 Gb

II 2 D Ex op is tb
IIIC T80°C Db

IP66



EU-Type Examination Certificate:

IBExU 17 ATEX 1132

Other approvals:

IECEx IBE 17.0037

Type of protection: eb (increased safety)

Marking:

II 2 G Ex eb mb op is q II C T4 Gb (Zone 1)

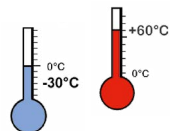
II 2 D Ex op is tb IIIC T80°C Db (Zone 21)

Rated Voltage: 220-240V AC, 176-275V

DC, 50/60Hz

Permissible ambient temperature:

-30°C up to see article table



85500 0007	e855F L05	5	510	102	60	1 x 8W	5,0
85500 0001	e855F L10	10	1.060	106	60	2 x 8W	5,0
85500 0002	e855F L20	18	2.050	114	60	2 x 18W	5,1
85500 0003	e855F L10 DIMD	10	1.060	106	60	2 x 8W	5,0
85500 0004	e855F L20 DIMD	18	2.050	114	60	2 x 18W	5,1

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

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.

Article no.	Type	Connected load [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Suitable for pictogram	Ta max [°C]	Substitute for *	Weight [kg] (without packing material)
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e855... ZB		II 2 G Ex eb mb op is q II C T4 Gb	II 2 G Ex db eb mb op is q II C T4 Gb	II 2 D Ex op is tb IIIC T80°C Db	IP66	
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for connection to central power supply unit

EU-Type Examination Certificate: IBExU 17 ATEX 1132
 Other approvals: IECEx IBE 17.0037
 Type of protection: eb (increased safety)
 Marking: II 2 G Ex eb mb op is q IIC T4 Gb (Zone 1)
 II 2 D Ex op is tb IIIC T80°C Db (Zone 21)

Rated Voltage: 220-240V AC, 176-275V DC, 50/60Hz
 Permissible ambient temperature: -30°C up to see article table

85500 0009	e855F L05 ZB	5	510	102	•	60	1 x 8W	5,0
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* The given information is for rough orientation only. In each individual case a lighting calculation is necessary.



Photo: BASF

Explosion protected Light Fittings

Accessories / Spare Parts



Self-adhesive pictograms for identification of escape routes acc. to DIN EN ISO 7010 and ASR A1.3.



121/33 W .../34 W .../35 W

Viewing distance = 30m

Article No.	Type	
Spare diffuser		
85501 9001	ABD 855	cover, diffuser PC frosted, silicone seal, for e855 ..., e856 ...
Cable entries/Glands/Breather		
90117 9000	2537	ex-protected plastic cable gland M25 x 1,5
90118 9000	2538	ex-protected plastic plug M25 x 1,5
90119 9000	2539	ex-protected plastic plug M25 x 1,5 with blanking plug
90259 9000	KS25 EX	ex-breather M25 x 1,5
Mounting material		
90000 0002	15A P	2 ceiling brackets, hot galvanized steel
90032 0002	15AV P	2 ceiling brackets, stainless steel
90037 0004	RO84 112 A P	2 pipe clamps 1 1/2", stainless steel, with support
90038 0004	RO84 2 A P	2 pipe clamps 2", stainless steel, with support
26000 0008	W 26 L P	2 wall mounting angles, hot galvanized steel
26000 0002	W 26/30 P	2 wall mounting angles 30°, hot galvanized steel
26000 0003	W 26/45 P	2 wall mounting angles 45°, hot galvanized steel
Self-adhesive pictograms		
12112 0006	121/33 W	emergency exit to the left
12112 0007	121/34 W	emergency exit to the right
12112 0008	121/35 W	emergency exit below