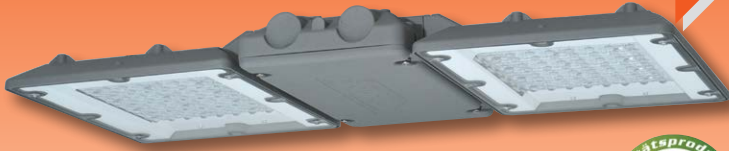


**NEW**

## Explosion-Protected LED High Bay Light Fittings Series nD8301/nD8302... LED



### Application:

Hazardous locations, of Zones 2 (gas atmosphere) and 22 (dust atmosphere), production halls and warehouses, in industrial sectors, workshops and chemical factories etc.

### Design:

Two versions are available: 1 or 2 LED wings for substitution of 250W / 400W high pressure discharge lamps

**Housing:** Diecast aluminum, DB 702N (mica-iron paint). **LED-housing** with LED modules, optics behind tempered safety glass

(IK08). **ECG housing** with integrated electronic control gear, prewired on terminals.

**Optics:** Narrow-wide respectively wide beam without lenses.

**Connection:** 3 poles up to 2,5.

**Entries:** 1 gland M25 x 1,5.

**Mounting material:** See accessories/spare parts.

**General Purpose:** Beaming downwards (0°).

### Technical Data:

**LED:** Highpower-LED 4,000K,  $R_a > 80$ , life cycle  $L_{80B_{10}} > 50.000h$  at max. ambient temperature (see notes).

**Version nD830. L ...:** Mid-Power-LED 4,000K,  $R_a > 80$ , life cycle  $L_{70B_{10}} > 50.000h$  at max. ambient temperature (see notes).

**ECG:** 220 - 240V, 50-60Hz. Due to the inrush current of the electronic ballasts, the maximum permissible number of light fittings per circuit breaker is limited. Overvoltage protection 4kV, excess temperature protection-, overload and short circuit protection, temperature monitoring of the LED modules (types nD830. L... excluded).

**DALI-interface** for dim light operation

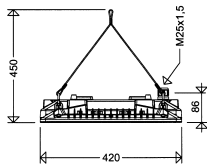
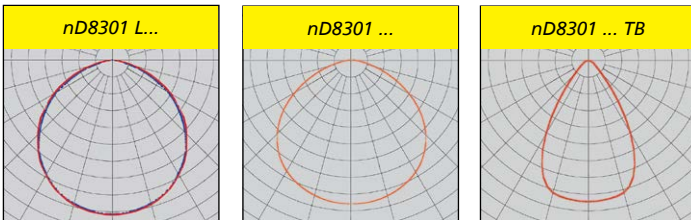
**Ambient temperature:** -20°C up to +40°C / +50°C / +55°C (see article tables)

### Options:

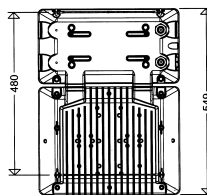
- 5.700K ( $R_a > 70$ )
- dimmable version 1-10V interface (DIMA) for analog components
- light output reduction (LR) per 230V control line (dimmable)
- uniform luminous flux option (CL) to keep the light output on same level for

the whole life cycle

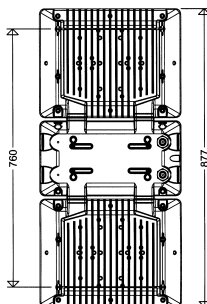
- **narrow beam version (T)**
- asymmetrical optics (A)
- version with additional borings for wall mounting by means of angle brackets (swivel range 45°)



nD8301...

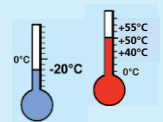


nD8302...



### SCHUCH Quality - your advantage:

- energy efficient and economical
  - up to **68% energy savings** compared to conventional light sources
  - up to **86% energy savings** in dimming mode
  - further **energy saving via the life of the LED by the uniform luminous flux function (CL-option)**. No luminous flux decrease due to the omission of the usual oversizing in new plannings.
  - uniform illumination due to the „Multi-Layer Principle“ i.e. every individual LED illuminates the whole surface, the light curves of the individual LED are overlapping. No dark zones if any single LED would fail and the uniformity of the illumination is kept.
- high quality level, reliable over whole life cycle
  - diecast aluminum housing
  - tempered safety glass IK08
  - optimized thermo management due to direct adaption of the LED modules at the housing, huge heat sink with excellent heat dissipation
  - temperature controlled by the ECG (versions nD830. L... excluded)
  - ECG with overvoltage, overload, short-circuit and overvoltage protection
- DALI interface (standard) for dimmed operation
- operational at ambient temperatures from -20°C up to +40°C / +50°C / +55°C (depending on version)
- colour reproduction  $R_a > 80$
- low maintenance and downtime costs because of extended maintenance intervals



### Notes:

**Limitations for LED-light fittings:** See chapter „Use of LED lighting in corrosive atmospheres“ in the Technical Appendix.

All technical data is relevant at the time of print. Actual technical data can be found in the internet under [www.schuch.de](http://www.schuch.de).

Article no.	Type	Power consumption [W] *	Luminous flux [lm] *	Luminous efficacy [lm/W] **	Ta max [°C]	Wide beam	Narrow-wide beam	Energy efficiency class	Substitute for **	Weight [kg] (without packing material)
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Ignition protection: nR

Rated voltage: 220V - 240V, 50-60Hz

Marking:

Permissible ambient temperature:

II 3 G Ex nR IIC T4 Gc (Zone 2)

-20°C up to +40°C / +50°C / +55°C

II 3 D Ex tc IIIC T100°C Dc (Zone 22)

## nD8301/nD8302...



... for ambient temperatures up to +40°C

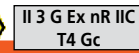
### 1 LED wing

83012 0001	nD8301 L115	100	12.270	123	40	•	A++	HME 250	8,8
83012 0002	nD8301 6403	135	14.460	107	40	•	A+	HIT 250/HME 400	8,9
83012 0003	nD8301 6403TB	135	14.250	106	40	•	A+	HIT 250/HME 400	8,9

### 2 LED wings

83012 0101	nD8302 L230	200	24.540	123	40	•	A++	HIT 400	14,5
83012 0102	nD8302 12803	270	28.910	107	40	•	A+	HIT 400	14,6
83012 0103	nD8302 12803TB	270	28.510	106	40	•	A+	HIT 400	14,6

## nD8301/nD8302... H50/H55



... for ambient temperatures up to +50°C/+55°C

### 1 LED wing

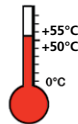
83012 0011	nD8301 L115 H55	100	12.270	123	55	•	A++	HME 250	8,8
83012 0007	nD8301 6403 H50	135	14.460	107	50	•	A+	HIT 250/HME 400	8,9

### 2 LED wings

83012 0111	nD8302 L230 H55	200	24.540	123	55	•	A++	HIT 400	14,5
83012 0104	nD8302 12803 H50	270	28.910	107	50	•	A+	HIT 400	14,6

\* see notes

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



## Accessories / Spare Parts

Article no.	Type	
33001 9001	3301/10	spare safety glass
90117 9006	2537 G	plastic gland M25x1,5 with nut
90118 9006	2538 G	plastic plug M25x1,5 with nut
33001 9004	3301/3302 Y P	1 pair of Y-ropes, (2-point-mounting)
33001 9002	3301/3302 D	1 pair of angle brackets for direct ceiling mounting
33001 9003	3301 W	1 angle bracket, adjustable, for wall mounting series nD8301... <sup>1)</sup>
33001 9007	3302 W	1 angle bracket, adjustable, for wall mounting series nD8302... <sup>1)</sup>

1) For mounting these brackets additional mounting holes are required on the luminaire. Please indicate way of mounting when ordering the luminaire.