



ExDUEVO

LED High Bay Fittings for Ex-Zone 2/22

Series nD8301/nD8302...

Applications:

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

Design:

Two versions are available: 1 (nD8301) or 2 (nD8302) LED segments.

Housing: Diecast aluminum, DB 702 (mica-iron paint).

LED-segment(s) with LED modules, optics (B- and TB-types) behind tempered safety glass (IK10).

ECG segment with integrated electronic control gear, prewired on terminals.

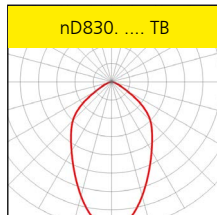
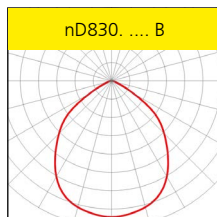
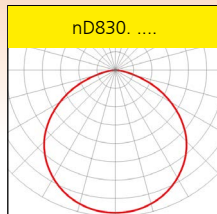
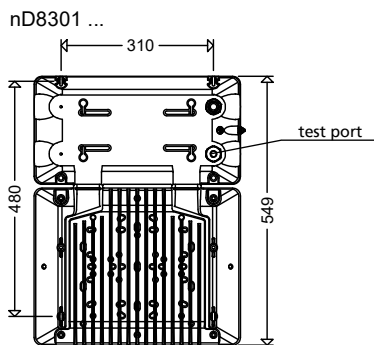
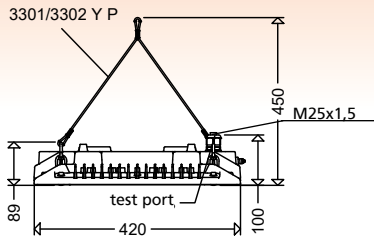
Light distribution: Without optic wide beam, with optic wide (B) or narrow-wide beam (TB).

Connection: 5 poles up to 4 mm²

Entries: 1 gland M25 x 1,5

Mounting material: 4 eyelets M6 (included in delivery) or see accessories/spare parts

General Purpose: Beaming downwards 0°.



Technical Data:

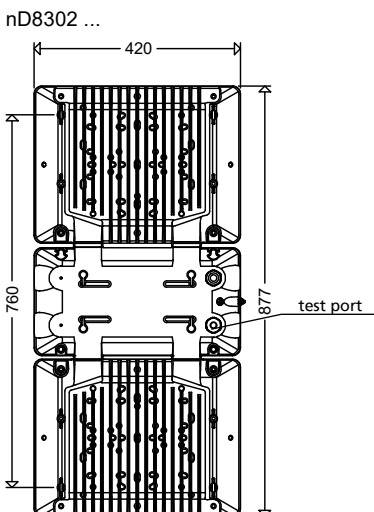
LED-module: 4,000 K, CRI > 80, service life L₇₀ > 100,000 h at ambient temperature ≤ 50 °C or L₇₀ > 90,000 h at ambient temperature > 50 °C, L₈₀ > 100,000h at 25 °C ambient temperature, L₈₀ > 60,000 h at max. ambient temperature

ECG: 220 - 240 V, 50/60 Hz. Surge voltage resistance 4 kV, overload and short circuit protection

Ambient temperature: -20 °C up to +40 °C / +50 °C / +60 °C

Options:

- narrow beam (T)
- with narrow oval optic (TO), for illumination of aisles in rack areas
- cable looping at 1 small side
- for connection to central emergency supply systems (ZB)
- power reduction with control phase (LR)
- constant luminous flux function (CL)
- for wall mounting with wall brackets, cannot be retrofitted



Product highlights:

- high efficiency by use of top-quality mid-power LEDs
- extremely high service life even at the maximum permissible ambient temperature
- optimized thermal management due to direct mounting of the LED modules to the housing and separate housings for ECG- and LED-modules, huge heat sink with excellent heat dissipation
- high-quality ECG with overload and short circuit protection
- DALI interface (standard) for dimmed operation, compatible with LIMAS Line BASIC/PRO (DIMD) Light Management System
- uniform illumination due to the „Multi-Layer Technology“ 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. The uniformity of the illumination is kept
- colour rendering index CRI > 80
- sustainable, control gear and LED-module replaceable by qualified personnel on-site
- future proof by using standardized LED-modules (Zhaga)
- GreenLine luminaire, outstanding sustainable design



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

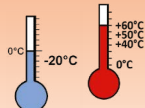
See "Technical Supplement"

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]	T max [°C]	Wide beam	Narrow-wide beam	Substitute for *	Weight [kg] (without packing material)
nD8301/nD8302...					II 3 G Ex nR IIC T4 Gc	II 3 D Ex tc IIIC T100°C Dc	IP65		

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.



Ignition protection: nR

Marking:

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

II 3 D Ex tc IIIC T100°C Dc (Zone 22)

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

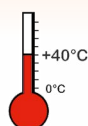
Permissible ambient temperature:

-20 °C up to +40 °C / +50 °C / +60 °C

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

1 LED segment

83010 0001	nD8301 L110	67	10.800	161	40	•		8,9
83010 0002	nD8301 L160	96	15.000	156	40	•		8,9
83010 0003	nD8301 L210	135	20.200	150	40	•		8,9
83010 0004	nD8301 L110B	67	10.800	161	40	•		9,2
83010 0005	nD8301 L160B	96	15.000	156	40	•		9,2
83010 0006	nD8301 L210B	135	20.200	150	40	•		9,2
83010 0007	nD8301 L110TB	67	10.800	161	40		•	9,2
83010 0008	nD8301 L160TB	96	15.000	156	40		•	9,2
83010 0009	nD8301 L210TB	135	20.200	150	40		•	9,2



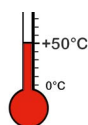
2 LED segments

83020 0002	nD8302 L320	192	30.000	156	40	•		14,5
83020 0003	nD8302 L420	270	40.400	150	40	•		14,5
83020 0005	nD8302 L320B	192	30.000	156	40	•		14,6
83020 0006	nD8302 L420B	270	40.400	150	40	•		14,6
83020 0008	nD8302 L320TB	192	30.000	156	40		•	14,6
83020 0009	nD8302 L420TB	270	40.400	150	40		•	14,6

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

1 LED segment

83010 0101	nD8301 L110 H50	67	10.800	161	50	•		8,9
83010 0102	nD8301 L160 H50	96	15.000	156	50	•		8,9
83010 0104	nD8301 L110B H50	67	10.800	161	50	•		9,2
83010 0105	nD8301 L160B H50	96	15.000	156	50	•		9,2
83010 0107	nD8301 L110TB H50	67	10.800	161	50		•	9,2
83010 0108	nD8301 L160TB H50	96	15.000	156	50		•	9,2



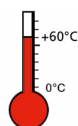
2 LED segments

83020 0101	nD8302 L220 H50	134	21.600	161	50	•		14,5
83020 0102	nD8302 L320 H50	192	30.000	156	50	•		14,5
83020 0104	nD8302 L220B H50	134	21.600	161	50	•		14,6
83020 0105	nD8302 L320B H50	192	30.000	156	50	•		14,6
83020 0107	nD8302 L220TB H50	134	21.600	161	50		•	14,6
83020 0108	nD8302 L320TB H50	192	30.000	156	50		•	14,6

... for ambient temperatures up to +60 °C

1 LED segment

83010 0201	nD8301 L110 H60	67	10.800	161	60	•		8,9
83010 0202	nD8301 L160 H60	96	15.000	156	60	•		8,9
83010 0204	nD8301 L110B H60	67	10.800	161	60	•		9,2
83010 0207	nD8301 L110TB H60	67	10.800	161	60		•	9,2



2 LED segments

83020 0201	nD8302 L220 H60	134	21.600	161	60	•		14,5
83020 0202	nD8302 L320 H60	192	30.000	156	60	•		14,5
83020 0204	nD8302 L220B H60	134	21.600	161	60	•		14,6
83020 0207	nD8302 L220TB H60	134	21.600	161	60	•		14,6

Accessories / Spare Parts

Article no.	Type	
90117 9006	2537 G	ex-protected plastic cable gland M25 x 1,5 with nut
90119 9001	2539 G	ex-protected plastic cable gland M25 x 1,5 with nut and plug
33001 9004	3301/3302 Y P	1 pair of Y-ropes, (2-point-mounting)
33001 9002	DBF 3301/3302	1 pair of angle brackets for direct ceiling mounting